Panasonic

KX-T336 SYSTEM

System Reference Manual
Vol. 1

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Contents

NOTIFY THE TELEPHONE COMPANY For U.S.A. Only

Installation must be performed by the telephone company or a qualified professional installer.

Notify the Telephone Company
Before connecting this equipment to any telephone, call the telephone company and inform them of the following:

- Telephone number to which the system will be connected .....
- Make.....Panasonic
- Model.....KX-T336100/KX-T336200

- FCC Registration No.....See the Name Plate on the KX-T336100/KX-T336200
  In case of enabling the following function(s), please inform your telephone company of the FCC Registration number “ACJJPN-18958-MF-E.”

  1. Ground Start
  2. Automatic Route Selection
  3. Local Access

  If these features are not being used, use “ACJJPN-18959-KF-E.”

- Ringer Equivalence.....0.4B
- Service Order Code 9.0F
- Facility Interface Code (Loop Start).....02LS2
  (Ground Start) 02GS2
  (DID).....02RV2-T
  (OPX).....0L13C
- Required Network Interface Jack (Loop Start and Ground Start).....RJ21X
  (DID and OPX).....RJ11

Present FCC Regulation prohibit connecting this unit to a party line, or to a coin operated telephone.

Please read the section on “Telephone Company and FCC Requirements and Responsibilities.”

TELEPHONE COMPANY and FCC REQUIREMENTS AND RESPONSIBILITIES

In compliance with the requirements of Part 68 of the FCC Rules and Regulations for connection of terminal system (this device is classified as terminal system) to the telephone network and for your convenience, the following information is presented:

1. Notification to the Telephone Company

Customers connecting terminal equipment to the telephone network shall, upon request of the Telephone Company, inform the Telephone Company of the particular line(s) to which such connection is made, the FCC registration number and (See label on bottom of unit.) ringer equivalence number of the registered terminal equipment.
The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the REN's of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, your should contact your local telephone company to determine the maximum REN for your calling area.

2. Direct connection to A Party-line or Coin-operated telephone Line is Prohibited

3. Incidence of Harm to The Telephone Lines

Should Terminal Equipment cause harm to the Telephone Network, the Telephone Company shall, where practical, notify the customer that temporary discontinuance of service may be required. However, where prior notice is not practical, the Telephone Company may temporarily discontinue service forthwith, if such action is reasonable in the circumstances. In case of such unnotified temporary discontinuance of service, the Telephone Company shall:

(a) Promptly notify the customer of such temporary discontinuance of service.
(b) Afford the customer the opportunity to correct the situation which gave rise to the temporary discontinuance.
(c) Inform the customer of the right to bring a complaint to the Commission pursuant to the procedures set out in Subpart E of Part 68 of FCC Telephone Equipment Rules.

4. Compatibility of The Telephone Network and Terminal Equipment

(a) Availability of telephone interface information.

Technical information concerning interface parameters and specifications not specified in FCC Rules, including the number of Ringers which may be connected to a particular telephone line, which is needed to permit Terminal Equipment to operate in a manner compatible with Telephone Company communications facilities, shall be provided by the Telephone Company upon customer's request.

(b)Changes in Telephone Company Communications Facilities, Equipment, Operations and Procedures.

The Telephone Company may make changes in its communications facilities, equipment, operations or procedures, where such action is reasonably required in the operation of its business and is not inconsistent with the rules and regulations in FCC Part 68 of the FCC Rules and Regulations. If such changes can be reasonably expected to render any customer Terminal Equipment incompatible with Telephone Company Communications Facilities, or require modification or alteration of such Terminal Equipment, or otherwise materially affect its use or performance, the customer shall be given adequate notice in writing, to allow the customer an opportunity to maintain uninterrupted service.

OTHERS

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

- Keep the unit away from heating appliances and electrical noise generating devices such as fluorescent lamps, motors and television. These noise sources can interfere with the performance of the EASA-PHONE.
- This unit should be kept free of dust, moisture, high temperature and vibration, and should not be exposed to direct sunlight.
- Never attempt to insert wires, pins, etc. into the vents or other holes of this unit.
- If there is trouble, disconnect the unit from the telephone line. Plug the telephone directly into the telephone line. If the telephone operates properly, do not reconnect the unit to the line until the trouble has been repaired by an authorized Panasonic Factory Service Center. If the telephone does not operate properly, chances are that the trouble is in the telephone system, and not in the unit.
- Do not use benzine, thinner, or similar solvents. Do not use abrasive powder to clean the cabinet. Wipe it with a soft cloth.

For U.S.A. only

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The serial number of this product may be found on the label affixed to the bottom of the unit. You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid in identification in the even of theft.

MODEL NO.: KX-T336100/KX-T336200

SERIAL NO.:

For your future reference

DATE OF PURCHASE

NAME OF DEALER

DEALER'S ADDRESS

IMPORTANT SAFETY INSTRUCTIONS

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1 . Read and understand all instructions.

2. Follow all warnings and instructions marked on the product.

3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

4. Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.

6. Slots and openings in the cabinet and the back or bottom are provided for ventilation, to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on the bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.

7. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.

8. This product is equipped with a three wire grounding type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

9. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.

10. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.

11. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.

12. To reduce the risk of electric shock, do not disassemble this product, but take it to a qualified serviceman when some service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the appliance is subsequently used.

13. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

    A. When the power supply cord or plug is damaged or frayed.
    B. If liquid has been spilled into the product.
    C. If the product has been exposed to rain or water.
    D. If the product does not operate normally by following the operating instructions. Adjust only those controls, that are covered by the operating instructions because improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
    E. If the product has been dropped or the cabinet has been damaged.
    F. If the product exhibits a distinct change in performance.

14. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.

15. Do not use the telephone to report a gas leak in the vicinity of the leak.

SAVE THESE INSTRUCTIONS

SAFETY INSTALLATION INSTRUCTIONS

When installing telephone wiring, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following;

1. Never install telephone wiring during a lightning storm.

2. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.

3. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

4. Use caution when installing or modifying telephone lines.

Section 1

System Outline

(Section 1)

System Outline

Contents

A. Overview

1.00 The Structure of This Manual

Introduction
This system reference manual provides general technical information on Panasonic KX-T336 system.
This includes a description of the system, its hardware and software, features and service, environmental requirements.
This manual is intended to serve as an overall technical reference for the system.

Organization
This manual is comprised of the following 19 sections.

Section 1 System Outline
This section describes the overall information of the system and the construction of this Service Reference Manual.

Section 2 Installation
This section describes how to install and start up the system.

Section 3 System Features and Operation
This section describes the basic system features.

Section 4 Station Features and Operation (PITS)
This section describes the basic features and operations from the viewpoint of Proprietary Integrated Telephone System (PITS) users.
The basic features and required operations for DSS console are also described.

Section 5 Station Feature and Operation (SLT)
This section describes the basic features and operations from the viewpoint of Single Line Telephone (SLT) users.

Section 6 Station Feature and Operation (ATT)
This section describes the basic features and operations from the viewpoint of the Attendant Console (ATT) Operator.

Section 7 Preparation for Programming and Operation (VT220 and Compatibles)
This section describes the basic usage and available functions of VT220 and Compatibles.

Section 8 Preparation for Programming and Operation (Dumb)
This section describes the basic usage and command reference of Dumb terminal.

Section 9 System Programming (VT220 and Compatibles)
This section provides information for the programming of the system database using VT220 and Compatibles.

Section 10 System Programming (Dumb)
This section provides information for the programming of the system database using Dumb terminal.

Section 11 System Programming (PITS)
This section provides information for a certain programming of the system database using PITS telephone.

Section 12 Station Programming (PITS)
This section provides information for the programming of various features specific to each PITS telephone and DSS console using PITS telephone.

Section 13 Station Programming (ATT)
This section provides information for the programming and the back-up of the attendant console database using the attendant console.

Section 14 Maintenance (VT220 and Compatibles)
This section describes the information necessary for monitoring, testing, and maintaining the system using VT220 and Compatibles.

Section 15 Maintenance (Dumb)
This section describes the information necessary for monitoring, testing, and maintaining the system using Dumb terminal.

Section 16 Backup Utility-On-Site
This section provides the information for saving and loading of the system programming data (including attendant console database) at on-site.

Section 17 Backup Utility-Remote Location
This section provides the information for saving and loading the system programming data (including attendant console database) from a remote location.

Section 18 Abbreviations
This section provides a list of abbreviations used in this manual.

Section 19 Index

2.00 Some Conventions Used in This Manual

In this manual “system features” are described in Section 3 and “station (PITS, SLT, ATT) features” are described in Section 4 to Section 6. In these sections, information for each feature is presented under the following four headings:

Description, Programming, Conditions, and Operation.

Description

Defines the feature, describes what it does for the user, and how it is used.

Programming

Provides tabular listing of items required for system programming as follows:

System Programming <1>	Reference VT <2>	Reference Dumb <3>
“System-Class of Service”, Executive Busy Override Deny	9-D-4.01	10-C-7.00
“System-Numbering Plan”, Busy Override Deny Set, Busy Override Deny Cancel	9-D-6.04	10-C-10.00

Interpret this table as follows:

<1> shows the required programming items for the described feature.

<2> shows the reference number for programming (VT 220 user)

For example, interpret “9-D-4.01” as follows.

9-D-4.01
- 4.01 — Title Number
- D — Subsection Number
- 9 — Section Number

<Example>

4.00 Class of Service

4.01 Class of Service (1/2)

Title Number

```
System  -  Class of Service
-------------------------------------------
                 Class of Service (COS) No.
    +--------------------------------------
    |  Toll Restriction Level (Day) -----
    |  Toll Restriction Level (Night) ---
    |  Max. Dialing Digits -------------
    |  Call Forwarding / Do Not Disturb -
```

<3> shows the reference number for programming (Dumb terminal user)

(Note)
In this manual, all reference numbers are described using Section Number, Subsection Number, and Title Number.

<Example>

2.00 System Administration from a Remote Location

Description

From a remote location, you can perform system programming, diagnosis and traffic measurements using a Dumb terminal.
For details about communication parameters, refer to Section 9-D-7.00 “Communication Interface.”

Conditions

- RMT card (Modem) must be installed in the system and assign the telephone number of

7.00 Communication Interface

Title Number

```
System  -  Communication Interface
--------------------------------------


          +--------------------------
          |    Item     |  SIO  #1
          |             | (Terminal)
          |-------------+------------
          | NL-code     |  <CR+LF>
          | Baud Rate   |  1200 baud
```

Conditions

Describes the applications and benefits of the feature, followed by factors to be considered when the feature is used.

Operation

Provides instructions for a user of PITS telephone (Section 4), Single Line Telephone (Section 5) and Attendant Console (Section 6) individually.

3.00 System Description

The system can consist of one, two, or three shelves (Basic and Expansion 1, 2) and Attendant Console. Each shelf contains its own power supply.
Basic shelf is always required and it can be equipped with up to 96 lines (including Extensions and CO lines).

Building Block System

Useful to enlarge system's ability by installing the optional Expansion Shelf.
Up to two Expansion Shelves can be installed to the system.
Each expansion shelf can be equipped with up to 120 lines (including Extensions and CO lines).

Flexible Ports

Up to 336 lines (including Extensions and CO lines) can be connected with this system. However Extensions (including DSS consoles)must be 288 lines or less and CO lines must be 144 lines or less.

Up to two Attendant Consoles (option-with CRT display) can be connected to the system if ATLC card is equipped with this system.
Attendant Console can be used for call processing and system programming in interactive format.
Switched Loop Attendant Console Operation makes the handling of incoming calls more efficient than conventional system.

Starting up the System Administration and Maintenance of this system can be done using VT220 (VT100), Compatibles, Dumb terminal or Attendant Console.

Not only Panasonic Proprietary Integrated Telephones (PITS) but Single Line Telephones (SLT) can be used as Extension Telephones in this system.

4.00 Communications Needs

To meet the user's communications needs, this system provides the following features.

Outgoing Call Features

Toll Restrictions allow the manager to restrict extension users from making certain types of calls.
Restriction is administered through outward restriction, toll restriction, and ARS restriction.

Automatic Route Selection (ARS) provides for the routing of calls over the telecommunication network based on preferred routes (normally the least expensive route available at the time the call is made) with capacity for multiple common carriers. (for U.S.A., Canada and New Zealand)

Receiving Features

Direct Inward Dialing (DID) allows outside parties to reach specific inside parties or facilities by direct dialing without attendant assistance.

Direct Inward System Access (DISA) allows the outside parties to dial directly into this system and access to certain system's features and facilities without attendant assistance.
After gaining access to the system, the outside party can access certain system's features by dialing the appropriate feature number.

Uniform Call Distribution (UCD) allows incoming calls to be distributed uniformly to a specific group of extensions. Calls to a UCD group hunt for an idle extension in a circular way, starting at the extension following the last one called.

Intercept Routing-No Answer allows calls that are not answered within a specified time set period to be redirected to an individual covering extension and/or an attendant console.

Station Hunting provides automatic redirection of incoming calls to pre-assigned extension of a hunting group in a circular way or one way when the called party is busy.

Holding Features

Hold allows an extension user to suspend a call. This feature allows users to temporarily disconnect from one conversation and either make or answer another call. Music on-hold or message may be provided to the held party if available.

Call Park allows a user to place a call on hold, then pick up the call at any station in the system. The user can page another party to pick up the parked call or may move to another location and then re-access the call.

Transferring Features

Transfer allows a user to transfer any call to another party.
This feature supports transfer of calls from the called party to another party for completion of a transaction.

Call Forwarding allows users who are away from their phones to receive calls at another phone. This feature supports roving personnel and shared office space or company staff.

Conversation Features

Conference allows up to 3 parties (maximum two outside parties), including the originator, to join a call.

Paging Features

Paging allows extension users to make announcement through built-in speaker of Proprietary Integrated Telephone (PITS) and/or external Pager Equipments.

Other Features

Station Message Detail Recording (SMDR) generates detailed call information on all CO calls and sends this information to the printer. SMDR also generates detailed data on Error Log Records, System Programming Data and Traffic Information.

Off Premise Extension (OPX) allows Single Line Telephones (SLT) installed off the premises can be operated via a public or private network in exactly the same way as extension on the premise.

Account Code Entry allows a user to associate calls with an account code for charge-back purposes.

No.	Item	Maximum number	per system/ station
1	Tenant	2	system
2	Operator	2	tenant
3	Speed Dialing-System	200	system
4	Speed Dialing-Station/SLT	10	station
5	One Touch Dialing-Station/PITS	23	station
6	Call Park Area	20	system
7	Programmable Absent Message	10	system
8	Trunk Group	16	system
9	Equal Access Group	4	system
10	OCC Access Group	4	system
11	Toll Restriction Level	16	system
12	Paging Group	8	system
13	ICM Group	8	system
14	Pickup Group	32	system
15	UCD Group	32	system
16	Class of Service	32	system
17	Primary DN (PDN)	3	station
18	Message Waiting	500	system

5.00 Service Cards Description

Extension cards

Proprietary Integrated Line Circuit (PLC) Card;
This card interfaces 8 PITS telephones/DSS consoles and the TDM bus.
It is available to connect 8 PITS telephones, DSS consoles to the system per PLC card.

Single Line Telephone Line Circuit (SLC) Card;
This card interfaces 8 SLT type telephones and the TDM bus.
It is available to connect 8 SLT telephones to the system per SLC card.

SLC Card with Message Waiting (MSLC);
This card is the same as the standard SLC card except that it has the capability to turn on and off the message waiting lamp of a Single Line Telephone.

Hybrid Line Circuit (HLC) Card;
This card interfaces PITS/SLT type telephones, DSS consoles and the TDM bus.
It is available to connect 8 PITS/SLT telephones/ DSS consoles to the system per HLC card.

Off Premise Extension Trunk (OPX) Card;
This card interfaces 4 off premise extensions through off premise extension power unit.

Attendant Console Line Circuit (ATLC) Card;
This card interfaces 2 Attendant Consoles and the TDM bus.
It is available to connect 2 attendant consoles to the system if this card is installed.

CO trunk cards

Loop Start Central Office Trunk (LCOT) Card; *
This card interfaces 8 central office loop start trunks and the TDM bus.
It is available to connect 8 CO lines to the system per LCOT card.
With loop start, you seize a line by bridging through a resistance the tip and ring (both wires) of your telephone line.

LCOT Card with Pay-Tone Detection (PCOT);
This card is a version of the LCOT card with the capability to detect a pay-tone of CO line. This is useful to charge management with a pay-tone which is sent from CO line

LCOT Card with Polarity Reversal Detection (RCOT);
This card is a version of the LCOT card with the capability to detect a reversal of CO line polarity. This is useful for determining the start and completion of calls.

Ground Start Central Office Trunk (GCOT) Card; *
This card interfaces 8 central office trunks and the TDM bus. It is available to connect 8 CO lines to the system per GCOT card.
A way of signaling on subscriber trunks in which one side of the two wire trunk (typically the “Ring” conductor of the Tip and Ring) is momentarily grounded to get dial tone.
(◆ for U.S.A. and Canada only)

* There are two types of switched trunks one can typically lease from a local phone company- Loop Start and Ground Start.
You must be careful to order the correct type of trunk from your local phone company and correctly install your telephone system at your end — so that they both match.

Direct Inward Dialing Trunk (DID) Card;
This card interfaces 4 central office trunks arranged for Direct Inward Dialing (DID) and the TDM bus.

E&M Card;
This card interfaces 4 E&M lines and TDM bus. It is available to connect 4 E&M lines to the system per E&M card.

T-1 Digital Trunk Card;
This card interfaces 1 T-1 line and TDM bus. It is available to connect a T-1 line to the system per T-1 digital trunk card. A T-1 line has capacity of 24 voice conversations.

E-1 Digital Trunk Card;
This card interfaces 1 E-1 line (PCM 30) and TDM bus. It is available to connect an E-1 line to the system per E-1 digital trunk card. An E-1 line has capacity of 30 voice conversations.

Resource cards

Direct Inward System Access (DISA) Card;
This card interfaces 4 central office trunks arranged for Direct Inward System Access (DISA) and the TDM bus.

Automatic Gain Control (AGC) Card;
This card is used to maintain volume of CO-CO communication.
An electronic circuit which compares the level of an incoming signal with a previously defined standard and automatically amplifies or attenuates that signal so it arrives at its destination at the correct level.

Remote Circuit (RMT) Card;
This card is necessary for accessing the system from a remote location.

Other cards

Doorphone Circuit (DPH) Card;
This card interfaces 4 doorphones and the TDM bus. Up to 4 doorphones can be connected to the system.

Time Switch Conference Expansion Card (T-SW Conference) Card;
This card provides 64 additional conference trunks, and is installed on the T-SW card.

Off Hook Call Announcement (OHCA) Card;
This card is for Off Hook Call Announcement features, and is installed on the HLC card or PLC card.

Time Switch Off Hook Call Announcement Expansion (T-.SW OHCA) Card;
This card is for Off Hook Call Announcement features, and is installed in the Basic Slot 2.

System Configuration

No.	Item	Maximum number	per system/ station
1	HLC+PLC+SLC+OPX+DID+LCOT/GCOT+T-1+ E-1+E&M+PCOT+RCOT	42 cards (336 ports)	system*
2	DID+LCOT/GCOT+T-1+E-1+E&M+PCOT+RCOT	18 cards (144 ports)	system*
3	DPH	1 card (4 doorphones)	system*
4	DISA	4 cards (16 resources)	system*
5	AGC	4 cards (16 resources)	system*
6	RMT	1 card (1 resource)	system*
7	ATLC	1 card (2 ports)	system*
8	HLC+PLC+SLC+OPX+DID+LCOT/GCOT+T-1+ E-1+E&M+PCOT+RCOT	12 cards (96 ports)	basic shelf
9	HLC+PLC+SLC+OPX+DID+LCOT/GCOT+T-1+ E-1+E&M+PCOT+RCOT	15 cards (120 ports)	expansion shelf
10	HLC+PLC+SLC+OPX	12 cards (96 ports)	shelf
11	DSS console	16 consoles (16 ports)	system*
12	External Pager	2	system*
13	External Music Source	2	system*

* System = fully expanded system = basic shelf + expansion shelf 1 + expansion shelf 2

Note:
Total 18 CO cards (144 ports) allowed per system
DID + LCOT + GCOT + T-1 + E-1 + E&M + PCOT + RCOT
*T-1 is counted as 3 cards, and E-1 is counted as 4 cards.

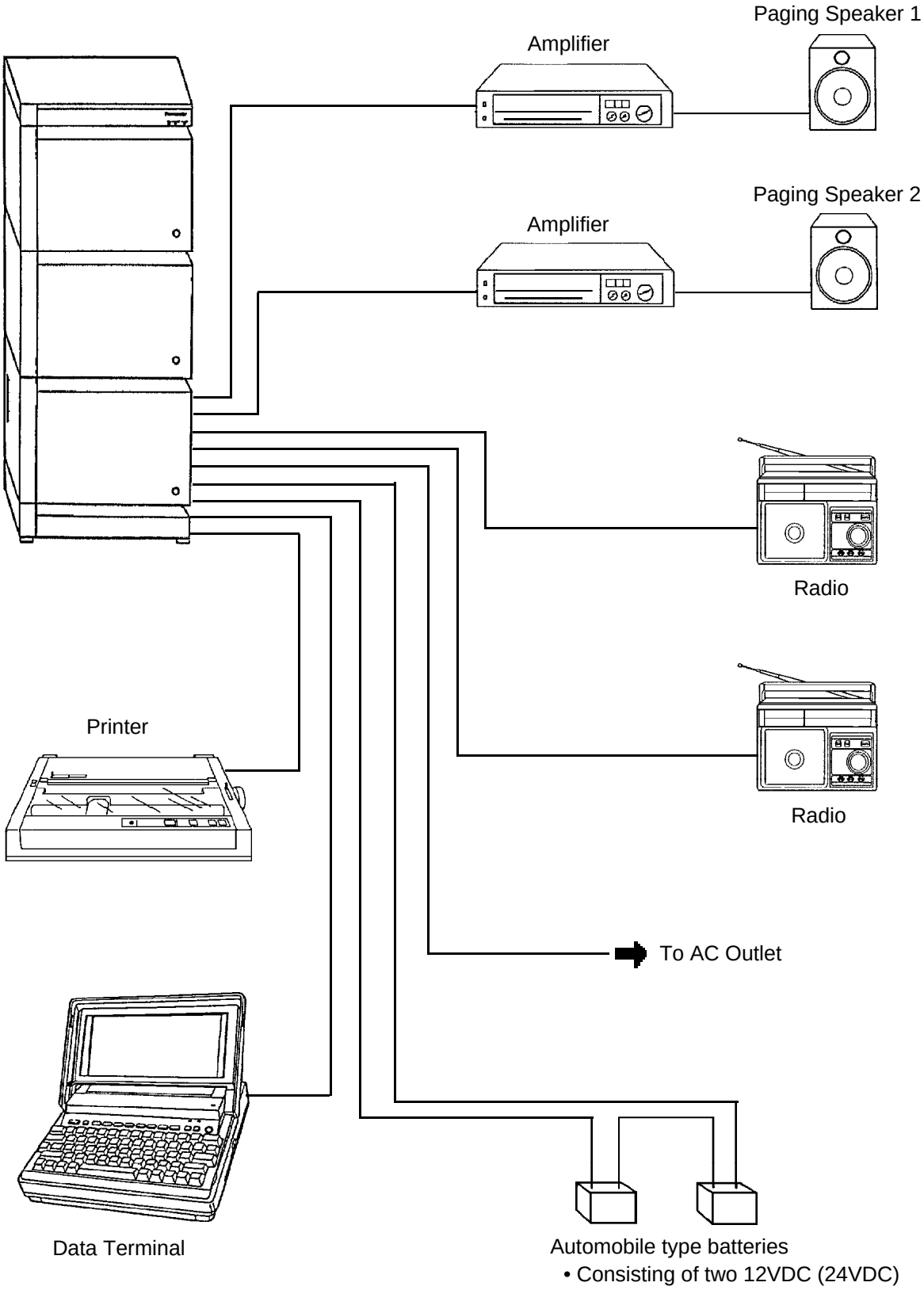
B. System Components

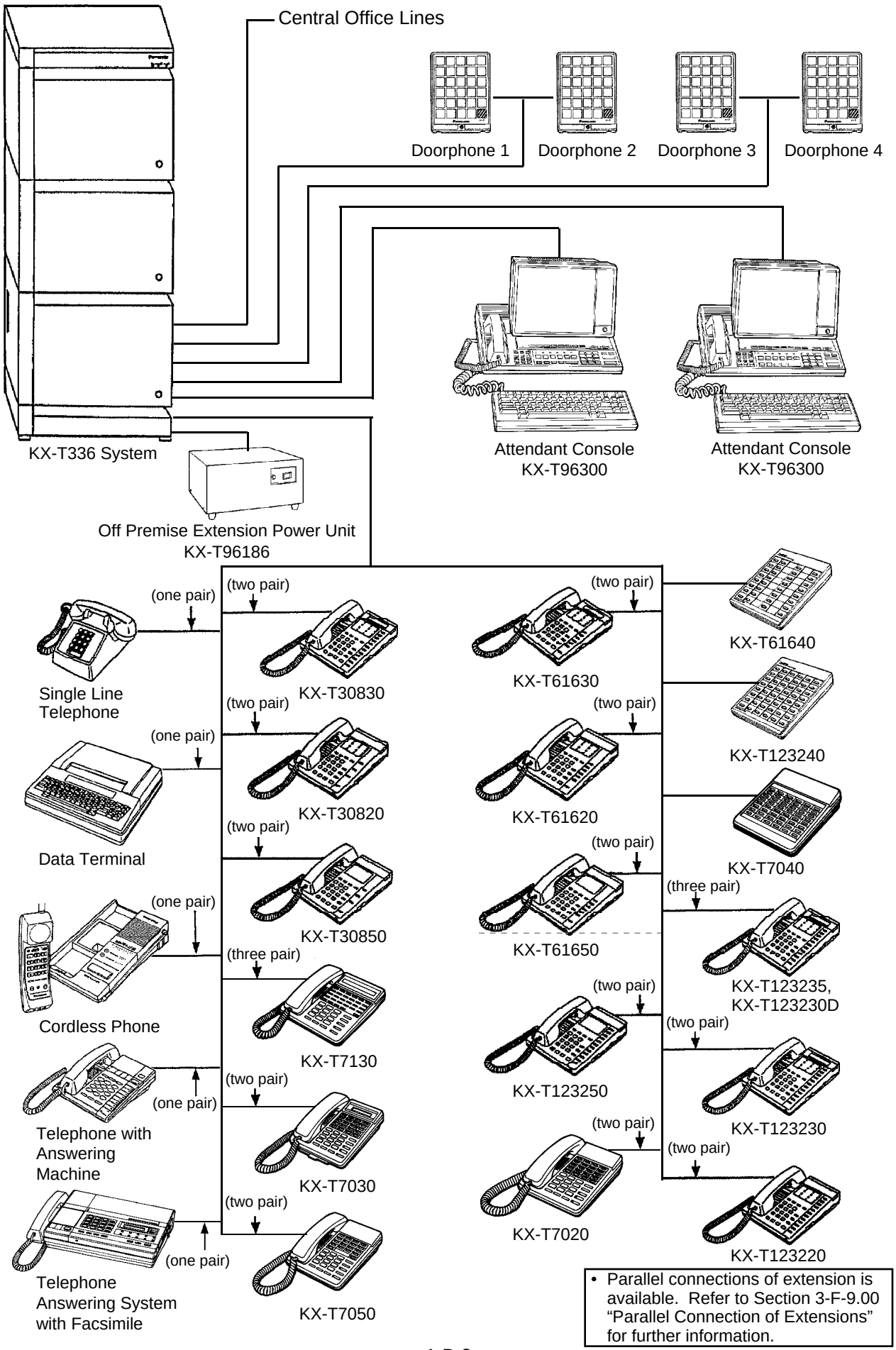
1.00 Components List

Model No.	Name
KX-T336100	Basic Shelf
KX-T336101	CPU card
KX-T336102	T-SW card
KX-T336200	Expansion Shelf
KX-T96300	Attendant Console
KX-T96145	Attendant Console Keyboard
KX-T96186	Off Premise Extension (OPX) Power Unit
KX-T96180	Loop Start Central Office Trunk (LCOT) Card
KX-T96189	Loop Start Central Office Trunk Card with Pay - Tone Detection (PCOT) Card
KX-T96183	Loop Start Central Office Trunk Card with Polarity Reversal Detection (RCOT) Card
KX-T96181	Ground Start Central Office Trunk (GCOT) Card
KX-T96172	Proprietary ITS Line Circuit (PLC) Card
KX-T96174	Single Line Telephone Line Circuit (SLC) Card
KX-T96175	Single Line Telephone Circuit (SLC) Card with Message Waiting
KX-T96170	Hybrid Line Circuit (HLC) Card
KX-T96141	Attendant Console Line Circuit (ATLC) Card
KX-T96191	Direct Inward System Access (DISA) Card
KX-T96182	Direct Inward Dialing Trunk (DID) Card
KX-T96182D	Both-way Direct Inward Dialing Trunk (DID) Card
KX-T96182CE	MFC Direct Inward Dialing Trunk (DID) Card
KX-T96185	Off Premise Extension Trunk (OPX) Card
KX-T96161	Doorphone Circuit (DPH) Card
KX-T96193	Automatic Gain Control(AGC) Card
KX-T96196	Remote Circuit (RMT) Card
KX-T336104	Time Switch Conference (T-SW Conference) Expansion Card
KX-T96136	Off Hook Call Announcement (OHCA) Card
KX-T336105	Time Switch Off Hook Call Announcement (T-SW OHCA) Card
KX-T96184	E&M Card
KX-T96187	T-1 Digital Trunk Card
KX-T96188	E-1 Digital Trunk Card

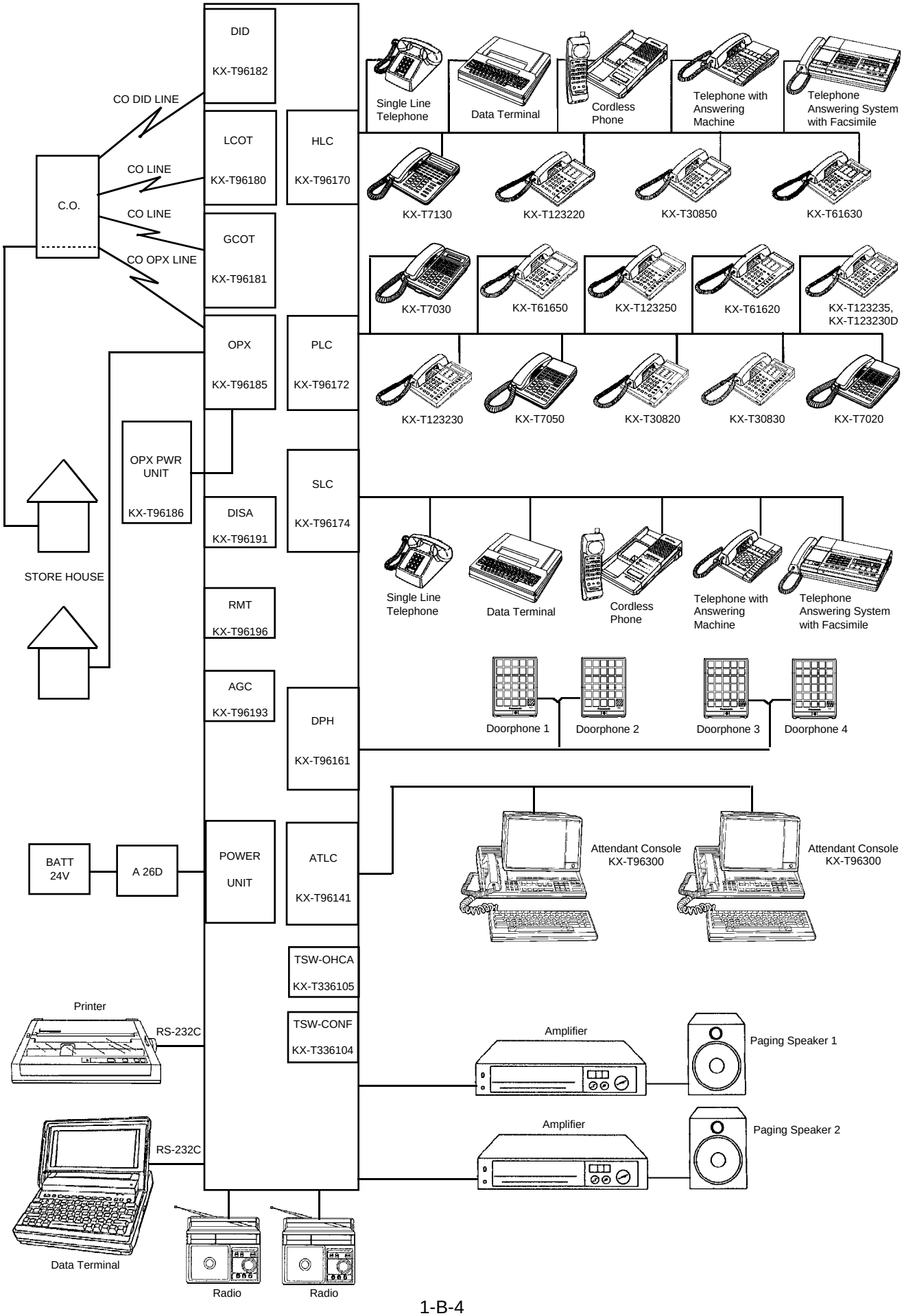
Model No.	Name
KX-T30820	Proprietary Telephone (3 CO’s)
KX-T30830	Proprietary Telephone with LCD (3 CO’s, 8 DSS’s)
KX-T30850	Proprietary Telephone (3 CO’s)
KX-T61620	Proprietary Telephone (6 CO’s)
KX-T61630	Proprietary Telephone with LCD (6 CO’s)
KX-T61650	Proprietary Telephone (6 CO’s)
KX-T123220	Proprietary Telephone (12 CO’s)
KX-T123230	Proprietary Telephone with LCD (12 CO’s)
KX-T123230D	Proprietary Telephone with LCD (12 CO’s)
KX-T123235	Proprietary Telephone with LCD (12 CO’s)
KX-T123250	Proprietary Telephone (12 CO’s)
KX-T7020	Proprietary Telephone (12 CO’s)
KX-T7030	Proprietary Telephone with LCD (12 CO’s)
KX-T7050	Proprietary Telephone (12 CO’s)
KX-T7052	Single Line Telephone with FLASH button
KX-T7130	Proprietary Telephone with LCD (12 CO’s)
KX-T61640	DSS Console (16 DSS's, 16 PF buttons)
KX-T123240	DSS Console (32 DSS's, 16 PF buttons)
KX-T7040	DSS Console (32 DSS's, 16 PF buttons)
KX-T30865	Doorphone
KX-T30890	Headset
KX-A26D	Battery Adapter

2.00 System Connections





- Parallel connections of extension is available. Refer to Section 3-F-9.00 "Parallel Connection of Extensions" for further information.


DID
KX-T96182
LCOT
KX-T96180
GCOT
KX-T96181
OPX
KX-T96185
OPX PWR UNIT
KX-T96186
DISA
KX-T96191
RMT
KX-T96196
AGC
KX-T96193
POWER UNIT
BATT 24V
A 26D
HLC
KX-T96170
PLC
KX-T96172
SLC
KX-T96174
DPH
KX-T96161
ATLC
KX-T96141
TSW-OHCA
KX-T336105
TSW-CONF
KX-T336104
C.O.
CO DID LINE
CO LINE
CO LINE
CO OPX LINE
STORE HOUSE
Single Line Telephone
Data Terminal
Cordless Phone
Telephone with Answering Machine
Telephone Answering System with Facsimile
KX-T7130
KX-T123220
KX-T30850
KX-T61630
KX-T7030
KX-T61650
KX-T123250
KX-T61620
KX-T123235, KX-T123230D
KX-T123230
KX-T7050
KX-T30820
KX-T30830
KX-T7020
Single Line Telephone
Data Terminal
Cordless Phone
Telephone with Answering Machine
Telephone Answering System with Facsimile
Doorphone 1
Doorphone 2
Doorphone 3
Doorphone 4
Attendant Console KX-T96300
Attendant Console KX-T96300
Printer
RS-232C
Amplifier
Paging Speaker 1
RS-232C
Amplifier
Paging Speaker 2
Data Terminal
Radio
Radio

C. Features

Tabular listings of features by group (System, Stations) are provided in this subsection.

System Features are programmed at system level and affect the entire operation of the system.

Basic Features	Flexible Numbering Directory Number (DN) Floating Directory Number (FDN) Tenant Service Operator Class of Service (COS) Group - Intercom - Pickup - UCD - Paging - Trunk Night Service - Directed Night Answer - Universal Night Answer (UNA) - Flexible Night Service - Fixed Night Service - Switching of Day/Night Mode Mixed Station Capacities Variable Time-Out Lockout Automatic Station Release Distinctive Dial Tone Distinctive Busy Tone Confirmation Tone Tone and Ringing Patterns
Outgoing Call Features	Toll Restriction for Local Trunk Dial Access Toll Restriction in ARS System Toll Restriction for Individual Trunk Group Dial Access/Direct Trunk Access Toll Restriction for Individual Virtual Trunk Group Dial Access Operator/International Call Restriction 7/10 Digit Toll Restriction Toll Restriction for Speed Dialing Automatic Route Selection (ARS) Tone/Pulse Conversion Automatic Pause Insertion
Receiving Features	Dual Console Operation Attendant Consoles-less Operation Direct In Line (DIL) Direct Inward System Access (DISA) Direct Inward Dialing (DID) Trunk Answer From Any Station (TAFAS) - Day Service Uniform Call Distribution (UCD) - without OGM - with OGM Private CO Single CO Group CO Flexible Ringing Assignment - No Ringing - Delayed Ringing Discriminating Ringing Station Hunting - Circular - Terminal

Continued

Continued

Holding Features	Music on Hold Held Call Reminder Transfer Recall
Other Features	Station Message Detail Recording (SMDR) Off Premise Extension (OPX) Walking Station Outgoing Message (OGM) Recording and Playing Back Intercept Routing - No Answer Rerouting Calling Party Control (CPC) Detection CO Busy Out Parallel Connection of Extensions Voice Mail Integration DTMF Tone Integration

Station Features are accessible by an extension user or attendant, either through dial feature number at a Single Line Telephone, or by either feature number or dedicated feature button access at a Proprietry Integrated Telephone (PITS) or Attendant Console location.

	Features	PITS	SLT	ATT
Outgoing Call Features	Line Selection-Calling	○		
	Prime Line Preference	○		
	Idle Line Preference	○		
	No Line Preference	○		
	Local Trunk Dial Access	○	○	○
	Individual Trunk Group Dial Access	○	○	○
	Individual Virtual Trunk Group Dial Access	○	○	○
	Direct Trunk Access	○		
	Inter Office Calling	○	○	○
	Intercom Calling	○		
	Intercom - Voice Calling	○		
	Intercom - Busy Station Signaling	○		
	Off-Hook Call Announcement (OHCA)	○		○
	Automatic Callback Busy - Trunk	○	○	
	- Station	○	○	
	Executive Busy Override	○	○	○
	Do Not Disturb (DND) Override	○	○	○
	Walking COS (Class of Service)	○	○	
	Operator Call	○	○	○
	On-Hook Dialing	○		
	Speed Dialing - System	○	○	○
	Speed Dialing - Station		○	
	One Touch Dialing	○		
	Last Number Redial (LNR)	○	○	○
	Saved Number Redial (SNR)	○		
	Automatic Redial	○		
	Pickup Dialing		○	
	Serial Call			○
Receiving Features	Line Selection - Answering	○		
	Direct Answering	○		
	Ringing Line Preference	○		
	Prime Line Preference	○		
	Call Waiting	○	○	
	Executive Busy Override Deny	○	○	
	Do Not Disturb (DND)	○	○	
	Intercom Answer - Voice Calling Deny	○		
	- BSS/OHCA Deny	○		
	No Line Preference	○		
	Dial Call Pickup	○	○	
	Directed Call Pickup	○	○	
	Call Pickup Deny	○	○	
	Hands-Free Answerback	○		
	Uniform Call Distribution (UCD) Log Out	○	○	
	Trunk Answer From Any Station (TAFAS)	○	○	
	- Day Service			

Continued

Continued

	Features	PITS	SLT	ATT
Holding Features	Hold	○	○	○
	Exclusive Hold	○		
	Consultation Hold	○	○	
	Call Park- System	○	○	○
	- Station	○	○	
	Call Hold Retrieve - Station	○	○	
	Call Splitting	○		○
Transferring Features	Unscreened Call Transfer to Station	○	○	○
	Screened Call Transfer to Station	○	○	○
	Screened Call Transfer to Trunk	○		○
	Ringing Transfer	○		
	Unscreened Call Transfer to Remote	○	○	○
	Call Forwarding- All Calls	○	○	
	- Busy/Off-Hook	○	○	
	- No Answer	○	○	
	- Busy/Off-Hook/No Answer	○	○	
	- to Trunk	○	○	
	Heavy Traffic Overflow Transfer to Station			○
	Camp-on to Station	○	○	○
	Interposition Call/Transfer			○
	Call Transfer via Attendant Console			○
	Released Link Operation			○
Conversation Features	Programmable Privacy	○		
	Privacy Release	○		
	Privacy Attach	○		
	Hands-Free Operation	○		
	Conference	○	○	○
	Unattended Conference	○		○
	Doorphone	○	○	○
	Flash	○		
	External Feature Access	○	○	
	Microphone Mute	○		
	Off-Hook Call Announcement (OHCA)	○		○
	Tone Through (End to End DTMF Signaling)	○		○
Paging Features	Paging All Extensions	○	○	○
	Group Paging	○	○	○
	Paging External Pagers	○	○	○
	Paging All Extensions and External Pagers	○	○	○
	Call Park and Paging			○
	Background Music (BGM) through External Pager	○	○	○

Continued

Continued

	Features	PITS	SLT	ATT
Other Features	Universal Night Answer	○	○	
	Night Service - Manual Change	○	○	○
	Flexible Night Service	○	○	○
	Account Code Entry	○	○	○
	Timed Reminder	○	○	
	Background Music (BGM)	○		
	Secret Dialing	○		○
	Assigned Feature Clear	○	○	
	Electronic Station Lock Out	○	○	
	Remote Station Feature Control	○	○	○
	Absent Message Capability	○	○	
	Message Waiting	○	○	○
	Data Line Security	○	○	
	DSS Console features	○		
	- Automatic Transfer	○		
	Dial Tone Transfer			○
	CO Access Control			○
	Search by Name/Department			○
	OGM Recording and Playing Back	○		○
	Power Failure Operation			○
	Trunk Verify			○

D. Administration

1.00 Introduction

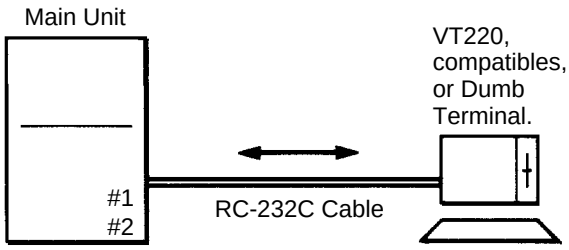
Starting up the system administration can be done using one of the following devices.

- VT220 (VT100)(default setting), Compatibles
- Dumb Terminal
- Attendant Console

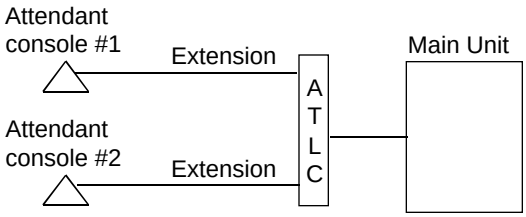
Only one terminal can perform system administration at any one time.
Starting up the system administration from a remote location is available. For details about Remote Operation, refer to Section 14-B-2.00 “System Administration from a Remote Location.”

System Configurations

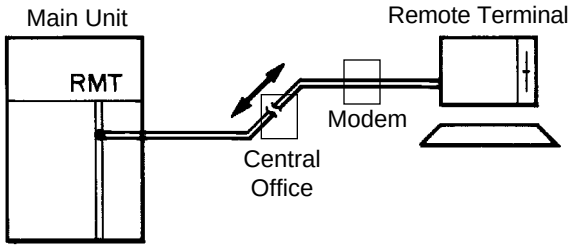
A. VT220 and Dumb terminal



B. Attendant console



C. Remote operation



2.00 System Interface

The programming and diagnostics features can be accessed either locally or remotely using the system RS-232C interface.
The system may be configured for local direct access from the data terminal, or via a modem connection that allows the data terminal to be located at a greater distance from the system than is allowed for an RS-232C interface.
For remote access, a data terminal and modem are required at the maintenance location, and the RMT card (Modem) at the system.

Two RS-232C interfaces are provided by the system.
These connections provide communication either locally or remotely between the system and devices for programming and diagnostics, external system programming data storage and Station Message Detailed Recording (SMDR). SIO #2 is used for SMDR only. SIO #1 is for programming and diagnostics, and external system programming data storage functions. Typical devices would include VT220, compatibles, personal computers and line printers.
Refer to Section 9-D-7.00 “Communication Interface” for further information.

3.00 Programming

Before starting up the basic system data programming, general feature description must be read.
For further information about general feature description, refer to Section 3 “System Features and Operation.”

Basic system data programming can be done using VT220, compatibles, dumb terminal and attendant console.

(VT220 and Compatibles user)
Refer to Section 7 “Preparation for Programming and Maintenance (VT220 and Compatibles)” and Section 9 “System Programming (VT220 and Compatibles).”

(Dumb terminal user)
Refer to Section 8 “Preparation for Programming and Maintenance (Dumb)” and Section 10 “System Programming (Dumb).”

4.00 Test

System’s built-in maintenance capabilities and the basic diagnostics in fault diagnosis and corrective maintenance are described in Section 14 “Maintenance (VT220 and Compatibles)” and Section 15 “Maintenance (Dumb).”

Self-Test (System-Detected Troubles)
System’s built-in on-line diagnostic test program monitors the troubles generated by hardware or software during on-line communication mode.

(VT220 and Compatibles user)
Refer to Section 14-D “Self-Test (System-Detected Troubles)” for further information.

(Dumb terminal user)
Refer to Section 15-D “Self-Test (System-Detected Troubles)” for further information.

Functional test by entering commands
Functional test is done by entering specific test commands when you install the new device and so on.

(VT220 and Compatibles user)
Refer to Section 14-F “Functional Test by Entering Commands” for further information.

(Dumb terminal user)
Refer to Section 15-E “Functional Test by Entering Commands” for further information.

5.00 Monitor

Monitor function provides displaying current status of “Error Log,” “Device Status” and “Traffic Information” individually on the screen.

Error Log
When a system maintenance object begins to fail periodic testing, the system automatically generates an error record which is stored in the Error Log.
Consulting the error log should be the first step in diagnosing system related troubles.
For further information, refer to Section 14-D-2.02 “Consulting the Error Log.”

Device Status
Provides information about current operation status of the following items individually on the screen.

- System
- Card
- Port
- Conference Trunk

Traffic
Provides current traffic information about following items individually.

- Station
- Trunk Group
- Attendant Console
- DISA
- OGM1
- OGM2
- AGC

Refer to Section 14-G “Monitor” for further information about monitor.

6.00 Backup Utility

Making backups of the system programming data and keeping it is extremely important in the unlikely event that system programming data are lost in a system failure.
Backup Utility consists of “save” and “load.”
Save is to transmit a file of data from your system to backup device.
Load is to send a file of data on your system from backup device.
Before beginning saving or loading, check carefully that you are going to the direction you want.
It’s very easy to erase files if you make a mistake and confuse saving and loading.
Starting up the backup operation can be done both at on-site and from a remote location.
Refer to Section 16 “Backup-Utility on-site” and Section 17 “Backup Utility-Remote Location” for further information.

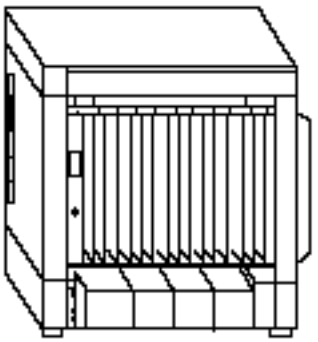
E. System Configuration

1.00 Basic Shelf

Basic Shelf is always required.
Basic Shelf contains its own power supply and 15 mounting spaces called “Slot.” CPU card and T-SW card are installed at factory.
Basic Slot 2 is provided for installing the optional T-SW OHCA card.
The remaining 12 slots provide mounting space for the various cards that can be used. Any optional service card can be mounted in any of these 12 slots.
So these slots are called “Free Slot.”

Basic Shelf consists of the followings.

No.	Name	Number
1	POWER-for Power Unit	1
2	BS1 (Basic Slot 1) - for CPU card	1
3	BS2 (Basic Slot 2) - for optional T-SW OHCA card	1
4	BS3 (Basic Slot 3) - for T-SW card	1
5	FS1 to 12 (Free Slot 1 to 12) - for optional service card	12



Construction of Basic Shelf

POWER	FS1	FS2	FS3	FS4	FS5	FS6	FS7	FS8	FS9	FS10	FS11	FS12	BS1	BS2	BS3

Free Slot can be equipped with the following optional service cards.

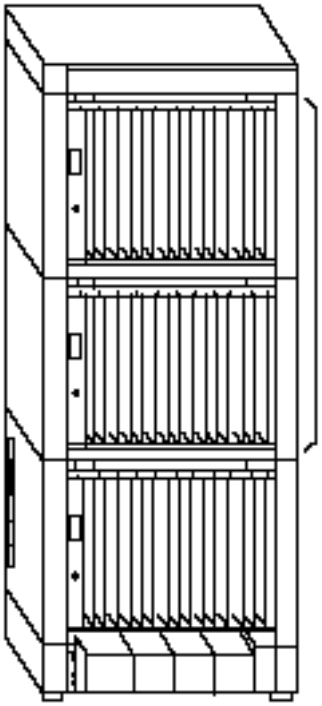
a. Loop start central office trunk (LCOT) Card
b. Loop start central office trunk with Pay-Tone Detection (PCOT) Card
c. Loop start central office trunk with Polarity Reversal Detection (RCOT) Card
d. Ground start central office trunk (GCOT) Card
e. Hybrid line circuit (HLC) Card
f. Proprietary ITS Line circuit (PLC) Card
g. Single line telephone line circuit (SLC) Card
h. Single line telephone line circuit with Message Waiting (MSLC) Card
i. Direct inward dialing trunk (DID) Card
j. Both-way direct inward dialing access (DID-W) Card
k. MFC direct inward dialing access (DID-MFC) Card
l. Off premise extension trunk (OPX) Card
m. Doorphone circuit (DPH) Card
n. Automatic Gain control (AGC) Card
o. Direct inward system access (DISA) Card
p. Remote circuit (RMT) Card
q. Attendant console Line circuit (ATLC) Card
r. E&M Card
s. T-1 Digital Trunk Card (Free slot 1, 5 or 9 only)
t. E-1 Digital Trunk Card (Free slot 1, 5 or 9 only)

2.00 Expansion Shelf

Expansion Shelf is provided optionally.
Up to two Expansion Shelves (1 and 2) can be installed on the Basic Shelf to enlarge the ability of the system.
Each Expansion Shelf contains its own power supply and 15 mounting spaces for any optional card required for system expansion.
Expansion Shelf is installed on top of the basic shelf.

Expansion Shelf consists of the following.

No.	Name	Number
1	POWER-for Power Unit	1
2	FS1 to 15 (Free Slot) - for optional service card	15



Construction of Expansion Shelf (1 and 2).

POWER	FS1	FS2	FS3	FS4	FS5	FS6	FS7	FS8	FS9	FS10	FS11	FS12	FS13	FS14	FS15

Free Slot can be equipped with the following optional service cards.

a. Loop start central office trunk (LCOT) Card
b. Loop start central office trunk with Pay-Tone Detection (PCOT) Card
c. Loop start central office trunk with Polarity Reversal Detection (RCOT) Card
d. Ground start central office trunk (GCOT) Card
e. Hybrid line circuit (HLC) Card
f. Proprietary ITS Line circuit (PLC) Card
g. Single line telephone line circuit (SLC) Card
h. Single line telephone line circuit with Message Waiting (MSLC) Card
i. Direct inward dialing trunk (DID) Card
j. Both-way direct inward dialing access (DID-W) Card
k. MFC direct inward dialing access (DID-MFC) Card
l. Off premise extension trunk (OPX) Card
m. Doorphone circuit (DPH) Card
n. Automatic Gain control (AGC) Card
o. Direct inward system access (DISA) Card
p. Remote circuit (RMT) Card
q. Attendant console Line circuit (ATLC) Card
r. E&M Card
s. T-1 Digital Trunk Card (Free slot 1, 5 or 9 only)
t. E-1 Digital Trunk Card (Free slot 1, 5 or 9 only)

3.00 Attendant Console

Functions

Up to two Attendant Consoles (optional-with CRT display) can be equipped with the system.

The attendant console allows one or two attendants to answer, screen, and control incoming calls using Switched Loop Operation. With attendant operation, incoming calls can be screened and forwarded to the proper party for resolution, messages taken for absent users, or forwarded to alternate locations.

The attendant console is not dedicated to call processing and feature accessing, and can be used for system data programming and diagnostics.

Refer to Section 6 “Station Features and Operation-Attendant Console” for further information about attendant console call processing features, and Section 13 “Station Programming-Attendant Console” for further information about attendant console local programming mode.

Operation

Attendant console is operable for the following.

- Call Processing mode
- System programming
- Diagnostics
- Editing local data

4.00 CPU Card

Functions

(1)Call process and basic shelf main protocol.
(Microprocessor 80C286).
Time switch (TSW) control, detection of system clock alarm, basic shelf power down and expansion shelf power down alarm, watch dog.

(2)System switch interface.
There are Operation Switch (MODE) (10 modes, 0 to 9) and System Administration Device Selection Switch (SYSTEM) (10 modes, 0 to 9) on the CPU rotary switch. When the system lost the programming data because of system resetting, set system operation mode using these switches when starting up the system again.

(3)Terminal interface.
CPU card has two RS-232C terminal interfaces.

Operation

(1)Operation Switch (MODE) and System Administration Device Selection Switch (SYSTEM) are set by turning with screw driver.

(2)Reset switch is non-lock push switch.

(3) LED for battery alarm lights when voltage of Lithium-battery becomes too low (less than 2.5V).

(4)LED for watch dog lights when CPU’s software is running away.

(5)Watch dog is detecting CPU’s running away.

5.00 TSW Card

Functions

(1)Time switch.
Capability of switching voice is 512ch x 512ch.

(2) Generation of system clocks.
System clocks are 2,048MHz (PCM clock), 8kHz (PCM frame clock).

(3)Generation of call progress tone.
Call progress tones are 350+440Hz, 620Hz, 480+620Hz and 440+480Hz.

(4) Conference circuit.
T-SW card has 3 party x 8 conference's circuits.
For CO-CO speech amp., AGC card can be inserted to a free slot of basic or expansion shelf.

(5)Paging interface.
T-SW card has 2 pre-amp. circuits for paging. In order to adjust volume, each amp circuit is equipped with a knob.

(6)Music-in interface.
T-SW card has 2 interface circuits for music on hold or BGM.

Operation

(1)A knob for adjusting volume of external paging is turned with a screw driver from front of T-SW card.

(2)LED indicator or the T-SW card lights when system reset or T-SW local reset occurs.

6.00 Power Unit

Functions

(1)Power supply (+5, ±15, GND) for a shelf.

(2)External battery interface. (+24)
Battery power (+24) is input from a battery interface unit in basic shelf with a 2 wire cable.

(3)Power failure detection.
A circuit in POW detects power failures of +5VDC, ±15VDC, AC power supply, and 2 power alarm signals are sent to CPU card as DC alarm and AC alarm.

(4)Generation of bell signal. (20Hz, 100V0p)

7.00 LCOT Card

Functions

LCOT (KX-T96180)-----Loop Start Central Office Trunk card (8 CO Lines/ card)

(1)Loop start CO interface.
CPC detection, 1 DTMF driver.
With loop start, you seize a line by bridging through a resistance the tip and ring (both wires) of your telephone line.

(2)Power failure transfer (PFT) by each port.
Tip/Ring of CO are connected to a CO interface circuit, and directly to LCOT PFT modular. When power failure occurs, CO Tip/Ring leads are directly connected to SLT Tip/Ring leads, but LCOT PFT modular and SLT PFT modular should be connected each other with connection cord in advance.

(3)Diagnostic transfer (DT) by each port.
A diagnostic relay is placed in Tip/Ring of each port.
During diagnostic test, only one diagnostic relay in an LCOT of a system is activated.

Operation

LED indicator on the LCOT card lights when the system reset or LCOT local reset occurs.

8.00 RCOT Card

Functions

RCOT (KX-T96183) ----Loop Start Central Office Trunk with Polarity Reversal Detection card (8 CO Lines/card)

(1)Loop start CO interface.
CPC detection, 1 DTMF driver.
With loop start, you seize a line by bridging through a resistance the tip and ring (both wires) of your telephone line.

(2)Power failure transfer (PFT) by each port.
Tip/Ring of CO are connected to a CO interface circuit, and directly to RCOT PFT modular. When power failure occurs, CO Tip/Ring leads are directly connected to SLT Tip/Ring leads, but RCOT PFT modular and SLT PFT modular should be connected each other with connection cord in advance.

(3)Diagnostic transfer (DT) by each port.
A diagnostic relay is placed in Tip/Ring of each port.
During diagnostic test, only one diagnostic relay in an RCOT of a system is activated.

Operation

LED indicator on the RCOT card lights when the system reset or RCOT local reset occurs.

9.00 PCOT Card

Functions

PCOT (KX-T96180)-----Loop Start Central Office Trunk with Pay Tone Detection card (4 CO Lines/card)

(1)Loop start CO interface.
CPC detection, 1 DTMF driver.
With loop start, you seize a line by bridging through a resistance the tip and ring (both wires) of your telephone line.
Pay tone detection (12kHz/16kHz)

(2)Power failure transfer (PFT) by each port.
Tip/Ring of CO are connected to a CO interface circuit, and directly to PCOT PFT modular. When power failure occurs, CO Tip/Ring leads are directly connected to SLT Tip/Ring leads, but PCOT PFT modular and SLT PFT modular should be connected each other with connection cord in advance.

(3)Diagnostic transfer (DT) by each port.
A diagnostic relay is placed in Tip/Ring of each port.
During diagnostic test, only one diagnostic relay in an PCOT of a system is activated.

Operation

LED indicator on the PCOT card lights when the system reset or PCOT local reset occurs.

10.00 GCOT Card

(◆ for U.S.A. and Canada only)

Functions

GCOT (KX-T96181) ----Ground Start Central Office Trunk card (8 CO Lines/ card)

(1)Ground start CO interface.
CPC detection, 1 DTMF driver.
A way of signaling on subscriber trunks in which one side of the two wire trunk (typically the “Ring” conductor of the Tip and Ring) is momentarily grounded to get dial tone.

(2)Power failure transfer (PFT) by each port.
Tip/Ring of CO are connected to a CO interface circuit, and directly to GCOT PFT modular. When power failure occurs, CO Tip/Ring leads are directly connected to SLT Tip/Ring leads, but GCOT PFT modular and SLT PFT modular should be connected each other with connection cords in advance.

(3)Diagnostic transfer (DT) by each port.
A diagnostic relay is placed in Tip/Ring of each port.
During diagnostic test, only one diagnostic relay in a GCOT of a system is activated.

Operation

LED indicator on the GCOT card lights when the system reset or GCOT local reset occurs.

11.00 PLC Card

Functions

PLC card (KX-T96172)

(1)PITS and DSS console interface. (8 circuits/ card)
Maximum loop resistance : 40 ohms
Power supply 1 : +30V (supplied through speech path, and with current limitation circuit).
Power supply 2 : +15V (supplied through data line).

(2)PITS (KX-T123230D, KX-T123235, KX-T7130) interface with OHCA feature.
When a PITS with OHCA feature is connected to a port, an OHCA piggy back card (KX-T96136) should be mounted to its interface circuit.

Operation

LED indicator on the PLC card lights when the system reset or PLC local reset occurs.

12.00 SLC Cards

12.01 SLC Card

Functions

SLC card (KX-T96174)

(1)Standard SLT interface.
Maximum loop resistance : 600 ohms. (including SLT)
Power supply : +30V (with current limitation circuit.)
2 DTMF receivers, dial pulse detector.

(2)Power Failure Transfer (PFT) by ports 1 through 8*.
When power failure occurs, SLT Tip / Ring are led by a PFT relay, but SLT PFT modular and LCOT / GCOT modular should be connected each other by connection cords in advance.

* 3 ports are available for KX-T96174X.

(3) Diagnostic transfer (DT) by each port.
Diagnostic relay is placed in Tip / Ring of each port.
During diagnostic test, only one diagnostic relay in the SLT of a system is activated.

Operation

LED indicator on the SLC card lights when system reset or SLC local reset occurs.

12.02 SLC-M Card

Functions

SLC-M Card (KX-T96175)

(1)
(2) Same as 12.01 SLC Card
(3)

(4) SLT with Message Waiting Lamp interface
Power supply to Message Waiting Lamp: +80VDC (when 1mA)

Operation

Same as 10.01 SLC Card

13.00 HLC Card

Functions

HLC card (KX-T96170) is for PITS, DSS console and SLT.
(8 extensions / card)

(1)Standard SLT interface. SLT interface is quite same as that of SLT card.

(2)PITS and DSS console interface. PITS and DSS console interface is quite same as that of PLC card.

(3)Interface for PITS (KX-T123230D, KX-T123235, KX-T7130) with OHCA feature.
Interface for PITS (KX-T123230D, KX-T123235, KX-T7130) with OHCA feature is quite same as that of PLC.

(4)Power failure transfer by each port. (when using SLT)
Power failure transfer is quite same as that of SLC card.

(5) Diagnostic transfer by each port. Diagnostic transfer is quite same as that of SLC card.

Operation

LED indicator on the HLC card lights when the system reset or HLC local reset occurs.

14.00 ATLC Card

Functions

(1)ATLC card. (KX-T96141)
Attendant console interface. (2 circuits / card)
(Attendant console : KX-T96300)

Operation

LED indicator on the ATLC card lights when the system reset or attendant console local reset occurs.

15.00 DISA Card

Functions

DISA (Direct Inward System Access) card. (KX-T96191)

(1)4 OGM trunks.
OGM duration : 30 seconds,
OGM Battery Backup : 5 days.
The number of OGM : 1,
Recording Algorithm : ADPCM.

(2)4 CO-CO speech paths without amp.
A CO-CO speech path consists of up-path and down-path.
Up-path is from call-originate CO to call-answer CO, and 1 DTMF receiver and one speech end detector is connected to it.
Down-path is from call-answer CO to call-originate CO and one speech end detector is connected to it.

(3)Speech end detector.
Speech end detector detects call progress tones.

Operation

LED indicator on the DISA card lights when the system reset or DISA local reset occurs.

16.00 DID Card

Functions

(1) DID (Direct Inward Dialing) card (KX-T96182)

Wink start/immediate start DID interface. (4 circuits/card)
45V used in circuits is originated from DC-DC converter in DID card.
DID card will receive pulse signal only.

(2) Both-way DID card (KX-T96182D)
Wink start/immediate start DID interface. (4 circuits/card)
a) Incoming
- 45V used in circuit is originated from DC-DC converter in DID card.
- Signaling - Pulse/DTMF

b) Outgoing
- Seize a line by bridging through a resistance between tip and ring.
- Signaling - Pulse/DTMF

(3) DID card with MFC (KX-T96182CE)
Wink start/immediate start DID interface. (4 circuits/card)
a) Incoming
- 48V used in circuit is originated from DC-DC converter in DID card.
- Signaling - MFC-R2

b) Outgoing
- Seize a line by bridging through a resistance between tip and ring.
- Signaling - MFC-R2 signal

Operation

LED indicator on the DID card lights when the system reset or DID local reset occurs.

17.00 OPX Card

Functions

OPX (KX-T96185)-----Off Premise Extension.
(4 OPX Lines / card)
OPX Power Unit is necessary.

OPX Power Unit should be connected with OPX card, and Single Line Telephones for OPX should be connected with OPX card.

18.00 DPH Card

Functions

Doorphone card (KX-T96161)

(1)Doorphone interface (4 circuits / card)
4 doorphones can be connected using a modular connector.
Doorphone chime is sent to both extension and doorphone at a time when a doorphone button is pressed.

(2) Door opener interface (4 circuits / card)
DPH card has 4 relays for door opener. (120VAC, 1A)
The relay opens for doorlock, closes for door release. It also opens in the case of power failure.

Operation

Terminal plate on the DPH card has 8 terminals, 2 leads from door opener are directly connected to two of 8 terminals.
Operation interval of door opener is 3 seconds.

19.00 AGC Card

Functions

AGC (Automatic Gain Control) card (KX-T96193)

(1)4 CO-CO speech paths with AGC Amp. and Echo-Suppressor.
A CO-CO speech path consists of up-path and down-path, up-path is from call-originate CO to call-answer CO, and AGC amp is inserted and speech end detector is connected.
Maximum amplitude rate of AGC is 14 dB.
Echo-Suppressor is inserted in a CO-CO speech path.

(2) 4 DTMF transceivers.
DTMF transceiver is used as DTMF repeater. So, AGC card microprocessor controls DTMF repeater.

(3) 8 Speech End Detectors.
Speech end detector of AGC is quite same as that of DISA card.

Operation

LED indicator on the AGC card lights when the system reset or AGC local reset occurs.

20.00 RMT Card

Functions

RMT (Remote Circuit) card (KX-T96196)

Modem (300/1200 bps) for remote administration.
Modem protocol (1) free wheeling (TTY).

Operation

LED indicator on the RMT card lights when the system reset or RMT local reset occurs.

21.00 T-SW Conference Expansion Card

Functions

T-SW Conference Expansion card (KX-T336104)

Mounted on T-SW card.
3 party x 64 conference circuits.

22.00 OHCA Card

Functions

OHCA (Off Hook Call Announcement) card (KX-T96136)

This card is mounted on HLC card (KX-T96170) or PLC card (KX-T96172)

This card includes 2 OHCA circuits.
Allows an extension user to intrude through the speaker into another extension that is in conversation using the handset.
This feature is available only against the following PITS telephones: KX-T123230D, KX-T123235, KX-T7130.

23.00 T-SW OHCA Expansion Card

Functions

T-SW OHCA Expansion card (KX-T336105)

This card is mounted on Basic Slot 2 for OHCA feature.
OHCA card (KX-T96136) for extension port must be installed on the HLC card or PLC card in advance.

24.00 OPX Power Unit

Functions

OPX (Off Premise Extension) Power Unit (KX-T96186).

Input: 115/200/220/240V (voltage selector)
Output is Ringing Signal (100VAC, 20Hz) and 48V DC for OPX Card.

25.00 E&M Card

Functions

(1) E&M (Tie) Line Types..... Type 5 only.
(2) Transmission..... 2-wire/4-wire voice path (Programmable)
(Note) Maximum cabling distance of E&M line cord (twisted cable): 22 AWG: Under 9.6 km
(3) Transmission levels
2-wire voice path..... -3 dB (transmit/receive)
4-wire voice path..... -3 dB normal (transmit/receive)
Programmable (-6 dB,-3 dB,0 dB,+3 dB)
(4) Signaling DTMF/Pulse
(5) E lead Battery -48 VDC, 20 mA to ground (max.)
Sensitivity 5 mA or 2000 Ω to (min) ground (max.)
(6) M lead Permitted current : 30mA (max.)
Permitted voltage: ±100V (max.)

26.00 T-1 Digital Trunk Card

Functions

T-1 interface.(1 circuit / card)
T-1 is a digital transmission link with a capacity of 1.544 Mbps.
A T-1 card carries 24 voice conversations.
Frame Format : D4 / ESF
Line Coding : AMI / B8ZS
Channel Type : LCO / GCO / DID / OPX / TIE
Signaling : DP / DTMF
(DTMF:24 receivers and 6 generators)

Operation

RED LED indicator on T-1 card lights when the system reset or T-1 card local reset, T-1 line fault occurs.

27.00 E-1 Digital Trunk Card

Functions

E-1 interface.(1 circuit / card)
E-1 is a digital transmission link with a capacity of 2.048Mbps.
An E-1 card carries 30 voice conversations.

Frame Format : PCM30 / PCM30-CRC
Line Coding : HDB3 / AMI
Channel Type : DR2 / E&M-C /E&M-P
Signaling : DP / DTMF / MFC-R2
(DTMF:8 receivers and 2 generators)
(MFC-R2:16 receivers and 16 generators)

Operation

RED LED indicator on E-1 card lights when the system reset or E-1 card local reset, E-1 line fault occurs.

Section 2

Installation

(Section 2)

Installation

Contents

A. Preparation

1.00 Introduction

This section describes the procedures required to install the KX-T336 System.
Detailed instructions for planning the installation site, installing the shelves and optional cards, and cabling of peripheral equipments are provided.
Further information on system expansion and peripheral equipment installation is included.

2.00 Before Installation

Please read the following notes concerning installations and connections before installing the KX-T336 system.

1) Installation Cautions

- Avoid installing the KX-T336 system in the following places. (Doing so may result in malfunction, noise, or discoloration.)

1. In direct sunlight and hot, cold, or humid places. [Temperature range: 32°F-104°F (0°C-40°C)]
2. Sulfuric gases produced in areas where there are thermal springs, etc. may damage the equipment or contacts.
3. Places in which shocks or vibrations are frequent or strong.
4. Dusty places, or places where water or oil may come into contact with the unit.
5. Near high-frequency generating devices such as sewing machines or electric welders.
6. On or near computers, telexes, or other office equipments, as well as microwave ovens or air conditioners.
   (It is preferable not to be installed in the same room with the above equipment.)
7. Install at least 6 feet (1.8 m) away from televisions. (both the KX-T336 system and EMSS proprietary telephones)
8. Do not obstruct area around the KX-T336 system. (for reasons of maintenance and inspection—be especially careful to allow space for cooling above and at the sides of the KX-T336 system)

2) Wiring Cautions

- Make sure to keep the following instructions when wiring.

1. Do not wire the telephone cable in parallel with an AC power source, computer, telex, etc. If the cables are run near those wires, shield the cables with metal tubing or use shielded cables and ground the shields.
2. If cables are run on the floor, use protectors or the like to protect the wires where they may be stepped on. Avoid wiring under carpets.
3. Avoid sharing the same power supply outlet for computers, telexes, and other office equipments. Otherwise, the operation of KX-T336 system may be interrupted by the induction noise from such equipments.
4. Please use one pair telephone wire for extension connection of (telephone) equipments such as single line telephone, data terminal, answering machine, computer etc., except proprietary telephone (KX-T7130, KX-T7030, KX-T123230D etc.,).

B. Installation of Shelf

This subsection describes the installation of the shelf, with information on expanding the capacity of an existing system.

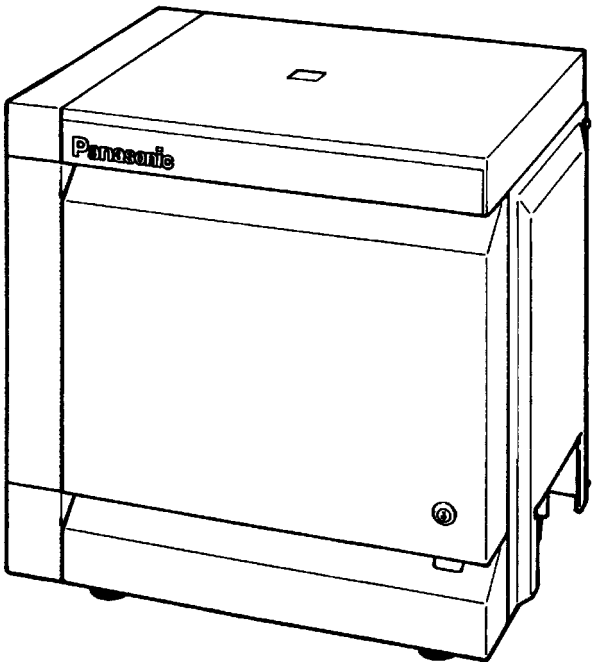
Building Block System provides the enlargement of system's ability by installing the optional Expansion Shelf.
Up to two Expansion Shelves can be installed to the system.
Each expansion shelf can be equipped with up to 120 lines (including Extensions and CO lines).

The system can consist of one, two or three shelves (Basic, Expansion 1 and Expansion 2).
Each shelf contains its own power supply.

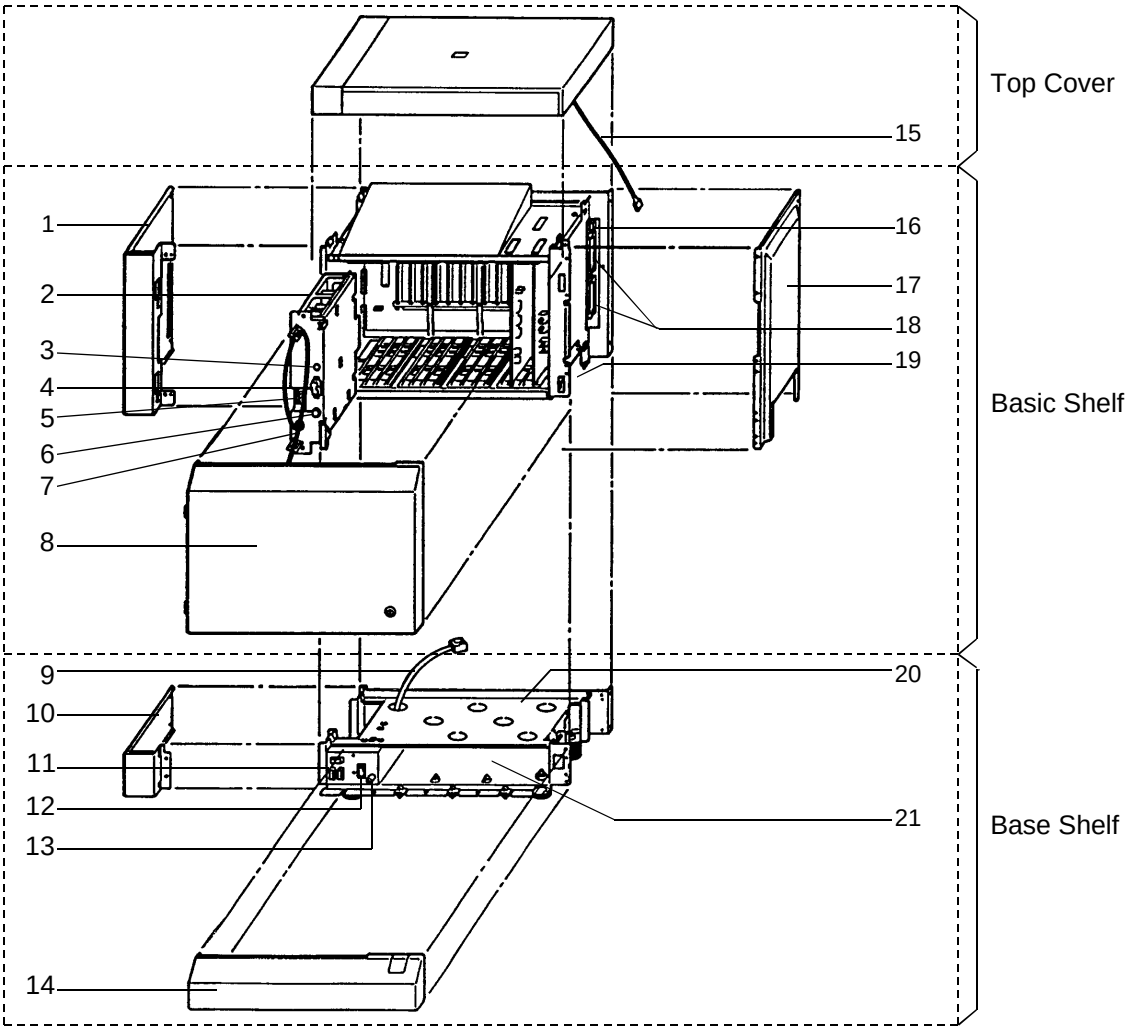
1.00 Basic Shelf

Basic Shelf is always required and it can be equipped with up to 96 lines (including Extension and CO lines).
The basic shelf includes top cover and base shelf.

The following figure shows a basic system composed of a basic shelf only.



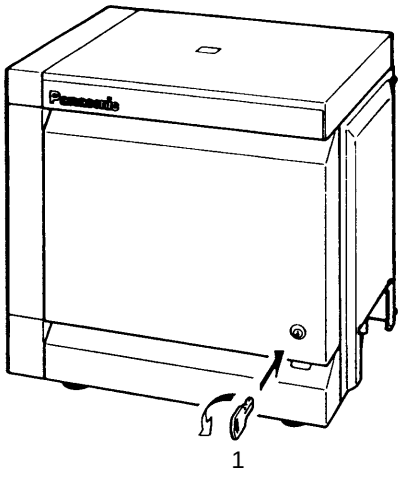
1.01 Basic Shelf Assembly

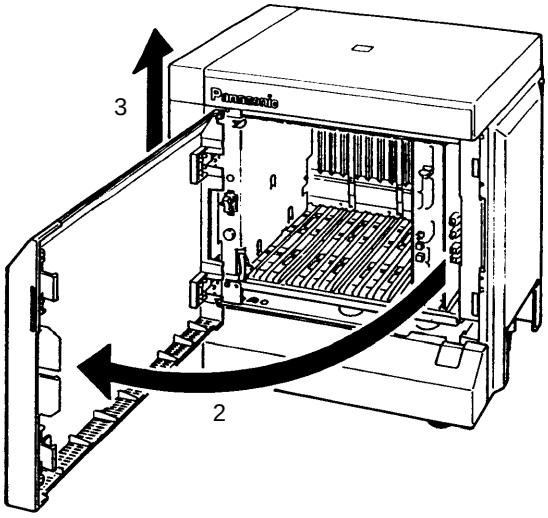


1. Side Panel (Left)
2. Power Unit
3. Power Indicator
4. Power Switch
   (Turns ON and OFF the Power of Basic Shelf)
5. Backup Battery Connector
   (Connects the Battery Adaptor Cable)
6. Fuse
7. Power Supply Cable
8. Front Panel
9. Transform Cord
10. Base Side Panel (Left)
11. Power Supply Cable Connector
12. Main Power Switch
    (Turns ON and OFF the Power of Whole Unit)
13. Ground Wire Connector (GND)
14. Base Front Panel
15. LED Cable
16. LED Cable Connector
    (Connects the LED Cable)
17. Side Panel (Right)
18. Flat Cable Connector
    (Connects the Flat Cable from Expansion Shelf)
19. Cable Opening
20. Base Board
21. Battery Adaptor Compartment

1.02 Removing the Panels

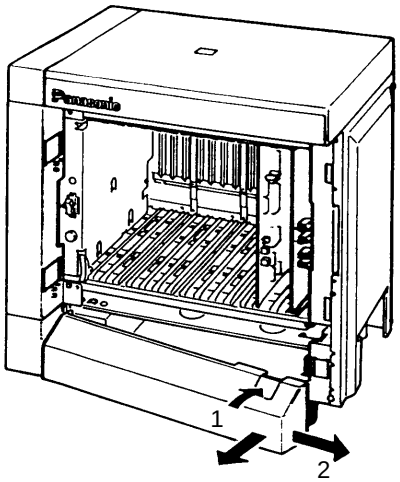
Front Panel





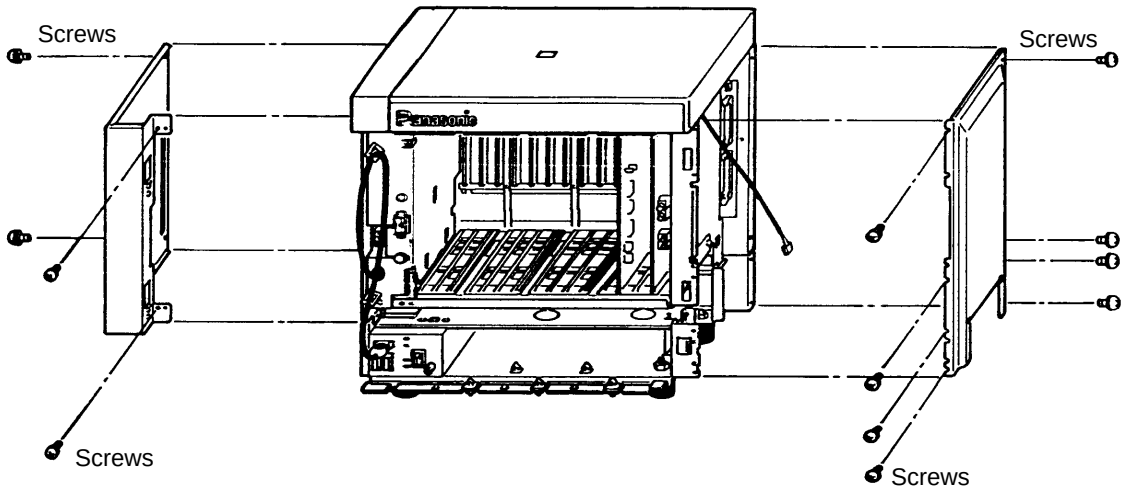
1. Rotate the key on the front panel counterclockwise to unlock.
2. Open the front panel toward you at right angles to the basic shelf.
3. Remove the front panel by lifting it straight up.

Base Front Panel



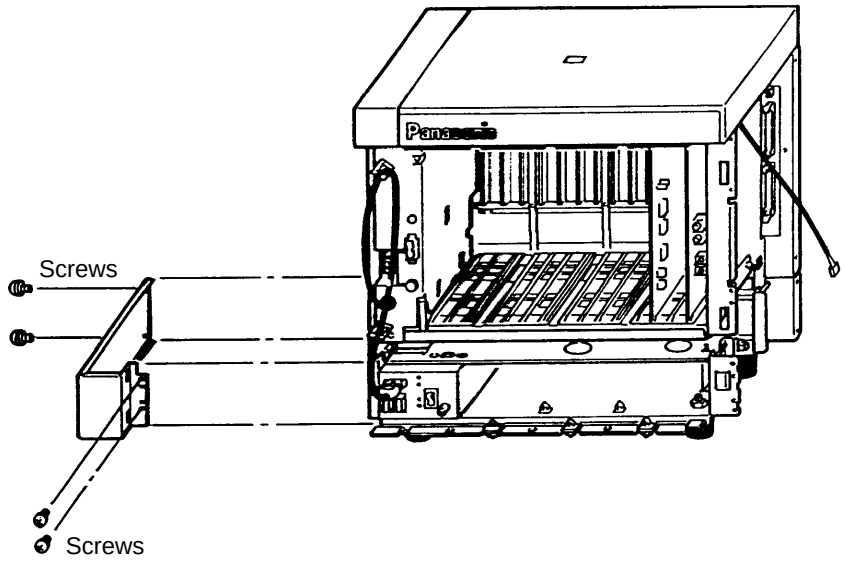
1. Open the base front panel toward you while holding down the button on the panel.
2. Pull out the base front panel to the right.

Side Panel



1. Remove the right side panel by loosening the eight screws.
2. Remove the upper left side panel by loosening the four screws.

Base Side Panel



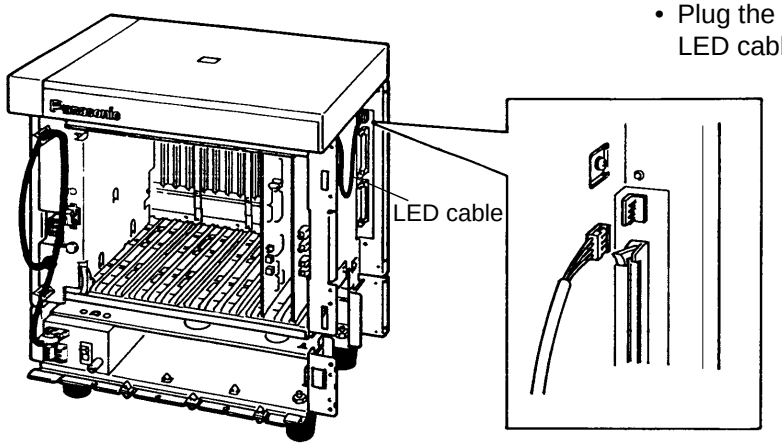
1. Remove the lower left side panel by loosening the four screws.

Note :
If the system is to be expanded to 2-Shelf System, proceed to Section 2-B-2.00 "Expansion to 2-Shelf System."

1.03 Cable Connections

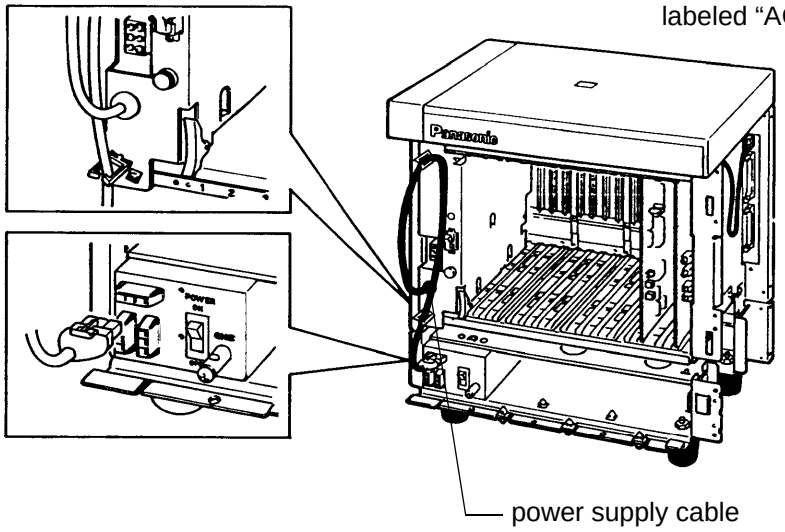
LED Cable

- Plug the LED cable (on the top cover) into the LED cable connector (on the basic shelf).



Power Supply Cable

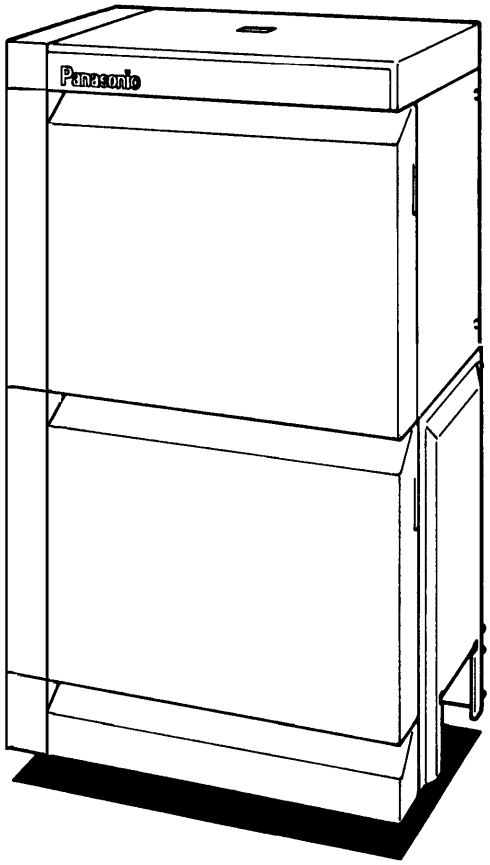
- Plug the power supply cable (on the basic shelf) into the power supply cable connector labeled “AC OUT 1” (on the base shelf).



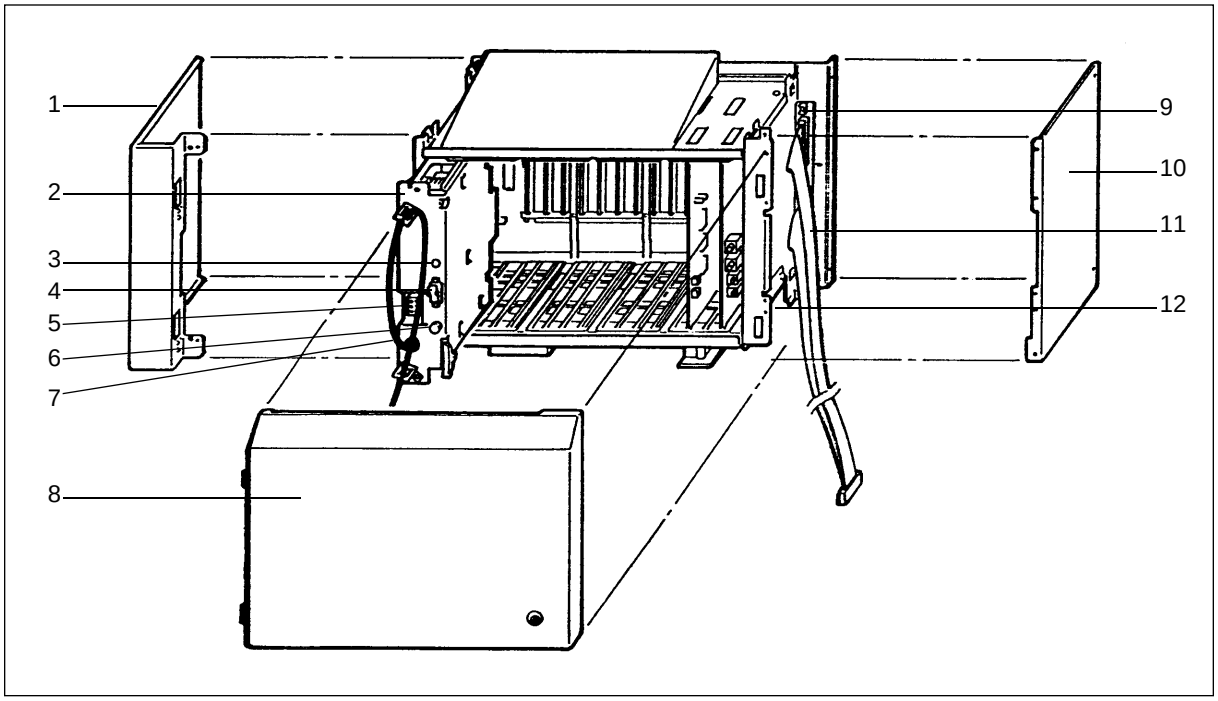
2.00 Expansion to 2-Shelf System

The KX-T336 System can be expanded to 2-Shelf System by installing the Expansion Shelf 1 on the Basic Shelf.
The 2-Shelf system can be equipped with up to 216 lines (including extensions and CO lines).

The following figure shows a 2-Shelf System composed of a basic shelf and an expansion shelf.



2.01 Expansion Shelf Assembly



1. Side Panel (Left)
2. Power Unit
3. Power Indicator
4. Power Switch
   (Turns ON and OFF the Power of Expansion Shelf)
5. Backup Battery Connector
   (Connects the Battery Adaptor Cable)
6. Fuse
7. Power Supply Cable
8. Front Panel
9. LED Cable Connector
   (Connects the LED Cable)
10. Side Panel (Right)
11. Flat Cable
12. Cable Opening

Note :

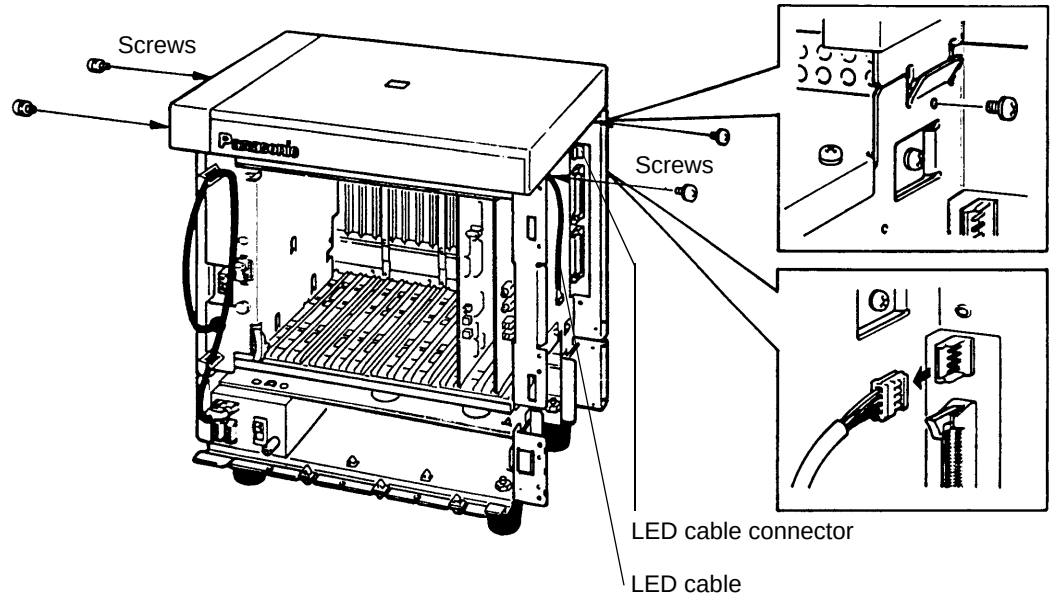
The construction of Expansion Shelf 1 and Expansion Shelf 2 is identical to each other.

2.02 Removing the Panels

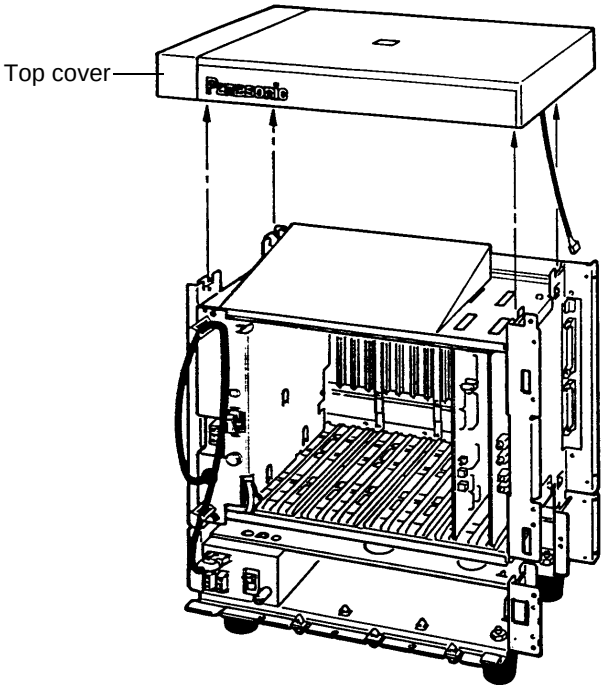
<Basic Shelf>

Removing the Top Cover

1)



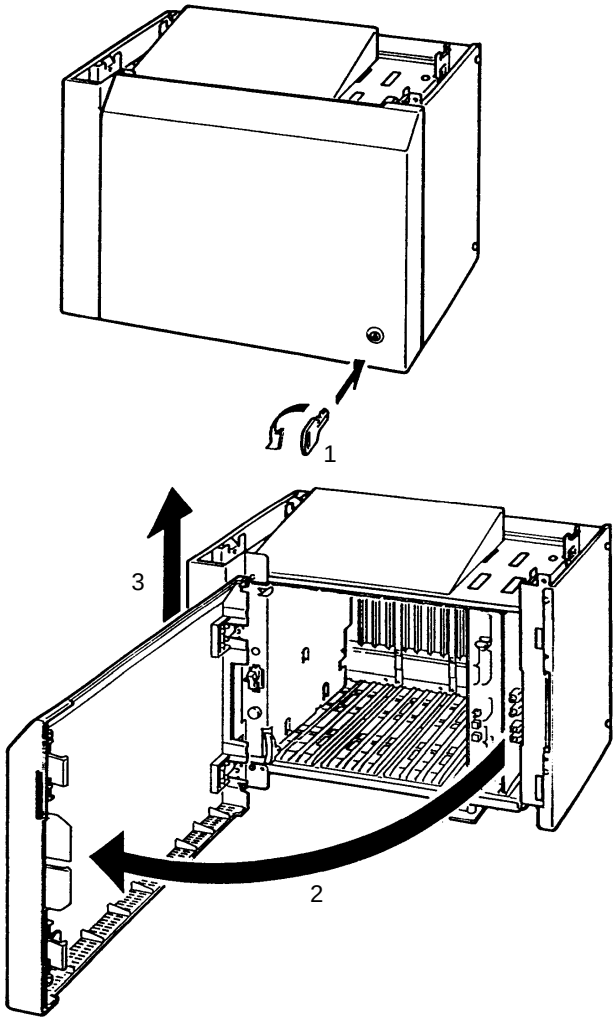
2)



1. Disconnect the LED cable (on the top cover) from the LED cable connector (on the basic shelf).
2. Remove the top cover by loosening the four screws.

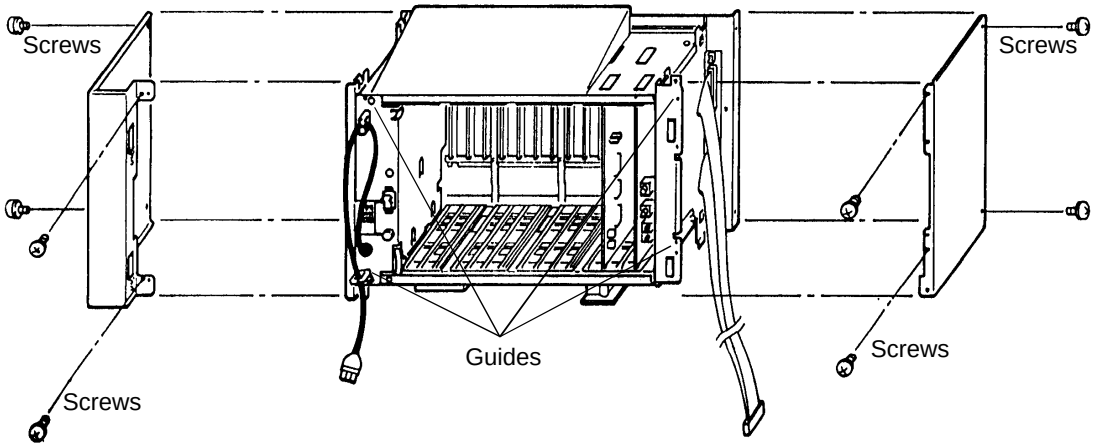
<Expansion Shelf>

Front Panel



1. Rotate the key on the front panel counterclockwise to unlock.
2. Open the front panel toward you at right angles to the expansion shelf.
3. Remove the front panel by lifting it straight up.

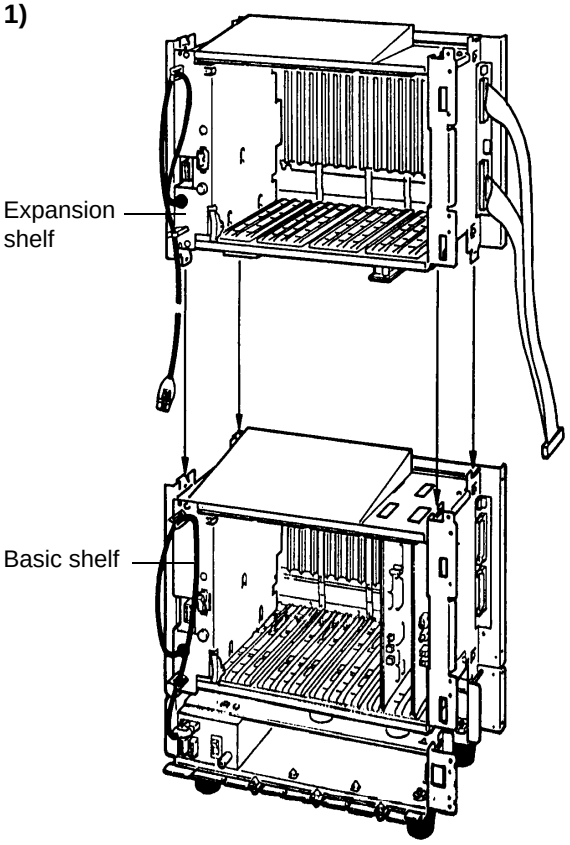
Side Panel



1. Remove the right side panel by loosening the four screws.
2. Remove the left side panel by loosening the four screws.

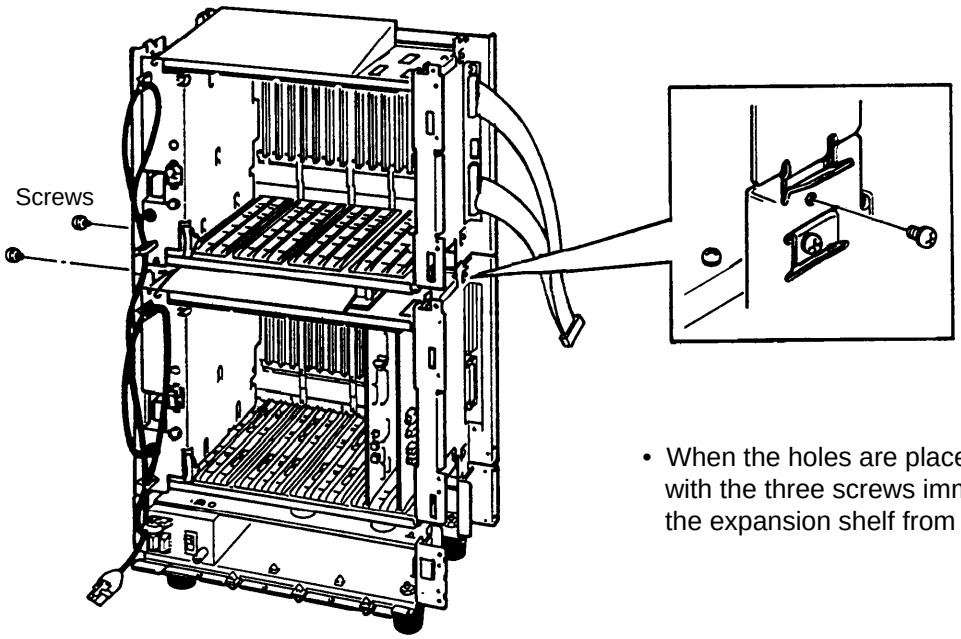
2.03 Stacking on the Basic Shelf

1)



- To connect the expansion shelf with basic shelf, place the holes of the expansion shelf exactly on the holes of the basic shelf.

2)



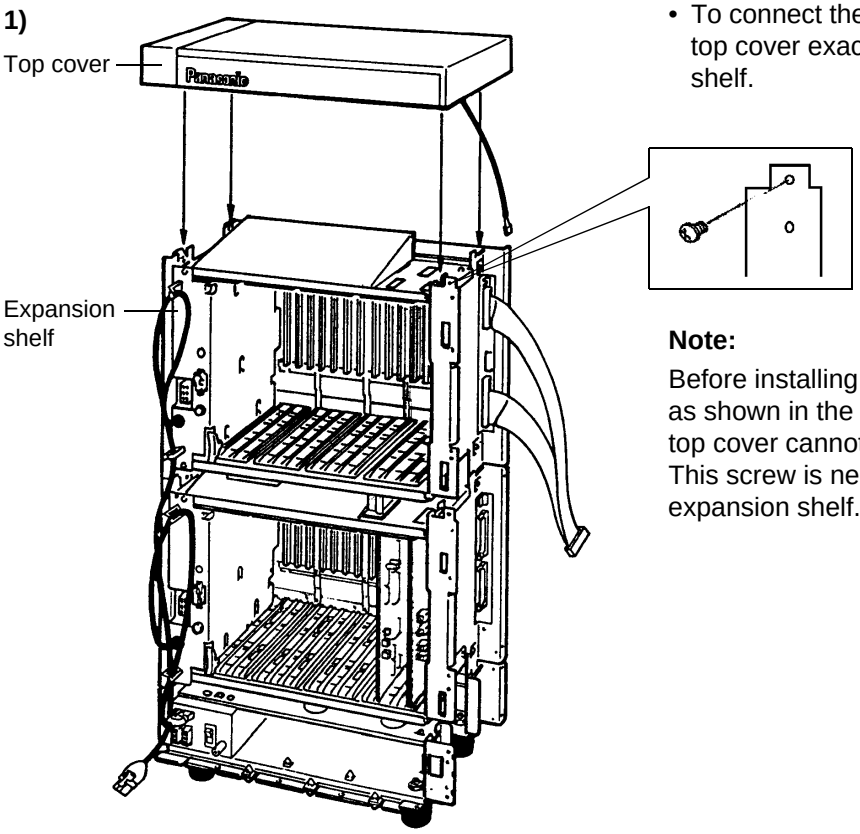
- When the holes are placed properly, fix them with the three screws immediately to prevent the expansion shelf from falling down.

Note :

If the system is to be expanded to 3-Shelf System, proceed to Section 2-B-3.00 “Expansion to 3-Shelf System.”

2.04 Installation of Top Cover

1)

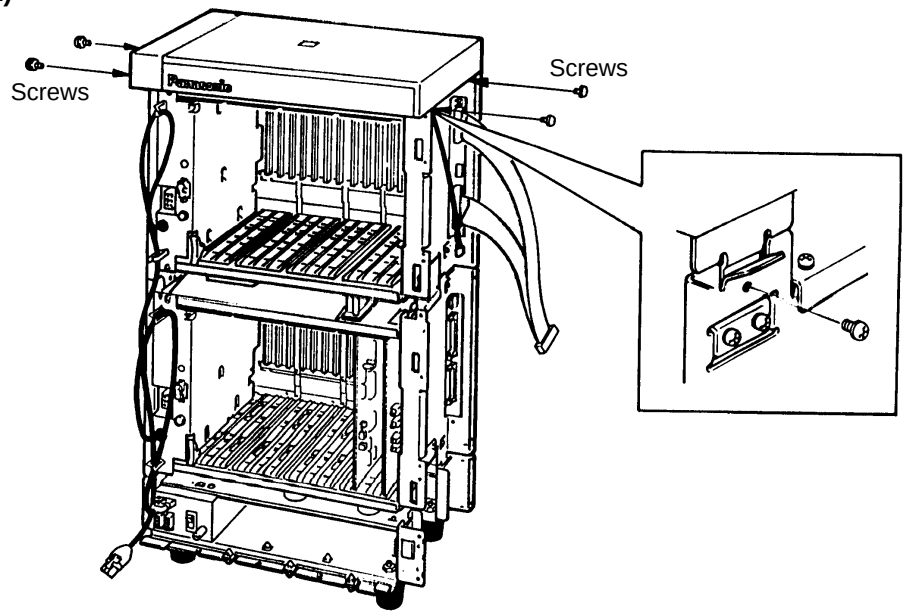


- To connect the top cover, place the holes of the top cover exactly on the holes of the expansion shelf.

Note:

Before installing the top cover, remove a screw as shown in the illustration above. Otherwise the top cover cannot be installed properly.
This screw is necessary for installing an expansion shelf.

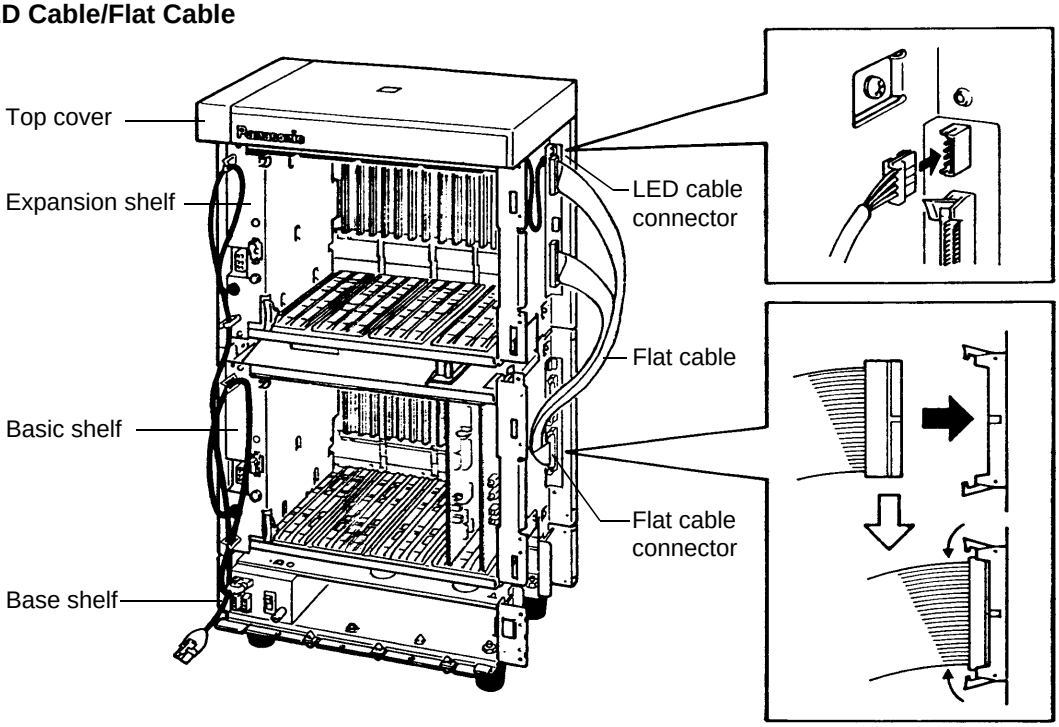
2)



- When the holes are placed properly, fix them with the four screws immediately to prevent the top cover from falling down.

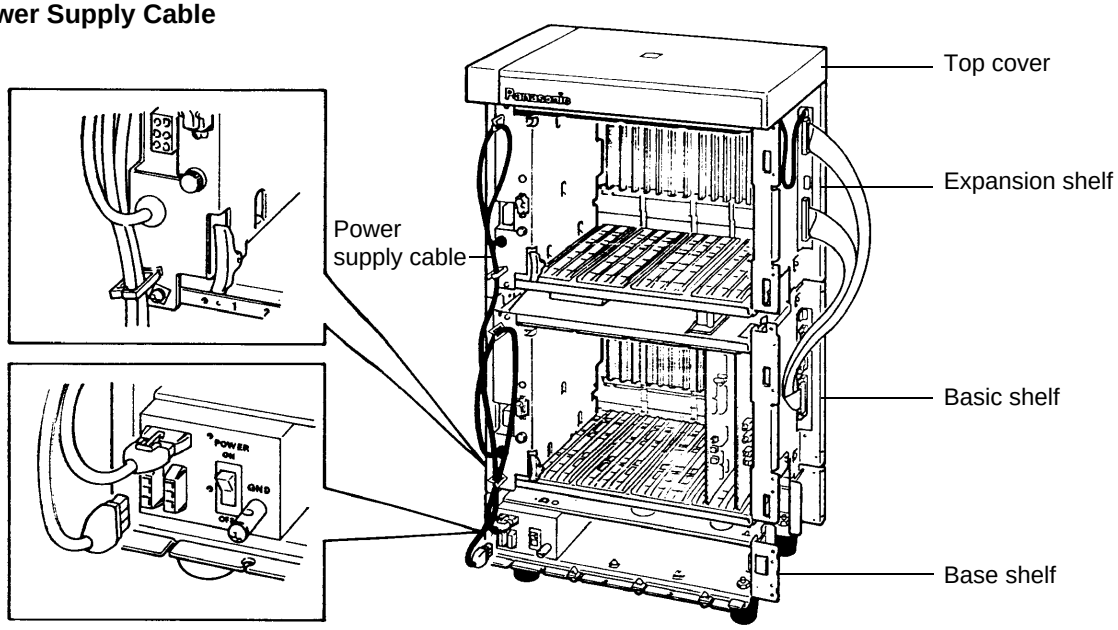
2.05 Cable Connections

LED Cable/Flat Cable



1. Plug the LED cable (on the top cover) into the LED cable connector (on the expansion shelf).
2. Plug the flat cable (on the expansion shelf) into the flat cable connector (on the basic shelf).

Power Supply Cable



- Plug the power supply cable into the power supply cable connector (“AC OUT 2”).

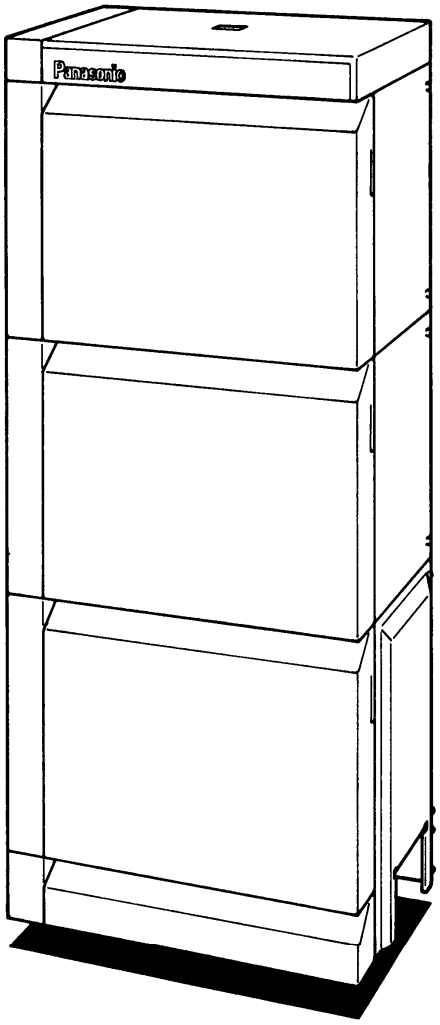
3.00 Expansion to 3-Shelf System

The KX-T336 System can be expanded to 3-Shelf System by installing the Expansion Shelf 2 on the 2-Shelf System.
Up to 336 lines (including extensions and CO lines) can be equipped with 3-Shelf System.

Note :

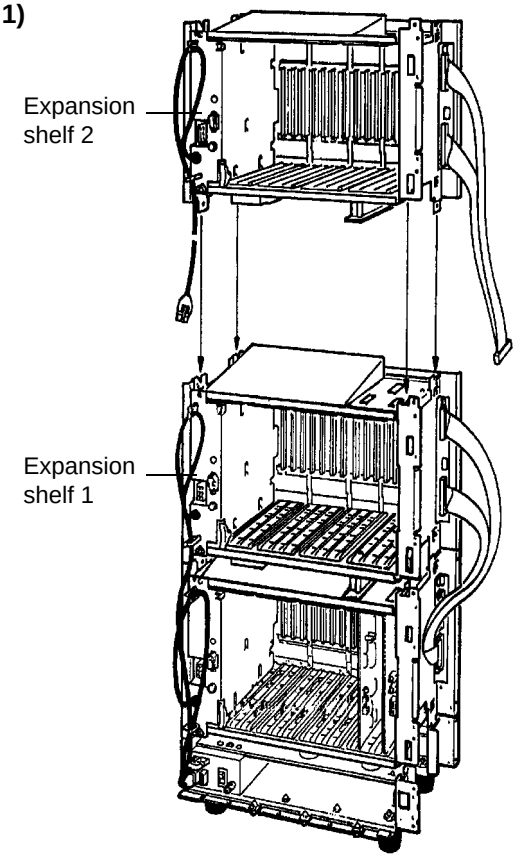
Before stacking the Expansion Shelf 2 on the 2-Shelf System, remove the front panel and side panels from Expansion Shelf 2 following the procedures described in Section 2-B-2.00 “Expansion to 2-Shelf System.”

The figure below shows a 3-Shelf System composed of a basic shelf and two expansion shelves.



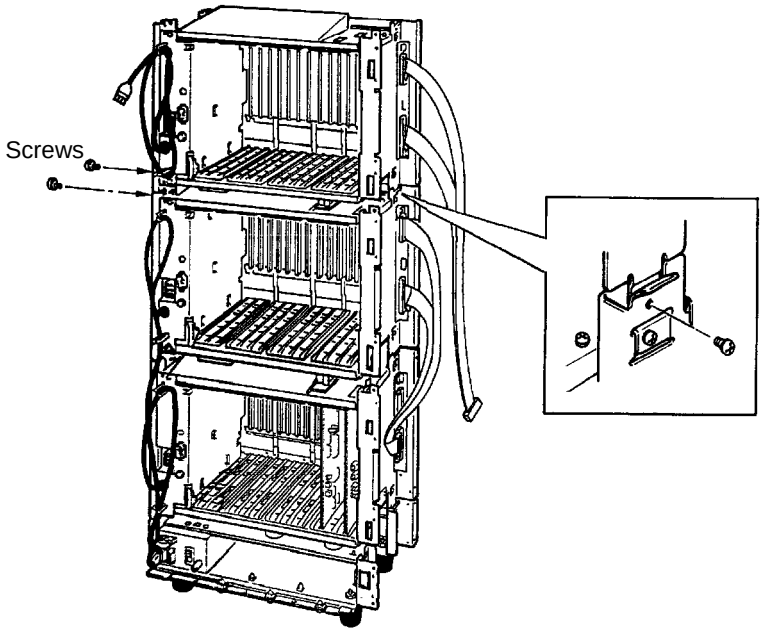
3.01 Stacking on the 2-Shelf System

1)



- To connect the expansion shelf 2 with 2-Shelf System, place the holes of the expansion shelf 2 exactly on the holes of the expansion shelf 1.

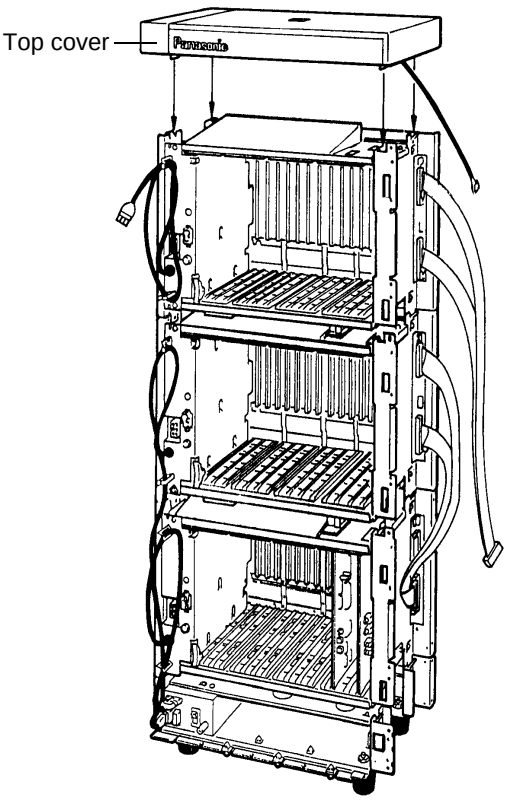
2)



- When the holes are placed properly, fix them with the three screws immediately to prevent the expansion shelf 2 from falling down.

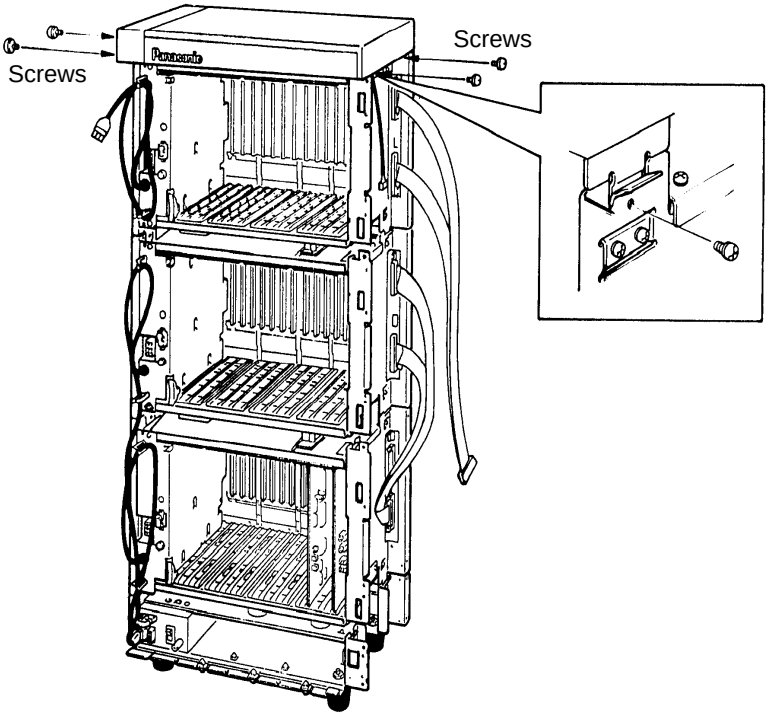
3.02 Installation of Top Cover

1)



- To connect the top cover, place the holes of the top cover exactly on the holes of the expansion shelf 2.

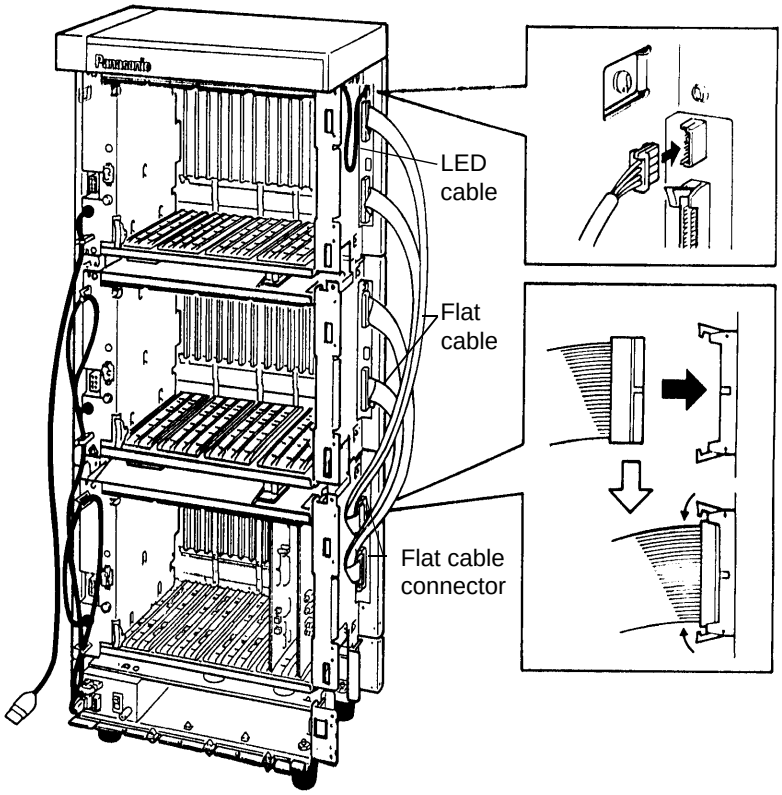
2)



- When the holes are placed properly, fix them with the four screws immediately to prevent the top cover from falling down.

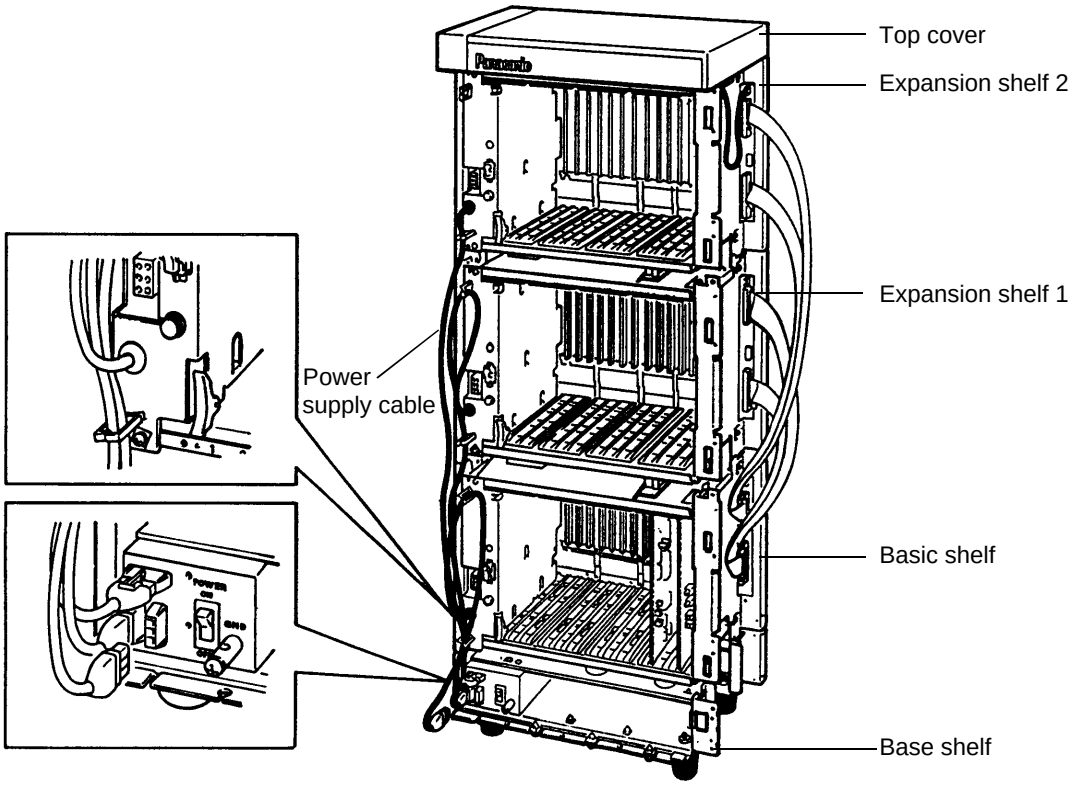
3.03 Cable Connections

LED Cable/Flat Cable



1. Plug the LED cable (on the top cover) into the LED cable connector (on the expansion shelf 2).
2. Plug the flat cable (on the expansion shelf 2) into the flat cable connector (on the basic shelf).

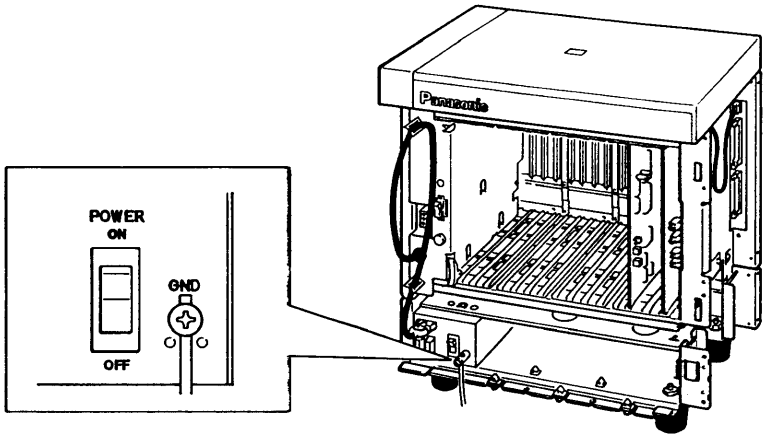
Power Supply Cable



- Plug the power supply cable (on the Expansion Shelf 2) into the power supply cable connector (“AC OUT 3”).

4.00 Ground Wiring

IMPORTANT!!!
Make sure to connect the frame of the KX-T336 system to the earth ground properly to protect the unit.

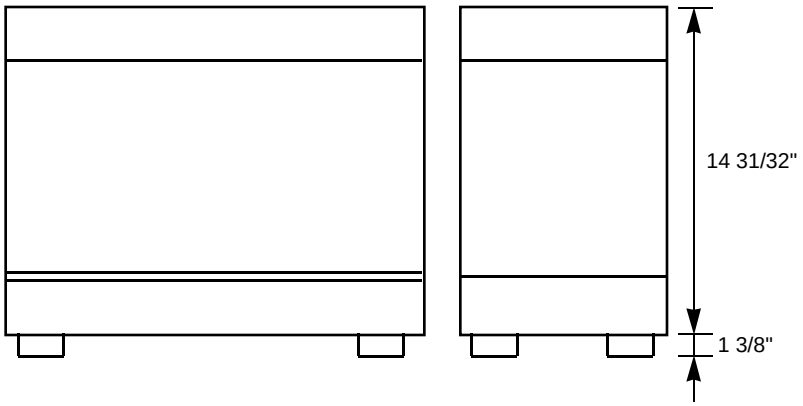


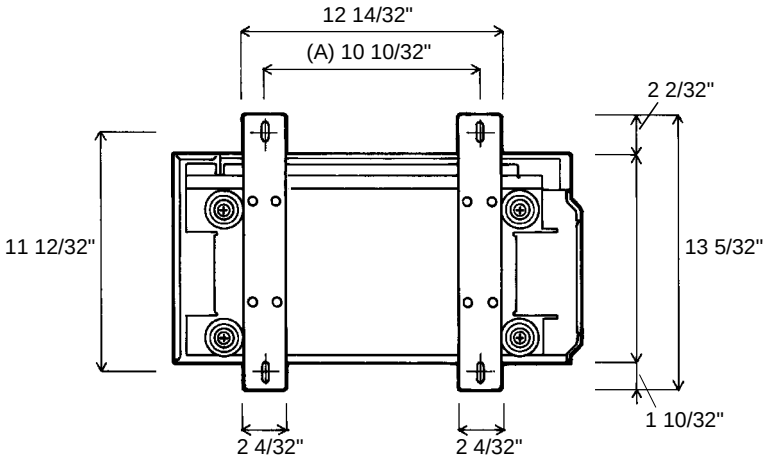
- Connect the ground wire to the ground wire connector (GND).

5.00 Fixing on the Floor

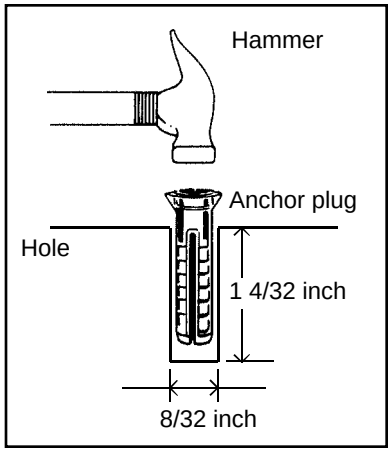
5.01 Setting Out and Drilling

1) Basic System (Basic Shelf)





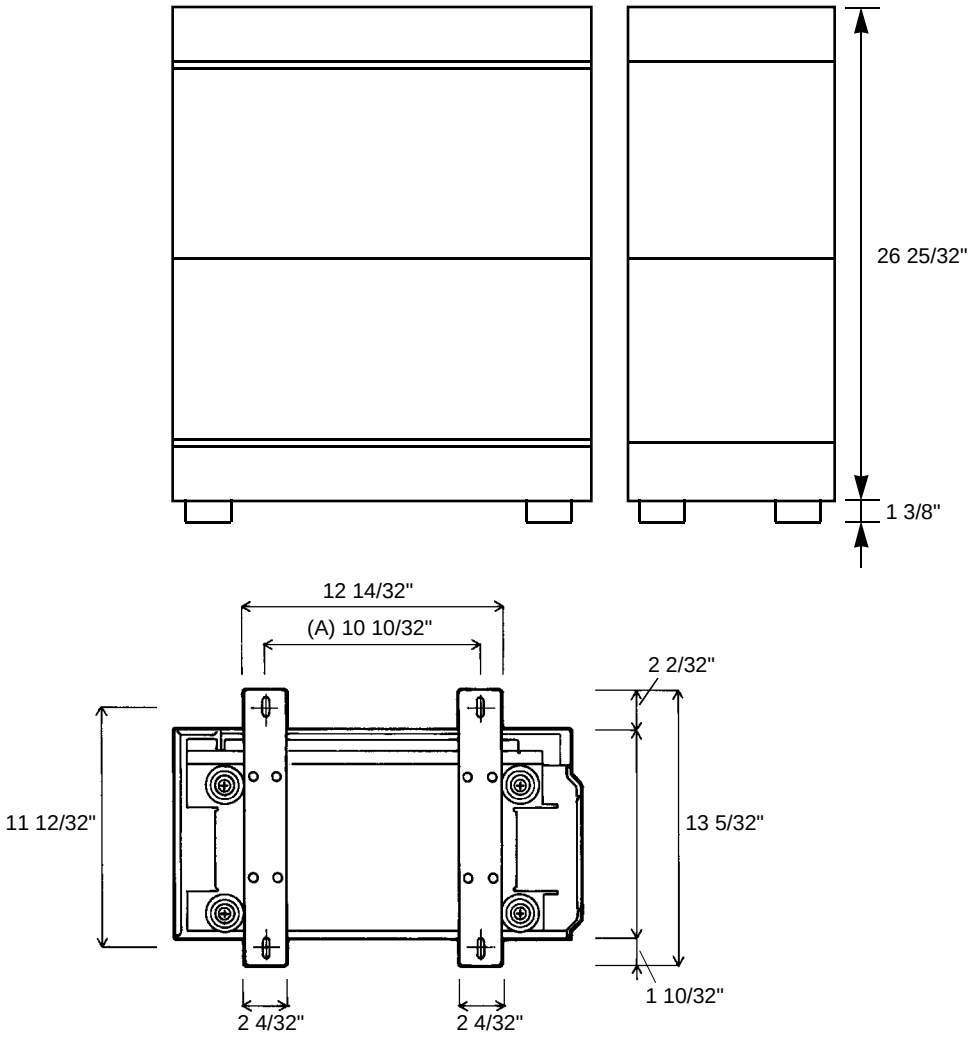
- Location of the anchor plug (A):
  Drill the hole for the anchor plug on the floor in accordance with the measurements.



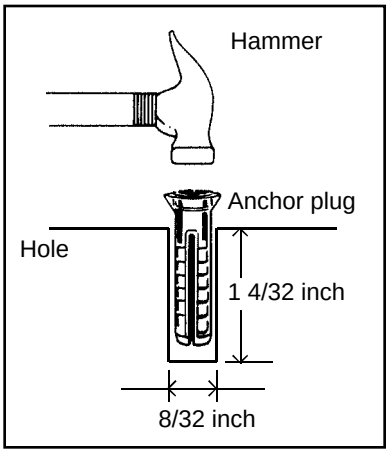
- Drive the anchor plug into the hole.

Note:
When fixing the KX-T336 System to the floor, anchor plugs should always be used to prevent the system from falling down.

2) 2-Shelf System (Basic Shelf + Expansion Shelf 1)



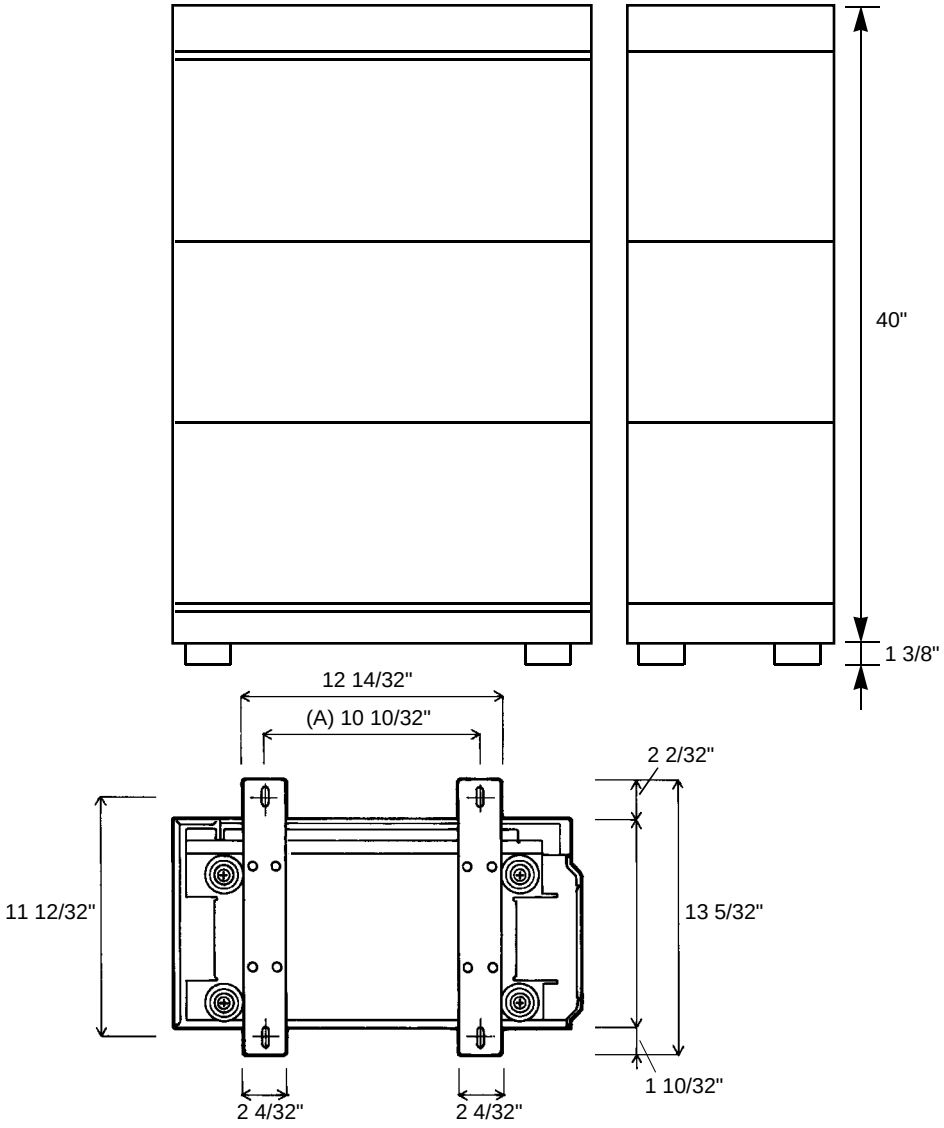
- Location of the anchor plug (A):
  Drill the hole for the anchor plug on the floor in accordance with the measurements.



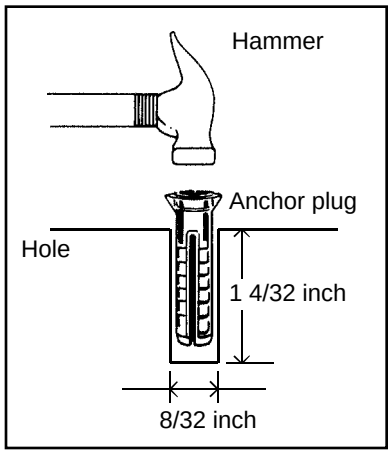
- Drive the anchor plug into the hole.

Note:
When fixing the KX-T336 System to the floor, anchor plugs should always be used to prevent the system from falling down.

3) 3-Shelf System (Basic Shelf + Expansion Shelf 1 + Expansion Shelf 2)



- Location of the anchor plug (A):
  Drill the hole for the anchor plug on the floor in accordance with the measurements.

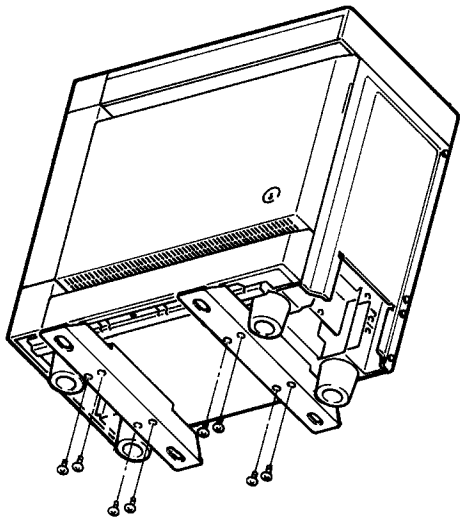


- Drive the anchor plug into the hole.

Note:
When fixing the KX-T336 System to the floor, anchor plugs should always be used to prevent the system from falling down.

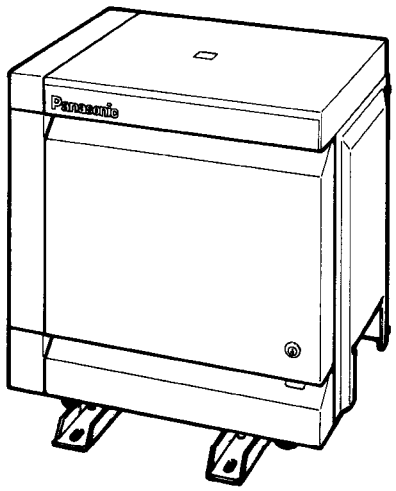
5.02 Fixing on the Floor

1)



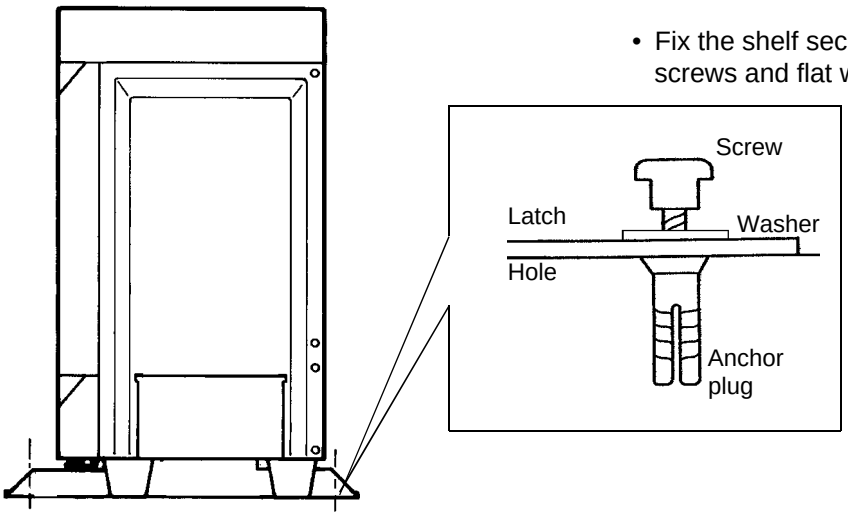
- Attach the two floor-fixing hardwares to the basic shelf as shown in the figure.
  Fasten each hardware with four screws.

2)



- Position the shelf on the floor.
  Check alignment and level of the shelf.

3)

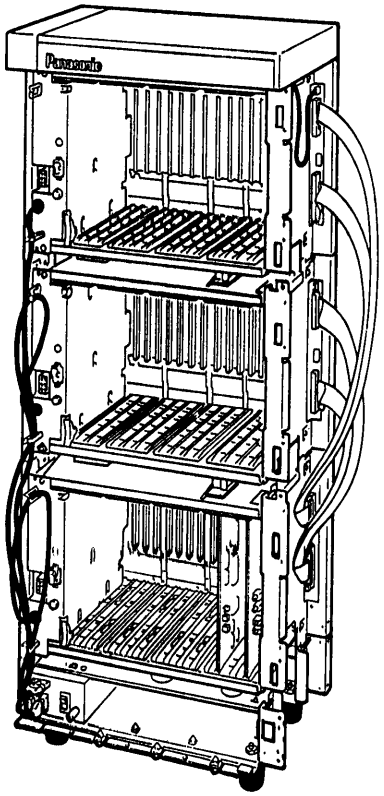


- Fix the shelf securely to the floor using screws and flat washers.

C. Installation of Cards

1.00 Before Installation

1.01 Slot Construction



Expansion shelf 2

POWER	FS1	FS2	FS3	FS4	FS5	FS6	FS7	FS8	FS9	FS10	FS11	FS12	FS13	FS14	FS15

Expansion shelf 1

POWER	FS1	FS2	FS3	FS4	FS5	FS6	FS7	FS8	FS9	FS10	FS11	FS12	FS13	FS14	FS15

Basic shelf

POWER	FS1	FS2	FS3	FS4	FS5	FS6	FS7	FS8	FS9	FS10	FS11	FS12	BS1	BS2	BS3

Basic shelf

No.	Name	Number
1	POWER - for Power Unit	1
2	BS1 (Basic Slot 1) - for CPU card	1
3	BS2 (Basic Slot 2) - for optional T-SW OHCA card	1
4	BS3 (Basic Slot 3) - for T-SW card	1
5	FS1 to 12 (Free Slot 1 to 12) - for optional service card	12

Expansion shelf 1/Expansion shelf 2

Name	Number
POWER - for Power Unit	1
FS1 to FS15 (Free Slot) - for optional service card	15

1.02 Guide Plate

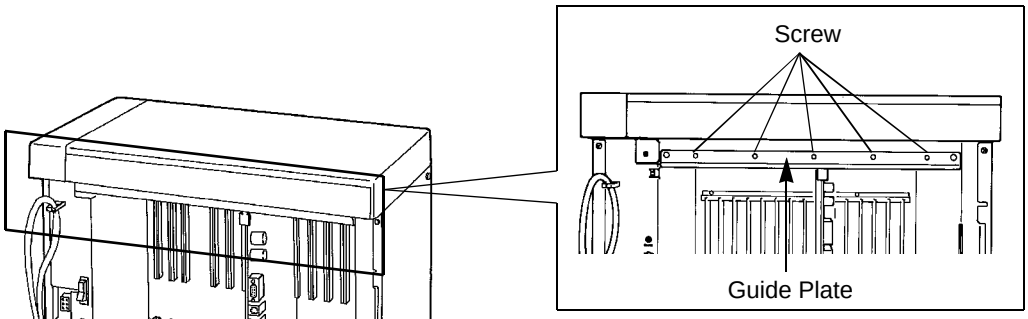


Fig.1

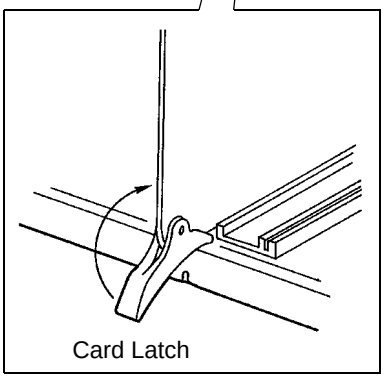


Fig.2

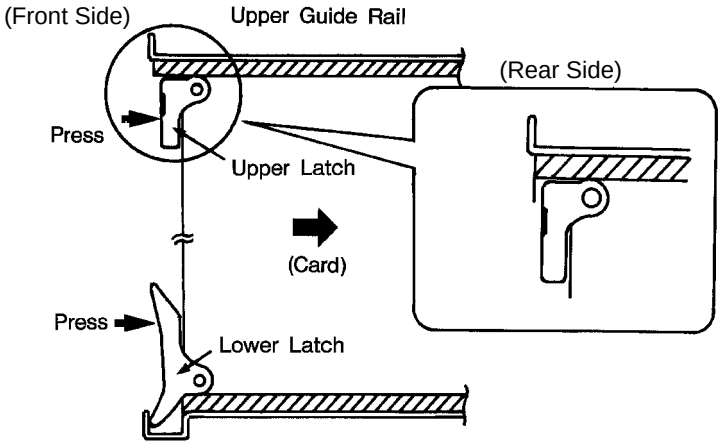


Fig.3

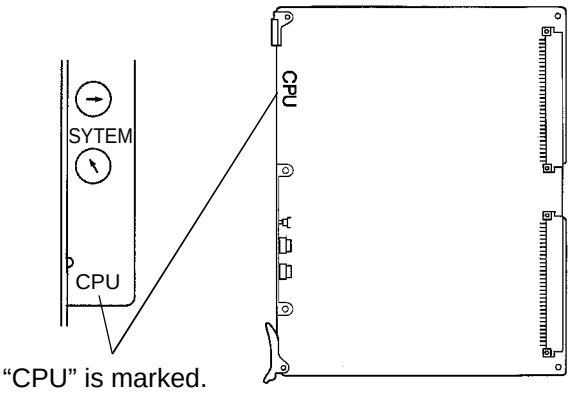
1. Before installing the service cards, remove the Guide Plate (See Fig.1) from the upper front side of the basic shelf (and expansion shelf 1 and 2, if provided) by loosening the five screws.

2. Install a service card (with facing the components side to the right) along with the upper and lower guide rails. Press the upper and lower latch firmly until the upper latch is located inside of the shelf. (See Fig.2 and Fig.3)
   Please do not touch the components side of the service card.

3. After installing the service cards, attach the Guide Plate to the upper front side of the basic shelf (and expansion shelf 1 and 2, if provided) with five screws.
   If service cards are not installed properly, the Guide Plate will not be fixed.

2.00 Connection of Standard System

2.01 CPU Card

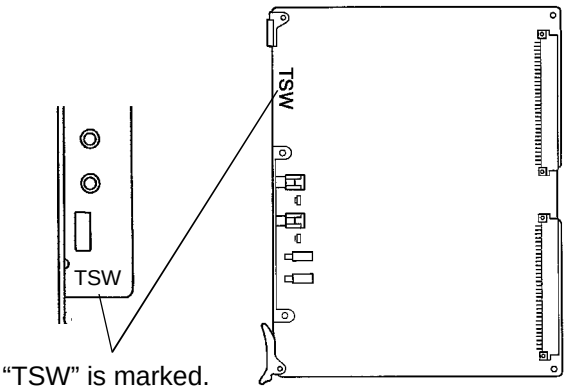


"CPU" is marked.

- This card is already inserted at the factory in the "CPU" in the Basic shelf.

2.02 T-SW Card

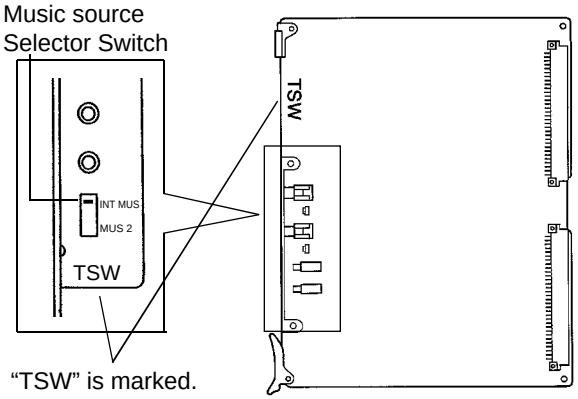
(for U.S.A. and Canada)



"TSW" is marked.

- This card is already inserted at the factory in the "TSW" in the Basic shelf.

(for areas other than U.S.A. and Canada)



"TSW" is marked.

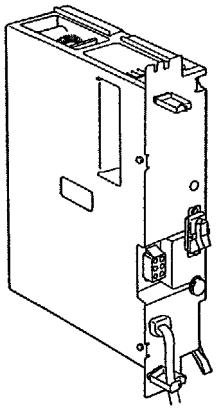
- This card is already inserted at the factory in the "TSW" in the Basic shelf.

  Music Source Selector Switch

  INT MUS : Set when using the internal music source

  MUS 2 : Set when using the external music source.

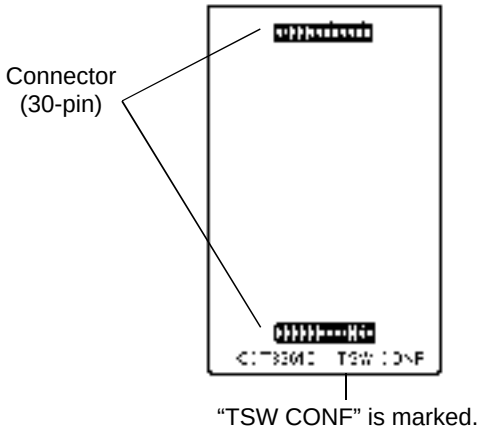
2.03 Power Unit



- Power unit is already inserted at the factory in the “POWER” in the Basic shelf and the Expansion shelf 1, 2.

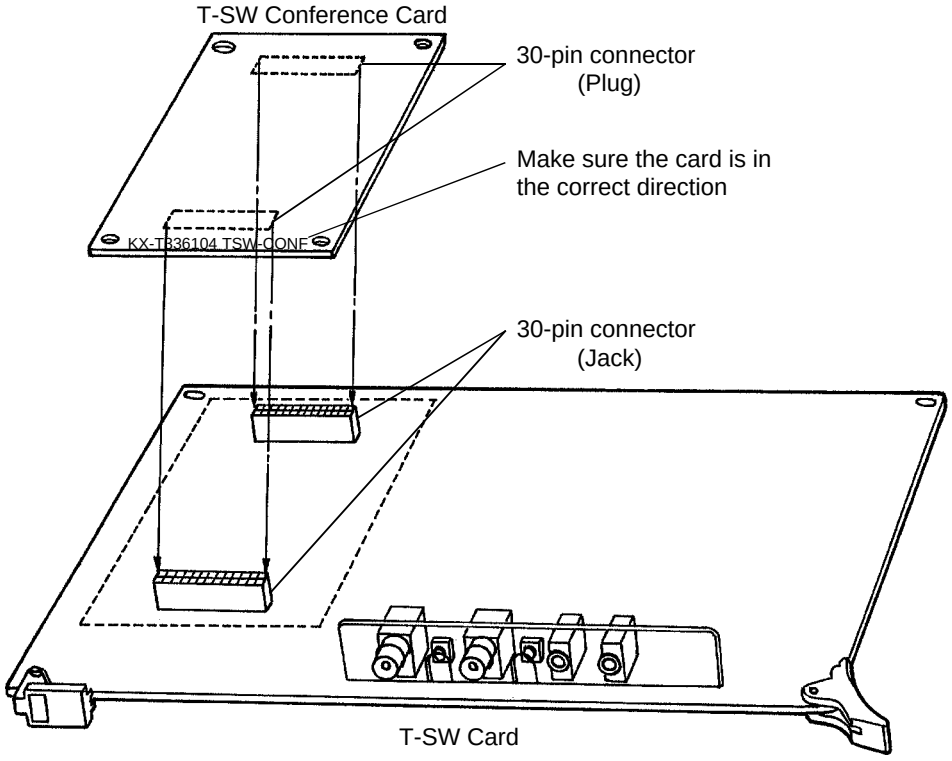
3.00 Connection of Optional Cards

3.01 T-SW Conference Expansion Card (KX-T336104)



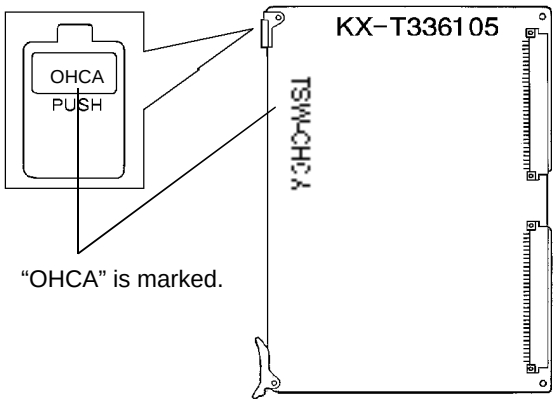
- This card is installed on the T-SW card.

1) Connection to the T-SW card



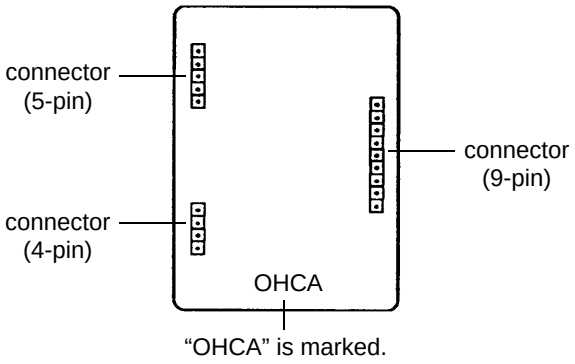
1. Insert the 30-pin connector (plug) on the T-SW CONF card into the 30-pin connector (jack) on the T-SW card.
2. Install the T-SW card into the Basic Slot 1 (BS1). See page 2-C-3.

3.02 T-SW OHCA Card (KX-T336105)



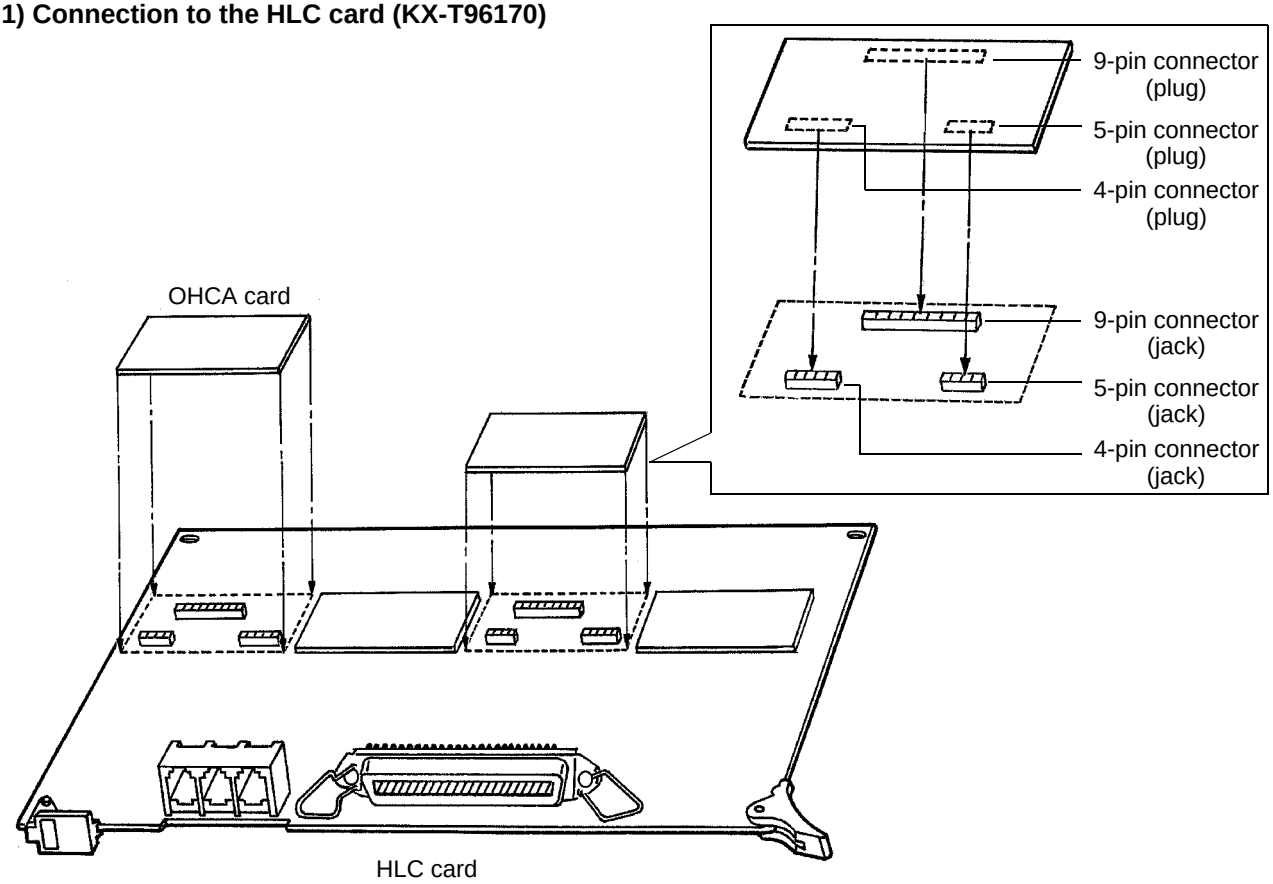
- Insert this card into the Basic Slot 2 (BS2).

3.03 OHCA Card (KX-T96136)



- This card is installed on the HLC card or PLC card.

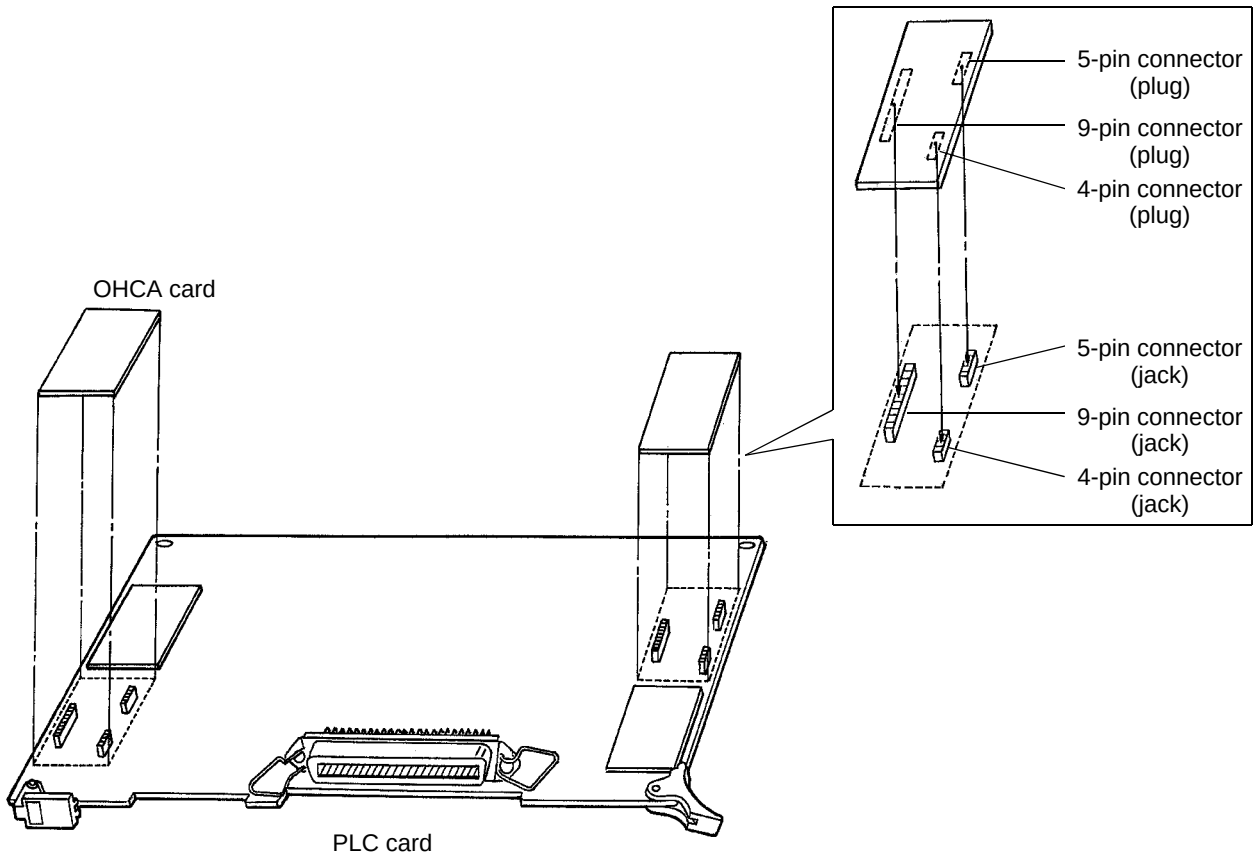
1) Connection to the HLC card (KX-T96170)



1. Make sure that the extensions which use OHCA function have OHCA cards.
2. Insert the connector (plug) on the OHCA card into the connector (jack) on the HLC card.
3. Install the HLC card into a free slot. See page 2-C-14.

- Two extensions are available for the OHCA function with one OHCA card. Refer to page 2-C-8.
- The OHCA function is provided with the following PITS telephones only: KX-T123235, KX-T123230D or KX-T7130.

2) Connection to the PLC card (KX-T96172)



1. Make sure that the extensions which use OHCA function have OHCA cards.
2. Insert the connector (plug) on the OHCA card into the connector (jack) on the PLC card.
3. Install the PLC card to a free slot. See page 2-C-16.

- Two extensions are available for the OHCA function with one OHCA card. Refer to page 2-C-8.
- The OHCA function is provided with the following PITS telephones only: KX-T123235, KX-T123230D or KX-T7130.

3) Wiring Table

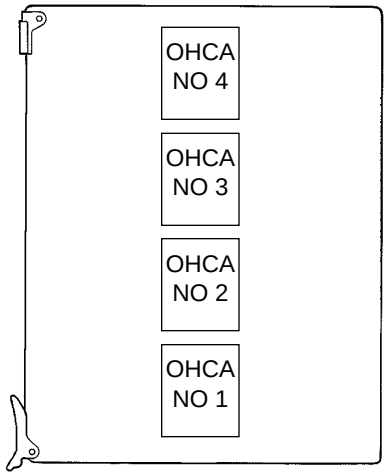
CONN. PIN	CABLE COLOR	CLIP NO.	Extension		OHCA Extension
26	WHT-BLU	1		T	
1	BLU-WHT	2		R	
27	WHT-ORN	3	NO.1	D1	
2	ORN-WHT	4		D2	
28	WHT-GRN	5		P1	
3	GRN-WHT	6		P2	NO1
29	WHT-BRN	7		T	
4	BRN-WHT	8		R	
30	WHT-SLT	9	NO.2	D1	
5	SLT-WHT	10		D2	
31	RED-BLU	11		P1	
6	BLU-RED	12		P2	
32	RED-ORN	13		T	
7	ORN-RED	14		R	
33	RED-GRN	15	NO.3	D1	
8	GRN-RED	16		D2	
34	RED-BRN	17		P1	
9	BRN-RED	18		P2	NO2
35	RED-SLT	19		T	
10	SLT-RED	20		R	
36	BLK-BLU	21	NO.4	D1	
11	BLU-BLK	22		D2	
37	BLK-ORN	23		P1	
12	ORN-BLK	24		P2	
38	BLK-GRN	25		T	
13	GRN-BLK	26		R	
39	BLK-BRN	27	NO.5	D1	
14	BRN-BLK	28		D2	
40	BLK-SLT	29		P1	
15	SLT-BLK	30		P2	NO3
41	YEL-BLU	31		T	
16	BLU-YEL	32		R	
42	YEL-ORN	33	NO.6	D1	
17	ORN-YEL	34		D2	
43	YEL-GRN	35		P1	
18	GRN-YEL	36		P2	
44	YEL-BRN	37		T	
19	BRN-YEL	38		R	
45	YEL-SLT	39	NO.7	D1	
20	SLT-YEL	40		D2	
46	VIO-BLU	41		P1	
21	BLU-VIO	42		P2	NO4
47	VIO-ORN	43		T	
22	ORN-VIO	44		R	
48	VIO-GRN	45		D1	
23	GRN-VIO	46	NO.8	D2	
49	VIO-BRN	47		P1	
24	BRN-VIO	48		P2	
50	VIO-SLT	49			
25	SLT-VIO	50			

- Connection of the Proprietary Telephones: KX-T123235, KX-T123230D, or KX-T7130.

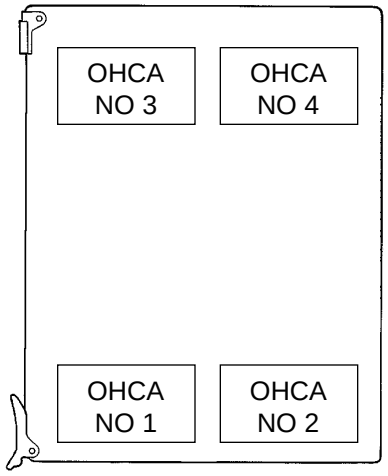
  T: Tip D1: Data 1 P1: 3 Pair Voice
  R: Ring D2: Data 2 P2: 3 Pair Voice

- OHCA NO.

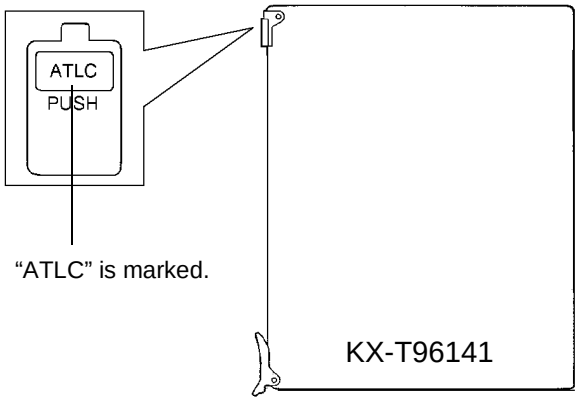
(HLC card)



(PLC card)

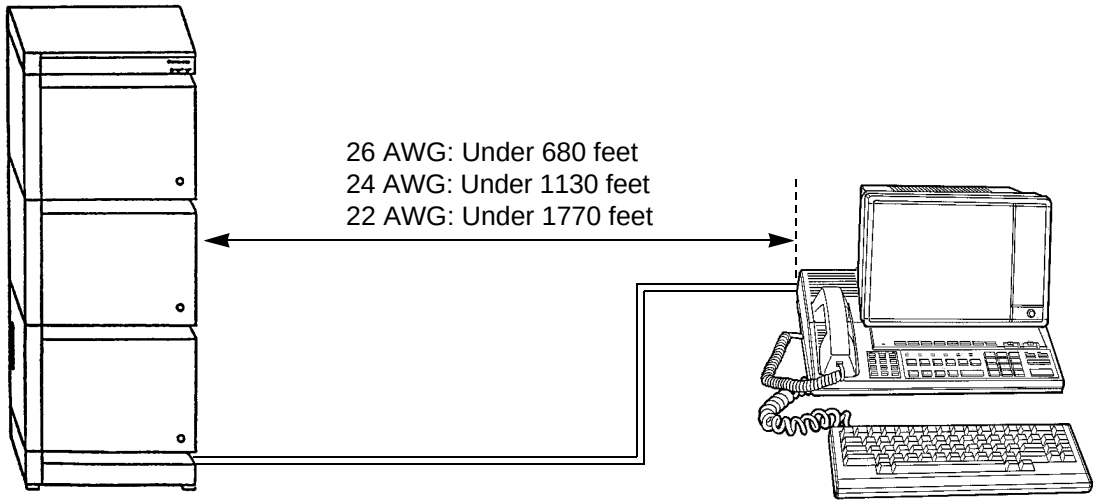


3.04 ATLC Card (KX-T96141)

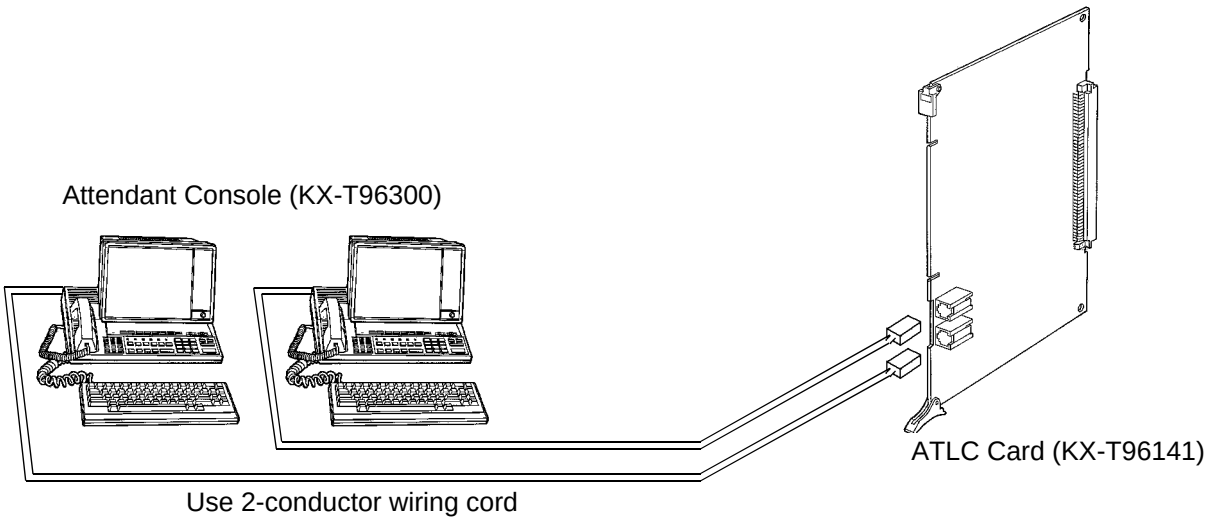


- Insert this card into a free slot.

1) Maximum cabling distance of the Attendant Console line cord (2-conductor wiring)

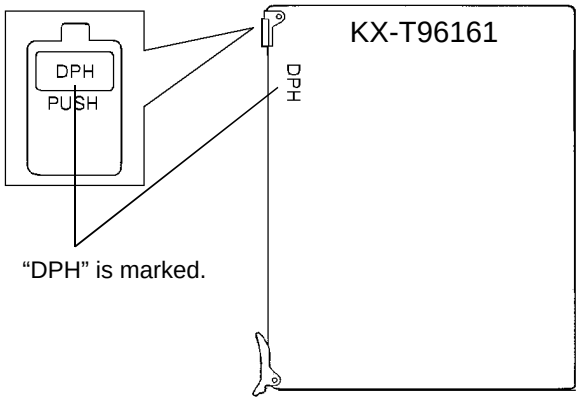


2) Connection to the Attendant Console (KX-T96300)



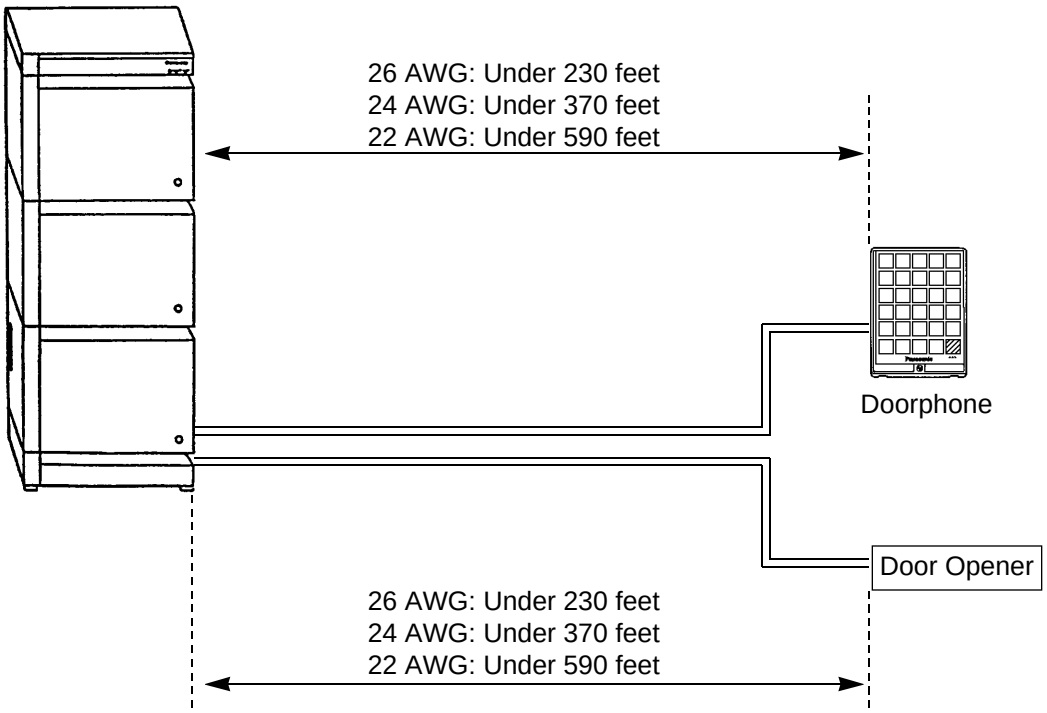
- Insert the modular plug of the Attendant Console line cord (2-conductor wiring) into the modular jack on the ATLC card.

3.05 DPH Card (KX-T96161)

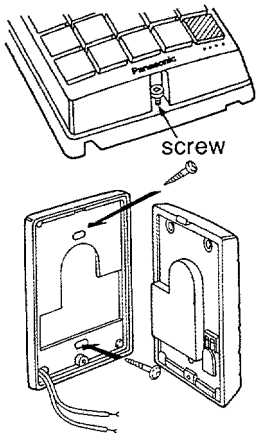


- Insert this card into a free slot.

1) Maximum cabling distance of the Doorphone and the Door Opener line.



2) Installation of the Doorphone (KX-T30865)



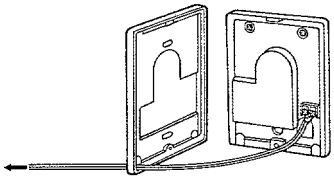
1. Loosen the screw to separate the doorphone into two halves.

2. Install the base cover to the wall with two screws.

   • Two kinds of screws are included.
   Please choose appropriate one according to your wall type. See the following.


.....When the doorphone plate has been fixed to the wall.


.....When you wish to install the doorphone directly to the wall.

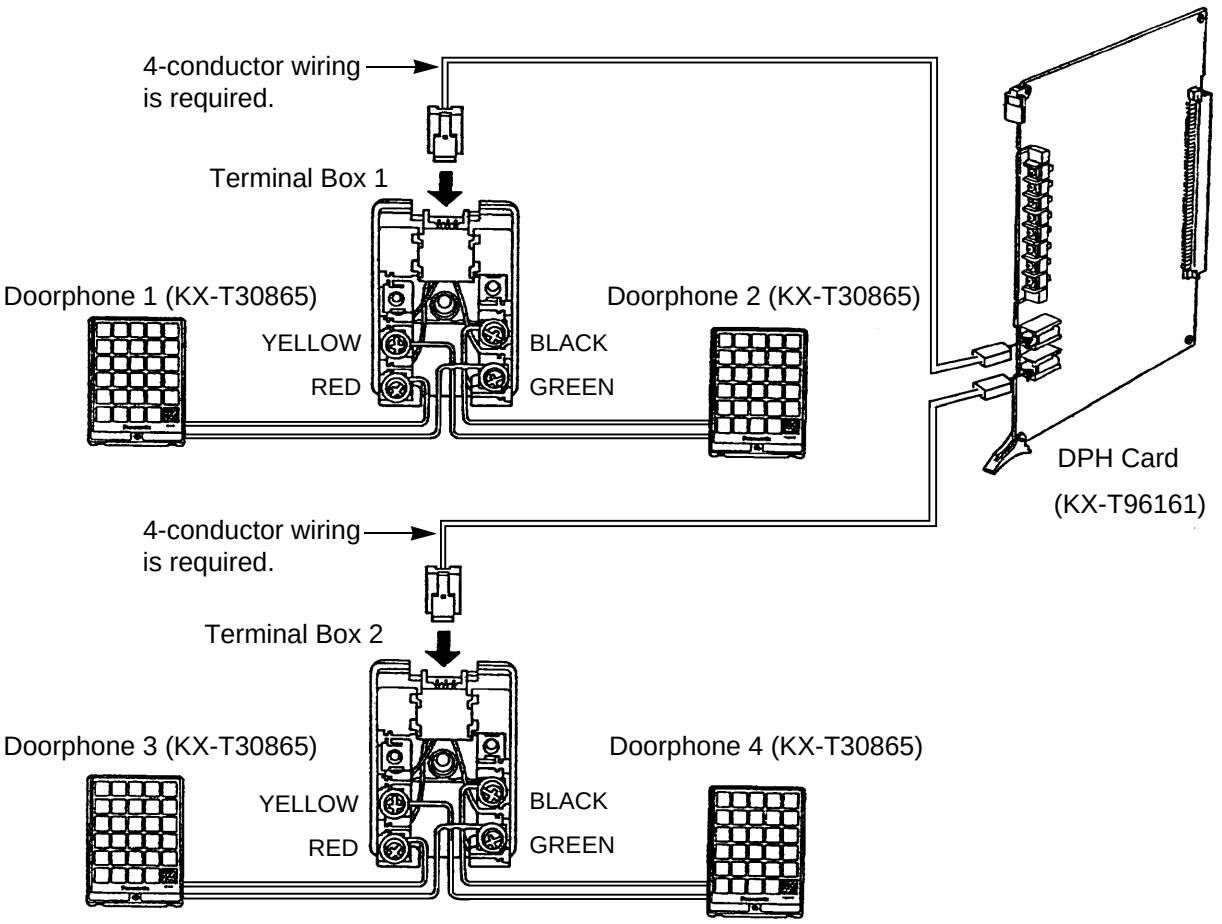


To the terminal box
(See page 2-C-12)

3. Connect the wires from the terminal box to the screws located in the front cover.

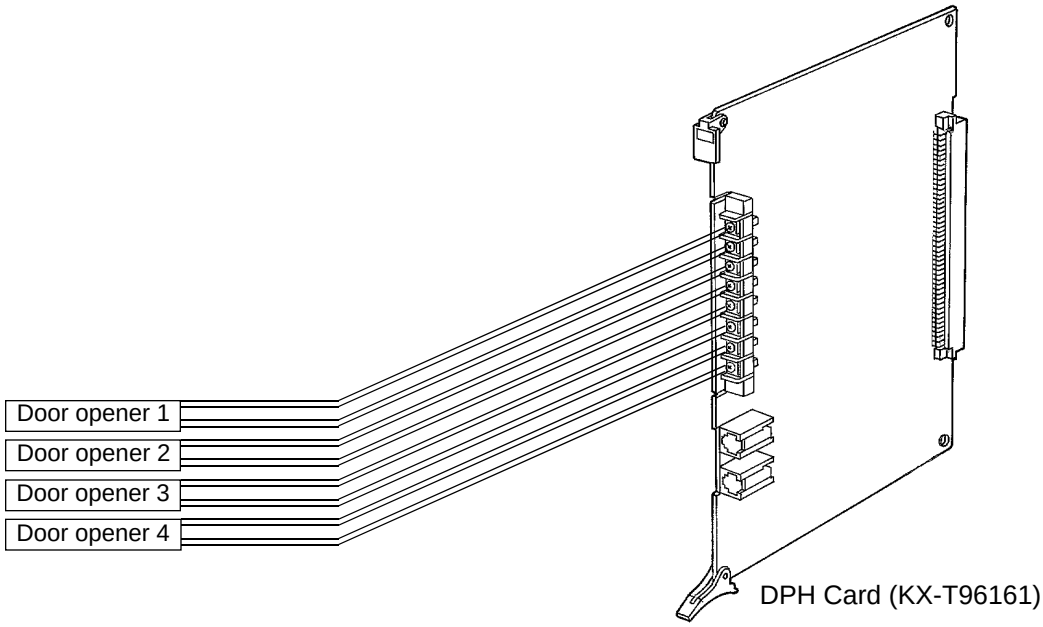
4. Secure both halves together and re-install the screw.

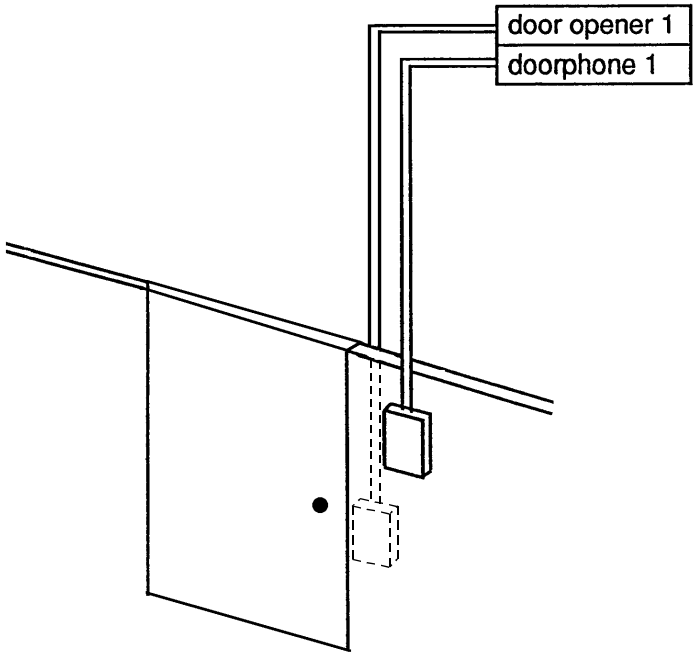
3) Wiring of the Doorphone



1. Connect the DPH Card to the terminal box using a 4-conductor modular connector.
2. Connect the wires of doorphone 1 to the red and green screws of the terminal box 1.
3. Connect the wires of doorphone 2 to the yellow and black screws of the terminal box 1.
4. Connect the wires of doorphone 3 to the red and green screws of the terminal box 2.
5. Connect the wires of doorphone 4 to the yellow and black screws of the terminal box 2.

4) Connection to Door Openers



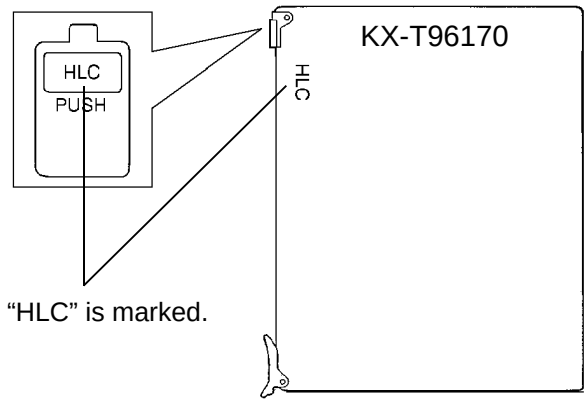


doorphone 1	Paired
door opener 1	
doorphone 2	Paired
door opener 2	
doorphone 3	Paired
door opener 3	
doorphone 4	Paired
door opener 4	

- Set the door opener paired with the doorphone.

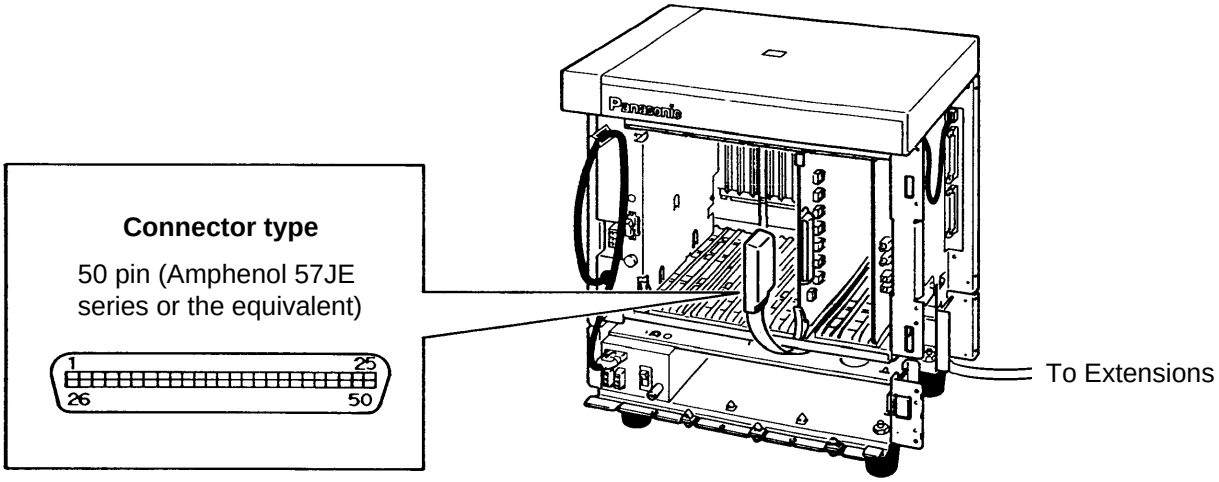
Only the telephone which received the doorphone call and in conversation can open the door using door opener. System program determines the telephones that can receive the doorphone calls and use the door opener.

3.06 HLC Card (KX-T96170)



- Insert this card into a free slot.

1) Connection of the extension line cord



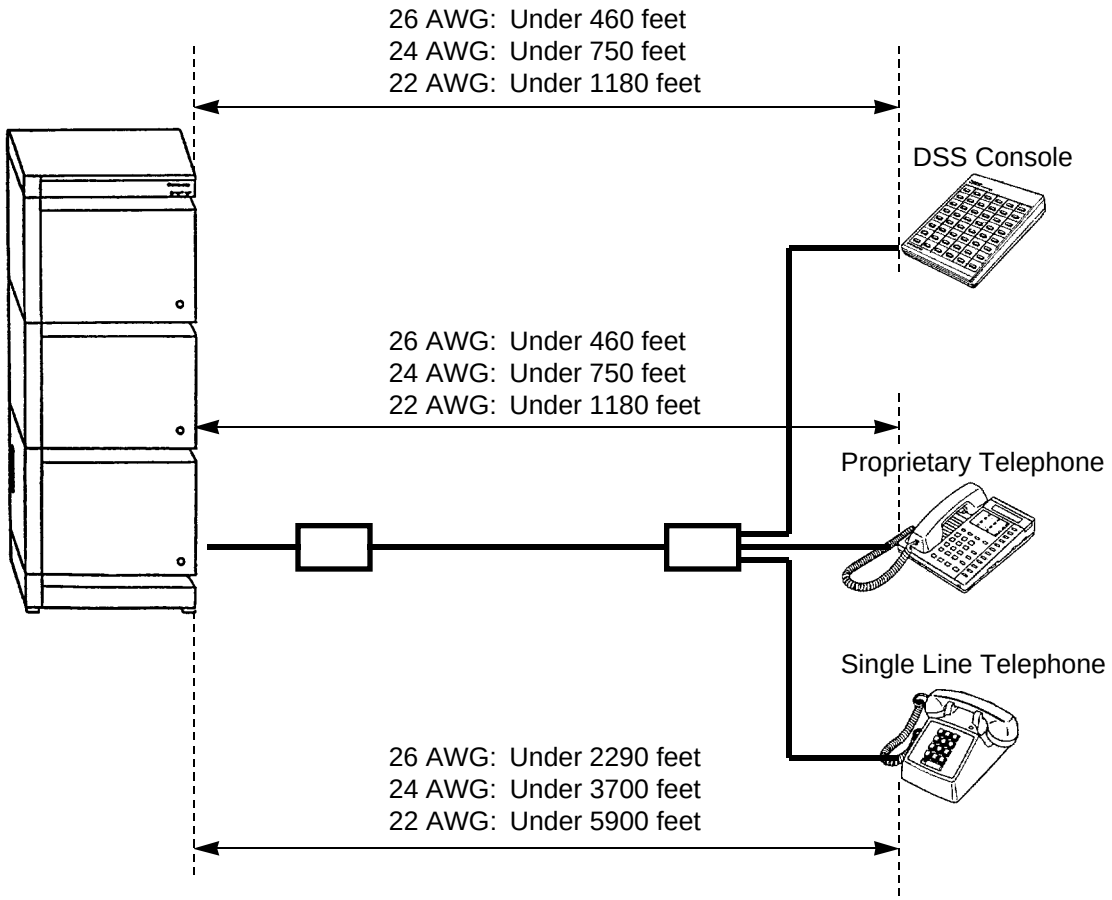
- Insert the 50-pin connector (plug) of the extension line cord into the 50-pin connector (jack) on the HLC card.

Refer to the Installation of the Amphenol 57JE series on page 2-C-24.

2) Connection of cable pins.

See page 2-C-20.

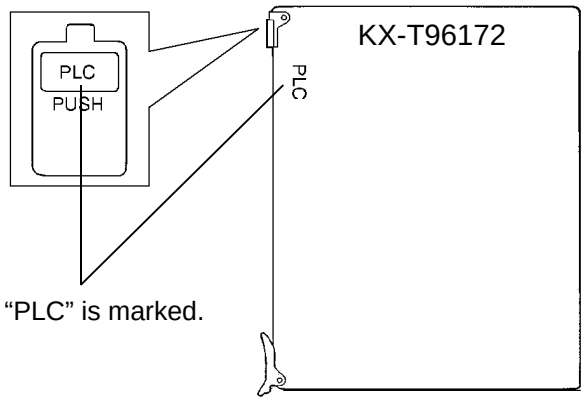
3) Maximum cabling distance of the extension line cord (twisted cable)



4) Auxiliary connection

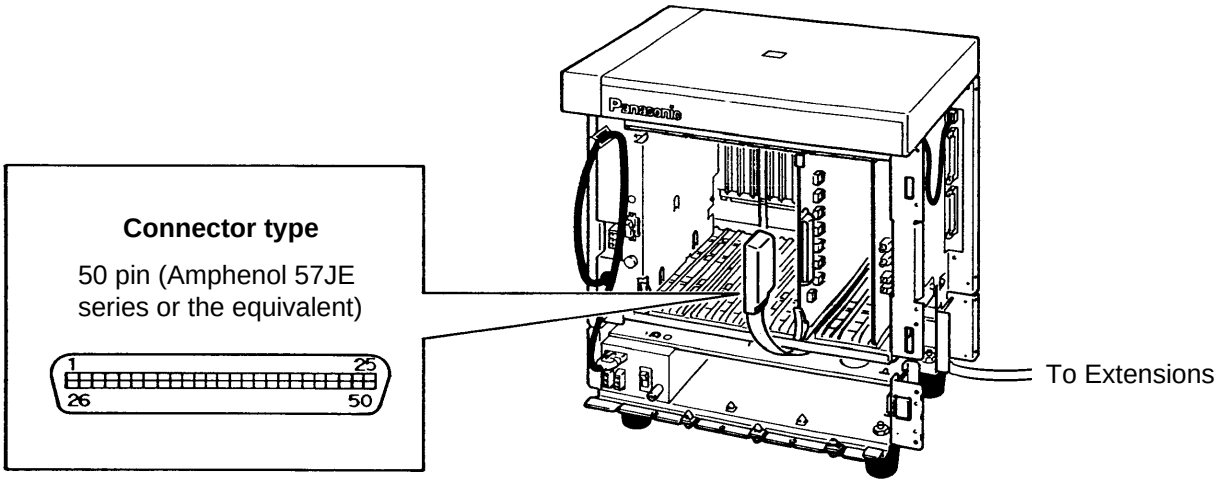
See page 2-C-30.

3.07 PLC Card (KX-T96172)



- Insert this card into a free slot.

1) Connection of the extension line cord



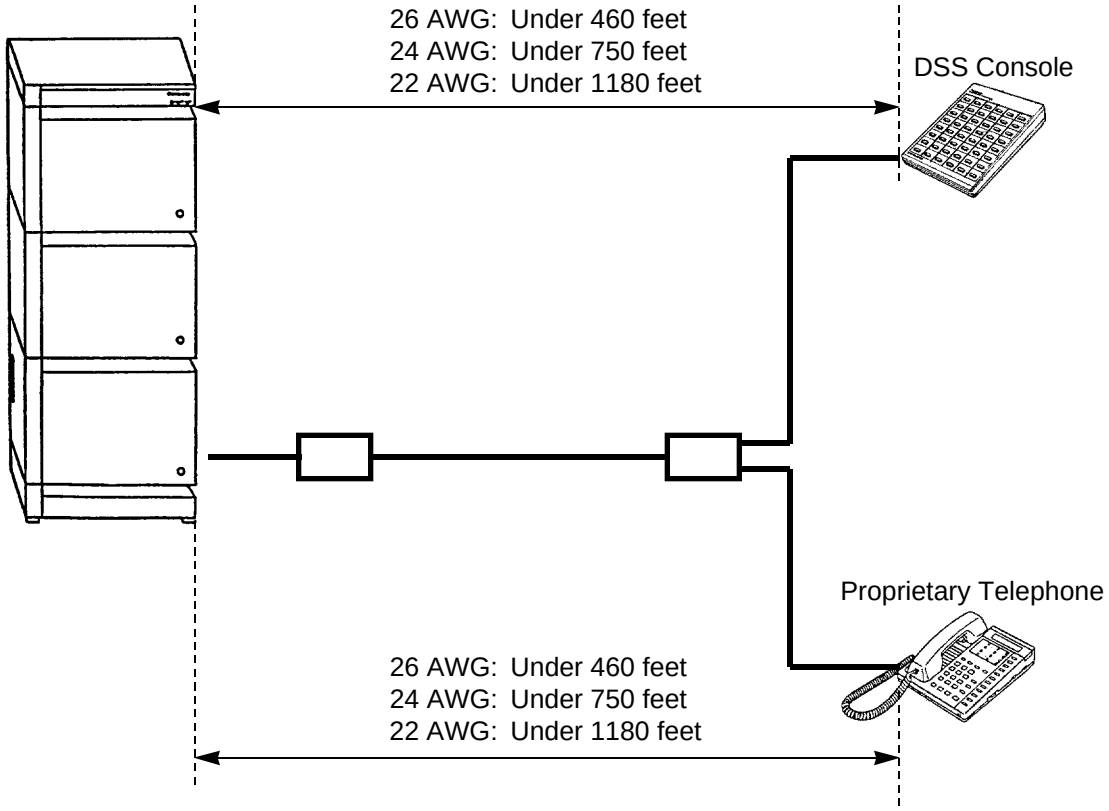
- Insert the 50-pin connector (plug) of the extension line cord into the 50-pin connector (jack) on the PLC card.

Refer to the Installation of the Amphenol 57JE series on page 2-C-24.

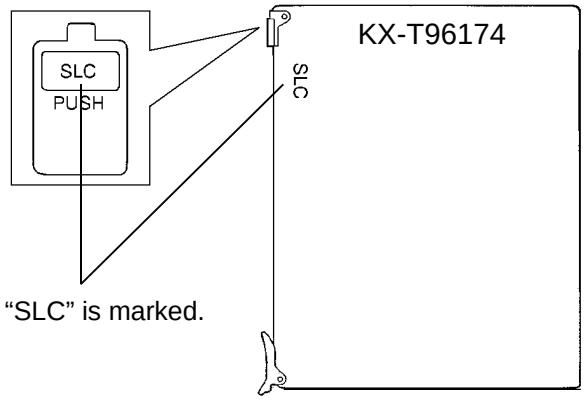
2) Connection of cable pins.

See page 2-C-20.

3) Maximum cabling distance of the extension line cord (twisted cable)

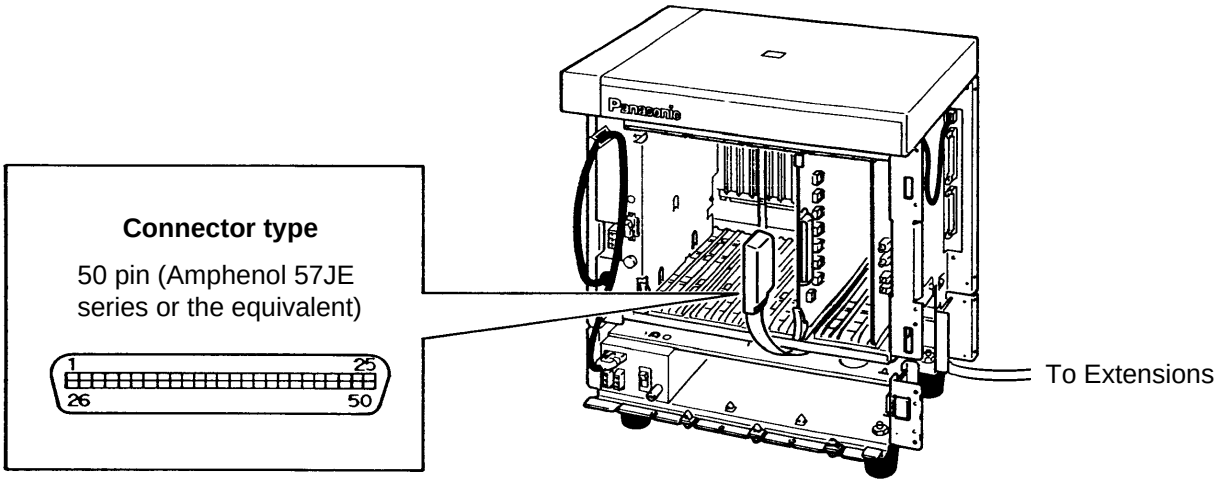


3.08 SLC Card (KX-T96174)



- Insert this card into a free slot.

1) Connection of the extension line cord



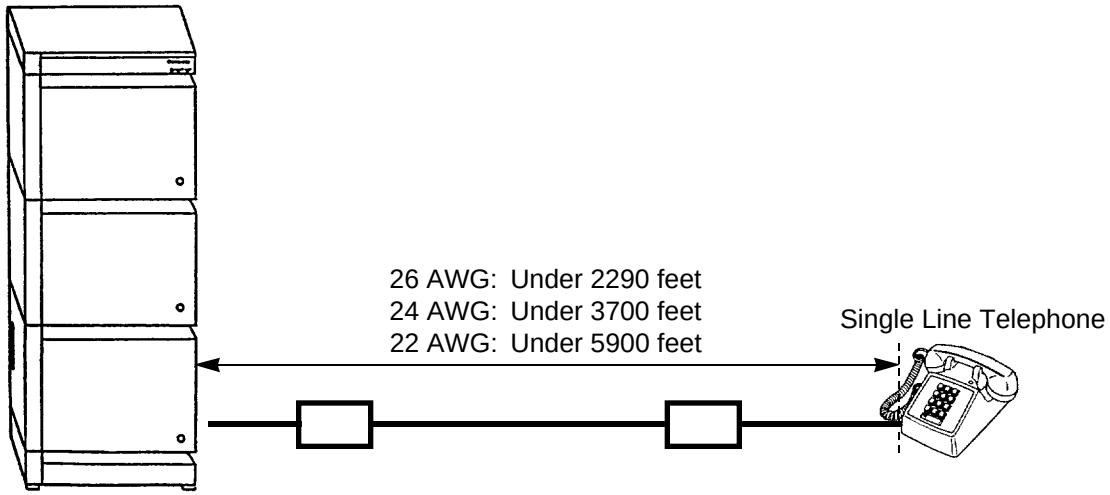
- Insert the 50-pin connector (plug) of the extension line cord into the 50-pin connector (jack) on the SLC card.

Refer to the Installation of the Amphenol 57JE series on page 2-C-24.

2) Connection of cable pins

See page 2-C-20.

3) Maximum cabling distance of the extension line cord (twisted cable)



4) Auxiliary connection

See page 2-C-30.

■ Cable Pin Numbers to be connected (Extension Line)

CONN. PIN	CABLE COLOR	CLIP NO.	Extension	
26	WHT-BLU	1		T
1	BLU-WHT	2		R
27	WHT-ORN	3	NO.1	D1
2	ORN-WHT	4		D2
28	WHT-GRN	5		P1
3	GRN-WHT	6		P2
29	WHT-BRN	7		T
4	BRN-WHT	8		R
30	WHT-SLT	9	NO.2	D1
5	SLT-WHT	10		D2
31	RED-BLU	11		P1
6	BLU-RED	12		P2
32	RED-ORN	13		T
7	ORN-RED	14		R
33	RED-GRN	15	NO.3	D1
8	GRN-RED	16		D2
34	RED-BRN	17		P1
9	BRN-RED	18		P2
35	RED-SLT	19		T
10	SLT-RED	20		R
36	BLK-BLU	21	NO.4	D1
11	BLU-BLK	22		D2
37	BLK-ORN	23		P1
12	ORN-BLK	24		P2
38	BLK-GRN	25		T
13	GRN-BLK	26		R
39	BLK-BRN	27	NO.5	D1
14	BRN-BLK	28		D2
40	BLK-SLT	29		P1
15	SLT-BLK	30		P2
41	YEL-BLU	31		T
16	BLU-YEL	32		R
42	YEL-ORN	33	NO.6	D1
17	ORN-YEL	34		D2
43	YEL-GRN	35		P1
18	GRN-YEL	36		P2
44	YEL-BRN	37		T
19	BRN-YEL	38		R
45	YEL-SLT	39	NO.7	D1
20	SLT-YEL	40		D2
46	VIO-BLU	41		P1
21	BLU-VIO	42		P2
47	VIO-ORN	43		T
22	ORN-VIO	44		R
48	VIO-GRN	45		D1
23	GRN-VIO	46	NO.8	D2
49	VIO-BRN	47		P1
24	BRN-VIO	48		P2
50	VIO-SLT	49		
25	SLT-VIO	50		

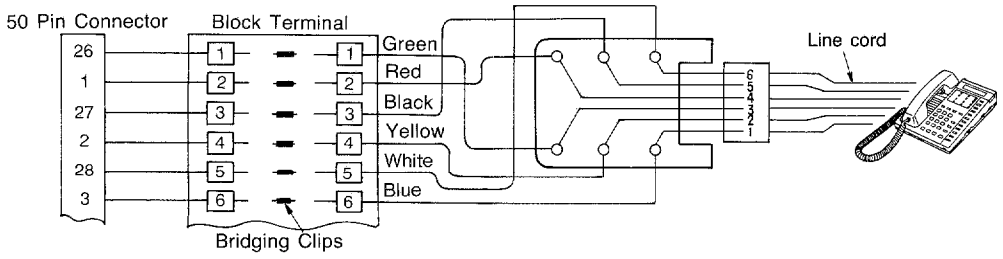
- Connection of the following Proprietary Telephones
  KX-T123230D, KX-T123235 and KX-T7130
  T: Tip D1: Data 1 P1: 3 Pair Voice
  R: Ring D2: Data 2 P2: 3 Pair Voice

- Connection of other Proprietary Telephones
  Connect the only pin number of “T”, “R”, “D1” and “D2”.

- Connection of a Single Line Telephone
  Connect the only pin number of “T” and “R”.

- Connection of a DSS Console
  Connect the only pin number of “D1” and “D2”.

- Station wiring (3-pair twisted cabling)



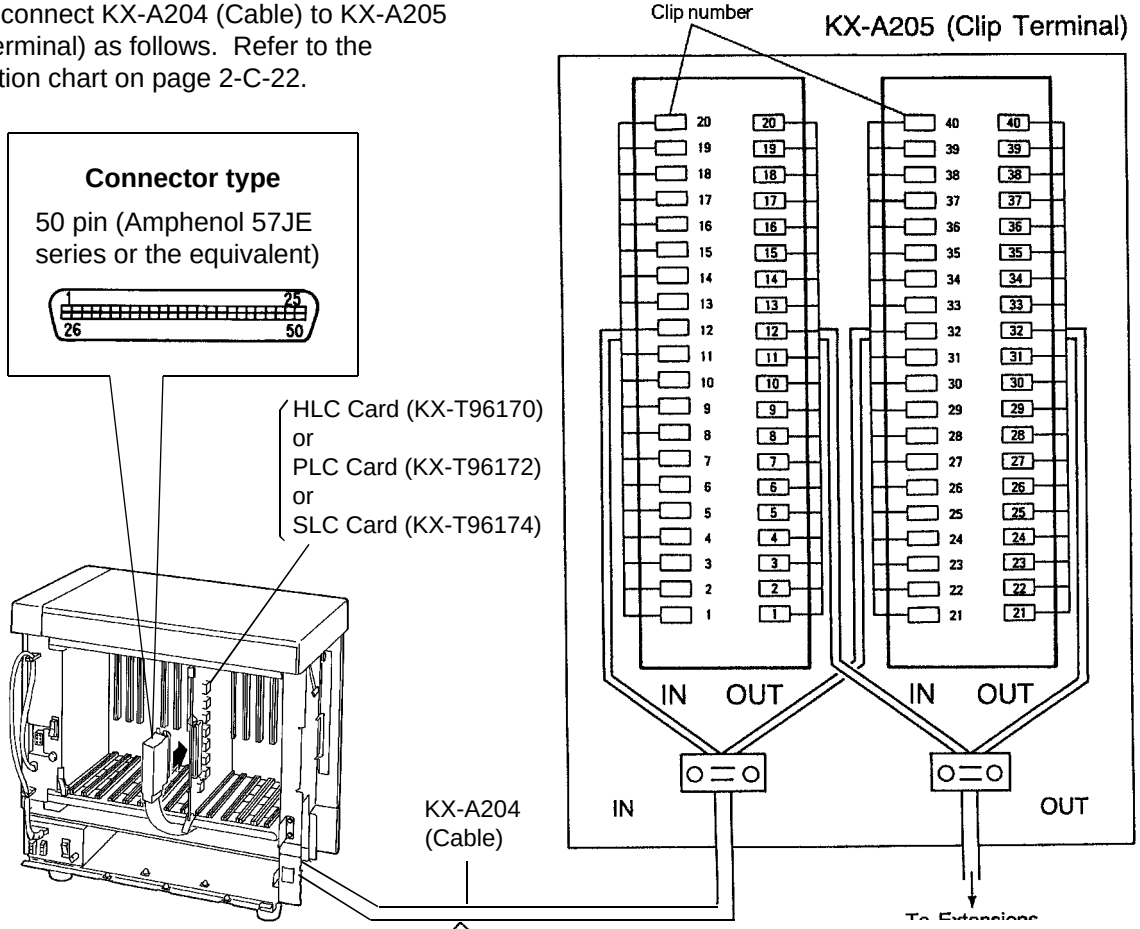
■ Extension Connection of KX-A204 (Cable)/KX-A205 (Clip Terminal)

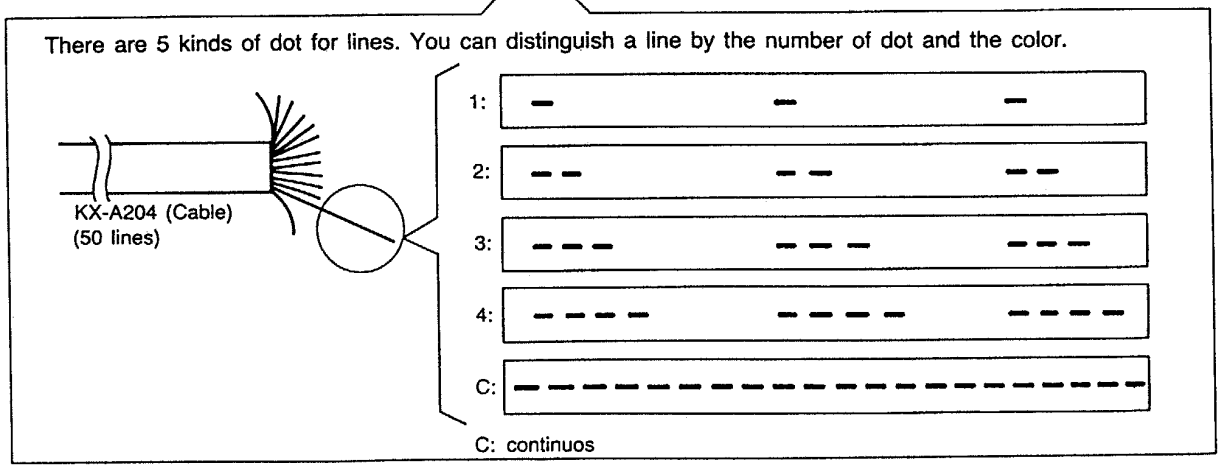
This KX-A204 (cable) enables you to connect 8 extensions to the KX-T336 System.
When you want to connect 8 extensions to the connector (KX-A205), two of KX-A205 are required.

The KX-A204/205 consists of the following:

KX-A204 : Cable..... 1
KX-A205 : Clip Terminal..... 1

Please connect KX-A204 (Cable) to KX-A205 (Clip Terminal) as follows. Refer to the connection chart on page 2-C-22.





■ Cable Pin Numbers to be connected (Extension Line)

Connection Chart

Conn. Pin	Cable Color	Clip No.	Number of Dot	Extension	
26	ORN-RED	1	1		T
1	ORN-BLK	2	1		R
27	YEL-RED	3	1	No.1	D1
2	YEL-BLK	4	1		D2
28	GRN-RED	5	1		P1
3	GRN-BLK	6	1		P2
29	GRY-RED	7	1		T
4	GRY-BLK	8	1		R
30	WHT-RED	9	1	No.2	D1
5	WHT-BLK	10	1		D2
31	ORN-RED	11	2		P1
6	ORN-BLK	12	2		P2
32	YEL-RED	13	2		T
7	YEL-BLK	14	2		R
33	GRN-RED	15	2	No.3	D1
8	GRN-BLK	16	2		D2
34	GRY-RED	17	2		P1
9	GRY-BLK	18	2		P2
35	WHT-RED	19	2		T
10	WHT-BLK	20	2		R
36	ORN-RED	21	3	No.4	D1
11	ORN-BLK	22	3		D2
37	YEL-RED	23	3		P1
12	YEL-BLK	24	3		P2
38	GRN-RED	25	3		T
13	GRN-BLK	26	3		R
39	GRY-RED	27	3	No.5	D1
14	GRY-BLK	28	3		D2
40	WHT-RED	29	3		P1
15	WHT-BLK	30	3		P2
41	ORN-RED	31	4		T
16	ORN-BLK	32	4		R
42	YEL-RED	33	4	No.6	D1
17	YEL-BLK	34	4		D2
43	GRN-RED	35	4		P1
18	GRN-BLK	36	4		P2
44	GRY-RED	37	4		T
19	GRY-BLK	38	4		R
45	WHT-RED	39	4	No.7	D1
20	WHT-BLK	40	4		D2
46	ORN-RED	41	C		P1
21	ORN-BLK	42	C		P2
47	YEL-RED	43	C		T
22	YEL-BLK	44	C		R
48	GRN-RED	45	C		D1
23	GRN-BLK	46	C	No.8	D2
49	GRY-RED	47	C		P1
24	GRY-BLK	48	C		P2
50	WHT-RED	49	C	Not use	
25	WHT-BLK	50	C		

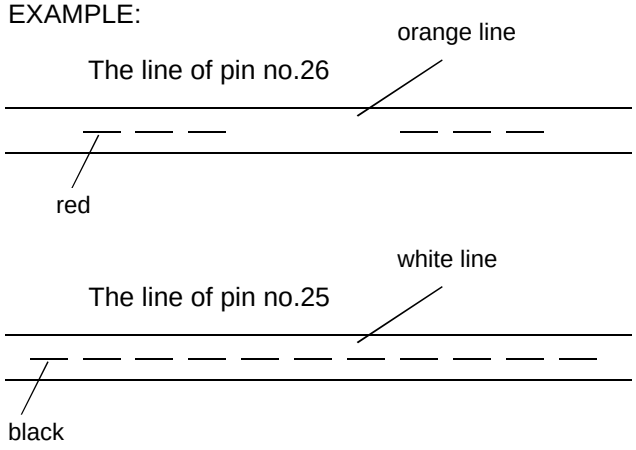
C: continuos

- Connection of the following Proprietary Telephones (6-conductor wiring is required for each extension.)
  KX-T123230D, KX-T123235 and KX-T7130.
  Connect the pin number of “T”, “R”, “D1”, “D2”, “P1” and “P2”.
  T: Tip D1: Data 1 P1: 3 Pair Voice (O.H.C.A.)
  R: Ring D2: Data 2 P2: 3 Pair Voice (O.H.C.A.)

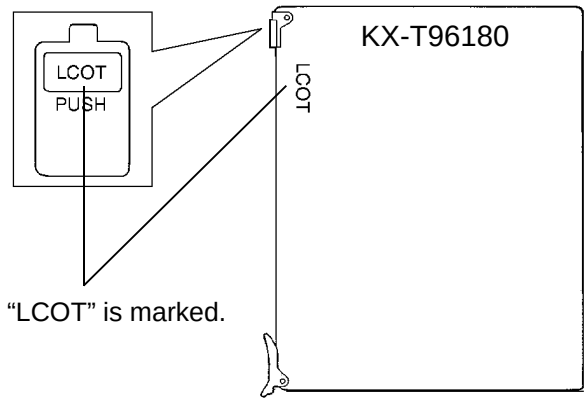
- Connection of the Proprietary Telephone (4-conductor wiring is required for each extension.)
  Connect the pin number of “T”, “R”, “D1” and “D2” only.

- Connection of Standard Telephone (2-conductor wiring is required for each extension). Connect the pin number of “T” and “R” only.

EXAMPLE:

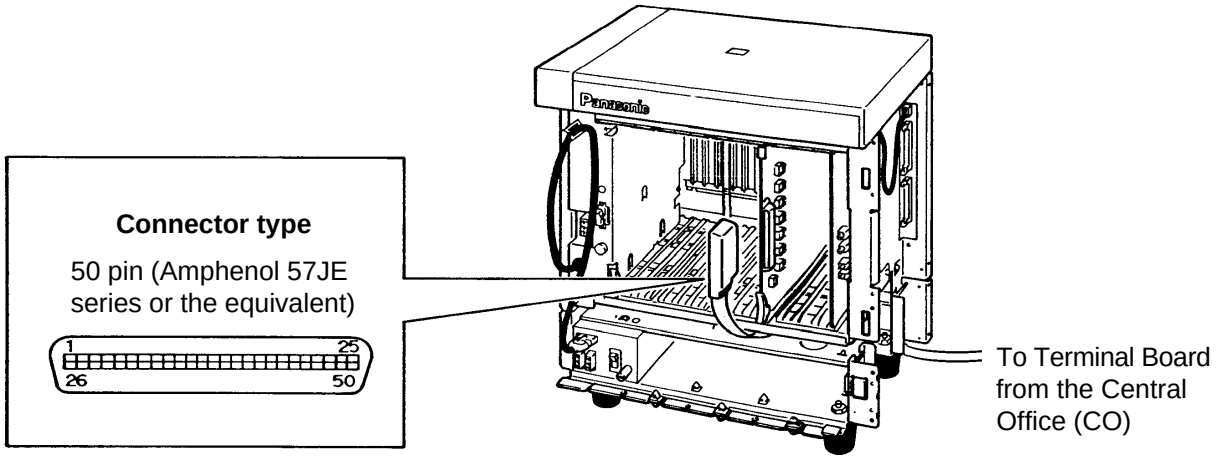


3.09 LCOT Card (KX-T96180)



- Insert this card into a free slot.

1) Connection of the Central Office Line cord (twisted cable)



- Insert the 50-pin connector (plug) of the Central Office Line cord (twisted cable) into the 50-pin connector (jack) on the LCOT card.

Refer to the Installation of the Amphenol 57JE series on page 2-C-24.

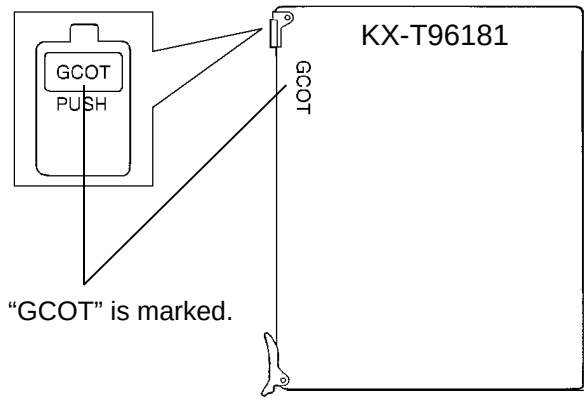
2) Connection of cable pins

See page 2-C-23.

3) Auxiliary connection

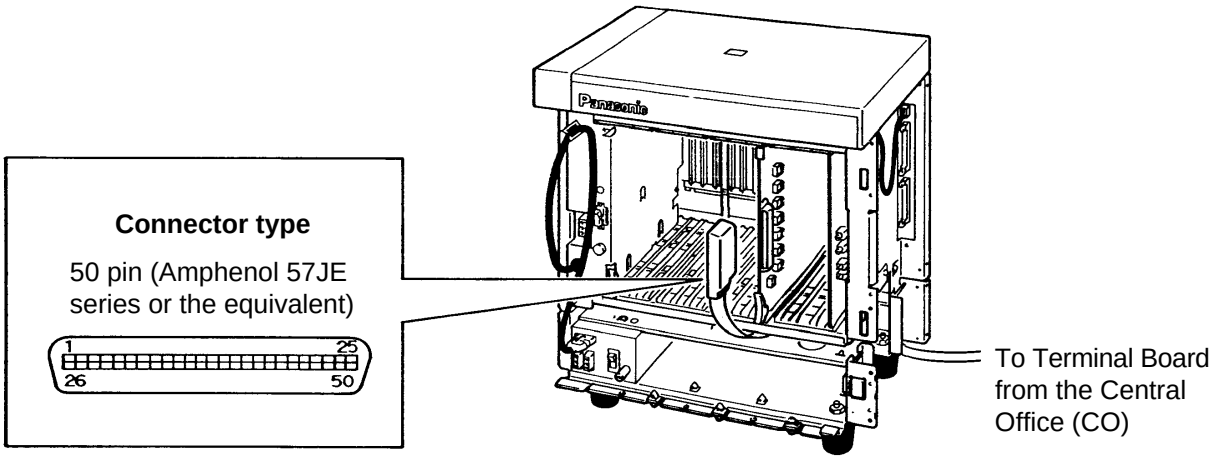
See page 2-C-30.

3.10 GCOT Card (KX-T96181)



- Insert this card into a free slot.

1) Connection of the Central Office Line cord (twisted cable)



- Insert the 50-pin connector (plug) of the Central Office Line cord (twisted cable) into the 50-pin connector (jack) on the GCOT card.

Refer to the Installation of the Amphenol 57JE series on page 2-C-24.

2) Connection of cable pins

See page 2-C-23.

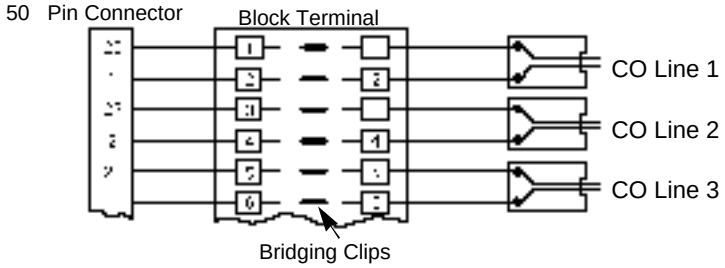
3) Auxiliary connection

See page 2-C-30.

◗ Cable Pin Numbers to be connected (Central Office Line)

CONN. PIN	CABLE COLOR	CLIP NO.	CO Line	
26 1	WHT-BLU BLU-WHT	1 2	NO.1	T R
27 2	WHT-ORN ORN-WHT	3 4	NO.2	T R
28 3	WHT-GRN GRN-WHT	5 6	NO.3	T R
29 4	WHT-BRN BRN-WHT	7 8	NO.4	T R
30 5	WHT-SLT SLT-WHT	9 10	NO.5	T R
31 6	RED-BLU BLU-RED	11 12	NO.6	T R
32 7	RED-ORN ORN-RED	13 14	NO.7	T R
33 8	RED-GRN GRN-RED	15 16	NO.8	T R
34 9 35 10 36 11 37 12 38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46 21 47 22 48 23 49 24 50 25	RED-BRN BRN-RED RED-SLT SLT-RED BLK-BLU BLU-BLK BLK-ORN ORN-BLK BLK-GRN GRN-BLK BLK-BRN BRN-BLK BLK-SLT SLT-BLK YEL-BLU BLU-YEL YEL-ORN ORN-YEL YEL-GRN GRN-YEL YEL-BRN BRN-YEL YEL-SLT SLT-YEL VIO-BLU BLU-VIO VIO-ORN ORN-VIO VIO-GRN GRN-VIO VIO-BRN BRN-VIO VIO-SLT SLT-VIO	17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50		

• Central Office Line Wiring



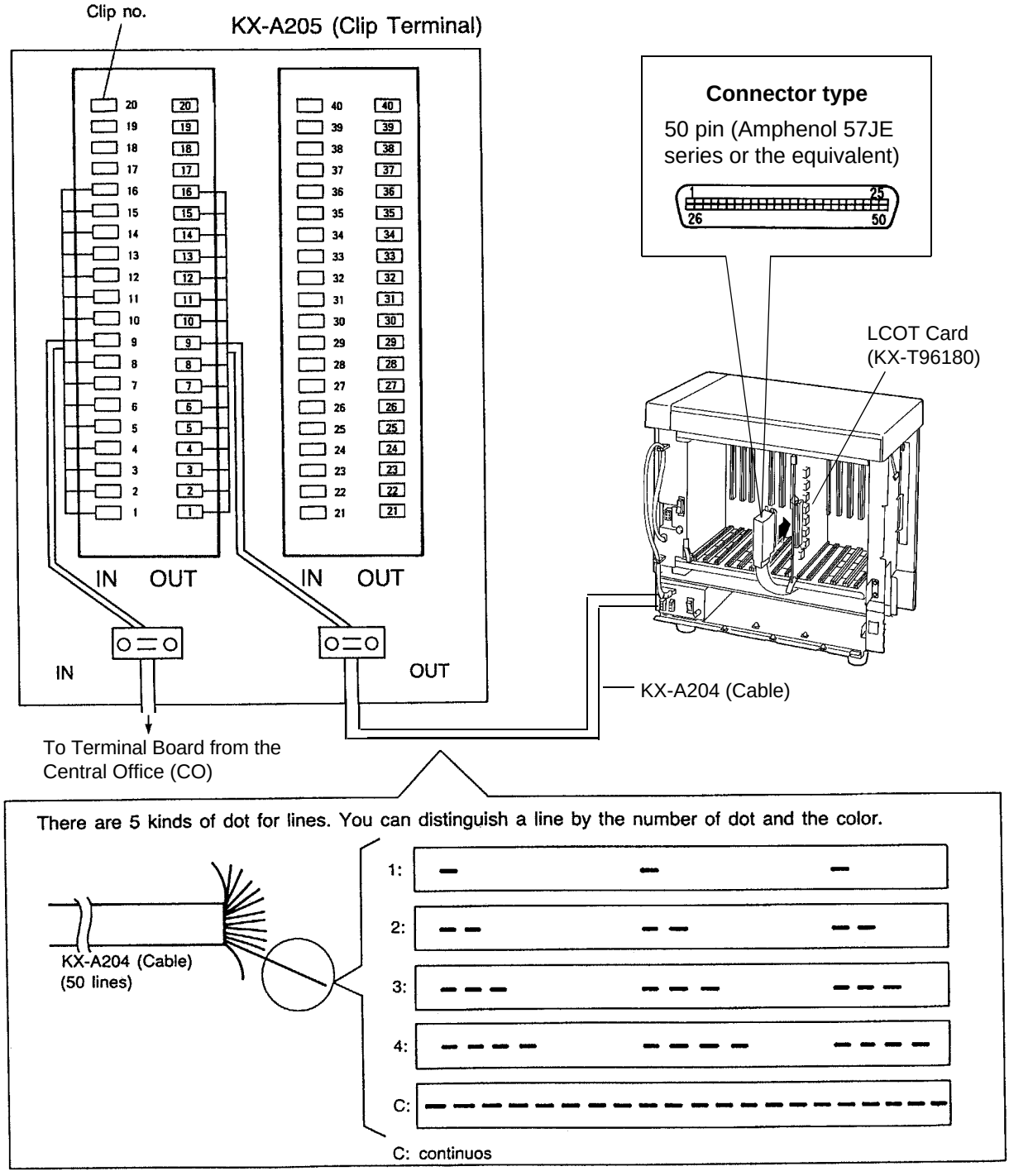
■ Central Office Line Connection of KX-A204 (Cable)/KX-A205 (Clip Terminal)

This KX-A204 (cable) enables you to connect 8 Central office lines to the KX-T336 System.

Please connect KX-A204 (Cable) to KX-A205 (Clip Terminal) as follows. Refer to the connection chart on page 2-C-26.

The KX-A204/205 consists of the following:

KX-A204 : Cable..... one
KX-A205 : Clip Terminal ..... one



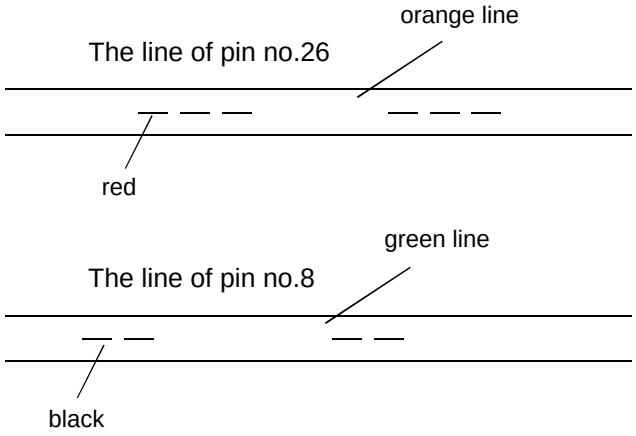
■ Cable Pin Numbers to be connected (Central Office Line)

Connection Chart

Conn. Pin	Cable Color	Clip No.	Number of Dot	CO Line
26 1	ORN-RED ORN-BLK	1 2	1 1	NO.1
27 2	YEL-RED YEL-BLK	3 4	1 1	NO.2
28 3	GRN-RED GRN-BLK	5 6	1 1	NO.3
29 4	GRY-RED GRY-BLK	7 8	1 1	NO.4
30 5	WHT-RED WHT-BLK	9 10	1 1	NO.5
31 6	ORN-RED ORN-BLK	11 12	2 2	NO.6
32 7	YEL-RED YEL-BLK	13 14	2 2	NO.7
33 8	GRN-RED GRN-BLK	15 16	2 2	NO.8
34 9 35 10 36 11 37 12 38 13 39 14 40 15 41 16 42 17 43 18 44 19 45 20 46 21 47 22 48 23 49 24 50 25	GRY-RED GRY-BLK WHT-RED WHT-BLK ORN-RED ORN-BLK YEL-RED YEL-BLK GRN-RED GRN-BLK GRY-RED GRY-BLK WHT-RED WHT-BLK ORN-RED ORN-BLK YEL-RED YEL-BLK GRN-RED GRN-BLK GRY-RED GRY-BLK WHT-RED WHT-BLK ORN-RED ORN-BLK YEL-RED YEL-BLK GRN-RED GRN-BLK GRY-RED GRY-BLK WHT-RED WHT-BLK	17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	2 2 2 2 3 3 3 3 3 3 3 3 3 3 4 4 4 4 4 4 4 4 4 4 C C C C C C C C C C	

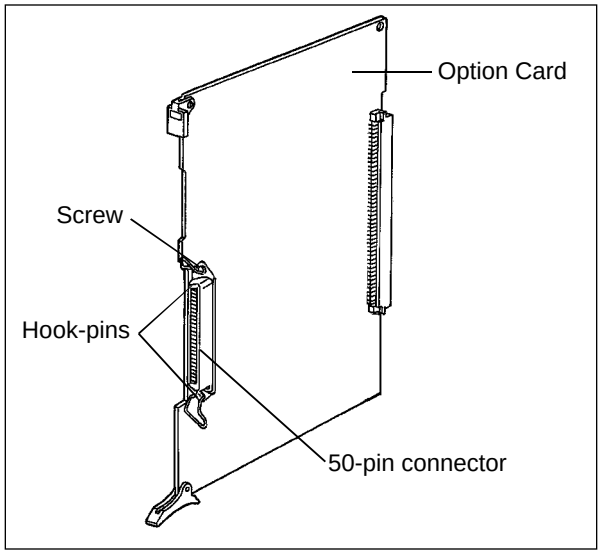
C: continuous

EXAMPLE:

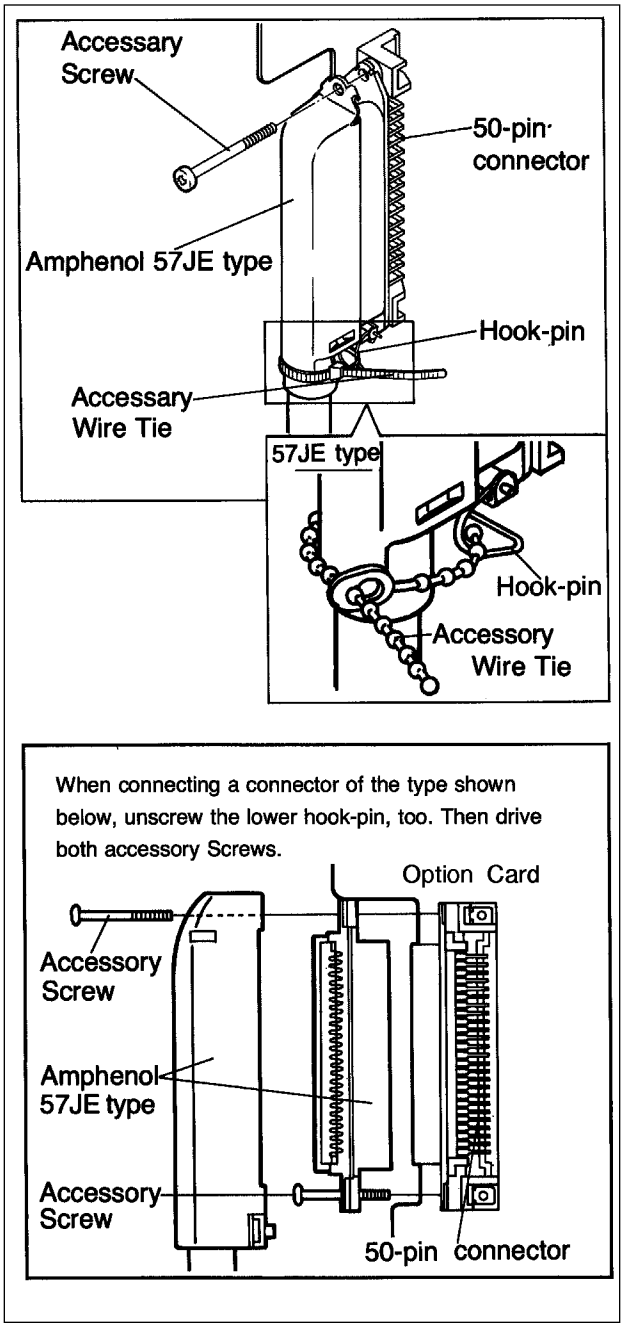


■ To connect Amphenol 57JE type (screw-attach-type 50-pin connector) to the Option Card, follow the procedure below.

1. The 50-pin connector (jack) on the Option Card has two hook-pins.
   Remove the upper hook-pin, taking out the screw.

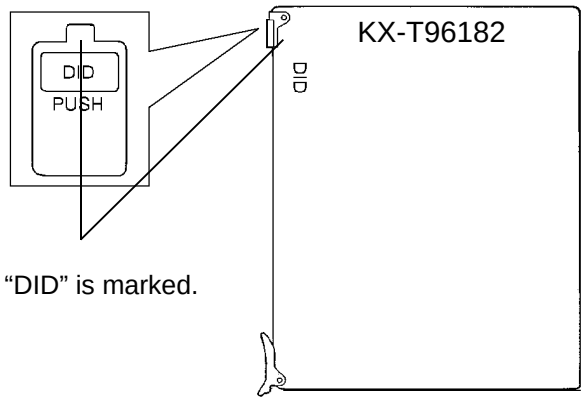


2. To attach the Amphenol 57JE type (plug) to the connector, drive the accessory Screw at the upper part, and fasten the accessory Wire Tie around the lower hook-pin and the Amphenol 57JE type, as shown.



3.11 DID Card

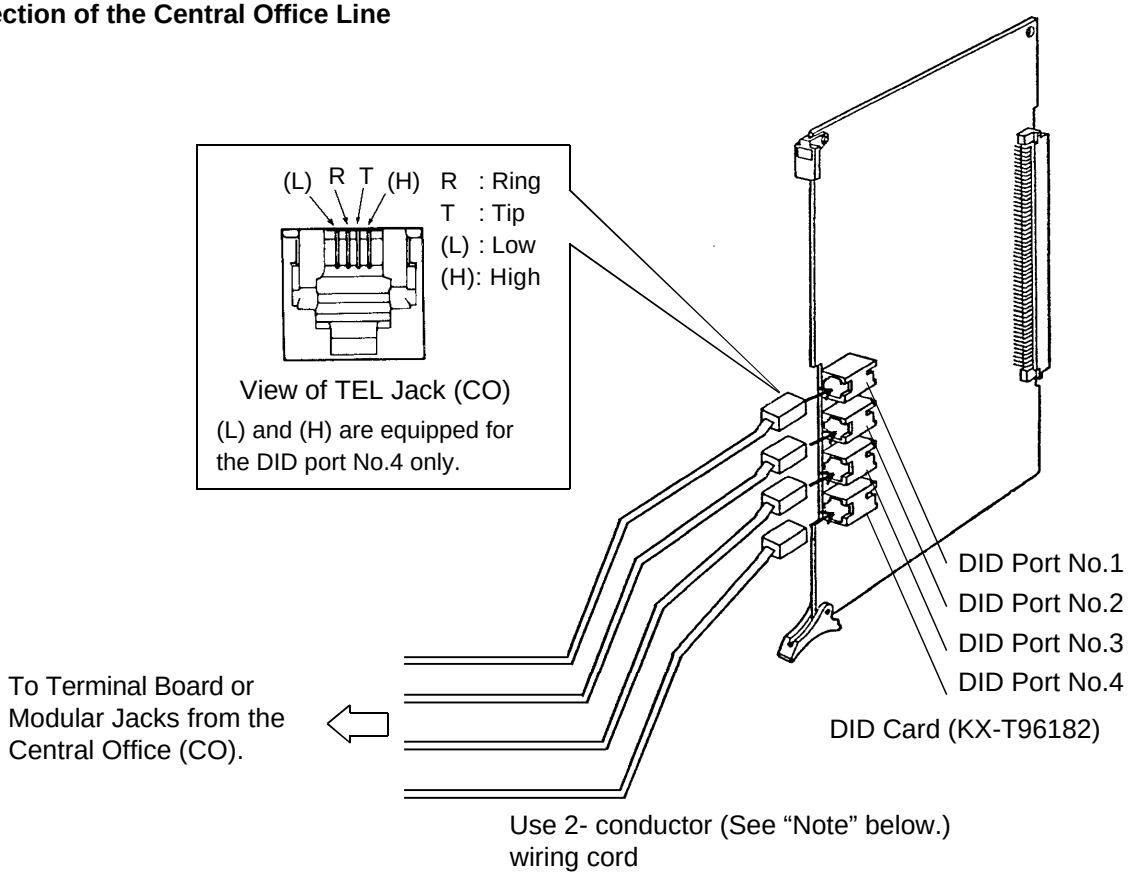
1. DID Card (KX-T96182) (for U.S.A. and Canada)



"DID" is marked.

- Insert this card into a free slot.

Connection of the Central Office Line



- Insert the modular plug of the telephone line cord (2-conductor wiring) into the modular jack on the DID card.

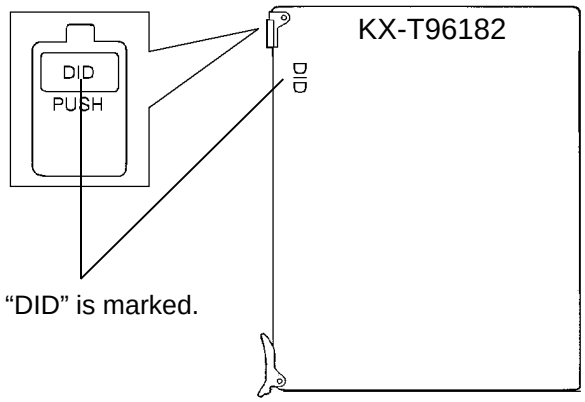
(Note)

The DID port No.4 is equipped with "H (High)" and "L (Low)" leads.
If you connect a 4-conductor wiring cord to this port, the on/off status of the system can be detected through "H" and "L" leads.

When the system is on : Ground is applied.
When the system is off : Ground is not applied.

3.11 DID Card

2. DID Card (KX-T96182) (for areas other than U.S.A. and Canada)

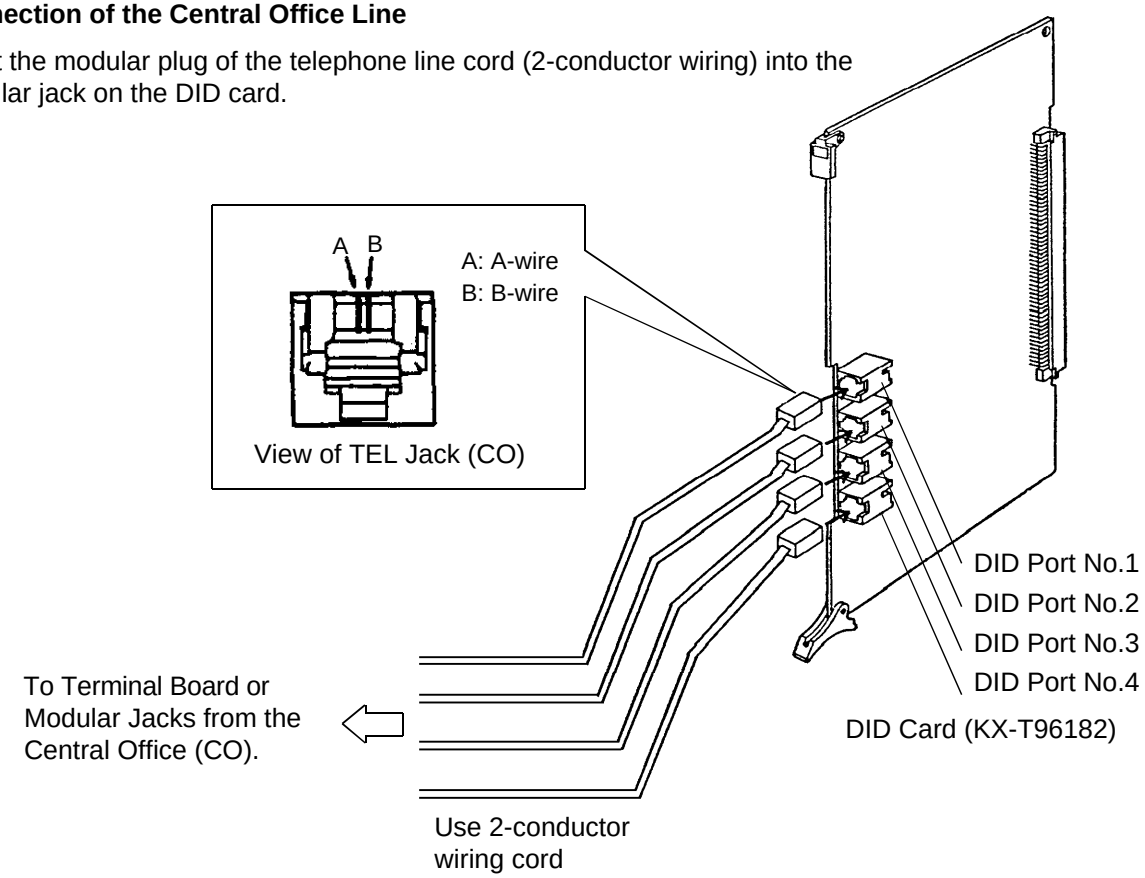


"DID" is marked.

- Insert this card into a free slot.

Connection of the Central Office Line

Insert the modular plug of the telephone line cord (2-conductor wiring) into the modular jack on the DID card.

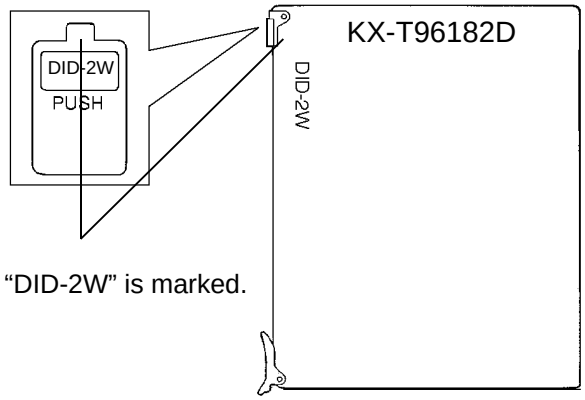


- The DID port No.4 is equipped with "H" and "L" leads as well as "A-wire" and "B- wire."
  However, please be sure to use 2-conductor wiring cord for connection.

- Make sure to connect the frame of the KX-T336 System to the earth ground properly to protect the unit.

3.11 DID Card

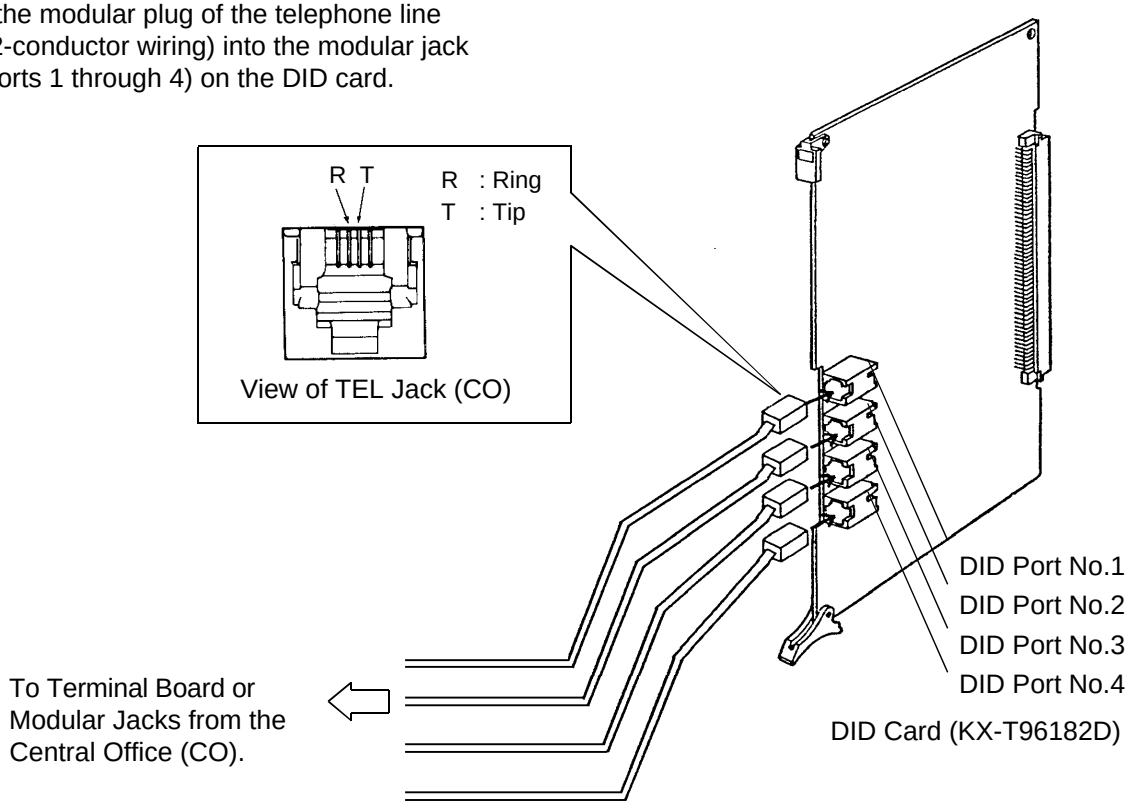
3. Both-way DID Card (KX-T96182D) (for areas other than U.S.A. and Canada)



- Insert this card into a free slot.

Connection of the Central Office Line

Insert the modular plug of the telephone line cord (2-conductor wiring) into the modular jack (DID ports 1 through 4) on the DID card.



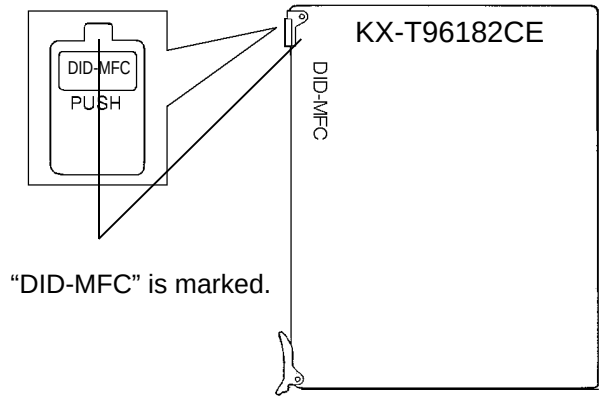
Use 2- conductor wiring cord (See "Note" below.)

(Note)

- Make sure to match the polarity of DID lines and DID port — Ring: "–" (negative)
  Tip: "+" (positive).
- The DID ports 1 through 4 are equipped with "H (High)" and "L (Low)" leads in addition to "R" and "T." However, please be sure to use 2-conductor wiring cord for connection.
- Make sure to connect the frame of the Main Unit to the earth ground properly to protect the unit.

3.11 DID Card

4. MFC DID Card (KX-T96182CE) (for areas other than U.S.A. and Canada)

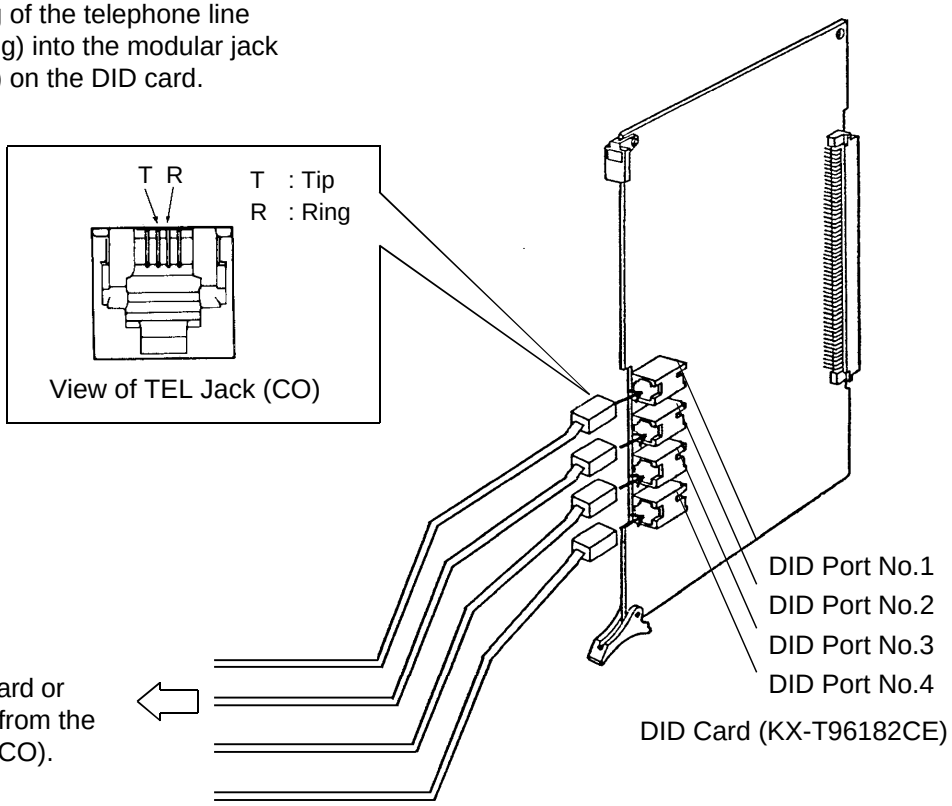


"DID-MFC" is marked.

- Insert this card into a free slot.

Connection of the Central Office Line

Insert the modular plug of the telephone line cord (2-conductor wiring) into the modular jack (DID ports 1 through 4) on the DID card.

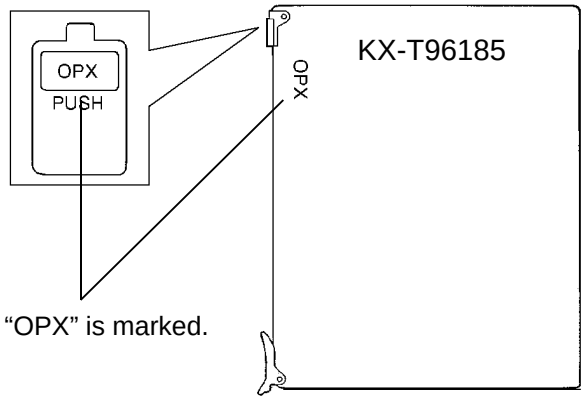


Use 2- conductor wiring cord (See "Note" below.)

(Note)

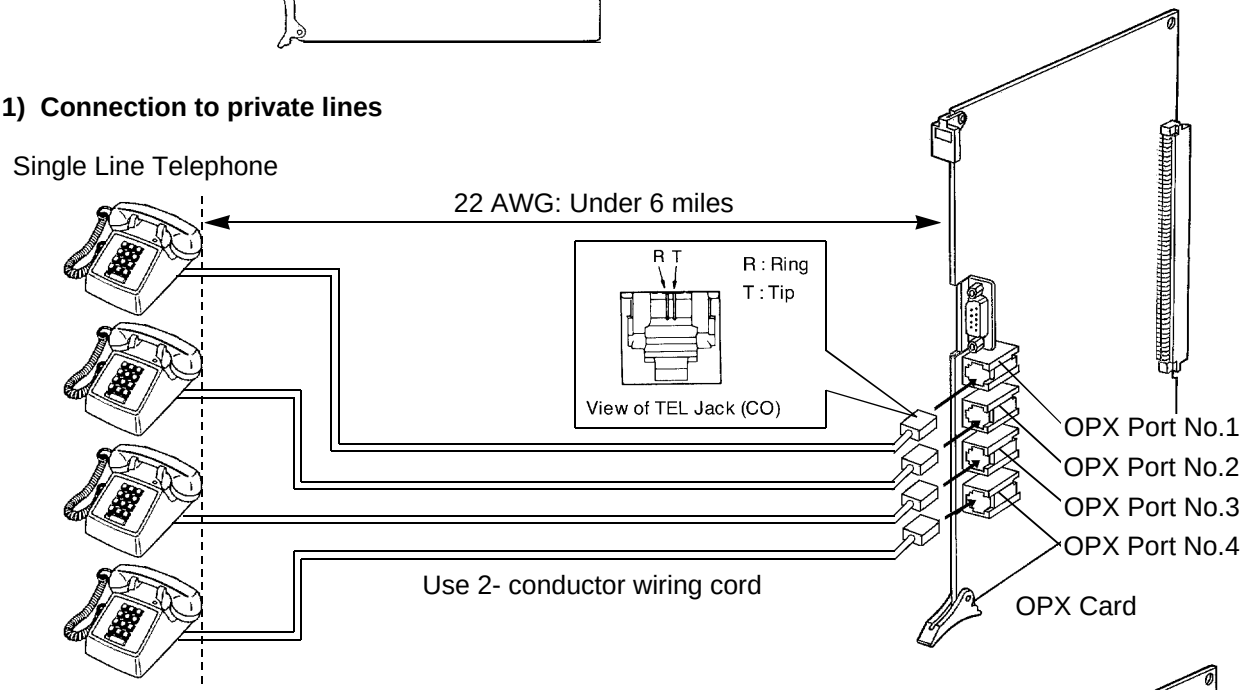
- Make sure to match the polarity of DID lines and DID port — Ring: "–" (negative)
  Tip: "+" (positive).
- The DID ports 1 through 4 are equipped with "H (High)" and "L (Low)" leads in addition to "R" and "T.' However, please be sure to use 2-conductor wiring cord when connecting.
- Connect the Main Unit frame to the earth ground properly to protect the unit.

3.12 OPX Card (KX-T96185)



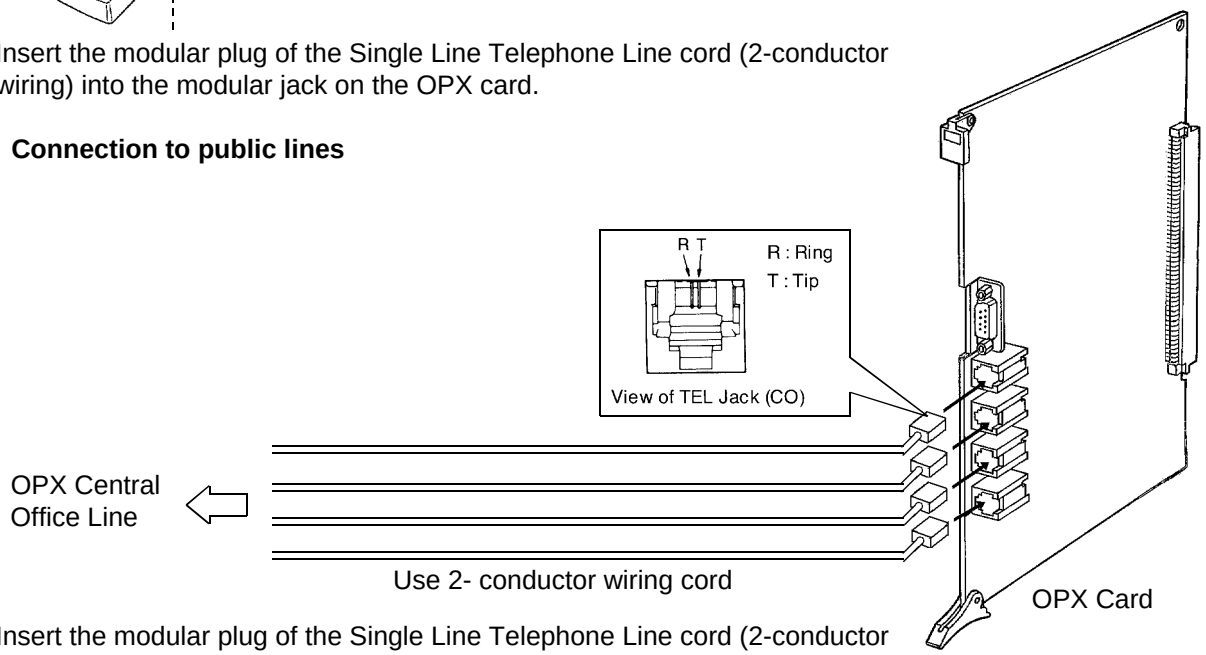
- Insert this card into a free slot.

1) Connection to private lines



- Insert the modular plug of the Single Line Telephone Line cord (2-conductor wiring) into the modular jack on the OPX card.

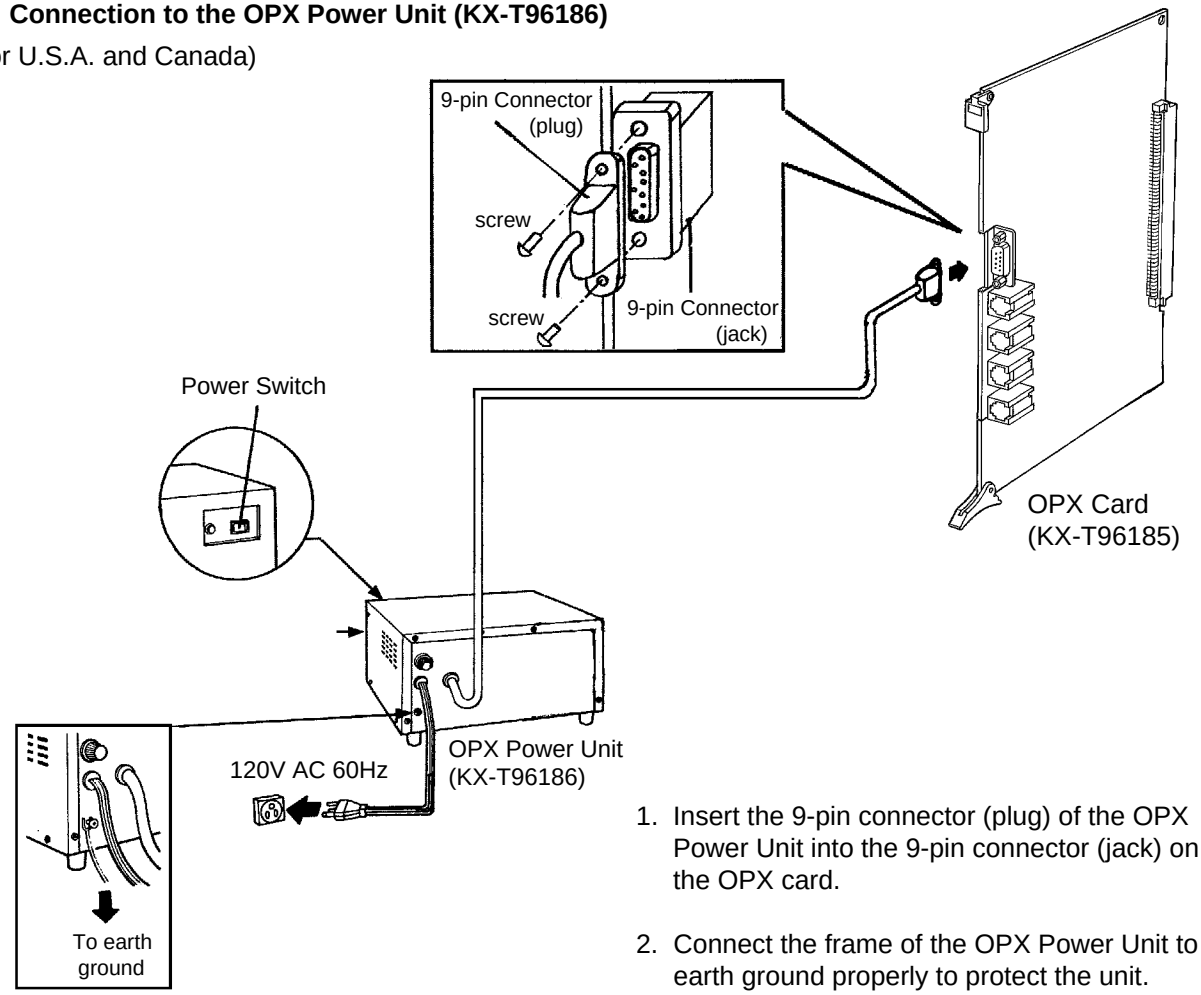
2) Connection to public lines



- Insert the modular plug of the Single Line Telephone Line cord (2-conductor wiring) into the modular jack on the OPX card.

3) Connection to the OPX Power Unit (KX-T96186)

(for U.S.A. and Canada)



1. Insert the 9-pin connector (plug) of the OPX Power Unit into the 9-pin connector (jack) on the OPX card.

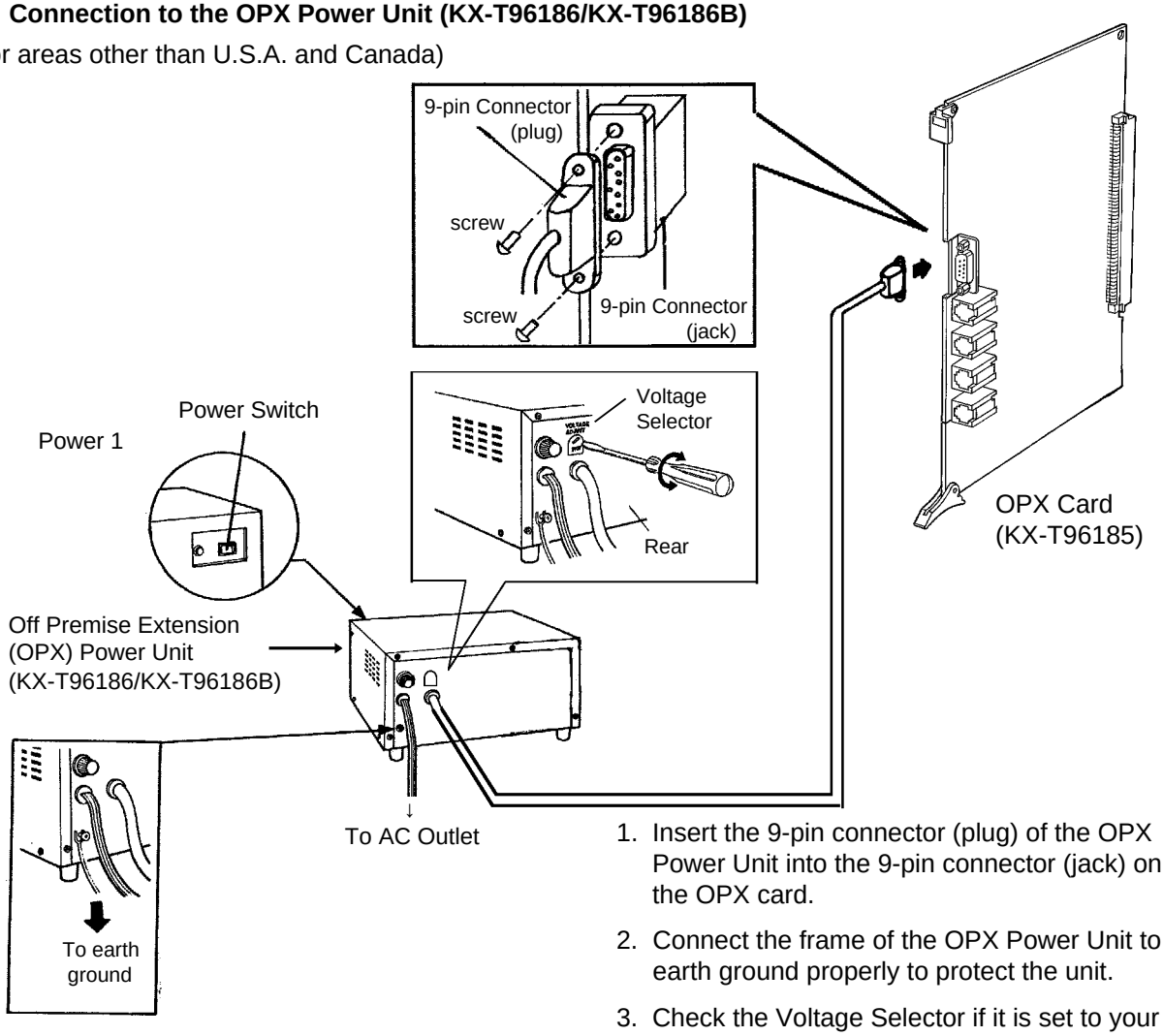
2. Connect the frame of the OPX Power Unit to earth ground properly to protect the unit.

3. Plug the AC Power cord of the OPX Power Unit to the AC outlet.

4. Turn on the Power Switch on the OPX Power Unit.
   - The Power indicator will be lit.

3) Connection to the OPX Power Unit (KX-T96186/KX-T96186B)

(for areas other than U.S.A. and Canada)



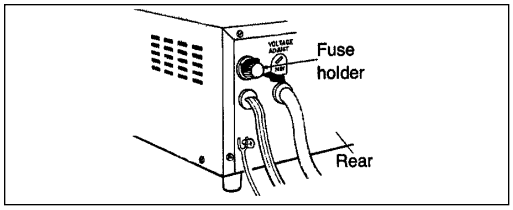
NOTE:

Model No. of available OPX Power Unit depends on the electrical requirement in your area.

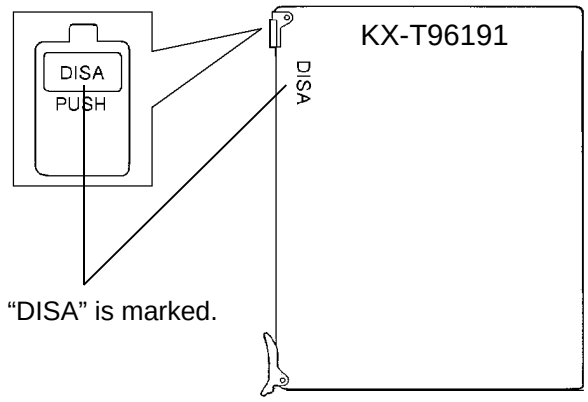
1. Insert the 9-pin connector (plug) of the OPX Power Unit into the 9-pin connector (jack) on the OPX card.
2. Connect the frame of the OPX Power Unit to earth ground properly to protect the unit.
3. Check the Voltage Selector if it is set to your household AC voltage. If not, reset the Voltage Selector to the correct position with a screwdriver. There is no Voltage Selector for some countries; The correct voltage is already set.
4. Plug in the AC Power cord from the OPX Power Unit.
5. Turn on the Power Switch on the OPX Power Unit.
   - The Power indicator will be lit.

■ Primary Power Fuse

If the Power Indicator light goes out, replace the Primary Power Fuse after removing the cause.

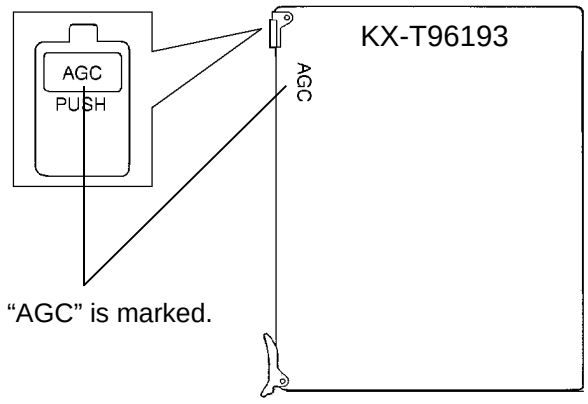


3.13 DISA Card (KX-T96191)



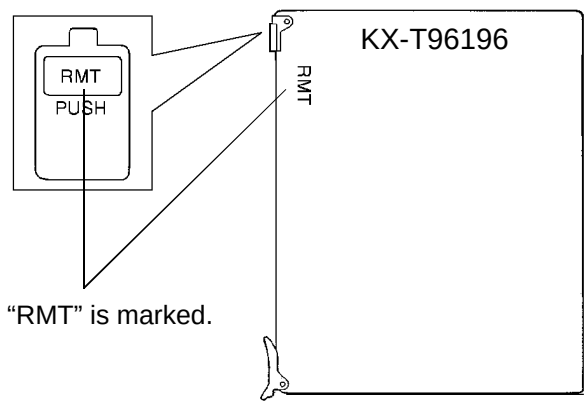
- Insert this card into a free slot.

3.14 AGC Card (KX-T96193)



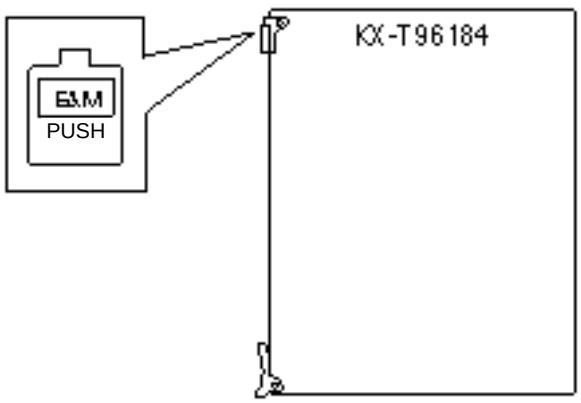
- Insert this card into a free slot.

3.15 RMT Card (KX-T96196)



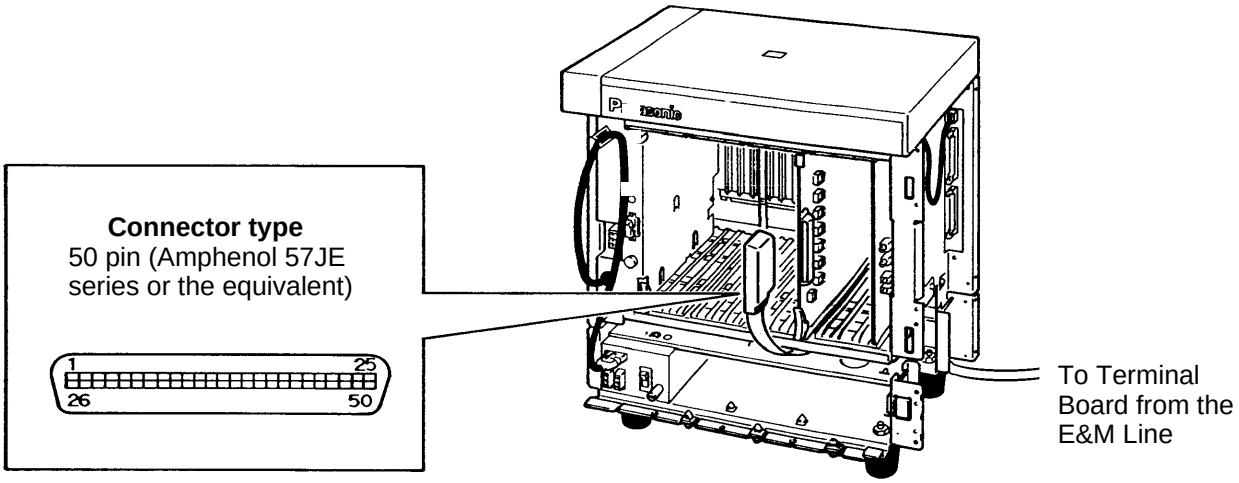
- Insert this card into a free slot.

3.16 E&M Card (KX-T96184)



• Insert this card into a free slot.

1) Connection of the E&M Line cord (twisted cable)



• Connect the ground wire to the ground wire connector (GND).
•Insert the 50-pin connector (plug) of the E&M Line cord (twisted cable) into the 50-pin connector (jack) on the E&M card.

※ Refer to the Installation of the Amphenol 57JE series on page 2-C-24.

2) Connection of cable pins

See pages 2-C-28-2 and 2-C-28-3.

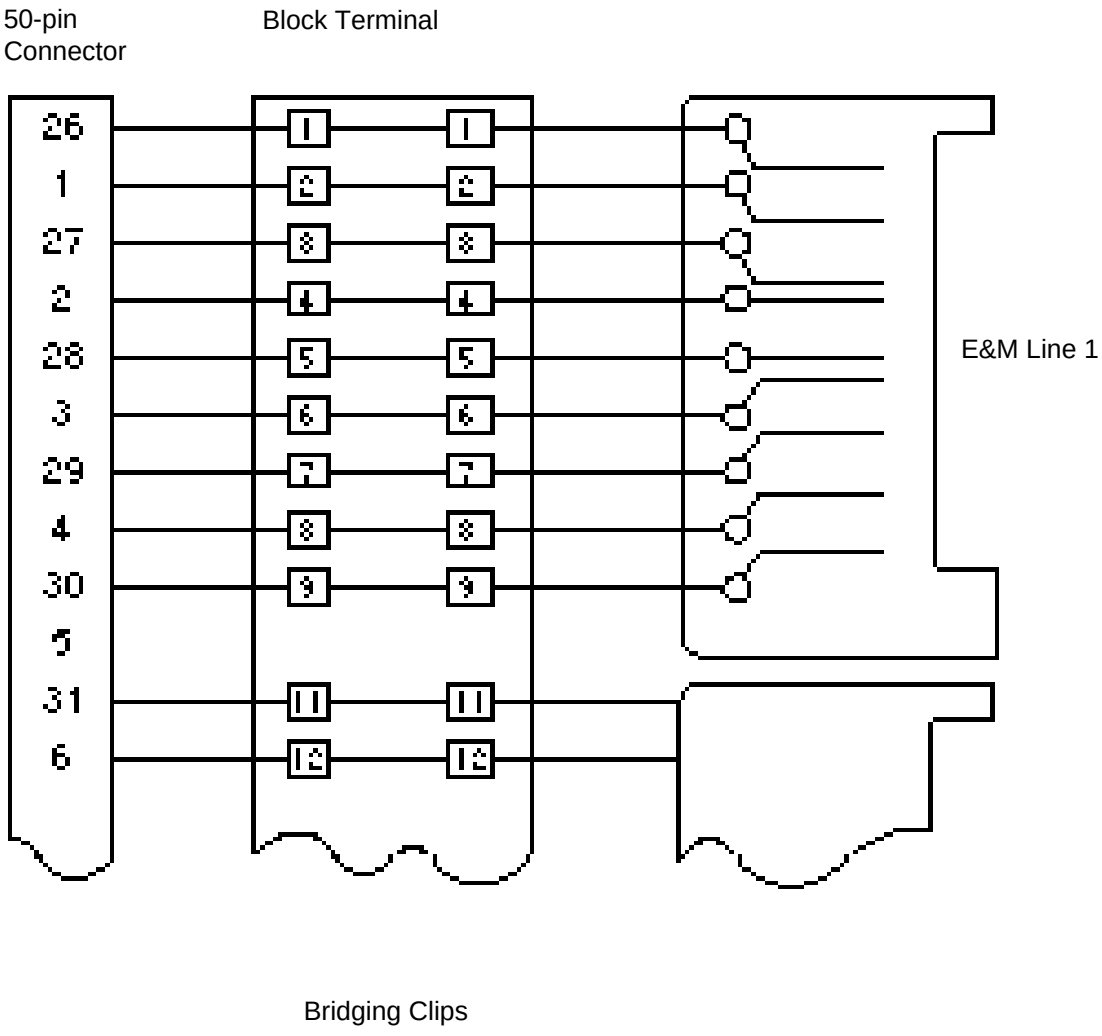
■ Cable Pin Numbers to be connected (E&M Line)

Connect Pin	Cable Color	Clip No	Number of Dot	E&M Line	
1	ORN-RED	1	1		T } 2-wire or 4 - wire - send
26	ORN-BLK	2	1		R }
2	YEL-RED	3	1		T1 } 4-wire - receive
27	YEL-BLK	4	1		R1 }
3	GRY-RED	5	1		E Lead
28	GRY-BLK	6	1	NO.1	SG Lead
4	WHY-RED	7	1		SB Lead
29	WHY-BLK	8	1		M1 Lead
5	ORN-RED	9	1		No connect
30	ORN-BLK	10	1		M Lead only for Type 5
6	YEL-RED	11	2		T } 2-wire or 4-wire - send
31	YEL-BLK	12	2		R }
7	GRY-RED	13	2		T1 } 4-wire - receive
32	GRY-BLK	14	2		R1 }
8	WHY-RED	15	2		E Lead
33	WHY-BLK	16	2	NO.2	SG Lead
9	ORN-RED	17	2		SB Lead
34	ORN-BLK	18	2		M1 Lead
10	YEL-RED	19	2		No connect
35	YEL-BLK	20	2		M Lead only for Type 5
11	GRY-RED	21	3		T } 2-wire or 4-wire - send
36	GRY-BLK	22	3		R }
12	WHY-RED	23	3		T1 } 4-wire - receive
37	WHY-BLK	24	3		R1 }
13	ORN-RED	25	3		E Lead
38	ORN-BLK	26	3	NO.3	SG Lead
14	YEL-RED	27	3		SB Lead
39	YEL-BLK	28	3		M1 Lead
15	GRY-RED	29	3		No connect
40	GRY-BLK	30	3		M Lead only for Type 5
16	WHY-RED	31	4		T } 2-wire or 4-wire - send
41	WHY-BLK	32	4		R }
17	ORN-RED	33	4		T1 } 4-wire - receive
42	ORN-BLK	34	4		R1 }
18	YEL-RED	35	4		E Lead
43	YEL-BLK	36	4	NO.4	SG Lead
19	GRY-RED	37	4		SB Lead
44	GRY-BLK	38	4		M1 Lead
20	WHY-RED	39	4		No connect
45	WHY-BLK	40	4		M Lead only for Type 5

Note:
21~25, 46~50: No connect

■ Cable Pin Numbers to be connected (E&M Line)

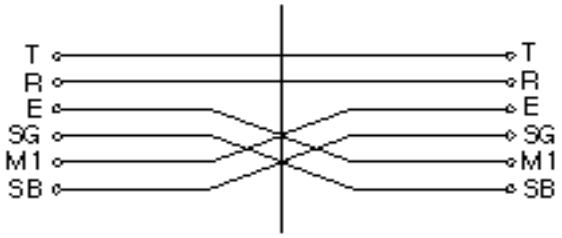
• E&M Line Wiring



■ Connection to another KX-T336 system (KX-T96184)

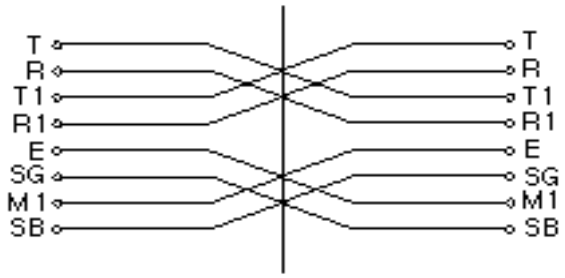
① 2-wire voice path

KX-T96184 Another KX-T96184



② 4-wire voice path

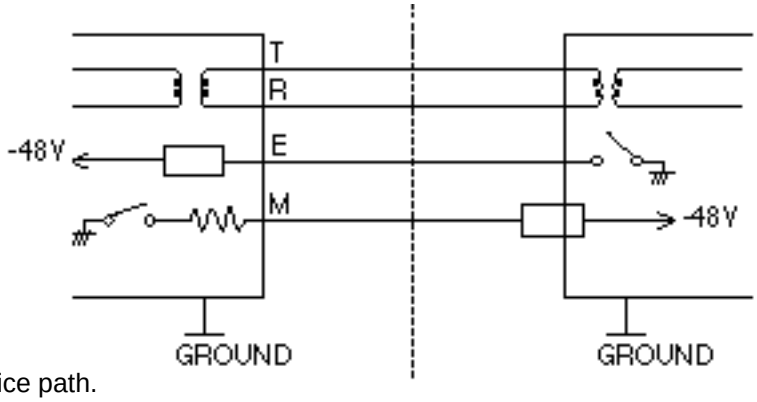
KX-T96184 Another KX-T96184



■ Connection to E&M Central Office

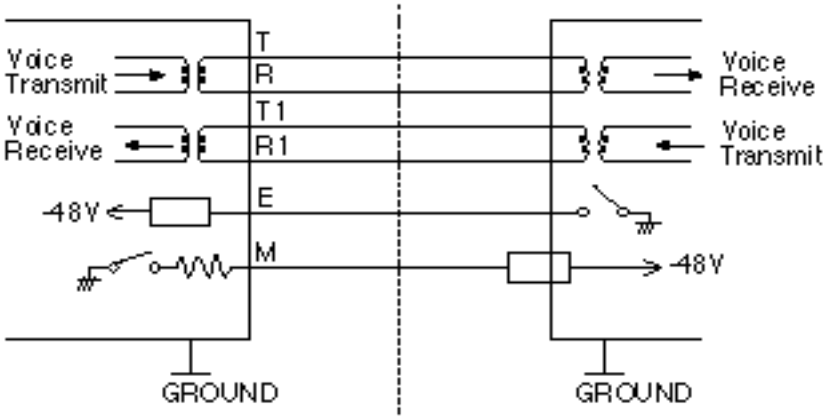
① 2-wire voice path.

KX-T96184 E&M Central Office



② 4-wire voice path.

KX-T96184 E&M Central Office

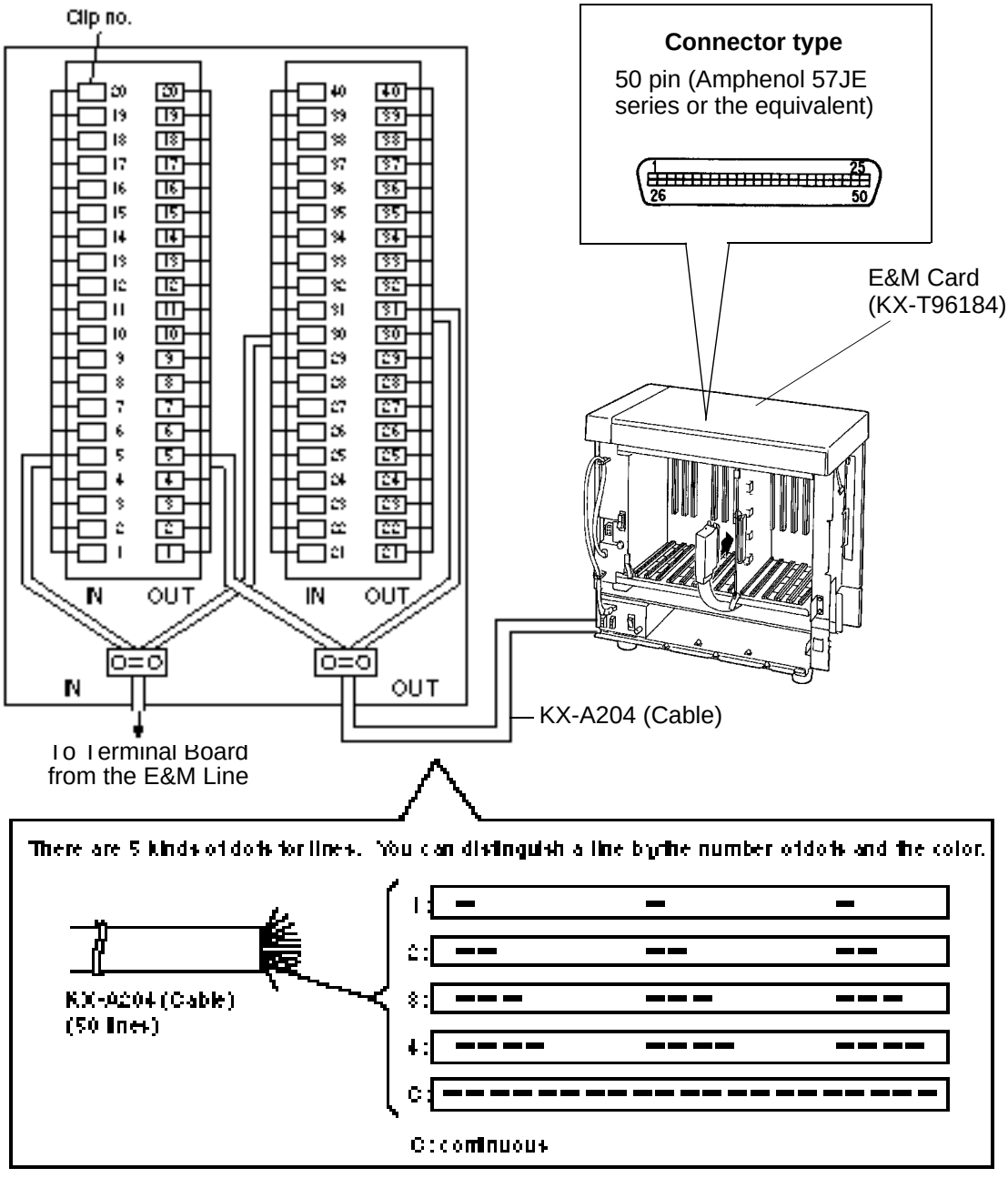


■ E&M Line Connection of KX-A204 (Cable)/KX-A205 (Clip Terminal)

KX-A204 (cable) enables you to connect four E&M lines to the KX-T336 System. Please connect KX-A204 (Cable) to KX-A205 (Clip Terminal) as follows. Refer to the connection chart on page 2-C-28-6.

The KX-A204/205 consists of the following:

KX-A204 : Cable ..... one
KX-A205 : Clip Terminal ..... one



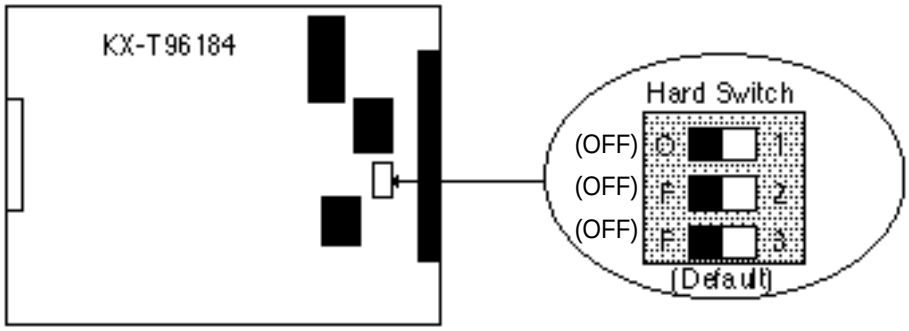
■ Cable Pin Numbers to be connected (E&M Line)

Connect Pin	Cable Color	Clip No	Number of Dot	E&M Line	
1	ORN-RED	1	1		T } 2-wire or 4 - wire - send
26	ORN-BLK	2	1		R }
2	YEL-RED	3	1		T1 } 4-wire - receive
27	YEL-BLK	4	1		R1 }
3	GRY-RED	5	1		E Lead
28	GRY-BLK	6	1	NO.1	SG Lead
4	WHY-RED	7	1		SB Lead
29	WHY-BLK	8	1		M1 Lead
5	ORN-RED	9	1		No connect
30	ORN-BLK	10	1		M Lead only for Type 5
6	YEL-RED	11	2		T } 2-wire or 4-wire - send
31	YEL-BLK	12	2		R }
7	GRY-RED	13	2		T1 } 4-wire - receive
32	GRY-BLK	14	2		R1 }
8	WHY-RED	15	2		E Lead
33	WHY-BLK	16	2	NO.2	SG Lead
9	ORN-RED	17	2		SB Lead
34	ORN-BLK	18	2		M1 Lead
10	YEL-RED	19	2		No connect
35	YEL-BLK	20	2		M Lead only for Type 5
11	GRY-RED	21	3		T } 2-wire or 4-wire - send
36	GRY-BLK	22	3		R }
12	WHY-RED	23	3		T1 } 4-wire - receive
37	WHY-BLK	24	3		R1 }
13	ORN-RED	25	3		E Lead
38	ORN-BLK	26	3	NO.3	SG Lead
14	YEL-RED	27	3		SB Lead
39	YEL-BLK	28	3		M1 Lead
15	GRY-RED	29	3		No connect
40	GRY-BLK	30	3		M Lead only for Type 5
16	WHY-RED	31	4		T } 2-wire or 4-wire - send
41	WHY-BLK	32	4		R }
17	ORN-RED	33	4		T1 } 4-wire - receive
42	ORN-BLK	34	4		R1 }
18	YEL-RED	35	4		E Lead
43	YEL-BLK	36	4	NO.4	SG Lead
19	GRY-RED	37	4		SB Lead
44	GRY-BLK	38	4		M1 Lead
20	WHY-RED	39	4		No connect
45	WHY-BLK	40	4		M Lead only for Type 5

Note:
21~25, 46~50: No connect

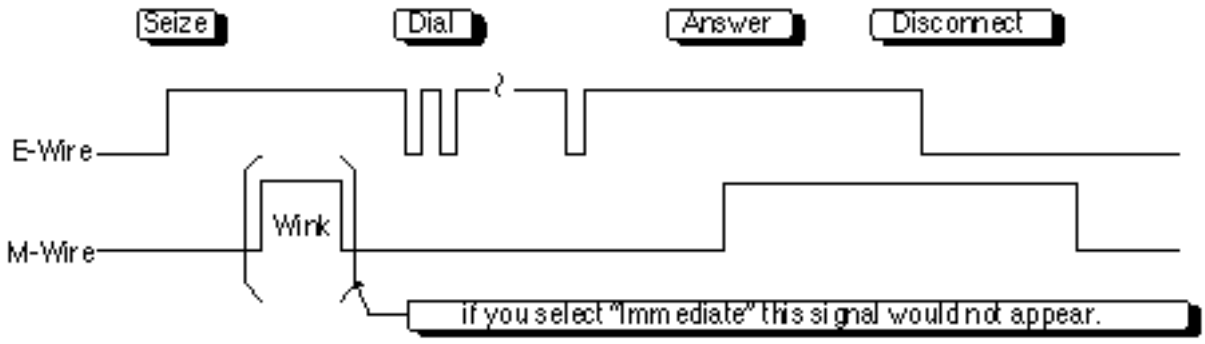
■ Hardware Setting

You can choose one of the following E&M sequences using the hard switch on the KX-T96184



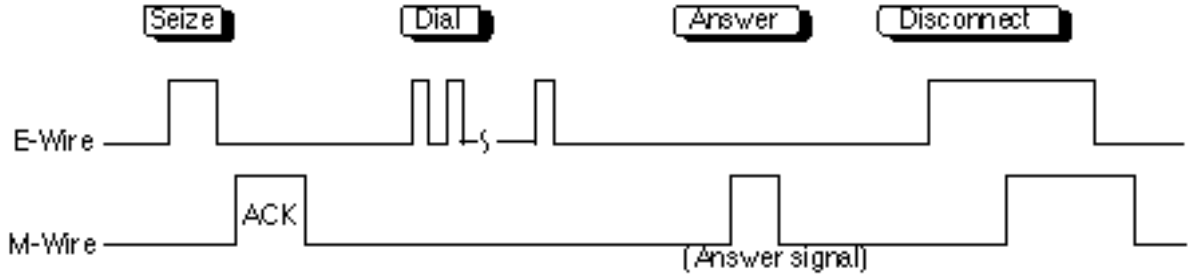
Hard switch	1 2 3 (ON/ON/ON)	(1) Continuous E&M (Wink/Immediate)
	1 2 3 (OFF/ON/ON)	
	1 2 3 (ON/OFF/ON)	(2) Pulsed E&M with Answer signal (Wink)
	1 2 3 (OFF/OFF/ON)	(3) Pulsed E&M without Answer signal (Wink)
	1 2 3 (ON/ON/OFF)	Reserved
	1 2 3 (OFF/OFF/OFF)	

(1)Continuous E&M



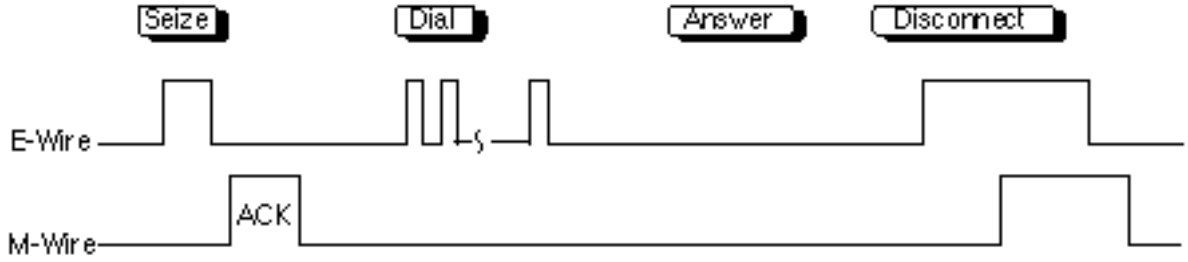
■ Hardware Setting (E&M Card)

(2)Pulsed E&M with Answer signal



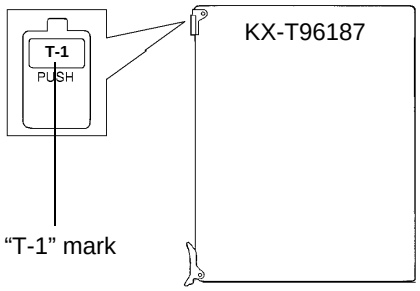
If you select this sequence, then you must select “Wink” as a start type.

(3)Pulsed E&M without Answer signal



If you select this sequence, then you must select “Wink” as a start type.

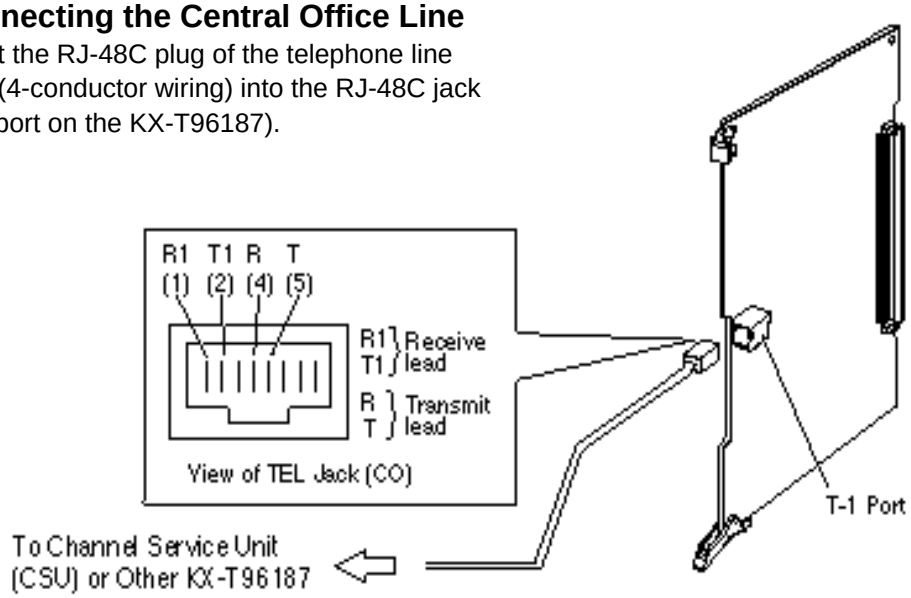
3.17 T-1 Digital Trunk Card (KX-T96187)



- Insert the card into Free Slot 1, 5 or 9 of any shelf.
- A maximum of six KX-T96187 can be installed in the system.

Connecting the Central Office Line

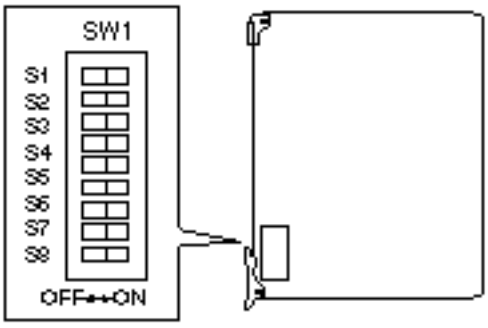
Insert the RJ-48C plug of the telephone line cord (4-conductor wiring) into the RJ-48C jack (T-1 port on the KX-T96187).



T-1 DIGITAL TRUNK CARD (KX-T96187)

Use 4-conductor wiring cord.

Transmit Equalizer Setting

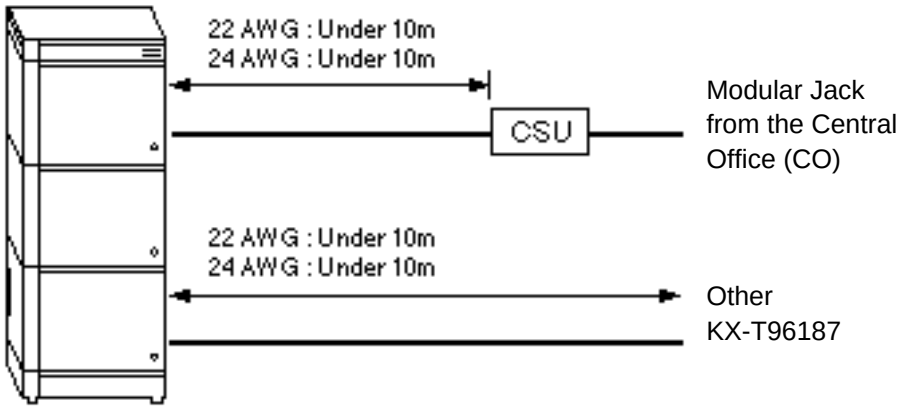


S1	ON
S2	OFF
S3	OFF
S4	OFF
S5	OFF
S6	OFF
S7	OFF
S8	(Not Used)

(defaulf)

Note.
The User cannot change this setting.

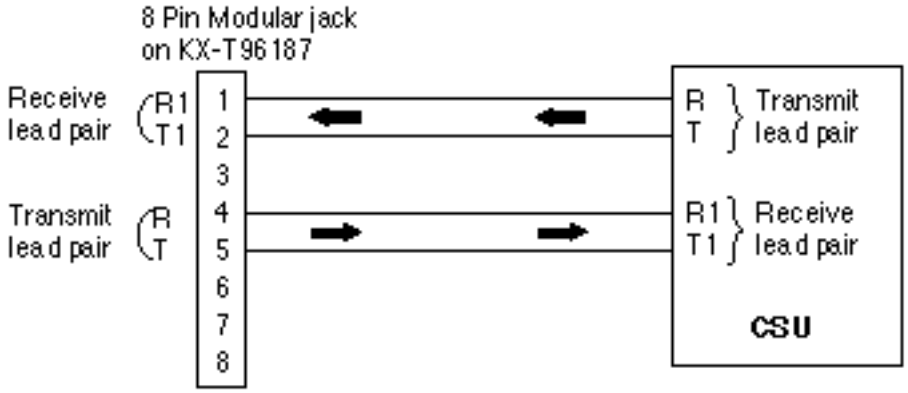
Maximum Cabling Distance of the T-1 Line



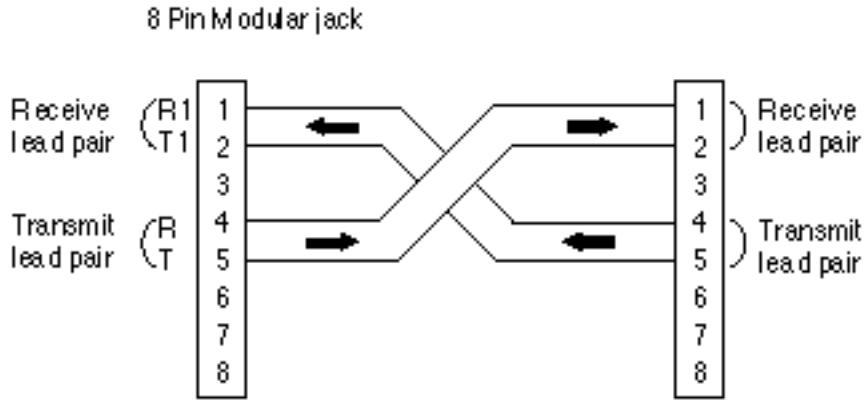
Note :
The T-1 line cable must be 22 AWG shielded twisted pair cable or 24 AWG UTP (unshielded twisted pair) cable supported Category 5.

Cable Pin Numbers to be connected for KX-T96187

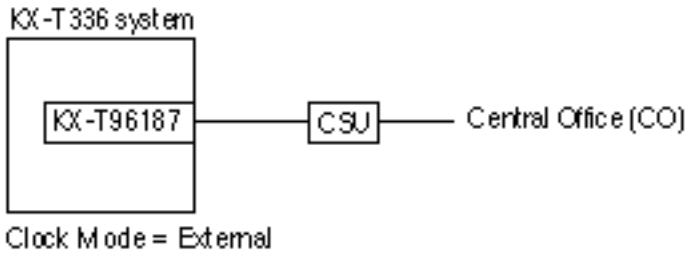
KX-T96187 Channel Service Unit (CSU)

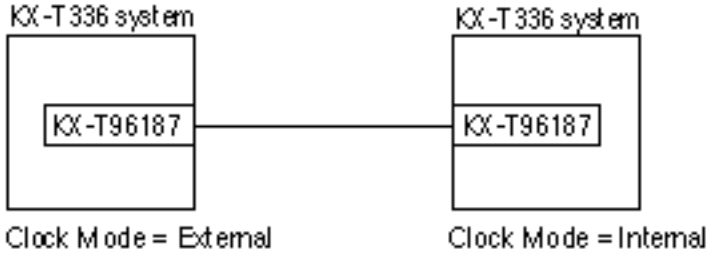


KX-T96187 KX-T96187



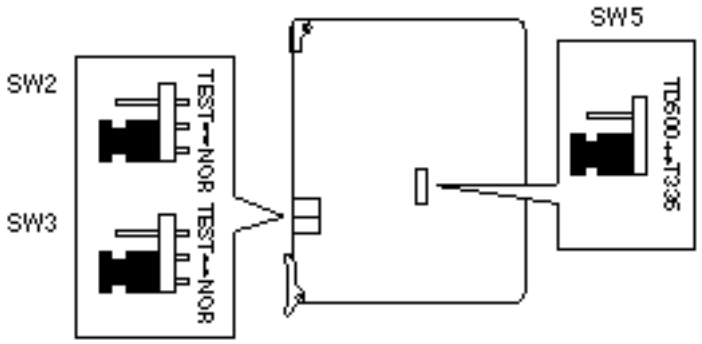
System Clock Mode for KX-T96187





Note:
System Clock mode is programmed by CLK command.(see 10-C-64.02)

Short Jumper Setting for KX-T96187



SW2, SW3

NOR	Normal (default)
TEST	TEST (see Note)

SW5

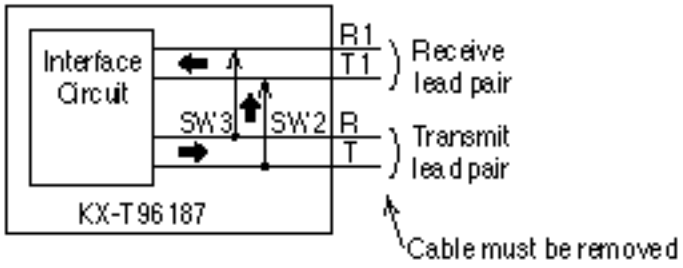
T336	Mode for KX-T336 (default)
TD500	(Reserved)

Note:

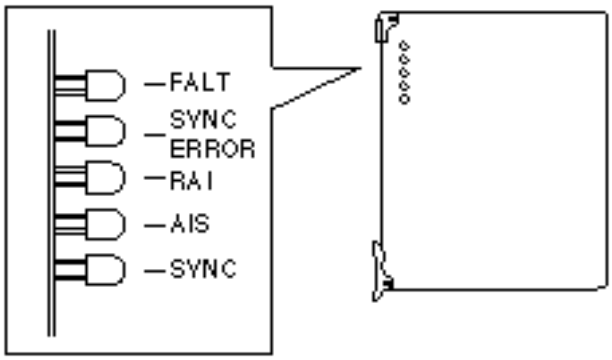
Loop Back Test

The user can check KX-T96187 by the following procedure.

1. Remove T-1 cable from KX-T96187.
2. Set SW2 and SW3 to TEST position.
3. Check SYNC LED (green).
   - If SYNC LED does not light or flash, KX-T96187 does not work.
4. Set SW2 and SW3 to NOR position.

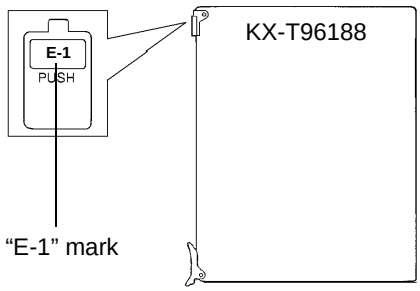


LED Indication for KX-T96187



Item	Status	Contents
FAULT	ON	Card Fault
	OFF	Normal
SYNC ERROR	ON	Clock Synchronization Error or Loss of Signal
	OFF	Normal
RAI	ON	Receive Remote Alarm Indication signal (Yellow Alarm)
	OFF	Normal
AIS	ON	Send Alarm Indication Signal (Yellow Alarm)
	OFF	Normal
SYNC	FLASH	Clock Master at External Clock Mode
	ON	Detection of Signal
	OFF	No Detection of Signal

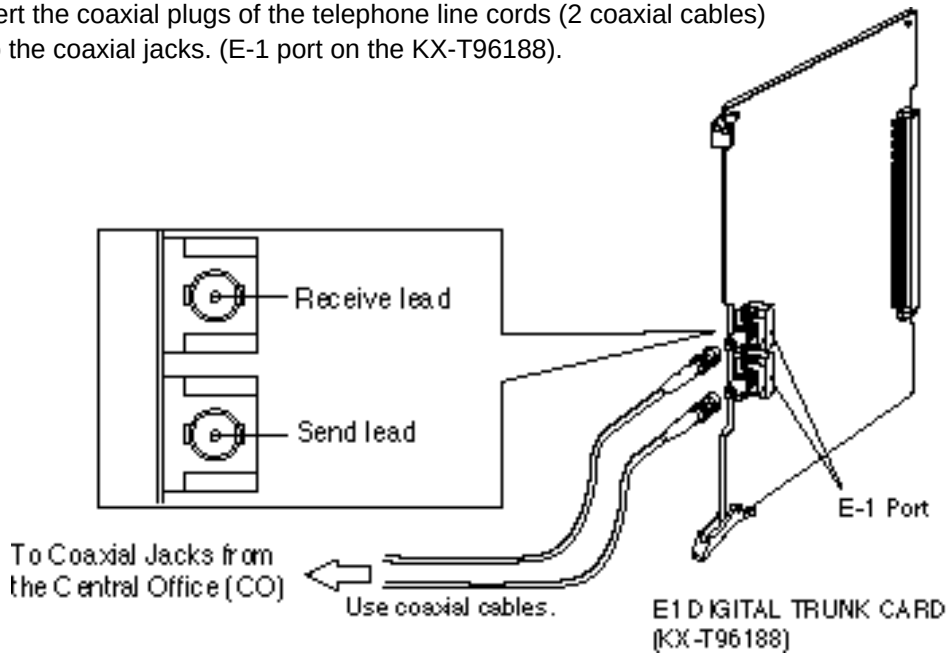
3.18 E-1 Digital Trunk Card (KX-T96188)



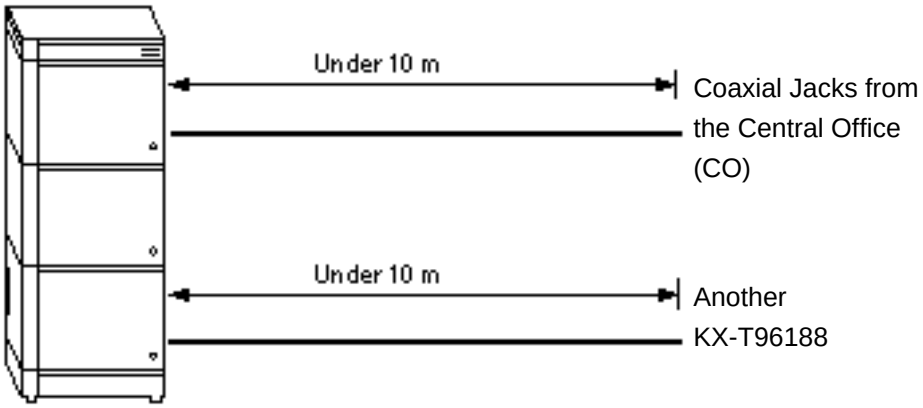
- Insert the card into Free Slot 1, 5 or 9 of any shelf.
- A maximum of four E1 DIGITAL TRUNK CARDS can be installed in the system.

■ Connecting the Central Office Line

Insert the coaxial plugs of the telephone line cords (2 coaxial cables) into the coaxial jacks. (E-1 port on the KX-T96188).



■ Maximum Cabling Distance of the E-1 Line

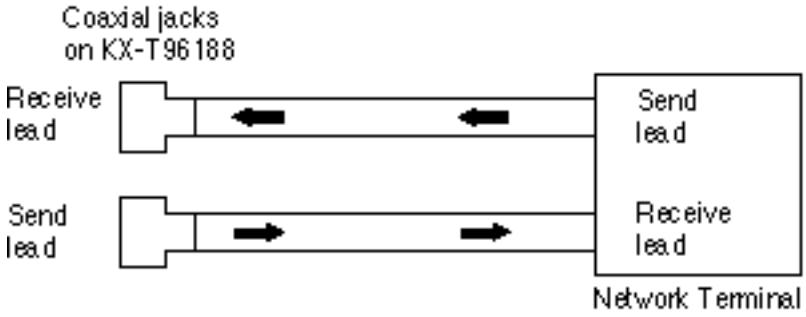


Note:

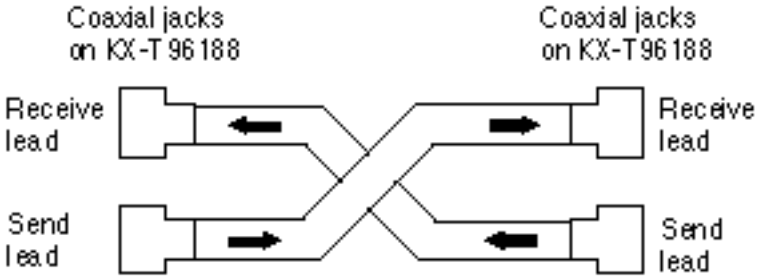
- The E-1 line cable must be 75 ohm transmission coaxial cable.

■ Cable Pin Numbers to be Connected for KX-T96188

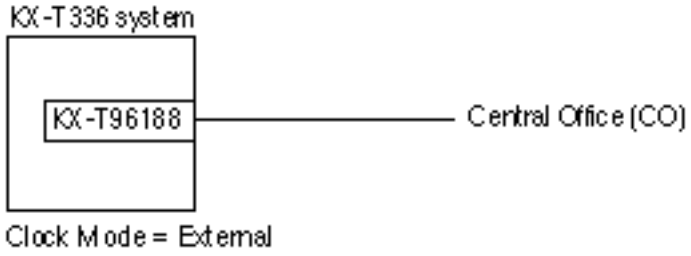
KX-T96188 Central Office (CO)

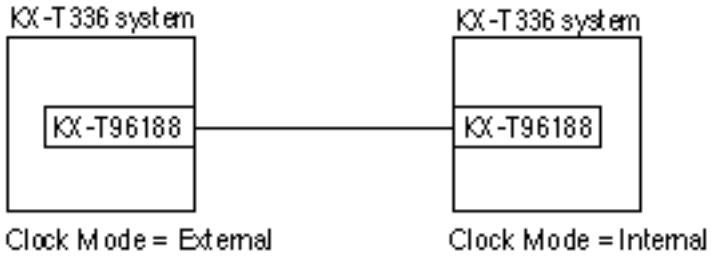


KX-T96188 KX-T96188



■ System Clock Mode for KX-T96188

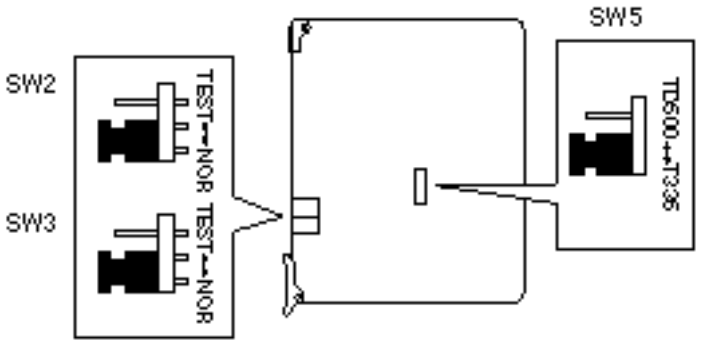




Note:

• System Clock mode is programmed using CLK command (See 10-C-64.02).

■ Short Jumper Setting for KX-T96188



SW2, SW3

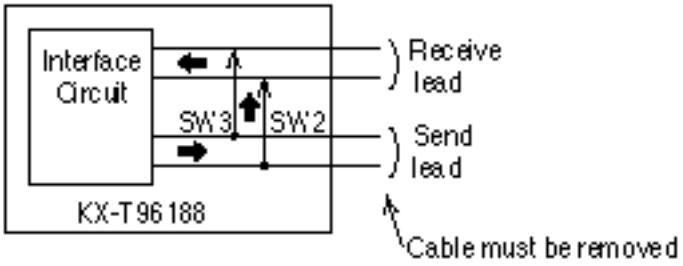
NOR	Normal (default)
TEST	TEST (see Note)

SW5

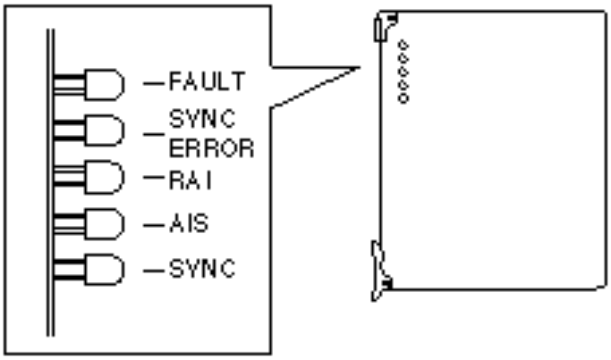
T336	Mode for KX-T336 (default)
TD500	(Reserved)

Note:
Loop Back Test
The user can check KX-T96188 by the following procedure.

1. Remove E-1 coaxial cables from KX-T96188.
2. Set SW2 and SW3 to TEST position.
3. Check SYNC LED (green).
   • If SYNC LED does not light or flash, KX-T96188 does not work.
4. Set SW2 and SW3 to NOR position.



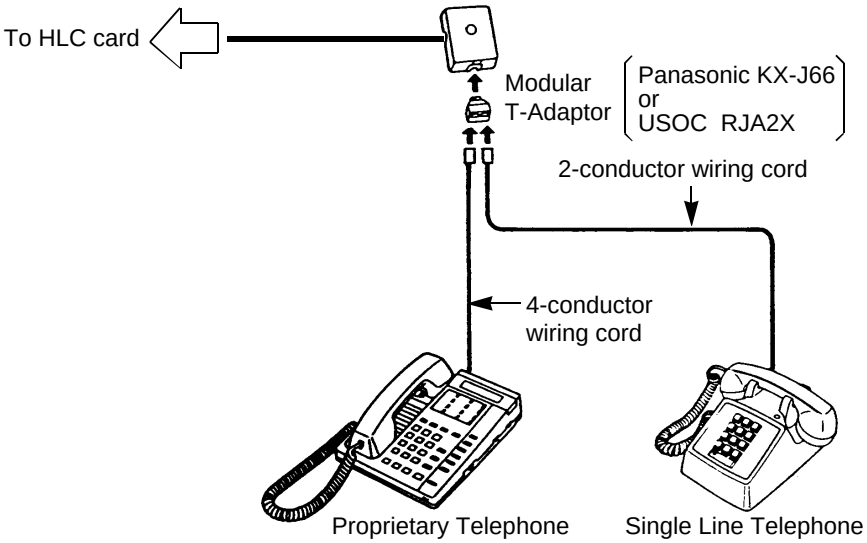
■ LED Indication for KX-T96188



Item	Status	Contents
FAULT	ON	Card Fault
	OFF	Normal
SYNC ERROR	ON	Clock Synchronization Error or Loss of Signal
	OFF	Normal
RAI	ON	Receive Remote Alarm Indication Signal
	OFF	Normal
AIS	ON	Send Alarm Indication Signal
	OFF	Normal
SYNC	FLASH	Clock Master at External Clock Mode
	ON	Detection of Signal
	OFF	No Detection of Signal

4.00 Parallel Connection of the Extensions

Any Single Line Telephone can be connected parallelly with Proprietary Telephone as follow:



KX-T7020	KX-T61620
KX-T7030	KX-T61630
KX-T7050	KX-T61650
KX-T7130	KX-T123220
KX-T30820	KX-T123230
KX-T30830	KX-T123230D
KX-T30850	KX-T123235
	KX-T123250

Note :

The 6-conductor wiring cord and the Modular T Adaptor KX-J36 are required when one of the following PITS telephones is used for parallel connection. KX-T7130, KX-T123230D and KX-T123235.

Not only a Single Line Telephone but an answering machine, a facsimile or a modem (personal computer) can be connected parallelly with certain PITS telephones.
Refer to Section 3-F-9.00 “Parallel Connection of Extensions” for further information.

5.00 Auxiliary Connection for Power Failure Transfer

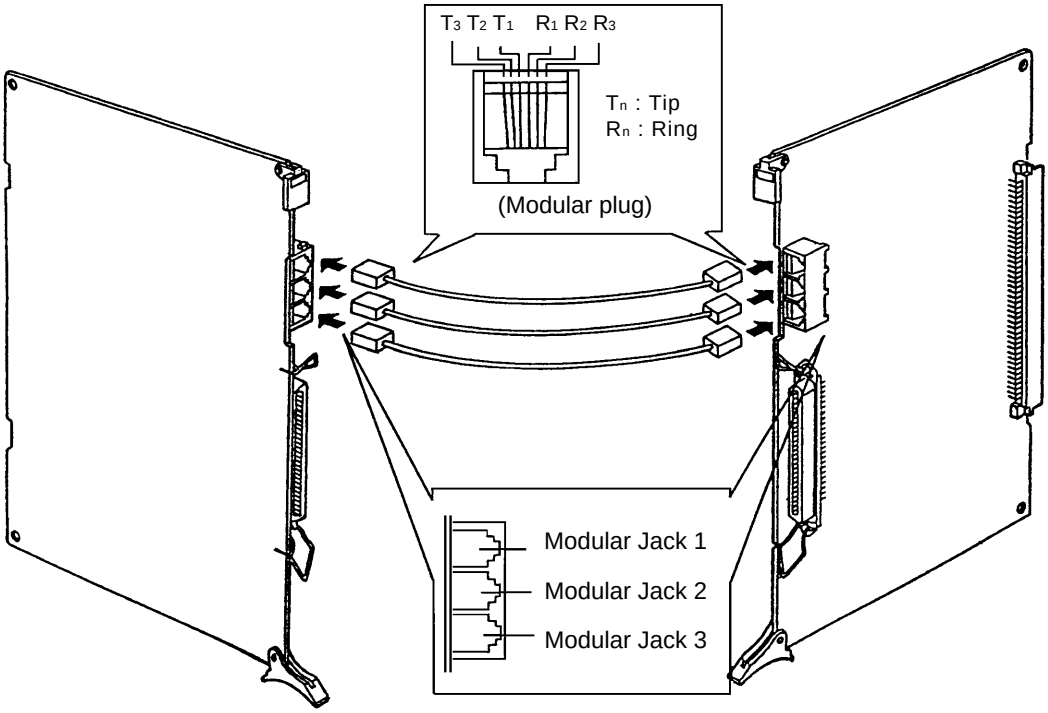
Power Failure Transfer connects a specific Single Line and PITS telephones to selected trunks in the event of system power failure.

The following PITS telephones can be used during power failure.
KX-T30830, KX-T61630, KX-T123230, KX-T123230D, KX-T123235

For further information about Power Failure Transfer, refer to Section 14-H-1.00 “Power Failure Transfer Assignment.”
The Auxiliary Connection (see the illustration below) is required to implement this feature.

- KX-T336 System changes the current connection to the Auxiliary connection automatically when the power supply stops.
- While the DC power is available by the backup batteries even if the AC power fails, KX-T336 System does not change the current connection to the Auxiliary connection.
- 3 ports are available for KX-T96174X.

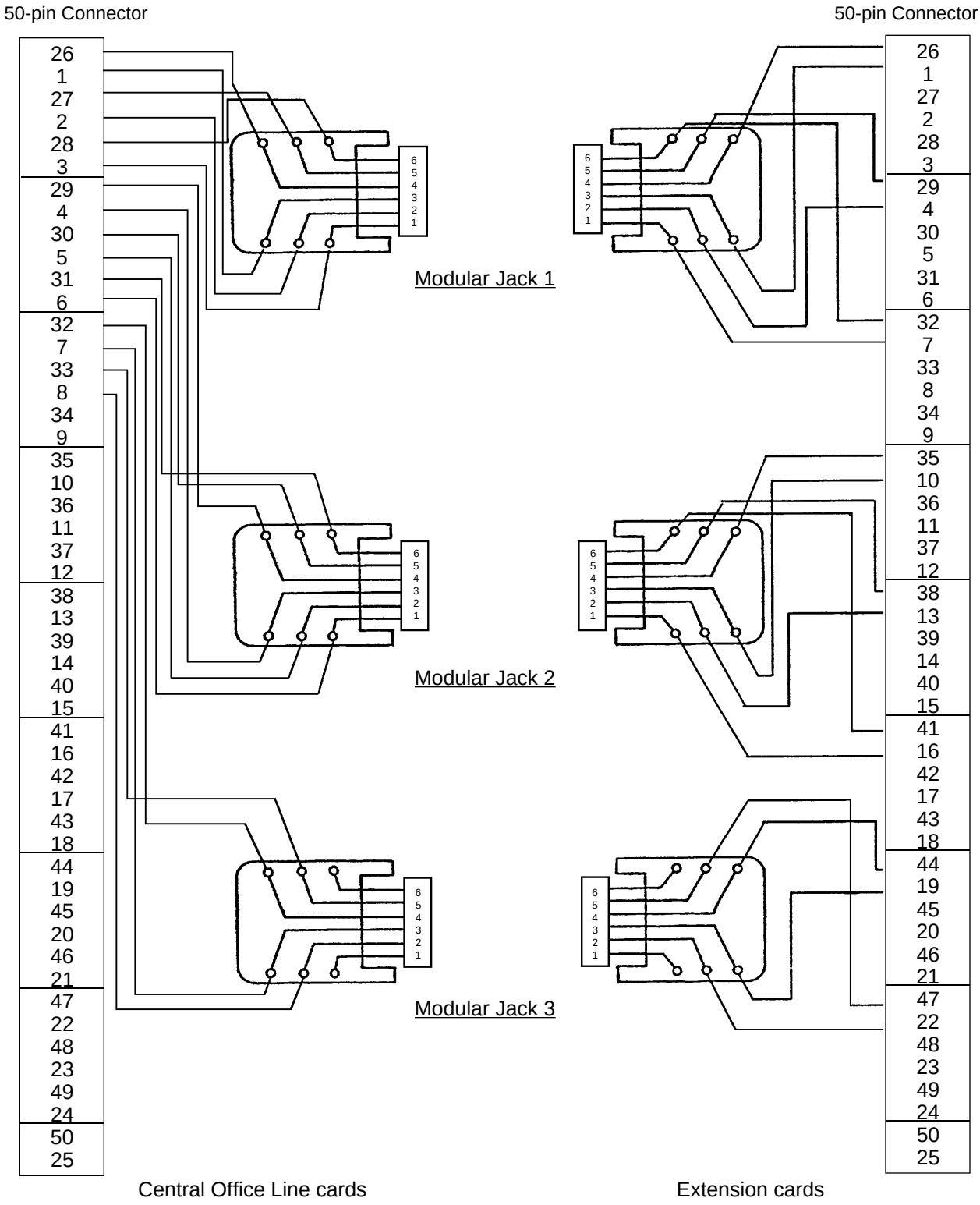
1) Connection



- Insert the modular plugs of connection cords (6-conductor wiring) to the modular jacks of Central Office Line option cards (LCOT, GCOT) and Extension option cards (SLC, HLC).

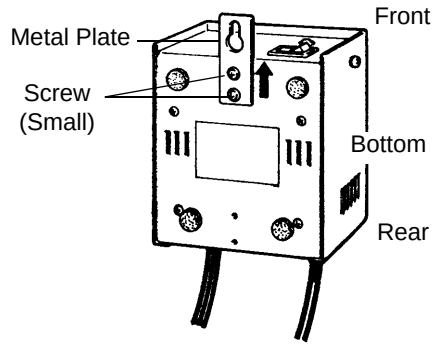
- PLC card (Extension card) is not available with Power Failure Transfer.

2) Connection of Central Office Line and Extensions



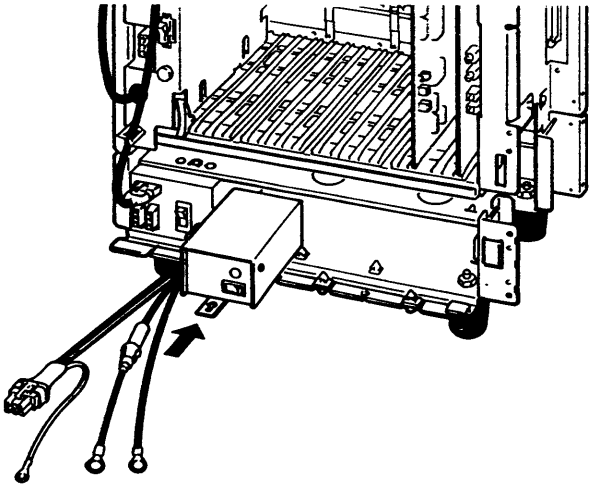
6.00 Connection of the Battery Adaptor (KX-A26D)

1.



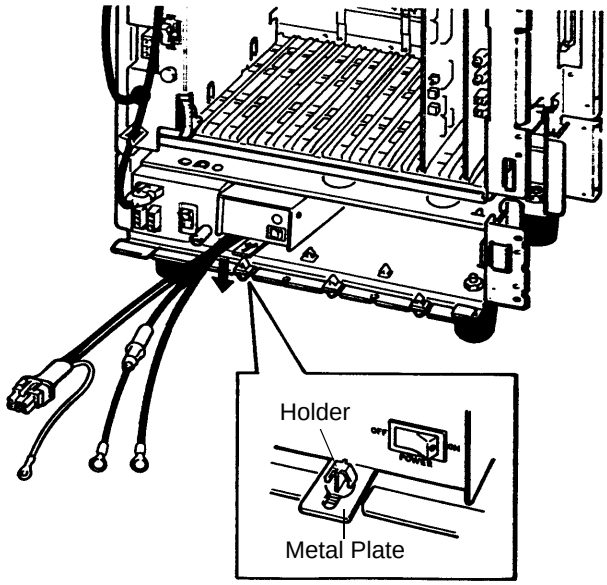
1) Drive the two small screws (accessory) on the bottom of the unit.
2) Place the Metal Plate so that the screw heads insert into the slots as shown.
3) Slide the Metal Plate in the directions of the arrows, and drive the screws.

2.



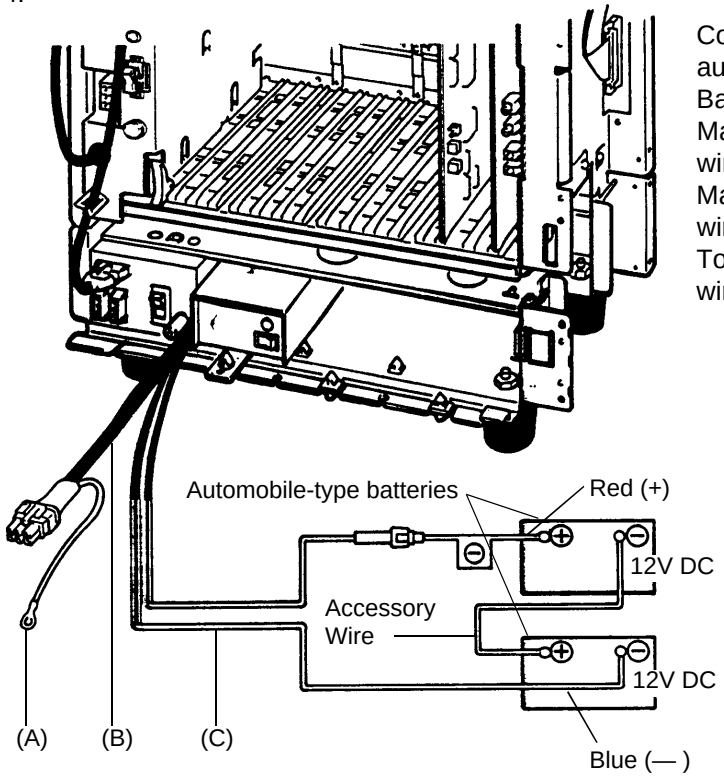
Insert Battery Adaptor into the Battery Adaptor Compartment (Base Shelf).
Pull out the cords from the left side of the Battery Adaptor.

3.



Slide the Metal Plate on Battery Adaptor toward you and fix it to the Holder attached to Base Shelf, as illustrated.

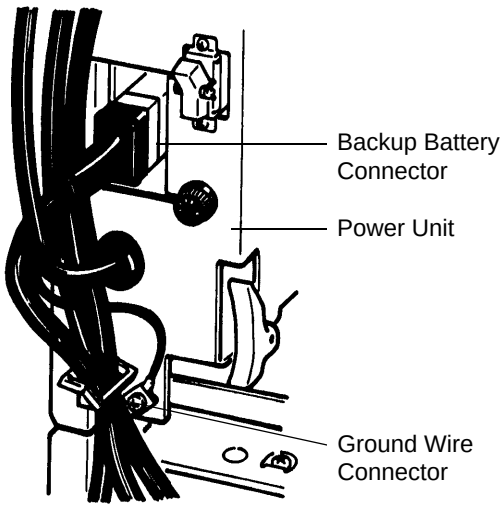
4.



Connect the Battery Adaptor with two automobile-type batteries (12V DC × 2) using Battery Adaptor Line Cable as shown.
Make sure of the polarities of batteries and wires.
Make sure do not short the batteries and wires.
To connect the two batteries, use accessory wire.

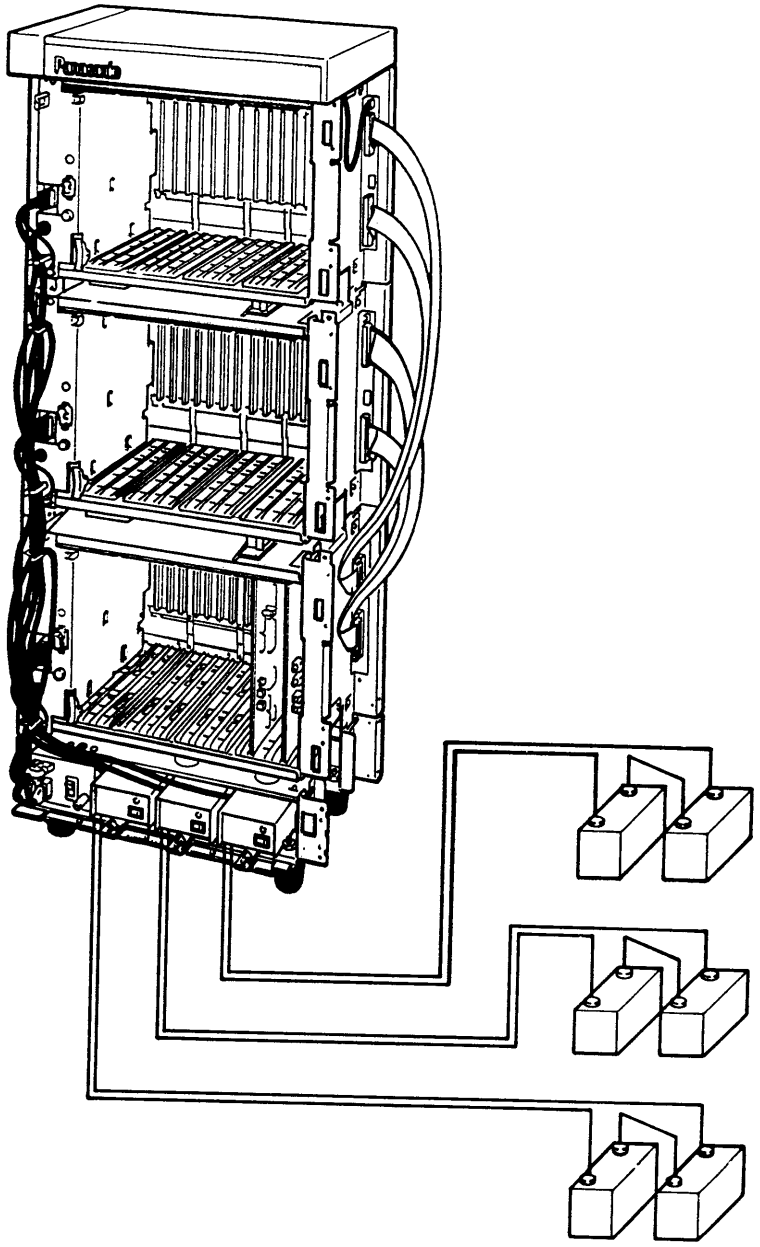
(A) Ground Wire
(B) Battery Adaptor Cord
(C) Battery Adaptor Line Cable

5.



- Plug the Battery Adaptor cord to Backup Battery connector on the Basic Shelf.
- Connect the Ground Wire of Battery Adaptor to Ground Wire Connector on the Base Shelf.

6. When one or two Expansion Shelves (KX-T336200) are installed, connect another Battery Adaptor (KX-A26D) with automobile type batteries (12V DC × 2) following the same procedures from 1 to 5.



Automobile type batteries (24V DC)

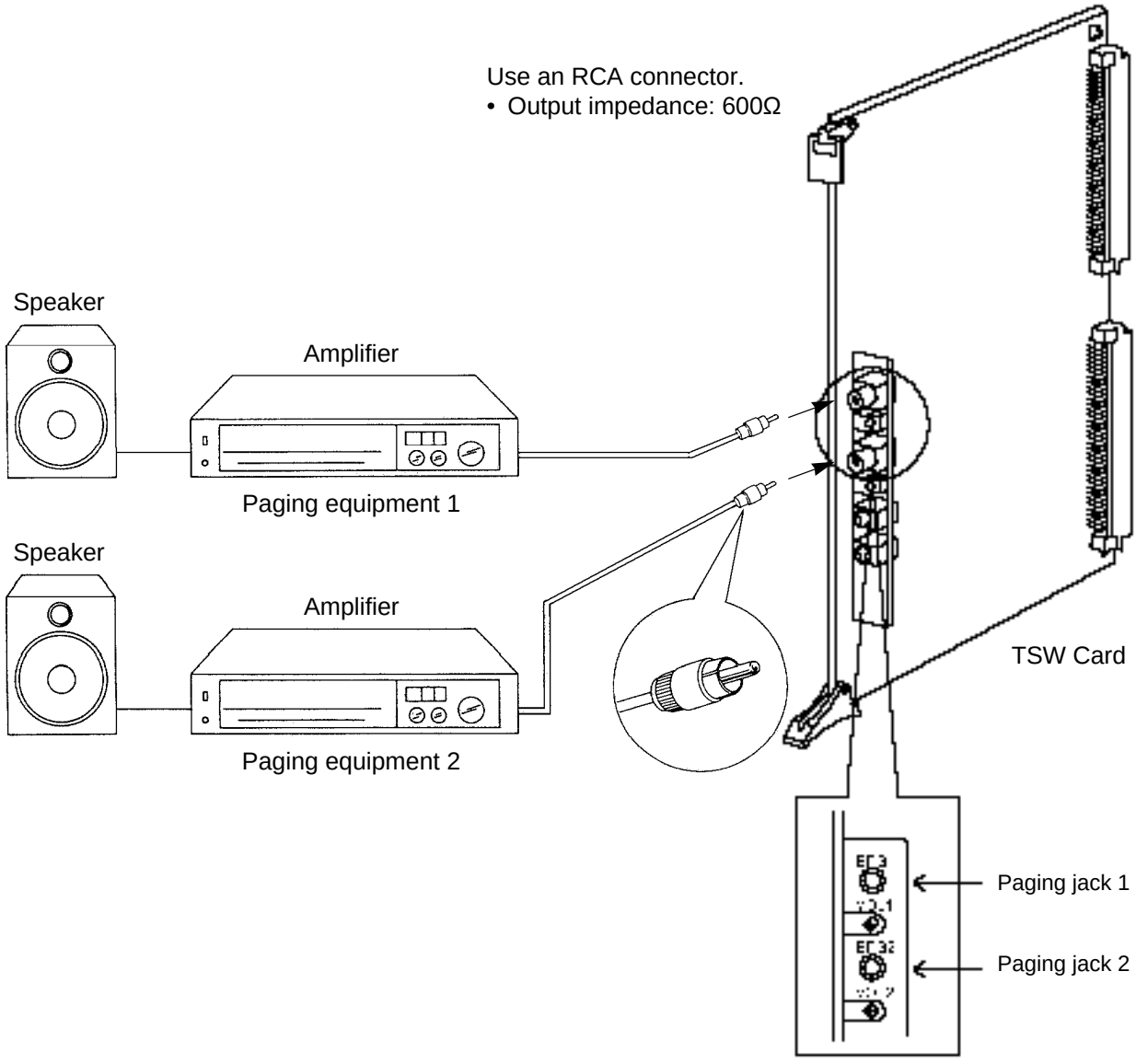
Note :

Up to three pairs of automobile-type batteries can be connected to the KX-T336 System. If power failure occurs, each pair of batteries supplies the power to each shelf (Basic, Expansion 1, 2) connected respectively via Battery Adaptor (KX-A26D).

D. Connection of Optional Peripheral Equipments

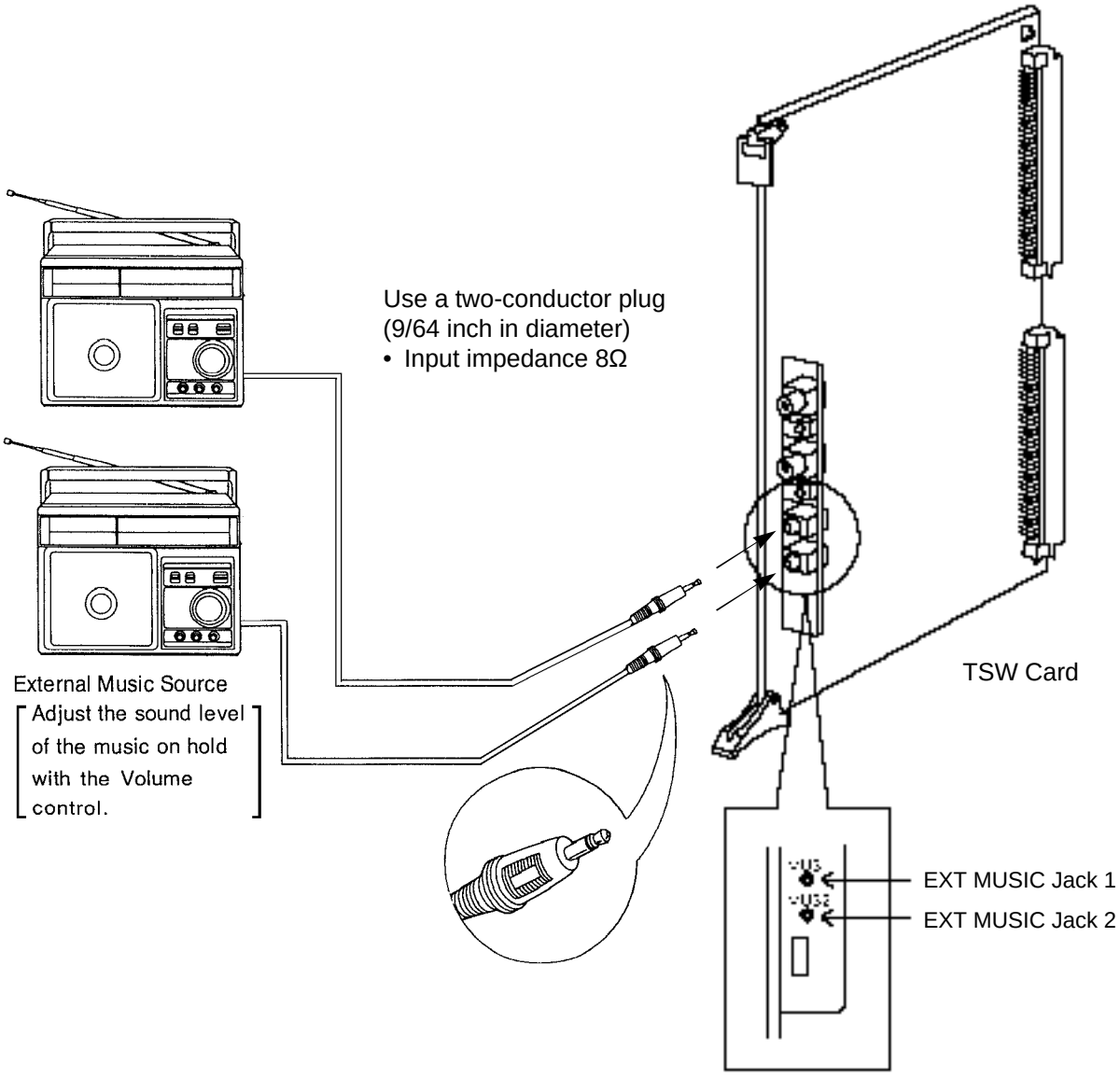
1.00 Paging Equipment

Up to two paging equipments (customer-supplied) can be connected to the system as illustrated below.



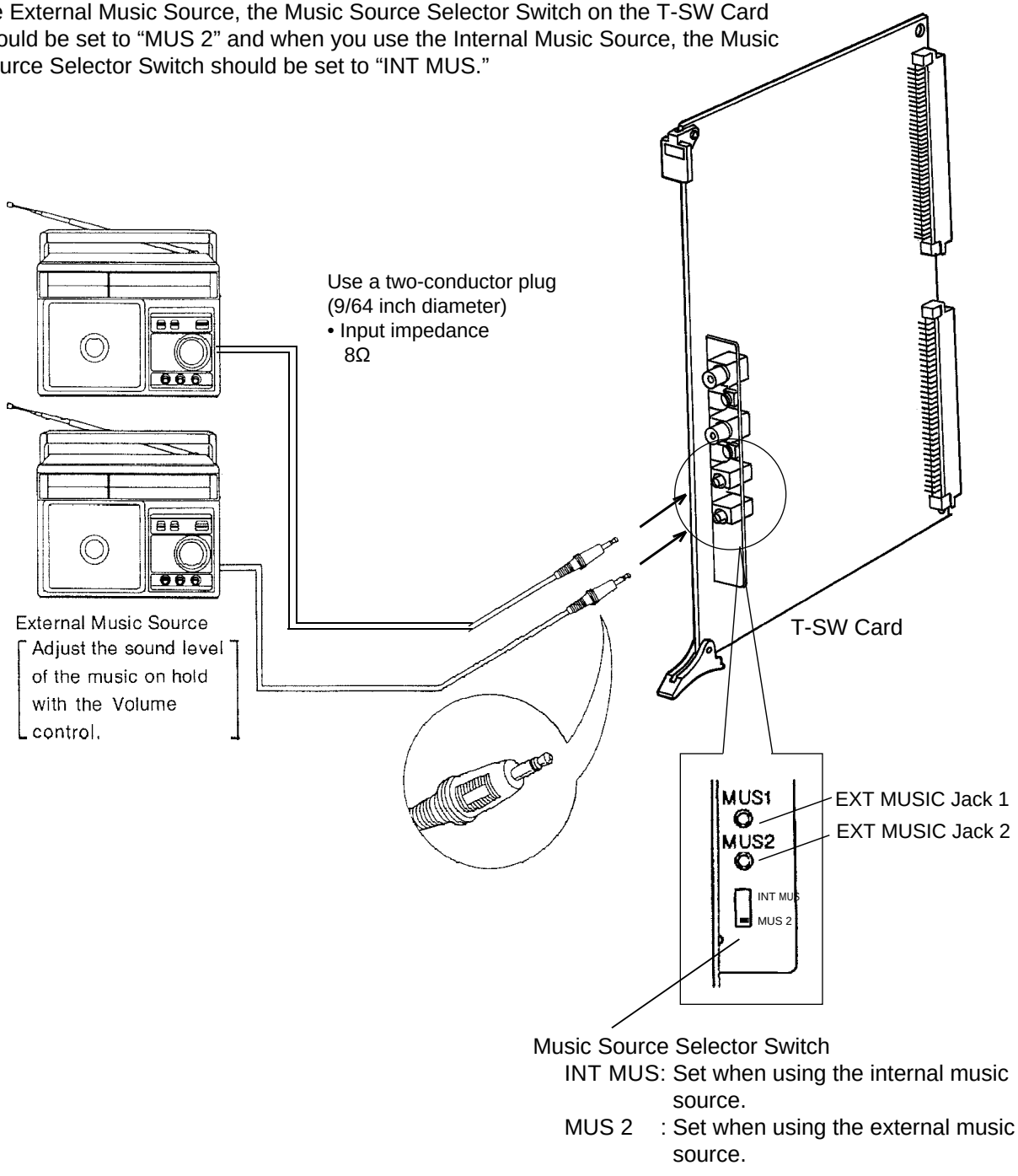
2.00 External Music Source (for U.S.A. and Canada)

Up to two external music sources (customer-supplied) can be connected to the system as illustrated below.



2.00 External Music Source (for areas other than U.S.A. and Canada)

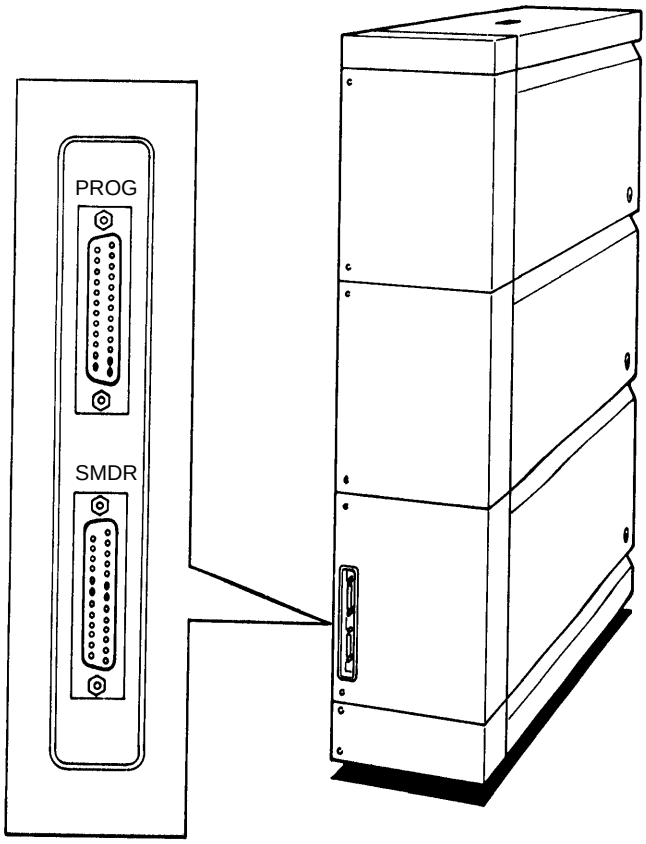
The KX-T336 System provides Music on Hold and Background Music. The KX-T336 System itself has music source (Internal Music Source), but External Music Source (e.g.radio) can also be used by connecting it to the KX-T336 System. When you use the External Music Source, the Music Source Selector Switch on the T-SW Card should be set to “MUS 2” and when you use the Internal Music Source, the Music Source Selector Switch should be set to “INT MUS.”



- For the assignment of external Music Source 1 or 2, refer to 9-D-1.01 System-Operation (1/3) and 9-F-2.00 Trunk-Pager & Music Source.
- If you use the internal music source, set 9-D-1.01 System-Operation (1/3), External Music Source 1, 2 to “No, Yes.”

3.00 RS-232C Interface

The KX-T336 System provides two RS-232C interfaces.
These interfaces provide communication between the system and customer supplied devices such as data terminals and line printers.
RS-232C Port 1 (PROG) is used for system programming, diagnostics and external system database storage (Save/Load) functions, and Port 2 (SMDR) for Station Message Detailed Recording (SMDR) only.



1) Pin Configuration ("PROG", "SMDR")

Pin Number	Signal Name		Circuit Type	
			EIA	CCITT
1	FG	Frame Ground	AA	101
2	TXD	Transmitted Data	BA	103
3	RXD	Received Data	BB	104
4	RTS	Request To Send	CA	105
5	CTS	Clear To Send	CB	106
6	DSR	Data Set Ready	CC	107
7	SG	Signal Ground	AB	102
8	DCD	Data Carrier Detect	CF	109
20	DTR	Data Terminal Ready	CD	108.2

EIA (RS-232C) SIGNALS:

Frame Ground (FG);
Connects to the unit frame and the earth ground conductor of the AC power cord.

Transmitted Data (TXD);.....(output)
Conveys signals from the unit to the printer. A "Mark" condition is held unless data or BREAK signals are being transmitted.

Received Data (RXD);.....(input)
Conveys signals from the printer.

Request To Send (RTS);.....(output)
This lead is held ON whenever DSR is ON.

Clear To Send (CTS);..... (input)
The ON condition of circuit CTS indicates that the printer is ready to receive data from the unit. The unit does not attempt to transfer data or receive data when circuit CTS is OFF.

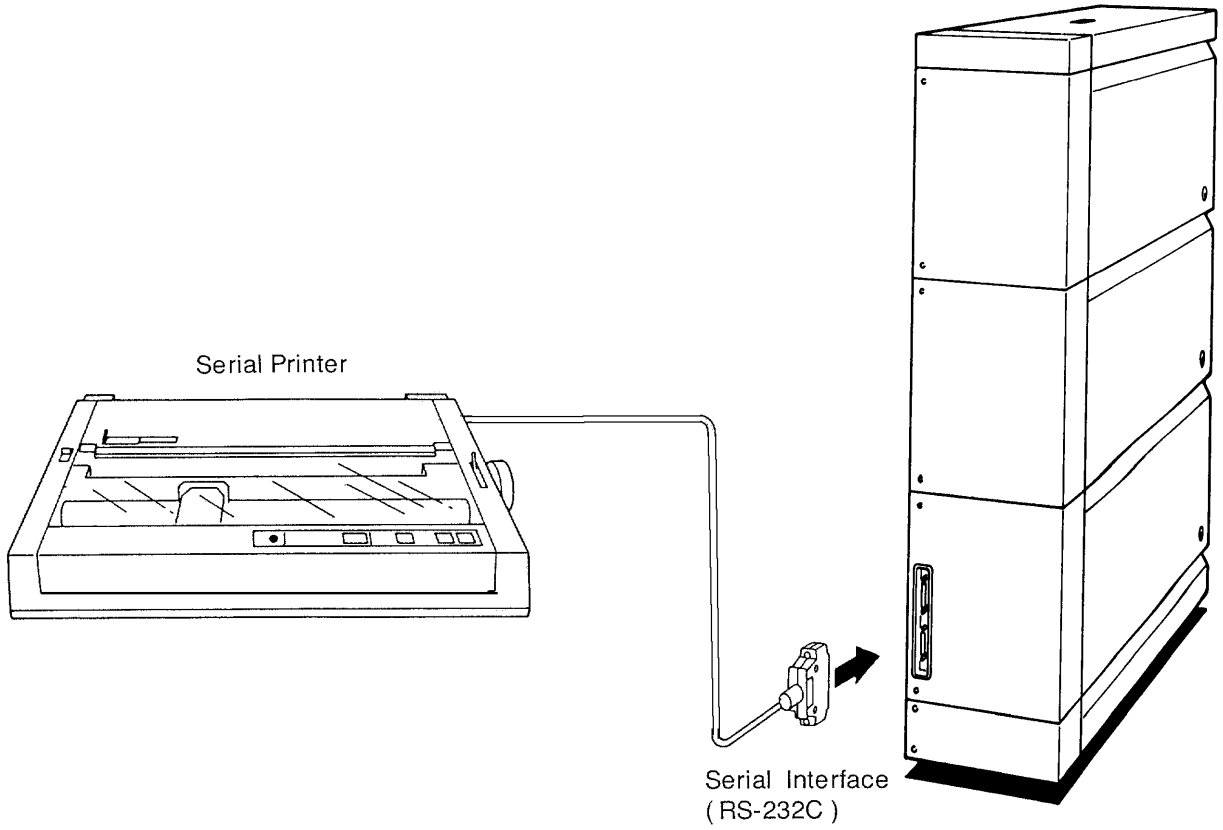
Data Set Ready (DSR); .....(input)
The ON condition of circuit DSR indicates the printer is ready. Circuit DSR ON does not indicate that communication has been established with the printer.

Signal Ground (SG);
Connects to the DC ground of the unit for all interface signal.

Data Terminal Ready (DTR).....(output)
This signal line is turned ON by the unit to indicate that it is ON LINE. Circuit DTR ON does not indicate that communication has been established with the printer. It is switched OFF when the unit is OFF LINE.

Data Carrier Detect (DCD).....(input)
The ON condition is an indication to data terminal (DTE) that the carrier signal is being received.

3.01 Connection to the Printer



- Connect the RS-232C connector of the printer to “SMDR.”
- Cables must be shielded and the maximum cabling distance is 6.5 feet.

- Connection Chart

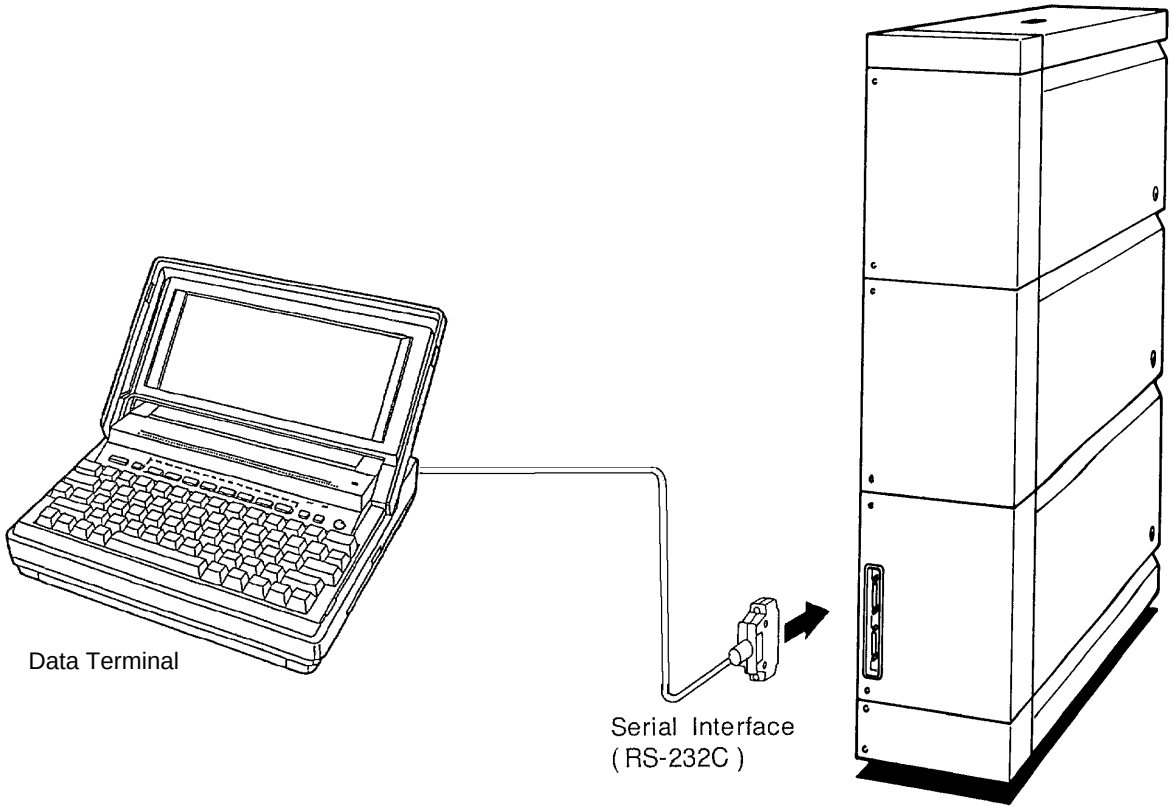
RS-232C (SMDR) port on the Basic Shelf (KX-T336100)

Circuit Type (EIA)	Single Name	Pin No.
AA BA	FG TXD	1 2
BB	RXD	3
CC AB	DSR SG	6 7
CD	DTR	20

RS-232C port on the printer

Pin No.	Single Name	Circuit Type (EIA)
1 3	FG RXD	AA BB
2	TXD	BA
20 7	DTR SG	CD AB
5 6 8	CTS DSR DCD	CB CC CF

3.02 Connection to the Data Terminal



- Connect the RS-232C connector of the data terminal to the “PROG.”
- Cables must be shielded and the maximum length of the cable is 6.5 feet.

- Connection Chart

RS-232C port (PROG) on the Basic Shelf (KX-T336100) — RS-232C port on the data terminal

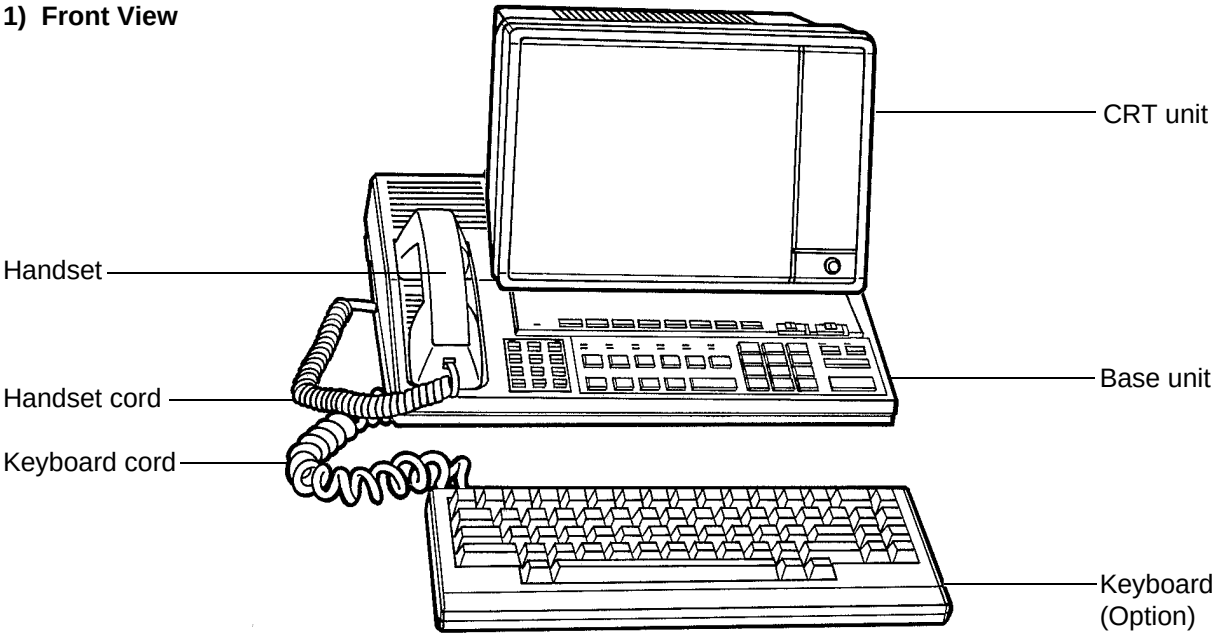
Circuit Type (EIA)	Single Name	Pin No.		Pin No.	Single Name	Circuit Type (EIA)
AA	FG	1	↔	1	FG	AA
BB	RXD	3	←	2	TXD	BA
BA	TXD	2	→	3	RXD	BB
CB	CTS	5	←	4	RTS	CA
CA	RTS	4	→	5	CTS	CB
CD	DTR	20	→	6	DSR	CC
AB	SG	7	↔	7	SG	AB
CC	DSR	6	←	20	DTR	CD

Panasonic data terminal ; KX-D4930, etc.
If you connect this unit to a Panasonic Data Terminal, the Communication Parameter Transmit XON/XOFF on the Data Terminal must be set to “YES.”
For further details, see the Operating Instructions of the Data Terminal.

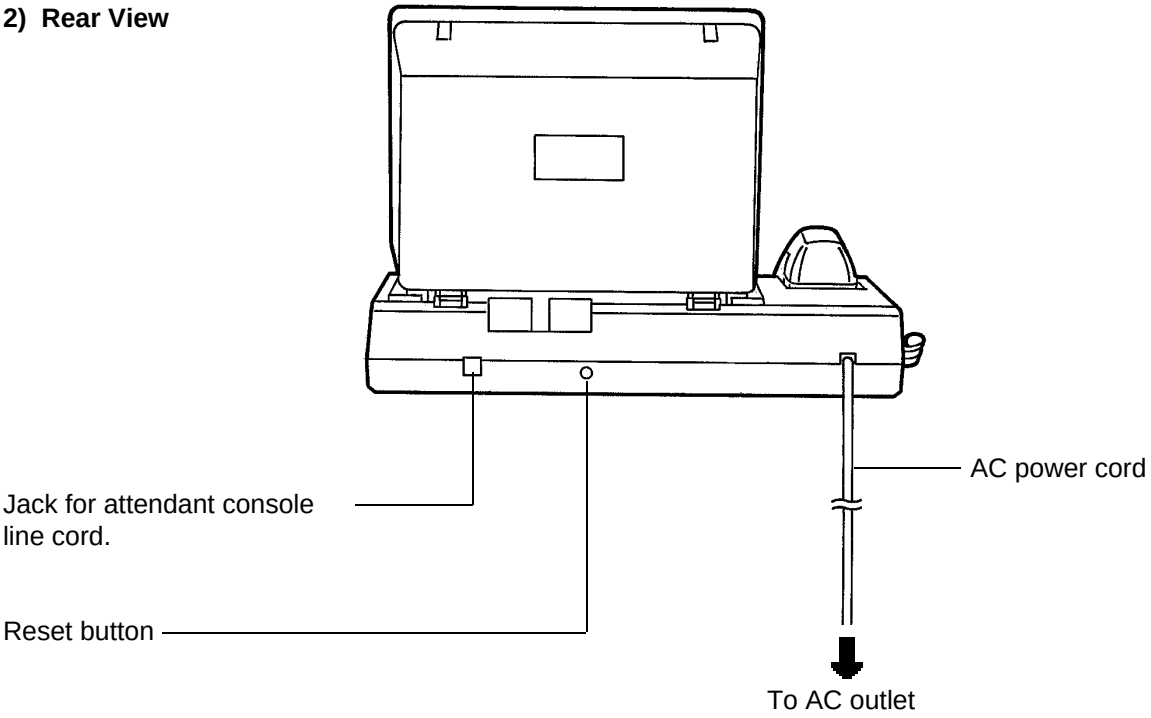
E. Installation of Attendant Console

1.00 Configuration

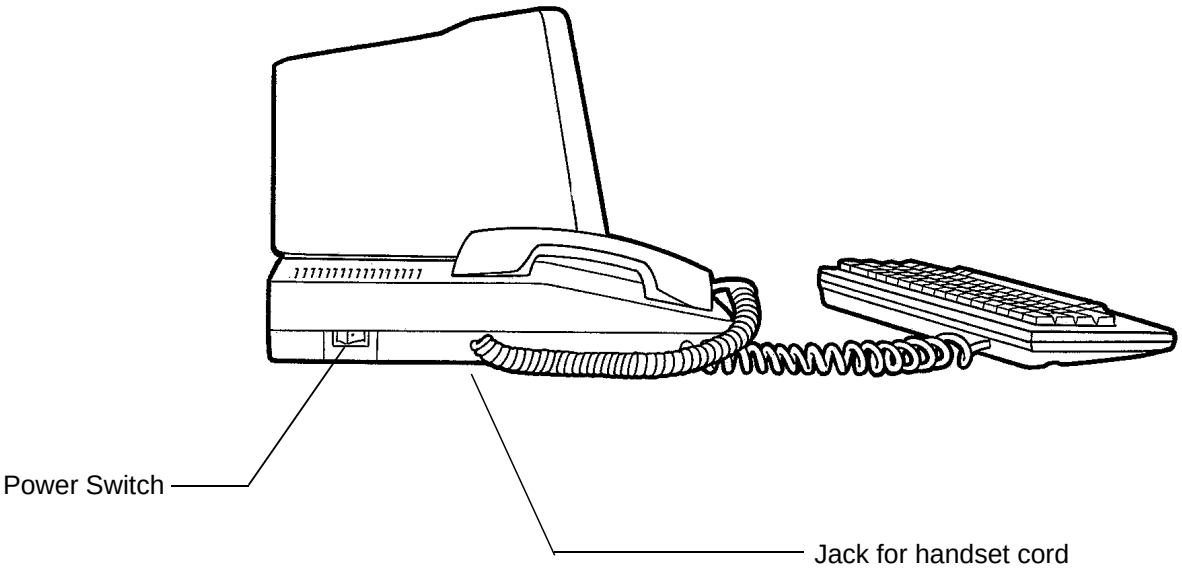
1) Front View



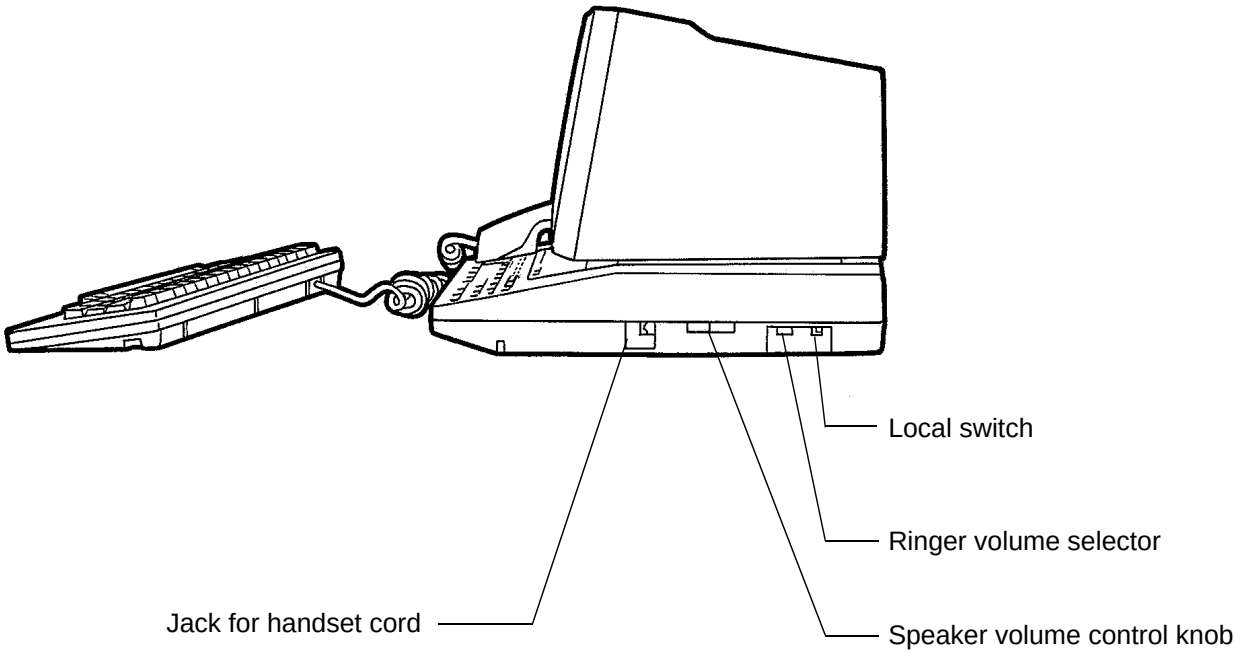
2) Rear View



3) Left Side View

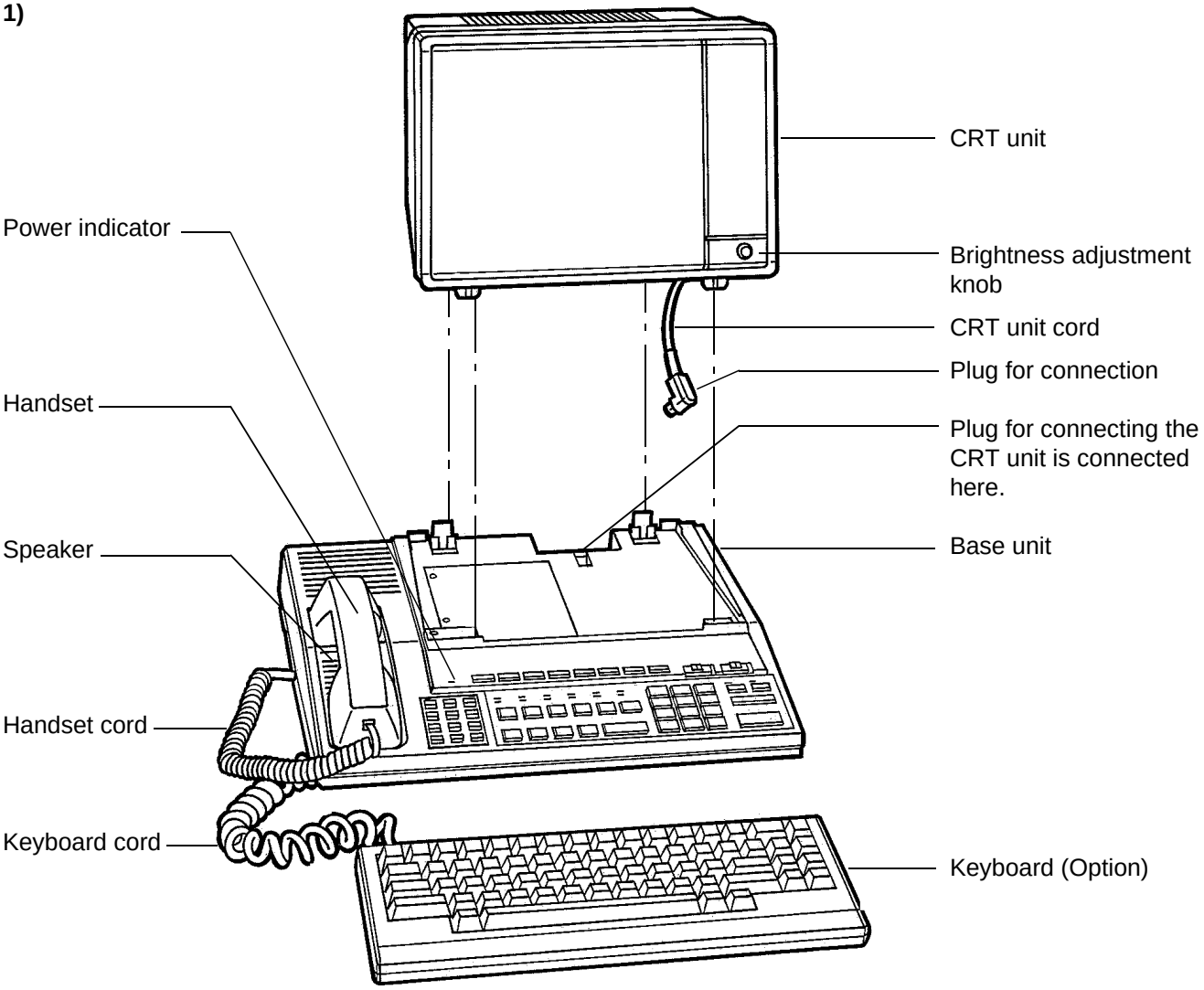


4) Right Side View

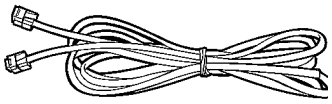


2.00 Attendant Console Assembly

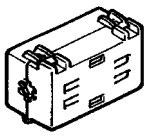
1)



Name	Quantity
CRT unit	1
Base unit	1
Handset	1
Handset cord	1
Attendant Console Line cord	1
Ferrite core	1
Keyboard (Option)	1



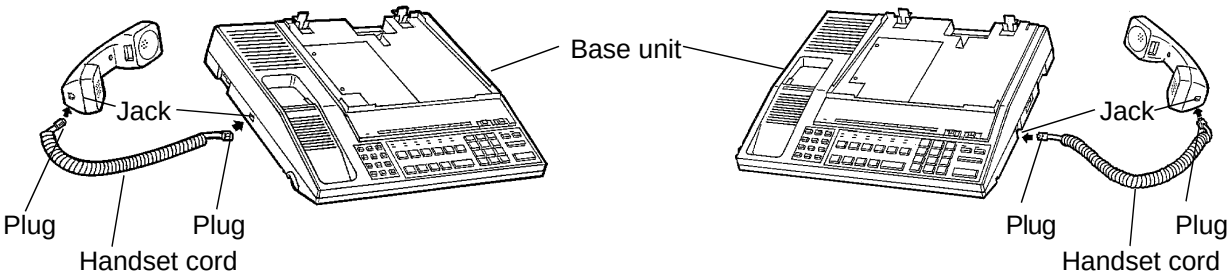
Attendant Console Line cord
(2-conductor wiring)



Ferrite core

Note: The illustration of Ferrite core may vary slightly from the actual product.

3.00 Handset Connection



1. Plug the coiled handset cord into the jack labeled “TO HANDSET” either right side or left side of the base unit.
2. Plug the other end of the coiled cord into the handset, and then hang up.

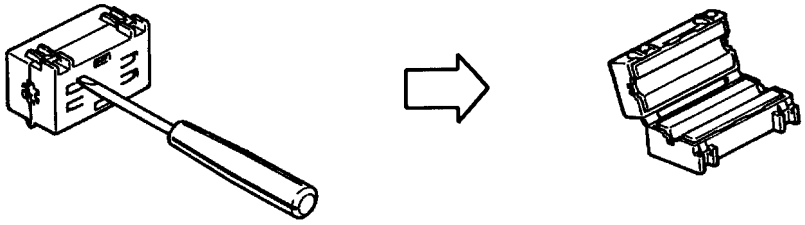
✳ You can use either of the right and left jacks.

4.00 Installation and Removal of CRT Unit

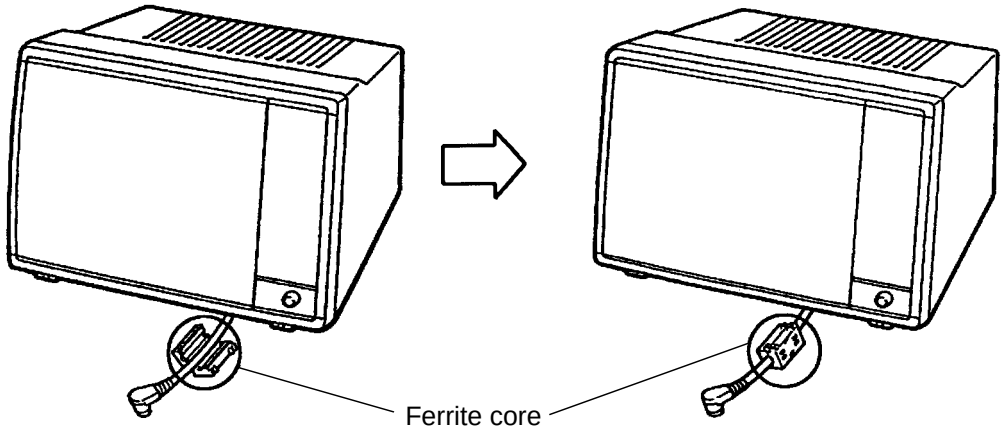
4.01 CRT Unit Installation

1) Before connecting the CRT unit to the Base unit, be sure to attach the Ferrite core to the CRT unit cord as shown in the figure below.

(Opening the Ferrite core)

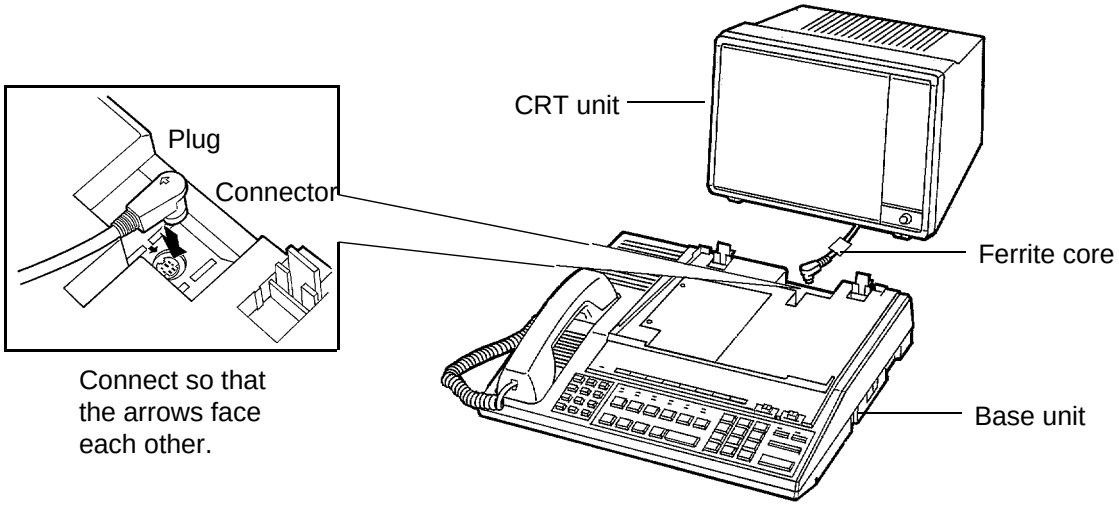


(Attaching the Ferrite core to the CRT unit cord)

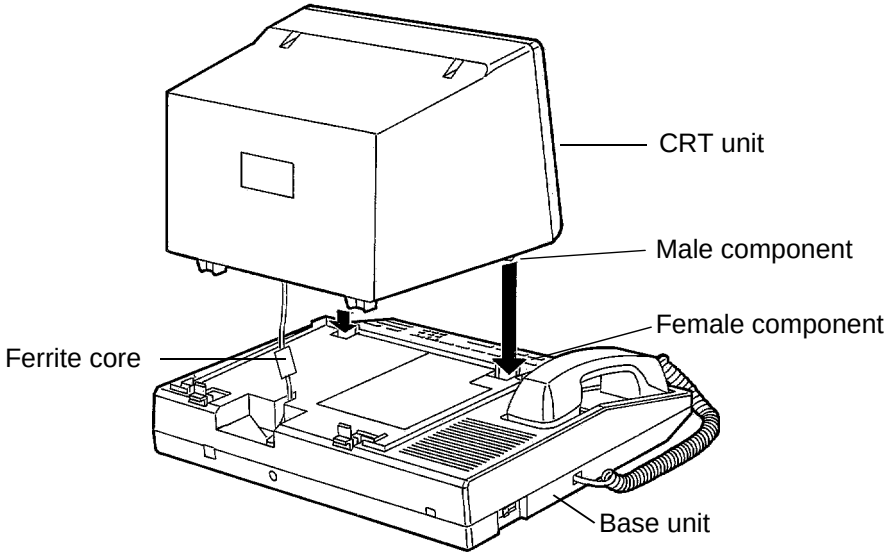


Note: The illustration of Ferrite core may vary slightly from the actual product.

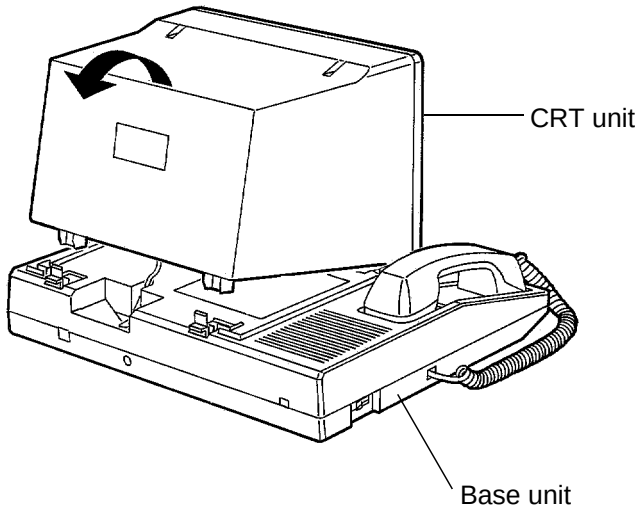
2) Plug the CRT unit cord into the connector (“CRT CONNECTOR”) on the base unit.



3) Insert the two male components of the bottom front surface of the CRT unit to the two female components at the top front surface of the base unit.

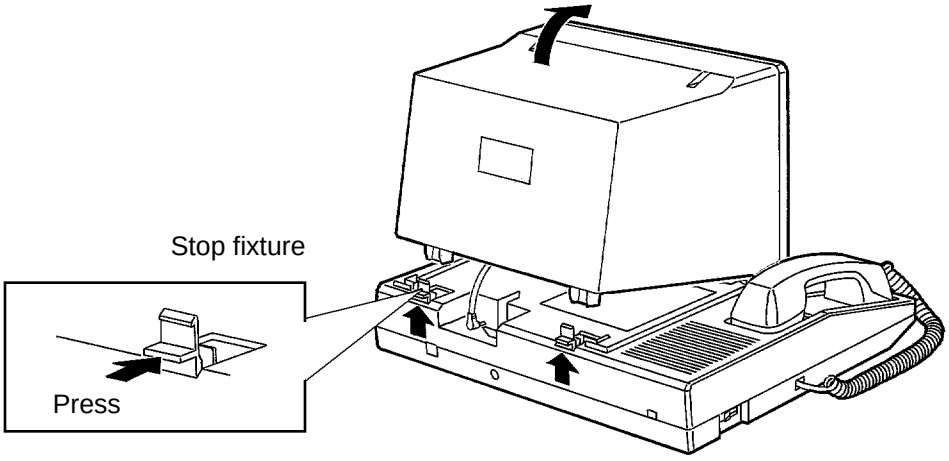


4) Set rear portion of the CRT unit slowly onto the base unit until the stop fixture holds the CRT unit securely.



4.02 CRT Unit Removal

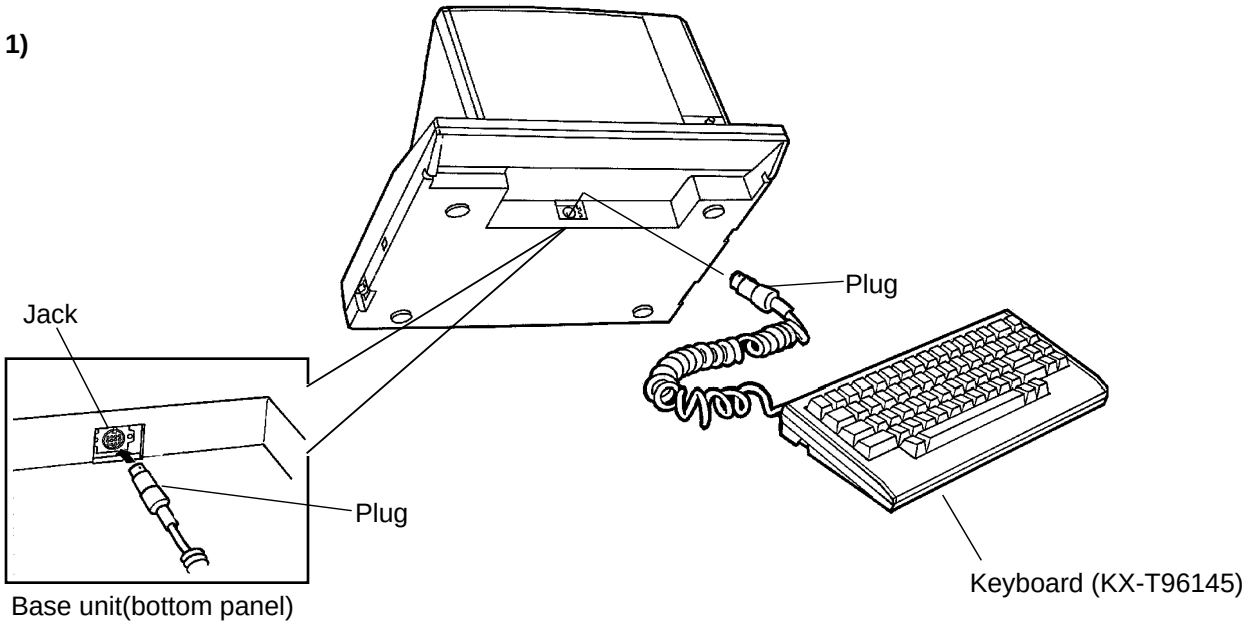
❋ Confirm that the AC power cord has been removed.



1. Press the stop fixture toward you and hold it pressed, then lift up the rear portion of the CRT unit.
2. Unplug the CRT unit cord from the base unit connector.

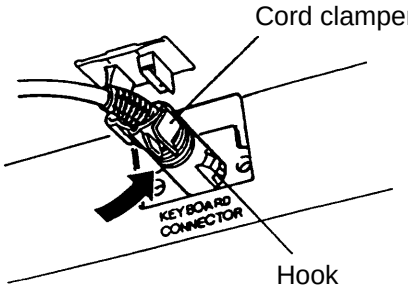
5.00 Keyboard Connection

1)



Insert the plug of the keyboard cord into the jack (“KEY BOARD CONNECTOR”) on the base unit.

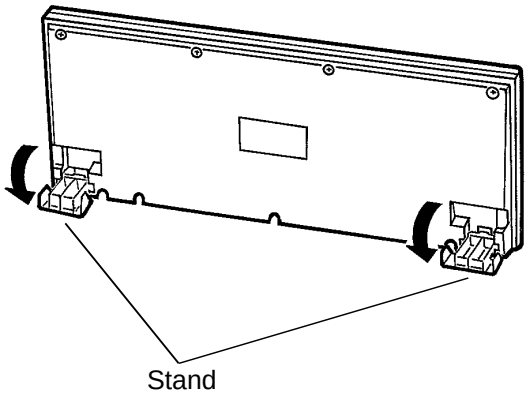
2)



To disconnect the plug, pull the plug while keeping the hook pushed.

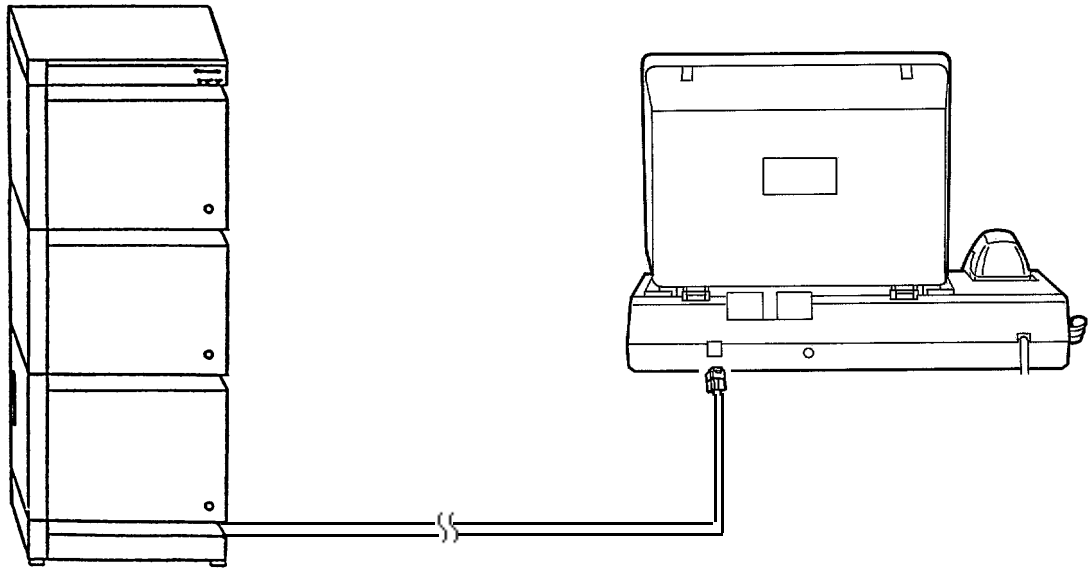
Fasten the keyboard plug securely with the cord clamper.

3)



- Stands are attached to the bottom of the keyboard so that the keyboard incline can be adjusted.
  Set the stands for maximum ease in key operation.

6.00 Connection with KX-T336 System



KX-T336 System

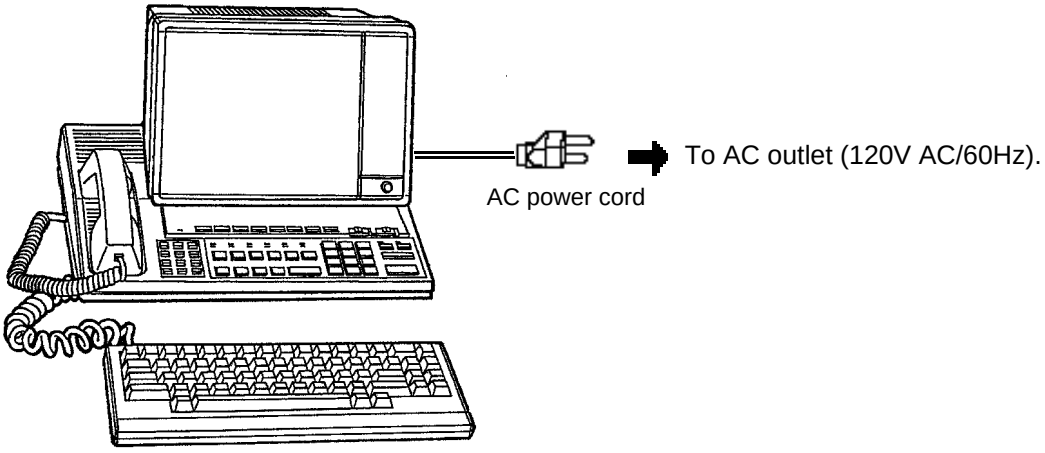
- Insert the modular plug of the attendant console line cord (2-conductor wiring) into the modular jack (“TO AT LC”) on the base unit.

✵ For connection on the KX-T336 System side, see page 2-C-9.

7.00 AC Power Cord Connection (for U.S.A. and Canada)

✵ Connect the AC power cord only after all attendant console connections have been completed.

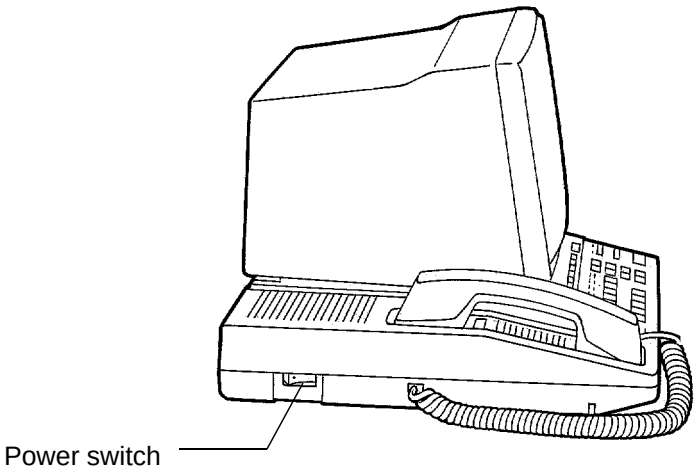
1)



• Insert the AC power cord into the AC outlet (120V AC/60Hz).

Attention!
- Hold the AC power cord plug to insert or remove the AC power cord.
- Do not insert or remove the AC power cord with a wet hand.
- Do not forcefully twist or pull on the AC power cord, and do not leave it only partially inserted.
- When connecting the AC power cord, be sure to always establish ground wiring.

2)

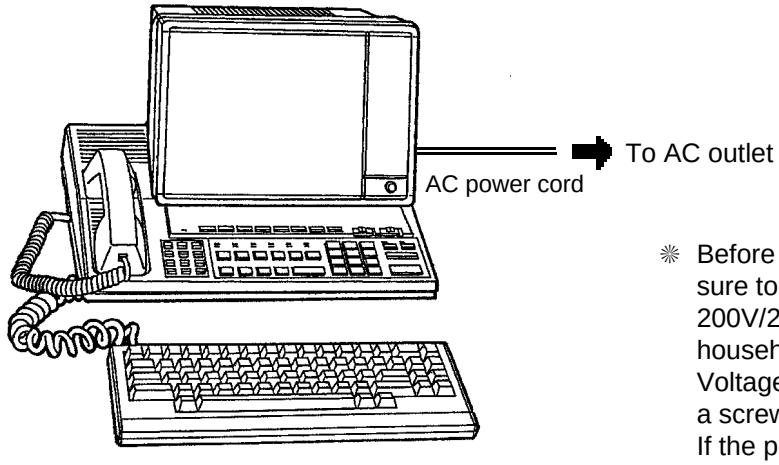


• Turn on the power switch.
(The power indicator lights and the initial screen appears on the display.)

7.00 AC Power Cord Connection (for areas other than U.S.A. and Canada)

✵ Connect the AC power cord only after all attendant console connections have been completed.

1)

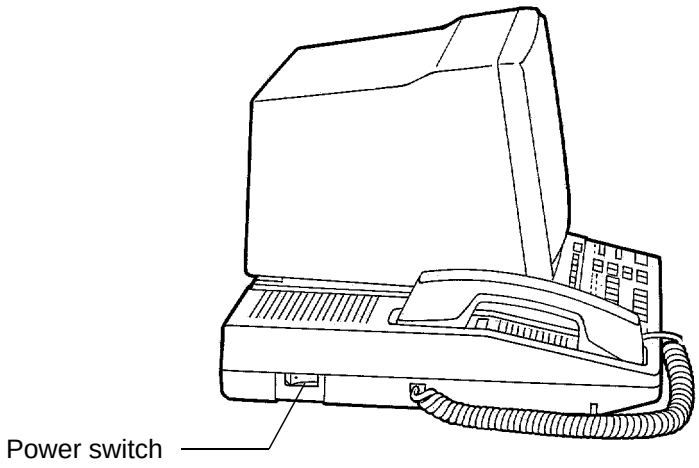


- Insert the AC power cord into the AC outlet.

✵ Before connecting the AC power cord, be sure to check the Voltage Selector (115V/ 200V/220V/240V) if it is set to your household AC voltage. If not, reset the Voltage Selector to the correct position with a screwdriver.
If the plug of AC Power Cord does not fit your electrical outlet, use the furnished plug adaptor.

Attention!
- Hold the AC power cord plug to insert or remove the AC power cord.
- Do not insert or remove the AC power cord with a wet hand.
- Do not forcefully twist or pull on the AC power cord, and do not leave it only partially inserted.
- When connecting the AC power cord, be sure to always establish ground wiring.

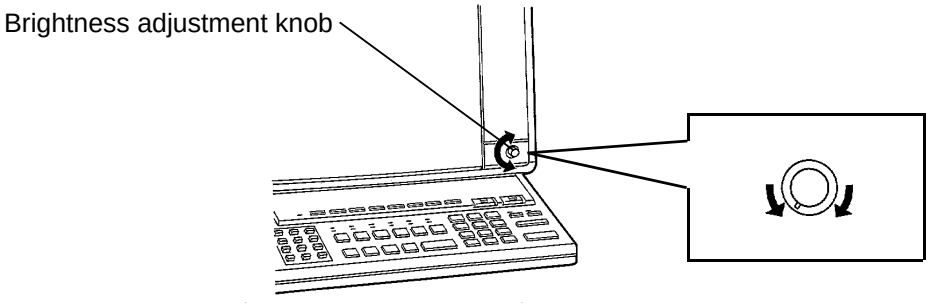
2)



- Turn on the power switch.
  (The power indicator lights and the initial screen appears on the display.)

8.00 Various Adjustments

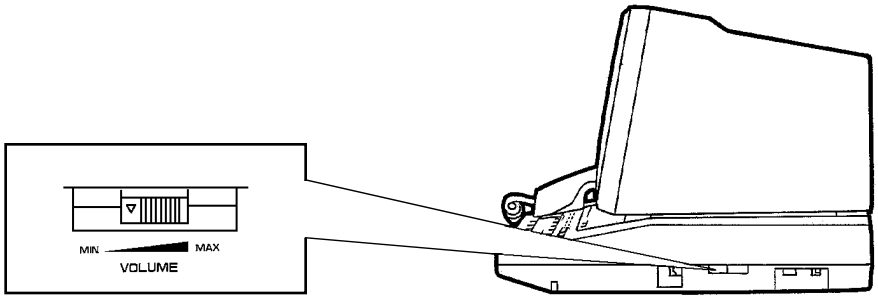
1) Display brightness adjustment



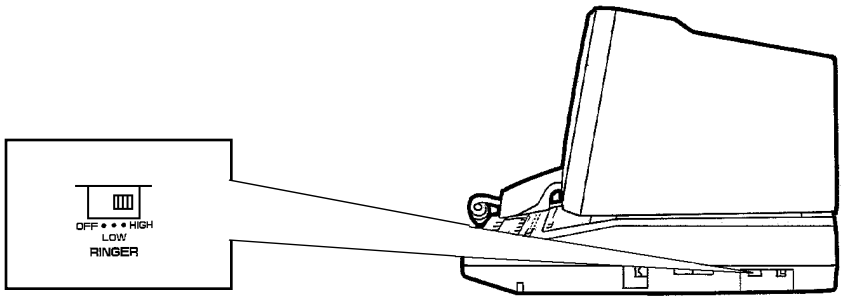
- The brightness adjustment knob is used to adjust the brightness of the display. Turn the knob to the right for increasing brightness until the proper brightness is established.

2) SP-PHONE volume adjustment

- Volume control knob is used to adjust the volume level of the call through the SP-PHONE. Adjust this volume for maximum ease in listening.



3) Ringer volume adjustment



- The ringer volume selector is used to adjust the ringer volume.
  This selector can be switched among three stages: OFF, LOW and HIGH. Set for the most appropriate volume.

F. Starting Up the KX-T336 System

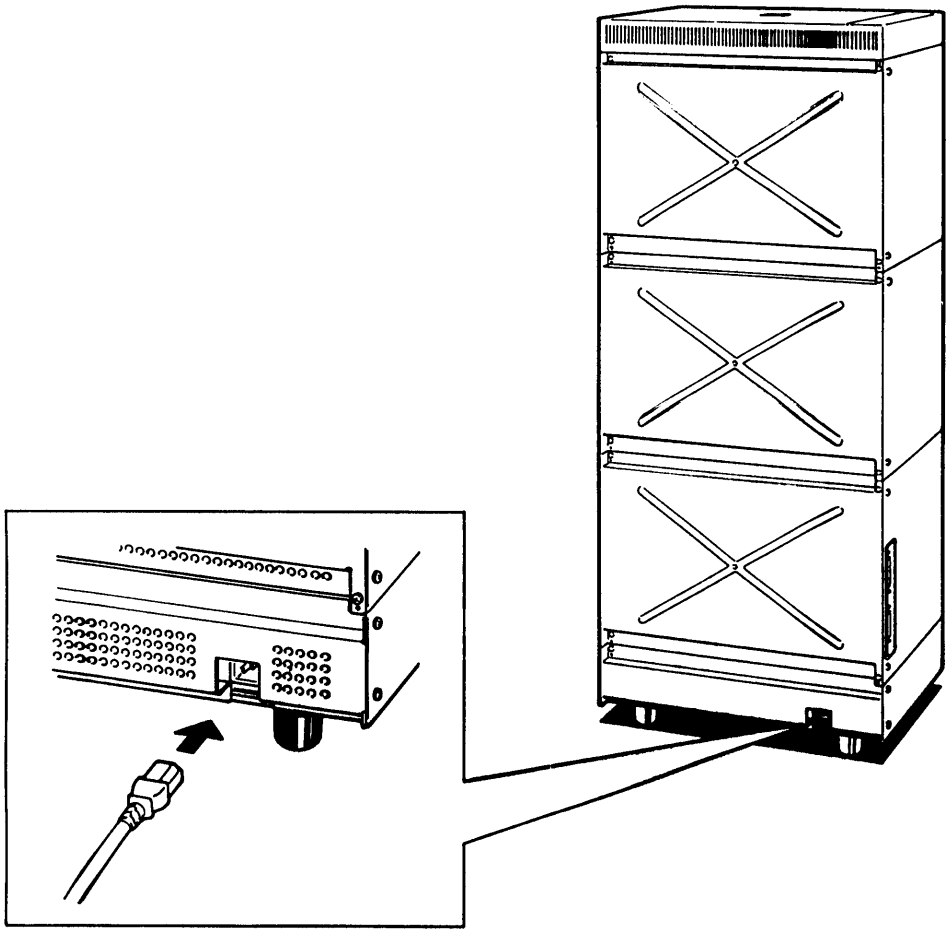
1.00 System Power-Up Procedure

❋ Complete and check all installation procedures before connecting the AC power cord (packaged separately).

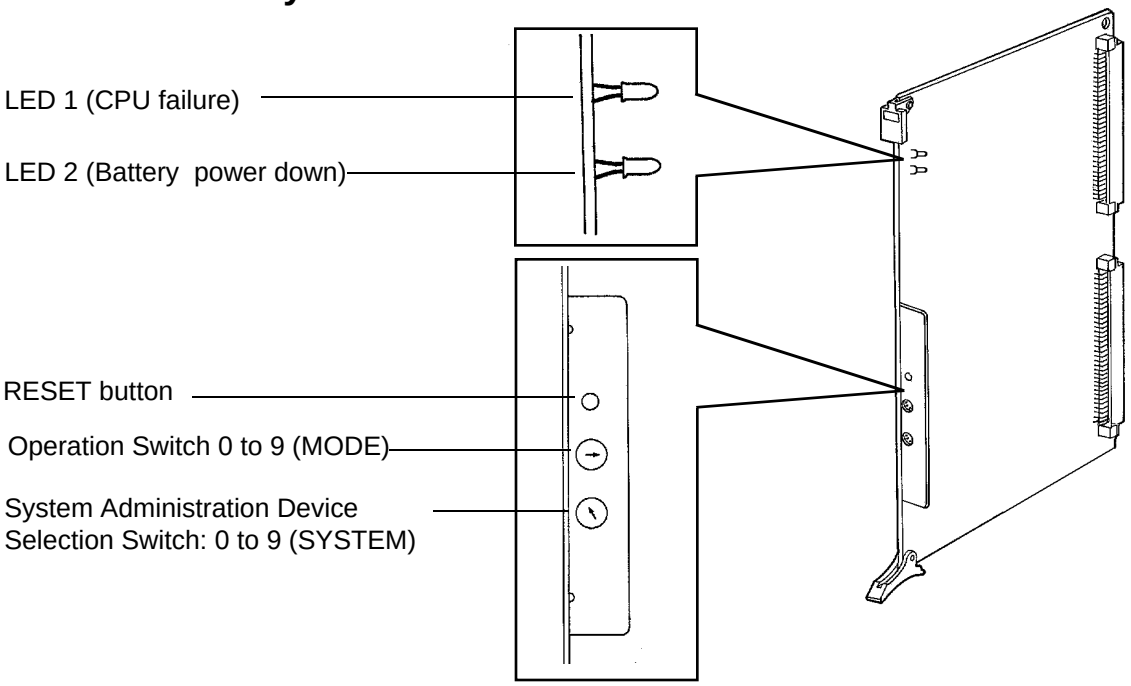
1. First insert the AC power cord into the AC power cord connector on the back of the base shelf as shown below.
2. Then insert the other end of the AC power cord into the AC outlet .
3. Turn on the Main Power Switch on the base shelf.
4. Turn on the power switch on the power unit of each shelf.
   - The power indicator on the power unit will light.

Note :

Each shelf may be powered down individually, without powering down the entire system.



2.00 CPU Rotary-Switch Features



2.01 Operation Switch (MODE)

Switch No.	Operation Mode	With System Memory	Without System Memory
0	On-line	Starts up the system with current system programming data	• System programming data is verified logically → on-line • System programming data is not verified logically → off-line
1		Starts up the system with current system programming data	Starts up the system with default values
2		Starts up the system with current system programming data	Enters to off-line mode without initializing the data (Power failure transfer status)
3		Special Operation (Examination on the finished product)	
4	Off-line	Holds the current system programming data	
5		Assigns default values automatically and “System Installation” screen is displayed (Installation)	
6		Initializes the current system programming data and “System Installation” screen is displayed (Installation)	
7		Holds the current programming data and “System Installation” screen is displayed (Enters to “Password Entry” screen compulsorily)	
8		Reserved for future expansion (Functions same as “0”)	
9		Reserved for future expansion (Functions same as “0”)	

[Note]

a) When you start up the system after installation, the Operation Switch (MODE) should be set to “5” or “6.”

- No.5 ....When you program the system data based on the factory programmed default values.
- No.6 ....When you program the system data without the factory programmed default values.

b) When system programming is finished, the Operation Switch (MODE) should be set to “0,” “1” or “2.”

- No.0 .....When CPU runaway occurs due to a loss of system programming data or the RESET button is pressed, the system enters to on-line mode if system programming data is verified logically, or the system enters to off-line mode if system programming data is not verified logically.

- No.1 ....When CPU runway occurs due to a loss of system programming data or the RESET button is pressed, default value is loaded and the system enters to on-line mode.
  If system programming data is not lost, reset-routine will be activated and enters to on-line mode with the current system programming data.

- No.2 ....When CPU runaway occurs due to a loss of system programming data or the RESET button is pressed, the system enters to off-line mode with the current System programming data.

c) With System Memory
System memory is provided.

d) Without System Memory
System memory is not provided.

e) Off-line
It is available to perform system data programming but call processing and functional test are not available in off-line mode.

f) Power failure transfer
Connects preassigned CO lines and extensions directly, bypassing the system.

g) After you entered the system administration mode, keep the following considerations in mind when setting the Operation Switch.

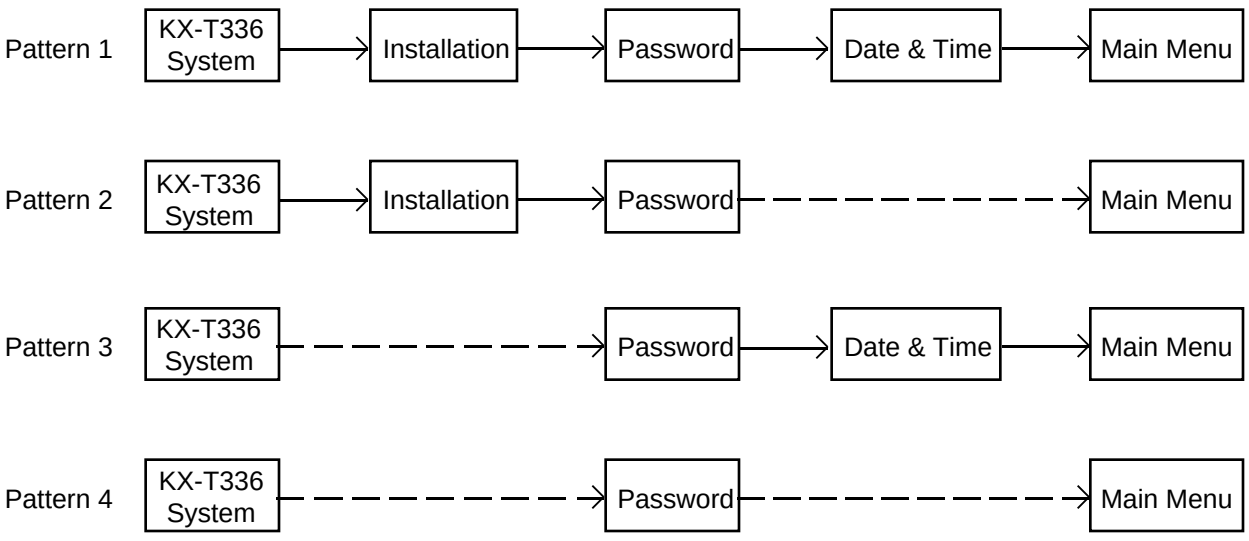
- No.5 ....Current programming data will be defaulted.
- No.6 ....Current programming data will be removed.

Operation Switch and Screen Display

Operation Switch	Backup Data	Clock Setting Data	On-line/Off-line	Patterns of Screen Display (Below)
0 1 8 3 9	Without	——	On-line	3
	With	Not assigned yet		3
		Already assigned		4
2	Without	Not assigned yet	Off-line	3
		Already assigned		4
	With	Not assigned yet	On-line	3
		Already assigned		4
4	— —	Not assigned yet	Off-line	3
		Already assigned		4
7	— —	Not assigned yet		1
		Already assigned		2
5 6	— —	—— ——		1

(Note) Once you exit the “System Installation” screen and “Date & Time Set Up” screen, these screens are not displayed again.

Patterns of Screen Display



2.02 System Administration Device Selection Switch (SYSTEM)

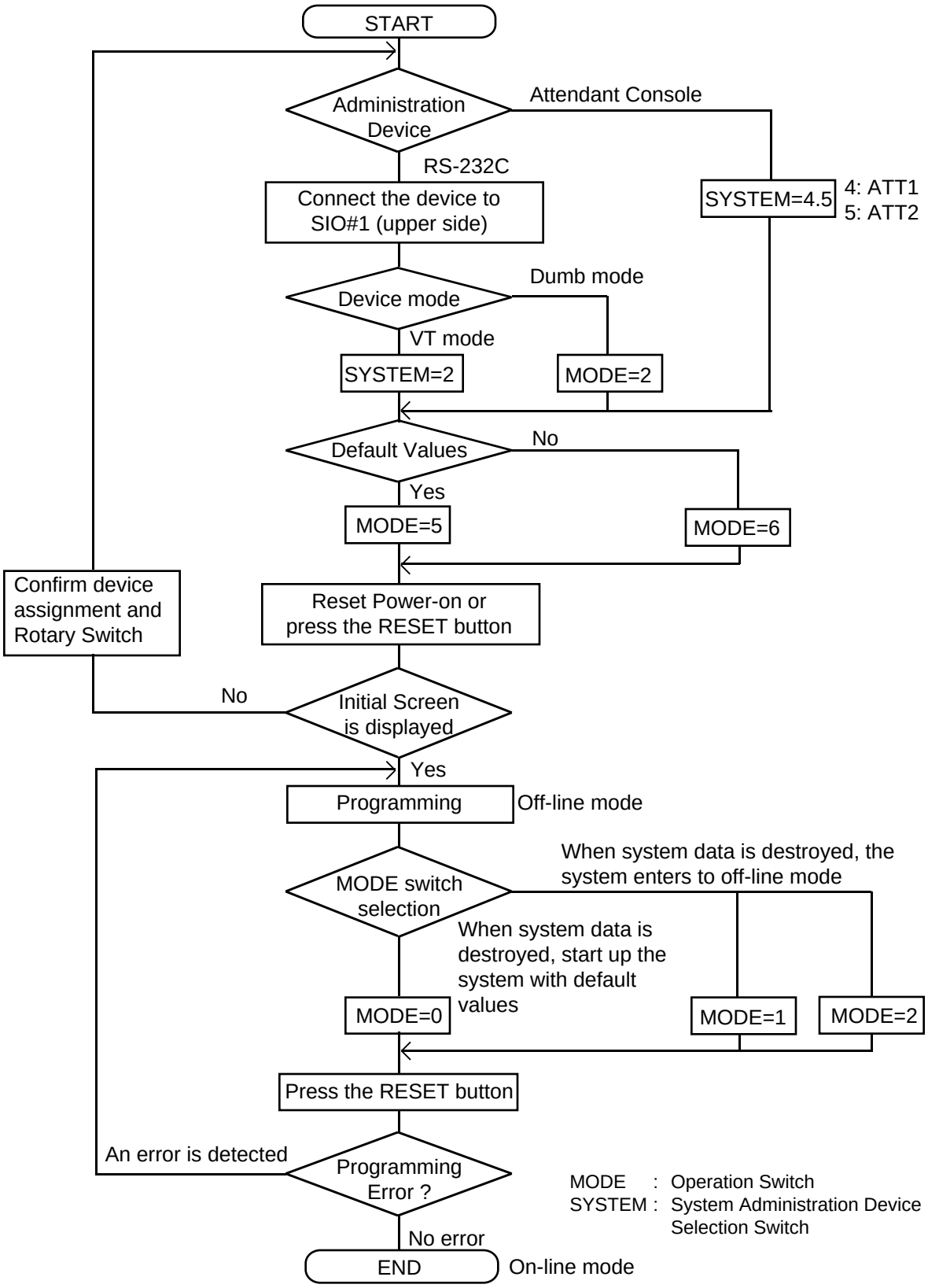
0	Pre-Programmed device is assigned
1	Reserved for future expansion (Functions same as “0”)
2	VT220 is assigned as the System Administration Device compulsorily
3	Dumb is assigned as the System Administration Device compulsorily
4	ATT1 is assigned as the System Administration Device compulsorily
5	ATT2 is assigned as the System Administration Device compulsorily
6	Reserved for future expansion (Functions same as “0”)
7	Reserved for future expansion (Functions same as “0”)
8	Reserved for future expansion (Functions same as “0”)
9	Reserved for future expansion (Functions same as “0”)

a) If reset-routine is activated when this switch is set to “2” through “5,” System Administration Device will be assigned compulsorily regardless of the system programming. Default setting is VT220. (Refer to the table above)

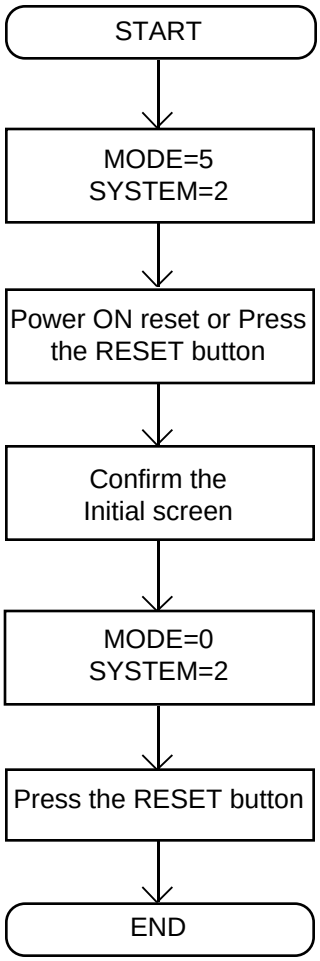
b) If reset-routine is activated when this switch is set to “0,” “1,” or “6” through “9,” pre-programmed device becomes valid as the System Administration Device.

It is possible to change the System Administration Device assignment compulsorily by pressing the RESET button after selecting the desired switch position, if pre-programmed System Administration Device is not available due to the hardware troubles or something.

2.03 Operation Sequence for System Starting Up



(Example) The following flow chart shows the operation sequence for System Starting Up with default values using Panasonic KX-D4930 in VT mode.



MODE : Operation Switch
SYSTEM : System Administration Device Selection Switch

* To start up the system using Panasonic KX-D4930 in Dumb mode, set SYSTEM switch to “3” in above sequence.

Section 3

System Features and Operation

(Section 3)

System Features and Operation

Contents

A. Preparation

This section provides the basic information on each of the system features which are programmed at system level.
System features are those that affect the entire operation of the system.
In this section, system features are divided into the following five categories.

- Basic Features
- Outgoing Call Features
- Receiving Features
- Holding Features
- Other Features

B. Basic Features

1.00 Flexible Numbering

Description

This system comes with a variety of services, and the feature numbers used when executing these services can be set as required.
Feature numbers can be from one to four digits, utilizing numbers “0” through “9” as well as “* ” and “#.”

Directory Numbers (DN) can be three or four digits in length, and it is acceptable for some to have three digits and others four digits.
When three-digit DN's are used, any number can be set as the initial digit; when four-digit DN's are used, any numbers can be set as the initial two digits.

The feature numbers are set in the “System-Numbering Plan” screens.
Two default parameters sets are provided for the feature numbers and when either is used in its original form, the Numbering Plan option in the “System-Operation” screen is set to “Fixed 1” or “Fixed 2.”

In this case, the settings cannot be changed in the “System-Numbering Plan” screen. When a feature number is to be changed, select Flex in the “System-Operation”, Numbering Plan before making the change in the “System-Numbering Plan.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, Numbering Plan	9-D-1.01	10-C-4.00
“System-Numbering Plan”	9-D-6.01 to 6.09	10-C-10.00

Conditions

The followings are examples of feature number conflicts:

Examples: 2 and 21, 32 and 321, etc.

Conversely, the following numbers can be used without conflict:

Examples: 2 and 3, 3 and 41, 41 and 42, 450 and 451, etc.

“* ” and “#” cannot be used for extension numbers (extension blocks).

When “* ” and “#” are included in a feature number, it will not be possible to execute the corresponding feature using a dial pulse type of Single Line Telephone (SLT).

Only “0”, “1” to “9”, “* ” and “#” are valid for entering feature numbers into One Touch dial buttons.
When “FLASH”, “-” ,“PAUSE” and “SECRET” are included into feature numbers, reorder tone is sent and the features cannot be executed.

“#” cannot be used for the feature numbers listed below, for those features require “#” as a delimiter when setting the feature:

“Call Forwarding-to Trunk”
“Pickup Dialing Programming”
“Speed Dialing-Station”

The feature numbers which have been set in the “System-Numbering Plan” screens can be used when dial tone is heard. However, feature number for “Account Code” may be used at times other than when dial tone is heard.

In addition to the feature numbers which can be set in “System-Numbering Plan,” fixed feature numbers are provided and these are shown in the following table.

Fixed Feature Numbers

Function	Number
While busy tone is heard	
Call-back (for extensions only)	6
Busy Override	1
While Do Not Disturb tone is heard	
DND Override	1
When handset is on-hook (PITS only)	
Time display/date display switching	*
Background music on/off	1
Day/Night mode display	#
While talking to doorphone	
Open the door	5
Others	
Extension time and data display mode switching	*
Account code delimiter	#
Account code delimiter (for dial pulse type SLT only)	99
Account code re-input	*

- The feature numbers which are set in the “System-Numbering Plan” are listed on the following pages.

Flexible Feature Numbers

Function	Default	
	Fixed 1	Fixed 2
1st Hundred Block Extension	1	1
2nd Hundred Block Extension	2	2
3rd Hundred Block Extension	3	3
4th Hundred Block Extension	—	—
5th Hundred Block Extension	—	—
6th Hundred Block Extension	—	—
7th Hundred Block Extension	—	—
8th Hundred Block Extension	—	—
9th Hundred Block Extension	—	—
10th Hundred Block Extension	—	—
11th Hundred Block Extension	—	—
12h Hundred Block Extension	—	—
13th Hundred Block Extension	—	—
14th Hundred Block Extension	—	—
15th Hundred Block Extension	—	—
16th Hundred Block Extension	—	—
Operator Call (General)	0	0
Operator Call (Specific)	—	—
ARS/Local CO Line Access	9	9
Trunk Group 01-08 Access	81	81
Trunk Group 09-16 Access	82	82
Trunk Group 17-24 Access *	83	83
Speed Dialing - System	✱1	6✱1
Speed Dialing - Station	✱2	6✱2
Doorphone Call (1-4)	40	640
External Paging	41	641
Station Paging	42	642
External Paging Answer	43	643
Station Paging Answer	44	644
Night Answer 1	45	645
Night Answer 2	46	646
Dial Call Pickup	47	647
Directed Call Pickup	48	648
Hold Extension Retrieve	49	649
Redial	✱3	6✱3
External Feature Access	50	650
Account Code	✱#	✱#
Hold	51	651
Hold Retrieve	52	652
Call Park-System	53	653
Call Park Retrieve - System	54	654
Call Park - Station	55	655
Call Park Retrieve - Station	56	656
Call Forwarding - All Call Set	✱✱2	✱✱2
Call Forwarding - Busy Set	✱✱3	✱✱3
Call Forwarding - No Answer Set	✱✱4	✱✱4
Call Forwarding - to Trunk	✱✱5	✱✱5
Call Forwarding - Busy/No Answer	✱✱6	✱✱6
Do Not Disturb Set	✱✱1	✱✱1
Call Forwarding/Do Not Disturb Cancel	##0	##0
Dial Call Pickup Deny Set	61✱	61✱
Dial Call Pickup Deny Cancel	61#	61#

* (◆ for U.S.A. and Canada only)

Flexible Feature Numbers

Function	Default	
	Fixed 1	Fixed 2
Call Waiting Set	62#	62#
Call Waiting Cancel	62#	62#
BSS/OHCA Deny Set	63#	63#
BSS/OHCA Deny Cancel	63#	63#
Busy Override Deny Set	64#	64#
Busy Override Deny Cancel	64#	64#
Data Line Security Set	65#	65#
Data Line Security Cancel	65#	65#
Pickup Dialing Programming	660	660
Pickup Dialing Set	66#	66#
Pickup Dialing Cancel	66#	66#
Absent Message Set	#4	6#4
Absent Message Cancel	#4	6#4
Timed Reminder Confirm	#50	#50
Timed Reminder Set	#51	#51
Timed Reminder Cancel	#5	#50
Voice Calling Mode Set	67#	67#
Voice Calling Mode Cancel	67#	67#
Voice Calling Deny Set	68#	68#
Voice Calling Deny Cancel	68#	68#
Speed Dialing - Station Programming	6#	6#5
Station Lock Set	#6	6#6
Station Lock Cancel	#6	6#6
Walking COS Set	#7	6#7
Walking COS Cancel	#7	6#7
Walking Station Set	#8	6#8
Walking Station Cancel	#8	6#8
Message Set	#9	6#9
Message Cancel	#9	6#9
Station Program Clear	###	###
Message Waiting Reply	57	657
TIE Trunk Access	84	7
Night Mode Set	70#	69#
Night Mode Cancel	70#	69#
Night Service Manual Mode Set	71#	51#
Night Service Manual Mode Cancel	71#	51#
Flexible Night Service	72	520
Remote Station Lock Set	73#	53#
Remote Station Lock Cancel	73#	53#
Remote DND Set	74#	54#
Remote DND Cancel	74#	54#
Remote FWD Cancel	75	675
Remote FWD Cancel - One Time	76	676
BGM Through External Pager	77	677
Busy Out Trunk	78#	57#
Unbusy Trunk	78#	57#
OGM Record	791	691
OGM Playback	792	692
UCD Log In	#0	6#0
UCD Log Out	#0	6#0
Remote Timed Reminder Confirm	7#0	5#0
Remote Timed Reminder Set	7#1	5#1
Remote Timed Reminder Cancel	7#	50#

Flexible Feature Numbers

Function	Default	
	Fixed 1	Fixed 2
Call Forwarding - Follow Me Set	✻✻7	✻✻7
Call Forwarding - Follow Me Cancel	✻✻8	✻✻8
Other PBX Extension 01	—	—
Other PBX Extension 02	—	—
Other PBX Extension 03	—	—
Other PBX Extension 04	—	—
Other PBX Extension 05	—	—
Other PBX Extension 06	—	—
Other PBX Extension 07	—	—
Other PBX Extension 08	—	—
Other PBX Extension 09	—	—
Other PBX Extension 10	—	—
Other PBX Extension 11	—	—
Other PBX Extension 12	—	—
Other PBX Extension 13	—	—
Other PBX Extension 14	—	—
Other PBX Extension 15	—	—
Other PBX Extension 16	—	—
Transfer	58	58
Conference	59	59

2.00 Directory Number (DN)

Description

Directory numbers are the software type logical numbers which are programmed to match the hardware type physical numbers (port numbers) attached to ports of extensions.
Accordingly, directory numbers are extension numbers.

Directory numbers are assigned in “Configuration-DN Assignment” to be three or four digits.
Only numeric characters “0 to 9” can be used as a Directory Number.

Directory number setting follows the setting in “System-Numbering Plan”, 1st Hundred Block Extension through 16th Hundred Block Extension.

<Example>

System-Numbering Plan

Numbering Plan (01/11)

No.	Feature	DG1	DG2	DG3	DG4
1	1st Hundred Block Extension	5		-	-
2	2nd Hundred Block Extension	6		-	-
3	3rd Hundred Block Extension	7	0	-	-
4	4th Hundred Block Extension	8	0	-	-

DNs from 8000 to 8099 are assignable.
DNs from 7000 to 7099 are assignable.
DNs from 600 to 699 are assignable.
DNs from 500 to 599 are assignable.

Programming

System Programming	Reference	
	VT	Dumb
“Configuration-DN Assignment”	9-C-3.00	10-C-3.00
“System-Numbering Plan”,	9-D-6.01	10-C-10.00
1st Hundred Block Extension	9-D-6.02	
•		
•		
•		
16th Hundred Block Extension		

Conditions

There are two types of directory numbers: the Primary Directory Number (PDN) and the Secondary Directory Number (SDN).
For further details of PDN, refer to Section 4-B-3.01 “PDN Button.” For SDN, refer to Section 4-B-3.02 “SDN Button.”

If you assign only one digit in “System-Numbering Plan”, 1st Hundred Block Extension through 16th Hundred Block Extension, you can assign three-digit DNs which start with the pre-assigned digit in “Configuration-DN Assignment.”

If you assign leading two digits in “System-Numbering Plan,” you can assign four-digit DNs which start with the pre-assigned two digits in “Configuration-DN Assignment.”

3.00 Floating Directory Number (FDN)

Description

It is possible to assign virtual directory numbers to resources and make them appear to be extensions. Those directory numbers are defined as Floating Directory Numbers (FDN).

For example, if an operator receives an incoming CO call for Remote Administration, the operator can transfer the call to Remote Administration resource using the FDN, in the same way as if the operator transfers an incoming CO call to an extension, that is, if the operator is PITS, by pressing the TRANSFER button and dialing the FDN.

FDN can be assigned to the following:

1. Pilot number for UCD groups 01 to 32
2. General Operator Call (two FDN's can be programmed)
3. Attendant Console number (ATT1, ATT2)
4. Remote Administration resource

Programming

System Programming	Reference	
	VT	Dumb
"Special Attended-UCD (1/2)", FDN	9-K-3.01	10-C-44.00
"System-Operation (1/3)", FDN for General Operator Call	9-D-1.01	10-C-4.00
"System-Operation (2/3)", Remote Directory Number	9-D-1.02	
"Extension-Attendant Console (1/2)", DN	9-G-4.01	10-C-28.00

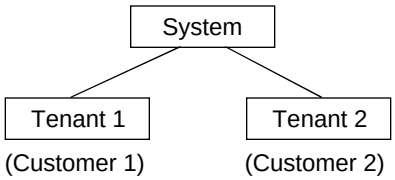
Conditions

FDN setting must follow the assignment of "System-Numbering Plan", 1st Hundred Block Extension through 16th Hundred Block Extension, as well as DN setting.

4.00 Tenant Service

Description

A single system can be used as if two systems were available.
This enables the configuration of two systems which, in each case, are suited to a different customer.



Some of resources can be divided up between the tenants and others are used in common.
A list of resources in each classification is given below.

[Resources which can be divided up]
- Trunk Groups
- Attendant Consoles
- Extensions
- Direct Inward System Access (DISA)
- Automatic Gain Control (AGC)
- Number of Speed Dialing-System
- External pagers
- Doorphones
- Background Music or Music on Hold
- Number of Call Park-System parking zones
- Number of Flexible Absent Messages
- Number of possible Message Waiting entries
- Passwords (Walking COS, PITS System Programming)

[Common resources]
- Station Message Detail Recording (SMDR)
- Automatic Route Selection (ARS)
- Numbering Plan
- Remote operation control
- Class of Service (COS)
- Administration Device
- Toll restriction tables

To enable Tenant Service, set “System-Operation”, Tenant Service to “Yes.”
“System-Tenant”, programming is used to determine how the resources will be divided up between the tenants.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, Tenant Service	9-D-1.01	10-C-4.00
“System-Tenant”	9-D-2.00	10-C-5.00

Conditions

The Night Mode can be operated separately for each tenant.

Calling to extensions in the other tenant can be enabled by setting “System-Tenant”, Inter-Tenant Calling to “Yes.”
However, even when this function has been set to “Yes,” it is not possible to call the Attendant Console in the other tenant.

5.00 Operator

Description

The system allows the operator to answer, monitor and control the incoming calls.

Up to two operators (operator 1 and 2) can be assigned in the system.
The Operator 1 and 2 can perform several special functions listed in the table below.
If tenant service is employed, up to two operators can be assigned to each tenant individually.
Not only the ATT (attendant console) operator but the extension user can be assigned as an operator.
“Operator 1” must always be selected when only one operator is assigned.
If an attendant console is connected to the system, the operator assignment should be arranged as follows.

(When one attendant console is connected)

Operator 1	ATT	or	ATT
Operator 2	extension		— — —

(When two attendant consoles are connected)

Operator 1	ATT
Operator 2	ATT

The operator assignment can be done in the system programming “System-Operation (3/3),” Operator 1 and Operator 2.

Special functions available with each operator.

	Feature	Operator 1 (ATT)	Operator 1 (Extension)	Operator 2 (ATT or Extension)
1	Change Night/Day Mode	○	○	×
2	Change Night/Day Switching Mode (Auto/Man)	○	○	×
3	Set Destination in the Night Mode (Only for Flexible Night Answer Trunk)	○	○	×
4	Pickup Group Station Lock/Unlock	○	×	×
5	Electronic Station Lock Out/Unlock (to Other Stations)	○	○	○
6	DND Set/Cancel (to Other Stations)	○	○	○
7	FWD Cancel (to Other Stations)	○	○	○
8	One-time FWD Cancel (to Other Stations)	○	○	○
9	External BGM On/Off	○	○	×
10	Manual Trunk Busy-Out Setting	○	○	×
11	CO Access Control	○	×	×
12	OGM Record/Playback	○	○	×
13	Transfer to Internal Modem *1 (For Remote Maintenance)	○	○	○
14	Local Alarm Indication	○	○	×
15	Remote Timed Reminder	○	○ *2	○ *2

*1 Available with any extension user from software version 9.XX and above.
*2 In case of an extension, only a PITS with display is available.

○ : available
× : not available

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (3/3)", Operator 1 Operator 2	9-D-1.03	10-C-5.00
"System-Tenant", Operator 1 (Tenant 2) Operator 2 (Tenant 2)	9-D-2.00	10-C-5.00

Conditions

• Tenant Service

If tenant service is employed, each tenant (1 and 2) can have unique operator assignment individually, that is, up to four operators can be assigned to the system.
In this case, the operator assignment should be arranged as follows.

	Tenant 1	Tenant 2
Operator 1	ATT	ATT
Operator 2	extension	extension

or

Operator 1	ATT	extension
Operator 2	ATT	extension

or

Operator 1	ATT	extension
Operator 2	— — —	— — —

The operator assignment can be done in the system programming as follows.

(Tenant 1)
"System-Operation (3/3)", Operator 1 and Operator 2.

(Tenant 2)
"System-Tenant", Operator 1 and Operator 2.

• Invalid Operator Assignment

The following arrangement is invalid in the operator assignment whether tenant service is employed or not.

Operator 1	—	—	extension
Operator 2	ATT	extension	ATT

• Operator Call

The extension user can call the operator in the system by dialing the feature number for "Operator Call (General)" or "Operator Call (Specific)."
For further information, refer to the following:

(PITS users)
Section 4-C-10.00 "Operator Call"

(SLT users)
Section 5-A-8.00 "Operator Call."

• Transfer

The extension user can transfer a call to the operators (Attendant Console or Extension) by both screened and unscreened call transfers.
For further information, refer to the following.

(PITS users)
Section 4-F-1.01 "Unscreened Call Transfer to Station"
Section 4-F-1.02 "Screened Call Transfer to Station"
Section 4-F-1.06 "Unscreened Call Transfer to Attendant Console"

(SLT users)
Section 5-D-1.01 "Unscreened Call Transfer to Station"
Section 5-D-1.02 "Screened Call Transfer to Station"
Section 5-D-1.04 "Unscreened Call Transfer to Attendant Console"

• Hold

The extension user cannot hold a call with an attendant console operator.

6.00 Class of Service (COS)

Description

The functions executed by the extensions users can be restricted by the COS No. assigned for each extension user.
A total of 32 classes of service are available.
A Class of Service is assigned to every extension in “Extension-Station”, Class of Service. The available options are set in “System-Class of Service”.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service”	9-D-4.01 9-D-4.02	10-C-7.00 10-C-8.00
“Extension-Station”, Class of Service	9-G-1.01	10-C-22.00

Conditions

A list of the items which can be set in "System-Class of Service" are given below:

1) Outgoing call restriction level (Day mode)
2) Outgoing call restriction level (Night mode)
3) Maximum number of digits allowed for a CO call
4) The ability to allow or deny Call Forwarding and Do Not Disturb
5) The ability to override Do Not Disturb of the called station
6) The ability to forward or transfer a call to an outside party.
7) Forced account code operation-enable/disable
8) BSS/OHCA override operation-enable/disable
9) BSS/OHCA deny-enable/disable
10) Executive Busy Override of called party-enable/disable
11) Executive Busy Override deny-enable/disable
12) Electronic Station Lock Out/Walking COS-enable/disable
13) Walking Station-enable/disable
14) The ability to perform PITS System Programming-enable/disable
15) ARS/Local toll restriction-with restriction/no restriction/no access
16) Trunk groups available for an outgoing CO call when the outgoing call is made by specifying a trunk group. This setting is not valid for one-touch CO line outgoing calls, outgoing calls by specifying a Virtual Trunk Group, and local CO line outgoing calls including Automatic Route Selection calls.
17) Special carrier access-enable/disable (Setting of accessible carrier when outgoing calls are made by specifying Virtual Trunk Group)
18) Setting of accessible paging group with station paging
19) Setting of accessible external pager with external paging

7.00 Group

7.01 Intercom Group

Description

Each extension is assigned to an intercom group (1 to 8). The extension users in the same intercom group can call each other by dialing the intercom number (one or two digits) using ICM button on a PITS telephone. It is also possible to make an intercom call by dialing "∗" and the directory number (three or four digits).
Refer to Section 4-C-5.02 "Intercom Calling" for further information.

The intercom group affiliation of each extension user is determined in the "Extension-Station", ICM Group and the intercom numbers are set by "Extension-Station", Intercom Number.
All extensions (PITS and SLT) must belong to one of eight intercom groups.

Since intercom numbers cannot be given to SLT, it is only possible to call these telephones by using their directory numbers. Also, since SLTs are not provided with ICM buttons they can only call PITS using the directory numbers.

The relationship between intercom groups and paging groups is determined by programming the "Group-Call Pickup Group" screen.

Programming

System Programming	Reference	
	VT	Dumb
"Group-ICM/Paging Group"	9-E-2.00	10-C-16.00
"Group-Call Pickup Group", ICM	9-E-3.00	10-C-17.00
"Extension-Station", Intercom Number ICM Group	9-G-1.01	10-C-22.00

Conditions

If tenant service is employed, the affiliation of each intercom group is determined by the programming in "Group-ICM/Paging Group" screen.

There is no limit on the number of extensions that each Intercom Group can include, but an extension user can be assigned to only one Intercom Group.

Intercom numbers are composed of one or two digits. This means that there are a maximum of 100 intercom numbers (00 through 99) per intercom group.
Extensions belonging to different intercom groups can have the same intercom number.

7.02 Call Pickup Group

Description

Extensions belonging to a particular intercom group can be divided into call pickup groups which can execute the Dial Call Pickup feature. The call pickup group belonging to an intercom group is set by programming in the “Group-Call Pickup Group”, ICM.

Up to 32 call pickup groups can be assigned in the system.
Extensions programmed into call pickup groups are set in the “Extension-Station”, Pickup Group. It is not necessary for all extensions to be in a pickup group.
See Section 4-D-3.01 “Dial Call Pickup” for further information about the Dial Call Pickup feature.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Call Pickup Group”, ICM	9-E-3.00	10-C-17.00
“Extension-Station (1/3)”, Pickup Group	9-G-1.01	10-C-22.00

Conditions

Different call pickup groups can have the same UCD and/or paging groups.

See Section 3-B-7.04 “Paging Group” for details on Paging Groups.
See the following Section 3-B-7.03 “Uniform Call Distribution (UCD) Group” for details on UCD Groups.

7.03 Uniform Call Distribution (UCD) Group

Description

It is possible to execute UCD functions in a group composed of one or more Call Pickup Groups. Such a group is called a UCD group.
The “Group-Call Pickup Group” screen determines which pickup group(s) will be in the UCD group.
Up to 32 UCD groups can be assigned in the system.
The UCD group and the call pickup group configuring the UCD group must belong to the same intercom group.
See Section 3-D-2.05 “Uniform Call Distribution (UCD)-without OGM” and Section 3-D-2.06 “Uniform Call Distribution (UCD)-with OGM” for further information about the UCD functions.
See the previous Section 3-B-7.02 “Call Pickup Group” for details on Call Pickup Groups.
See Section 3-B-7.01 “Intercom Group” for further information about ICM Groups.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Call Pickup Group”, UCD	9-E-3.00	10-C-17.00

Conditions

None

7.04 Paging Group

Description

It is possible to execute paging functions in a group composed of one or more pickup groups. Such a group is called a “Paging Group.”

Up to eight paging groups can be assigned in the system.
When Tenant Service is employed, the “Group-ICM/Paging Group” screen sets which tenant the paging group belongs to.
The “Group-Call Pickup Group” screen sets which pickup group(s) make up a paging group.

Programming

System Programming	Reference	
	VT	Dumb
“Group-ICM/Paging Group”, Paging Group-Tenant	9-E-2.00	10-C-16.00
“Group-Call Pickup Group”, PAG	9-E-3.00	10-C-17.00

Conditions

If tenant service is employed, pickup groups which can be used to configure a paging group are limited within the same tenant.
See Section 4-H-1.00 “Paging” for further information about paging features.

7.05 Trunk Group

Description

To support efficient utilization of trunks, they can be grouped together (up to 16 groups) if all trunks in the group perform the same function. The following six kinds of trunk groups can be assigned in the system.
The items listed below are set in the “Group-Trunk Group” screen.

(a) Trunk group type
(b) Trunk group name
(c) Tenant selection
(d) Trunk group direction
(e) Incoming destination (Day)
(f) Incoming destination (Night)
(g) Intercept Routing (Day)
(h) Intercept Routing (Night)
(i) Toll restriction level
(j) Toll restriction table
(k) Dialing plan selection
(l) Disconnect time selection
(m) Pause time selection
(n) Hookswitch flash time selection
(o) DID digit modification table selection
(p) Entry of PBX access code (No restriction)
(q) Entry of PBX access code (Restriction)
(r) Restriction time on CO-CO calls
(s) DIL (I:N) destination
(t) Maximum number of digits after External Feature Access
(u) CO-TIE Restriction
(v) TIE-CO Restriction
(w) TIE Forced Account Mode
(x) TIE Incoming Delete Digit
(y) TIE Incoming Insert Dial

The “Trunk-CO Line”, Trunk Group determines which trunk group the CO line belongs to.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group”	9-E-1.01	10-C-14.00
	9-E-1.02	10-C-15.00
“Trunk-CO Line”, Trunk Group	9-F-1.00	10-C-18.00

Conditions

A single CO line cannot belong to more than one trunk group.

8.00 Night Service

Description

Special arrangements are required to handle attendant-seeking incoming CO calls during period when the operator at Attendant Console is not available, for example at night and on weekends. Attendant-seeking incoming CO calls will be redirected to the designated extension and/or a group of extensions (Directed Night Answer)or will ring an external pager (Universal Night Answer) in night mode.

1. Treatment of attendant-seeking incoming CO calls in night mode

   (Directed Night Answer)
   Used to redirect incoming attendant-seeking CO calls to the designated extension or a group of extensions automatically in night mode.

   (Universal Night Answer (UNA))
   Allows any extension user in the system to answer incoming attendant-seeking CO calls ringing at an external pager, by dialing the feature number for “Night Answer 1 or 2.”

   Note: Incoming attendant-seeking CO calls can be redirected to the Remote Maintenance Resource for the System Administration.

   Night Answer Destination can be administered either by fixed mode (Fixed Night Service) or flexible mode (Flexible Night Service).

   (Flexible Night Service)
   Allows the Operator 1 to change the pre-assigned night answer destination.

   (Fixed Night Service)
   The Operator 1 cannot change the pre-assigned night answer destination.
   Only the system administrator can change the pre-assigned night answer destination.

   Call handling in Flexible and Fixed night service is almost the same.

   The difference is:

Flexible	The Operator 1 (Attendant Console or Extension) can change the night answer destination.
Fixed	A group of extensions (Night Answer Group) can be assigned as the destination of one or more CO lines in night mode

2. Treatment of other calls in night mode

   DID and PCO calls are not assignable to Night Service.
   A DID call will ring at the appropriate extension and PCO call will ring at designated extension regardless of Day/Night mode.

   The following list shows the relationship between Incoming Mode (Day) and assignable Incoming Mode (Night) of the Trunk Group.

Incoming Mode (Day)	Incoming Mode (Night)
ATT	FIXED FLEXIBLE DISA

Incoming Mode (Day)	Incoming Mode (Night)
DISA	Day Mode FIXED FLEXIBLE DISA
DIL 1: 1	
DIL 1: N	
TAFAS (1/2)	

   To continue the same Incoming Mode for a trunk group both in Day and Night, set “Incoming Mode (Night)” to Day Mode.

   (Note)
   If Incoming Mode (Day) of a trunk group is set to ATT, Day Mode can not be selected for Incoming Mode (Night).

   The following calls directed to the Attendant Console in day mode can be redirected to the designated extension in night mode.

   DPH, DID, DISA and Extension calls

   To utilize this redirection, assign desired extension number in “Extension-Attendant Console” Night.

3. Switching of Day/Night Mode

It is assignable to switch Day/Night mode either automatically at pre-assigned time or manually by the Operator 1 (Attendant Console or Extension User) at any time desired.

(Automatic Switching)
The system will switch the day and night modes at the programmed time automatically each day.

(Manual Switching)
Operator 1 can switch the Day/Night mode at desired time.

(Supplement)

The following programming items may be assigned in a different way between day mode and night mode.

- "System-Class of Service"
  Toll Restriction Level (Day)
  Toll Restriction Level (Night)
  (Refer to Section 9-D-4.01 "Class of Service (1/2).")
- "Group-Trunk Group"
  Incoming Mode (Day)
  Incoming Mode (Night)
  Intercept Routing (Day)
  Intercept Routing (Night)
  (Refer to Section 9-E-1.01 "Trunk Group (1/2).")
- "Extension-Station"
  Day Ring
  Night Ring
  (Refer to Section 9-G-1.02 "Station (2/3).")

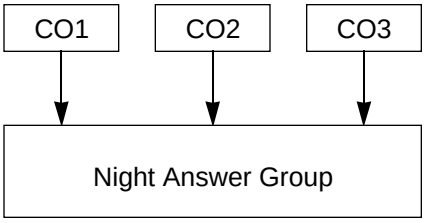
8.01 Directed Night Answer

Description

Used to redirect incoming attendant-seeking CO calls to the designated extension or a group of extensions (Night Answer Group) automatically in night mode.

To activate this feature, set "Group-Trunk Group" Incoming Mode (Night) to FIXED or FLEXIBLE and "Trunk-CO Line" Night Answer Point to EXT: xxxx or NAG (Night Answer Group).

Night Answer Group
A single group of extensions (called the Night Answer Group) can be created to receive calls at night.
Calls from more than one CO line may arrive at this group.
The size limit of the group is 32 extensions.



To utilize this feature, program as follows.

1. Assign "Group-Trunk Group" Incoming Mode (Night) to "FIXED."
2. Assign "Trunk-CO Line" Night Answer Point to "NAG."

   This CO line must belong to the Trunk Group whose Incoming Mode (Night) is assigned to FIXED.
3. Assign the DN of the destination extensions by using NAG command.

Programming

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (1/2)", Incoming Mode (Night)	9-E-1.01	10-C-14.00
"Trunk-CO Line", Night Answer Point	9-F-1.00	10-C-18.00
"Night Answer Group (NAG)"	—	10-C-59.00

Conditions

1. IRNA and Rerouting
   If an incoming CO call directed to a single extension is not answered within a specified time period, the caller will receive Rerouting or IRNA treatment.
   For further information, refer to Section 3-F-5.00 "Intercept Routing-No Answer (IRNA)" and Section 3-F-6.00 "Rerouting."

2. Remote Administration
   To execute the system administration from a remote location at night, select "RMT" for "Trunk-CO Line" Night Answer Point assignment.
   For further information about remote administration, refer to section 14-B-2.00 "System Administration from a Remote Location."

3. Tenant Service
   If tenant service is employed, each tenant (1 and 2) can have unique Night Service arrangement individually.
   In this case, Night Service assignment for tenant 1 is determined by the system programming "System-Operation" and Night Service assignment for tenant 2 is determined by the system programming "System-Tenant."

8.02 Universal Night Answer (UNA)

Description

Allows any extension user in the system to answer incoming attendant-seeking CO calls ringing at an external pager, by dialing the feature number for "Night Answer 1 or 2."

To activate this feature, set "Group-Trunk Group" Incoming Mode (Night) to FIXED or FLEXIBLE and "Trunk-CO Line" Night Answer Point to UNA 1 or UNA 2. UNA 1 is associated with External Pager 1 and UNA 2 is associated with External Pager 2. All CO lines belonging to this trunk group are covered by this assignment.

External pager must be connected to the system beforehand.
Up to two external pagers can be connected to the system.
To answer calls ringing at external pager 1, dial the feature number for "Night Answer 1," and to answer calls ringing at external pager 2, dial the feature number for "Night Answer 2."
For further information about external pager assignment, refer to Section 4-H-1.03 "Paging External Pagers."

Programming

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (1/2)", Incoming Mode (Night)	9-E-1.01	10-C-14.00
"Trunk-CO Line", Night Answer Point	9-F-1.00	10-C-18.00
"System-Numbering Plan (03/11)", Night Answer 1 Night Answer 2	9-D-6.03	10-C-10.00

Conditions

1. UNA and TAFAS
   Call handling in UNA is identical to TAFAS. The difference is that TAFAS is available in day mode and UNA is available in night mode.
   For further information about TAFAS, refer to Section 4-D-4.00 “Trunk Answer From Any Station (TAFAS)-Day Service.”

2. IRNA and Rerouting
   If incoming CO calls are not answered for any reason within a specified time period, the caller will receive Rerouting or IRNA treatment.
   For further information, refer to section 3-F-6.00 “Rerouting” and Section 3-F-5.00 “Intercept Routing-No Answer (IRNA).”

3. Remote Administration
   To execute the system administration from a remote location at night, select “RMT” for “Trunk-CO Line” Night Answer Point assignment.
   For further information about remote administration, refer to Section 14-B-2.00 “System Administration from a Remote Location.”

4. Tenant Service
   If tenant service is employed, each tenant (1 and 2) can have a unique Night Service arrangement individually.
   The affiliation of each external pager is determined by the system programming in “Trunk-Pager & Music Source”, External Pager- Tenant.
   Extension users cannot answer the UNA calls ringing at an external pager in the different tenant.

Operation

Refer to the following:

(PITS) Section 4-I-1.01 “Universal Night Answer (UNA)”

(SLT) Section 5-G-1.01 “Universal Night Answer (UNA)”

8.03 Flexible Night Service

Description

Flexible Night Service allows the Operator 1 (Attendant Console or Extension user) to change the assigned night answer destination on a CO line basis by dialing the feature number for “Flexible Night Service.”

To utilize this feature, set “Group-Trunk Group” Incoming Mode (Night) to FLEXIBLE. All CO lines which belong to this trunk group are covered by this assignment.
If FIXED is selected for the above setting, the assigned night answer destination can not be changed by the Operator 1.

Call handling in Flexible and Fixed night service is almost the same.

The difference is:

Flexible	The Operator 1 (Attendant Console or Extension) can change the night answer destination.
Fixed	A group of extensions (Night Answer Group) can be assigned as the destination of one or more CO lines in night mode

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Incoming Mode (Night)	9-E-1.01	10-C-14.00
“Trunk-CO Line”, Night Answer Point	9-F-1.00	10-C-18.00
“System-Numbering Plan (08/11)”, Flexible Night Service	9-D-6.08	10-C-10.00

Conditions

Tenant Service
If tenant service is employed, the night answer destination for a CO line can only be changed by the Operator 1 in the same tenant.

Operation

For the operation of changing the Night Answer destination, refer to the following:

(PITS) Section 4-I-1.02 “Flexible Night Service”
(SLT) Section 5-G-1.02 “Flexible Night Service”
(ATT) Section 6-J-1.01 “Flexible Night Service”

8.04 Fixed Night Service

Description

Call handling in Flexible and Fixed night service is almost the same.

The difference is:

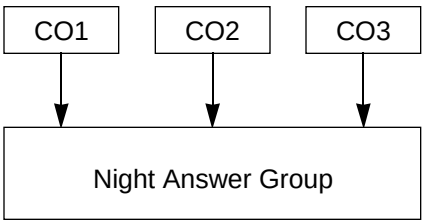
Flexible	The Operator 1 (Attendant Console or Extension) can change the night answer destination.
Fixed	A group of extensions (Night Answer Group) can be assigned as the destination of one or more CO lines in night mode

If FIXED is selected, the assigned night answer destination can not be changed by the Operator 1.

To utilize this feature, set “Group-Trunk Group” Incoming Mode (Night) to “FIXED.” All CO lines belong to this trunk group are covered by this assignment.

Night Answer Group

A single group of extensions (called the Night Answer Group) can be created to receive calls at night.
Calls from more than one CO line may arrive at this group.
The size limit of the group is 32 extensions.



To utilize this feature, program as follows.

1. Assign “Group-Trunk Group” Incoming Mode (Night) to “FIXED.”
2. Assign “Trunk-CO Line” Night Answer Point to “NAG.”

   This CO line must belong to the Trunk Group whose Incoming Mode (Night) is assigned to FIXED.
3. Assign the DN of the destination extensions by using NAG command.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Incoming Mode (Night)	9-E-1.01	10-C-14.00
“Trunk-CO Line”, Night Answer Point	9-F-1.00	10-C-18.00
“Night Answer Group (NAG)”	—	10-C-59.00

Conditions

None

Operation

None

8.05 Switching of Day/Night Mode

Description

It is assignable to switch Day/Night mode either automatically at pre-assigned time or manually by the Operator 1 (Attendant Console or Extension) at any time desired.
If Manual Switching mode is assigned, the Operator 1 must dial the feature number for "Night Mode Set" for night service or "Night Mode Cancel" for day service.
If Auto Switching mode is assigned, the system will switch the day and night modes at the programmed time each day.

To utilize Auto Switching mode, set "System-Operation (3/3)" Night Service to "Auto" and assign desired mode switching time to "Auto Start Time" on a per day of the week basis.
To utilize Manual Switching mode, set "System-Operation (3/3)" Night Service to "Manual."

The Operator 1, however, can override the Auto Mode setting, that is Manual Mode can be established, by dialing the feature number for "Night Service Manual Mode Set." To restore the Auto mode, the Operator 1 must dial the feature number for "Night Service Manual Mode Cancel."

If tenant service is employed, night service assignment unique to each tenant (Tenant 1 and Tenant 2) can be programmed individually.
The assignment in "System-Operation (3/3)" is applied to Tenant 1 and the assignment in "System-Tenant" is applied to Tenant 2.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (3/3)", Night Service Auto Start Time	9-D-1.03	10-C-4.00
"System-Tenant", Night Service (Tenant 2) Auto Start Time	9-D-2.00	10-C-5.00
"System-Numbering Plan (08/11)", Night Mode Set Night Mode Cancel Night Service Manual Mode Set Night Service Manual Mode Cancel	9-D-6.08	10-C-10.00

Conditions

If Auto Start Time on a certain day is not assigned, the current mode is continued until a new start time is encountered.

If the Start Time for Day mode and Night mode on the same day are set identically, the current mode is continued.

If Auto Start Time assignment is not programmed at all, the current mode is continued. In other words if the current mode is Day then Day Mode is continued, and if the current mode is Night then Night Mode is continued.

Operation

Refer to the following:

(PITS) Section 4-I-1.03 "Switching of Day/Night Mode"
(SLT) Section 5-G-1.03 "Switching of Day/Night Mode"
(ATT) Section 6-J-1.02 "Switching of Day/Night Mode"

9.00 Mixed Station Capacities

Description

The KX-T336 System supports a wide range of telephone sets, not only PITS (Proprietary Integrated Telephone System) telephones but also Standard Rotary telephones (10 pps/20 pps) and Standard Push-button telephones.

The PITS telephones can be categorized as follows:

KX-T308 system : KX-T30820
KX-T30830
KX-T30850

KX-T616 system : KX-T61620
KX-T61630
KX-T61650

KX-T1232 system: KX-T123220
KX-T123230
KX-T123230D
KX-T123235
KX-T123250

KX-T7000 series : KX-T7020
KX-T7030
KX-T7050
KX-T7130

Hybrid Line Circuits (HLC) card or Proprietary ITS Line Circuits (PLC) card are required for PITS telephones. Hybrid Line Circuits (HLC) card or Single Line Circuits (SLC) card are required for single line telephones.
The “Configuration-Slot Assignment” screen defines which card is installed in which slot.

Programming

System Programming	Reference	
	VT	Dumb
“Configuration-Slot Assignment”	9-C-2.00	10-C-2.00

Conditions

None

10.00 Variable Time-Out

Description

The timer values listed below can be set and changed in system programming.
Common system timer values are set by the “System–System Timer” screen and “Special Attendant–DISA” screen. The timer values used with each trunk group are set by the “Group-Trunk Group” screen and the timer values used by the CO lines are set by the "Trunk–CO Line" screen. The timer values used with each extension are set by the "Extension-Station" screen.

System timer values:
- <1> Held Call Reminder
- <2> Held Call Reminder (Attendant)
- <3> Transfer Recall
- <4> Pickup Dial Waiting
- <5> External First Digit Time-Out
- <6> External Interdigit Time-Out
- <7> External Interdigit Time-Out (PBX)
- <8> Toll Restriction Guard Time-Out
- <9> Call Forwarding–No Answer Time-Out
- <10> Intercept Routing–No Answer Time-Out (System)
- <11> Intercept Routing–No Answer Time-Out (DISA)
- <12> Attendant Overflow Time
- <13> SMDR Duration Time
- <14> TIE Interdigit Time-Out
- <15> DISA Interdigit Time-Out
- <16> Delayed Answer (DISA)
- <17> Prolonged Time (DISA)
- <18> Automatic Redial Retry Interval (WS1)
- <19> First Dial Timer (WS2)
- <20> First Dial Timer (DID) (WS2)

Trunk group timer values:
- <1> CO-CO Duration Limit
- <2> Disconnect Time
- <3> Pause Time
- <4> Hook Switch Flash Time

CO Line timer values:
- <1> DTMF Duration Time
- <2> CPC Detection Time (Incoming)
- <3> Wink Singnal Time-Out

Station timer values:
- <1> Delayed Ringing (Day/Night)

Programming

System Programming	Reference	
	VT	Dumb
“System-System Timer”	9-D-3.00	10-C-6.00
“Special Attended-DISA”,	9-K-1.00	10-C-40.00
Delayed Answer		
Prolong Time		
“Group-Trunk Group”,	9-E-1.01	10-C-14.00
CO-CO Duration Limit		
Disconnect Time		
Pause Time		
Hook Switch Flash Time		
“Trunk-CO Line”,	9-F-1.00	10-C-18.00
DTMF Duration Time		
CPC Detection		
Wink Signal Time-Out		
“Extension-Station”,	9-G-1.02	10-C-22.00
Day Ring		
Night Ring		
“World Select 1 (WS1)”	—	10-C-51.00
Automatic Redial Retry Interval		
“World Select 2 (WS2)”	—	10-C-52.00
First Dial Timer		
First Dial Timer (DID)		

Conditions

None

11.00 Lockout

Description

If the extension user remains off-hook after the completion of a call, he or she will be disconnected from the channel after hearing reorder tone.
Lockout applies to all types of calls:Extension, Intercom and CO line calls.

Programming

None

Conditions

If the extension user remains off-hook after the completion of a CO call on which “CPC Detection” has been set to “None,” reorder tone is not sent even if the other party, on the CO line, goes on-hook.
Refer to Section 3-F-7.00 “Calling Party Control (CPC) Signal Detection” for further information.

12.00Automatic Station Release

Description

If an extension user fails to dial any digits within a specified time period after getting a line for making a call, he or she will be disconnected from the channel after hearing reorder tone.
To get a line for making a call again, the extension user must once go on-hook and then off-hook.

When making an outgoing CO call with either PITS and SLT, the timers set by "System-System timers", External First Digit Time-Out, External Interdigit Time-Out and External Interdigit Time-Out (PBX) are used.

Programming

System Programming	Reference	
	VT	Dumb
“System-System Timer ”, External First Digit Time-Out External Interdigit Time-Out External Interdigit Time-Out (PBX)	9-D-3.00	10-C-6.00

Conditions

This function does not work when originating an intercom call or extension call with a PITS.

This function works in the following cases when originating a CO line call with a PITS.

<1> When nothing has been dialed before the External First Digit Time-Out expires. This timer is started after CO dial tone has been heard.
<2> When the External Interdigit Time-Out has expired during dialing.

This function works in the following cases when originating a call with an SLT.

<1> When the first digit was not dialed within 10 seconds after dial tone was heard.
<2> When the time between the digits being dialed exceeds five seconds (only when originating an extension call).

The following conditions apply when originating a CO call with an SLT.

<1> When the first digit was not dialed within 10 seconds after dial tone was heard.
<2> When the five second interdigit timer expires when dialing on a CO line.
<3> When the first digit was not dialed before the External First Digit Timer Time-Out expires after the CO dial tone was heard
<4> When the External Interdigit Time-Out expires during dialing.

13.00 Distinctive Dial Tone

Description

Multiple dial tone patterns are presented to the extension user to give some information about selected lines, features set to the lines, etc.

There are five dial tone types, as follows:

Dial tone 1 : Normal dial tone, sounds when calling on DN buttons.

Dial tone 2 : Sounds to request an account code entry or DISA user code entry, or sounds when an extension goes off-hook after Timed Reminder.

Dial tone 3 : Sounds if the extension user has set any of the following features:

- Do Not Disturb
- Call Forwarding
- Absent Message
- Timed Reminder
- Walking Station
- Walking COS

Dial tone 4 : Sounds if the extension user has set UCD Log Out.

Dial tone 5 : Sounds when intercom calling (only for PITS's).

Programming

None

Conditions

The patterns for dial tone are listed in Section 3-B-16.00 “Tone and Ringing Patterns.”

14.00 Distinctive Busy Tone

Description

There are three busy tone patterns as follows:

Busy tone 1 : Normal busy tone.

Busy tone 2 : A unique busy tone which allows users with busy tone detection SLT's to use Busy Override, etc, when encountering a busy line.

Busy tone 3 : A special busy tone sent when a trunk is busy to inform the extension user that Automatic Callback to Trunk will be set by going on-hook automatically.

Busy tones 1 and 2 are not used at the same time. Only one tone is selected by "System-Operation", Busy Tone.

If busy tone 2 is selected, PITS's follow the setting.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", Busy Tone	9-D-1.01	10-C-4.00

Conditions

If Automatic Callback to Trunk is programmed, the function is automatically set when making an outgoing CO call and going on-hook when hearing busy tone.
See Section 4-C-6.01, 5-A-4.01 "Automatic Callback-Trunk" for details.
When the Automatic Callback to Trunk function is enabled in system programming, special busy tone is sent. When Automatic Callback to Trunk is not enabled in system programming, busy tone 1 or busy tone 2 is sent. See Section 3-B-16.00 "Tone and Ringing Patterns" for the busy tone patterns.

15.00 Confirmation Tone

Description

After several operations the system confirms the success of the operation by sending a confirmation tone to the extension user.

Multiple patterns of confirmation tone is sent when the following operations have been successfully conducted:

Confirmation tone 1 :

When a function is set, indicates that the new setting differs from the previous setting.

Confirmation tone 2 :

When a function is set, indicates that the new setting is identical to the previous setting. In addition, the tone is sent when holding a calling party (including Consultation Hold and Call Park) or setting Call Park and when setting or releasing Message Waiting, and setting BGM through External Pager on and off.

Confirmation tone 3 :

The tone is sent when calling by OHCA, answering by Call Pickup or by Call Hold Retrieve-Station, or when making and answering the paging announcement, or when calling a doorphone or starting conference, and so on.

Confirmation tone 4 :

The tone is sent when converting conference into a two party call.

A setting can be made by programming “System-Operation”, Beep Tone for Bsy-ovr/Brg-in to determine whether confirmation tone is to be sent or not when two party conversation is successfully converted into a three party conversation (Busy Override, Conference, etc.).

Confirmation tone from external pagers can be selected to be sent or not in “Trunk-Pager & Music Source”, External Pager-Tone.

Refer to Section 3-B-16.00 “Tone and Ringing Patterns” for the confirmation tone patterns.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, Beep Tone for Bsy-ovr/Brg-in	9-D-1.01	10-C-4.00
“Trunk-Pager & Music Source”, External Pager-Tone	9-F-2.00	10-C-19.00

Conditions

Dial tone is sent after confirmation tone has been sent. However, if the Automatic Callback to Station function has been set, reorder tone is sent after confirmation tone.

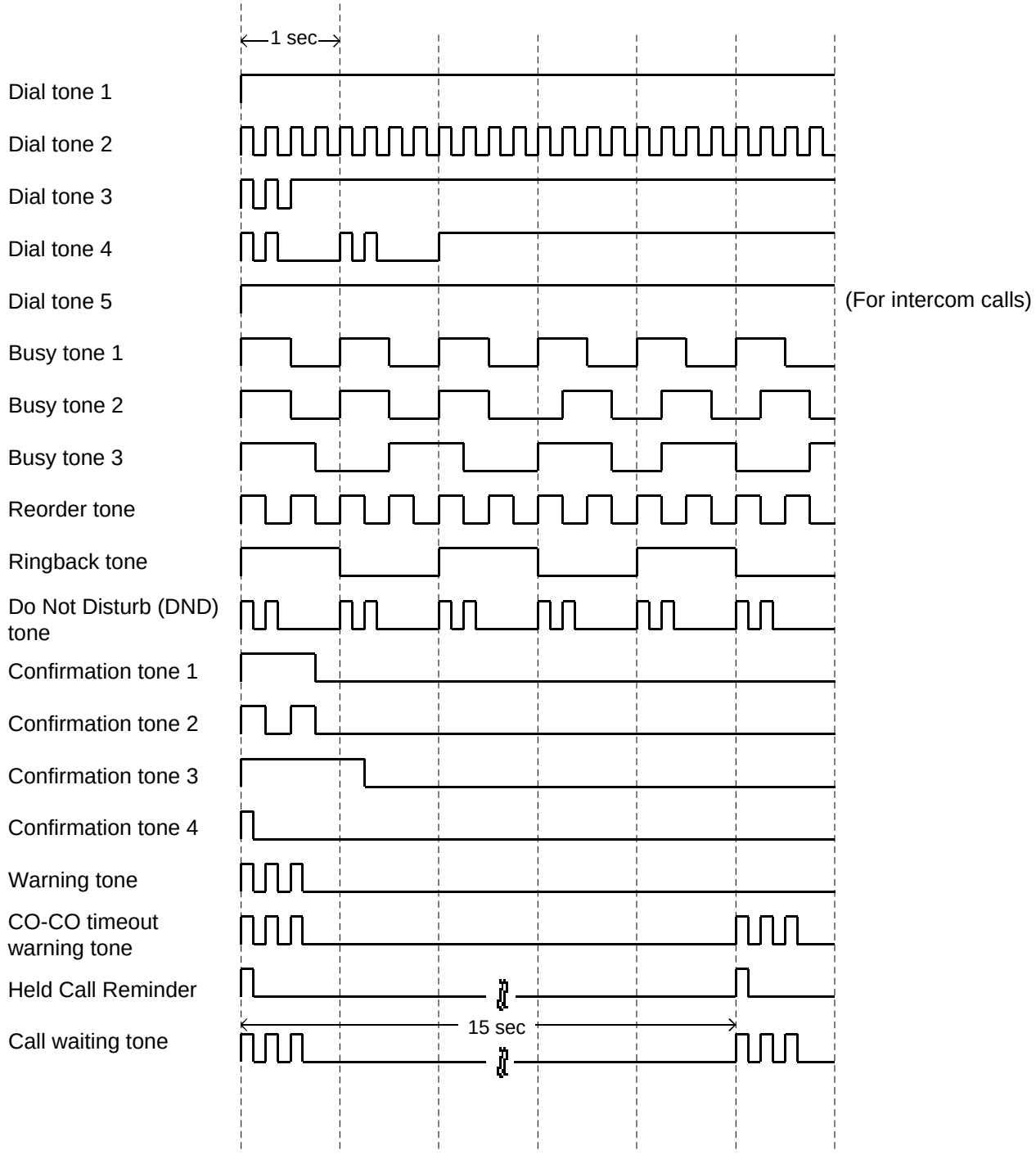
When a function is set using a PITS with the display, details of the setting appear on the display while confirmation tone is sent.
If any operation is performed, the message on the display will be terminated at that time.

16.00 Tone and Ringing Patterns

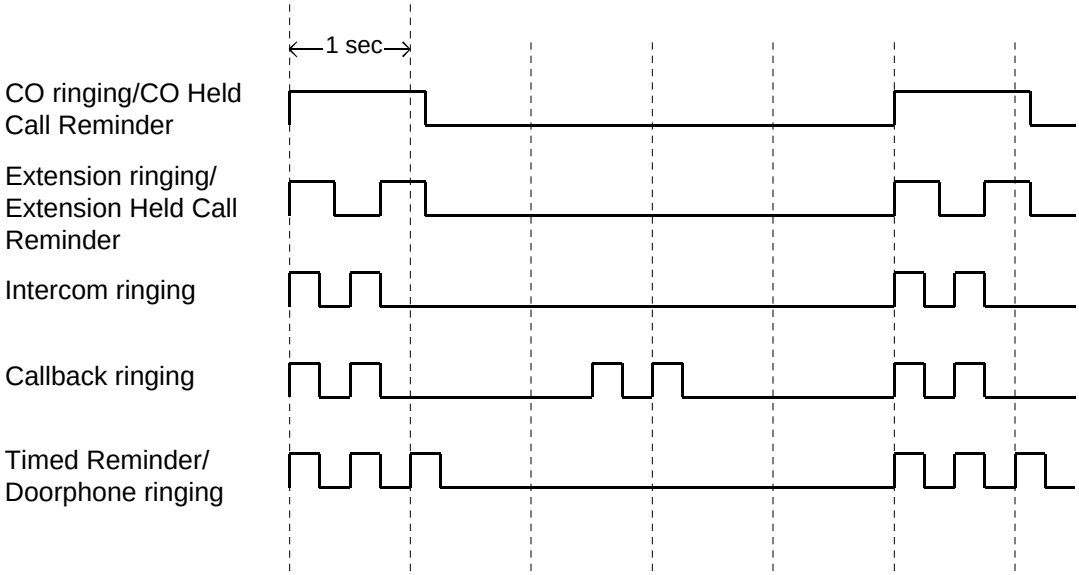
Description

This system offers various tone patterns and ringing patterns, as listed below:

Tone Patterns



Ringing Patters



See Section 3-B-13.00 “Distinctive Dial Tone” for details of dial tone.
See Section 3-B-14.00 “Distinctive Busy Tone” for details of busy tone.
See Section 3-B-15.00 “Confirmation Tone” for details of confirmation tone.
See Section 3-D-4.00 “Discriminating Ringing.”

Programming

None

Conditions

None

C. Outgoing Call Features

1.00 Toll Restriction (for U.S.A. and Canada)

Description

Toll Restriction is a system programmable feature that, in conjunction with the assigned Class of Service, can prohibit selected extension users from placing unauthorized toll call.
Toll Restriction types depend on the following four ways of selecting a trunk:

- Local Trunk Dial Access (Refer to Section 3-C-1.01)
- Automatic Route Selection (ARS) (Refer to Section 3-C-1.02)
- Individual Trunk Group Dial Access/Direct Trunk Access (Refer to Section 3-C-1.03)
- Individual Virtual Trunk Group Dial Access (Refer to Section 3-C-1.04)

Three Toll Restriction types below are common to the above listed four methods:

- Operator/International Call Restriction (Refer to 3-C-1.05)
- 3/6 Digit Toll Restriction (Refer to Section 3-C-1.06)
- 7/10 Digit Toll Restriction (Refer to Section 3-C-1.07)

3/6 Digit Toll Restriction and 7/10 Digit Toll Restriction are used in pairs.

Flow charts and **Programming** are used to explain Toll Restriction types.
Flow chart illustrates the flow of procedures.
Programming shows the programming reference and the method to execute each program for the procedures illustrated in the flow chart. Each **Programming** has a number, which matches the numbers attached to the procedures in the flow chart: <1>, <2> . . .

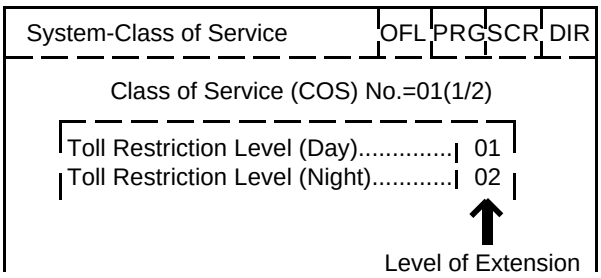
Toll Restriction Level

Toll restriction level is one of the elements used to judge Toll Restriction. The level consists of 16 stages from 01 to 16. 01 is the highest level and 16 is the lowest:

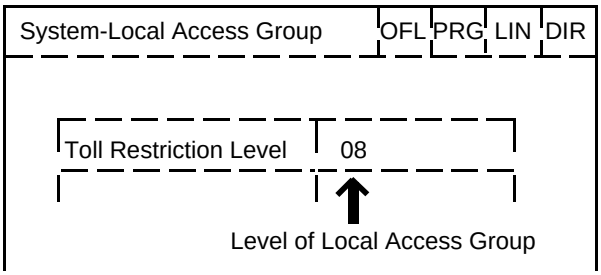
01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16
high ⟵⟶ low

The higher the level of an extension is, the less the extension is restricted. Conversely, the lower the level the greater the restriction.

The levels of extensions are assigned in “System-Class of Service”, Toll Restriction Level (Day) and Toll Restriction Level (Night) as below:



“Toll Restriction Level of Extension” is referred to as “TRLE” in the following.
Each Toll Restriction type can set its own level and executes restriction by comparing its own level with TRLE.
For example, the toll restriction level for Local Trunk Dial Access can be programmed in “System-Local Access Group”, Toll Restriction Level.



In the flow charts, marks such as “>” are used to compare TRLE and the level of each Toll Restriction type.
When TRLE is equal to or higher than the toll restriction level, it is described as follows:
TRLE ≧ Toll restriction level
When TRLE is lower than the toll restriction level, it is described as follows:
TRLE < Toll restriction level

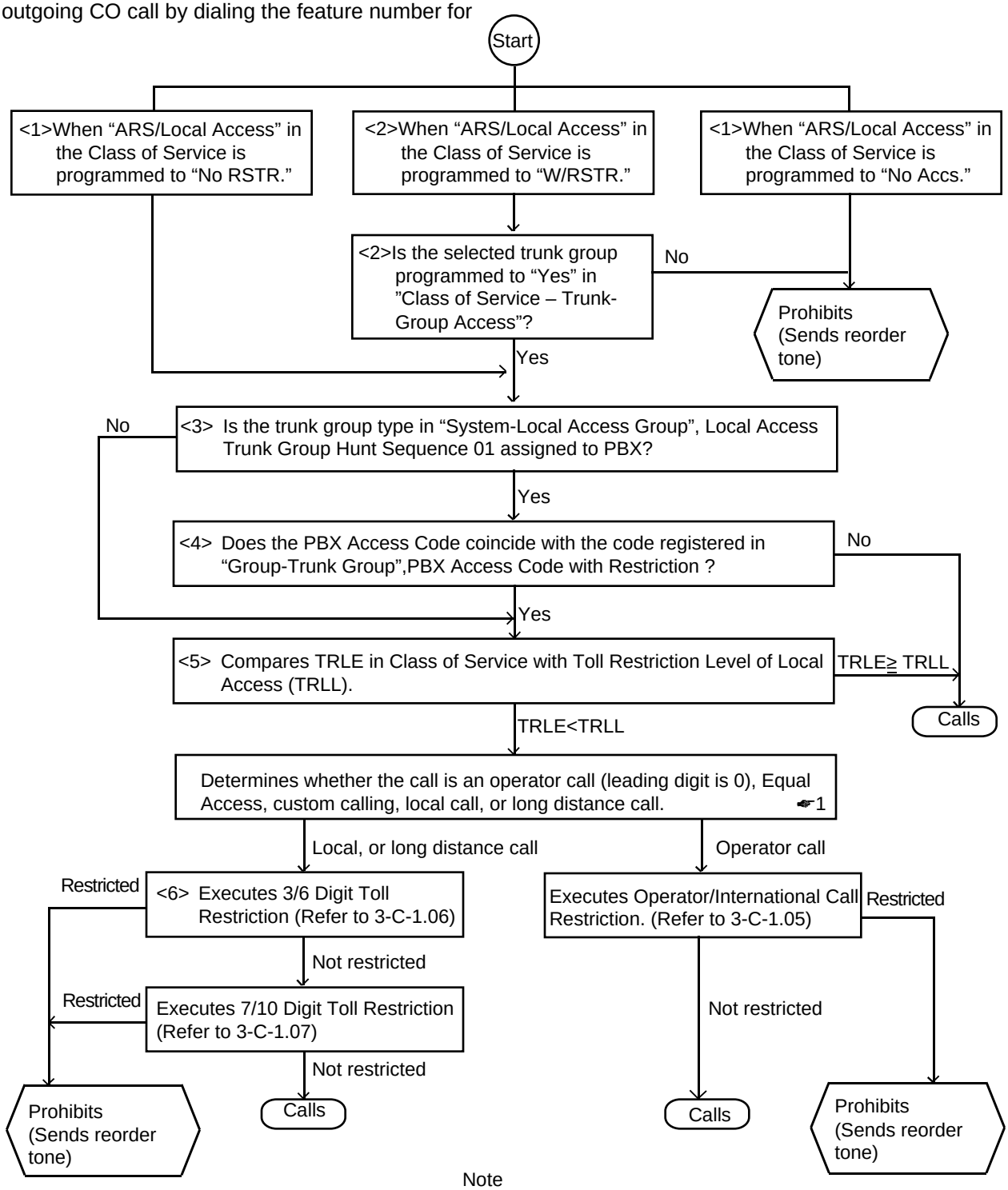
<Example>

TRLE 03
Toll restriction level 08
The levels above are described as :
TRLE > Toll restriction level

1.01 Toll Restriction for Local Trunk Dial Access (for U.S.A. and Canada)

Flow Chart

The flow chart below shows the procedures for restricting outgoing calls when a user makes an outgoing CO call by dialing the feature number for "ARS/Local CO line Access" in the system without ARS service.



Note

☛1 Equal Access is prohibited. Custom Calling is performed.

Programming <1>

System Programming	Reference	
	VT	Dumb
"System-Class of Service", ARS/Local Access	9-D-4.01	10-C-7.00

Extension users may be restricted from Local Trunk Dial Access by "System-Class of Service", ARS Local Access, as follows:

If set to "No ACCS" (No Access), calling is impossible (reorder tone is returned).

If set to "W/RSTR" (With Restriction), calling is possible with restriction by "System-Class of Service", Trunk Group Access.

If set to "No RSTR" (No Restriction), calling is possible with no restriction by "System-Class of Service", Trunk Group Access.

Programming <2>

System Programming	Reference	
	VT	Dumb
"System-Class of Service", Trunk Group Access	9-D-4.02	10-C-8.00

Programming <3>

System Programming	Reference	
	VT	Dumb
"System-Local Access Group", Local Access Trunk Group Hunt Sequence	9-D-5.00	10-C-9.00
"Group-Trunk Group (1/2)", Type	9-E-1.02	10-C-14.00

When "Type" of the trunk group which is set to "Local Access Trunk Group Hunt Sequence 01" in Local Access Group is programmed to "PBX," the types of the other trunk groups preset to other "Hunt Sequence" than "01" are all regarded as "PBX". "PBX Access Code (No Restriction)" and "PBX Access Code (Restriction)" of the trunk group which is set to "Hunt Sequence 01" are used to judge.

Programming <4>

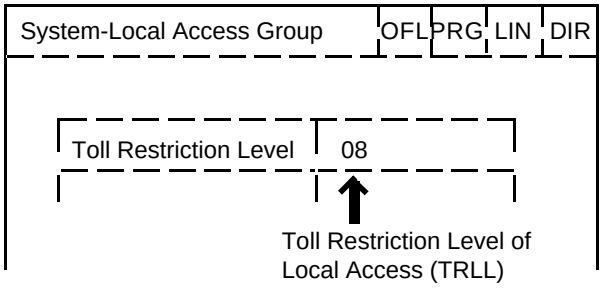
System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (2/2)", PBX Access Code (No Restriction) PBX Access Code (Restriction)	9-E-1.02	10-C-15.00

If this system works into the host PBX, PBX access code is required to dial through the connected PBX.
To execute Toll Restriction, register PBX Access Code in "Group-Trunk Group", PBX Access Code (Restriction).
To access the Host PBX without executing Toll Restriction, register PBX Access Code in "Group-Trunk Group", PBX Access Code (No Restriction)

Programming <5>

System Programming	Reference	
	VT	Dumb
"Class of Service (1/2)" Toll Restriction Level (Day) and (Night)	9-D-4.01	10-C-7.00
"System-Local Access Group", Toll Restriction Level	9-D-5.00	10-C-9.00

TRLL is assigned in the item below:

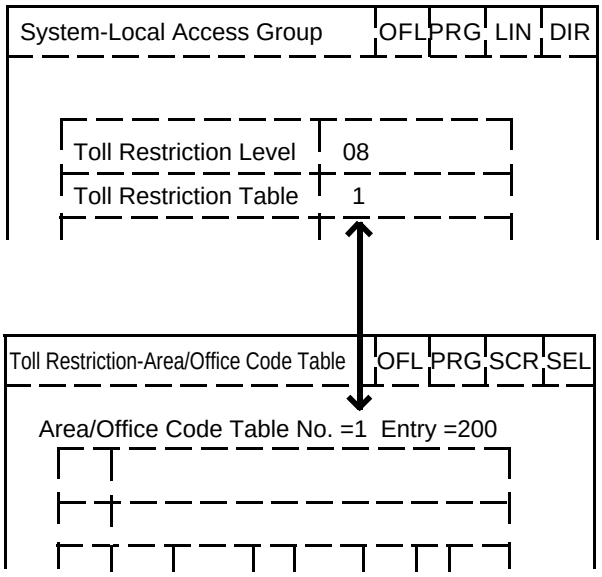


When TRLL is programmed higher than TRLE, the procedure advances to the next step.
When TRLL is programmed equal to or lower than TRLE, the call is not restricted and performed.

Programming <6>

System Programming	Reference	
	VT	Dumb
"System-Local Access Group", Toll Restriction Table	9-D-5.00	10-C-9.00

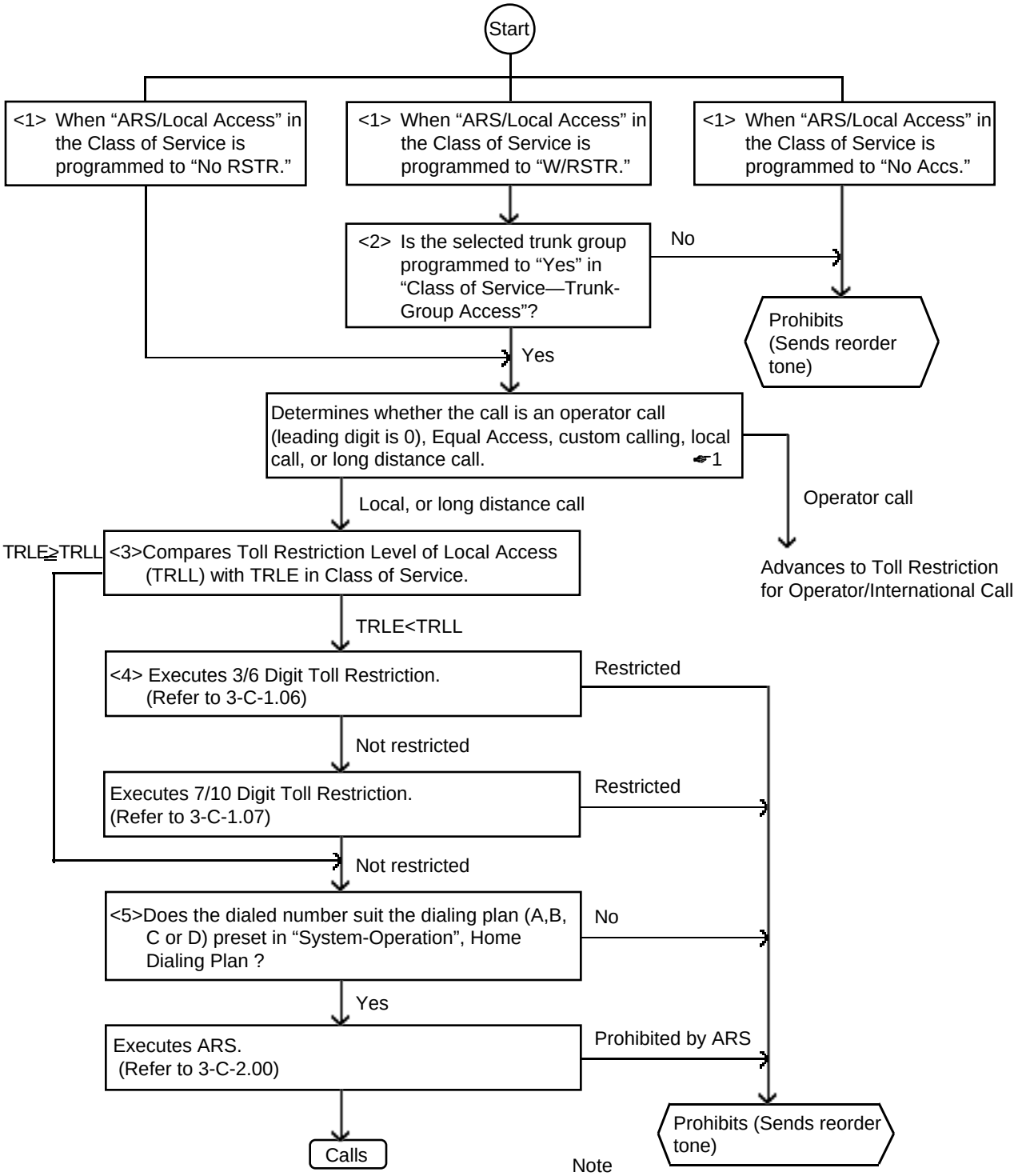
The number that is registered in the "System-Local Access Group", Toll Restriction Table is the number of the Area/Office Code Table.



1.02 Toll Restriction in Automatic Route Selection (ARS) System (for U.S.A. and Canada)

Flow Chart

The flow chart below shows the toll restriction procedures for outgoing calls when an extension user makes an outgoing CO call by dialing the feature number for “ARS/Local CO Line Access” in the system with ARS service.



Note
☛1 Equal Access and custom calling are prohibited.

Programming <1>

System Programming	Reference	
	VT	Dumb
"System-Class of Service", ARS/Local Access	9-D-4.01	10-C-7.00

Extension users may be restricted from Local Trunk Dial Access by the assignment of "System-Class of Service", ARS Local Access, as follows:

If set to "No ACCS" (No Access), calling is impossible (reorder tone is returned).

If set to "W/RSTR" (With Restriction), calling is possible with restriction by "System-Class of Service", Trunk Group Access.

If set to "No RSTR" (No Restriction), calling is possible regardless of the assignment of "System-Class of Service", Trunk Group Access assignment.

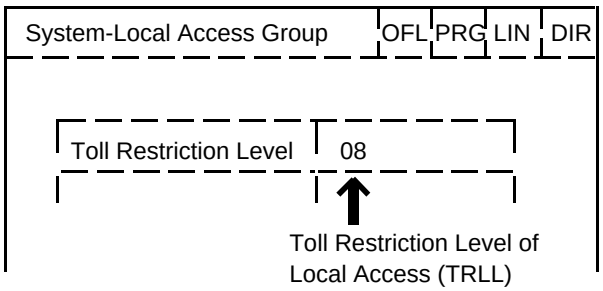
Programming <2>

System Programming	Reference	
	VT	Dumb
"System-Class of Service", Trunk Group Access	9-D-4.02	10-C-8.00

Programming <3>

System Programming	Reference	
	VT	Dumb
"System-Local Access Group", Toll Restriction Level	9-D-5.00	10-C-9.00

TRLL is assigned in the item below:

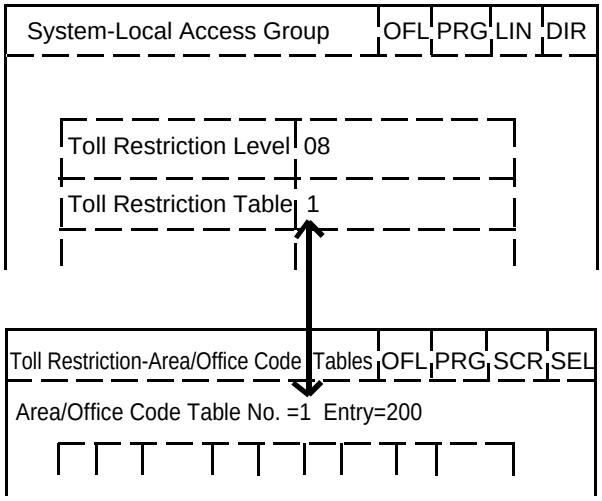


When TRLL is set higher than TRLE, Toll Restriction advances to the next step.
When TRLL is set equal to or lower than TRLE, Toll Restriction advances to ARS without executing 3/6 and 7/10 Digit Toll Restrictions.

Programming <4>

System Programming	Reference	
	VT	Dumb
"System-Local Access Group", Toll Restriction Table	9-D-5.00	10-C-9.00

The number that is registered in "System-Local Access Group", Toll Restriction Table is the number of the Area/Office Code Table.



Programming <5>

System Programming	Reference	
	VT	Dumb
"System-Operation (1/2)", Home Dialing Plan	9-D-1.01	10-C-4.00

Dialing Plan
There are four types of dialing plans for local calls and long distance calls depending on areas, as follows:

Type A : 1+NXX+NXX+XXXX
NXX+XXXX

Type B : 1+NPX+NXX+XXXX
NNX+XXXX

Type C : 1+NPX+NXX+XXXX
1+ NNX+XXXX
NXX+XXXX

Type D : 1+NXX+NXX+XXXX
NXX+NXX+XXXX
NXX+XXXX

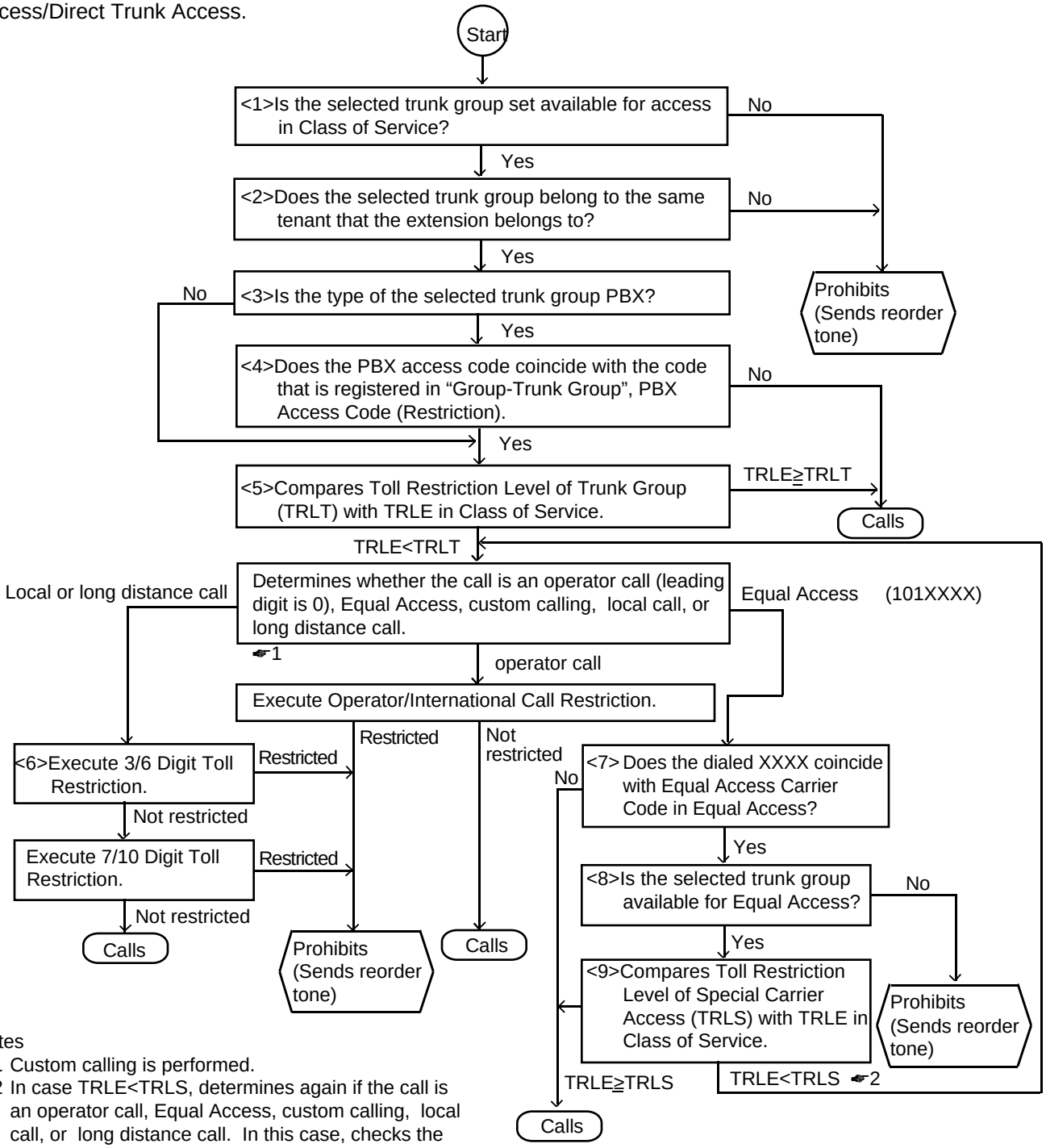
Area Code
Office Code
Subscriber Number

N=2 to 9, P=0 or 1, X=0 to 9

1.03 Toll Restriction for Individual Trunk Group Dial Access/Direct Trunk Access (for U.S.A. and Canada)

Flow Chart

Shows the procedures for restricting outgoing calls when an extension user makes an outgoing CO call by employing Individual Trunk Group Dial Access/Direct Trunk Access.



Notes

☛1 Custom calling is performed.

☛2 In case TRLE<TRLS, determines again if the call is an operator call, Equal Access, custom calling, local call, or long distance call. In this case, checks the subsequent dialed numbers after "101XXXX."

Programming <1>

System Programming	Reference	
	VT	Dumb
"System-Class of Service", Trunk Group Access	9-D-4.02	10-C-8.00

When the selected trunk group is assigned to "No" in "System-Class of Service", Trunk Group Access, calling is impossible.
When you want to make a trunk group unavailable for outgoing calls, assign the trunk group to "No" in "System-Class of Service", Trunk Group Access.

Programming <2>

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group", Tenant	9-E-1.01	10-C-14.00
"Group-ICM/Paging Group"	9-E-2.00	10-C-16.00
"Extension-Station", ICM Group	9-G-1.01	10-C-22.00

The tenant of the selected trunk group is assigned in "Group-Trunk Group", Tenant.
An extension should belong to one of eight ICM groups.
The tenant that the extension belongs to is the tenant that the ICM group belongs to.
The tenant that the ICM group belongs to is programmed in "Group-ICM/Paging Group."
The ICM group that the extension belongs to is programmed in "Extension-Station", ICM Group.

Programming <3>

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group", Type	9-E-1.02	10-C-14.00

Programming <4>

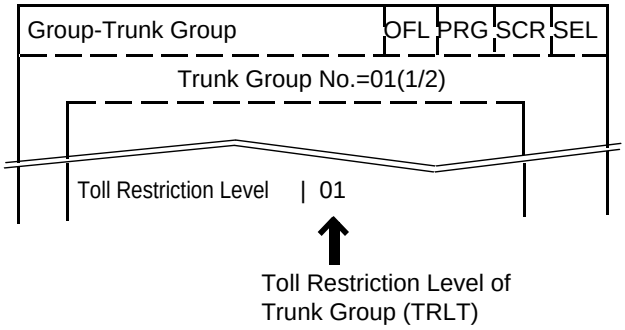
System Programming	Reference	
	VT	Dumb
"Group-Trunk Group", PBX Access Code (No Restriction) PBX Access Code (Restriction)	9-E-1.02	10-C-15.00

To execute Toll Restriction, the PBX Access Code must be registered in "Group-Trunk Group", PBX Access Code (Restriction).
To access the Host PBX without Toll Restriction, the PBX Access Code must be assigned in "Group-Trunk Group", PBX Access Code (No Restriction).

Programming <5>

System Programming	Reference	
	VT	Dumb
"Class of Service (1/2)", Toll Restriction Level (Day) and (Night)	9-D-4.01	10-C-7.00
"Group-Trunk Group", Toll Restriction Level	9-E-1.01	10-C-14.00

TRLT is assigned in the item below (Assuming Trunk Group No.=01):

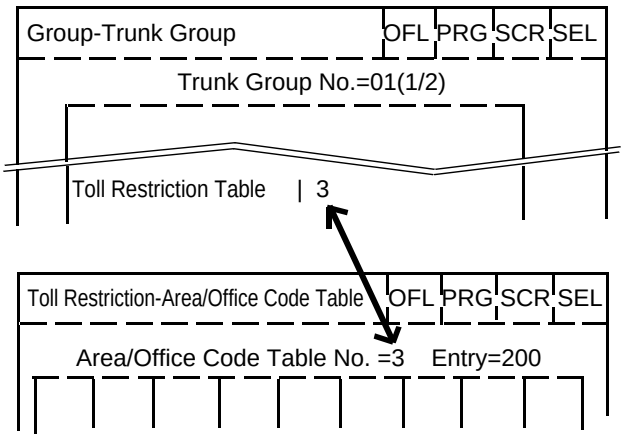


When TRLT is programmed higher than TRLE, Toll Restriction advances to the next step.
When TRLT is programmed equal to or lower than TRLE, calling is performed without restriction.

Programming <6>

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group", Toll Restriction Table	9-E-1.01	10-C-14.00

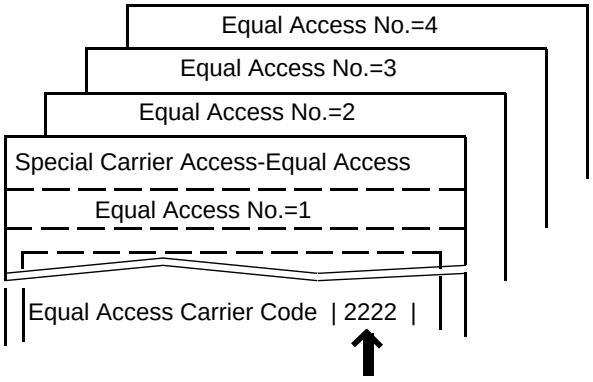
The number that is registered in "Group-Trunk Group", Toll Restriction Table is the number of the Area/Office Code Table.



Programming <7>

System Programming	Reference	
	VT	Dumb
"Special Carrier Access-Equal Access", Equal Access Carrier Code	9-H-1.00	10-C-30.00

There are four types of Equal Access Tables to check if the dialed XXXX corresponds with assigned numbers in four types of tables.



When the dialed XXXX does not correspond with any of the tables, calling is performed without restriction.
When the dialed XXXX corresponds with any table, the procedures in steps 8 and 9 in the flow chart (3-C-1.03) depend on the table that the dialed XXXX corresponds with.

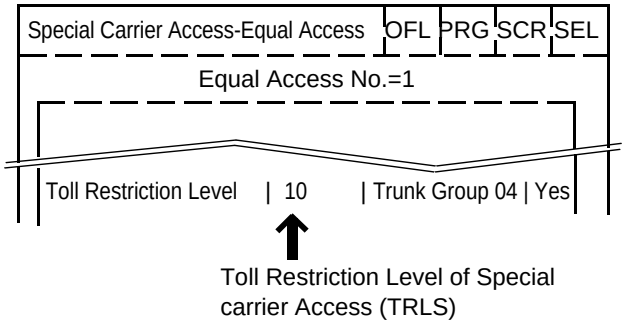
Programming <8>

System Programming	Reference	
	VT	Dumb
"Special Carrier Access-Equal Access", Trunk Group 01-16	9-H-1.00	10-C-30.00

Programming <9>

System Programming	Reference	
	VT	Dumb
"Special Carrier Access-Equal Access", Toll Restriction Level	9-H-1.00	10-C-30.00

TRLS is programmed in the item below:

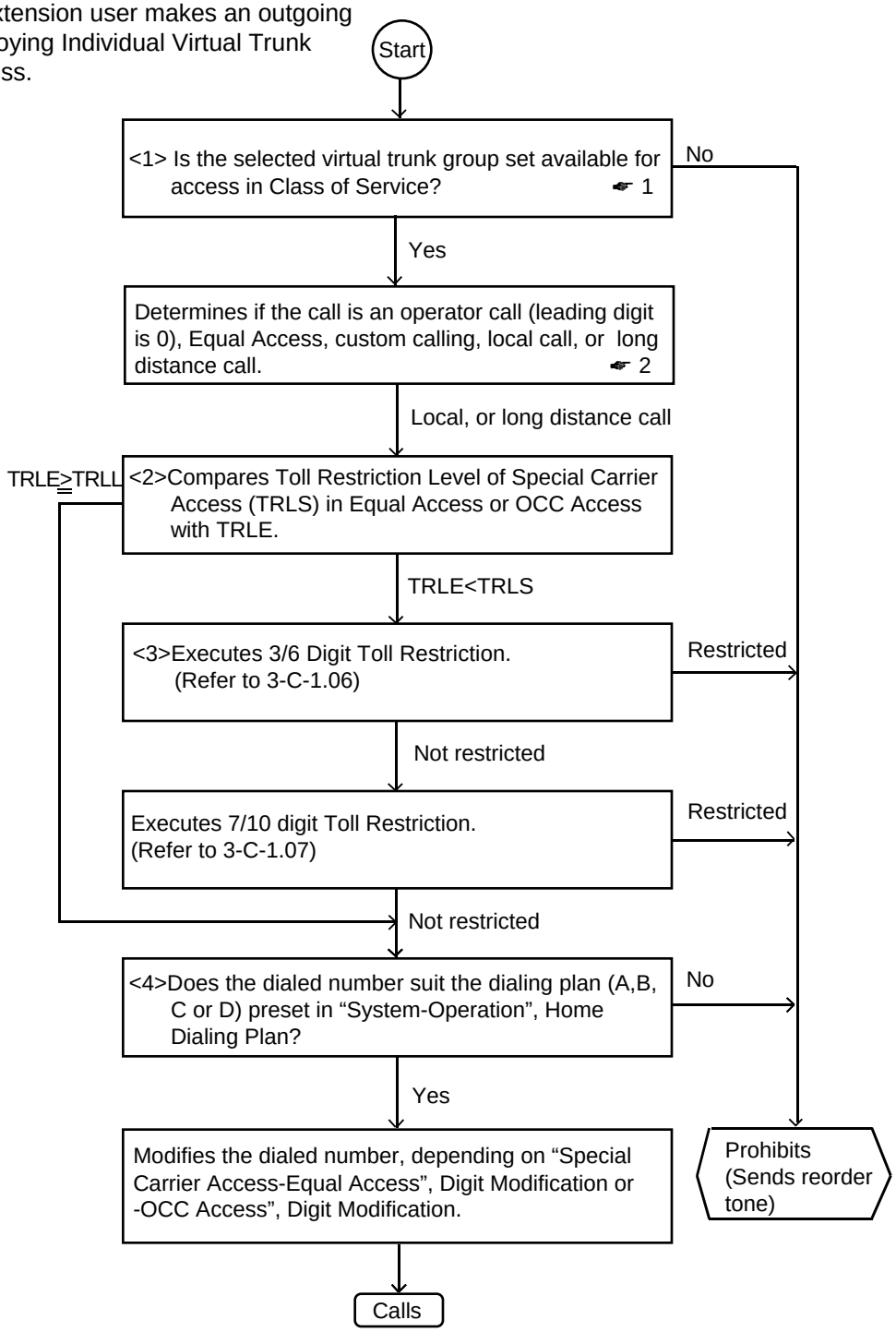


When TRLS is programmed higher than TRLE, checks again if the call is an operator call, Equal Access, custom calling, local call, or long distance call.
When TRLS is programmed equal to or lower than TRLE, calling is performed without restriction.

1.04 Toll Restriction for Individual Virtual Trunk Group Dial Access (◆ for U.S.A. and Canada only)

Flow Chart

Shows the procedures for restricting outgoing calls when an extension user makes an outgoing CO call by employing Individual Virtual Trunk Group Dial Access.



Notes

☛1. When available, accesses an idle trunk group that is assigned to "Yes" in "Special Carrier Access-Equal Access" or "-OCC Access."

☛2.Operator calls, Equal Access, custom calling are prohibited.

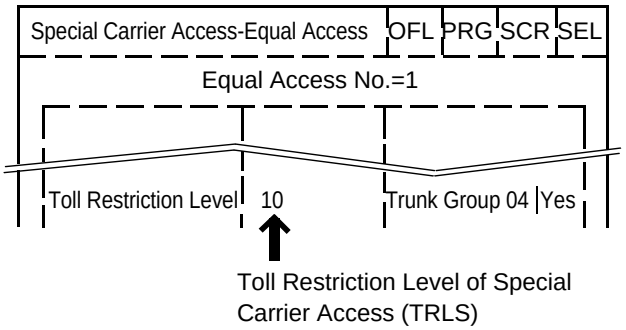
Programming <1>

System Programming	Reference	
	VT	Dumb
"System-Class of Service", Special Carrier Access	9-D-4.02	10-C-8.00

Programming <2>

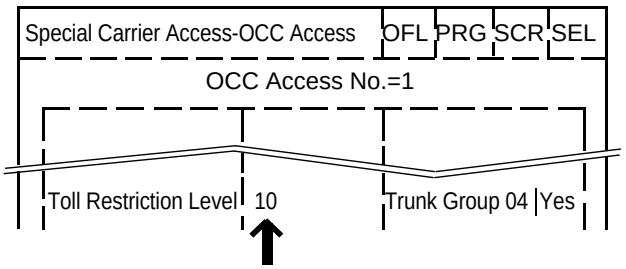
System Programming	Reference	
	VT	Dumb
"Special Carrier Access–Equal Access", Toll Restriction Level	9-H-1.00	10-C-30.00
"Special Carrier Access–OCC Access", Toll Restriction Level	9-H-2.00	10-C-31.00

TRLS of Equal Access is assigned in the item below (when virtual trunk group 1 is designated):



Toll Restriction Level of Special Carrier Access (TRLS)

TRLS of OCC Access is assigned in the item below (when virtual trunk group 5 is designated):



Toll Restriction Level of Special Carrier Access (TRLS)

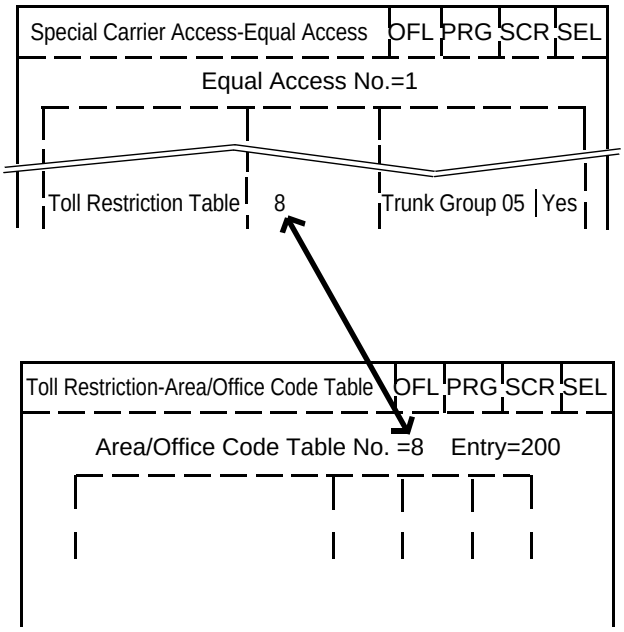
When TRLS is programmed higher than TRLE, the procedure advances to the next step.

When TRLS is programmed equal to or lower than TRLE, the procedure advances to check the dial type in "Home Dialing Plan" without executing 3/6 and 7/10 Digit Toll Restrictions.

Programming <3>

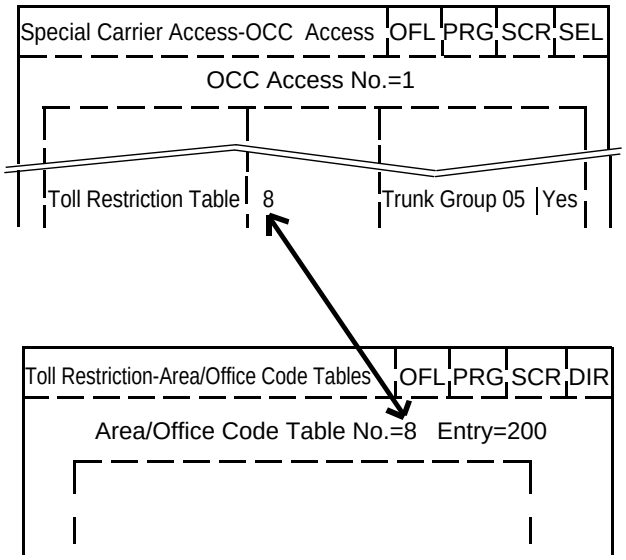
System Programming	Reference	
	VT	Dumb
"Special Carrier Access–Equal Access", Toll Restriction Table	9-H-1.00	10-C-30.00
"Special Carrier Access–OCC Access", Toll Restriction Table	9-H-2.00	10-C-31.00

The number that is registered in "Special Carrier Access–Equal Access", Toll Restriction Table is the number of the Area/Office Code Table.



The number that is registered in “Special Carrier Access–OCC Access”, Toll Restriction Table is the number of the Area/Office Code Table.

(when virtual trunk group 5 is designated):



Programming <4>

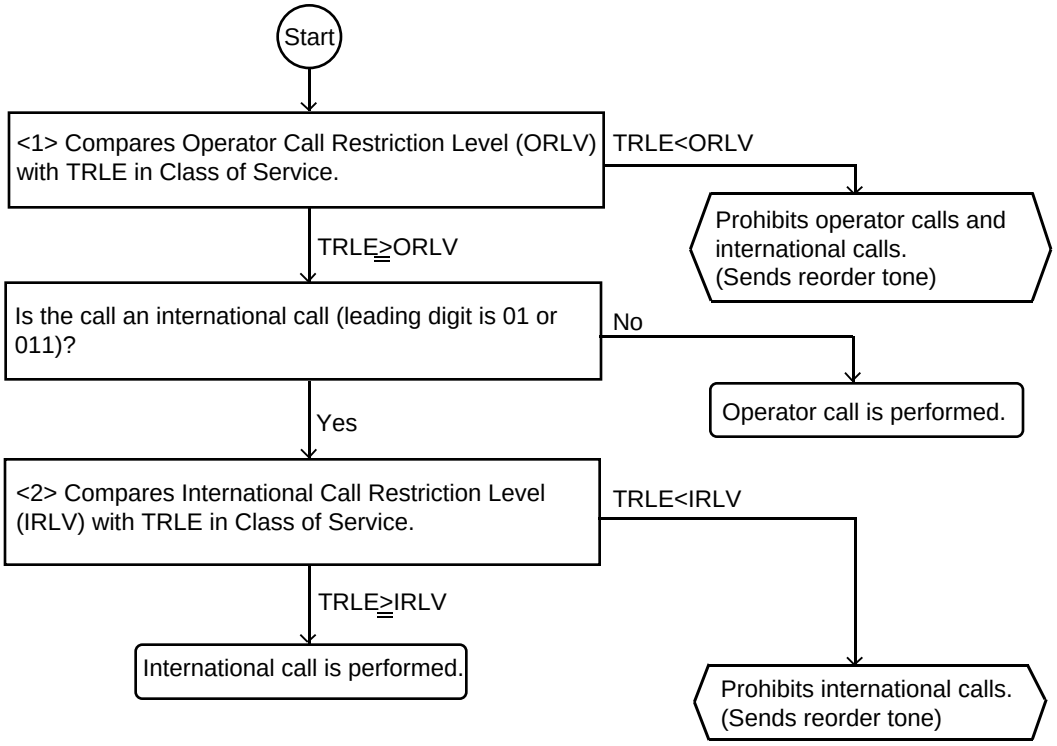
System Programming	Reference	
	VT	Dumb
“System-Operation”, Home Dialing Plan	9-D-1.00	10-C-4.00

There are three types of dialing plans for local and long distance calls. Each area has one of the three plans as mentioned before.

1.05 Operator/International Call Restriction (◆ for U.S.A. and Canada only)

Flow chart

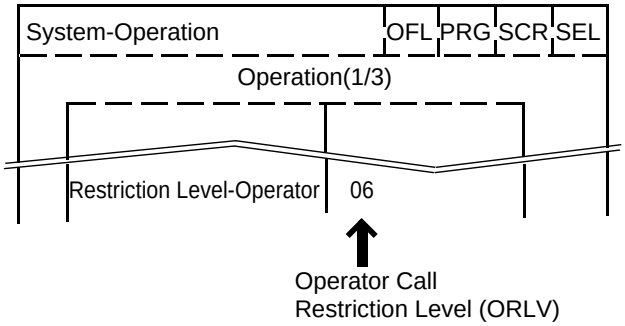
The flow chart below shows the toll restriction procedure for Operator (telephone company) and International calls.



Programming <1>

System Programming	Reference	
	VT	Dumb
"System-Operation", Restriction Level-Operator	9-D-1.01	10-C-4.00

ORLV is assigned in the item below:



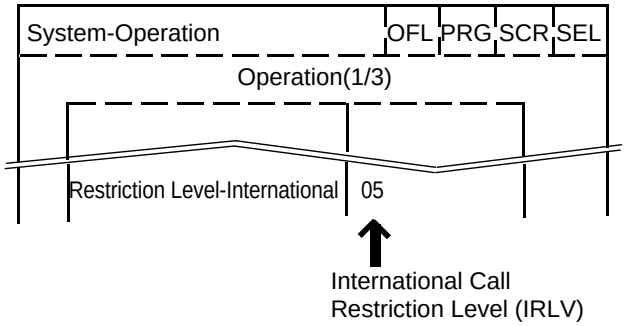
When ORLV is programmed higher than TRLE, operator and international calls are prohibited.

When ORLV is programmed equal to or lower than TRLE, operator calls are performed. International calls advances to the next procedure.

Programming <2>

System Programming	Reference	
	VT	Dumb
"System-Operation", Restriction Level-International	9-D-1.01	10-C-4.00

IRLV is assigned in the following item:

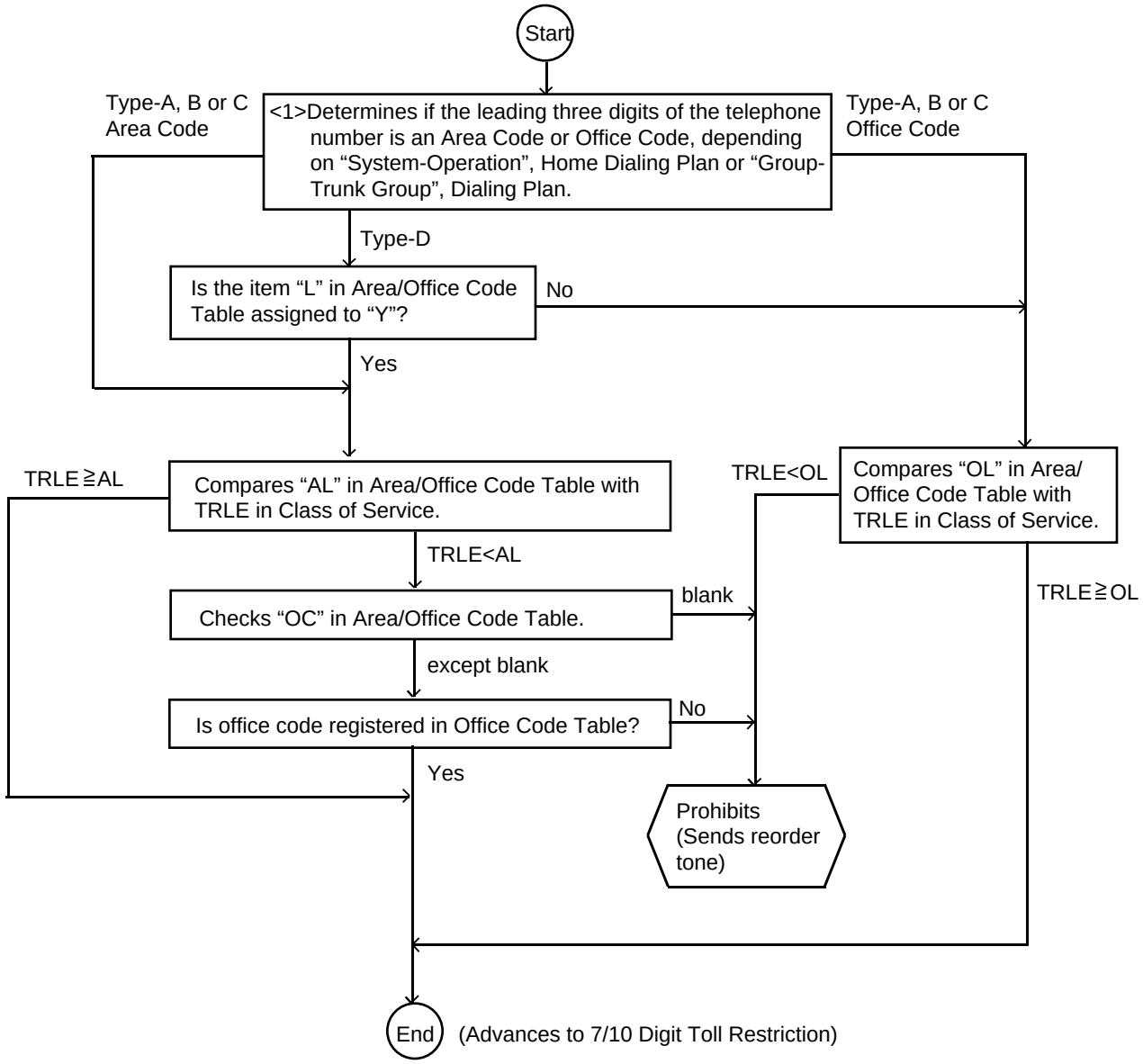


When IRLV is programmed equal to or lower than TRLE, international calls are performed.

1.06 3/6 Digit Toll Restriction (◆ for U.S.A. and Canada only)

Flow Chart

Local and long distance calls can be restricted by area codes only, or by office codes only, or by both area codes and office codes.
The procedures are shown below:



Programming <1>

System Programming	Reference	
	VT	Dumb
"System-Operation", Home Dialing Plan	9-D-1.01	10-C-4.00
"Group-Trunk Group", Dialing Plan	9-E-1.01	10-C-14.00

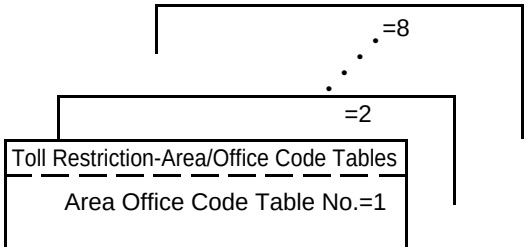
When a call is made by ARS or Individual Virtual Trunk Group Dial Access, the call is judged by "System-Operation", Home Dialing Plan.

When a call is made by Local Trunk Dial Access or Individual Trunk Group Dial Access/Direct Trunk Access, the call is judged by "Group-Trunk Group", Dialing Plan.

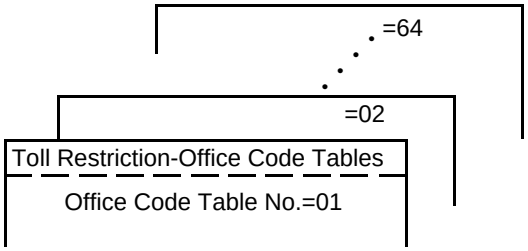
Programming <2>

System Programming	Reference	
	VT	Dumb
"Toll Restriction-Area/Office Code Tables"	9-I-1.00	10-C-32.00
"Toll Restriction-Office Code Tables"	9-I-2.00	10-C-33.00

- Eight Area/Office Code Tables are prepared to program various restrictions for calling ways such as Local Trunk Group Dial Access, Individual Trunk Group Dial Access, etc. Each table consists of 16 screens:



- 64 Office Code Tables are also prepared. Each table consists of four screens:



(1)Programming the 3/6 Digit Toll Restriction plan (General)

Before programming the toll restriction plan, determine the TRLE of each extension user in Class of Service programming.

Table 1 Toll Restriction Level of each Extension user

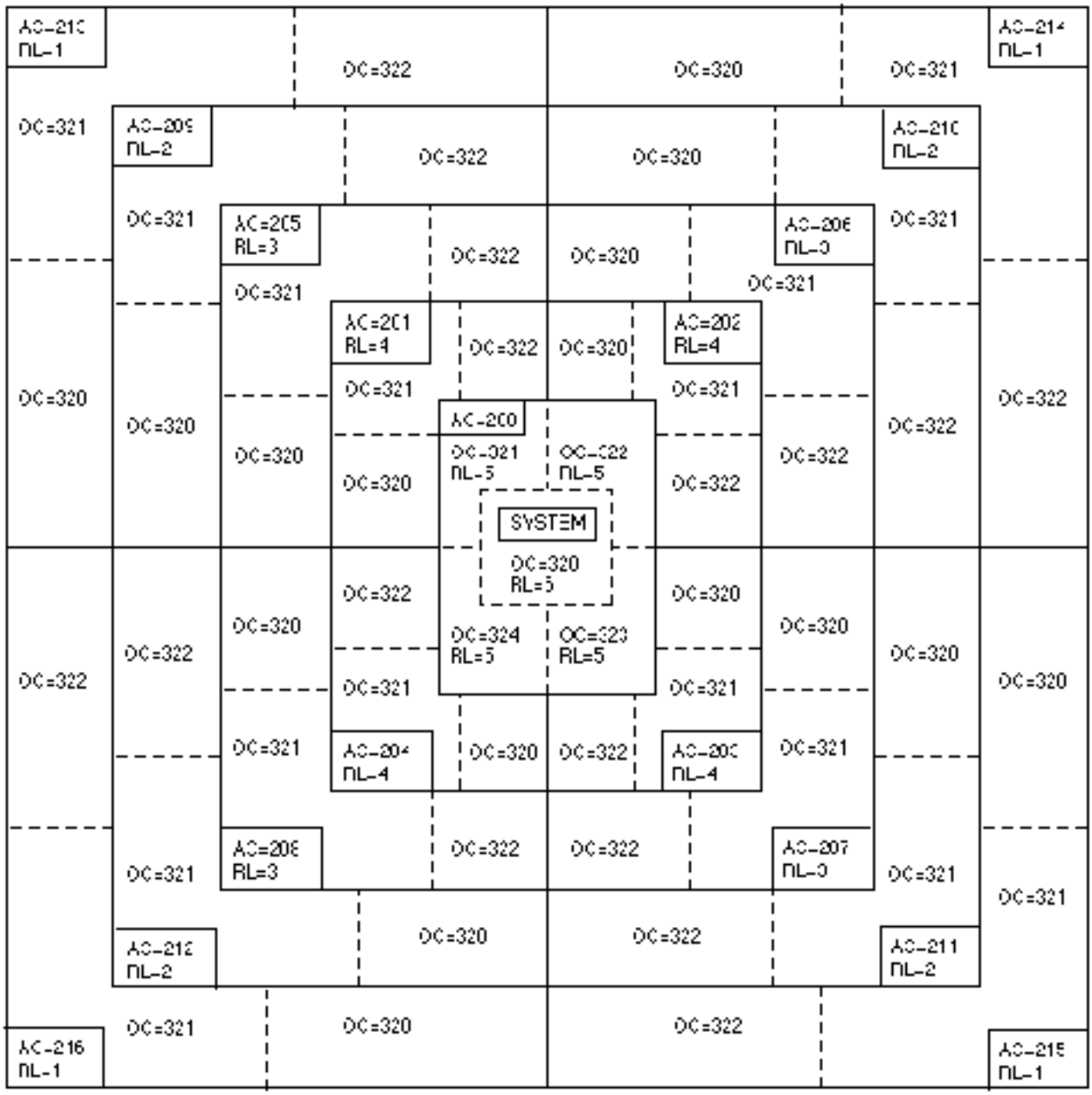
	TRLE	RL1	RL2	RL3	RL4	RL5	RL6
President	1	A	A	A	A	A	A
Vice-President	2	R	A	A	A	A	A
Manager	3	R	R	A	A	A	A
Assistant Manager	4	R	R	R	A	A	A
Part-Timer 1	5	R	R	R	R	A	A
Part-Timer 2	6	R	R	R	R	R	A

Legend:
TRLE - Toll Restriction Level of Extension
RL - Restriction Level
A - Allowed
R - Restricted

Assuming that your telephone system is located in the area, Area Code (AC)=200, Office Code (OC)=320, accordingly, your CO number is (1) + 200 + 320 + XXXX.

Determine the Restriction Level of each AC and OC respectively according to the TRLE of each extension user (Table 1).

Table 2 Restriction Level of each AC and OC



the boundaries of Area Code

the boundaries of Office Code

Now program the 3/6 digit toll restriction plan according to the Table 1 and Table 2 using “Area/ Office Code Table.”

In some areas, the same 3-digit code may be used as both an Area Code and Office Code.

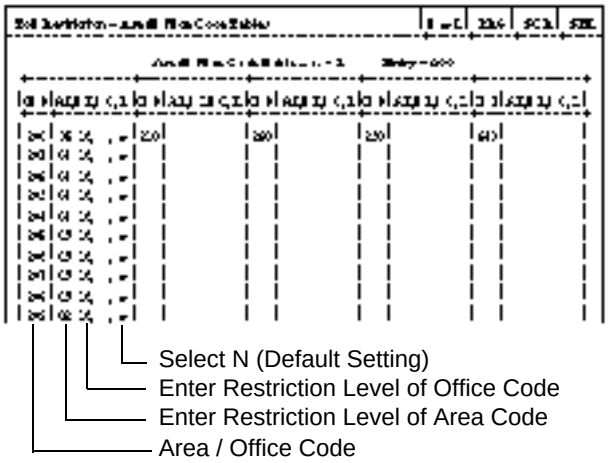
<Example>

1 – 201 – NXX – XXXX, 201 – XXXX

Office Code

Area Code

Therefore, assign restriction level for an Area Code in “AL” field and an Office Code in “OL” field respectively as shown below.

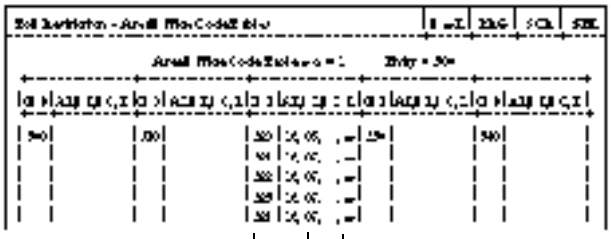


Select N (Default Setting)

Enter Restriction Level of Office Code

Enter Restriction Level of Area Code

Area / Office Code



Select N (Default Setting)

Enter Restriction Level of Office Code

Area/Office Code

[Note]

AL : Restriction Level for Area Code

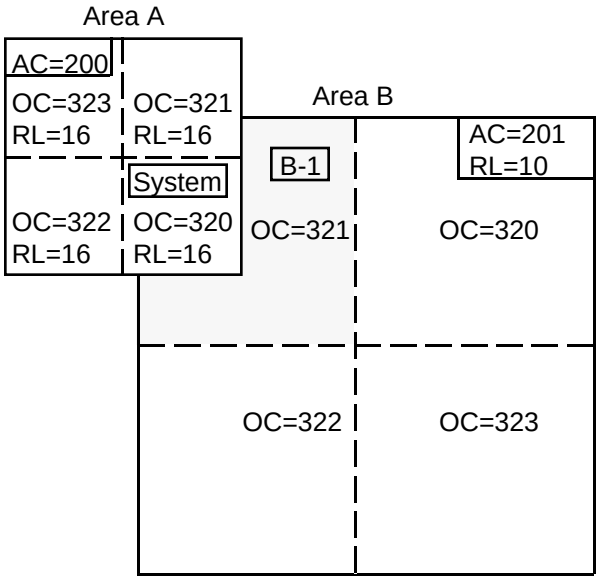
OL : Restriction Level for Office Code

(2)Programming the 3/6 Digit Toll Restriction Plan Using “OC” field.

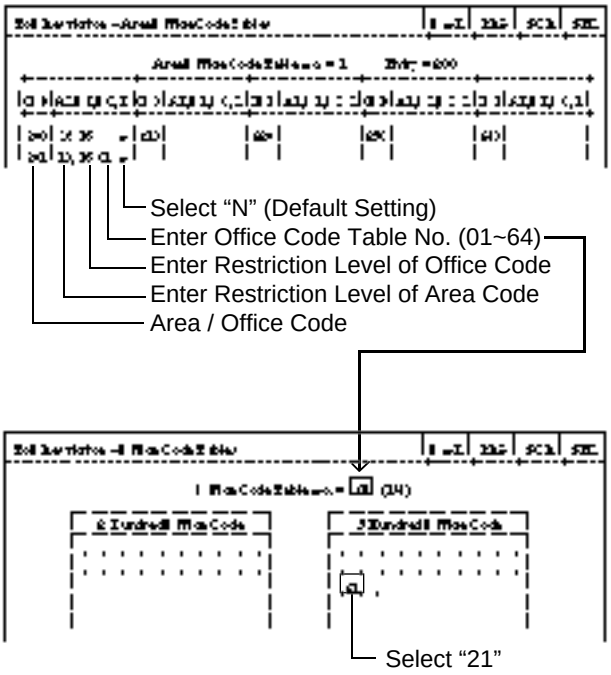
When you want to restrict an outgoing call for certain area except a district within that area, program the toll restriction plan by entering Office Code Table No. in “OC” field of that Area Code and set Office Code of the destrict in that Office Code Table.

Assuming that your system is located in Area A AC=200, and Restriction Level of Area B is set to “10.”

So extension users with TRLE of 11-16 are restricted to place a call to Area B.



If you do not want to restrict an extension user from originating CO calls for district B-1 within Area B, because calls for district B-1 are considered local calls.
Then enter “01” in “OC” field of Area Code 201, and register Office Code 321 in the Office Code Table No.=1 as follows.



Now Restriction Level 10 is not applied to calls for district B-1 ((1) + 201 + 321 + XXXX).

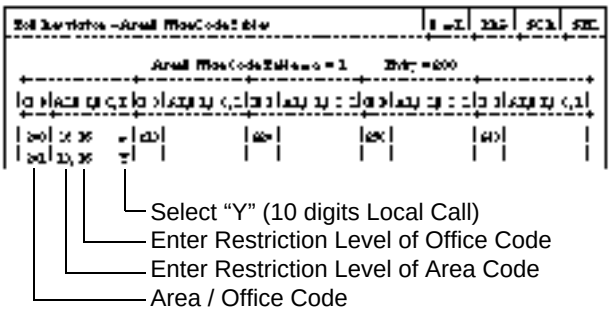
(3)Programming the 3/6 Digit Toll Restriction Plan by selecting “Y” in “L” field.

In the area where Dialing Plan Type D is adopted, the system may not be able to identify the leading three digits of the dialed number as an Area Code or Office Code.

<Example>

NXX + NXX + XXXX — 10 digits local call
NXX + XXXX — 7 digits local call

If your system is located in the Type D area, program the toll restriction plan as follows.



(If “N” is selected in “L” field, the dialed number “201 + NXX + XXXX” will be checked against the Restriction Level in “OL” field.)

[Note]

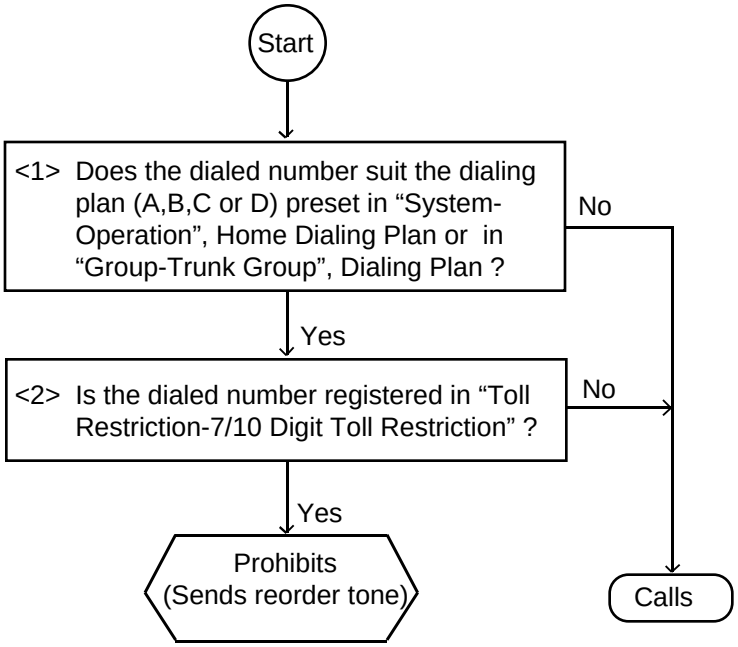
The above example is based on the following conditions.

- Calls to the AC201 area can be made without dialing “1” (Toll Prefix), that is, in the “201 + NXX + XXXX” format.
- Restriction Level for the call is “10.”

1.07 7/10 Digit Toll Restriction (◆ for U.S.A. and Canada only)

Flow Chart

7/10 Digit Toll Restriction is to restrict calls that are not restricted by 3/6 Digit Toll Restriction, employing office codes and subscriber numbers, as follows:



Programming <1>

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", Home Dialing Plan	9-D-1.01	10-C-4.00
"Group-Trunk Group", Dialing Plan	9-E-1.01	10-C-14.00

When a call is made by ARS or Individual Virtual Trunk Group Dial Access, the call is judged by "System-Operation", Home Dialing Plan.

When a call is made by Local Trunk Dial Access or Individual Trunk Group Dial Access/Direct Trunk Access, the call is judged by "Group-Trunk Group", Dialing Plan.

Programming <2>

System Programming	Reference	
	VT	Dumb
"Toll Restriction-7/10 Digit Toll Restriction"	9-I-3.00	10-C-34.00

Enter the office codes and the subscriber numbers that you want to restrict into "Toll Restriction-7/10 Digit Toll Restriction" Table. Up to 64 entries can be assigned to the table.

Note

If there are several subscribers who have the same office code and the same subscriber number in different areas, all the calls for the subscribers are restricted by entering the code and the number into the 7/10 Digit Toll Restriction Table.

1.00 Toll Restriction (for areas other than U.S.A. and Canada)

Description

Toll restriction is a system programmable feature that, in conjunction with the assigned Class of Service, can prohibit the extension users from making unauthorized toll calls.

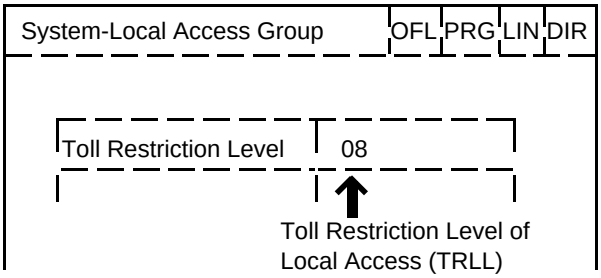
The following three toll restriction plans can be programmed depending on a way of making outgoing calls.

- Toll Restriction for Local Trunk Dial Access (Refer to Section 3-C-1.08)
- Toll Restriction for Individual Trunk Group Dial Access/Direct Trunk Access (Refer to Section 3-C-1.09)
- Toll Restriction in Automatic Route Selection (ARS) System (Refer to Section 3-C-1.11)

"7-Digit Toll Restriction" applies to all above mentioned toll restriction plan.
(Refer to Section 3-C-1.10)

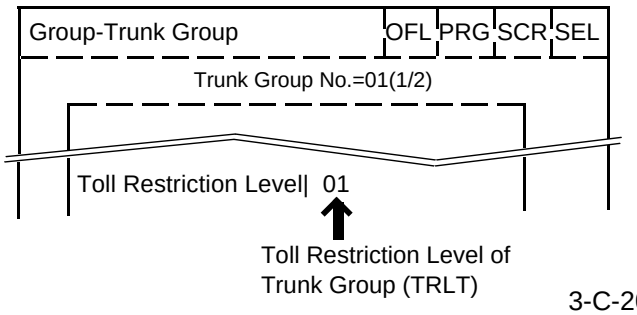
The system administrator in conjunction with the assigned Class of Service, can assign toll restriction level for the above mentioned three ways.

To assign toll restriction level for "Local Trunk Dial Access," enter the desired restriction level in System-Local Access Group "Toll Restriction Level" as follows.

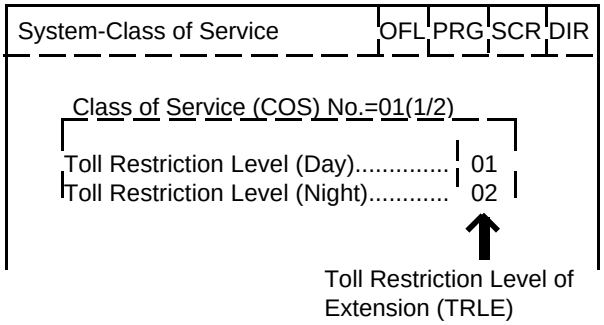


Toll restriction level of Local Trunk Dial Access is referred to as "TRLL" in the following.

To assign toll restriction level of "Individual Trunk Group Dial Access," enter the desired restriction level for each trunk group in Group-Trunk Group "Toll Restriction Level" as follows.



Toll restriction level for Trunk Group is referred to as "TRLT" in the following.
To assign toll restriction level for an extension user, enter the desired restriction level in System-Class of Service "Toll Restriction Level (Day)" and "Toll Restriction Level (Night)" as follows.



Toll restriction level of an extension user is referred to as "TRLE" in the following.

Toll restriction level consists of 16 levels (01 to16).
01,02 - 15, 16
higher ⟷ lower

An extension user assigned to TRLE of 01 has the most privileges, an extension user assigned to TRLE of 16 has the least.
When an extension user makes an outgoing CO call, TRLE of that extension is compared with TRLL or TRLT.
If TRLE is equal to or higher than TRLL or TRLT (TRLE ≥ TRLL or TRLT), the call is made, and if TRLE is lower than TRLL or TRLT (TRLE< TRLL or TRLT), the call will be checked against "7-Digit Toll Restriction Table."
(Refer to Section 3-C-1.10 "7-Digit Toll Restriction.")

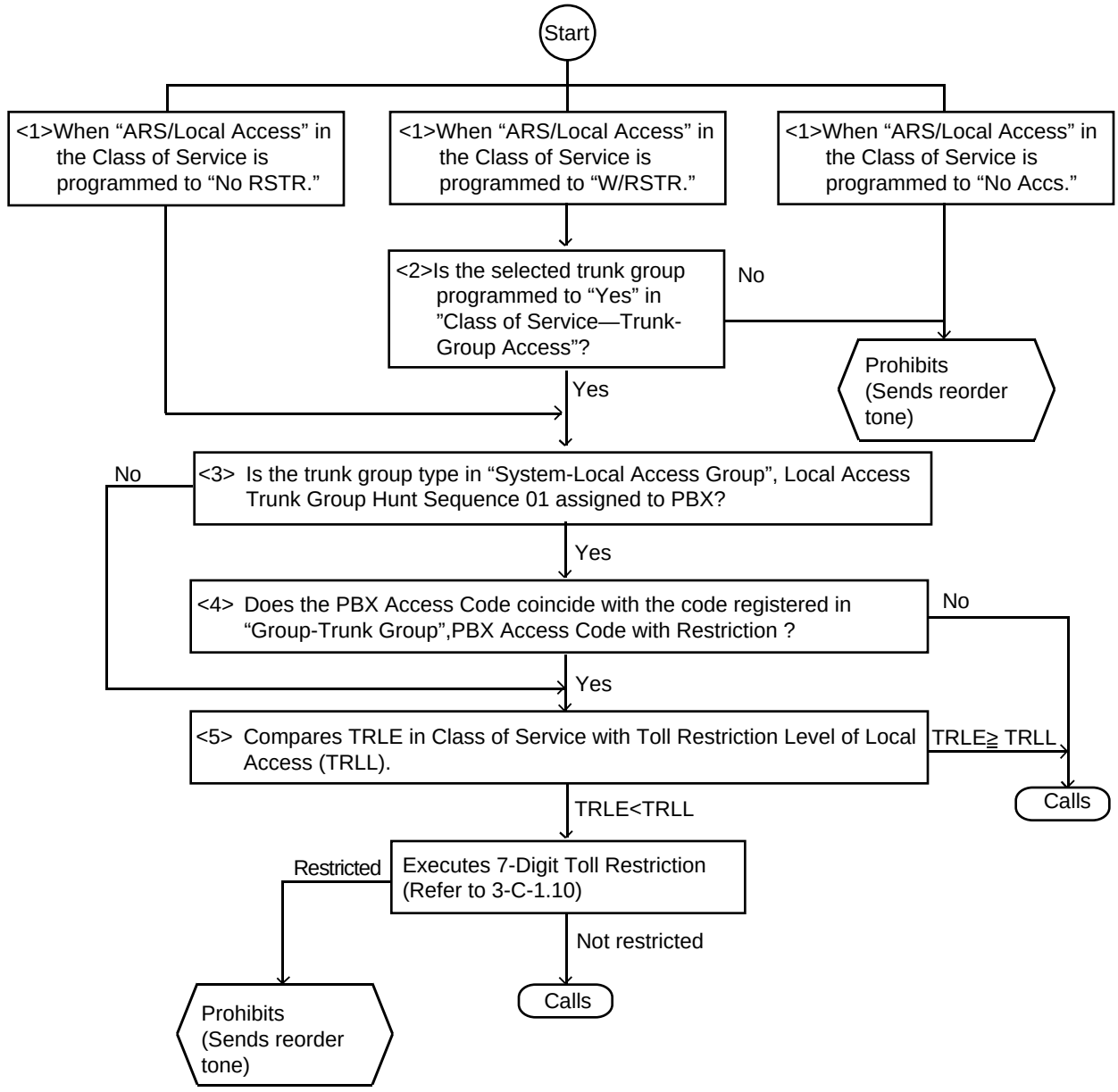
<Example>
Assuming that TRLL is assigned as 09:
When an extension user assigned to TRLE of 08 makes an outgoing CO call, in this case TRLE of 08 is higher than TRLL of 09 (TRLE>TRLL), so the call is made.

When an extension user assigned to TRLE of 10 makes an outgoing CO call, in this case TRLE of 10 is lower than TRLL of 09 (TRLE<TRLL), then the call is checked against "7-Digit Toll Restriction Table."

1.08 Toll Restriction for Local Trunk Dial Access (for areas other than U.S.A. and Canada)

Flow Chart

The following flow chart shows the procedures for restricting an extension user when an outgoing CO call is made by dialing the feature number for "ARS/Local CO line Access."



(Note)
Bracketed numbers (e.g., <1> <2>) provide a link between an item on the flow chart and the associated programming items.
(See the following page.)

Programming <1>

System Programming	Reference	
	VT	Dumb
"System-Class of Service", ARS/Local Access	9-D-4.01	10-C-7.00

Extension users may be restricted from Local Trunk Dial Access by "System-Class of Service", ARS Local Access, as follows:

If set to "No ACCS" (No Access), calling is impossible (reorder tone is returned).

If set to "W/RSTR" (With Restriction), calling is possible with restriction by "System-Class of Service", Trunk Group Access.

If set to "No RSTR" (No Restriction), calling is possible with no restriction by "System-Class of Service", Trunk Group Access.

Programming <2>

System Programming	Reference	
	VT	Dumb
"System-Class of Service", Trunk Group Access	9-D-4.02	10-C-8.00

Programming <3>

System Programming	Reference	
	VT	Dumb
"System-Local Access Group", Local Access Trunk Group Hunt Sequence	9-D-5.00	10-C-9.00
"Group-Trunk Group (1/2)", Type	9-E-1.02	10-C-14.00

When "Type" of the trunk group which is set to "Local Access Trunk Group Hunt Sequence 01" in Local Access Group is programmed to "PBX," the types of the other trunk groups preset to other "Hunt Sequence" than "01" are all regarded as "PBX". "PBX Access Code (No Restriction)" and "PBX Access Code (Restriction)" of the trunk group which is set to "Hunt Sequence 01" are used to judge.

Programming <4>

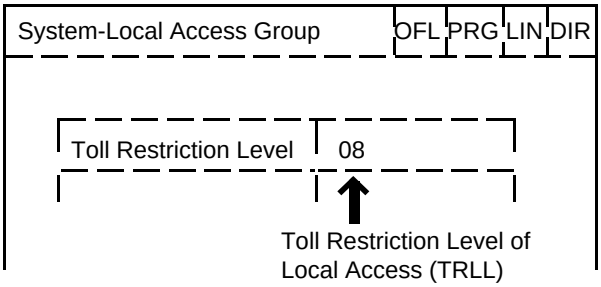
System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (2/2)", PBX Access Code (No Restriction) PBX Access Code (Restriction)	9-E-1.02	10-C-15.00

If this system works into the host PBX, PBX access code is required to dial through the connected PBX.
To execute Toll Restriction, register PBX Access Code in "Group-Trunk Group", PBX Access Code (Restriction).
To access the Host PBX without executing Toll Restriction, register PBX Access Code in "Group-Trunk Group", PBX Access Code (No Restriction)

Programming <5>

System Programming	Reference	
	VT	Dumb
"Class of Service (1/2)" Toll Restriction Level (Day) and (Night)	9-D-4.01	10-C-7.00
"System-Local Access Group", Toll Restriction Level	9-D-5.00	10-C-9.00

TRLL is assigned in the item below:

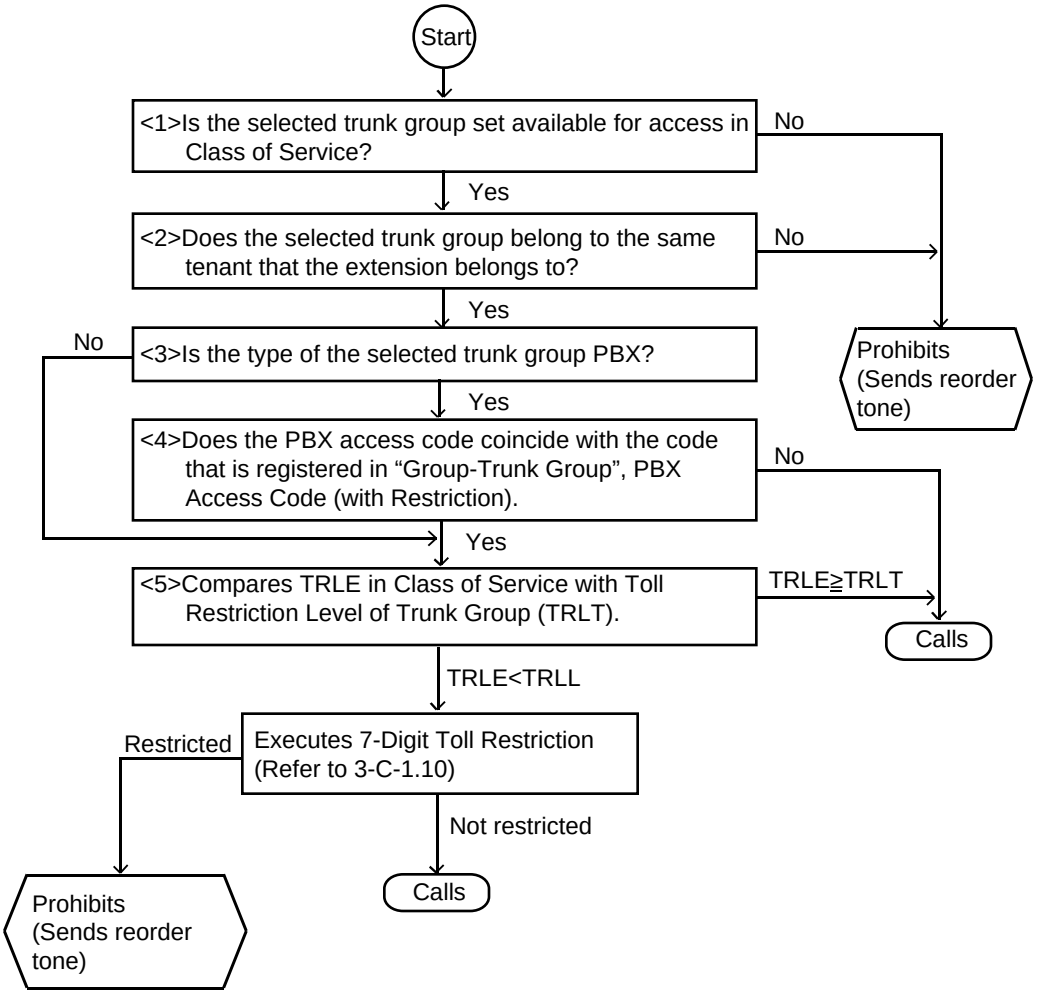


When TRLL is programmed higher than TRLE, the procedure advances to the next step.
When TRLL is programmed equal to or lower than TRLE, the call is not restricted and performed.

1.09 Toll Restriction for Individual Trunk Group Dial Access/Direct Trunk Access (for areas other than U.S.A. and Canada)

Flow Chart

The following flow chart shows the procedures for restricting an extension user when an outgoing CO call is made by dialing the feature number for "Trunk Group 01-08/09-16 Dial Access," or by pressing SCO/GCO button.



(Note)
Bracketed numbers (e.g., <1> <2>) provide a link between an item on the flow chart and the associated programming items.
(See the following page.)

Programming <1>

System Programming	Reference	
	VT	Dumb
"System-Class of Service (2/2)", Trunk Group Access	9-D-4.02	10-C-8.00

When the selected trunk group is assigned to "No" in "System-Class of Service", Trunk Group Access, call is denied.
When you want to make a trunk group unavailable for outgoing calls, assign the trunk group to "No" in "System-Class of Service", Trunk Group Access.

Programming <2>

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (1/2)", Tenant	9-E-1.01	10-C-14.00
"Group-ICM/Paging Group"	9-E-2.00	10-C-16.00
"Extension-Station (1/3)", ICM Group	9-G-1.01	10-C-22.00

The tenant of the selected trunk group is assigned in "Group-Trunk Group", Tenant.
All extension users should belong to one of eight ICM groups.
The tenant that the extension belongs to is the tenant that the ICM group belongs to.
The tenant that the ICM group belongs to is programmed in "Group-ICM/Paging Group."
The ICM group that the extension belongs to is programmed in "Extension-Station", ICM Group.

Programming <3>

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (1/2)", Type	9-E-1.02	10-C-14.00

Programming <4>

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (2/2)", PBX Access Code (No Restriction) PBX Access Code (Restriction)	9-E-1.02	10-C-15.00

To execute toll restriction, the PBX Access Code must be registered in "Group-Trunk Group", PBX Access Code (Restriction).
To access the Host PBX without Toll Restriction, the PBX Access Code must be assigned in "Group-Trunk Group", PBX Access Code (No Restriction).

Programming <5>

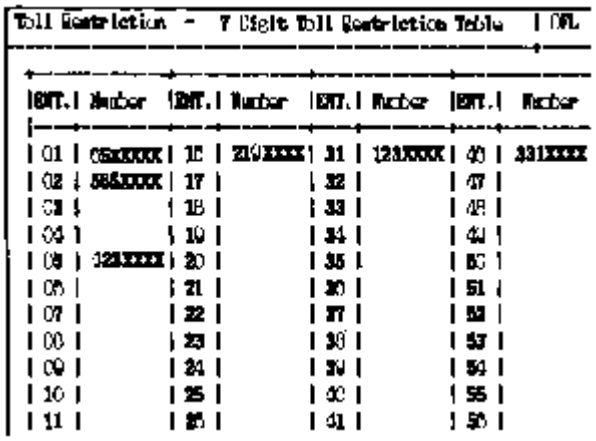
System Programming	Reference	
	VT	Dumb
"Class of Service (1/2)", Toll Restriction Level (Day) and (Night)	9-D-4.01	10-C-7.00
"Group-Trunk Group(1/2)", Toll Restriction Level	9-E-1.01	10-C-14.00

1.10 7-Digit Toll Restriction (for areas other than U.S.A. and Canada)

Description

The 7-digit toll restriction feature applies to the outgoing CO calls made by the extension users whose TRLE are lower than TRLL or TRLT.
The 7-digit toll restriction table is used to perform toll restriction by checking the leading seven digits (except the feature number for CO access) of the dialed number.
If the leading seven digits of dialed number are found in the table, the call is denied and the users receive reorder tone.
If not found in the table, the call is made.
The system administrator can register up to 64 entries (each entry=seven digits) in this table.

Assign entry number as follows.



In this table, each unit of four entry numbers corresponds with toll restriction levels 01 to 16 respectively as follows.

Entry Number	Registered Digits	Toll Restriction Level
01	653XXXX	1
02	555XXXX	
03		
04		
05	423XXXX	2
06		
07		
08		
⋮	⋮	⋮
61	396XXXX	16
62		
63		
64		

(Example)
If a call is made by an extension user whose TRLE is 05, the leading three digits of the dialed number is checked against the entries of the toll restriction levels 01 to 05, that is, entries 01 to 20.
If a match is found in the table, the call is denied and an extension user receives reorder tone.
If no match is found, the call is made.

Programming

System Programming	Reference	
	VT	Dumb
"Toll Restriction-7-Digit Toll Restriction Table"	9-I-4.00	10-C-34.00

Conditions

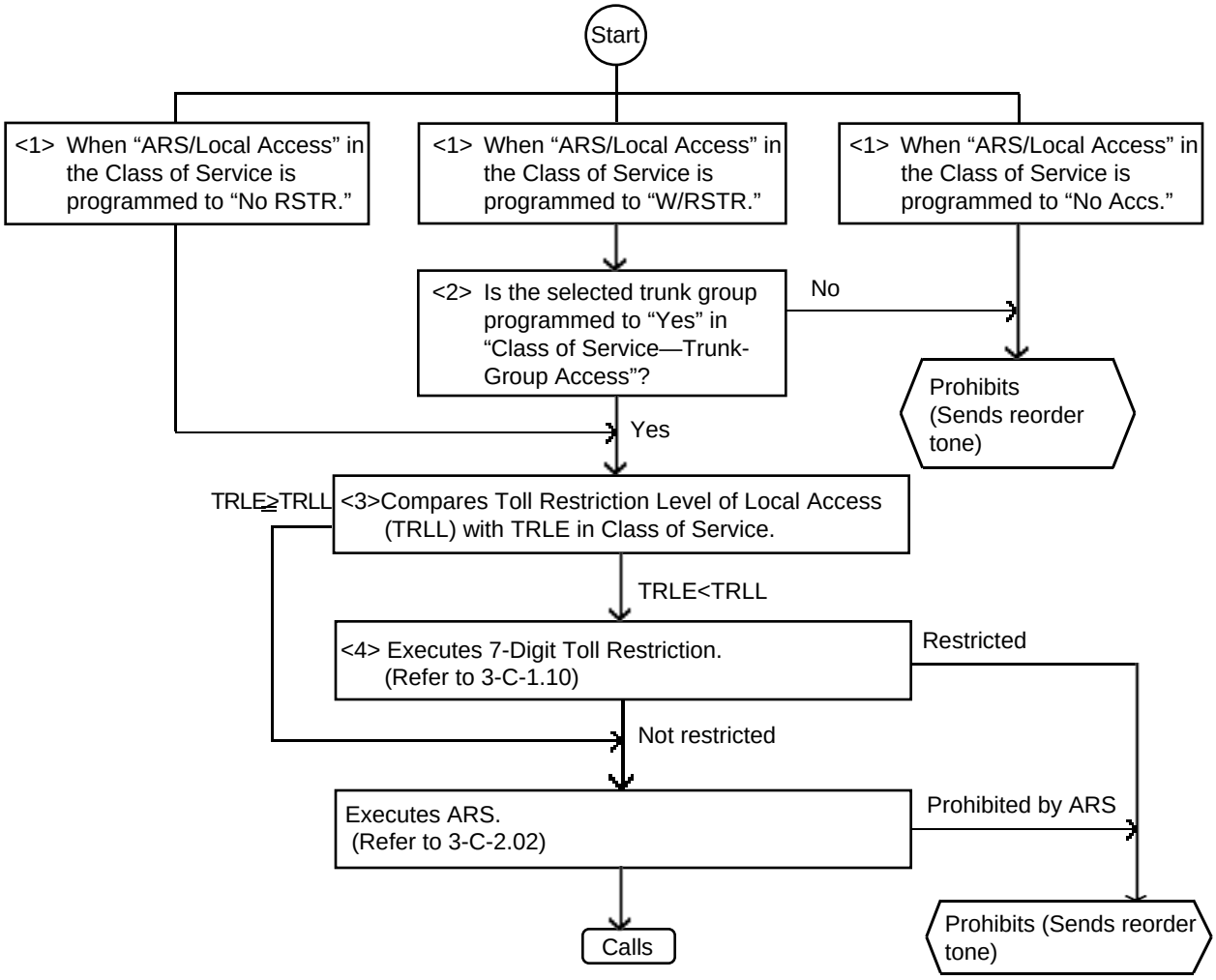
- If no digits were dialed until "External First Digit Time-Out" timer has expired, an extension user hears reorder tone.
- If "External Interdigit Time-Out" Timer has expired before less than seven digits were dialed, the number dialed is checked against the entry number in the 7-digit toll restriction table.
- One of the following three characters "N (2 to 9)," "P (0,1)" and "X (0 to 9)" can be used as a wild card character in any position of the entry number.

Note:
Software version
- V.14.XX or lower version
  3-Digit Toll Restriction is applied.
- V.15.XX or higher version
  7-Digit Toll Restriction is applied.

1.11 Toll Restriction in Automatic Route Selection (ARS) System (for New Zealand)

Flow Chart

The flow chart below shows the toll restriction procedures for outgoing calls when an extension user makes an outgoing CO call by dialing the feature number for “ARS/Local CO Line Access” in the system with ARS service.



Programming <1>

System Programming	Reference	
	VT	Dumb
"System-Class of Service", ARS/Local Access	9-D-4.01	10-C-7.00

Extension users may be restricted from Local Trunk Dial Access by the assignment of "System-Class of Service", ARS Local Access, as follows:

If set to "No ACCS" (No Access), calling is impossible (reorder tone is returned).

If set to "W/RSTR" (With Restriction), calling is possible with restriction by "System-Class of Service", Trunk Group Access.

If set to "No RSTR" (No Restriction), calling is possible regardless of the assignment of "System-Class of Service", Trunk Group Access assignment.

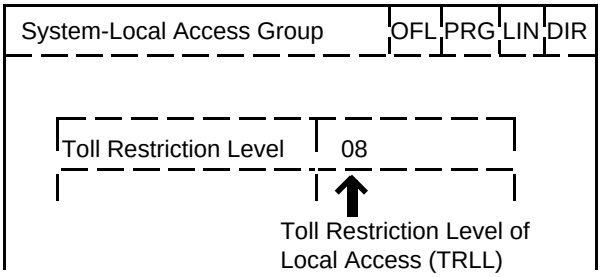
Programming <2>

System Programming	Reference	
	VT	Dumb
"System-Class of Service", Trunk Group Access	9-D-4.02	10-C-8.00

Programming <3>

System Programming	Reference	
	VT	Dumb
"System-Local Access Group", Toll Restriction level	9-D-5.00	10-C-9.00

TRLL is assigned in the item below:



When TRLL is set higher than TRLE, Toll Restriction advances to the next step.
When TRLL is set equal to or lower than TRLE, Toll Restriction advances to ARS without executing 7-Digit Toll Restriction.

Programming <4>

System Programming	Reference	
	VT	Dumb
"Toll Restriction-7-Digit Toll Restriction Table"	9-I-4.00	10-C-34.00

2.00 Automatic Route Selection (ARS)

2.01 ARS (for U.S.A. and Canada)

Description

Automatic Route Selection (ARS) is a system programmable feature that automatically selects the least expensive route available at the time an outgoing CO call is made. It is executed by dialing the feature number for "ARS/Local CO Line Access" from a DN button, then making a long distance call or local call.

A typical application is to deny most extensions dial access to all trunk groups. This forces extension users to use the ARS feature, which should results in reduced toll charges.

To utilize the ARS feature, program the preferred call routing plan in the system programming "Automatic Route Selection," then set "System-Operation", Automatic Route Selection to "Yes."

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation", Automatic Route Selection Home Dialing Plan	9-D-1.01	10-C-4.00
"System-Numbering Plan (02/11)", ARS/Local CO Line Access	9-D-6.02	10-C-10.00
"Automatic Route Selection",		
Leading Digit Table	9-J-1.00	10-C-35.00
Office Code Tables (ARS)	9-J-2.00	10-C-36.00
Route Plan Tables	9-J-3.00	10-C-37.00
Route Lists Tables	9-J-4.00	10-C-38.00
Modified Digit Tables	9-J-5.00	10-C-39.00

Conditions

1. ARS Restriction
   ARS is restricted by "System-Class of Service", ARS/Local Access, as follows:

   •If "No ACCS" (No Access) is set, making an outgoing CO call is impossible (reorder tone is returned.)

   •If "W/RSTR" (With Restriction) is set , calling is possible with restriction by "System-Class of Service", Trunk Group Access.

   •If "No RSTR (No Restriction) is set, calling is possible regardless of the assignment of "System-Class of Service", Trunk Group Access.

2. Not outdialed via ARS
   The following types of calls are not outdialed via ARS, reorder tone is sent if dialed.

   • [9] + 10XXX or 101XXXX (Equal Access*)
   • [9] + 11XXX (Custom Calling)
   • [9] + [*] or [#] in the leading 3 digits.

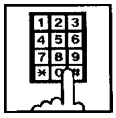
   • Equal Access Code "10XXX" or "101XXXX" is decided by EQC command.
   Refer to Section 10-C-63.00 "Equal Access Code (EQC)."

3. Toll Restriction
   ARS applies to the call after the toll restriction procedure.

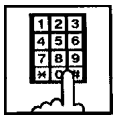
4. ARS Override
   If an extension user selects the desired outside line directly (Individual Line Access). ARS does not function and a call is routed via selected CO line.

Operation

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for ARS/Local CO Line Access "9" (default).



3. Dial the telephone number of the external party.

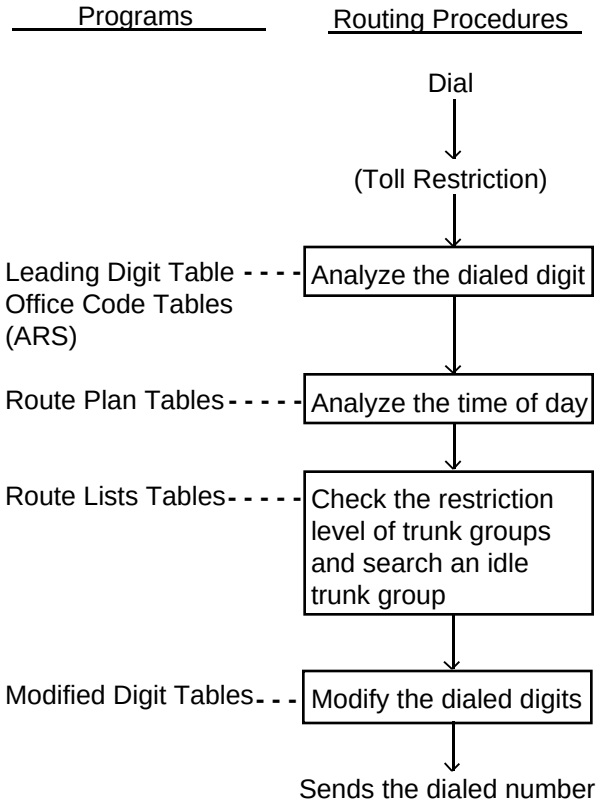
   • The system follows the pre-programmed sequence and selects the least expensive route.

   • The dialed digits are then sent after the system adds or deletes digits according to the ARS programming.

Explanation

ARS Programming

The following is an example to show the procedures for programming ARS feature.
Five types of tables are used to program ARS feature;
The ARS feature, when accessed, selects the least expensive route as follows.



<Example>

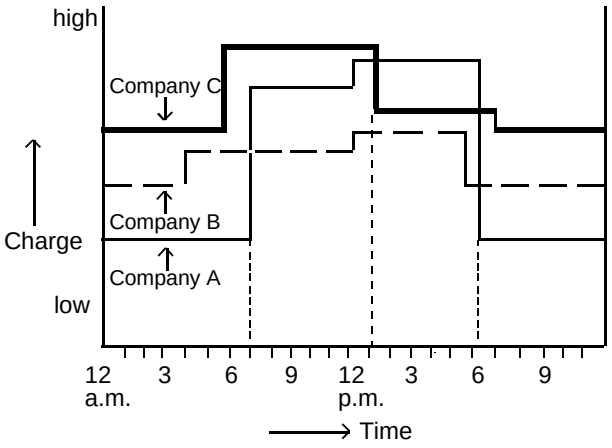
Explains the procedures to program ARS plan for calling the XYZ Company, which has the telephone number “201-234-5678” and is long distance.
Three telephone service companies are available to call the XYZ Company: telephone company A, B and C.
Telephone companies A and B are the long distance carriers.

Telephone company A has:
- Local access code: 765-4321
- Authorization number: 012345

Telephone company B has:
- Local access code: 987-6543
- Authorization number: 567890

Telephone company A is connected to trunk group 01.
Telephone company B is connected to trunk group 02.
Telephone company C is connected to trunk group 03.

Telephone companies A, B, and C charges for Monday are as follows:



(Table 1)

The companies are shown below in order from least to most expensive :

Hour	Least Costly Company	Next Less Costly Company	Most Costly Company
7:00 a.m. to 1:00 p.m.	B	A	C
1:00 p.m. to 6:00 p.m.	B	C	A
6:00 p.m. to 7:00 a.m.	A	B	C

(Table 2)

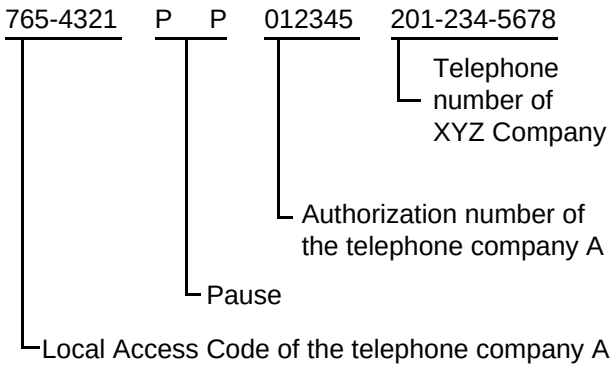
Based upon Table 2, the order of trunk group numbers connected to the telephone companies are shown below:

	Priority 1 (Least Costly Trunk Group)	Priority 2 (Next Less Costly Trunk Group)	Priority 3 (Most Costly Trunk Group)
Route List 01 (7:00 a.m. to 1:00 p.m.)	02	01	03
Route List 02 (1:00 p.m. to 6:00 p.m.)	02	03	01
Route List 03 (6:00 p.m. to 7:00 a.m.)	01	02	03

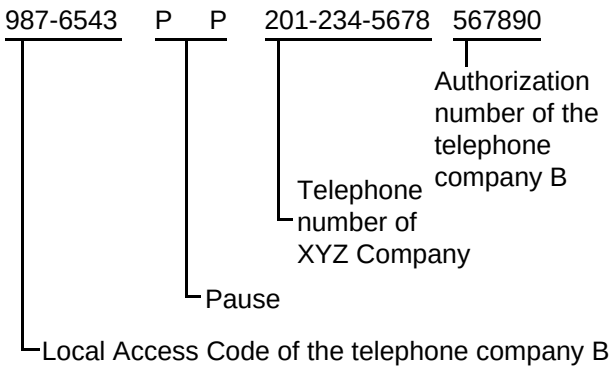
(Table 3)

When an extension user calls the XYZ Company by selecting trunk group 01 or 02, he must dial the local access code and the authorization number of the telephone company A or B before dialing the telephone number of XYZ Company, as follows:

When trunk group 01 is selected to use the telephone company A;



When trunk group 02 is selected to use the telephone company B;



To add the above local access code and the authorization numbers of the telephone companies to the user dialed digits, the Modified Digit Table is made up in the following manner.

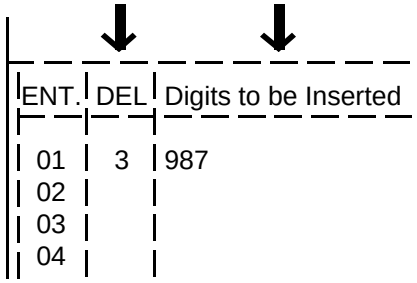
Modified Digit Table

Enter the digits which you want to add automatically to the user dialed number into the "Digits to be Inserted" field.
Enter the number of digits which you want to delete from the beginning of the user dialed number except the feature number for "ARS / Local CO Line Access" into "DEL" field.

<Example 1>

Deleting "012" from the beginning of the user dialed number and adding number "987",

Enter "3" in "DEL" field.
Enter "987" in "Digits to be Inserted" field.



ENT.	DEL	Digits to be Inserted
01	3	987
02		
03		
04		

When "9-012-345-6789" is dialed,

012 345 6789

Three digits are deleted and "987" is added here.
"987 345 6789" is sent to the CO line.

<Example 2>

To register the local access code and the authorization number of the telephone company A which you want to add automatically when trunk group 01 or 02 is accessed, enter those numbers into “Digits to be Inserted” field.

When trunk group 01 is accessed:

765-4321 P P 012345 201-234-5678

Enter these numbers into “Digits to be Inserted” field of “ENT” 01.

When trunk group 02 is accessed:

987-6543 P P 201-234-5678 567890

Enter these numbers into “Digits to be Inserted” field of “ENT” 02.

Automatic Route Selection-Modified Digit Table — OFL | PRG | SCR | DIR

Modified Digit Table (1/2)

ENT.	DEL	Digits to be Inserted	ENT.	DEL	Digits to be Inserted
01	0	7654321PP012345	09		
02	0	9876543PPH567890	10		
03			11		
04			12		

(Table 4)

The numbers stored in “Digits to be Inserted” is sent to the CO line first before the user dialed number is sent.
To insert the user dialed number into the stored number, enter “H” at the proper place. Then the user dialed number is inserted where “H” is entered and sent to the CO line.
The registered numbers in the above table are sent to the CO line as follows:

When “7654321PP01234” is stored:

7654321 Pause 012345 2012345678 is sent to the CO line.

User dialed number

Automatically added number

When “9876543PPH56789” is registered :

9876543 Pause 2012345678 567890 is sent to the CO line.

Automatically added number

Automatically added number

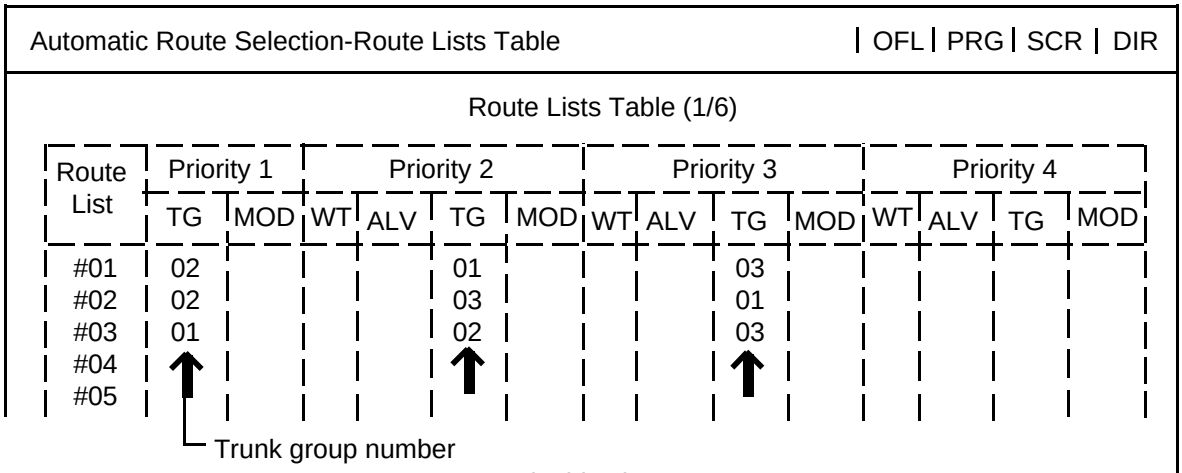
User dialed number

Route Lists Table

Entering “TG”

Enter the trunk group numbers in “TG” field according to the Table 3.

Enter the numbers “02” “01” “03” (7:00 a.m. to 1:00 p.m.) in Route List #01.
Enter the numbers “02” “03” “01” (1:00 p.m. to 6:00 p.m.) in Route List #02.
Enter the numbers “01” “02” “03” (6:00 p.m. to 7:00 a.m.) in Route List #03.

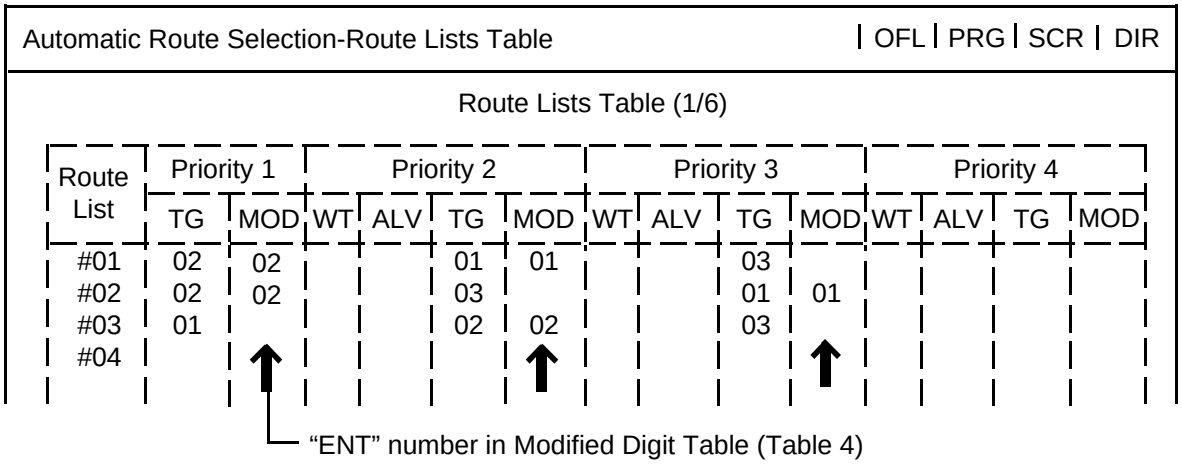


(Table 5)

Entering “MOD”

Select the digits that you want to add to or delete from the telephone number depending on Modified Digit Table (Table 4) and enter the applicable “ENT” number in “MOD” field.

For trunk group 01, enter ENT “01” in “MOD” field.
For trunk group 02, enter ENT “02” in “MOD” field.

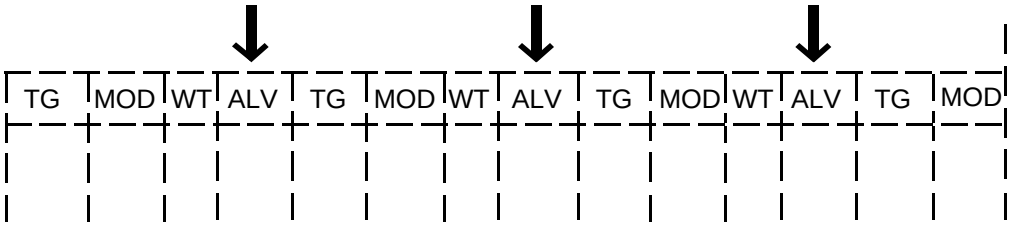


(Table 6)

Leave “MOD” field blank if there are no digits to be entered or deleted.

Entering “ALV”

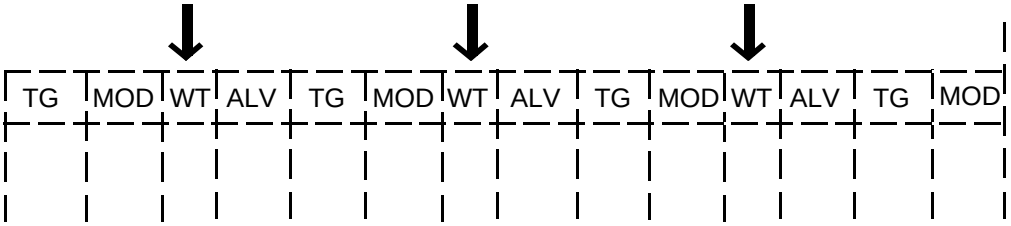
It is possible to set ARS restriction levels from “01” to “16” for Priority 2, 3, and 4. Enter ARS restriction level into “ALV” field.



(Table 7)

Entering “WT”

It is programmable to send the warning tone to the user or not when the trunk group of Priority 2 to 4 are seized, by selecting “Y” in “WT” field of Priority 2.



(Table 8)

Route Plan Table

Enter the starting Hour designated in Table 2 in the “Start Hour” field.

Enter the “Route List Number” in Route Lists Table (Table 6) depending on the trunk group in Table 3 into “Route List Number” field.

Enter Route List Number “01” for “Hour” : 7:00 a.m. to 1:00 p.m..
Enter Route List Number “02” for “Hour” : 1:00 p.m. to 6:00 p.m..
Enter Route List Number “03” for “Hour” : 6:00 p.m. to 7:00 a.m..

Route Plan Table No. =01

Start Hour		Route List Number (01~64)						
Hour	AM/PM	MON.	TUE.	WED.	THU.	FRI.	SAT.	SUN.
7	AM	01						
1	PM	02						
6	PM	03						

Enter the “Route List Number” in Route Lists Table (Table 6) into each field divided by hour and the day of the week.

Enter the starting Hour according to Table 2.

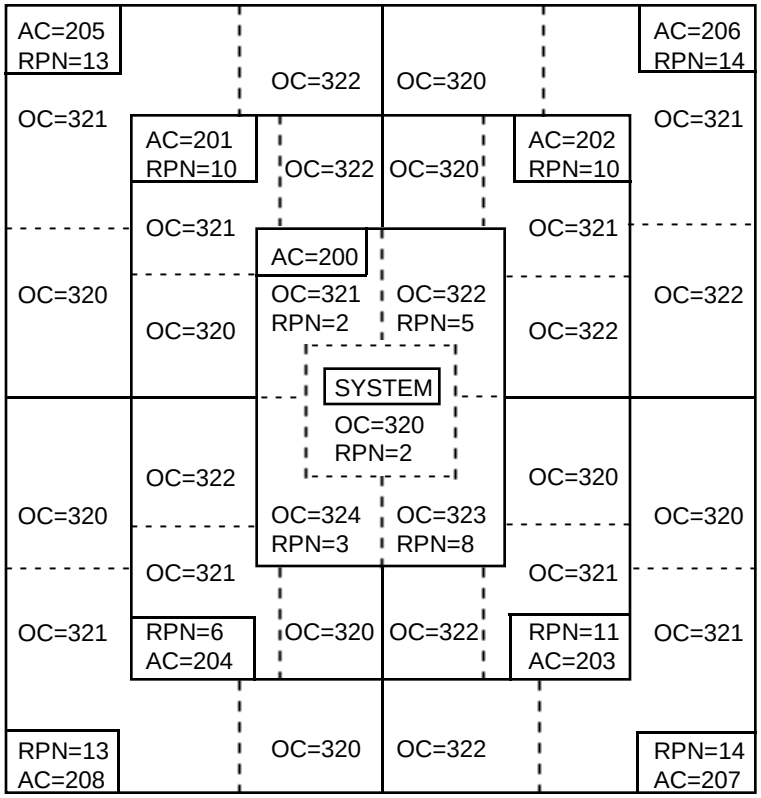
(Table 9)

Leading Digit Table/Office Code Table

1. Leading Digit Table

Leading Digit Table is used for assigning Route Plan Table Number (RPN) for Area Code or Office Code respectively.
Route Plan Table number assigned to the Area Code is applied to the long distance call and Route Plan table number assigned to the Office Code is applied to the local call.

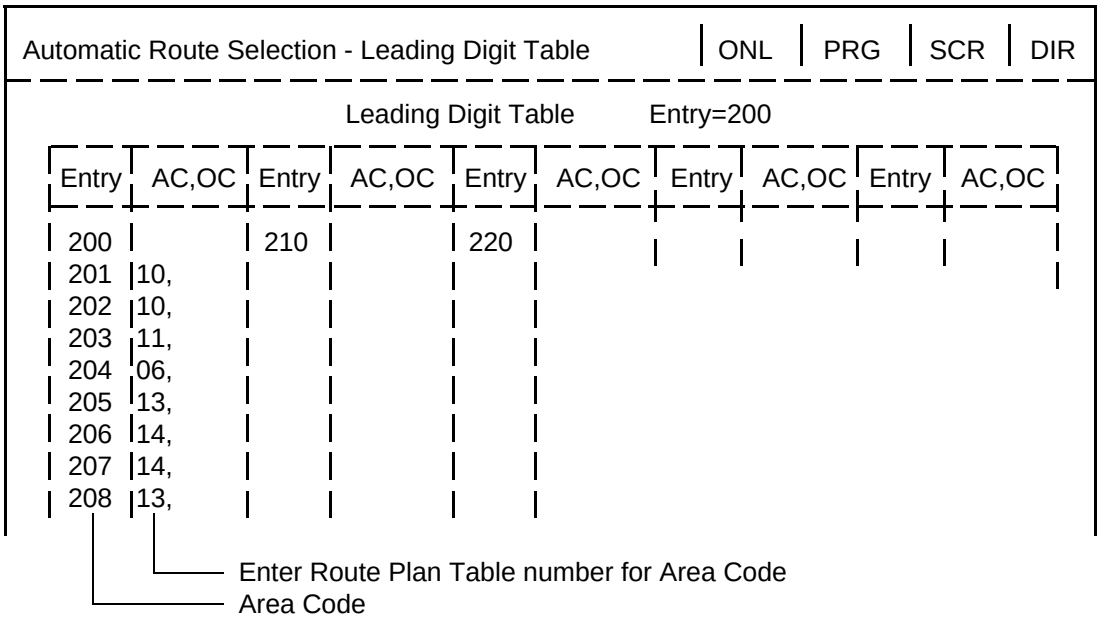
Assuming that your system is located in the area AC=200, OC=320, that is, your CO number is (1) + 200 + 320 + XXXX, and Route Plan Table number for each Area Code and Office Code are determined as follows.



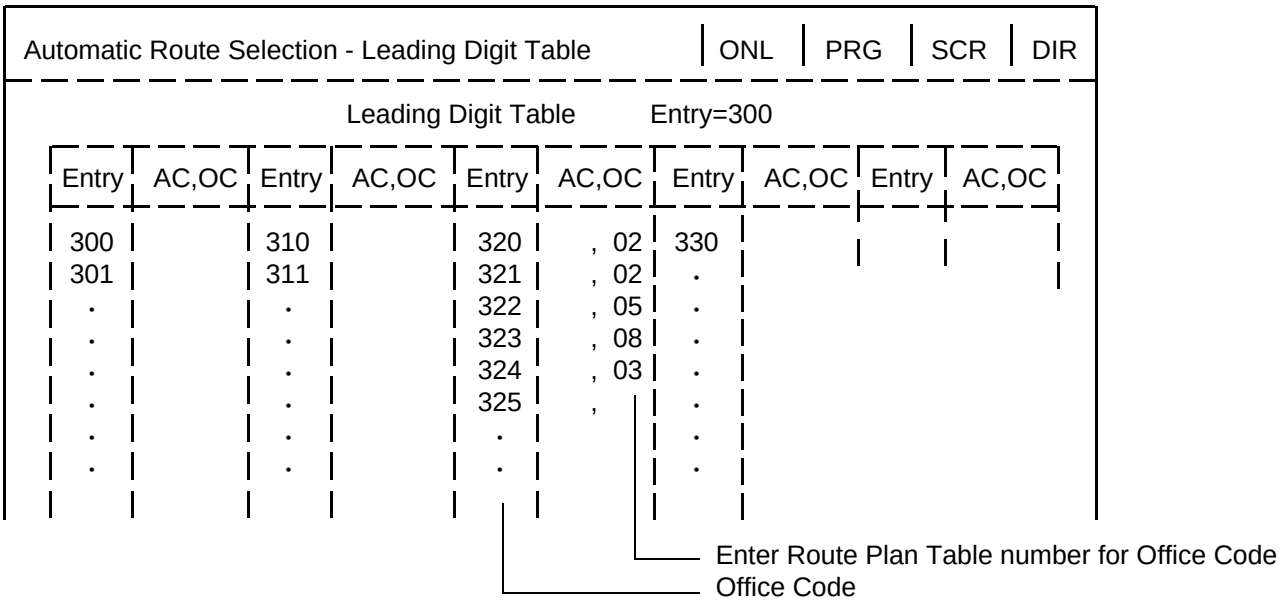
the boundaries of Area Code
the boundaries of Office Code

Assign Route Plan Table number for each Area Code or Office Code as follows,

For Long Distance Call



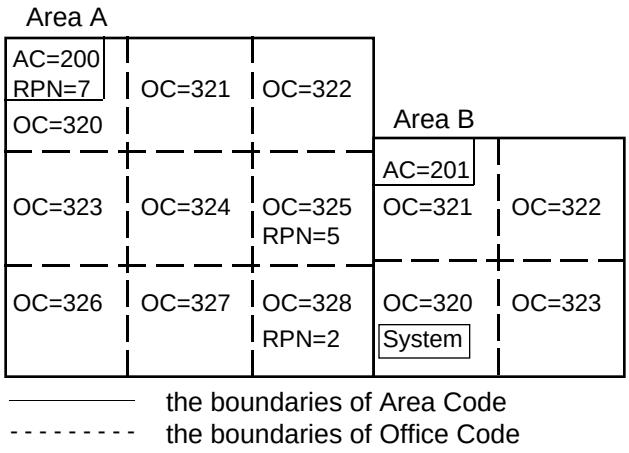
For Local Call



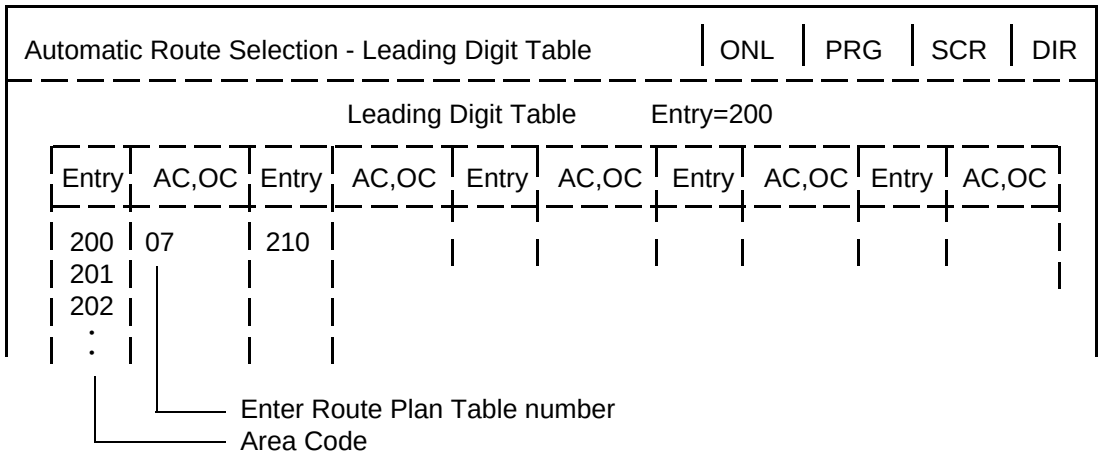
2. Office Code Table

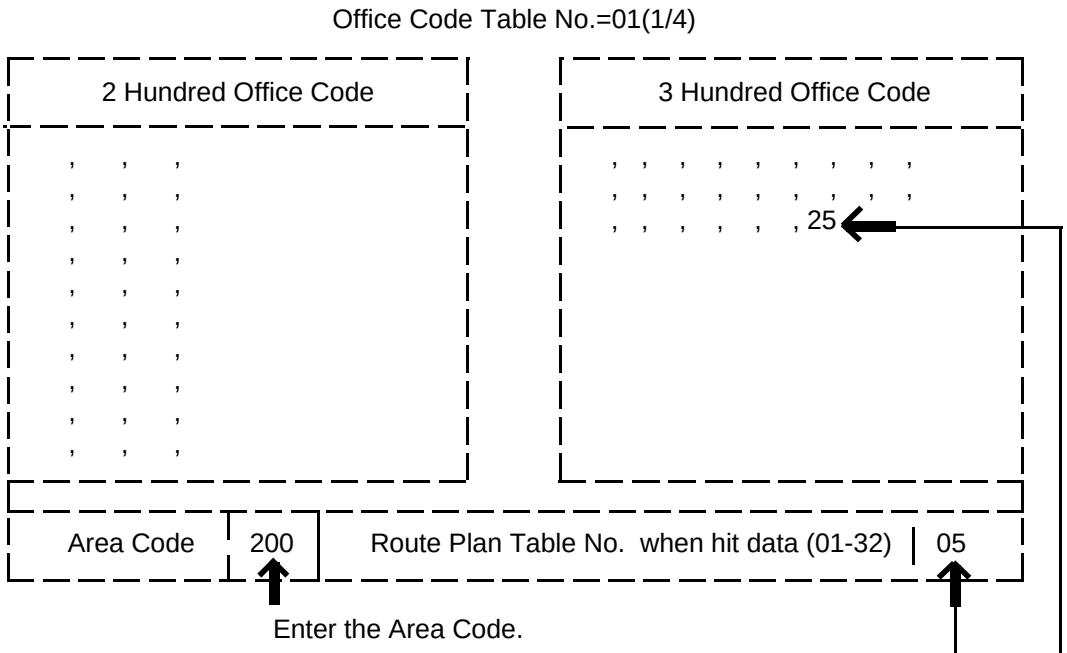
Route Plan Table number for Area Code is applied to the long distance call, accordingly, the same Route Plan Table number is applied to all Office Codes within that area.
Office Code Table is used when you want assign another Route Plan Table number to an Office Code within that area.

Assuming that your system is located in the area AC=201, OC=320, and Route Plan Table number 7 is applied to the calls for Area A, AC=200.



In above case, usually Route Plan Table number 7 is applied to all Office Codes within Area A, AC=200.
But if you want to assign Route Plan Table number 5 to OC=325 and Route Plan Table number 2 to OC=328 within Area A, program the Leading Digit Table as follows.





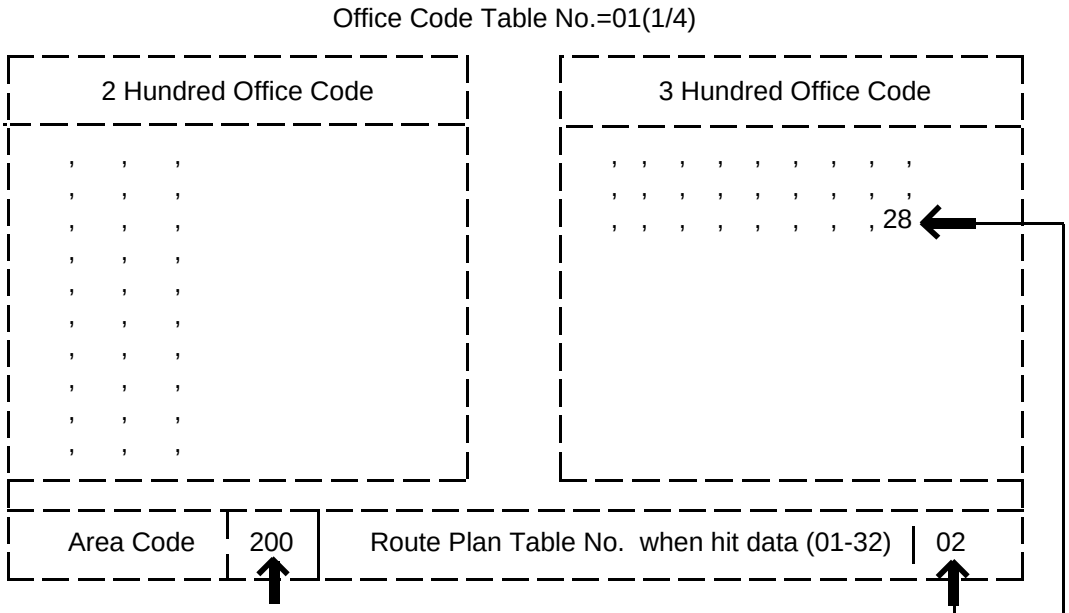
To register the Office Code 325, enter the last two digits of 325 into "3 Hundred Office Code" field.

2 0 0 - 3 2 5 - x x x x

The last two digits of the Office Code

Enter the Route Plan Table number (Table 9) which is applied to calls for the area, AC=200, OC=325.

Route Plan Table number 5 is applied to the Office Code 325 within the Area A.



To register the Office Code 328, enter the last two digits of 328 into "3 Hundred Office Code" field.

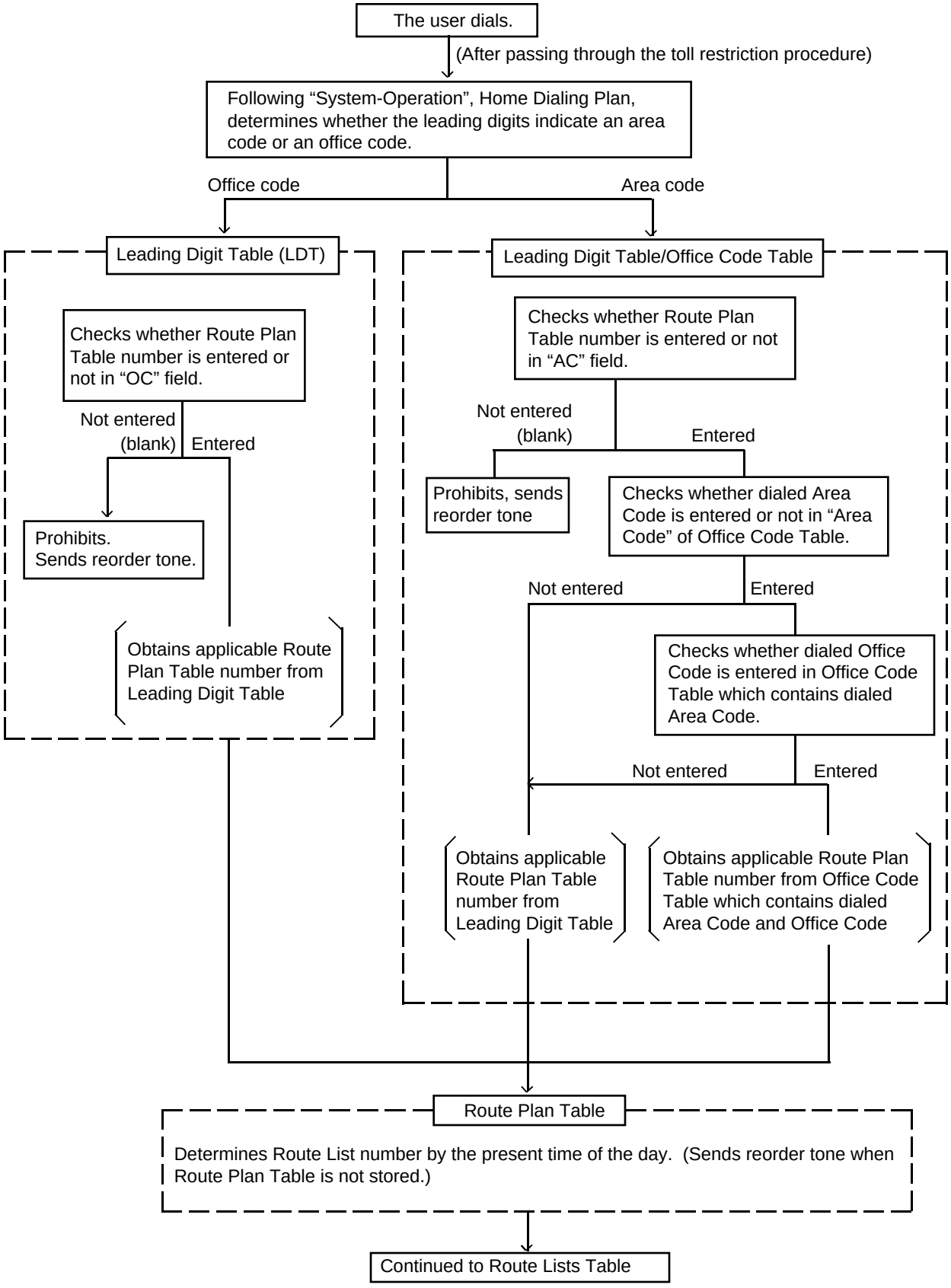
2 0 0 - 3 2 8 - x x x x

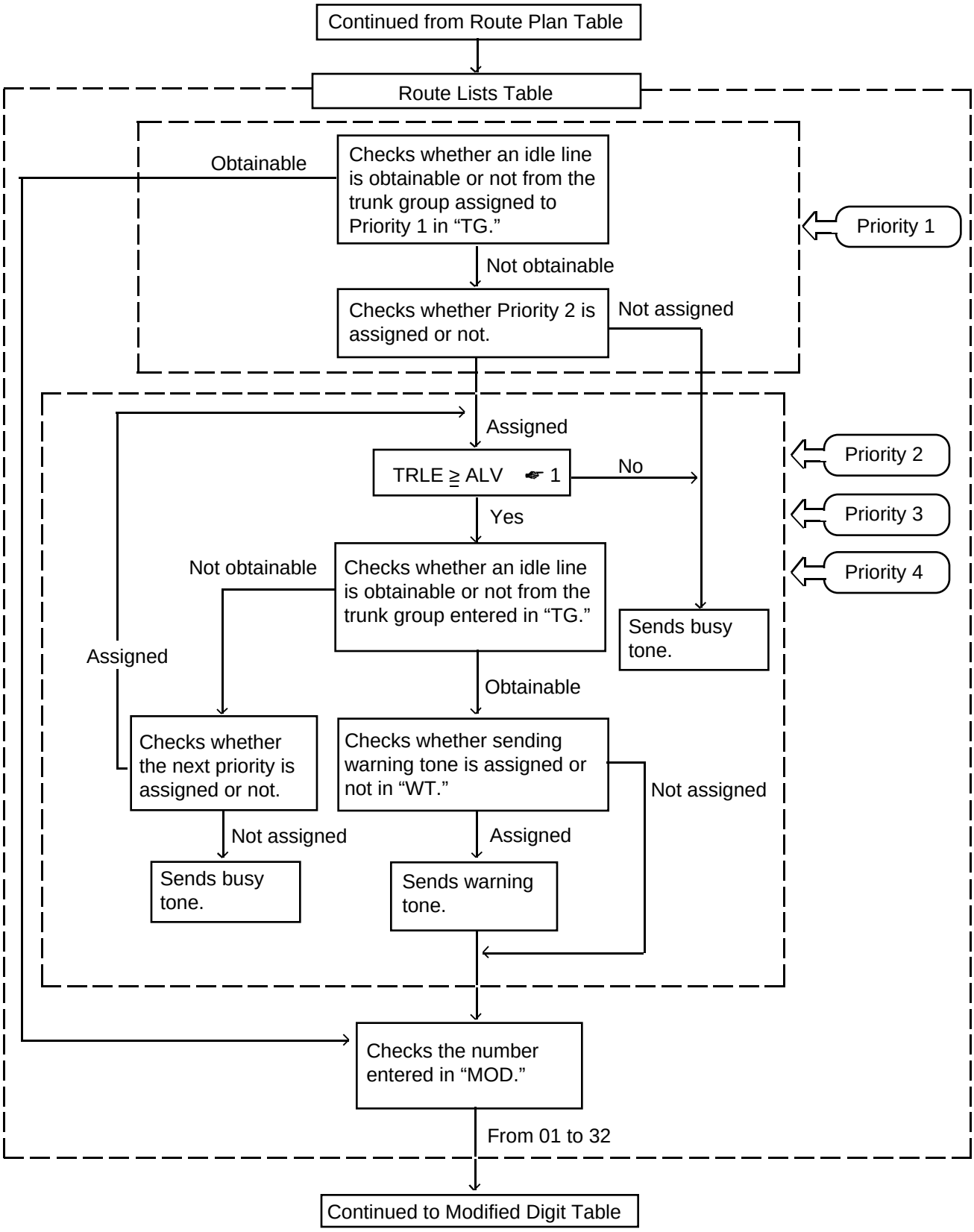
The last two digits of the Office Code

Enter the Route Plan Table number (Table 9) which is applied to calls for the area, AC=200, OC=328.

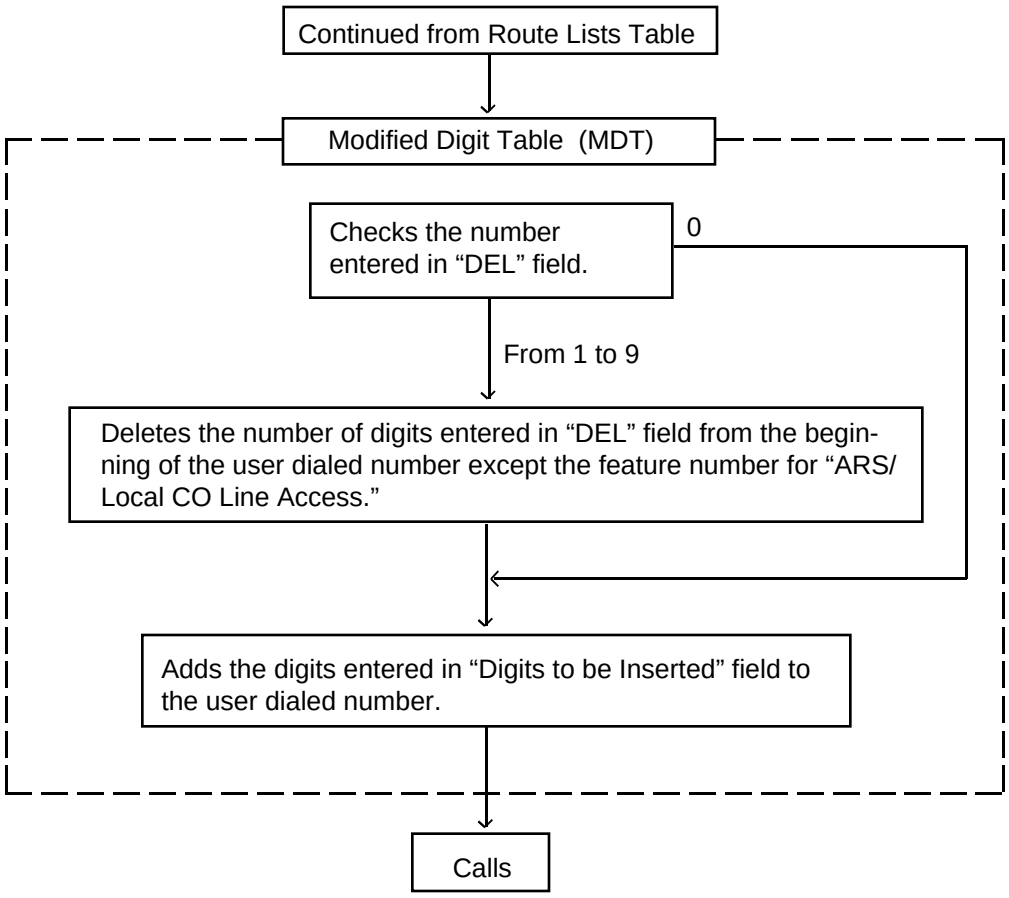
Route Plan Table number 2 is applied to the Office Code 328 within the Area A.

The flow chart shows the procedures for ARS feature:





☛1 TRLE : toll restriction level of extension assigned in Class of Service.


Continued from Route Lists Table
Modified Digit Table (MDT)
Checks the number entered in “DEL” field.
0
From 1 to 9
Deletes the number of digits entered in “DEL” field from the beginning of the user dialed number except the feature number for “ARS/ Local CO Line Access.”
Adds the digits entered in “Digits to be Inserted” field to the user dialed number.
Calls

2.02 ARS (for New Zealand)

Description

Automatic Route Selection (ARS) is a system programmable feature that automatically selects the least expensive route available at the time an outgoing CO call is made. It is executed by dialing the feature number for “ARS/Local CO Line Access” from a DN button, then making a long distance call or local call.

A typical application is to deny most extension's dial access to all trunk groups. This forces extension users to use the ARS feature, which should results in reduced toll charges.

To utilize the ARS feature, program the preferred call routing plan in the system programming “Automatic Route Selection,” then set “System-Operation”, Automatic Route Selection to “Yes.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation”, Automatic Route Selection Home Dialing Plan	9-D-1.01	10-C-4.00
“System-Numbering Plan (02/11)”, ARS/Local CO Line Access	9-D-6.02	10-C-10.00
“Automatic Route Selection”,		
Leading Digit Table	9-J-6.00	10-C-35.00
Route Plan Tables	9-J-7.00	10-C-37.00
Route Lists Tables	9-J-8.00	10-C-38.00
Modified Digit Tables	9-J-9.00	10-C-39.00

Conditions

1. ARS Restriction
   ARS is restricted by “System-Class of Service”, ARS/Local Access, as follows:

- If “No ACCS” (No Access) is set, making an outgoing CO call is impossible (reorder tone is returened.)

- If “W/RSTR” (With Restriction) is set, calling is possible with restriction by “System-Class of Service”, Trunk Group Access.

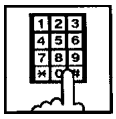
- If “No RSTR (No Restriction) is set, calling is possible regardless of the assignment of “System-Class of Service”, Trunk Group Access.

3. Toll Restriction
   ARS applies to the call after the toll restriction procedure.

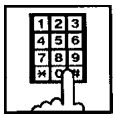
4. ARS Override
   If an extension user selects the desired outside line directly (Individual Line Access), ARS does not function and a call is routed via selected CO line.

Operation

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for ARS/Local CO Line Access “9” (default).



3. Dial the telephone number of the external party.

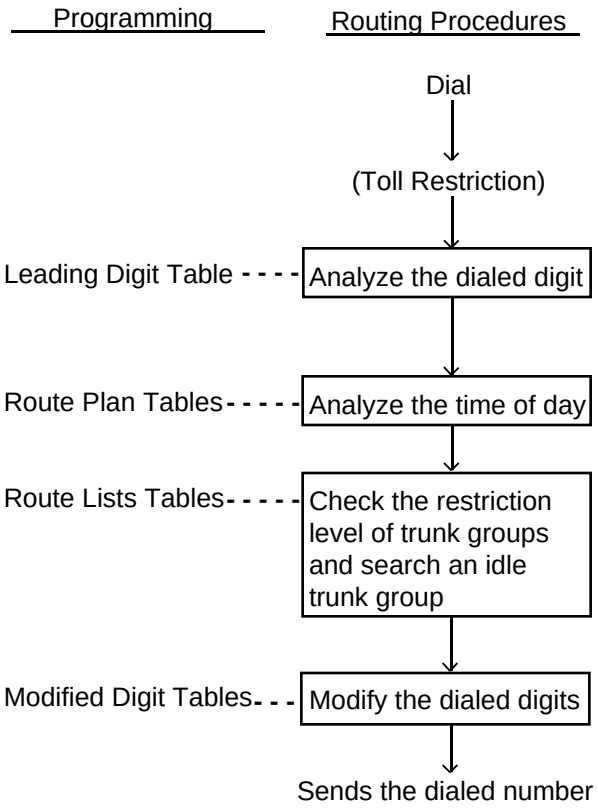
   - The system follows the pre-programmed sequence and selects the least expensive route.

   - The dialed digits are then sent after the system adds or deletes digits according to the ARS programming.

Explanation

ARS Programming

The following is an example to show the procedures for programming ARS feature.
Five types of tables are used to program ARS feature;
The ARS feature, when accessed, selects the least expensive route as follows.



<Example>

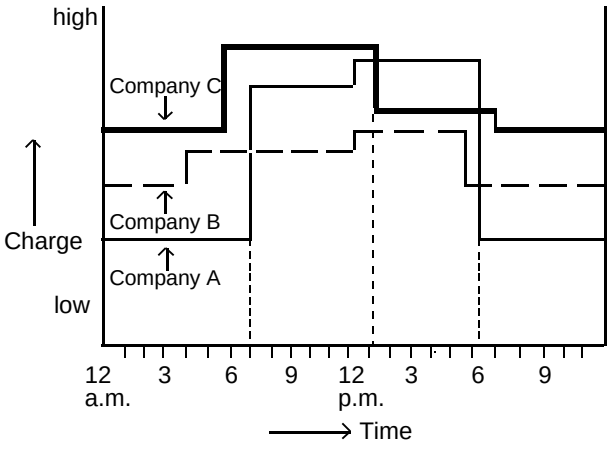
Explains the procedures to program ARS plan for calling the XYZ Company, which has the telephone number “03-234-5678” and is long distance.
Three telephone service companies are available to call the XYZ Company: telephone company A, B and C.
Telephone companies A and B are the long distance carriers.

Telephone company A has:
- Local access code: 765-4321

Telephone company B has:
- Local access code: 987-6543

Telephone company A is connected to trunk group 01.
Telephone company B is connected to trunk group 02.
Telephone company C is connected to trunk group 03.

Telephone companies A, B, and C's charges for Monday are as follows:



(Table 1)

The companies are shown below in order from least to most expensive :

Hour	Least Costly Company	Next Less Costly Company	Most Costly Company
7:00 a.m. to 1:00 p.m.	B	A	C
1:00 p.m. to 6:00 p.m.	B	C	A
6:00 p.m. to 7:00 a.m.	A	B	C

(Table 2)

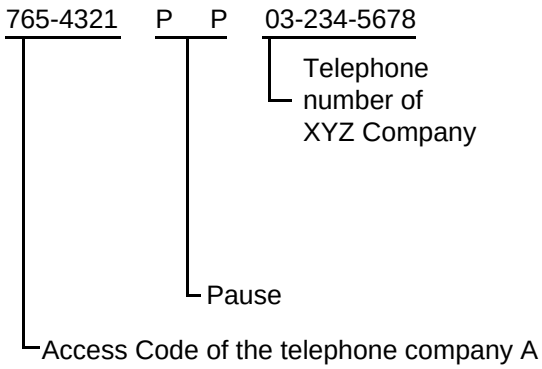
Based upon Table 2, the order of trunk group numbers connected to the telephone companies are shown below:

	Priority 1 (Least Costly Trunk Group)	Priority 2 (Next Less Costly Trunk Group)	Priority 3 (Most Costly Trunk Group)
Route List 01 (7:00 a.m. to 1:00 p.m.)	02	01	03
Route List 02 (1:00 p.m. to 6:00 p.m.)	02	03	01
Route List 03 (6:00 p.m. to 7:00 a.m.)	01	02	03

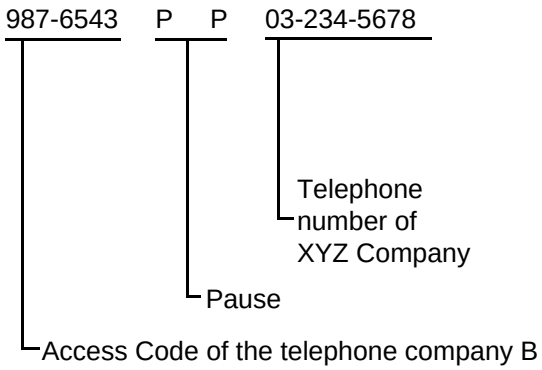
(Table 3)

When an extension user calls the XYZ Company by selecting trunk group 01 or 02, he must dial the local access code of the telephone company A or B before dialing the telephone number of XYZ Company, as follows:

When trunk group 01 is selected to use the telephone company A;



When trunk group 02 is selected to use the telephone company B;



To add required access code of the telephone company to the user dialed digits, the Modified Digit Table is made up in the following manner.

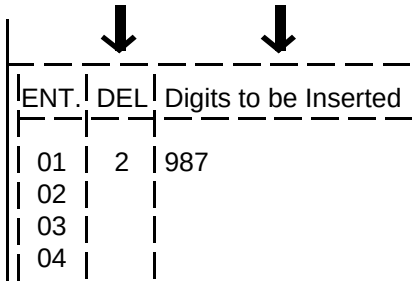
Modified Digit Table

Enter the digits which you want to add automatically to the user dialed number into the "Digits to be Inserted" field.
Enter the number of digits which you want to delete from the beginning of the user dialed number except the feature number for "ARS / Local CO Line Access" into "DEL" field.

<Example 1>

Deleting "03" from the beginning of the user dialed number and adding number "987",

Enter "2" in "DEL" field.
Enter "987" in "Digits to be Inserted" field.



ENT.	DEL	Digits to be Inserted
01	2	987
02		
03		
04		

When "9-03-345-6789" is dialed,

03 345 6789

Two digits are deleted and "987" is added here.

"987 345 6789" is sent to the CO line.

<Example 2>

To register the access code required by the telephone company which you want to add automatically when trunk group 01 (telephone company A) or 02 (telephone company B) is accessed, enter those numbers into “Digits to be Inserted” field.

When trunk group 01 is accessed:

7654321 P P 03-234-5678

Enter these numbers into “Digits to be Inserted” field of “ENT” 01.

When trunk group 02 is accessed:

9876543 P P 03-234-5678

Enter these numbers into “Digits to be Inserted” field of “ENT” 02.

Automatic Route Selection-Modified Digit Table | OFL | PRG | SCR | DIR

Modified Digit Table (1/2)

ENT.	DEL	Digits to be Inserted	ENT.	DEL	Digits to be Inserted
01	0	7654321PP	09		
02	0	9876543PP	10		
03			11		
04			12		

register the required access code

(Table 4)

The numbers stored in “Digits to be Inserted” is sent to the CO line first before the user dialed number is sent.
The registered numbers in the above table are sent to the CO line as follows:

7654321 Pause 03-234-5678 is sent to the CO line.

User dialed number

Automatically added number

Route Lists Table

Entering “TG”

Enter the trunk group numbers in “TG” field according to the Table 3.

Enter the numbers “02” “01” “03” (7:00 a.m. to 1:00 p.m.) in Route List #01.
Enter the numbers “02” “03” “01” (1:00 p.m. to 6:00 p.m.) in Route List #02.
Enter the numbers “01” “02” “03” (6:00 p.m. to 7:00 a.m.) in Route List #03.

Automatic Route Selection-Route Lists Table | OFL | PRG | SCR | DIR

Route Lists Table (1/6)

Route List	Priority 1		Priority 2				Priority 3				Priority 4			
	TG	MOD	WT	ALV	TG	MOD	WT	ALV	TG	MOD	WT	ALV	TG	MOD
#01	02				01				03					
#02	02				03				01					
#03	01				02				03					
#04														
#05														

Trunk group number

(Table 5)

Entering “MOD”

Select the digits that you want to add to or delete from the telephone number depending on Modified Digit Table (Table 4) and enter the applicable “ENT” number in “MOD” field.

For trunk group 01, enter ENT “01” in “MOD” field.
For trunk group 02, enter ENT “02” in “MOD” field.

Automatic Route Selection-Route Lists Table | OFL | PRG | SCR | DIR

Route Lists Table (1/6)

Route List	Priority 1		Priority 2				Priority 3				Priority 4			
	TG	MOD	WT	ALV	TG	MOD	WT	ALV	TG	MOD	WT	ALV	TG	MOD
#01	02	02			01	01			03					
#02	02	02			03				01	01				
#03	01				02	02			03					
#04														

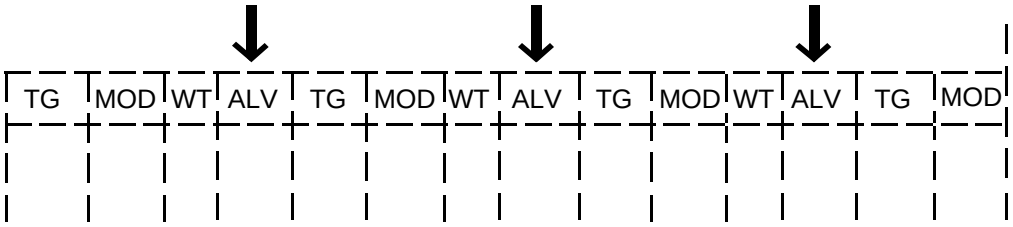
“ENT” number in Modified Digit Table (Table 4)

(Table 6)

Leave “MOD” field blank if there are no digits to be entered or deleted.

Entering “ALV”

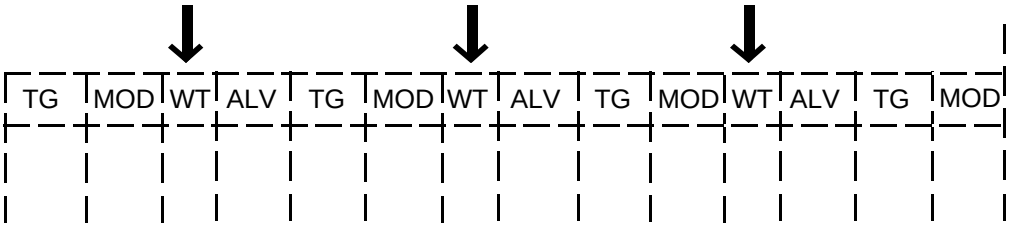
It is possible to set ARS restriction levels from “01” to “16” for Priority 2, 3, and 4. Enter ARS restriction level into “ALV” field.



(Table 7)

Entering “WT”

It is programmable to send the warning tone to the user or not when the trunk group of Priority 2 to 4 are seized, by selecting “Y” in “WT” field of Priority 2.



(Table 8)

Route Plan Table

Enter the starting Hour designated in Table 2 in the “Start Hour” field.

Enter the “Route List Number” in Route Lists Table (Table 6) depending on the trunk group in Table 3 into “Route List Number” field.

Enter Route List Number “01” for “Hour” : 7:00 a.m. to 1:00 p.m..
Enter Route List Number “02” for “Hour” : 1:00 p.m. to 6:00 p.m..
Enter Route List Number “03” for “Hour” : 6:00 p.m. to 7:00 a.m..

Route Plan Table No. =01

Start Hour		Route List Number (01~64)						
Hour	AM/PM	MON.	TUE.	WED.	THU.	FRI.	SAT.	SUN.
7	AM	01						
1	PM	02						
6	PM	03						

Enter the “Route List Number” in Route Lists Table (Table 6) into each field divided by hour and the day of the week.

Enter the starting Hour according to Table 2.

(Table 9)

Leading Digit Table

Leading Digit Table is used for assigning Route Plan Table Number (RPN) for Area Code or Office Code respectively.
Route Plan Table number assigned to the Area Code is applied to the long distance calls, and Route Plan table number assigned to the Office Code is applied to the local calls or VPN (Virtual Private Network) calls.

Assign Route Plan Table number for each Area Code or Office Code as follows,

For Long Distance Call

Automatic Route Selection - Leading Digit Table | ONL | PRG | SCR | DIR

Leading Digit Table Entry=200

Entry	AC,OC	Entry	AC,OC	Entry	AC,OC	Entry	AC,OC	Entry	AC,OC
200		210		220					
201	10,								
202	10,								
203	11,								
204	06,								
205	13,								
206	14,								
207	14,								
208	13,								

Enter Route Plan Table number for Area Code
Area Code

For Local Call NPN Call

Automatic Route Selection - Leading Digit Table | ONL | PRG | SCR | DIR

Leading Digit Table Entry=300

Entry	AC,OC	Entry	AC,OC	Entry	AC,OC	Entry	AC,OC	Entry	AC,OC
300		310		320	, 02	330			
301		311		321	, 02	.			
.		.		322	, 05	.			
.		.		323	, 08	.			
.		.		324	, 03	.			
.		.		325	,	.			
.		.		.		.			
.		.		.		.			

Enter Route Plan Table number for Office Code
Office Code

Routing the VPN (Virtual Private Network) calls

VPN calls can be routed using one of the following two ways.

1. Using the ARS Procedures

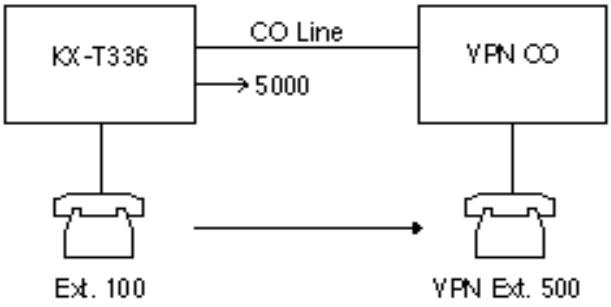
ARS procedures can be used for routing the VPN calls.
In this case, VPN access code “1” should be attached to the beginning of the extension user dialed number using the Modified Digit Table.

(Example)
Dialed number: 9-250-1234
↓
After modification: 1-250-1234
└ VPN access code

2. Using the TIE trunk call procedures

TIE trunk call procedures can be used for routing the VPN calls as follows.

(Example)
Calling to VPN extension 5000



Call Flow

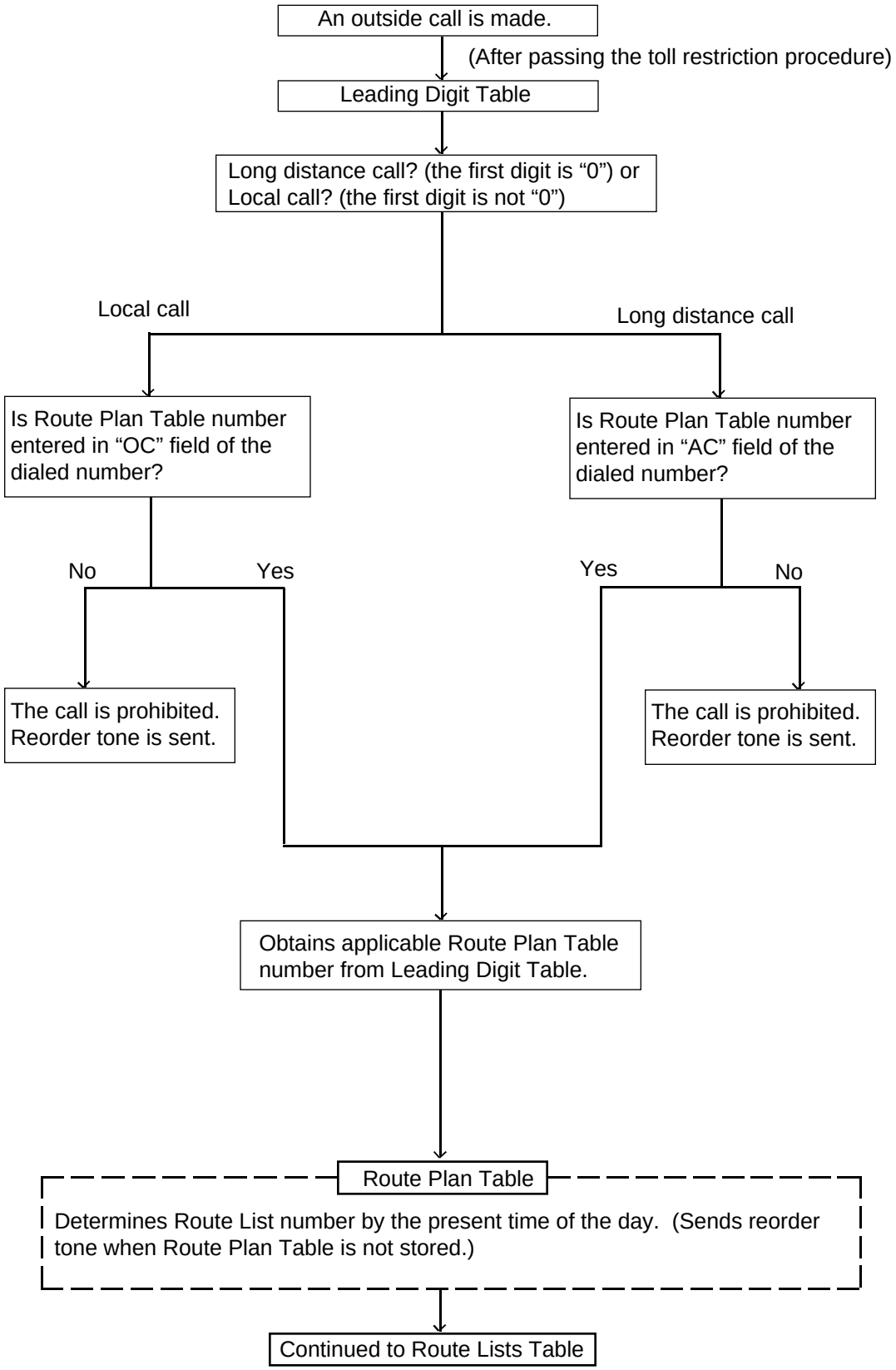
1.Ext.100 dials 5000.
2.Ext.100 is connected to VPN Ext.5000

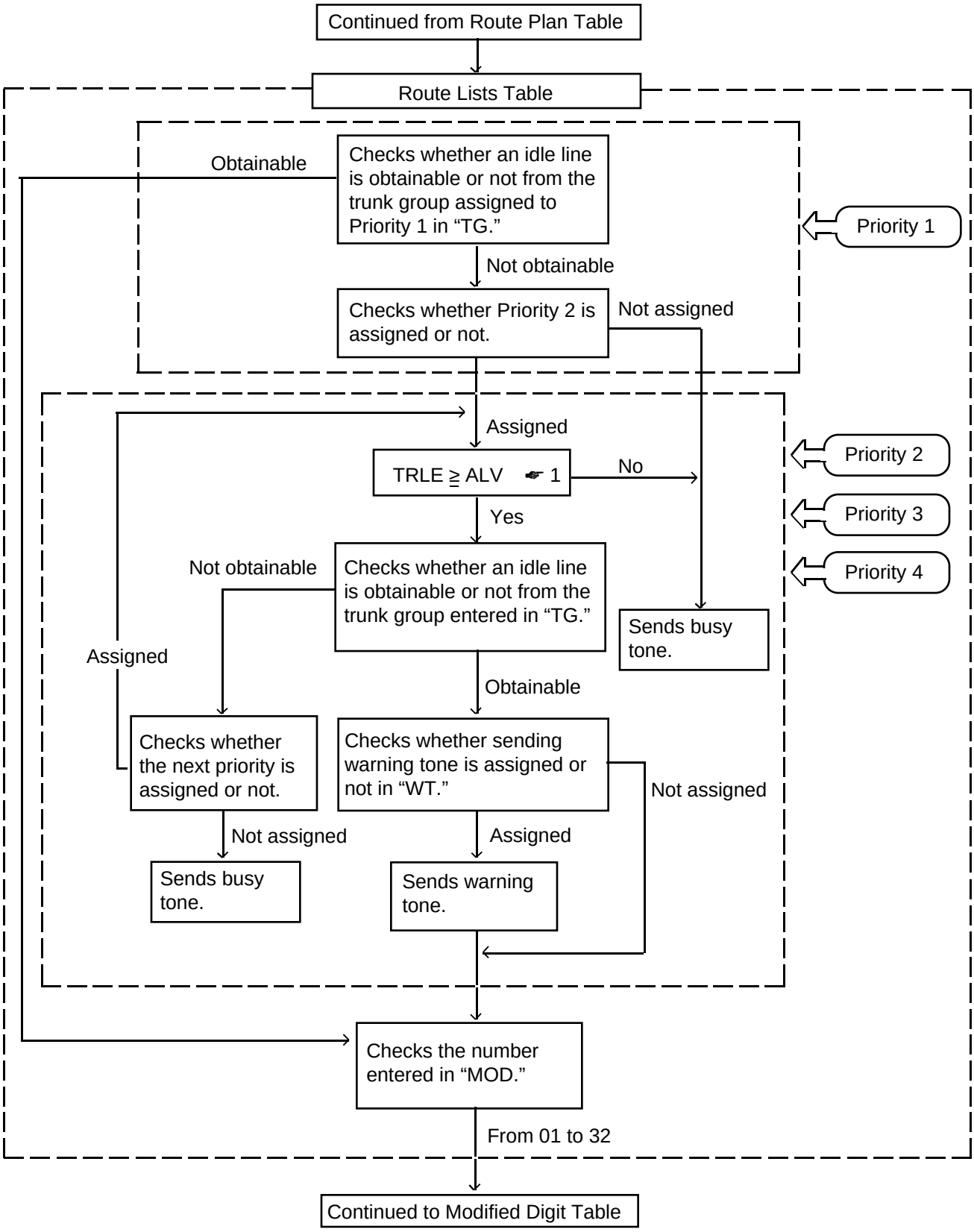
Programming example:

- System-Numbering Plan (9-D-6.00, 10-C-10.00)
  Other PBX Extension 01:50
- Special Attended - TIE Line Routing Table (9-K-4.00, 10-C-65.01)

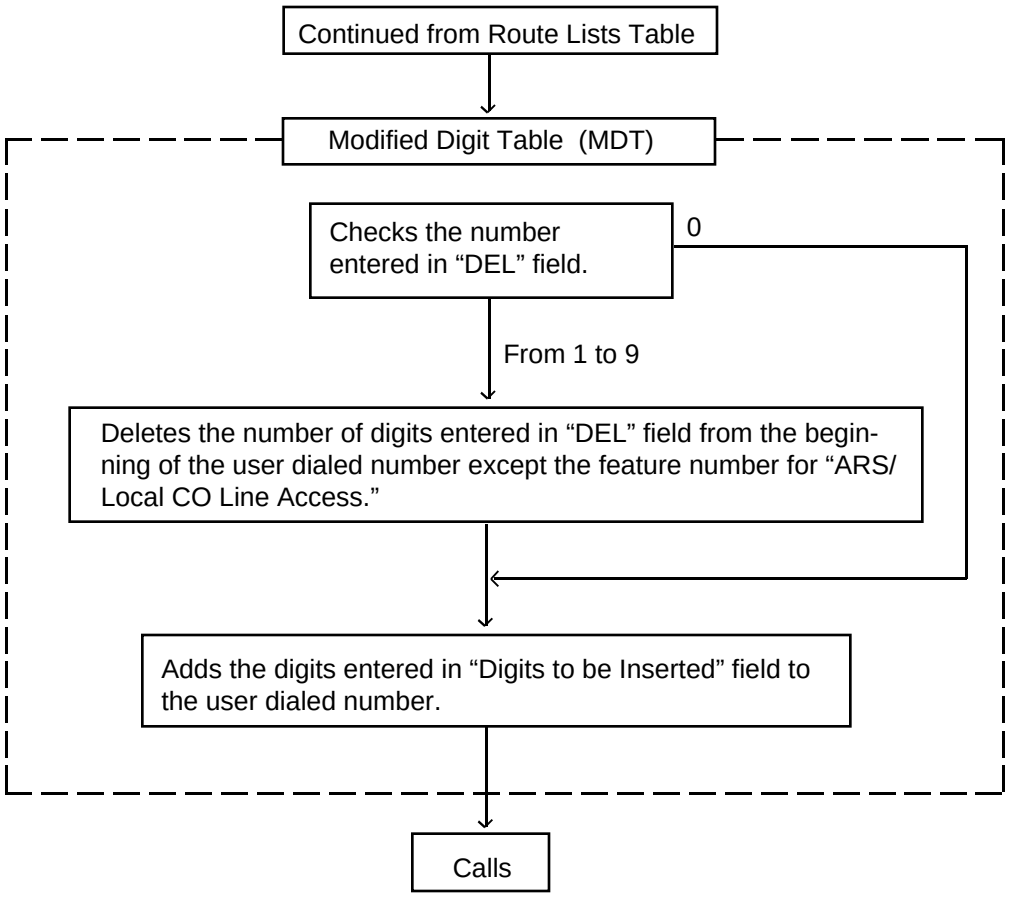
No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 . .	5XX	0		02	03	

The flow chart shows the procedures for ARS feature:





☛1 TRLE : toll restriction level of extension assigned in Class of Service.


Continued from Route Lists Table
Modified Digit Table (MDT)
Checks the number entered in “DEL” field.
0
From 1 to 9
Deletes the number of digits entered in “DEL” field from the beginning of the user dialed number except the feature number for “ARS/ Local CO Line Access.”
Adds the digits entered in “Digits to be Inserted” field to the user dialed number.
Calls

3.00 Tone/Pulse Conversion

Description

When the DTMF dial mode is established on a CO line, the dial signal sent from an extension (tone or pulse dial mode) is converted into DTMF signals by the COT (LCOT,GCOT) card and sent to the Central Office.
If the PULSE dial mode is established on a CO line, the dial signal sent from an extension (tone or pulse dial mode) is converted into pulse signal by the COT card and sent to the Central Office.

The “DTMF dial mode” or “PULSE dial mode” is set in "Trunk-CO Line", Dial Mode.
Set “DTMF” for a CO line which can accept both DTMF and PULSE dialing.

Programming

System Programming	Reference	
	VT	Dumb
“Trunk-CO Line”, Dial Mode	9-F-1.00	10-C-18.00

Conditions

When making a CO call, if the trunk is assigned to a PULSE dial mode, in the following conditions the dial signal is converted into DTMF signal after sending a telephone number.

1) A telephone number belongs to “Special Carrier Access-OCC Access.”
2) The selected trunk group belongs to the trunk group in “Special Carrier Access-OCC Access.”

After External Feature Access, until the maximum digits are dialed, the dialing mode is changed to the mode set in “Trunk-CO Line”, Dial Mode.
(With a PITS, Tone Though mode is released temporarily during this time.)

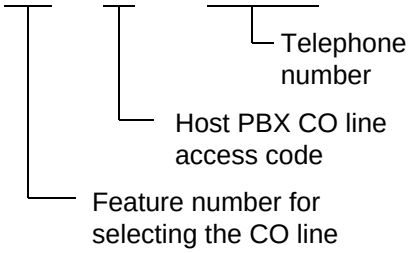
With a PITS, Tone Through mode is established automatically after the dialing sequence.
After pressing the Tone Through Break button, until the maximum digits are dialed, the dialing mode becomes the dialing mode set in “Trunk-CO Line”, Dial Mode. Tone Through mode is released temporarily during the time.
Refer to Section 4-G-12.00 “Tone Through (End to End DTMF Signaling)” for further information.

4.00 Automatic Pause Insertion

Description

When a host PBX or Centrex is accessed and PBX access code with no restriction or restriction is programmed, a pause is automatically inserted after the access code.
This function can only be executed for a trunk group whose Type PBX. The access code after which the pause is to be inserted is determined by programming “Group-Trunk Group”, PBX Access Code (No Restriction) or (Restriction)
An example of using the system as behind PBX is given below.

<Example>
Dial details: 811 9 201 3456



When “9” is entered in “PBX Access Code (No Restriction)”, the pause is automatically inserted after dialing 9.
When “9” is entered in “PBX Access Code (Restriction)”, the pause is automatically inserted after dialing 9, and the outgoing restrictions are checked for the “201 3456” phone number.
The length of the automatically inserted pause depends on the “Group-Trunk Group”, Pause Time setting.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Type Pause Time	9-E-1.01	10-C-14.00
“Group-Trunk Group (2/2)”, PBX Access Code (No Restriction) PBX Access Code (Restriction)	9-E-1.02	10-C-15.00

Conditions

When the type of the top priority trunk group is PBX with the “System-Local Access Group”, Local Access Trunk Group Hunt Sequence setting, all local access is considered to be host PBX or Centrex line access. The data set in the top priority trunk group is used as the data required for the access.

In the same trunk group, the access codes set in “PBX Access Code (No Restriction)” and “PBX Access Code (Restriction)” must be different.

D. Receiving Features

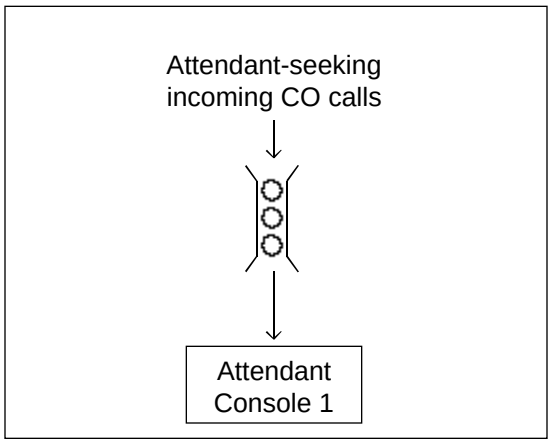
1.00 Attendant Console Operation

Description

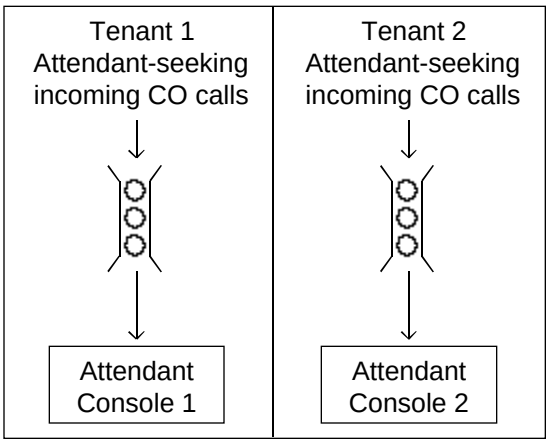
An incoming call from a CO line can be routed to the Attendant Console operator who can then transfer it to the target extension.
This function works by setting “Group-Trunk Group”, Incoming Mode (Day) to ATT (Attendant Consoles).
Up to two Attendant Consoles (with CRT display — Optional) can be equipped with the KX-T336 system.
The Attendant Console Line Circuit (ATLC) Port 1 is for Attendant Console 1 and Port 2 is for Attendant Console 2.
Outline drawings of the basic process are shown below.

Attendant Console Incoming Mode

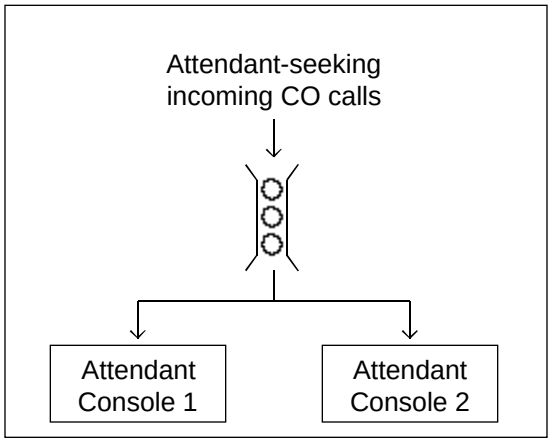
1. Single Console Operation



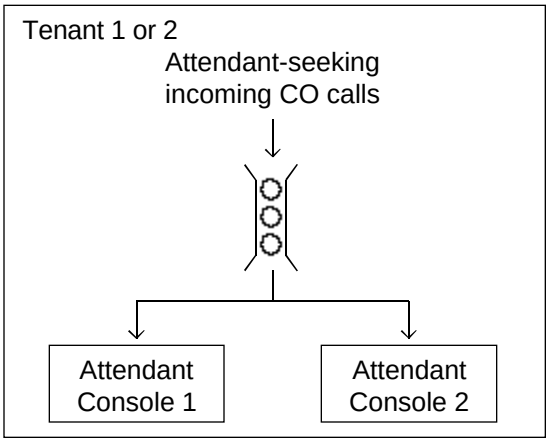
• When Tenant Service is employed:



2. Dual Console Operation



• When Tenant Service is employed:



Dual Console Operation

When two attendant consoles are equipped with the system, one of the following three types of Incoming Mode can be selected.
Options B and C work only for the incoming outside call routed via a CO line which belongs to a Trunk Group whose Incoming Mode (Day) is assigned as “ATT.”

A. Load Sharing (Section 3-D-1.01)
   Incoming calls are distributed evenly to two attendant consoles so that they can share the same load. (default)

B. Simultaneous Ringing (Section 3-D-1.02)
   An incoming outside call rings at two attendant consoles simultaneously.

C. Interconsole IRNA (Section 3-D-1.03)
   If an incoming outside call ringing at one attendant console is not answered within a specified time period (Attendant Overflow Time), it will be automatically transferred to another attendant console.

This selection can be done by entering the WS3 command at Dumb programming mode.
Refer to “Attendant Incoming Mode” in Section 10-C-53.00 World Select 3 (WS3).

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Incoming Mode (Day)	9-E-1.01	10-C-14.00
“World Select 3 (WS3)”,	—	10-C-53.00

Conditions

(1)The attendant console is not available to receive a call in:
- Night mode (Section 3-B-8.00)
- ATT-FWD mode (Section 6-A-1.00)

(2)What if all six LOOP keys on the attendant console are in use?
- Heavy Traffic Overflow Transfer to Station (Section 6-G-2.00)

(3)What if an incoming outside call ringing at a LOOP key is not answered?
- Automatic Redirection If No Answer (Section 6-G-7.00)

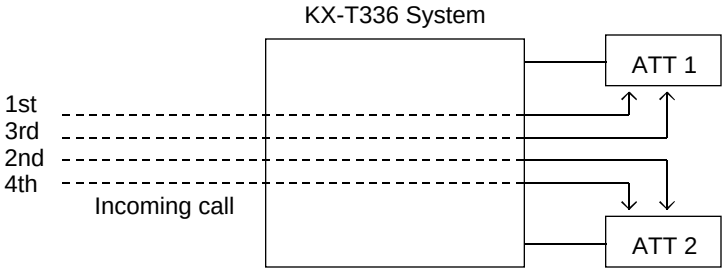
(4)Tenant Service
To use two attendant consoles in dual console operation mode, both consoles should belong to either one of two Tenants.

(5) Operator Assignment
With Dual Console Operation, two attendant consoles must be programmed as operator 1 and operator 2 for the above operation to be valid. See Section 3-B-5.00 “Operator” for further information.

1.01 Load Sharing

Description

When two attendant consoles are equipped with the KX-T336 system, incoming calls directed to the attendant console are distributed to each console evenly so that both consoles can share the same load.



In Dual Console Operation mode, “Load Sharing” is the default setting. This setting can be changed to one of the following other two settings by using the WS3 command at Dumb programming mode.

- Simultaneous Ringing (Section 3-D-1.02)
- Interconsole IRNA (Section 3-D-1.03)

Refer to Section 10-C-53.00 “World Select 3 (WS3)” for further information.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Incoming Mode (Day)	9-E-1.01	10-C-14.00
“World Select 3 (WS3)”,	—	10-C-53.00

Conditions

1. General and Specific Calls
   Incoming outside calls directed to the attendant console are categorized as “General” or “Specific.”

   (General Calls)

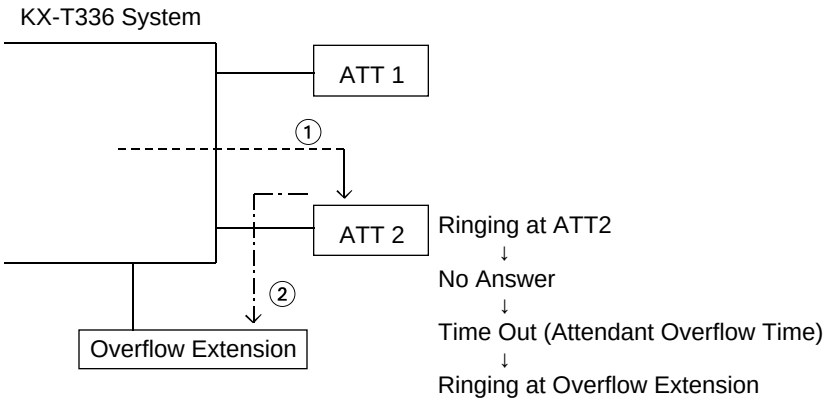
   - Operator Call (General)
   - Incoming outside calls routed via CO lines which belong to a Trunk Group whose Incoming Mode (Day) is “ATT.”
   - FDN for General Operator Call

   (Specific Calls)

   - Operator Calls (Specific)
   - Directory Number for ATT1 and 2

2. Call Distribution Order
   General calls are distributed to each console on the basis of “First In First Out.”
   Specific calls always arrive at the specified attendant console.

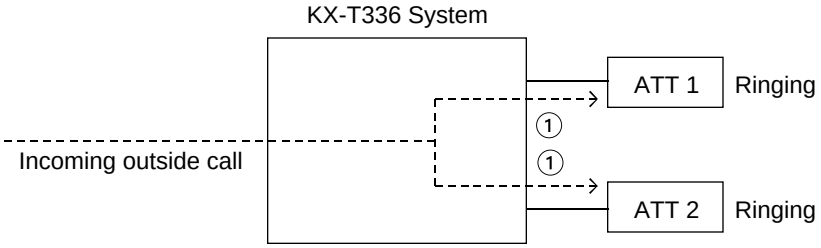
3. Automatic Redirection If No Answer
   If an incoming outside call (a call routed via a CO line which belongs to a Trunk Group whose Incoming Mode (Day) is “ATT”) ringing on a LOOP key of ATT1 or 2 is not answered within a specified time (Attendant Overflow Time), it may be redirected to the extension assigned as the overflow destination.
   Refer to Section 6-G-7.00 “Automatic Redirection If No Answer” for further information.



1.02 Simultaneous Ringing

Description

When two attendant consoles are equipped with the KX-T336 system, an incoming outside call directed to the attendant console will ring on a LOOP key of both attendant consoles simultaneously.



In Dual Console Operation mode, “Load Sharing” is the default setting. This “Simultaneous Ringing” setting can be selected by using the WS3 command at Dumb programming mode.
Refer to Section 10-C-53.00 “World Select 3 (WS3)” for further information.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Incoming Mode (Day)	9-E-1.01	10-C-14.00
“World Select 3 (WS3)”,	—	10-C-53.00

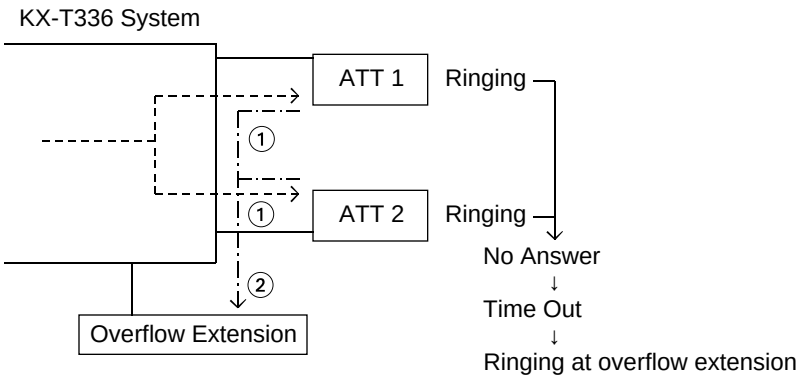
Conditions

1. A call will ring simultaneously at both ATT1 and 2 when:
   - An incoming call is routed via a CO line which belongs to a Trunk Group whose Incoming Mode (Day) is assigned as “ATT.”
   - Both ATT1 and 2 are available to receive a call.
   - An idle LOOP key is available at both ATT1 and 2.

   Otherwise, a call will ring at either one of two attendant consoles.

2. Automatic Redirection If No Answer
   If an incoming outside call (a call routed via a CO line which belongs to a Trunk Group whose Incoming Mode (Day) is “ATT”) ringing on a LOOP key of two attendant consoles simultaneously is not answered within a specified time (Attendant Overflow Time), it may be redirected to the extension assigned as the overflow destination.

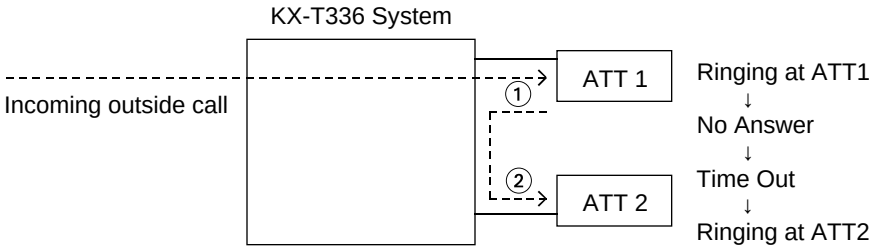
   Refer to Section 6-G-7.00 “Automatic Redirection If No Answer” for further information.



1.03 Interconsole IRNA

Description

When two attendant consoles are equipped with the KX-T336 system, if an incoming outside call ringing at a LOOP key of one attendant console is not answered within a specified time (Attendant Overflow Time), it will be redirected to another attendant console automatically.



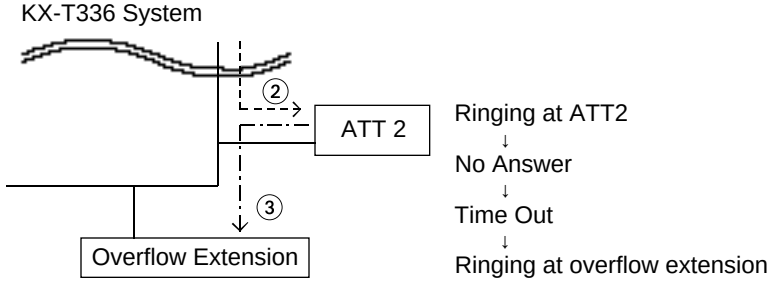
In Dual Console Operation mode, “Load Sharing” is the default setting. This “Interconsole IRNA” setting can be selected by using the WS3 command at Dumb programming mode.
Refer to Section 10-C-53.00 “World Select 3 (WS3)” for further information.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Incoming Mode (Day)	9-E-1.01	10-C-14.00
“World Select 3 (WS3)”,	—	10-C-53.00

Conditions

1. Interconsole IRNA works when:
   - An incoming call is routed via a CO line which belongs to a Trunk Group whose Incoming Mode (Day) is assigned as “ATT.”
   - An idle LOOP key is available at the second console when a call ringing at the first console is not answered within a specified time.
2. Attendant Overflow Time
   The timer which applies to the feature is “System—System Timer”, Attendant Overflow Time.
3. Automatic Redirection If No Answer
   If an incoming outside call (a call routed via a CO line which belongs to a Trunk Group whose Incoming Mode (Day) is “ATT”) ringing on a LOOP key of ATT2 (see illustration above) is not answered within a specified time (Attendant Overflow Time) it may be redirected to the extension assigned as the overflow extension.
   Refer to Section 6-G-7.00 “Automatic Redirection If No Answer” for further information.



2.00 Attendant Console-less Operation

2.01 Direct In Line (DIL)

Description

Once set in system program, this function makes it possible for an incoming call from a CO line to go directly to an extension without assistance of the attendant.
This function can be performed in two ways, as described below.

DIL 1:1:For putting an incoming call from a CO line trunk to a single destination
Assignable destinations are:

- Extension User
- FDN for Remote
- FDN for UCD group

DIL 1: N: For putting an incoming call from a CO line to a maximum of eight destinations simultaneously
Assignable destinations are:

- Extension User
- Pickup Group
- ICM Group

For DIL 1:1, set “Group-Trunk Group”, Incoming Mode (Day) to DIL 1:1, and program the CO line to this Trunk Group using “Trunk- CO Line”, Trunk Group. Then set the incoming destination in “Trunk-CO Line”, Direct Termination.

For DIL 1: N, program “Group-Trunk Group”, Incoming Mode (Day) to DIL 1: N, and program the “Group-Trunk Group”, Destination (DIL 1: N Only) Type and Number.

To use these functions in the Night mode, set the Day mode to the DIL 1:1 or DIL 1: N setting, and set “Group-Trunk Group”, Incoming Mode (Night) to Day Mode.

Programming

DIL 1:1

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”,	9-E-1.01	10-C-14.00
Incoming Mode (Day)		
Incoming Mode (Night)		
“Trunk-CO Line”,	9-F-1.00	10-C-18.00
Trunk Group		
Direct Termination		

DIL 1: N

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”,	9-E-1.01	10-C-14.00
Incoming Mode (Day)		
Incoming Mode (Night)		
“Group-Trunk Group (2/2)”,	9-E-1.02	10-C-15.00
Destination (DIL 1: N Only)		
Type and Number		

To use the DIL 1:1 and DIL 1: N functions, program “Group-Trunk Group”,Incoming/Outgoing to Both-Way or Incoming Only.

Conditions

If CO buttons are assigned, an incoming call to a PITS will arrive at one of the CO buttons (except PCO button). If no CO button is assigned, it will arrive at a PDN.

When a DIL 1:1 incoming call arrives at a PDN, it will also arrive at a PITS having a SDN whose owner is that PDN.

When a DIL 1: N incoming call arrives at a PDN, it will not arrive at a PITS having a SDN whose owner is that PDN.

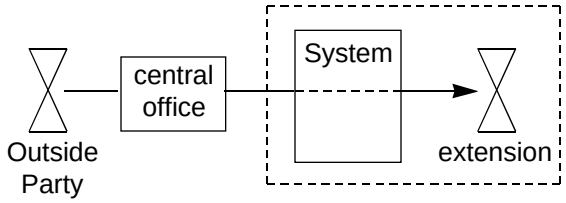
It is programmable that an incoming CO call routed via DIL 1:N feature arrives at “CO button only” or “CO button or PDN button.” For further information, refer to Section 10-C-53.00 “World Select 3 (WS3).”

2.02 Direct Inward System Access (DISA)

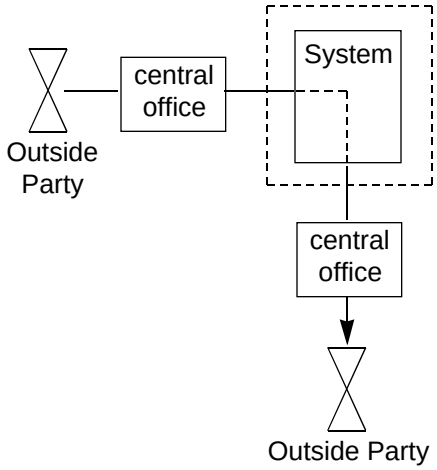
Description

DISA allows an outside party calling into the system on a DTMF line to directly access certain system features, without attendant assistance. After gaining access to the system, the caller can access allowed features by dialing the appropriate feature number.
The caller is required to enter DISA User Code before being allowed to make an outgoing CO call via DISA feature.
Once a DISA call has gained access to the system, it is treated as any other incoming CO call.

Extension call via DISA is made as follows:
Outgoing call via DISA is made as follows:



To utilize DISA feature, a DISA card is required



and assign “Special Attended-DISA”, For Use to “DISA.”

It can be used as one of the following four ways.

1. OGM 1 for UCD with OGM
2. OGM 2 for UCD with OGM
3. OGM for DISA
4. OGM for W-UP (Wake-up call)

Up to four DISA cards can be installed to the system.

Programming

System Programming	Reference	
	VT	Dumb
“Configuration-Slot Assignment”	9-C-2.00	10-C-2.00
“System-System Timer”, Intercept Routing Time-Out (DISA)	9-D-3.00	10-C-6.00
“Group-Trunk Group (1/2)”, Incoming Mode (Day) Incoming Mode (Night) Intercept Routing (Day) Intercept Routing (Night)	9-E-1.01	10-C-14.00
“Trunk-AGC”	9-F-3.00	10-C-21.00
“Special Attended-DISA”	9-K-1.00	10-C-40.00 to 41.00

Conditions

If Tenant Service is employed, the affiliation of DISA card can be programmed by “Special Attended-DISA”, Tenant.

Automatic Gain Control can be used for DISA to maintain the volume of CO-CO call via DISA feature by equipping up to four AGC cards. If Tenant Service is employed, the AGC card can be assigned to a tenant in “Trunk-AGC.”

Dialing “* ” allows the user to call again or disconnect the line. It is possible to disable it by setting “Special Attended-DISA”, Control Code “* ” to “No.”

Four digit DISA User Code is necessary for making outgoing calls via DISA. It is assigned in “Special Attended-DISA”, DISA User Code.

To execute Intercept Routing-No Answer and Rerouting for DISA calls, assign “System-System Timer”, Intercept Routing Time-Out (DISA) and “Group-Trunk Group”, Intercept Routing (Day) and (Night).
For further information, refer to Section 3-F-5.00 “Intercept Routing-No Answer (IRNA).”

Conditions

DISA calls should be made from external callers by DTMF dial type telephone instruments.

If reorder tone is returned but "* " is not dialed in 10 seconds, the line will be disconnected.

Rerouting starts in the cases below:

1) When nothing is dialed in 10 seconds during no tone heard after OGM is sent.
2) When a wrong extension number is dialed.
3) When the number of "Out Service" status extension is dialed.
4) When a wrong DISA user code is dialed.

If the destination of Intercept Routing is programmed, extension calls unanswered in programmed period are forwarded to the destination. The call will be disconnected after 60 seconds, if the destination does not answer. If no destination is programmed, extension calls are disconnected after 60 seconds, if unanswered.

Procedures for outgoing calls are similar to that from extensions.

Warning tone is sent during CO-CO conversation 15 seconds before time limit programmed in "Group-Trunk Group", CO-CO Duration Limit. It is possible to prolong the duration by dialing a digit other than "* " and "#." Prolonging the duration is enabled or disabled by system programming.

It can be selected whether detecting of the CPC signal is done at the end of the CO-CO conversation or not in "Trunk-AGC", Tone Detect.

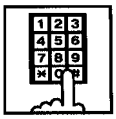
If "Tone Detect" is set to "Yes," the following will occur in each case:

<1> If the calling party finishes first, both lines are disconnected.

<2> If the receiving party finishes first, reorder tone is sent to the caller.

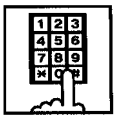
Operation

Calling an extension from outside



1. Dial the telephone number of the line which is programmed as a DISA line in this system.

   - You hear ringback tone until the system detects your call.
   - When it is detected, you hear the outgoing message if recorded, or no tone if not recorded.

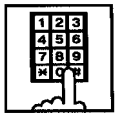


2. Dial the directory number of the extension.

   - You hear ringback tone.

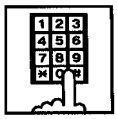
3. When the extension answers, start conversation.

Calling an external party



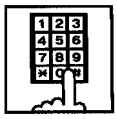
1. Dial the telephone number of the line which is programmed as a DISA line in this system.

   - You hear ringback tone until the system detects your call.
   - When it is detected, you hear the outgoing message if recorded, or no tone if not recorded.

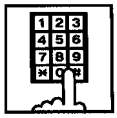


2. Dial the feature number for selecting a CO line.

   - You hear dial tone 2.



3. Dial the DISA user code: four digits.



4. Dial the telephone number of the external party.

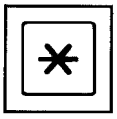
5. When the external party answers, start conversation (CO-CO conversation).

(Supplement)

If account code entry is forced for the accessed line by programming, you must dial the account code in step 4 before the telephone number.

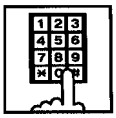
Calling again

While talking with an external party, or hearing ringback tone, busy tone, or reorder tone.



1. Dial "* ."

   - You hear dial tone 1.



2. To call an extension, follow the procedure for calling an extension from step 2.
   To call an external party, follow the procedure for calling an external party from step 4.

(Supplement)

If you dial "* " while hearing OGM, or hearing no tone in 10 seconds after OGM is sent, or hearing dial tone, you are disconnected from the line.

If you dial "* " during conversation with an extension, you are not disconnected and able to continue the conversation.

2.03 Direct Inward Dialing (DID)

Description

Incoming calls can be put through directly to extensions in accordance with the subscriber numbers sent from the Central Office.
Not only extensions but either an Attendant Console or UCD group may serve as the destination of the incoming calls via DID lines.

<u>for U.S.A. and Canada</u>
Available for receiving incoming calls only. DID lines cannot be used for making outside calls. DID card (KX-T96182) and T-1 Digital Trunk card (DID channel) are provided for this usage.

<u>for areas other than U.S.A. and Canada</u>
(Both-way DID service)
In some areas, DID lines can be used for both receiving incoming calls and making outside calls. One of the following three cards is required to utilize Both-way DID service.

- Both-way DID card (KX-T96182D) (Refer to Reference Guide for KX-T96182D).
- MFC DID card (KX-T96182CE) (Refer to Reference Guide for KX-T96182CE.)
- E-1 DIGITAL TRUNK CARD (KX-T96188) (Refer to Section 3-F-16.00 “E-1 Carrier”.)

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group”,		
Type	9-E-1.01	10-C-14.00
DID Digit Modification Table	9-E-1.02	10-C-15.00
“Trunk-CO Line”,	9-F-1.00	10-C-18.00
Trunk Group		
DID Start Arrangement		
“Special Attended-DID”,	9-K-2.00	10-C-43.00
Receive Digit		
Delete Digit		
Insert Dial No.		

To make use of DID trunks, program “Group-Trunk Group”, Type to DID, and assign the CO lines to be used for DID by programming the “Trunk-CO Line”, Trunk Group option. Set the DID Start Arrangement in “Trunk-CO Line” and the DID Digit Modification Table in “Group-Trunk Group (2/2)”. This table is used to convert the subscriber numbers sent from the Central Office into DNs or Floating Directory Numbers (FDN). The number of “received digits”, “digits to be deleted” and “the digits to insert” are programmed in the “Special Attended-DID” screen.

Conditions

A subscriber number received from the Central Office is converted into a DN or FDN according to the DID Digit Modification Table setting as follows.

<Example>
“Special Attended-DID” Table settings
Receive Digit: 4
Delete Digit: 2
Insert Dial No.: 2
Subscriber number received from the Central Office: 43112

Processing
<1> The “2” in 43112 is ignored since there are four receive digits. This leaves 4311.
<2> “43” is deleted since there are two delete digits. This leaves 11. Note that the digits are deleted from the beginning of the number.
<3> Inserting Dial No. “2” makes the final number 211 which serves as the DN or FDN. Note that digits are inserted before the beginning of the number.

Reorder tone is sent to the DID caller if the number of digits received is less than the number programmed in “Special Attended-DID”, Receive Digit.

The subscriber number received from the Central Office is converted into a DN or FDN. If it could not be put through to the incoming call destination, because the DN or FDN does not exist or the destination is Out of Service, the call is sent to the destination specified by the “Group-Trunk Group”, Intercept Routing (Day/Night). If there is nothing programmed for intercept routing then the call is sent to Operator 1.*

* If MFC signaling is utilized, reorder tone is sent to the caller in this case.

When the CO Forward Mode function has been programmed in “System-Class of Service” for the DID incoming call destination, forwarding will not take place, and the call will be put through to the extension.

2.04 Trunk Answer From Any Station (TAFAS)-Day Service

Description

Incoming CO calls programmed for TAFAS will ring the external pager and any extension user in the system can answer the calls by dialing the feature number for “Night Answer 1” (when a call is ringing at external pager 1) or “Night Answer 2” (when a call is ringing at external pager 2).

To activate this feature, assign “Group-Trunk Group”, Incoming Mode (Day) to TAFAS 1 or TAFAS 2, and “Trunk-CO Line” Trunk Group to “1 to 16” (Trunk Group Number whose Incoming Mode (Day) is assigned as TAFAS 1 or 2).
To utilize the external pager, assign “System-Operation”, External Paging 1, 2” to “Yes.”

Up to two external pagers can be connected to this system. TAFAS 1 is associated with external pager 1 and TAFAS 2 is associated with external pager 2.

Call handling in TAFAS is identical to UNA. The difference is that TAFAS is available in day mode and UNA is available in night mode.
For further information about UNA, refer to Section 4-I-1.01 “Universal Night Answer (UNA).”

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, External Paging 1, 2	9-D-1.01	10-C-4.00
“System-Numbering Plan (3/9)”, Night Answer 1 Night Answer 2	9-D-6.03	10-C-10.00
“Group-Trunk-Group (1/2)”, Incoming Mode (Day)	9-E-1.01	10-C-14.00
“Trunk-CO Line”, Trunk Group	9-F-1.00	10-C-18.00
“Trunk-Pager & Music Source”, External Pager-Tenant	9-F-2.00	10-C-19.00

Conditions

If tenant service is employed :
The affiliation of each external pager is determined by the system programming in “Trunk-Pager & Music Source”, External Pager-Tenant.
Extension users cannot answer the TAFAS call ringing at an external pager in the different tenant.

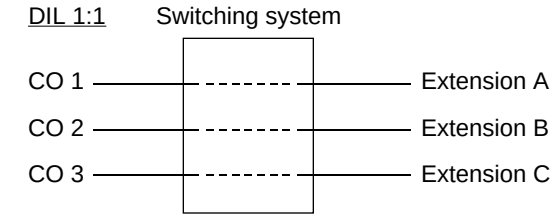
2.05 Uniform Call Distribution (UCD)-General

Description

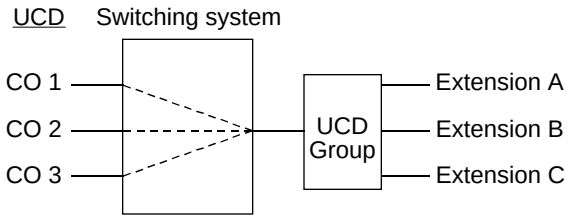
Calls to a UCD group are distributed uniformly among the group members so that each member can share the same load.

This UCD feature is particularly helpful when certain extension receives a high volume of calls compared with other extensions.

(Example)



Calls from CO 1 always arrive at Extension A.
Calls from CO 2 always arrive at Extension B.
Calls from CO 3 always arrive at Extension C.



Calls to a UCD group hunt for an idle station in a circular way, starting at the extension following the last one called.
Call completion time is minimized without attendant assistance.

The UCD group is comprised of one or more pickup groups in the same Intercom group.
An extension can be in only one UCD group.
Members can leave the group temporarily, to prevent calls being sent to their extension (Logout).

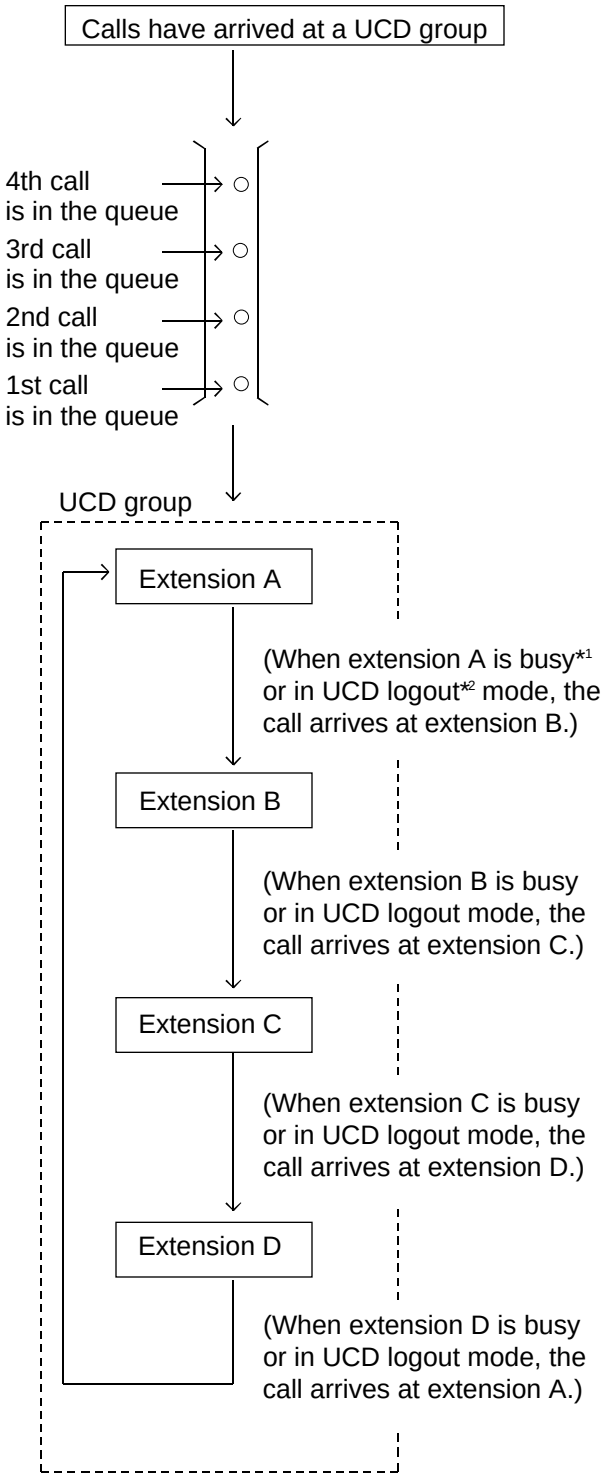
UP to 32 UCD groups can be set up in the system and they can be categorized into the following two types.

1. UCD group with OGM (01-04)
   –Section 2.06-1
2. UCD group without OGM (05-32)
   –Section 2.06-2

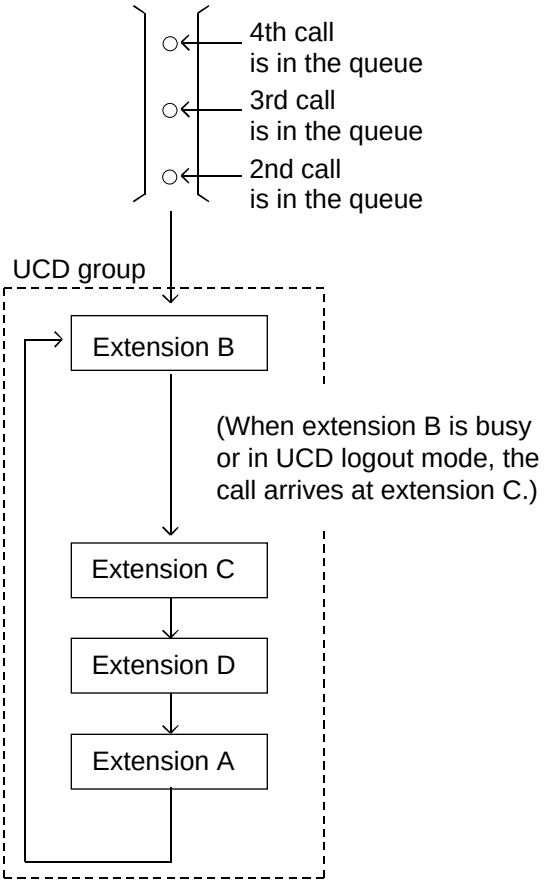
Detailed information is described in the Section 3-D-2.06.

An outline sketch of UCD is shown below.

(1)When a number of calls have been arrived at a UCD group, the 1st call arrives at extension A first.



(2)When the 1st call arrives at extension A, the 2nd call arrives at extension B.



(3)When the 2nd call arrives at extension C, the 3rd call will arrive at extension D.

(4)When the 3rd call arrives at extension D, the 4th call will arrive at extension A.

[Note]

*1 Busy status

- When “Do Not Disturb (DND)” or “Call Forwarding” has been set to the extension.
- When any one of PDN is used. (Including using own PDN as an SDN at another extension)
- When the extension is off-hook.

*2 Logout

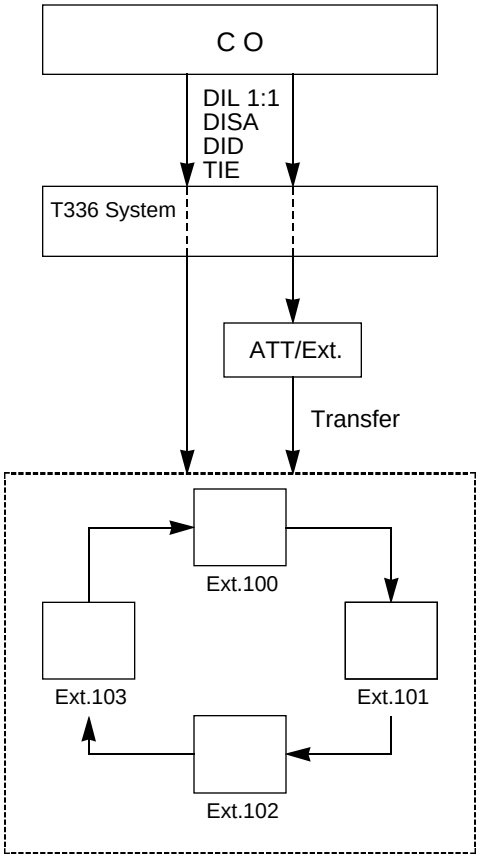
Members can leave the group temporarily, to prevent calls being sent to their extension.

2.06 Uniform Call Distribution (UCD)-with/without OGM

2.06-1 UCD Group with OGM (01-04)

Description

UCD Groups 01-04 are provided exclusively for receiving outside calls.



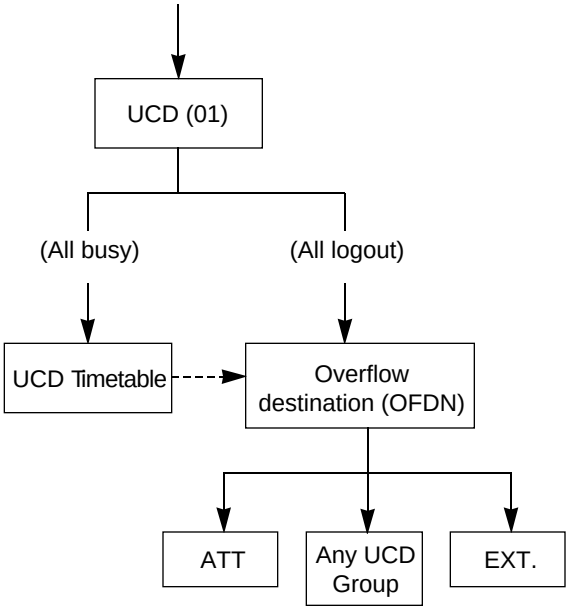
UCD group (01-04)

If all group members are busy

A caller may receive an answer delay announcement (OGM 1,2) and be placed in the waiting queue until any one of busy group member goes on-hook, or be redirected to another destination (Overflow destination), or receive any other treatments.
A type of treatments may differ depending on the preprogrammed UCD Timetable.

If all group members are not available to answer a call (All Logout)

A call will be redirected to another destination (Overflow destination) immediately.



(only one for each group)

Programming

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (1/2)" Incoming Mode (Day) -DIL 1:1 Incoming Mode (Night) -Day Mode	9-E-1.01	10-C-14.00
"Group-Call Pickup Group", UCD	9-E-3.00	10-C-17.00
"Trunk-CO Line", Direct Termination-DN	9-F-1.00	10-C-18.00
"Extension-Station (1/3)", Pickup Group	9-G-1.01	10-C-22.00
"Special Attended-DISA", For Use	9-K-1.00	10-C-40.00
"Special Attended-UCD (1/2)", 01 to 04	9-K-3.01	10-C-44.00
"Special Attended-UCD (2/2)"	9-K-3.02	10-C-45.00
"UCD Auto Log-out Operation (ULO)"	—	10-C-70.00

Conditions

1. Calls which can arrive at a UCD group (with OGM) are:
   - Incoming outside calls via DIL(1:1) for which destination is set as FDN of a UCD group
   - Incoming outside calls via DID or TIE by dialing FDN of a UCD group
   - Incoming outside calls via DISA by dialing FDN of a UCD group
   - Incoming outside calls transferred by an attendant console or extension

2. Login and Logout

   Members can leave the group temporarily when they will be away from their desks, to prevent calls being sent to their extension. (Logout). They can return to the group when they are ready to answer a call (Login). Refer to Section 4-D-8.00 “Uniform Call Distribution (UCD)-Log Out” for more information on Login and Logout.

3. Busy status
   - When “Do Not Disturb (DND)” or “Call Forwarding” has been set to the extension.
   - When any one of PDN has been used. (Including using own PDN as an SDN at another extension)
   - When the extension is off-hook.

4. Auto Log-out

   When a group member does not answer a call more than a set time period (“Call Forwarding-No Answer Time-Out”), the call will be automatically transferred to other member's extension. If “No Answer Time-Out” occurs twice in succession on the same extension, it automatically set to log-out status.

   Note:
   From software version 15.XX or higher, “Auto Log-out” can be disabled on a UCD Group basis. See Section 10-C-70.00 “UCD Auto Log-out Operation (ULO)”.

   What if all members are logged-out?

   Then depending on your software version, the call is handled as follows.

   (Software version 8. XX or higher)
   The call overflows to the overflow destination immediately after the Auto-Logout.
   This is changed from 6.XX versions.

   (Software version 6.XX or higher)
   The call is put in the waiting queue. but continues to hear ringback tone.
   There is no timetable treatment.

5. Overflow destination

   One of the following three destinations can be assigned as the overflow destination (OFDN) per UCD group (01-04).
   - Attendant Console
   - Extension
   - Another UCD Group (01-04), (05-32)

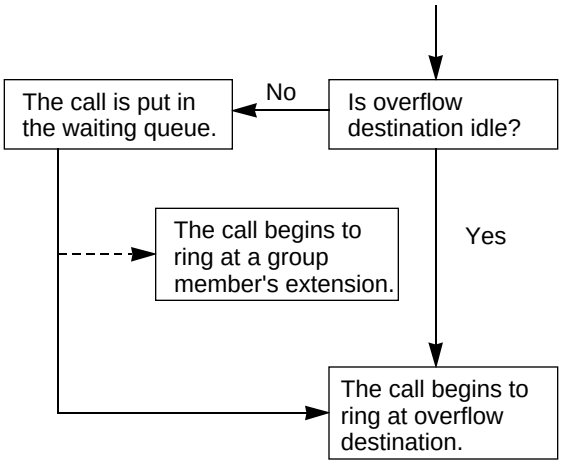
(Treatment of the calls transferred to the overflow destination (OFDN))

(1) What if the overflow destination is busy?

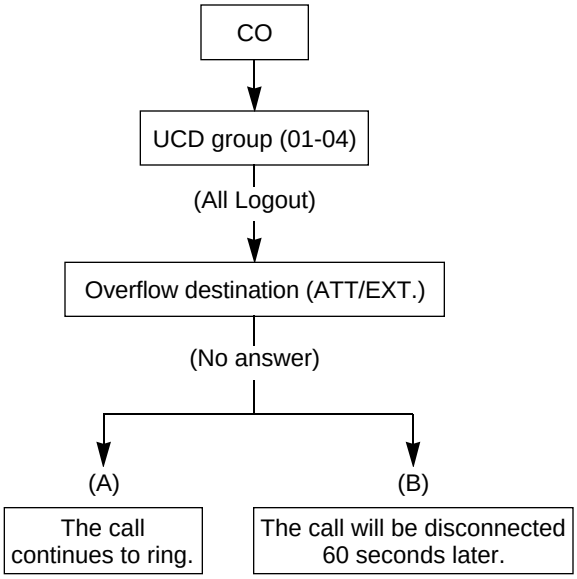
The call is put in the waiting queue, and will begin to ring at the overflow destination as soon as it becomes idle.

or

The call may begin to ring at a group member's extension, if it becomes idle while overflow destination is still busy.



(2) What if a call ringing at overflow destination (ATT/EXT.) is not answered?



(A) A call which comes in directly on the overflow destination*1 continues to ring on it.

(B) A call which comes in on the overflow destination after being answered or held once by the system*2 will be disconnected automatically, if not answered by the overflow destination within 60 seconds.

*1 A call via DIL 1:1, DID.

*2 A call via DISA, transferred by ATT or Extension, or a call held by the system as a treatment of the UCD Time Table.

6. OGM1 and OGM2

To utilize OGM, install Direct Inward System Access (DISA) card to the system and assign the usage of DISA card to OGM1 and/or OGM2 by system programming in advance.
The Operator 1 can record OGM.
Up to four DISA cards can be installed to the system.
Four OGMs per DISA card can be sent to outside callers simultaneously.
Refer to Section 3-F-4.00, 4-I-13.00 and 6-J-6.00 “Outgoing Message (OGM) Recording and Playing Back,” for further information.

7. UCD Timetable

When all extensions in a UCD group are busy, calls are handled according to the pre-programmed timetable.

The timetable is assigned to the system by employing “UCD Time Table-UCD (2/2)” in system programming.

(1) Number of timetables
Each UCD group (01 to 04) has own timetable respectively.

(2) Up to 16 steps can be registered per timetable by selecting a command listed below.

Command list and functions

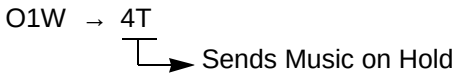
Command	Functions
1T	Callers are put in the waiting queue for 15 seconds.
2T	Callers are put in the waiting queue for 30 seconds.
3T	Callers are put in the waiting queue for 45 seconds.
4T	Callers are put in the waiting queue for 60 seconds.
O1W	When OGM1 is in use, wait until OGM1 becomes available and then OGM1 is sent to the caller.
O2W	When OGM2 is in use, wait until OGM2 becomes available and then OGM2 is sent to the caller.
O1S	OGM1 is sent to the caller if available. When OGM1 is in use, skips to the next step without sending OGM1.
O2S	OGM2 is sent to the caller if available. When OGM2 is in use, skips to the next step without sending OGM2.
H	Music-on-Hold is sent to the caller.
TR	Transfers a call to the overflow destination set by “OFDN” of “Special Attended-UCD(1/2)” in system programming.
OFF	Disconnects the outside call.
RET	Returns to the first column.

Note: Any command after “TR” or “OFF” does not function.

(3) Music on Hold is sent to the caller in the queue until a group member answers it.

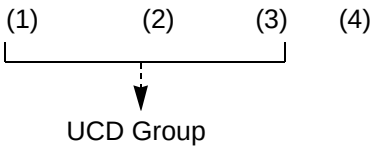
(Example)

In the following case, Music on Hold is sent to the caller, during 4T (60 seconds) interval.



Timetable operation examples

(Example 1) O1S → 4T → 2T → O2S → TR



(1)The caller hears OGM1, if available.

(Example)

Sorry, all lines are busy. Please wait a moment

- What if OGM1 is busy?

  Steps (1) and (2) will be skipped. The caller hears OGM2, if available (Go to Step 3).

  If “O1W” is used instead of “O1S,” the caller first hears ringback tone and then will hear OGM1 as soon as it becomes available (Go to Step 2).

- What if OGM1 is Out of Service?

  Steps (1), (2) and (3) will be skipped. The caller is directly transferred to the Overflow destination (Go to Step 4).

(2)The caller hears Music on Hold for 90 seconds (4T + 2T).

(3)The caller hears OGM2.

(Example)

Sorry, all lines are still busy. Calling the Operator.

(4)The caller is transferred to the Overflow destination (Operator or covering extension).

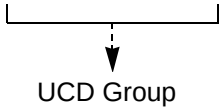
Note:

- During steps (1) through (3), the caller will be connected to a UCD group member as soon as anyone of members becomes available to answer the call.

(Example 2) O1S → H → 4T → 2T → O2S → H → TR

If “H” command is used as shown above, Music on Hold is always sent to the caller whether OGMs are In Service or not.

(Example 3) O1S → 2T → O2W → OFF
(1) (2) (3) (4)



(1)The caller hears OGM1.

(Example)

Sorry, all lines are busy. Please wait a moment.

If OGM1 is busy or Out of Service, this step will be skipped.
Then the caller hears ringback tone.

(2)The caller hears Music on Hold for 30 seconds (2T).

(3)The caller hears OGM2.

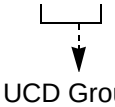
(Example)

Sorry, all lines are still busy. Please call us again. Thank you for calling.

If OGM2 is busy, the caller first hears ringback tone and then will hear OGM2 as soon as it becomes available.

(4)The caller is disconnected from the switch.

(Example 4) H → TR
(1)

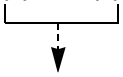


(1)The caller hears Music on Hold until anyone of the group members or Overflow destination becomes idle.

Note:

- If “IT” command is used instead of “H,” the caller hears ringback tone instead of Music on Hold.

(Example 5) H → O1S → TR
(1) (2) (3)



(1)This step is skipped automatically.

“H” does not function.

(2)The caller hears OGM1 followed by Music on Hold.

(3)The caller is transferred to the Overflow destination.

(Example 6) → O1S → 2T → O2W → 2T → RET
(1) (2) (3) (4) (5)

(1)The caller hears OGM1.

(Example)

Sorry, all lines are busy. Please wait a moment.

If OGM1 is busy or Out of Service, this step will be skipped.
Then the caller hears ringback tone.

(2)The caller hears Music on Hold for 30 seconds (2T).

(3)The caller hears OGM2.

(Example)

Sorry, all lines are still busy. Please wait a moment.

If OGM2 is busy, the caller first hears ringback tone and then will hear OGM2 as soon as it becomes available.

(4)Same as the step (2).

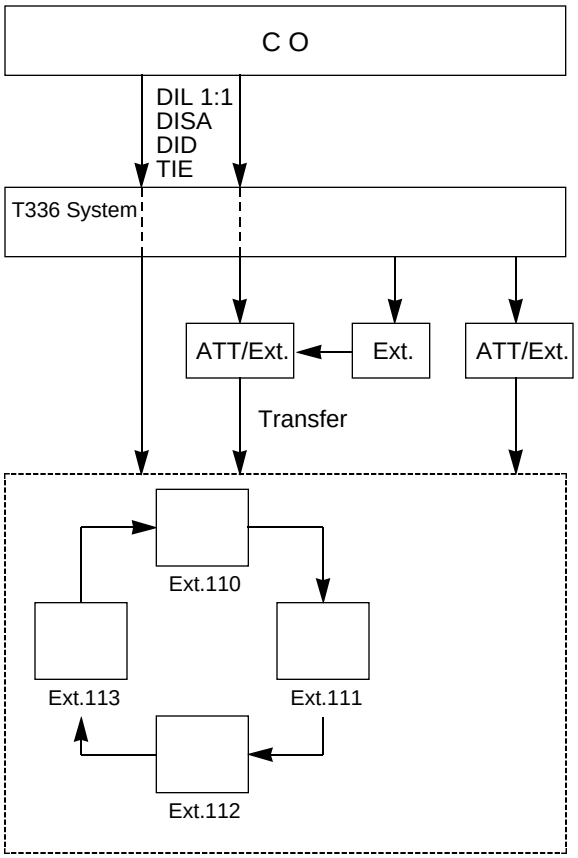
(5)Go back to the step (1).

2.06 Uniform Call Distribution (UCD)-with/without OGM

2.06-2 UCD Group without OGM (05-32)

Description

UCD Groups (05-32) are provided to receive both extension and outside calls.



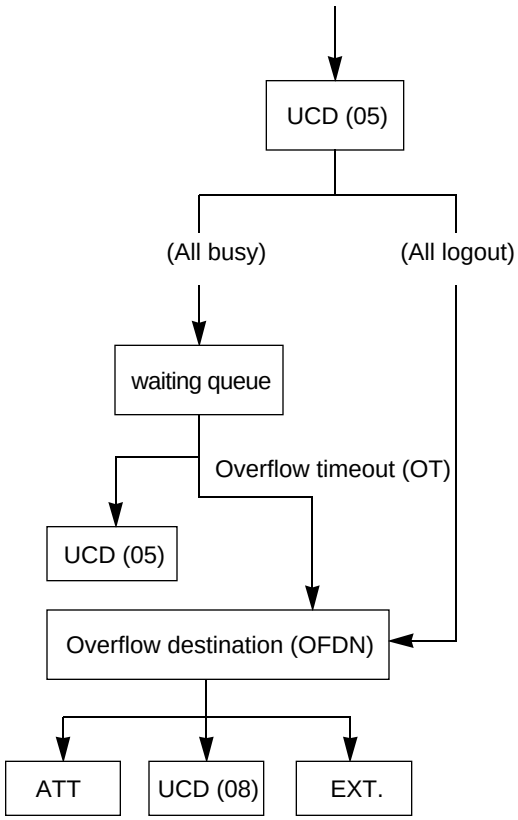
UCD group (05-32)

If all group members are busy

A call is placed in the waiting queue and the caller hears ringback tone.
A call in the queue will be redirected to another destination (Overflow destination) if all group members are still busy after a specified time period (Overflow Timer – OT) has elapsed.

If all group members are not available to answer a call (All Logout)

A call will be redirected to another destination (Overflow destination) immediately.



Programming

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (1/2)" Incoming Mode (Day) -DIL 1:1 Incoming Mode (Night) -Day Mode	9-E-101	10-C-14.00
"Group-Call Pickup Group", UCD	9-E-3.00	10-C-17.00
"Trunk-CO Line", Direct Termination-DN	9-F-1.00	10-C-18.00
"Extension-Station (1/3)", Pickup Group	9-G-1.01	10-C-22.00
"Special Attended-UCD (1/2)" 05 to 32	9-K-3.01	10-C-44.00
"UCD Auto Log-out operation (ULO)"	—	10-C-70.00

Conditions

1. Calls which can arrive at UCD group (05-32) are:

(1) Outside calls

- Incoming outside calls via DIL (1:1) for which call destination is set as FDN of a UCD group
- Incoming outside calls via DID by dialing FDN of a UCD group
- Incoming outside calls via DISA by dialing FDN of a UCD group
- Incoming outside calls transferred by the Extension or Attendant Console

(2)Extension calls

- Calls made by extension or attendant console by dialing FDN of UCD group
- Calls transferred by extension or attendant console by dialing FDN of UCD group.

2. Login and Logout

   Members can leave the group temporarily when they will be away from their desks, to prevent calls being sent to their extension. (Logout)
   They can return to the group when they are ready to answer a call. (Login)
   Refer to Section 4-D-8.00 “Uniform Call Distribution (UCD)- Log Out” for more information on login and logout.

3. Busy status

   - When “Do Not Disturb (DND)” or “Call Forwarding” has been set to the extension.
   - When any one of PDN is used. (Including using own PDN as an SDN at another extension)
   - When the extension is off-hook.

<LCD display> (Extension user only)

When all extensions within a UCD group are busy, the display, if provided, of the caller's PITS shows:

```
1234: UCD GRP 12
↓          ↓
FDN        UCD group number
```

4. Overflow destination

   One of the following three destinations can be assigned as the overflow destination (OFDN) per UCD group (05-32)

   - Attendant Console
   - Extension
   - Another UCD Group (05-32)*

   * UCD group (01-04) is not available to set as the overflow destination of a UCD group (05-32).

<LCD display> (Extension user only)

When a call to a UCD group is transferred and placed to another UCD group assigned as overflow destination, the display, if provided, of the caller's PITS shows:

```
→ 5678: UCD  GRP  08
```

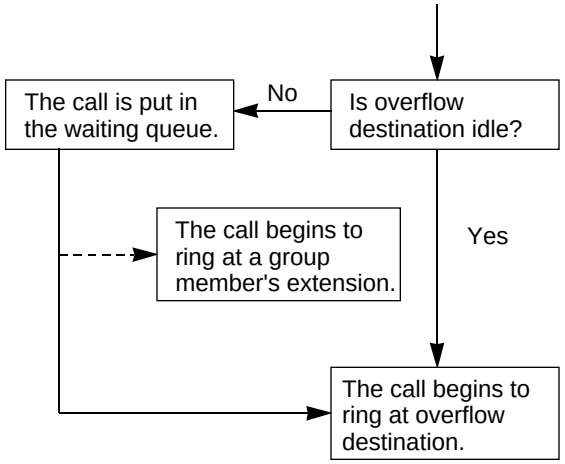
(Treatment of the calls transferred to the overflow destination (OFDN))

(1) What if the overflow destination is busy?

The call is put in the waiting queue, and will begin to ring at the overflow destination as soon as it becomes idle.

or

The call may begin to ring at a group member's extension, if it becomes idle while overflow destination is still busy.



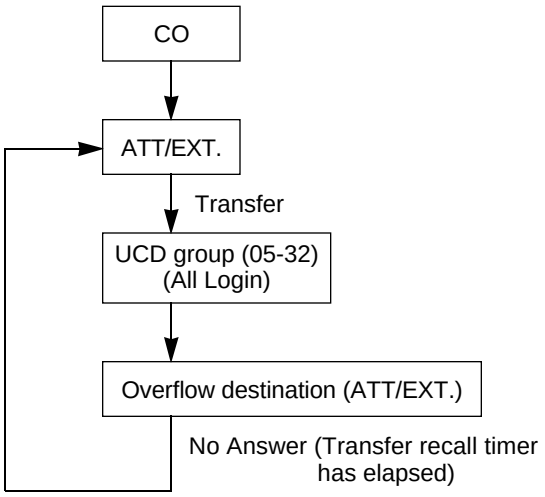
(2) What if a call ringing at overflow destination is not answered?

In case the overflow destination is an attendant console or extension.

1. When the call ringing at overflow destination has originally arrived to a UCD group by call transfer.

   (Transfer Recall)

   The call will ring back at the attendant console/extension who transferred it, if not answered until the transfer recall timer has elapsed.



2. When the call ringing at overflow destination has originally routed via DISA.

   <Disconnection>

   The call will be disconnected automatically, if not answered within 60 seconds.

5. Auto Log-out

When an extension in a UCD group does not answer more than a set time period (“Call Forwarding-No Answer Time-Out”),the call will be automatically transferred to other member's extension.
If “No Answer Time-Out” occurs twice in succession on the same extension, it is automatically set to Log-out status.

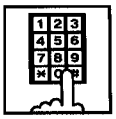
Note:
From software version 15.XX or higher, “Auto Log-out” can be disabled on a UCD Group basis. See Section 10-C-70.00 “UCD Auto Log-out” Operation (ULO).

Operation

Making a call from extension to a UCD group

1. Lift the handset or press the SP-PHONE button.

   • Dial tone 1 or 3 or 4 sounds.



2. Dial FDN of the UCD group.

2.07 Private CO (PCO)

Description

It is possible to connect a CO line as if it were connected directly to a DN button on a PITS. This operation is called Private CO (PCO).
It is then no longer possible to place outgoing calls from other extensions using this CO line. Also, an incoming call from the CO line assigned as PCO will arrive only at this PITS.

To program a Private CO line, set “Group-Trunk Group”, Type to PVL and program the CO line to the Private trunk group in “Trunk-CO Line”, Trunk Group.
Also, program the DN button on the PITS to PRV-CO using “Extension-Station (2/3)”, Type and assign the physical number of the Private CO line under Number.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Type	9-E-1.01	10-C-14.00
“Trunk-CO Line”, Trunk Group	9-F-1.00	10-C-18.00
“Extension-Station (2/3)”, Type and Number	9-G-1.02	10-C-24.00

Conditions

A Private CO button lights up red at the times below.

1) When the Private CO line is not In Service.
2) When the Private CO line has been set to CO Busy-Out.
3) When access using the Trunk Verify function is made by the Attendant Console.

A call held on a Private CO button can not be retrieved by other extensions, however, an incoming call to a Private CO button can be transferred.

When an incoming CO call arrives, ringing occurs instantly. Delayed ringing is not available.

2.08 Single CO (SCO)

Description

To support prompt handling of outside calls, a CO line can be assigned to a DN button on a PITS telephone.
When this function is assigned, a DN button on a PITS serves as the Single CO (SCO) button.
SCO button feature provides easy access to the CO lines for extension users who make and receive many outside calls.
The PITS telephone user can access a CO line by simply pressing the SCO button without dialing the CO line access code, and an incoming outside call can be directed to the PITS telephone via dedicated SCO button without assistance of the Operator.
In addition, the associated status LED provides busy/idle status and the busy to idle reminder.

SCO button can be used either one-way service (Incoming Only or Outgoing Only) or two-ways service (Both-Way).

SCO button can be assigned to a PITS telephone in conjunction with DIL 1:1 or DIL 1:N feature.

SCO button with DIL 1: 1 feature

When DIL 1: 1 feature is employed, SCO button can be assigned to the PITS telephone programmed as the destination of DIL 1: 1 feature.
If SCO button is not assigned on the PITS telephone, an incoming CO call arrives at a PDN button on it.

The table below shows the relationship between the DN button programmed as Single CO and the CO line status:

Indicator	CO Line Status
Off	Idle
Lights green	I-use
Green 60 wink	I-hold
Green 120 wink	I-exclusive hold, consultation hold, unattended conference
Green 240 wink	Incoming call (DIL 1: 1)
Lights red	Other-use, exclusive hold
Red 60 wink	Other-hold
Red 120 wink	Privacy release possible
Red 240 wink	Incoming call (DIL 1: N)

CO line which can be assigned as a SCO button is:

- A CO line which belongs to a trunk group assigned as Bothway or Incoming Only and whose Incoming Mode (Day) is DIL 1: 1, or DIL 1: N.

- A CO line which belongs to a trunk group assigned as Outgoing Only.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Station (2/3)", Type and Number	9-G-1.02	10-C-24.00

Conditions

- Even if Automatic Route Selection (ARS) function is set, it is overridden by an outgoing call made by pressing the Single CO button.

- The Single CO button indicator will light up red in the following circumstances.

  <1> When the Single CO is not In Service

  <2> Idle status and Single CO in Busy Out status

  <3> Idle status and Single CO in trunk route control status
  When the Single CO button is pressed in any of these statuses, its indicator lights up green but busy tone is heard.

In the following cases, the Single CO button indicator remains lit green and reorder tone is sent.

<1> When Calling Party Control signal has been detected during a call using the Single CO.

<2> When outgoing restriction applies to an outgoing call made from the Single CO.

2.09 Group CO (GCO)

Description

To support efficient utilization of CO lines, a group of CO lines (trunk group) can be assigned to a DN button on a PITS telephone.
When this function is assigned, a DN button on a PITS serves as the Group CO (GCO) button. GCO button feature provides better service with a given number of CO lines.

GCO button can be assigned to a PITS telephone in conjunction with DIL 1: N feature. Incoming calls on any CO line in the trunk group can be directed to a maximum of eight destinations (extension user, ICM group, pickup group) simultaneously.
In this case, incoming calls arrive at GCO buttons on the PITS telephone.
If GCO button is not assigned, incoming CO calls via DIL 1: N feature arrive at a PDN button on it.

To make an outside call, a PITS telephone user can access an idle CO line in the group by simply pressing the dedicated GCO button.

The table below shows the relationship between the DN button programmed as Group CO and the CO line status:

Indicator	CO Line Status
Off	Free CO line in trunk group and no incoming CO call
Lights green	I-use
Green 60 wink	I-hold
Green 120 wink	I-exclusive hold, consultation hold, unattended conference
Green 240 wink	—
Lights red	No idle CO lines in trunk group and no incoming call in trunk group
Red 60 wink	—
Red 120 wink	—
Red 240 wink	CO line receiving an incoming call in trunk group

Trunk group which can be assigned as a GCO button is:

- A trunk group assigned as Bothway or Incoming Only, and whose Incoming Mode (Day) is DIL 1:1 or DIL 1: N.
- A trunk group assigned as Outgoing Only.

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (2/3)”, Type and Number	9-G-1.02	10-C-24.00

Conditions

When the ARS function is set, it is overridden by outgoing calls made by the Group CO button.

Pressing a Group CO button when it is red serves to set the “Automatic Callback to Trunk” function.
See Section 4-C-6.01, 5-A-4.01 “Automatic Callback-Trunk” for details.

In the following cases, the Group CO button indicator remains green and reorder tone is sent.

<1> When Calling Party Control signal has been detected during a call using the Group CO.

<2> When outgoing restriction applies to an outgoing call made from a Group CO.

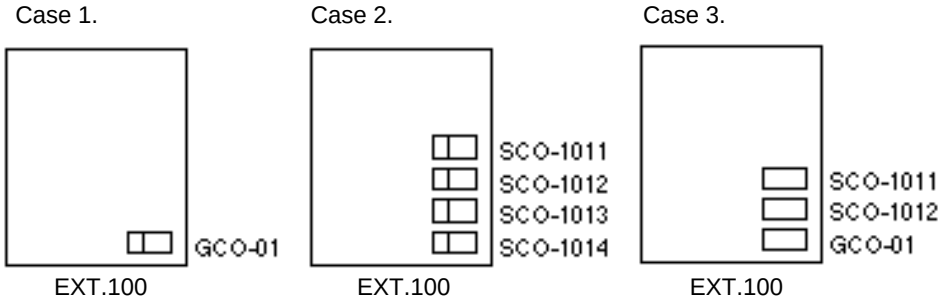
2.10 Flexible SCO/GCO Assignment

Description

CO lines of the same trunk group can be assigned to both GCO (as a group unit) and SCO (as a single unit) at a time.

Assuming that Trunk Group 01 consists of the following CO lines.

TG01	CO line 1011
	CO line 1012
	CO line 1013
	CO line 1014

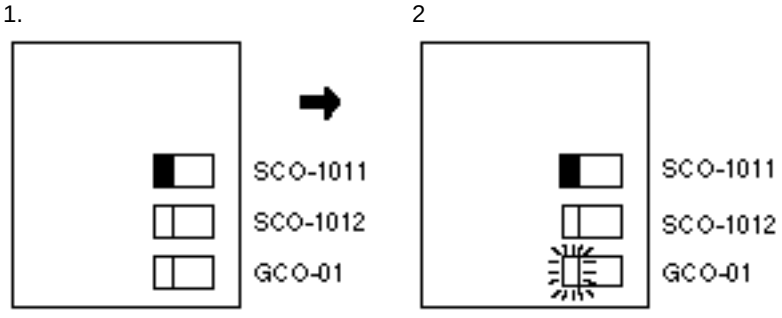


(Appearance of the call indication in Case 3.)
SCO has priority over GCO when incoming CO calls come.
When an outside call via CO line-1011 comes in on an extension, the call indication appears on SCO-1011, not on GCO-01.

However it may appear on GCO-01, if SCO-1011 is in use as follows.

(Example)

1. SCO-1011 is in use.
2. Indication of the call which comes in on Ext.100 via CO line-1011 appears on GCO-01.



Retrieving a call held on GCO from SCO.

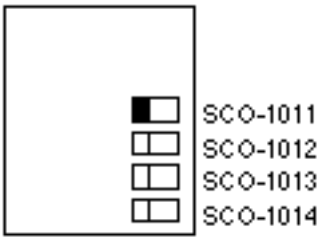
Assuming that Trunk Group 01 consists of the following CO lines and GCO and SCO buttons are assigned as follows.

TG01	CO line 1011
	CO line 1012
	CO line 1013
	CO line 1014

GCO-01 is in use at EXT.100 now.

EXT.100

GCO-01 is lit in green※.

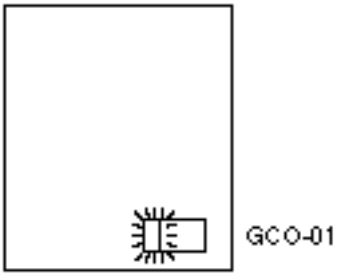


EXT.101

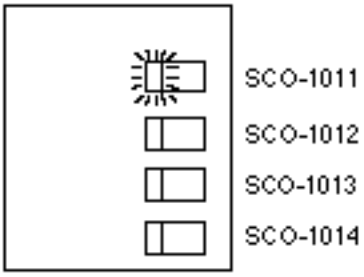
SCO-1011 is lit in red※.

※ In case, CO line 1011 is captured by pressing GCO-01.

When a call on GCO-01 is put on hold at EXT.100, GCO-01 begins to flash in green and SCO-1011 on EXT.101 begins to flash in red as follows:



EXT.100



EXT.101

EXT.101 can retrieve a call held on GCO-01 by simply pressing the red flashing SCO-1011.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Station (2/3)", Type and Number	9-G-1.02	10-C-24.00

Conditions

None

2.11 Multiple GCO Assignment

Description

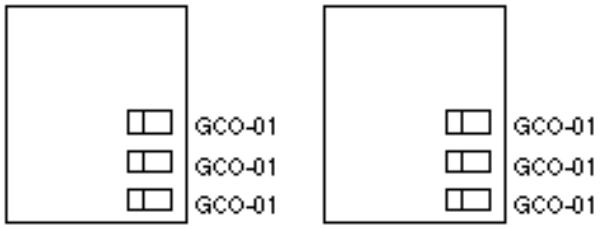
More than one GCO button of the same trunk group can be assigned to a single PITS extension.

(Example)
Assuming that Trunk Group 01 consists of the following CO lines.

TG01	CO line 1011
	CO line 1012
	CO line 1013
	CO line 1014

Case 1.

Case 2.



	Case 1	Case 2
Old version	Available	Not Available
New version	Available	

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (2/3)”, Type and Number	9-G-1.02	10-C-24.00

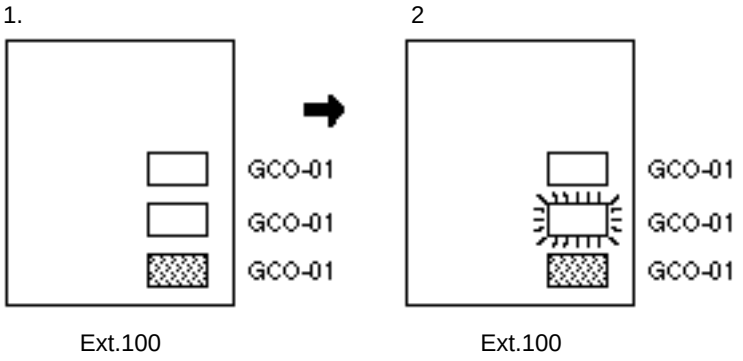
Conditions

(1) Appearance of the call indication in case 2.
If more than one outside call (via CO lines of the same trunk group) comes in under the following situation, the second call will appear on the next GCO button of the same extension.

(Example)

	CO Lines	Direct Termination
Trunk Group 01	CO Line 1011	Ext. 100
	CO Line 1012	
Incoming Mode (Day): DIL 1: 1	CO Line 1013	Ext. 101
	CO Line 1014	

1. GCO-01 is in use at Ext.100.
2. Indication of the call which comes in on Ext.100 via a CO line of Trunk Group 01 appears on another GCO of Ext.100.



3.00 Flexible Ringing Assignment

3.01 Flexible Ringing Assignment- No Ringing

Description

Each line access button on the PITS telephone can be programmed to ring or not to ring when incoming calls arrive during the day or at night. When incoming calls are placed to PITS from extensions, CO lines or doorphones, the indicators of the PDN, SDN, SCO, GCO and PCO buttons corresponding to the respective incoming calls start 240 winking. At the same time, ringing is sent to the phone.
It is possible to disable the ringing and have different settings in the day and night mode.

"Extension-Station", Day Ring and Night Ring are set to No Ring.

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (2/3)”, Day Ring Night Ring	9-G-1.02	10-C-24.00

Conditions

When incoming calls are placed to a PDN, SDN, SCO, GCO or PCO button for which no ringing has been set, it is still possible to answer the call flashing in 240 wink. In other words, responding to incoming calls is not affected by no ringing assignment in any way.

3.02 Flexible Ringing Assignment - Delayed Ringing

Description

When incoming calls are placed to PITS from extensions, CO lines or doorphones, the indicators of the PDN, SDN, SCO and GCO buttons corresponding to the respective incoming calls start 240 winking. At the same time, ringing is sent to the phone.
It is possible to delay the ringing and have different settings in the day and night mode.

“Extension-Station”, Day Ring and Night Ring are set to delayed ringing.
The delay time can be set to any one of three values.

Delayed 1: 5 seconds after placement of the incoming call
Delayed 3: 15 seconds after placement of the incoming call
Delayed 6: 30 seconds after placement of the incoming call

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (2/3)”, Day Ring Night Ring	9-G-1.02	10-C-24.00

Conditions

When incoming calls are placed to a PDN, SDN, SCO or GCO button for which delayed ringing has been set, it is still possible to answer the call flashing in 240 wink before ringing begins. In other words, responding to incoming calls is not affected by delayed ringing assignment in any way.

4.00 Discriminating Ringing

Description

It is possible to identify the type of an incoming call by the ringing pattern.

The ringing patterns are listed on Section 3-B-16.00 “Tone and Ringing Patterns.”

Programming

None

Conditions

All Transfer Recall signals have the same ringing pattern as Held Call Reminder.

If there are multiple incoming calls on an extension when the extension user goes on-hook, the calls are rung in the following sequence.

<1> Consultation Held Call Reminder
<2> In a PITS, an incoming call from a line in which the Prime Line Preference (incoming) function has been set
<3> Call Waiting. The call was waiting when the user was off-hook.
<4> CO line incoming call, extension incoming call, intercom incoming call, doorphone incoming call, Held Call Reminder, Transfer Recall, Unattended Conference Recall.
When there is more than one of the above incoming calls in a PITS, the calls are prioritized in DN sequence (PDN takes top priority). Intercom incoming calls have the lowest priority.
<5> Automatic Callback
<6> Timed Reminder

When a multiple number of incoming calls arrive at a PITS in the on-hook status, priority as to which calls should be rung is generally on a “first-come first-served” basis. However, when the Prime Line Preference (incoming) function has been set, this line takes precedence.

When there are multiple calls placed to an SLT which is on-hook, priority as to which calls should be rung is generally on a “first-come first-served” basis.

In an SLT, the Held Call Reminder for CO calls is the same as the CO line incoming ringing pattern. The ringing for extension hold is the same as the extension incoming ringing pattern.

There is no distinction made for calls to an Off Premise Extension (OPX): The CO line incoming ringing pattern only.

5.00 Station Hunting

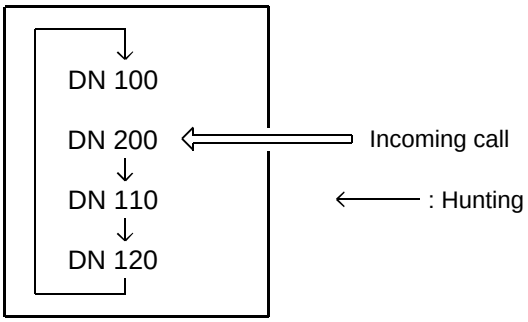
5.01 Station Hunting-Circular

Description

Station Hunting provides automatic redirection of incoming calls to an idle member of a hunt group when the called extension is busy. Idle extensions are automatically hunted in accordance with the hunting sequence set in the system program, and the call is put through to an idle extension.

The hunting sequence is set by "Extension-Station", Next Hunt Station.
The group formed by this setting is called a hunting group.
Busy status applies when there are no idle PDNs for the extension and when the extension is Out of Service or in fault condition.

Circular hunting is enabled when the last DN in the hunting group sets the first DN as the Next Hunt Station as follows.



Hunting Group - Circular

When an incoming call cannot be put through even after hunting all the extensions belonging to the hunting group, busy tone is sent to the calling party.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Station (1/3)", Next Hunt Station	9-G-1.01	10-C-22.00

Conditions

Extensions can be in only one hunting group.

Extensions in a UCD group cannot belong to hunting groups. Similarly, extensions in hunting groups cannot belong to UCD groups.

See Section 3-B-7.03 "Uniform Call Distribution (UCD) Group" for details on UCD groups.
See Section 3-D-2.05, 2.06 "Uniform Call Distribution (UCD)-without OGM/-with OGM" for details on the UCD function.

The following calls do not receive the Station Hunting treatment.

- A call on the ICM button.
- An incoming outside call routed via DIL 1:N or Private CO feature.
- A call on the SDN button.

When the incoming destination extension is in any of the following statuses, the operation below is accomplished.

Status	Operation
Idle PDN	Incoming call processed (caller hears ringback tone)
FWD setting	FWD processing
DND setting	DND processing

Depending on the status of the hunted extensions, the operation below is accomplished after hunting starts.

Status	Operation
Idle PDN	Incoming call processed (caller hears ringback tone)
Busy	Hunting proceeds to next station
FWD setting	Hunting proceeds to next station
DND setting	Hunting proceeds to next station

The call forwarded to a busy extension/Voice Mail Port receives the treatment of the Station Hunting if programmed.
Refer to Section 3-F-10.00 "Voice Processing System (VPS)" for further information.

A call redirected to another PITS extension by the Station Hunting feature always rings on a PDN button on it even if a call is originally routed on a SCO or GCO button.

5.02 Station Hunting-Terminal

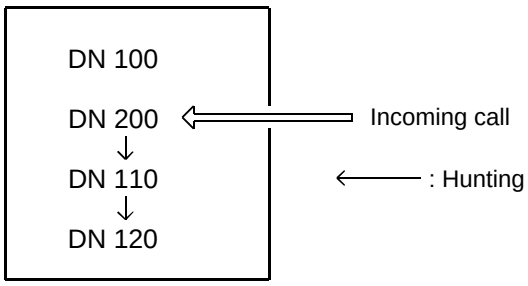
Description

Station Hunting provides automatic redirection of incoming calls to an idle member of a hunt group when the called extension is busy. Idle extensions are automatically hunted in accordance with the hunting sequence set in the system program, and the call is put through to an idle extension.

The hunting sequence is set by "Extension-Station", Next Hunt Station.
The group formed by this setting is called a hunting group.
Busy status applies when there are no idle PDN's for the extension and when the extension is Out of Service or in fault condition.

Terminal hunting is selected when the last station in the hunt leaves the Next Hunt Station blank.

Example



Hunting Group - Circular

When an incoming call cannot be put through even after hunting up to the last extension in the hunting group, busy tone is sent to the calling party.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Station (1/3)", Next Hunt Station	9-G-1.01	10-C-22.00

Conditions

An extension can belong to only one hunting group.

Extensions belonging to a UCD group cannot belong to hunting groups. Similarly, extensions belonging to hunting groups cannot belong to UCD groups.

See Section 3-B-7.03 "Uniform Call Distribution (UCD) Group" for details on UCD groups.
See Section 3-D-2.05, 2.06 "Uniform Call Distribution (UCD)-without OGM/-with OGM" for details on the UCD function.

The following calls do not receive the Station Hunting treatment.

- A call on the ICM button.
- An incoming outside call routed via DIL 1:N or Private CO feature.
- A call on the SDN button.

When the incoming destination extension is in any of the following statuses, the operation below is accomplished instead.

Status	Operation
Idle PDN	Incoming call processed (caller hears ringback tone)
FWD setting	FWD processing
DND setting	DND processing

Depending on the status of the hunted extensions, the operation below is accomplished after hunting starts.

Status	Operation
Idle PDN	Incoming call processed (caller hears ringback tone)
Busy	Hunting proceeds to next station
FWD setting	Hunting proceeds to next station
DND setting	Hunting proceeds to next station

The call forwarded to a busy extension/Voice Mail Port receives the treatment of the Station Hunting if programmed.
Refer to Section 3-F-10.00 "Voice Processing System (VPS)" for further information.

A call redirected to another PITS extension by the Station Hunting feature always rings on a PDN button on it even if a call is originally routed on a SCO or GCO button.

E. Holding Features

1.00 Music on Hold (for U.S.A. and Canada)

Description

The external music device (up to two units can be accommodated by this system) automatically sends Music on Hold to a party on Hold.

This function will only be executed when "System-Operation", External Music Source 1, 2 is set to Yes, "Trunk-Pager & Music Source", Music Source - For Use set either to "HOLD" or "HOLD & BGM" and the external music device has been connected.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", External Music Source 1, 2	9-D-1.01	10-C-4.00
"Trunk-Pager & Music Source", Music Source - For Use	9-F-2.00	10-C-20.00
Music Source - Tenant		

Conditions

Music on Hold is not sent to the party on Hold unless the settings outlined in description have been made.

If Tenant Service is employed, the "Trunk-Pager & Music Source", Music Source - Tenant setting determines which tenant the external music device belongs to.

When both external music devices are accommodated in the same tenant and the applications of both devices are set identically, the device connected to port 1 is used as the Music on Hold.
An example of this is given below.

<Example>

Port number	Trunk-Pager & Music Source	
	Tenant	For Use
1	1	HOLD
2	1	HOLD

1.00 Music on Hold (for areas other than U.S.A. and Canada)

Description

System built-in Music Source and/or External Music Source (if available) provide(s) Music on Hold and Background Music.
Music on Hold is a programmable feature that provides music from a music source to a party placed on Hold.
This lets the waiting party know that he is still connected.
For further information about Background Music, refer to the followings.

Section 4-I-4.00	"Background Music (BGM)"
Section 4-H-2.00 Section 5-F-2.00 Section 6-I-2.00	"Background Music (BGM) through External Pager"

<Using system built-in Music Source>
1. Set Music Source Selector Switch on the T-SW card to "INT MUS."
2. Assign "System-Operation (1/2)", External Music Source 1,2 to "No, Yes."
3. Assign "Trunk Pager & Music Source", For Use of Music Source 2 to "Hold" or "Hold & BGM."
   If you assign "BGM" to For Use, Music on Hold is not provided to the party placed on Hold.

<Using the External Music Device>
1. Connect External Music Device (such as a radio) to the system.
2. Set Music Selector Switch on the T-SW card to "MUS 2."
3. Assign "System-Operation (1/2)" External Music Source 1, 2 to "Yes, Yes."
4. Assign "Trunk Pager & Music Source", For Use of Music Source 2 to "Hold" or "Hold & BGM."
   If you assign "BGM" to For Use, Music on Hold is not provided to the party placed on Hold.

When Tenant Service is activated and two External Music Devices are connected to the system, the "Trunk-Pager & Music Source", Music Source - Tenant setting determines which tenant the external music device belongs to.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", External Music Source 1, 2	9-D-1.01	10-C-4.00
"Trunk-Pager & Music Source", Music Source - For Use Music Source - Tenant	9-F-2.00	10-C-20.00

Conditions

Even if tenant service is activated, the built-in Music Source cannot be divided between two tenants.
In this case, both built-in and external music source can be used at a time by the following setting.

1. Connect External Music Device such as a radio to EXT MUSIC Jack 2 on the T-SW Card.
2. Assign "System-Operation (1/2)", External Music Source 1 to "Yes."

When both external music devices are accommodated in the same tenant and the applications of both devices are set identically, the device connected to port 1 is used as the Music on Hold.
An example of this setting is given below.

<Example>

Port number	Trunk-Pager & Music Source	
	Tenant	For Use
1	1	HOLD
2	1	HOLD

2.00 Held Call Reminder

Description

When the Hold, Exclusive Hold or Call Park (system or station) function has been activated, the party on Hold cannot be kept waiting longer than a specific time. A call (when on-hook) or call waiting tone (when off-hook) is generated to the attendant console or extension as a reminder that there is a party on Hold.
The alarm tone sent when the handset is off hook, is heard through the speaker of a PITS and through the handset of an SLT.

To execute this function, set “System-Operation”, Held Call Reminder to “Yes.”
The extension and Attendant times for this function to be activated are respectively set by “System-System Timer”, Held Call Reminder and Held Call Reminder (ATT).
In order for the call waiting tone to be sent, the feature number for “Call Waiting Set” must be set.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, Held Call Reminder	9-D-1.01	10-C-4.00
“System-System Timer”, Held Call Reminder Held Call Reminder (ATT)	9-D-3.00	10-C-6.00
“System-Numbering Plan (05/11)”,Call Waiting Set	9-D-6.05	10-C-10.00

Conditions

If more than one call is placed on hold at a PITS extension, this function is executed starting with the earliest held call.

In a PITS, the CO line and extension Held Call Reminder call signals have respectively the same ringing pattern as the CO line and extension incoming call signals, and a monotone call signal is sent.
While the Held Call Reminder call signal or call waiting tone is being sent, if your PITS has a display, it shows:

Held Reminder

In an SLT, the CO line and extension Held Call Reminder call signals are exactly the same as the CO line and extension incoming call signals.

3.00 Transfer Recall

Description

If a call transferred by the Unscreened Call Transfer, Camp-On Transfer or Ringing Transfer function is not answered by the destination party within a preprogrammed time period, the call will return to the extension user or attendant console that transferred the call.
When the handset is on-hook or off-hook, the Transfer Recall call signal or call waiting tone, respectively, enables the party attempting the transfer to be advised that the call has not been answered. The call waiting tone sent when the handset is off-hook, is heard through the speaker in the case of a PITS and through the handset in the case of an SLT.

The time taken to activate this function for the extension or attendant console is set by “System-System Timer”, Transfer Recall.

Programming

System Programming	Reference	
	VT	Dumb
“System-System Timer”, Transfer Recall	9-D-3.00	10-C-6.00

Conditions

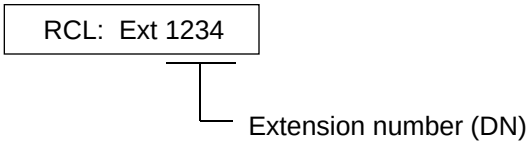
When there are more than one parties on hold, this function is started from the earliest time for the transfer operation.

In a PITS, the CO line and extension Transfer Recall call signals have the same ringing pattern as the CO line and extension incoming call signals, and a monotone call signal is sent.

While the Transfer Recall call signal or call waiting tone is being sent, if your PITS has a display, it shows:

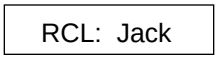
- When the transfer destination extension does not have a name programmed:

<Example>



- When the transfer destination extension has a name programmed:

<Example>



In an SLT, the CO line and extension Transfer Recall signals are exactly the same as the CO line and extension incoming call signals.

F. Other Features

1.00 Station Message Detail Recording (SMDR)

Description

When an output device such as the printer provided with RS-232C interface etc., is connected to the system, it is possible to print out the following information.

- Information about outgoing CO calls
- Information about incoming CO calls
- Error log data
- Programming data
- Traffic data

To execute SMDR, connect the output device to SIO #2 port of RS-232C on the basic shelf (KX-T336100) and set “System-Operation”, SMDR to “Yes.”
To print out the information about outgoing CO calls, set “System-Operation”, Outgoing Duration Log to “Yes.”
To print out the information about incoming CO calls, set “System-Operation”, Incoming Duration Log to “All Call.”
To print out error log data, set “System-Operation”, Error Log to “Yes.”
To print out programming data, set “System-Operation”, Programming to “Yes.”
To print out traffic data, set “System-Operation”, Traffic to “Yes.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation”, SMDR Page Length (4~99) Skip Perf (0~95) Outgoing Duration Log Incoming Duration Log Attendant Duration Special Carrier Name Print Secret Dial Error Log/Programming/Traffic	9-D-1.02	10-C-4.00
“System-Communication Interface”	9-D-7.00	10-C-11.00

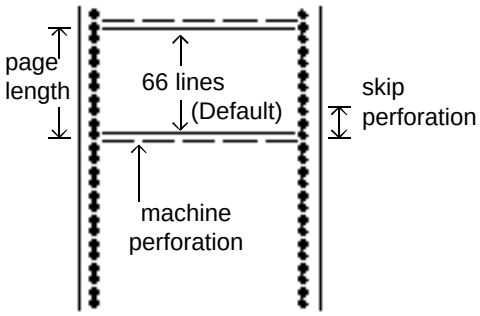
SMDR Parameters

Page Length

The page length may be selected to position a title and data on each page.
A page length code indicates the number of lines per page.
A title will be printed on the first three lines of each page.

4	4 lines per page
•	•
•	•
•	•
•	•
99	99 lines per page

Standard Continuous Paper (11 inches)



To print data, page length must be longer than skip perforation by four or more lines.

Skip Perforation

The skip perforation code indicates the number of lines to be skipped. When the print head reaches the line designated, the print head moves to the top position of the next page.

0	Print head does not skip. (Default)
1	Print head skips the last line.
2	Print head skips the last two lines.
•	•
•	•
•	•
•	•
95	Print head skips the last 95 lines.

Typical SMDR Call Detail Report (Information about CO calls)

```
***********************************************************************
Date      Time     T CD  Sour   Dest   DN         Dial Number       Duration  Acc code
***********************************************************************
03/24/91 10:03AM  1      E1011  T1017  1011 1234567890123456         00:05'12  1234567890
03/24/91 10:05AM  1      E1012  T1014  1011 4222144                  00:01'24

  (1)      (2)   (3)(4)  (5)    (6)    (7)        (8)                  (9)       (10)
```

(1) Date (start of call)
03 / 24 / 91
- 03 — month
- 24 — day
- 91 — year

(2) Time (start of call)
10 : 05 AM
- 10 — hour
- 05 — minute
- AM — a.m. or p.m.

(3) T (tenant number)
1 or 2

(4) CD (condition code)

- A0 : DISA, OGM-UCD handling
- A1 : Attendant Console 1 handling
- A2 : Attendant Console 2 handling
- D1 : DISA code 1
- D2 : DISA code 2
- D3 : DISA code 3
- D4 : DISA code 4
- D5 : DISA code 5
- D6 : DISA code 6
- D7 : DISA code 7
- D8 : DISA code 8
- FW : Call Forwarding to Trunk
- RM : Remote Maintenance
- RA : Remote Alarm
- TR : Transfer
- OR : COS Override (Dial transfer, Walking COS)

(5) Sour (source: calling party)

- EXXX/EXXXX : extension number
- A0 : DISA, OGM-UCD
- A1/A2 : Attendant Console number
- TXXXX : trunk physical number

(6) Dest (destination: called party)

- EXXX/EXXXX : extension number
- A0 : DISA, OGM-UCD
- A1/A2 : Attendant Console number
- TXXXX : trunk physical number

(7) DN (directory number)

- XXX/XXXX : used directory number
- (Blank) : when using CO button

(8) Dial Number

(for U.S.A. and Canada)
Dial Number printout type changes depending on the setting of "System-Operation", Special Carrier Name.
When it is set to "Dial":
The dialed number sent to the CO line is printed out at a maximum of 21 digits.
When it is set to "User Name":
The name stored in "Special Carrier Access", Name is printed out in three letters or marks.
When it is set to "Default":
When using Equal Access, "EQ1 to EQ4" is printed out.
When using OCC Access, "OC1 to OC4" is printed out.

(for areas other than U.S.A. and Canada)
The dialed number sent to the CO line is printed out at a maximum of 21 digits.

(9) Duration (duration of call)
00 : 01 ' 24
- 00 — hour
- 01 — minute
- 24 — second

(10) Acc code (account code)
Account code is printed out at a maximum of 10 digits.

2.00 Off Premise Extension (OPX)

Description

Single line telephones installed off the premise can be operated via a public or private network in exactly the same way as extension which are on the premise.
Up to 80 Off Premise Extensions can be installed per system.

The OPX card and OPX Power Unit are required. OPX must be set in the "Configuration-Slot Assignment."

Programming

System Programming	Reference	
	VT	Dumb
"Configuration-Slot Assignment"	9-C-2.00	10-C-2.00

Conditions

When an incoming call is placed to OPX, ringing is heard in all the CO line incoming patterns.
A doorphone incoming call cannot be sent to an OPX telephone.

3.00 Walking Station

Description

It is possible to move an extension to a new location without re-programming.
When moving a telephone, dial the feature number for "Walking Station Set" at both the source and destination telephones.
After the move, dial the feature number for "Walking Station Cancel" and the original extension number of the moved extension.
Up to two telephones in a system can be moved simultaneously.
Before executing this function, assign "System-Class of Service (1/2)", Walking Station to "Yes" for the extension.

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (1/2)", Walking Station	9-D-4.01	10-C-7.00
"System-Numbering Plan (07/11)", Walking Station Set Walking Station Cancel	9-D-6.07	10-C-10.00

Conditions

It is possible to move a telephone to an extension which is in the pre-install status. In this case, dial the feature number for "Walking Station Set" only at the extension to be moved, and dial the feature number for "Walking Station Cancel" and the original extension number at the destination extension.

With a PITS, this function is executed from a PDN.

The telephone type (PITS, SLT, OPX) must be the same at the source and destination.

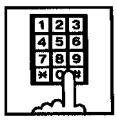
If a busy tone is heard when dialing the feature number for "Walking Station Cancel" and the extension number, it means that the moving extension is being used (possibly by another station with an SDN of the moving station) and the function cannot be completed. In cases like this, dial again. If your PITS has a display, it shows: Try Again

Dialing the feature number for "Walking Station Cancel" and the extension number at the move destination in a PITS cannot be done with the SP-PHONE on.
First lift the handset and then proceed.

Operation

Before proceeding with the move, complete steps 1 to 3 at the source and destination extensions.

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for "Walking Station Set."

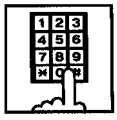
   - Confirmation tone 1 or 2 is heard.
   - If your PITS has a display, it shows:

   WST (E xxxx) ON
   ↓
   Extension number

3. Replace the handset or press the SP-PHONE button.

After the move, complete steps 4 to 6 at the move destination extension.

4. Lift the handset.



5. First dial the feature number for "Walking Station Cancel" and then dial the original extension number.

   - Confirmation tone 1 or 2 is heard.
   - If your PITS has a display, it shows:

   WST (E xxxx) OFF

6. Replace the handset or press the SP-PHONE button.

(Supplement)

When moving to an extension in the pre-installed status, follow steps 1 to 3 for the extension before moving it.
No settings are required for an extension in the pre-installed status.

4.00 Outgoing Message (OGM) Recording and Playing Back

Description

Up to four types of OGM's can be recorded by the Operator 1 (Attendant Console or PITS user) so that different messages can be used for different situations.

The following four types of OGM can be recorded respectively:

DISA, OGM1, OGM2 and W-UP (Wake-up)

OGM for outside parties

OGM for DISA is played to the outside party who called the system via DISA feature.
(See Section 3-D-2.02 "Direct Inward System Access (DISA).")

OGM for OGM1 and OGM2 are played to the outside party in conjunction with UCD feature.
(See Section 3-D-2.06 "Uniform Call Distribution (UCD)-with OGM.")

OGM for extension users

OGM for W-UP (Wake-up) can be used as a wake-up message for the extension user.
(See Section 3-F-13.00 "Timed Reminder with OGM (Wake-up Call).")

Each OGM can be up to 30 seconds long.

A DISA card is required to record OGM and up to four DISA cards can be installed to the system.

Usage of each DISA card is determined by the system programming.
(See Section 9-K-1.00 "Special Attended-DISA.")

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (09/11)", OGM Record OGM Playback	9-D-6.09	10-C-10.00
"Special Attended-DISA", For Use	9-K-1.00	10-C-40.00

Conditions

(1)Tenant Service
If tenant service is employed, the affiliation of each DISA card is determined by the system programming "Special Attendant-DISA" tenant. The Operator 1 of each tenant can record and play back the OGM within the same tenant.

(2) Recording of OGM
- OGM recording is executed by selecting an OGM type (usage of DISA card) from the following four types:
  1. OGM1 for UCD with OGM
  2. OGM2 for UCD with OGM
  3. OGM for DISA
  4. OGM for W-UP (Wake-up call)
- If the type of multiple DISA cards are the same in a tenant, the same message is recorded for them at a time.

(3)Playing back of OGM
- The following two ways are available:
  A. By selecting an OGM type
  B. By designating the logical number of each DISA card directly.
- If there are multiple DISA cards of the same type in the system or a tenant and the OGM type is selected to play back, playback starts from the lowest DISA card physical number.

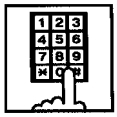
(4)Others
Call Waiting tone and so on are prohibited during OGM recording and playing.

Operation

Recording OGM from PITS (For Operation from Attendant Console, refer to Section 6-J-8.00 “Outgoing Message (OGM) Recording and Playing Back.”)

1. Lift the handset or press the SP-PHONE button.

   • You hear dial tone 1 or 3 or 4.

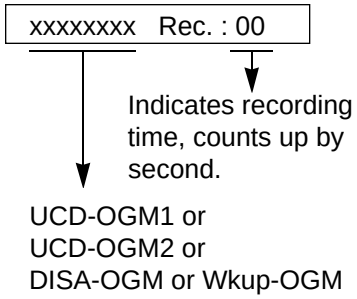


2. Dial the feature number for OGM Record “791” (default) and the resource number (1 to 4) in succession.

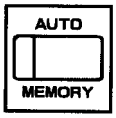
   (Resource number)
   1 : OGM1 for UCD
   2 : OGM2 for UCD
   3 : OGM for DISA
   4 : OGM for W-UP (Wake-up)

   • The MEMORY indicator flashes in red 60 wink, confirmation tone 3 is heard.

   • If your PITS has a display, it shows:



3. Begin your message.

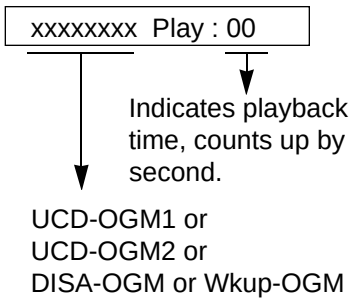


4. As soon as you finish, press the MEMORY button.

   • The MEMORY indicator lights in red.

   • After confirmation tone 3 sounds, the recorded message is played back automatically.

   • If your PITS has a display, it shows:



   • When playback is finished, the MEMORY indicator goes out. You hear confirmation tone 3, then no tone.

5. Replace the handset or press the SP-PHONE button.

(Supplement)

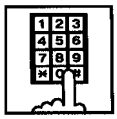
In step 3 if 30 seconds is over, recording is terminated and playback starts automatically. Accordingly, it is not necessary to execute step 4 afterward.

In step 3 if you wish to change the message during recording, you can start recording again by dialing “* .”

In step 4 if you wish to interrupt and finish playback, press the MEMORY button.

Playing back OGM

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for OGM Playback “792” (default) and a number below in succession.

   (Resource number)
   1 : OGM1 for UCD
   2 : OGM 2 for UCD
   3 : OGM for DISA
   4 : OGM for W-UP (Wake-up)

   (“* ” and DISA No.)
   * 1: selects card 1
   * 2: selects card 2
   * 3: selects card 3
   * 4: selects card 4

   - The MEMORY indicator lights in red.
     You hear confirmation tone 3, then the message.
   - If your PITS has a display, it shows:

   <Example>

DISA-OGM Play: 00

   - When playback is finished, you hear confirmation tone 3, then no tone.
   - The MEMORY indicator goes out.

3. Replace the handset or press the SP-PHONE button.

(Supplement)

In step 2 if you wish to interrupt and finish playback, press the MEMORY button.

During playback you can start playback again from the beginning by dialing “* .”

5.00 Intercept Routing-No Answer (IRNA)

Description

If an incoming outside call directed to a single extension is not answered in a specified time period, it can be redirected to another destination in the system.

Another destination can be:
- An Attendant Console
- An extension user
- A Voice Mail extension

For further information about IRNA and a Voice Mail extension, refer to Section 3-F-10.00 “Voice Processing System (VPS).”

This feature also applies to the following calls.

- When an incoming outside call rings back at the extension who once put the call on hold, is not answered in a specified time period. (Held Reminder Call)

- When an incoming outside call rings back at the extension who once transferred the call to another extension, is not answered in a specified time period. (Transfer Recall)

The destination of Intercept Routing during day and night are assigned in “Group-Trunk Group”, Intercept Routing (Day) and Intercept Routing (Night) on a trunk group basis.

Set the duration to start Intercept Routing in “System-System Timer”, Intercept Routing Time-Out (System).

The duration to start Intercept Routing for DISA calls follows the setting in “System-System Timer”, Intercept Routing Time-Out (DISA).
For details about DISA, refer to Section 3-D-2.02 “Direct Inward System Access (DISA).”

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Intercept Routing (Day) Intercept Routing (Night)	9-E-1.01	10-C-14.00
“System-System Timer”, Intercept Routing Time-Out (System) Intercept Routing Time-Out (DISA)	9-D-3.00	10-C-6.00

Conditions

Intercept Routing-No Answer works for the following incoming CO calls.

1. All incoming CO calls other than calls placed on DIL1 : N, Private CO, Attendant Consoles, Remote and UCD
2. Transfer Recall calls (except those to Attendant Consoles)
3. Held Call Reminder calls (except those to Attendant Consoles, calls on Exclusive Hold, calls on hold on Private CO lines)
4. An incoming outside call via DISA/DID which comes in on an extension in the DND mode.

Call Forwarding or Do Not Disturb feature assigned on the IRNA destination does not work on the call which has been transferred to it by the IRNA feature.

If the IRNA destination is not currently available to answer the call transferred by the IRNA feature, the call may receive the treatment of the Station Hunting feature.

If the destination extension of a direct incoming outside call is in the data line security mode, IRNA feature does not work on it.
Refer to Section 4-I-6.00 “Data Line Security” for further information.

If the destination is a PITS with display, it shows:

<Example>

6.00 Rerouting

Description

If an incoming outside call cannot be placed anywhere, the call can be routed to another destination. This is called Rerouting.
Rerouting will take place in the following cases.

1. If the system cannot determine the destination to place the call (for example, no destination is assigned).
2. If the system determines the destination but the destination cannot currently receive the call (for example, it is not “In Service”).
3. If a call arrives at a trunk which is set to “Outgoing Only.”

If a call is rerouted, the call will be sent to the following destinations:

1. If “Group-Trunk Group”, Intercept Routing (Day/Night) is assigned, the call is sent to the assigned destination.*
2. If it is not assigned, the call is sent to Operator 1 in the receiving tenant.

* If the assigned destination is a Voice Mail extension, the call is not sent to it.
Refer to Section 3-F-10.00 “Voice Processing System (VPS)” for further information.

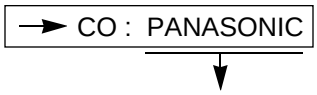
Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Intercept Routing (Day) Intercept Routing (Night)	9-E-1.01	10-C-14.00

Conditions

If a call is rerouted to an extension user and the user's PITS has a display, it shows:

<Example>



Indicates the name of the CO line.

7.00 Calling Party Control (CPC) Signal Detection

Description

CPC (Calling Party Control) signal is the on-hook indication (disconnect signal) sent through the CO line when either calling or called party goes on-hook.
To support efficient utilization of the CO lines, the system monitors the status of the CO lines, and when CPC signal is detected, the system disconnects the CO lines connected compulsorily.
In default mode, CPC signal detection works on incoming CO calls, and does not work on outgoing CO calls (except once they are placed on hold or consultation hold).
In this case, if the extension user remains off-hook after the completion of an outgoing CO call, the system does not release all the switches used to establish the connection, and a CO line connected will continue to be seized by the extension user ineffectively.

To prevent the extension users from such invalid seizure of CO lines, it is administrable to make CPC signal detection effect on outgoing CO calls by using CPC command at dumb programming mode.
This feature is assignable on a CO line basis.
Refer to Section 10-C-49.00 “CPC Detect Timing-Outgoing CO Calls (CPC)” for further information.

Programming

System Programming	Reference	
	VT	Dumb
“Trunk-CO Line”, CPC Detection	9-F-1.00	10-C-18.00
“CPC Signal Detect Timing-Outgoing CO Calls (CPC)”	—	10-C-49.00

Conditions

Some switching system of the central office may send CPC-like signal in dialing sequence and the attempt of making a call may be terminated.
If your switching system does not send CPC-like signal in dialing sequence, we recommend to make CPC signal detection work on outgoing CO calls.

CPC signal detection can be assigned to incoming CO calls only or both on incoming and outgoing CO calls. If CPC signal detection is assigned to outgoing CO calls only, it does not function.

8.00 CO Busy Out

Description

Allows the operator 1 (extension user or attendant console) to busy out the invalid CO lines.
Any user (including the operator at attendant console) cannot seize the busied-out CO lines.
To busy out the invalid CO line, dial the feature number for “Busy Out Trunk” and trunk port physical number of the associated CO line.
To return the busied-out CO line to service, dial the feature number for “Unbusy Trunk” and trunk-port physical number of the associated CO line.

It is assignable to busy out the invalid CO lines automatically by using ABC command at dumb programming mode.
Refer to Section 10-C-50.00 “Automatic Busy-Out Count (ABC)” for further information.
For CO Busy Out from Attendant Console, refer to Section 6-J-10.00 “CO Access Control.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (09/11)”, Busy Out Trunk Unbusy Trunk	9-D-6.09	10-C-10.00
“Automatic Busy-Out Count (ABC)”	—	10-C-50.00

Conditions

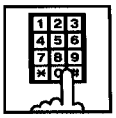
None

Operation

Setting CO Busy Out to a CO line (from operator 1)

1. Lift the handset or press the SP-PHONE button.

   • You hear dial tone.



2. Dial the feature number for “Busy Out Trunk” and trunk port physical number.

   • You hear confirmation tone.
   • If your PITS has a display, it shows:

   Busy Out: T xxxx

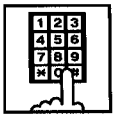
   Trunk port physical number

3. Replace the handset or press the SP-PHONE button.

Canceling CO Busy Out (from operator 1)

1. Lift the handset or press the SP-PHONE button.

   • You hear dial tone.



2. Dial the feature number for “Unbusy Trunk” and trunk port physical number.

   • You hear confirmation tone.
   • If your PITS has a display, it shows:

   Unbusy: T xxxx

   Trunk port physical number

3. Replace the handset or press the SP-PHONE button.

9.00 Parallel Connection of Extensions

Description

Any Single Line Telephone can be connected parallelly with a PITS telephone.
When parallel connection is made, an extension user can make and answer a call by using either of both telephones.

However, the operation of parallelly connected Single Line Telephone is somewhat restricted as follows:

Features not available are:
- External Feature Access
- Conference
- Pickup Dialing
- Account Code Entry

Cannot make a call when parallelly connected PITS telephone is:
- In the BGM mode
- Being paged through built-in speaker
- In the PITS programming mode

Will not ring if parallelly connected PITS telephone is:
- In the Intercom Automatic Answer mode
- In the Voice Alerting mode

To make parallel connection effective, assign "Extension-Station," Parallel Connect to "Yes" at parallelly connected PITS telephone side.

Programming

System Programming	Reference	
	VT	Dumb
"Extension Station" Parallel Connect	9-G-1.01	10-C-22.00

Conditions

Not only a Single Line Telephone but an answering machine, a facsimile, or a modem (personal computer) can be connected parallelly with certain PITS telephones.

The parallel connection of a Single Line Telephone and a PITS telephone becomes available under the following conditions.

— Parallelly connected PITS telephones are interfaced with HLC card.
— The number of Single Line Telephones which can be connected parallelly with PITS telephones must be within 48 lines per shelf.

10.00 Voice Processing System (VPS)

Description

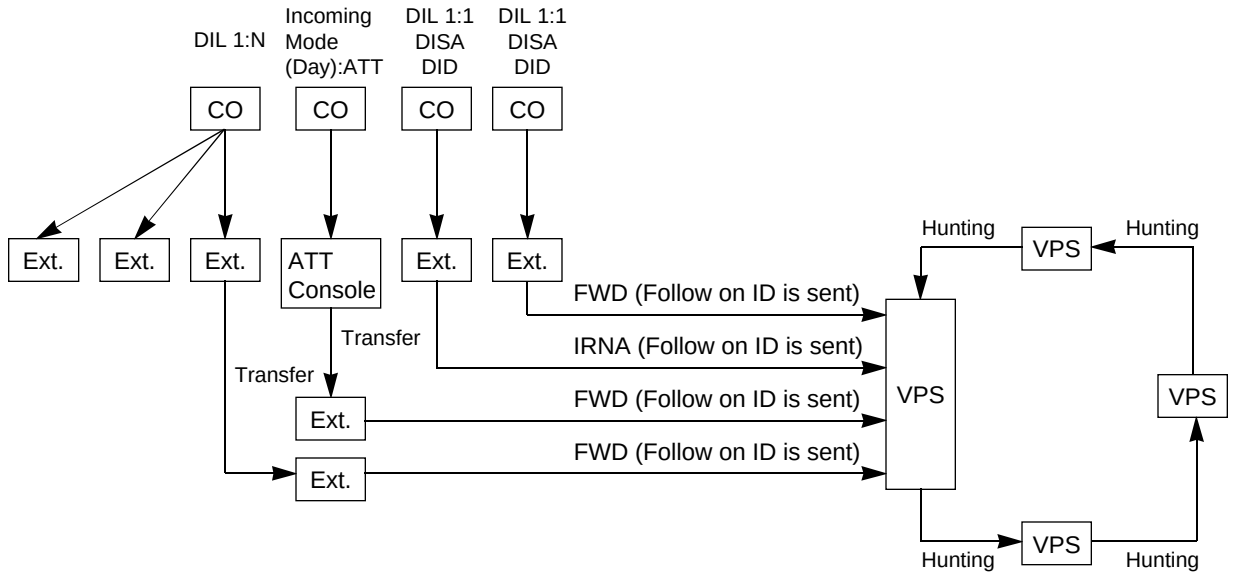
The KX-T336 system provides the following features to enhance the performance of the Voice Processing System (VPS) — KX-TVP150.

- Voice Mail Integration (Section 3-F-10.01)
- DTMF Tone Integration (Section 3-F-10.02)

Voice Mail Integration

The KX-T336 system can forward callers directly to the called extension's mailbox.

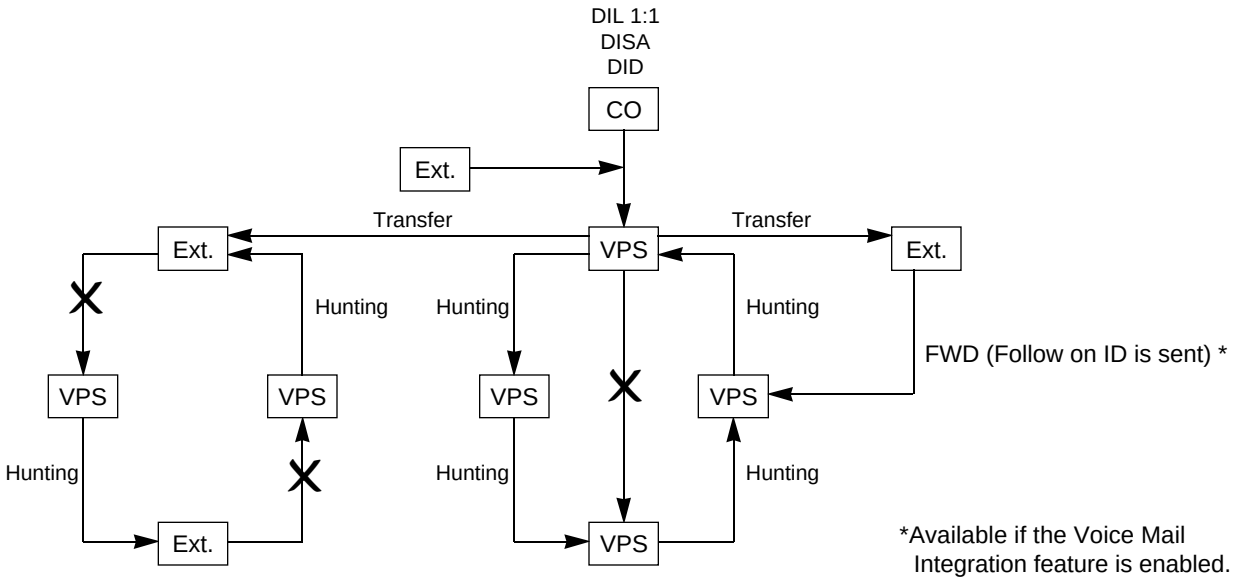
(Configuration)



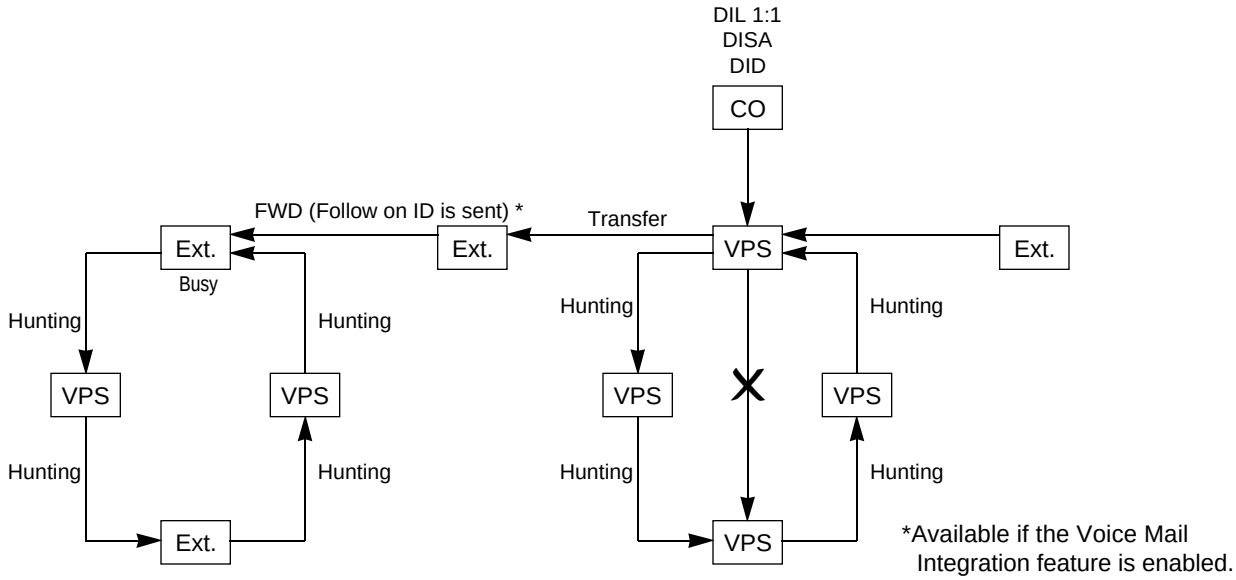
DTMF Tone Integration

The KX-T336 system can send codes (DTMF tones) to indicate the state of the call (busy, answered, ringing, disconnect, etc.) in addition to the normal call progress tones.

(Configuration 1)



(Configuration 2)



10.01 Voice Mail Integration

Description

The KX-T336 system can forward callers directly to the called extension's voice mailbox, if the caller is forwarded to a Voice Mail Port (all calls, busy or no answer) and this feature is enabled by the extension user.
The KX-T336 system automatically sends the digits of mailbox number of the called extension with DTMF tones to the Voice Mail Port before connecting the caller.
These digits are commonly known as the Follow on ID.
A max of 16 extension ports (HLC or SLC card) of the KX-T336 system can be programmed for connection to the Voice Processing System KX-TVP150.

This feature applies to the following calls.

Calls transferred by :

- Call Forwarding — All Calls
- Call Forwarding — Busy/Off-hook
- Call Forwarding — No Answer
- Call Forwarding — Busy/No Answer

  (including the calls transferred to the extensions on which one of the above mentioned Call Forwarding feature is assigned.)
- Intercept Routing — No Answer (IRNA)

  (including the transfer recalled outside call and held reminder outside call)

Extensions assigned as Voice Mail Port are not allowed to connect to each other. For example, an Automated Attendant Port is not allowed to connect to another Voice Mail Port.

Note this feature can be programmed in Dumb mode only.

Programming

(Dumb programming mode)

1) Press [CTRL] key and [V] key simultaneously when Main Menu screen is displayed at VT programming mode.

2) Enter [P] [R] [G] and press [Return] key when Dumb programming mode initial prompt (; >) is displayed. Then programming mode initial prompt (; PRG >) is displayed on the screen.

3) Program the required items as follows:

Voice Mail Port Assignment:

Input Format PRG>VMD AT Item Number (01-16) CR

Input Value for Item Number

Item Number	Assigning Items	Input Value
01 • • 16	Voice Mail DN	DNxxxx:Directory Number 0: None (Default = 0)

To remove the existing setting, use "$CLR" command.
For further information about programming, refer to Section 10-C-54.00 "Voice Mail Directory Number (VMD)."

Mailbox Number Assignment:

Input Format PRG>MBN AT Index Number CR

Index Number = Physical Number of Extension Port or DN

Input Value for Item Number

Item Number	Assigning Items	Input Value
None	Mailbox Number	Up to 10 digits of numeric characters (0-9), "*" and " # " (Default = Extension Number)

Mailbox Number specific to each extension (same as the extension number) is assigned to all extensions by default.

To remove the existing setting, use "$CLR" command.
For further information about programming, refer to Section 10-C-55.00 "Mailbox Number (MBN)."

Conditions

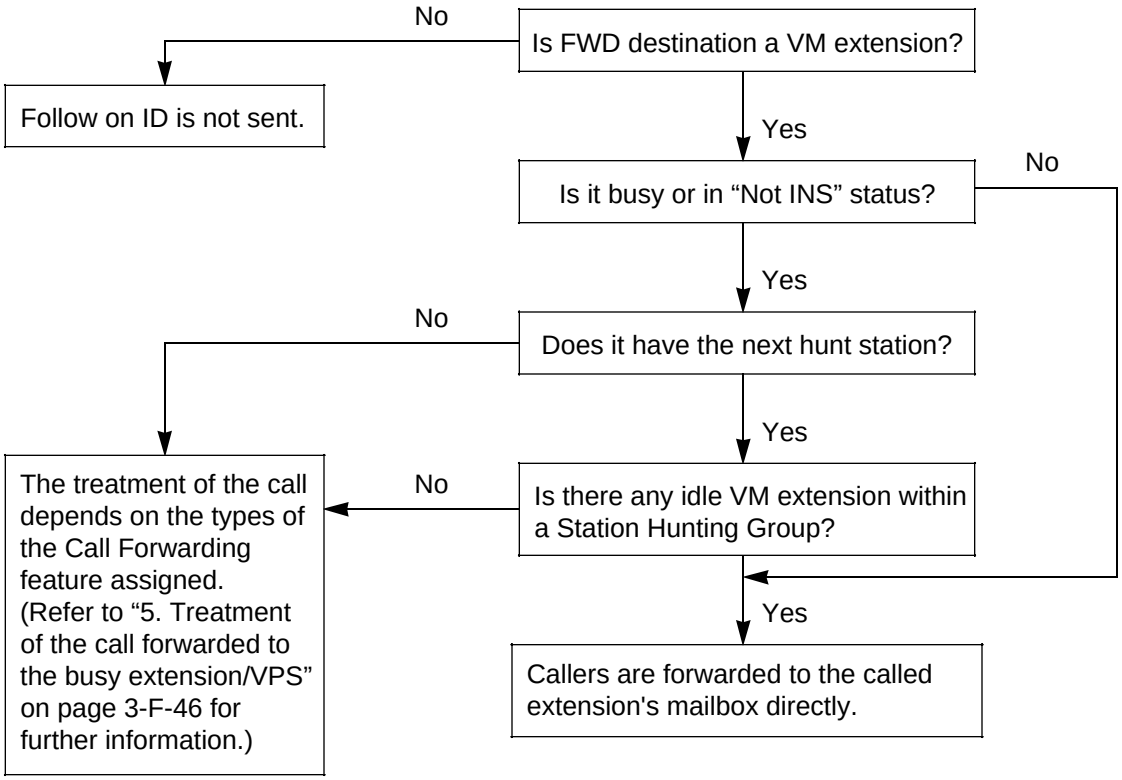
1) Station Hunting Group – Circular

To use the Voice Mail Integration feature efficiently, we recommend to program a station hunting group among the Voice Mail (VM) Extensions, this would reduce the possibility of the callers encountering the busy status.

When "Station Hunting Group – Circular" is programmed among the VM Extensions, a call transferred to the busy VM Extension (including "Not INS" status) by Call Forwarding (FWD) or Intercept Routing No Answer (IRNA) feature will be automatically transferred to an idle VM Extension.

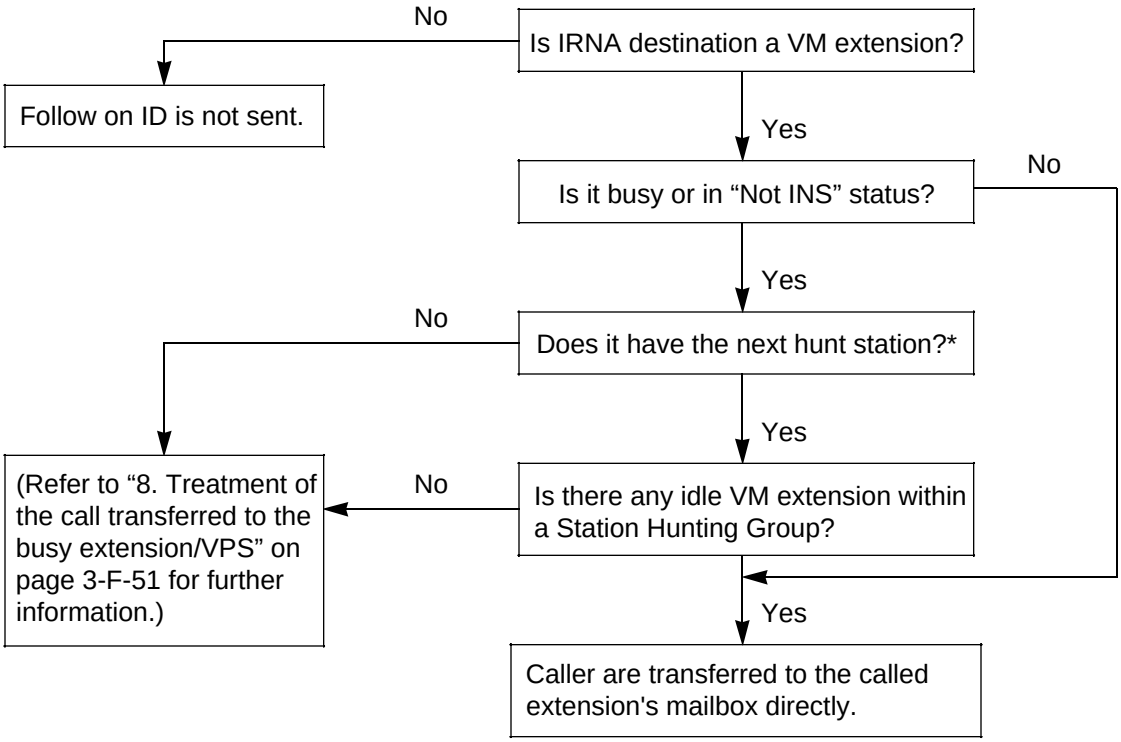
2) Call Forwarding and Station Hunting

The KX-T336 system can send the Follow on ID (the digits of mailbox number of the called extension) to the Voice Mail Port, if the caller is forwarded to a Voice Mail Port.
The following simplified flow chart shows the treatment of the call forwarded to a VM extension.



3) Intercept Routing No Answer (IRNA) and Station Hunting

The KX-T336 system can send the Follow on ID (the digits of mailbox number of the called extension) to the Voice Mail Port, if the caller is transferred to a Voice Mail Port by IRNA feature.
The following simplified flow chart shows the treatment of the call which has been transferred to a VM extension by the IRNA feature.



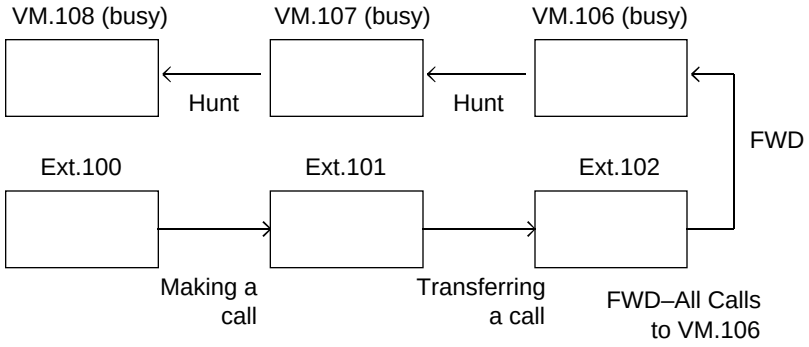
* If a call transferred to a busy VM extension by IRNA feature is “Transfer recalled call” or “Held Reminder Call,” it will be put on the waiting status whether the IRNA destination has the next station assignment or not.

4) Call Transfer and Voice Mail Integration

Not only an incoming call directed to the extension, but a transferred call (both screened and unscreened call transfer) is applied to the Voice Mail Integration feature.

Camp-on Transfer to a VM extension and Transfer Recall

Example



1. The Ext.100 makes a call to the Ext.101.
2. The Ext.101 answers the call from the Ext.100. and transfers it to the Ext.102 (Call Forwarding – All Calls to VM 106 is assigned). Then replaces the handset.
3. Since FWD destination VM.106 and all other VM extensions in the Station Hunting Group are busy, the call from Ext.100 is put on the waiting status.

<Camp-on Transfer to a VM extension>

If VM.106 becomes idle before the transfer recall timer has been elapsed, the call is connected to the VM.106, and the caller can access the Mailbox of the Ext.100 automatically.

Camp-on Transfer to a VM extension is only available when “Call Forwarding–All Calls” is assigned to the Ext.102.

<Transfer Recall>

If VM.106 is still busy after the transfer recall timer has been elapsed, the call will ring back at Ext.101.

What if Call Forwarding (FWD)-No Answer is assigned on the extension where a call has been transferred without announcement (Unscreened Call Transfer) ?

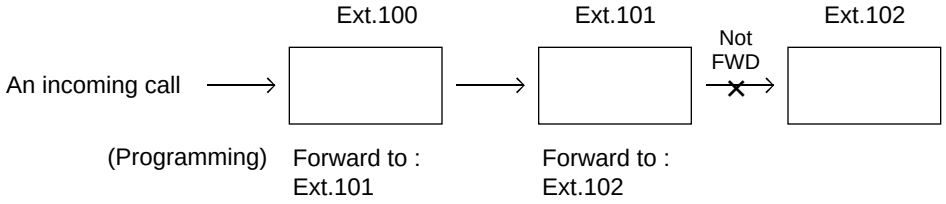
A call is forwarded to the FWD destination after the Call Forwarding No Answer timer has been expired.
If the FWD destination is busy, the forwarded call will ring back at the extension who transferred the call.

(Note)
In above case, if the destination of Call Forwarding-No Answer is an Attendant Console, the transferred call is not forwarded to an Attendant Console.
The transferred call rings back at the extension who transferred the call after the Call Forwarding No Answer timer has been expired.

5) Others

(a) If the extension to which calls are to be forwarded itself is in a call forward mode, a call will not be forwarded furthermore and it is connected to the first forwarded extension.

Example



An incoming call is forwarded to Ext.101 and connected to it, not forwarded to Ext.102 furthermore.

(b) If an Operator calls to the extension in a call forward mode by employing “One time FWD cancel” feature, a call is not forwarded furthermore and rings on the FWD setting extension.

(c) Conference call

The VM extension can not originate a conference call.

(Example)

During a call with the Party 1 while putting the Party 2 on consultation hold.

- If an SLT extension (not a VM extension) presses the switchhook, a conference call among three parties is established.
- In case of a VM extension, it will be connected to the Party 2 and the Party 1 is disconnected.

Reference

Station Hunting — Circular (Section 3-D-5.02)

Intercept Routing No Answer (IRNA) (Section 3-F-5.00)

Call Forwarding (FWD) (Section 4-F-2.00, Section 5-D-2.00)

Voice Mail Directory Number (VMD) (Section 10-C-54.00)

Mailbox Number (MBN) (Section 10-C-55.00)

10.02 DTMF Tone Integration

Description

On extensions with the Voice Mail Port parameter enabled, the KX-T336 system can send codes (DTMF tones) to indicate the sate of the call (busy, answered, ringing, disconnect, etc.) in addition to the normal call progress tones. These codes enable the Voice Processing system to immediately recognize the current state of the call and improve its call handling performance. These codes apply to all incoming calls: Outside calls only indicate disconnect (provided the KX-T336 system is programmed properly for CPC detection and the Central Office sends the CPC signal).

Programming

1) Press [CTRL] key and [V] key simultaneously when Main Menu screen is displayed at VT programming mode.

2) Enter [P] [R] [G] and press [Return] key when Dumb programming mode initial prompt (;>) is displayed. Then programming mode initial prompt (; PRG>) is displayed on the screen.

3) At the programming prompt (PRG>), type:

   ; PRG > WS 3 AT 3 ■ ( )

   The screen displays the Input prompt (INPUT >>) as follows:

   ; PRG > WS 3 AT 3
   ; 3 : DTMF-Tone Integration..... N
   ; INPUT >> ■

4) At the Input prompt (INPUT >>), type:

   ; PRG > WS 3 AT 3
   ; 3 : DTMF-Tone Integration..... N
   ; INPUT >> Y■ ( )

5) The screen displays the Input prompt (INPUT >>) for Item 1 as follows:

   ; PRG > WS 3 AT 3
   ; 3 : DTMF-Tone Integration..... N
   ; INPUT >> Y
   ; 1 : DIL 1:N CO Key Only ..... N
   ; INPUT >> ■

6) To store the new assignment to the system, at Input prompt (INPUT >>), type:

   ; PRG > WS 3 AT 3
   ; 3 : DTMF-Tone Integration..... N
   ; INPUT >> Y
   ; 1 : DIL 1:N CO Key Only ..... N
   ; INPUT >> $ EOD ■ ( )

This assigns the DTMF-Tone Integration feature to the system, and the programming prompt (PRG>) appears on the screen again.

Conditions

The following table describes the DTMF codes, call state and typical condition where the KX-T336 system would send the code.

Code	Call State	Typical Conditions
A 1	Ringback Tone	Sent to the VPS when the extension it dialed is ringing.
B 1	Busy Tone	Sent to the VPS when the extension it dialed is busy.
B 2	Reorder Tone	Sent to the VPS if it dials an invalid extension number or if it is inadvertently connected to another VPS.
B 3	DND Tone	Sent to the VPS if the dialed extension has set DND feature (Do Not Disturb).
A 2	Answer	Sent to the VPS when the called extension answers the call.
C 1	Forwarded to Voice Mail (Ringing)	Sent to the VPS if the caller is forwarded to a voice mail port and that voice mail port is available to accept the call.
C 2	Forwarded to Voice Mail (Busy)	Sent to the VPS if the caller is forwarded to a voice mail port and that voice mail port is not available to accept the call.
C 3	Forwarded to Extension (Ringing)	Sent to the VPS if the caller is forwarded to another, non-voice mail, extension.
D 1	Confirmation Tone	Sent to the VPS when it successfully dials a message waiting lamp on or message waiting lamp off code.
D D	Disconnect (Reorder Tone)	Sent to the VPS when the calling party disconnects.

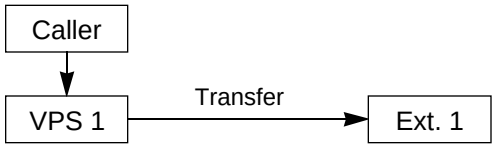
A. Treatment of the call transferred by the VPS

The treatment of the call from a VPS extension varies depending on the conditions.

The following detailed information explains the treatment of a call from a VPS extension by the types of the call.

1. Direct Call

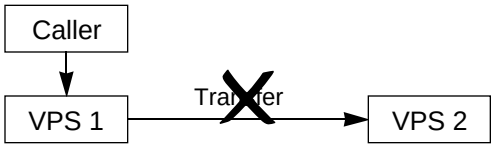
1-1. <u>To an extension</u>



The type of the DTMF tones sent to the VPS depends on the status of the called extension as follows.

Code	Call State	Conditions
A 1	Ringback Tone	The Ext.1 is idle.
B 1	Busy Tone	The Ext.1 is busy.
B 3	DND Tone	The Ext.1 is in the DND mode.
A 2	Answer	The Ext.1 answers the call.

1-2. <u>To another VPS extension</u>

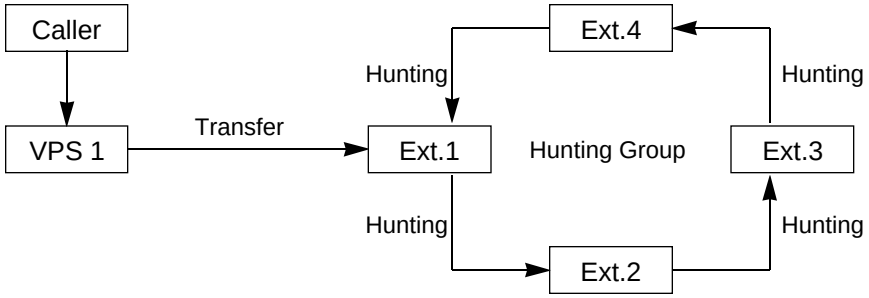


A call from a VPS extension does ring on another VPS extension whether it is idle or not.

Code	Call State	Conditions
B 2	Reorder Tone	The VPS 1 is inadvertently connected to the VPS 2

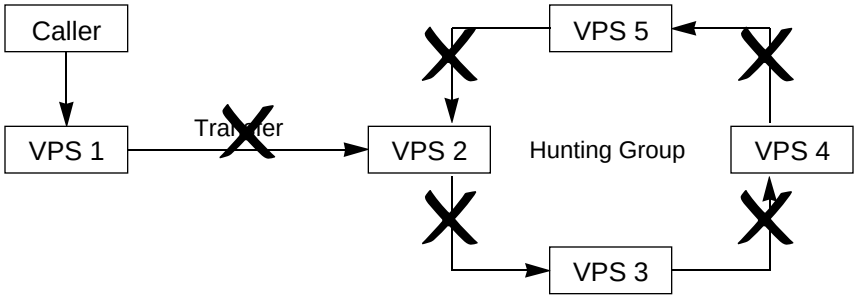
2. Station Hunting

2-1. <u>All members of a hunting group are non-VPS extensions</u>



Code	Call State	Conditions
A 1	Ringback Tone	At least one extension of a hunting group is idle.
B 1	Busy Tone	All members of a hunting group are busy.

2-2. <u>All members of a hunting group are VPS extensions</u>



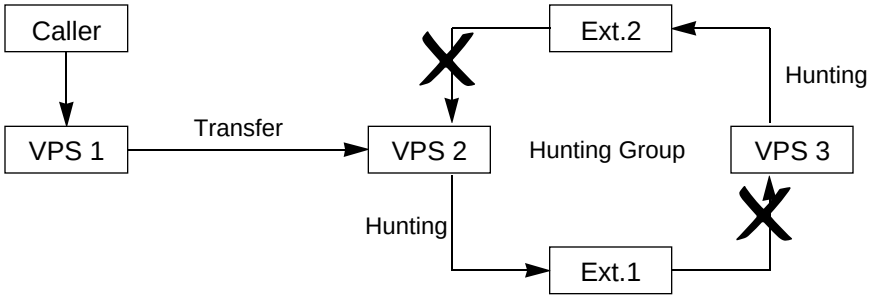
A call from a VPS extension does not ring on another VPS extension whether it is idle or not.

Code	Call State	Conditions
B 2	Busy Tone	The VPS 1 is inadvertently connected to another VPS.

2. Station Hunting (continued)

2-3. Both VPS and non-VPS extensions are members of a hunting group

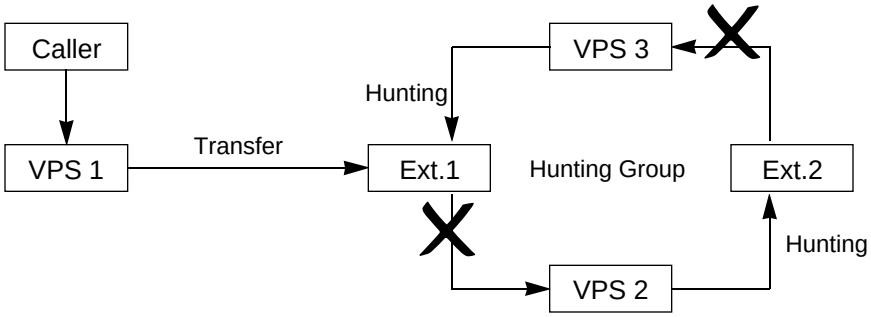
A) When the destination is a VPS extension



A call from a VPS extension does not ring on another VPS extension whether it is idle or not.

Code	Call State	Conditions
B 2	Busy Tone	The VPS 1 is inadvertently connected to another VPS.

B) When the destination is a non-VPS extension.



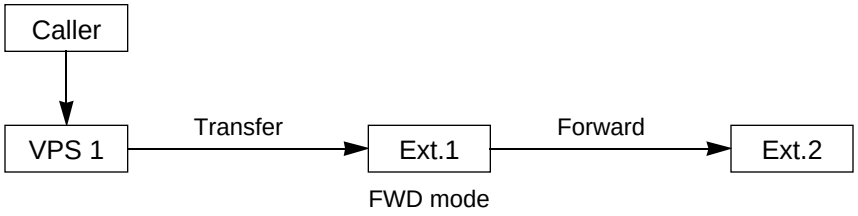
The call hunts for the idle non-VPS extension only.

Code	Call State	Conditions
A 1	Ringback Tone	The Ext.1 or 2 is idle.
C 2	Busy Tone	Both Ext.1 and 2 are busy. *

* This way, the VPS 1, typically an Automated-Attendant, knows it must give the caller an opportunity to leave a message before releasing the call.

3. Call Forwarding (FWD)

3-1. FWD to a non-VPS extension



(FWD-All/Busy)

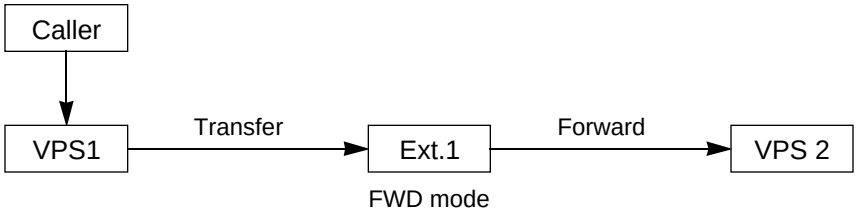
Code	Call State	Conditions
C 3	Ringback Tone	The Ext.2 is idle.
B 1	Busy Tone	The Ext.2 is busy.

(FWD-No Answer)

Code	Call State	Conditions
A 1 C 3	Ringback Tone (The call is ringing at the Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the Ext.2 and ringing on it)	The Ext.2 is idle.
A 1	Ringback Tone (The call is ringing at the Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ The call is still ringing at the Ext.1.	The Ext.2 is busy.

3. Call Forwarding (FWD) (continued)

3-2. FWD to a VPS extension



(FWD-All/Busy)

Code	Call State	Conditions
C 1	Ringback Tone (The call is forwarded to the VPS 2.) *1	The VPS 2 is idle.
C 2	Busy Tone *2	The VPS 2 is busy.

(FWD-No Answer)

Code	Call State	Conditions
A 1 C 1	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the VPS 2.) *1	The VPS 2 is idle.
A 1 C 2	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone *2	The VPS 2 is busy.

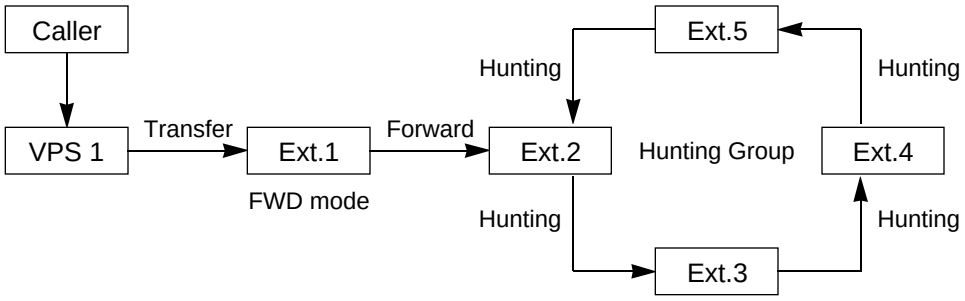
*1 This way, the VPS 1, typically an Automated-Attendant, can release the call to the VPS 2 and take another incoming call.
The Follow on ID of the Ext.1 is sent to the VPS 2.

*2 This way, the VPS 1, typically an Automated-Attendant, knows it must give the caller an opportunity to leave a message before releasing the call.

4. Call Forwarding and Station Hunting

4-1. FWD to a non-VPS extension

(All members of a hunting group are non-VPS extensions)



(FWD-All/Busy)

Code	Call State	Conditions
C 3	Ringback Tone	At least one extension of a hunting group is idle.
B 1	Busy Tone	All members of a hunting group are busy.

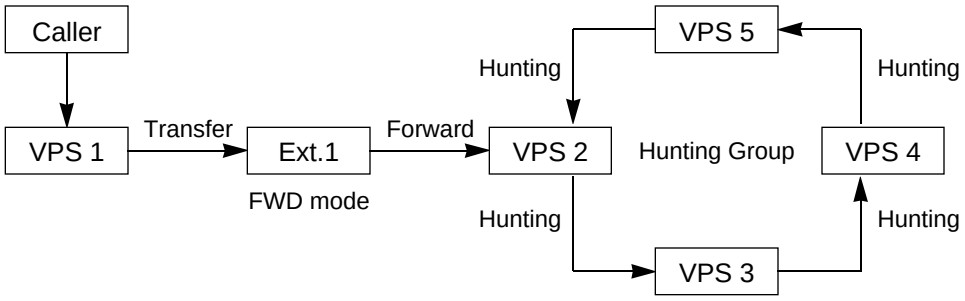
(FWD-No Answer)

Code	Call State	Conditions
A 1 C 3	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to an idle extension of a hunting group and ringing on it.)	At least one extension of a hunting group is idle.
A 1	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ The call is still ringing at Ext.1.	All extensions of a hunting group are busy.

4. Call Forwarding and Station Hunting (continued)

4-2. FWD to a VPS extension

(All members of a hunting group are VPS extensions)



(FWD-All/Busy)

Code	Call State	Conditions
C 1	Ringback Tone (The call is forwarded to an idle VPS extension and ringing on it.) *1	At least one VPS extension of a hunting group is idle.
C 2	Busy Tone *2	All members of a hunting group are busy.

(FWD-No Answer)

Code	Call State	Conditions
A 1 C 1	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to an idle VPS extension and ringing on it.) *1	At least one VPS extension of a hunting group is idle.
A 1 C 2	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone *2	All members of a hunting group are busy.

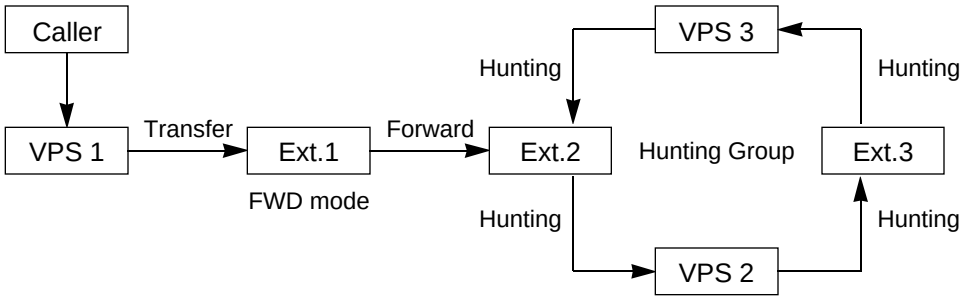
*1 This way, the VPS 1, typically an Automated-Attendant, can release the call to an idle VPS extension and take another incoming call.
The Follow on ID of the Ext.1 is sent to an idle VPS extension.

*2 This way, the VPS 1, typically an Automated-Attendant, knows it must give the caller an opportunity to leave a message before releasing the call.

4. Call Forwarding and Station Hunting (continued)

4.3 FWD to a non-VPS extension

(Both VPS and non-VPS extensions are members of a hunting group)



The call hunts for both VPS and non-VPS extensions in a hunting group following the programmed order.

(FWD-All/Busy)

Code	Call State	Conditions
C 3	Ringback Tone (The call is ringing at Ext.2)	The Ext.2 is idle.
C 1	Ringback Tone (The call is forwarded to the VPS 2.) *1	The Ext.2 is busy but the VPS 2 is idle.
C 3	Ringback Tone (The call is ringing at Ext.3)	The Ext.2 and VPS 2 are busy. The Ext.3 and the VPS 3 are idle.
C 2	Busy Tone *2	All members of a hunting group are busy.

*1 This way, the VPS 1, typically an Automated-Attendant, can release the call to the VPS 2 and take another incoming call.
The Follow on ID of the Ext.1 is sent to the VPS 2.

*2 This way, the VPS 1, typically an Automated-Attendant, knows it must give the caller an opportunity to leave a message before releasing the call.

4. Call Forwarding and Station Hunting (continued)

(FWD-No Answer)

Code	Call State	Conditions
A 1 C 3	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the Ext.2 and ringing on it.)	The Ext.2 is idle.
A 1 C 1	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the VPS 2 and ringing on it.) *1	The Ext.2 is busy. The VPS 2 is idle.
A 1 C 3	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the Ext.2 and ringing on it.)	The Ext.2 and VPS 2 are busy. The Ext.3 and the VPS 3 are idle.
A 1 C 2	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone *2	All members of a hunting group are busy.

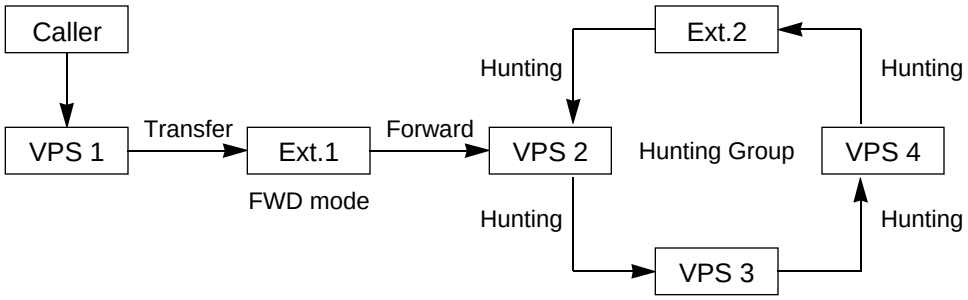
*1 This way, the VPS 1, typically an Automated-Attendant, can release the call to the VPS 2 and take another incoming call.
The Follow on ID of the Ext.1 is sent to the VPS 2.

*2 This way, the VPS 1, typically an Automated-Attendant, knows it must give the caller an opportunity to leave a message before releasing the call.

4. Call Forwarding and Station Hunting (continued)

4.4 FWD to a VPS extension

(Both VPS and non-VPS extensions are members of a hunting group)



The call hunts for both VPS and non-VPS extensions in a hunting group following the programmed order.

(FWD-All/Busy)

Code	Call State	Conditions
C 1	Ringback Tone (The call is forwarded to the VPS 2 and ringing on it.) *1	The VPS 2 is idle.
C 3	Ringback Tone (The call is ringing at Ext.3)	The VPS 2,3 and 4 are busy. The Ext.3 is idle.
C 2	Busy Tone *2	All members of a hunting group are busy.

(FWD-No Answer)

Code	Call State	Conditions
A 1	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓	The VPS 2 is idle.
C 1	Ringback Tone (The call is forwarded to the VPS 2 and ringing on it.) *1	

Continued

4. Call Forwarding and Station Hunting (continued)

Continued

Code	Call State	Conditions
A 1 C 3	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the Ext.3 and ringing on it.)	The VPS 2,3 and 4 are busy. The Ext.3 is idle.
A 1 C 2	Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone *2	All members of a hunting group are busy.

*1 This way, the VPS 1, typically an Automated-Attendant, can release the call to the VPS 2 and take another incoming call.
The Follow on ID of the Ext.1 is sent to the VPS 2.

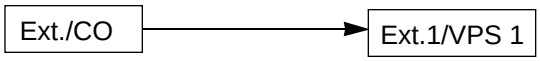
*2 This way, the VPS 1, typically an Automated-Attendant, knows it must give the caller an opportunity to leave a message before releasing the call.

B. Treatment of the call placed by the extension or outside party

The treatment of a call from the extension or outside party varies depending on the conditions of the called extension.
The KX-T336 system does not send codes (DTMF tones).
The following detailed information explains the treatment of a call from the extension or outside party by the types of the call.

1. Direct Call

1-1. To an extension



The type of call progress tones sent to the caller varies depending on the status of the called extension/VPS as follows.

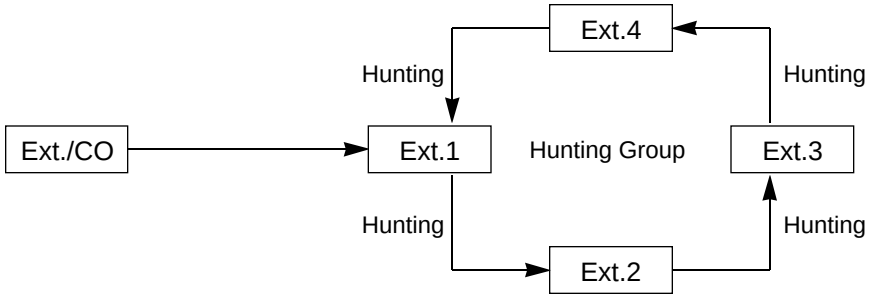
Call State	Conditions
Ringback Tone *1	The Ext.1/VPS 1 is idle.
Busy Tone	The Ext.1/VPS 1 is busy.
DND Tone	The Ext.1/VPS 1 is in the DND mode. *2
Answer	The Ext.1/VPS 1 answers the call.

*1 In case of outside calls (DIL 1:1, DISA,DID)
If an incoming outside call is not answered by the extension in a specified time period (IRNA timer), it will be transferred to another destination. — IRNA
Refer to “6. Intercept Routing No Answer (IRNA)” and “7. IRNA and Station Hunting” on pages 3-F-47 through 3-F-50 for further information.

*2 In case of calls via DISA/DID
If a call via DISA/DID is directed to an extension in the DND mode, it will be automatically redirected to another extension (including VPS extension) or an attendant console assigned as the IRNA destination.
For further information, refer to Section 4-D-6.00, 5-B-4.00 “Do Not Disturb (DND).”

2. Station Hunting

2-1. <u>All members of a hunting group are non-VPS extensions</u>



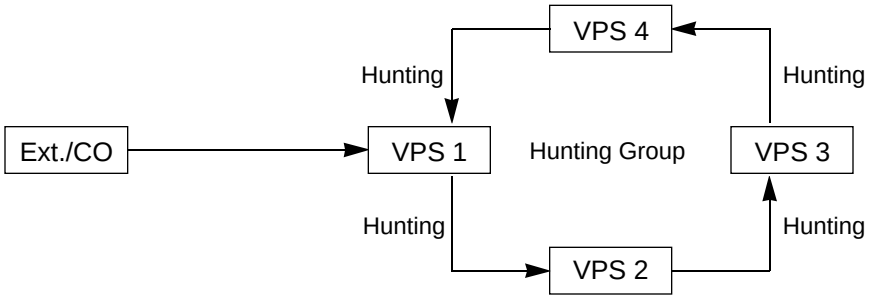
Call State	Conditions
Ringback Tone *	At least one extension of a hunting group is idle.
Busy Tone	All members of a hunting group are busy.

* In case of outside calls (DIL 1:1, DISA,DID)

In an incoming outside call is not answered by the extension in a specified time period (IRNA timer), it will be transferred to another destination. — IRNA

Refer to “6. Intercept Routing No Answer (IRNA)” and “7. IRNA and Station Hunting” on pages 3-F-47 through 3-F-50 for further information.

2-2. <u>All members of a hunting group are VPS extensions</u>



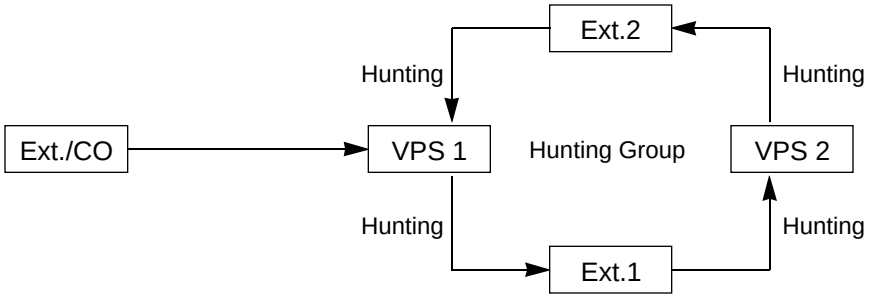
Call State	Conditions
Ringback Tone *	At least one VPS extension of a hunting group is idle.
Busy Tone	All members of a hunting group are busy.

* The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

2. Station Hunting (continued)

2-3. Both VPS and non-VPS extensions are members of a hunting group

A) When the destination is a VPS extension



Call State	Conditions
Ringback Tone *1,*2	At least one extension of a hunting group is idle.
Busy Tone	All members of a hunting group are busy.

*1 In case of outside calls (DIL 1:1, DISA,DID)

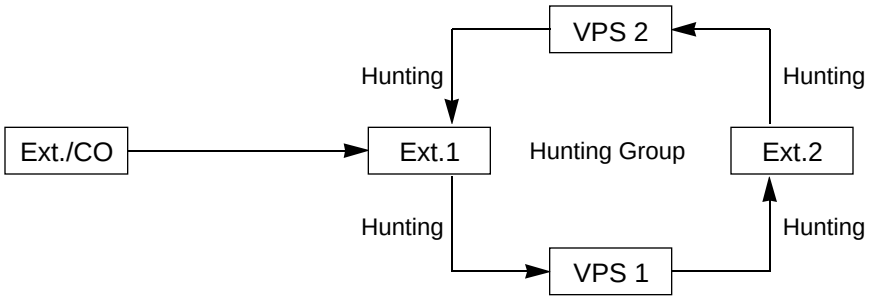
In an incoming outside call is not answered by the extension in a specified time period (IRNA timer), it will be transferred to another destination. — IRNA

Refer to “6. Intercept Routing No Answer (IRNA)” and “7. IRNA and Station Hunting” on pages 3-F-47 through 3-F-50 for further information.

*2 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

2. Station Hunting (continued)

B) When the destination is a non-VPS extension.



Call State	Conditions
Ringback Tone *1,*2	At least one member of a hunting group is idle.
Busy Tone	All members of a hunting group are busy.

*1 In case of outside calls (DIL 1:1, DISA,DID)

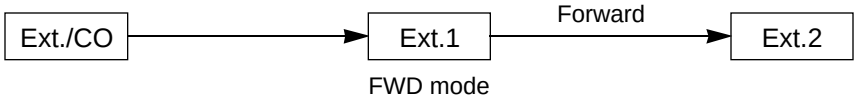
In an incoming outside call is not answered by the extension in a specified time period (IRNA timer), it will be transferred to another destination. — IRNA

Refer to “6. Intercept Routing No Answer (IRNA)” and “7. IRNA and Station Hunting” on pages 3-F-47 through 3-F-50 for further information.

*2 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

3. Call Forwarding (FWD)

3-1. FWD to a non-VPS extension



(FWD-All/Busy)

Call State	Conditions
Ringback Tone *1	The Ext.2 is idle.
Busy Tone *2	The Ext.2 is busy.

(FWD-No Answer)

Call State	Conditions
Ringback Tone (The call is ringing at the Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the Ext.2 and ringing on it) *1	The Ext.2 is idle.
Ringback Tone (The call is ringing at the Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ The call is still ringing at the Ext.1. *2	The Ext.2 is busy.

*1 In case of outside calls (DIL 1:1, DISA,DID)

In an incoming outside call is not answered by the extension in a specified time period (IRNA timer), it will be transferred to another destination. — IRNA

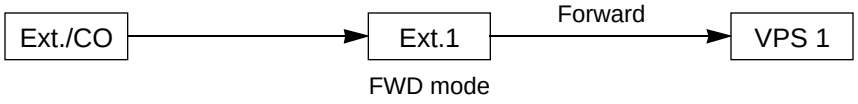
Refer to “6. Intercept Routing No Answer (IRNA)” and “7. IRNA and Station Hunting” on pages 3-F-47 through 3-F-50 for further information.

*2 The treatment of calls differs depending on the types of calls.

Refer to “5. Treatment of the call forwarded to the busy extension/VPS” for further information.

3. Call Forwarding (FWD) (continued)

3-2. FWD to a VPS extension



(FWD-All/Busy)

Call State	Conditions
Ringback Tone (The call is forwarded to the VPS 1.) *1	The VPS 1 is idle.
Busy Tone *2	The VPS 1 is busy.

(FWD-No Answer)

Call State	Conditions
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the VPS 1.) *1	The VPS 1 is idle.
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone *2 (The call is still ringing at Ext.1.)	The VPS 1 is busy.

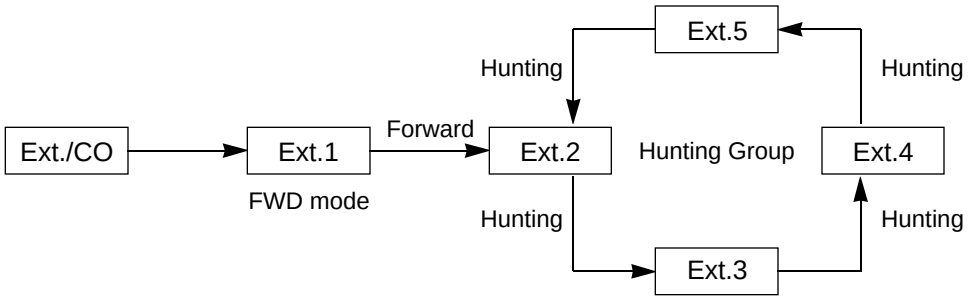
*1 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

*2 The treatment of calls differs depending on the types of calls.
Refer to “5. Treatment of the call forwarded to the busy extension/VPS” for further information.

4. Call Forwarding and Station Hunting

4-1. FWD to a non-VPS extension

(All members of a hunting group are non-VPS extensions)



(FWD-All/Busy)

Call State	Conditions
Ringback Tone *1	At least one extension of a hunting group is idle.
Busy Tone *2	All members (including the Ext.1) of a hunting group are busy.

(FWD-No Answer)

Call State	Conditions
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ The call is forwarded to an idle extension of a hunting group and ringing on it. *1	At least one extension of a hunting group is idle.
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ The call is still ringing at Ext.1. *2	All extensions of a hunting group are busy.

*1 In case of outside calls (DIL 1:1, DISA,DID)

In an incoming outside call is not answered by the extension in a specified time period (IRNA timer), it will be transferred to another destination. — IRNA

Refer to “6. Intercept Routing No Answer (IRNA)” and “7. IRNA and Station Hunting” on pages 3-F-47 through 3-F-50 for further information.

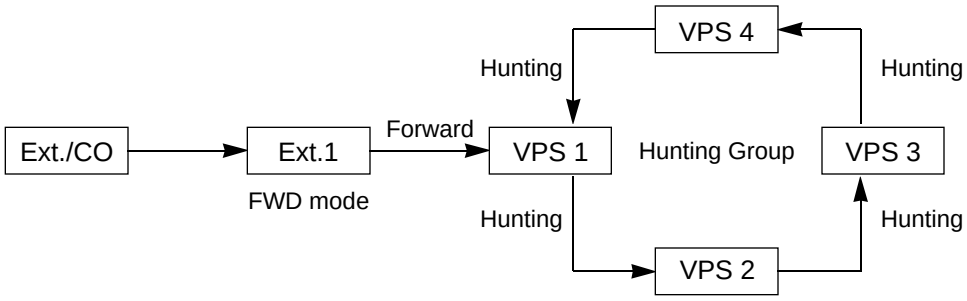
*2 The treatment of calls differs depending on the types of calls.

Refer to “5. Treatment of the call forwarded to the busy extension/VPS” for further information.

4. Call Forwarding and Station Hunting (continued)

4-2. FWD to a VPS extension

(All members of a hunting group are VPS extensions)



(FWD-All/Busy)

Call State	Conditions
Ringback Tone (The call is forwarded to an idle VPS extension and ringing on it.) *1	At least one VPS extension of a hunting group is idle.
Busy Tone *2	All members of a hunting group are busy.

(FWD-No Answer)

Call State	Conditions
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to an idle VPS extension and ringing on it.)*1	At least one VPS extension of a hunting group is busy.
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone *2 (The call is still ringing at Ext.1.)	All members of a hunting group are busy.

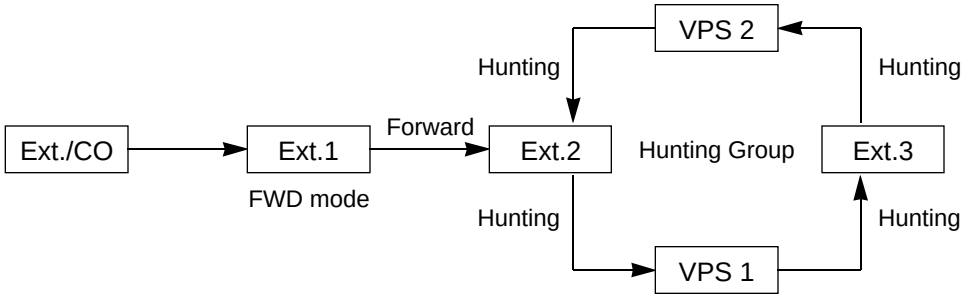
*1 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

*2 The treatment of calls differs depending on the types of calls.
Refer to “5. Treatment of the call forwarded to the busy extension/VPS” for further information.

4. Call Forwarding and Station Hunting (continued)

4.3 FWD to a non-VPS extension

(Both VPS and non-VPS extensions are members of a hunting group)



The call hunts for both VPS and non-VPS extensions in a hunting group following the programmed order.

(FWD-All/Busy)

Call State	Conditions
Ringback Tone (The call is ringing at Ext.2) *1	The Ext.2 is idle.
Ringback Tone (The call is forwarded to the VPS 1 and ringing on it.) *2	The Ext.2 is busy but the VPS 1 is idle.
Ringback Tone (The call is ringing at Ext.3) *1	The Ext.2 and VPS 1 are busy. The Ext.3 and the VPS 2 are idle.
Busy Tone *3	All members of a hunting group are busy.

*1 In case of outside calls (DIL 1:1, DISA,DID)

In an incoming outside call is not answered by the extension in a specified time period (IRNA timer), it will be transferred to another destination. — IRNA

Refer to “6. Intercept Routing No Answer (IRNA)” and “7. IRNA and Station Hunting” on pages 3-F-47 through 3-F-50 for further information.

*2 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

*3 The treatment of calls differs depending on the types of calls.

Refer to “5. Treatment of the call forwarded to the busy extension/VPS” for further information.

4. Call Forwarding and Station Hunting (continued)

(FWD-No Answer)

Call State	Conditions
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the Ext.2 and ringing on it.) *1	The Ext.2 is idle.
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the VPS 1 and ringing on it.) *2	The Ext.2 is busy. The VPS 1 is idle.
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the Ext.3 and ringing on it.) *1	The Ext.2 and VPS 1 are busy. The Ext.3 is idle.
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is still ringing at Ext.1) *3	All members of a hunting group are busy.

*1 In case of outside calls (DIL 1:1, DISA,DID)

In an incoming outside call is not answered by the extension in a specified time period (IRNA timer), it will be transferred to another destination. — IRNA

Refer to “6. Intercept Routing No Answer (IRNA)” and “7. IRNA and Station Hunting” on pages 3-F-47 through 3-F-50 for further information.

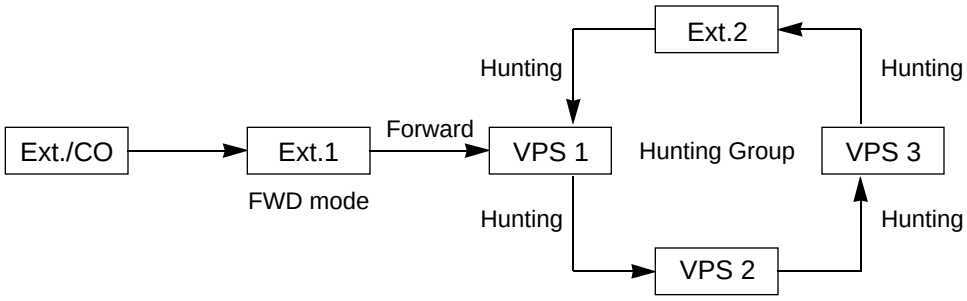
4. Call Forwarding and Station Hunting (continued)

*2 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

*3 The treatment of calls differs depending on the types of calls.
Refer to “5. Treatment of the call forwarded to the busy extension/VPS” for further information.

4.4 FWD to a VPS extension

(Both VPS and non-VPS extensions are members of a hunting group)



The call hunts for both VPS and non-VPS extensions in a hunting group following the programmed order.

(FWD-All/Busy)

Call State	Conditions
Ringback Tone (The call is forwarded to the VPS 2 and ringing on it.) *1	The VPS 1 is idle.
Ringback Tone (The call is ringing at Ext.2) *2	The VPS 1,2 and 3 are busy. The Ext.2 is idle.
Busy Tone *3	All members of a hunting group are busy.

4. Call Forwarding and Station Hunting (continued)

(FWD-No Answer)

Call State	Conditions
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the VPS 1 and ringing on it) *1	The VPS 1 is idle.
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is forwarded to the Ext.2 and ringing on it.) *2	The VPS 1,2 and 3 are busy. The Ext.2 is idle.
Ringback Tone (The call is ringing at Ext.1) ↓ Call Forwarding No Answer Time has been elapsed. ↓ Ringback Tone (The call is still ringing at Ext.1) *3	All members of a hunting group are busy.

*1 In case of outside calls (DIL 1:1, DISA,DID)

In an incoming outside call is not answered by the extension in a specified time period (IRNA timer), it will be transferred to another destination. — IRNA
Refer to “6. Intercept Routing No Answer (IRNA)” and “7. IRNA and Station Hunting” on pages 3-F-47 through 3-F-50 for further information.

*2 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

*3 The treatment of calls differs depending on the types of calls.
Refer to “5. Treatment of the call forwarded to the busy extension/VPS” for further information.

5. Treatment of the call forwarded to the busy extension/VPS

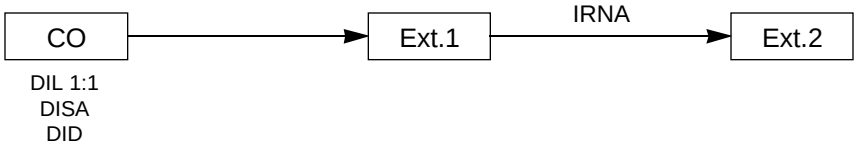
The following table shows the treatment of the call forwarded to the busy extension or VPS (including all members of the Station Hunting Group are busy) by types of the Call Forwarding feature assigned.

<table>
<tr><td colspan="3" rowspan="2"></td><td rowspan="2">Extension Call</td><td colspan="3">Outside Call</td></tr>
<tr><td>DID</td><td>DIL 1:1</td><td>DISA</td></tr>
<tr><td colspan="3" rowspan="4">Call Forwarding – All Calls:</td><td rowspan="4">The caller hears busy tone.</td><td colspan="2">The call is put on the waiting status, and it will be connected to the FWD destination as soon as it becomes idle. If the FWD destination is still busy after the IRNA timer has been elapsed, a call will be transferred to the IRNA destination.</td></tr>
<tr><td colspan="2">If the IRNA destination is not programmed.</td></tr>
<tr><td>The call is put on the waiting status until the FWD destination becomes idle.</td><td>The call will be disconnected within 60 seconds after the IRNA timer has been elapsed.</td></tr>
<tr><td colspan="2"></td></tr>
<tr><td rowspan="11">Call Forwarding
– Busy/Off-hook
– No Answer
–Busy/No Answer</td><td colspan="2" rowspan="4">When the call ringing at Ext.1 is not answered.</td><td colspan="3">Call Forwarding does not function.</td></tr>
<tr><td rowspan="3">The call continues to ring at Ext.1.</td><td colspan="2">The call continues to ring at Ext.1, and it will be transferred to the IRNA destination after a specified time period* has been elapsed.</td></tr>
<tr><td colspan="2">If the IRNA destination is not programmed.</td></tr>
<tr><td>The call continues to ring at Ext.1.</td><td>The call is disconnected within 60 seconds after the IRNA timer has been elapsed.</td></tr>
<tr><td rowspan="7">When Ext.1 is busy or off-hook.</td><td rowspan="2">If Ext.1 is an SLT or a PITS with all PDN buttons are in use.</td><td colspan="3">Call Forwarding does not function.</td></tr>
<tr><td colspan="3">The caller hears busy tone.</td></tr>
<tr><td rowspan="5">If Ext.1 is a PITS and one or two PDN buttons on it are not in use.</td><td colspan="3">Call Forwarding does not function.</td></tr>
<tr><td rowspan="3">The call continues to ring on an idle PDN of Ext.</td><td colspan="2">The call continues to ring at Ext.1, and it will be transferred to the IRNA destination after the IRNA timer has been elapsed.</td></tr>
<tr><td colspan="2">If the IRNA destination is not programmed.</td></tr>
<tr><td>The call continues to ring at Ext.1.</td><td>The call will be disconnected within 60 seconds after the IRNA timer has been elapsed.</td></tr>
</table>

* Call Forwarding No Answer timer + IRNA timer

6. Intercept Routing No Answer (IRNA)

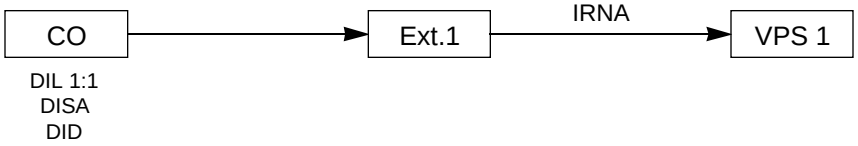
6-1. IRNA to a non-VPS extension



Call State	Conditions
Ringback Tone	The Ext.2 is idle.
Busy Tone *	The Ext.2 is busy.

* Refer to “8. Treatment of the call transferred to the busy extension/VPS by IRNA feature” for further information.

6-2. IRNA to a VPS extension



Call State	Conditions
Ringback Tone (The call is transferred to the VPS 1.) *1	The VPS 1 is idle.
Busy Tone *2	The VPS 1 is busy.

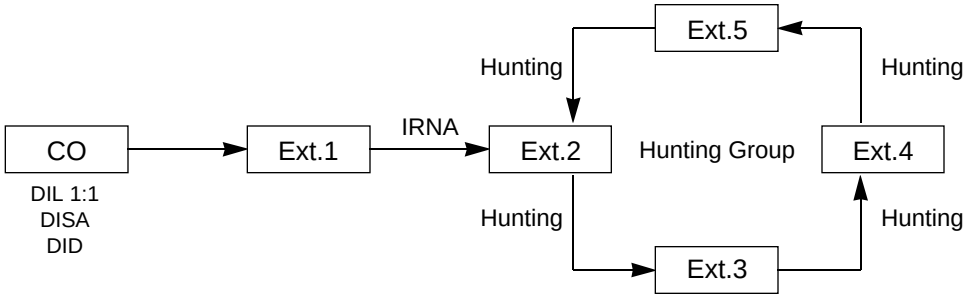
*1 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

*2 Refer to “8. Treatment of the call transferred to the busy extension/VPS by IRNA feature” for further information.

7. IRNA and Station Hunting

7-1. IRNA to a non-VPS extension

(All members of a hunting group are non-VPS extensions)

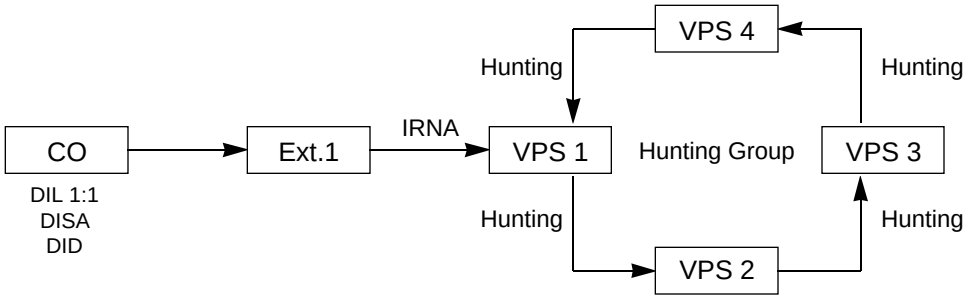


Call State	Conditions
Ringback Tone	At least one extension in a hunting group is idle.
Busy Tone *	All members in a hunting group are busy.

* Refer to “8. Treatment of the call transferred to the busy extension/VPS by IRNA feature” for further information.

7-2. IRNA to a VPS extension

(All members of a hunting group are VPS extensions)
The call hunts for an idle VPS extension in a hunting group following the programmed order.



Call State	Conditions
Ringback Tone ↓ (The call is transferred to an idle VPS extension.) *1	At least one VPS extension in a hunting group is idle.
Busy Tone *2	All members in a hunting group are busy.

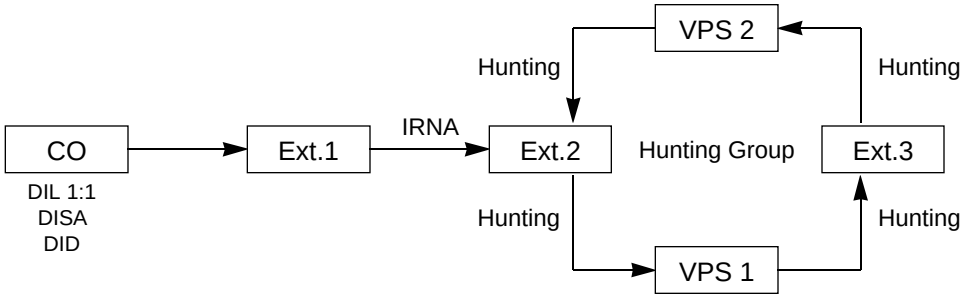
*1 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

*2 Refer to “8. Treatment of the call transferred to the busy extension/VPS by IRNA feature” for further information.

7. IRNA and Station Hunting (continued)

7.3 IRNA to a non-VPS extension

(Both VPS and non-VPS extensions are members of a hunting group)



The call hunts for both VPS and non-VPS extensions in a hunting group following the programmed order.

Call State	Conditions
Ringback Tone (The call is ringing at Ext.2)	The Ext.2 is idle.
Ringback Tone (The call is forwarded to the VPS 1 and ringing on it.) *1	The Ext.2 is busy but the VPS 1 is idle.
Ringback Tone (The call is ringing at Ext.3)	The Ext.2 and VPS 1 are busy. The Ext.3 and the VPS 2 are idle.
Busy Tone *2	All members of a hunting group are busy.

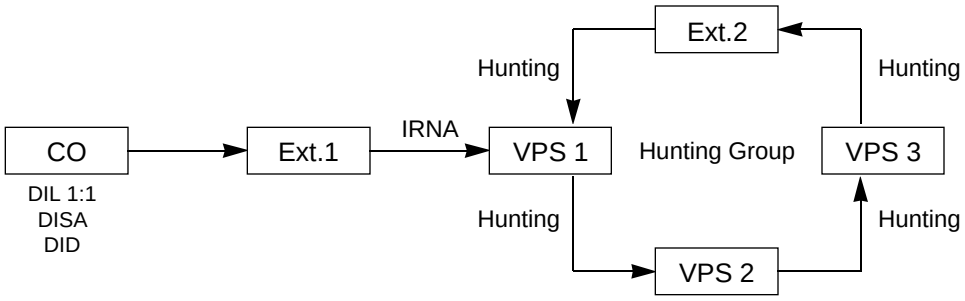
*1 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

*2 Refer to “8. Treatment of the call transferred to the busy extension/VPS by IRNA feature” for further information.

7. IRNA and Station Hunting (continued)

7.4 IRNA to a VPS extension

(Both VPS and non-VPS extensions are members of a hunting group)



The call hunts for both VPS and non-VPS extensions in a hunting group following the programmed order.

Call State	Conditions
Ringback Tone (The call is forwarded to the VPS 1.) *1	The VPS 1 is idle.
Ringback Tone (The call is ringing at Ext.2)	The VPS 1,2 and 3 are busy. The Ext.2 is idle.
Busy Tone *2	All members of a hunting group are busy.

*1 The KX-T336 system sends Follow on ID (mailbox number of the called extension) when a VPS extension answers the call.

*2 Refer to “8. Treatment of the call transferred to the busy extension/VPS by IRNA feature” for further information.

8. Treatment of the call transferred to the busy extension/VPS by IRNA feature

The following table shows the treatment of the call transferred to the busy extension or VPS (including all members of a Station Hunting Group are busy.)

<table>
<tr><th>DID</th><th>DIL 1:1</th><th>DISA</th></tr>
<tr><td rowspan="3">The call continues to ring at the called extension or VPS, and it will not be transferred to the IRNA destination by the IRNA feature.</td><td colspan="2">The call is put on the waiting status, and it will be connected to the IRNA destination as soon as it becomes idle.</td></tr>
<tr><td colspan="2">If the IRNA destination does not become idle.</td></tr>
<tr><td>A call continues to be on the waiting status until the IRNA destination becomes idle.</td><td>The call will be disconnected if the IRNA destination does not become idle within 1 minute.
(In case of the IRNA destination is an attendant console, a call will be disconnected within 3 minutes.)</td></tr>
</table>

11.00 Call Accounting Summary

The KX-T336 System has the following three programming items related to Call Accounting.

- System — Class of Service
  "Forced Account Code Mode"
  (Section 4-I-2.00, Section 5-G-2.00 "Account Code Entry"
  Section 9-D-4.01 "Class of Service (1/2)"
  Section 10-C-7.00 "Class of Service 1 (CS1))

- Account Code Verified (ACV)
  (Section 10-C-56.00 "Account Code Verified")

- Account Code Entry on Long Distance Calls
  (Section 10-C-57.00 "Account Code Entry on Long Distance Calls (ACL))

You can use any combination of those three programming items as follows.

Table 1. shows available combination of those three programming items.

	Forced Account Code Mode	Account Code Verified (ACV)	Account Code Entry on Long Distance Calls (ACL)
1	Yes (Forced mode)	Yes	Yes
2		Yes	No
3		No	Yes
4		No	No
5	No (Option mode)	Yes	Yes
6		Yes	No
7		No	Yes
8		No	No

Table 1.

Table 2. shows how each combination of programming items works.

<table>
<tr><th></th><th>Account Code Entry</th><th>Validity Check</th><th>Restriction by Toll Restriction Table</th></tr>
<tr><td>1</td><td rowspan="4">Always required</td><td rowspan="2">Always checked</td><td>Not restricted, if a system registered account code is entered</td></tr>
<tr><td>2</td><td>Restricted</td></tr>
<tr><td>3</td><td rowspan="2">Not checked</td><td>Not restricted, if an appropriate account code is entered</td></tr>
<tr><td>4</td><td>Restricted</td></tr>
<tr><td>5</td><td rowspan="4">Not required</td><td rowspan="2">Checked
(if the account code is entered)</td><td>Not restricted, if a system registered account code is entered</td></tr>
<tr><td>6</td><td>Restricted</td></tr>
<tr><td>7</td><td rowspan="2">Not checked</td><td>Not restricted, if an appropriate account code is entered</td></tr>
<tr><td>8</td><td>Restricted</td></tr>
</table>

Table 2.

When both ACL and ACV features are assigned (for U.S.A. and Canada)

The extension user can override the restriction on numbers (registered in the Toll Restriction Table) by entering the account code before making an outside call if the validly of the account code entered is proved by the system.

The following example shows how to restrict the extension users from dialing a specific outside number, and allow some of them to dial that number.

Example

(A) To prevent the extension users (whose COS No.=02) from dialing a specific outside number, follow the steps below.

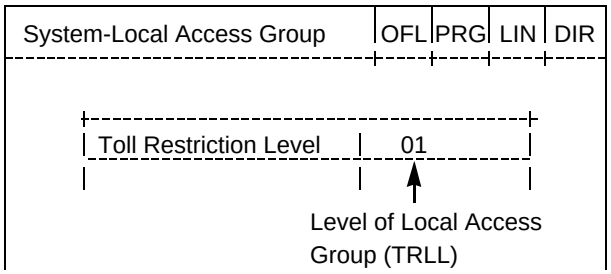
(For example)

(1) + 201 + 204 + XXXX

1. Assign TRLE of the extension lower than TRLL and TRLT as follows.

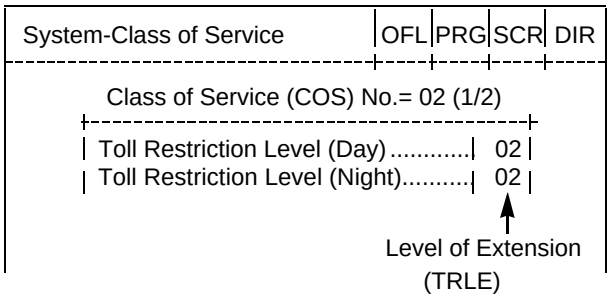
   (In case of “Local Trunk Dial Access.”)

   TRLL (Toll Restriction Level of Local Access)



(Section 9-D-5.00 “Local Access Group”
Section 10-C-9.00 “Local Access Group (LAG)”)

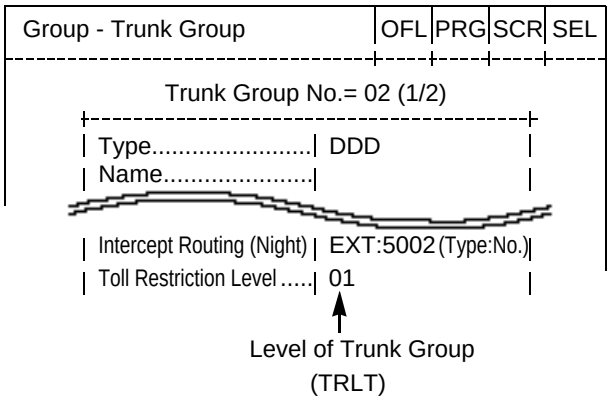
   TRLE (Toll Restriction Level of Extension)



(Section 9-D-4.01 “Class of Service (1/2)”
Section 10-C-7.00 “Class of Service 1 (CS1)”)

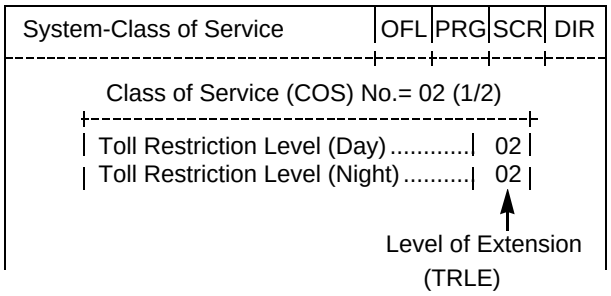
(In case of “Individual Trunk Group Dial Access” and “Direct Trunk Access.”)

TRLT (Toll Restriction Level of Trunk Group) of a specific trunk group



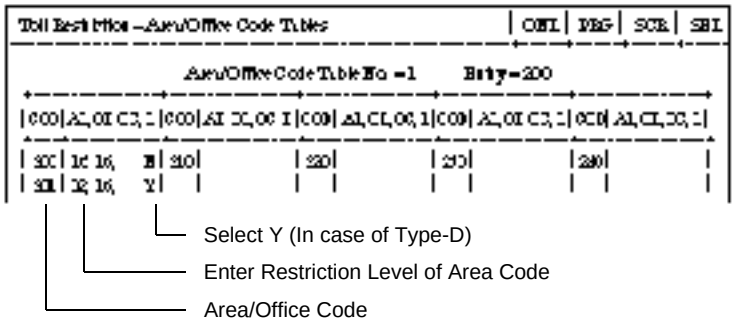
Section 9-E-1.01 “Trunk Group (1/2)”
Section 10-C-14.00 “Trunk Group 1 (TG1)

TRLE (Toll Restriction Level of Extension)



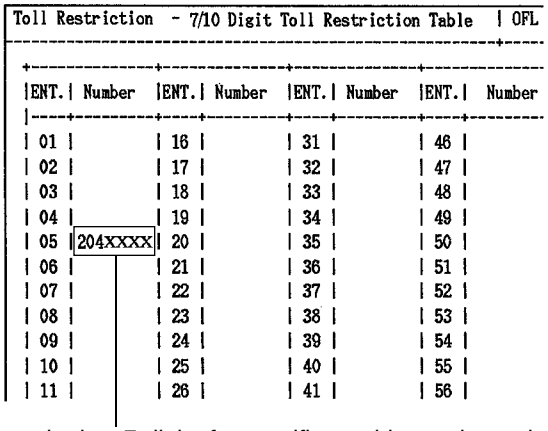
Section 9-D-4.01 “Class of Service (1/2)”
Section 10-C-7.00 “Class of Service 1 (CS1)”

2. Program the Area/Office Code Tables as follows.



Enter Restriction Level “02” in “AL” field of Area/Office Code 201.
If dialing plan type-D is applied in your area, select “Y” in “L” field of Area/Office Code 201.

3. Register the last 7-digit (Office Code + Subscriber Number) of a specific outside number to be restricted for COS.02 extensions as follows.



Section 9-I-3.00 “7/10 Digit Toll Restriction Table”
Section 10-C-34.00 “Toll Restriction 3 (TR3)”

Note:

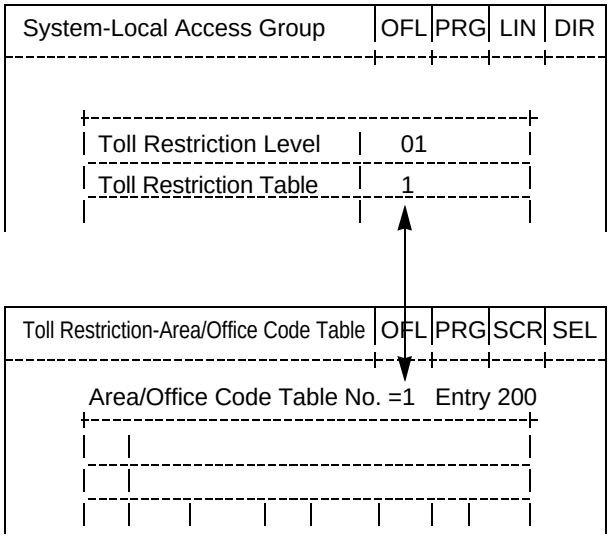
The outside number registered applies to both local and long distance calls.

(Example)

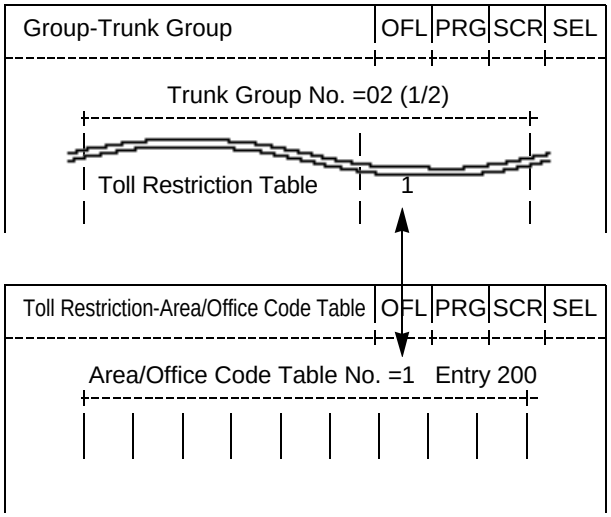
(1) + 201 + 204 + XXXX (Long Distance)
204 + XXXX (Local)

4. Register the Area/Office Code Table No. to be used as follows:

(Local Trunk Dial Access)

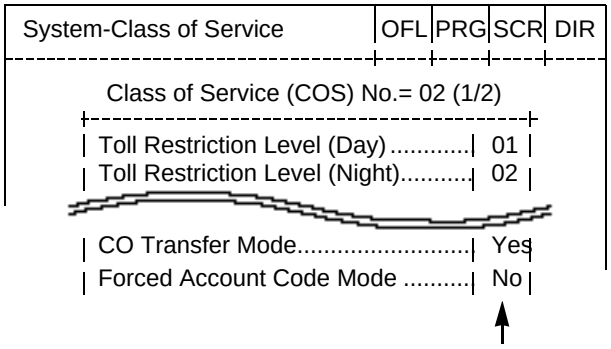


(Individual Trunk Group Dial Access and Direct Trunk Access)



(B) To allow the extension users (whose COS No.=02) to override the restriction on numbers.

1. Assign System – Class of Service “Forced Account Code Mode” for COS.02 to “No.” as follows.



(Section 9-D-4.01 “Class of Service (1/2)”
Section 10-C-7.00 “Class of Service 1 (CS1)”)

2. Assign ACV and ACL features to “Y (Yes)” for COS.02 extension users as follows.

ACV

```
; PRG>ACV AT<CR>
; Class of Service No. 01.....  N
;         INPUT>>  <CR>
; Class of Service No. 02.....  N
;         INPUT>> Y  <CR>
; Class of Service No. 03.....  N
;         INPUT>> $ EOD  <CR>
; PRG>
```

(Section 10-C-56.00 “Account Code Verified”)

ACL

```
; PRG>ACL AT<CR>
; Class of Service No. 01.....  N
;         INPUT>>  <CR>
; Class of Service No. 02.....  N
;         INPUT>> Y  <CR>
; Class of Service No. 03.....  N
;         INPUT>> $ EOD  <CR>
; PRG>
```

(Section 10-C-57.00 “Account Code Entry on Long Distance Calls (ACL)”)

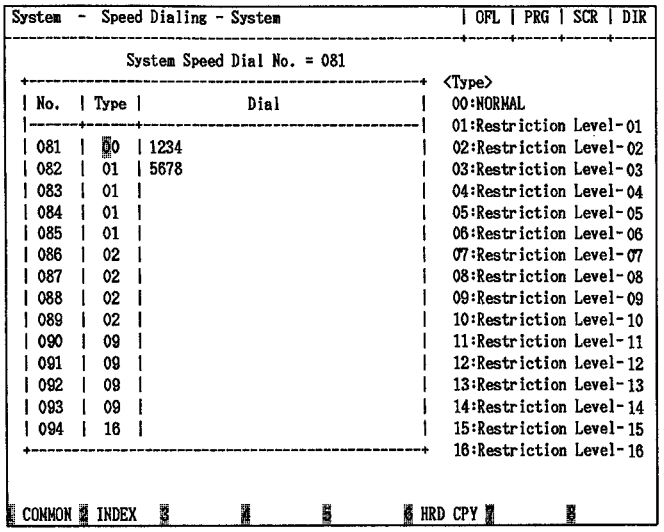
3. To register the System Account Codes, first divide the System Speed Dialing area into two areas by entering the SPB command as follows.

   To assign 80 Speed Dialing Codes and 120 System Account Codes in the Speed Dialing Screen, enter as follows.

   ; PRG>SPB AT<CR>
   ; Speed Dial Boundary..... 200
   ; INPUT>> 080 <CR>
   ; Speed Dial Boundary..... 080
   ; INPUT>> $ EOD <CR>
   ; PRG>

   (Section 10-C-56.00 “Account Code Verified”)

   Then you can register the System Account Codes into the System Speed Dialing Codes from No.081 to 200 as follows.



(Section 9-D-8.00 “Speed Dialing – System”
Section 10-C-12.00 “Speed Dialing – System (SPD)”)

When the programming steps from (A)1 through (B)3 have already been done, the treatment of an outside call made by an extension user (whose COS.No. is 02) depends on the operation as follows.

(In case of “Local Trunk Dial Access.”)

PITS

	Operation	Result	
1	[9] + [(1) + 201+] 204xxxx	Restricted. (Call is not completed.)	The outside number dialed is Restricted by “Toll Restriction Table.”
2	[9] + [FWD/DND] + 3456# + [(1) + 201+] 204xxxx		The account code entered is “Not valid.”
3	[9] + [FWD/DND] + 1234# + [(1) + 201+] 204xxxx	Restriction on number is overridden. (Call is completed.)	

SLT

	Operation	Result	
1	[9] + [(1) + 201+] 204xxxx	Restricted. (Call is not completed.)	The outside number dialed is Restricted by “Toll Restriction Table.”
2	[9] + [#] [#] + 3456# + [(1) + 201+] 204xxxx		The account code entered is “Not valid.”
3	[9] + [#] [#] + 1234# + [(1) + 201+] 204xxxx	Restriction on number is overridden. (Call is completed.)	

(In case of “Individual Trunk Group Dial Access” and “Direct Trunk Access.”)

Individual Trunk Group Dial Access

When making an outside call by specifying the trunk group 02.

PITS

	Operation	Result	
1	[8] [1] [2] + [(1) + 201+] 204xxxx	Restricted. (Call is not completed.)	The outside number dialed is Restricted by “Toll Restriction Table.”
2	[8] [1] [2] + [FWD/DND] + 3456# + [(1) + 201+] 204xxxx		The account code entered is “Not valid.”
3	[8] [1] [2] + [FWD/DND] + 1234# + [(1) + 201+] 204xxxx	Restriction on number is overridden. (Call is completed.)	

SLT

	Operation	Result	
1	[8] [1] [2] + [(1) + 201+] 204xxxx	Restricted. (Call is not completed.)	The outside number dialed is Restricted by “Toll Restriction Table.”
2	[8] [1] [2] + [*] [#] + 3456# + [(1) + 201+] 204xxxx		The account code entered is “Not valid.”
3	[8] [1] [2] + [*] [#] + 1234# + [(1) + 201+] 204xxxx	Restriction on number is overridden. (Call is completed.)	

Direct Trunk Access

PITS

	Operation	Result	
1	[CO button] ※ + [(1) + 201+] 204xxxx	Restricted. (Call is not completed.)	The outside number dialed is Restricted by “Toll Restriction Table.”
2	[CO button] ※ + [FWD/DND] + 3456# + [(1) + 201+] 204xxxx		The account code entered is “Not valid.”
3	[CO button] ※ + [FWD/DND] + 1234# + [(1) + 201+] 204xxxx	Restriction on number is overridden. (Call is completed.)	

※ CO buttons which belong to the trunk group 02.

When both ACL and ACV features are assigned (for areas other than U.S.A. and Canada)

The extension user can override the restriction on number by entering the account code before making an outside call if the validly of the account code entered is proved by the system.

The following example shows how to restrict the extension users from dialing a specific outside number, and allow some of them to dial that number.

Example

1. Assign the first 3-digit of a specific number to be restricted for COS.02 extensions as follows.

Toll Restriction - 3 Digit Toll Restriction Table | OFL

ENT.	Number	ENT.	Number	ENT.	Number	ENT.	Number
01		16	219	31	123	46	331
02		17		32		47	
03		18		33		48	
04		19		34		49	
05	0XX	20		35		50	
06		21		36		51	
07		22		37		52	
08		23		38		53	
09		24		39		54	
10		25		40		55	
11		26		41		56	

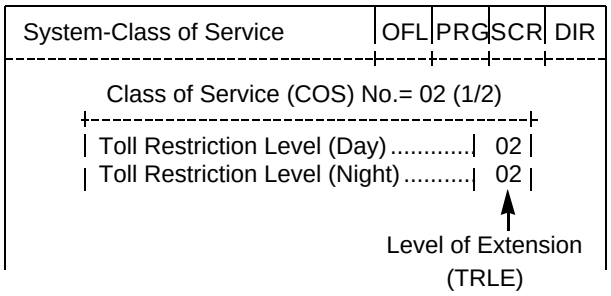
the first 3-digit of a specific outside number to be restricted.

(Section 9-I-4.00 “3 Digit Toll Restriction Table”
Section 10-C-34.00 “Toll Restriction 3 (TR3)”)

(In case of “Local Trunk Dial Access.”)

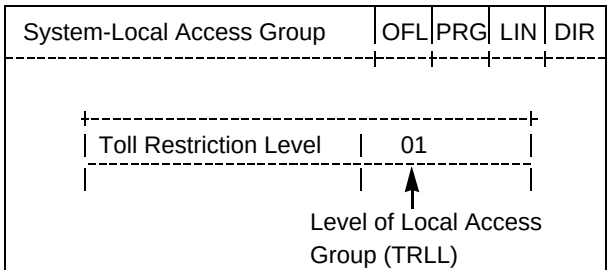
2. Assign TRLE of the extension lower than TRLL as follows.

TRLE (Toll Restriction Level of Extension)



(Section 9-D-4.01 “Class of Service (1/2)”
Section 10-C-7.00 “Class of Service 1 (CS1)”)

TRLL (Toll Restriction Level of Local Access)

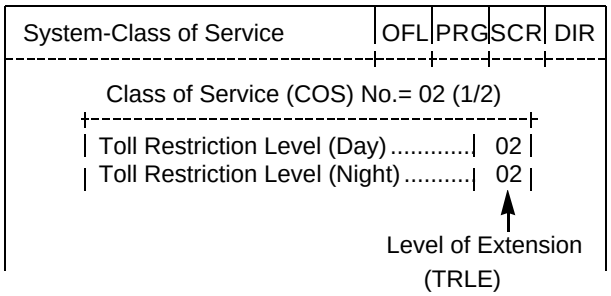


(Section 9-D-5.00 “Local Access Group”
Section 10-C-9.00 “Local Access Group (LAG)”)

(In case of “Individual Trunk Group Dial Access” and “Direct Trunk Access.”)

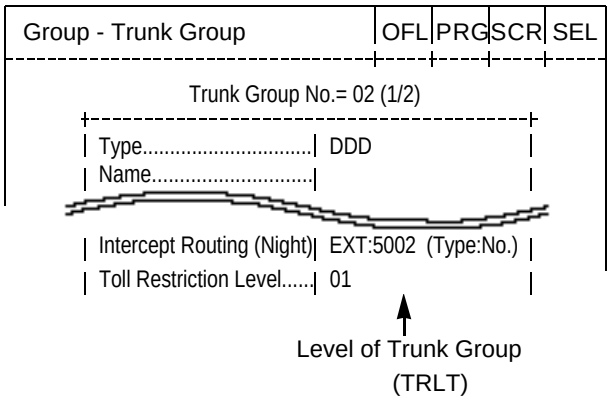
2. Assign TRLE of the extension lower than TRLT of a specific trunk group as follows.

TRLE (Toll Restriction Level of Extension)



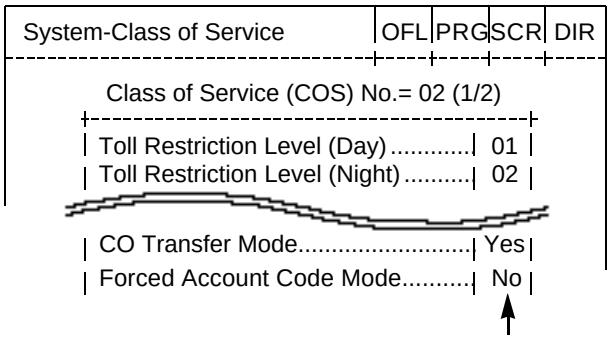
(Section 9-D-4.01 “Class of Service (1/2)”
Section 10-C-7.00 “Class of Service 1 (CS1)”)

TRLT (Toll Restriction Level of Trunk Group)



(Section 9-E-1.01 “Trunk Group (1/2)”
Section 10-C-14.00 “Trunk Group 1 (TG1) ”)

3. Assign System – Class of Service “Forced Account Code Mode” for COS.02 to “No.” as follows.



(Section 9-D-4.01 “Class of Service (1/2)”
Section 10-C-7.00 “Class of Service 1 (CS1)”)

4. Assign ACV and ACL features to “Y (Yes)” for COS.02 extension users as follows.

ACV

```
; PRG>ACV AT<CR>
; Class of Service No. 01.....  N
;         INPUT>>  <CR>
; Class of Service No. 02.....  N
;         INPUT>> Y  <CR>
; Class of Service No. 03.....  N
;         INPUT>> $ EOD  <CR>
; PRG>
```

(Section 10-C-56.00 “Account Code Verified”)

ACL

```
; PRG>ACL AT<CR>
; Class of Service No. 01.....  N
;         INPUT>>  <CR>
; Class of Service No. 02.....  N
;         INPUT>> Y  <CR>
; Class of Service No. 03.....  N
;         INPUT>> $ EOD  <CR>
; PRG>
```

(Section 10-C-57.00 “Account Code Entry on Long Distance Calls (ACL)”)

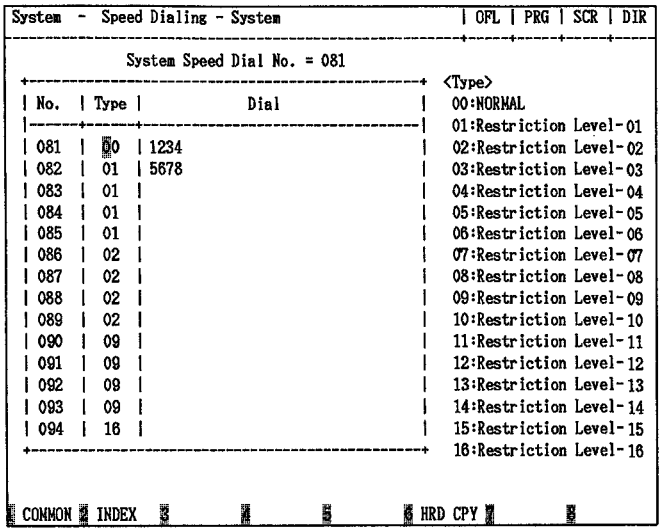
5. To register the System Account Codes, first divide the System Speed Dialing area into two areas by entering the SPB command as follows.

   To assign 80 Speed Dialing Codes and 120 System Account Codes in the Speed Dialing Screen, enter as follows.

   ; PRG>SPB AT<CR>
   ; Speed Dial Boundary..... 200
   ; INPUT>> 080 <CR>
   ; Speed Dial Boundary..... 080
   ; INPUT>> $ EOD <CR>
   ; PRG>

   (Section 10-C-56.00 “Account Code Verified”)

   Then you can register the System Account Codes into the System Speed Dialing Codes from No.081 to 200 as follows.



(Section 9-D-8.00 “Speed Dialing – System”
Section 10-C-12.00 “Speed Dialing – System (SPD)”)

When the programming procedures from 1 to 5 have already been done, the treatment of an outside call made by an extension user (whose COS.No. is 02) depends on the operation as follows.

(In case of “Local Trunk Dial Access.”)

PITS

	Operation	Result	
1	[9] + 0xxxx	Restricted (Call is not completed)	The outside number dialed is Restricted by “3 Digit Toll Restriction Table”
2	[9] + [FWD/DND] + 3456# + 0xxxx		The account code entered is “Not valid”
3	[9] + [FWD/DND] + 1234# + 0xxxx	Restriction on number is overridden (Call is completed)	

SLT

	Operation	Result	
1	[9] + 0xxxx	Restricted (Call is not completed)	The outside number dialed is Restricted by “3 Digit Toll Restriction Table”
2	[9] + [#] + [#] + 3456# + 0xxxx		The account code entered is “Not valid”
3	[9] + [#] + [#] + 1234# + 0xxxx	Restriction on number is overridden (Call is completed)	

(In case of “Individual Trunk Group Dial Access” and “Direct Trunk Access.”)

Individual Trunk Group Dial Access

When making an outside call by specifying the trunk group 02.

PITS

	Operation	Result	
1	[8] [1] [2] + 0xxxx	Restricted (Call is not completed)	The outside number dialed is Restricted by “3 Digit Toll Restriction Table”
2	[8] [1] [2] + [FWD/DND] + 3456# + 0xxxx		The account code entered is “Not valid”
3	[8] [1] [2] + [FWD/DND] + 1234# + 0xxxx	Restriction on number is overridden (Call is completed)	

SLT

	Operation	Result	
1	[8] [1] [2] + 0xxxx	Restricted (Call is not completed)	The outside number dialed is Restricted by “3 Digit Toll Restriction Table”
2	[8] [1] [2] + [#] [#] + 3456# + 0xxxx		The account code entered is “Not valid”
3	[8] [1] [2] + [#] [#] + 1234# + 0xxxx	Restriction on number is overridden (Call is completed)	

Direct Trunk Access

PITS

	Operation	Result	
1	[CO button]※ + 0xxxx	Restricted (Call is not completed)	The outside number dialed is Restricted by “3 Digit Toll Restriction Table”
2	[CO button]※ + [FWD/DND] + 3456# + 0xxxx		The account code entered is “Not valid”
3	[CO button]※ + [FWD/DND] + 1234# + 0xxxx	Restriction on number is overridden (Call is completed)	

※ CO buttons which belong to the trunk group 02.

12.00 Waiting for Second Dial tone

Description

In some areas, upon completion of area code entry, the extension user must ensure the reception of the second dial tone from the central office before continuing to dial the rest of the telephone number.

The following dialing procedures assume that the required system programming has already been done.

Dialing Procedures

(1) Manual Dialing

1. [Feature number for selecting a CO line] + [Area Code] is dialed.

↓

2. CO line specified is seized instantly, if available. (*1)

↓

3. Area code dialed is sent to the Central Office.

↓

4. Second CO dial tone is returned in a delayed timing. (*2, *3, *4)

↓

5. The rest of the telephone number dialed at an extension is sent to the Central Office.

(2) Memory Dialing

1. [One Touch Dialing] / [Speed Dialing] / [LNR] / [SNR]

↓

2. CO line specified is seized instantly, if available. (*1)

↓

3. Leading one through four digits (Area code) of the memorized number is sent to the Central Office automatically. (*2, *3, *4)

↓

4. Second CO dial tone is returned in a delayed timing. (*2, *3, *4)

↓

5. The rest of the memorized number is sent to the CO line automatically. (*2, *3, *4)

To support the WSD dialing procedure, the following system programming should be done beforehand.

Note:

(*1) Assign “CO Access Instantly (CAI)” feature to “Yes” on a trunk group by entering the CAI command.
This feature is programmable on a trunk group basis.
In case of Local Trunk Dial Access, the system decides the mode by the top trunk group of Local Trunk Hunt Sequence.
Refer to Section 10-C-58.00 “CO Access Instantly (CAI)” for further information.

(*2) Set the WSD (Waiting Second Dial tone) mode to “Yes” by entering the WS3 command.
Refer to Section 10-C-53.00 “World Select 3 (WS3)” for further information.

(*3) Assign “External First Digit Time-out” timer longer than a delayed timing of the second dial tone from Central Office.

(*4) Register the required area code and pause time by entering the WSD command.
Refer to Section 10-C-61.00 “Waiting for Second Dial tone (WSD)” for further information

Programming

System Programming	Reference	
	VT	Dumb
“System—System Timer”, External First Digit Time-Out	9-D-3.00	10-C-6.00
“World Select 3 (WS3)”	—	10-C-53.00
“CO Access Instantly (CAI)”	—	10-C-58.00
“Waiting Second Dial Tone (WSD)”	—	10-C-61.00

Conditions

External First Digit Time-Out

This timer is usually used to set the waiting time allowed between CO dial tone or pseudo dial tone and the Time-out first digit dialed.
However, if the WSD feature is utilized by system programming, this timer works to set the waiting time allowed between area code dialed and the remaining number dialed.

13.00 Timed Reminder with OGM (Wake-up Call)

Description

A wake-up call can be set either by any extension user to his or her own extension, or by the Operator 1 or 2 (Attendant Console or Extension) to any extension.
When this feature is activated, the extension user can hear a wake-up message by going off-hook after being alerted by the alarm tone at a specified time.

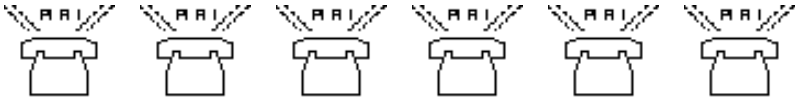
To utilize this feature, a wake-up message should be recorded by the Operator 1 beforehand.
(Refer to Section 3-F-4.00, 4-I-13.00 and 6-J-8.00 “Outgoing Message (OGM) Recording and Playing Back.”)

This feature is functionally equivalent to “Timed Reminder” (if set by the extension user himself) or “Remote Timed Reminder” (if set by the Operators). The difference is, this feature provides the wake-up message instead of the second dial tone when the extension user goes off-hook.

Up to four extension users per DISA card can initially hear the wake-up message at a time, and a maximum of four DISA cards can be installed to the system. That is, up to 16 extension users can initially hear the wake-up message at a time, if a maximum of four DISA cards are installed.

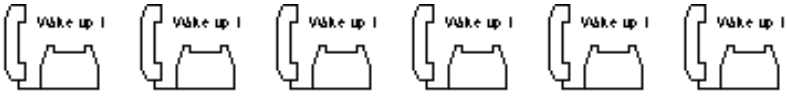
<Example>
Assuming that one DISA card (For Use is W-UP) is installed in the system, and six extension users have set the wake-up call to ring at 7:30 A.M.

1. At 7:30 A.M, timed reminder tone (alarm tone) begins to ring at six extensions simultaneously.



2. Each extension user goes off-hook respectively.
   The first four extension users (who go off-hook earlier than two other extensions) can hear the wake-up message and two other extensions hear BGM. *1

3. Two other extension users will hear the wake-up message instead of BGM when:
   - Next playback of the message begins.*2
   - A DISA resource is released, that is, the extension user goes on-hook after hearing the wake-up message.



Note:

*1 To utilize BGM, set the usage of music source to “BGM” or “Hold & BGM.” If set to “Hold,” other two extensions hear the second dial tone instead of BGM and will not be able to hear a wake-up message. (See Section 9-F-2.00 “Pager and Music Source.”)

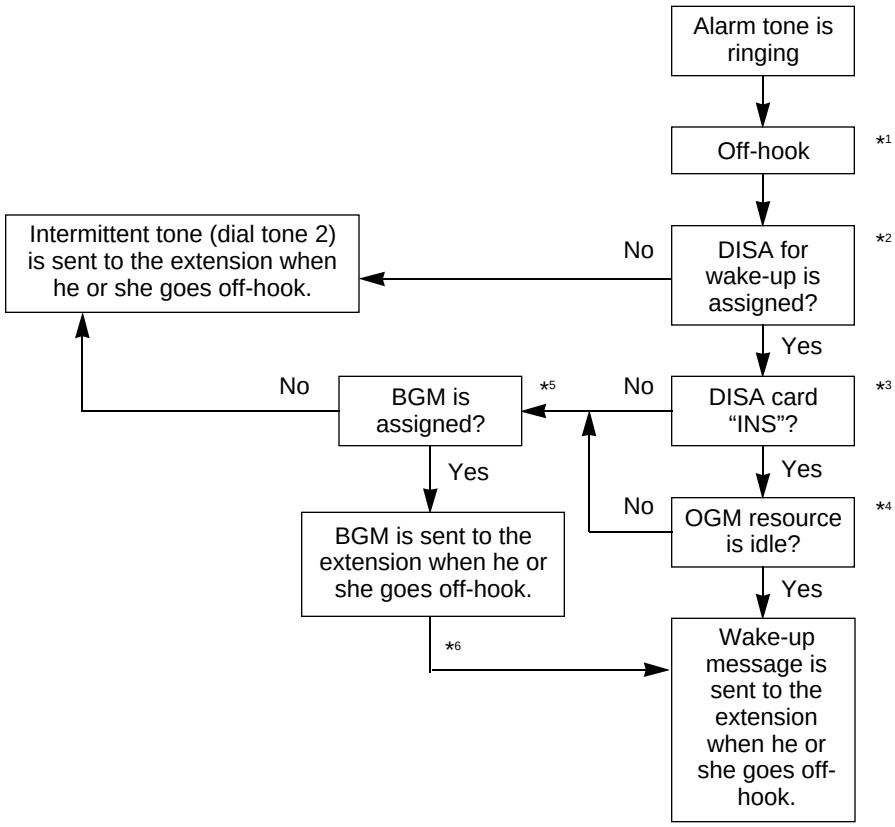
*2 Endless loop OGM
A wake-up message is always played back from the beginning of it to the extension user when he or she goes off-hook to hear a wake-up message. It is played back repeatedly until the extension goes on-hook.

Programming

System Programming	Reference	
	VT	Dumb
“Special Attended — DISA”, For Use	9-K-1.00	10-C-40.00
“System — Operation (1/3)”, External Music Source 1, 2	9-D-1.01	10-C-4.00
“Trunk — Pager & Music Source”, Music Source — For use Music Source — Tenant	9-F-2.00	10-C-20.00

Conditions

The following simplified flowchart shows the treatment of the extension user who goes off-hook after being alerted by an alarm tone.



Note:

*1 This feature works if the extension user goes off-hook while the alarm tone is ringing for 2 minutes.

*2 Tenant Service
If the tenant service is employed, each tenant (1 and 2) can have its unique wake-up message respectively.
In this case, affiliations of the wake-up message and the extension should be the same tenant.

*3 Operating Status
Refer to Section 14-C-2.00 “Definition of Operating Status.”

*4 OGM busy
Up to four extensions per DISA card can initially receive a wake-up message at a time.

*5 BGM
To utilize BGM, set the usage of music source to “BGM” or “Hold & BGM.” (Refer to Section 9-F-2.00 “Pager and Music Source.”)

*6 From BGM to a wake-up message
The extension who currently hears BGM will hear the wake-up message instead of BGM when:

- Next playback of the message begins.
- A DISA resource is released, that is, the extension user goes on-hook after hearing the message.

14.00 TIE Lines

Description

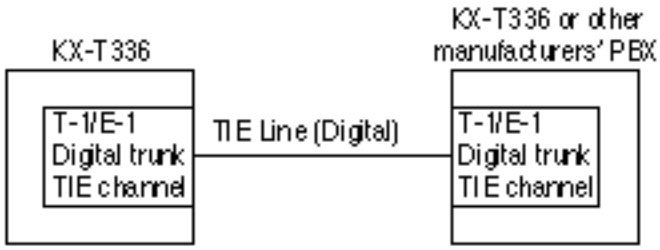
A TIE line is a privately leased communication line between two or more PBXs, which provides cost effective communications between company members at different locations.

TIE lines can be used to call through KX-T336 to reach another switching system (PBX or CO). By utilizing the TIE lines, the KX-T336 can support not only communications with the public network but with other locations of the company in the private network which your KX-T336 can be a part of.

To make a call to a person in a distant company location, an extension user must first obtain the appropriate TIE line to that person's PBX, and then dial the extension number only or a location number plus extension number.

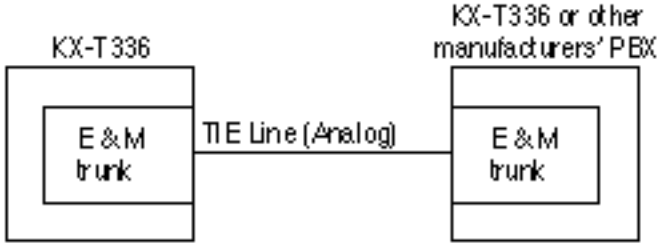
A Network of TIE Lines

1.Interfaced by a TIE (E&M) channel of T-1/E-1 DIGITAL TRUNK card (Digital)



Hardware Requirements: T-1 DIGITAL TRUNK card (KX-T96187) or E-1 DIGITAL TRUNK card (KX-T96188)

2.Interfaced by an E&M card (Analog)



Hardware Requirements: E & M card (KX-T96184)

Numbering Plan: Extension users can make a call over the TIE Line Network to other extension users in a distant location by one of the following procedures.

1. Extension Number only (See Section 3-F-14.01.)
   - [Extension Number]
   - [CO (TIE)] button + [Extension Number]
   - [Trunk Group Access Number] + [Extension Number]

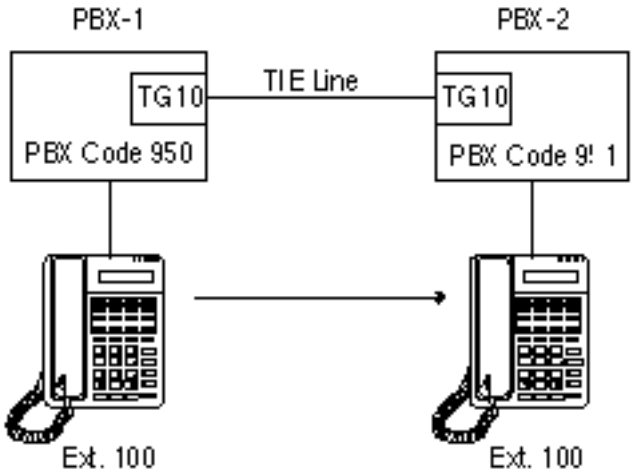
2. Location Number (PBX Code) + Extension Number (See Section 3-F-14.01.)
   - [TIE Trunk Access Code] + [PBX Code] + [Extension Number]
   - [CO (TIE)] button + [PBX Code] + [Extension Number]
   - [Trunk Group Access Number] + [PBX Code] + [Extension Number]

Routing Procedure 1: Routing Table

Provides for the routing of calls over the TIE Line Network.
Up to 36 routing patterns can be programmed in this table.
This table is referenced by the system to identify the trunk route, when an extension user made a TIE call by dialing the feature number for “TIE Trunk Access,” or Other PBX extension number. A routing pattern appropriate for each call is decided by the first one, two or three digits (except TIE trunk access code) of the dialed number.

- Routing Table Override
  If a TIE call is made by pressing a CO key or dialing Trunk Group Access Number, this table is not referenced by the system and the call is routed over the specified TIE trunk directly.

(Programming Example)



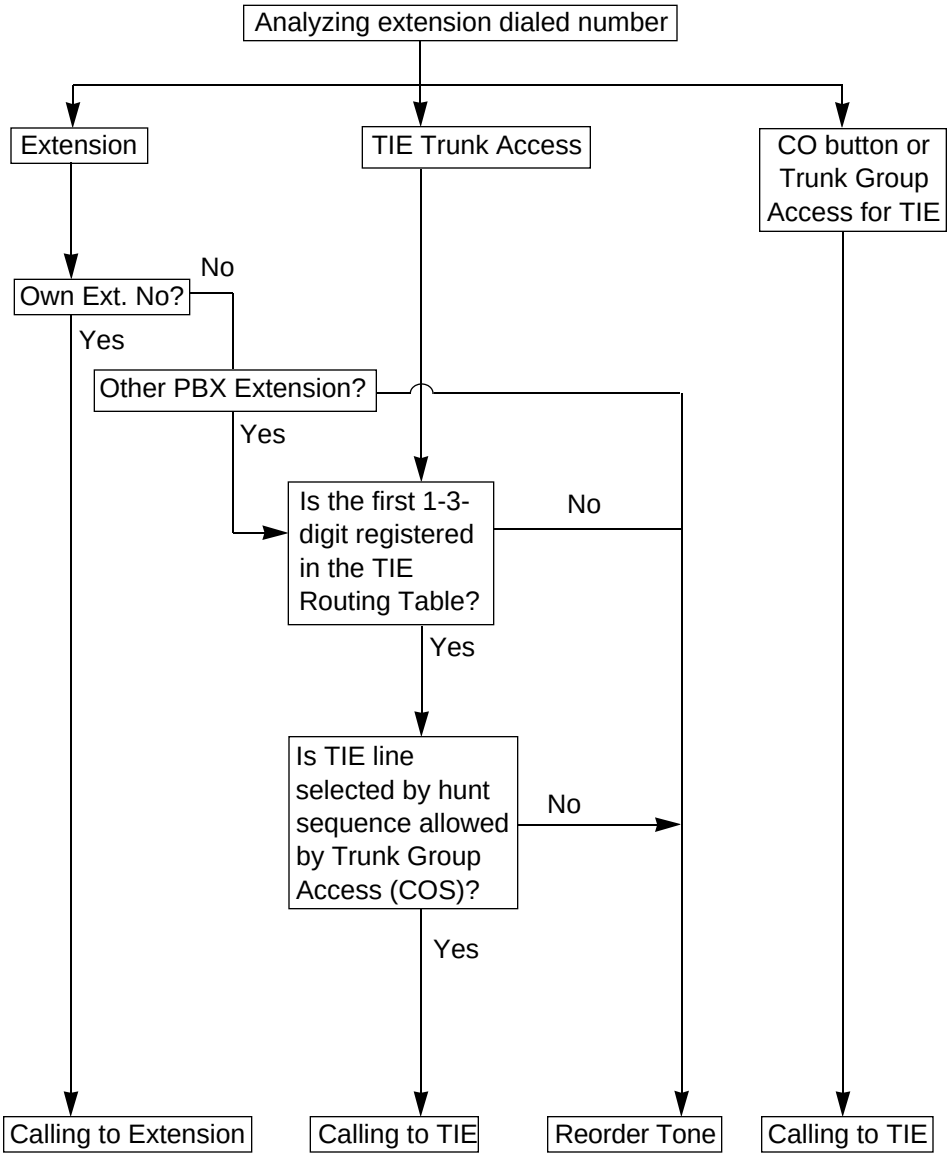
TIE Line Routing Table in PBX-1

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 :	951	0		10		

When "84* (TIE Trunk Access Code)+951+100" is dialed by an extension user, the routing pattern for this call is decided by "951."
Then the call is routed over TG10 (Trunk Group 10 whose type is "TIE").
* Default for Fixed 1.

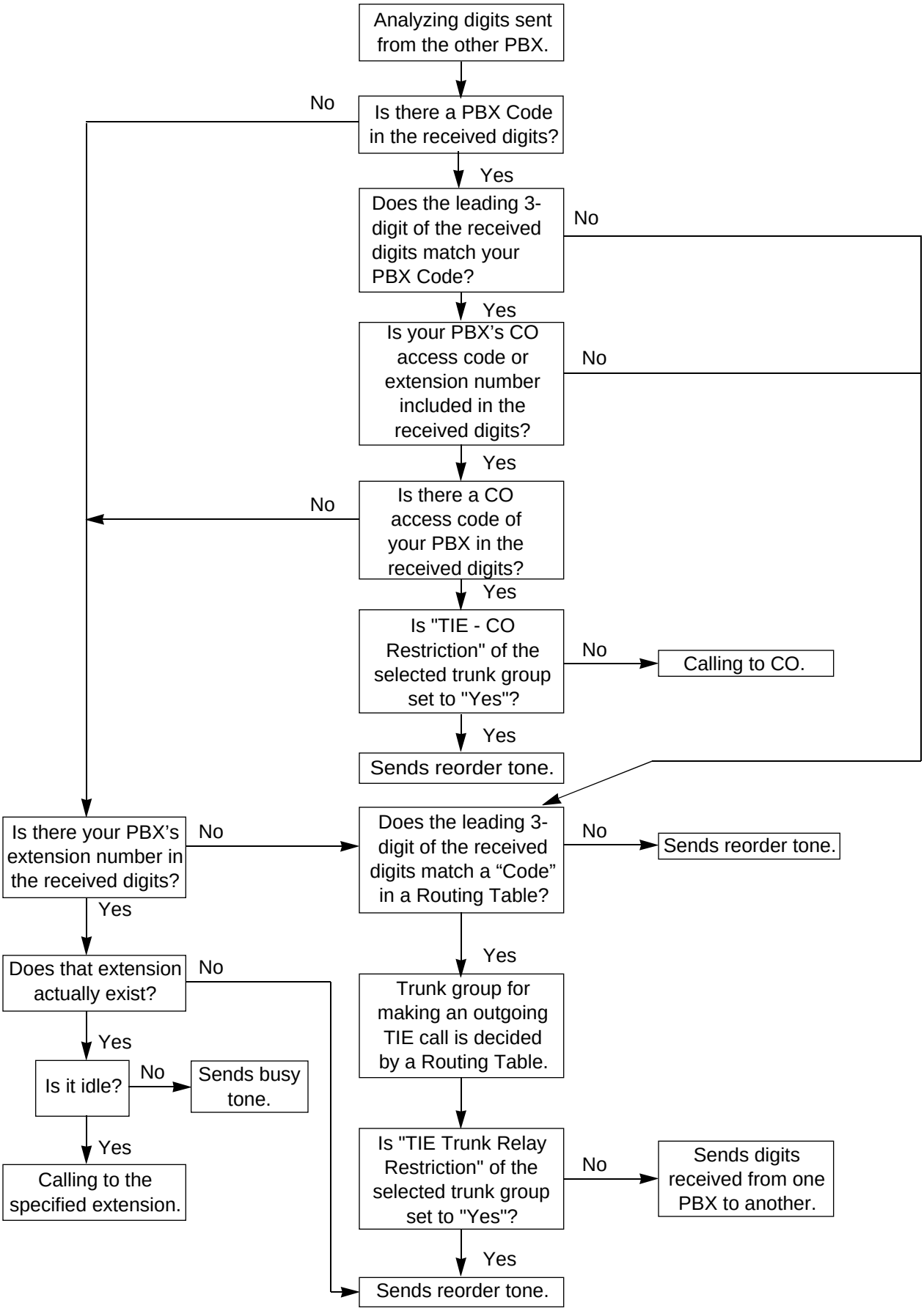
Routing Procedure 2: Routing Flow Chart

(1) When a TIE call is made by an extension user in your PBX



(Note)
TRLE = Toll Restriction Level of Extension
TRLT = Toll Restriction Level of Trunk Group

Routing Procedure 2: (2) When a TIE call comes in on your PBX from other PBXs.



Programming

(1) Basic Programming

Always required to make use of TIE lines regardless of the type of applications.

System Programming	Reference	
	VT	Dumb
"Configuration — Slot Assignment"	9-C-2.00	10-C-2.00
"Configuration — Channel Assignment"	9-C-4.00	10-C-64.01
"Group — Trunk Group (1/2)", Type	9-E-1.01	10-C-14.00
"Trunk— CO Line", Trunk Group	9-F-1.00	10-C-18.00
"World Select 1 (WS1)", Flash Detect (TIE) Answer Decision Timer	—	10-C-51.00

(2) Timer programming

System Programming	Reference	
	VT	Dumb
"System-System Timer", TIE Interdigit Time-Out	9-D-3.00	10-C-6.00

(3) Application programming

Programming items required vary depending on the type of application. Refer to Section 3-F-14.01 through 14.05 for further information about each application programming.

Conditions

•The treatment of the TIE calls is the same as that of extension and CO calls. TIE calls can be put on hold, be transferred to/forwarded to other extensions or trunks (CO, TIE).

• **Unscreened Call Transfer to TIE trunks** (for areas other than U.S.A. and Canada)
An extension user can transfer a call to TIE trunks without announcement. If a tranferred call is not answered by the destination party within a preprogrammed time ("Transfer Recall" timer), it will return to the party who transferred the call.
This feature is available with software version 15.XX or higher.

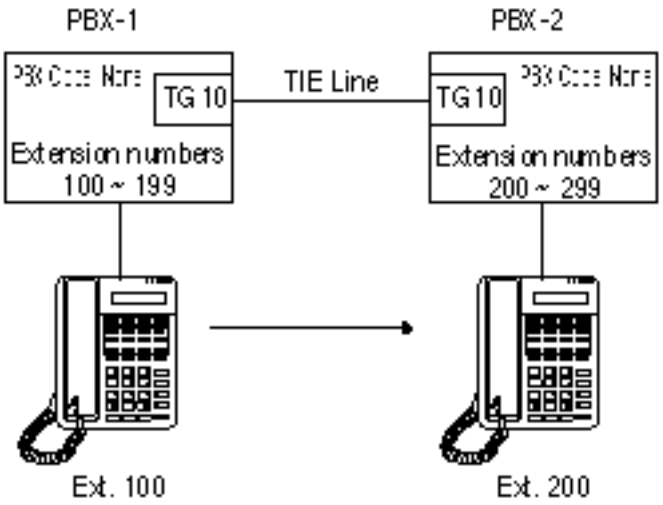
14.01 Calling from TIE to TIE

Description TIE calls among several different company locations can be done by dialing a 3 or 4-digit extension number only, or by dialing a location number (PBX Code) and an extension number.

(1) By dialing Extension Number only

Description Extension users can make a call via TIE line to other extension users in other PBXs within a private network by simply dialing a 3 or 4-digit extension number.

A Network of TIE Lines



Call Flow

1. Ext.100 dials 200.
2. Ext.100 is connected to Ext.200 of PBX-2.

Programming example: To make up the TIE Line Network above, the following system programming is required at PBX-1 and -2 respectively.

PBX-1

- System - Operation (1/3)-PBX Code: (Blank)
- System - Numbering Plan (9-D-6.00, 10-C-10.00)
  1st Hundred Extension 1
  Other PBX Extension 01 2
- Special Attended - TIE Line Routing Table (9-K-4.00,10-C-65.01)

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01	2XX	0		10		

PBX-2

- System - Operation (1/3)-PBX Code: (Blank)
- System - Numbering Plan
  1st Hundred Extension 2
  Other PBX Extension 01 1
- Special Attended - TIE Line Routing Table

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01	1XX	0		10		

Programming

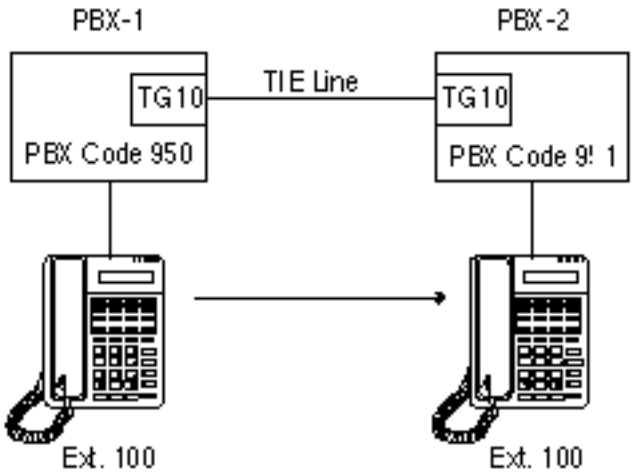
System Programming	Reference	
	VT	Dumb
"System-Operation(1/ 3)",	9-D-1.01	10-C-4.00
Numbering Plan		
"System-Numbering Plan",	9-D-6.00	10-C-10.00
TIE Trunk Access	9-D-6.10	
Other PBX Extension 01-16	9-D-6.11	
"Special Attended-TIE Line Routing Table",	9-K-4.00	10-C-65.01
Code		
Delete Digit		
Insert Dial		
Trunk Group Hunt Sequence		
01-05		

(2) By dialing Location Number (PBX code) and Extension Number

Description

Extension users can make a call to other extension users in other PBXs within a TIE line network by dialing a location number (PBX Code) and an extension number. Each PBX in the same TIE Line Network can have its own flexible extension numbering plan.

A Network of TIE Lines



Call Flow

1. Ext.100 of PBX-1 dials 84-951-100.
2. Ext.100 of PBX-1 is connected to Ext.100 of PBX-2.

Programming example

To make up the TIE Line Network above, the following system programming is required at PBX-1 and -2 respectively.

PBX-1

- System -Operation (1/3) (9-D-1.01, 10-C-4.00)
  PBX Code: 950
- System - Numbering Plan (07/11)-TIE Trunk Access: 84 (default)
- Special Attended - TIE Line Routing Table (9-K-4.00, 10-C-65.01)

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 :	951	0		10		

PBX-2

- System - Operation (1/3)
  PBX Code: 951
- System - Numbering Plan (07/11)-TIE Trunk Access: 84 (default)
- Special Attended - TIE Line Routing Table

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 :	950	0		10		

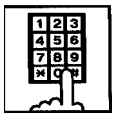
Programming

System Programming	Reference	
	VT	Dumb
“System-Operation(1/ 3)”,	9-D-1.01	10-C-4.00
PBX Code		
“System-Numbering Plan”,	9-D-6.00	10-C-10.00
TIE Trunk Access	9-D-6.10	
“Group-Trunk Group (2/2)”,	9-E-1.02	10-C-15.00
TIE Incoming Delete Digit		
TIE Incoming Insert Dial		
“Special Attended-TIE Line Routing Table”,	9-K-4.00	10-C-65.01
Code		
Delete Digit		
Insert Dial		
Trunk Group Hunt Sequence 01-05		
“TIE Trunk Relay Restriction (TRR)”	—	10-C-65.03

Operation

Making a TIE call
(A) By dialing an extension number

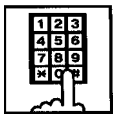
1.Lift the handset or press the SP-PHONE button.
- You hear dial tone 1 or 3 or 4,



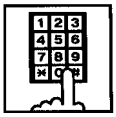
2.Dial the other PBX's extension number.
- You hear ringback tone.

(B) By dialing a PBX code and an extension number

1.Lift the handset or press the SP-PHONE button.
- You hear dial tone 1 or 3 or 4.



2.Dial the feature number for TIE Trunk Access "84" (default).
- You hear dial tone 1.



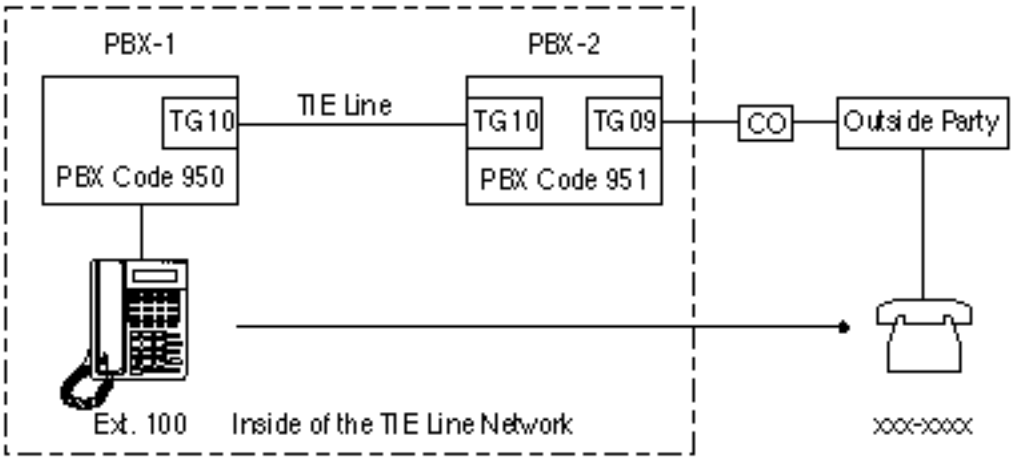
3.Dial the PBX code of the destination PBX and then the extension number of your destination party.
- You hear ringback tone.

14.02 Calling from TIE to CO

Description

TIE Lines can be used to minimize the cost of calls to a distant location outside of the TIE Line Network. A long distance call from one location may be a local call from another location. This fact must be taken into consideration before making a long distance call.
If the destination of the long distance call is outside of the TIE Line Network, extension users first call to a distant PBX via TIE Line and then can make a local CO call to the final destination through that PBX.

A Network of TIE Lines



Call Flow

1. Ext.100 dials 84-951-9 (TIE Trunk Access Code + PBX Code + CO Access Code).
2. Ext.100 is required to enter a TIE account code*.
3. Ext.100 hears dial tone from an idle CO line of PBX-2.
4. Ext.100 dials xxx-xxxx (phone number of the outside party).

*Step 2 is required when “TIE Forced Account Code” Mode is set to “Yes” at PBX-2.

Programming example: To make up the TIE Line Network above, the following system programming is required at PBX-1 and -2 respectively.

PBX-1

- System - Operation (1/3) (9-D-1.01, 10-C-4.00)
  PBX Code: 950

- Special Attended - TIE Line Routing Table (9-K-4.00, 10-C-65.01)

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 :	951	0		10		

PBX-2

- System - Operation (1/3)
  PBX Code: 951

- Group - Trunk Group (2/2) (9-E-1.02, 10-C-15.00)
  Type: TIE
  TIE - CO Restriction: No
  TIE-Forced Account Code Mode: Yes
- Special Attended - TIE Line Routing Table

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 :	950	0		10		

Programming

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (2/2)",	9-E-1.02	10-C-15.00
TIE-CO Restriction		
TIE-Forced Account Code Mode		
TIE Incoming Delete Digit		
TIE Incoming Insert Dial		
"Special Attended-TIE Line	9-K-4.00	10-C-65.01
Routing Table",		
Code		
Delete Digit		
Insert Dial		
Trunk Group Hunt Sequence 01-05		
"TIE Account Code (TAC)"	—	10-C-65.02
"TIE Trunk Relay Restriction (TRR)"	—	10-C-65.03

Conditions

1.TIE-CO Restriction
Used to restrict or not extension users from "Calling from TIE to CO."
To restrict, set to "Yes." To allow, set to "No."

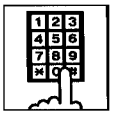
2.TIE Account Code
Used to allow certain extension users "Calling from TIE to CO."
If "Forced Account Mode" of the trunk group is set to "Yes", an extension user must enter a valid TIE account code before "Calling from TIE to CO." TIE Account Codes can be registered by using TAC command in the Dumb Programming mode. (Refer to Section 10-C-65.02 "TIE Account Code.")

3."Calling from TIE to CO" is available only when your system employs PBX Code (Location number) method for making/receiving TIE calls.

Operation

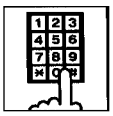
1.Lift the handset or press the SP-PHONE button.

- You hear dial tone 1 or 3 or 4.

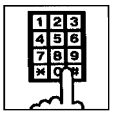


2.Dial the feature number for TIE Trunk Access “84” (default).

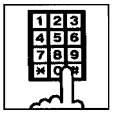
- You hear dial tone 1,



3.Dial the PBX code and a CO access code of the destination PBX.



4.Dial a TIE Account Code (if required).

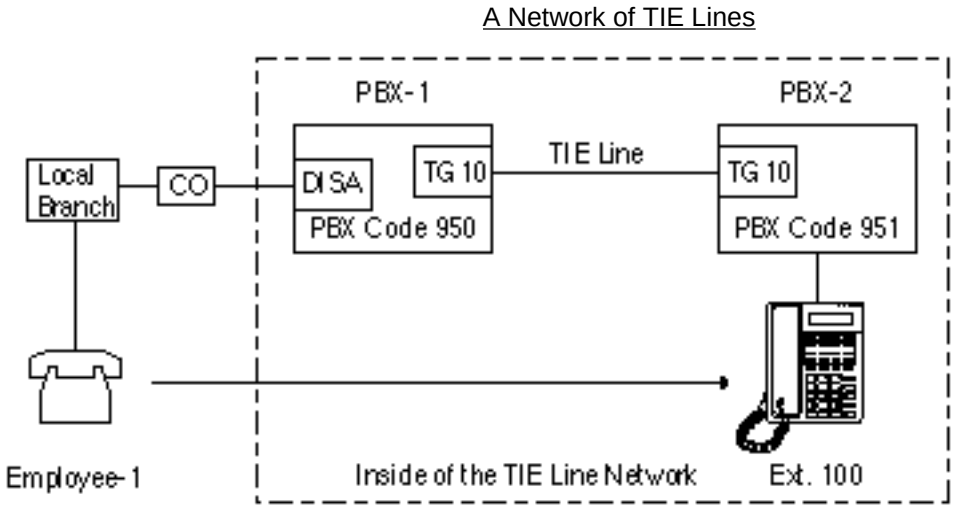


5.Dial the telephone number of the outside party.

14.03 Calling from CO to TIE

Description

TIE lines are usually used to link two or more distant locations where high volume calling traffic exists. However, a person at a location outside of the Tie Line Network can also use it by first making a CO call via public network to the nearest point of TIE Line Network for the purpose of saving the toll call charge.



Call Flow

1. Employee-1 at a local branch makes a CO call to PBX-1 via DISA.
2. Employee-1 dials “84” (TIE trunk access code).
3. After hearing dial tone, Employee-1 dials 951-100.
4. Employee-1 at a local branch will be connected to Ext.100 of PBX-2.

Programming example: To make up the TIE Line Network above, the following system programming is required at PBX-1 and -2 respectively.

PBX-1

- System -Operation (1/3) (9-D-1.01, 10-C-4.00)
  PBX Code: 950

- Group - Trunk Group (2/2) (9-E-1.02, 10-C-15.00)
  CO-TIE Restriction: No*

* This assignment is required at the trunk group whose “Incoming Mode” is set to “DISA”.

- Special Attended - TIE Line Routing Table

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 :	951	0		10		

PBX-2

- System - Operation (1/3)
  PBX Code: 951

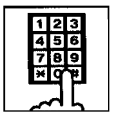
- Special Attended - TIE Line Routing Table

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 :	950	0		10		

Programming

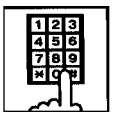
System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (2/ 2)",	9-E-1.02	10-C-15.00
CO-TIE Restriction		
TIE Incoming Delete Digit		
TIE Incoming Insert Dial		
"Special Attended-TIE Line	9-K-4.00	10-C-65.01
Routing Table",		
Code		
Delete Digit		
Insert Dial		
Trunk Group Hunt Sequence 01-05		
"TIE Trunk Relay Restriction (TRR)"	—	10-C-65.03

Operation

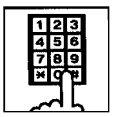


1.Dial the DISA phone number.
- You hear ringback tone.

2.You hear the DISA outgoing message.



3.Dial the feature number for TIE Trunk Access "84" (default).



4.Dial the PBX code of other PBX and then the extension number of your party.
- You hear ringback tone.

14.04 Alternate Routing

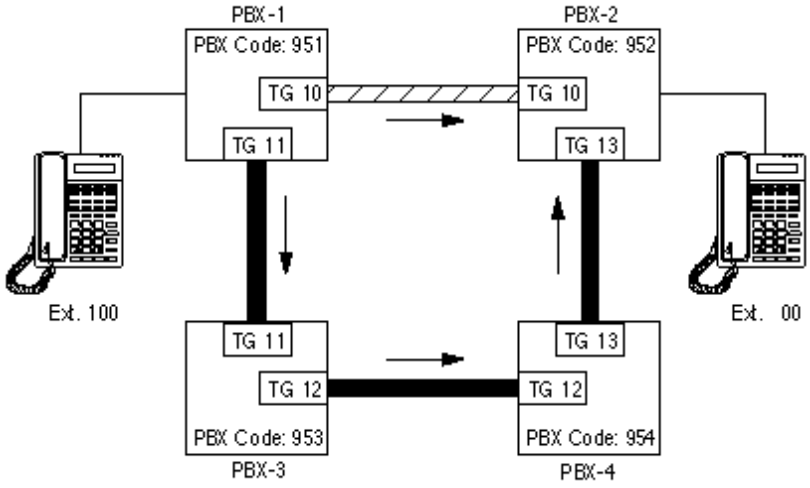
Description

When more than two PBXs at different locations are interconnected with a network of TIE Lines, your KX-T336 works as an intermediate switching office to other PBXs in the network by relaying tie calls from one PBX to another.

A problem of telephone switching is that blocking sometimes occurs on the network, and a call cannot be switched as required because all the lines on a given route are occupied or unavailable.
By utilizing this relay function, several alternative routes can be set up beforehand in addition to the primary-route. This permits TIE calls to be routed from “A to B” or “A through C to B” and so on.
If the primary-route is poor because of equipment failure or congestion, KX-T336 bypasses it and selects the secondary-route.

On receipt of a TIE call, KX-T336 analyzes it to determine the destination to which the call must be sent or the route by which the calls will be sent, and then transmit it.
Alternate Routing makes a TIE Line Network more flexible in adapting to peaks of traffic and it provides a variety of different routing plans.

A Network of TIE Lines



Call Flow

1.Ext.100 dials “84+952+200.”
2.When “952” is found in the table,TG10 (Hunt Sequence 01 for “952”) is selected automatically.
- If TG10 is not available, TG11(Hunt Sequence 02) will be selected.
  In this case, the call is sent to PBX-2 via PBX-3 and -4.
  The treatment of the call is decided by Routing Table of PBX-3 and then PBX-4.

3.The call is sent to PBX-2.

Programming example: To realize the call flow mentioned in the previous page, the following system programming is required at PBX-1, -3, and -4 respectively.

PBX-1

- System -Operation (1/3) (9-D-1.01, 10-C-4.00)
  PBX Code: 951

- Special Attended - TIE Line Routing Table (9-K-4.00, 10-C-65.01)

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 :	952 953	0		10 11	11 10	

- TIE Trunk Relay Restriction (TRR) (10-C-65.03)

PBX-3

- System -Operation (1/3)
  PBX Code: 953

- Special Attended - TIE Line Routing Table

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 :	952	0		12		

- TIE Trunk Relay Restriction (TRR)

PBX-4

- System -Operation (1/3)
  PBX Code: 954

- Special Attended - TIE Line Routing Table

No.	Code	Delete Digit	Insert Dial	Trunk Group Hunt Sequence		
				01	02	
01 02 :	952	0		13		

- TIE Trunk Relay Restriction (TRR)

Note:
If you want to restrict “call relay from PBX-1 to PBX-2 via PBX-3”, set “TG11” to “Yes” at PBX-3 using TRR command.

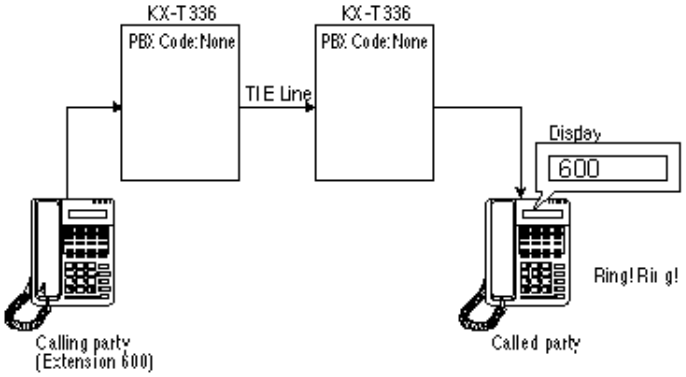
Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (2/ 2)”,	9-E-1.02	10-C-15.00
CO-TIE Restriction		
TIE-CO Restriction		
TIE Incoming Delete Digit		
TIE Incoming Insert Dial		
“Special Attended-TIE Line	9-K-4.00	10-C-65.01
Routing Table”,		
Code		
Delete Digit		
Insert Dial		
Trunk Group Hunt Sequence 01-05		
“TIE Trunk Relay Restriction (TRR)”	—	10-C-65.03

14.05 TIE Caller ID Identification (for areas other than U.S.A. and Canada)

Description

Provides the called party with the presentation of caller's TIE Line ID (extension) number. With this service, an extension user can find out who's calling before answering a TIE call. This service can be set on a TIE trunk group basis.
This feature is available with software version 15.XX or higher.

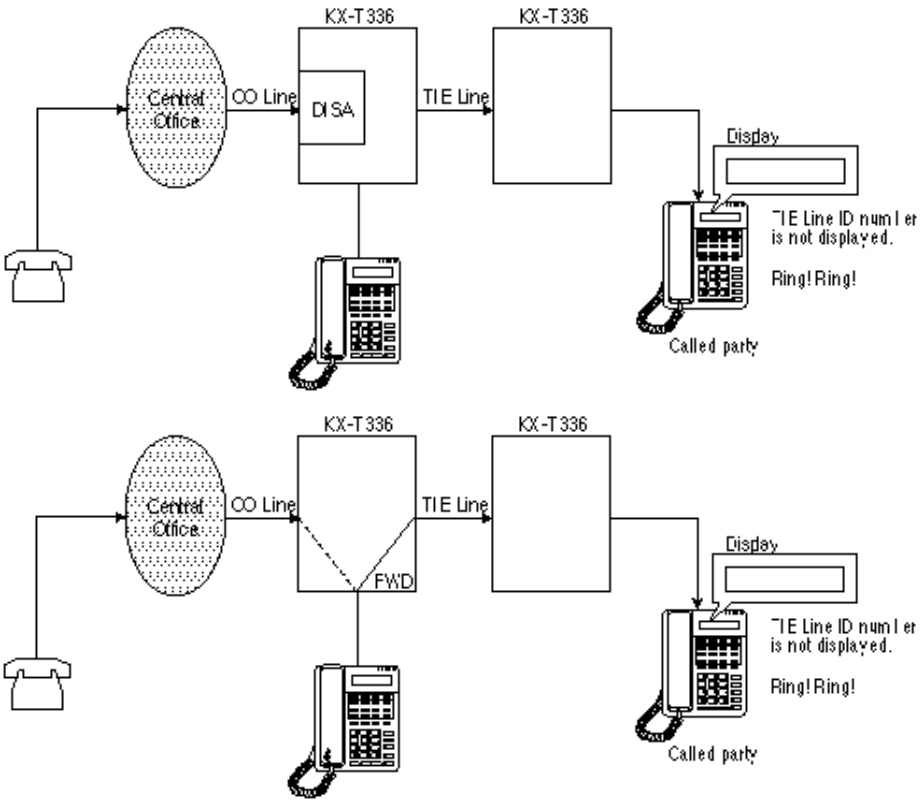


Programming

System Programming	Reference	
	VT	Dumb
"TIE Caller ID Identification (TCI)"	—	10-C-65.06

Conditions

- To utilize this service, both two PBXs linked by a TIE Line must be KX-T336 System.
- If PBX Code is used for making TIE calls, "PBX Code and Extension No." is displayed on the display.
- This service does not apply to the following calls.



15.00 T-1 Carrier

Description

The T-1 carrier is a hierarchy of digital systems designed to carry approx. 1.544 Mbps. speech and other signals in digital form. The T-1 carrier has 24 PCM (Pulse Code Modulation) voice channels.

T-1 DIGITAL TRUNK Card (KX-T96187) and CSU (Channel Service Unit) are required to utilize T-1 carrier with KX-T336 System. This card supports five different trunk interfaces to provide desired connection at minimum expense. One of the following five trunk types can be assigned to one of 24 voice channels of T-1 DIGITAL TRUNK card individually according to tariffs and customer need.

type of interface : LCO/GCO/DID/OPX/TIE

T-1 line

The installer must arrange for the following parameters with the Central Office or T-1 provider:

Type of Interface: LCO/GCO/DID/OPX/TIE, **Frame format:** D4 (SF)/ESF
Line coding: AMI/B8ZS, **Signaling:** DP/DTMF

CSU (Channel Service Unit)

The installer must provide a CSU to connect the T-1 line to the KX-T96187. The CSU must support the following functions:

: Protection for the Central Office line
: Loop Back
: Performance Monitoring

Programming

System Programming	Reference	
	VT	Dumb
"Configuration — Slot Assignment"	9-C-2.00	10-C-2.00
"Configuration — DN Assignment"	9-C-3.00	10-C-3.01
"Configuration — Channel Assignment" T-1 card	9-C-4.01	10-C-64.01
"System Clock Mode (CLK)"	—	10-C-64.02
"Master Clock Priority (CLP)"	—	10-C-64.03
"ESF Frame Option (EFO)"	—	10-C-64.04

Description

(1) Up to six T-1 DIGITAL TRUNK cards (144 ports) can be installed to the system under the following conditions.

System Configuration

Basic shelf	HLC+PLC+SLC+OPX+DID+LCOT+ GCOT+T-1+E-1+E&M+PCOT+RCOT	12 cards (96 ports)
Expansion shelf	HLC+PLC+SLC+OPX+DID+LCOT+ GCOT+T-1+E-1+E&M+PCOT+RCOT	15 cards (120 ports)
Fully Expanded system	HLC+PLC+SLC+OPX+DID+LCOT+ GCOT+T-1+E-1+E&M+PCOT+RCOT	42 cards (336 ports)

Note: Total 18 CO cards (144 ports) allowed per system
DID + LCOT + GCOT + T-1 + E-1 + E&M + PCOT +RCOT
*T-1 is counted as 3 cards, and E-1 is counted as 4 cards.

(2) Physical port number for each T-1 trunk channel is as follows:

Slot No.	T-1 Channel	Port No.
Slot 01	ch 01-08	X011-X018
	ch 09-16	X021-X028
	ch 17-24	X031-X038
Slot 05	ch 01-08	X051-X058
	ch 09-16	X061-X068
	ch 17-24	X071-X078
Slot 09	ch 01-08	X091-X098
	ch 09-16	X101-X108
	ch 17-24	X111-X118

X: Shelf No. (1=Basic, 2=Expansion 1, 3=Expansion 2)

(3) DN Assignment is required when a channel of T-1 card is assinged as “OPX.”
(4) Select the external clock mode, if your system is interfaced by T-1 interface with another exchange. Refer to Section 10-C-64.02 “System Clock Mode (CLK)” and Section 10-C-64.03 “Master Clock Priority (CLP).”

Maintenance

The following two test commands are provided for T-1 DIGITAL TRUNK Card.

- Loop Back Test (LBT) - Section 15-E-3.01
- DTMF-Generator/Receiver Test (DTM) - Section 15-E-3.02

16.00 E-1 Carrier

Description

The E-1 carrier is a hierarchy of digital systems designed to carry approx. 2.048 Mbps speech and other signals in digital form. The E-1 carrier has 30 PCM voice channels.
E-1 DIGITAL TRUNK Card (KX-T96188) is required to utilize E-1 carrier with the KX-T336 System. This card supports the following three different trunk interfaces to provide desired connection at minimum expense. One of the following three trunk types can be assigned to one of 30 voice channels of E-1 DIGITAL TRUNK Card individually according to tariffs and customer needs.

type of interface: DR2/E&M-C (Continuous E&M) /E&M-P (Pulsed E&M)

Trunk Group Types and CO Dial Mode available for each voice channel

Voice Channel	Trunk Group Type	CO Dial Mode
DR2 (Digital System R2)	DID (Both-way DID)	DP/DTMF/MFC-R2
	DDD/FEX/WATS/PBX/PVL*1	
E&M-C (Continuous E&M) E&M-P (Pulsed E&M)	TIE (E&M Lines)	DP/DTMF
	DDD/FEX/WATS/PBX/PVL*2	

*1 If DID service is not available in your area, you can choose one of these Trunk Group Types.
*2 If the destination specifying signal is not sent from a local CO, you can choose one of these Trunk Group Types.

The installer must arrange for the following parameters with the Central Office or E-1 provider.

Type of Interface: DR2/E&M-C/E&M-P, **Frame format:** PCM30/PCM30-CRC
Line coding: AMI/HDB 3, **Signaling:** DP/DTMF/MFC-R2

Trunk Interface:

(DR2 channel)
• DID (Direct Inward Dialing)
Refer to Section 3-D-2.03 “Direct Inward Dialing (DID)” for further information.

(E&M-C/-P channel)
• E-1 TIE Line
Refer to Section 3-F-14.00 “TIE Lines” for further information.

Supplementary Service for DR2:

• Automatic Number Identification (ANI)
Refer to Section 3-F-17.00 “Automatic Number Identification (ANI)” for further information.

• Charge Management
Refer to Section 3-F-19.00 “Charge Management” for further information.

Programming

• E-1 General

System Programming	Reference	
	VT	Dumb
"Configuration - Slot Assignment"	9-C-2.00	10-C-2.00
"Configuration - Channel Assignment" E-1 card	9-C-4.02	10-C-64.01
"System Clock Mode (CLK)"	—	10-C-64.02
"Master Clock Priority (CLP)"	—	10-C-64.03

• DR2

System Programming	Reference	
	VT	Dumb
"Group - Trunk Group (1/2)"	9-E-1.01	10-C-14.00
"Group - Trunk Group (2/2)"	9-E-1.02	10-C-15.00
"Trunk - CO Line"	9-F-1.00	10-C-18.00
"Special Attended - DID"	9-K-2.00	10-C-43.00
"World Select 3 (WS3)", Tone Except Idle Status	—	10-C-53.00
"MFC Sequence Parameter"	—	10-C-64.05
"Answer Signal Wait Time (AWT)"	—	10-C-64.06
"MFC-R2 Option (MRO)"	—	10-C-64.08

• Charge Management

System Programming	Reference	
	VT	Dumb
"E-1 Signaling Option (ESO)"	—	10-C-64.07

Refer to Section 3-F-19.00 "Charge Management" for other programming items required.

• E-1 TIE Line (E&M-P)

System Programming	Reference	
	VT	Dumb
"Pulsed E&M (PEM)"	—	10-C-64.09

Refer to Section 3-F-14.00 "TIE Lines" for further information.

Conditions

(1) Up to four E-1 DIGITAL TRUNK Cards (120 ports) can be installed to the system under the following conditions.

System Configuration

Basic shelf	HLC+PLC+SLC+OPX+DID+LCOT+ GCOT+T-1+E-1+E&M+PCOT+RCOT	12 cards (96 ports)
Expansion shelf	HLC+PLC+SLC+OPX+DID+LCOT+ GCOT+T-1+E-1+E&M+PCOT+RCOT	15 cards (120 ports)
Fully Expanded system	HLC+PLC+SLC+OPX+DID+LCOT+ GCOT+T-1+E-1+E&M+PCOT+RCOT	42 cards (336 ports)

Note: Total 18 CO cards (144 ports) allowed per system
DID + LCOT + GCOT + T-1 + E-1 + E&M + PCOT + RCOT
*T-1 is counted as 3 cards, and E-1 is counted as 4 cards.

(2) The physical port number for each E-1 Digital Trunk channel is as follows:

Slot No.	E-1 Channel	Port No.
Slot 01	ch 01-08	X011-X018
	ch 09-16	X021-X028
	ch 17-24	X031-X038
	ch 25-32	X041-X048
Slot 05	ch 01-08	X051-X058
	ch 09-16	X061-X068
	ch 17-24	X071-X078
	ch 25-32	X081-X088
Slot 09	ch 01-08	X091-X098
	ch 09-16	X101-X108
	ch 17-24	X111-X118
	ch 25-32	X121-X128

X: Shelf No. (1=Basic, 2=Expansion 1, 3=Expansion 2)

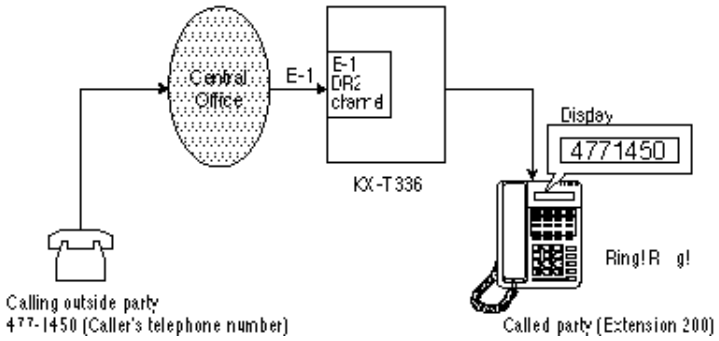
Note:
• Channels 16 (signaling channel) and 32 of the E-1 DIGITAL TRUNK Card are not available for CO line programming.

17.00 Automatic Number Identification (ANI)

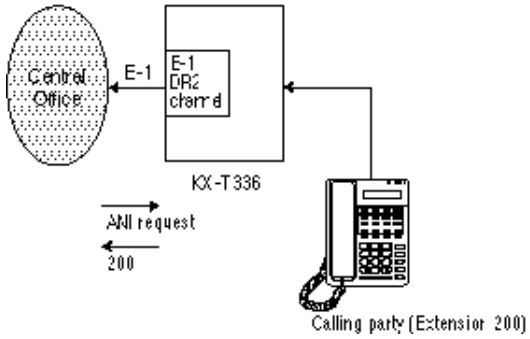
Description

Provides the called party with the presentation of caller's phone number.
With the ANI service, an extension user can find out who's calling before deciding to answer a call.
One of the following three presentation ways of caller's phone number can be utilized depending on the system programming.

1. Incoming CO calls only
   Provides the display PITS user with the presentation of calling outside party's phone number.



2. Outgoing CO calls only
   Provides the outside party with the presentation of caller's extension number.



3. Both Incoming and Outgoing CO calls
   A combination of above mentioned two ways.

Programming

System Programming	Reference	
	VT	Dumb
MFC-R2 Option (MFC)	—	10-C-64.08

Conditions

- A special arrangement is required with a local Central Office to utilize ANI service. Consult with your local Central Office about whether they provide this service or not.
- ANI service can be utilized with an E-1 “DR2” Channel Trunk whose Dial Mode is set to “MFC-R2.”
- DIL 1:N
  If an incoming call comes in on more than two extensions simultaneously, outside party’s phone number is displayed on all call receiver’s extensions (display PITS only)
- Call Forwarding
  If “Call Forwarding” (except Call Forwarding to Trunk) is set at the extension, caller’s phone number will be displayed on the extension where an incoming CO call will be forwarded.

<Display example>

→4771450

“ → ”indicates that the call has been forwarded from another extension.

18.00 Limited Call Duration

Description

Limited Call Duration is a system programmable feature that disconnects a CO call when a pre-specified time expires. A warning tone is sent to the extension user 15 seconds before the time limit. Limiting the call duration can be enabled or disabled on a COS (Class of Service) basis for each extension.

Programming

System Programming	Reference	
	VT	Dumb
"Limited Call Duration (LCD)"	—	10-C-69.00

Conditions

- This feature applies to incoming CO calls only, outgoing CO calls only or both incoming and outgoing CO calls depending on the system programming.
- Call duration time limit is ranging from 01 to 60 minutes depending on the system programming.
- Call duration time of any CO call (except a CO-to-CO call) can be limited by this feature. CO-to-CO Call Duration timer applies to a CO-to-CO call.
- This feature does not apply to CO calls to/from an Attendant Console.
- This feature is available with the following version of the software.

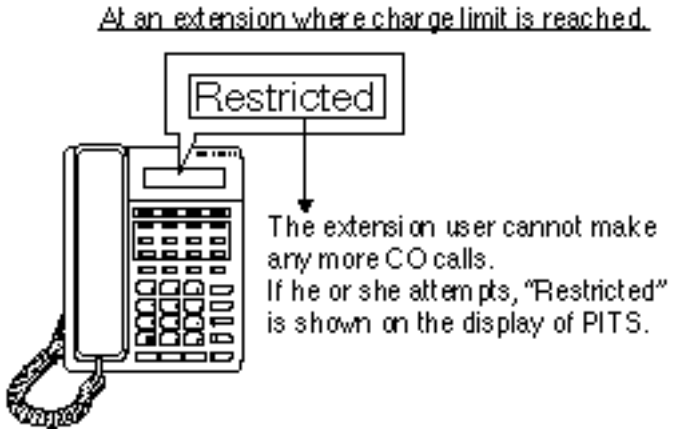
  V.12.XX, V.15.XX or higher version

19.00 Charge Management (for areas other than U.S.A and Canada)

19.01 Budget Management

Description

Used to limit the total amount of phone charge of each extension to a pre-assigned amount. If the pre-assigned limit is reached, the extension user cannot make further CO calls until his or her charge meter is reset. (See Section 3-F-19.02 “Charge Fee Reference”)
Useful to keep phone bills down by restricting the excess amount of phone charge.



Programming

System Programming	Reference	
	VT	Dumb
“Configuration - Slot Assignment”	9-C-2.00	10-C-2.00
“World Select 2 (WS2)”,	—	10-C-52.00
PAY-TONE Frequency		
PAY-TONE Gain		
“E-1 Signaling Option (ESO)”	—	10-C-64.07
“Charge Limitation (CLT)”	—	10-C-66.03

PITS System Programming	Reference
Setting Charge Limitation	11-C-9.00

Conditions

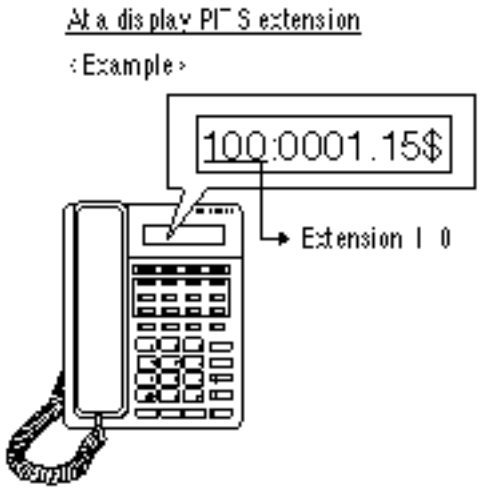
- This feature can be realized by utilizing either PCOT card (KX-T96189) or E1 DIGITAL TRUNK Card* (KX-T96188).

*Available with the DR2 channel on E1 DIGITAL TRUNK Card when a local Central Office (E-1 provider) supports “Metering Pulse Service”.

19.02 Charge Fee Reference

Description

Allows a display PITS user to check, clear phone charges and print out the data by SMDR. Phone charges are displayed per extension, ATT, CO line, account code, or the total of each.



Programming

System Programming	Reference	
	VT	Dumb
"World Select 3 (WS3)", Charge Display	—	10-C-53.00
"Charge Management ID Code (CPD)"	—	10-C-66.01

PITS System Programming	Reference
Changing Charge Management ID Code	11-C-10.00

PITS Station Programming	Reference
Charge Management	12-C-9.00
Checking/Clearing the Charge Meter – Extensions	12-C-9.03
Checking/Clearing the Charge Meter – ATT	12-C-9.04
Checking the Charge Meter – CO Line	12-C-9.05
Checking the Charge Meter – All CO Lines	12-C-9.06
Checking/Clearing the Charge Meter – Account Code	12-C-9.07
Clearing All Charge Meters	12-C-9.08
Printing Charge Information on SMDR	12-C-9.09
Setting Charge Rate	12-C-9.10
Setting Account Codes	12-C-9.11

Section 4

Station Features and Operation

Proprietary Integrated Telephone System (PITS)

(Section 4)

Station Features and Operation

Proprietary Integrated Telephone System (PITS)

Contents

A. Preparation

1.00 Outline

Panasonic EMSS PITS (Proprietary Integrated Telephone System) telephones are provided to utilize the various features of the KX-T336 system, in addition to supporting basic telephone service (making and answering calls).
This section describes special features and required operation of PITS telephones.

2.00 Configuration

PITS telephones can be categorized as the following four types.

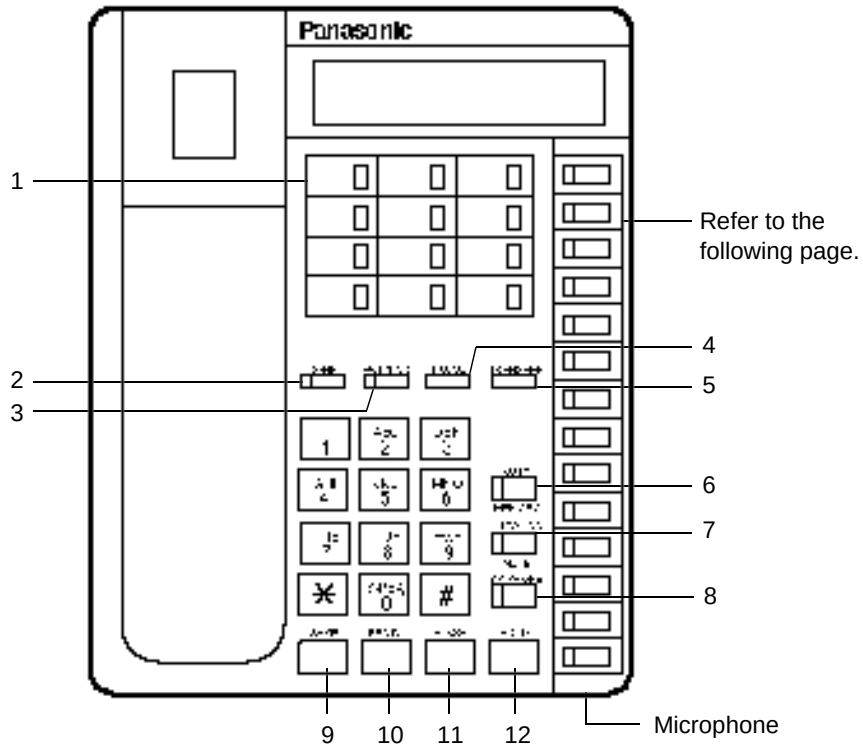
Type 20	KX-T30820, KX-T61620, KX-T123220
Type 30	KX-T30830, KX-T61630, KX-T123230, KX-T123230D, KX-T123235
Type 50	KX-T30850, KX-T61650, KX-T123250
7000 Series	KX-T7020, KX-T7030, KX-T7050, KX-T7130

2.01 Location of Feature Buttons

(Type 20)

Common

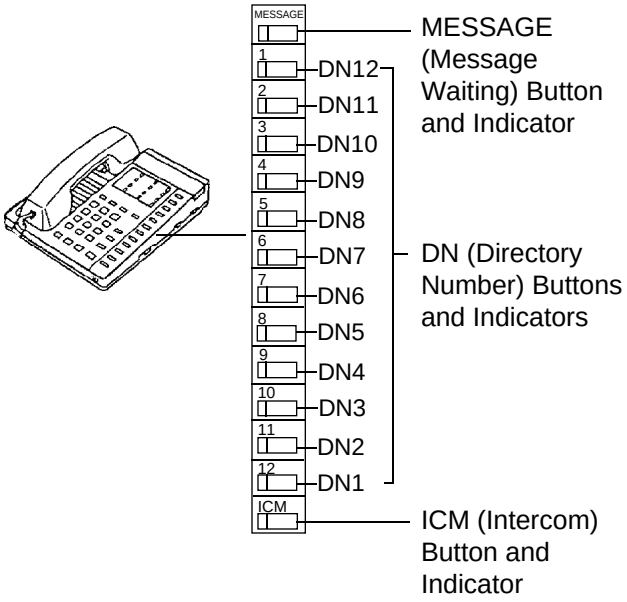
Location of Feature Buttons illustrated below is common to all Type 20 PITS telephones.



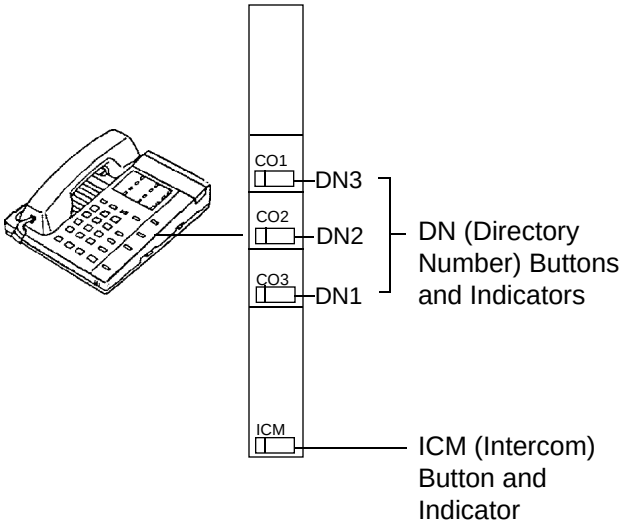
1 PF (Programmable Feature) Buttons
2 CONF Button and Indicator
3 FWD/DND Button and Indicator
4 PAUSE Button
5 TRANSFER Button
6 AUTO/MEMORY Button and Indicator
7 AUTO ANS/MUTE Button and Indicator
8 SP-PHONE Button and Indicator
9 SAVE Button
10 REDIAL Button
11 FLASH Button
12 HOLD Button

Location of DN buttons is specific to each model as follows.

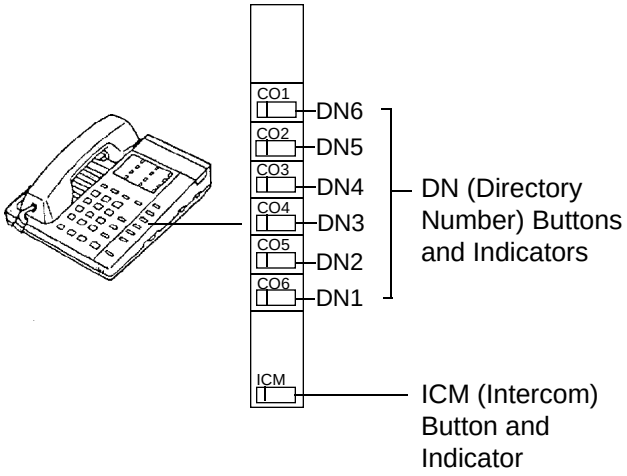
KX-T123220



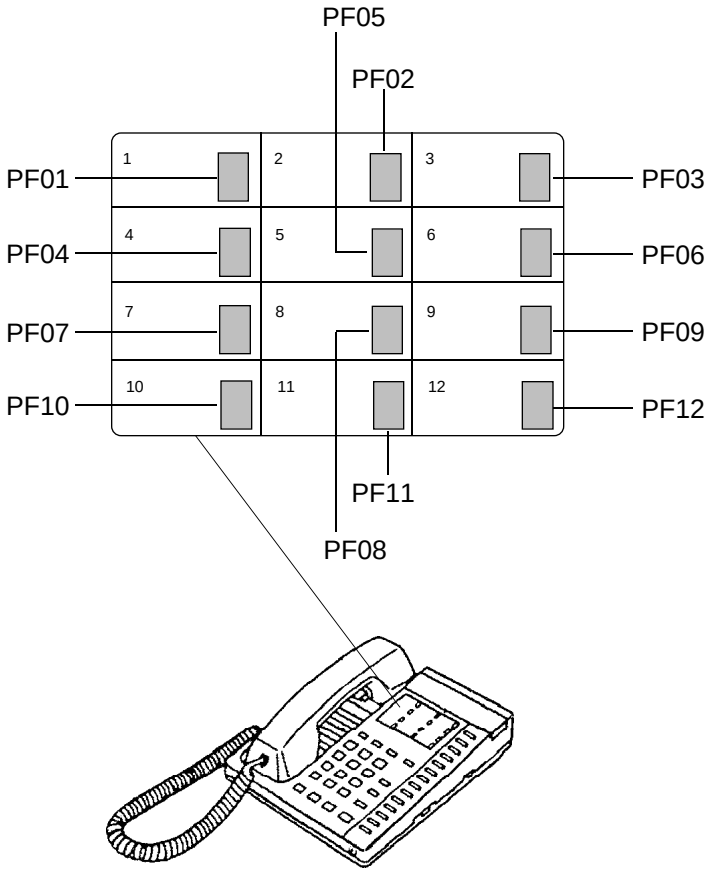
KX-T30820



KX-T61620



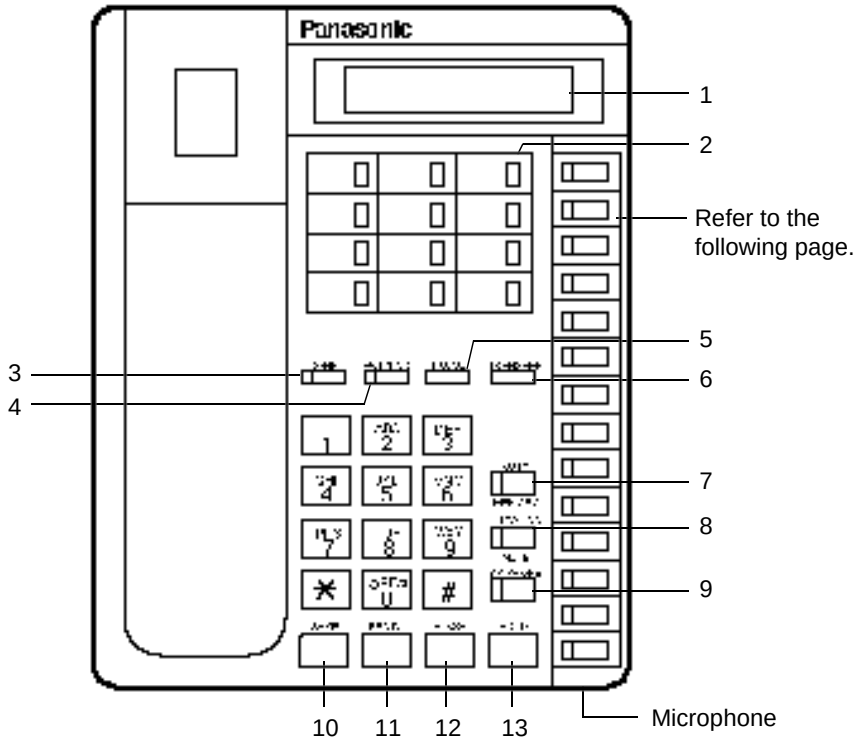
Programmable Feature buttons



(Type 30)

Common

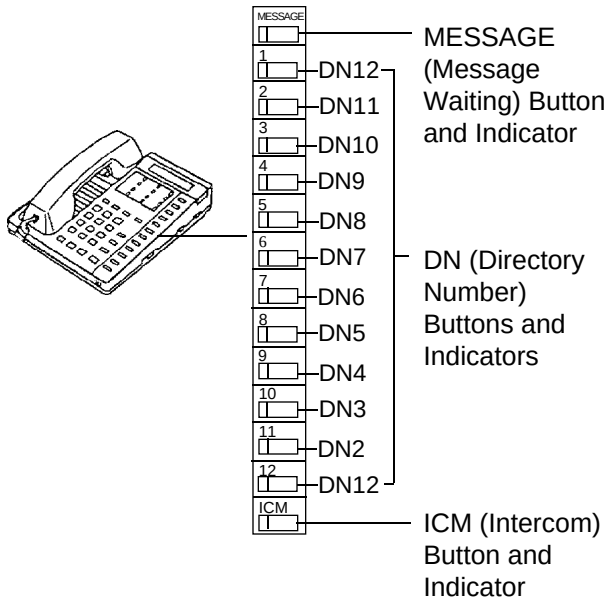
Location of Feature Buttons illustrated below is common to all Type 30 PITS telephones.



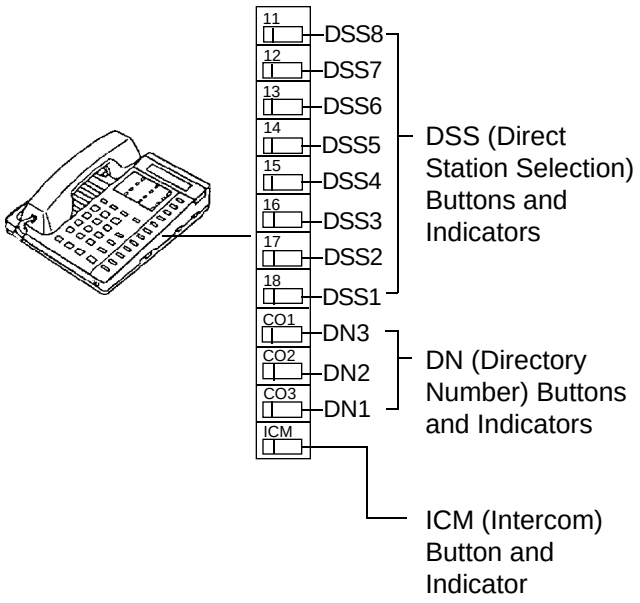
1 LCD (Liquid Crystal Display)
2 PF (Programmable Feature) Buttons
3 CONF Button and Indicator
4 FWD/DND Button and Indicator
5 PAUSE Button
6 TRANSFER Button
7 AUTO/MEMORY Button and Indicator
8 AUTO ANS/MUTE Button and Indicator
9 SP-PHONE Button and Indicator
10 SAVE Button
11 REDIAL Button
12 FLASH Button
13 HOLD Button

Location of DN buttons is specific to each model as follows.

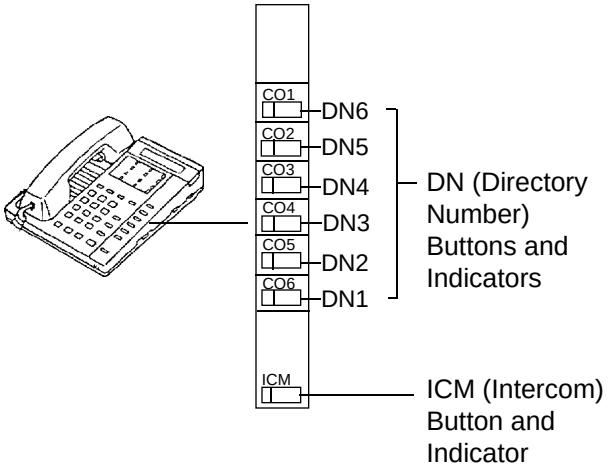
KX-T123230, KX-T123230D, KX-T123235



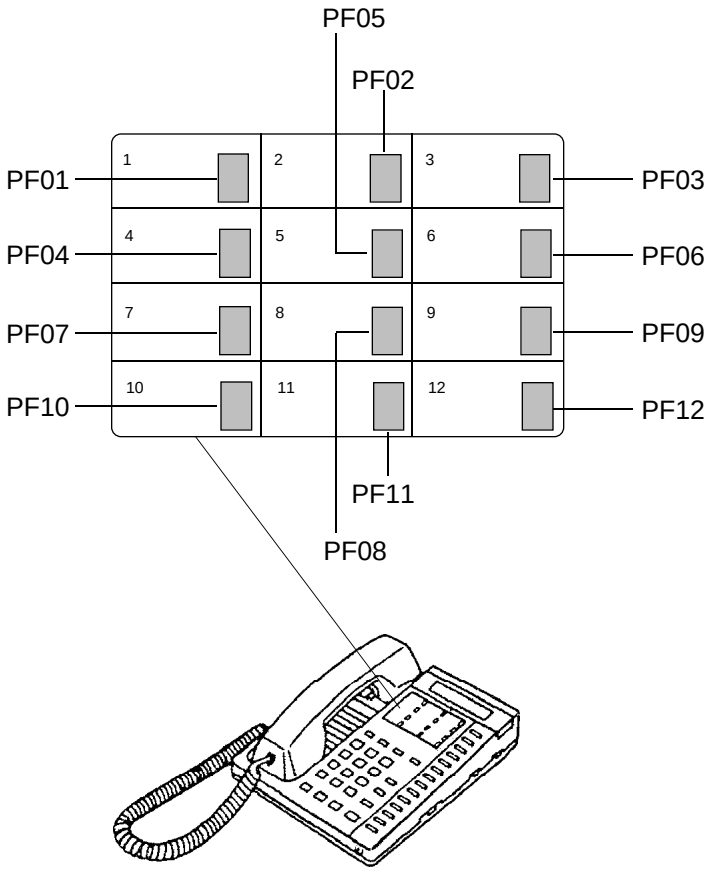
KX-T30830



KX-T61630



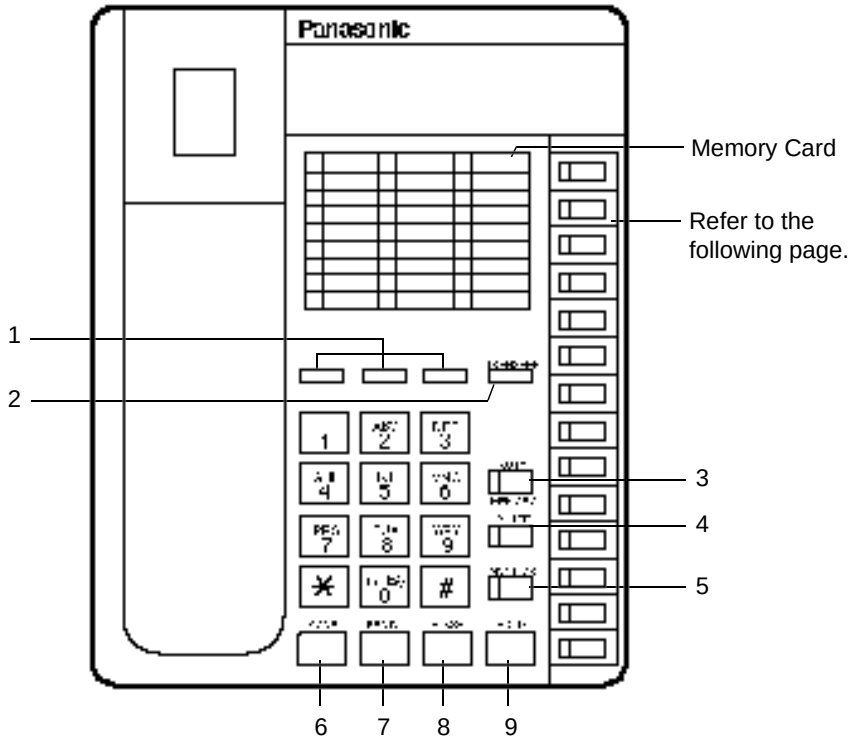
Programmable Feature buttons



(Type 50)

Common

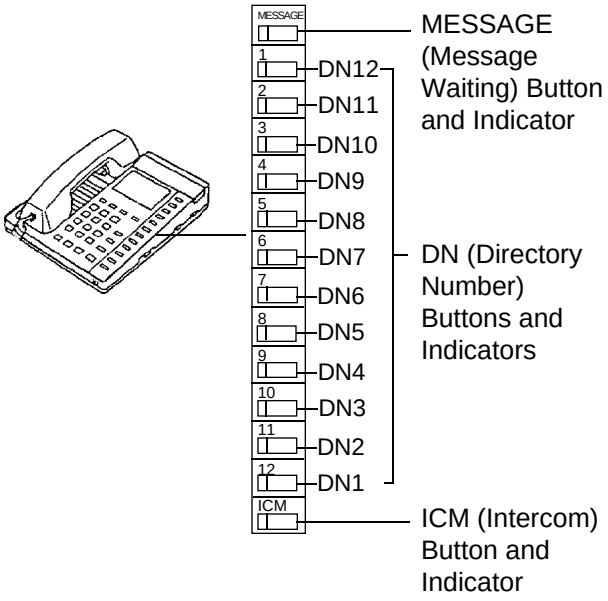
Location of Feature Buttons illustrated below is common to all Type 50 PITS telephones.



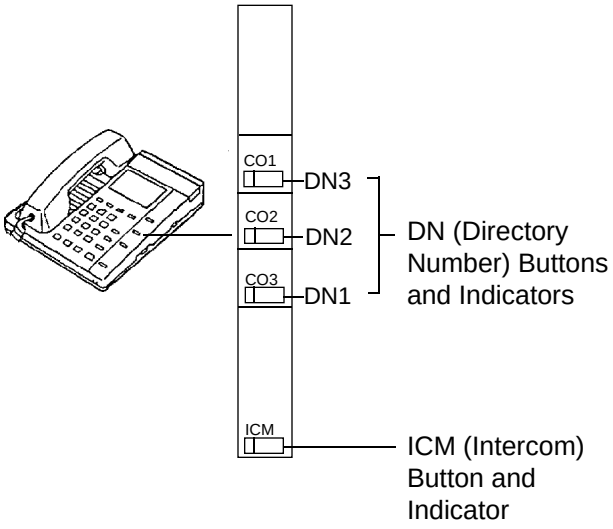
1 PF (Programmable Feature) Buttons
2 TRANSFER Button
3 AUTO/MEMORY Button
4 PAUSE Button
5 MONITOR Button
6 CONF Button
7 REDIAL Button
8 FLASH Button
9 HOLD Button

Location of DN buttons is specific to each model as follows.

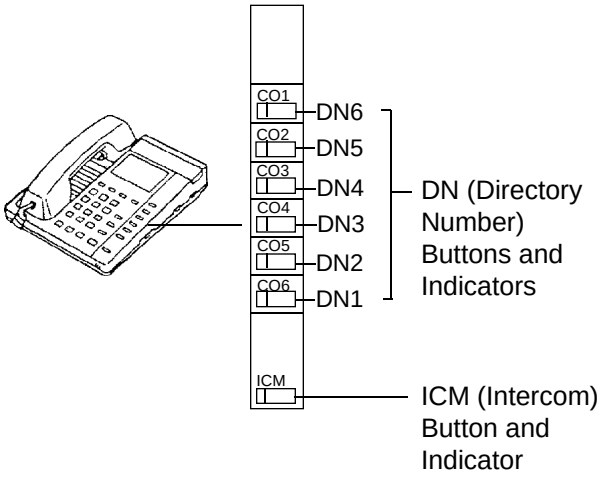
KX-T123250



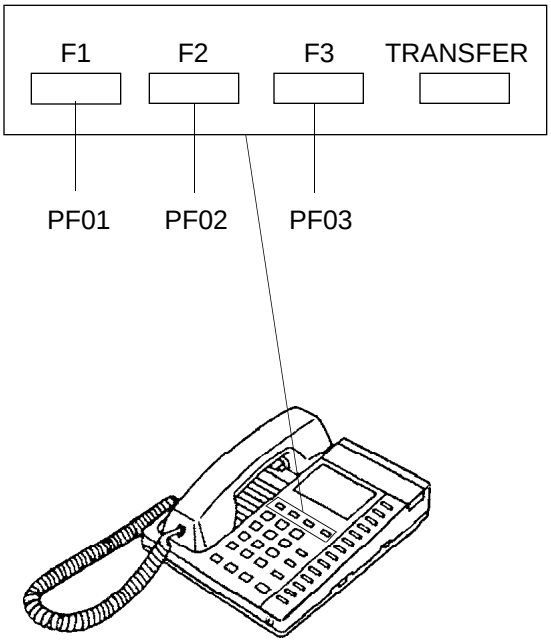
KX-T30850



KX-T61650



Programmable Feature buttons

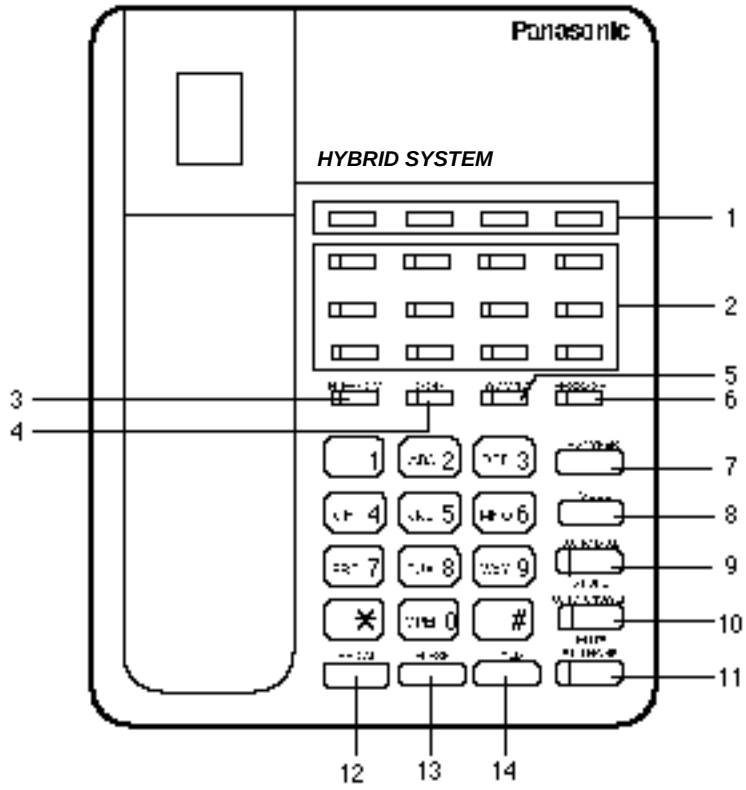


(7000 Series)

Preliminary Remarks:
Some buttons provided for the KX-T7020, KX-T7030, KX-T7050 and KX-T7130 are called by names other than the ones described in this manual.
If you use these models, please press the equivalent buttons shown below instead of the buttons described in this manual.

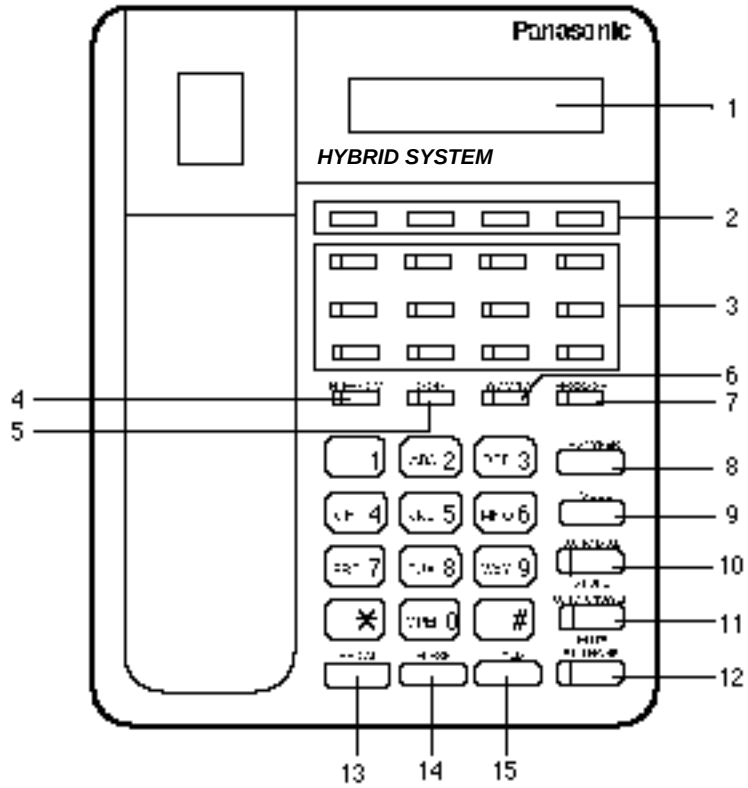
Description here	Equivalent button
ICM	INTERCOM
MEMORY	STORE
AUTO	AUTO DIAL
AUTO ANS	AUTO ANSWER

KX-T7020



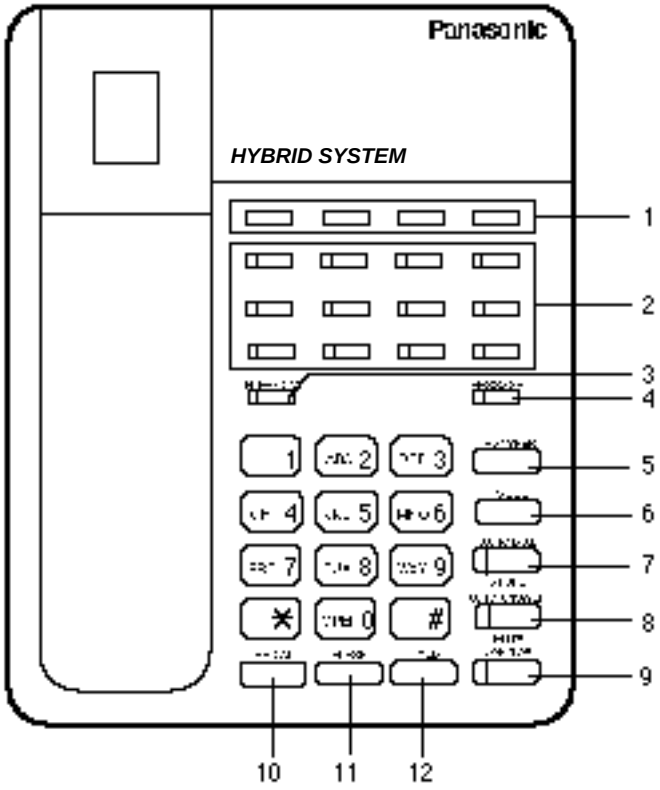
1 PF (Programmable Feature) Buttons
2 DN (Directory Number) Buttons and Indicators
3 INTERCOM Button and Indicator
4 CONF Button and Indicator
5 FWD/DND Button and Indicator
6 MESSAGE Button and Indicator
7 TRANSFER Button
8 PAUSE Button
9 AUTO DIAL/STORE Button and Indicator
10 AUTO ANSWER/MUTE Button and Indicator
11 SP-PHONE Button and Indicator
12 REDIAL Button
13 FLASH Button
14 HOLD Button

KX-T7030



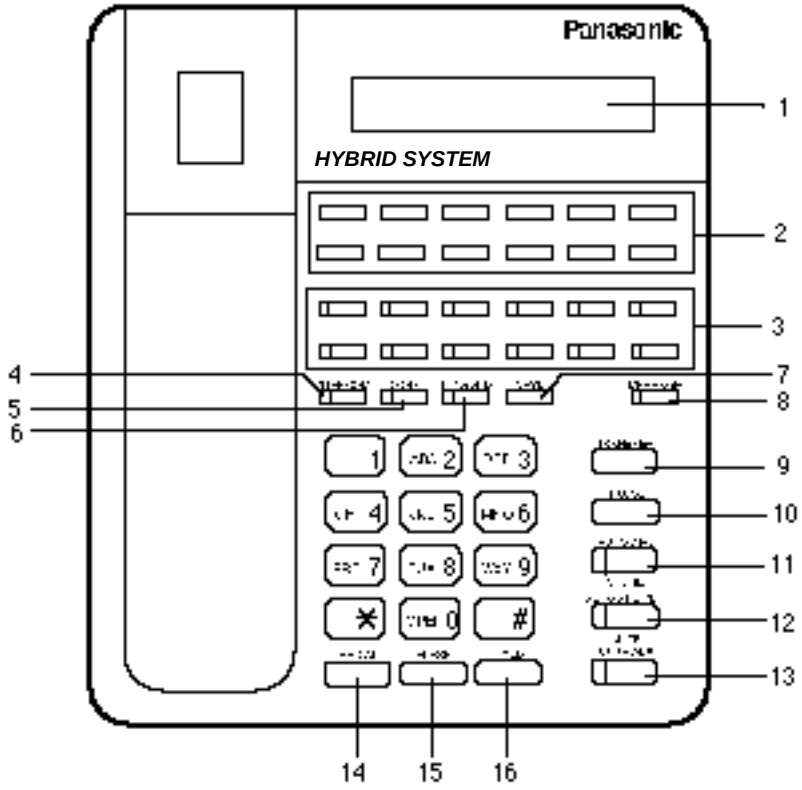
1 LCD (Liquid Crystal Display)
2 PF (Programmable Feature) Buttons
3 DN (Directory Number) Buttons and Indicators
4 INTERCOM Button and Indicator
5 CONF Button and Indicator
6 FWD/DND Button and Indicator
7 MESSAGE Button and Indicator
8 TRANSFER Button
9 PAUSE Button
10 AUTO DIAL/STORE Button and Indicator
11 AUTO ANSWER/MUTE Button and Indicator
12 SP-PHONE Button and Indicator
13 REDIAL Button
14 FLASH Button
15 HOLD Button

KX-T7050



1 PF (Programmable Feature) Buttons
2 DN (Directory Number) Buttons and Indicators
3 INTERCOM Button and Indicator
4 MESSAGE Button and Indicator
5 TRANSFER Button
6 PAUSE Button
7 AUTO DIAL/STORE Button and Indicator
8 AUTO ANSWER/MUTE Button and Indicator
9 MONITOR Button and Indicator
10 REDIAL Button
11 FLASH Button
12 HOLD Button

KX-T7130



1 LCD (Liquid Crystal Display)
2 PF (Programmable Feature) Buttons
3 DN (Directory Number) Buttons and Indicators
4 INTERCOM Button and Indicator
5 CONF Button and Indicator
6 FWD/DND Button and Indicator
7 SAVE Button
8 MESSAGE Button and Indicator
9 TRANSFER Button
10 PAUSE Button
11 AUTO DIAL/STORE Button and Indicator
12 AUTO ANSWER/MUTE Button and Indicator
13 SP-PHONE Button and Indicator
14 REDIAL Button
15 FLASH Button
16 HOLD Button

2.02 Controls

Various controls are provided for each type of PITS telephones as shown below.

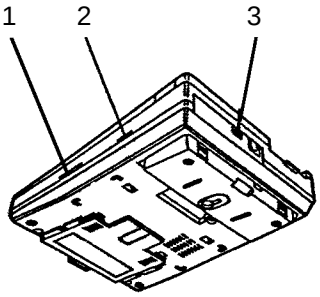
Controls	Usage	Type 20/50	Type 30	7020/ 7050	7030/ 7130
MEMORY Switch	SET: Normal operation PROGRAM: Local station programming (See Sections 11 and 12)	◯	◯	◯	◯
RINGER Volume Selector	HIGH/LOW: Sets the desired ringer volume OFF: The telephone does not ring	◯	◯	◯	◯
HANDSET VOLUME Selector	NORMAL/HIGH: Determines the desired handset volume	—	—	◯	◯
VOLUME Control	A sliding lever used to control the speaker volume	◯	◯	◯	◯
CONTRAST Selector	Set to “LOW,” “MID” or “HIGH” to choose the best display intensity	—	◯	—	◯
HANDSET/HEADSET Selector	HANDSET: Normal operation HEADSET: When using an optional headset, KX-T30890	—	◯	—	◯
POWER FAILURE Switch	OFF: Normal operation ON: When power failure occurs (See Section 14-H-1.00)	—	◯	—	—
DIALING MODE Selector	This is used to set the dialing mode during power failure. TONE: Sets tone dialing mode PULSE: Sets pulse dialing mode	—	◯	—	—

◯ : provided

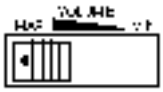
— : not provided

Location

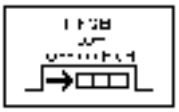
(Type 20/50)



1 VOLUME Control

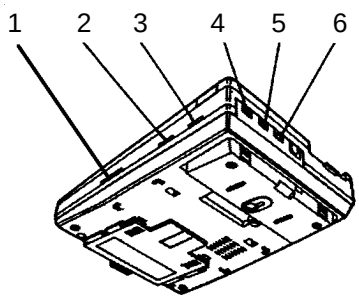


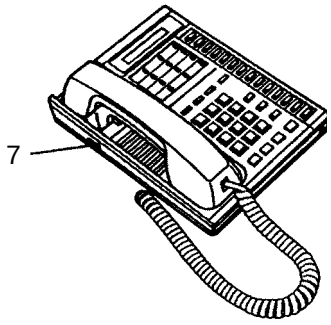
2 RINGER Volume Selector



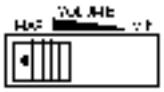
3 MEMORY Switch

(Type 30)

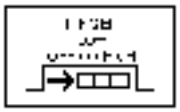




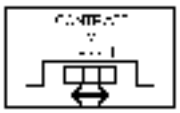
1 VOLUME Control



2 RINGER Volume Selector

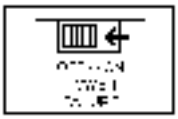


3 CONTRAST Selector



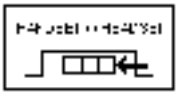
4 DIALING MODE Selector

5 POWER FAILURE Switch



6 MEMORY Switch

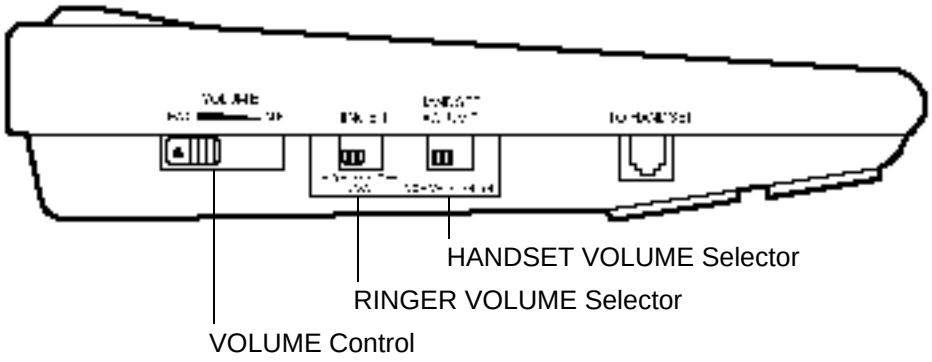
7 HANDSET/HEADSET Selector



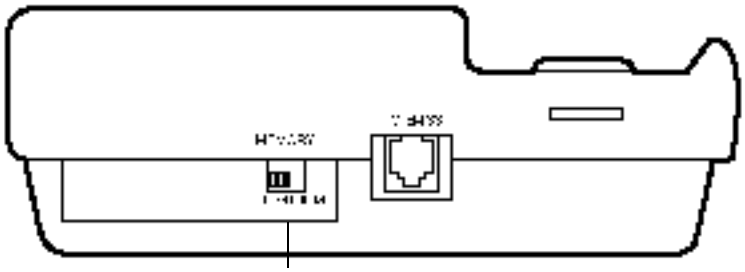
(7000 series)

KX-T7020, KX-T7050

Left

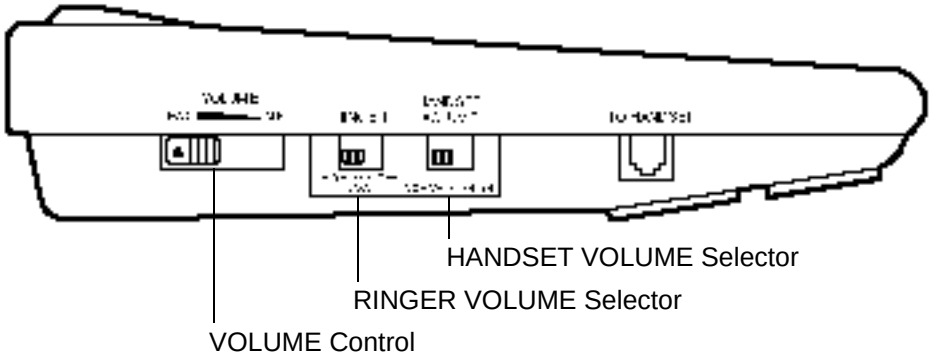


Rear

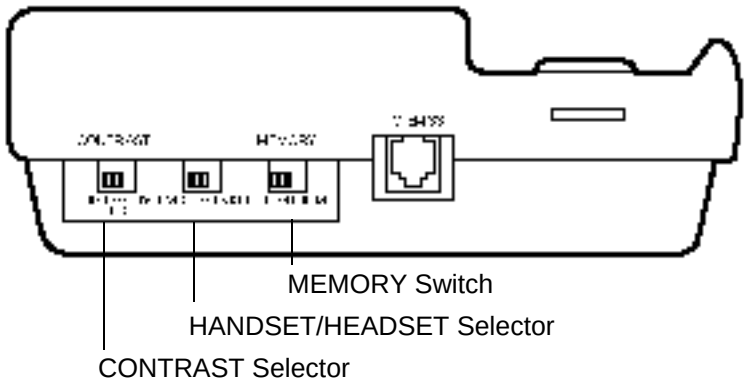


KX-T7030, KX-T7130

Left

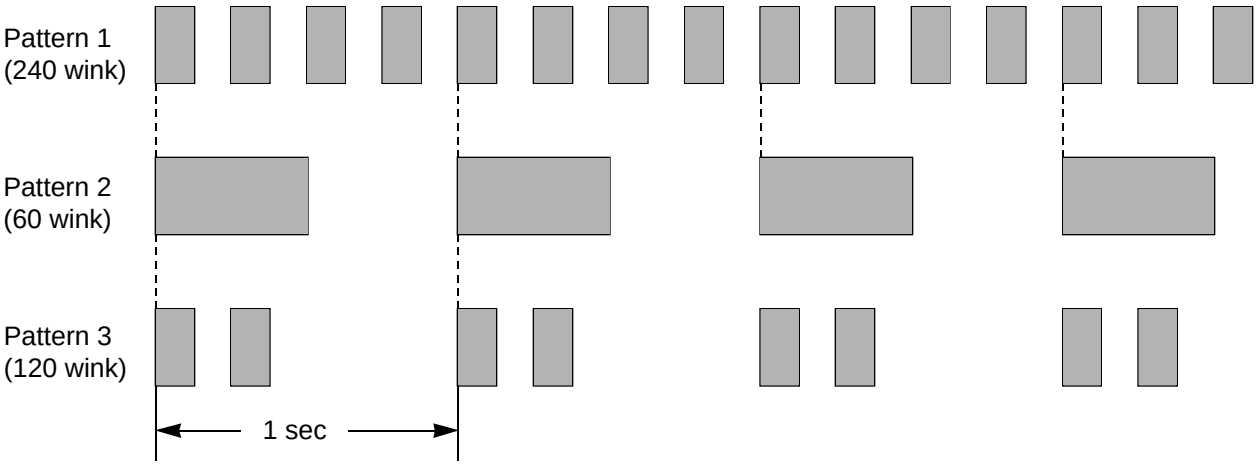


Rear



3.00 LED Indication Patterns

Line conditions are displayed by three patterns of flashing LED indicators on PITS buttons, as follows.



Pattern 1 : Shows call arriving with 240 winks/min and is called “240 wink.”
Pattern 2 : Shows holding a call with 60 winks/min and is called “60 wink.”
Pattern 3 : Shows Unattended Conference and Privacy Release with 120 winks/min and is called “120 wink.”

Light on steady shows busy status and light off shows idle status.

4.00 Display-LCD

4.01 Time and Date Display

Description

This is a function for a PITS provided with the display to offer a display either of the present time or of the date and the day of the week. It is indicated on the display when the PITS is on-hook and the SP-PHONE is off.

Two display modes are available: the time display mode and the date display mode. For instance, the displays for “January 1, Friday, 12:00 a.m., 1999” in each mode are as follows:

In the time display mode:

Jan 1 12:00 AM

In the date display mode:

Jan 1, 1999 FRI

To alternate the modes, dial “* ” while on-hook and SP-PHONE off.

Setting the time and date is executed by “Date & Time Set Up Screen” and “Change Date & Time.” Extensions assigned to a “Class of Service” in which Maintenance Capability is set to “Yes” can also set the time and date. Refer to Section 11-C-2.00 “Setting Date and Time.”

Programming

System Programming	Reference	
	VT	Dumb
“Date & Time Set Up Screen”	7-B-4.00	8-F-7.00
“Change Date & Time”	7-F-1.00	8-F-7.00
“System-Class of Service (1/2)”, Maintenance Capability	9-D-4.01	10-C-7.00

PITS System Programming	Reference
Setting Date and Time	11-C-2.00

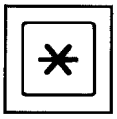
Conditions

None

Operation

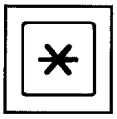
Changing the time display mode to the date display mode

Be sure the telephone set is on-hook and the SP-PHONE is off.



1. Dial “*.”
   - The message on the display of PITS changes to the date display mode.

Changing the date display mode to the time display mode.



1. Dial “*.”
   - The message on the display changes to the time display mode.

4.02 Dialed Number Display

Description

This is a function for the user of a PITS with the display to see the dialed number of the other party shown on the display. It is displayed when the user is calling an extension or an outside party and also when talking with it.

Programming

None

Conditions

None

Operation

The following is an example of the display when calling an extension.

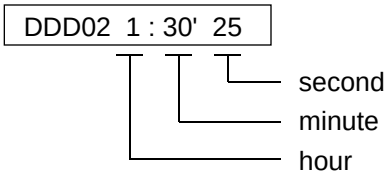
Operation:	Display:
Lift the handset.	
Dial “1.”	1
Dial “2.”	1 2
Dial “3.”	1 2 3
Calling the extension.	1 2 3 : Jack

4.03 Duration Time of Call Display

Description

This function permits a PITS with the display to show the duration of an incoming or outgoing CO call by second.
This function does not apply to extension calls.

An example of the display is shown below:



For an incoming call from an outside party, the duration starts at the time an extension answers the call.

For outgoing calls to outside parties, the starting time of count is assignable in “System-System Timer”, SMDR Duration Time.

Programming

System Programming	Reference	
	VT	Dumb
“System-System Timer”, SMDR Duration Time	9-D-3.00	10-C-6.00

Conditions

Holding of an outside party or in conference with outside parties is also counted as part of the duration. Consequently when returning to the conversation with the party after retrieving the hold or after concluding the conference, the display shows the continued period including the period of the hold or the conference.

The display duration is held for five seconds after the handset is replaced.

Operation

None

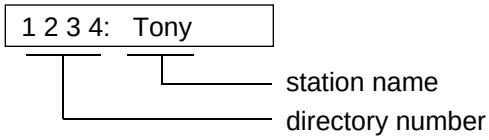
4.04 Incoming Call Source Display

Description

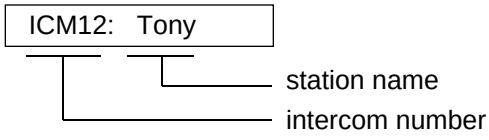
If the user of a PITS provided with the display is called by somebody, the user can see the name, if pre-assigned, of the calling party on the display.

The display contents differ according to the type of arriving calls as illustrated below:

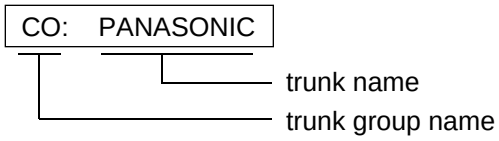
When called by an extension using the DN button :



When called by an extension using the ICM (intercom) button :



When called by an outside party :



A station name or a trunk name does not appear unless they are assigned in “Extension-Station”, Station Name or “Trunk-CO Line”, Trunk Name.

Programming

System Programming	Reference	
	VT	Dumb
“Trunk-CO Line”, Trunk Name	9-F-1.00	10-C-18.00
“Extension-Station (1/3)” Station Name	9-G-1.01	10-C-22.00

Conditions

None

Operation

None

4.05 Station Programmed Data Display

Description

When a PITS provided with the display is on-hook and the SP-PHONE button is off, pressing the following buttons provides the display of the kind of the pressed button or the content assigned to the button on the display for five seconds:

- REDIAL or LNR (Last Number Redial) button
- SAVE or SNR (Saved Number Redial) button
- MESSAGE (Message Waiting) button
- PF (Programmable feature) buttons
- FWD/DND (Call Forwarding/Do Not Disturb) button

Programming

None

Conditions

When the assigned data exceeds 16 characters, “&” appears on the most right side of the display.

Operation

Press the button to be confirmed.

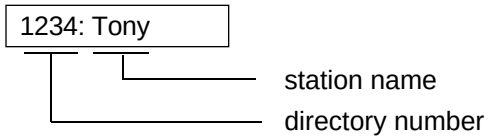
4.06 Station Name Display

Description

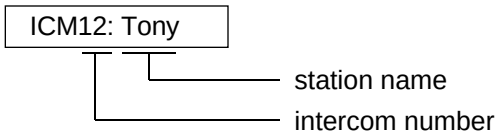
This is a function that shows the user of a PITS with the display the other extension's directory number and, if stored, its name. This is displayed when the user is calling or called by or talking with an extension party.

[Example]

When calling/called by/talking with an extension on the DN button :



When calling/called by/talking with an extension on the ICM button :



Station names do not appear unless they are assigned in “Extension-Station”, Station Name.

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (1/3)”, Station Name	9-G-1.01	10-C-22.00

Conditions

When calling an extension on the DN button, if the called party answers on the SDN button, the display on the calling station changes as follows:

When calling extension 1234 :

1234: Tony

After extension 1000, whose SDN is owned by extension 1234, answers the call:

1000: Jack

The example below shows the display on the calling station when calling an extension assigned to Call Forwarding on the DN button :

[Example]

Extension 2000 calls extension 1000. Extension 1000 sets the destination of Call Forwarding-No Answer to extension 1001.

The following display appears on the display of extension 2000 :

→ 1001: Jack

The following display appears on the display of extension 1001 :

→ 2000: Betty

Operation

None

B. Feature Buttons

1.00 Fixed Feature Buttons

Description

Feature Buttons, like features, are either fixed or assignable.
Fixed Feature Buttons, (for example HOLD ,) have specific functions permanently associated with them.

The following table shows all Fixed Feature Buttons provided on the PITS telephone by each type.

Feature Button	Type 20/30	Type 50	7020/7030	7050	7130
SP-PHONE *	○	○ ※1	○	○ ※1	○
AUTO/MEMORY *	○	○			
AUTO DIAL/STORE *			○	○	○
PAUSE *	○	○	○	○	○
REDIAL (LNR)	○	○	○	○	○
SAVE (SNR)	○	None ※2	None ※2	None ※2	○
ICM *	○	○			
INTERCOM *			○	○	○
AUTO ANS/MUTE *	○	None			
AUTO ANSWER/MUTE *			○	None	○
HOLD	○	○	○	○	○
TRANSFER	○	○	○	○	○
FWD/DND *	○	None ※3	○	None ※3	○
CONF *	○	○	○	○	○
FLASH *	○	○	○	○	○
MESSAGE *	○ ※4	○ ※4	○	○	○

[Note]

In the above list, Feature Buttons marked * have an LED indicator.

※1 The MONITOR button is provided instead of the SP-PHONE button.

※2 The SAVE button can be assigned to the PF1 button.

※3 The FWD/DND button can be assigned to the PF 3 button.

*[4] The MESSAGE button is not provided on the PITS's listed below, but can be assigned to the assignable buttons respectively, as follows:

PITS not provided with MESSAGE	Assignable Buttons
KX-T30830	DSS 8
KX-T30820, KX-T30850	DN 3
KX-T61620, KX-T61630, KX-T61650	DN 6

For the assignment of the FWD/DND, SAVE and MESSAGE buttons, refer to the following.

FWD/DND button SAVE button	Section 9-G-1.03 “Station (3/3)” Section 12-C-2.00 “PF (Programmable Feature) Button Assignment”
MESSAGE button	Section 9-G-1.02 “Station (2/3)” Section 9-G-1.03 “Station (3/3)”

Usage

SP-PHONE (MONITOR) Button and Indicator

This key allows the set user to receive or originate calls without using the handset. Each time the SP-PHONE button is pressed, the speaker and microphone are alternately switched on and off.

AUTO/MEMORY, AUTO DIAL/STORE Button and Indicator

This button is used for dialing system speed dial numbers and for storing the results of a local programming operation.

PAUSE Button

This button is used to insert a pause in a speed dial number.

REDIAL (LNR) Button

This button is causes the last number dialed to be redialed when the key is pressed.

SAVE (SNR) Button

This button allows the set user to store the telephone number to make the same call again by pressing the key.

ICM, INTERCOM Button and Indicator

This button is used to make or receive an intercom call.

AUTO ANS/MUTE, AUTO ANSWER/MUTE Button and Indicator

This dual function button is used to automatically answer an intercom call or disable the microphone during handsfree operation.

HOLD Button and Indicator

This button allows the set user to place any call at the set on hold.

TRANSFER Button

This is used to transfer an outside or an intercom call to another extension.

FWD/DND Button

This button can be used for setting or canceling the Call Forwarding or Do Not Disturb feature.

CONF Button and Indicator

Allows the user to perform a three party conference.

FLASH Button

This button causes a flash signal to be sent to the Central Office.

MESSAGE Button and Indicator

This button can be used for Message Waiting feature.

2.00 Assignable Feature Buttons

Description

Assignable Feature Buttons can have features assigned to them, by the System Programming or by the PITS Station Programming.

The following three types of Assignable Feature Buttons are provided on the PITS telephones.

- DN button
- DSS button (KX-T30830 only)
- PF button

(Note)
DSS button and PF button are also provided on the DSS consoles.

The following list shows all features available to Assignable Feature Buttons by type of buttons.

Features	DN	DSS button		PF button	
		PITS	DSS	PITS	DSS
PDN (Primary Directory Number)	○	×	×	×	×
SDN (Secondary Directory Number)	○	×	×	×	×
PRV-CO (Private CO)	○	×	×	×	×
SINGLE CO (Single CO)	○	×	×	×	×
GROUP CO (Group CO)	○	×	×	×	×
OHCA (Off-Hook Call Announcement)	○	×	×	×	×
MESSAGE (Message Waiting)	○	○	×	×	×
LOGIN (UCD Log In)	○	○	○	×	×
ALARM (Local Alarm)	○	○	○	×	×
DSS DN (Direct Station Selection-DN)	○	○	○	×	×
DSS ICM (Direct Station Selection-ICM)	○	○	○	○	○
ONETOUCH (One Touch Dialing)	○	○	○	○	○
PRV-CHG (Privacy Change)	○	○	○	×	×
EXT FEAT (External Feature Access)	○	○	○	○	○
CALL PAR (Call Park-System)	○	○	○	○	○
CALL STA (Call Park-Station)	○	○	○	○	○
RNG TRN (Ringing Transfer)	○	○	○	○	○
SPLIT (Call Split)	○	○	○	○	○
FWD/DND (Call Forwarding/Do Not Disturb)	×	×	×	○ ※1	×
TONE-BRK (Tone Through Break)	○	○	○	○	○
SAVE (Saved Number Redial)	×	×	×	○ ※2	×

In the list on the previous page:
“ ◯ ” indicates that the feature is assignable.
“ × ” indicates that the feature is not assignable.

For example, “PDN” is assignable to DN button only and “Call Park-System” is assignable to all types of Assignable Feature Buttons (DN, DSS, PF).

The assignable features in the shaded part can be assigned and canceled by the system programming only.

✳1

The FWD/DND button is not provided on the PITS type 50 and KX-T7050 as a Fixed Feature Button but can be assigned to the PF3 button.

✳2

The SAVE button is not provided on the following PITS telephones, but the SAVE function can be assigned to the PF1 button of them.

PITS type 50
KX-T7020
KX-T7030
KX-T7050

System Programming	Reference	
	VT	Dumb
“Extension-Station (1/3)”, Primary Directory Number	9-G-1.01	10-C-22.00
“Extension-Station (2/3)”,	9-G-1.02	10-C-24.00
“Extension-Station (3/3)”, PF Key Type and Number DSS Key Type and Number	9-G-1.03	10-C-25.00
“Extension-DSS Console (2/3)”,	9-G-2.02	10-C-26.00
“Extension-DSS Console (3/3)”	9-G-2.03	

PITS Station Programming	Reference
Assigning DN (Directory Number) Buttons	12-C-1.00
Assigning PF (Programmable Feature) Buttons	12-C-2.00
Assigning DSS (Direct Station Selection) Buttons	12-C-3.00

Programming

Conditions

A code number for any of the following features can be assigned on only one DN button of a PITS.
Assigning the same number to multiple buttons of a PITS is impossible.

- Secondary Directory Number (SDN)
- Private CO
- Single CO
- Group CO

<Example>

SDN 100 and SDN 100
Group CO 01 and Group CO 01

Each of the following features can be assigned to only one Assignable Feature button of a PITS. Assigning the same feature to multiple buttons of a PITS is impossible.

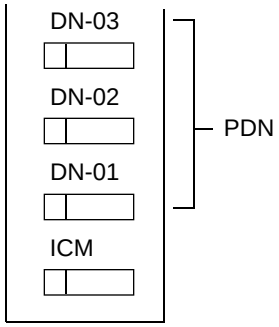
- Off-Hook Call Announcement
- Message Waiting
- UCD Log In
- Local Alarm
- Privacy Change

3.00 Line Access Buttons

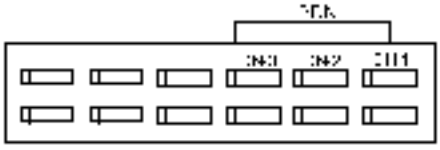
3.01 PDN Button

Description

When the KX-T336 System is installed, a Primary Directory Number (PDN) button is always assigned to every PITS telephone.
A PDN is a user's extension number.
Each PITS telephone has at least one PDN button that is used not only to make and receive calls but to access system features.
The DN-01 button is fixed to PDN.
Up to three PDN buttons can be assigned to each PITS telephone.
If you assign three PDN buttons, they must be arranged consecutively.
PDN buttons are assigned in “Extension-Station”, Type and Number.
By default setting, PDN button is seized automatically by simply lifting the handset or pressing the SP-PHONE button.



(DN buttons-PITS type 20, 30, 50)



(DN buttons - PITS 7000 series)

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (2/3)”, DN Key Type and Number	9-G-1.02	10-C-24.00

Conditions

The table below shows the relationship between the DN button and the CO line status.

Indicator	CO Line Status
Off	Idle
Lights green	I-use
Green 60 wink	I-hold
Green 120 wink	I-exclusive hold, consultation hold or unattended conference
Green 240 wink	Incoming call
Lights red	Other-use, exclusive hold
Red 60 wink	Other-hold
Red 120 wink	Privacy release possible

3.02 SDN Button

Description

Allows an extension user to assign PDN buttons of other extensions on DN buttons of PITS. This assigned DN buttons are called SDN buttons.
The assignment of SDN buttons make it easier to transfer or answer other extensions.
SDN buttons are assigned in “Extension-Station”, Type and Number.

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (2/3)”, DN Key Type and Number	9-G-1.02	10-C-24.00

Conditions

The table below shows the relationship between the DN button and the CO line status.

Indicator	CO Line Status
Off	Idle
Lights green	I-use
Green 60 wink	I-hold
Green 120 wink	I-exclusive hold, consultation hold or unattended conference
Lights red	Other-use, exclusive hold
Red 60 wink	Other-hold
Red 120 wink	Privacy release possible
Red 240 wink	Incoming call

Preferential order of SDN indicators is as follows:

1. I-use, hold, exclusive hold, consultation hold, unattended conference : Lights green, Green 60 wink, Green 120 wink
2. Incoming call : Red 240 wink
3. Other-hold : Red 60 wink
4. Privacy Release : Red 120 wink
5. Busy : Lights red
6. Idle : Off

3.03 ICM Button

Description

Allows an extension user to make/receive an intercom call within an ICM (Intercom) group.

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (1/3)”, Intercom Number	9-G-1.01	10-C-22.00

Conditions

The table below shows the relationship between the indicator and the intercom status.

Indicator	Intercom Status
Off	Idle
Lights green	I-use, Off-Hook Call Announcement (OHCA)
Green 240 wink	Incoming call

3.04 PCO Button

Description

It is possible to connect a CO line as if it were connected directly to a DN button on a PITS. This operation is called Private CO.
It is then no longer possible to place outgoing calls from other extensions using this CO line. Also, an incoming call from the CO line will arrive only at this PITS.

To program a Private CO line, set “Group-Trunk Group”, Type to PVL and program the CO line to the Private trunk group in “Trunk-CO Line”, Trunk Group.
Also, program the DN button on the PITS to PRV-CO using “Extension-Station (2/3)”, Type and assign the physical number of the Private CO line under Number.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Type	9-E-1.01	10-C-14.00
“Trunk-CO Line”, Trunk Group	9-F-1.00	10-C-18.00
“Extension-Station (2/3)”, Type and Number	9-G-1.02	10-C-24.00

Conditions

A Private CO button lights up red at the times below.

1) When the Private CO line is not In Service.
2) When the Private CO line has been set to Busy-Out.
3) When access using the Trunk Verify function is made by the Attendant Console.

A call held on a Private CO button can not be retrieved by other extensions, however, an incoming call to a Private CO button can be transferred.

When an incoming call arrives, ringing occurs instantly. Delayed ringing is not available.

3.05 SCO Button

Description

To support prompt handling of outside calls, a CO line can be assigned to a DN button on a PITS telephone.
When this function is assigned, a DN button on a PITS serves as the Single CO (SCO) button.
SCO button feature provides easy access to the CO lines for extension users who make and receive many outside calls.
The PITS telephone user can access a CO line by simply pressing the SCO button without dialing the CO line access code, and an incoming outside call can be directed to the PITS telephone via dedicated SCO button without assistance of the Operator.
In addition, the associated status LED provides busy/idle status and the busy to idle reminder.

SCO button can be used either one-way service (Incoming Only or Outgoing Only) or two-ways service (Both-Way).

SCO button can be assigned to a PITS telephone in conjunction with DIL 1:1 or DIL 1:N feature.

SCO button with DIL 1: 1 feature

When DIL 1: 1 feature is employed, SCO button can be assigned to the PITS telephone programmed as the destination of DIL 1: 1 feature.
If SCO button is not assigned on the PITS telephone, an incoming CO call arrives at a PDN button on it.

The table below shows the relationship between the DN button programmed as Single CO and the CO line status:

Indicator	CO Line Status
Off	Idle
Lights green	I-use
Green 60 wink	I-hold
Green 120 wink	I-exclusive hold, consultation hold, unattended conference
Green 240 wink	Incoming call (DIL 1: 1)
Lights red	Other-use, exclusive hold
Red 60 wink	Other-hold
Red 120 wink	Privacy release possible
Red 240 wink	Incoming call (DIL 1: N)

CO line which can be assigned as a SCO button is:

- A CO line which belongs to a trunk group assigned as Bothway or Incoming Only and whose Incoming Mode (Day) is DIL 1: 1, or DIL 1: N.

- A CO line which belongs to a trunk group assigned as Outgoing Only.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Station (2/3)", Type and Number	9-G-1.02	10-C-24.00

Conditions

- Even if Automatic Route Selection (ARS) function is set, it is overridden by an outgoing call made by pressing the Single CO button.

- The Single CO button indicator will light up red in the following circumstances.

  <1> When the Single CO is not In Service

  <2> Idle status and Single CO in Busy Out status

  <3> Idle status and Single CO in trunk route control status
  When the Single CO button is pressed in any of these statuses, its indicator lights up green but busy tone is heard.

In the following cases, the Single CO button indicator remains lit green and reorder tone is sent.

<1> When Calling Party Control signal has been detected during a call using the Single CO.

<2> When outgoing restriction applies to an outgoing call made from the Single CO.

3.06 GCO Button

Description

To support efficient utilization of CO lines, a group of CO lines (trunk group) can be assigned to a DN button on a PITS telephone.
When this function is assigned, a DN button on a PITS serves as the Group CO (GCO) button. GCO button feature provides better service with a given number of CO lines.

GCO button can be assigned to a PITS telephone in conjunction with DIL 1: N feature. Incoming calls on any CO line in the trunk group can be directed to a maximum of eight destinations (extension user, ICM group, pickup group) simultaneously.
In this case, incoming calls arrive at GCO buttons on the PITS telephone.
If GCO button is not assigned, incoming CO calls via DIL 1: N feature arrive at a PDN button on it.

To make an outside call, a PITS telephone user can access an idle CO line in the group by simply pressing the dedicated GCO button.

The table below shows the relationship between the DN button programmed as Group CO and the CO line status:

Indicator	CO Line Status
Off	Free CO line in trunk group and no incoming CO call
Lights green	I-use
Green 60 wink	I-hold
Green 120 wink	I-exclusive hold, consultation hold, unattended conference
Green 240 wink	—
Lights red	No idle CO lines in trunk group and no incoming call in trunk group
Red 60 wink	—
Red 120 wink	—
Red 240 wink	CO line receiving an incoming call in trunk group

Trunk group which can be assigned as a GCO button is:

- A trunk group assigned as Bothway or Incoming Only, and whose Incoming Mode (Day) is DIL 1:1 or DIL 1: N.
- A trunk group assigned as Outgoing Only.

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (2/3)”, Type and Number	9-G-1.02	10-C-24.00

Conditions

When the ARS function is set, it is overridden by outgoing calls made by the Group CO button.

Pressing a Group CO button when it is red serves to set the “Automatic Callback to Trunk” function.
See Section 4-C-6.01, 5-A-4.01 “Automatic Callback-Trunk” for details.

In the following cases, the Group CO button indicator remains green and reorder tone is sent.

<1> When Calling Party Control signal has been detected during a call using the Group CO.

<2> When outgoing restriction applies to an outgoing call made from a Group CO.

C. Outgoing Call Features

1.00 Line Selection-Calling

Description

PITS telephones may have many line access buttons and the set user can access a desired line either directly by pressing the button or by employing automatic line selection feature.
This Line Selection-Calling feature offers the following three line-preferences and the user can select only one preference for his or her PITS set:

- Prime Line Preference-Calling (default)
- Idle Line Preference-Calling
- No Line Preference-Calling

If Prime Line Preference or Idle Line Preference is selected, the user can get the programmed line automatically for making a call by simply lifting the handset or pressing the SP-PHONE button (On-Hook Dialing).
If No Line Preference is selected, no line is accessed until the user directly presses the desired button.

Every PITS telephone is assigned to Prime Line Preference on PDN button by default setting. This can be changed on a PITS telephone basis using PITS station programming. Refer to Section 12-C-4.00 “Automatic Line Hunting (Calling).”
Line Preference-Calling feature newly assigned on a PITS telephone overrides the previous assignment.

Note

Line access buttons that are available for a PITS telephone are:

- DN buttons... Primary Directory Number (PDN) buttons
  Secondary Directory Number (SDN) buttons
  (Refer to Section 4-B-3.01 through 3.02.)
- CO buttons... Private CO (PCO), Single CO (SCO), Group CO (GCO)
  (Refer to Section 4-B-3.04 through 3.06.)
- ICM (Intercom) button
  (Refer to Section 4-B-3.03.)

1.01 Prime Line Preference-Calling

Description

Automatically connects a PITS telephone to a line pre-assigned as Prime Line by simply lifting the handset or pressing the SP-PHONE button.

Once the Prime Line Preference is selected from the Preference Calling features, one of the following buttons should be assigned as the Prime Line of the PITS telephone:

- DN button - PDN (default), SDN
- CO button - PCO, SCO, GCO
- ICM button

Programming

PITS Station Programming	Reference
Automatic Line Hunting (Calling) Selection	12-C-4.00

Conditions

A line access button except PDN and ICM cannot be assigned as the Prime Line unless it has been assigned to a PITS telephone by system programming.

PDN button and ICM button are fixed feature buttons and always provided on PITS telephones.
However, SDN, PCO, SCO and GCO buttons are assignable feature buttons.
If you assign SDN, PCO, SCO or GCO button as Prime Line, pre-assignment as a line access button on a PITS telephone must be done beforehand by system programming.

Silence when going off-hook indicates that the prime line is busy.

When two or more PDN buttons are assigned on a PITS (up to three PDN buttons can be assigned per PITS), line selection feature always functions if at least one PDN button is available.

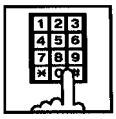
This feature is available when a PITS telephone has no incoming call, or when a PITS telephone does not answer an incoming call automatically by going off-hook, that is, “Ringing Line Preference-Answering” overrides “Prime Line Preference-Calling.”
Refer to Section 4-D-1.01 “Ringing Line Preference-Answering” for further information.

The user can override the preferred line temporarily to access another line (Pre-selection). To override the line, without lifting the handset nor pressing the SP-PHONE button, press the desired line access button listed below:

- PDN button
- Private CO button
- Single CO button
- Group CO button
- ICM button

Operation

1. Lift the handset or press the SP-PHONE button.
   - The indicator on the button assigned as the prime line lights in green.
   - Dial tone 1 or 3 or 4 sounds.



2. Call the other party depending on the assigned line.

1.02 Idle Line Preference-Calling

Description

One of the idle DN buttons (PDN, SDN) or CO buttons (PCO, SCO, GCO) on a PITS telephone will be automatically selected by lifting the handset or pressing the SP-PHONE button.

It is determined by the system programming that which button (DN or CO) will be selected as an idle line.
Refer to Section 9-D-1.01 “System-Operation (1/3)” for programming.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, Idle Line Preference	9-D-1.01	10-C-4.00

PITS Station Programming	Reference
Automatic Line Hunting (Calling) Selection	12-C-4.00

Conditions

Silence when going off-hook indicates that no idle line is available on the PITS telephone.

ICM button is not selected automatically by this feature.

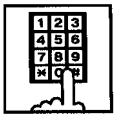
This feature is available when a PITS telephone has no incoming call, or when a PITS telephone does not answer an incoming call automatically by going off-hook, that is, “Ringing Line Preference-Answering” overrides “Idle Line Preference-Calling.”
Refer to Section 4-D-1.01 “Ringing Line Preference-Answering” for further information.

The user can override the preferred line temporarily to access another line (Pre-selection). To override the line, without lifting the handset nor pressing the SP-PHONE button, press the desired line access button listed below:

- PDN button
- Private CO button
- Single CO button
- Group CO button
- ICM button

Operation

1. Lift the handset or press the SP-PHONE button.
   - The indicator on the selected idle line access button lights in green.
   - You hear dial tone 1.



2. Call the other party depending on the selected line.

1.03 No Line Preference-Calling

Description

If No Line Preference is assigned to a PITS telephone, no line is automatically connected to a PITS telephone when it goes off-hook.
To get a line for making a call, the extension user must press the desired DN (PDN or SDN) or CO (PCO, SCO or GCO) or ICM button on a PITS telephone.

This feature can be assigned on a PITS telephone basis.

Programming

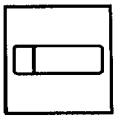
PITS Station Programming	Reference
Automatic Line Hunting (Calling) Selection	12-C-4.00

Condition

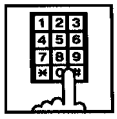
Going off-hook selects no line and no tone is heard.

Operation

1. Lift the handset or press the SP-PHONE button.
   - You hear no tone.



2. Press the desired line access button.
   - The indicator on the pressed button lights in green.



3. Call the other party depending on the pressed button.

2.00 On-Hook Dialing

Description

On-Hook Dialing enables various hands-free dialing operation. This permits the PITS telephone users without lifting the handset to access a line and dial telephone numbers, intercom numbers, and feature numbers, or do other dialing performances.

Programming

None

Conditions

If Prime Line Preference or Idle Line Preference is assigned to a PITS, pressing the SP-PHONE button automatically selects the preprogrammed line.

If No Line Preference is assigned to a PITS telephone, no tone sounds when SP-PHONE button is pressed, and to get a line for making a call, press the appropriate line access button.

The SP-PHONE button is turned off automatically, if no operation is made within 15 seconds in the following states after the SP-PHONE button is pressed.

The states are:

- While hearing one of the following tones;
  Dial tone
  Busy tone
  Reorder tone
  DND tone
- While no tone is heard

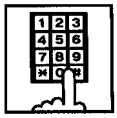
Operation

Without lifting the handset, press the desired line access button listed below and perform an appropriate dialing operation:

- SP-PHONE button
- PDN button
- Private CO button
- Single CO button
- Group CO button
- ICM button

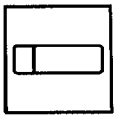
By pressing the SP-PHONE button

1. Press the SP-PHONE button.
   - The indicator on the SP-PHONE button lights in red. The indicator on the PDN button lights in green.
   - You hear dial tone 1 or 3 or 4.

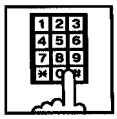


2. Dial the telephone number of the other party.

By using the PDN button

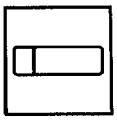


1. Press the PDN button.
   - The indicator on the SP-PHONE button lights in red. The indicator on the PDN button lights in green.
   - You hear dial tone 1 or 3 or 4.

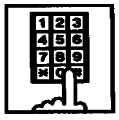


2. Dial the telephone number of the other party.

By using the Private CO button

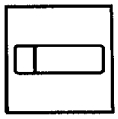


1. Press the Private CO button.
   - The indicator on the SP-PHONE button lights in red. The indicator on the Private CO button lights in green.
   - You hear dial tone 1.

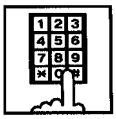


2. Dial the telephone number of the outside party.

By using the Single CO button

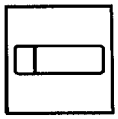


1. Press the Single CO button.
   - The indicator on the SP-PHONE button lights in red. The indicator on the Single CO button lights in green.
   - You hear dial tone 1.

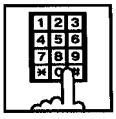


2. Dial the telephone number of the external party.

By using the Group CO button

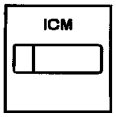


1. Press the Group CO button.
   - The indicator on the SP-PHONE button lights in red. The indicator on the Group CO button lights in green.
   - You hear dial tone 1.

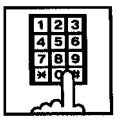


2. Dial the telephone number of the external party.

By using the ICM button



1. Press the ICM button.
   - The indicator on the SP-PHONE button lights in red. The indicator on the ICM button lights in green.
   - You hear dial tone 5.



2. Dial the intercom number of the other extension.

3.00 Making Outside Calls

3.01 Local Trunk Dial Access

Description

Allows extension users to make outgoing CO calls by automatic selection of an idle CO line. Dialing the feature number for ARS/Local CO Line Access" enables you to execute this function.

To activate this feature, set "System-Operation", Automatic Route Selection to "No." If set to "Yes," ARS feature is activated instead of this feature.
Refer to Section 3-C-2.00 "Automatic Route Selection (ARS)" for further information.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", Automatic Route Selection	9-D-1.01	10-C-4.00
"System-Local Access Group", Hunt Sequence	9-D-5.00	10-C-9.00
"System-Numbering Plan (02/11)", ARS/Local CO Line Access	9-D-6.02	10-C-10.00

Conditions

An idle CO line available and hunting sequence is determined by the system programming "System-Local Access Group", Hunt Sequence.

If an extension user hears busy tone, there is no idle CO line available.

If an extension user hears reorder tone, the user is restricted from accessing this feature.
Refer to Section 3-C-1.01 "Toll Restriction for Local Trunk Dial Access," for further information.

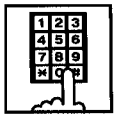
If tenant service is employed, accessible trunk groups are limited to the trunk groups within the same tenant.

(◆ for U.S.A. and Canada only)
The dialing plan followed is that of the trunk group in hunt sequence 01 in "System-Local Access Group."

Operation

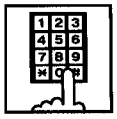
1. Lift the handset or press the SP-PHONE button.

   • You hear dial tone 1 or 3 or 4.



2. Dial the feature number for ARS/Local CO Line Access "9" (default)

   • You hear dial tone 1."



3. Dial the telephone number of the outside party.

3.02 Individual Trunk Group Dial Access

Description

Allows extension users to make outgoing CO calls via an idle CO line in the specified trunk group by dialing the feature number for “Trunk Group 01-08 Access” or “Trunk Group 09-16 Access.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (2/2)”, Trunk Group Access	9-D-4.02	10-C-8.00
“System-Numbering Plan (02/11)”, Trunk Group 01-08 Access Trunk Group 09-16 Access	9-D-6.02	10-C-10.00

Conditions

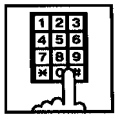
Trunk groups to be specified are limited to the ones assigned in “System-Class of Service”, Trunk Group Access.

If an extension user hears busy tone, all CO lines in the specified trunk group are not available.

If an extension user hears reorder tone, the user is restricted from accessing the specified trunk group.
Refer to Section 3-C-1.03 “Toll Restriction for Individual Trunk Group Dial Access/Direct Trunk Access,” for further information.

Operation

1. Lift the handset or press the SP-PHONE button.
   - You hear dial tone 1 or 3 or 4.

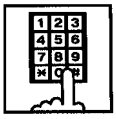


2-1 Specifying one trunk group from 01 to 08.

1) Dial the feature number for Trunk Group 01-08 Access “81” (default).
2) Dial the number for specifying the trunk group: 1 to 8.

- Trunk group specifying number matches trunk group number, as follows:

Trunk Group Specifying Number	Trunk Group Number
1	01
2	02
3	03
4	04
5	05
6	06
7	07
8	08

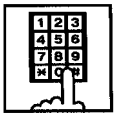


2-2 Specifying one trunk group from 09 to 16

1) Dial the feature number for Trunk Group 09-16 Access “82” (default).
2) Dial the number for specifying the trunk group: 1 to 8.

- Trunk group specifying number matches trunk group number, as follows:

Trunk Group Specifying Number	Trunk Group Number
1	09
2	10
3	11
4	12
5	13
6	14
7	15
8	16



3. Dial the telephone number of the outside party.

3.03 Individual Virtual Trunk Group Dial Access (◆ for U.S.A. and Canada only)

Description

Allows extension users to make outgoing CO calls using Special Carrier Facilities by simply dialing the feature number for “Trunk Group 17-24 Access.”
Detailed data, such as access codes and authorization codes, required to Special Carrier Access must be programmed beforehand in “Special Carrier Access” screen.
Trunk groups available for Special Carrier Access is also defined in the same screen.

Special carriers available for each extension user is defined in “System-Class of Service (2/2)” Special Carrier Access.

It is programmable to restrict Special Carrier Access on system-wide basis.
Refer to Section 10-C-52.00 “World Select 2-EQU/OCC Access Assignment” for further information.

Programming

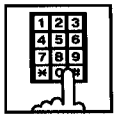
System Programming	Reference	
	VT	Dumb
“System-Class of Service (2/2)”, Special Carrier Access	9-D-4.02	10-C-8.02
“System-Numbering Plan (02/11)”, Trunk Group 17-24 Access	9-D-6.02	10-C-10.00
“Special Carrier Access-Equal Access/OCC Access”	9-H-1.00 9-H-2.00	10-C-30.00 10-C-31.00
“World Select 2”	—	10-C-52.00

Conditions

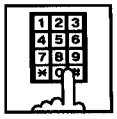
None

Operation

1. Lift the handset or press the SP-PHONE button.
   - You hear dial tone 1 or 3 or 4.

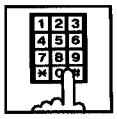


2. Dial the feature number for Trunk Group 17-24 Access “83” (default).



3. Dial the number for specifying the virtual trunk group: 1 to 8.
   - Virtual trunk group number matches virtual trunk group specifying number and digit modification table number (Equal access table number 1 to 4, OCC access table number 1 to 4 which should be assigned beforehand), as follows:

Virtual Trunk Group Number	Virtual Trunk Group Specifying Number	Digit Modification Table Number
17	1	Equal access table number 1
18	2	Equal access table number 2
19	3	Equal access table number 3
20	4	Equal access table number 4
21	5	OCC access table number 1
22	6	OCC access table number 2
23	7	OCC access table number 3
24	8	OCC access table number 4



4. Dial the telephone number of the outside party.

3.04 Direct Trunk Access

Description

Allows a PITS telephone user one-button access to a CO line.
You can make an outgoing CO call without dialing the feature number for CO line access.

This feature requires a CO button assignment on a PITS telephone.
There are three types of CO buttons available in this system: Private CO (PCO), Single CO (SCO) and Group CO (GCO) buttons.
For further information about CO button features, refer to Section 3-D-2.07 through 2.09.

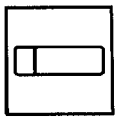
Programming

System Programming	Reference	
	VT	Dumb
"Extension-Station (2/3)", DN Key Type and Number	9-G-1.02	10-C-24.00

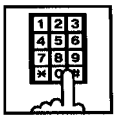
Condition

Direct trunk access (for making calls) can be done by simply pressing the appropriate CO button without lifting the handset or pressing the SP-PHONE button.
Refer to Section 4-C-2.00 "On-Hook Dialing" for related information.

Operation



1. Press the desired CO button.
   - The indicator on the CO button lights in green.
   - You hear dial tone 1.



2. Dial the telephone number of the outside party.

4.00 Automatic Dialing

4.01 One Touch Dialing

Description

Extension users can program frequently dialed telephone numbers (of both extensions and outside parties) or feature numbers into memory on the following PITS telephone's Assignable Feature buttons.

- PF buttons
- DN buttons
- DSS buttons (KX-T30830 only)

To dial a number stored in an assignable feature button, the extension user just press the button and the PITS telephone automatically dials the number.
This feature can be programmed by either system programming and PITS station programming.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Station (2/3)", DN Key Type, Number	9-G-1.02	10-C-24.00
"Extension-Station (3/3)",	9-G-1.03	
PF Key Type, Number		10-C-25.00
DSS Key Type, Number		10-C-26.00
"Extension-DSS Console (1/3)",	9-G-2.01	
DSS Key Type, Number		10-C-24.00
"Extension-DSS Console (2/3)",	9-G-2.02	
PF Key Type, Number		10-C-25.00

PITS Station Programming	Reference
DN (Directory Number) Button Assignment	12-C-1.00
PF (Programmable Feature) Button Assignment	12-C-2.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

Conditions

Each stored number can have up to 16 digits including CO line access code. "0 to 9," "* ," "#," "PAUSE," "FLASH," "—" and "SECRET" can be registered.
For employing One Touch Dialing for calling an outside party, stored number must include a feature number for selecting a CO line as leading digits.

<Example>
For calling an outside party automatically:
ARS/Local CO Line Access - telephone number

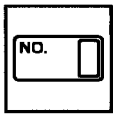
The feature numbers for selecting a CO line are:

- ARS/Local CO Line Access
- Trunk Group 01-08 Access
- Trunk Group 09-16 Access
- Trunk Group 17-24 Access (Virtual Trunk Group — ◆ for U.S.A. and Canada only)

Operation

Making a call using One Touch Dialing

1. Lift the handset or press the SP-PHONE button.
   - You hear dial tone 1 or 3 or 4.



2. Press the One Touch button.
   - Stored number is sent.

(Supplement)

In step 2, dialing a feature number for selecting a CO line before pressing the One Touch button ignores the stored feature number and seizes the CO line selected by manual operation.

Instead of the operation in step 1, pressing the Private CO, the Single CO, or the Group CO button ignores the stored feature number for selecting a CO line and seizes the CO line of the pressed button.

One Touch Dialing, Speed Dialing, Last Number Redial, Saved Number Redial and manual dialing can be used in combination.

<Example>
An extension user can store a number consisting of 17 digits or more by dividing it and storing it in two assignable feature buttons.
In this case, feature number for selecting a CO line should not be stored on the second button.

To dial the number, first press the first One Touch button, and then press the second One Touch button.

4.02 Speed Dialing-System

Description

Allows any extension user to call outside parties by simply pressing the AUTO button and dialing a pre-assigned 3-digit code (001 to 200) common to any extension user in the system. Up to 200 Speed Dialing Codes can be registered to the system

The Speed Dialing Codes are registered in "System-Speed Dialing-System" screen, and toll restriction level unique to each speed dialing code can be assigned in the same screen.
Refer to "Toll Restriction Plan for System Speed Dialing" on next page for further information.

If Tenant Service is employed, Speed Dialing Codes can be divided by two tenants. In this case, one tenant cannot use the Speed Dialing Codes which belong to the other tenant.

Programming

System Programming	Reference	
	VT	Dumb
"System-Tenant", Speed Dialing-System Boundary	9-D-2.00	10-C-5.00
"System-Speed Dialing-System"	9-D-8.00	10-C-12.00

PITS System Programming	Reference
Storing Speed Dialing-System	11-C-3.00

Conditions

Each stored number can have up to 32 digits including CO line access code. "0 to 9," "* ," "#," "PAUSE," "FLASH," "—" and "SECRET" can be registered.

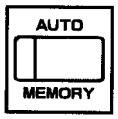
A feature number for selecting a CO line must be stored as leading digits.

The feature numbers for selecting a CO line are:
- ARS/Local CO Line Access
- Trunk Group 01-08 Access
- Trunk Group 09-16 Access
- Trunk Group 17-24 Access (Virtual Trunk Group — ◆ for U.S.A. and Canada only)

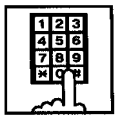
Operation

Calling an outside party using Speed Dialing-System

1. Lift the handset or press the SP-PHONE button.
   - The indicator on the SP-PHONE button lights in green.
   - You hear dial tone 1 or 3 or 4.



2. Press the AUTO button.
   - The indicator on the AUTO button lights.
   - You hear no tone.



3. Dial the speed dialing code.
   - The registered number is sent.

(Supplement)

Before pressing the AUTO button in step 2, dialing a feature number for selecting a CO line seizes the dialed CO line and starts outpulsing, ignoring the feature number for selecting a CO line registered in the speed dialing code.

Instead of the operation in step 1, pressing Private CO, Single CO or Group CO ignores the feature number for selecting a CO line stored in the speed dialing codes and makes a call to an outside party through the pressed CO line.

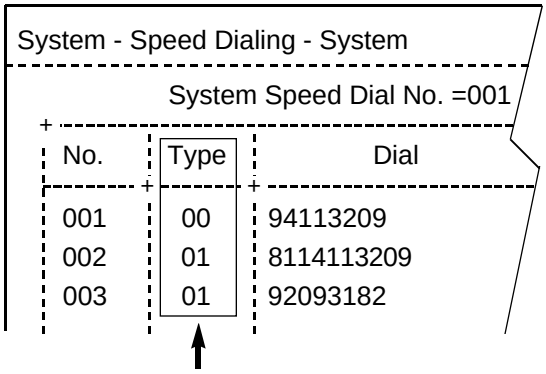
While dialing a speed dialing code in step 3, canceling the code is possible by pressing the AUTO button. Then repeat steps 2 to 3 for the new entry.

One Touch Dialing, Speed Dialing, Last Number Redial, Saved Number Redial and manual dialing can be used in combination.

<Example>
An extension user can store a number consisting of 33 digits or more by dividing it and storing it in two speed dialing codes. In this case, a feature number for selecting a CO line should not be stored on the second speed dialing code.
To dial the number, first press the AUTO button and dial the first speed dialing code, and then press the AUTO button and dial the second speed dialing code.

<Toll Restriction Plan for System Speed Dialing>

The system administrator can assign Toll Restriction Level of System Speed Dialing (referred to as “TRLSD” in the following) to each code as follows:



TRLSD consists of 17 levels (“00” and “01 to 16”) TRLSD “00” receives a treatment different from TRLSDs “01 to 16.”
In TRLSD “01 to 16,” “01” is the highest level and “16” is the lowest.

1. Toll Restriction Plan for System Speed Dialing Code (TRLSD=00)

   When an outgoing CO call is made by dialing a System Speed Dialing Code (TRLSD=00), extension users receive standard toll restriction treatment.

   If selected speed dialing code includes Local Trunk Dial Access code as leading digits, a call is checked against “Toll Restriction for Local Trunk Dial Access.”

   If selected speed dialing code includes Individual Trunk Group Dial Access Code as leading digits, a call is checked against “Toll Restriction for Individual Trunk Group Dial Access.”
   For further information about System Toll Restriction feature, refer to Section 3-C-1.00 “Toll Restriction.”

2. Toll Restriction Plan for System Speed Dialing Code (TRLSD=01 to 16)

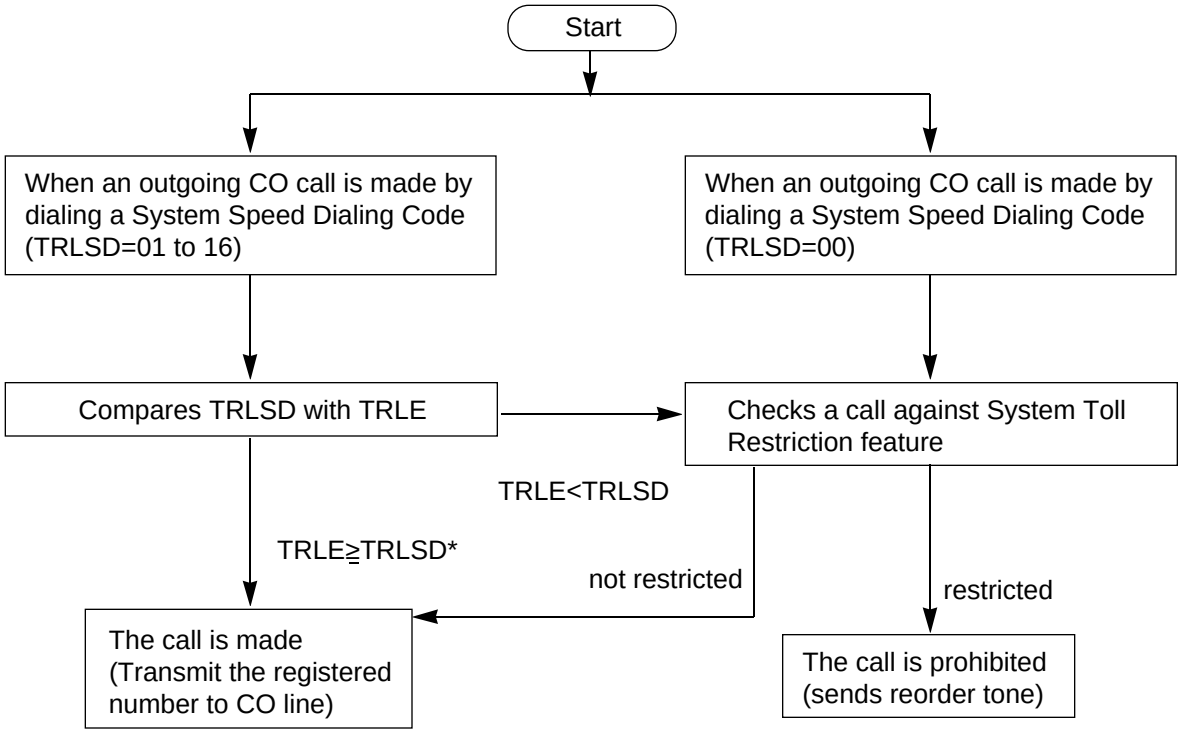
   When an extension user makes an outgoing CO call by dialing a System Speed Dialing Code (TRLSD=01 to 16), the system compares Toll Restriction Level of Extension (TRLE) with TRLSD.

   If TRLE is equal to or higher than TRLSD (TRLE≥TRLSD) a call is made, and if TRLE is lower than TRLSD (TRLE<TRLSD), a call is checked against System Toll Restriction feature.
   For further information about TRLE, refer to Section 3-C-1.00 “Toll Restriction.”

<Example>
If an extension user (TRLE=6) makes an outgoing CO call by selecting a System Speed Dialing Code (TRLSD=7), in this case, TRLE of 6 is higher than TRLSD of 7 (TRLE>TRLSD), so a call is made.

If an extension user (TRLE=6) makes an outgoing CO call by selecting a System Speed Dialing Code (TRLSD=4), in this case, TRLE of 6 is lower than TRLSD of 4 (TRLE<TRLSD), so a call is checked against the System Toll Restriction feature.

The following flowchart shows the simplified procedure of toll restriction plan for System Speed Dialing.



* In this case, “Local Trunk Dial Access restriction” and “Individual Trunk Group Dial Access restriction” assigned in Class of Service are disregarded.

4.03 Last Number Redial (LNR)

Description

Automatically saves the last outside number dialed from a PITS telephone and allows the extension user to make the same outgoing CO call again by simply pressing the REDIAL (or LNR) button.

Programming

None

Conditions

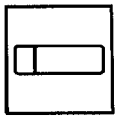
Up to 32 digits except the feature number for selecting a CO line can be memorized automatically as the last dialed number.

"* ," "#," "PAUSE," or "SECRET" are counted as one digit respectively.

Last number redialing memory is renewed automatically every time you make a new outgoing CO call and even one digit is sent to CO line. Dialing a feature number for selecting a CO line only does not renew the memorized number.

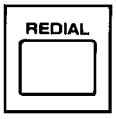
Operation

Calling an outside party by LNR on the DN button or the CO button



1. Press the DN button or the CO button.

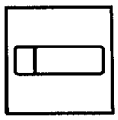
   - The indicator on the pressed button lights in green.
   - You hear dial tone 1 or 3 or 4.



2. Press the REDIAL (LNR) button.

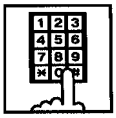
   - If the last call was made on the CO button, calling by the DN button is unavailable and pressing the REDIAL (LNR)button is ignored.

Calling by LNR after dialing a feature number for selecting a CO line

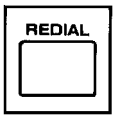


1. Press the DN button.

   - The indicator on the pressed button lights in green.
   - You hear dial tone 1 or 3 or 4.



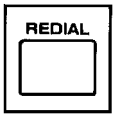
2. Dial a feature number for selecting a CO line.



3. Press the REDIAL (LNR) button.

Interrupting redialing

While you hear busy tone, ring back tone, or reorder tone,



1. Press the REDIAL (LNR) button.

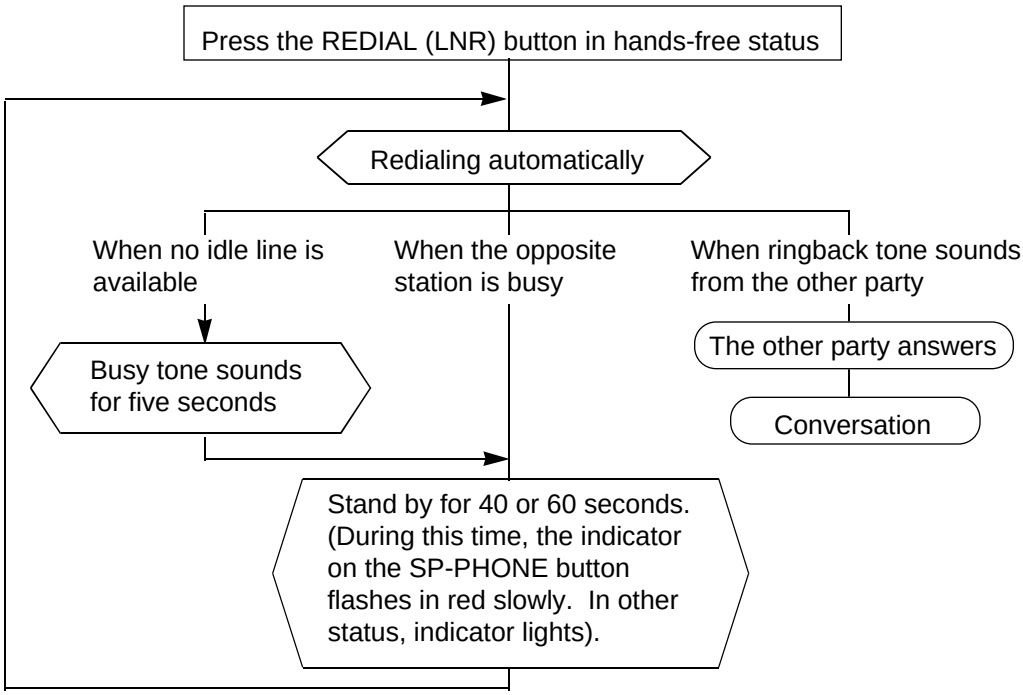
4.04 Automatic Redial

Description

Automatic Redialing is activated by pressing the SP-PHONE button and REDIAL (LNR) button successively (On-hook dialing).
By default, redialing will be repeated 10 or 15 times automatically at 40 or 60-second intervals until the called party answers.
(These settings can be changed by system programming. Default values for each area and available range of values are described in Section 10-C-51.00 “World Select 1 (WS1)”

No answer after dialing 10 or 15 times conclude this function, turning the SP-PHONE button off.

Automatic Redialing is available with the following PITS telephones only:
KX-T123230D, KX-T123235, KX-T7130, KX-T7030, KX-T7050



Programming

None

Conditions

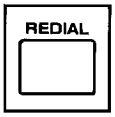
Besides the number, this function memorizes the button (DN or CO) used for the last call and executes automatic redial on that button.
Pressing the REDIAL (LNR) button while the last used button is in use causes the system to wait until the button becomes idle. As soon as the button becomes idle, this function is executed.
If the last used button was the PDN and multiple PDNs are available, the system selects any idle PDN.

Automatic Redialing is terminated, if any key operation is made during Automatic Redialing.

If a CO line is not seized, busy tone sounds for five seconds.
Turning the SP-PHONE off while hearing busy tone activates Automatic Callback-Trunk.
For further information, refer to Section 4-C-6.01 “Automatic Callback-Trunk.”

Operation

1. Press the SP-PHONE button.



2. Press the REDIAL (LNR) button.
   - The indicator on the SP-PHONE button flashes in red slowly for 40 or 60 seconds of standby status.

4.05 Saved Number Redial (SNR)

Description

Saved Number Redial allows the extension user to store the telephone number of the outside party when the called line is busy or during a conversaion and make the same call again by simply pressing the dedicated feature button: SAVE or SNR button.

Programming

None

Conditions

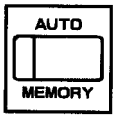
Up to 32 digits of a dialing number can be stored for this function, not counting the feature number for selecting a CO line.
" * ," "#," "PAUSE" or "SECRET" is counted as one digit.

Saved Number Redialing memory remains intact until another number is stored in memory.

Operation

Storing the phone number into SNR memory

When you are speaking on the CO line or when the called CO line is busy

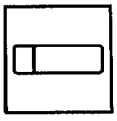


1. Press the AUTO button.

2. Press the SAVE (SNR) button.
   - System saves the dialed telephone number.

3. Replace the handset or press the SP-PHONE button.

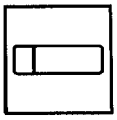
Calling an outside party by SNR on the DN button or the CO button



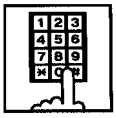
1. Press the DN button or the CO button.
   - The indicator on the pressed button lights in green.
   - You hear dial tone 1 or 3 or 4.

2. Press the SAVE (SNR)button.
   - If the saved call was on the CO button, calling on the DN button is ineffective: pressing the SAVE (SNR) button is ignored.

Calling by SNR after dialing a feature number for selecting a CO line



1. Press the DN button.
   - The indicator on the pressed button lights in green.
   - You hear dial tone 1 or 3 or 4.



2. Dial a feature number for selecting a CO line.

3. Press the SAVE (SNR)button.

Interrupting redialing

While hearing busy tone, ring back tone, or reorder tone from a CO line

1. Press the SAVE (SNR) button.

(Supplement)

SAVE button is not provided on the following PITS telephones:

PITS type 50, KX-T7020, KX-T7030, KX-T7050

However, the SAVE button can be assigned to the PF1 button of the above listed PITS telephones.
Refer to Section 9-G-1.03 "Station (3/3) and Section 12-C-2.00 "PF (Programmable Feature) Button Assignment" for further information.

5.00 Making Internal Calls

5.01 Inter Office Calling

Description

Inter Office Calling allows the extension user to call another extension user within the system by dialing the directory number (three or four digits) on a DN button.

Programming

None

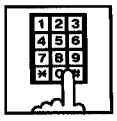
Conditions

If Tenant Service is employed, Inter Office Calling to the other tenant (inter-tenant calling) can be enabled or disabled by programming.
Refer to Section 3-B-4.00 “Tenant Service” for further information.

Operation

Calling an extension with the handset

1. Lift the handset.



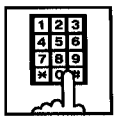
2. Dial the directory number of the other extension.
   - You hear ringback tone.

3. When the other party answers, start conversation.

4. After concluding conversation, replace the handset.

Calling an extension hands-free

1. Press the SP-PHONE button.



2. Dial the directory number of the other extension.
   - You hear ringback tone.

3. When the other party answers, start conversation.

4. Press the SP-PHONE button after concluding conversation.

5.02 Intercom Calling

Description

Intercom Calling allows the extension user to call another extension user in the same Intercom group by dialing the Intercom Number (one or two digits) on the ICM button.
Refer to Section 3-B-7.01 “Intercom Group” for details about Intercom group.

Besides Intercom Calling, Intercom facility offers the following features:

- Intercom - Voice Calling
- Intercom - Busy Station Signaling (BSS)
- Intercom - Off-Hook Call Announcement (OHCA)

Refer to descriptions on the following pages.

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (1/3)”, Intercom Number ICM Group	9-G-1.01	10-C-22.00

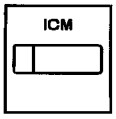
Conditions

Intercom Calling is available within the same Intercom group.

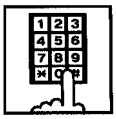
SLT telephone users can neither execute nor receive Intercom Calling.

Operation

1. Lift the handset or press the SP-PHONE button.



2. Press the ICM button.
   - You hear dial tone 5.
   - The indicator on the ICM button lights in green.



3. Dial the intercom number of the other extension.
   - You hear ringback tone.
   - An intercom number is one or two digit(s).

4. When the other party answers, start conversation.

5. After finishing conversation, replace the handset or press the SP-PHONE button.

(Supplement)

In step 3, you can also call the other party by pressing “*,” then dialing the directory number of the extension, instead of dialing the intercom number.

5.03 Intercom-Voice Calling

Description

Intercom-Voice Calling allows an extension user to call another extension user in the same Intercom group through Intercom Calling with his voice instead of ringing.
While calling an extension, the user can change the voice calling mode to the ringing mode by pressing " * . " The ringing mode cannot be changed to the voice calling mode while calling.

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (06/11)", Voice Calling Mode Set Voice Calling Mode Cancel	9-D-6.06	10-C-10.00

Conditions

If the called extension has enabled Voice Calling Deny, Intercom-Voice Calling results in ringing call even though the caller sets "Voice Calling Mode Set."

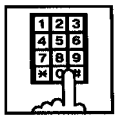
For further information about Voice Calling Deny, refer to Section 4-D-2.02 "Intercom Answer Voice Calling Deny."
Use PDN button to set or cancel this feature.

Operation

Setting the Voice Calling mode

1. Lift the handset or press the SP-PHONE button.

   - The indicator on the PDN button lights in green.
   - You hear dial tone 1 or 3 or 4.



2. Dial the feature number for Voice Calling Mode Set "67#" (default).

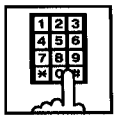
   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

     Voice Alerting

Canceling the Voice Calling mode

1. Lift the handset or press the SP-PHONE button.

   - The indicator on the PDN button lights in green.
   - You hear dial tone 1 or 3 or 4.



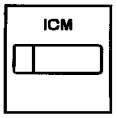
2. Dial the feature number for Voice Calling Mode Cancel "67#" (default).

   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

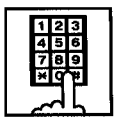
     Tone Ringing

Changing to the ringing mode during Intercom-Voice Calling in the Voice Calling mode.

1. Lift the handset or press the SP-PHONE button.

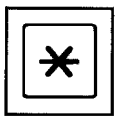


2. Press the ICM button.



3. Dial the intercom number of the other extension.

   - You hear confirmation tone 3.
   - Start Intercom-Voice Calling to the opposite party.



4. Dial "#."

   - Ringing the other party starts .
   - You hear ringback tone.

5.04 Intercom-Busy Station Signaling (BSS)

Description

When the called extension user is busy talking on a DN or CO button, and the ICM button is idle, Intercom-Busy Station Signaling informs the other extension user that he or she is called by another extension through Intercom Calling with the flashing ICM button.
The called extension user's telephone must be off-hook.

To activate this function, assign “System-Class of Service”, BSS/OHCA to “Yes.”

If the called extension user's telephone is PITS KX-T123230D, KX-T123235 or KX-T7130, Busy Station Signaling turns into Intercom Off-Hook Call Announcement (OHCA).
Refer to the next page for further information.
BSS feature is available between the extension users in the same Intercom group.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, BSS/OHCA	9-D-4.01	10-C-7.00

Conditions

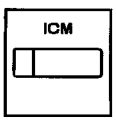
Intercom-Busy Station Signaling is effective if the called extension is preset to either of the following functions:

- “System-Class of Service”, BSS/OHCA Deny is set to “Yes.”
- “System-Class of Service”, Call Forwarding/ Do Not Disturb is set to “Yes.”

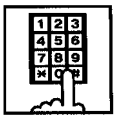
Operation

Calling an extension

1. Lift the handset or press the SP-PHONE button.



2. Press the ICM button.



3. Dial the intercom number of the other extension.

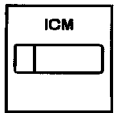
   - You hear ringback tone.
   - The indicator on the ICM button of the other station flashes in 240 wink.

(Supplement)

If the ICM button of the other station is occupied, the caller hears busy tone.

Answering the call

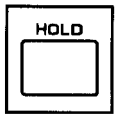
The indicator on the ICM button flashes in 240 wink and you hear call waiting tone.
Talking to the second caller by disconnecting the first party



1. Press the ICM button.

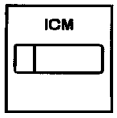
   - Talk to the second party.
   - The indicator on the ICM button lights.

Talking to the second caller by holding the first party



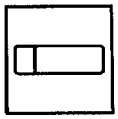
1. Press the HOLD button.

   - The first party is placed on hold.



2. Press the ICM button.

   - Speak to the second party.
   - The indicator on the ICM button lights.



3. Press the button that is flashing in 60 wink to talk to the first party again.

   - The second party is disconnected. Talk to the first party.

5.05 Intercom Off-Hook Call Announcement (OHCA)

Description

When the called extension is busy talking on a DN or CO button, and the ICM button is idle, OHCA allows the calling extension user to inform the called party that another call is waiting, through the built-in speaker of the called party's PITS telephone.

OHCA works under the following conditions:

- The ICM buttons on both the calling extension's telephone and the called extension's telephone are idle.
- The called extension's telephone is PITS KX-T123230D, KX-T123235 or KX-T7130.
- The called extension's handset is off the hook.

To activate this function, install T-SW OHCA card (KX-T336105) in the Basic Slot 02, and OHCA card (KX-T96136) on the PLC or HLC card. Refer to Section 2-C-3.02 “T-SW OHCA Card (KX-T336105)” and Section 2-C-3.03 “OHCA Card (KX-T96136)” for further information.
In the system programming, assign “System-Class of Service (1/2)”, BSS/OHCA to “Yes” at calling extension, and assign “Extension-Station (1/3)”, OHCA Circuit to “Yes” at the called extension.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, BSS/OHCA	9-D-4.01	10-C-7.00
“Extension-Station (1/3)”, OHCA Circuit	9-G-1.01	10-C-22.00

Conditions

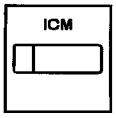
OHCA does not work if the called extension is under one of the following conditions:

- The ICM button is not idle.
- Talking in the speaker phone mode.
- “System-Class of Service”, BSS/OHCA Deny is set to “Yes.”
- “System-Class of Service”, Call Forwarding/Do Not Disturb is set to “Yes.”

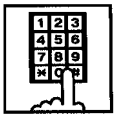
Operation

Executing OHCA

1. Lift the handset or press the SP-PHONE button.



2. Press the ICM button.



3. Dial the intercom number of the extension.
   - When the extension is off-hook, you hear confirmation tone 3.

4. Talk to the other party.

6.00 Automatic Callback

6.01 Automatic Callback-Trunk

Description

If no idle CO line is available when dialing a feature number for selecting a CO line and the telephone number of an outside party, the caller hears special busy tone.
On-hook while hearing the special busy tone calls back the caller as soon as a CO line becomes idle: call-back ringing. Off-hook or pressing the SP-PHONE button catches the CO line automatically, and sends the last dialed telephone number to the CO line.

Off-hook prior to the start of callback ringing cancels this function.
Also no answer in four ringings (within 10 seconds) after the start of callback ringing cancels this function.

To activate “Automatic Callback-Trunk,” assign “Extension-Station”, Automatic Callback-Trunk to “Yes.”
This setting is assignable on an extension basis.

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (1/3)”, Automatic Callback-Trunk	9-G-1.01	10-C-22.00

Conditions

Multiple extensions are able to set this function to one or more CO lines at the same time.
A maximum of 64 Automatic Callback-Trunk can be active in the system.

If 64 extensions already set this function to one or more CO lines, another caller's attempt to execute this setting is rejected by normal busy tone, not by special busy tone.

Even if an extension user sets Call Forwarding-No Answer or Do Not Disturb, he or she can set Automatic Callback-Trunk: callback ringing is effective to the extension.

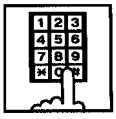
Automatic Callback-Trunk cannot be set by the extension which has a consultation hold call.

Operation

Setting Automatic Callback-Trunk (1)

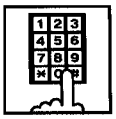
1. Lift the handset or press the SP-PHONE button.

   - You hear dial tone 1 or 3 or 4.
   - The indicator on the PDN button lights in green.



2. Dial the feature number for selecting a CO line.

   - You hear dial tone 1.



3. Dial the telephone number of the outside party.

   - You hear busy tone 3.

4. Replace the handset or press the SP-PHONE button.

   - If your PITS has a display, it shows:

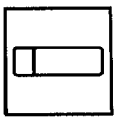
     Trunk Queuing

(Supplement)

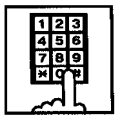
The following four feature numbers are available for selecting a CO line:

- ARS/Local CO Line Access
- Trunk Group 01-08 Access
- Trunk Group 09-16 Access
- Trunk Group 17-24 Access (Virtual Trunk Group — for U.S.A. and Canada only)

Setting Automatic Callback-Trunk (2)



1. Press the CO button (PCO, SCO☛ or GCO) which is lit in red without lifting the handset.
   - The indicator on the pressed CO button lights in green. You hear dial tone 1.
   - You are in hands-free mode.



2. Dial the telephone number of the outside party.
   - You hear busy tone 3.

3. Press the SP-PHONE button.
   - If your PITS has a display, it shows:

Trunk Queuing

☛ In non-privacy system, pressing the SCO button does not set Automatic Callback-Trunk but establishes a three-party conversation. Refer to Section 4-G-1.00 “Programmable Privacy” for further information.

Answering callback ringing

As soon as the specified CO line or a CO line in the specified trunk group becomes idle, callback ringing starts.

1. Lift the handset or press the SP-PHONE button.
   - The last dialed number is sent to the line automatically and calling the other party starts.

6.02 Automatic Callback-Station

Description

If busy tone is heard when calling an extension user, dialing “6” and hanging up causes Automatic Callback to the caller as soon as the called party concludes conversation:

When callback ringing for the caller starts, answering by off-hook or pressing the SP-PHONE button offers calling the other party automatically.

Off-hook prior to the start of call-back ringing cancels this function.
Also no answer during four ringings after the start of call-back ringing cancels this function.

Programming

None

Conditions

Up to four extensions are able to assign this function to one extension at the same time.
The fifth extension attempting to set this function is rejected by reorder tone.

If you do not dial “6” within 10 seconds after hearing busy tone, you hear reorder tone and cannot execute this feature.

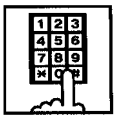
Even if an extension user sets Call Forwarding-No Answer or Do Not Disturb, Automatic Callback-Station is effective to that extension.

Automatic Callback-Station cannot be set by the extension which has a call on consultation hold.

Operation

1. Lift the handset or press the SP-PHONE button.

   - You hear dial tone 1.
   - The indicator on the PDN button lights in green.



2. Dial the directory number of the other extension.

   - You hear busy tone 1 or 2.

3. Dial “6.”

   - You hear confirmation tone 2 and reorder tone.
   - If your PITS has a display, it shows:

Callback Ext xxxx

   Directory number

4. Replace the handset.

Answering callback ringing

As soon as the other extension user concludes the conversation, callback ringing starts.

1. Lift the handset or press the SP-PHONE button.

   - You hear ringback tone. Calling the other extension starts.

7.00 Executive Busy Override

Description

Executive Busy Override allows the extension user to intrude on a busy line, and then a 3-party conversation is established. This feature is accessed by dialing "1" while hearing busy tone.

To utilize this feature, assign "System-Class of Service", Executive Busy Override to "Yes," at overriding extension.

In entering into a three-party conversation, all the three parties hear confirmation tone.
It is programmable to send this tone or not by "System-Operation", Beep Tone for Bsy-ovr/Brg-in.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", Beep Tone for Bsy-ovr/Brg-in	9-D-1.01	10-C-4.00
"System-Class of Service (1/2)", Executive Busy Override	9-D-4.01	10-C-7.00

Conditions

Busy status means that all PDN buttons on the called extension are in use.
In this status, busy tone sounds.

Executive Busy Override does not function when the other party is any one of the following status;

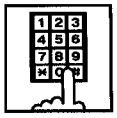
- Three-party conversation
- OHCA conversation
- ICM conversation
- Private CO conversation

Executive Busy Override does not function if either of two parties in conversation has set the followings.

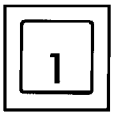
- Executive Busy Override Deny
  (Refer to Section 4-D-5.00.)
- Data Line Security
  (Refer to Section 4-I-6.00.)

Operation

1. Lift the handset or press the SP-PHONE button.
   - The indicator on the PDN button lights in green.
   - You hear dial tone 1 or 3 or 4.



2. Dial the directory number of the other extension.
   - You hear busy tone 1 or 2.



3. Dial "1."
   - After you hear confirmation tone 3, start a three-party conversation.

8.00 Do Not Disturb (DND) Override

Description

Do Not Disturb Override allows an extension to call another extension which has set Do Not Disturb.
Dialing “1” after hearing DND tone provides calling the extension.
Refer to Section 4-D-6.00 “Do Not Disturb (DND)” for further information about DND feature.

To activate this function, assign “System-Class of Service”, Do Not Disturb Override to “Yes.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, Do Not Disturb Override	9-D-4.01	10-C-7.00

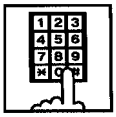
Conditions

When dialing “1,” if the other extension is busy, the caller hears busy tone. In this case, it is possible to assign Automatic Callback-Station, etc.,.
For Automatic Callback-Station, refer to Section 4-C-6.02 “Automatic Callback-Station.”

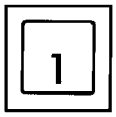
If “System-Class of Service,” Do Not Disturb Override is set to “No,” the caller hears reorder tone after dialing “1” and cannot call the other party.

Operation

1. Lift the handset or press the SP-PHONE button.
   - The indicator on the PDN button lights in green.
   - You hear dial tone 1 or 3 or 4.



2. Dial the directory number of the other extension.
   - If the other extension sets DND (Do Not Disturb), you hear DND tone.



3. Dial “1.”
   - You hear ringback tone.
   - Calling the other party starts.

9.00 Walking COS (Class Of Service)

Description

Allows an extension user to call an outside party from another extension preset to a lower COS (Class of Service) by using a higher COS of his or her own extension temporarily.
This is generally used for making toll calls from a toll restricted extension.

After conclusion of one call to an outside party, Class of Service of the employed station returns to the original class automatically.

Each tenant has a four digit Walking COS Password programmed in system program.
The password allows a user to set Walking COS.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (3/3)", Walking COS Password	9-D-1.03	10-C-5.00
"System-Tenant", Walking COS Password (Tenant 2)	9-D-2.00	10-C-5.00
"System-Numbering Plan (07/11)", Walking COS Set Walking COS Cancel	9-D-6.07	10-C-10.00

Conditions

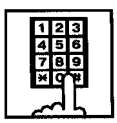
Use the PDN button to set and cancel Walking COS.

Operation

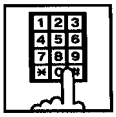
Setting Walking COS

From a lower COS telephone,

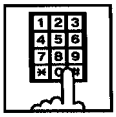
1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Walking COS Set "# 7" (default).



3. Dial the four-digit Walking COS Password.

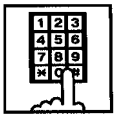


4. Dial the extension number of your own station.

   - You hear confirmation tone 2.
   - If your PITS has a display, it shows:

   Set COS of Exxxx

   Directory number

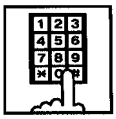


5. Call an outside party by using a higher COS of your own station.

Canceling Walking COS

It is possible to cancel Walking COS without making any call to an outside party as follows:

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Walking COS Cancel "#7" (default).

   - You hear confirmation tone 2.
   - If your PITS has a display, it shows:

   Restored COS

   - COS returns to the original grade.

10.00 Operator Call

Description

Allow extension users to call the operator by dialing the feature number for “Operator Call (General)” or “Operator Call (Specific).”

Up to two operators are assignable for the whole system. If Tenant Service is available, two operators are assignable for each tenant, that makes four operators available for the whole system.

If two operators are assigned in the system, or in the tenant (if tenant Service is employed), extension users can specify the operator (in the same tenant) by dialing the feature number for “Operator Call (Specific).”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (02/11)”, Operator Call (Specific) Operator Call (General)	9-D-6.02	10-C-10.00

Conditions

When calling an operator by dialing the feature number for “Operator Call (General),” the operator is selected according to the type of the operators' stations as shown below:

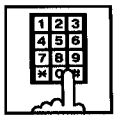
Type of Station		Operator Selected
Operator 1	Operator 2	
ATT	ATT	Operator 1 or Operator 2
ATT	EXT	Operator 1 only
EXT	EXT	Operator 1 only
ATT	—	Operator 1 only
EXT	—	Operator 1 only

When no operators are assigned, a user hears reorder tone during executing Operator Call.
For the assignment of operators, refer to Section 3-B-5.00 “Operator.”

Operation

1. Lift the handset or press the SP-PHONE button.

2. Calling an operator without specifying
   1) Dial the feature number for Operator Call (General) “0” (default).



Calling an operator by specifying
1) Dial the feature number for “Operator Call (Specific).”
2) Dial “1” to specify operator 1. Dial “2” to specify operator 2.

(Supplement)

- If your PITS has a display, the following message appears on the display:

  When the called operator is at an Attendant Console:

  ATT Console

  When the called operator is at an extension: <Example>

  1000 : Mary

  extension name
  directory number

D. Receiving Features

1.00 Line Selection-Answering

Description

Line Selection-Answering feature allows a PITS telephone user to answer an incoming call on it by simply lifting the handset or pressing the SP-PHONE button.

One of the following three Line Selection-Answering features can be assigned to a PITS telephone individually.

- Ringing Line Preference - Answering
- Prime Line Preference - Answering
- No Line Preference - Answering

Ringing Line Preference-Answering is assigned to all PITS telephones by default.
This assignment can be changed on a PITS telephone basis in PITS station programming mode.

To prevent a PITS telephone from automatically answering an incoming call by simply going off-hook, assign No Line Preference-Answering feature to the PITS telephone.
If No Line Preference-Answering is assigned, press the appropriate button on a PITS telephone to answer a call.

Line Selection-Answering feature newly assigned on a PITS overrides the pre-assigned Line Selection-Answering feature.

1.01 Ringing Line Preference-Answering

Description

Automatically connects a PITS telephone user to an incoming call ringing at PITS telephone by simply lifting the handset.
Line access buttons that can be selected by this feature include PDN, SDN, ICM, PCO, SCO and GCO buttons.

Programming

PITS Station Programming	Reference
Automatic Answering Selection	12-C-5.00

Conditions

It two or more line on a PITS are ringing simultaneously, a PITS telephone user is connected to the first line to start ringing.

If a PITS telephone user wishes to answer a line other than the first ringing line, the desired line access button must be pressed prior to going off-hook (Refer to Section 4-D-1.04 “Direct Answering (Pre-selection).”)

This feature functions only for incoming calls ringing at a PITS telephone.
Consequently, if an incoming call arrives at a line access button on which delayed ringing is assigned, that is, no ringing occurs while the indicator flashes in 240 wink, in this case extension user must press the appropriate line access button to answer the incoming call.
Refer to Section 3-D-3.02 “Flexible Ringing Assignment-Delayed Ringing” for further information about delayed ringing.

Operation

An incoming call is ringing at your telephone.
Also the indicator light on the call-receiving button flashes in 240 wink, showing the arrival of the call.

1. Lift the handset or press the SP-PHONE button.
   - You can automatically answer the incoming call ringing, and the indicator on the button lights in green.
   - Talk to the caller.

1.02 Prime Line Preference-Answering

Description

Automatically connects a PITS telephone to answer an incoming call assigned as “Prime Line (Answering)” on a PITS telephone.
Line access buttons that can be selected by this feature include PDN, SDN, ICM, PCO, SCO and GCO buttons.

Even if two or more lines on a PITS are ringing simultaneously, PITS telephone is automatically connected to an incoming call on a line assigned as Prime Line-Answering by simply lifting the handset or pressing the SP-PHONE button.

Programming

PITS Station Programming	Reference
Automatic Answering Selection	12-C-5.00

Conditions

When a call or calls are coming on a line or lines other than the prime line, lifting the handset or pressing the SP-PHONE button is considered as a calling operation. If you wish to answer the call at the time, press the desired line access button.
Refer to Section 4-C-1.01 “Prime Line Preference-Calling” for related information.

It is possible to answer desired incoming call by pressing the appropriate DN or CO button directly without lifting the handset or pressing the SP-PHONE button (Direct Answering).
Refer to Section 4-D-1.04 “Direct Answering (Pre-selection)” for further information.

Operation

A call arrives at the assigned prime line and your telephone is ringing. The indicator on the line access button assigned as Prime line flashes in 240 wink.

1. Lift the handset or press the SP-PHONE button.

   - The indicator on the call-receiving button lights in green.
   - Talk to the caller.

1.03 No Line Preference-Answering

Description

If this feature is assigned to a PITS telephone, the extension user cannot answer an incoming call by simply lifting the handset or pressing the SP-PHONE button.
To answer an incoming call, the user must press the appropriate line access button.

Programming

PITS Station Programming	Reference
Automatic Answering Selection	12-C-5.00

Conditions

In case your PITS telephone is KX-T30820 (only three DN buttons are provided) and all DN buttons are assigned as PDN buttons:

If all three PDN buttons are occupied by incoming calls, no tone is heard when you lift the handset or press the SP-PHONE buttons.

If two PDN buttons are occupied by the incoming calls and the other one is idle, PITS telephone is connected to the idle PDN automatically and dial tone is heard, when you lift the handset or press the SP-PHONE button since going off-hook is regarded as calling operation.

Operation

A call arrives and your telephone is ringing. The indicator on the button which the call is reaching flashes in 240 wink.

1. Lift the handset or press the SP-PHONE button, then press the button on which the call is coming.

   - The indicator on the call-receiving button lights in green.
   - Talk to the caller.

1.04 Direct Answering (Pre-selection)

Description

Allows the user to answer an incoming call by simply pressing the appropriate DN button (PDN, SDN), CO button (PCO, SCO, GCO) or ICM button on which a call is coming without lifting the handset or pressing the SP-PHONE button. Direct Answering provides hands-free conversation mode automatically.

Programming

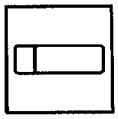
None

Conditions

None

Operation

A call arrives and the indicator on the DN, the CO or the ICM button flashes in 240 wink.



1. Press the button that is flashing in 240 wink.

   - The pressed button lights in green and hands-free conversation is established automatically.

2.00 Intercom Answer

2.01 Intercom Hands-Free Answerback

Description

Hands-Free Answerback enables the extension user to talk to a caller without lifting the handset when he receives an intercom call.
When Intercom Hands-Free Answerback mode is established, a calling extension user hears confirmation tone and a called extension hears a beep tone.
This feature applies to Intercom calling only.

Programming

None

Conditions

Type 50 and KX-T7050 PITS telephones cannot use this function.

Operation

Setting Hands-Free Answerback

Be sure the handset is on-hook and the SP-PHONE is off.

1. Press the AUTO ANS button.
   - The indicator on the AUTO ANS button lights.

Canceling Hands-Free Answerback

Be sure the handset is on-hook and the SP-PHONE is off.

1. Press the AUTO ANS button.
   - The indicator light on the AUTO ANS button goes out.

2.02 Intercom Answer Voice Calling Deny

Description

Allows extension users to deny the Intercom Voice Calling from other extension users. When an extension sets this function, another extension's attempt to execute Voice Calling is ignored and turned into normal ringing alert automatically.
For further information about Voice Calling, refer to Section 4-C-5.03 “Intercom-Voice Calling.”

To deny Intercom Voice Calling, dial the feature number for “Voice Calling Deny Set.”
To allow Intercom Voice Calling, dial the feature number for “Voice Calling Deny Cancel.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (06/11)”, Voice Calling Deny Set Voice Calling Deny Cancel	9-D-6.06	10-C-10.00

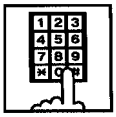
Conditions

This setting must be executed on the PDN button.

Operation

To deny Intercom Answer Voice Calling

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Voice Calling Deny Set “68#” (default).

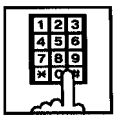
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     V. Alerting Deny

3. Replace the handset or press the SP-PHONE button.

To allow Intercom Answer Voice Calling

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Voice Calling Deny Cancel “68#” (default).

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     V. Alerting Allow

3. Replace the handset or press the SP-PHONE button.

2.03 Intercom Answer BSS/OHCA Deny

Description

Allows an extension user to deny “Intercom-Busy Station Signaling (BSS)” and “Intercom Off-Hook Call Announcement (OHCA)” from other extension users. If an user sets this function, another's attempt to execute BSS/OHCA is rejected with busy tone.
For further information about BSS/OHCA function, refer to Section 4-C-5.04 “Intercom-Busy Station Signaling (BSS)” and Section 4-C-5.05 “Intercom-Off-Hook Call Announcement (OHCA).”

Assigning and canceling this function are executed by dialing the feature number for “BSS/OHCA Deny Set” and “BSS/OHCA Deny Cancel.”

To perform this function with the feature number for “BSS/OHCA Deny Set,” assign “System-Class of Service”, BSS/OHCA Deny to “Yes” on an extension user basis.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, BSS/OHCA Deny	9-D-4.01	10-C-7.00
“System-Numbering Plan (05/11)”, BSS/OHCA Deny Set BSS/OHCA Deny Cancel	9-D-6.05	10-C-10.00

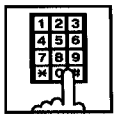
Conditions

Use the PDN button to assign and cancel this function.

Operation

To deny Intercom Answer BSS/OHCA

1. Lift the handset or press the SP-PHONE button.



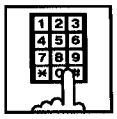
2. Dial the feature number for “BSS/OHCA Deny Set “63#” (default).
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     BSS/OHCA Deny

3. Replace the handset or press the SP-PHONE button.

To allow Intercom Answer BSS/OHCA

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for BSS/OHCA Deny Cancel “63#” (default).
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     BSS/OHCA Allow

3. Replace the handset or press the SP-PHONE button.

3.00 Call Pickup

3.01 Dial Call Pickup

Description

Dial Call Pickup allows an extension user to answer the call that is ringing at another telephone in the same call pickup group.
To answer a call at nearby extension, simply lift the handset and dial the feature number for “Dial Call Pickup.”

An extension user can be assigned to only one call pickup group.
Up to 32 call pickup groups are assignable in the whole system.

For further information about call pickup group, refer to Section 3-B-7.02 “Call Pickup Group.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”, Dial Call Pickup	9-D-6.03	10-C-10.00

Conditions

It is possible to execute this function after holding the current call.

An extension user who has Do Not Disturb assigned can answer a call that is ringing at other extensions.

This feature is not available to answer the following calls:

<1> A call ringing at an extension outside of the same call pickup group

<2> A call ringing at an extension on which Dial Call Pickup Deny is set
(Refer to Section 4-D-3.03 “Call Pickup Deny” for further information.)

<3> A call ringing on PCO button

<4> A call ringing on ICM button

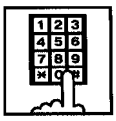
<5> A call arriving at an extension but not ringing (Refer to Section 3-D-3.02 “Flexible Ringing Assignment-Delayed Ringing” for further information.)

If extension users attempt to pick up the above mentioned calls, reorder tone sounds after dialing the feature number for “Dial Call Pickup” and the following message appears on the display, if provided:

No Incoming Call

Operation

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Dial Call Pickup “47” (default).

   - After you hear confirmation tone 3, you can answer the call arriving at another telephone in the same call pickup group.

3. Start Conversation.

Note:
- Confirmation tone 3 for Call Pickup can be eliminated by WS4 command (See Section 10-C-62.00 “World Select 4 (WS4)”).

3.02 Directed Call Pickup

Description

Directed Call Pickup allows any extension user to answer the call ringing at an extension in any call pickup group by dialing the feature number for "Directed Call Pickup," and then the directory number of the ringing extension.

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (03/11)", Directed Call Pickup	9-D-6.03	10-C-10.00

Conditions

It is possible to execute Directed Call Pickup after holding the current call.

An extension user who has Do Not Disturb assigned can answer a call that is ringing at other extensions.

This feature is not available to answer the following calls:

<1> A call ringing at an extension on which Dial Call Pickup Deny is set
(Refer to Section 4-D-3.03 "Call Pickup Deny" for further information.)

<2> A call ringing on PCO button

<3> A call ringing on ICM button

<4> A call arriving at an extension but not ringing
(Refer to Section 3-D-3.02 "Flexible Ringing Assignment-Delayed Ringing" for further information.)

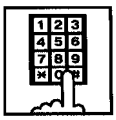
For the above calls, reorder tone sounds after dialing the feature number for "Directed Call Pickup" and the following message appears on the display, if provided:

No Incoming Call

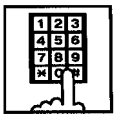
Operation

Picking up a call ringing at an extension in the different call pickup group

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Directed Call Pickup "48" (default).



3. Dial the directory number of the ringing extension.
   - You hear confirmation tone 3.
   - Talk to the caller.

4. Start Conversation.

Note:
- Confirmation tone 3 for Call Pickup can be eliminated by WS4 command (See Section 10-C-62.00 "World Select 4 (WS4)").

3.03 Call Pickup Deny

Description

Call Pickup Deny allows an extension user to prohibit the other extension users from picking up calls ringing at his or her extension by the call pickup feature (whether Dial Call Pickup or Directed Call Pickup).

To assign or cancel this function, dial the feature number for “Dial Call Pickup Deny Set” or “Dial Call Pickup Deny Cancel.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (05/11)”, Dial Call Pickup Deny Set Dial Call Pickup Deny Cancel	9-D-6.05	10-C-10.00

Conditions

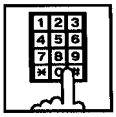
Use the PDN button to assign and cancel Call Pickup Deny.

Even if an extension user has Call Pickup Deny assignment, he or she can execute Dial Call Pickup or Directed Call Pickup for calls ringing at other extensions.

Operation

Assigning Call Pickup Deny

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Dial Call Pickup Deny Set “61#” (default).

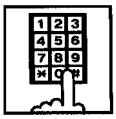
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     C. Pickup Deny

3. Replace the handset or press the SP-PHONE button.

Canceling Call Pickup Deny

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Dial Call Pickup Deny Cancel “61#” (default).

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     C. Pickup Allow

3. Replace the handset or press the SP-PHONE button.

4.00 Trunk Answer From Any Station (TAFAS)-Day Service

Description

Incoming CO calls programmed for TAFAS will ring the external pager and any extension user in the system can answer the calls by dialing the feature number for “Night Answer 1” (when a call is ringing at external pager 1) or “Night Answer 2” (when a call is ringing at external pager 2).

To activate this feature, assign “Group-Trunk Group”, Incoming Mode (Day) to TAFAS 1 or TAFAS 2, and “Trunk-CO Line” Trunk Group to “1 to 16” (Trunk Group Number whose Incoming Mode (Day) is assigned as TAFAS 1 or 2).
To utilize the external pager, assign “System-Operation”, External Paging 1, 2” to “Yes.”

Up to two external pagers can be connected to this system. TAFAS 1 is associated with external pager 1 and TAFAS 2 is associated with external pager 2.

Call handling in TAFAS is identical to UNA. The difference is that TAFAS is available in day mode and UNA is available in night mode.
For further information about UNA, refer to Section 4-I-1.01 “Universal Night Answer (UNA).”

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, External Paging 1, 2	9-D-1.01	10-C-4.00
“System-Numbering Plan (03/11)”, Night Answer 1 Night Answer 2	9-D-6.03	10-C-10.00
“Group-Trunk-Group (1/2)”, Incoming Mode (Day)	9-E-1.01	10-C-14.00
“Trunk-CO Line”, Trunk Group	9-F-1.00	10-C-18.00
“Trunk-Pager & Music Source”, External Pager-Tenant	9-F-2.00	10-C-19.00

Conditions

If tenant service is employed :
The affiliation of each external pager is determined by the system programming in “Trunk-Pager & Music Source”, External Pager-Tenant.
Extension users cannot answer the TAFAS call ringing at an external pager which belongs to the other tenant.

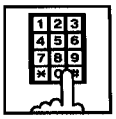
Operation

Answering incoming CO calls programmed for TAFAS

An incoming CO call is ringing at an external pager.

1. Lift the handset or press the SP-PHONE button.

   • You hear dial tone 1 or 3 or 4.



2. If a call is ringing at external pager 1: Dial the feature number for Night Answer 1 “45” (default).

   If a call is ringing at external pager 2: Dial the feature number for Night Answer 2 “46” (default).

   • You hear confirmation tone 3.

3. Start conversation.

Note:
• Confirmation tone 3 for TAFAS can be eliminated by WS4 command (See Section 10-C-62.00 “World Select 4 (WS4)”).

5.00 Executive Busy Override Deny

Description

Assigning and canceling Busy Override Deny are available to each extension.
If an extension sets this function, another extension's attempt to perform Executive Busy Override on the extension is rejected with busy tone.
Refer to Section 4-C-7.00 “Executive Busy Override” for further information.

To set or cancel this function, dial the feature number for “Busy Override Deny Set” or “Busy Override Deny Cancel.”

System programming is required to assign this feature.
Assign “System-Class of Service”, Executive Busy Override Deny to “Yes.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, Executive Busy Override Deny	9-D-4.01	10-C-7.00
“System-Numbering Plan (05/11)”, Busy Override Deny Set Busy Override Deny Cancel	9-D-6.05	10-C-10.00

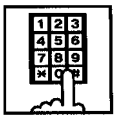
Conditions

To assign and cancel Executive Busy Override Deny, use the PDN button.

Operation

Assigning Executive Busy Override Deny

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Busy Override Deny Set “64#” (default).

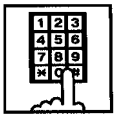
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     Busy Ovrde Deny

3. Replace the handset or press the SP-PHONE button.

Canceling Executive Busy Override Deny

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Busy Override Deny Cancel “64#” (default).

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     Busy Ovrde Allow

3. Replace the handset or press the SP-PHONE button.

6.00 Do Not Disturb (DND)

Description

Do Not Disturb allows an extension user to appear busy to all incoming calls (intercom,extension and outside calls).

To utilize this feature, assign “System-Class of Service”, Call Forwarding/Do Not Disturb to “Yes” beforehand by system programming.
This feature can be assigned and canceled either by dialing the feature number or using the FWD/DND button.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, Call Forwarding/Do Not Disturb	9-D-4.01	10-C-7.00
“System-Numbering Plan (05/11)”, Do Not Disturb Set Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00

Conditions

(1) IRNA – Automatically
If a call via DISA/DID is directed to an extension in the DND mode, it will be automatically redirected to another extension (including VPS extension) or an Attendant Console assigned as the IRNA destination.
Refer to Section 3-F-5.00 “Intercept Routing – No Answer (IRNA) for further information.

(2) Making Calls
An extension in the DND mode can still be used to make calls and access any other features available to that extension.

(3) Answering Calls
An extension in the DND mode is available:

- To answer a call if its indication of arrival is shown on his or her extension.
Refer to (Supplement 2) on page 4-D-14 for further information.
- To answer a call ringing at another extension by “Call Pickup” feature.
Refer to Section 4-D-3.00 “Call Pickup” for further information.

(4) FWD/DND
Setting DND feature cancels any Call Forwarding feature pre-assigned on the extension and vice versa.
Refer to Section 4-F-2.00 “Call Forwarding (FWD)” for further information.

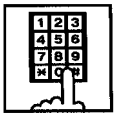
(5) BSS/OHCA
DND is effective for BSS/OHCA.
Refer to Section 4-C-5.04 and 4-C-5.05 for further information.

(6) DND Override
“Do Not Disturb Override” allows extension users to override “Do Not Disturb” feature assigned on the called extension user.
Refer to Section 4-C-8.00 “Do Not Disturb Override” for further information.

Operation

Assigning Do Not Disturb (1)

1. Lift the handset or press the SP-PHONE button.
   - You hear dial tone 1 or 3 or 4.



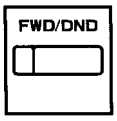
2. Dial the feature number for Do Not Disturb Set “# # 1” (default).
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     Do Not Disturb

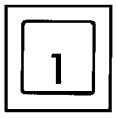
3. Replace the handset or press the SP-PHONE button.
   - The FWD/DND indicator lights.

Assigning Do Not Disturb (2)

1. Lift the handset or press the SP-PHONE button.



2. Press the FWD/DND button.



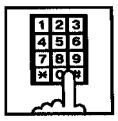
3. Dial “1.”
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     Do Not Disturb

4. Replace the handset or press the SP-PHONE button.
   - The FWD/DND indicator lights.

Canceling Do Not Disturb (1)

1. Lift the handset or press the SP-PHONE button.
   - You hear dial tone 1 or 3 or 4.
   - The FWD/DND indicator goes out.



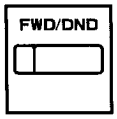
2. Dial the feature number for Call Forwarding/Do Not Disturb Cancel “##0” (default).
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     FWD/DND Cancel

3. Replace the handset or press the SP-PHONE button.
   - The FWD/DND indicator remains off.

Canceling Do Not Disturb (2)

1. Lift the handset or press the SP-PHONE button.
   - The indicator light on the FWD/DND button goes out.



2. Press the FWD/DND button.

3. Dial “0.”
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     FWD/DND Cancel

4. Replace the handset or press the SP-PHONE button.
   - The FWD/DND indicator remains off.

(Supplement)

Type 50 and the KX-T7050 PITS telephones are not provided with the FWD/DND button. To do step 2 using them, assign a PF button to be FWD/DND button in “Extension-Station”, PF Key Type or PITS station program mode.
For further information about PITS station program mode, refer to Section 12-C-2.00 “PF Button Assignment.”

(Supplement 2)

The table below shows whether an extension which has DND assigned rings or not and how its PDN indicator lights, when it receives a call. Also shows whether the other extensions which has the extension's PDN assigned rings or not and how their SDN indicators light, when the extension having DND receives a call.

Type of call arriving at setting extension	Other extensions has SDN assigned or not	Extension which has DND assigned (PDN)	Extension which has SDN assigned (SDN)
Extension call	No	Indicator off No ring ☛1	
	Yes	Green 240 wink No ring	Red 240 wink Ring
Attendant Console call	No	Indicator off No ring ☛1	
	Yes	Green 240 wink No ring	Red 240 wink Ring
DIL (1:N) call to PDN	No	Green 240 wink No ring	
	Yes		Lights on in red No ring
DIL (1:1) call to PDN	No	Green 240 wink Ring	
	Yes	Green 240 wink No ring	Red 240 wink Ring
DID call	No	Indicator off No ring	
	Yes		Indicator off No ring
DISA call	No	Indicator off No ring	
	Yes		Indicator off No ring
DIL (1:N) call to Group CO/Single CO		Red 240 wink No ring	
DIL (1:1) call to Single CO		Green 240 wink Ring	
Other calls		Indicator off No ring ☛1	

☛1 DND tone is sent to the caller.

7.00 Call Waiting

Description

Call waiting tone to a busy extension indicates that another call (extension or CO line) is waiting.

To assign or cancel this function, dial the feature number for “Call Waiting Set” or “Call Waiting Cancel.”

Programming

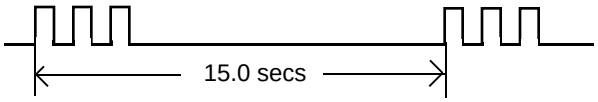
System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (05/11)”, Call Waiting Set Call Waiting Cancel	9-D-6.05	10-C-10.00

Conditions

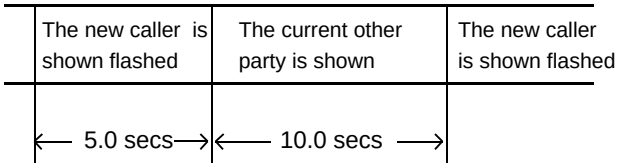
Use the PDN button to assign and cancel Call Waiting.

While Call Waiting is active, the waiting tone and the display, if provided, are executed by the following timing :

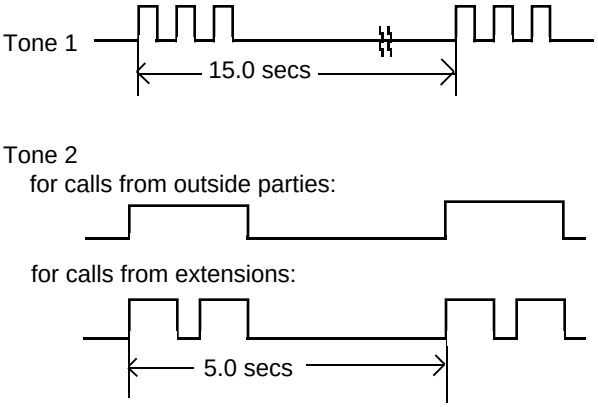
Call waiting tone:



LCD display:



Call waiting tone can be assigned to two types by specifying the timing according to the type of arriving calls: calls from outside parties or calls from extensions, as illustrated below :

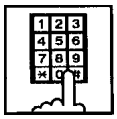


For selecting tone 1 or tone 2, refer to Section 12-C-6.00 “Call Waiting Tone Selection.”

Operation

Setting Call Waiting

1. Lift the handset or press the SP-PHONE button.

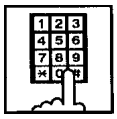


2. Dial the feature number for “Call Waiting Set.”
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3.

3. Replace the handset.

Canceling Call Waiting

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for “Call Waiting Cancel.”
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

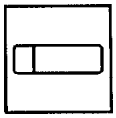
3. Replace the handset.

Answering Call Waiting

A call from an extension or an outside party arrives while having a conversation.

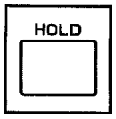
- The indicator on the DN or the CO button flashes in 240 wink.
- You hear call waiting tone.

Talking to the new caller by concluding the current call

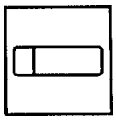


1. Press the flashing DN or CO button.
   - The current call is disconnected.
   - Talk to the new caller on the pressed DN or CO button.

Talking to the new caller by holding the current call



1. Press the HOLD button to hold the current party.
   - You hear no tone.



2. Press the DN or CO button flashing in 240 wink.
   - Talk to the new caller.
   - To conclude the new call and talk to the held party again, press the DN or CO button flashing in 60 wink.

8.00 Uniform Call Distribution (UCD)-Log Out

Description

UCD group members may leave the group temporarily by dialing the feature number for "UCD Log Out" or using the programmable UCD Log In button to prevent UCD calls being sent to their extensions.

Refer to Section 3-D-2.05 "Uniform Call Distribution (UCD)-without OGM" and Section 3-D-2.06 "Uniform Call Distribution (UCD)-with OGM."

Programming

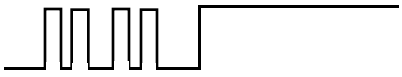
System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (09/11)", UCD Log In UCD Log Out	9-D-6.09	10-C-10.00
"Extension-Station (2/3)", DN Key Type,	9-G-1.02	10-C-24.00
"Extension-Station (3/3)", DSS Key Type	9-G-1.03	10-C-26.00

Condition

To set or cancel UCD Log Out, use the PDN button.

When an extension of the UCD group set forLog Out goes off-hook, dial tone 4 below can be heard.

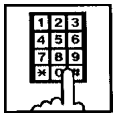
(second) 0 1 2 3 4 5



Operation

Setting UCD Log Out (1)

1. Lift the handset or press the SP-PHONE button.
   - You hear dial tone 1 or 3 or 4.



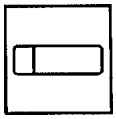
2. Dial the feature number for UCD Log Out "#0" (default).
   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

     UCD Logout

3. Replace the handset or press the SP-PHONE button.

Setting UCD Log Out (2)

1. Lift the handset or press the SP-PHONE button.
   - You hear dial tone 1 or 3 or 4.



2. Press the UCD Log In button.
   - You hear confirmation tone 1 or 2.
     The indicator on the UCD Log In button lights in red.
   - If your PITS has a display, it shows:

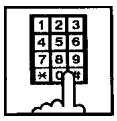
     UCD Logout

3. Replace the handset or press the SP-PHONE button.

Canceling UCD Log Out (1)

1. Lift the handset or press the SP-PHONE button.

   • You hear dial tone 1 or 3 or 4.



2. Dial the feature number for “UCD Log In.”

   • You hear confirmation tone 1 or 2.
   • If your PITS has a display, it shows:

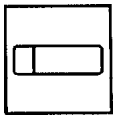
UCD Login

3. Replace the handset or press the SP-PHONE button.

Canceling UCD Log Out (2)

1. Lift the handset or press the SP-PHONE button.

   • You hear dial tone 1 or 3 or 4.



2. Press the UCD Log In button.

   • You hear confirmation tone 1 or 2.
   The indicator light on the UCD Log In button goes out.
   • If your PITS has a display, it shows:

UCD Login

3. Replace the handset or press the SP-PHONE button.

E. Holding Features

1.00 Hold

Description

Allows an extension user to hold the current call and either call or answer another extension or outside party.

To place a call on hold, press the HOLD button. To retrieve a held call, simply press the flashing line access button on which a call is held.

A call placed on hold can be retrieved at the extension that put the call on hold or at an extension that shares the held line.

A PITS telephone user can place as many calls on hold as it has line access button (PCO, GCO, SCO, PDN, SDN).

Programming

None

Conditions

The extension users can not hold the following calls.

- A call on ICM button
- A call with Attendant Console
- A call with Doorphone
- Paging Announcement through built-in speaker of PITS

A call held on PCO button can not be retrieved from the other extensions.

If a held call has not been answered more than a pre-assigned time, a warning tone may sound at extension which placed a call on hold.
Refer to Section 3-E-2.00 “Held Call Reminder” for further information.

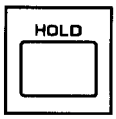
If a held call is not answered more than 30 minutes, it will be disconnected automatically.

Music on Hold will be sent to the held party if available. For sending Music on Hold, prior assignment is necessary. Refer to Section 3-E-1.00 “Music on Hold” for further information.

Operation

Placing a Call on Hold

In conversation on the DN, SCO, GCO or PCO button

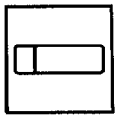


1. Press the HOLD button.

   - If the call is on the DN or SCO or GCO button, the indicator on the button flashes in green 60 wink. If the call is on the PCO button, the indicator on the button flashes in green 120 wink. You hear confirmation tone 2 and then no tone.
   - The other party is placed on Hold.
   - You can hang up without loosing a held call.

Retrieving a Held Call

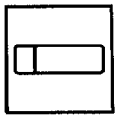
From the holding extension



1. Press the green button that is flashing in 60 wink or 120 wink.

   - The indicator on the pressed button lights in green.
   - Talk to the other party again.

From another extension that shares the held line



1. Press the red button that is slowly flashing in 60 wink.

   - The indicator on the pressed button lights in green.
   - Start conversation with the retrieved party.

(Supplement)
Any extension user can retrieve the call held at another extension by dialing the feature number for “Hold Extension Retrieve.”
For further information, refer to Section 4-E-4.00 “Call Hold Retrieve-Station.”

2.00 Exclusive Hold

Description

Allows an extension user to place a call on hold exclusively and either make or answer another extension or outside call.
A call held by “Exclusive Hold” can not be retrieved from any other extension.

To place a call on exclusive hold, press the HOLD button twice.
To retrieve a call placed on exclusive hold, simply press the flashing line access button (PCO, GCO, SCO, PDN, SDN) on which a call is held.
A call on exclusive hold can be retrieved only at the extension that put a call on exclusive hold.

A PITS telephone user can place as many calls on exclusive hold as it has line access buttons.

Programming

None

Conditions

The extension users can not place the following calls on exclusive hold.

- A call on ICM button
- A call with Attendant Console
- A call with Doorphone
- Paging Announcement through built-in speaker of PITS

A call held on PCO button is always treated as exclusive hold and therefore it can not be retrieved from any other extension.

If a held call has not been answered within the pre-assigned time, a warning tone may sound at extension which placed a call on hold.
Refer to Section 3-E-2.00 “Held Call Reminder” for further information.

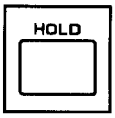
If a held call is not answered within 30 minutes, it will be disconnected automatically.

Music on Hold will be sent to the held party if available. For sending Music on Hold, prior assignment is necessary. Refer to Section 3-E-1.00 “Music on Hold” for further information.

Operation

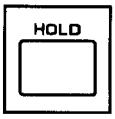
Placing a Call on Exclusive Hold

During a conversation with the other party



1. Press the HOLD button.

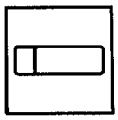
   - The indicator on the button in use flashes in green 60 wink. You hear confirmation tone 2 and then no tone.



2. Press the HOLD button again.

   - The flashing indicator changes to green 120 wink.
   - The other party is held exclusively.

Retrieving a Call on Exclusive Hold



1. Press the green button that is flashing in 120 wink.

   - The indicator on the pressed button lights in green.
   - The held party is retrieved.
   - Talk to the other party again.

(Supplement)
To change “Exclusive Hold” to “Hold,” press the HOLD button again. Exclusive Hold and Hold alternate with each pressing of the HOLD button.

3.00 Consultation Hold

Description

Allows extension users to place a call on hold temporarily on purpose to transfer a call or make a conference call.
Other extension users cannot retrieve the calls on Consultation Hold.

Consultation Hold is performed by pressing the TRANSFER button or the CONF button. If the TRANSFER button is pressed, a call is held until the user dials the telephone number to transfer the call. If the CONF button is pressed, a call is held until the user dials the telephone number of the conference member and presses the CONF button again.

Programming

None

Conditions

The extension users can not place the following calls on consultation hold.

- A call on ICM button
- A call with Attendant Console
- A call with Doorphone
- Paging Announcement through built-in speaker of PITS

Consultation Hold Recall tone sound immediately if the extension user replaces the handset while having a call on consultation hold.

If an extension user makes a call by pressing the FLASH button while having a call on consultation hold, Consultation Hold Recall tone does not sound.

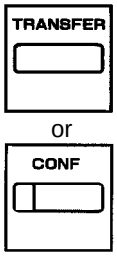
Consultation Hold Recall tone sounds in the same way as Held Call Reminder.

If a held call is not answered within 30 minutes, it will be disconnected automatically.

Music on Hold will be sent to the held party if available. For sending Music on Hold, prior assignment is necessary. Refer to Section 3-E-1.00 “Music on Hold” for further information.

Operation

Placing a call on Consultation Hold on one DN button



1. Press the TRANSFER or CONF button.

   - The DN button in use is still lit in green, you hear confirmation tone 2 then dial tone 1 or 3 or 4.
   - The call is placed on Consultation Hold.
   - You can make another call on the same DN button.

(Supplement)
In step 1, if the CO button is used instead of the DN button, the CO button starts flashing in 120 wink, and an idle DN button is automatically selected.

Retrieving a call on Consultation Hold (1)

1. Replace the handset or press the SP-PHONE button.

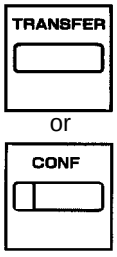
   - Consultation Hold Recall starts.

2. Lift the handset or press the SP-PHONE button.

   - A call on Consultation Hold is retrieved.
   - Talk to the other party.

Retrieving a call on Consultation Hold (2)

You have placed a call on Consultation Hold and are in conversation with another party on the DN button.

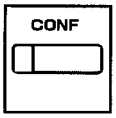


1. Press the TRANSFER or CONF button.

   - A call on Consultation Hold is retrieved and you can talk to the retrieved party.
   - Another party is placed on Consultation Hold.
   - The DN button is still lit in green.

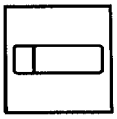
Placing a call on Consultation Hold on two DN buttons

or



1. Press the TRANSFER or CONF button.

   - The DN button in use is still lit in green, you hear confirmation tone 2 then dial tone 1 or 3 or 4.
   - The call is placed on Consultation Hold.



2. Press another DN or CO button.

   - The pressed button lights in green, you hear dial tone 1 or 3 or 4.
     You can call another party from the selected DN or CO button.
   - The DN button where a call has been held changes from being lit in green to flashing in green 120 wink.

Retrieving a call on Consultation Hold (1)

You placed a call on Consultation hold and press another DN or CO button.

1. Replace the handset or press the SP-PHONE button.

   - The indicator light on the pressed DN or CO button goes out.
   - Consultation Hold Recall starts.

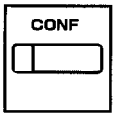
2. Lift the handset or press the SP-PHONE button.

   - A call on Consultation Hold is retrieved. You can talk to the party.
   - The DN button changes from flashing in 120 wink to being lit in green.

Retrieving a call on Consultation Hold (2)

You have placed a call on Consultation Hold and are talking on another DN or CO button.

or

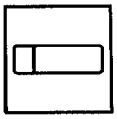


1. Press the TRANSFER or CONF button.

   - A call on Consultation Hold is retrieved and you can talk to the retrieved party.
   - The DN or CO button changes from flashing in green 120 wink to being lit in green.
   - Another party in conversation is placed on Consultation Hold and the DN button changes from being lit in green to flashing in green 120 wink.

Retrieving a call on Consultation Hold (3)

You have placed a call on Consultation Hold and are talking on another DN or CO button.



1. Press the DN or CO button where the call has been held and flashing in green 120 wink.

   - A call on Consultation Hold is retrieved and you can talk to the retrieved party.
   - The DN or CO button changes from flashing in green 120 wink to being lit in green.
   - Another call is disconnected and the green indicator light on the button goes out.

4.00 Call Hold Retrieve-Station

Description

Allows an extension user to talk to the other party by retrieving a call held by another extension. This function is performed by dialing the feature number for “Hold Extension Retrieve” and extension number on which a call is placed on hold (directory number: three or four digits).

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”, Hold Extension Retrieve	9-D-6.03	10-C-10.00

Conditions

Even if the other extension has held multiple calls, there is no preferential order for retrieving calls.

In case of a failure to retrieve a call (the other extension holds no call), reorder tone is returned and the following message appears on the display, if provided:

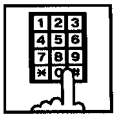
No Hold Call

The following calls cannot be retrieved from other extensions.

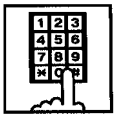
- A call held on PCO button
- A call placed on Exclusive Hold
- A call place on Consultation Hold

Operation

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Hold Extension Retrieve “49” (default).



3. Dial the directory number of the holding extension : three or four digits.

   - You hear confirmation tone 3.

4. Start conversation with the retrieved party.

5.00 Call Park

5.01 Call Park-System

Description

Allows an extension user to hold a call on the DN or CO button (both extension and outside) into a parking area common to the system.
The parked call can be retrieved from any extension in the system.
Call Park can be used whenever an extension user engaged on a call needs to go elsewhere, and wishes to complete the call from another extension.

Two methods are available for Call Park-System.
<1> By dialing the feature number for “Call Park-System.”
<2> By pressing the Call Park System button (Assignable Feature button).

To retrieve a parked call, dial the feature number for “Call Park Retrieve-System.”

20 parking areas are available common to the system.

Programming

System Programming	Reference	
	VT	Dumb
“System-Tenant”,	9-D-2.00	10-C-5.00
Call Park Boundary		
“System-Numbering Plan (04/11)”,	9-D-6.04	10-C-10.00
Call Park-System		
Call Park Retrieve-System		
“Extension-Station (2/3)”,	9-G-1.02	10-C-24.00
DN Key Type		
“Extension-Station (3/3)”,	9-G-1.03	
PF Key Type		10-C-25.00
DSS Key Type		10-C-26.00

PITS Station Programming	Reference
DN (Directory Number) Button Assignment	12-C-1.00
PF (Programmable Feature) Button Assignment	12-C-2.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

Conditions

If Tenant Service is employed, 20 parking areas can be split between two tenants in “System-Tenant”, Call Park Boundary.

A parked call will be disconnected automatically by the system, if it is not answered within 30 minutes.

When a call on PCO or SCO button is parked in the system parking area, the green indicator light on PCO or SCO button turns to red.
When a call on DN or GCO button is parked in the system parking area, the green indicator light on DN or GCO button turns off.

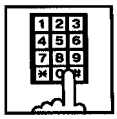
Parking a call in the system parking area by pressing the Call Park System button is ignored by the system if the extension user has already consultation hold call.

Music on Hold will be sent to the held party if available. For sending Music on Hold, prior assignment is necessary. Refer to Section 3-E-1.00 “Music on Hold.”

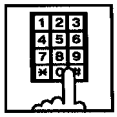
Operation

Parking a call during a conversation on the DN or CO button

1. Press the TRANSFER button, then dial the feature number for "Call Park-System," or press only the "Call Park System" button.



- The other party is placed on Consultation Hold. You hear confirmation tone 2 then dial tone 1 or 3 or 4.



2. Dial the parking area number in two digits : 01 to 20.
   - When you succeed in Call Park-System, you hear confirmation tone 2 then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     Call Parked at xx
     ↓
     parking area number (01 to 20)

   - If a call cannot be parked on the selected parking area, (another call is already parked in the parking area), you hear busy tone 1 or 2.
   - If your PITS has a display, it shows:

     Parked at xx N/A
     ↓
     parking area number (01 to 20)

   - In this case, dialing another parking area number (01 to 20) allows you to try a new call park destination.
   - To talk to the party placed on Consultation Hold again while hearing busy tone 1 or 2, follow the same procedure as retrieving Consultation Hold. Refer to Section 4-E-3.00 "Consultation Hold."

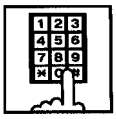
3. Replace the handset or press SP-PHONE button.

(Supplement)

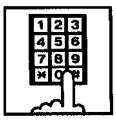
In step 1, when you are talking on the CO button, pressing the Call Park System button is ignored if there is no idle DN button.

Retrieving a call parked in the system parking area

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for "Call Park Retrieve-System."



3. Dial the parking area number : 01 to 20.
   - When you succeed in retrieving the parked call, you hear confirmation tone 2. Then talk to the other party.
   - If no call is parked on the selected parking area, you hear reorder tone.
   - If your PITS has a display, it shows:

     No Hold Call

Note:

- Confirmation tone 2 for Call Park can be eliminated by WS4 command (See Section 10-C-62.00 "World Select 4 (WS4)").

5.02 Call Park-Station

Description

Allows an extension user to hold a call on the DN or CO button (both extension and outside) into his own parking area, then retrieve the parked call from any extension in the system.

Call Park also allows extension users to answer a call from any extension or outside party when paged.

Each extension has its own parking area.

Two ways are available for Call Park-Station.
<1> By dialing the feature number for “Call Park-Station”
<2> By pressing the Call Park Station button (Assignable Feature button).

To retrieve a parked call, dial the feature number for “Call Park Retrieve-Station.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (04/11)”,	9-D-6.04	10-C-10.00
Call Park-Station		
Call Park Retrieve-Station		
“Extension-Station (2/3)”,	9-G-1.02	10-C-24.00
DN Key Type		
“Extension-Station (3/3)”,	9-G-1.03	
PF Key Type		10-C-25.00
DSS Key Type		10-C-26.00

PITS Station Programming	Reference
DN (Directory Number) Button Assignment	12-C-1.00
PF (Programmable Feature) Button Assignment	12-C-2.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

Conditions

A parked call will be disconnected automatically by the system, if it is not answered within 30 minutes.

During a conversation on the PCO or SCO button, executing Call Park-Station makes the indicator on the button light in red.

During a conversation on the DN or GCO button, executing Call Park-Station makes the indicator light on the button go out.

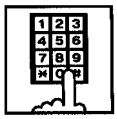
Call Park-Station by pressing the Call Park Station button is ignored if Consultation Hold is executed at the extension beforehand.

Music on Hold will be sent to the held party if available. For sending Music on Hold, prior assignment is necessary. Refer to Section 3-E-1.00 “Music on Hold.”

Operation

Executing Call Park-Station

During a conversation on the DN or CO button



1. Press the TRANSFER button, then dial the feature number for "Call Park-Station," or press only the "Call Park Station" button.

   If you use the TRANSFER button and the feature number:
   - When you succeed in Call Park-Station, you hear confirmation tone 2, then dial tone 1 or 3 or 4.
   - When you fail, you hear busy tone 1 or 2.

   If you use the Call Park Station button :

   1) During a conversation on the CO button,
      - When you succeed in Call Park-Station, you hear confirmation tone 2, then no tone.
      - When you fail, you remain in conversation status (pressing the Call Park Station button is ignored).
   2) During a conversation on the DN button,
      - When you succeed, you hear confirmation tone 2, then dial tone 1 or 3 or 4.
      - When you fail, you remain in conversation (pressing the Call Park Station button is ignored).
      - If your PITS has a display, it shows:

        Call Parked at ST

      - If you fail in Call Park-Station (another call is already parked), you hear busy tone 1 or 2.
      - If your PITS has a display, it shows:

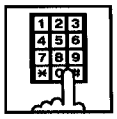
        Park at ST N/A

      - To talk to the other party placed on Consultation Hold while hearing busy tone 1 or 2, follow the procedure identical to retrieving Consultation Hold. Refer to Section 4-E-3.00 "Consultation Hold."

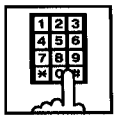
2. Replace the handset or press the SP-PHONE button.

Retrieving a call parked in the station parking area

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for "Call Park Retrieve-Station."



3. Dial the extension number of the parking extension : three or four digits.

   - When you succeed in retrieving the parked call, you hear confirmation tone 2. Then talk to the other party.
   - If no call is parked at the extension, you hear reorder tone.
   - If your PITS has a display, it shows:

     No Hold Call

Note:

- Confirmation tone 2 for Call Park can be eliminated by WS4 command (See Section 10-C-62.00 "World Select 4 (WS4)").

6.00 Call Splitting

Description

When a new call arrives at the DN or CO button during a conversation with another party, pressing the SPLIT button (Assignable Feature button) allows the called party to hold the current party exclusively and at the same time answer the new caller automatically.

If another new call arrives, another pressing of the SPLIT button connects the new caller, holding the previous caller exclusively.

As the above procedure, every time a new call arrives, it is possible to answer the call by executing Exclusive Hold for the current other party.

Calls placed on hold by pressing the SPLIT button are joined one by one to the call splitting chain.

Pressing the SPLIT button again while no call is arriving connects the current call to the call splitting chain and changes the chain into a circle.
At this moment, the first held party is retrieved from the chain and conversation with the retrieved party is possible.

After the circular call splitting chain is constructed, every pressing of the SPLIT button provides Exclusive Hold on the current party again and establishes a conversation with the next oldest party.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Station (2/3)", DN Key Type	9-G-1.02	10-C-24.00
"Extension-Station (3/3)",	9-G-1.03	
PF Key Type		10-C-25.00
DSS Key Type		10-C-26.00

PITS Station Programming	Reference
DN (Directory Number) Button Assignment	12-C-1.00
PF (Programmable Feature) Button Assignment	12-C-2.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

Conditions

Pressing the SPLIT button during a doorphone conversation, paging conversation etc., is ignored: it is impossible to hold those conversations.

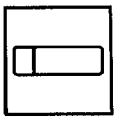
Each extension is able to make one call splitting chain.

After the call splitting chain changes to a circle, pressing the SPLIT button during a conversation if a new call arrives is ignored.
Any other operation than pressing the SPLIT button cancels the call splitting chain, and changes Exclusive Hold to common Hold.

Operation

Call Splitting operation

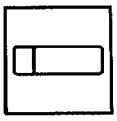
During a conversation, another call arrives at the DN or CO button.



1. Press the SPLIT button.

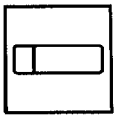
   - The current call is placed on Exclusive Hold and connected to the call splitting chain.
   - Start conversation with the new caller.

Another call arrives again.



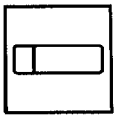
2. Press the SPLIT button.

   - The current call is placed on Exclusive Hold and chained to the call splitting chain.
   - Start conversation with the new caller.



3. During a conversation, press the SPLIT button every time a new call arrives. Then press the SPLIT button again while no call is arriving.

   - The current party is joined to the call splitting chain, that completes a circular chain.
   - Start conversation with the first held party.



4. Press the SPLIT button.

   - Every pressing of the SPLIT button connects the current call to the call splitting chain again.
   - Start conversation with a held call in the chained order.

F. Transferring Features

1.00 Call Transfer

1.01 Unscreened Call Transfer to Station

Description

Transfer is convenient to redirect a call to another extension user.
Attendant assistance is not required and the caller does not have to redial.
Unscreened Call Transfer allows an extension user to transfer calls placed on the DN or CO button to another extension without announcement.

Programming

None

Conditions

If transferred call is not answered by the destination party, it will receive one of the following treatments.

Status of Destination	Operation Resulted
Able to receive the call (sending ringback tone)	Performs the call to the destination for a specific period. In case of no answer, interrupts ringing and starts ringing to the originator of transfer. ☛1 For detail, refer to Section 3-E-3.00 "Transfer Recall."
Busy (sending busy tone)	As soon as the destination goes on-hook, starts calling the destination (Camp-on Transfer). If the destination party remains busy or does not answer the call within a specified period, starts calling back the originator of transfer. ☛1 For detail, refer to Section 3-E-3.00 "Transfer Recall."
Setting Do Not Disturb (sending DND tone)	Unscreened Call Transfer to extension is ineffective. Transferred party is treated simply as a party placed on Consultation Hold. Hanging up causes the Consultation Hold Recall to the originator of transfer.

☛1 When the originator of transfer answers the call, conversation between the originator and the transferred party starts.

The extension users can not transfer the following calls.

- A call on ICM button
- A call with Attendant Console
- A call with Doorphone
- Paging Announcement through built-in speaker of PITS

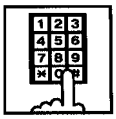
If Music on Hold is available, from the start of the transferring operation until the destination party answers, the system sends Music on Hold to the transferred party.
For further detail, refer to Section 3-E-1.00 "Music on Hold."

Operation

During a conversation with an extension or an outside party on the DN or CO button

1. Press the TRANSFER button.
   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     Transfer to



2. Dial the directory number of the destination extension: three or four digits.

3. Replace the handset or press the SP-PHONE button.
   - Calling the desired extension starts and if the extension answers, conversation between the held party and the extension is established.

(Supplement)

After step 2, if you want to restore the conversation with the transferred party, (1) if the destination has already answered, press the FLASH button and then TRANSFER button. (2) if the destination has not answered yet, press the TRANSFER button only.

To change the destination of transfer after executing step 2, press the FLASH button while hearing ringback tone, busy tone, or DND tone. Then after hearing dial tone, dial the extension number of the new destination.

1.02 Screened Call Transfer to Station

Description

Allows an extension user to transfer a call placed on the DN or CO button to another extension with announcement.

Programming

None

Conditions

The extension users can not transfer the following calls.

- A call on ICM button
- A call with Attendant Console
- A call with Doorphone
- Paging Announcement through built-in speaker of PITS

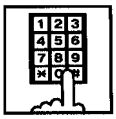
If Music on Hold is available, from the start of the transferring operation until the destination party answers, the system sends Music on Hold to the transferred party.
For further detail, refer to Section 3-E-1.00 “Music on Hold.”

Operation

During a conversation with an extension or an outside party on the DN or CO button

1. Press the TRANSFER button.
   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

Transfer to



2. Dial the directory number of the destination: three or four digits.
   - You hear ringback tone.

3. After the destination answers, make the announcement.

4. Replace the handset or press the SP-PHONE button.
   - The transferred party and the destination party start conversation.

(Supplement)

After step 2, you can interrupt the transfer and talk to the held party, (1) if the destination has already answered, by pressing the FLASH button, and then the TRANSFER button. (2) if the destination has not answered yet, by pressing the TRANSFER button only.

After step 2, you can change the destination by pressing the FLASH button while hearing ringback tone, busy tone, or DND tone. Then after hearing dial tone, dial the directory number of the new destination.

1.03 Screened Call Transfer to Trunk

Description

Allows an extension user to transfer a call placed on the DN or CO button to outside party with announcement.

To execute this function, assign “System-Class of Service”, CO Transfer mode to “Yes.”

If outside call is transferred to another outside party, CO-CO conversation mode is established and the duration of the conversation is restricted by “Group-Trunk Group”, CO-CO Duration Limit.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, CO Transfer Mode	9-D-4.01	10-C-7.00
“Group-Trunk Group (1/2)”, CO-CO Duration Limit	9-E-1.01	10-C-14.00

Conditions

If a call from outside party is transferred to another outside party, CO-CO conversation mode is established. In this case, the system uses the preset time limit for the trunk group that the transferred party is placed on, not using the time limit for the trunk group used to call the destination and alarm tone is sent to parties 15 seconds before the assigned time limit, and when time is out, both CO lines are disconnected.

The extension users can not transfer the following calls.

- A call on ICM button
- A call with Attendant Console
- A call with Doorphone
- Paging Announcement through built-in speaker of PITS

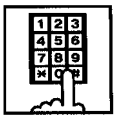
If Music on Hold is available, from the start of the transferring operation until the destination party answers, the system sends Music on Hold to the transferred party.
For further detail, refer to Section 3-E-1.00 “Music on Hold.”

Operation

During a conversation with an outside party or an extension on the DN or CO button

1. Press the TRANSFER button.
   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     Transfer to



2. Call another outside party.
   - You hear ringback tone from the CO line.

3. When the destination answers, make the announcement.

4. Replace the handset or press the SP-PHONE button.
   - The held party and the destination party start conversation.

(Supplement)

If an extension that cannot execute this function by the restriction of COS attempts to do this procedure, the system sends consultation hold recall to the extension after step 4 and the transfer is rejected.

After step 2, you can interrupt the transfer and talk to the held party again, (1) if the destination has already answered, by pressing the FLASH button and the TRANSFER button in succession. (2) If the destination has not answered yet, by pressing the TRANSFER button only.

After step 2, you can change the destination by pressing the FLASH button, and calling a new outside party.

1.04 Ringing Transfer

Description

Allows an extension user to transfer a call on the SDN button to the owner extension of the SDN button by simply pressing the Ringing Transfer button (Assignable Feature Button). Ringing Transfer can be done either with or without announcement.

To execute Ringing Transfer, assign the Ringing Transfer button to the user's PITS by the system programming or PITS station programming.

Either PITS or SLT or OPX can be assigned as the destination of the transfer.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Station (2/3)", DN Key Type	9-G-1.02	10-C-24.00
"Extension-Station (3/3)",	9-G-1.03	
PF Key Type		10-C-25.00
DSS Key Type		10-C-26.00

System Programming	Reference
DN (Directory Number) Button Assignment	12-C-1.00
PF (Programmable Feature) Button Assignment	12-C-2.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

Conditions

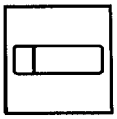
If the owner extension is in the PITS programming mode, Ringing Transfer is ineffective.

If the owner extension is SLT, Ringing Transfer is effective when the owner extension is on-hook and also able to ring.

Operation

Executing screened Ringing Transfer

During a conversation with an outside party or an extension on the SDN button.
The indicator on the SDN button is lit in green.



1. Press the Ringing Transfer button .

   - You hear ringback tone.
   - When the owner extension is PITS, the indicator on the owner's PDN button changes from red light to green 240 wink.

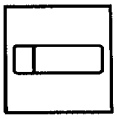
2. When the owner extension answers, start conversation.

3. Replace the handset or press the SP-PHONE button.

   - The transferred party and the owner extension start conversation.
   - The indicator on the SDN button changes from green light to red light.

Executing unscreened Ringing Transfer

During a conversation with an outside party or an extension on the SDN button.
The indicator on the SDN button is lit in green.



1. Press the Ringing Transfer button.

   - You hear ringback tone.
   - When the owner extension is PITS, the indicator of the owner's PDN button changes from red light to green 240 wink.

2. Replace the handset or press the SP-PHONE button.

- When the owner extension answers, the transferred party and the owner extension start conversation.

1.05 Unscreened Call Transfer to Remote

Description

Allows an extension user to transfer a call placed on the DN or CO button to Remote Maintenance Resource. (Available with Software Version 9.XX and above). Modem answer tone is returned instantly, if it is not in use.
This operation allows System Administrator to perform System Administration from Remote Location.
Refer to Section 14-B-2.00 “System Administration from a Remote Location” for further information.

To transfer a call to Remote Maintenance Resource, “FDN for Remote” is used, which is assigned in “System-Operation”, Remote Directory Number.
See Section 3-B-3.00 “Floating Directory Number (FDN)” for details about FDN.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (2/3)”, Remote Directory Number	9-D-1.02	10-C-4.00

Conditions

If Music on Hold is assigned, the system sends Music on Hold to the transferred party during the transferring operation.
For further detail, refer to Section 3-E-1.00 “Music on Hold.”

If Remote Maintenance Resource is in use, busy tone is returned to the held party. Automatic Callback does not function in this case, so the party should call Remote again when it becomes idle.

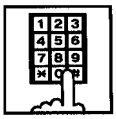
Operation

During a conversation with an extension or an outside party on the DN or CO button

1. Press the TRANSFER button.

   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2, then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     Transfer to



2. Dial the “Remote Directory Number”: three or four digits.

   - You hear confirmation tone 3, then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

<Example>

1234: RMT Access

Remote Directory Number: three or four digits

   - If Remote Maintenance Resource is not in use, the held party hears modem answer tone and start communication with Remote instantly.

3. Replace the handset or press the SP-PHONE button.

1.06 Unscreened Call Transfer — to Attendant Console

Description

Allows an extension user to transfer a call (both extension and outside) to an Attendant Console without announcement.

Programming

None

Conditions

1) Transfer Recall

   A call transferred by this feature will not ring back at the extension who transferred the call even if the Attendant Console does not answer the call after the transfer recall timer has been elapsed.

2) Intercept Routing No Answer (IRNA)

   A call transferred to an Attendant Console will not be transferred to another extension by IRNA feature even if the Attendant Console does not answer the call after the IRNA timer has been elapsed.

3) What if all six Loop keys on the Attendant Console are not idle?

   A call is put in the call waiting queue of the Attendant Console.

4) What if the Attendant Console is in ATT-FWD mode?

   This feature does not function.
   A call is simply put on Consultation Hold, that is, a call will ring back at the extension who tries to transfer the call as soon as he or she goes on-hook.

5) Music on Hold

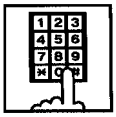
   If Music on Hold is available, the system sends Music on Hold to the transferred party, from the start of the transferring operation till the destination party answers.

Operation

During a conversation with an extension or an outside party.

1 Press the TRANSFER button.
- The other party is put on Consultation Hold.
- You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
- If your PITS has a display, it shows:

  Transfer to



2 Make a call to an Attendant Console.
- You hear ringback tone.
- Calling an Attendant Console starts.

3 Replace the handset or press the SP-PHONE button.
- At an Attendant Console: The call is displayed as a transfer recall.

(Supplement)

The feature numbers and DN's for making a call to an Attendant Console are:

- Operator Call (General)
- Operator Call (Specific)
- FDN for General Operator Call
- DN for ATT1 and ATT2

1.07 Unscreened Call Transfer — to a UCD Group (with OGM)

Description

Allows any extension user to transfer an outside call to a UCD Group from 01 to 04 (with OGM type).

From version 8.XX, not only the operators but any extension user can transfer an outside call to a UCD group (with OGM).

Programming

System Programming	Reference	
	VT	Dumb
"Special Attended–UCD (1/2)"	9-K-3.01	10-C-44.00

Conditions

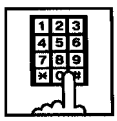
If all group members are not available to answer the call, it will be redirected to the Overflow destination. In this case, the call will be disconnected if not answered by the Overflow destination within 60 seconds.
See page 3-D-13 for further information.

Operation

During a conversation with an outside party.

1 Press the TRANSFER button.
- The other party is put on Consultation Hold.
- You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
- If your PITS has a display, it shows:

  Transfer to



2 Dial the FDN for UCD group (01 to 04).
- You hear confirmation tone 3 and then dial tone 1 or 3 or 4.

3 Replace the handset or press the SP-PHONE button.

Feature References

Uniform Call Distribution (UCD)–with /without OGM (Section 3-D-2.06)

2.00 Call Forwarding (FWD)

2.01 Call Forwarding-All Calls

Description

Call Forwarding-All Calls allows extension users who are away from their phones to receive incoming calls (both extension and CO) at another extension.

Incoming calls can be forwarded to extension users, Voice Mail ports, or operators (Attendant Console or Extension).
"FDN for General Operator Call" can be used to assign operators as the destination of Call Forwarding.
Refer to Section 9-D-1.01 "Operation (1/3)" for further information.

The following incoming calls do not receive Call Forwarding treatment.

- A call appearing on ICM button
- A call from doorphone
- A call appearing on PCO button
- A call routed via DIL 1: N feature
- A call directed to a UCD group

To execute Call Forwarding-All Calls, assign "System-Class of Service", Call Forwarding/Do Not Disturb to "Yes."

To set or cancel this function, the following two methods are available:
<1> By pressing the FWD/DND button.
<2> By dialing the feature number for "Call Forwarding-All Calls Set" and "Call Forwarding-Do Not Disturb Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (1/2)", Call Forwarding/Do Not Disturb	9-D-4.01	10-C-7.00
"System-Numbering Plan (04/11)", Call Forwarding-All Call Set	9-D-6.04	10-C-10.00
"System-Numbering Plan (05/11)", Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00

Conditions

To set or cancel this function, use the PDN button.

An extension user may have only one type of Call Forwarding/Do Not Disturb feature in effect at any time. If a second type is assigned, the previously assigned type is canceled.

Call Forwarding-All Calls feature functions even if the extension is in the PITS programming mode.

If the extension to which calls are to be forwarded itself is in a call forward mode, a call is not forwarded furthermore. The call rings at the first forwarded extension. In case of an outside call, if not answered in a specified time period, the call will be routed to another destination, if available, based on the "Intercept Routing-No Answer" feature.

If Tenant Service is employed and "Inter Tenant Calling" is assigned to "Yes" by programming, this function is ineffective for the calls from another tenant if the destination of Call Forwarding-All Calls is set to an Attendant Console.

Calls from any VM extension will not be forwarded, if forwarding destination is another VM extension.

An extension user is rejected with reorder tone if he or she attempts:

- To set the destination to an extension in the other tenant when Tenant Service is employed.
- To call the other extension whose call forwarding destination is set to his or her own extension.

The Operators (Attendant Console or Extension) can cancel the Call Forwarding/Do Not Disturb feature assigned to the extension users. Refer to Section 4-I-11.00 "Remote Station Feature Control."

The following table shows the results of the calls arriving at an extension setting this function depending on the conditions of the preset destination.

Type of Call Arriving at Setting Extension	Condition of Destination	Forwarding Execution	Result
Extension call	Idle status	◯	Call is forwarded to destination.
	Busy status	◯	Busy tone is sent from destination.
	Assigned to DND	◯	DND tone is sent from destination.
	PITS programming mode	◯	Busy tone is sent from destination.
	Conditions except In Service ☛	╳	Call is placed on setting extension.
DIL (1:1) or DISA call	Idle status	◯	Call is forwarded to destination.
	Busy status	◯	Call is forwarded and kept waiting at destination.
	Assigned to DND	◯	Same as call reaching DND. See Section 4-D-6.00 “Do Not Disturb (DND).”
	PITS programming mode	◯	Call is forwarded and kept waiting at destination.
	Conditions except In Service ☛	╳	Call is placed on setting extension.
DID call	Idle status	◯	Call is forwarded to destination.
	Busy status	◯	Busy tone is sent from destination
	Assigned to DND	◯	Same as call reaching DND. See Section 4-D-6.00 “Do Not Disturb (DND).”
	PITS programming mode	◯	Busy tone is sent from destination
	Conditions except In Service ☛	╳	Call is placed on destination.

◯ : Forwarding possible

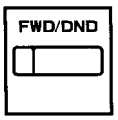
╳ : Forwarding impossible

☛ Conditions are “Out of Service,” “Fault” and “Pre-Installed.” See Section 14-C-2.02 “Port” for details.

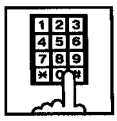
Operation

Setting Call Forwarding-All Calls

1. Lift the handset or press the SP-PHONE button.



2. Press the FWD/DND button, then dial “2.”
   Or, dial the feature number for “Call Forwarding-All Call Set.”



3. Dial the directory number of the extension or the Voice Mail port, or “FDN for General Operator Call” to be set as the destination.

   - You hear confirmation tone 1 or 2 and dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

   When setting an extension as the destination:

   FWD (All) Ext xxxx

   ↓

   Directory number: three or four digits

   When setting operators as the destination:

   If an operator is Attendant Console

   FWD (All) ATT

   If an operator is extension

   FWD (All) Ext xxxx

   ↓

   Directory number: three or four digits

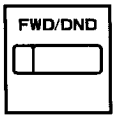
4. Replace the handset or press the SP-PHONE button.

   - The indicator on the FWD/DND button starts flashing.

Canceling Call Forwarding-All Calls

1. Lift the handset or press the SP-PHONE button.

   - The indicator light flashing on the FWD/DND button goes out.



2. Press the FWD/DND button, then dial “0.”
   Or, dial the feature number for “Call Forwarding/Do Not Disturb Cancel.”

   - You hear confirmation tone 1 or 2 and dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

   FWD/DND Cancel

3. Replace the handset or press the SP-PHONE button.

(Supplement)

Type 50 and KX-T7050 PITS telephones are not provided with the FWD/DND button. Only the PF3 button on them can be programmed to be the FWD/DND button.
Refer to Section 9-G-1.03 “Station (3/3)” and Section 12-C-2.00 “PF Button Assignment” for further information.

2.02 Call Forwarding-Busy/Off-Hook

Description

Call Forwarding-Busy/Off-Hook provides automatic call transfer to a preset destination when the user's extension is busy.
Busy status means all PDNs are used, or off-hook status (including hands-free status) or in the PITS programming mode.

Incoming calls can be forwarded to extension users, Voice Mail ports, or operators.
"FDN for General Operator Call" is used to assign operators as the destination of Call Forwarding. Refer to Section 9-D-1.01 "Operation (1/3)" for further information.

The following incoming calls do not receive Call Forwarding treatment.

- A call appearing on ICM button
- A call from doorphone
- A call appearing on PCO button
- A call routed via DIL 1: N feature
- A call directed to a UCD group

To set this function, assign "System-Class of Service", Call Forwarding/Do Not Disturb to "Yes."

For setting and canceling this function, two methods are available:
<1> By pressing the FWD/DND button.
<2> By dialing the feature number for
"Call Forwarding-Busy Set" and
"Call Forwarding/Do Not Disturb Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (1/2)", Call Forwarding/Do Not Disturb	9-D-4.01	10-C-7.00
"System-Numbering Plan (04/11)", Call Forwarding-Busy Set	9-D-6.04	10-C-10.00
"System-Numbering Plan (05/11)", Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00

Conditions

To set or cancel this function, use the PDN button.

An extension user may have only one type of Call Forwarding/Do Not Disturb feature in effect at any time. If a second type is assigned, the previously assigned type is canceled.

If the extension to which calls are to be forwarded itself is in a call forward mode, a call is not forwarded furthermore. The call rings at the first forwarded extension. In case of an outside call, if not answered in a specified time period, the call will be routed to another destination, if available, based on the "Intercept Routing-No Answer" feature.

If Tenant Service is employed and "Inter Tenant Calling" is assigned to "Yes" by programming, this function is ineffective for the calls from another tenant if the destination of Call Forwarding-Busy/Off-Hook is set to an Attendant Console.

Calls from any VM extension will not be forwarded, if forwarding destination is another VM extension.

An extension user is rejected with reorder tone if he or she attempts:

- To set the destination to an extension in the other tenant when Tenant Service is employed.
- To call the other extension whose call forwarding destination is set to his or her own extension.

The Operators (Attendant Console or Extension) can cancel the Call Forwarding/Do Not Disturb feature assigned to the extension users. Refer to Section 4-I-11.00 "Remote Station Feature Control."

The following table shows the results of the calls arriving at an extension setting this function depending on the conditions of the preset destination.

Type of Call Arriving at Setting Extension	Condition of Destination	Forwarding Execution	Result
Extension call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DIL (1:1) or DISA call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DID call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		

◯ : Forwarding possible

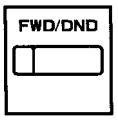
× : Forwarding impossible

☛ Conditions are “Out of Service,” “Fault” and “Pre-Installed.” See Section 14-C-2.02 “Port” for details.

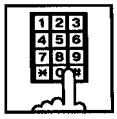
Operation

Setting Call Forwarding-Busy/Off-Hook

1. Lift the handset or press the SP-PHONE button.



2. Press the FWD/DND button, then dial “3.”
   Or, dial the feature number for “Call Forwarding-Busy Set.”



3. Dial the directory number of the extension or the Voice Mail ports, or “FDN for General Operator Call” to be set as the destination.

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

   When setting an extension as the destination:

   FWD (BSY) Ext xxxx

   Directory number: three or four digits

   When setting operators as the destination:

   If an operator is Attendant Console

   FWD (BSY) ATT

   If an operator is extension

   FWD (BSY) Ext xxxx

   Directory number: three or four digits

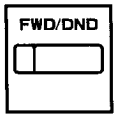
4. Replace the handset or press the SP-PHONE button.

   - The indicator on the FWD/DND button starts flashing.

Canceling Call Forwarding-Busy/Off-Hook

1. Lift the handset or press the SP-PHONE button.

   - The indicator light flashing on the FWD/DND button goes out.



2. Press the FWD/DND button, then dial “0.”
   Or, dial the feature number for “Call Forwarding/Do Not Disturb Cancel.”

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

   FWD/DND Cancel

3. Replace the handset or press the SP-PHONE button.

(Supplement)

Type 50 and KX-T7050 PITS telephones are not provided with the FWD/DND button. Only the PF3 button on them can be programmed to be the FWD/DND button.
Refer to Section 9-G-1.03 “Station (3/3)” and Section 12-C-2.00 “PF Button Assignment” for further information.

2.03 Call Forwarding-No Answer

Description

Call Forwarding-No Answer provides automatic call transfer to a preset destination if the extension user cannot answer the call in a determined period (that is, if the caller is not answered while hearing ringback tone in a specified period).

If the extension setting this function is in the PITS programming mode, Call Forwarding-No Answer is disabled and the caller hears busy tone.

Determine the duration from the arrival of a call to the start of Call Forwarding (period of no answer) by "System-System Timer", Call Forwarding-No Answer Time-Out.

Incoming calls can be forwarded to extension users, Voice Mail ports, or operators.
"FDN for General Operator Call" is used to assign operators as the destination of Call Forwarding. Refer to Section 9-D-1.01 "Operation (1/3)" for further information.

The following incoming calls do not receive Call Forwarding treatment.

- A call appearing on ICM button
- A call from doorphone
- A call appearing on PCO button
- A call routed via DIL 1: N feature
- A call directed to a UCD group

To set Call Forwarding-No Answer, assign "System-Class of Service", Call Forwarding/Do Not Disturb to "Yes."

For setting or canceling this function, two methods are available:
<1> By pressing the FWD/DND button.
<2> By dialing the feature number for "Call Forwarding-No Answer Set" and "Call Forwarding/Do Not Disturb Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-System Timer", Call Forwarding-No Answer Time-Out	9-D-3.00	10-C-6.00
"System-Class of Service (1/2)", Call Forwarding/Do Not Disturb	9-D-4.01	10-C-7.00
"System-Numbering Plan (04/11)", Call Forwarding-No Answer Set	9-D-6.04	10-C-10.00
"System-Numbering Plan (05/11)", Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00

Conditions

An extension user may have only one type of Call Forwarding/Do Not Disturb feature in effect at any time. If a second type is assigned, the previously assigned type is canceled.

If the extension to which calls are to be forwarded itself is in a call forward mode, a call is not forwarded furthermore. The call rings at the first forwarded extension. In case of an outside call, if not answered in a specified time period, the call will be routed to another destination, if available, based on the "Intercept Routing-No Answer" feature.

When Tenant Service is employed and "Inter Tenant Calling" is assigned to "Yes" by programming, a call from another tenant will not be forwarded if forwarding destination is an Attendant Console.

Calls from any VM extension will not be forwarded, if forwarding destination is another VM extension.

An extension user is rejected with reorder tone if he or she attempts to set the destination to an extension in the other tenant when Tenant Service is employed.

- This feature does not function if an extension user attempts to call the other extension whose call forwarding-no answer destination is set to his or her own extension.

The Operators (Attendant Console or Extension) can cancel the Call Forwarding/Do Not Disturb feature assigned to the extension users. Refer to Section 4-I-11.00 "Remote Station Feature Control."

The following table shows the results of the calls arriving at an extension setting this function depending on the conditions of the preset destination.

Type of Call Arriving at Setting Extension	Condition of Destination	Forwarding Execution	Result
Extension call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DIL (1:1) or DISA call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DID call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		

◯ : Forwarding possible

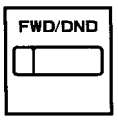
× : Forwarding impossible

☛ Conditions are “Out of Service,” “Fault” and “Pre-Installed.” See Section 14-C-2.02 “Port” for details.

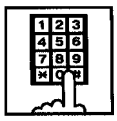
Operation

Setting Call Forwarding-No Answer

1. Lift the handset or press the SP-PHONE button.



2. Press the FWD/DND button, then dial “4.”
   Or, dial the feature number for “Call Forwarding-No Answer Set.”



3. Dial the directory number of the extension or the Voice Mail port, or “FDN for General Operator Call” to be set as the destination.
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

   When setting an extension as the destination:

   FWD (NA) Ext xxxx

   Directory number: three or four digits

   When setting operators as the destination:

   If an operator is Attendant Console

   FWD (NA) ATT

   If an operator is extension

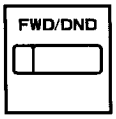
   FWD (NA) Ext xxxx

   Directory number: three or four digits

4. Replace the handset or press the SP-PHONE button.
   - The indicator on the FWD/DND button starts flashing.

Canceling Call Forwarding-No Answer

1. Lift the handset or press the SP-PHONE button.
   - The indicator light flashing on the FWD/DND button goes out.



2. Press the FWD/DND button, then dial “0.”
   Or, dial the feature number for “Call Forwarding/Do Not Disturb Cancel.”
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

   FWD/DND Cancel

3. Replace the handset or press the SP-PHONE button.

(Supplement)

Type 50 and KX-T7050 PITS telephones are not provided with the FWD/DND button. Only the PF3 button on them can be programmed to be the FWD/DND button.
Refer to Section 9-G-1.03 “Station (3/3)” and Section 12-C-2.00 “PF Button Assignment” for further information.

2.04 Call Forwarding-Busy/Off-Hook/No Answer

Description

Call Forwarding-Busy/Off-Hook/No Answer provides automatic call transfer to a preset destination if the user's extension is busy or the user cannot answer the call in a determined period (that is, if the caller is not answered while hearing ringback tone in a specified period).

Busy status means all PDNs are used, or off-hook status (including hands-free status) or in the PITS programming mode.

If the extension setting this function is in the PITS programming mode, Call Forwarding-Busy/Off-Hook/No Answer is disabled and the caller hears busy tone.

Determine the duration from the arrival of a call to the start of Call Forwarding (period of no answer) by “System-System Timer”, Call Forwarding-No Answer Time-Out.

Incoming calls can be forwarded to extension users, Voice Mail ports, or operators.
“FDN for General Operator Call” is used to assign operators as the destination of Call Forwarding. Refer to Section 9-D-1.01 “Operation (1/3)” for further information.

The following incoming calls do not receive Call Forwarding treatment.

- A call appearing on ICM button
- A call from doorphone
- A call appearing on PCO button
- A call routed via DIL 1: N feature
- A call directed to a UCD group

To set this function, assign “System-Class of Service”, Call Forwarding/Do Not Disturb to “Yes.”

For setting or canceling this function, two methods are available:
<1> By pressing the FWD/DND button.
<2> By dialing the feature number for “Call Forwarding-Busy/No Answer” and “Call Forwarding/Do Not Disturb Cancel.”

Programming

System Programming	Reference	
	VT	Dumb
“System-System Timer”, Call Forwarding-No Answer Time-Out	9-D-3.00	10-C-6.00
“System-Class of Service (1/2)”, Call Forwarding/Do Not Disturb	9-D-4.01	10-C-7.00
“System-Numbering Plan (04/11)”, Call Forwarding-Busy/No Answer	9-D-6.04	10-C-10.00
“System-Numbering Plan (05/11)”, Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00

Conditions

An extension user may have only one type of Call Forwarding/Do Not Disturb feature in effect at any time. If a second type is assigned, the previously assigned type is canceled.

If the extension to which calls are to be forwarded itself is in a call forward mode, a call is not forwarded furthermore. The call rings at the first forwarded extension. In case of an outside call, if not answered in a specified time period, the call will be routed to another destination, if available, based on the “Intercept Routing-No Answer” feature.

When Tenant Service is employed and “Inter Tenant Calling” is assigned to “Yes” by programming, a call from another tenant will not be forwarded if forwarding destination is an Attendant Console.

Calls from any VM extension will not be forwarded, if forwarding destination is another VM extension.

An extension user will be rejected with reorder tone if he or she attempts to set the destination to an extension in the other tenant when Tenant Service is employed.

- This feature does not function if an extension user attempts to call the other extension whose call forwarding-no answer destination is set to his or her own extension.

The Operators (Attendant Console or Extension) can cancel the Call Forwarding/Do Not Disturb feature assigned to the extension users. Refer to Section 4-I-11.00 “Remote Station Feature Control.”

The following table shows the results of the calls arriving at an extension setting this function depending on the conditions of the preset destination.

Type of Call Arriving at Setting Extension	Condition of Destination	Forwarding Execution	Result
Extension call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DIL (1:1) or DISA call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DID call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		

◯ : Forwarding possible

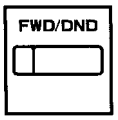
× : Forwarding impossible

☛ Conditions are “Out of Service,” “Fault” and “Pre-Installed.” See Section 14-C-2.02 “Port” for details.

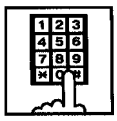
Operation

Setting Call Forwarding-Busy/Off-Hook/No Answer

1. Lift the handset or press the SP-PHONE button.



2. Press the FWD/DND button, then dial “6.”
   Or, dial the feature number for “Call Forwarding-Busy/No Answer.”



3. Dial the directory number of the extension or the Voice Mail port, or “FDN for General Operator Call” to be set as the destination.

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

   When setting an extension as the destination:

   FWD (B/N) Ext xxxx

   Directory number: three or four digits

   When setting operators as the destination:

   If an operator is Attendant Console

   FWD (B/N) ATT

   If an operator is extension

   FWD (B/N) Ext xxxx

   Directory number: three or four digits

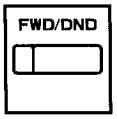
4. Replace the handset or press the SP-PHONE button.

   - The indicator on the FWD/DND button starts flashing.

Canceling Call Forwarding-Busy/Off-Hook/No Answer

1. Lift the handset or press the SP-PHONE button.

   - The indicator light flashing on the FWD/DND button goes out.



2. Press the FWD/DND button, then dial “0.”
   Or, dial the feature number for “Call Forwarding/Do Not Disturb Cancel.”

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

   FWD/DND Cancel

3. Replace the handset or press the SP-PHONE button.

(Supplement)

Type 50 and KX-T7050 PITS telephones are not provided with the FWD/DND button. Only the PF3 button on them can be programmed to be the FWD/DND button.
Refer to Section 9-G-1.03 “Station (3/3)” and Section 12-C-2.00 “PF Button Assignment” for further information.

2.05 Call Forwarding to Trunk

Description

Call Forwarding to Trunk allows extension users who are away from their phones to receive incoming calls (both CO and extension) at outside place.

The following incoming calls do not receive Call Forwarding treatment.

- A call appearing on ICM button
- A call from doorphone
- A call appearing on PCO button
- A call routed via DIL 1: N feature
- A call directed to a UCD group

When an incoming CO call is forwarded to the pre-assigned outside party by this feature, CO to CO call via this system is established. Duration time of CO to CO call is restricted by "Group-Trunk Group," CO-CO Duration Limit of receiving CO line. The system sends alarm tone to both parties 15 seconds before the Duration Limit time is expired, and when expired the system disconnects both parties compulsively.

To set Call Forwarding to Trunk, assign both "System-Class of Service", Call Forwarding/Do Not Disturb and CO forward Mode to "Yes."

For setting and canceling this function, two methods are available:
<1> By pressing the FWD/DND button.
<2> By dialing the feature number for "Call Forwarding-to Trunk" and "Call Forwarding/Do Not Disturb Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (1/2)", Call Forwarding/Do Not Disturb CO Forward Mode	9-D-4.01	10-C-7.00
"System-Numbering Plan (04/11)", Call Forwarding-to Trunk	9-D-6.04	10-C-10.00
"System-Numbering Plan (05/11)", Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00
"Group-Trunk Group (1/2)", CO-CO Duration Limit	9-E-1.01	10-C-14.00

Conditions

To set or cancel this function, use the PDN button.

An extension user may have only one type of Call Forwarding/Do Not Disturb feature in effect at any time. If a second type is assigned, the previously assigned type is canceled.

The Operators (Attendant Console or Extension) can cancel the Call Forwarding/Do Not Disturb feature assigned to the extension users. Refer to Section 4-I-11.00 "Remote Station Feature Control."

Up to 32 digits composed of "0 through 9" and "#" can be entered as the telephone number of the destination. CO line access code must be entered as the leading digit of each entry.

Note:

- If CPC signal is not supplied by the Central Office in your area, KX-T336 cannot detect the end of CO-CO call after one party disconnects the call.
  In this case, we recommend to use tone detection feature of AGC Card (See Section 10-C-67.00 "DISA/AGC Tone Detection Mode (TDM)").

The following table shows the results of the calls arriving at an extension setting this function depending on the conditions of the preset destination.

Type of Call Arriving at Setting Extension	Condition of Destination	Forwarding Execution	Result
Extension call	Idle status	◯	Call is forwarded to external destination.
	Busy status	✕	Call is placed on setting extension.
	Conditions except In Service ☛		
DIL (1:1) or DISA call	Idle status	◯	Call is forwarded to external destination.
	Busy status	✕	Call is placed on setting extension.
	Conditions except In Service ☛		
DID call	Idle status	✕	Call is placed on setting extension.
	Busy status		
	Conditions except In Service ☛		

◯ : Forwarding possible

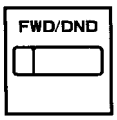
✕ : Forwarding impossible

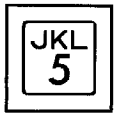
☛ Conditions are “Out of Service,” “Fault” and “Pre-Installed.” See Section 14-C-2.02 “Port” for details.

Operation

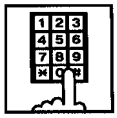
Setting Call Forwarding to Trunk

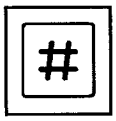
1. Lift the handset or press the SP-PHONE button.





2. Press the FWD/DND button, then dial “5.”
   Or, dial the feature number for “Call Forwarding to Trunk.”





3. Dial the feature number for selecting the CO line and the telephone number of the destination and “#” in succession.
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     <Example>

FWD (CO) 92011234

     If the assigned number exceeds the display capacity:

FWD (CO) 9201123 &

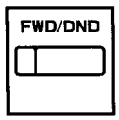
4. Replace the handset or press the SP-PHONE button.
   - The indicator on the FWD/DND button starts flashing.

(Supplement)

The system does not check the dialed number, toll restriction level, and the feature number for selecting a CO line when the extension user is setting this function.

Canceling Call Forwarding to Trunk

1. Lift the handset or press the SP-PHONE button.



2. Press the FWD/DND button, then dial “0.”
   Or, dial the feature number for “Call Forwarding/Do Not Disturb Cancel.”
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

FWD/DND Cancel

3. Replace the handset or press the SP-PHONE button.

(Supplement)

Type 50 and KX-T7050 PITS telephones are not provided with the FWD/DND button. Only the PF3 button on them can be programmed to be the FWD/DND button.
Refer to Section 9-G-1.03 “Station (3/3)” and Section 12-C-2.00 “PF Button Assignment” for further information.

2.06 Call Forwarding-Follow Me

Description

You can set the “Call Forwarding-All calls” feature from the destination extension. This is useful if you forget to set “Call Forwarding -All Calls” feature before you leave your desk or when you move from pre-set place to another.
This feature can be enabled or disabled on a COS (Class of Service) basis. If enabled, an extension user can set this feature.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering plan (09/11)”, Call Forwarding-Follow Me Set	9-D-6.09	10-C-10.00
Call Forwarding-Follow Me Cancel		
“Call Forwarding-Follow Me (CFM)”	—	10-C-68.00

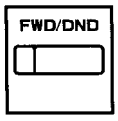
Conditions

Same as “Call Forwarding-All Calls “(Section 4-F-2.01).

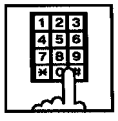
Operation

Setting “Call Forwarding-Follow Me” at the destination extension

1. Lift the handset or press the SP-PHONE button.



2. Press the FWD/DND button, then dial “7.”
   Or, dial the feature number for Call Forwarding-Follow Me Set “✻✻7” (default).



3. Dial the directory number of your extension.

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   • If your PITS has a display, it shows:

   FWD (From) Ext xxxx

   Directory number: three or four digits

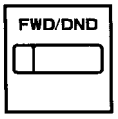
4. Replace the handset or press the SP-PHONE button.

   • The indicator on the FWD/DND button starts flashing at your own extension.

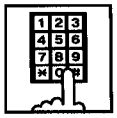
Canceling “Call Forwarding-Follow Me” at the destination extension.

1. Lift the handset or press the SP-PHONE button.

   • The indicator light flashing on the FWD/DND button goes out.



2. Press the FWD/DND button, then dial “8.”
   Or, dial the feature number for Call Forwarding-Follow Me Cancel “✻✻8” (default).



3. Dial the directory number of your extension.

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   • If your PITS has a display, it shows:

   FWD Cancel Exxx

4. Replace the handset or press the SP-PHONE button.

Note:
You can cancel this feature at your own extension by following the same procedure as canceling other call forwarding features.

G. Conversation Features

1.00 Programmable Privacy

Description

The extension user can intrude on a busy line by pressing the red lit PDN, SDN or SCO button, if the system is set to non-privacy.
In default mode, the system is set to privacy. This means that a third party cannot intrude on a busy line.

It is administrable to make system privacy or non-privacy by “System-Operation”, Privacy on DN Key.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, Privacy on DN Key	9-D-1.01	10-C-4.00

Conditions

The table shows the other party to be barged in by pressing the red lit PDN, SDN and Single CO buttons in the non-privacy system.

Button Pressed	A call to be barged in
PDN	A call on the SDN button owned by this PDN.
SDN	A call on PDN button which is owner (including SLT) of this SDN.
SCO	A call on the pressed Single CO button.

Privacy and non-privacy can be temporarily changed.
For further details, refer to Section 4-G-2.00 “Privacy Release” and Section 4-G-3.00 “Privacy Attach.”

In privacy and non-privacy system, pressing a button which is lit in red results in the following:

1. In privacy system:

Pressing PDN or SDN	Pressing SCO, GCO, or PCO
Ignored	Cause Automatic Callback-Trunk ☛

2. In non-privacy system:

Pressing PDN or SDN	Pressing SCO	Pressing GCO or PCO
Allows a three party conversation (ignored if conference trunk is unavailable)	Allows a three party conversation (reorder tone sounds if conference trunk is unavailable	Cause Automatic Callback-Trunk ☛

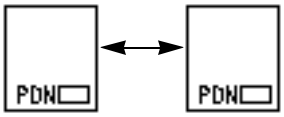
☛ Refer to Section 4-C-5.01 “Automatic Callback-Trunk.”

Operation

Intruding on a busy line in non-privacy system

The following example shows the procedure to be used by extension B whose SDN is owned by the PDN of extension A, who is talking with party C on the PDN button.

Extension A Extension C

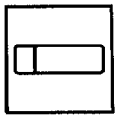


• Extension A is talking with Extension C.

Extension B

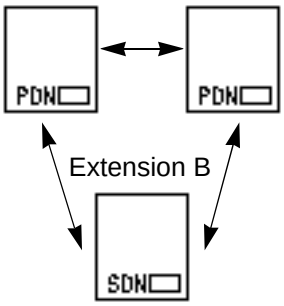
• Extension B has the SDN button owned by extension A's PDN.

The indicator on the SDN button of extension B is lit in red.



1. Press the SDN button (on extension B) lit in red.

Extension A Extension C



• A three party conversation is established among the extensions A, B and C.

2.00 Privacy Release

Description

In the privacy system, Privacy Release feature temporarily releases the privacy by pressing the Privacy Change button (Assignable Feature button), and allows the extension user to let another extension user intrude on a busy line on PDN, SDN or SCO button then a 3-party conference will be established.

Privacy change button must be assigned on a PITS telephone beforehand.
For the assignment of Privacy Change button, refer to Section 9-G-1.00 “Station” and Section 12 “Station Programming (PITS).”

The table shows the relationship between the employed button and the extension to be released:

Button Employed by the Talking Extension	The Other Extension to be Allowed to Override
SDN	The PITS having the PDN that is the owner of the SDN
PDN	All PITS's having the SDN's owned by the PDN
Single CO	All PITS's having the same Single CO

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, Privacy on DN Key	9-D-1.01	10-C-4.00
“Extension-Station (2/3)”, DN Key Type	9-G-1.02	10-C-24.00
“Extension-Station (3/3)”, DSS Key Type	9-G-1.03	10-C-26.00

PITS Station Programming	Reference
DN (Directory Number) Button	12-C-1.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

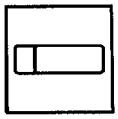
Conditions

Privacy Release feature overrides Data Line Security feature assigned to the extension.

Operation

The following example shows the procedure for the extensions A and B.
Extension A is talking on the PDN button.
Extension B has the SDN button owned by the PDN button of extension A.

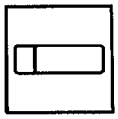
Canceling the privacy system by extension A



1. Press the Privacy Change button.

   - The indicator on the Privacy Change button lights in red.
   - The indicator on the SDN button of extension B changes from being lit in red to flashing in red 120 wink.
   - Privacy system is canceled temporarily.

Overriding by extension B



1. Press the red SDN button that is flashing in 120 wink.

   - Start a three party conversation.

(Supplement)

Pressing the Privacy Change button on extension A again while the indicator is lit in red turns out the light and returns privacy system.
At the same time the indicator on the SDN button of extension B stops flashing and lights in red.

3.00 Privacy Attach

Description

When the system is in non-privacy, pressing the Privacy Change button (Assignable Feature button) when the extension user is talking on the PDN, SDN, or Single CO button enables system to be in privacy mode temporarily and prohibits another extension from intruding on a busy line by pressing the PDN, SDN, or Single CO button.

While this function is enabled, the indicator on the Privacy Change button is lit in red.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", Privacy on DN Key	9-D-1.01	10-C-4.00
"Extension-Station (2/3)", DN Key Type	9-G-1.02	10-C-24.00
"Extension-Station (3/3)", DSS Key Type	9-G-1.03	10-C-26.00

PITS Station Programming	Reference
DN (Directory Number) Button Assignment	12-C-1.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

Conditions

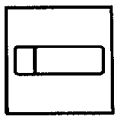
An extension user can assign Privacy Attach by pressing the Privacy Change button in any status such as on-hook, conversation and so on.

It is possible to cancel Privacy Attach by pressing the Privacy Change button lit in red again, regardless of the status of extensions such as on-hook.

If either or both of the two extensions in conversation in a non-privacy system sets Privacy Attach, no other extension is able to override the conversation by pressing the PDN, SDN, or Single CO button.

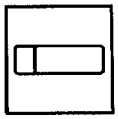
Operation

Setting Privacy Attach



1. Press the Privacy Change button.
   - The indicator on the Privacy Change button lights in red.

Canceling Privacy Attach



1. Press the Privacy Change button lit in red.
   - The indicator light on the Privacy Change button goes out.

4.00 Hands-Free Conversation

Description

Turning the SP-PHONE button on without lifting the handset offers hands-free operation and conversation status.

Programming

None

Conditions

One minute of hands-free status without any operation after turning the SP-PHONE button on cancels the status automatically, that is, turns the SP-PHONE button off.

Operation

Be sure the handset is on-hook and the SP-PHONE button is off.

1. Press the SP-PHONE button.
   - The microphone and the speaker for the speakerphone are activated and hands-free operation and conversation is available.

Changing the handset conversation mode to the hands-free conversation mode

1. Press the SP-PHONE button.
   - The microphone and the speaker for the speakerphone are activated, and the handset sends no tone.

2. Replace the handset.
   - Continue the conversation using the speakerphone.

(Supplement)

Lifting the handset in the hands-free mode turns the speakerphone off and changes to the handset mode.

5.00 Conference

5.01 Conference-One Appearance

Description

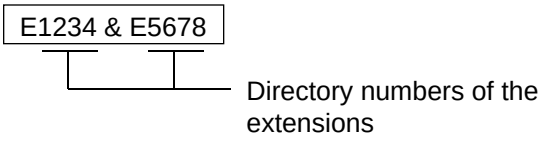
During a conversation with an extension or an outside party, the extension user can add another party (extension or outside party) on the current conversation and hold a three party conference on one DN button : this is called Conference-One Appearance.

On the TSW card, there are eight standard conference trunks provided for this purpose. By equipping the optional conference expansion card (KX-T336104), the number of conference trunks increases to 64.
To utilize optional conference expansion card, assign “Configuration-System Assignment”, TSW Additional CONF to “Yes.”

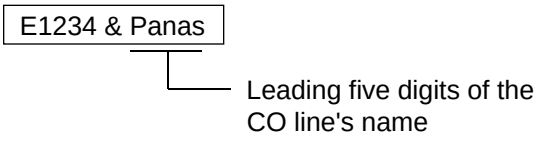
When two members in the conference are outside parties, two conference trunks are necessary. In all other cases, one conference trunk is enough.

If a member in the conference is using the PITS provided with a display, the following message appears on the display of the PITS during the conference, showing the other two members.

- When both of the other members are extensions:



- When one is an extension and the other is an outside party:



- When both of the other members are outside parties:

Programming

System Programming	Reference	
	VT	Dumb
“Configuration-System Assignment”, TSW Additional CONF	9-D-1.01	10-C-1.00

Conditions

Pressing the HOLD button during a conference is ignored.

Pressing the CONF button after calling the second party offers conference status. If no conference trunks are available, pressing the CONF button is ignored and conference is not established.

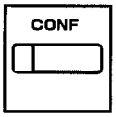
Pressing the TRANSFER button by the conference originator during a conference restores the conversation with the previous party, placing the later party on Consultation Hold. Pressing the TRANSFER button again establishes the conversation with the later party, placing the previous party on Consultation Hold. Pressing the CONF button restores the conference.

Pressing the TRANSFER button by a conference member other than the conference originator during the conference is ignored.

Operation

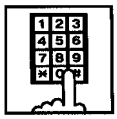
Establishing a Conference-One Appearance

Extension A is having a conversation with party B (another extension or an outside party on the DN button).
The following is the operation from the standpoint of extension A.



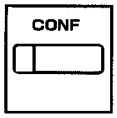
1. Press the CONF button.

   - The indicator on the CONF button starts flashing in red 60 wink.
   - The other party B is placed on Consultation Hold. Extension A hears dial tone 1 or 3 or 4.



2. Call another party C (an extension or an outside party).

   - Talk to station C on the DN button.



3. Press the CONF button.

   - The indicator on the CONF button lights in red, conference among the parties A, B and C on the DN button is established.

(Supplement)

Pressing the TRANSFER button is available instead of pressing the CONF button in step 1. In this case, the indicator on the CONF button is off in step 1, then in step 3 it lights in red by pressing the CONF button.

To change the conference member after step 2, press the FLASH button and execute step 2 again.

Concluding a Conference-One Appearance

1. Replace the handset or press the SP-PHONE button.

   - If both B and C are outside parties, both parties are disconnected.
   - If both B and C are extension users, or either of them is an extension user, a conversation between B and C is established.

(Supplement)

If the conference originator presses another DN, ICM, or CO button during a conference, the originator seizes the line on the pressed button and leaves the conference. The remaining two parties are treated in the same way as if the originator concluded the conference by replacing the handset or by pressing the SP-PHONE button.

5.02 Conference-Two Appearances

Description

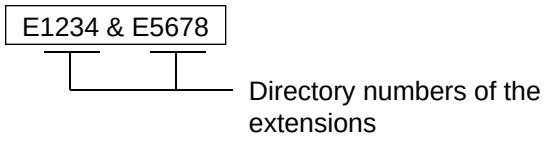
During a conversation with an extension or an outside party on the DN or the CO button, employing another DN or CO button instead of currently using button allows another party (an extension or an outside party) to join the conversation and offers Conference-Two Appearances.

On the TSW card, there are eight standard conference trunks provided for this purpose. By equipping the optional conference expansion card (KX-T336104), the number of conference trunks increases to 64.
To utilize optional conference expansion card, assign “Configuration-System Assignment”, TSW Additional CONF to “Yes.”

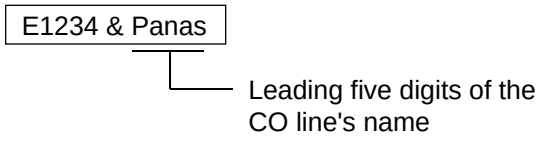
If two members of the conference are outside parties, two conference trunks are necessary. In other cases, one conference trunk is enough.

If a member of the conference is using the PITS provided with a display, the following message appears on the display, showing the other two members:

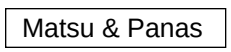
- When both of the other members are extensions:



- When one is an extension and the other is an outside party:



- When both of the other members are outside parties:



Programming

System Programming	Reference	
	VT	Dumb
“Configuration-System Assignment”, TSW Additional CONF	9-C-1.01	10-C-1.00

Conditions

Pressing the CONF button after calling the second party establishes conference. If no conference trunks are available, pressing the CONF button is ignored and conference is not established.

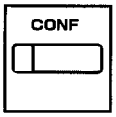
Pressing the TRANSFER button by the conference originator during a conference restores conversation with the previous party, placing the latter party on Consultation Hold. Pressing the TRANSFER button again offers conversation with the latter party, placing the previous party on Consultation Hold. Pressing the CONF button in this status restores the conference.

Pressing the TRANSFER buttons by a conference member other than the conference originator during the conference is ignored.

Operation

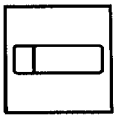
Establishing a Conference-Two Appearances

Extension A is having a conversation with party B (an extension or an outside party) on the DN or CO button.
The following is the operation from the standpoint of extension A.



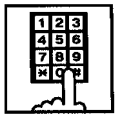
1. Press the CONF button.

   - The indicator on the CONF button starts flashing in red 60 wink.
   - The other party B is placed on Consultation Hold. Extension A hears dial tone 1 or 3 or 4.



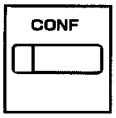
2. Press another idle DN or CO button.

   - The pressed DN or CO button lights in green.



3. Call another party C through extension call if the pressed button is DN or through CO call if the pressed button is CO.

   - Start conversation with the party C on the pressed DN or CO button.



4. Press the CONF button.

   - The indicator on the CONF button lights in red. Conference conversation among the parties A, B and C is established.

(Supplement)

Pressing the TRANSFER button is available instead of pressing the CONF button in step 1. In this case, the indicator on the CONF button is off in step 1, then it lights in red in step 4 by pressing the CONF button.

To change the conference member after step 3, press the FLASH button and execute step 3 again.

Concluding a Conference -Two Appearances

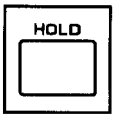
1. Replace the handset or press the SP-PHONE button.

   - If both B and C are outside parties: both parties are disconnected.
   - If both B and C are extension users, or either of them is an extension users: a conference between B and C is established.

(Supplement)

If the conference originator presses another DN, ICM, or CO button during a conference, the originator seizes the line on the pressed button and leaves the conference. The remaining two parties are treated in the same way as if the originator concluded the conference by replacing the handset or pressing the SP-PHONE button.

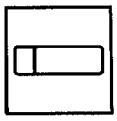
Placing the two other parties on hold during a conference



1. Press the HOLD button.

   - The two parties are held.
   - The indicator on the DN or CO button flashes in green 60 wink.
   - You hear no tone.

Having a conversation with one party, by dropping the other party



1. Press the DN or CO button of the desired party.

   - Conversation with the party of the pressed button is established.
   - The other party is disconnected and the indicator light on the button goes out.

6.00 Unattended Conference

6.01 Unattended Conference-One Appearance

Description

When an extension is in a conference with two outside parties on one DN button, the extension can leave the conference and establishes the CO-to-CO call between other two parties by pressing the CONF button: this is called Unattended Conference-One Appearance.

During an unattended conference between the two outside parties, the indicator on the DN button flashes in 120 wink.

To execute this function, assign “System-Class of Service”, CO Transfer Mode to “Yes.”

The duration of the Unattended Conference is limited by “Group-Trunk Group”, CO-CO Duration Limit.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, CO Transfer Mode	9-D-4.01	10-C-7.00
“Group-Trunk Group (1/2)”, CO-CO Duration Limit	9-E-1.01	10-C-14.00

Conditions

If the extension is not allowed to execute this function in Class of Service, or either or both of the other parties are not outside ones, pressing the CONF button during the conference is ignored.

When the two occupied CO lines belong to different trunk groups, the following time limits apply to each case:

In the case one party is an outgoing CO call, the other is an incoming CO call; The duration limit follows to the trunk group of the incoming CO call.

If both are outgoing CO calls or both are incoming CO calls; The longest duration limit assigned to one of the two trunk groups is used.

Unattended Conference Recall starts 50 seconds before the time limit.

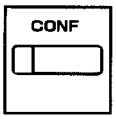
30 seconds of no answer after the start of the Unattended Conference Recall causes Intercept Routing-No Answer.
For further details, refer to Section 3-F-5.00 “Intercept Routing-No Answer (IRNA).”

Warning tone is sent to both outside parties 15 seconds before the time limit. When CO-CO Duration Limit applied is expired, both outside parties are disconnected.

Operation

Establishing an Unattended Conference-One Appearance

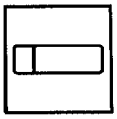
During a conference with two outside parties on one DN button



1. Press the CONF button.

   - The indicator on the DN button flashes in green 120 wink.
   - You leave the conference. CO-to-CO call between the other two parties is established.
   - The indicator light on the CONF button goes out.

Returning to a conference

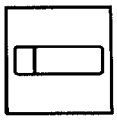


1. Press the green DN button that is flashing in 120 wink.

   - You join the conference again.
   - The indicator on the DN button lights in green.
   - The indicator on the CONF button lights in red.

Answering Unattended Conference Recall

If on-hook, Unattended Conference Recall starts.
If off-hook, call waiting tone sounds.



1. Press the green DN button that is flashing in 120 wink.

   - You return to the conference.
   - The indicator on the DN button lights in green.

(Supplement)

If no conference trunks are available at the time, returning to the conference and answering Unattended Conference Recall results in conversation with the first party, placing the other party on Consultation Hold.
Pressing the TRANSFER button offers alternate conversation with the two parties.
Pressing the CONF button again restores the Unattended Conference.

6.02 Unattended Conference-Two Appearances

Description

When an extension is in a Conference-Two Appearances with two outside parties, the extension can leave the conference and establishes the CO-to-CO call between other two parties by pressing the CONF button: this is called Unattended Conference Two Appearances.

During an unattended conference between the two outside parties, the indicators on both buttons (both are DNs, or one is DN and the other is CO, or both are COs) flash in 120 wink.

To execute this function, assign “System-Class of Service”, CO Transfer Mode to “Yes.”

The duration of the Unattended Conference is restricted by “Group-Trunk Group”, CO-CO Duration Limit.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, CO Transfer Mode	9-D-4.01	10-C-7.00
“Group-Trunk Group (1/2)”, CO-CO Duration Limit	9-E-1.01	10-C-14.00

Conditions

If the extension is not allowed to execute this function in Class of Service, or either or both of the other parties are not outside ones, pressing the CONF button is ignored.

When the two occupied CO lines belong to different trunk groups, the following time limits apply to each case:

If one party is an outgoing CO call and the other is an incoming CO call; The duration limit follows the trunk group of the incoming CO call.

If both are outgoing CO calls or both are incoming CO calls; The longest duration limit assigned to one of the two trunks is used.

Unattended Conference Recall starts 50 seconds before the time limit.

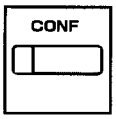
30 seconds of no answer after the start of the Unattended Conference Recall causes Intercept Routing-No Answer.
For the further detail, refer to Section 3-F-5.00 “Intercept Routing-No Answer (IRNA).”

Alarm tone is sent to both outside parties 15 seconds before the time limit. When CO-CO Duration Limit applied is expired, both outside parties are disconnected.

Operation

Establishing an Unattended Conference-Two Appearances

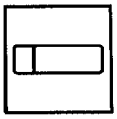
During a Conference on Two Appearances with two outside parties



1. Press the CONF button.

   - The indicators on the two buttons (both DN buttons or one DN and one CO or both CO buttons) flash in 120 wink.
   - You leave the conference. CO-to-CO call between the other two parties is established.
   - The indicator light on the CONF button goes out.

Returning to a conference

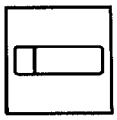


1. Press either of the two buttons flashing in green 120 wink.

   - You join the conference again.
   - Both the indicators on the two buttons light in green.
   - The indicator on the CONF button lights in red.

Answering Unattended Conference Recall

If on-hook, Unattended Conference Recall starts.
If off-hook, call waiting tone sounds.



1. Press either of the two buttons flashing in green 120 wink.

   - You join the conference again.
   - Both the indicators on the buttons light in green.
   - The indicator on the CONF button lights in red.

(Supplement)

If no conference trunks are available at the time, returning to the conference and answering Unattended Conference Recall results in conversation with the party on the pressed button, placing the other party on Consultation Hold.

Pressing the TRANSFER button offers alternate conversation with the two parties.
Pressing the CONF button again restores the Unattended Conference.

7.00 Doorphone

Description

Up to four doorphones can be connected to the system. This provides conversations between extensions and doorphones.

Any extension user can call the doorphones within the same tenant on the DN button by dialing the feature number for “Doorphone Call (1~4).” It is possible to direct calls from doorphones to specified extensions, intercom groups, pickup groups or Attendant Consoles in “Extension-Doorphone”, Doorphone Call Assignment.

If Tenant Service is employed, the affiliation of each doorphone can be determined by the system programming in “Extension- Doorphone”, Tenant.

Set the duration of the door opener in “Extension-Doorphone”, Open Duration. When Open Duration is set to “0,” the door opener is unavailable.

Opening the door is available to Attendant Consoles and the extensions which are able to receive calls from doorphones: the extensions belonging to intercom groups and pickup groups that are able to receive calls from doorphones. They can open the door by dialing “5” during conversation with the doorphone.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”, Doorphone Call (1~4)	9-D-6.03	10-C-10.00
“Extension-Doorphone”	9-G-3.00	10-C-27.00

Conditions

Only conversations are available for the doorphone call. The other functions such as Hold, Transfer are all ineffective.

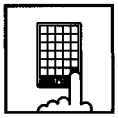
When a visitor presses the button on the doorphone, ping-pong tone sounds twice, then doorphone call ringing starts.
No answer of the call in 15 seconds cancels the doorphone call.

Dialing “5” again while the door is open enables the user to prolong the opening duration to the specified duration assigned in “Extension-Doorphone”, Open Duration.

When a call from a doorphone reaches the preset extensions, the indicators on the SDN buttons whose owners are the receiving extensions light in red.

Operation

Calling from a doorphone



1. Press the button on the doorphone.

   - You hear ping-pong tone.
   - When the other party answers, start talking to the other party.

Answering a doorphone call

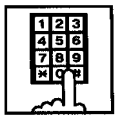
When your telephone set receives a doorphone call and rings,

1. Lift the hand set or press the SP-PHONE button.

   - Start conversation with the caller from the doorphone.

Calling a doorphone

1. Lift the handset or press the SP-PHONE button.



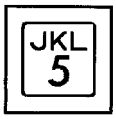
2. After dialing the feature number for Doorphone Call (1-4) “40” (default), dial the doorphone number: 1 to 4.

   - After hearing confirmation tone 3, start conversation over the specified doorphone.

3. After concluding conversation, replace the handset or press the SP-PHONE button.

Opening the door

During a conversation over the doorphone



1. Dial “5.”

   - The door opens for the specified duration.
   - If your PITS has a display, it shows:

     Door Open

8.00 Flash

Description

Flash allows the extension user to get a line for making a call on the selected line access button again without hanging up. The FLASH button can be used for this procedure. While still on the CO, DN, or ICM line, press the FLASH button and dial tone will be returned.

While or after talking on a CO line, the system releases the CO DC loop after the FLASH button is pressed for the specified period assigned in “Group-Trunk Group”, Disconnect Time.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Disconnect Time	9-E-1.01	10-C-14.00

Conditions

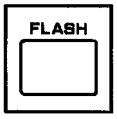
While or after talking on a CO line, pressing the FLASH button renews conversation duration, inserts the automatic pause, and checks toll restriction level again.

Flash stored in “System-Speed Dial-System”, Speed Dialing-Station or One Touch dialing etc., functions as External Feature Access, not as this feature.

Operation

Using Flash

While hearing any tone, while dialing, or during a conversation



1. Press the FLASH button.

   - After hearing dial tone 1 or 3 or 4, dial the telephone number.

9.00 External Feature Access

Description

Sending a flash signal through the CO line allows the extension to gain access to the features offered by the host PBX, or to receive centrex service provided by the central office, such as Call Waiting and so on.

External Feature Access is effective only during a 1:1 conversation with an outside party.

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (03/11)", External Feature Access	9-D-6.03	10-C-10.00
"Group-Trunk Group (1/2)", Hook Switch Flash Time	9-E-1.01	10-C-14.00
"Group-Trunk Group (2/2)", Max. Dial No. after EFA Signal	9-E-1.02	10-C-15.00
"Extension-Station (2/3)", DN Key Type	9-G-1.02	10-C-24.00
"Extension-Station (3/3)", PF Key Type	9-G-1.03	10-C-25.00
DSS Key Type		10-C-26.00

PITS Station Programming	Reference
DN (Directory Number) Button Assignment	12-C-1.00
PF (Programmable Feature) Button Assignment	12-C-2.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

Conditions

External Feature Access is ineffective when "Group-Trunk Group", Hook Switch Flash Time is assigned to "None."

The maximum dialing digits to be sent to the CO line after sending the flash signal are restricted by "Group-Trunk Group", Max. Dial No. after EFA Signal. The longest time limit among the following assignments determines the time limit between dialing digits.

- "System-System Timer", External Firstdigit Time-Out.
- "System-System Timer", External Interdigit Time-Out.
- "System-System Timer", Toll Restriction Guard Time-Out.

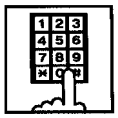
Operation

Gaining access to a feature (in this case, Call Waiting) (1)
A call arrives from another outside party during a conversation with an outside party.

- You hear call waiting tone.

1. Press the TRANSFER button.

- You hear dial tone 1 or 3 or 4.



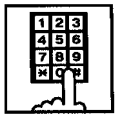
2. Dial the feature number for External Feature Access "50" (default).

- The first party is held. Talk to the second party.

Finishing conversation with the second party and starting conversation with the first party again

1. Press the TRANSFER button.

- You hear dial tone 1 or 3 or 4.

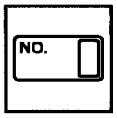


2. Dial the feature number for External Feature Access "50" (default).

- Talk to the first party.

Gaining access to a feature (in this case, Call Waiting) (2)
A call arrives from another outside party during a conversation with an outside party.

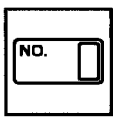
- You hear call waiting tone.



1. Press the External Feature Access button.

- The first party is held. Talk to the second party.

Finishing conversation with the second party and starting conversation with the first party again



1. Press the External Feature Access button again.

- Talk to the first party.

10.00 Microphone Mute

Description

Microphone Mute allows an extension user to disable the microphone of the speakerphone. This is useful when the user needs to speak privately with someone in the office while on an inside, an outside, or a door-phone call.
If the user presses the AUTO ANS/MUTE button during a hands-free conversation with speakerphone on, the other party cannot hear the user until he or she presses the button again.

Programming

None

Conditions

Microphone Mute does not disable the microphones in the handsets.

Setting and canceling this function is available only when the SP-PHONE is on. Pressing the AUTO ANS/MUTE button when the SP-PHONE is off sets Hands-Free Answerback.
Refer to Section 4-D-2.01 “Intercom Hands-Free Answerback.”

While Microphone Mute is set, the indicator on the AUTO ANS/MUTE button flashes in 60 wink.

Operation

Setting Microphone Mute

During a hands-free conversation

1. Press the AUTO ANS/MUTE button.

   - The indicator on the AUTO ANS/ MUTE button flashes in 60 wink.
   - The microphone of the SP-PHONE becomes mute status.

Canceling Microphone Mute

1. Press the flashing AUTO ANS/MUTE button again.

   - The indicator light on the AUTO ANS/MUTE button goes out.
   - Microphone Mute is canceled.

11.00 Intercom Off-Hook Call Announcement (OHCA)

Description

During a conversation using the handset by PITS telephone KX-T7130, KX-T123235 or KX-T123230D, the extension user can receive another call from Intercom Calling or from Attendant Console, unless the current call is made by Intercom Calling.

To execute this function, optional T-SW OHCA Expansion card (KX-T336105) and OHCA card (KX-T96136) are necessary.

Programming

System Programming	Reference	
	VT	Dumb
"Configuration-Slot Assignment" "Extension-Station (1/3)", OHCA Circuit	9-C-2.00 9-G-1.01	10-C-2.00 10-C-22.00

Conditions

OHCA can be received only with the PITS KX-T7130, KX-T123235, and KX-T123230D telephones.

OHCA does not work if the receiving extension is in the following situations:

- Talking in speaker phone mode.
- Do Not Disturb is set.
- ICM button is not idle.
- "System-Class of Service",
  BSS/OHCA Deny is set to "Yes."

Operation

Answering OHCA

You are having a conversation using the handset.

1. When the indicator on the ICM button lights in green, you hear two beeps. At the same time the microphone and the speaker for hands-free turn on automatically. Talk to the caller over the speaker.

Finishing the original call during a conversation by OHCA

You are having conversations with the original caller and the OHCA caller.

1. Replace the handset.
   - The original call is finished. The OHCA call changes to hands-free mode.

2. After finishing conversation, press the SP-PHONE button.

12.00 Tone Through (End to End DTMF Signaling)

Description

During a call (extension, outside or doorphone), this function allows the PITS telephone user to send DTMF (touch tone) signals to the voice path when a dial pad button is pressed.
Tone Through mode is established automatically after the dialing sequence.

End-To-End DTMF Signaling permits the extension user to access network services such as OCC access which requires touch-tone signals.

Only during a conversation with an outside party, Tone Through mode can be canceled by pressing the Tone Through Break button (Assignable Feature Button).

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Station (2/3)", DN Key Type	9-G-1.02	10-C-24.00
"Extension-Station (3/3)",	9-G-1.03	
PF Key Type		10-C-25.00
DSS Key Type		10-C-26.00

PITS Station Programming	Reference
DN (Directory Number) Button Assignment	12-C-1.00
PF (Programmable Feature) Button Assignment	12-C-2.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

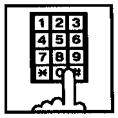
Conditions

The maximum dialing digits after canceling Tone Through mode is restricted by "Group-Trunk Group", Max. Dial No. after EFA Signal.
The longest time limit among the following assignments determines the time limit between dialing digits:

- "System-System Timer", External First Digit Time Out
- "System-System Timer", External Inter Digit Time Out
- "System-System Timer", Toll Restriction Guard Time Out

Operation

During a call (extension, outside or doorphone)

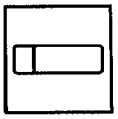


1. Dial the telephone number.

   - DTMF signal is sent to the other party while dialing.

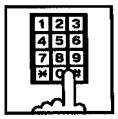
Canceling Tone Through

During an outside call



1. Press the Tone Through Break button.

   - Tone Through is canceled.



2. Dial the telephone number.

   - The dialed number is sent in accordance with the CO line dial mode.
   - When the dialing sequence is finished, Tone Through mode is established again.

H. Paging Features

1.00 Paging

1.01 Paging All Extensions

Description

Paging All Extensions allows any extension user to perform paging on the DN button to the all PITS telephone users at the same time through the built-in speakers of PITS telephones.

The Class of Service of the user's extension determines the extensions that can receive paging. They are assigned to be paged by “System-Class of Service”, Station Paging Access and also if they belong to the same tenant as the performer.
See Section 3-B-7.04 “Paging Group” for details of paging groups.

To perform Paging All Extensions, dial the feature number for “Station Paging” and “0.” To answer paging, dial the feature number for “Station Paging Answer.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (2/2)”, Station Paging Access	9-D-4.02	10-C-8.00
“System-Numbering Plan (03/11)”, Station Paging Station Paging Answer	9-D-6.03	10-C-10.00

Conditions

Single Line Telephones (SLT's) cannot be paged.

If all of the extensions assigned to be paged are being paged by another page, busy tone is returned to the new paging performer.
If any of the extensions is not being paged, paging is executed.

If you hear busy tone when attempting to page, you cannot set Automatic Callback function. Refer to Section 4-C-6.02 “Automatic Callback-Station” for further information.

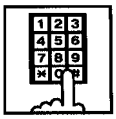
When there is no paging group assigned to “Yes” in “System-Class of Service”, Station Paging Access within the same tenant, the performer hears reorder tone.

Paging is broadcast over idle speakers in SP-PHONEs of on-hook PITS telephones.

Operation

Performing Paging All Extensions

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for "Station Paging," then dial "0."

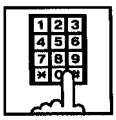
   - After hearing confirmation tone 3, start paging.
   - If your PITS has a display, it shows:

   Group Page All

3. After making the announcement, replace the handset or press the SP-PHONE button.

Answering Paging All Extensions while being paged

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for "Station Paging Answer."

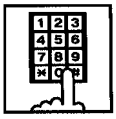
   - After hearing confirmation tone 3, talk to the paging performer.

Transferring a call using Paging All Extensions

During a conversation with an extension or outside party

1. Press the TRANSFER button.

   - The other party is placed on hold. You hear dial tone 1 or 3 or 4.



2. Dial the feature number for "Station Paging" and dial "0."

   - You hear confirmation tone 3.
   - If your PITS has a display, it shows:

   Group Page All

3. Start paging.

4. When an extension answers, replace the handset or press the SP-PHONE button.

   - The held party and the paged extension start conversation.

1.02 Group Paging

Description

Group Paging provides paging on the DN button to a group of extensions specified from eight paging groups through the built-in speakers of their PITSs.

The Class of Service of the user's extension determines the paging groups that can receive paging. They are assigned to be paged by "System-Class of Service", Station Paging Access and also if they belong to the same tenant as the user's extension.
See Section 3-B-7.04 "Paging Group" for details of paging groups.

To execute Group Paging, dial the feature number for "Station Paging" and paging group specifying number. To answer paging, dial the feature number for "Station Paging Answer."

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (2/2)", Station Paging Access	9-D-4.02	10-C-8.00
"System-Numbering Plan (03/11)", Station Paging Station Paging Answer	9-D-6.03	10-C-10.00

Conditions

Single Line Telephones (SLT's) cannot be paged.

If the designated paging group is being paged by another page, busy tone is returned to the new paging performer.
However, he can do paging within the range not overlapping the previous paging range.
For instance, when paging is being done to group 1, paging groups 2 to 8 are available for new paging.

If you hear busy tone when attempting to page, you cannot set Automatic Callback function.
Refer to Section 4-C-6.02 "Automatic Callback-Station" for further information.

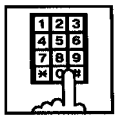
When there is no paging group assigned to "Yes" in "System-Class of Service", Station Paging Access within the same tenant, the performer hears reorder tone.

Paging is broadcast over idle speakers in SP-PHONEs of on-hook PITS sets.

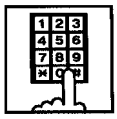
Operation

Performing Group Paging

1. Lift the handset or press the SP-PHONE button.

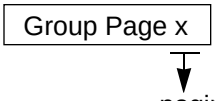


2. Dial the feature number for "Station Paging."



3. Dial the paging group number: 1 to 8.

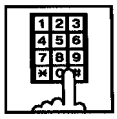
   - After hearing confirmation tone 3, start paging.
   - If your PITS has a display, it shows:



4. After paging, replace the handset or press the SP-PHONE button.

Answering Group Paging while being paged

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for "Station Paging Answer."

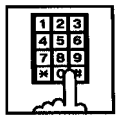
   - After hearing confirmation tone 3, talk to the paging performer.

Transferring a call using Group Paging

During a conversation with an extension or an outside party

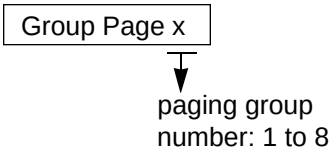
1. Press the TRANSFER button.

   - The other party is placed on hold. You hear dial tone 1 or 3 or 4.



2. Dial the feature number for "Station Paging" and paging group number: 1 to 8.

   - You hear confirmation tone 3.
   - If your PITS has a display, it shows:



3. Start paging.

4. When an extension answers, replace the handset or press the SP-PHONE button.

   - The held party and the paged extension start conversation.

1.03 Paging External Pagers

Description

Allows extension users to perform paging through the external pager belonging to the same tenant by employing the DN button.
If two external pagers are available in the same tenant, two methods are available: one is to page by designating one external pager, and the other is to page using two pagers simultaneously.

To execute this function, dial the feature number for “External Pager” and to answer the paging, dial the feature number for “External Paging Answer”

Even if an external pager is connected to this system, this function does not operate unless “System-Operation”, External Paging 1, 2 is assigned to “Yes.”

If Tenant Service is employed, assigning each external pager to belong to a tenant is possible by “Trunk-Pager & Music Source”, External Pager-Tenant.

Confirmation tone from external pagers is selected by “Trunk-Pager & Music Source”, External Pager-Tone.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, External Paging 1, 2	9-D-1.01	10-C-4.00
“System-Class of Serice (2/2)”, External Paging	9-D-4.02	10-C-8.00
“System-Numbering Plan (03/11)”, External Paging External Paging Answer	9-D-6.03	10-C-10.00
“Trunk-Pager & Music Source”, External Pager-Tenant External Pager-Tone	9-F-2.00	10-C-19.00

Conditions

If the designated pager is being used, busy tone is returned to the paging performer.

If either or both of the pagers in a tenant are being used, it is not possible to page using two pagers. Busy tone is returned to the user.

If external pagers are not assigned in system programming, reorder tone sounds.

The following shows the paging priorities:

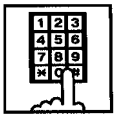
(1)Paging External Pager from an Attendant Console
(2)TAFAS (Trunk Answer From Any Station) (Refer to Section 4-D-4.00 “Trunk Answer From Any Station (TAFAS)-Day Service.”)
(3)Paging External Pager from an extension (this function)
(4)BGM through External Pager

If a lower priority page is active, and a higher priority page is actuated, it overrides the lower one: for instance, if Paging External Pager is overridden by another higher priority, reorder tone is returned to the performer of Paging External Pager. If TAFAS signal or BGM is overridden by another higher priority, it is interrupted and starts again when the higher priority is finished.

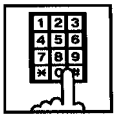
Operation

Paging External Pagers

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for "External Paging."



3. Dial the number for specifying an external pager or pagers: 0, 1 or 2.

   0: specifies external pagers 1 and 2.
   1: specifies external pager 1.
   2: specifies external pager 2.

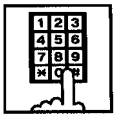
   - After you hear confirmation tone 3, start paging through the external pager(s).
   - If your PITS has a display, it shows:

   External page xxx
   The number which specifies an external pager or pagers:
   All: specifies the external pagers 1 and 2.
   1: specifies external pager 1.
   2: specifies external pager 2.

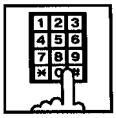
4. After paging, replace the handset or press the SP-PHONE button.

Answering the external paging announcement

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for "External Paging Answer."



3. Dial the number of the external pager: 1 or 2.

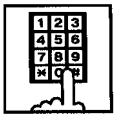
   - After you hear confirmation tone 3, talk to the caller who made the page.

Transferring a call using Paging External Pagers

During a conversation with an extension or an outside party

1 Press the TRANSFER button.

   - The other party is placed on hold. You hear dial tone 1 or 3 or 4.



2. Dial the feature number for "External Paging" and external pager specifying number; 0, 1 or 2.

   0: specifies external pagers 1 and 2
   1: specifies external pager 1
   2: specifies external pager 2

   - You hear confirmation tone 3.
   - If your PITS has a display, it shows:

   External page xxx
   Pager specifying number

3. Start paging.

4. When an extension answers, replace the handset or press the SP-PHONE button.

   - The held party and the paged extension start conversation.

1.04 Paging All Extensions and External Pagers

Description

Paging All Extensions and External Pagers offers both Paging All Extensions and Paging External Pagers at the same time. It provides paging through the preprogrammed external pagers and the built-in speakers in PITSs of the extensions within the range of the tenant that the user belongs to.

The user's “System-Class of Service”, Station Paging Access determines the paging groups of the extensions that can receive paging and also External Paging determines the external pagers that can receive paging.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (2/2)”,	9-D-4.02	10-C-8.00
Station Paging Access		
External Paging 1, 2		
“System-Numbering Plan (03/11)”,	9-D-6.03	10-C-10.00
External Paging		
Station Paging		
External Paging Answer		
Station Paging Answer		

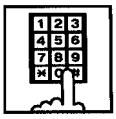
Conditions

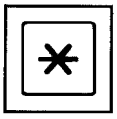
Refer to Section 4-H-1.01 “Paging All Extensions” and Section 4-H-1.03 “Paging External Pagers.”

Operation

Performing Paging All Extensions and External Pagers

1. Lift the handset or press the SP-PHONE button.





2. Dial the feature number for Station Paging “42” (default), or the feature number for External Paging “41” (default), then dial “#.”

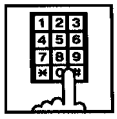
   - After hearing confirmation tone 3, start paging.
   - If your PITS has a display, it shows:

All Call Page

3. After paging, replace the handset or press the SP-PHONE button.

Answering paging while being paged

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for "Station Paging Answer," or the feature number for "External Paging Answer" and the number of the external pager: 1 or 2.

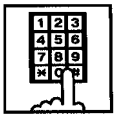
   • After hearing confirmation tone 3, talk to the paging performer.

Transferring a call using Paging All Extensions and External Pagers

During a conversation with an extension or an outside party

1. Press the TRANSFER button.

   • The other party is placed on hold. You hear dial tone 1 or 3 or 4.



2. Dial the feature number for "Station Paging" or the feature number for "External Paging," then dial "* ."

   • You hear confirmation tone 3.
   • If your PITS has a display, it shows:

All Call Page

3. Start paging.

4. When an extension answers, replace the handset or press the SP-PHONE button.

   • The held party and the paged extension start conversation.

Note:

• The following tones for paging can be eliminated by WS4 command (See Section 10-C-62.00 "World Select 4 (WS4)").

  — Beep tone and confirmation tone 3 at paged extension.
  — Confirmatione tone 3 at paging originator's extension.

2.00 Background Music (BGM) through External Pager

Description

The system can provide up to two external music sources. The music source can be broadcast as background music (BGM) through external pagers.

Starting or stopping BGM can be executed by the operator 1 (Attendant Console or extension user) in the same tenant that the external pagers and external music equipment belong to. For executing this function by PITS, use the DN button.

To start and stop this function, use the same feature number for “BGM Through External Pager.”
Dialing the feature number while BGM is on stops BGM, and reversely starts BGM while BGM is off.

To utilize this feature, first connect external music equipments and external pagers to the system, then assign “System-Operation”, External Music Source 1, 2 and External Paging 1, 2 to “Yes.”

If Tenant Service is employed, assigning each external music equipment and external pager to a tenant is possible by using “Trunk-Pager & Music Source”, External Pager-Tenant and Music Source-Tenant.

Assign “Trunk-Pager & Music Source”, External Pager-BGM to “Yes” to use this function. This assignment can be done to each external pager.

Also assign “Trunk-Pager & Music Source”, Music Source-For Use to either “BGM” or “Hold & BGM.” This assignment can be done to each external music equipment individually.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”,	9-D-1.01	10-C-4.00
External Paging 1, 2		
External Music Source 1, 2		
“System-Numbering Plan (08/11)”,	9-D-6.08	10-C-10.00
BGM Through External Paging		
“Trunk-Pager & Music Source”,	9-F-2.00	
External Pager-Tenant		10-C-19.00
External Pager-BGM		
Music Source-Tenant		10-C-20.00
Music Source-For Use		

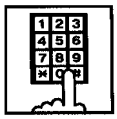
Conditions

This function is effective when an external pager and an external music equipment are connected and programming has been completed. Otherwise, the user hears reorder tone after executing the operation to activate this function.

Operation

Turning BGM on when BGM is off

1. Lift the handset or press the SP-PHONE button.



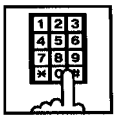
2. Dial the feature number for “BGM Through External Pager.”
   - After you hear confirmation tone 2, BGM sounds from the external pager(s).
   - If your PITS has a display, it shows:

   External BGM On

3. Replace the handset or press the SP-PHONE button.

Turning BGM off when BGM is on

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for “BGM Through External Pager.”
   - After you hear confirmation tone 2, BGM from the external pager(s) stops.
   - If your PITS has a display, it shows:

   External BGM Off

3. Replace the handset or press the SP-PHONE button.

I. Other Features

1.00 Night Service

1.01 Universal Night Answer (UNA)

Description

Allows any extension user in the system to answer the incoming CO calls ringing at an external pager, by dialing the feature number for "Night Answer 1 or 2."

To activate this feature, set "Group-Trunk Group" Incoming Mode (Night) to FIXED or FLEXIBLE and "Trunk-CO Line" Night Answer Point to UNA 1 or UNA 2. UNA 1 is associated with External Pager 1 and UNA 2 is associated with External Pager 2. All CO lines that belong to this trunk group are covered by this assignment.

External pager must be connected to the system beforehand.
Up to two external pagers can be connected to the system.
To answer a call ringing at external pager 1, dial the feature number for "Night Answer 1," and to answer a call ringing at external pager 2, dial the feature number for "Night Answer 2."
For further information about external pager assignment, refer to Section 4-H-1.03 "Paging External Pagers."

Call handling in UNA is identical to TAFAS. The difference is that TAFAS is available in day mode and UNA is available in night mode.
For further information about TAFAS, refer to section 4-D-4.00 "Trunk Answer From Any Station (TAFAS)-Day Service."

Programming

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (1/2)", Incoming Mode (Night)	9-E-1.01	10-C-14.00
"Trunk-CO Line", Night Answer Point	9-F-1.00	10-C-18.00
"System-Numbering Plan (03/11)", Night Answer 1 Night Answer 2	9-D-6.03	10-C-10.00

Conditions

To execute the system administration from a remote location at night, select "RMT" for "Trunk-CO Line" Night Answer Point assignment.
For further information about remote administration, refer to Section 14-B-2.00 "System Administration from a Remote Location."

If tenant service is employed, each tenant (1 and 2) can have unique Night Service arrangement individually.
The affiliation of each external pager is determined by the system programming in "Trunk-Pager & Music Source", External Pager-Tenant.
The extension user cannot answer the UNA call ringing at an external pager in the different tenant.

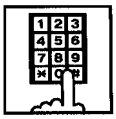
Operation

Answering incoming CO calls ringing at an external pager

An incoming CO call is ringing at an external pager.

1. Lift the handset or press the SP-PHONE button.

   • You hear dial tone 1 or 3 or 4.



2. If a call is ringing at external pager 1: Dial the feature number for Night Answer 1 "45" (default).

   If a call is ringing at external pager 2: Dial the feature number for Night Answer 2 "46" (default).

   • You hear confirmation tone 3.

3. Start conversation.

Note:
• Confirmation tone for UNA (TAFAS) can be eliminated by WS4 command (See Section 10-C-62.00 "World Select 4 (WS4)").

1.02 Flexible Night Service

Description

Flexible Night Service allows the Operator 1 (Attendant Console or extension user) to change the assigned night answer destination on a CO line basis by dialing the feature number for "Flexible Night Service."

To utilize this feature, set "Group-Trunk Group" Incoming Mode (Night) to FLEXIBLE. All CO lines that belong to this trunk group are covered by this assignment.
If FIXED is selected for the above setting, the assigned night answer destination can not be changed by the Operator 1.

Call handling in Flexible and Fixed night service is almost the same.

The difference is:

Flexible	The Operator 1 (Attendant Console or Extension) can change the night answer destination.
Fixed	A group of extensions (Night Answer Group) can be assigned as the destination of one or more CO lines in night mode

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (08/11)", Flexible Night Service	9-D-6.08	10-C-10.00
"Group-Trunk Group (1/2)", Incoming Mode (Night)	9-E-1.01	10-C-14.00
"Trunk-CO Line", Night Answer Point	9-F-1.00	10-C-18.00
"Night Answer Group (NAG)"	—	10-C-59.00

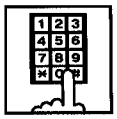
Conditions

If tenant service is employed, the night answer destination can only be changed for a CO line in the same tenant by the Operator 1.

Operation

Changing a night answer destination to an extension

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Flexible Night Service "72" (default) and CO physical number and destination extension number.

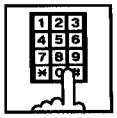
   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

   NAP: Txxxx => Exxxx
   (Txxxx: Physical number; Exxxx: Extension number)

3. Replace the handset or press the SP-PHONE button.

Changing a night answer destination to the remote maintenance port

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Flexible Night Service "72" (default) and CO physical number and FDN for remote.

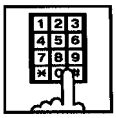
   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

   NAP: Txxxx => RMT
   (Txxxx: Physical number)

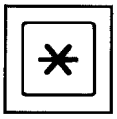
3. Replace the handset or press the SP-PHONE button.

Changing a night answer destination to a UNA (Universal Night Answer)

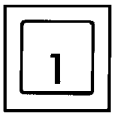
1. Lift the handset or press the SP-PHONE button.



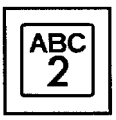
2. Dial the feature number for Flexible Night Service “72” (default) and CO physical number, * and 1 for external pager 1 or * and 2 for external pager 2.



- You hear confirmation tone 1 or 2.
- If your PITS has a display, it shows:



or



NAP: Txxxx => UNAx

Physical number

1 or 2

3. Replace the handset or press the SP-PHONE button.

1.03 Switching of Day/Night Mode

Description

It is assignable to switch Day/Night mode either automatically at pre-assigned time or manually by the Operator 1 (Attendant Console or Extension) at any time desired.
If Manual Switching mode is assigned, the Operator 1 must dial the feature number for “Night Mode Set” for night service or “Night Mode Cancel” for day service.
If Auto Switching mode is assigned, the system will switch the day and night modes at the programmed time each day.

To utilize Auto Switching mode, set “System-Operation (3/3)” Night Service to “Auto” and assign desired mode switching time to “Auto Start Time” on a per day of the week basis.
To utilize Manual Switching mode, set “System-Operation (3/3)” Night Service to “Manual.”

The Operator 1, however, can override the Auto Mode setting, that is Manual Mode is established, by dialing the feature number for “Night Service Manual Mode Set.” To restore the Auto mode, the Operator 1 must dial the feature number for “Night Service Manual Mode Cancel.”

If tenant service is employed, night service assignment unique to each tenant (Tenant 1 and Tenant 2) can be programmed individually.
In this case, the assignment in “System-Operation (3/3)” is applied to Tenant 1 and the assignment in “System-Tenant” is applied to Tenant 2.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (3/3)”,	9-D-1.03	10-C-4.00
Night Service		
Auto Start Time		
“System-Tenant”,	9-D-2.00	10-C-5.00
Night Service (Tenant 2)		
Auto Start Time		
“System-Numbering Plan (08/11)”,	9-D-6.08	10-C-10.00
Night Mode Set		
Night Mode Cancel		
Night Service Manual Mode Set		
Night Service Manual Mode Cancel		

Conditions

If Auto Start Time on a certain day is not assigned, the current mode is continued until a new start time is encountered.

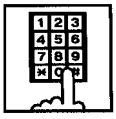
If the Start Time for Day mode and Night mode on the same day are set identically, the current mode is continued.

If Auto Start Time assignment is not programmed at all, the current mode is continued. In other words if the current mode is Day then Day Mode is continued, and if the current mode is Night then Night Mode is continued.

Operation

Switching Day mode to Night mode

1. Lift the handset or press the SP-PHONE button.



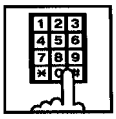
2. Dial the feature number for "Night Mode Set."
   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

     Night Mode

3. Replace the handset or press the SP-PHONE button.

Switching Night mode to Day mode

1. Lift the handset or press the SP-PHONE button.



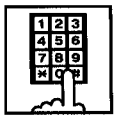
2. Dial the feature number for "Night Mode Cancel."
   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

     Day Mode

3. Replace the handset or press the SP-PHONE button.

Switching Auto mode to Manual mode

1. Lift the handset or press the SP-PHONE button.



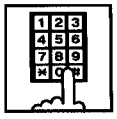
2. Dial the feature number for "Night Service Manual Mode Set."
   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

     Day/Night : Man

3. Replace the handset or press the SP-PHONE button.

Switching Manual mode to Auto mode

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for "Night Service Manual Mode Cancel."
   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

     Day/Night : Auto

3. Replace the handset or press the SP-PHONE button.

2.00 Account Code Entry

Description

Account Code Entry is used to identify incoming and outgoing CO calls for accounting and billing purposes.
Entry of the code is appended to the SMDR call record and can be used later.
The account code can include up to 10 digits.
The validity of the entered account code is not checked by the system.

Entry of account codes can be forced or optional. In the forced mode, the account code must be entered before making an outgoing CO call.
In the option mode, enter the account code, if necessary.

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (1/2)", Forced Account Code Mode	9-D-4.01	10-C-7.00

Conditions

Only numerical characters "0 to 9" can be entered as account codes.

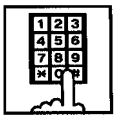
Entering an account code over 10 digits sounds the alarm tone.

Be sure to enter "#" after dialing a code, since "#" delimits the code.

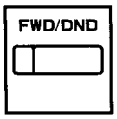
Operation

Entering an account code when calling an outside party in the Forced mode

1. Lift the handset or press the SP-PHONE button.
   - You hear dial tone1 or 3 or 4.

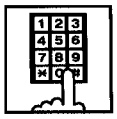


2. Dial the feature number for selecting a CO line.
   - You hear dial tone 1.
   - The indicator on the FWD/DND button flashes.

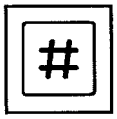


3. Press the FWD/DND button.
   - You hear dial tone 2.
   - The indicator on the FWD/DND button lights in red.
   - If your PITS has a display, it shows:

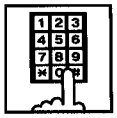
     Enter ACCNT Code



4. Dial the account code.
   - Up to 10 digits can be entered as an account code.



5. Dial "#."
   - The indicator light on the FWD/DND button goes out.
   - You hear dial tone 1.

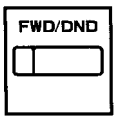


6. Dial the telephone number of the outside party.

Entering an account code when receiving a call from an outside party in the Forced mode

1. Press the handset or press the SP-PHONE button.

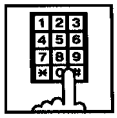
   • The indicator on the FWD/DND button flashes.
   • Talk to the other party



2. Press the FWD/DND button.

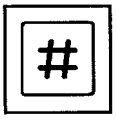
   • The indicator on the FWD/DND button lights.
   • If your PITS has a display, it shows:

   Enter ACCNT Code



3. Dial the account code.

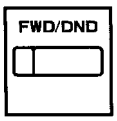
   • Maximum digits for an account code is 10.



4. Dial “#.”

   • The indicator light on the FWD/DND button goes out.

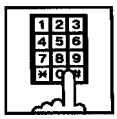
Entering an account code after calling an outside party or after receiving a call from an outside party in the Option mode



1. Press the FWD/DND button during a conversation with the outside party.

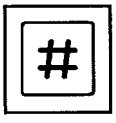
   • The indicator on the FWD/DND button lights.
   • If your PITS has a display, it shows:

   Enter ACCNT Code



2. Dial the account code.

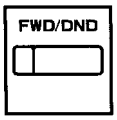
   • Maximum digits for an account code is 10.



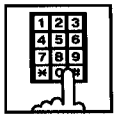
3. Dial “#.”

   • The indicator light on the FWD/DND button goes out.

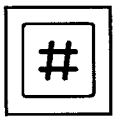
Correcting an error after dialing a wrong account code



1. Press the FWD/DND button.



2. Dial the correct account code.



3. Dial “#.”

(Supplement)

Type 50 and KX-T7050 PITS telephones are not provided with the FWD/DND button. Only the PF3 button on them can be programmed to be the FWD/DND button.
Refer to Section 9-G-1.03 “Station (3/3)” and Section 12-C-2.00 “PF Button Assignment” for further information.

3.00 Timed Reminder (Alarm Clock)

Description

The extension user can use his or her PITS telephone as an alarm clock.
When this feature is set, alarm tone will ring for 2 minutes at the programmed time from the built-in speaker of your PITS telephone.

Wake-up Call

By going off-hook, the extension user can hear the wake-up message, if it has been recorded beforehand.
The extension user may hear BGM or intermittent tone (dial tone 2) instead of the wake-up message.
(See Section 3-F-13.00 “Timed Reminder with OGM (wake-up call).”)

This feature can be set to operate only once or everyday at a specified time.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (06/11)”, Timed Reminder Confirm Timed Reminder Set Timed Reminder Cancel	9-D-6.06	10-C-10.00

Conditions

(1) What if the extension is busy or off-hook at the programmed time?

Alarm tone will ring after the extension goes on-hook.

(2)What if a call comes in when alarm tone is ringing?

The call comes in on an extension (call indication is shown)* but does not ring.
It will ring after alarm tone stops to ring.

*The caller hears busy tone if the call is coming to a PDN button and the extension has only one PDN.

(3)Remote Timed Reminder

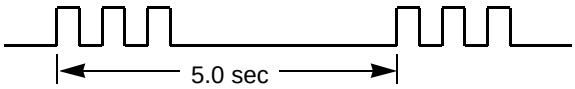
This feature can also be set by the Operator 1 or 2 to any extension.
(See Section 4-I-14.00 and Section 6-J-13.00.)

(4)Newly programmed time overrides the old one.

Only the latest setting is valid at a single extension whether it was set by the extension itself or by the operator.

(5)Tone Pattern

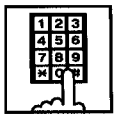
Alarm tone sounds in the following manner:



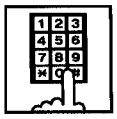
Operation

Setting the alarm time

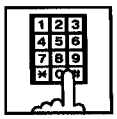
1. Lift the handset or press the SP-PHONE button.



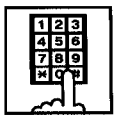
2. Dial the feature number for Timed Reminder set “* 51” (default).



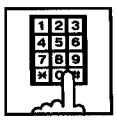
3. Dial “hour” with two digits: 01 to 12.



4. Dial “minute” with two digits: 00 to 59.



5. Dial “0” for a.m. or dial “1” for p.m..



6. Dial “0” for Timed Reminder-one time, or dial “1” Timed Reminder-every day.

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

<Example>

Executing once at 10:15 a.m.:

Alarm 10:15 AM

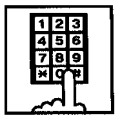
Executing every day at 10:15 a.m.:

Alarm 10:15 AM*

7. Replace the handset or press the SP-PHONE button.

Canceling the alarm time programmed

1. Lift the handset or press the SP-PHONE button.



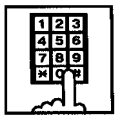
2. Dial the feature number for Timed Reminder Cancel “#5” (default).
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

Alarm Cancelled

3. Replace the handset or press the SP-PHONE button.

Confirming the alarm time programmed (PITS with display only)

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Timed Reminder Confirm “* 50” (default).
   - The display on your PITS shows:

   When no time is set:

Alarm Not Stored

If executing every day at 9:00 a.m. is preset:

<Example>

Alarm 9:00 AM *

3. Replace the handset or press the SP-PHONE button.

(Supplement)

When a user executes step 2 by a PITS set without display, reorder tone is heard.

To stop the ringing of alarm tone

When the preset time comes, alarm tone sounds. If your PITS has a display, it shows:

<Example>

Alarm 5:00 PM

1. Lift the handset or press the SP-PHONE button.
   - Alarm tone stops and you hear a wake-up message or BGM, or “intermittent tone” (dial tone 2).*

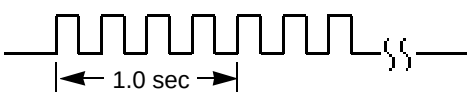
2. Replace the handset or press the SP-PHONE button.

* This is determined by the system programming. Refer to Section 3-F-13-00 “Timed Reminder with OGM (Wake-up Call).”

(Supplement)

In step 1, if you press any button (including dial keypad) except SP-PHONE without going off-hook, alarm tone stops and then no tone sounds.

Dial tone 2 in step 1 sounds in the following timing:



4.00 Background Music (BGM)

Description

Background Music can be supplied to any PITS telephone user in the system through the built-in speaker of the PITS, when the PITS is on-hook. An external music source (customer-supplied) should be connected to the system beforehand.

Lifting the handset or pressing the SP-PHONE button stops BGM temporarily.
Going back on-hook restarts BGM.

To set and cancel this function, use the same feature number “1.”
While BGM is set, dialing “1” cancels BGM, reversely it sets BGM when BGM is not set.

To execute this function, connect an external music source, then set “System-Operation”, External Music Source 1, 2 to “Yes” and set “Trunk-Pager & Music Source”, Music Source-For Use to either “BGM” or “Hold & BGM.”
This setting (BGM or Hold & BGM) is assignable to each external pager.

Programming

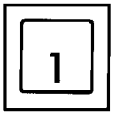
System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, External Music Source 1, 2	9-D-1.01	10-C-4.00
“Trunk-Pager & Music Source”, Music Source-Tenant Music Source-For Use	9-F-2.00	10-C-20.00

Conditions

If Tenant Service is employed, the affiliation of the external pager is determined by the following system programming.
“Trunk-Pager & Music Source”, Music Source-Tenant.

Operation

Hearing BGM



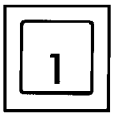
1. Dial “1” in on-hook status.

   - BGM sounds from the built-in speaker of PITS.
   - If your PITS has a display, it shows:

     BGM On

Canceling BGM

While hearing BGM



1. Dial “1” in on-hook status.

   - BGM from the built-in speaker of PITS stops.
   - If your PITS has a display, it shows:

     BGM Off

5.00 Secret Dialing

Description

When using the PITS with a display, Secret Dialing provides concealing all or part of the registered telephone numbers that appear on the display.
The telephone numbers are registered by “System-Speed Dial-System” or stored into Programmable Feature buttons on PITS and DSS consoles. When storing a number, bracket the secret part that you want to hide with [ ]. Then the part does not appear on the display when the number is sent.

It is assignable to print out the secret part onto SMDR (Station Message Detail Recording) or not by “System-Operation”, Print Secret Dial.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (2/3)”, Print Secret Dial	9-D-1.02	10-C-4.00
“System-Speed Dialing-System”, Dial	9-D-8.00	10-C-12.00

PITS Station Programming	Reference
DN (Directory Number) Button Assignment	12-C-1.00
PF (Programmable Feature) Button Assignment	12-C-2.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

Conditions

The feature numbers for selecting a CO line can not be concealed by this feature.
If the telephone number “9-1-[201]-431-2111” is stored in speed dialing code 01 by “System-Speed Dial-System”, the following message appears on the display when call is made:

9-1 - • • • - 431-2111

When storing a speed dialing code, entering “ [” only without entering “] ” causes all the digits entered after “ [” to be hidden.

Operation

None

6.00 Data Line Security

Description

Used to maintain the communication properly by prohibiting various tones such as call waiting tone or Held Call Reminder from sounding at the extension in data communication mode. It also prohibits other extensions from executing overriding functions such as Busy Override.

To assign Data Line Security, assign "Extension-Station", Data Line Security to "Yes."

Setting or canceling this function is executed using the feature number for "Data Line Security Set" or "Data Line Security Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (05/11)", Data Line Security Set Data Line Security Cancel	9-D-6.05	10-C-10.00
"Extension-Station (1/3)", Data Line Security	9-G-1.01	10-C-22.00

Conditions

Use the PDN button to set and cancel Data Line Security mode.

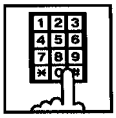
Assigning Data Line Security always offers the user conversation privacy unless Privacy Release is executed.

If there is a conversation between the extension setting Data Line Security and the extension not setting it, Data Line Security applies to the both extensions.

Operation

Assigning Data Line Security

1. Lift the handset or press the SP-PHONE button.



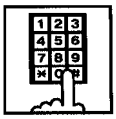
2. Dial the feature number for Data Line Security Set "65+" (default).
   - You hear confirmation tone 1 or 2 then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     Data Mode On

3. Replace the handset or press the SP-PHONE button.

Canceling Data Line Security

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Data Line Security Cancel "65#" (default).
   - You hear confirmation tone 1 or 2 then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     Data Mode Off

3. Replace the handset or press the SP-PHONE button.

7.00 Absent Message Capability

Description

Provides an absent message on the display of a calling extension if the called extension has assigned an absent message.

An absent message appears only on the PITS telephones provided with the display.

There are six fixed and 10 programmable absent messages that are common to the system and can be assigned by system programming.
The following are the six fixed messages (the "x" means a parameter to be entered when assigning a message at individual stations):

1) Will Return Soon
2) Gone Home
3) In a Meeting
4) Back At x x : x x x x
   - x x → hour
   - x x → minute
   - x x → a.m/p.m.
5) Out Until x x / x x
   - x x → month
   - x x → day
6) At Ext x x x x
   - x x x x → directory number (three or four digits)

To set and cancel this function at individual PITS sets, use the feature numbers for "Absent Message Set" and "Absent Message Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Tenant", Absent Message Boundary	9-D-2.00	10-C-5.00
"System-Numbering Plan (06/11)", Absent Message Set Absent Message Cancel	9-D-6.06	10-C-10.00
"System-Absent Message", Fixed Message Flexible Message	9-D-9.00	10-C-13.00

Conditions

If Tenant Service is employed, 10 programmable messages can be split between two tenants by assigning the boundary number in "System-Tenant", Absent Message Boundary.
Six fixed absent messages are shared with two tenants.

An extension user can select only one message from six fixed and 10 programmable messages to assign at a time. Setting multiple messages is impossible.

When setting fixed messages 4), 5), 6) at a station, the system checks the parameters entered : for example, the parameters of "hour," "minute," "a.m./p.m." are checked in fixed message 4). In case of a wrong entry, the user hears reorder tone.

When setting a flexible message by the system programming, up to six parameters: "%" can be entered. These are used to allow an extension user to enter the desired parameters later at his PITS set.

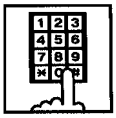
If a flexible message contains any parameter to be entered, use "0 to 9", " * " and "#."
If the user enters fewer or more parameters than the assigned parameters, or enters characters except "0 to 9" "* " and "#," reorder tone is heard.

When an extension has set both an absent message and Call Forwarding-No Answer feature, Call Forwarding-No Answer is activated when the extension is called.
Refer to Section 4-F-2.03 "Call Forwarding-No Answer" for further information.

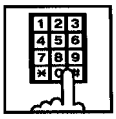
Operation

Setting fixed message 1), 2), or 3)

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for “Absent Message Set.”



3. Dial “01” for fixed message 1), or dial “02” for fixed message 2), or dial “03” for fixed message 3).

   - You hear confirmation tone 1 or 2, then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

   When setting fixed message 1):

Will Return Soon

   When setting fixed message 2):

Gone Home

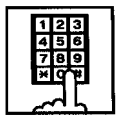
   When setting fixed message 3):

In a Meeting

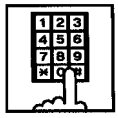
4. Replace the handset or press the SP-PHONE button.

Setting fixed messages 4), 5) or 6)

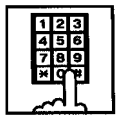
1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for “Absent Message Set.”



3. Dial “04” for fixed message 4), or dial “05” for fixed message 5), or dial “06” for fixed message 6).



4. Dial “TIME” for fixed message 4), or dial “DATE” for the fixed message 5), or dial “directory number” for fixed message 6) as follows:

   Input format
   for “TIME” : HH MM AM/PM
   01 to 12 (hour)
   00 to 59 (minute)
   0 for a.m., 1 for p.m.

   Input format for “DATE” : MM DD
   01 to 12 (month)
   01 to 31 (day)

   Input format for “directory number”: three or four digits.

   - You hear confirmation tone, then dial tone.
   - If your PITS has a display, it shows:

   When setting fixed message 4):

Back at x x : x x x x

   When setting fixed message 5):

Out Until x x / x x

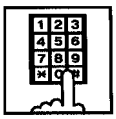
   When setting fixed message 6):

At Ext. x x x x

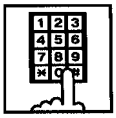
5. Replace the handset or press the SP-PHONE button.

Setting a flexible message

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for “Absent Message Set.”

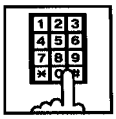


3. Dial the two digit message number: 07 to 16.
   If the message requires any parameters, enter all the parameters.
   - You hear confirmation tone 1 or 2, then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows the entered message.

4. Replace the handset or press the SP-PHONE button.

Canceling the assigned message

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for “Absent Message Cancel.”
   - You hear confirmation tone 1 or 2 then dial tone 1 or 3 or 4.

3. Replace the handset or press the SP-PHONE button.

8.00 Message Waiting

Description

Allows an extension user to indicate to another extension that a message is waiting for him or her, by turning on the MESSAGE indicator (button) on the called extension.
The extension user who received the message waiting indication can call back the message sender by simply going off-hook and pressing the red lit MESSAGE indicator (button).

This feature is useful when the called extension is busy or does not answer the call.

Up to 500 message waiting indications can be set for the whole system.

Programming

System Programming	Reference	
	VT	Dumb
"System-Tenant", Message Waiting Boundary	9-D-2.00	10-C-5.00
"System-Numbering Plan (07/11)", Message Cancel	9-D-6.07	10-C-10.00
"Extension-Station (2/3)", DN Key Type	9-G-1.02	10-C-24.00
"Extension-Station (3/3)", DSS Key Type	9-G-1.03	10-C-26.00

Conditions

1. Suitable Telephones:
   (1) Message Sender
   - Attendant Console
   - A PITS telephone with a MESSAGE button.*
   - Any Single Line Telephone

   (2) Message Receiver
   - A PITS telephone with a MESSAGE button.*
   - A Single Line Telephone with MESSAGE lamp.

* Refer to <Supplement> on page 4-I-17 for further information.

2. Reorder Tone
   A caller who attempts to leave message waiting indication may hear the reorder tone in the following cases:
   (1) Receiver's extension is:
   - A PITS telephone without a MESSAGE button.
   - A Single Line Telephone without MESSAGE lamp.

   (2) The maximum number of message waiting indications available for the system or tenant 1/2 has been assigned.

   If your PITS has a display, it shows:

   MW Not Accepted

3. Tenant Service
   The maximum number of message waiting indications available for Tenant 1 and 2 is determined by "System–Tenant" Message Waiting Boundary.

4. Setting of the multiple message waiting indications
   (1) More than one message sender can leave message waiting indications to the same extension at the same time.
   (2) Even if the same message sender sets message waiting indications to the same extension more than once, this leaves only one message on the called extension.

5. The MESSAGE indicator on the message receiver's extension will be turned off when:
   (1) The message receiver calls back the message sender by pressing the red lit MESSAGE button, and it was answered by the message sender (or by another extension using Call Pickup or an SDN button).*1
   (2) Message waiting indication is canceled by the message sender.*1
   (3) Message waiting indications are canceled by the message receiver.*2

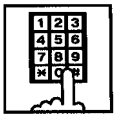
*1 The indicator may not be turned off, if there are other message waiting indications sent by other extensions.
*2 All message waiting indications are canceled at once.

Operation by Caller

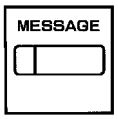
(At message sender's extension)

Setting the Message Waiting Indication

1. Lift the handset or press the SP-PHONE button.



2. Dial the extension number of the other party.
   - You hear ringback tone, or busy tone 1 or 2, or DND tone.

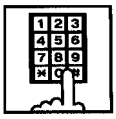


3. Press the MESSAGE button.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - The MESSAGE indicator of the other extension lights.

4. Replace the handset or press the SP-PHONE button.

Canceling the Message Waiting Indication on receiver's extension set by a caller

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Message Cancel “#9” (default) and the extension number of the message receiver successively.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - If the other extension received only one message, the MESSAGE indicator of the other extension goes out.

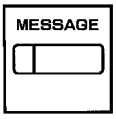
3. Replace the handset or press the SP-PHONE button.

Operation by Receiver

(At message receiver's extension)

Calling back the message sender

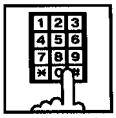
1. Lift the handset or press the SP-PHONE button.



2. Press the MESSAGE button that is lit.
   - You hear ringback tone. When the message sender answers, start conversation.
   - If you received multiple messages, calling back the first message sender is performed. At the conclusion of the conversation, the first message is canceled.
   - At the conclusion of the conversations with all the message senders, the MESSAGE indicator goes out.

Canceling all Message Waiting Indications on your extension

1. Lift the handset or press the SP-PHONE button.

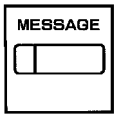


2. Dial the feature number for Message Cancel “#9” (default)and your own extension number in succession.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - The MESSAGE indicator on receiver's extension goes out.

3. Replace the handset or press the SP-PHONE button.

Confirming the message sender by the message receiver (for PITS with the display only) and changing the calling order if multiple messages are left (for all PITSs).

In on-hook condition or SP-PHONE off



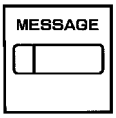
1. Press the MESSAGE button that is lit.

   - If your PITS has a display, it shows:
     When the message sender is an extension user:
     <Example>

1234 : Tony

     When the message sender is an Attendant Console:
     <Example>

ATT Console

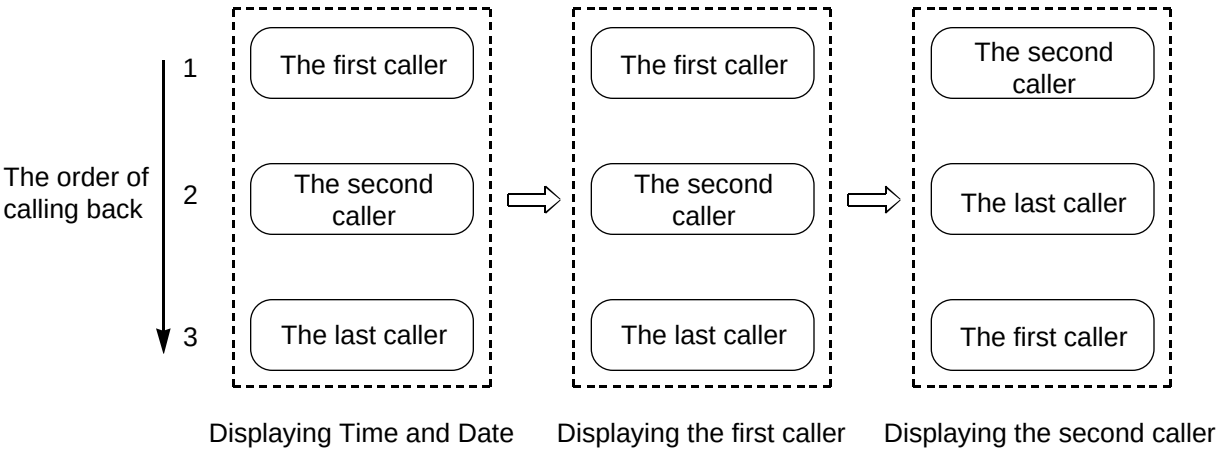


2. Press the MESSAGE button that is lit again.

   - If multiple messages are left, the second message sender is displayed. The calling order of the first message sender becomes the last, and the second message sender becomes the first.

(Note)

Repeating step 2 displays the message sender on the display of PITS type 30 one by one in receiving order.
The calling order also changes at the same time.
The illustration below shows the change at every pressing of the MESSAGE button:
" ⇨ " in the illustration means pressing of the MESSAGE button.



<Supplement>

A MESSAGE button is not provided on the PITS's listed below, but can be assigned to the assignable buttons respectively, as follows:

PITS not provided with MESSAGE button	Assignable Buttons
KX-T30830	DSS 8
KX-T30820, KX-T30850	DN 3
KX-T61620, KX-T61630, KX-T61650	DN 6

9.00 Electronic Station Lock Out

Description

Electronic Station Lock Out allows an extension user to prohibit other extension users from making outgoing CO calls from his or her extension.

Any three-digit number (000 to 999) can be used as a lock code.

To execute this function, assign “System-Class of Service”, Station Lock to “Yes.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, Station Lock	9-D-4.01	10-C-7.00
“System-Numbering Plan (07/11)”, Station Lock Set Station Lock Cancel	9-D-6.07	10-C-10.00

Conditions

Set and cancel Electronic Station Lock Out on the PDN button.

Both Operator 1 and 2 (extension user or Attendant Console) can lock and unlock the other extensions remotely without dialing the lock code as shown in the following format.

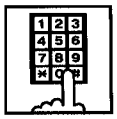
[Remote Station Lock cancel + Extension no.]

Once locked by an Operator, the extension user cannot unlock it.
See Section 4-I-11.00 “Remote Station Feature Control” for the details.

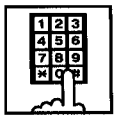
Operation

Setting Electronic Station Lock Out

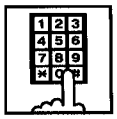
1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Station Lock Set “✻6” (default).



3. Dial the lock code: 000 to 999.



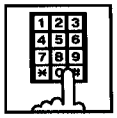
4. Dial the same lock code again.
   - You hear confirmation tone 2.
   - If your PITS has a display, it shows:

     Locked No. : xxx
     lock code

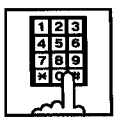
5. Replace the handset.

Canceling Electronic Station Lock Out

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Station Lock Cancel “#6” (default).



3. Dial the lock code.
   - You hear confirmation tone 2.
   - If your PITS has a display, it shows:

     Unlocked

4. Replace the handset.

10.00 Assigned Feature Clear

Description

Allows an extension user to clear the following features assigned on it by dialing the feature number for “Station Program Clear” :

(a) Call Forwarding/Do Not Disturb
(b) Absent Message
(c) Timed Reminder

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (07/11)”, Station Program Clear	9-D-6.07	10-C-10.00

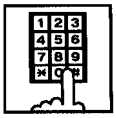
Conditions

Execute Assigned Feature Clear on the PDN button.

Operation

1. Lift the handset or press the SP-PHONE button.

   - You hear dial tone 1 or 3 or 4.
   - The indicator on the PDN button lights in green.



2. Dial the feature number for Station Program Clear “###” (default).

   - You hear confirmation tone 3.
   - If your PITS has a display, it shows:

     Ext Data Clear

3. Replace the handset.

11.00 Remote Station Feature Control

Description

Allows the Operator 1 and 2 (extension user or Attendant Console) to cancel or set the following features assigned to each extension:

Features to be canceled:
- DND (Do Not Disturb)
- Electronic Station Lock Out
- FWD (Call Forwarding)

(It is also possible to cancel FWD temporarily.)

Features to be set:
- DND (Do Not Disturb)
- Electronic Station Lock Out

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (08/11)", Remote Station Lock Set Remote Station Lock Cancel Remote DND Set Remote DND Cancel Remote FWD Cancel Remote FWD Cancel-OneTime	9-D-6.08	10-C-10.00

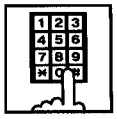
Conditions

When an extension is locked by the operator, unlocking by the locked extension itself is impossible.

Operation

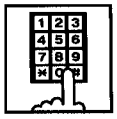
Setting/canceling Do Not Disturb to/from an extension

1. Lift the handset or press the SP-PHONE button.



2. Setting : Dial the feature number for Remote DND Set "74#" (default).

   Canceling : Dial the feature number for Remote DND Cancel "74#" (default).



3. Dial the directory number of the extension.

   - Confirmation tone 1 or 2 sounds.
   - If your PITS has a display, it shows:

   When setting:

   DND Set: E xxxx

   Extension Number

   When canceling:

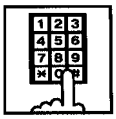
   DND Cancel: E xxxx

   Extension Number

4. Replace the handset or press the SP-PHONE button.

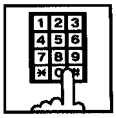
Setting/canceling Electronic Station Lock Out to/from an extension

1. Lift the handset or press the SP-PHONE button.



2. Setting : Dial the feature number for “Remote Station Lock Set.”

   Canceling : Dial the feature number for “Remote Station Lock Cancel.”



3. Dial the directory number of the extension.

   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

   When setting:

   Locked: E xxxx

   Extension number

   When canceling:

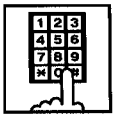
   Unlocked: E xxxx

   Extension number

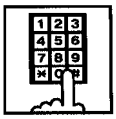
4. Replace the handset or press the SP-PHONE button.

Canceling Call Forwarding from an extension

1. Lift the handset or press the SP-PHONE button



2. Dial the feature number for “Remote FWD Cancel.”



3. Dial the directory number of the extension.

   - You hear confirmation tone 1 or 2.
   - If your PITS has a display, it shows:

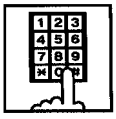
   FWD cancel: E xxxx

   Extension number

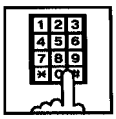
4. Replace the handset or press the SP-PHONE button.

Canceling Call Forwarding from an extension temporarily

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for “Remote FWD Cancel-One Time.”



3. Dial the directory number of the extension.

   - Call Forwarding is canceled temporarily.
   - Calling the extension starts.

12.00 DSS Console

Description

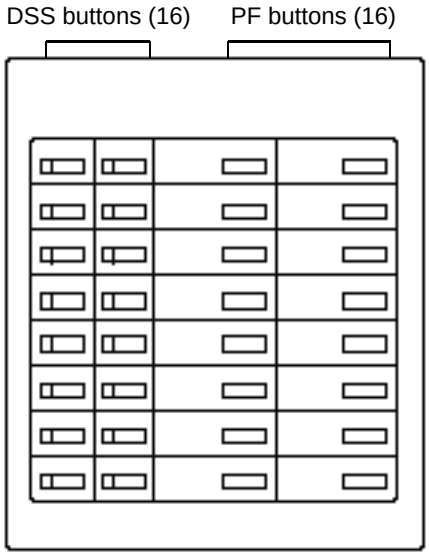
The DSS Console is used to monitor the busy/idle status of the extension users in the system, and make a call to an extension user by simply pressing the associated DSS (Direct Station Selection) button.
The DSS Console provides a convenient way to transfer an incoming CO call to an extension user by simply pressing the associated DN•DSS button instead of pressing the TRANSFER button and dialing the extension number.
(See 4-I-12.01 “Automatic Transfer.”)

The DSS Console can also be used to make an outgoing CO call and to access certain programmable feature (e.g. Call Park-System).

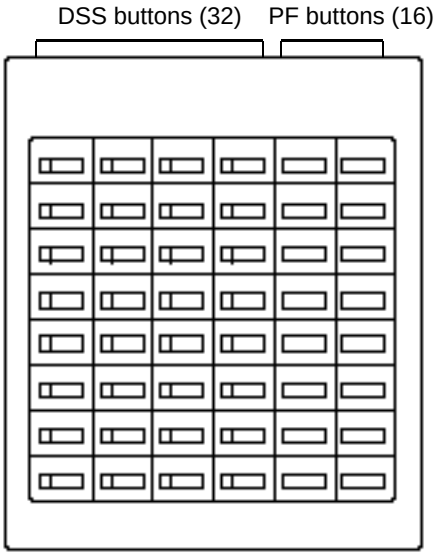
Up to 16 DSS Consoles (one per extension port) can be connected to the system in conjunction with a PITS telephone.

Place the DSS Console and the paired PITS telephone side by side on your desk.

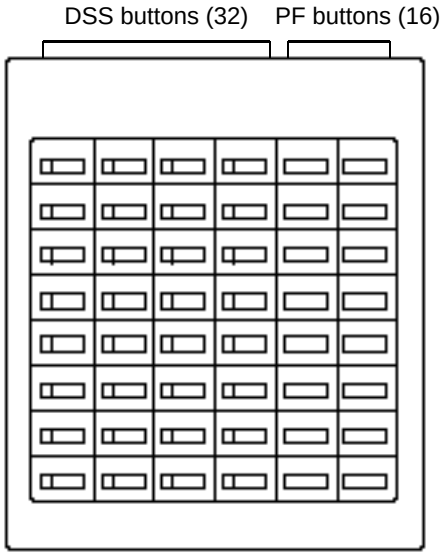
We provide three types of DSS Console as illustrated below:



KX-T61640



KX-T123240



KX-T7040

The DSS Console has an array of 32 DSS buttons※ plus 16 PF (Programmable Feature) buttons.

※ The KX-T61640 has only 16 DSS buttons.

Any extension directory number can be programmed to each DSS button, and the associated LED indicator for each button provides a busy/idle indication of the programmed extension. Various features can be programmed to the DSS and PF buttons.

The assignment for the DSS buttons and PF buttons are programmed and changed either by the system programming or PITS station programming.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-DSS Console"	9-G-2.00	10-C-23.00 10-C-25.00 10-C-26.00

PITS Station Programming	Reference
PF (Programmable Feature) Button Assignment	12-C-2.00
DSS (Direct Station Selection) Button Assignment	12-C-3.00

Conditions

None

12.01 Automatic Transfer

Description

Allows the DSS console operator to transfer the CO call to an extension user by simply pressing the associated DN•DSS button on the DSS console.
This performance is, as a result, equivalent to the operation of Call Transfer of a CO call to an extension on a DN button.

To execute Automatic Transfer, assign "System-Operation", DSS Operation Mode to "With Transfer."
Default is set to "With Transfer."

If DSS Operation Mode is set to "Without Transfer," pressing the DN•DSS button disconnects the other party and only calls the extension user.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", DSS Operation Mode	9-D-1.01	10-C-4.00

Conditions

Automatic Transfer is effective only during a conversation with an outside party when the DSS console does not have a call on Consultation Hold.

If the DSS console has a call on Consultation Hold, the system ignores the pressing of the DN•DSS button.

Pressing the DN•DSS button in the following modes causes the corresponding operations.

Modes of call	Operations caused by pressing the DN•DSS button.	
Talking to an outside party on the DN button	Calls the extension by placing the current call on Consultation Hold.	☛1
Talking to an extension on the DN button	Calls the extension by disconnecting the current call.	
Talking on the CO button	By placing the current call on Consultation Hold, selects the DN button automatically, and calls the extension.	☛1 ☛2
Talking on the ICM button	By disconnecting the current call, selects the DN button automatically, and calls the extension.	☛3

☛1 : If it is impossible to place the current call on Consultation Hold, the system ignores the pressing of the DN•DSS button.

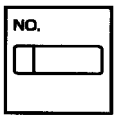
☛2 : If there is no idle PDN button, the current call is placed on Consultation Hold and no tone sounds.

☛3 : If there is no idle PDN button, the current call is disconnected and no tone sounds.

Music on Hold will be sent to the held party if available. For sending Music on Hold, prior assignment is necessary. Refer to Section 3-E-1.00 "Music on Hold" for further information.

Operation

During a conversation with an outside party



1. Press the DN•DSS button on the DSS Console.

   • As soon as the other party is placed on Consultation Hold, extension calling starts and ringback tone sounds.

13.00 Outgoing Message (OGM) Recording and Playing Back

Description

Up to four OGM's can be recorded by the Operator 1 (Attendant Console or PITS user) so that different messages can be used for different situations.

The following four types of OGM can be recorded respectively:

DISA, OGM1, OGM2 and W-UP (Wake-up)

OGM for outside parties

OGM for DISA is played to the outside party who called the system via DISA feature.
(See Section 3-D-2.02 "Direct Inward System Access (DISA).")

OGM for OGM1 and OGM2 are played to the outside party in conjunction with UCD feature.
(See Section 3-D-2.06 "Uniform Call Distribution (UCD)-with OGM.")

OGM for extension users

OGM for W-UP (Wake-up) can be used as a wake-up message for the extension user.
(See Section 3-F-13.00 "Timed Reminder with OGM (Wake-up Call).")

Each OGM can be up to 30 seconds long.

A DISA card is required to record OGM and up to four DISA cards can be installed to the system.

Usage of each DISA card is determined by the system programming.
(See Section 9-K-1.00 "Special Attended-DISA.")

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (09/11)",	9-D-6.09	10-C-10.00
OGM Record		
OGM Playback		
"Special Attended-DISA", For Use	9-K-1.00	10-C-40.00

Conditions

(1)Tenant Service
If tenant service is employed, the affiliation of each DISA card is determined by the system programming "Special Attendant-DISA" tenant. The Operator 1 of each tenant can record and play back the OGM within the same tenant.

(2) Recording of OGM
- OGM recording is executed by selecting an OGM type (usage of DISA card) from the following four types:
  1. OGM1 for UCD with OGM
  2. OGM2 for UCD with OGM
  3. OGM for DISA
  4. OGM for W-UP (Wake-up)
- If the type of multiple DISA cards are the same in a tenant, the same message is recorded for them at a time.

(3)Playing back of OGM
- The following two ways are available:
  A. By selecting an OGM type
  B. By designating the logical number of each DISA card directly.
- If there are multiple DISA cards of the same type in the system or a tenant and the OGM type is selected to play back, playback starts from the lowest DISA card physical number.

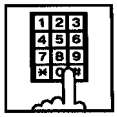
(4)Others
Call Waiting tone and so on are prohibited during OGM recording and playing.

Operation

Recording OGM from PITS (For Operation from Attendant Console, refer to Section 6-J-8.00 “Outgoing Message (OGM) Recording and Playing Back.”)

1. Lift the handset or press the SP-PHONE button.

   • You hear dial tone 1 or 3 or 4.

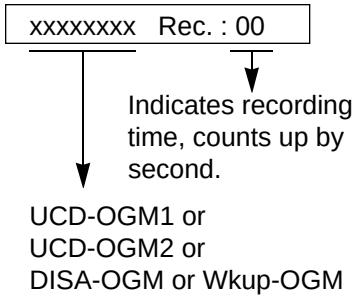


2. Dial the feature number for OGM Record “791” (default) and the resource number (1 to 4) in succession.

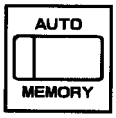
   (Resource number)
   1 : OGM1 for UCD
   2 : OGM2 for UCD
   3 : OGM for DISA
   4 : OGM for W-UP (Wake-up)

   • The MEMORY indicator flashes in red 60 wink, confirmation tone 3 is heard.

   • If your PITS has a display, it shows:



3. Begin your message.

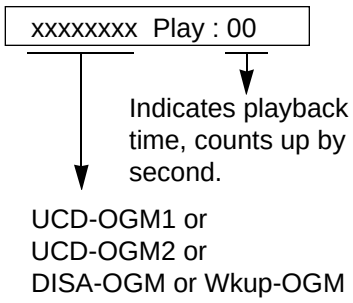


4. As soon as you finish, press the MEMORY button.

   • The MEMORY indicator lights in red.

   • After confirmation tone 3 sounds, the recorded message is played back automatically.

   • If your PITS has a display, it shows:



   • When playback is finished, the MEMORY indicator goes out. You hear confirmation tone 3, then no tone.

5. Replace the handset or press the SP-PHONE button.

(Supplement)

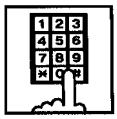
In step 3 if 30 seconds is over, recording is terminated and playback starts automatically. Accordingly, it is not necessary to execute step 4 afterward.

In step 3 if you wish to change the message during recording, you can start recording again by dialing “* .”

In step 4 if you wish to interrupt and finish playback, press the MEMORY button.

Playing back OGM

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for OGM Playback “792” (default) and a number below in succession.

   (Resource number)
   1 : OGM1 for UCD
   2 : OGM 2 for UCD
   3 : OGM for DISA
   4 : OGM for W-UP (Wake-up)

   (“* ” and DISA No.)
   * 1: selects card 1
   * 2: selects card 2
   * 3: selects card 3
   * 4: selects card 4

   - The MEMORY indicator lights in red.
     You hear confirmation tone 3, then the message.
   - If your PITS has a display, it shows:

   <Example>

DISA-OGM Play: 00

   - When playback is finished, you hear confirmation tone 3, then no tone.
   - The MEMORY indicator goes out.

3. Replace the handset or press the SP-PHONE button.

(Supplement)

In step 2 if you wish to interrupt and finish playback, press the MEMORY button.

During playback you can start playback again from the beginning by dialing “* .”

14.00 Remote Timed Reminder – One Time

Description

Allows the Operator 1 or 2 (Attendant Console or PITS with display) to set “Timed Reminder” feature to any extension.
(Refer to Section 4-I-3.00, 5-G-3.00 “Timed Reminder.”)
If Timed Reminder with OGM is programmed beforehand, the extension user (on which Remote Timed Reminder is set) hears a wake-up message.
(Refer to Section 3-F-13.00 “Timed Reminder with OGM (Wake-up Call).”)

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (09/11)”, Remote Timed Reminder Confirm Remote Timed Reminder Set Remote Timed Reminder Cancel	9-D-6.09	10-C-10.00

Conditions

(1) The difference between “Timed Reminder” and “Remote Timed Reminder” is:

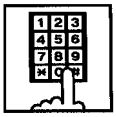
	Setting	Validity of the setting
Timed Reminder	by extenison itself	Once or everyday at the programmed time
Remote Timed Reminder	by Operator 1 or 2	Once

(2)At a single extension, only the latest setting is valid whether it was set by the extension itself (Timed Reminder) or by the Operator 1 or 2 (Remote Timed Reminder).

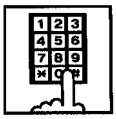
Operation

Setting Timed Reminder to another extension

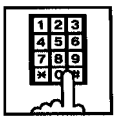
1. Lift the handset or press the SP-PHONE button.



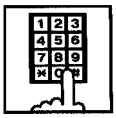
2. Dial the feature number for Remote Timed Reminder Set “7* 1” (default) and the extension number to be set Timed Reminder in succession.



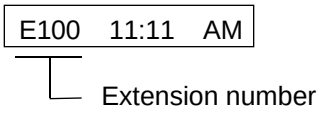
3. Dial “hour” with two digits: 01 to 12.



4. Dial “minute” with two digits: 00 to 59.



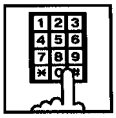
5. Dial “0” for a.m. or dial “1” for p.m..
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:



6. Replace the handset or press the SP-PHONE button.

Canceling Timed Reminder set to another extension

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Remote Timed Reminder Cancel "7#" (default) and the extension number to be canceled Remote Timed Reminder in succession.

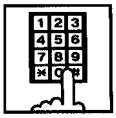
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.
   - If your PITS has a display, it shows:

     E100 Cancelled

3. Replace the handset or press the SP-PHONE button.

Confirming the alarm time programmed to another extension (PITS with display only)

1. Lift the handset or press the SP-PHONE button.



2. Dial the feature number for Remote Timed Reminder Confirm "7* 0" (default) and the extension number to be confirmed the setting in succession.

   - The display on your PITS shows:

   When no time is set:

   Alarm Not Stored

   If executing at 9:00 a.m. is preset at Extension 100:

   <Example>

   E100 9:00 AM

3. Replace the handset or press the SP-PHONE button.

(Supplement)

When a user executes step 2 by a PITS set without display, reorder tone is heard.

Section 5

Station Features and Operation

Single Line Telephone (SLT)

(Section 5)

Station Features and Operation

Single Line Telephone (SLT)

Contents

A. Outgoing Call Features

1.00 Making Outside Calls

1.01 Local Trunk Dial Access

Description

Allows extension users to make outgoing CO calls by automatic selection of an idle CO line.
Dialing the feature number for ARS/Local CO Line Access" enables you to execute this function.

To activate this feature, set "System-Operation",Automatic Route Selection to "No." If set to "Yes," ARS feature is activated instead of this feature.
Refer to Section 3-C-2.00 "Automatic Route Selection (ARS)" for further information.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", Automatic Route Selection	9-D-1.01	10-C-4.00
"System-Local Access Group", Hunt Sequence	9-D-5.00	10-C-9.00
"System-Numbering Plan (02/11)", ARS/Local CO Line Access	9-D-6.02	10-C-10.00

Conditions

An idle CO line available and hunting sequence is determined by the system programming "System-Local Access Group", Hunt Sequence.

If an extension user hears busy tone, there is no idle CO line available.

If an extension user hears reorder tone, the user is restricted from accessing this feature.
Refer to Section 3-C-1.01 "Toll Restriction for Local Trunk Dial Access," for further information.

If tenant service is activated, accessible trunk group is limited to the trunk groups within the same tenant.

(◆ for U.S.A. and Canada only)
The dialing plan followed is that of the trunk group in hunt sequence 01 in "System-Local Access Group."

Operation

1. Lift the handset .
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for ARS/Local CO Line Access "9" (default).
   - You hear dial tone 1."

3. Dial the telephone number of the outside party.

1.02 Individual Trunk Group Dial Access

Description

Allows extension users to make outgoing CO calls via an idle CO line in the specified trunk group by dialing the feature number for “Trunk Group 01-08 Access” or “Trunk Group 09-16 Access.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (2/2)”, Trunk Group Access	9-D-4.02	10-C-8.00
“System-Numbering Plan (02/11)”, Trunk Group 01-08 Access Trunk Group 09-16 Access	9-D-6.02	10-C-10.00

Conditions

Trunk groups to be specified are limited to the ones assigned in “System-Class of Service”, Trunk Group Access.

If an extension user hears busy tone, all CO lines in the specified trunk group are not available.

If an extension user hears reorder tone, the user is restricted from accessing the specified trunk group.
Refer to Section 3-C-1.03 “Toll Restriction for Individual Trunk Group Dial Access/Direct Trunk Access,” for further information.

Operation

1. Lift the handset.

   • You hear dial tone 1 or 3 or 4.

2-1 Specifying any one of trunk groups 01 to 08

1) Dial the feature number for Trunk Group 01-08 Access “81” (default).
2) Dial the trunk group specifying number : 1 to 8.

• Trunk group specifying number matches trunk group number, as follows:

Trunk Group Specifying Number	Trunk Group Number
1	01
2	02
3	03
4	04
5	05
6	06
7	07
8	08

2-2 Specifying any one of trunk groups 09 to 16

1) Dial the feature number for Trunk Group 09-16 Access “82” (default).
2) Dial the trunk group specifying number : 1 to 8.

• Trunk group specifying number matches trunk group number, as follows:

Trunk Group Specifying Number	Trunk Group Number
1	09
2	10
3	11
4	12
5	13
6	14
7	15
8	16

3. Dial the telephone number of the outside party.

1.03 Individual Virtual Trunk Group Dial Access (◆ for U.S.A. and Canada only)

Description

Allows extension users to make outgoing CO calls using Special Carrier Facilities by simply dialing the feature number for “Trunk Group 17-24 Access.”
Detailed data, such as access codes and authorization codes, required to Special Carrier Access must be programmed beforehand in “Special Carrier Access” screen.
Trunk groups available for Special Carrier Access is also defined in the same screen.

Special carriers available for each extension user is defined in “System-Class of Service (2/2)” Special Carrier Access.

It is programmable to restrict Special Carrier Access on system-wide basis.
Refer to Section 10-C-52.00 “World Select 2-EQU/OCC Access Assignment” for further information.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (2/2)”, Special Carrier Access	9-D-4.02	10-C-8.02
“System-Numbering Plan (02/11)”, Trunk Group 17-24 Access	9-D-6.02	10-C-10.00
“Special Carrier Access-Equal Access/OCC Access”,	9-H-1.00 9-H-2.00	10-C-30.00 10-C-31.00
“World Select 2”	—	10-C-52.00

Conditions

None

Operation

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for Trunk Group 17-24 Access “83” (default).

3. Dial the virtual trunk group specifying number : 1 to 8.
   - Virtual trunk group number matches virtual trunk group specifying number and digit modification table number (Equal access table number 1 to 4, OCC access table number 1 to 4 which should be assigned beforehand), as follows:

Virtual Trunk Group Number	Virtual Trunk Group Specifying Number	Digit Modification Table Number
17	1	Equal access table number 1
18	2	2
19	3	3
20	4	4
21	5	OCC access table number 1
22	6	2
23	7	3
24	8	4

4. Dial the telephone number of the outside party.

2.00 Automatic Dialing

2.01 Speed Dialing-Station

Description

Allows SLT telephone users to program frequently dialed telephone numbers (both extension and outside numbers) in the Speed Dialing code (0 to 9 : dedicated to each SLT telephone user) by dialing the feature number for “Speed Dialing-Station Programming.”
To make a call using pre-assigned Speed Dialing code, dial the feature number for “Speed Dialing-Station” and appropriate Speed Dialing code (0 to 9).

Up to 10 codes can be registered for each SLT telephone.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (02/11)”, Speed Dialing-Station	9-D-6.02	10-C-10.00
“System-Numbering Plan (07/11)”, Speed Dialing-Station Programming	9-D-6.07	10-C-10.00

Conditions

To register the outside number in a speed dialing code, the feature number for selecting a CO line must be registered as leading digits.

When calling an outside party automatically:

9 - 411 - 3209

└ Feature number for “ARS/Local CO Line Access”

When calling an outside party by specifying the trunk group:

811 - 411 - 3209

└ Feature number for “Trunk Group 01-08 Access” or
Feature number for “Trunk Group 09-16 Access” or
Feature number for “Trunk Group 17-24 Access” (Virtual Trunk Group
— ◆ for U.S.A. and Canada only)

Each stored number can have up to 16 digits including CO line access code.
Numbers from “0 to 9” and “ ” can be registered.
To store “PAUSE,” dial “ ”.

When SLT is connected with HLC card, the SLT can use One Touch Dialing and the special dials such as secret dialing etc. which are stored for PITS.
It is performed by connecting PITS with HLC card temporarily and registering One Touch Dialing by using the PITS.
In this case, One Touch Dialing codes stored on PF1 to PF10 on a PITS match speed dialing codes by SLT (Single Line Telephone), as follows:

PITS One Touch Dialing	SLT Speed Dialing-Station
PF1	0
PF2	1
PF3	2
PF4	3
PF5	4
PF6	5
PF7	6
PF8	7
PF9	8
PF10	9

Operation

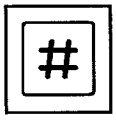
Storing the telephone number

1. Lift the handset.

2. Dial the feature number for “Speed Dialing-Station Programming.”

3. Dial the speed dialing code : 0 to 9.

4. Dial the telephone number that you want to store.



5. Dial “#.”
   - You hear confirmation tone 1 or 2.

6. Replace the handset.

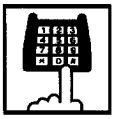
(Supplement)

When using a rotary telephone (pulse type), wait until you hear confirmation tone in step 5 without dialing “#.”

Executing Speed Dialing-Station

1. Lift the handset.

2. Dial the feature number for “Speed Dialing-Station.”
   - No tone is heard.



3. Dial the speed dialing code: 0 to 9.
   - Registered telephone number is sent.

2.02 Speed Dialing-System

Description

Allows any extension user to call outside parties by dialing the feature number for “Speed Dialing-System” and a pre-assigned 3-digit code (001 to 200) common to any extension user in the system.
Up to 200 Speed Dialing Codes can be registered to the system.

The speed dialing codes are registered in “System-Speed Dialing-System” screen, and specific toll restriction level for each speed dialing code can be assigned in the same screen.
Refer to “Toll Restriction Plan for System Speed Dialing” on next page for further information.

Programming

System Programming	Reference	
	VT	Dumb
“System-Tenant”, Speed Dialing-System Boundary	9-D-2.00	10-C-5.00
“System-Numbering Plan (02/11)”, Speed Dialing-System	9-D-6.02	10-C-10.00
“System-Speed Dialing-System”	9-D-8.00	10-C-12.00

Conditions

If Tenant Service is employed, Speed Dialing Codes can be split by two tenants. In this case, one tenant cannot use the Speed Dialing Codes which belong to another tenant.

Each stored number can have up to 32 digits including CO line access code.
“0~9,” “ ,” “#,” “PAUSE,” “FLASH,” “—” and “SECRET” can be registered.

Speed Dialing and manual dialing can be used in combination. In this case, execute Speed Dialing before manual dialing.

A feature number for selecting a CO line must be stored as leading digits.

The feature numbers for selecting a CO line are:
- ARS/Local CO Line Access
- Trunk Group 01-08 Access
- Trunk Group 09-16 Access
- Trunk Group 17-24 Access (Virtual Trunk Group — ◆ for U.S.A. and Canada only)

When the mark “ ” or “#” is stored in the feature number for “Speed Dialing-System,” the rotary telephone users can not use this feature.

Operation

Calling an outside party using System Speed Dialing Code

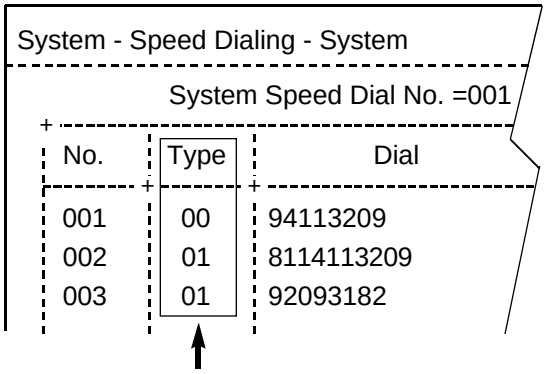
1. Lift the handset.
   - You hear dial tone 1 or 3 or 4 .

2. Dial the feature number for Speed Dialing-System “ 1” (default).
   - You hear no tone.

3. Dial the appropriate speed dialing code : 001 to 200.
   - The registered number is sent to CO line automatically.

<Toll Restriction Plan for System Speed Dialing>

The system administrator can assign Toll Restriction Level of System Speed Dialing (referred to as “TRLSD” in the following) to each code as follows:



TRLSD consists of 17 levels (“00” and “01 to 16”) TRLSD “00” receives a treatment different from TRLSDs “01 to 16.”
In TRLSD “01 to 16,” “01” is the highest level and “16” is the lowest.

1. Toll Restriction Plan for System Speed Dialing Code (TRLSD=00)

   When an outgoing CO call is made by dialing a System Speed Dialing Code (TRLSD=00), extension users receive standard toll restriction treatment.

   If selected speed dialing code includes Local Trunk Dial Access code as leading digits, a call is checked against “Toll Restriction for Local Trunk Dial Access.”

   If selected speed dialing code includes Individual Trunk Group Dial Access Code as leading digits, a call is checked against “Toll Restriction for Individual Trunk Group Dial Access.”
   For further information about System Toll Restriction feature, refer to Section 3-C-1.00 “Toll Restriction.”

2. Toll Restriction Plan for System Speed Dialing Code (TRLSD=01 to 16)

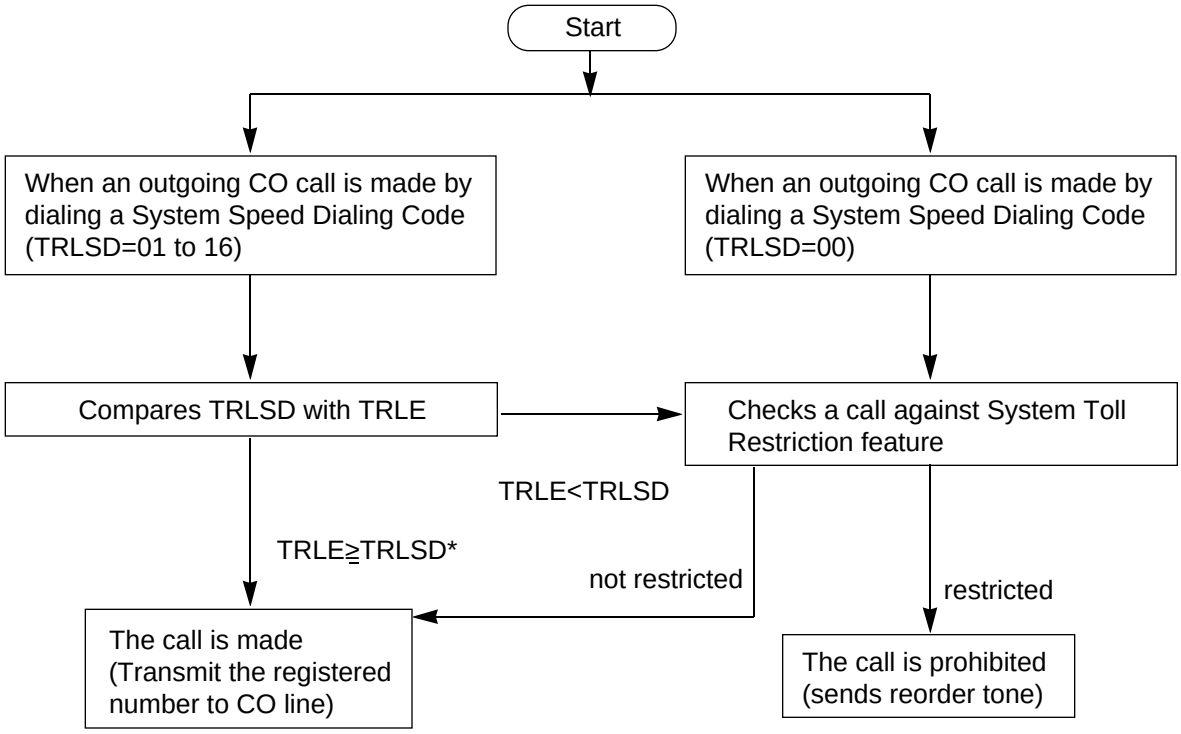
   When an extension user makes an outgoing CO call by dialing a System Speed Dialing Code (TRLSD=01 to 16), the system compares Toll Restriction Level of Extension (TRLE) with TRLSD.

   If TRLE is equal to or higher than TRLSD (TRLE≥TRLSD) a call is made, and if TRLE is lower than TRLSD (TRLE<TRLSD), a call is checked against System Toll Restriction feature.
   For further information about TRLE, refer to Section 3-C-1.00 “Toll Restriction.”

<Example>
If an extension user (TRLE=6) makes an outgoing CO call by selecting a System Speed Dialing Code (TRLSD=7), in this case, TRLE of 6 is higher than TRLSD of 7 (TRLE>TRLSD), so a call is made.

If an extension user (TRLE=6) makes an outgoing CO call by selecting a System Speed Dialing Code (TRLSD=4), in this case, TRLE of 6 is lower than TRLSD of 4 (TRLE<TRLSD), so a call is checked against the System Toll Restriction feature.

The following flowchart shows the simplified procedure of toll restriction plan for System Speed Dialing.



* In this case, “Local Trunk Dial Access restriction” and “Individual Trunk Group Dial Access restriction” assigned in Class of Service are disregarded.

2.03 Last Number Redial (LNR)

Description

Automatically saves the last number dialed from an extension and allows the user to make the outgoing CO call again by simply dialing the feature number for “Redial.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”, Redial	9-D-6.03	10-C-10.00

Conditions

Up to 32 digits except the feature number for selecting a CO line can be memorized as the last dialed number.

“✻,” “#,” “PAUSE,” or “SECRET” are counted as one digit respectively.

The memorized telephone number is replaced automatically by a new one every time you make a new outgoing CO call and even one digit is sent to a CO line. That is, dialing a feature number for selecting a CO line only does not renew the memorized number.

Operation

Executing LNR

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for Redial “✻3” (default).

2.04 Pickup Dialing

Description

Pickup Dialing allows SLT telephone users to make calls automatically by simply lifting the handset.

To program the desired number for this feature, dial the feature number for “Pickup Dialing Programming.”
To activate this feature, dial the feature number for “Pickup Dialing Set.”
To cancel this feature, dial the feature number for “Pickup Dialing Cancel.”

This feature works only when an extension user goes off-hook from on-hook status. Period from off-hook to Pickup Dialing is assigned in “System-System Timer”, Pickup Dial Waiting.

Programming

System Programming	Reference	
	VT	Dumb
“System-System Timer”, Pickup Dial Waiting	9-D-3.00	10-C-6.00
“System-Numbering Plan (06/11)”, Pickup Dialing Programming Pickup Dialing Set Pickup Dialing Cancel	9-D-6.06	10-C-10.00

Conditions

It is available to override this feature temporarily by dialing another telephone number before “System-System Timer”, Pickup Dial Waiting timer expires.

This feature does not function when a call is arriving or the user has a call on Consultation Hold.

UP to 32 digits can be stored as a telephone number including “0 through 9,” and “✻.”
To store “PAUSE,” use “✻✻.”

Operation

Storing the telephone number for Pickup Dialing

1. Lift the handset.

2. Dial the feature number for “Pickup Dialing Programming.”

3. Dial the telephone number that you want to store.

   • You hear confirmation tone 1 or 2 then dial tone 1 or 3 or 4.

4. Replace the handset.

Setting or canceling Pickup Dialing

1. Lift the handset.

2-1 Setting : Dial the feature number for “Pickup Dialing Set.”

2-2 Canceling : Dial the feature number for “Pickup Dialing Cancel.”

   • You hear confirmation tone 1 or 2 then dial tone 1 or 3 or 4.

3. Replace the handset.

Executing Pickup Dialing

1. Lift the handset.

   • You hear dial tone 1 or 3 or 4.

2. Wait until the time preprogrammed in “System-System Timer”, Pickup Dial Waiting is over.

   • The system sends the stored telephone number automatically.

Canceling Pickup Dialing temporarily

1. Lift the handset.

   • You hear dial tone 1 or 3 or 4.

2. Dial a telephone number before the time preprogrammed in “System-System Timer”, Pickup Dial Waiting is over.

   • The system sends the dialed telephone number.

3.00 Making Internal Calls

3.01 Inter Office Calling

Description

Inter Office Calling allows the extension user to call another extension user within the system by dialing the directory number of extensions (three or four digits).

Programming

None

Conditions

If Tenant Service is employed, Inter Office Calling to the extension users in the other tenant (inter-tenant calling) can be enabled by programming. Refer to Section 3-B-4.00 “Tenant Service” for further information.

Operation

1. Lift the handset.

2. Dial the directory number of the other extension.

   - You hear ringback tone.
   - A directory number consists of three or four digits from 0 to 9.

3. When the other extension answers, start conversation.

4. After concluding conversation, replace the handset.

4.00 Automatic Callback

4.01 Automatic Callback-Trunk

Description

When no idle CO line is available after dialing a feature number for selecting a CO line and the telephone number of an outside party, the caller hears special busy tone, if this feature is assigned.

On-hook while hearing the special busy tone calls back the caller as soon as a CO line becomes idle: call-back ringing. Off-hook catches the CO line automatically, and sends the last dialed telephone number to the CO line.

Off-hook prior to the start of callback ringing cancels this feature.
Also no answer in four ringing tones (within 10 seconds) after the start of callback ringing cancels this feature.

To execute this feature, assign “Extension-Station”, Automatic Callback-Trunk to “Yes” on an extension user basis.

Programming

System Programming	Reference	
	VT	Dumb
“Extension-Station (1/3)”, Automatic Callback-Trunk	9-G-1.01	10-C-22.00

Conditions

Multiple extensions are able to set this function to one or more CO lines at the same time.
A maximum of 64 Automatic Callback-Trunk can be active in the system.

If 64 extensions already set this function to one or more CO lines, another caller's attempt to execute this setting is rejected by normal busy tone, not by special busy tone.

Even if Call Forwarding-No Answer or Do Not Disturb is assigned on the extension, the extension user can set Automatic Callback-Trunk: callback ringing starts on the extension.

Automatic Callback-Trunk cannot be set by the extension which has a call on Consultation Hold.

Operation

Setting Automatic Callback-Trunk

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for selecting a CO line.
   - You hear dial tone 1.

3. Dial the telephone number of the outside party.
   - You hear busy tone 3.

4. Replace the handset

(Supplement)

The following four feature numbers are available for selecting a CO line:

- ARS/Local CO Line Access
- Trunk Group 01-08 Access
- Trunk Group 09-16 Access
- Trunk Group 17-24 Access (Virtual Trunk Group — ◆ for U.S.A. and Canada only)

Answering callback ringing

As soon as a CO line in the specified trunk group becomes idle, callback ringing starts.

1. Lift the handset.
   - The last dialed number is sent to the line automatically and calling the other party starts.

4.02 Automatic Callback-Station

Description

If busy tone is heard when calling an extension, dialing “6” and hanging up causes Automatic Callback to the caller as soon as the called party concludes conversation.

When callback ringing for the caller starts, answering by off-hook offers calling the other party automatically.

Off-hook prior to the start of callback ringing cancels this function.
Also no answer during four ring tones after the start of callback ringing cancels this function.

Programming

None

Conditions

Up to four extensions are able to assign this function to one extension at the same time.
The fifth extension attempting to set this function is rejected by reorder tone.

If you do not dial “6” within 10 seconds after hearing busy tone, you hear reorder tone and cannot execute this feature.

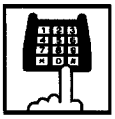
Even if Call Forwarding-No Answer or Do Not Disturb is assigned to the extension, the extension user can set Automatic Callback-Station: callback starts on the extension.

Automatic Callback-Station cannot be set by the extension which has a call on consultation hold.

Operation

Setting Automatic Callback-Station

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.



2. Dial the directory number of the other extension.
   - You hear busy tone 1 or 2.

3. Dial “6.”
   - You hear confirmation tone 2, then reorder tone.

4. Replace the handset.

Answering callback ringing

As soon as the other party concludes the conversation, callback ringing starts.

1. Lift the handset .
   - You hear ringback tone. Calling the other extension starts.

5.00 Executive Busy Override

Description

Executive Busy Override allows an extension user to intrude on a busy line, and then a 3-party conversation is established. This feature is accessed by dialing “1” while hearing busy tone.

To utilize this feature, assign “System-Class of Service”, Executive Busy Override to “Yes,” at overriding extension.

Setting can be made by system programming “System-Operation”, Beep Tone for Bsy-ovr/Brg-in to determine whether the overriding tone is be sent or not when entering into a three-person conversation.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, Beep Tone for Bsy-ovr/Brg-in	9-D-1.01	10-C-4.00
“System-Class of Service (1/2)”, Executive Busy Override	9-D-4.01	10-C-7.00

Conditions

Executive Busy Override does not function when the other party is in the following status.

- Three-party conversation status
- OHCA conversation status
- ICM conversation status
- Private CO conversation status

Executive Busy Override does not function if any of two parties in conversation has set the following.

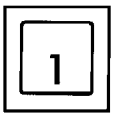
- Executive Busy Override Deny
  (Refer to Section 4-D-5.00.)
- Data Line Security
  (Refer to Section 4-I-6.00.)

If you do not dial “1” within 10 seconds after hearing busy tone, you cannot execute this function.

Operation

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the directory number of the other extension.
   - You hear busy tone 1 or 2.



3. Dial “1.”
   - After you hear confirmation tone 3, start a three party conversation.

6.00 Do Not Disturb (DND) Override

Description

Do Not Disturb Override allows an extension to call another extension which has set Do Not Disturb.
Dialing “1” after hearing DND tone provides calling the extension.
Refer to Section 4-D-6.00 “Do Not Disturb (DND)” for further information about DND feature.

To activate this function, assign “System-Class of Service”, Do Not Disturb Override to “Yes” at overriding extension.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, Do Not Disturb Override	9-D-4.01	10-C-7.00

Conditions

Make sure to dial “1” within 10 seconds after hearing DND tone to execute Do Not Disturb Override.

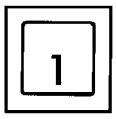
When dialing “1,” if the other extension is busy, the caller hears busy tone. In this case, it is possible to assign Automatic Callback-Station.For Automatic Callback-Station, refer to Section 5-A-4.02 “Automatic Callback-Station.”

If “System-Class of Service,” Do Not Disturb Override is set to “No,” the caller hears reorder tone after dialing “1” and cannot call the other party.

Operation

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the directory number of the other extension.
   - If the other extension sets DND (Do Not Disturb), you hear DND tone.



3. Dial “1.”
   - You hear ringback tone.
   - Calling the other party starts.

7.00 Walking COS (Class of Service)

Description

Allows an extension user to call an outside party from another extension preset to a lower COS (Class of Service) by using higher COS of his or her own extension temporarily.

When an outgoing CO call is finished, COS grade of the employed extension returns to the original grade automatically.

Dialing a Walking COS Password (four digits) is required to execute this feature.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (3/3)", Walking COS Password	9-D-1.03	10-C-5.00
"System-Tenant", Walking COS Password (Tenant 2)	9-D-2.00	10-C-5.00
"System-Numbering Plan (07/11)", Walking COS Set Walking COS Cancel	9-D-6.07	10-C-10.00

Conditions

If tenant service is employed, each tenant can have its own walking COS Password.

Operation

Setting Walking COS

From another telephone,

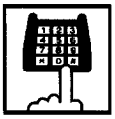
1. Lift the handset.

2. Dial the feature number for Walking COS Set "✱7" (default).

3. Dial the four-digit Walking COS Password.

4. Dial the extension number of your own station.

   - You hear confirmation tone 2.



5. Call an outside party by using COS of your own station.

Canceling Walking COS

One call to an outside party after setting Walking COS cancels this function automatically.

It is also possible to cancel Walking COS without making outgoing CO calls as follows:

1. Lift the handset.

2. Dial the feature number for Walking COS Cancel "#7" (default).

   - You hear confirmation tone 2.
   - COS returns to the original grade.

8.00 Operator Call

Description

Allows the extension users to call the operator by dialing the feature number for “Operator Call (General)” or “Operator Call (Specific).”

Up to two operators are assignable for the whole system. If Tenant Service is available, two operators are assignable for each tenant, that makes four operators available for the whole system.

If two operators are assigned in the system, or in a tenant (if tenant Service is employed), extension users can specify the operator (in the same tenant) by dialing the feature number for “Operator Call (Specific).”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (02/11)”, Operator Call (General) Operator Call (Specific)	9-D-6.02	10-C-10.00

Conditions

When calling an operator by dialing the feature number for “Operator Call (General),” the operator is selected according to the type of the operator's stations as shown below:

Type of Station		Operator Selected
Operator 1	Operator 2	
ATT	ATT	Operator 1 or Operator 2
ATT	EXT	Operator 1 only
EXT	EXT	Operator 1 only
ATT	—	Operator 1 only
EXT	—	Operator 1 only

When no operators are assigned, a user hears reorder tone during executing Operator Call. For the assignment of operators, refer to Section 3-B-5.00 “Operator.”

Operation

Calling an operator

1. Lift the handset.

2. Calling an operator without specifying
   1) Dial the feature number for Operator Call (General) “0” (default).

   Calling an operator by specifying
   1) Dial the feature number for “Operator Call (Specific).”
   2) Dial “1” to specify operator 1. Dial “2” to specify operator 2.

B. Receiving Features

1.00 Call Pickup

1.01 Dial Call Pickup

Description

Dial Call Pickup allows an extension user to answer the call that is ringing at another telephone in the same call pickup group by dialing the feature number for “Dial Call Pickup.”

An extension user can be assigned to only one call pickup group.
Up to 32 call pickup groups are assignable in the whole system.

For further information about call pickup group, refer to Section 3-B-7.02 “Call Pickup Group.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”, Dial Call Pickup	9-D-6.03	10-C-10.00

Conditions

It is possible to execute this function after holding the current call.

An extension user who has Do Not Disturb assigned can answer a call that is ringing at other extension.

This feature is not available to answer the following calls:

<1> A call ringing at an extension outside of the same call pickup group

<2> A call ringing at an extension on which Dial Call Pickup Deny is set
(Refer to Section 5-B-1.03 “Call Pickup Deny” for further information.)

<3> A call ringing on PCO button of PITS telephone

<4> A call ringing on ICM button of PITS telephone

<5> A call arriving at an extension but not ringing (Refer to Section 3-D-3.02 “Flexible Ringing Assignment-Delayed Ringing” for further information.)

If extension users attempt to pick up the those calls, reorder tone sounds after dialing the feature number for “Dial Call Pickup.”

Operation

Answering a call using Dial Call Pickup

1. Lift the handset.

2. Dial the feature number for Dial Call Pickup “47” (default).

   • After you hear confirmation tone 3, you can answer the call arriving at another telephone in the same call pickup group.

3. Start conversation.

Note:
• Confirmation tone 3 for Call Pickup can be eliminated by WS4 command (See Section 10-C-62.00 “World Select 4 (WS4)”).

1.02 Directed Call Pickup

Description

Directed Call Pickup allows any extension user to answer the call ringing at extension in any call pickup group by dialing the feature number for “Directed Call Pickup,” and the directory number of ringing extension.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”, Directed Call Pickup	9-D-6.03	10-C-10.00

Conditions

It is possible to execute Directed Call Pickup after holding the current call.

An extension user who has Do Not Disturb assigned can answer a call that is ringing at other extensions.

This feature is not available to answer the following calls:

<1> A call ringing at an extension on which Dial Call Pickup Deny is set
(Refer to Section 5-B-1.03 “Call Pickup Deny” for further information.)

<2> A call ringing on PCO button of PITS telephone

<3> A call ringing on ICM button of PITS telephone

<4> A call arriving at an extension but not ringing (Refer to Section 3-D-3.02 “Flexible Ringing Assignment-Delayed Ringing” for further information.)

If the extension users attempt to pick up the above mentioned call, reorder tone sounds after dialing the feature number for “Directed Call Pickup.”

Operation

Answering a call ringing at extension in the different call pickup group.

1. Lift the handset.

2. Dial the feature number for Directed Call Pickup “48” (default).

3. Dial the directory number of the ringing extension.
   - You hear confirmation tone 3.
   - Talk to the caller.

4. Start conversation.

Note:
- Confirmation tone 3 for Call Pickup can be eliminated by WS4 command (See Section 10-C-62.00 “World Select 4 (WS4)”).

1.03 Call Pickup Deny

Description

Call Pickup Deny allows an extension user to prohibit the other extension users from picking up calls ringing at his or her extension by a call pickup feature (Both Dial Call Pickup and Directed Call Pickup).

To assign or cancel this function, dial the feature number for “Dial Call Pickup Deny Set” or “Dial Call Pickup Deny Cancel.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (05/11)”, Dial Call Pickup Deny Set Dial Call Pickup Deny Cancel	9-D-6.05	10-C-10.00

Conditions

Even if an extension user has Call Pickup Deny assignment, he or she can execute Dial Call Pickup or Directed Call Pickup feature for calls ringing at other extensions.

Operation

Setting Call Pickup Deny

1. Lift the handset.

2. Dial the feature number for Dial Call Pickup Deny Set “61#” (default).

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

Canceling Call Pickup Deny

1. Lift the handset

2. Dial the feature number for Dial Call Pickup Deny Cancel “61#” (default).

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

2.00 Trunk Answer From Any Station (TAFAS)-Day Service

Description

Incoming CO calls programmed for TAFAS will ring the external pager and any extension user in the system can answer the calls by dialing the feature number for “Night Answer 1” (when a call is ringing at external pager 1) or “Night Answer 2” (when a call is ringing at external pager 2).

To activate this feature, assign “Group-Trunk Group”, Incoming Mode (Day) to TAFAS 1 or TAFAS 2, and “Trunk-CO Line” Trunk Group to “1 to 16” (Trunk Group Number whose Incoming Mode (Day) is assigned as TAFAS 1 or 2).
To utilize the external pager, assign “System-Operation”, External Paging 1, 2” to “Yes.”

Up to two external pagers can be connected to this system. TAFAS 1 is associated with external pager 1 and TAFAS 2 is associated with external pager 2.

Call handling in TAFAS is identical to UNA. The difference is that TAFAS is available in day mode and UNA is available in night mode.
For further information about UNA, refer to section 5-G-1.01 “Universal Night Answer (UNA).”

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, External Paging 1, 2	9-D-1.01	10-C-4.00
“System-Numbering Plan (03/11)”, Night Answer 1 Night Answer 2	9-D-6.03	10-C-10.00
“Group-Trunk-Group (1/2)”, Incoming Mode (Day)	9-E-1.01	10-C-14.00
“Trunk-CO Line”, Trunk Group	9-F-1.00	10-C-18.00
“Trunk-Pager & Music Source”, External Pager-Tenant	9-F-2.00	10-C-19.00

Conditions

If tenant service is employed :
The affiliation of each external pager is determined by the system programming in “Trunk-Pager & Music Source”, External Pager-Tenant.
Extension users cannot answer the TAFAS call ringing at an external pager in the different tenant.

Operation

Answering incoming CO calls programmed for TAFAS

An incoming CO call is ringing at an external pager.

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2-1 If a call is ringing at external pager 1: Dial the feature number for Night Answer 1 “45” (default).

2-2 If a call is ringing at external pager 2: Dial the feature number for Night Answer 2 “46” (default).

- You hear confirmation tone 3.

3. Start conversation.

Note:
- Confirmation tone 3 for TAFAS can be eliminated by WS4 command (See Section 10-C-62.00 “World Select 4 (WS4)”).

3.00 Executive Busy Override Deny

Description

Allows the extension user to prohibit other extensions from intruding on the current call using Executive Busy Override feature.
If this feature is assigned to the extension, another extension's attempt to execute Executive Busy Override is rejected with busy tone.
Refer to Section 5-A-5.00 “Executive Busy Override” for further information.

To assign or cancel this feature, dial the feature number for “Busy Override Deny Set” or “Busy Override Deny Cancel.”

System programming is required to assign this feature.
Assign “System-Class of Service”, Executive Busy Override Deny to “Yes.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, Executive Busy Override Deny	9-D-4.01	10-C-7.00
“System-Numbering Plan (05/11)”, Busy Override Deny Set Busy Override Deny Cancel	9-D-6.05	10-C-10.00

Conditions

None

Operation

Assigning Executive Busy Override Deny

1. Lift the handset.

2. Dial the feature number for Busy Override Deny Set “64#” (default).
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

Canceling Executive Busy Override Deny

1. Lift the handset.

2. Dial the feature number for Busy Override Deny Cancel “64#” (default).
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

4.00 Do Not Disturb (DND)

Description

Do Not Disturb allows an extension user to appear busy to all incoming calls (intercom, extension and outside calls).

To utilize this feature, assign “System-Class of Service”, Call Forwarding/Do Not Disturb to “Yes” beforehand by system programming.
This feature can be assigned and canceled by dialing the feature number “Do Not Disturb Set” and “Call Forwarding/Do Not Disturb Cancel.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, Call Forwarding/Do Not Disturb	9-D-4.01	10-C-7.00
“System-Numbering Plan (05/11)”, Do Not Disturb Set Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00

Conditions

(1) IRNA – Automatically
If a call via DISA/DID is directed to an extension in the DND mode, it will be automatically redirected to another extension (including VPS extension) or an Attendant Console assigned as the IRNA destination.
Refer to Section 3-F-5.00 “Intercept Routing – No Answer (IRNA) for further information.

(2) Making Calls
An extension in the DND mode can still be used to make calls and access any other features available to that extension.

(3) Answering Calls
An extension in the DND mode is available:

- To answer a call ringing at another extension by “Call Pickup” feature.
  Refer to Section 5-B-1.00 “Call Pickup” for further information.

(4) FWD/DND
Setting DND feature cancels any Call Forwarding feature pre-assigned on the extension and vice versa.
Refer to Section 5-D-2.00 “Call Forwarding (FWD)” for further information.

(5) DND Override
“Do Not Disturb Override” allows extension users to override “Do Not Disturb” feature assigned on the called extension user.
Refer to Section 5-A-6.00 “Do Not Disturb Override” for further information.

Operation

Setting Do Not Disturb

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for Do Not Disturb Set “✻ ✻ 1” (default).
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

Canceling Do Not Disturb

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for Call Forwarding/Do Not Disturb Cancel “##0” (default).
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

(Supplement)

The table below shows whether an extension which has DND assigned rings or not and the other extensions which has the extension's directory number assigned (PITS) rings or not and how their SDN indicators light, when the extension setting DND receives a call.

Type of call arriving at setting extension	Other extensions has SDN assigned or not	Extension which has DND assigned (PDN)	Extension which has SDN assigned (SDN)
Extension call	No	No ring ☛1	
	Yes	No ring	Red 240 wink Ring
Attendant Console call	No	No ring ☛1	
	Yes	No ring	Red 240 wink Ring
DIL (1:N) call	No	No ring	
	Yes		Lights on in red No ring
DIL (1:1) call	No	Ring	
	Yes	No ring	Red 240 wink Ring
DID call	No	No ring	
	Yes		Indicator off No ring
DISA call	No	No ring	
	Yes		Indicator off No ring
Other calls		No ring ☛1	

☛1 DND tone is sent to the caller.

5.00 Call Waiting

Description

Call waiting tone to a busy extension indicates that another call (extension or outside) is waiting.

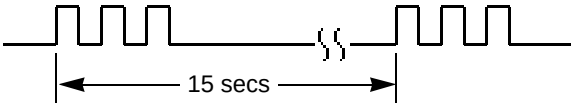
To set or cancel Call Waiting feature, dial the feature number for “Call Waiting Set” or “Call Waiting Cancel.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (05/11)”, Call Waiting Set Call Waiting Cancel	9-D-6.05	10-C-10.00

Conditions

Call waiting tone is sent in the following mode:



Operation

Setting Call Waiting

1. Lift the handset.

2. Dial the feature number for Call Waiting Set “62#” (default).
   - You hear confirmation tone 1 or 2, and then dial tone 1 or 3 or 4.

3. Replace the handset.

Canceling Call Waiting

1. Lift the handset.

2. Dial the feature number for Call Waiting Cancel “62#” (default).
   - You hear confirmation tone 1 or 2, and then dial tone 1 or 3 or 4.

3. Replace the handset.

Operation

Answering Call Waiting

A call from another extension or outside party arrives during a conversation.

- You hear call waiting tone.

Talking to the new party by disconnecting the current call

1. Replace the handset to disconnect the current call.
   - Your telephone set rings.

2. Lift the handset.
   - Talk to the new party.

Talking to the new party by holding the current party

1. Press the switchhook for approximately one half second and release.
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for “Hold” to hold the current party.
   - You hear confirmation tone 2 then dial tone 1 or 3 or 4.

3. Replace the handset.
   - Your telephone set rings.

4. Lift the handset.
   - Talk to the new caller.
   - To conclude the new conversation and return to the held party again, replace the handset and lift the handset again, then dial the feature number for “Hold Retrieve.”

(Supplement)

See Section 5-C-1.00 “Hold” for further information about Hold.

6.00 Uniform Call Distribution (UCD)-Log Out

Description

UCD group members may leave the group temporarily by dialing the feature number for "UCD Log Out" to avoid UCD calls being sent to their extensions.

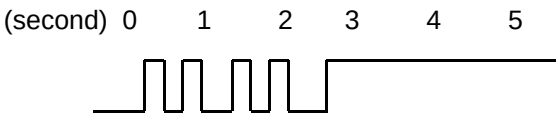
Refer to Section 3-D-2.05 "Uniform Call Distribution (UCD)-without OGM" and Section 3-D-2.06 "Uniform Call Distribution (UCD)-with OGM" for further information about UCD call.

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (09/11)", UCD Log In UCD Log Out	9-D-6.09	10-C-10.00

Conditions

When an extension of the UCD group set for Log Out goes off-hook, dial tone 4 below can be heard.



Operation

Setting UCD Log Out (Leaving a UCD group)

1. Lift the handset.
   - You hear dial tone 4.

2. Dial the feature number for UCD Log Out "#0" (default).
   - You hear confirmation tone 1 or 2.

3. Replace the handset.

Canceling UCD Log Out (Returning to a UCD group)

1. Lift the handset.
   - You hear dial tone 4.

2. Dial the feature number for UCD Log In "#0" (default).

3. Replace the handset.

C. Holding Features

1.00 Hold

Description

Allows an extension user to hold the current call and either make or answer another call (extension or outside).

To hold a call, dial the feature number for “Hold.” To retrieve a held call, dial the feature number for “Hold Retrieve.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (04/11)”, Hold Hold Retrieve	9-D-6.04	10-C-10.00

Conditions

SLT telephone user cannot hold the multiple calls at a time. So if the SLT telephone users attempt to hold another call while holding a current call, reorder tone is heard. If SDN button for SLT telephone user is busy, the SLT telephone users cannot hold a call even though no call is held by SLT.

The extension users can not hold the following calls.

- A call with Attendant Console
- A call with Doorphone

If a held call has not been answered more than a pre-assigned time, a warning tone may sound at extension which placed a call on hold.
Refer to Section 3-E-2.00 “Held Call Reminder” for further information.

If a held call is not answered more than 30 minutes, it will be disconnected automatically.

Music on Hold will be sent to the held party if available. For sending Music on Hold, prior assignment is necessary. Refer to Section 3-E-1.00 “Music on Hold” for further information.

Operation

Placing a call on hold.

1. Press the switchhook for approximately one half second and release it.

   - The other party is held temporarily.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2. Dial the feature number for Hold “51” (default).

   - The other party is placed on hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

Retrieving a held call

1. Lift the handset.

   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for Hold Retrieve “52” (default).

   - You hear confirmation tone 3 and a held call is retrieved.

3. Start conversation again.

2.00 Consultation Hold

Description

Allows the extension user to hold the current call temporarily on purpose to transfer it or establish a conference. Other extensions cannot retrieve the call during Consultation Hold.

Programming

None

Conditions

The extension users can not place the following calls on consultation hold.

- A call with Attendant Console
- A call with Doorphone

Consultation Hold Recall tone sound immediately if the extension user replaces the handset while having a call on consultation hold.

Consultation Hold Recall tone sounds in the same way as Held Call Reminder.

If a held call is not answered more than 30 minutes, it will be disconnected automatically.

When you have a call on Consultation Hold and are talking to another party, pressing the switchhook for approximately one half second and releasing it enables you to have conference if a conference trunk is available. If there is no conference trunk available, the party in conversation is placed on Consultation Hold and you can talk to the retrieved party.
For further information about conference, refer to Section 5-E-1.00 “Conference.”

Music on Hold will be sent to the held party if available. For sending Music on Hold, prior assignment is necessary. Refer to Section 3-E-1.00 “Music on Hold” for further information.

Operation

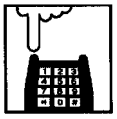
Placing a call on Consultation Hold

1. Press the switchhook for approximately one half second and release.

   - The call is placed on Consultation Hold, and you hear confirmation tone 2 then dial tone 1 or 3 or 4.
   - You can call another party.

Retrieving a call on Consultation Hold

You have placed a call on Consultation Hold and are not in conversation.



1. Press the switchhook for approximately one half second and release.

   - The call is retrieved and you can talk to the party.

3.00 Call Hold Retrieve-Station

Description

Allows an extension user to talk to the other party by retrieving a call held by another extension. This function is performed by dialing the feature number for “Hold Extension Retrieve” and extension number on which a call is placed on hold (directory number: three or four digits).

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”, Hold Extension Retrieve	9-D-6.03	10-C-10.00

Conditions

Even if the other extension has held multiple calls, there is no preferential order for retrieving calls.

In case of a failure to retrieve a call (the other extension holds no call), reorder tone is returned.

The following calls cannot be retrieved from other extensions.

- A call held on PCO button
- A call placed on Exclusive Hold
- A call place on Consultation Hold

Operation

1. Lift the handset.

2. Dial the feature number for Hold Extension Retrieve “49” (default).

3. Dial the directory number of the holding extension: three or four digits.

   - You hear confirmation tone 3.

4. Start conversation with the other party.

4.00 Call Park

4.01 Call Park-System

Description

Allows an extension user to hold a call (both extension and outside) into a parking area common to the system.
The parked call can be retrieved from any extension in the system.
Call Park can be used whenever an extension user engaged on a call needs to go elsewhere, and wishes to complete the call from another extension.

Call Park feature is also convenient to be used in combination with paging feature since any extension user can retrieve a parked call after being paged.

20 parking areas are available common to the system.

To execute Call Park-System, dial the feature number for “Call Park-System.”
To retrieve a call parked in the system parking area, dial the feature number for “Call Park Retrieve-System.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Tenant”, Call Park Boundary	9-D-2.00	10-C-5.00
“System-Numbering Plan (04/11)”, Call Park-System Call Park Retrieve-System	9-D-6.04	10-C-10.00

Conditions

If Tenant Service is employed, 20 parking areas can be split between two tenants in “System-Tenant”, Call Park Boundary.

A parked call will be disconnected automatically by the system, if it is not answered within 30 minutes.

Music on Hold will be sent to the held party if available. For sending Music on Hold, prior assignment is necessary. Refer to Section 3-E-1.00 “Music on Hold.”

Operation

Parking a call to the system parking area

1. Press the switchhook for approximately one half second and release.

   - The other party is placed on Consultation Hold. You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2. Dial the feature number for Cal Park-System “53” (default).

3. Dial the parking area number in two digits: 01 to 20.

   - When you succeed in Call Park-System, you hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - If you fail in Call Park-System (another call is already parked in the specified parking area), you hear busy tone 1 or 2.
   - In this case, dialing another parking area number (01 to 20) allows you to try a new call park destination.
   - To talk to the party placed on Consultation Hold again while hearing busy tone, follow the same procedures as retrieving Consultation Hold. Refer to Section 5-C-2.00 “Consultation Hold.”

4. Replace the handset.

Retrieving a call parked in the system parking area

1. Lift the handset.

2. Dial the feature number for Call Park Retrieve-System “54” (default).

3. Dial the parking area number: 01 to 20.

   - When you succeed in retrieving the parked call, you hear confirmation tone 2. Start conversation with the retrieved party.
   - If you fail, you hear reorder tone.

Note:

- Confirmation tone 2 for Call Park can be eliminated by WS4 command (See Section 10-C-62.00 “World Select 4 (WS4)”).

4.02 Call Park-Station

Description

Allows an extension user to hold a call (both extension and outside) into the parking area dedicated to each extension.
The parked call can be retrieved from any extension in the system.

Call Park feature can be used whenever an extension user engaged on a call needs to go elsewhere, and wishes to complete the call from another extension.
Call Park feature is also convenient to be used in combination with paging feature since any extension user can retrieve a parked call after being paged.
Any extension user can park only one call to the parking area dedicated to each extension.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (04/11)”, Call Park-Station Call Park Retrieve-Station	9-D-6.04	10-C-10.00

Conditions

A parked call will be disconnected automatically by the system, if it is not answered within 30 minutes.

Music on Hold will be sent to the held party if available. For sending Music on Hold, prior assignment is necessary. Refer to Section 3-E-1.00 “Music on Hold.”

Operation

Executing Call Park-Station

1. Press the switchhook for approximately one half second and release it.

   - The current call is placed on Consultation Hold. You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2. Dial the feature number for “Call Park-Station.”

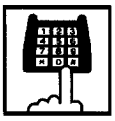
   - When you succeed in Call Park-Station, you hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - When you cannot park a call (another call is already parked), you hear busy tone 1 or 2.
   - To talk to the party placed on Consultation Hold again while hearing busy tone 1 or 2, follow the same procedures as retrieving Consultation Hold. Refer to Section 5-C-2.00 “Consultation Hold.”

3. Replace the handset.

Retrieving Call Park-Station

1. Lift the handset.

2. Dial the feature number for “Call Park Retrieve-Station.”



3. Dial the directory number of the parking extension : three or four digits.

   - When you succeed in retrieving Call Park-Station, you hear confirmation tone 2. Then start conversation with the retrieved party.
   - If no call is parked at the extension, you hear reorder tone.

Note:

- Confirmation tone 2 for Call Park can be eliminated by WS4 command (See Section 10-C-62.00 “World Select 4 (WS4)”).

D. Transferring Features

1.00 Call Transfer

Description

Transfer is convenient to redirect a call to another place. Attendant assistance is not required and the caller does not have to redial.

SLT Transfer Operation

When SLT Transfer Operation mode is set to “Mode 2”, an SLT user can transfer a call to an outside party.

Reference

- Section 5-D-1.06 “Screened call Transfer to Trunk”
- Section 10-C-53.00 “World Select 3”

1.01 Unscreened Call Transfer to Station

Description

Allows an extension user to transfer calls (both extension and outside calls) to another extension without announcement.

Programming

System Programming	Reference	
	VT	Dumb
“World Select 3 (WS3)” SLT Transfer Operation	—	10-C-53.00

Conditions

If transferred call is not answered by the destination party, it will receive one of the following treatments.

Status of Destination	Operation Resulted
Able to receive the call (sending ringback tone)	Performs the call to the destination for a specific period. In case of no answer, interrupts ringing and starts ringing to the originator of transfer. ☛1 For detail, refer to Section 3-E-3.00 “Transfer Recall.”
Busy (sending busy tone)	As soon as the destination goes on-hook, starts calling the destination (Camp-on Transfer). If the destination party remains busy or does not answer the call within a specified period, starts calling back the originator of transfer. ☛1 For detail, refer to Section 3-E-3.00 “Transfer Recall.”
Setting Do Not Disturb (sending DND tone)	Unscreened Call Transfer to extension is ineffective. Transferred party is treated simply as a party placed on Consultation Hold. Hanging up causes the Consultation Hold Recall to the originator of transfer.

☛1 When the originator of transfer answers the call, conversation between the originator and the transferred party starts.

The extension users can not transfer the following calls.

- A call with Attendant Console
- A call with Doorphone

If Music on Hold is available, from the start of the transferring operation until the destination party answers, the system sends Music on Hold (See Section 3-E-1.00 “Music on Hold,”) to the party while he or she is being transferred.

Instead of Music on Hold, Ringback Tone can be sent to the caller while he or she is being transferred (See Section 10-C-53.00 “World Select 3 (WS3)”).

Operation -1 (Mode 1)

While having a conversation;

1. Press the switchhook for approximately one half second and release it.

   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2. Dial the directory number of the destination: three or four digits.

   - You hear ringback tone.
   - Ringback starts at the destination extention.

3. Replace the handset.

Note:

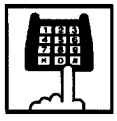
- If you want to return to the held party, press the switchhook for approximately one half second and release it before the destination extension answers.

Operation -2 (Mode 2)

While having a conversation;

1. Press the switchhook for approximately one half second and release it.

   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.



2. Dial the feature number for Transfer “58” (default).

   - You hear confirmation tone 2 and then dial tone.

3. Dial the directory number of the destination: there or four digits.

   - You hear ringback tone.
   - Ringing starts at the destination extension.

4. Replace the handset.

Note:

- It the feature number for “Transfer” is not dialed at step 2, the call will be disconnected after replacing the handset.
- If you want to return to the held party at step 3 above, press the switchhook for approximately one half second and release it before the destination extension answers.

1.02 Screened Call Transfer to Station

Description

Allows an extension user to transfer the calls (both extension and outside calls) to another extension with announcement.

Programming

System Programming	Reference	
	VT	Dumb
"World Select 3(WS3)" SLT Transfer Operation	—	10-C-53.00

Conditions

The extension user cannot transfer the following calls.

- A call with Attendant Console
- A call with Doorphone

If Music on Hold is assigned, Music on Hold is sent to the transferred party since the party starts being transferred until he starts conversation with the destination party.
For further detail, refer to Section 3-E-1.00 “Music on Hold.”

The user can execute this function even after holding another party.

Operation - 1 (Mode 1)

While having a conversation;

1. Press the switchhook for approximately one half second and release it.
   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2. Dial the directory number of the destination: three or four digits.
   - You hear ringback tone.

3. Wait for the answer and announce.

4. Replace the handset.
   - The call is transferred to the destination.

Note:
If you want to return to the held party, press the switchhook for approximately one half second and release before the destination extension answers.

Operation - 2 (Mode 2)

While having a conversation;

1. Press the switchhook for approximately one half second and release it.
   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2. Dial the feature number for Transfer "58" (Default).
   - You hear confirmation tone 2 and then dial tone.

3. Dial the directory number of the destination: there or four digits.
   - You hear ringback tone.

4. Wait for the answer and announce.

5. Replace the handset.
   - The call is transferred to the destination.

Note:
- If you want to return to the held party, press the switchhook for approximately one half second and release it before the destination extension answers.
- If the feature number for "Transfer" is not dialed at step 2, the call will be disconnected after replacing the handset.

1.03 Unscreened Call Transfer to Remote

Description

Allows an extension user to transfer a call to the remote maintenance resource. (Available with Software Version 9.5X and above). Modem answer tone is returned instantly, if it is not in use. This operation allows System Administrator to perform System Administration from Remote Location.
Refer to Section 14-B-2.00 “System Administration from a Remote Location” for further information.

To transfer a call to remote maintenance resource, “FDN for Remote” is used, which is assigned in “System-Operation”, Remote Directory Number.
See Section 3-B-3.00 “Floating Directory Number (FDN)” for details of FDN.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (2/3)”, Remote Directory Number	9-D-1.02	10-C-4.00
"World Select 3 (WS3)" SLT Transfer Operation	—	10-C-53.00

Conditions

If Music on Hold is assigned, the system sends Music on Hold to the transferred party during the transferring operation. For details, refer to Section 3-E-1.00 “Music on Hold.”

If the remote maintenance port is in use, busy tone is returned to the held party. Automatic Callback does not function in this case, so the caller should call again when it becomes idle.

Operation -1 (Mode 1)

While having a conversation;

1. Press the switchhook for approximately one half second and release it.

   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2, then dial tone 1 or 3 or 4.

2. Dial the “FDN for Remote”: three or four digits.

   - You hear confirmation tone 3, then dial tone 1 or 3 or 4.
   - If the remote maintenance port is not in use, the held party hears answer tone and can start communication instantly.

3. Replace the handset.

Operation -2 (Mode 2)

While having a conversation;

1. Press the switchhook for approximately one half second and release it.

   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 3, then dial tone 1 or 3 or 4.

2. Dial the feature number for Transfer "58" (Default).

   - You hear confirmation tone 2 and then dial tone.

3. Dial the "FDN for Remote": three or four digits.

   - You hear confirmation tone 3,then dial tone 1 or 3 or 4.
   - If the remote maintenance port is not in use, the held party hears answer tone and can start communication instantly.

4. Replace the handset.

1.04 Unscreened Call Transfer — to Attendant Console

Description

Allows an extension user to transfer calls (both extension and outside) to an Attendant Console without announcement.

Programming

System Programming	Reference	
	VT	Dumb
"World Select 3(WS3)" SLT Transfer Operation	—	10-C-53.00

Conditions

1) Transfer Recall

   A call transferred by this feature will not ring back at the extension who transferred the call even if the Attendant Console does not answer the call after the transfer recall timer has been elapsed.

2) Intercept Routing No Answer (IRNA)

   A call transferred to an Attendant Console will not be transferred to another extension by IRNA feature even if the Attendant Console does not answer the call after the IRNA timer has been elapsed.

3) What if all six Loop keys on the Attendant Console are not idle?

   A call is put in the call waiting queue of the Attendant Console.

4) What if the Attendant Console is in ATT-FWD mode?

   This feature does not function.
   A call is simply put on Consultation Hold, that is, a call will ring back at the extension who tries to transfer the call as soon as he or she goes on-hook.

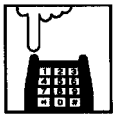
5) Music on Hold

   If Music on Hold is available, the system sends Music on Hold to the transferred party, from the start of the transferring operation till the destination party answers.

   Instead of Music on Hold, Ringback Tone can be sent to the caller while he or she is being transferred (See Section 10-C-53.00 “World Select 3 (WS3)”).

Operation -1 (Mode 1)

While having a conversation;



1. Press the switchhook for approximately one half second and release it.
   - The other party is put on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2. Make a call to an Attendant Console.
   - You hear ringback tone.
   - Calling an Attendant Console starts.

3. Replace the handset.
   - At an Attendant Console: The call is displayed as a transfer recall.

Operation -2 (Mode 2)

While having a conversation;

1. Press the switchhook for approximately one half second and release it.
   - The other party is put on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2. Dial the feature number for Transfer "58"(Default).

3. Make a call to an Attendant Console.
   - You hear ringback tone.
   - Calling an Attendant Console starts.

4. Replace the handset.
   - At an Attendant Console: The call is displayed as a transfer recall.

Note:
The feature numbers and DN's for making a call to an Attendant Console are:

- Operator Call (General)
- Operator Call (Specific)
- FDN for General Operator Call
- DN for ATT1 and ATT2

1.05 Unscreened Call Transfer — to a UCD Group (with OGM)

Description

Allows an extension user to transfer an outside call to a UCD Group from 01 to 04 (with OGM type).

From version 8.XX, not only the operators but any extension user can transfer an outside call to a UCD group (with OGM).

Programming

System Programming	Reference	
	VT	Dumb
“Special Attended–UCD (1/2)”	9-K-3.01	10-C-44.00
"World Select 3 (WS3)" SLT Transfer Operation	—	10-C-53.00

Conditions

If all group members are not available to answer the call, it will be redirected to the Overflow destination. In this case, the call will be disconnected if not answered by the Overflow destination within 60 seconds.
See page 3-D-13 for further information.

Operation -1 (Mode 1)

While having a conversation;

1 Press the switchhook for approximately one half second and release it.
- The other party is put on Consultation Hold.
- You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2 Dial the FDN for UCD group (01 to 04).
- You hear confirmation tone 3 and then dial tone 1 or 3 or 4.

3 Replace the handset.

Operation -2 (Mode 2)

While having a conversation;

1. Press the switchhook for approximately one half second and release it.
   - The other party is put on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2. Dial the feature number for Transfer "58"(Default).
   - You hear confirmation tone 2 and then dial tone.

3. Dial the FDN for UCD group (01 to 04).
   - You hear confirmation tone 3 and then dial tone 1 or 3 or 4

4. Replace the handset.

Feature References

Uniform Call Distribution (UCD)–with/without OGM (Section 3-D-2.06)

1.06 Screened Call Transfer to Trunk

Description

Allows an extension user to transfer calls (both extension and outside) to an outside party with announcement.
Available when “SLT Transfer Operation” is set to “Mode 2”.

To execute this function, assign “System-Class of Service”, CO Transfer mode to “Yes.”

If outside call is transferred to another outside party, CO-CO conversation mode is established and the duration of the conversation is restricted by “Group-Trunk Group”, CO-CO Duration Limit.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, CO Transfer Mode	9-D-4.01	10-C-7.00
“System-Numbering Plan (11/11)”, Transfer	9-D-6.11	10-C-10.00
“Group-Trunk Group (1/2)”, CO-CO Duration Limit	9-E-1.01	10-C-14.00
“World Select 3 (WS3)” SLT Transfer Operation	—	10-C-53.00

Conditions

If a call from outside party is transferred to another outside party, CO-CO conversation mode is established. In this case, the system uses the preset time limit for the trunk group that the transferred party is placed on, not using the time limit for the trunk group used to call the destination and alarm tone is sent to parties 15 seconds before the assigned time limit, and when time is out, both CO lines are disconnected.

The extension users can not transfer the following calls.

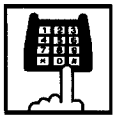
- A call with Attendant Console
- A call with Doorphone

If Music on Hold is available, from the start of the transferring operation until the destination party answers, the system sends Music on Hold to the transferred party.
For further detail, refer to Section 3-E-1.00 “Music on Hold.”

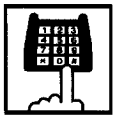
Operation (Mode 2)

While having a conversation;

1. Press the switchhook for approximately one half second and release it.
   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.



2. Dial the feature number for Transfer “58” (Default).
   - You hear confirmation tone 2 and then dial tone.



3. Call another outside party
   - You hear ringback tone from the CO line.

4. When the destination answers, make the announcement.

5. Replace the handset.
   - The call is transferred to the destination.

Note:

- If an extension that cannot execute this function (by COS restriction) attempts to do this procedure, the system sends a consultation hold recall to the extension after step 5 and the transfer is rejected.

- If you want to return to the held party, press the switchhook for approximately one half second and release it before the destination answers.

- If CPC signal is not supplied by the Central Office in your area, KX-T336 cannot detect the end of CO-CO call after one party disconnects the call. In this case, we recommend to use tone detection feature of AGC Card (See Section 10-C-67.00 “DISA/AGC Tone Detection Mode (TDM)”).

2.00 Call Forwarding (FWD)

2.01 Call Forwarding-All Calls

Description

Call Forwarding-All Calls allows extension users who are away from their phones to receive incoming calls (both extension and CO) to them at another extension.

Incoming calls can be forwarded either to extension users, Voice Mail port, or operators (Attendant Console or Extension).
"FDN for General Operator Call" can be used to assign operators as the destination of Call Forwarding.
Refer to Section 9-D-1.01 "Operation (1/3)" for further information.

The following incoming calls do not receive Call Forwarding treatment.

- A call from doorphone
- A call routed via DIL 1: N feature
- A call directed to a UCD group

To execute Call Forwarding-All Calls, assign "System-Class of Service", Call Forwarding/Do Not Disturb" to "Yes."

To set and cancel this function, dial the feature number for "Call Forwarding-All Calls Set" and "Call Forwarding-Do Not Disturb Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (1/2)", Call Forwarding/Do Not Disturb	9-D-4.01	10-C-7.00
"System-Numbering Plan (04/11)", Call Forwarding-All Call Set	9-D-6.04	10-C-10.00
"System-Numbering Plan (05/11)", Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00

Conditions

An extension user may have only one type of Call Forwarding/Do Not Disturb feature in effect at any time. If a second type is assigned, the previously assigned type is canceled.

If the extension to which calls are to be forwarded itself is in a call forward mode, a call is not forwarded furthermore. The call rings at the first forwarded extension. In case of an outside call, if not answered in a specified time period, the call will be routed to another destination, if available, based on the "Intercept Routing-No Answer" feature.

If Tenant Service is employed and "Inter Tenant Calling" is assigned to "Yes" by programming, this function is ineffective for the calls from another tenant if the destination of Call Forwarding-All Calls is set to an Attendant Console.

Calls from any VM extension will not be forwarded, if forwarding destination is another VM extension.

The following attempt will be rejected with reorder tone.

- If Tenant Service is employed, the user cannot set the destination to an extension in the other tenant.
- To call the other extension whose call forwarding destination is set to his or her own extension.

The Operators (Attendant Console or Extension) can cancel the Call Forwarding/Do Not Disturb feature assigned to the extension users. Refer to Section 5-G-9.00 "Remote Station Feature Control."

The following table shows the results of the calls arriving at an extension setting this function depending on the conditions of the preset destination.

Type of Call Arriving at Setting Extension	Condition of Destination	Forwarding Execution	Result
Extension call	Idle status	◯	Call is forwarded to destination.
	Busy status	◯	Busy tone is sent from destination.
	Assigned to DND	◯	DND tone is sent from destination.
	PITS programming mode	◯	Busy tone is sent from destination.
	Conditions except In Service ☛	╳	Call is placed on setting extension.
DIL (1:1) or DISA call	Idle status	◯	Call is forwarded to destination.
	Busy status	◯	Call is forwarded and kept waiting at destination.
	Assigned to DND	◯	Same as call reaching DND. See Section 5-B-4.00 “Do Not Disturb (DND).”
	PITS programming mode	◯	Call is forwarded and kept waiting at destination.
	Conditions except In Service ☛	╳	Call is placed on setting extension.
DID call	Idle status	◯	Call is forwarded to destination.
	Busy status	◯	Busy tone is sent from destination
	Assigned to DND	◯	Same as call reaching DND. See Section 5-B-4.00 “Do Not Disturb (DND).”
	PITS programming mode	◯	Busy tone is sent from destination
	Conditions except In Service ☛	╳	Call is placed on destination.

◯ : Forwarding possible

╳ : Forwarding impossible

☛ Conditions are “Out of Service,” “Fault” and “Pre-Installed.” See Section 14-C-2.02 “Port” for details.

Operation

Setting Call Forwarding-All Calls

1. Lift the handset.

2. Dial the feature number for “Call Forwarding-All Call Set.”

3. Dial the directory number of the extension or the Voice Mail port, or the “FDN for General Operator Call” to be set as the destination:

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

4. Replace the handset.

Canceling Call Forwarding-All Calls

1. Lift the handset.

2. Dial the feature number for “Call Forwarding/Do Not Disturb Cancel.”

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

2.02 Call Forwarding-Busy/Off-Hook

Description

Call Forwarding-Busy/Off-Hook provides automatic call transfer to a preset destination when the user's extension is busy or off-hook.

Incoming calls can be forwarded to extension users, Voice Mail ports, or operators.
"FDN for General Operator Call" is used to assign operators as the destination of Call Forwarding. Refer to Section 9-D-1.01 "Operation (1/3)" for further information.

The following incoming calls do not receive Call Forwarding treatment.

- A call from doorphone
- A call routed via DIL 1: N feature
- A call directed to a UCD group

To set Call Forwarding-Busy/Off-Hook, assign "System-Class of Service", "Call Forwarding/Do Not Disturb" to "Yes."

To set and cancel this function, dial the feature number for "Call Forwarding-Busy Set," and "Call Forwarding/Do Not Disturb Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (1/2)", Call Forwarding/Do Not Disturb	9-D-4.01	10-C-7.00
"System-Numbering Plan (04/11)", Call Forwarding-Busy Set	9-D-6.04	10-C-10.00
"System-Numbering Plan (05/11)", Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00

Conditions

An extension user may have only one type of Call Forwarding/Do Not Disturb feature in effect at any time. If a second type is assigned, the previously assigned type is canceled.

If the extension to which calls are to be forwarded itself is in a call forward mode, a call is not forwarded furthermore. The call rings at the first forwarded extension. In case of an outside call, if not answered in a specified time period, the call will be routed to another destination, if available, based on the "Intercept Routing-No Answer" feature.

If Tenant Service is employed and "Inter Tenant Calling" is assigned to "Yes" by programming, this function is ineffective for the calls from another tenant if the destination of Call Forwarding-Busy/Off-Hook is set to an Attendant Console.

Calls from any VM extension will not be forwarded, if forwarding destination is another VM extension.

The following attempt will be rejected with reorder tone.

- If Tenant Service is employed, the user cannot set the destination to an extension in the other tenant.
- To call the other extension whose call forwarding destination is set to his or her own extension.

The Operators (Attendant Console or Extension) can cancel the Call Forwarding/Do Not Disturb feature assigned to the extension users. Refer to Section 5-G-9.00 "Remote Station Feature Control."

The following table shows the results of the calls arriving at an extension setting this function depending on the conditions of the preset destination.

Type of Call Arriving at Setting Extension	Condition of Destination	Forwarding Execution	Result
Extension call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DIL (1:1) or DISA call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DID call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		

◯ : Forwarding possible

× : Forwarding impossible

☛ Conditions are “Out of Service,” “Fault” and “Pre-Installed.” See Section 14-C-2.02 “Port” for details.

Operation

Setting Call Forwarding-Busy/Off-Hook

1. Lift the handset.

2. Dial the feature number for “Call Forwarding-Busy Set.”

3. Dial the directory number of the extension or the Voice Mail ports,or the “FDN for General Operator Call” to be set as the destination.

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

4. Replace the handset.

Canceling Call Forwarding-Busy/Off-Hook

1. Lift the handset.

2. Dial the feature number for “Call Forwarding/Do Not Disturb Cancel.”

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

2.03 Call Forwarding-No Answer

Description

Call Forwarding-No Answer provides automatic call transfer to a preset destination if the extension user cannot answer the call in a determined period (that is, if the caller is not answered while hearing ringback tone in a specified period).

Determine the duration from the arrival of a call to the start of Call Forwarding (period of no answer) by “System-System Timer”, Call Forwarding-No Answer Time-Out.

Incoming calls can be forwarded to extension users, Voice Mail ports, or operators.
“FDN for General Operator Call” is used to assign operators as the destination of Call Forwarding. Refer to Section 9-D-1.01 “Operation (1/3)” for further information.

The following incoming calls do not receive Call Forwarding treatment.

- A call from doorphone
- A call routed via DIL 1: N feature
- A call directed to a UCD group

To set Call Forwarding-No Answer, assign “System-Class of Service”, Call Forwarding/Do Not Disturb” to “Yes.”

To set and cancel this function, dial the feature number for “Call Forwarding-No Answer Set” and “Call Forwarding/Do Not Disturb Cancel.”

Programming

System Programming	Reference	
	VT	Dumb
“System-System Timer”, Call Forwarding-No Answer Time-Out	9-D-3.00	10-C-6.00
“System-Class of Service (1/2)”, Call Forwarding/Do Not Disturb	9-D-4.01	10-C-7.00
“System-Numbering Plan (04/11)”, Call Forwarding-No Answer Set	9-D-6.04	10-C-10.00
“System-Numbering Plan (05/11)”, Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00

Conditions

An extension user may have only one type of Call Forwarding/Do Not Disturb feature in effect at any time. If a second type is assigned, the previously assigned type is canceled.

If the extension to which calls are to be forwarded itself is in a call forward mode, a call is not forwarded furthermore. The call rings at the first forwarded extension. In case of an outside call, if not answered in a specified time period, the call will be routed to another destination, if available, based on the “Intercept Routing-No Answer” feature.

If Tenant Service is employed and “Inter Tenant Calling” is assigned to “Yes” by programming, this function is ineffective for the calls from another tenant if the destination of Call Forwarding-No Answer is set to an Attendant Console.

Calls from any VM extension will not be forwarded, if forwarding destination is another VM extension.

The following attempt will be rejected with reorder tone.

- If Tenant Service is employed, the user cannot set the destination to an extension in the other tenant.

This feature does not function if an extension user attempts to call the other extension whose call forwarding-no answer destination is set to his or her own extension.

The Operators (Attendant Console or Extension) can cancel the Call Forwarding/Do Not Disturb feature assigned to the extension users. Refer to Section 5-G-9.00 “Remote Station Feature Control.”

The following table shows the results of the calls arriving at an extension setting this function depending on the conditions of the preset destination.

Type of Call Arriving at Setting Extension	Condition of Destination	Forwarding Execution	Result
Extension call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DIL (1:1) or DISA call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DID call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		

◯ : Forwarding possible

× : Forwarding impossible

☛ Conditions are “Out of Service,” “Fault” and “Pre-Installed.” See Section 14-C-2.02 “Port” for details.

Operation

Setting Call Forwarding-No Answer

1. Lift the handset.

2. Dial the feature number for “Call Forwarding-No Answer Set.”

3. Dial the directory number of the extension or the Voice Mail port, or the “FDN for General Operator Call” of the destination.

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

4. Replace the handset.

Canceling Call Forwarding-No Answer

1. Lift the handset.

2. Dial the feature number for “Call Forwarding/Do Not Disturb Cancel.”

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

2.04 Call Forwarding-Busy/Off-Hook/No Answer

Description

Call Forwarding-Busy/Off-Hook/No Answer provides automatic call transfer to a preset destination if the user's extension is busy off-hook or the user cannot answer the call in a determined period (that is, if the caller is not answered while hearing ringback tone in a specified period).

Determine the duration from the arrival of a call to the start of Call Forwarding (period of no answer) by “System-System Timer”, Call Forwarding-No Answer Time-Out.

Incoming calls can be forwarded to extension users, Voice Mail ports, or operators.
“FDN for General Operator Call” is used to assign operators as the destination of Call Forwarding. Refer to Section 9-D-1.01 “Operation (1/3)” for further information.

The following incoming calls do not receive Call Forwarding treatment.

- A call from doorphone
- A call routed via DIL 1: N feature
- A call directed to a UCD group

To set Call Forwarding-Busy/Off-Hook/No Answer, assign “System-Class of Service”, Call Forwarding /Do Not Disturb” to “Yes.”

To set and cancel this function, dial the feature number for “Call Forwarding-Busy/No Answer” and “Call Forwarding/Do Not Disturb Cancel.”

Programming

System Programming	Reference	
	VT	Dumb
“System-System Timer”, Call Forwarding-No Answer Time-Out	9-D-3.00	10-C-6.00
“System-Class of Service (1/2)”, Call Forwarding/Do Not Disturb	9-D-4.01	10-C-7.00
“System-Numbering Plan (04/11)”, Call Forwarding-Busy/No Answer	9-D-6.04	10-C-10.00
“System-Numbering Plan (05/11)”, Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00

Conditions

An extension user may have only one type of Call Forwarding/Do Not Disturb feature in effect at any time. If a second type is assigned, the previously assigned type is canceled.

If the extension to which calls are to be forwarded itself is in a call forward mode, a call is not forwarded furthermore. The call rings at the first forwarded extension. In case of an outside call, if not answered in a specified time period, the call will be routed to another destination, if available, based on the “Intercept Routing-No Answer” feature.

If Tenant Service is employed and “Inter Tenant Calling” is assigned to “Yes” by programming, this function is ineffective for the calls from another tenant if the destination of Call Forwarding-Busy/Off-Hook/No Answer is set to an Attendant Console.

Calls from any VM extension will not be forwarded, if forwarding destination is another VM extension.

The following attempt will be rejected with reorder tone.

- If Tenant Service is employed, the user cannot set the destination to an extension in the other tenant.

This feature does not function if an extension user attempts to call the other extension whose call forwarding-no answer destination is set to his or her own extension.

The Operators (Attendant Console or Extension) can cancel the Call Forwarding/Do Not Disturb feature assigned to the extension users. Refer to Section 5-G-9.00 “Remote Station Feature Control.”

The following table shows the results of the calls arriving at an extension setting this function depending on the conditions of the preset destination.

Type of Call Arriving at Setting Extension	Condition of Destination	Forwarding Execution	Result
Extension call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DIL (1:1) or DISA call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		
DID call	Idle status	◯	Call is forwarded to destination.
	Busy status	×	Call is placed on setting extension.
	Assigned to DND		
	PITS programming mode		
	Conditions except In Service ☛		

◯ : Forwarding possible

× : Forwarding impossible

☛ Conditions are “Out of Service,” “Fault” and “Pre-Installed.” See Section 14-C-2.02 “Port” for details.

Operation

Setting Call Forwarding-Busy/Off-Hook/No Answer

1. Lift the handset.

2. Dial the feature number for “Call Forwarding-Busy/No Answer.”

3. Dial the directory number of the extension or the Voice Mail port, or the “FDN for General Operator Call” to be set as the destination.

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

4. Replace the handset.

Canceling Call Forwarding-Busy/Off-Hook/No Answer

1. Lift the handset.

2. Dial the feature number for “Call Forwarding/Do Not Disturb Cancel.”

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

2.05 Call Forwarding to Trunk

Description

Call Forwarding to Trunk allows extension users who are away from their phones to receive incoming calls (both CO and extension) at outside place.

When an incoming CO call is forwarded to the pre-assigned outside party by this feature, CO to CO call via this system is established. Duration time of CO to CO call is restricted by "Group-Trunk Group," CO-CO Duration Limit of receiving CO line. The system sends alarm tone to both parties 15 seconds before the Duration Limit time is expired, and when expired the system disconnects both parties compulsively.

The following incoming calls do not receive Call Forwarding treatment.

- A call from doorphone
- A call routed via DIL 1: N feature
- A call directed to a UCD group

To set Call Forwarding to Trunk, assign both "System-Class of Service", Call Forwarding/Do Not Disturb and CO Forward Mode to "Yes."

To set and cancel this function, dial the feature number for "Call Forwarding-To Trunk" and "Call Forwarding/Do Not Disturb Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (1/2)", Call Forwarding/Do Not Disturb CO Forward Mode	9-D-4.01	10-C-7.00
"System-Numbering Plan (04/11)", Call Forwarding-to Trunk	9-D-6.04	10-C-10.00
"System-Numbering Plan (05/11)", Call Forwarding/Do Not Disturb Cancel	9-D-6.05	10-C-10.00
"Group-Trunk Group (1/2)", CO-CO Duration Limit	9-E-1.01	10-C-14.00

Conditions

An extension user may have only one type of Call Forwarding/Do Not Disturb feature in effect at any time. If a second type is assigned, the previously assigned type is canceled.

The Operators (Attendant Console or Extension) can cancel the Call Forwarding/Do Not Disturb feature assigned to the extension users. Refer to Section 5-G-9.00 "Remote Station Feature Control."

Up to 32 digits composed of "0 through 9" and "#" can be entered as the telephone number of the destination. CO line access code must be entered as the leading digit of each entry.

Note:

- If CPC signal is not supplied by the Central Office in your area, KX-T336 cannot detect the end of CO-CO call after one party disconnets the call.
  In this case, we recommend to use tone detection feature of AGC Card (See Section 10-C-67.00 "DISA/AGC Tone Detection Mode (TDM)").

The following table shows the results of the calls arriving at an extension setting this function depending on the conditions of the preset destination.

Type of Call Arriving at Setting Extension	Condition of Destination	Forwarding Execution	Result
Extension call	Idle status	◯	Call is forwarded to external destination.
	Busy status	✕	Call is placed on setting extension.
	Conditions except In Service ☛		
DIL (1:1) or DISA call	Idle status	◯	Call is forwarded to external destination.
	Busy status	✕	Call is placed on setting extension.
	Conditions except In Service ☛		
DID call	Idle status	✕	Call is placed on setting extension.
	Busy status		
	Conditions except In Service ☛		

◯ : Forwarding possible

✕ : Forwarding impossible

☛ Conditions are “Out of Service,” “Fault” and “Pre-Installed.” See Section 14-C-2.02 “Port” for details.

Operation

Setting Call Forwarding to Trunk

1. Lift the handset.

2. Dial the feature number for “Call Forwarding to Trunk.”

3. Dial the feature number for selecting the CO line and the telephone number of the destination and “#” in succession.

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

4. Replace the handset.

(Supplement)

The system does not check the dialed number, toll restriction level, and the feature number for selecting a CO line at the time of setting this function.

Canceling Call Forwarding to Trunk

1. Lift the handset.

2. Dial the feature number for “Call Forwarding/Do Not Disturb Cancel.”

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

2.05 Call Forwarding-Follow Me

Description

You can set a “Call Forwarding” feature from the destination extension. This is useful if you forget to set “Call Forwarding -All Calls” before you leave your desk or when you move from pre-set place to another.
This feature can be enabled or disabled on a COS (Class of Service) basis. If enabled, an extension user can set this feature.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering plan (09/11)”,	9-D-6.09	10-C-10.00
Call Forwarding-Follow Me Set		
Call Forwarding-Follow Me Cancel		
“Call Forwarding-Follow Me (CFM)”	—	10-C-68.00

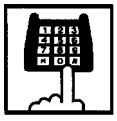
Conditions

Same as “Call Forwarding-All Calls “(Section 5-D-2.01).

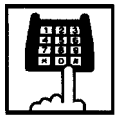
Operation

Setting “Call Forwarding-Follow Me” at the destination extension

1. Lift the handset.



2. Dial the feature number for Call Forwarding-Follow Me Set “# # 7” (default).



3. Dial the directory number of your extension.

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

4. Replace the handset.

Canceling “Call Forwarding-Follow Me” at the destination extension.

1. Lift the handset.

2. Dial the feature number for Call Forwarding-Follow Me Cancel “# # 8” (default).

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Dial the directory number of your extension.

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

4. Replace the handset.

Note:
You can cancel this feature at your own extension by following the same procedure as canceling other forwarding features.

E. Conversation Features

1.00 Conference

Description

Allows an extension user to add a third-party to a two-party conversation and make a three-party conference.
An extension user can have the following combination of calls on the line:

- three extensions
- one extension and two outside parties
- two extensions and one outside party

On the TSW card, there are eight standard conference trunks provided for this purpose.
By equipping the optional conference expansion card (KX-T336104), the number of conference trunks increases to 64.
To utilize optional conference expansion card, assign “Configuration-System Assignment”, TSW Additional CONF to “Yes.”

When two members in the conference are both outside parties, two conference trunks are necessary. In all other cases, one conference trunk is enough.

Programming

System Programming	Reference	
	VT	Dumb
“Configuration-System Assignment”, TSW Additional CONF	9-C-1.00	10-C-1.00
“System-Numbering Plan (11/11)” Conference	9-D-6.11	10-C-10.00
“World Select 3 (WS)” SLT Transfer Operation	—	10-C-53.00

Conditions

Pressing the switchhook by the conference originator during the conference restores a conversation with the first party.
This places the second party on Consultation Hold.

Pressing the switchhook again establishes the conference again if the conference trunk is available. If the conference trunk is not available, conversation with the held (second) party starts, placing the first party on Consultation Hold.

Operation

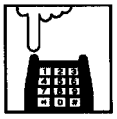
Establishing a conference - 1 (Default mode)
(SLT Transfer Operation is in Mode 1)

While having a two-party conversation;

1. Press the switchhook for approximately one half second and release it.

   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.

2. Dial the phone number of the third party.



3. Press the switchhook for approximately one half second and release after the third party answers.

   - You hear confirmation tone 3.
   - A three-party conference is now established.

Establishing a conference - 2
(SLT Transfer Operation is in Mode 2)

While having a two-party conversation;

1. Press the switchhook for approximately one half second and release it.

   - The other party is placed on Consultation Hold.
   - You hear confirmation tone 2 and then a dial tone 1 or 3 or 4.

2. Dial the feature number for conference “58” (default).

   - You hear confirmation tone 1 and then a dial tone.

3. Dial the phone number of the third party.

4. Press the switchhook for approximately one half second and release it after the third party answers.

   - You hear confirmation tone 3.
   - A three-party conference is now established.

Note:
If the conference trunk is not available in step 3, you cannot establish conference by pressing the switchhook, which puts the third party on Consultation Hold, and conversation with the held party starts.

Concluding a conference

1. Replace the handset.

   - The other two parties may continue their conversation.
   - If the other two parties are both outside parties, they will be disconnected.

Talking to the original party while holding the third party

1. Press the switchhook for approximately one half second and release it.

   - You hear confirmation tone.
   - You can talk to the original party.

2.00 Doorphone

Description

Up to four doorphones can be connected to the system. This provides conversations between extensions and doorphones.

Any extension user can call the doorphones within the same tenant by dialing the feature number for “Doorphone Call (1 to 4).” It is possible to direct calls from doorphones to specified extensions, intercom groups, pickup groups or Attendant Consoles in “Extension-Doorphone”, Doorphone Call Assignment.

If Tenant Service is employed, the affiliation of each doorphone can be determined by the system programming in “Extension- Doorphone”, Tenant.

Set the duration of the door opener in “Extension-Doorphone”, Open Duration. When Open Duration is set to “0,” the door opener is unavailable.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”, Doorphone Call (1 to 4)	9-D-6.03	10-C-10.00
“Extension-Doorphone”	9-G-3.00	10-C-27.00

Conditions

Only conversations are available for the doorphone. The other functions such as Hold, Transfer are all ineffective.

When a visitor presses the button on the doorphone, he hears ping-pong tone twice, then doorphone call ringing starts at the designated extension.
No answer of the call in 15 seconds cancels the doorphone call.

Operation

Calling from a doorphone

1. Press the button on the doorphone.

   - You hear ping-pong tone.
   - When the other party answers, start conversation.

Answering a doorphone call

When your telephone set receives a doorphone call and rings,

1. Lift the handset.

   - Start conversation with the caller from the doorphone.

Calling a doorphone

1. Lift the handset.

2. After dialing the feature number for Doorphone Call (1 to 4) “40” (default), dial the doorphone number : 1 to 4.

   - After hearing confirmation tone 3, start conversation over the specified doorphone.

3. After concluding conversation, replace the handset.

Opening the door

During a conversation over the doorphone

1. Press the switchhook for approximately one half second and release it.

2. Dial “5.”

   - The door opens for the specified duration.

3.00 External Feature Access

Description

Sending a flash signal through the CO line allows the extension user to gain access to the features offered by the host PBX, or to receive CENTREX service provided by the central office, such as Call Waiting and so on.

External Feature Access such as Call Waiting is effective only in 1:1 conversation with an outside party.

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (03/11)",	9-D-6.03	10-C-10.00
External Feature Access "Group-Trunk Group (1/2)",	9-E-1.01	10-C-14.00
Hook Switch Flash Time "Group-Trunk Group (2/2)",	9-E-1.02	10-C-15.00
Max. Dial No. after EFA Signal		

Conditions

External Feature Access is ineffective when "Group-Trunk Group", Hook Switch Flash Time is assigned to "None."

The maximum dialing digits to be sent to the CO line after sending the flash signal are restricted by "Group-Trunk Group", Max. Dial No. after EFA Signal.
The longest time limit among the following assignments determines the time limit between dialing digits.

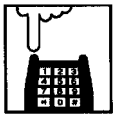
- "System-System Timer", External First Digit Time-Out.
- "System-System Timer", External Interdigit Time-Out.
- "System-System Timer", Toll Restriction Guard Time-Out.

Operation

Gaining access to a feature (in this case, Call Waiting)

When a call arrives from another outside party while in conversation with an outside party,

- You hear call waiting tone.



1. Press the hookswitch for approximately one half second and release it.

- You hear dial tone 1 or 3 or 4.

2. Dial the feature number for External Feature Access "50" (default).

- The first party is held. Start conversation with the second party.

Finishing the conversation with the second party and starting the conversation with the first party again

1. Press the hookswitch for approximately one half second and release it.

- You hear dial tone 1 or 3 or 4.

2. Dial the feature number for External Feature Access "50" (default).

- Start conversation with the first party.

F. Paging Features

1.00 Paging

1.01 Paging All Extensions

Description

Paging All Extensions allows any extension user to perform paging through the built-in speakers of all PITS telephones that can receive paging.

The Class of Service of the user's extension determines the extensions that can receive paging. They are assigned to be paged by “System-Class of Service”, Station Paging Access and also if they belong to the same tenant as the user's extension.
See Section 3-B-7.04 “Paging Group” for further information about paging groups.

To page all extensions, dial the feature number for “Station Paging” and “0.”
To answer paging, dial the feature number for “Station Paging Answer.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (2/2)”, Station Paging Access	9-D-4.02	10-C-8.00
“System-Numbering Plan (03/11)”, Station Paging	9-D-6.03	10-C-10.00
Station Paging Answer		

Conditions

Single Line telephone (SLT's) cannot be paged.

If all of the extensions assigned to be paged are being paged by another page, busy tone is returned to the new paging performer. If any of the extensions is not being paged, paging is executed.

Automatic Callback feature does not function during paging operation.
Refer to Section 5-A-4.01 “Automatic Callback-Trunk” for further information.

When there is no paging group assigned to “Yes” in “System-Class of Service”, Station Paging Access within the same tenant, the performer hears reorder tone.

Paging is broadcast over idle speakers in SP-PHONES of on-hook PITS sets.
The PITSs actuated by paging send confirmation tone and are ready to be paged.

Operation

Performing Paging All Extensions

1. Lift the handset.

2. Dial the feature number for "Station Paging" and dial "0."
   - After hearing confirmation tone 3, start paging.

3. After paging, replace the handset.

Answering Paging All Extensions when PITSs are paged

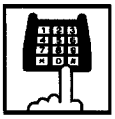
1. Lift the handset.

2. Dial the feature number for "Station Paging Answer."
   - After hearing confirmation tone 3, talk to the paging performer.

Transferring a call using Paging All Extensions

During a conversation with an extension or an outside party

1. Press the switchhook for approximately one half second and release.
   - The other party is placed on hold.
     You hear dial tone 1 or 3 or 4.



2. Dial the feature number for "Station Paging" and dial "0."
   - You hear confirmation tone 3.

3. Start paging.

4. When an extension answers, replace the handset.
   - The held party and the paged extension start conversation.

1.02 Group Paging

Description

Group Paging provides paging to a group of extensions specified from eight paging groups through the built-in speakers of their PITSs.

The Class of Service of the user's extension determines the paging groups that can receive paging. They are assigned to be paged by "System-Class of Service", Station Paging Access and also if they belong to the same tenant as the user's extension.

To execute Group Paging, dial the feature number for "Station Paging" and paging group specifying number.
To answer paging, dial the feature number for "Station Paging Answer."

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (2/2)", Station Paging Access	9-D-4.02	10-C-8.00
"System-Numbering Plan (03/11)", Station Paging Station Paging Answer	9-D-6.03	10-C-10.00

Conditions

Single Line Telephones (SLT's) cannot be paged.

If the designated paging group is being paged by another page, busy tone is returned to the new paging performer.

However, he can page within the range not overlapping the preset paging range.
For instance, when paging is being done to group 1, paging groups 2 to 8 are available for new paging.

Automatic Callback feature does not function during paging operation.

When there is no paging group allowed to receive paging in "System-Class of Service", Station Paging Access, the performer hears reorder tone.

Paging is broadcast over idle speakers in SP-PHONEs of on-hook PITS sets.
The PITSs actuated by paging send confirmation tone and then are ready to be paged.

Operation

Performing Group Paging

1. Lift the handset.

2. Dial the feature number for "Station Paging."

3. Dial the paging group number : 1 to 8.

   • After hearing confirmation tone 3, start paging.

4. After paging, replace the handset.

Answering Group Paging when PITSs are paged

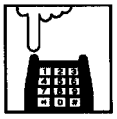
1. Lift the handset.

2. Dial the feature number for "Station Paging Answer."

   • After hearing confirmation tone 3, talk to the paging performer.

Transferring a call using Group Paging

During a conversation with an extension or an outside party



1. Press the switchhook for approximately one half second and release.

   • The other party is placed on hold.
   You hear dial tone 1 or 3 or 4.

2. Dial the feature number for "Station Paging" and paging group number : 1 to 8.

   • You hear confirmation tone 3.

3. Start paging.

4. When an extension answers, replace the handset.

   • The held party and the paged extension start conversation.

1.03 Paging External Pagers

Description

Allows the extension users to perform paging through the external pager(s) belonging to the same tenant.
If two external pagers are available in the same tenant, two methods are available: one is to page by designating one external pager, and the other is to page using two pagers.

To execute this function, dial the feature number for “External Pager” and to answer the paging, dial the feature number for “External Paging Answer.”

Even if an external pager is connected to the system, Paging External Pagers does not operate unless “System-Operation”, External Paging 1, 2 is assigned to “Yes”.

If Tenant Service is available, it is possible to attach each external pager to a tenant in “Trunk-Pager & Music Source”, External Pager-Tenant.

Confirmation tone from external pagers is selected by “Trunk-Pager & Music Source”, External Pager-Tone.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, External Paging 1, 2	9-D-1.01	10-C-4.00
“System-Class of Service (2/2)”, External Paging	9-D-4.02	10-C-8.00
“System-Numbering Plan (03/11)”, External Paging External Paging Answer	9-D-6.03	10-C-10.00
“Trunk-Pager & Music Source”, External Pager-Tenant External Pager-Tone	9-F-2.00	10-C-19.00

Conditions

If the designated pager is being used, busy tone is returned to the paging performer.

If either or both of the pagers in a tenant are being used, it is not possible to page using two pagers. Busy tone is returned to the user.

If external pagers are not assigned by system programming, reorder tone sounds when paging.

The followings show the paging priorities:

(1)Paging External Pager from an Attendant Console
(2)TAFAS (Trunk Answer from Any Station) (Refer to Section 5-B-2.00 “Trunk Answer From Any Station (TAFAS)–Day Service.”)
(3)Paging External Pagers from an extension (this function)
(4)BGM through External Pager

If a lower priority page is active, and a higher priority page is actuated, it overrides the lower one: for instance, if Paging External Pager is overridden by another higher priority, reorder tone is returned to the performer of Paging External Pager. If TAFAS signal or BGM is overridden by another higher priority, it is interrupted and starts again when the higher priority is finished.

Operation

Performing Paging External Pagers

1. Lift the handset.

2. Dial the feature number for “External Paging.”

3. Dial the number for specifying an external pager or pagers: 0, 1 or 2.

   0: specifies external pagers 1 and 2
   1: specifies external pager 1
   2: specifies external pager 2

   • After you hear confirmation tone 3, start paging through the external pager(s).

4. After paging, replace the handset.

Answering during external paging

1. Lift the handset.

2. Dial the feature number for “External Paging Answer.”

3. Dial the number of the external pager: 1 or 2.

   • After you hear confirmation tone 3, talk to the caller who made the page.

Transferring a call using Paging External Pagers

During a conversation with an extension or an outside party

1. Press the switchhook for approximately one half second and release.

   • The other party is placed on hold.
   You hear dial tone 1 or 3 or 4.

2. Dial the feature number for “External Paging” and external pager specifying number : 0, 1 or 2.

   0: specifies external pagers 1 and 2
   1: specifies external pager 1
   2: specifies external pager 2

   • You hear confirmation tone 3.

3. Start paging.

4. When an extension answers, replace the handset.

   • The held party and the paged extension start conversation.

1.04 Paging All Extensions and External Pagers

Description

Paging All Extensions and External Pagers offers both Paging All Extensions and Paging External Pagers at the same time. It provides paging through the preprogrammed external pagers and the built-in speakers in PITSs of the extensions within the range of the tenant that the user belongs to.
The user's “System-Class of Service”, Station Paging Access” determines the paging groups of the extensions that can receive paging and also External Paging determines the external pagers that can receive paging.

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (2/2)”,	9-D-4.02	10-C-8.00
Station Paging Access		
External Paging 1, 2		
“System-Numbering Plan (03/11)”,	9-D-6.03	10-C-10.00
External Paging		
Station Paging		
External Paging Answer		
Station Paging Answer		

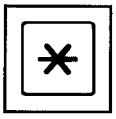
Conditions

Refer to Section 5-F-1.01 “Paging All Extensions” and Section 5-F-1.03 “Paging External Pagers.”

Operation

Performing Paging All Extensions and External Pagers

1. Lift the handset.



2. Dial the feature number for Station Paging “40” (default), or the feature number for External Paging “41” (default), then dial “#.”

   • After hearing confirmation tone 3, start paging.

3. After paging, replace the handset.

Answering Paging All Extensions and External Pagers

1. Lift the handset.

2. Dial the feature number for Station Paging Answer “44” (default), or the feature number for External Paging Answer “43” (default), and the number of the external pager : 1 or 2.

   • After hearing confirmation tone 3, talk to the paging performer.

Transferring a call using Paging All Extensions and External Pagers

During a conversation with an extension or an outside party

1. Press the switchhook for approximately one half second and release it.

   • The other party is placed on hold.
   You hear dial tone 1 or 3 or 4.

2. Dial the feature number for Station Paging “42” (default), or the feature number for External Paging “41” (default), then dial “#.”

   • You hear confirmation tone 3.

3. Start paging.

4. When an extension answers, replace the handset.

   • The held party and the paged extension start conversation.

Note:

- The following tones for paging can be eliminated by WS4 command (See Section 10-C-62.00 “World Select 4 (WS4)”).
  - — Beep tone and confirmation tone 3 at paged extension.
  - — Confirmatione tone 3 at paging originator’s extension.

2.00 Background Music (BGM) through External Pager

Description

The system can provide up to two external music sources. The music source can be broadcast as background music (BGM) through external pagers.

Starting or stopping BGM can be executed by the Operator 1 (Attendant Console or extension user) in the same tenant that the external pagers and external music equipment belong to.

To start and stop this function, use the same feature number for “BGM Through External Paging.”
Dialing the feature number while BGM is on stops BGM, and reversely starts BGM while BGM is off.

To activate this feature, external music equipment and an external pager should be connected to the system, and assign “System-Operation”, External Music Source 1, 2 and External Paging 1, 2 to “Yes” by the system programming.

“Trunk-Pager & Music Source”, External Pager-BGM should be assigned to “Yes” to use this function. This assignment can be done to each external pager.
Also assign “Trunk-Pager & Music Source”, Music Source-For Use to either “BGM” or “Hold & BGM.” This assignment can be done to each external music equipment.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”,	9-D-1.01	10-C-4.00
External Paging 1, 2		
External Music Source 1, 2		
“System-Numbering Plan (08/11)”,	9-D-6.08	10-C-10.00
BGM Through External Paging		
“Trunk-Pager & Music Source”,	9-F-2.00	
External Pager-Tenant		10-C-19.00
External Pager-BGM		
Music Source-Tenant		10-C-20.00
Music Source-For Use		

Conditions

If Tenant Service is employed, it is possible to attach each external music equipment and external pager to a tenant by using “Trunk-Pager & Music Source”, External Pager-Tenant and Music Source-Tenant.

This function is effective only when an external pager and an external music equipment are connected and programming has been completed. Otherwise, the user hears reorder tone after executing the operation to activate this function.

Operation

Turning BGM on when BGM is off

1. Lift the handset.

2. Dial the feature number for “BGM Through External Paging.”
   - After you hear confirmation tone 2, BGM sounds from the external pager(s).

3. Replace the handset.

Turning BGM off when BGM is on

1. Lift the handset.

2. Dial the feature number for “BGM Through External Paging.”
   - After you hear confirmation tone 2, BGM from the external pager(s) stops.

3. Replace the handset.

G. Other Features

1.00 Night Service

1.01 Universal Night Answer (UNA)

Description

Allows any extension user in the system to answer the incoming CO calls ringing at an external pager, by dialing the feature number for "Night Answer 1 or 2."

To activate this feature, set "Group-Trunk Group" Incoming Mode (Night) to FIXED or FLEXIBLE and "Trunk-CO Line" Night Answer Point to UNA 1 or UNA 2. UNA 1 is associated with External Pager 1 and UNA 2 is associated with External Pager 2. All CO lines belong to this trunk group are covered by this assignment.

External pager must be connected to the system beforehand.
Up to two external pagers can be connected to the system.
To answer a call ringing at external pager 1, dial the feature number for "Night Answer 1," and to answer a call ringing at external pager 2, dial the feature number for "Night Answer 2."
For further information about external pager assignment, refer to Section 5-F-1.03 "Paging External Pagers."

Call handling in UNA is identical to TAFAS. The difference is that TAFAS is available in day mode and UNA is available in night mode.
For further information about TAFAS, refer to Section 5-B-2.00 "Trunk Answer From Any Station (TAFAS)-Day Service."

Programming

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (1/2)", Incoming Mode (Night)	9-E-1.01	10-C-14.00
"Trunk-CO Line", Night Answer Point	9-F-1.00	10-C-18.00
"System-Numbering Plan (03/11)", Night Answer 1 Night Answer 2	9-D-6.03	10-C-10.00

Conditions

To execute the system administration from a remote location at night, select "RMT" for "Trunk-CO Line" Night Answer Point assignment.
For further information about remote administration, refer to section 14-B-2.00 "System Administration from a Remote Location."

If tenant service is employed, each tenant (1 and 2) can have unique Night Service arrangement individually.
The affiliation of each external pager is determined by the system programming in "Trunk-Pager & Music Source", External Pager-Tenant.
The extension user cannot answer the UNA call ringing at an external pager in the different tenant.

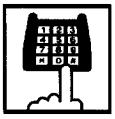
Operation

Answering incoming CO calls ringing at an external pager.

An incoming CO call is ringing at an external pager.

1. Lift the handset.

   • You hear dial tone 1 or 3 or 4 .



2. If a call is ringing at external pager 1: Dial the feature number for Night Answer 1 "45" (default).

   If a call is ringing at external pager 2: Dial the feature number for Night Answer 2 "46" (default).

   • You hear confirmation tone 3.

3. Start conversation.

Note:
• Confirmation tone for UNA (TAFAS) can be eliminated by WS4 command (See Section 10-C-62.00 "World Select 4 (WS4)").

1.02 Flexible Night Service

Description

Flexible Night Service allows the Operator 1 (Attendant Console or extension user) to change the assigned night answer destination on a CO line basis by dialing the feature number for "Flexible Night Service."

To utilize this feature, set "Group-Trunk Group" Incoming Mode (Night) to FLEXIBLE. All CO lines belong to this trunk group are covered by this assignment.
If FIXED is selected for above setting, the assigned night answer destination can not be changed by the Operator 1.

Call handling in Flexible and Fixed night service is almost the same.

The difference is:

Flexible	The Operator 1 (Attendant Console or Extension) can change the night answer destination.
Fixed	A group of extensions (Night Answer Group) can be assigned as the destination of one or more CO lines in night mode

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (08/11)", Flexible Night Service	9-D-6.08	10-C-10.00
"Group-Trunk Group (1/2)", Incoming Mode (Night)	9-E-1.01	10-C-14.00
"Trunk-CO Line", Night Answer Point	9-F-1.00	10-C-18.00
"Night Answer Group (NAG)"	—	10-C-59.00

Conditions

If tenant service is employed, the night answer destination can only be changed for a CO line in the same tenant by the Operator 1.

Operation

Changing a night answer destination to an extension

1. Lift the handset.

2. Dial the feature number for Flexible Night Service "72" (default) and CO physical number and destination extension number.
   - You hear confirmation tone 1 or 2.

3. Replace the handset.

Changing a night answer destination to the remote maintenance port

1. Lift the handset.

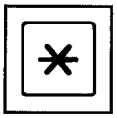
2. Dial the feature number for Flexible Night Service "72" (default) and CO physical number and FDN for remote.
   - You hear confirmation tone 1 or 2.

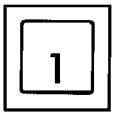
3. Replace the handset.

Changing a night answer destination to an UNA (Universal Night Answer)

1. Lift the handset.

2. Dial the feature number for Flexible Night Service “72” (default) and CO physical number, # and 1 for external pager 1 or # and 2 for external pager 2.





or

- You hear confirmation tone 1 or 2.

3. Replace the handset.

1.03 Switching of Day/Night Mode

Description

It is assignable to switch Day/Night mode either automatically at pre-assigned time or manually by the Operator 1 (Attendant Console or Extension) at any time desired.
If Manual Switching mode is assigned, the Operator 1 must dial the feature number for “Night Mode Set” for night service or “Night Mode Cancel” for day service.
If Auto Switching mode is assigned, the system will switch the day and night modes at the programmed time each day.

To utilize Auto Switching mode, set “System-Operation (3/3)” Night Service to “Auto” and assign desired mode switching time to “Auto Start Time” on a per day of the week basis.
To utilize Manual Switching mode, set “System-Operation (3/3)” Night Service to “Manual.”

The Operator 1, however, can override the Auto Mode setting, that is Manual Mode is established, by dialing the feature number for “Night Service Manual Mode Set.” To restore the Auto mode, the Operator 1 must dial the feature number for “Night Service Manual Mode Cancel.”

If tenant service is employed, night service assignment unique to each tenant (Tenant 1 and Tenant 2) can be programmed individually.
In this case, the assignment in “System-Operation (3/3)” is applied to Tenant 1 and the assignment in “System-Tenant” is applied to Tenant 2.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (3/3)”,	9-D-1.03	10-C-4.00
Night Service		
Auto Start Time		
“System-Tenant”,	9-D-2.00	10-C-5.00
Night Service (Tenant 2)		
Auto Start Time		
“System-Numbering Plan (08/11)”,	9-D-6.08	10-C-10.00
Night Mode Set		
Night Mode Cancel		
Night Service Manual Mode Set		
Night Service Manual Mode Cancel		

Conditions

If Auto Start Time on a certain day is not assigned, the current mode is continued until a new start time is encountered.

If the Start Time for Day mode and Night mode on the same day are set identically, the current mode is continued.

If Auto Start Time assignment is not programmed at all, the current mode is continued. In other words if the current mode is Day then Day Mode is continued, and if the current mode is Night then Night Mode is continued.

Operation

Changing Day mode to Night mode

1. Lift the handset.

2. Dial the feature number for "Night Mode Set."
   - You hear confirmation tone 1 or 2.

3. Replace the handset.

Changing Night mode to Day mode

1. Lift the handset.

2. Dial the feature number for "Night Mode Cancel."
   - You hear confirmation tone 1 or 2.

3. Replace the handset.

Changing from Auto mode to Manual mode

1. Lift the handset.

2. Dial the feature number for "Night Service Manual Mode Set."
   - You hear confirmation tone 1 or 2.

3. Replace the handset.

Changing from Manual mode to Auto mode

1. Lift the handset.

2. Dial the feature number for "Night Service Manual Mode Cancel."
   - You hear confirmation tone 1 or 2.

3. Replace the handset.

2.00 Account Code Entry

Description

Account Code Entry is used to associate an account code with incoming and outgoing CO calls.
The account code is appended to the SMDR call record and can be used later for accounting and billing purposes.
The account code can include up to 10 digits.
The validity of the entered account code is not checked by the system.
Entry of account code may be optional, or the extension user may be forced to enter the account code.

In the forced mode, the account code must be entered before making an outgoing CO call.
In the option mode, enter the account code, if necessary.

Programming

System Programming	Reference	
	VT	Dumb
"System-Class of Service (1/2)", Forced Account Code Mode	9-D-4.01	10-C-7.00
"System-Numbering Plan (04/11)", Account Code	9-D-6.04	10-C-10.00

Conditions

In the option mode, it is possible to dial an account code even after the conversation before hanging up.

Only numerical characters of "0 to 9" can be dialed as account codes.

Entering an account code over 10 digits sounds alarm tone.

Be sure to dial "#" after dialing a code, since "#" delimits the code.

If you use a rotary telephone, dial "99" instead of "#" to delimit the code.
You cannot use "99" and what ends with "9" as account codes by the rotary telephone.

Operation

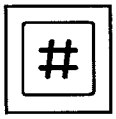
Entering an account code when calling an outside party in the Forced mode

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for selecting a CO line.
   - You hear no tone.

3. Dial the feature number for Account Code "✱#" (default).
   - You hear dial tone 2.

4. Dial the account code.
   - Up to 10 digits can be dialed as an account code.

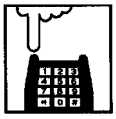


5. Dial "#."
   - You hear dial tone 1.

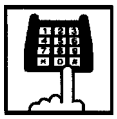
6. Dial the telephone number of the outside party.

Entering an account code when receiving a call from an outside party in the Forced mode

1. Lift the handset.
   - Talk to the other party.

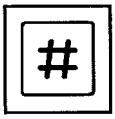


2. Press the switchhook for approximately one half second and release.
   - You hear dial tone 1 or 3 or 4.



3. Dial the feature number for “Account Code.”
   - You hear dial tone 2.

4. Dial the account code.
   - Maximum digits for an account code is 10.



5. Dial “#.”
   - Start conversation again.

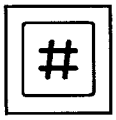
Entering an account code after calling an outside party or after receiving a call from an outside party in the Option mode

While having a conversation

1. Press the switchhook for approximately one half second and release.
   - You hear dial tone 1 or 3 or 4.

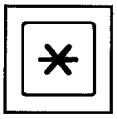
2. Dial the feature number for “Account Code.”
   - You hear dial tone 2.

3. Dial the account code.
   - Maximum digits for an account code is 10.



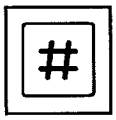
4. Dial “#.”
   - Start conversation again.

Correcting an error after dialing a wrong account code (not available with rotary type SLT telephones)



1. Dial “* .”
   - You hear dial tone 2.

2. Dial the correct account code.



3. Dial “#.”

3.00 Timed Reminder (Alarm Clock)

Description

The extension user can use his or her telephone as an alarm clock.
When this feature is set, alarm tone will ring for 2 minutes at the programmed time.

Wake-up Call

By going off-hook, the extension user can hear the wake-up message, if it has been recorded beforehand.
The extension user may hear BGM or intermittent tone (dial tone 2) instead of the wake-up message.
(See Section 3-F-13.00 “Timed Reminder with OGM (wake-up call).”)

This feature can be set to operate only once or everyday at a specified time.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (06/11)”, Timed Reminder Set Timed Reminder Cancel	9-D-6.06	10-C-10.00

Conditions

(1)What if the extension is busy or off-hook at the programmed time?

Alarm tone will ring after the extension goes on-hook.

(2)What if a call comes in when alarm tone is ringing?

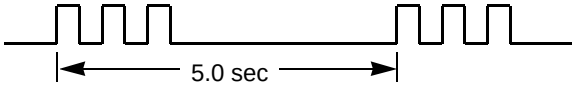
The caller hears busy tone.

(3)Newly programmed time overrides the old one.

Only the latest setting is valid at a single extension whether it was set by the extension itself or by the operator.

(4)Tone Pattern

Alarm tone sounds in the following manner:



Operation

Setting Timed Reminder

1. Lift the handset.

2. Dial the feature number for Timed Reminder set “* 51” (default).

3. Dial “hour” with two digits: 01 to 12.

4. Dial “minute” with two digits: 00 to 59.

5. Dial “0” for a.m. or dial “1” for p.m.

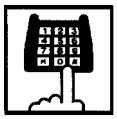
6. Dial “0” for Times Reminder-one time, or dial “1” for Timed Reminder-every day.

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

7. Replace the handset.

Canceling the Timed Reminder Assignment

1. Lift the handset.



2. Dial the feature number for Timed Reminder Cancel “#5” (default).

   • You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

3. Replace the handset.

Answering alarm tone

When the preset time comes, alarm tone sounds.

1. Lift the handset.

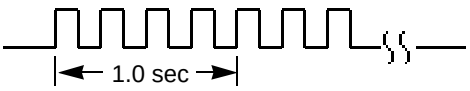
   • Alarm tone stops and you hear a wake-up message or BGM, or intermittent tone (dial tone 2).*

2. Replace the handset.

* This is determined by the system programming.
Refer to Section 3-F-13.00 “Timed Reminder with OGM (Wake-up Call).”

(Supplement)

Dial tone 2 in step 1 sounds in the following timing:



4.00 Data Line Security

Description

Used to maintain the communication properly by prohibiting various tones such as Call Waiting tone or Held Call Reminder from sounding at the extension in data communication mode. It also prohibits other extensions from executing overriding functions such as Busy Override.

To assign Data Line Security, assign "Extension-Station" Data Line Security to "Yes."

You can set and cancel this function by dialing the feature numbers for "Data Line Security Set" and "Data Line Security Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (05/11)",	9-D-6.05	10-C-10.00
Data Line Security Set		
Data Line Security Cancel	9-G-1.01	10-C-22.00
"Extension-Station (1/3)"		
Data Line Security		

Conditions

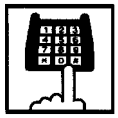
Assigning this function always offers the extension user Privacy mode unless Privacy Release is executed.

If there is a conversation between the extension setting Data Line Security and the extension not setting it, Data Line Security is applied to the both extensions.

Operation

Setting Data Line Security

1. Lift the handset.



2. Dial the feature number for Data Line Security Set "65✣ " (default).
   - You hear confirmation tone 1 or 2 then dial tone 1 or 3 or 4.

3. Replace the handset.

Canceling Data Line Security

1. Lift the handset.

2. Dial the feature number for Data Line Security Cancel "65#" (default).
   - You hear confirmation tone 1 or 2 then dial tone 1 or 3 or 4.

3. Replace the handset.

5.00 Absent Message Capability

Description

Provides an absent message on the display of a calling extension, if the called party has assigned an absent message.

An absent message appears only on the display of PITS (if provided).

There are six fixed and 10 programmable absent messages.
The following is the six fixed messages ("x" shows a parameter to be entered when a user sets a message).

1) Will Return Soon
2) Gone Home
3) In a Meeting
4) Back At x x : x x x x
   - a.m./p.m.
   - minute
   - hour
5) Out Until x x / x x
   - day
   - month
6) At Ext x x x x
   - directory number (three or four digits)

To set and cancel this function, use the feature numbers for "Absent Message Set" and "Absent Message Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Tenant", Absent Message Boundary	9-D-2.00	10-C-5.00
"System-Numbering Plan (06/11)", Absent Message Set Absent Message Cancel	9-D-9.00	10-C-13.00
"System-Absent Message", Fixed Message Flexible Message		

Conditions

If Tenant Service is employed, 10 programmable messages can be split between two tenants.
To split the messages, execute "System-Tenant", Absent Message Boundary.
Six fixed messages are shared with two tenants.

The user cannot set multiple messages at the same time.

When a user sets fixed message 4), 5), or 6), the system checks the parameters entered : for example, when the user sets fixed message 4), the parameters of "hour," "minute," "a.m./p.m." are checked. In case of an error entry, the user hears reorder tone.

When a user sets a flexible message by the system programming, he can enter up to six parameters: "%."

If a flexible message contains any parameter, use "0 to 9," "* ," and "#" to enter it.
If the user enters fewer or more parameters than the assigned parameters, or enters characters except "0 to 9," "* " and "#," he hears reorder tone.

When a user calls an extension that sets both Absent Message and Call Forwarding-No Answer, Call Forwarding-No Answer is activated.
Refer to Section 5-D-2.03 "Call Forwarding-No Answer" for further information.

Operation

Setting fixed message 1), 2), or 3)

1. Lift the handset.

2. Dial the feature number for Absent Message Set "# 4" (default).

3. Dial "01" for fixed message 1),or dial "02" for fixed message 2), or dial "03" for fixed message 3).
   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

4. Replace the handset.

Setting fixed message 4), 5) or 6)

1. Lift the handset.

2. Dial the feature number for “Absent Message Set.”

3. Dial “04” for fixed message 4),or dial “05” for fixed message 5), or dial “06” for fixed message 6).

4. Dial “TIME” for fixed message 4), or dial “DATE” for fixed message 5), or dial “directory number” for fixed message 6) as follows:

   Input format for “TIME” :

   HH MM AM/PM

   - HH: 01 to 12 (hour)
   - MM: 00 to 59 (minute)
   - AM/PM: 0 for a.m., 1 for p.m.

   Input format for “DATE” :

   MM DD

   - MM: 01 to 12 (month)
   - DD: 01 to 31 (day)

   Input format for “directory number” : three or four digits

   - You hear confirmation tone 1 or 2 and then dial tone 1 or 3 or 4.

5. Replace the handset.

Setting a flexible message

1. Lift the handset.

2. Dial the feature number for “Absent Message Set.”

3. Dial the two digit message number: 07 to 16.
   If the message requires any parameters, enter all the parameters.

   - You hear confirmation tone 1 or 2 then dial tone 1 or 3 or 4.

4. Replace the handset.

Canceling the assigned message

1. Lift the handset.

2. Dial the feature number for “Absent Message Cancel.”

   - You hear confirmation tone 1 or 2 then dial tone 1 or 3 or 4.

3. Replace the handset.

6.00 Message Waiting

Description

Allows an extension user to indicate to another extension that a message is waiting for him or her, by turning on the MESSAGE indicator (button) on the called extension.

This feature is useful when the called extension is busy or does not answer the call.

Any SLT user can set message waiting indication to other extensions (PITS with MESSAGE button or SLT with MESSAGE lamp), but cannot receive it unless your extension is an SLT with MESSAGE lamp.

(For SLT with MESSAGE lamp users)
To receive message waiting indication, “Extension-–Station” Message Waiting Indication should be set to “Lamp” beforehand.
To call back the message sender, dial the feature number for “Message Waiting Reply.”

Up to 500 message waiting indications can be set for the whole system.

Programming

System Programming	Reference	
	VT	Dumb
“System-Tenant”, Message Waiting Boundary	9-D-2.00	10-C-5.00
“System-Numbering Plan (07/11)”, Message Set Message Cancel Message Waiting Reply	9-D-6.07 9-G-1.01	10-C-10.00 10-C-22.00
“Extension-Station”, Message Waiting Indication		

Conditions

1. Suitable Telephones:
   (1) Message Sender
   - Attendant Console
   - A PITS telephone with a MESSAGE button.
   - Any Single Line Telephone.

   (2) Message Receiver
   - A PITS telephone with a MESSAGE button.
   - A Single Line Telephone with MESSAGE lamp.

2. Reorder Tone
   A caller who attempts to leave a message waiting indication may hear the reorder tone in the following cases:
   (1) Receiver's extension is:
   - A PITS telephone without a MESSAGE button.
   - A Single Line Telephone without MESSAGE lamp.

   (2) The maximum number of message waiting indications available for the system or tenant 1/2 has been assigned.

3. Tenant Service
   The maximum number of message waiting indications available for Tenant 1 and 2 is determined by "System–Tenant” Message Waiting Boundary.

4. Setting of the multiple message waiting indications
   (1) More than one message sender can leave message waiting indications to the same extension at the same time.
   (2) Even if the same message sender sets message waiting indications to the same extension more than once, this leaves only one message on the called extension.

5. The MESSAGE indicator on the message receiver's extension will be turned off when:
   (1) The message receiver calls back the message sender by dialing the feature number for “Message Waiting Reply”, and it was answered by the message sender (or by another extension using Call Pickup or an SDN button).*1
   (2) Message waiting indication is canceled by the message sender.*1
   (3) Message waiting indications are canceled by the message receiver.*2

*1 The indicator may not be turned off, if there are other message waiting indications sent by other extensions.

*2 All message waiting indications are canceled at once.

Operation by Caller

(At message sender's extension—Any SLT)

Setting the Message Waiting Indication

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for Message Set “*9” (default) and then extension number of the other party.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - The MESSAGE indicator on the message receiver’s extension is turned on.

3. Replace the handset.

Canceling the Message Waiting Indication on receiver's extension set by a caller

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for Message Cancel “#9” (default) and the extension number of the message receiver successively.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - If the other extension received only one message, the MESSAGE indicator on the message receiver’s extension goes out.

3. Replace the handset.

Operation by Receiver

(At message receiver's extension—SLT with MESSAGE lamp only)

Calling back the message sender

1. Lift the handset.
   - You hear dial tone 1 or 3 or 4.

2. Dial the feature number for Message Waiting Reply “57” (default).
   - You hear ringback tone. When the message sender answers, start conversation.
   - If you received multiple messages, calling back the first message sender is performed. At the conclusion of the conversation, the first message is canceled.
   - At the conclusion of the conversations with all the message senders, the MESSAGE lamp on your extension goes out.

3. Replace the handset.

(Note)

- Callback order

  If more than one message waiting indication is left on your extension, callback order is always from the oldest to the newest (First In First Out). This order cannot be changed.
- Confirming the message sender's extension is not available.

Canceling all Message Waiting Indications on your extension

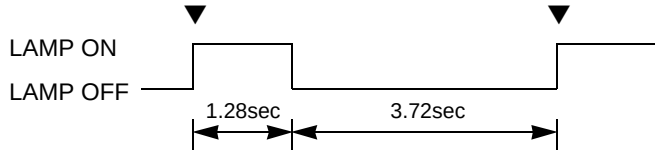
1. Lift the handset.

2. Dial the feature number for Message Cancel “#9” (default)and your own extension number in succession.
   - You hear confirmation tone 2 and then dial tone 1 or 3 or 4.
   - The MESSAGE lamp on your extension goes out.

3. Replace the handset.

<Supplement>

Light pattern of the MESSAGE lamp for an SLT with MESSAGE lamp.



7.00 Electronic Station Lock Out

Description

Allows an extension user to prohibit other extension users from making outgoing CO calls from his or her extension.

The user can select any three digit lock code from 000 to 999.

To execute this function, assign “System-Class of Service”, Station Lock to “Yes.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Class of Service (1/2)”, Station Lock	9-D-4.01	10-C-7.00
“System-Numbering Plan (07/11)” Station Lock Set Station Lock Cancel	9-G-6.07	10-C-10.00

Conditions

Both Operator 1 and 2 (Attendant Console or extension user) can lock and unlock the other extensions remotely without dialing the lock code as shown in the following format.

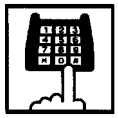
[Remote Station Lock Cancel + Extension no.]

Once locked by an Operator, the extension user cannot unlock it.
Refer to Section 5-G-9.00 “Remote Station Feature Control” for further information.

Operation

Setting Electronic Station Lock Out

1. Lift the handset.



2. Dial the feature number for Station Lock Set “# 6” (default).

3. Dial the lock code: 000 to 999.

4. Dial the same lock code again.
   - You hear confirmation tone 2.

5. Replace the handset.

Canceling Electronic Station Lock Out

1. Lift the handset.

2. Dial the feature number for Station Lock Cancel “#6” (default).

3. Dial the lock code.
   - You hear confirmation tone 2.

4. Replace the handset.

8.00 Assigned Feature Clear

Description

Allows an extension user to clear the following feature assigned on it by dialing the feature number for “Station Program Clear.”

(a) Call Forwarding/Do Not Disturb
(b) Absent Message
(c) Timed Reminder

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (07/11)” Station Program Clear	9-G-6.07	10-C-10.00

Conditions

None

Operation

1. Lift the handset.

   • You hear dial tone 1 or 3 or 4.

2. Dial the feature number for Station Program Clear “###” (default).

   • You hear confirmation tone 3.

3. Replace the handset.

9.00 Remote Station Feature Control

Description

Allows the Operator 1 and 2 (extension user or Attendant Console) to set or cancel the following features assigned to each extension:

Features that can be canceled :
- DND (Do Not Disturb)
- Electronic Station Lock Out
- FWD (Call Forwarding)

(It is also possible to cancel FWD temporarily)

Features that can be set :
- DND (Do Not Disturb)
- Electronic Station Lock Out

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (08/11)", Remote Station Lock Set Remote Station Lock Cancel Remote DND Set Remote DND Cancel Remote FWD Cancel Remote FWD Cancel-One Time	9-D-6.08	10-C-10.00

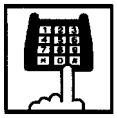
Conditions

When an extension is locked by the operator, unlocking by the locked extension itself is impossible.

Operation

Setting/canceling Do Not Disturb to/from an extension

1. Lift the handset.



2. Setting : Dial the feature number for Remote DND Set "74# " (default).

Canceling : Dial the feature number for Remote DND Cancel "74#" (default).

3. Dial the directory number of the extension.
   - You hear confirmation tone 1 or 2.

4. Replace the handset.

Setting/canceling Electronic Station Lock Out to/from an extension

1. Lift the handset.

2-1. Setting : Dial the feature number for Remote Station Lock Set "73# " (default).

2-2. Canceling : Dial the feature number for Remote Station Lock Cancel "73#" (default).

3. Dial the directory number of the extension.
   - You hear confirmation tone 1 or 2.

4. Replace the handset.

Canceling Call Forwarding from an extension.

1. Lift the handset.

2. Dial the feature number for "Remote FWD Cancel."

3. Dial the directory number of the extension.

   - You hear confirmation tone 1 or 2.

4. Replace the handset.

Canceling Call Forwarding temporarily from an extension

1. Lift the handset.

2. Dial the feature number for "Remote FWD Cancel-One Time."

3. Dial the directory number of the extension.

   - Call Forwarding is canceled temporarily.
   - Calling the extension starts.

Section 6

Station Features and Operation

Attendant Console (ATT)

(Section 6)

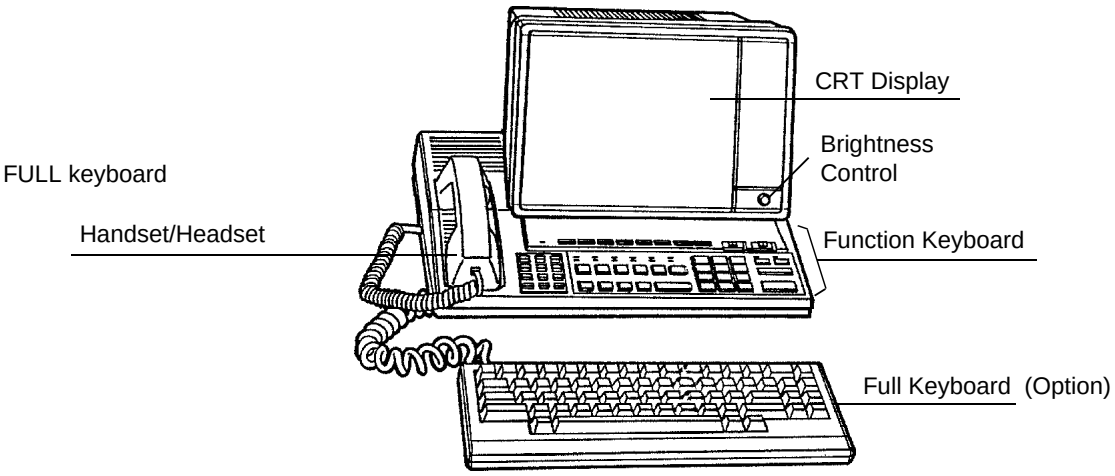
Station Features and Operation

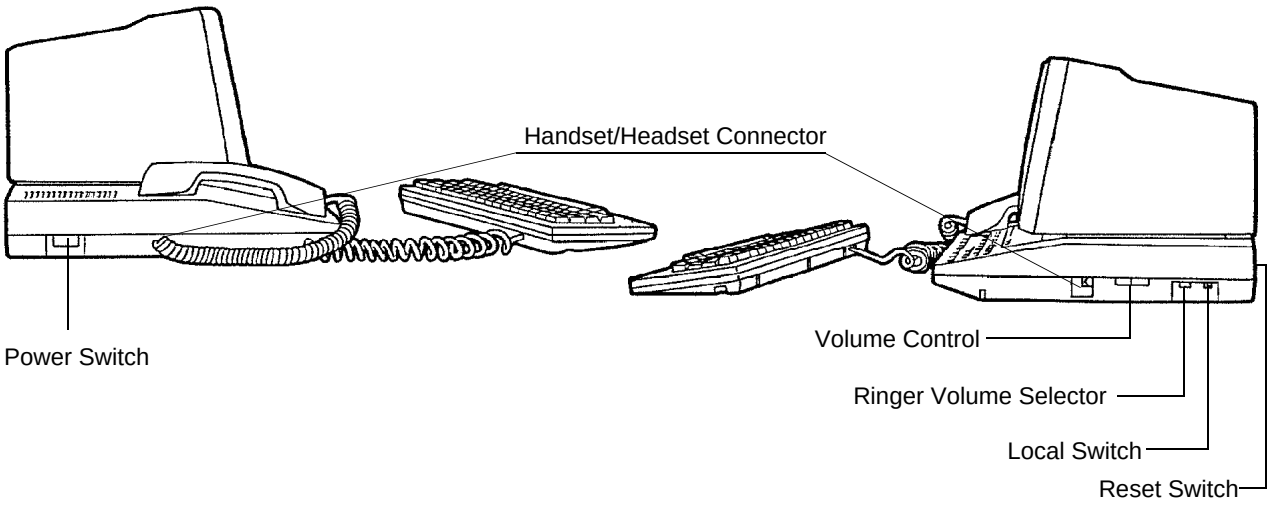
Attendant Console (ATT)

Contents

A. Preparation

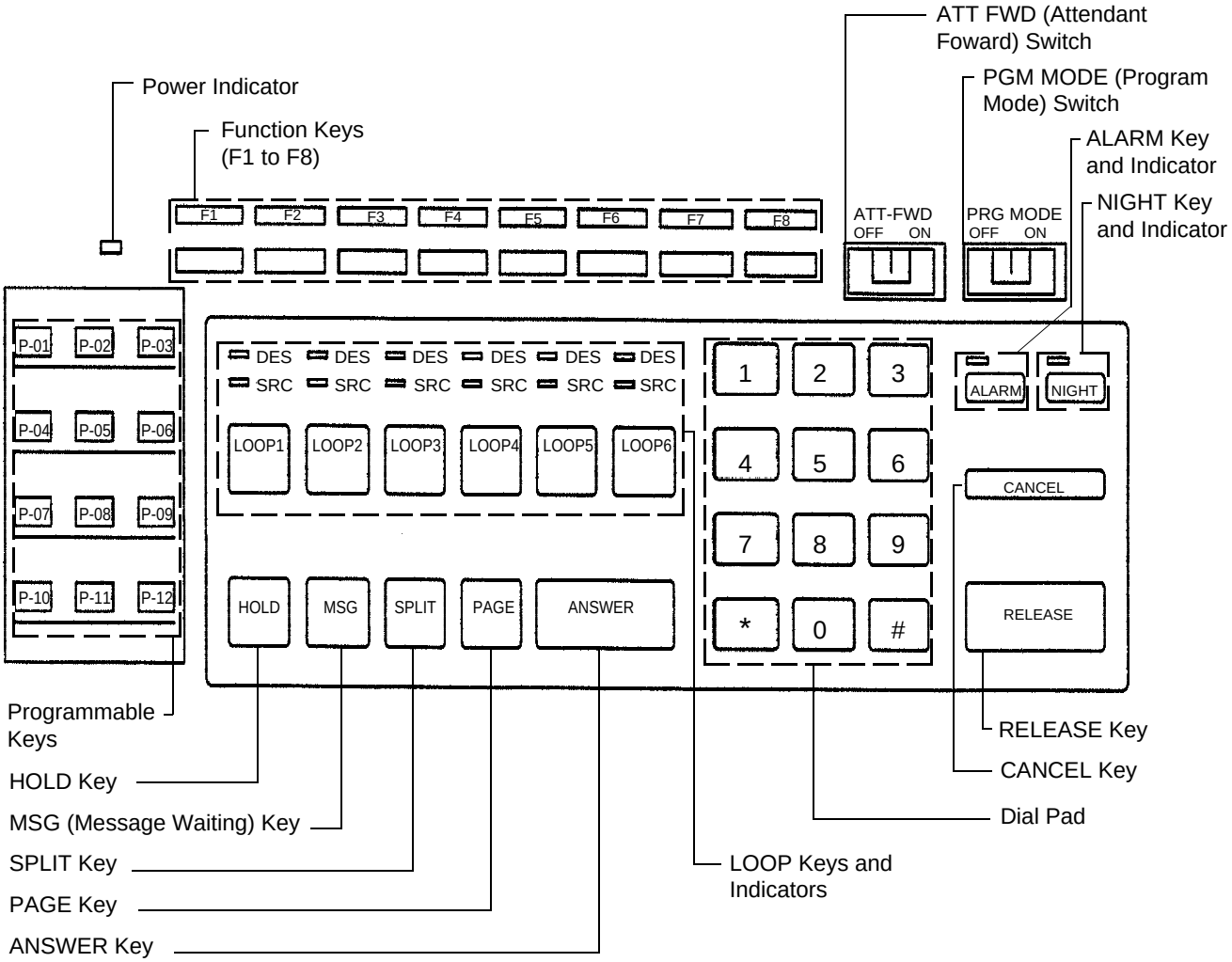
1.00 Location of Controls



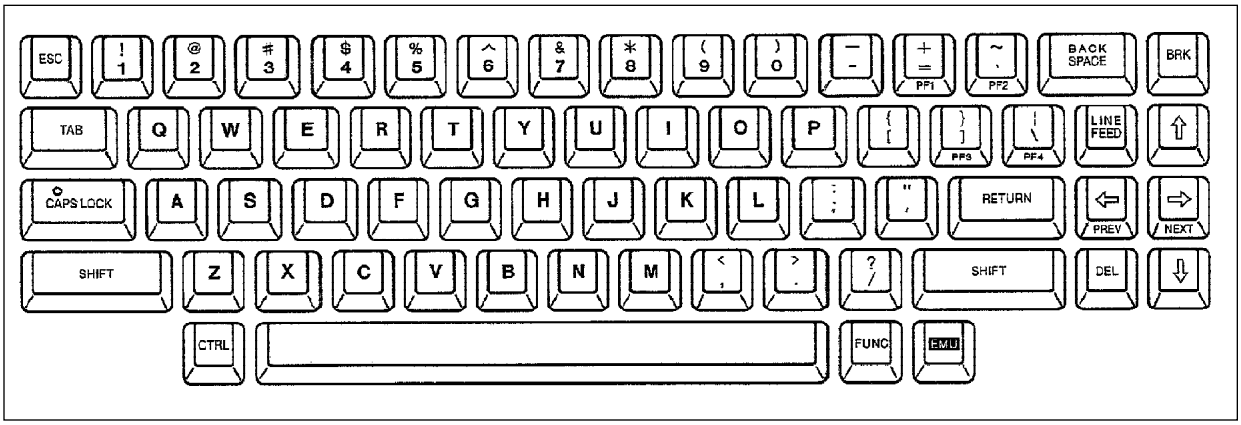


Switch	Function
Local Switch	Sets the attendant console to "LOCAL" mode.
Ringer Volume Selector	Selects the ringing tone level (Off-Low-High).
Volume Control	Adjusts the volume level of the handset or headset.
Reset Switch	Resets the attendant console.

Function keyboard



Full keyboard (Option)



Functions of various keys on the function keyboard

Function keys : (F1 to F8)	Functions of these keys vary according to the displayed screen.
LOOP keys : (LOOP1 to LOOP6)	Used to make and answer the calls (both extension and outside) etc..
RELEASE key :	Releases a call held on the LOOP key.
ANSWER key :	Used to answer incoming calls in first come first served basis.
HOLD key :	Places a call on hold.
CANCEL key :	Cancels any key operation while holding a call on the LOOP key.
SPLIT key :	Switches between the SRC (Source) side party and DES (Destination) side party.
PAGE key :	Used to execute parking a call and paging functions.
ALARM key :	Displays major/minor alarm when the ALARM LED is flashing/lit.
NIGHT key :	Switches between day and night modes.
MSG key :	Used to leave a message on the LED of an extension which does not answer.
DIAL PAD : (0 to 9, * #)	Used to dial the telephone number and the feature number.
Programmable keys:	There are 12 programmable keys on the keyboard, which can be assigned to be any of 11 function keys listed below: AUTO, TRG, CALL-PARK, TOLL-CHG, ACCOUNT, SERIAL, OHCA, CONF, REDIAL, E-E and One Touch (direct input) Refer to 6-C-10.00 “Attendant Management Screen,” for further information about Programmable key.
PRG MODE switch :	• The attendant console is operable as call processing terminal and system administration terminal by setting this switch ON and OFF. • When you set this switch to ON, the initial display of VT programming mode appears on the screen. Now you can operate the attendant console as the system administration device. (System administration device name must be set to “ATT 1 or ATT 2” in the system programming beforehand.) • You can enter into Dumb programming mode by pressing CTRL key + V key simultaneously at main menu screen of VT programming mode. • Set this switch to OFF, to return to the call processing mode.

ATT-FWD switch :

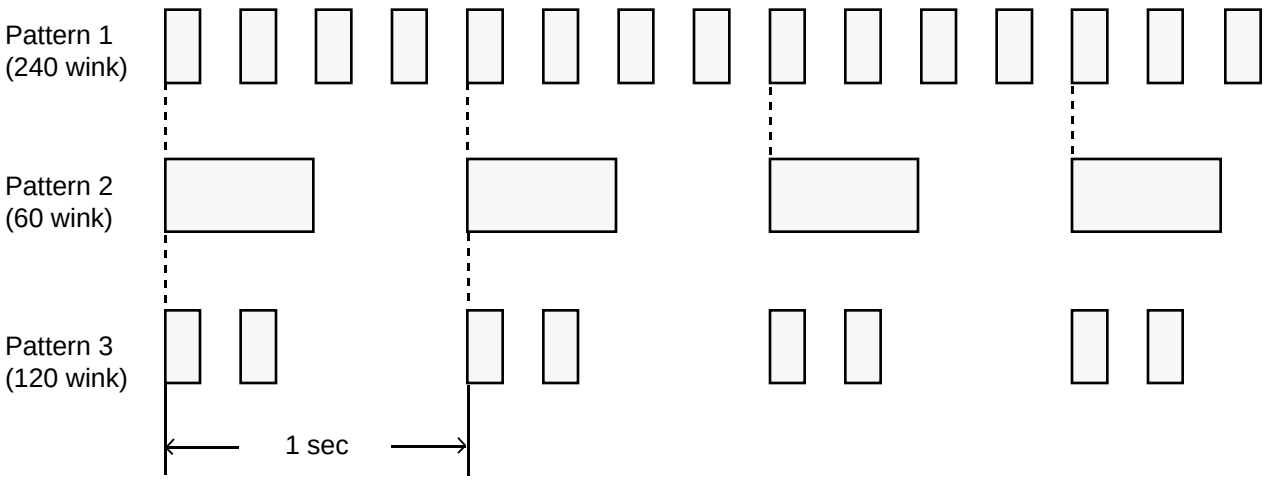
- Turning the ATT-FWD switch ON stops the arrival of all CO and extension calls (except recall) to the attendant console temporarily and provides for transfer of the incoming calls to the extension programmed in system programming “Extension-Attendant Console-Busy-Out Extension” in advance.
  It is available to make calls in this mode.

- CO calls arrived at the attendant console before this switch is set to ON and remained in the queue are transferred to another attendant console, if it belongs to the same tenant. If there is no other attendant console belonging to the same tenant; the calls are transferred to the above mentioned extension preset in system programming.

2.00 Display through LED Indicator

• SRC, DES indicators of LOOP key

Line conditions are displayed by three patterns of flashing LED indicators as follows.



Pattern 1: Shows call arriving with 240 winks/min and is called “240 wink.”
Pattern 2: Shows holding a call with 60 winks/min and is called “60 wink.”
Pattern 3: Shows Unattended Conference with 120 winks/min and is called “120 wink.”

Light on steady shows busy status and light off shows idle status.

- ALARM Indicator
  ALARM indicator shows the following conditions.

  Lit steadily : Indicates minor trouble.
  Blinking : Indicates major trouble.
  Not lit : Indicates the system is in normal operation.

  Pressing the ALARM key while ALARM indicator lights or flashes displays the detail of the trouble on the message line of the CRT screen and the ALARM indicator light goes out.
  Pressing the ALARM key again causes the trouble message disappear.

- NIGHT Indicator
  Not lit indicates Day mode and lit indicates Night mode.

- POWER Indicator
  Not lit indicates POWER switch☚ is turned OFF. and lit indicates POWER switch is turned ON.

☚ This POWER switch is used to turn on and off the CRT display.
The attendant console is operable during power failure, if it is connected to the main unit.
(For details, refer to Section 6-J-11.00 “Power Failure Operation.”)

B. Mode Structure

Attendant console is operable in the following modes:

- **Call processing mode (On-line)**
  The attendant operates the console in this mode ordinarily.

- **Local operation mode**
  Set the LOCAL switch to ON.
  In this mode, the following five functions are available:

  - Editing Extension Directory
  - Editing Speed Dial Dictionary
  - Diagnosing the Attendant Console
  - Making back-up data of Attendant Console database
  - Clearing Attendant Console database

  (Refer to Section 13 “Station Programming-Attendant Console” for further information about LOCAL mode operation)

- **System Programming**
  - Off-line programming
    Executes programming in off-line mode.

  - On-line programming
    Executes programming in on-line mode.

Setting positions of the switches executing the preceding operations are shown below:

Operation mode	Local switch	Program switch	Power switch on CRT	SystemOperation administration device
Call processing mode (On-line)	OFF	OFF	ON/OFF	
Local operation	ON	ON/OFF	ON	
Programming operation (Off-line)	OFF	ON/OFF	ON	ATT1 or ATT2
Programming operation (On-line)	OFF	ON	ON	ATT1 or ATT2

- For the assignment of system administration device, refer to Section 9-D-1.00 “Operation (2/3).”

- In the case of a power failure, the attendant console is operable in call processing mode except that the CRT screen is blank.
  (Refer to Section 6-J-11.00 “Power Failure Operation.”)

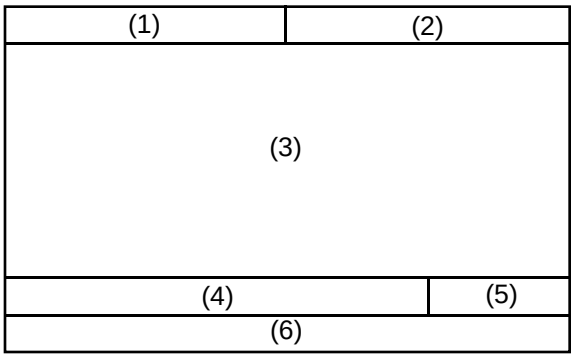
C. Useful Screens

1.00 Layout of Screen Display

Description

Explains the layout of the screen display, and the type of screens on the CRT display in the call processing mode of the attendant console.

Layout of screen



The screen is constructed with six fields as illustrated above, and they are called as follows:

(1) Title field
(2) Date & time field
(3) Application field
(4) Input/output (I/O) field
(5) Answer field
(6) Function field

1. Title field
   The display in this area varies with the mode of the console.
   There are 10 different modes.

2. Date & time field
   Current year, month, date and time are displayed in this field

3. Application field
   In conjunction with the function keys, 10 screens are available.

4. Input / output field
   This field consists of the following columns.

```
Input    :
   SRC:
   DES:
Message:
```

- Input column
  Details of the operations performed through the function keyboard or the full keyboard appear here.

- SRC column
  The LOOP key number currently in use, and the condition of SRC (Source) side party appear here.
  For instance, when extension 100 is making outgoing call on LOOP1 , the displays is as follows :

  L-1 SRC : Ext. 100 (Jack)Outgoing

- DES column
  Condition of DES side party currently active appears here.

- Message column
  Information message for the various operations appears here.

5. Answer field
   The party which will be answered by pressing the ANSWER key appears here.

<Example 1> When incoming call is from inside party:

```
LOOP-1      - - -LOOP key number
Ext.100     - - -Extension number calling
Betty       - - -Extension name;
Incoming    - - -Type of call
                 (blinking display)
```

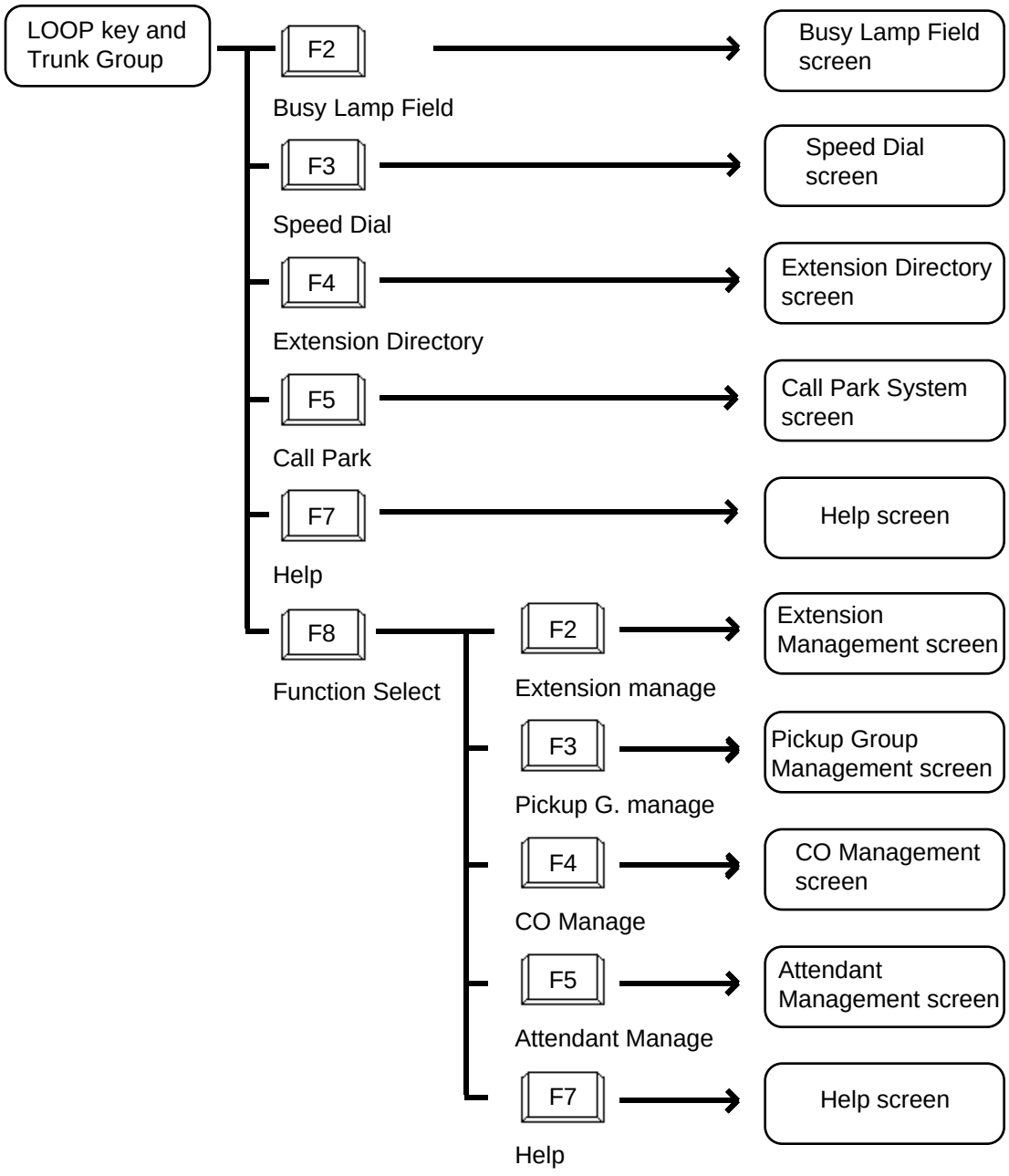
<Example 2> When incoming call is from outside party:

```
LOOP-2      - - -LOOP key number
TRG.10      - - -Trunk group number
Panasonic   - - -Trunk group name
Incoming    - - -Type of call
                 (blinking display)
```

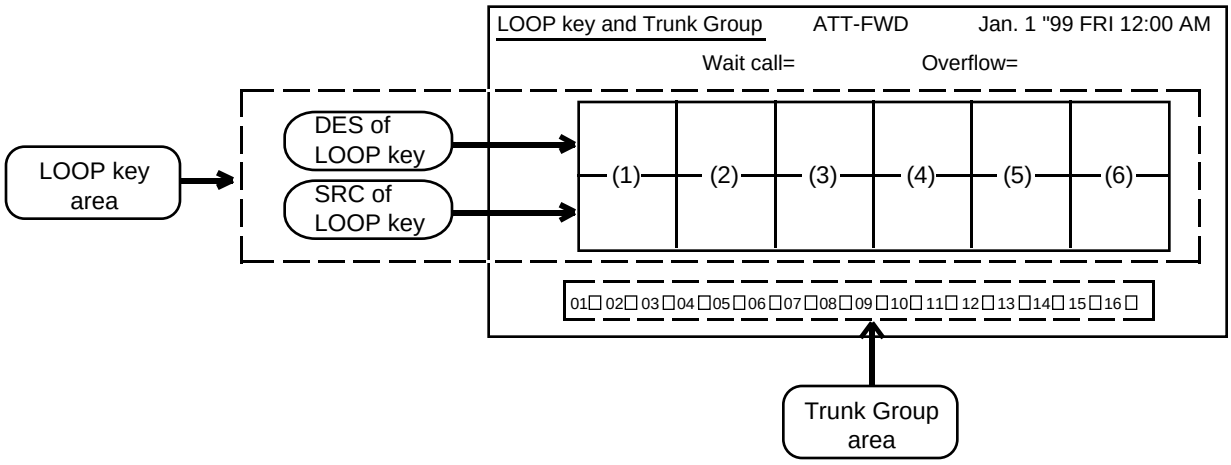
6. Function field
   Displays the functions of the F1 through F8 keys.

Classification of the screens

The screen will change depending on the function key pressed.



2.00 LOOP Key and Trunk Group Screen



Description

This screen displays the status of the LOOP keys and trunk groups.
Also displays the number of waiting calls and overflowed calls.

Conditions

The following explains the use of the various areas of the screen.

(1) Wait call
Number of the calls that cannot arrive at any LOOP keys. These calls are put in the queue when all the six LOOP keys are in use.

(2) Overflow
Number of the calls remaining in the queue when "System-System Timer" Attendant Overflow Time has expired.

(3) LOOP key area
Displays the status of calls on individual LOOP key by displaying SRC (source) and DES (destination).
The status of the individual LOOP key is displayed with four items as illustrated in the following examples.

Ext. 2001	- - -Extension number
Tony	- - -Extension name
C=01 T=02 O	- - -Class
Calling	- - -Status of the extension

The followings are example displays of the LOOP key field about extension, trunk and paging.

<Extension>

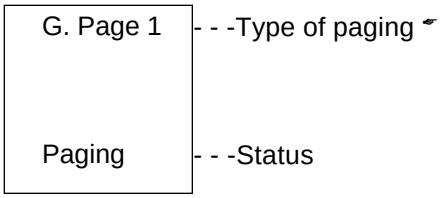
Ext. 2001	- - -Extension number ☛
Tony	- - -Extension name
C=01 T=02 O	- - -Service class (01 to 32), Toll restriction level (01 to 16), Account code (O: Option, F: Forced)
Calling	- - -Status of the extension

☛ In case "Call Forwarding" or "Call Hunting," indicated with " ⟶ ."

<Trunk>

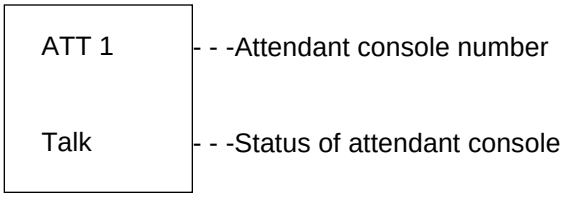
TRG. 01	- - -Trunk group number
Panasonic	- - -Trunk name.
T=02	- - -Toll restriction level (01 to 16)
Talk	- - -Status of the trunk

<Paging>

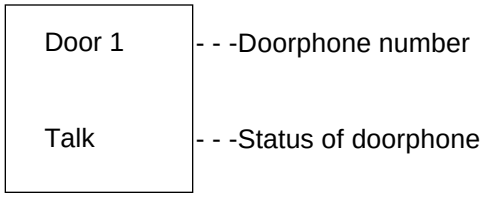


- G. page x : Group paging
  (x: 1 to 8)
- G. page All : Group paging all
- E. page x : External paging
  (x: 1 or 2)
- E. page All : External paging all
- All page : Group paging all and External paging all

<Attendant console>

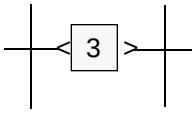


<Doorphone>



- The LOOP key number currently in use is displayed in reverse-video.

<Example>



(4)Trunk Group area

Trunk group number, trunk group name (Up to 10 alphanumeric characters) and trunk group status are displayed in the trunk group area. Display for trunk group status is as follows.

- □ : An idle trunk is available in the displayed trunk group.
- ■ : All trunks are busy in the displayed trunk group.
- - - : The trunk is not used.

(5)When the ATT-FWD switch is set to ON, the ATT-FWD indicator flashes.
The ATT-FWD indicator is not lit when the switch is set to OFF.

Function field

- Types of function fields
  Following two types of function fields are available for operation in LOOP key and Trunk Group screen.

- Selection of function fields
  Function field display changes by every pressing of the F8 key (function select).

<Field 1>

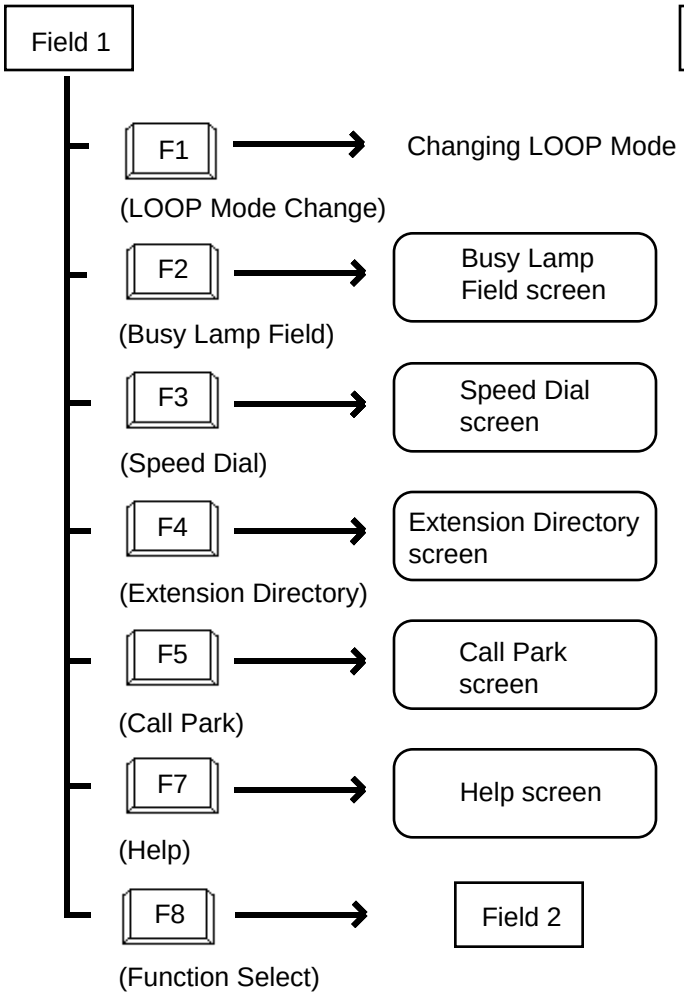
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LOOP Mode Change	Busy Lamp Field	Speed Dial	Extension Directory	Call Park		Help	Function Select

<Field 2>

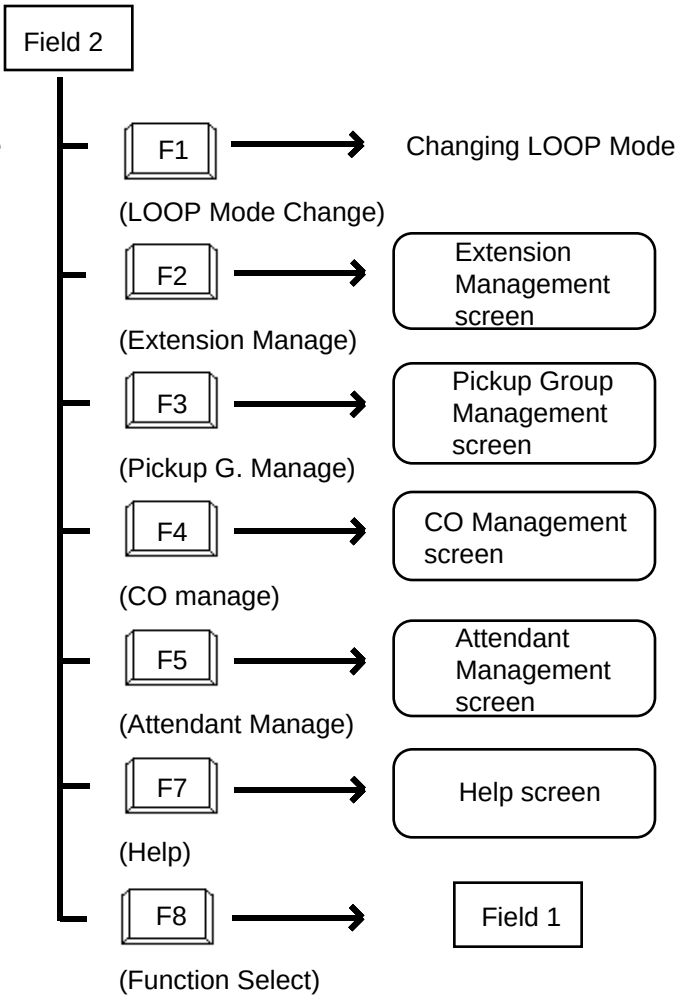
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LOOP Mode Change	Extension Manage	Pickup G. Manage	CO Manage	Attendant Manage		Help	Function Select

The following flow charts show the options available from each function field.
Advance to your desired screen by pressing a corresponding function key.

<Field 1>

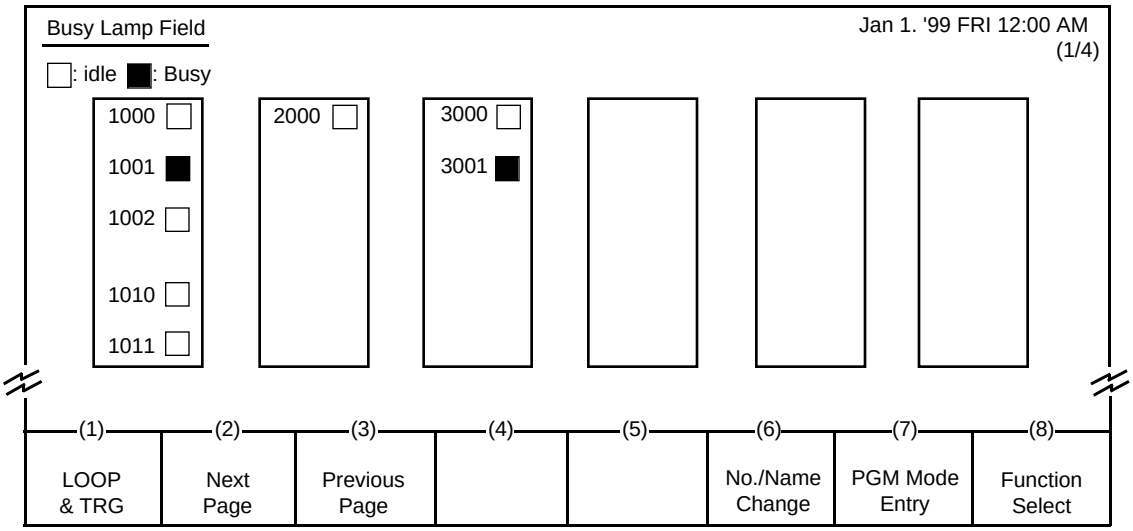


<Field 2>



3.00 Busy Lamp Field (BLF) Screen

<Example>



Description

This screen is available both for monitoring the status (Idle or Busy) of extensions and for placing inter office calling.
The symbols below are used to indicate the current extension status.

□ : Idle
■ : Busy

Conditions

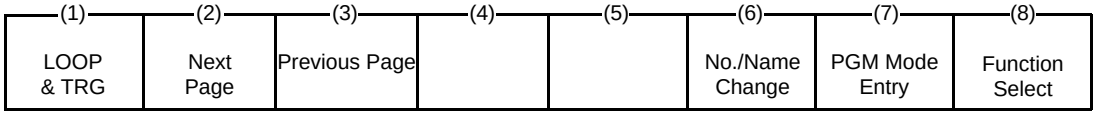
- For monitoring the extension status, or placing Inter Office Calling by this screen, the extension numbers must have been registered in this screen beforehand. For registration of extension numbers, refer to Function Field 4 described succeedingly.
  Extension names do not appear when they are not assigned in LOCAL mode. Refer to Section 13-B “Extension Directory Mode.”

- For an extension to be considered busy, all PDNs buttons are in use.
- For making Inter Office Call by this screen, see Section 6-D-3.03 “Inter Office Calling by BLF Screen.”

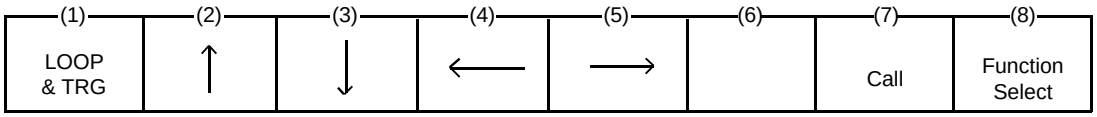
Function fields

- Types of function fields
  Following five types of function fields are available for operation in the Busy Lamp Field screen.

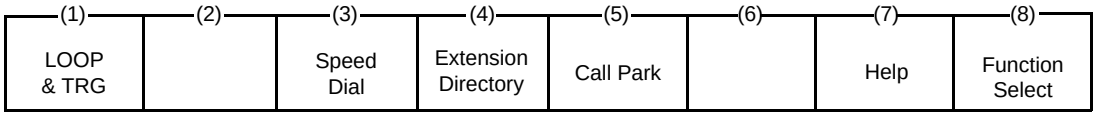
<Field 1>



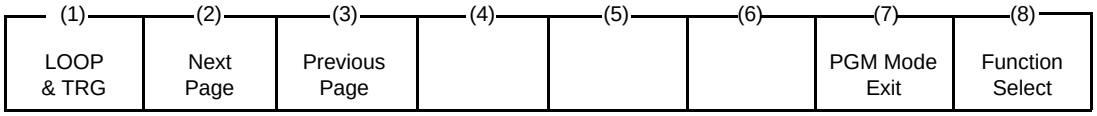
<Field 2>



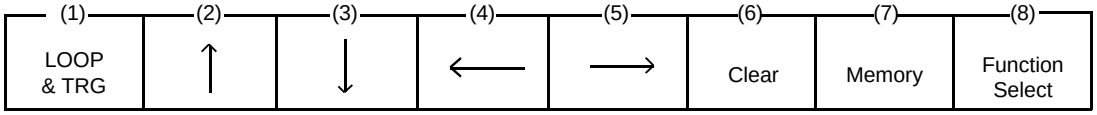
<Field 3>



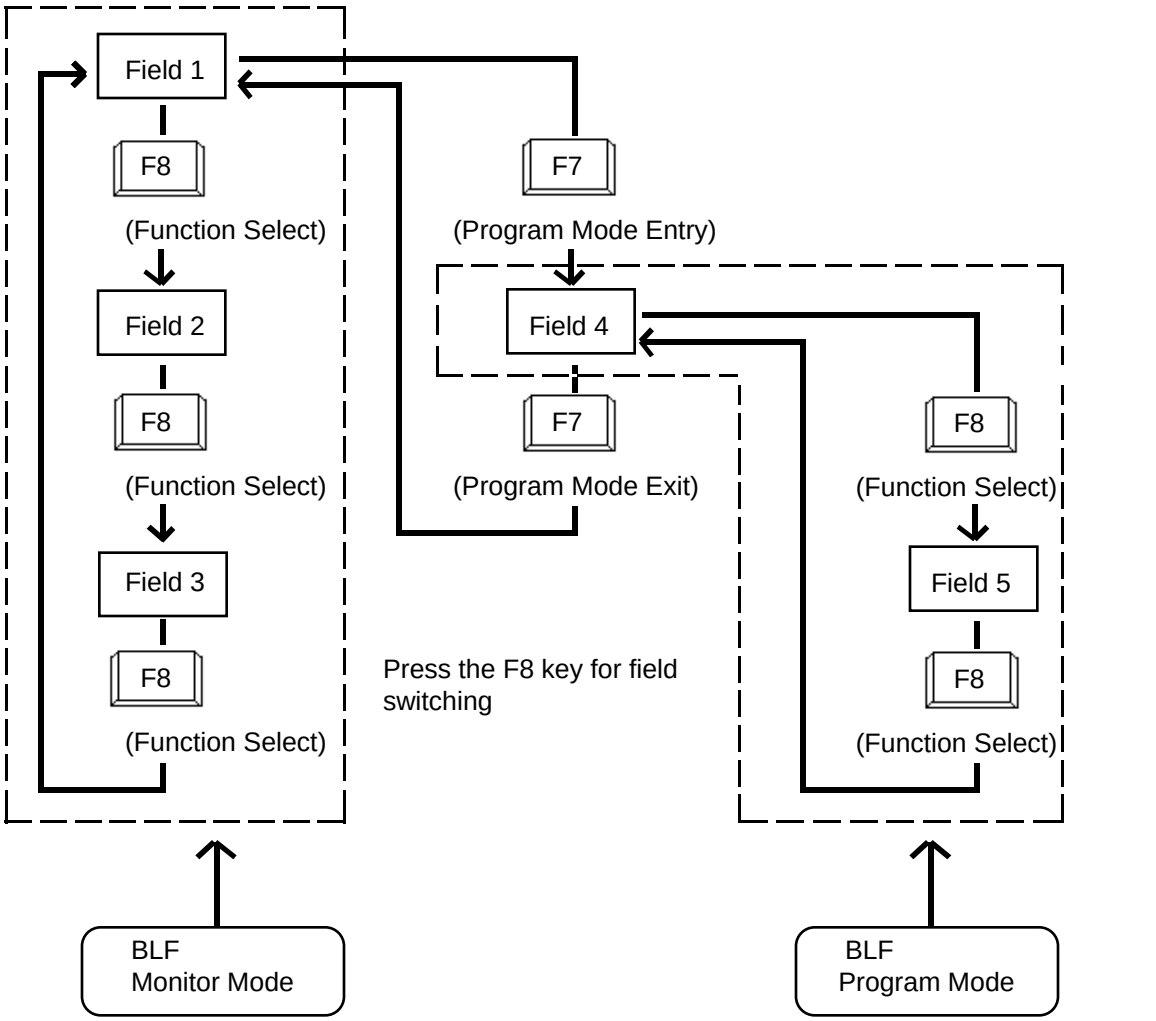
<Field 4>



<Field 5>



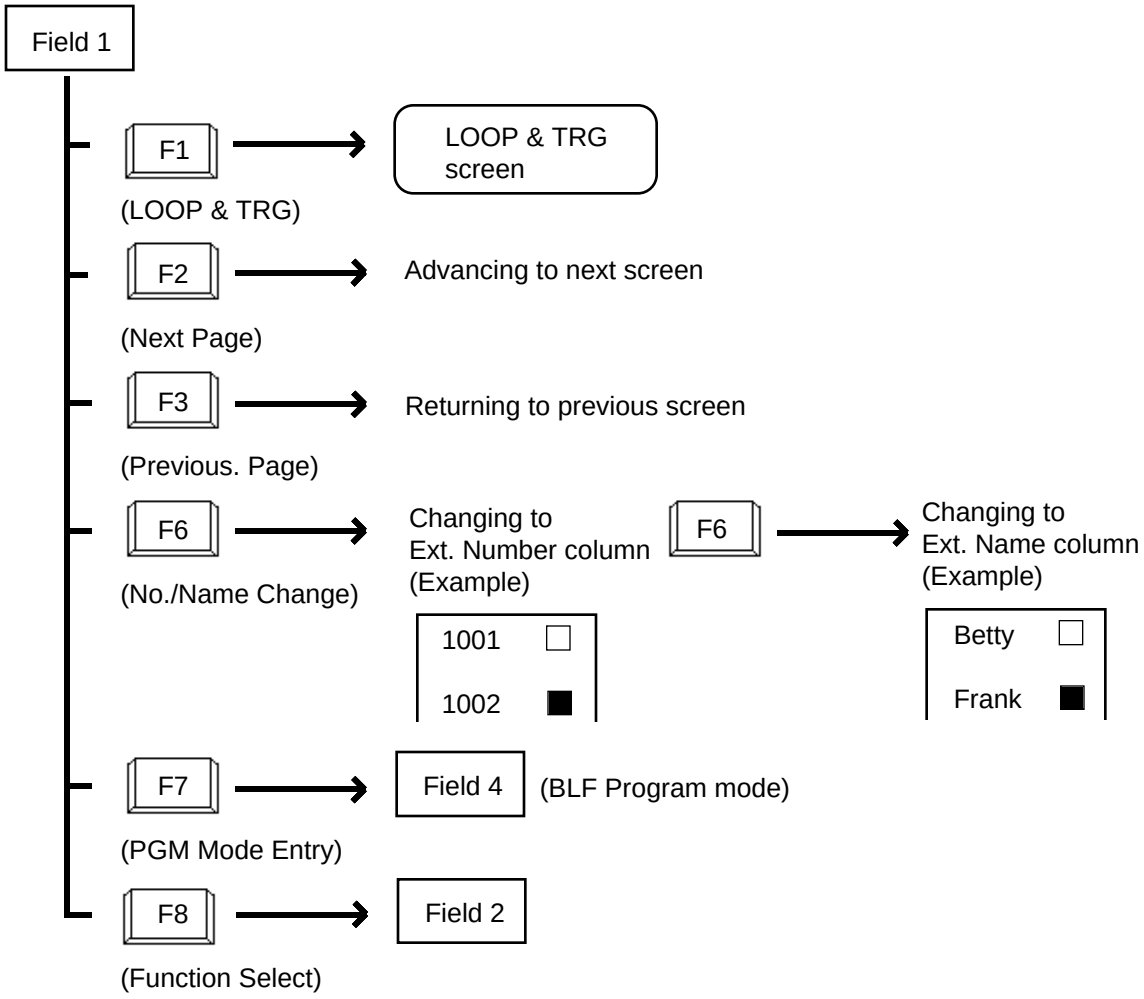
• Switching of function fields
The following flow chart shows how to move from field to field.



BLF Monitor Mode:
Monitoring the status of extension, or making an extension call

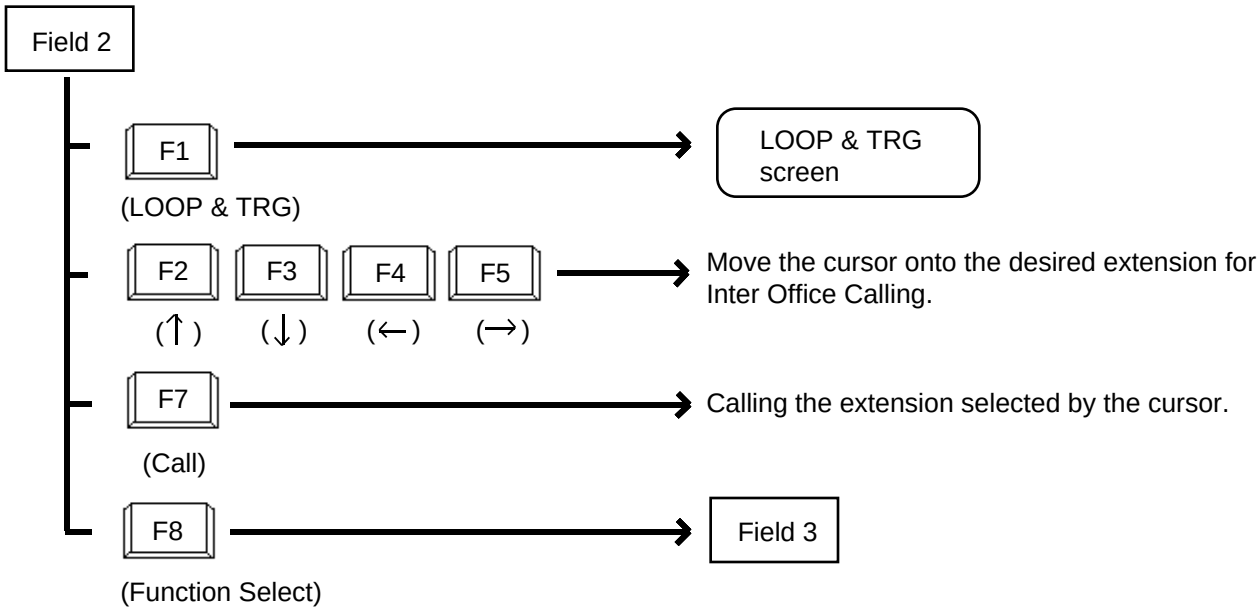
BLF Program mode:
Programming of BLF screen.

<Field 1>
This function field is available for advancing to the next screen or returning to the previous screen in the Busy Lamp Field screen. You can see the extension name screen by pressing the F6 key at extension number screen, Busy Lamp Field program mode is obtained by pressing the F7 key.

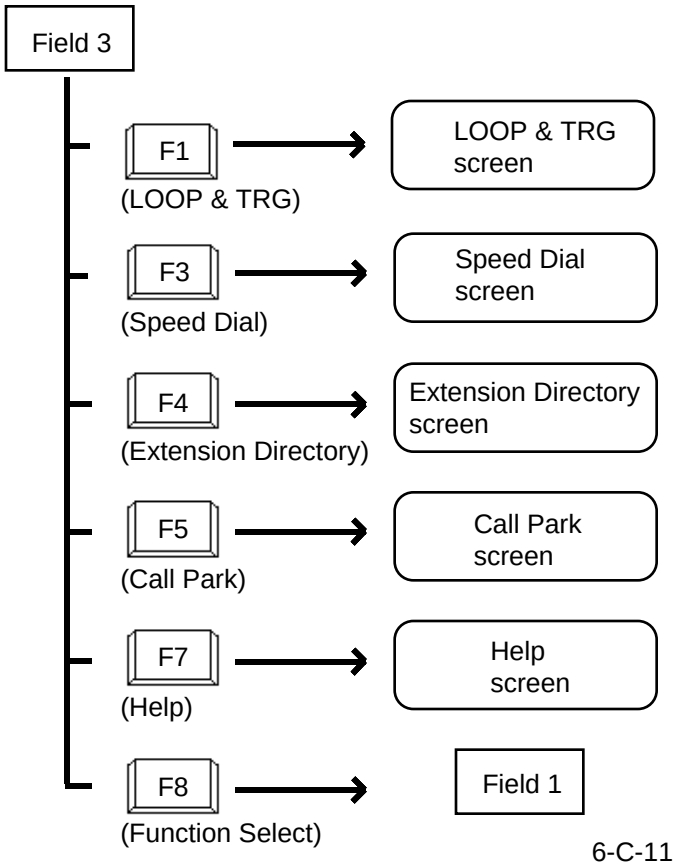


Program Mode Entry function (F7) appears only when the extension number column is displayed.
Press the F6 key if required to switch screens to extension name column.

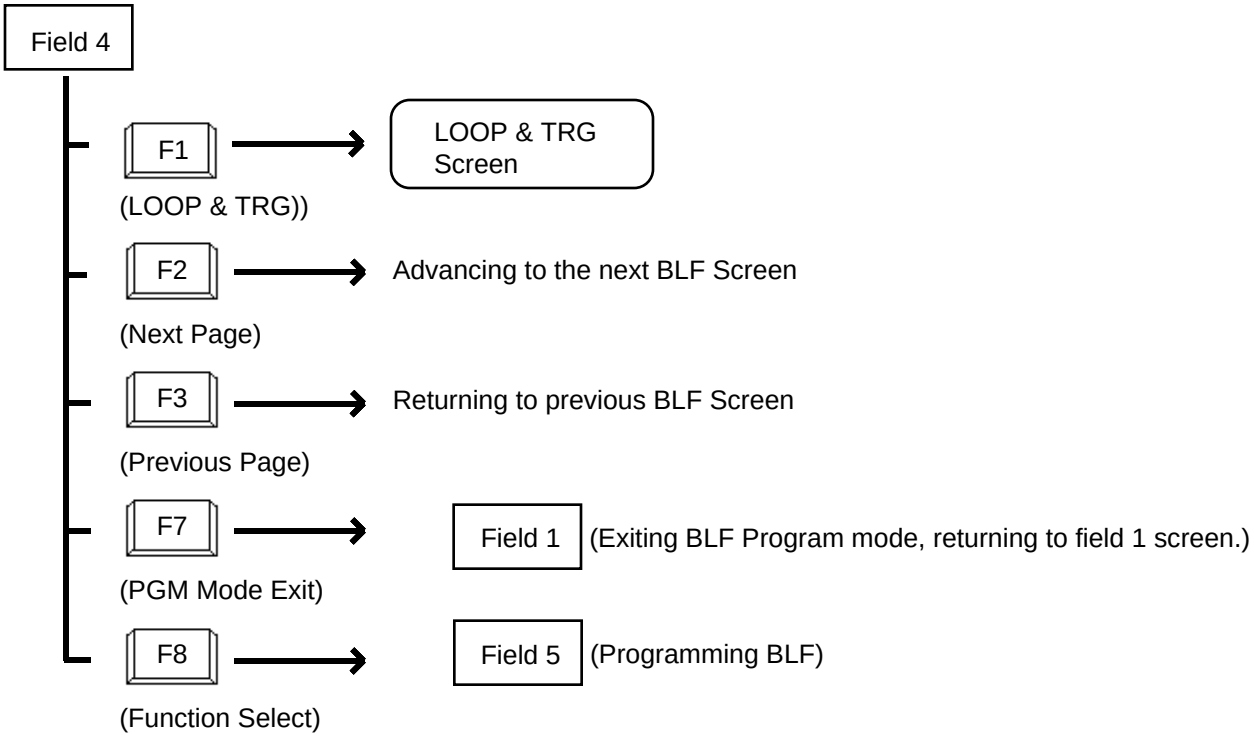
<Field 2>
This function field is available for Inter Office-Calling.



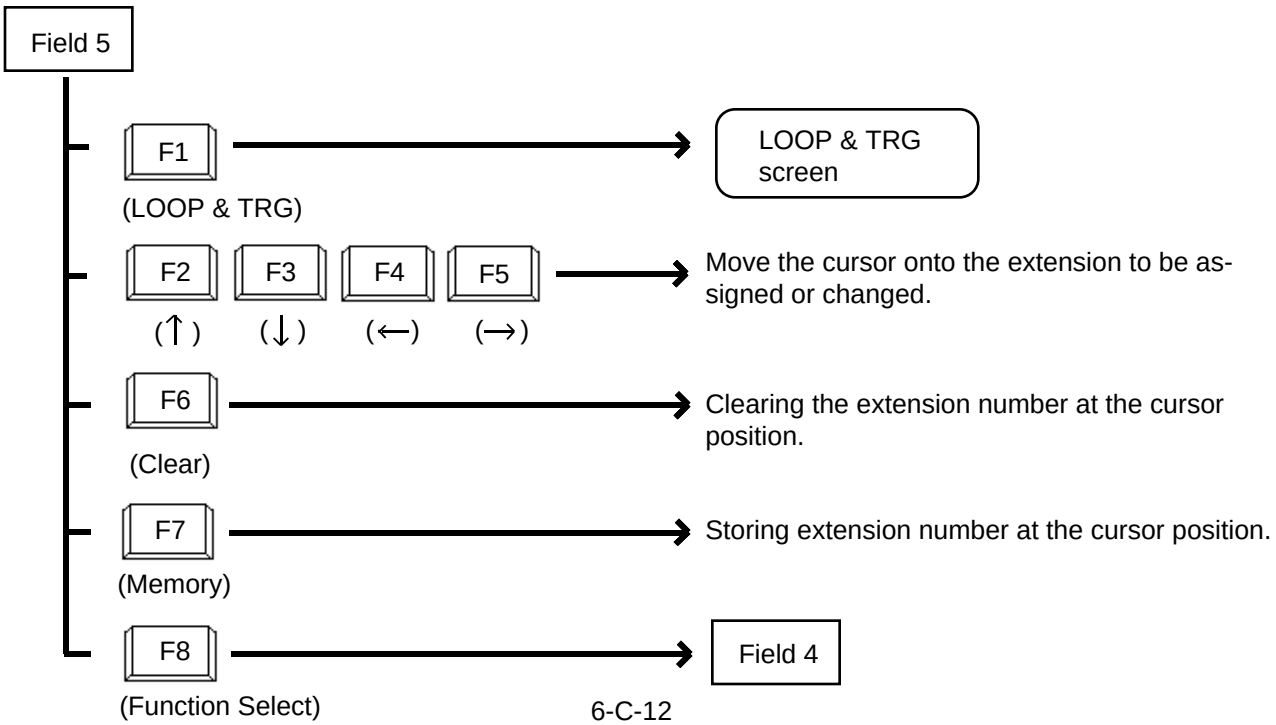
<Field 3>
This function field is available for concluding the Busy Lamp Field screen and moving to the screen corresponding to the selected function key.



<Field 4>
Pressing the F7 key (PGM Mode Entry) in Field 1 introduces this field. That is, this function field appears in the Busy Lamp Field program mode.
This field is available for advancing to next screen or returning to previous screen in the Busy Lamp Field program mode.



<Field 5>
This field is available for programming Busy Lamp Field screen.

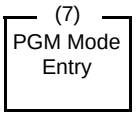


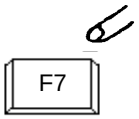
- Procedure for storing / changing Busy Lamp Field screen

1. Press the F7 key (PGM Mode Entry) in the function field 1.

   • Function field 4 appears on the screen.

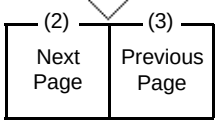
field 1

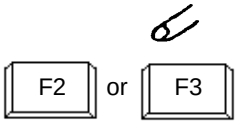




2. Obtain appropriate extension screen by pressing the F2 key (Next page) or the F3 key (Previous page).

field 4

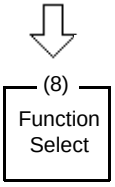


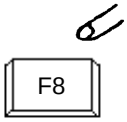


3. Press the F8 key (Function Select)

   • Function field 5 appears on the screen.

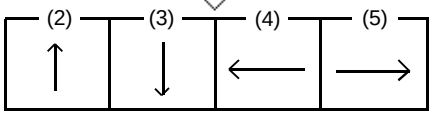
field 4



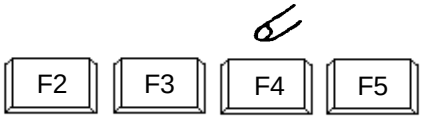


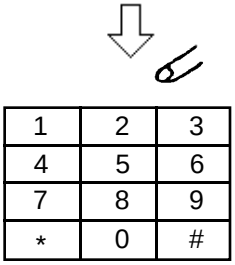
4. Move the cursor onto the extension to be stored / changed.

field 5



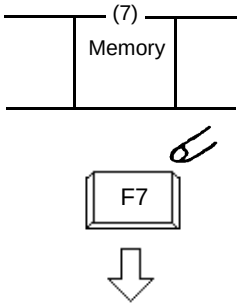
5. Enter the extension number to be stored / changed through the numeric keypad on the function keyboard.
   For correcting errors, or changing current data, reenter data after pressing the F6 key (clear).





6. Pressing the F7 key (memory) stores entered data.

field 5

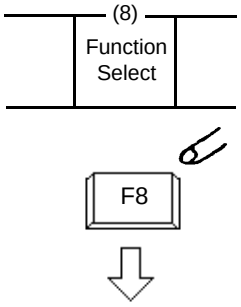


7. Repeat steps 2 to 6 to store or change other extensions if necessary.

8. After storing or changing, press the F8 key (function select).

   • Function field 5 appears on the screen.

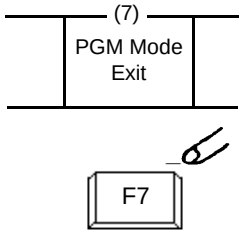
field 5



9. Press the F7 key (PGM mode exit).

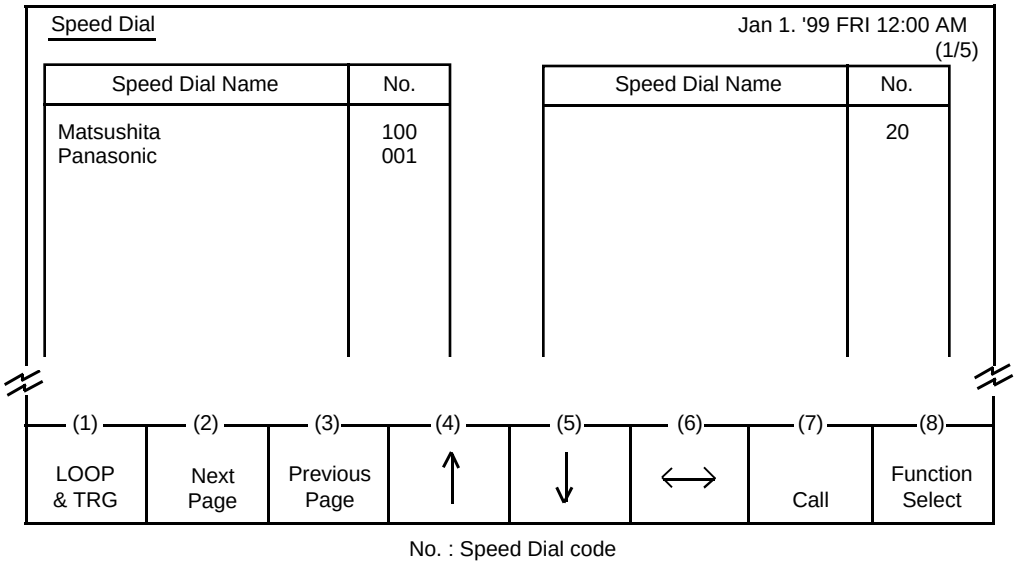
   • Exiting BLF PGM mode, changes to BLF Monitor mode.

field 4



4.00 Speed Dial Screen

<Example>



No. : Speed Dial code

Description

Allows the attendant to make a call using speed dial code by selecting the name programmed in the attendant console LOCAL mode.

Conditions

Speed dial names are listed in alphabetical order.

Storing of speed dial name will be performed in attendant console LOCAL mode.
For further details, refer to Section 13-C “Speed Dial Dictionary Mode.”

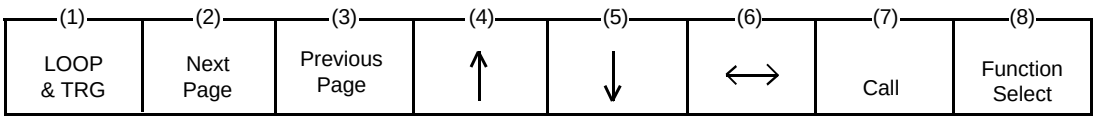
For making a call using this screen, refer to Section 6-D-2.01 “Speed Dialing-System.”

Function field

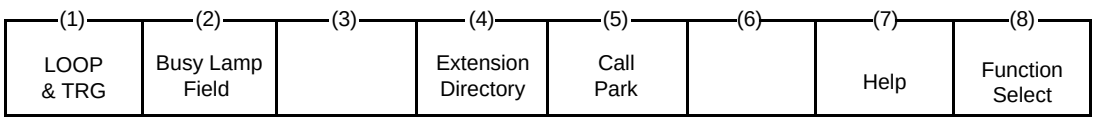
- Types of function fields
  Two types of function fields, Field 1 and Field 2, shown below are available to operate Speed Dial screen.

- Switching of function Fields.
  To switch the two function fields, press the F8 key (function select).

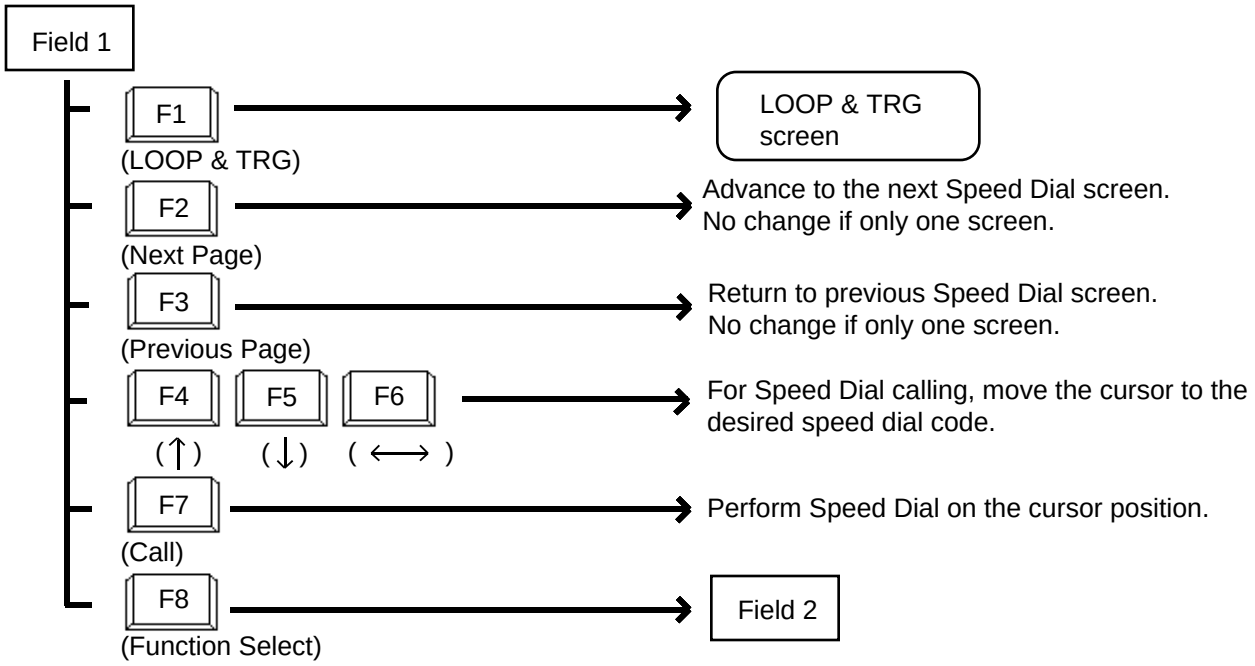
<Field 1>



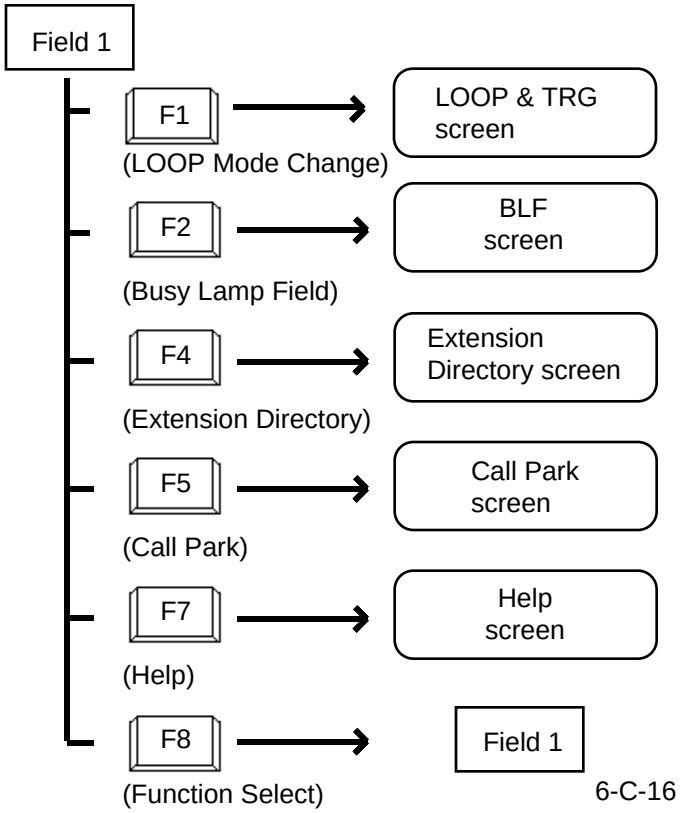
<Field 2>



<Field 1>
This function field is available for making a call through Speed Dial screen.
If there are multiple speed dial screens, it is used to advance to the next screen or to return to the previous screen.

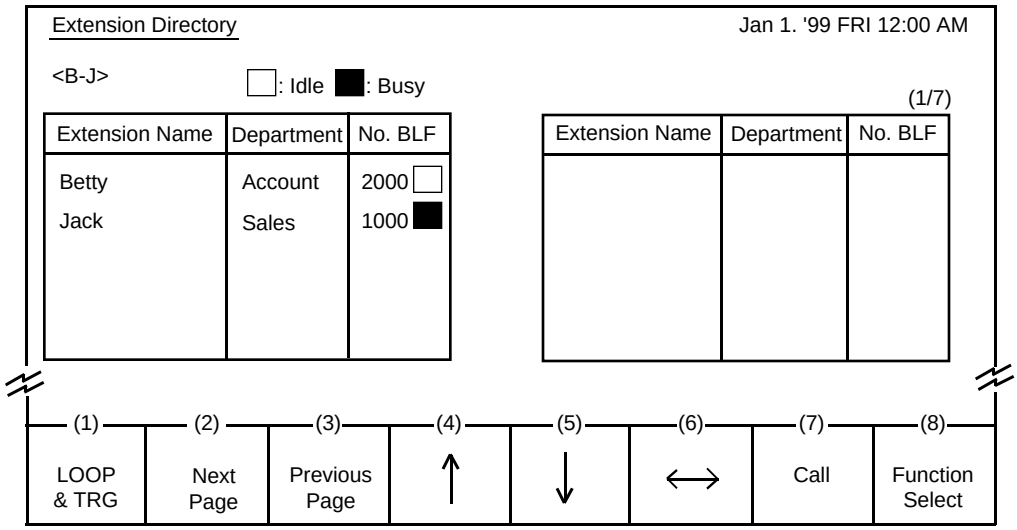


<Field 2>
This function field is available for exiting Speed Dial screen, and moving to the other screens as selected by the function keys.



5.00 Extension Directory Screen

<Example>



Description

The attendant can make the extension call by selecting desired extension name in this screen. It is available to search an extension number by specifying it's name and department.
It is also available to monitor the current extensions status as follows.

: Idle
: Busy

Conditions

For displaying contents of extension directory on the screen, the information must be entered in attendant console LOCAL mode beforehand. See Section 13-B “Extension Directory Mode.” The extension names are listed in alphabetical order.

For calling, refer to Section 6-D-3.02 “Inter Office Calling by Extension Directory Screen.”

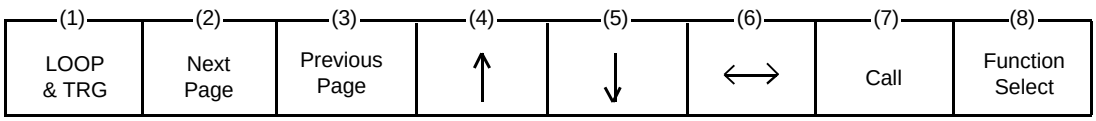
On this screen, <B-J> in the upper left corner shows the boundary of the initial letter of the first and last entries.

Function field

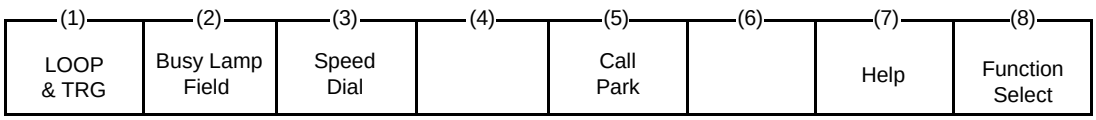
- Types of function fields.
  Two types of function fields, Field 1 and Field 2 shown below are available to operate Extension Directory Screen.

- Switching of function fields.
  To switch the two function fields, press the F8 key (function select).

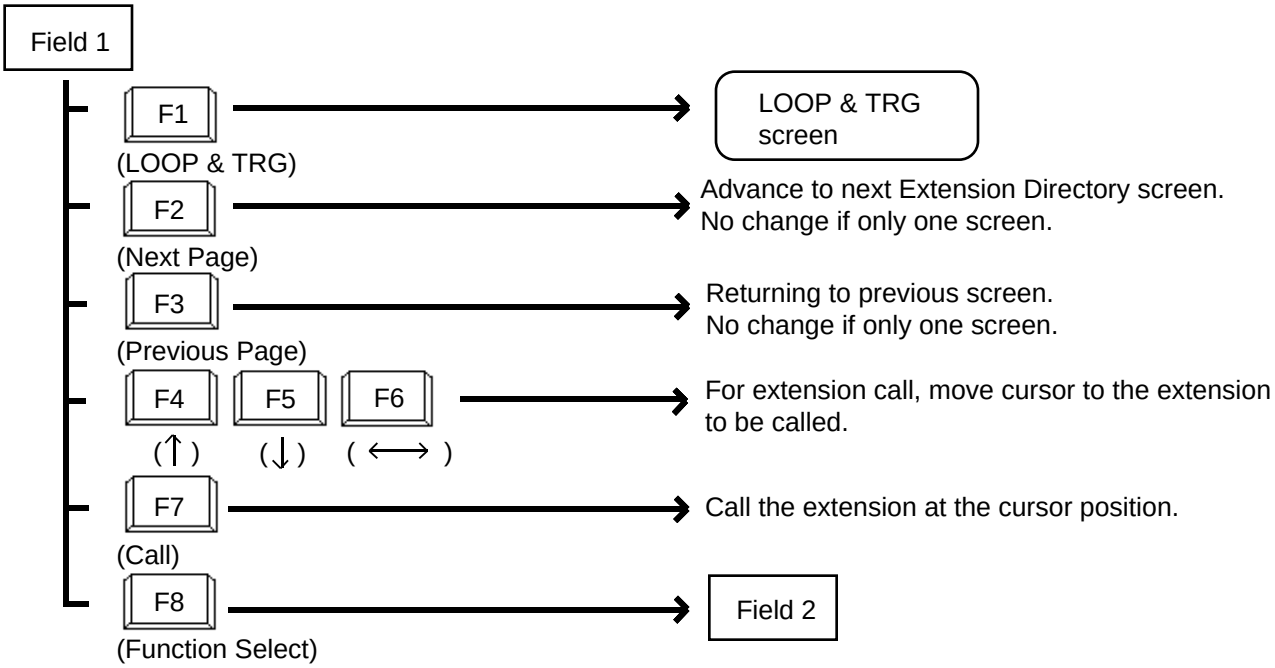
<Field 1>



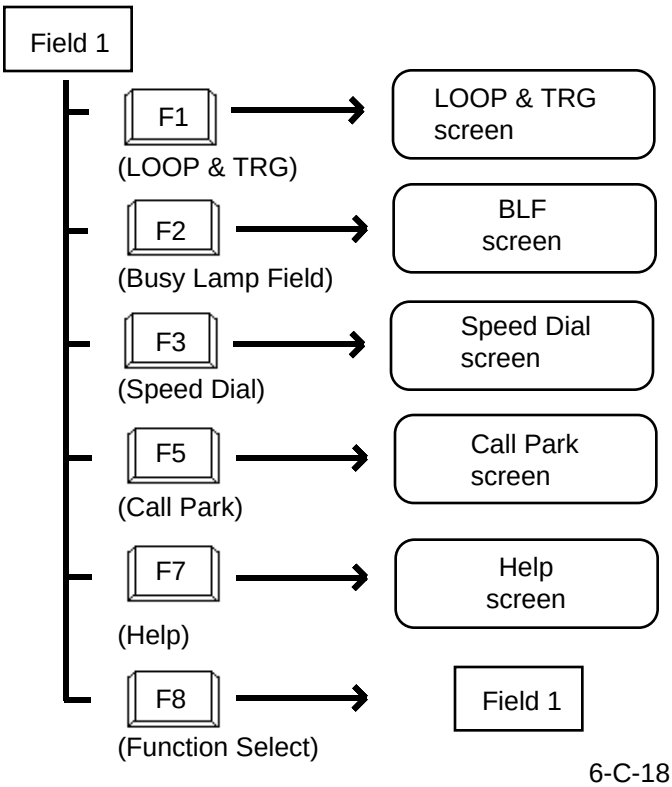
<Field 2>



<Field 1>
This function field is available for advancing to the next screen or returning to the previous screen, when there are a number of extension directory screens.
Also, this field is available for making Inter Office Call.

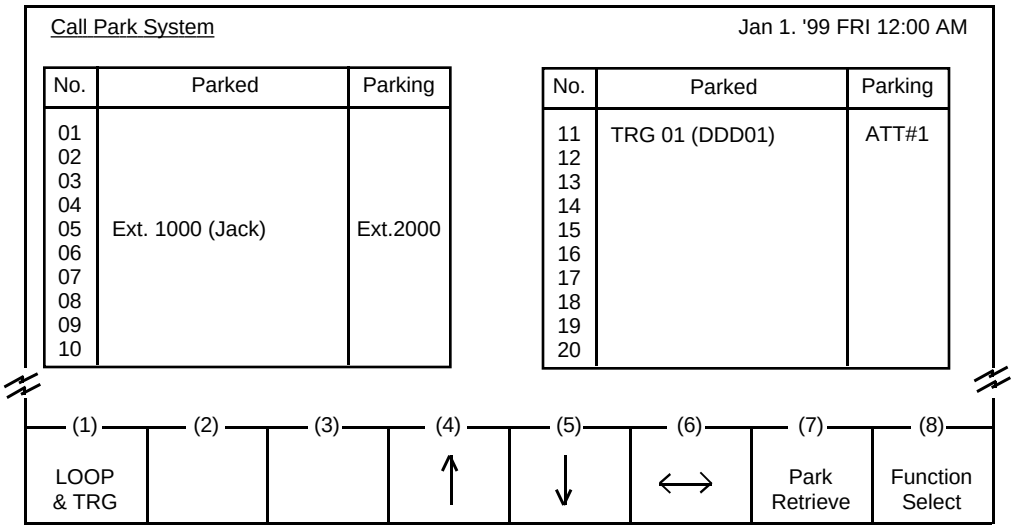


<Field 2>
This function field is available for concluding this screen and moving to the screens depending on the function key pressed.



6.00 Call Park System Screen

<Example>



Description

This screen displays extensions and CO calls parked in the call park area in the system, as well as retrieving the parked calls.

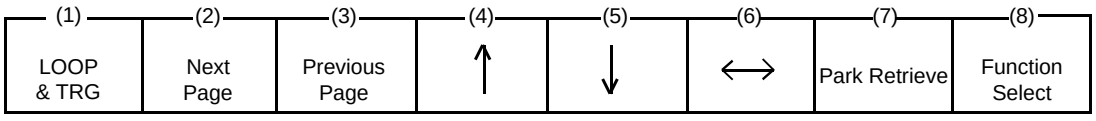
Conditions

For retrieving a parked call, refer to Section 6-F-3.00 “Call Park-System.”

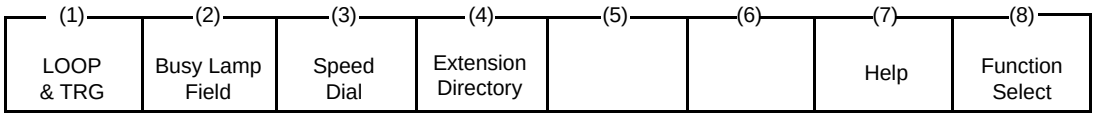
Function field

- Types of function field.
  Two types of function fields, Function Field 1 and Function Field 2 shown below are available to operate Call Park System screen.
- Switching of function fields.
  To switch the two function fields, press the F8 key (function select).

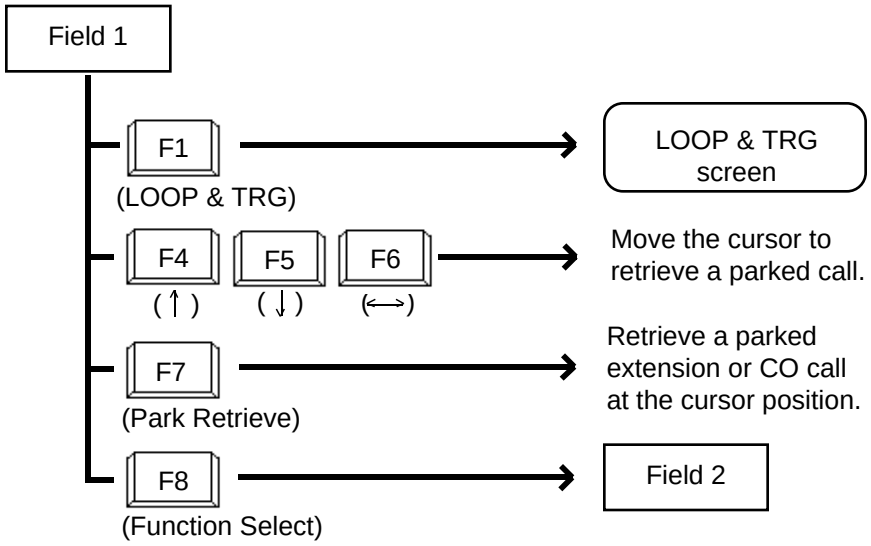
<Field 1>



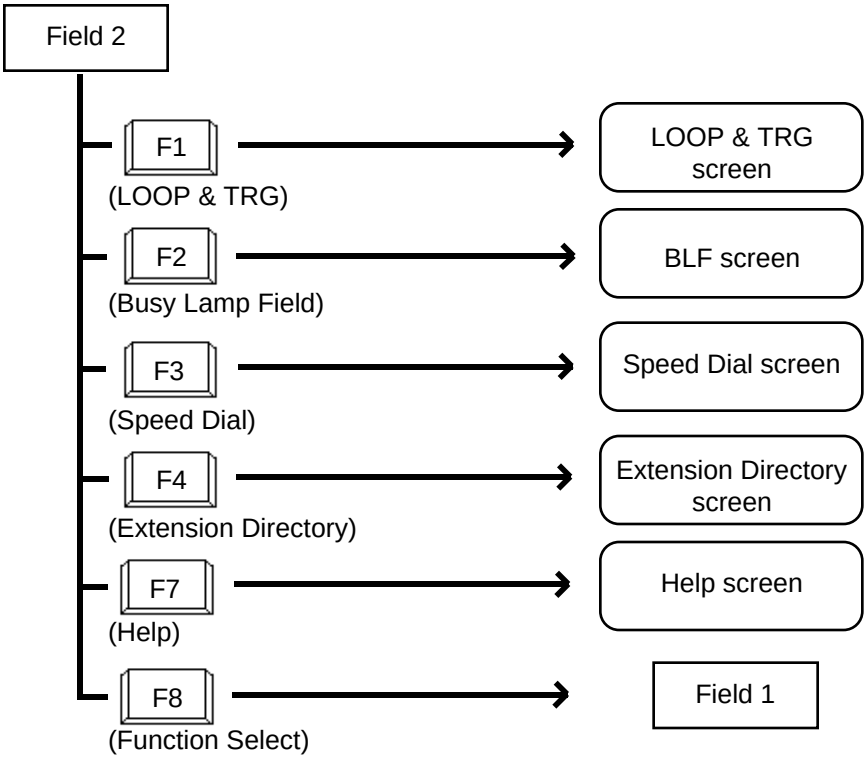
<Field 2>



<Field 1>
This function field is available for retrieving the parked calls.

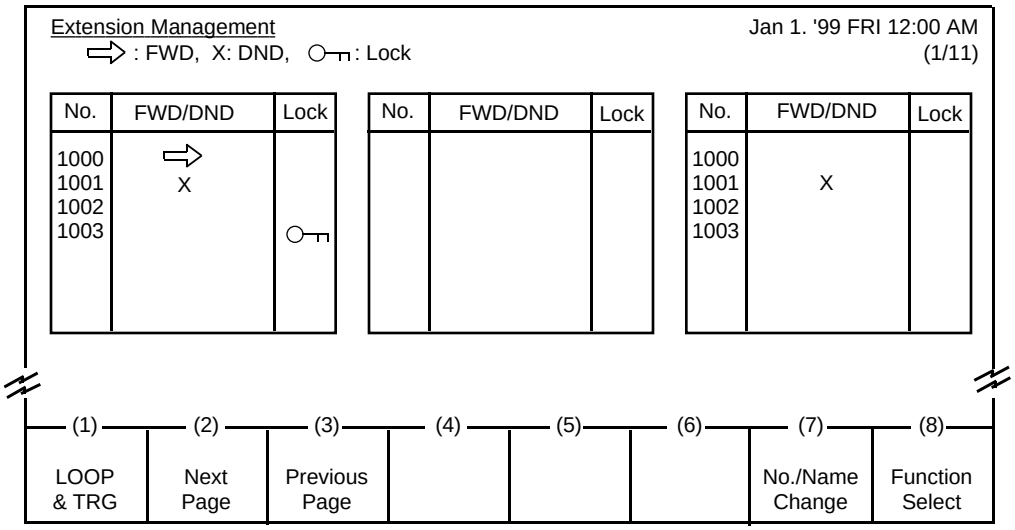


<Field 2>
This function field is available for concluding this screen and moving to other screens depending on the function key pressed.



7.00 Extension Management Screen

<Example>



Legend :

: FWD set
X : DND set
: Station lock set

Description

Enables the attendant to monitor the status of extensions about following three features :

- Call Forwarding
- Do Not Disturb
- Electronic Station Lock

The attendant can assign or cancel those features to/from the extension user (refer to Section 6-J-5.00 “Remote Station Feature Control”) and make Inter-Office call (refer to Section 6-D-3.04 “Inter Office Calling by Extension Management Screen”).

Conditions

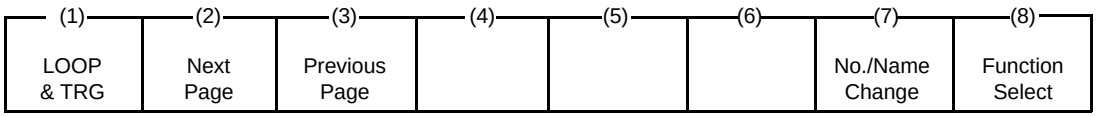
Extension number is displayed in ascending order of extension directory number.

Function field

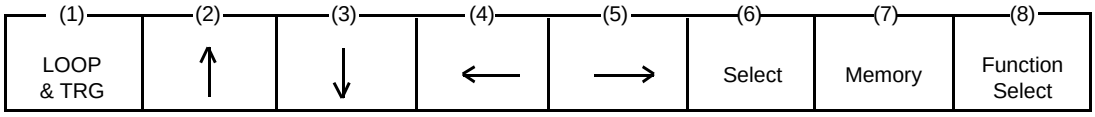
- Types of function fields
  Following four types of function fields are available for operation in Extension Management screen.

- Switching of function fields
  For switching between the four function fields, press the F8 (Function Select) key.

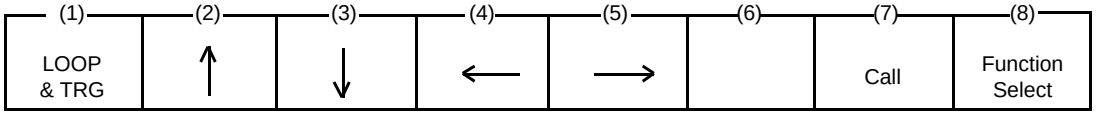
<Field 1>



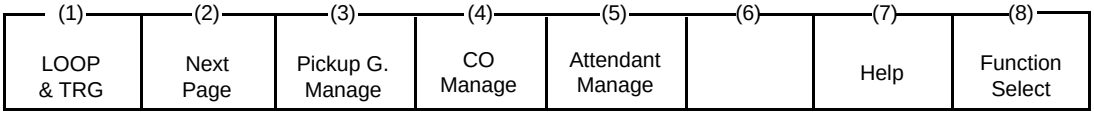
<Field 2>



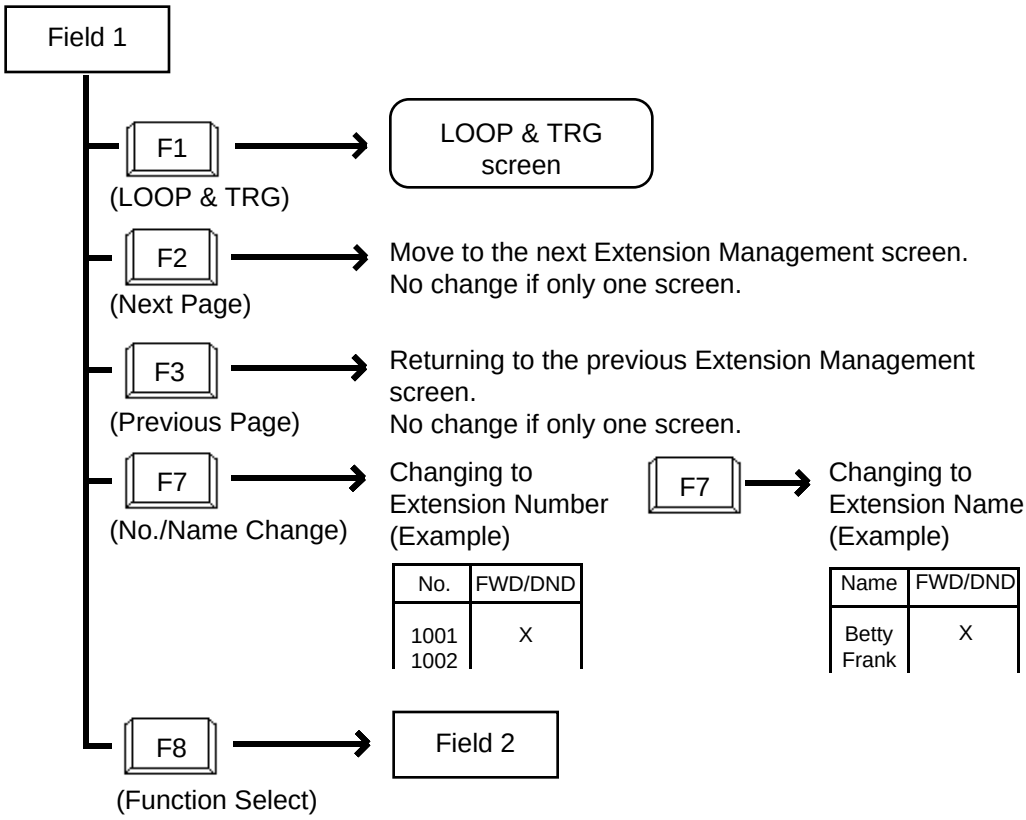
<Field 3>



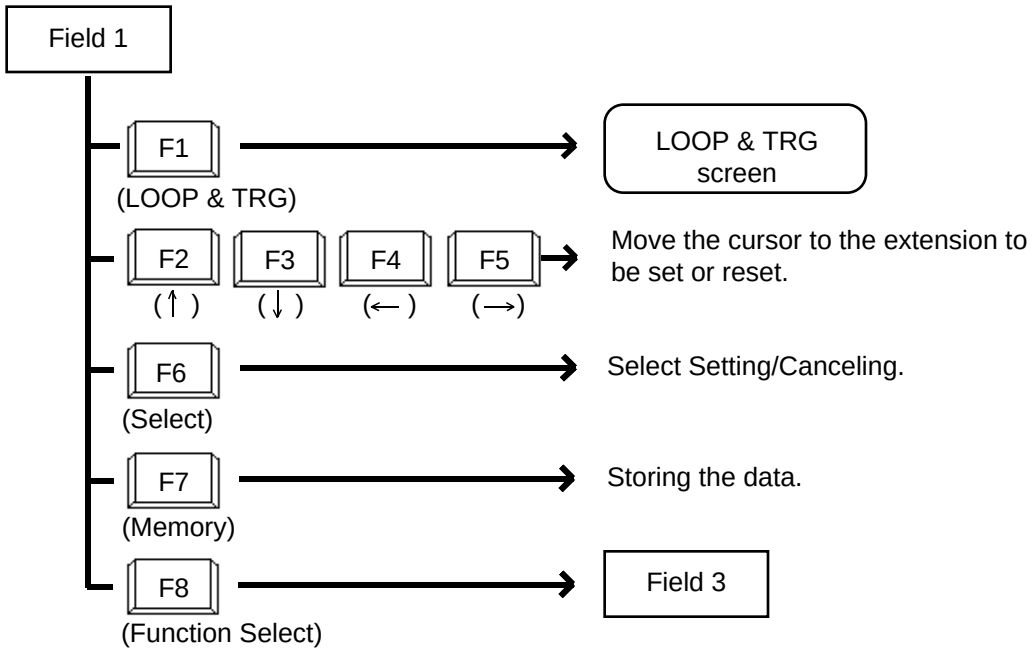
<Field 4>



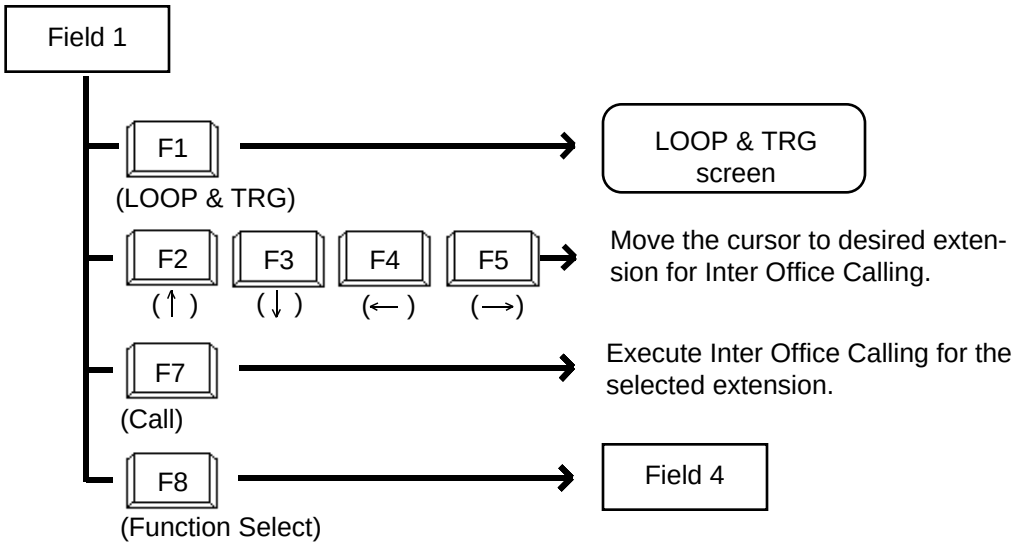
<Field 1>
This function field is available for advancing to the next screen or returning to the previous screen when there are multiple extension management screens, and changing the display from extension number to extension name.



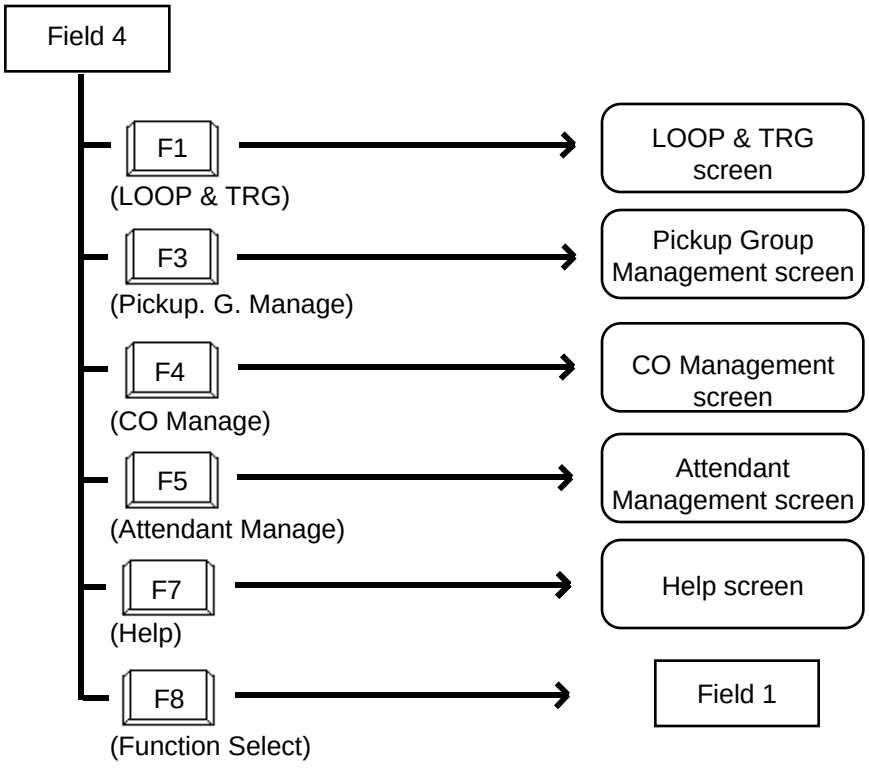
<Field 2>
This function field is available for canceling Call Forwarding, and setting/canceling Do Not Disturb and Electronic Station Lock.



<Field 3>
This function field is available for making Inter Office Call through the Extension Management screen.

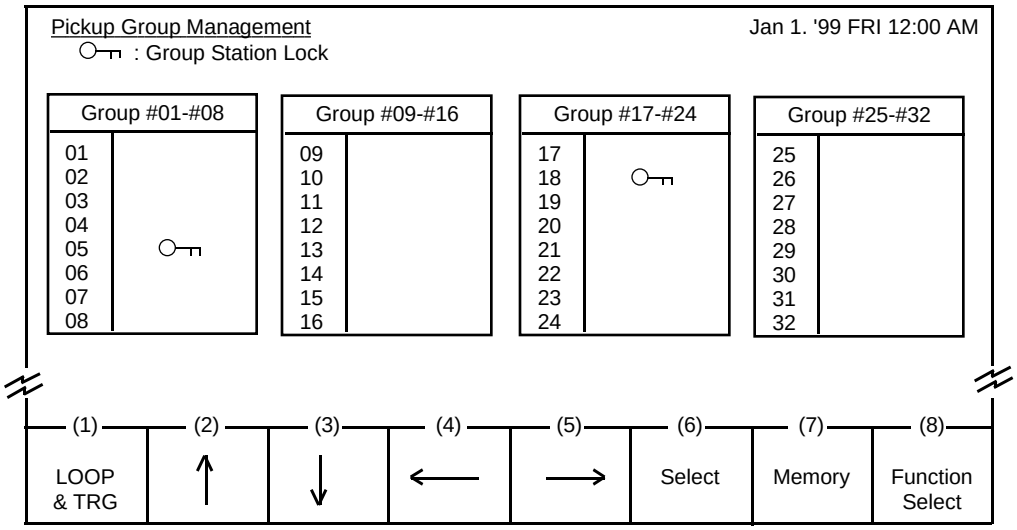


<Field 4>
This function field is available for concluding Extension Management screen and moving to other screens as selected by the function keys.



8.00 Pickup Group Management Screen

<Example>



Legend

: Group station lock is assigned

Description

This screen is used for monitoring whether the pickup groups are group-locked or not.
Also used for setting/canceling group station lock for individual pickup group.
Refer to Section 6-J-5.00 “Remote Station Feature Control” for further information.

Conditions

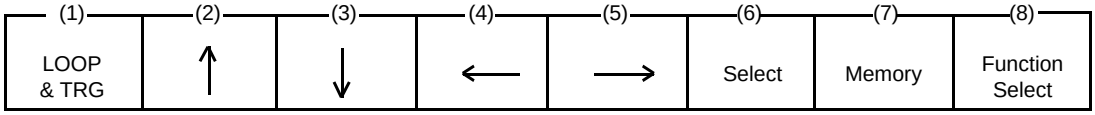
All extensions in the same pickup group assigned to Group Station Lock are locked.

Function field

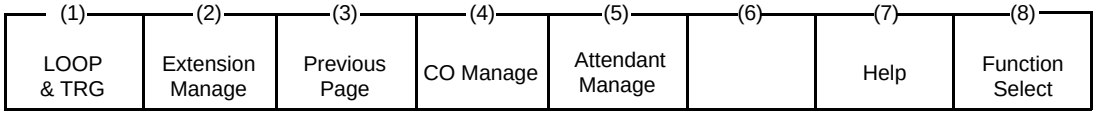
- Types of function fields
  Two types of function fields, Field 1 and Field 2, shown below are available to operate Pickup Group Management Screen.

- Switching of function Fields.
  To switch the two function fields, press the F8 key (function select).

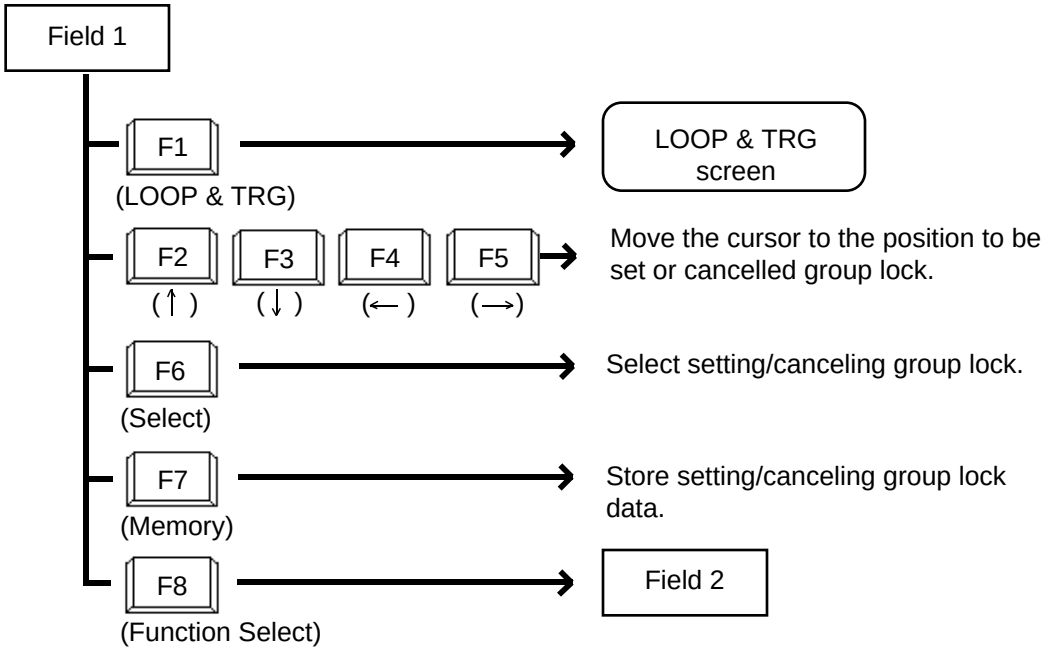
<Field 1>



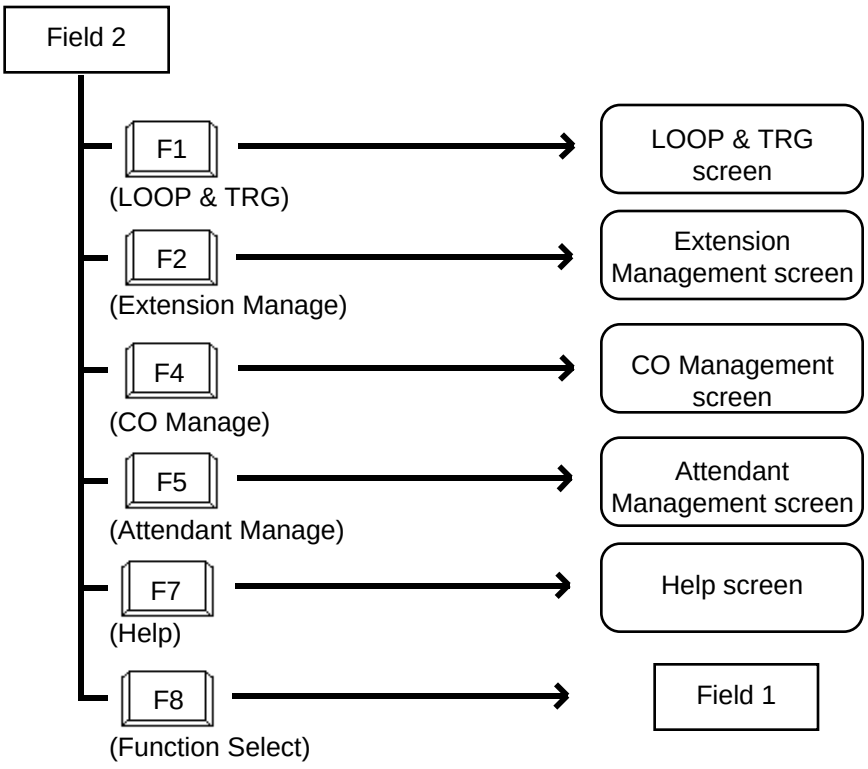
<Field 2>



<Field 1>
This function field is available for setting/canceling group locking.

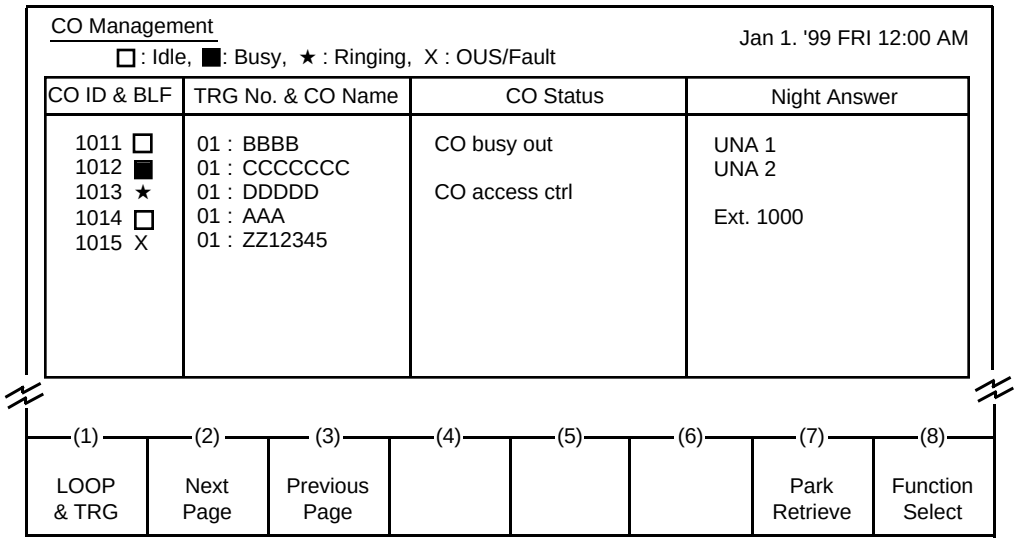


<Field 2>
This function field is available for concluding Pickup Group Management screen, and moving to other screens as selected by function keys.



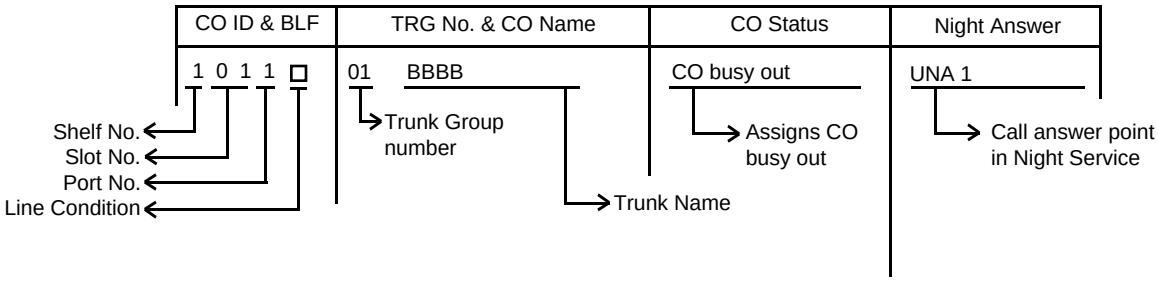
9.00 CO Management Screen

<Example>



Legend :

CO ID : Physical number of CO line
BLF : Busy Lamp Field
□: Idle
■: Busy
★: Ringing
X : OUS/Fault
TRG No. : Trunk group number (01 to 16)
CO Name : Name of trunk (Up to 10 alphanumeric characters)
CO Status : Assigns status of CO access control or CO busy out
Night Answer : Assigns call arrival destination of CO line in the night service mode (UNA 1, UNA 2, Extension or RMT)



Description

This screen is available for setting/canceling the following functions.

- CO busy out
- CO access control
- Night answer point

This screen also allows the attendant to confirm the current CO line status.

Conditions

CO IDs are listed in ascending order.

For details about CO busy out and CO access control, refer to Section 6-J-10.00 “CO Access Control.”

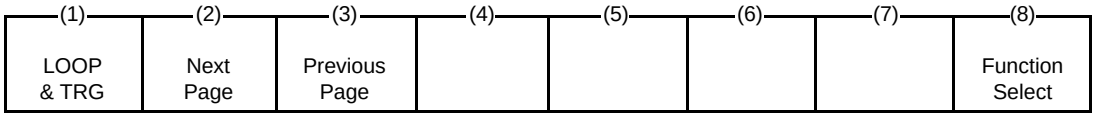
For details about Night Answer, refer to Section 6-J-1.01 “Flexible Night Service.”

Function field

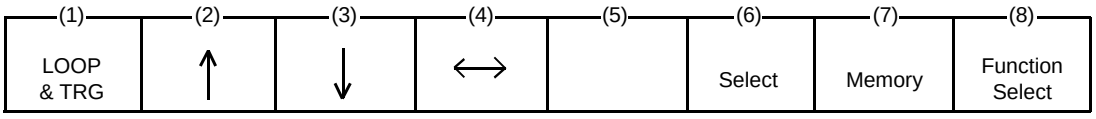
- Types of the function fields
  Following three types of function fields are available for operation in CO Management screen.

- Switching of function fields.
  For switching between three function fields shown below, press the F8 (Function Select) key.

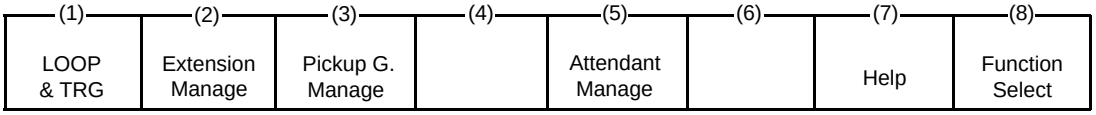
<Field 1>



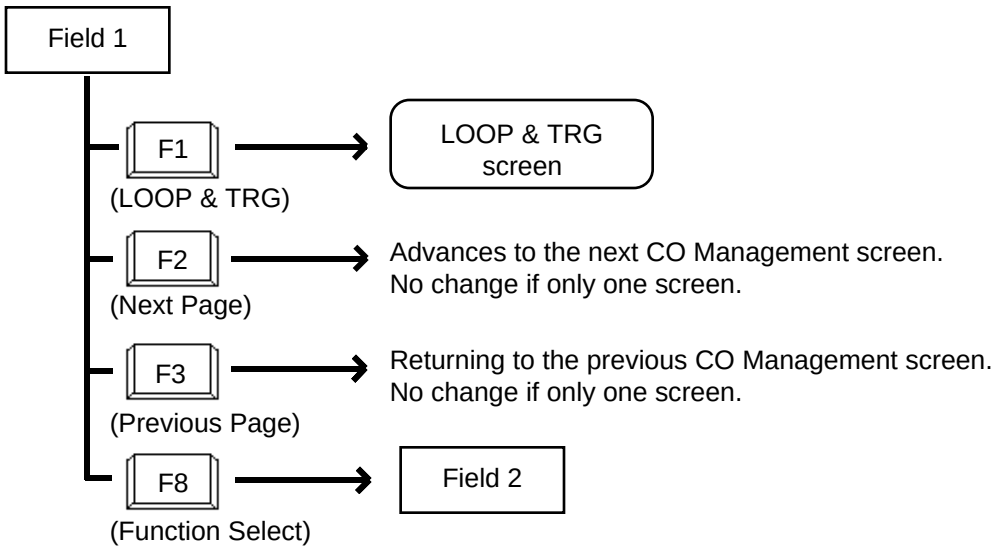
<Field 2>



<Field 3>

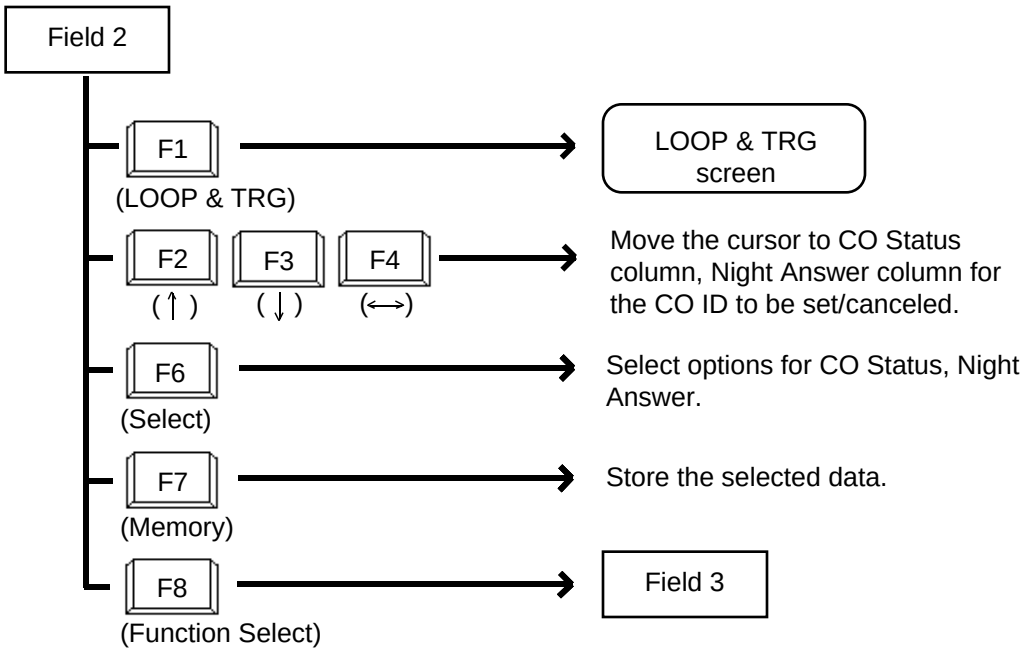


<Field 1>
This function field is available for advancing screen to the next screen or returning to the previous screen, when there are multiple screens.



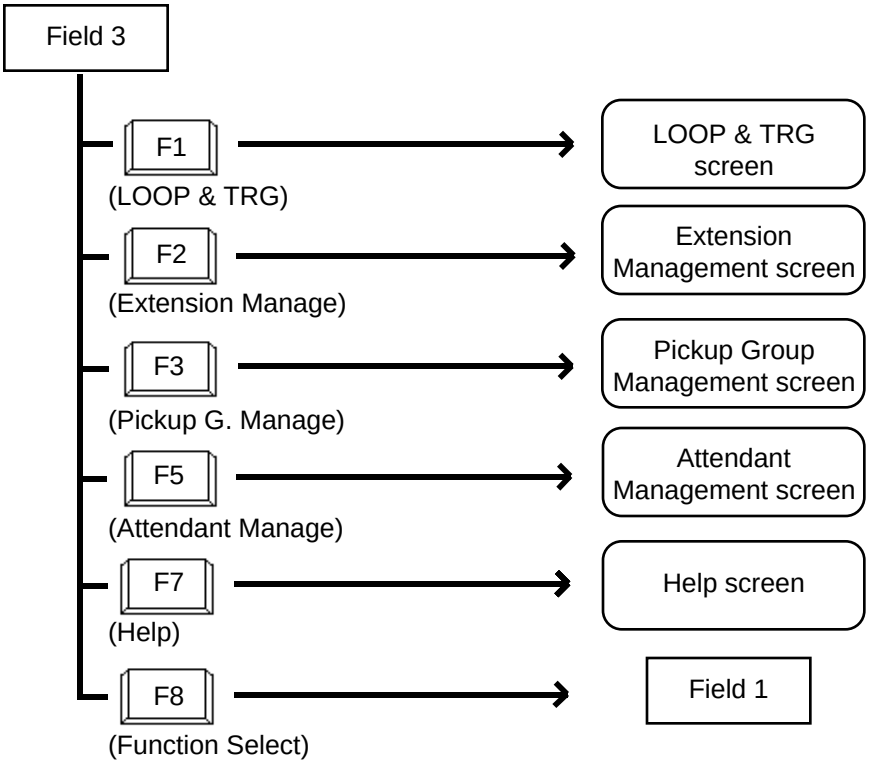
<Field 2>

This function field is available for setting/canceling “CO access control,” “CO busy out” and “Night answer point.”



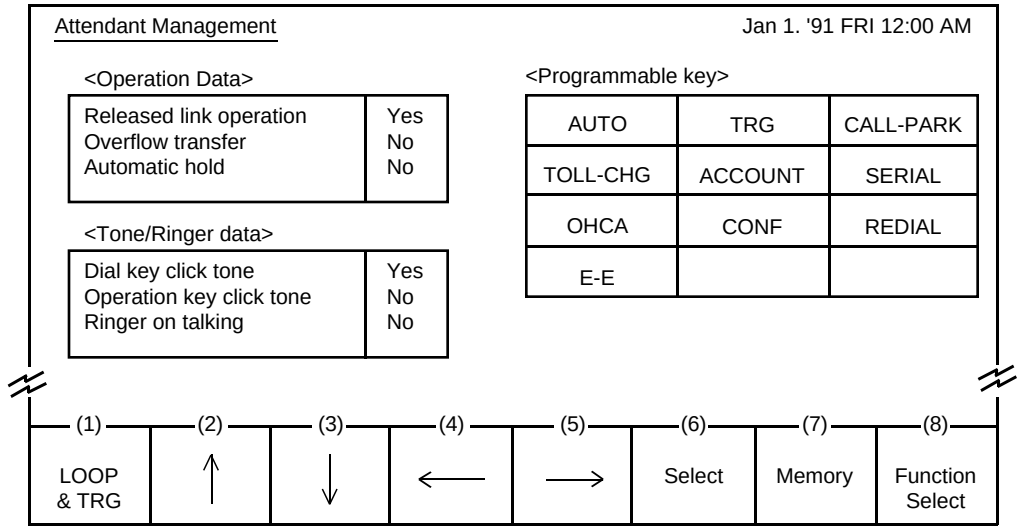
<Field 3>

This function field is available for concluding CO Management screen and moving to other screens as selected by function keys.

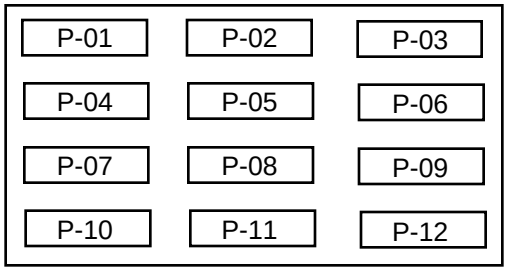


10.00 Attendant Management Screen

<Example>



The programmable key arrangement matches the operation keyboard as shown below.



Description

This screen is used to assign and monitor the various functions of the attendant console itself.

Conditions

For details of the three functions in <Operation Data> on this page, refer to the followings respectively.

Section 6-G-6.00 "Released Link Operation"
Section 6-G-2.00 "Heavy Traffic Overflow Transfer to Station"
Section 6-F-2.00 "Automatic Hold"

Concerning <Tone / Ring data>

Dial key click tone :
Determines whether key click tone is heard or not when pressing dial keys of the operation keyboard.

Operation key click tone :
Determines whether key click tone is heard or not when pressing any key other than dial keys of the operation keyboard.

Ringer on talking :
Determines whether ringer tone is heard or not while in the conversation.

All functions in <Operation data> or <Tone/Ringer data> are effective if set to "Yes", and ineffective if set to "NO."

<Programmable key>

There are 12 programmable keys provided on the attendant console. It is possible to assign the keys to be any of the following 11 function keys: AUTO, TRG, CALL-PARK, TOLL-CHG, ACCOUNT, SERIAL, OHCA, CONF, REDIAL, E-E, One Touch

Ten function keys except One Touch are preassigned as default values, which can be changed to other function keys. These keys are selected by pressing the PF6 (select) key.

The features assignable to One Touch key are listed below. These functions are selected by dialing the feature numbers, and other numbers if necessary, with up to eight digits.

Feature Number	Other Number Needed
Extension directory number	None
Operation Call (Specific)	Operator specifying number: 1 or 2
ARS/Local CO Line Access	At least one digit
Trunk Group 01-08 Access	Trunk group specifying number: 1 to 8 and at least one digit
Trunk Group 09-16 Access	Trunk group specifying number: 1 to 8 and at least one digit
Trunk Group 17-24 Access	Trunk group specifying number: 1 to 8 and at least one digit
Doorphone Call (1-4)	Doorphone number: 1 to 4
External Paging	Pager specifying number: 0, 1 or 2
Station Paging	"0" or "*" or paging group number: 1 to 8
External Paging Answer	Pager specifying number: 1 or 2
Station Paging Answer	None
Message Cancel	Extension directory number
Night Service Manual Mode Set	None
Night Service Manual Mode Cancel	None
Flexible Night Service	CO ID and pager specifying number: *1 or *2, extension directory number or Remote

(Continued)

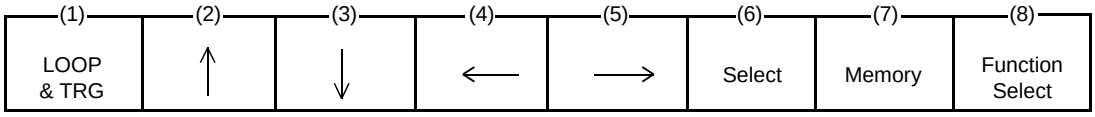
(Continued)

Feature Number	Other Number Needed
Remote Station Lock Set	Extension directory number
Remote Station Lock Cancel	Extension directory number
Remote DND Set	Extension directory number
Remote DND Cancel	Extension directory number
Remote FWD Cancel	Extension directory number
Remote FWD Cancel-One Time	Extension directory number
BGM through External Pager	None
Busy Out Trunk	Trunk port physical number
Unbusy Trunk	Trunk port physical number
OGM Record	Resource number: 1 to 3
OGM Playback	Resource number: 1 to 3, *1 to *4

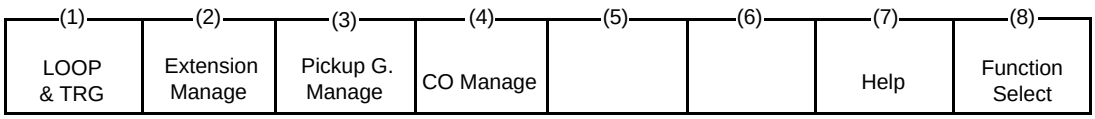
Function field

- Types of function fields
  Following two types of function fields are available for operation in Attendant Management screen.

<Field 1>

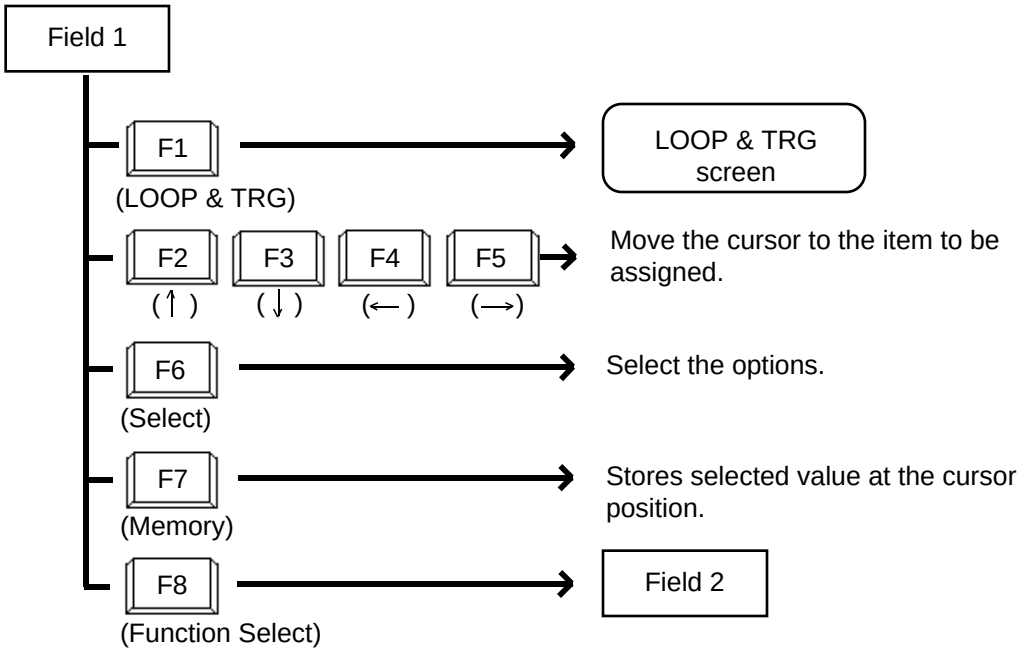


<Field 2>

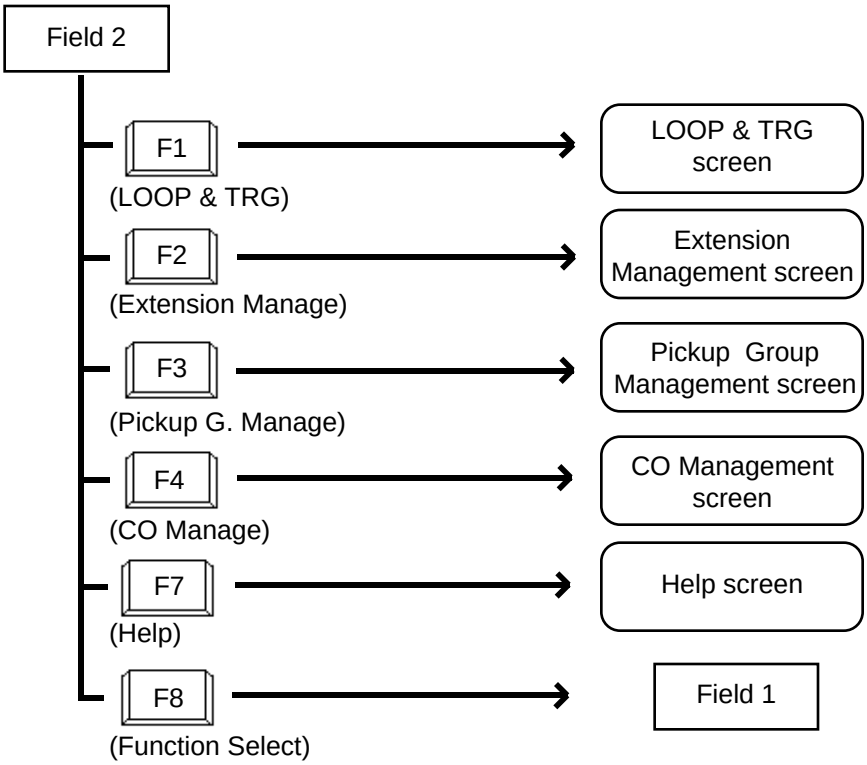


- Switching of function fields
  For switching between the function fields shown below, press the F8 (Function Select) key.

<Field 1>
This function field is available for assigning various functions



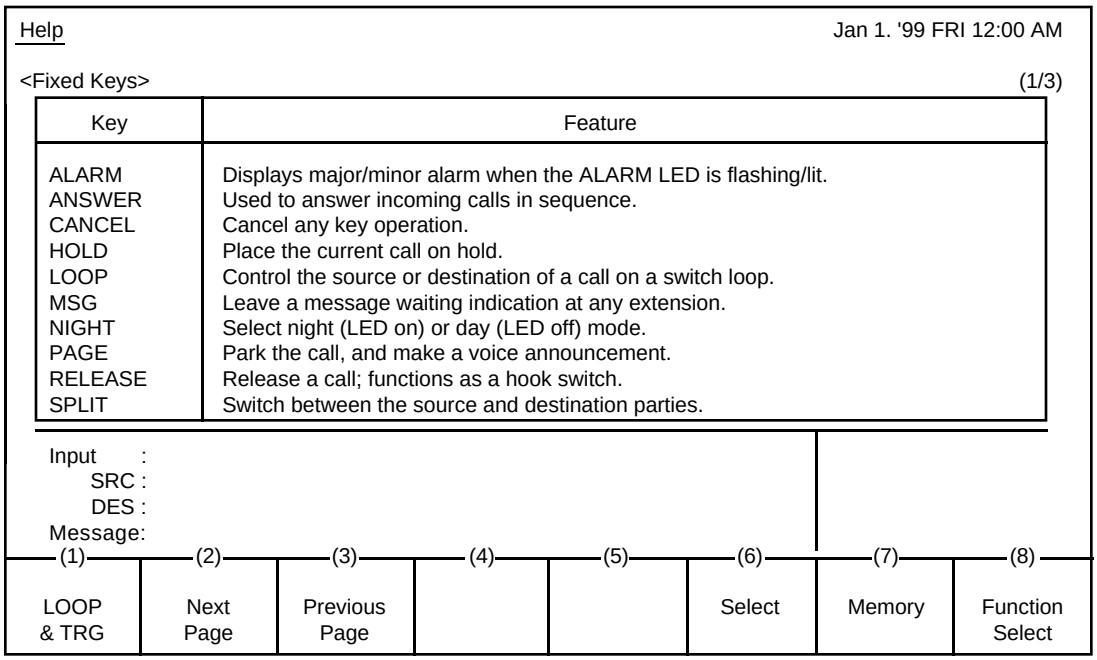
<Field 2>
This function field is available for concluding Attendant Management screen and moving to other screens as selected by function keys.



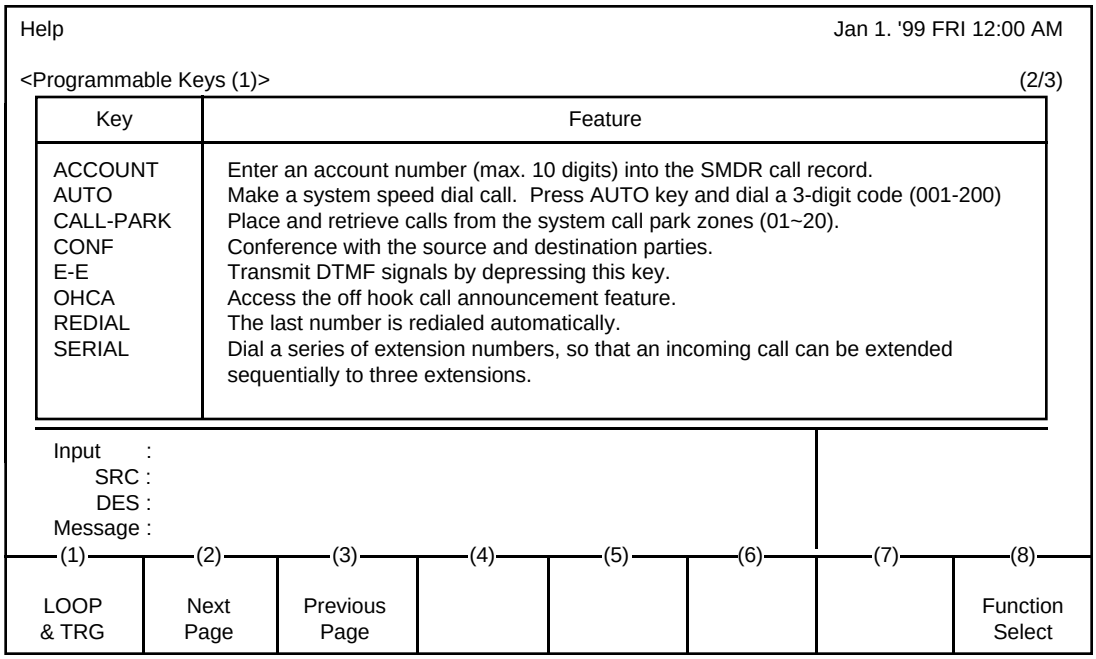
11.00 Help Screen

Description

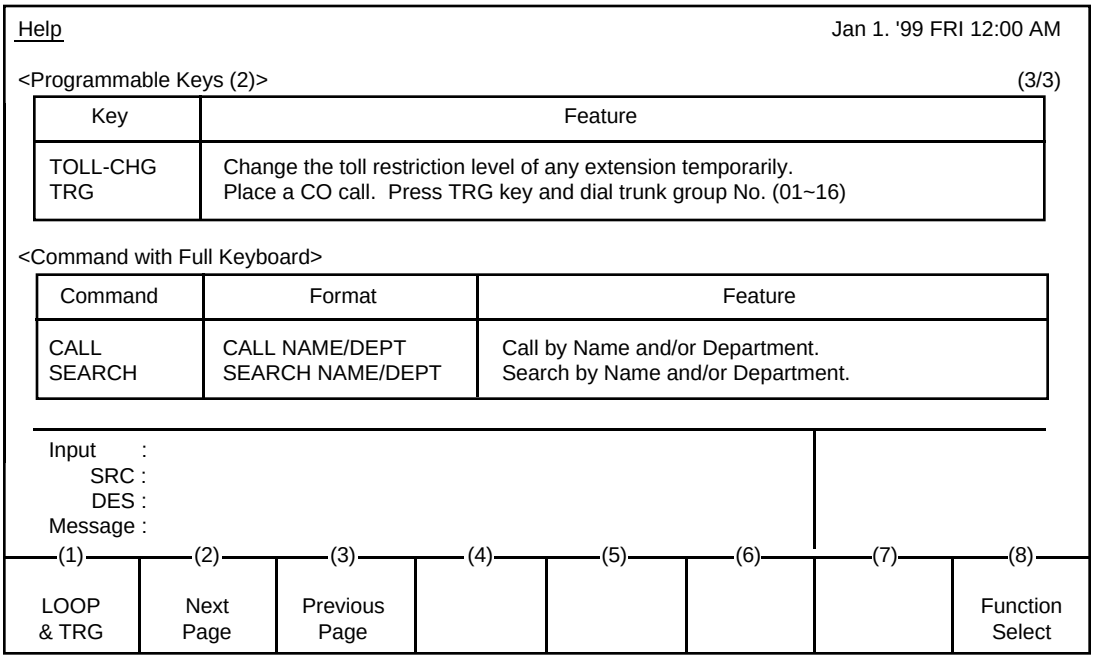
This screen displays the functions of the fixed keys and programmable keys.



<Programmable keys (1)>



<Programmable keys (2)>



Function field

- Types of function fields
  Following three types of function fields are available for operation in Help screen.

<Field 1>

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LOOP & TRG	Next Page	Previous Page					Function Select

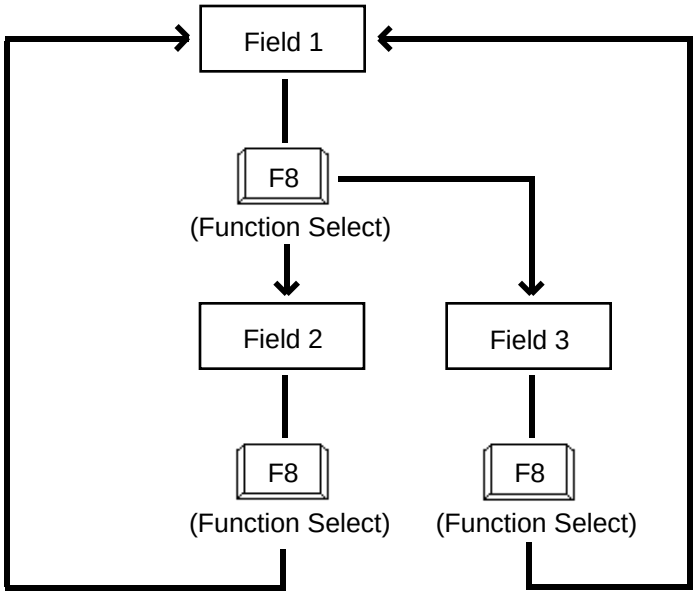
<Field 2>

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LOOP & TRG	Busy Lamp Field	Speed Dial	Extension Directory	Call Park			Function Select

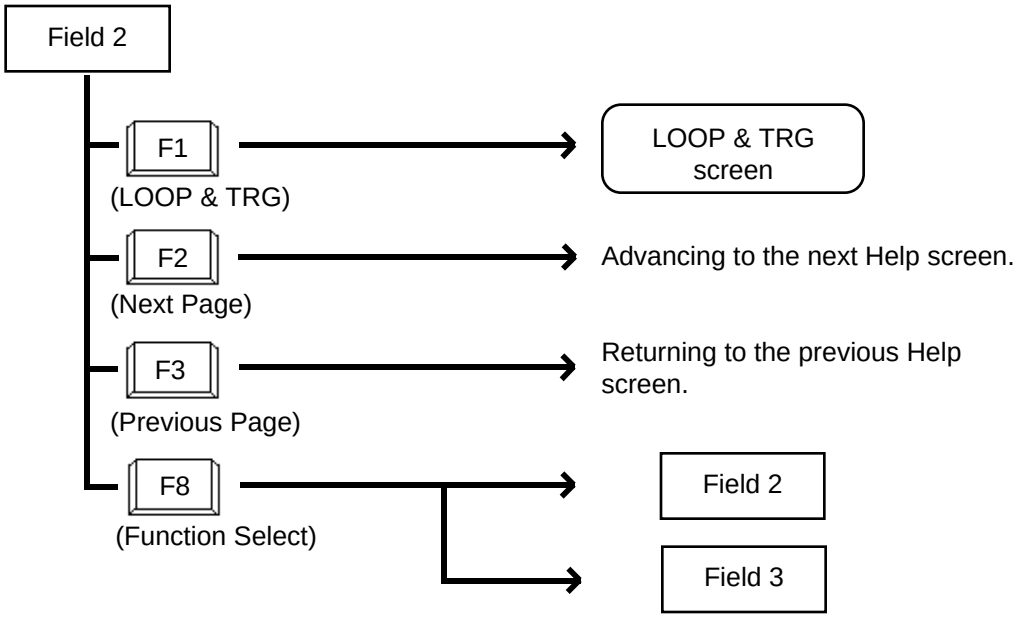
<Field 3>

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LOOP & TRG	Extension Manage	Pickup G. Manage	CO Manage	Attendant Manage			Function Select

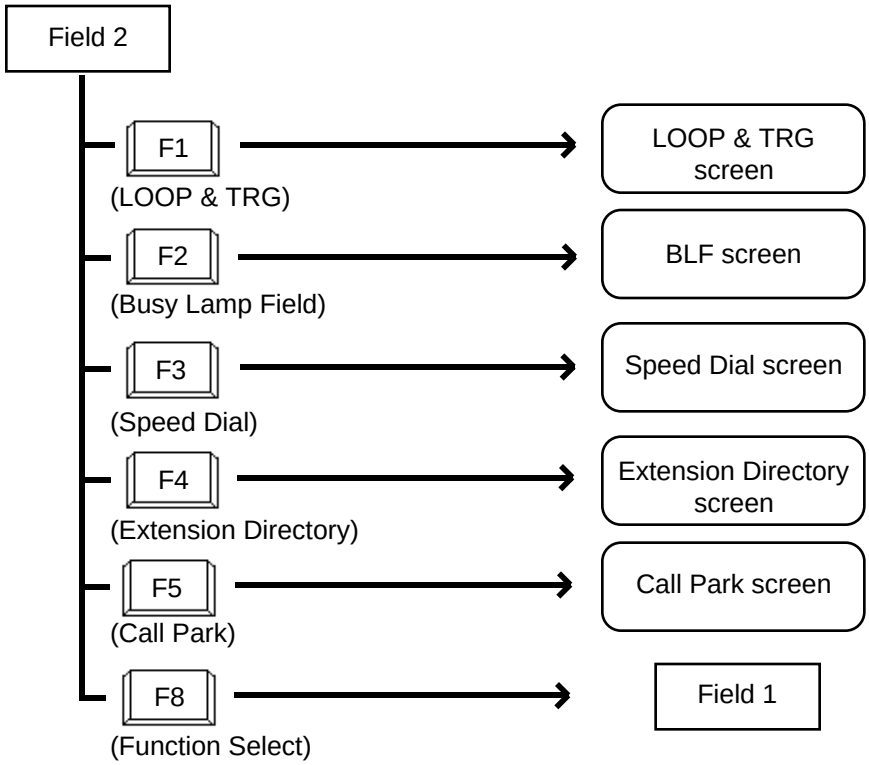
- Switching of function fields
  For switching between the function fields shown above, press the F8 key (Function Select).



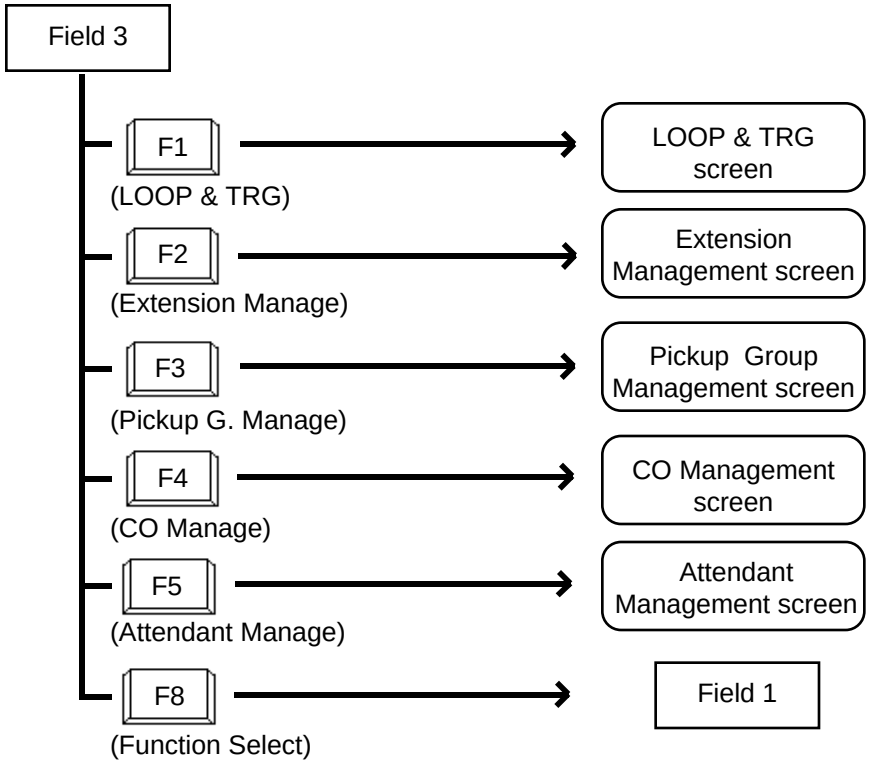
<Field 1>
This function field is available for switching Help screen to next or previous page.



<Field 2>
This function field is available for concluding this screen and switching to another screen as selected by the corresponding function key.



<Field 3>
This function field is available for concluding Help screen and switching to another screen as selected by a function key.



D. Outgoing Call Features

1.00 Making Outside Calls

1.01 Local Trunk Dial Access

Description

Allows the attendant to make outgoing CO calls using automatically selected idle CO line by dialing the feature number for “ARS/Local CO Line Access.”

To activate this feature, set “System-Operation”,Automatic Route Selection to “No.” If set to “Yes,” ARS feature is activated instead of this feature.
Refer to Section 3-C-2.00 “Automatic Route Selection (ARS)” for further information.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, Automatic Route Selection	9-D-1.01	10-C-4.00
“System-Local Access Group”, Hunt Sequence	9-D-5.00	10-C-9.00
“System-Numbering Plan (02/11)”, ARS/Local CO Line Access	9-D-6.02	10-C-10.00

Conditions

An idle CO line available and hunting sequence is determined by the system programming “System-Local Access Group”, Hunt Sequence.

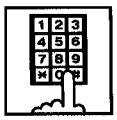
If busy tone is heard, there is no idle CO line available.

If tenant service is employed, accessible trunk group is limited to the trunk groups within the same tenant.

(◆ for U.S.A. and Canada only)
The dialing plan followed is that of the trunk group in hunt sequence 01 in “System-Local Access Group.”

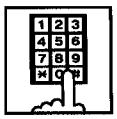
Operation

Dial tone sounds.
(For instance, an idle LOOP key is pressed and the SRC indicator is lit and dial tone sounds.)



1. Dial the feature number for ARS/Local CO Line Access “9” (default).

   • You hear dial tone.



2. Dial the telephone number of the outside party.

1.02 Individual Trunk Group Dial Access

Description

Allows the attendant to make outgoing CO calls via an idle CO line in the specified trunk group by dialing the feature number for “Trunk Group 01-08 Access” or “Trunk Group 09-16 Access.” TRG key (Programmable key) can be used for this purpose instead of dialing the feature number.
Refer to Section 6-C-10.00 “Attendant Management Screen” for further information about programmable key.

Programming

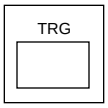
System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (02/11)”, Trunk Group 01-08 Access Trunk Group 09-16 Access	9-D-6.02	10-C-10.00

Conditions

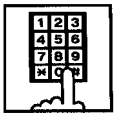
If busy tone is heard, all CO lines in the specified trunk group are in use.

Operation

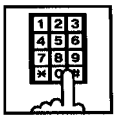
Dial tone sounds:
(For instance, an idle LOOP key is pressed, SRC indicator is lit and dial tone sounds.)



1. Press the TRG Key (Programmable key), then dial the trunk group number (01 to 16).



- Another dial tone sounds, and an idle line in specified trunk group is selected automatically.



2. Dial the telephone number of the outside party.

(Supplement)
The following procedure substitutes operation for step 1.

- To select one of trunk groups 01 to 08:
  Dial the feature number for Trunk Group 01-08 Access “81” (default), then dial the trunk group specifying number (1 to 8).
  In this case, dialed number matches trunk group number as follows:

Specifying Number	Trunk Group Number
1 : 8	01 : 08

- To specify one of trunk groups 09 to 16, dial the feature number for Trunk Group 09-16 Access “82” (default), then dial the trunk group specifying number (1 to 8).
  In this case dialed number matches trunk group number as follows:

Specifying Number	Trunk Group Number
1 : 8	09 : 16

(Supplement)

For recalling after selecting a CO line, press the CANCEL key. After dial tone sounds, repeat the same procedure from step1.

1.03 Individual Virtual Trunk Group Dial Access (◆ for U.S.A. and Canada only)

Description

Allows the attendant to make outgoing CO calls using Special Carrier Facilities by simply dialing the feature number for “Trunk Group 17-24 Access.”
TRG key (Programmable key) can be used for this purpose instead of dialing the feature number.
Detailed data, such as access codes and authorization codes, required to Special Carrier Access must be programmed beforehand in “Special Carrier Access” screen.
Trunk groups available for Special Carrier Access is also defined in the same screen.

It is programmable to restrict Special Carrier Access on system-wide basis.
Refer to Section 10-C-52.00 “World Select 2-EQU/OCC Access Assignment” for further information.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (02/11)”, Trunk Group 17-24 Access	9-D-6.02	10-C-10.00
“Special Carrier Access-Equal Access/OCC Access”	9-H-1.00 9-H-2.00	10-C-30.00 10-C-31.00

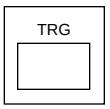
Attendant Management	Reference
TRG (Trunk Group) key	6-C-10.00

Conditions

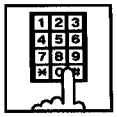
None

Operation

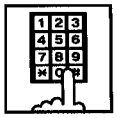
Dial tone sounds:
(For instance, an idle LOOP key is pressed and the SRC indicator is lit, and dial tone sounds.)



1. Press the TRG Key (Programmable key), then dial the virtual trunk group number: 17 to24.



- Another dial tone sounds, an idle trunk in the specified virtual trunk group is selected automatically.



2. Dial the telephone number of the outside party.

(Supplement)

The following procedure substitutes operation for step 1.

- Dial the feature number for “Trunk Group 17-24 Access” “83” (default) then dial the virtual trunk group specifying number: 1 to 8.
- Virtual trunk group number matches virtual trunk group specifying number and digit modification table number (Equal access table number 1 to 4, OCC access table number 1 to 4 which should be assigned beforehand), as follows:

Virtual Trunk Group Number	Virtual Trunk Group Specifying Number	Digit Modification Table Number
17	1	Equal access table number 1
18	2	2
19	3	3
20	4	4
21	5	OCC access table number 1
22	6	2
23	7	3
24	8	4

2.00 Automatic Dialing

2.01 Speed Dialing-System

Description

Speed Dialing-System allows the attendant to make an outgoing call by dialing speed dialing code common to the whole system.
Up to 200 speed dialing codes can be registered to the system.
There are two way of speed dialing:
<1> By using AUTO key (programmable key).
<2> By employing Speed Dial screen. Prior registration of Speed Dial dictionary in LOCAL mode is necessary.

The Speed Dialing Codes are registered in "System-Speed Dialing-System" screen, and toll restriction level unique to each speed dialing code can be assigned in the same screen.
Refer to "Toll Restriction Plan for System Speed Dialing" on next page for further information.

If Tenant Service is employed, speed dialing codes (001 through 200) can be divided by two tenants. In this case, speed dial codes for tenant 1 can not be used by tenant 2 and vice versa.

- Not only outside number but extension number and feature number can be registered to the Speed Dialing-System.

Programming

System Programming	Reference	
	VT	Dumb
"System-Tenant", Speed Dialing-System Boundary	9-D-2.00	10-C-5.00
"System-Speed Dialing-System"	9-D-8.00	10-C-12.00

Attendant Management	Reference
AUTO key	6-C-10.00

Conditions

Each speed dialing code can have up to 32 digits including CO line access code. "0~9," "* ," "#," "PAUSE," "FLASH," "—" and "SECRET" can be registered.

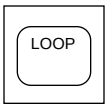
To register a telephone number to a System Speed Dialing Code, a feature number for selecting a CO line must be stored as leading digits.

The feature numbers for selecting a CO line are:

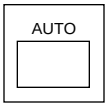
- ARS/Local CO Line Access
- Trunk Group 01-08 Access
- Trunk Group 09-16 Access
- Trunk Group 17-24 Access (Virtual Trunk Group — ◆ for U.S.A. and Canada only)

Operation

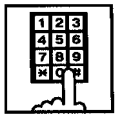
Speed Dialing-manual



1. Press an idle LOOP key.
   - The SRC indicator lights and dial tone sounds.



2. Press the AUTO key (programmable key) or dial the feature number for "Speed Dialing-System."
   - Dial tone stops.



3. Dial "Speed dial code" (001 to 200).
   - Registered telephone number is dialed.

(Supplement)

In step 2, before pressing the AUTO key, dialing the feature number for selecting a CO line (listed below) cancels the feature number for a CO line stored in the speed dialing code temporarily and allows you to call on the manually selected line.

Either of speed dialing and manual dialing can be used in combination.

Speed dialing codes can be used in succession.

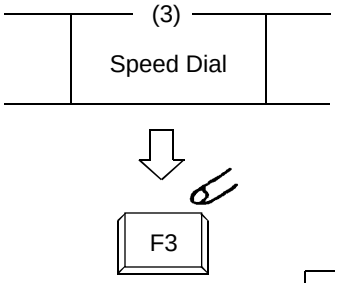
<Example>

AUTO 0 0 1 AUTO 0 0 2 — —

It is available to register a number consisting of 33 digits or more by dividing it and storing it in two speed dialing codes. In this case, a feature number for selecting a CO line should not be stored on the second speed dialing code.
To dial the number, first press the AUTO key and dial the first speed dialing code, and then press the AUTO key and dial the second speed dialing code.

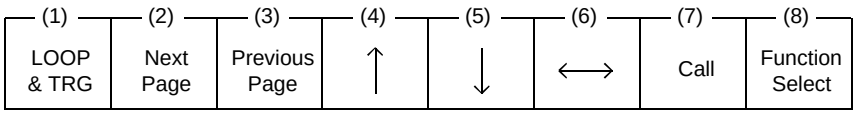
Operation

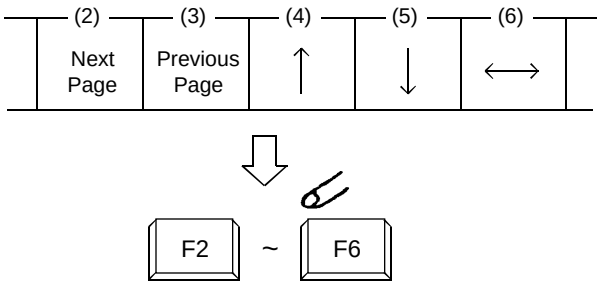
Speed dial calling through Speed Dial screen



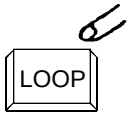
1. Press the F3 (speed dial). Speed Dial screen appears on the CRT display.

Speed Dial Name	No.
Panasonic	001
Matsushita	002



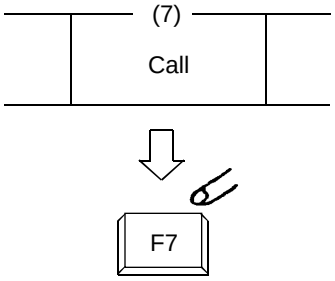


2. Move the cursor to the desired name by pressing the F4 through F6 keys (F4:↑ F5: ↓ F6:⟷).
   In case of multiple screens, scroll screen by pressing the F2 key (next page) or the F3 key (previous page) then press the F4 through F6 keys.



3. Press an idle LOOP key.

   • The SRC indicator lights and dial tone sounds.

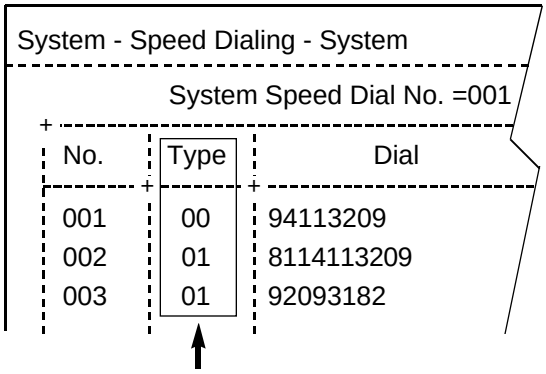


4. Press the F7 key (call).

   • Registered telephone number is dialed automatically.

<Toll Restriction Plan for System Speed Dialing>

The system administrator can assign Toll Restriction Level of System Speed Dialing (referred to as “TRLSD” in the following) to each code as follows:



TRLSD consists of 17 levels (“00” and “01 to 16”) TRLSD “00” receives a treatment different from TRLSDs “01 to 16.”
In TRLSD “01 to 16,” “01” is the highest level and “16” is the lowest.

1. Toll Restriction Plan for System Speed Dialing Code (TRLSD=00)

   When an outgoing CO call is made by dialing a System Speed Dialing Code (TRLSD=00), the attendant receive standard toll restriction treatment.

   If selected speed dialing code includes Local Trunk Dial Access code as leading digits, a call is checked against “Toll Restriction for Local Trunk Dial Access.”

   If selected speed dialing code includes Individual Trunk Group Dial Access Code as leading digits, a call is checked against “Toll Restriction for Individual Trunk Group Dial Access.”
   For further information about System Toll Restriction feature, refer to Section 3-C-1.00 “Toll Restriction.”

2. Toll Restriction Plan for System Speed Dialing Code (TRLSD=01 to 16)

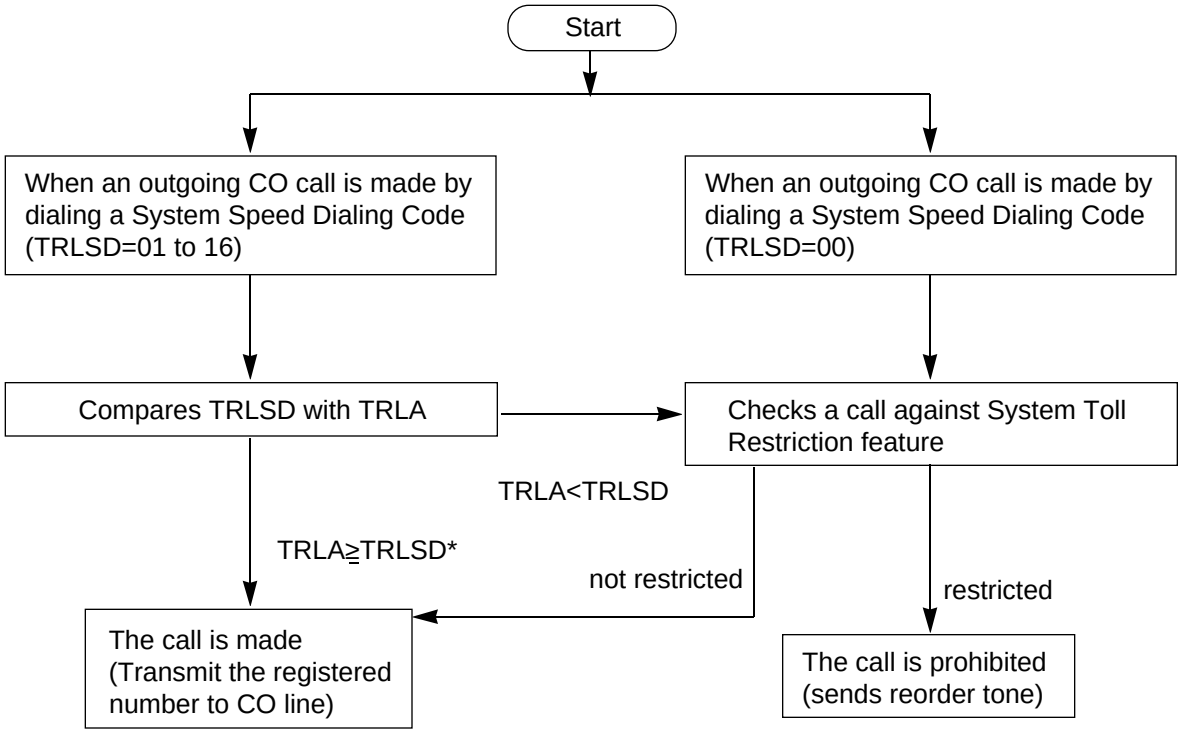
   When the attendant makes an outgoing CO call by dialing a System Speed Dialing Code (TRLSD=01 to 16), the system compares Toll Restriction Level of Attendant Console (TRLA) with TRLSD.

   If TRLA is equal to or higher than TRLSD (TRLA≥TRLSD) a call is made, and if TRLA is lower than TRLSD (TRLA<TRLSD), a call is checked against System Toll Restriction feature.

<Example>
If the attendant (TRLA=6) makes an outgoing CO call by selecting a System Speed Dialing Code (TRLSD=7), in this case, TRLA of 6 is higher than TRLSD of 7 (TRLA>TRLSD), so a call is made.

If the attendant (TRLA=6) makes an outgoing CO call by selecting a System Speed Dialing Code (TRLSD=4), in this case, TRLA of 6 is lower than TRLSD of 4 (TRLA<TRLSD), so a call is checked against the System Toll Restriction feature.

The following flowchart shows the simplified procedure of toll restriction plan for System Speed Dialing.



2.02 Last Number Redial (LNR)

Description

Last Number Redial feature automatically saves the last dialed telephone number of the outside party and allows the attendant to make the call to the same destination again by simply pressing the REDIAL key (programmable key).
Assign REDIAL key to programmable key in advance.

Programming

Attendant Management	Reference
REDIAL key	6-C-10.00

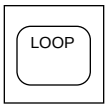
Conditions

Up to 32 digits except the feature number for selecting a CO line can be memorized automatically as the last dialed number.

"* ," "#," "PAUSE," or "SECRET" are counted as one digit respectively.

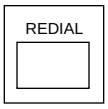
Last number redialing memory is renewed automatically every time a new outgoing CO call is made (including when ringback tone, DND tone or busy tone is returned) and even one digit is sent to CO line. Dialing a feature number for selecting a CO line only does not renew the memorized number.

Operation



1. Press an idle LOOP key.

   - The SRC indicator lights and dial tone sounds.



2. Press the REDIAL key (programmable key).

   - After dial tone, ringback tone sounds.
   - When the called party answers, start the conversation.

3.00 Making Internal Calls

3.01 Inter Office Calling-Manual Dialing

Description

Inter Office Calling allows the attendant to call extension users within the system by dialing the directory number (three or four digits).

Programming

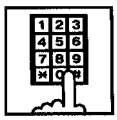
None

Conditions

If Tenant Service is employed, Inter Office Calling to the other tenant (inter-tenant calling) can be enabled by programming.
Refer to Section 3-B-4.00 “Tenant Service” for further information.

Operation

Dial tone sounds. (For instance, an idle LOOP key is pressed, the SRC indicator is lit, and dial tone sounds.)



1. Dial the directory number (DN) of the desired extension user.
   - Ringback tone sounds.
     If called party answers, begin speaking.

(Supplement)

- After dialing the directory number, the tone returned indicates the following:

Ringback tone : Calling the extension.
Busy tone : The called extension is busy.
DND tone : The called extension has DND assigned.
Reorder tone : Incorrect number is dialed.

- To make a call again, press the CANCEL key and after hearing dial tone, dial the directory number (DN).

3.02 Inter Office Calling by Extension Directory Screen

Description

Allows the attendant to make an extension call by searching extension name or department at the Extension Directory screen. To use this function, extension number, extension name and department should be registered in Extension Directory beforehand.

Programming

For storing in Extension Directory in Local mode, refer to Section 13-B “Extension Directory Mode.”

Conditions

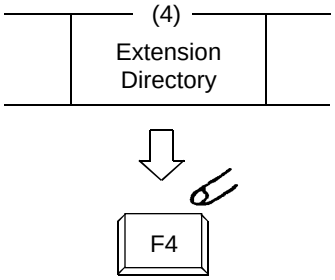
None

Operation

See the following page.

Operation

Dial tone sounds. (For instance, an idle LOOP key is pressed, the SRC indicator is lit, and dial tone sounds.)

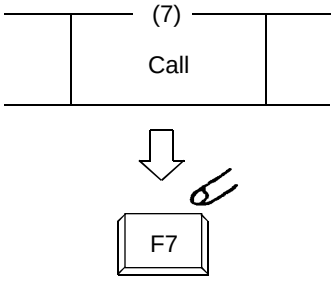


1. Press the F4 (extension directory).

   • Extension Directory screen appears on the display.

2. Move the cursor to the desired extension by pressing the F4 (↑), F5 (↓), F6 (⟷) keys.

   • If there are multiple extension directory screens, search the desired extension by pressing the F2 or F3 key (F2: next page, F3: previous page) then move the cursor by pressing F4 through F6 keys.



3. Press the F7 key (call) to call the extension at the cursor position.

   • Ringback tone sounds.
   When the called party answers, begin speaking.

(Supplement)

• The attendant can monitor the busy/idle status of the extension users at Extension Directory screen.

□ : Idle ■ : Busy

Extension Name	Department	No. BLF
Betty	Project	1000 □
Jack	Account	1010 ■

• For canceling an extension call and placing a call again, press the CANCEL key and after hearing dial tone, repeat the same procedure from step2.

3.03 Inter Office Calling by BLF Screen

Description

Allows the attendant to make an extension call after monitoring the extension status through BLF screen. To use this function, directory number should be registered in the Extension Directory beforehand.

Programming

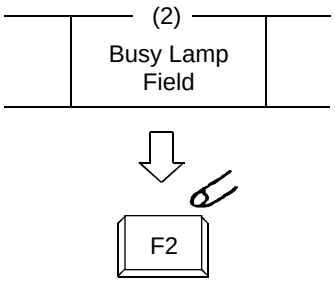
BLF screen: refer to Section 6-C-3.00 “Busy Lamp Field (BLF) Screen.”

Conditions

None

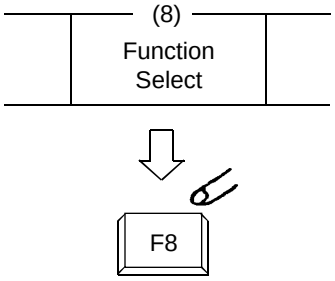
Operation

Dial tone sounds. (For instance, an idle LOOP key is pressed, the SRC indicator is lit, and dial tone sounds.)



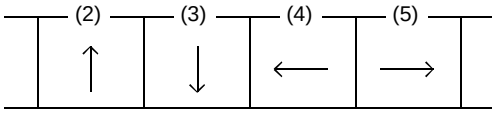
1. Press the F2 key (busy lamp field).

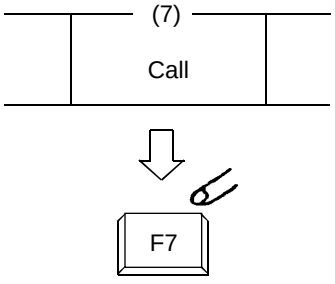
   - One of four BLF screens appears.
   - Search the screen to find the desired extension by pressing the F2 key (next page) or the F3 key (previous page).



2. After searching the desired page, press the F8 key (function select).

   - The following function field appears on the screen.





3. Move the cursor to the desired extension by pressing the F2 to F5 keys (F2:↑ F3:↓ F4:⟵ F5:⟶).

4. Press the F7 key (call).

   - Ringback tone sounds.
     When called extension party answers, begin speaking.

(Supplement)

For canceling an extension call and placing a call again, press the CANCEL key and after hearing dial tone, repeat the same procedure from step 2.

3.04 Inter Office Calling by Extension Management Screen

Description

Allows the attendant to make an extension call through Extension Management screen. Before the operation, directory number should be registered in the Extension Directory screen.

Programming

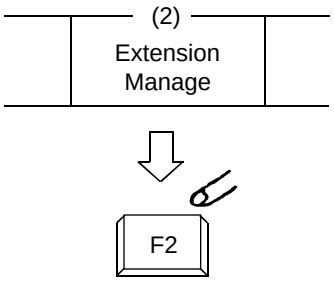
Refer to Section 6-C-7.00 “Extension Management Screen.”

Conditions

None

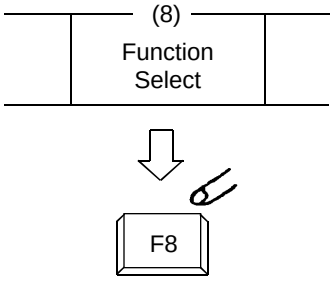
Operation

Dial tone sounds. (For instance, an idle LOOP key is pressed, the SRC indicator is lit, and dial tone sounds.)



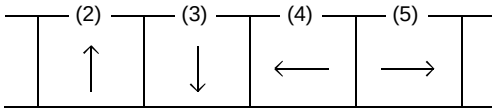
1. Press the F2 key (extension manage).

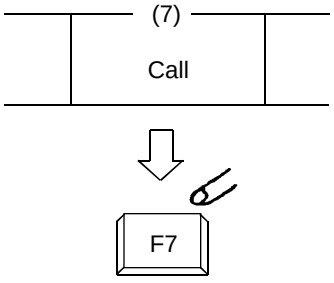
   - One of Extension Management screens appears.
   - Search the screen to find the desired extension by pressing the F2 key (next page) or the F3 key (previous page).



2. After searching the desired page, press the F8 key (function select).

   - The following function field appears on the screen.





3. Move the cursor to the desired extension by pressing the F2 to F5 keys (F2:↑ F3:↓ F4:⟵ F5:⟶).

4. Press the F7 key (call).

   - Ringback tone sounds.
     When called party answers, begin speaking.

(Supplement)

For canceling an extension call and placing a call again, press the CANCEL key and after hearing dial tone, repeat the same procedure from step 2.

3.05 Inter Office Calling by Name/ Department

Description

Allows the attendant to make an extension call by directly entering extension name and/or department using numeric key pad.

The following three entry types are available provided name means extension name, and (CR) means pressing RETURN key.

- Calling by specifying only extension name
  Entry type 1- Call Name (CR)

- Calling by specifying only department
  Entry type 2- Call/Department (CR)

- Calling by specifying both extension name and Department
  Entry type 3- Call Name/Department (CR)

Programming

For registering the extension number and name in Extension Directory in Local mode, refer to Section 13-B “Extension Directory Mode.”

Conditions

The attendant console can place an extension call by entering only department, if there is an idle extension in the specified department.

Operation

Dial tone sounds. (For instance, an idle LOOP key is pressed, the SRC indicator is lit and dial tone sounds.)

Enter the name/department using full keyboard following the above mentioned format.
After ringback tone sounds, when called party answers, start conversation.

(Supplement)

- If designated extension name or department name are not listed in the Extension Directory, the call is not placed, and the following message appears on the message line.

Message: The Name/Department does not exist.

- If there are two or more same extension names, all of them will be displayed.
  Move the cursor to the desired extension and press the F7 key to place an extension call.
  For further details, refer to Section 6-D-3.02 “Inter Office Calling by Extension Directory Screen.”

<Example>

- In case there are two or more same extension names in the list.

Extension Directory is displayed as follows:

Extension No.	Extension Name	Department
1000	Jack	Sales
2000	Jack	Account

Then enter “Call Jack” and press the RETURN key.

Then the screen is displayed as:

Extension Name	Department	Number BLF
Jack	Account	2000
Jack	Sales	1000

Message: Can not call (Same Name exist)

(1) (2) (3) (4)

Make the extension call using the same procedure as Section 6-D-3.02 “Inter Office Calling by Extension Directory Screen.”

3.06 Off-Hook Call Announcement (OHCA)

Description

When called extension is busy (busy tone is returned), OHCA allows the attendant to in form the busy party that another call is waiting through built-in speaker of the called user's PITS telephone.

OHCA works under the following conditions:

- OHCA key (Programmable key) is assigned the Attendant Console.
- The called extension's telephone is PITS KX-T123230D, KX-T123235 or KX-T7130 and OHCA button is assigned on it.
- The called extension is off-hook, all PDN buttons are busy, and OHCA button is not in use.

To utilize this function, install T-SW OHCA card (KX-T336105) in the Basic Slot 02, and OHCA card (KX-T96136) on the PLC or HLC card. Refer to Section 2-C-3.02 “T-SW OHCA Card (KX-T336105)” and Section 2-C-3.03 “OHCA Card (KX-T96136)” for further information.

In the system programming, assign “Extension-Station (1/3)”, OHCA Circuit to “Yes” at the called extension.

Programming

System Programming	Reference	
	VT	Dumb
“Configuration-Slot Assignment”	9-C-2.00	10-C-1.00
“Extension-Station (1/3)”, OHCA circuit	9-G-1.01	10-C-22.00

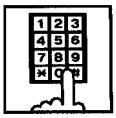
Attendant Management	Reference
OHCA key	6-C-10.00

Conditions

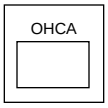
Busy status of PITS telephone user means all PDNs on called extension are in use. In this status, busy tone is returned.

OHCA does not function if “System-Class of Service (1/2)”, BSS/OHCA Deny is set to “Yes” at called extension.

Operation



1. Dial the extension number.
   - Busy tone sounds.



2. Press the OHCA key (programmable key).
   - Confirmation tone sounds. Start talking.
     In case OHCA is available for the extension, the OHCA indicator on the called extension lights in green, and confirmation tone of two beeps sounds.

(Supplement)

When a call is transferred to the extension in OHCA conversation status, the transferred call will be placed on a PDN as soon as any PDN becomes idle by pressing the RELEASE key.

<Example>

When answering an incoming CO call and transferring it to the extension, if the extension is busy, talk to the extension that you will transfer the CO call by pressing the OHCA key. Then press the RELEASE key.
As soon as any PDN becomes idle, the CO call is placed on the PDN on the called extension.

4.00 Executive Busy Override

Description

Executive Busy Override allows the attendant to intrude on a busy line, and then a 3-party conversation is established. The feature is accessed by dialing "1" while hearing busy tone.

In entering into a three-party conversation, all the three parties hear confirmation tone.
It is programmable to send this tone or not by "System-Operation", Beep Tone for Bsy-ovr/Brg-in.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", Beep Tone for Bsy-ovr/Brg-in	9-D-1.01	10-C-4.00

Conditions

Busy status means that all PDNs on the called extension are in use. In this status, busy tone sounds.

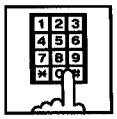
Executive Busy Override does not function when the other party is any one of the following status;

- Three-party conversation
- OHCA conversation
- ICM conversation
- Private CO conversation
- In conversation with another attendant console.

Executive Busy Override does not function if either of two parties in conversation has set the following;

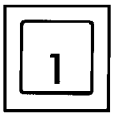
- Executive Busy Override Deny
  (Refer to Section 4-D-5.00.)
- Data Line Security
  (Refer to Section 4-I-5.00.)

Operation



1. Dial the extension number.

   • Busy tone sounds.



2. Dial "1."

   • Overriding tone sounds at the three parties. Start a three-person conversation.
   • In case overriding is impossible, busy tone continues.

(Supplement)

- To complete a three-person conversation after overriding on the SRC side, press the RELEASE key.

- To complete a three-person conversation after overriding on the DES side party and holding a party on SRC side, press the RELEASE key. In this case, the held station on SRC side is transferred. This is camp-on transfer.

<Example>

When answering an incoming CO call, dial the extension number to transfer the call to the extension.
(CO call is held on SRC side and busy tone sounds on DES side), dialing "1" offers a three-person conversation.
After informing the extension of transferring the CO call, press the RELEASE key.
As soon as any PDN becomes idle, the CO call arrives at the PDN.

For further detail of transferring a camped-on party, refer to Section 6-G-1.02 "Call Transfer by Camp-on to Station."

5.00 Do Not Disturb (DND) Override

Description

Do Not Disturb Override makes the attendant possible to call the extension which has set Do Not Disturb.
Dialing “1” after hearing DND tone provides calling the extension.
Refer to Section 4-D-6.00 “Do Not Disturb (DND)” for further information about DND feature.

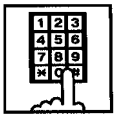
Programming

None

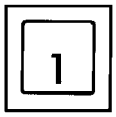
Conditions

If busy tone is heard after dialing “1,” Executive Busy Override can be done by dialing “1” again.

Operation



1. Dial the extension number.
   - If DND feature is assigned to the called extension, DND tone sounds.



2. Dial “1.”
   - Ringback tone sounds, and calling starts.

(Supplement)

To transfer a call to extension which has DND assigned.

<Example>

After answering an incoming CO call, to transfer the call to an extension, dial the extension number (the incoming call on SRC side is held, on DES side DND tone is heard). Dialing “1” cancels DND function temporarily, and while hearing ringback tone, press the RELEASE key. Then a call is transferred to the destination party.

E. Receiving Features

1.00 Answering by the ANSWER Key

Description

The attendant can answer an incoming call displayed on the answer field by pressing the ANSWER key. An incoming call appears on the answer field in preferential order, that is assigned by the system programming in advance.

For instance, if CO calls are assigned for higher preference than extension calls and if an extension call arrives first and then a CO call arrives, the answer field displays the extension call first, then changes to show the CO call as soon as it reaches.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Attendant Console" Attendant Console (Call Priority) (2/2)	9-G-4.02	10-C-28.00

Conditions

If another call arrives during a conversation, the attendant can answer it by simply pressing the ANSWER key.
In this case, the previous call will be placed on hold or disconnected depending on the attendant console programming.
For further information, refer to Section 6-F-2.00 "Automatic Hold."

Operation

Incoming call appears on the answer field.

1. Press the ANSWER key.

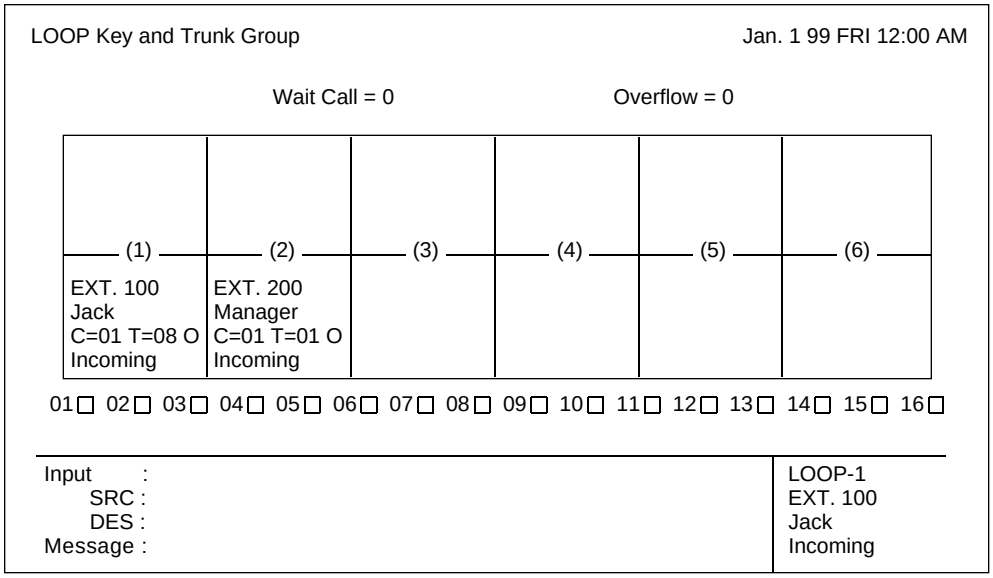
   - The attendant can answer the call appearing on the answer field.

2.00 Answering by a LOOP Key

Description

If there are multiple incoming calls, the attendant can answer a desired call by pressing a LOOP key associated with it.
For instance, when there are two incoming extension calls, you can confirm the callers on the screen below and answer a desired call by pressing a LOOP key associated with it.

In the example below, pressing the ANSWER key automatically connects a call from Jack. Press the LOOP 2 key to answer the call from Manager.



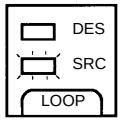
Programming

None

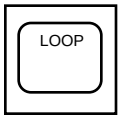
Conditions

During a conversation, the attendant can answer another incoming call by pressing a LOOP key associated with it.
In this case, the previous call will be placed on hold or disconnected depending on the attendant console programming.
For further information, refer to Section 6-F-2.00 “Automatic Hold.”

Operation



1. Multiple incoming calls are arriving at LOOP keys.
   - Multiple SRC indicators start to flash in 240 winks.



2. Press the desired LOOP key.
   - The SRC indicator of the pressed LOOP key lights. Talk to the caller.

3.00 Directed Call Pickup

Description

Directed Call Pickup allows the attendant to answer the call ringing at any extension by dialing the feature number for “Directed Call Pickup,” and then the directory number of the ringing extension.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”, Directed Call Pickup	9-D-6.03	10-C-10.00

Conditions

It is possible to execute Directed Call Pickup after holding the current call.

This feature is not available to answer the following calls:

<1> A call ringing at an extension on which Dial Call Pickup Deny is set
(Refer to Section 4-D-3.03 “Call Pickup Deny” for further information.)

<2> A call ringing on PCO button

<3> A call ringing on ICM button

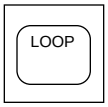
<4> A call arriving at an extension but not ringing
(Refer to Section 3-D-3.02 “Flexible Ringing Assignment-Delayed Ringing” for further information.)

For the above calls, reorder tone sounds after dialing the feature number for “Directed Call Pickup” and the directory number of the ringing extension and the following message appears on the Message line.

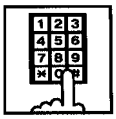
Message: No Incoming Call

Operation

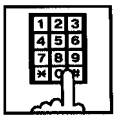
Picking up a call ringing at an extension



1. Press an idle LOOP key.
   - The SRC indicator lights and dial tone sounds.



2. Dial the feature number for Directed Call Pickup. “48” (default).



3. Dial the directory number of the ringing extension.
   - You hear confirmation tone 3.
   - Talk to the caller.

F. Holding Features

1.00 Hold

Description

Allows the attendant to hold the current call temporarily by pressing the HOLD key.
This is effective only for a call on the SRC side of a LOOP key.
A call on the DES side of the LOOP key can not be placed on hold.

To place a call on hold, press the HOLD key.
To retrieve a held call, press the LOOP key in holding status.

Programming

None

Conditions

Up to six calls can be placed on hold at the attendant console.

Calls held by the attendant console can not be retrieved by other extensions.

Holding the other attendant console and doorphone calls is impossible.

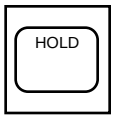
If a held call has not been answered more than a pre-assigned time, transfer recall tone may sound at attendant console.
Refer to Section 3-E-2.00 “Held Call Reminder” for further information.

If a held call is not answered for more than 30 minutes, it will be disconnected automatically.

Operation

Holding a call

During a conversation with an outside or inside party, the SRC indicator of the corresponding LOOP key is lit.

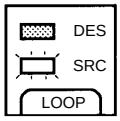


1. Press the HOLD key.

   - The other party is placed on hold. The SRC indicator of the corresponding LOOP key starts flashing in 60 wink.
   - The DES indicator of that LOOP key lights, and dial tone sounds.

Retrieving a held call

The SRC indicator is flashing and the DES indicator is lit.



1. Press the LOOP key in holding status.

   - Conversation with the SRC side party is established.
   - The SRC indicator of the corresponding LOOP key is lit, the DES indicator light goes out.

2.00 Automatic Hold

Description

Making a call during a conversation with an outside or extension party causes holding the current conversation automatically, and performs calling on the DES side.

Another call arriving during the conversation can be answered by pressing the ANSWER key or the LOOP key, holding the current party automatically, if “Automatic Hold” is set to “Yes” in the Attendant Management screen.
To answer the new call by holding or disconnecting the current call can be assigned by programming.

Music on Hold is sent to the held party if available. For sending Music on Hold, prior assignment is necessary by programming. Refer to Section 3-E-1.00 “Music on Hold.”

Programming

Attendant Management	Reference
Automatic Hold	6-C-10.00

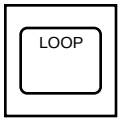
Conditions

None

Operation

Executing Automatic Hold by pressing the ANSWER key or the LOOP key

During a conversation with a CO call or an extension on the SRC side of the LOOP key, another call arrives on another LOOP key.



Press the ANSWER key, or the LOOP key where the call is arriving.

- The first call is held, and the SRC indicator starts to flash in green 60 wink.
- The SRC indicator of the LOOP key where call is arriving lights.
- Speak to the second party.

(Supplement)

Executing Automatic Hold without pressing the ANSWER key or the LOOP key

While in a conversation with an outside party or extension on SRC side of a LOOP key, execute any of the following operations on DES side of the LOOP key, then the current call is held automatically.

<Operations>
- Using dial pad
- Pressing the CALL PARK key (programmable key)
- Pressing the SERIAL key (programmable key)
  —Only during a conversation with a CO call.
- Pressing the TOLL CHG key (programmable key)
  —Only during a conversation with an extension
- Pressing the AUTO key (programmable key)
- Pressing the PAGE key
- Pressing the TRG key (programmable key)
- Pressing the One Touch key (programmable key)

3.00 Call Park-System

Description

This function provides putting a call into the parking place common to the whole system.
Up to 20 calls can be parked with each call park area number (01 to 20).
CALL-PARK key should be assigned as programmable key in advance.
Parked call can be retrieved from any extension in the system.

Programming

System Programming	Reference	
	VT	Dumb
"System-Tenant", Call Park Boundary	9-D-2.00	10-C-5.00

Attendant Management	Reference
CALL-PARK key	6-C-10.00

Conditions

A call on the DES side of the LOOP key can not be parked.

In case of no answer in preassigned time, Held Call Reminder starts.
For further detail, refer to Section 3-E-2.00 "Held Call Reminder."

In case of no answer in 30 minutes after starting hold, the held party is disconnected.

If Tenant Service is employed, 20 parking areas can be split between two tenants in "System-Tenant", Call Park Boundary. In this case, each tenant cannot use the other's parking place.

If music source is connected to the system, Music on Hold (such as radio) is sent to the parked party. For sending Music on Hold, prior assignment is necessary by programming.
Refer to Section 3-E-1.00 "Music on Hold."

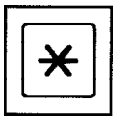
Operation

Parking a call

During a conversation with an extension or outside party,

1. Press the CALL-PARK key (programmable key).

   - The call is held.
   - The SRC indicator starts flashing in green 60 wink, the DES indicator is lit, dial tone sounds.

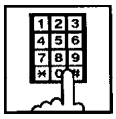


2-1 To park the call to an idle parking area: Dial "*."

   - The call is parked in an idle parking area. After confirmation tone sounds, it becomes silent.
   - Both SRC, DES indicator lights on the LOOP key go out.
   - The following message appears on the message line:

   Message : Call parked at xx

   xx: parking area number (01 to 20)



2-2 To park a call by specifying a parking area number: Dial the parking area number: 01 to 20.

   - Results is the same as dialing "*" key.

(Supplement)
Busy tone sounds if all the parking areas or a specified parking area are occupied.
The following message appears on the message line of CRT.

If all the parking areas are in use:

Message: Call park deny

If the specified parking area is occupied:

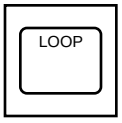
Message : Call park at xx deny

xx: parking area number

To start conversation again, press the LOOP key.

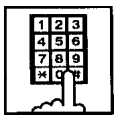
Retrieving a parked call
There are two ways to retrieve a parked call.

Retrieving a parked call by pressing the CALL PARK key (programmable key)



1. Press an idle LOOP key.
   - The SRC indicator of the LOOP key is lit.
     Dial tone sounds.

2. Press the CALL PARK key.
   - No tone is heard.



3. Dial the call park area number (01 to 20).
   - After you hear confirmation tone, speak with a parked caller.
   - The following message appears on the message line on CRT screen:

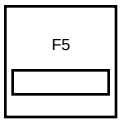
Message : Call park retrieve from xx

xx: call park area number (01 to 20)

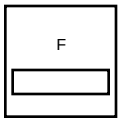
(Supplement)
If no call is parked in a specified parking area, reorder tone sounds and the following message appears on the message line:

Message : Call park retrieve deny

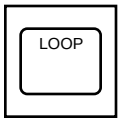
Retrieving a parked call employing Call Park System screen



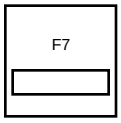
1. Press the F5 key (call park).
   - Call Park System screen appears on the screen.



2. Move the cursor to the desired number to be retrieved by pressing the F4, F5, F6 keys (↑ ,↓ ,↔).



3. Press an idle LOOP key.
   - The SRC indicator of the LOOP key is lit and dial tone sounds.



4. Press the F7 key (park retrieve).
   - After hearing confirmation tone, speak with the parked party.
   - The following message appears on the message line of CRT:

Message : Call park retrieve from xx.

xx : parking area number

G. Transferring Features

1.00 Call Transfer

1.01 Unscreened Call Transfer to Station

Description

Allows the attendant to transfer a call (extension, CO) to an extension user without announcement.

Programming

System Programming	Reference	
	VT	Dumb
"System-System Timer", Transfer Recall	9-D-3.00	10-C-6.00

Conditions

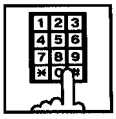
In case of no answer from the destination extension in 30 minutes, the line will be disconnected.

If Music on hold is available, during transferring operation, Music on Hold is sent to the transferred party until conversation starts. Refer to Section 3-E-1.00 "Music on Hold."

If transferred call is not answered in preassigned interval, Transfer Recall starts to the attendant console. The time taken to activate this function is set by "System-System Timer", Transfer Recall. Refer to Section 3-E-3.00 "Transfer Recall" for further information.

Operation

During a conversation with an extension or outside party



1. Dial the extension number of the destination.

   • Ringback tone sounds.

2. Press the RELEASE key.

   • Both SRC, DES indicator lights go out and the attendant console becomes silent.

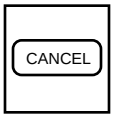
   • The following message appears on the message line.

   <Example>

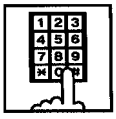
   If transferring a call routed via trunk group 01 to extension 100:

Message : TRG 01 is transferred to Ext.100

Changing the transfer destination before pressing the RELEASE key



1. Press the CANCEL key.



2. Dial the extension number of the new party.

(Supplement)

Instead of pressing the CANCEL key, if you press the LOOP key whose SRC indicator is flashing in 60 wink, you can talk to the held party again.

1.02 Call Transfer by Camp-on to Station

Description

Allows the attendant to transfer a call to busy extension.
Transferred call will ring the busy extension automatically when it becomes idle.

Programming

System Programming	Reference	
	VT	Dumb
"System-System Timer", Transfer Recall	9-D-3.00	10-C-6.00

Conditions

Busy status of PITS telephone means all PDNs on the destination extension are in use.

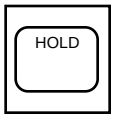
If Camp-on Transfer cannot be set (for example, the destination extension is in program mode), the following message appears on the message line on the screen:

Message: Camp-on deny.

If camped on call is not answered in preassigned interval, transfer recall starts at the attendant console.
The time taken to activate transfer recall is set by "System-System Timer", Transfer Recall.

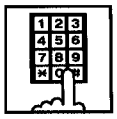
Operation

During a conversation with an outside party or extension. The SRC indicator is lit.



1. Press the HOLD key.

   - The SRC indicator starts to flash in 60 wink, and the DES indicator lights.



2. Dial the extension number of the destination.

   - Busy tone sounds on DES side of the LOOP key.

3. Press the RELEASE key.

   - Both SRC and DES indicator lights go out and the attendant console becomes silent.
   - Transferred party is placed on hold until the destination extension answers.
   - Ringing starts at the destination extension, as soon as it becomes idle.
     If the destination answers, conversation with the transferred party starts.

1.03 Screened Call Transfer to Station

Description

Allows the attendant to transfer a call (extension, CO) to an extension with announcement.

Programming

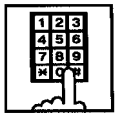
None

Conditions

If Music on Hold is available, a held party receives Music on Hold during transfer.
Refer to Section 3-E-1.00 “Music on Hold.”

Operation

During a conversation with an outside party or an extension



1. Dial the extension number of the destination.

   • Ringback tone sounds.

2. The called extension on the DES side answers.

   • Speak with the called party on DES side.

3. Press the RELEASE Key.

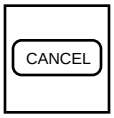
   • Both SRC, DES indicator lights go out and attendant console becomes silent.
   • The following message appears on the message line.

   <Example>

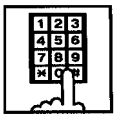
   If transferring a call routed via trunk group 01 to extension 100:

Message : TRG 01 is connected with Ext.100

Changing the transfer destination before pressing the RELEASE key



1. Press the CANCEL key.

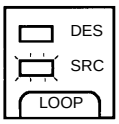


2. Dial the extension number of the new destination.

(Supplement)

Instead of pressing the CANCEL key, if you press the LOOP key whose SRC indicator is flashing in 60 wink, you can talk to the held party again.

Retrieving the transferred party if the destination party does not answer



1. Press the LOOP key which is flashing in 60 wink.

   • Conversation with the transferred party starts.

1.04 Screened Call Transfer to Trunk

Description

Allows the attendant to transfer a call (extension, CO) to an outside party with announcement.

Programming

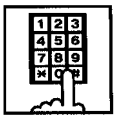
None

Conditions

A call placed on hold during call transfer receives Music on Hold, if available.
Refer to Section 3-E-1.00 “Music on Hold” for further information

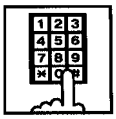
Operation

During a conversation with an extension or outside party



1. Select a CO line.

   - After selecting the CO line on DES side of the LOOP key, dial tone sounds.



2. Dial the telephone number of the outside party.

   - Ringback tone sounds from the CO line. When the called party answers, make the announcement.

3. Press the RELEASE key.

   - Held call is connected with the outside destination party, and the attendant console becomes silent.
   - The following message appears on the message line on the screen.

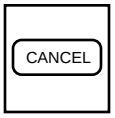
   <Example>

   If transferring extension 100 via CO line in the trunk group 01:

Message: Ext.100 is connected with TRG 01

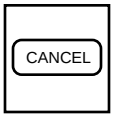
(Supplement)

If busy tone sounds after selecting the CO line,



1. Press the CANCEL key, then repeat the pre-described operation from step1.

If busy tone or reorder tone sounds after calling an outside party,



1. Press the CANCEL key, then repeat the pre-described operation from step 1.

1.05 Unscreened Call Transfer to Remote

Description

Allows the attendant to transfer a call (extension, CO) to the remote maintenance feature. Modem answer tone is returned instantly, if it is not in use.

This operation allows the System Administrator to perform System Administration from a Remote Location.
Refer to Section 14-B-2.00 “System Administration from a Remote Location” for further information.

To transfer a call to Remote Maintenance Resource, “FDN for Remote” is used, which is assigned in “System-Operation”, Remote Directory Number.
See Section 3-B-3.00 “Floating Directory Number (FDN)” for details about FDN.

For accessing the remote maintenance feature, RMT card must be installed and assigned to the system.

Programming

System Programming	Reference	
	VT	Dumb
“Configuration-Slot Assignment”,	9-C-2.00	10-C-2.00
“System-Operation”, Remote Directory Number	9-D-1.02	10-C-4.00

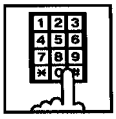
Conditions

If Music on Hold is assigned, the system sends Music on Hold to the transferred party during the transferring operation.
For further detail, refer to Section 3-E-1.00 “Music on Hold.”

If Remote Maintenance Resource is in use, busy tone is returned to the held party. Automatic Callback does not function in this case, so the party should call Remote again when it becomes idle.

Operation

During a conversation with an outside party or extension



1. Dial the FDN for Remote.

   - Confirmation tone sounds. The attendant console is free to handle another call.
   - The following message appears on the message line in I/O field:

<Example> If an outside party is transferred:

Message : TRG 01 is connected with Remote Term.

<Example> If an extension is transferred:

Message : Ext. 100 is connected with Remote Term.

1.06 Unscreened Call Transfer — to a UCD Group (with OGM)

Description

Allows the attendant to transfer an outside call to a UCD Group from 01 to 04 (with OGM type).

From version 8.XX, not only the operators but any extension user can transfer an outside call to a UCD group (with OGM).

Programming

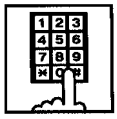
System Programming	Reference	
	VT	Dumb
“Special Attended–UCD (1/2)”	9-K-3.01	10-C-44.00

Conditions

If all group members are not available to answer the call, it will be redirected to the Overflow destination. In this case, the call will be disconnected if not answered by the Overflow destination within 60 seconds.
See page 3-D-13 for further information.

Operation

During a conversation with an outside party.



1 Dial the FDN for UCD group (01 to 04).

- The LOOP key is released automatically.

Feature References

Uniform Call Distribution (UCD)–with/without OGM (Section 3-D-2.06)

2.00 Heavy Traffic Overflow Transfer to Station

Description

Up to six calls can arrive at the attendant console at the same time.
If six calls have arrived and other calls arrive, the number of the other calls is displayed in the “wait call” on “LOOP key and Trunk Group” screen.

If the waiting calls remain in the “wait call” for a specified duration programmed in “System-System Timer”, Attendant Overflow Time, they will be transferred automatically to the specified extension assigned by “Extension-Attendant Console”, Overflow.
To transfer those calls, set “Overflow transfer” to “Yes” in the Attendant Management screen.

Programming

System Programming	Reference	
	VT	Dumb
“System-System Timer”, Attendant Overflow Time	9-D-3.00	10-C-6.00
“Extension-Attendant Console”, Overflow	9-G-4.01	10-C-28.00

Attendant Management	Reference
Overflow transfer	6-C-10.00

Conditions

If a call in the queue cannot be transferred to the preassigned destination, it is called an overflowed call.
The number of overflowed calls is displayed in “Over flow = ” of “LOOP key and Trunk Group” screen.
Calls cannot be transferred in the following cases:

- The transfer destination is not assigned.
- The destination extension is busy.
- The destination extension has DND assigned.

Operation

None

3.00 Serial Call

Description

Allows the attendant to transfer a CO call to multiple extensions (up to three extensions) sequentially.
When the first extension hangs up, a call is transferred to the second extension and the third extension in sequence automatically without assistance of the attendant console.
For this function prior assigning of SERIAL key to a programmable key is necessary.

Programming

Attendant Management	Reference
SERIAL key	6-C-10.00

Conditions

In case the specified extension is busy or does not answer within specified duration, call advances to the next extension.
Specified duration is the preset time assigned in “Call Forwarding No-Answer Time-Out” by system programming.

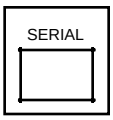
If all of the called extensions answer, serial call is concluded. If any of the called extensions is busy or does not answer, calling the attendant console starts again automatically.

Operation

CO call arrives at attendant console.

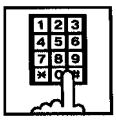
1. Answer the call by pressing the ANSWER key (programmable key).

   • SRC indicator lights.
   Start conversation.

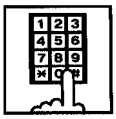


2. Press the SERIAL key (programmable key).

   • Outside party is placed on hold, SRC indicator starts to flash in 60 winks.
   • DES indicator lights.



3. Dial the required extension number.

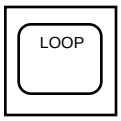


4. Repeat steps 2 and 3 for each required extension (up to three) during silence.

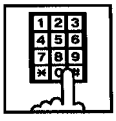
5. Press the RELEASE key.

   • The SRC and DES indicator lights go out.

Making a CO outgoing call and transfer it to extensions



1. Press an idle LOOP key.



2. Make an outgoing CO call.

   Steps 3 to 5 are same as mentioned above.

4.00 Interposition Call Transfer

Description

This function allows the attendant console to make Screened Call Transfer (transferring after informing it) to the other attendant console in the same tenant, after answering and placing a call on hold.

Conditions

Transferring a call to another attendant console is limited to screened call transfer. Unscreened call transfer (automatic transfer) is ineffective.

Programming

None

Operation

When attendant console 1 receives a call from extension 100, and transfer it to attendant console 2.

	< I / O Field of Attendant Console 1 >	< I / O Field of Attendant Console 2 >
1.	Attendant console 1 answers the incoming call from extension 100 and holds it.	
	SRC: Ext. 100 Hold DES:	SRC: DES:
2.	Attendant console 1 calls attendant console 2.	
	SRC: Ext. 100 Hold DES: ATT2 Outgoing	SRC: Ext. 100 Hold DES: ATT1 Incoming
3.	Attendant console 2 answers.	
	SRC: DES: ATT2 Talk	SRC: Ext. 100 Hold DES: ATT1 Talk
4.	Attendant console 1 presses the RELEASE key.	
	SRC: DES:	SRC: Ext. 100 Hold DES:
		• Reorder tone sounds.
5.	Attendant console 2 presses the corresponding LOOP key.	
	SRC: DES:	SRC: Ext. 100 Talk DES:

5.00 Call Transfer via Attendant Console

Description

The attendant can transfer an outside call held by an extension to another extension.

Programming

None

Conditions

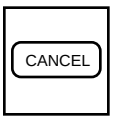
None

Operation

An extension which has held an outside party calls the attendant console.
The SRC indicator starts flashing in 60 wink, the DES indicator starts flashing in 240 wink.

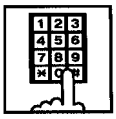
1. Press the ANSWER key .

   • The DES indicator lights. Start conversation with the DES side party.
   • The SRC indicator remains flashing in 60 wink.



2. Press the CANCEL key.

   • Dial tone sounds from DES side, and calling starts.
   • The SRC indicator is flashing in 60 wink.



3. Dial the telephone number of the destination.

   • Ringback tone sounds.

4. Press the RELEASE key.

   • The held call is transferred automatically and the called party answers it.
   • Both SRC and DES indicator lights go out and the attendant console becomes silent.

6.00 Released Link Operation

Description

Allows the attendant to transfer a call by simply dialing the extension number of the destination without pressing the RELEASE key.
If any PDN button on the destination extension is idle, the call is released from the console and call ringing starts at the destination party.

Set “Released link operation” to “Yes” in Attendant Management screen beforehand.

Programming

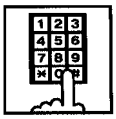
Attendant Management	Reference
Released link operation	6-C-10.00

Conditions

If the destination is busy or has DND assigned, transferring is ineffective .
In the former case, pressing the RELEASE key provides Camp-on Transfer.

Operation

During a conversation with an outside or inside party



1. Dial the extension number of the destination party.

   - The first party is placed on hold, and if the destination party is idle, call ringing starts.
   - Both SRC, DES indicator lights on the LOOP key go out.

7.00 Automatic Redirection If No Answer

Description

If an incoming outside call ringing on a LOOP key is not answered within a specified time, it can be redirected to the extension assigned as the overflow destination of Attendant Consoles.

Programming

System Programming	Reference	
	VT	Dumb
"System-System Timer", Attendant Overflow Time	9-D-3.00	10-C-6.00
"Extension-Attendant Console", Overflow	9-G-4.01	10-C-28.00

Attendant Management	Reference
Overflow transfer	6-C-10.00

Conditions

1. Incoming Mode (Day) : ATT
   This feature works only for the incoming call routed via a CO line which belongs to a Trunk Group whose Incoming Mode (Day) is assigned as "ATT."

2. "Overflow Transfer" assignment
   Set "Overflow transfer" to "Yes" in the Attendant Management screen of an attendant console assigned as the Operator 1.

3. "Overflow" extension assignment
   If the extension assigned as the overflow extension is busy, or not assigned, this feature does not work.
   The call continues to ring at an LOOP key.

4. Attendant Overflow Time
   The timer which applies to the feature is "System–System Timer", Attendant Overflow Time.

5. Single and Dual Console mode
   This feature works in both Single and Dual Console mode.
   Refer to Section 3-D-1.00 "Attendant Console Operation" for further information.

Operation

None

H. Conversation Features

1.00 Conference

Description

The attendant can set up a three-person conference that includes inside party as well as outside party by adding a new party to the established call.

The CONF key (programmable key) must be assigned to the attendant console in advance.

On the TSW card, there are eight standard conference trunks provided for this purpose. By equipping the optional conference expansion card (KX-T336104), the number of conference trunks increases to 64.
To utilize optional conference expansion card, assign “Configuration-System Assignment”, TSW Additional CONF to “Yes.”

When two members in the conference are outside parties, two conference trunks are necessary. In all other cases, one conference trunk is enough.

If there are no idle conference trunks, pressing the CONF key does not function.

Programming

System Programming	Reference	
	VT	Dumb
“Configuration System Assignment”, TSW Additional CONF	9-C-1.00	10-C-1.00

Attendant Management	Reference
CONF key	6-C-10.00

Conditions

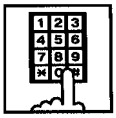
Conference call is available in the following combinations.

- Two outside parties and an attendant console
- An outside party, an inside party and an attendant console
- Two inside parties and an attendant console

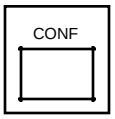
Conference call including another attendant console is unavailable.

Operation

During a conversation with an outside or inside party



1. Place a new call while holding the current party.
   - If the called party answers, begin speaking.



2. Press the CONF key (programmable key).
   - Both SRC and DES indicators light. Start a conference.

Finishing the conference

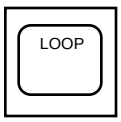
1. Press the RELEASE key.
   - Both SRC, DES indicator lights go out.
   - If both B and C are outside parties, both parties are disconnected.
   - If both B and C are extension users, or either of them is an extension user, a conversation between B and C is established.

The following message appears on the message line:

<Example>

Message: Ext.100 is connected with TRG (01)

Changing from conference to conversation with DES side party by holding SRC side party



1. Press the corresponding LOOP key.
   - The SRC side party is placed on hold, speak with the DES side party.

(Supplement)

To change from conference to conversation with the SRC side party by holding the DES side party, press the SPLIT key (call splitting function). For further information, refer to Section 6-H-3.00 “Call Splitting.”

2.00 Unattended Conference

Description

Allows the attendant to change a three-party conference including two outside parties to a CO-CO call by pressing the CONF key, and observing conversation status through SRC, DES indication is possible.

For this function, prior assignment of the CONF key to programmable key is necessary in the Attendant Programming. Conversation duration of the CO-CO call is limited, and can be changed by “Group-Trunk Group”, CO-CO Duration Limit.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group” CO-CO Duration Limit	9-E-1.00	10-C-14.00

Attendant Management	Reference
CONF key	6-C-10.00

Conditions

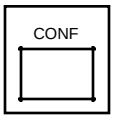
During a CO-CO call through Unattended Conference, Unattended Conference Recall begins 60 seconds before the CO-CO call duration is over.

During the conversation status between CO-CO through Unattended Conference, warning tone is sent to both outside parties 15 seconds before the CO-CO call duration expires.

Operation

Setting up an unattended conference call

During a three-person conference including two outside parties

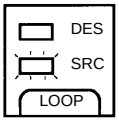


1. Press the CONF key (programmable key).

   - A three-party conference changes to a CO-CO call, and both SRC, DES indicators start flashing in 120 wink.

Returning to a three-party conference

Both SRC, DES indicators are flashing in 120 wink.



1. Press the associated LOOP key.

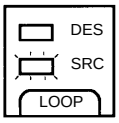
   - Establishes a three-person conference, both SRC, DES indicators light.

(Supplement)

If there is no idle conference trunk, the attendant can speak with only one outside party.

Answering unattended conference recall

During a CO-CO call through the unattended conference, unattended conference recall starts 60 seconds before the time limit. Both SRC and DES indicators flash in 240 wink.



1. Press the associated LOOP key.

   - A three-party conference starts. Both SRC, DES indicators light.

3.00 Call Splitting

Description

The attendant can speak with the SRC side party and the DES side party alternately while holding the other party by pressing the SPLIT key.

Programming

None

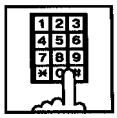
Conditions

Pressing the CONF key during Call Splitting introduces a conference call.

Pressing the RELEASE key during Call Splitting releases the attendant console from the call and a conversation between the SRC and DES parties starts.

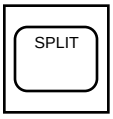
Operation

During a conversation with an outside or inside party on SRC side



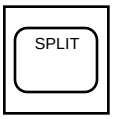
1. Call another extension or outside party from DES side.

   - The SRC side party is placed on hold.
   - When the called party answers, begin speaking.



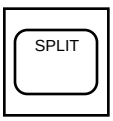
2. Press the SPLIT key.

- Conversation with the SRC side party starts and the DES side party is placed on hold.
- The SRC indicator is lit, and the DES indicator flashes in 60 wink.



3. Press the SPLIT key again.

   - Conversation with the DES side party starts, and the SRC side party is placed on hold.
   - The DES indicator is lit, the SRC indicator flashes in 60 wink.



4. The attendant can speak with the SRC side party and the DES side party alternately by every pressing of the SPLIT key.

(Supplement)

During a conversation with the DES side party while holding the SRC side party, pressing the LOOP key disconnects the DES side party and enables a conversation with the SRC side party.

During a conversation with the DES side party while holding the SRC side party, the attendant can make a call from the DES side while holding the SRC side party by pressing the CANCEL key.

During a conversation with the SRC side party while holding the DES side party, pressing the LOOP key or CANCEL key does not function.

4.00 Doorphone Calling

Description

The attendant can make and answer a doorphone call.
Up to four doorphones can be connected to the system.
During a doorphone call, dialing “5” opens the door for a specified period.

Set the duration of the door opener in “Extension-Doorphone”, Open Duration. When Open Duration is set to “0,” the door opener is unavailable.

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”,	9-D-6.03	10-C-10.00
Doorphone Call (1 to 4) “Extension-Doorphone”	9-G-3.00	10-C-27.00

Conditions

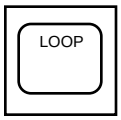
If tenant service is employed, the affiliation of each doorphone can be assigned by the system programming in “Extension-Doorphone,” Tenant.The attendant can place a call to the doorphone within the same tenant, but cannot hold or transfer the doorphone call.

When a visitor presses the button on the doorphone, ping-pong tone sounds twice, then doorphone call ringing starts.
No answer of the call in 15 seconds cancels the doorphone call.

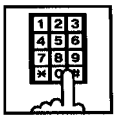
Dialing “5” again while the door is open enables the attendant to prolong the opening duration to the specified duration assigned in “Extension-Doorphone”, Open Duration.

Operation

Making a doorphone call

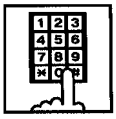


1. Press an idle LOOP key.
   - Dial tone sounds.



2. Dial the feature number for Doorphone Call (1 to 4) “40” (default), then, dial the doorphone number (1 to 4)
   - After hearing dial tone, start conversation over the doorphone.

Opening a door



1. Dial “5.”
   - The door opens for the specified duration.

5.00 Tone Through (End to End DTMF Signaling)

Description

During a call (extension, outside or doorphone), this function allows the attendant to send DTMF (touch tone) signals to the voice path while pressing dial pad buttons after pressing the E-E key (programmable key).
End to End DTMF Signaling is used to access network services such as OCC access which requires touch-tone signals.

The E-E key should be assigned in Attendant Management screen.

Programming

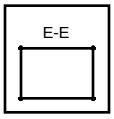
Attendant Management	Reference
E-E key	6-C-10.00

Conditions

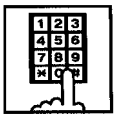
None

Operation

During a call (extension, outside or doorphone),



1. Press the E-E key (programmable key).



2. Dial the telephone number.

   - DTMF signal is transmitted while dialing.

6.00 Cancel Key Function

Description

Allows the attendant to get a line for making a call on the selected LOOP key again by simply pressing the CANCEL key.
When CANCEL key is pressed while seizing the selected LOOP key, dial tone will be heard.

Programming

System Programming	Reference	
	VT	Dumb
"Group-Trunk Group (1/2)" Disconnect Time	9-E-1.01	10-C-14.00

Conditions

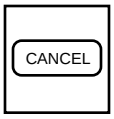
Pressing the CANCEL key does not function during a conference call and during a conversation with the SRC side party with holding the DES side party.

Cancel Key Function does not work while talking on DES side without holding a call on SRC side.

When a call is made after pressing the CANCEL key, it is checked against the system toll restriction procedure, and a call duration time count is renewed.

Operation

While hearing tone, dialing, or speaking



1. Press the CANCEL key.
   - Dial tone sounds.

I. Paging Features

1.00 Paging

1.01 Paging All Extensions

Description

Allows the attendant to make paging announcement through built-in speakers of all PITS telephones by dialing the feature number for “Station Paging” and “0.”

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (03/11)”, Station Paging	9-D-6.03	10-C-10.00

Conditions

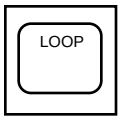
Single line telephones (SLT's) can not be paged.

If Tenant Service is employed, paging is only available within the same tenant as the attendant console.

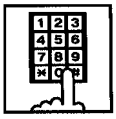
If an extension is off-hook or its SP-PHONE is active, paging is unavailable for the extension.

Current call is parked and paging all extensions through built-in speaker of all PITS telephones can be carried out by pressing the PAGE key during a conversation.
For further information, refer to Section 6-I-1.05 “Call Park and Paging.”

Operation



1. Press an idle LOOP key and dial the feature number for Station Paging “42” (default), and “0” in succession.



- After confirmation tone sounds, all extension paging through built-in speakers is possible.

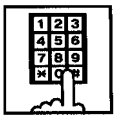
2. Perform paging.

3. An extension answers the page.

4. Press the RELEASE key.

Transferring a call using Paging All Extensions

During a conversation with an extension or outside party,



1. Dial the feature number for Station Paging “42” (default), and “0” in succession.

- After confirmation tone sounds, extension paging starts.
- The first party is placed on hold.

2. Perform paging.

3. After an extension answers the page, press the RELEASE key.

- Conversation between the held party and the paged party starts. Attendant console becomes silent.

1.02 Group Paging

Description

Allows the attendant to make paging announcement through built-in speakers of PITS telephones by specifying the desired Paging Group.

Up to eight paging groups can be assigned to the system.

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (03/11)", Station Paging	9-D-6.03	10-C-10.00

Conditions

Single line telephones (SLT's) can not be paged.

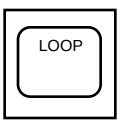
If Tenant Service is employed, paging is only available within the tenant where the attendant console belongs.

If the designated paging group is being paged by another page, busy tone is heard.
However, group paging can be done within the range not overlapping the previous paging range. For instance, when paging is being done to group 1, paging groups 2 to 8 are available for new paging.

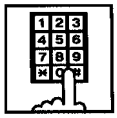
If an extension is off-hook or its SP-PHONE is active, paging is unavailable for the extension.

Current call is parked and Group Paging through built-in speaker of PITS telephones can be carried out by pressing the PAGE key during a conversation.
For further details, refer to Section 6-I-1.05 "Call Park and Paging."

Operation



1. Press an idle LOOP key and dial the feature number for Station Paging "42" (default) and paging group number (1 to 8) in succession.



- Confirmation tone sounds. The specified paging group gets ready to be paged.

2. Perform paging.

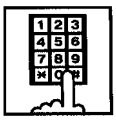
3. An extension answers the page.

4. Press the RELEASE key.

- The call is released from the attendant console.

Transferring a call using Group Paging

During a conversation,



1. Dial the feature number for Station Paging "42" (default) and desired paging group number (1 to 8) in succession.

- Confirmation tone sounds. The specified paging group gets ready to be paged.
- The call is held.

2. Perform paging.

3. An extension answers the page.

4. Press the RELEASE key.

- The call is released from the console.
- Conversation between the held party and the paged party starts.

1.03 Paging External Pagers

Description

Allows the attendant to make paging announcement through the external pagers by dialing the feature number for “External Paging.” Up to two external pagers can be equipped with this system.

Employing two external pagers or selecting one pager will be assigned by “System-Operation”, External Pager 1, 2.

External paging is effective when an external pager or pagers are connected and assigned for use by “System-Operation”, External Pager 1, 2.

Confirmation tone from external pagers is selected by “Trunk-Pager & Music Source”, External Pager-Tone.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”, External Paging 1, 2	9-D-1.01	10-C-4.00
“System-Numbering Plan (03/11)”, External Paging	9-D-6.03	10-C-10.00
“Trunk-Pager & Music Source”, External Pager-Tone	9-F-2.00	10-C-19.00

Conditions

If Tenant Service is employed, paging is available only in the same tenant.

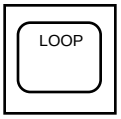
External paging originated by the attendant can override external paging from an extension. The extension will hear reorder tone.

The followings show the paging priorities:

(1)Paging External Pager from an Attendant Console
(2)TAFAS (Trunk Answer From Any Station) (Refer to Section 4-D-4.00 “Trunk Answer From Any Station (TAFAS)-Day Service.”)
(3)Paging External Pager from an extension (this function)
(4)BGM through External Pager

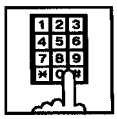
If a lower priority page is active, and a higher priority page is actuated, it overrides the lower one: for instance, if Paging External Pager from extension is overridden by Paging External Pager from an Attendant Console, reorder tone is returned to the extension who initiates the Paging External Pager. If TAFAS call or BGM is overridden by another higher priority, it is interrupted and starts again when the higher priority is finished.

Operation



1. Press an idle LOOP key.

   • The SRC indicator is lit, and dial tone is heard.



2. (Selecting external pager 1)
   Dial the feature number for "External Paging" and "1" in succession.

   (Selecting external pager 2)
   Dial the feature number for "External Paging" and "2" in succession.

   (Selecting external pagers 1 and 2)
   Dial the feature number for "External Paging" and "0" in succession.

   • After confirmation tone, the attendant console is connected to the external paging equipment.

3. Perform paging.

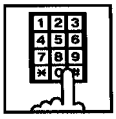
4. An extension answers the page.

5. Press the RELEASE key.

   • The call is released from the console.

Transferring a call using Paging External Pagers

During a conversation,



1. (Selecting external pager 1)
   Dial the feature number for "External Paging" and "1" in succession.

   (Selecting external pager 2)
   Dial the feature number for "External Paging" and "2" in succession.

   (Selecting external pagers 1 and 2)
   Dial the feature number for "External Paging" and "0" in succession.

   • After confirmation tone sounds, the attendant console is connected to the external pager.
   • The other party is held.

2. Perform paging.

3. An extension answers the page.

4. Press the RELEASE key.

   • The call is released from the console.
   • Conversation between the held party and the paged party starts.

1.04 Paging All Extensions and External Pagers

Description

Allows the attendant to make paging announcement through all built-in speakers of PITS and external pagers 1 and 2 at the same time.
External paging access tone can be set in the system program.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (1/3)", External Paging 1, 2	9-D-1.01	10-C-4.00
"System-Numbering Plan (03/11)", External Paging	9-D-6.03	10-C-10.00
Station Paging	9-F-2.00	10-C-19.00
"Trunk-Pager & Music Source", External Pager-Tone		

Conditions

If Tenant Service is employed, paging is available only in the same tenant.

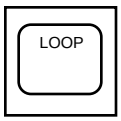
If an extension is off-hook or its SP-PHONE is active, paging is unavailable for the extension.

Paging All Extensions and External Pagers can be carried out after parking a call by pressing the PAGE key during conversation.
For further information, refer to Section 6-I-1.05 "Call Park and Paging."

Paging All Extensions and External Pagers originated by the attendant can override external paging from an extension unless the extension is paging other extensions at the same time. The extension will hear reorder tone when overridden.

This function originated by the attendant overrides TAFAS call and BGM through External Pager, which are interrupted and start again when the paging is finished.
For further information about TAFAS, refer to Section 3-D-2.04 "Trunk Answer From Any Station (TAFAS)-Day Service."

Operation



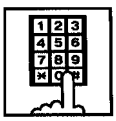
1. Press an idle LOOP key and dial the feature number for Station Paging "42" (default) and " # " in succession.
   - Confirmation tone sounds.

2. Perform paging.

3. An extension answers the page.

4. Press the RELEASE key.
   - The call is released from the console.

Transferring the held party using Paging All Extensions and External Pagers



1. Dial the feature number for Station Paging "42" (default) and " # " in succession.
   - After the confirmation tone sounds, the other party is held.

2. An extension answers the page.

3. Press the RELEASE key.
   - The call is released from the console.
   - Conversation between the held party and the paged party starts.

1.05 Call Park and Paging

Description

Allows the attendant to park a call (extension or outside) and perform paging by simply pressing the PAGE key (Programmable key).
When the PAGE key is pressed during a conversation, a call is parked in an idle call parking area and paging mode is established automatically.

One of the following five types of paging can be assigned to the PAGE key by the system programming:

Paging All Extensions
Paging External Pager 1
Paging External Pager 2
Paging External Pagers 1 and 2
Paging All Extensions and External Pagers.

Programming

System Programming	Reference	
	VT	Dumb
"Extension-Attendant Console", ATT 1-PAG ATT 2-PAG	9-G-4.01	10-C-28.00

Conditions

This function is available only during a conversation.

Operation

During a conversation

1. Press the PAGE key.

   - The other party is parked and paging is possible.
   - The following display appears on the message line:

   Message: Call Parked at xx

   parking area number: 01 to 20

2. Announce the call park destination number : 01 to 20.

3. An extension answers the page.

4. Press the RELEASE key.

   - The call is released from the console.
   - The paged extension retrieves a parked call and starts speaking.

2.00 BGM through External Pager

Description

The system can provide up to two external music sources. The music source can be broadcasted as background music (BGM) through external pagers.

The attendant can switch on/off the BGM within the same tenant.
To switch on/off the BGM, same feature number for “BGM Through External Pager” is used. Dialing the feature number while BGM is on stops the BGM, and starts the BGM while BGM is off.

If external music equipment and an external pager are connected, this function is not executed unless “System-Operation”, External Music Source 1, 2 and External Paging 1, 2 are assigned to “Yes.”

Assign “Trunk-Pager & Music Source”, External Pager-BGM to “Yes” to use this function. This assignment can be done to each external pager.

Also assign “Trunk-Pager & Music Source”, Music Source-For Use to either “BGM” or “Hold & BGM.” This assignment can be done to each external music equipment.

Programming

System Programming	Reference	
	VT	Dumb
“System-Operation (1/3)”,	9-D-1.01	10-C-4.00
External Paging 1, 2		
External Music Source 1, 2		
“System-Numbering Plan (08/11)”,	9-D-6.08	10-C-10.00
BGM Through External Paging		
“Trunk-Pager & Music Source”,	9-F-2.00	
External Pager-Tenant		10-C-19.00
External Pager-BGM		
Music Source-Tenant		10-C-20.00
Music Source-For Use		

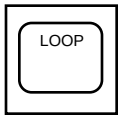
Conditions

If Tenant Service is employed, the affiliation of each external music equipment and external pager can be determined by the system programming “Trunk-Pager & Music Source”, External Pager-Tenant and Music Source-Tenant.

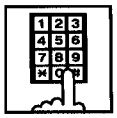
BGM will be terminated during external paging.

Operation

Switching on the BGM

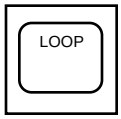


1. Press an idle LOOP key.
   - The SRC indicator lights and dial tone sounds.

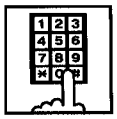


2. Dial the feature number for BGM through External Pager “77” (default).
   - Confirmation tone sounds, then BGM is heard from external pager.

Switching off the BGM



1. Press an idle LOOP key.
   - The SRC indicator lights, dial tone sounds.



2. Dial the feature number for BGM through External Pager “77” (default).
   - After confirmation tone sounds, BGM from external pager stops.

J. Other Features

1.00 Night Service

1.01 Flexible Night Service

Description

Flexible Night Service allows the Operator 1 (Attendant Console or extension user) to change the assigned night answer destination on a CO line basis.
The attendant assigned as Operator 1 can change the night answer destination by employing one of the following two ways.
<1> By dialing the feature number for “Flexible Night Service.”
<2> By employing the CO Management Screen of the attendant console.

To utilize this feature, set “Group-Trunk Group” Incoming Mode (Night) to FLEXIBLE. All CO lines belong to this trunk group are covered by this assignment.
If FIXED is selected for above setting, the assigned night answer destination can not be changed by the Operator 1.

Call handling in Flexible and Fixed night service is almost the same.

The difference is:

Flexible	The Operator 1 (Attendant Console or Extension) can change the night answer destination.
Fixed	A group of extensions (Night Answer Group) can be assigned as the destination of one or more CO lines in night mode

Programming

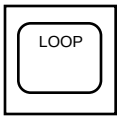
System Programming	Reference	
	VT	Dumb
“Group-Trunk Group (1/2)”, Incoming Mode (Night)	9-E-1.01	10-C-14.00
“Trunk-CO Line”, Night Answer Point	9-F-1.00	10-C-18.00
“System-Numbering Plan (08/11)”, Flexible Night Service	9-D-6.08	10-C-10.00

Conditions

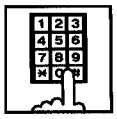
If tenant service is employed, the night answer destination can only be changed for a CO line in the same tenant by the Operator 1.

Operation

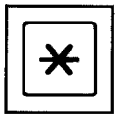
Changing Night Answer Point by dialing the feature number

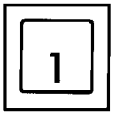


1. Press an idle LOOP key.
   - The SRC indicator lights and dial tone sounds.



2. Dial the feature number for Flexible Night Service “72” (default) and “CO ID (physical number).”



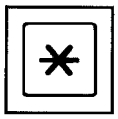


3-1 (Setting night answer point to external pager 1)

Dial “ # 1.”

- Confirmation tone sounds, and the LOOP key is released automatically.
- The following display appears on the message line:

Message : Flexible Night Service Set-UNA1

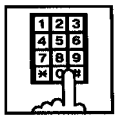


3-2 (Setting night answer point to external pager 2)

Dial “ # 2.”

- Confirmation tone sounds, and the LOOP key is released automatically.
- The following display appears on the message line:

Message : Flexible Night Service Set-UNA2



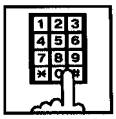
3-3 (Setting night answer point to an extension)

Dial the extension directory number.

- Confirmation tone sounds and the LOOP key is released automatically.
- The following display appears on the message line:

<Example>

Message : Flexible Night Service Set-Ext.1000



3-4 (Setting night answer point to Remote)

Dial “Remote Directory Number.”

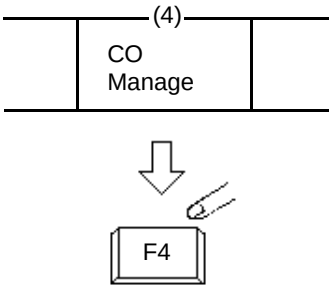
- Confirmation tone sounds, the LOOP key is released automatically.
- The display below appears on the message line:

<Example>

Message : Flexible Night Service Set-Remote

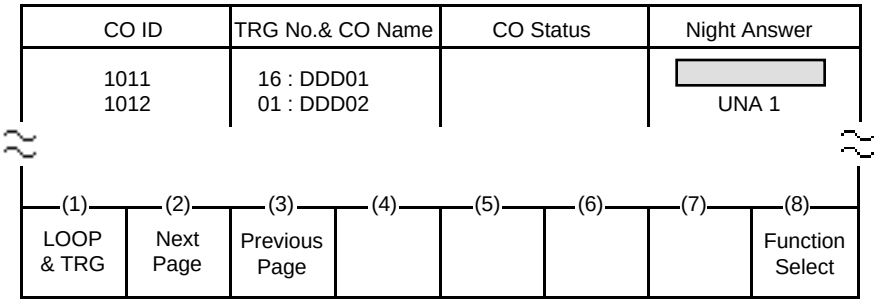
Operation

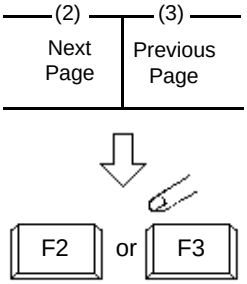
Changing Night Answer point by employing CO Management screen



1. Press the F4 key (CO manage).

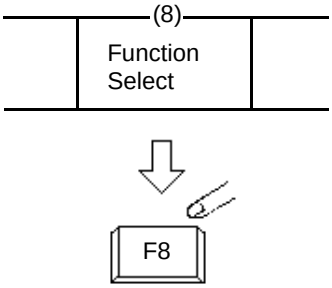
   • CO Management screen appears on the display.





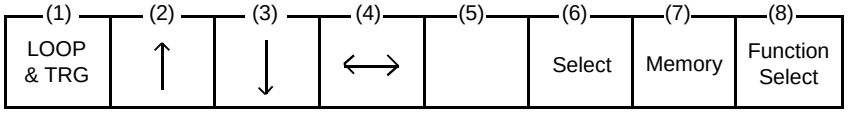
2. Press the F2 key (next page), or the F3 key (previous page).

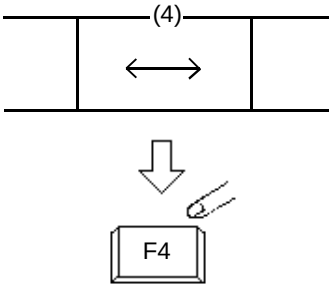
   • Obtain the desired screen.



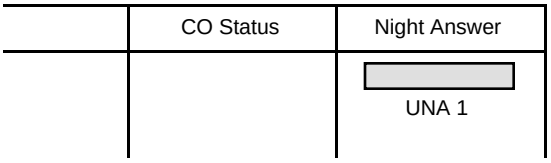
3. Press the F8 key (function select).

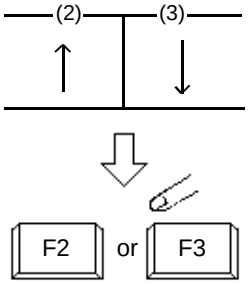
   • The following function field appears.



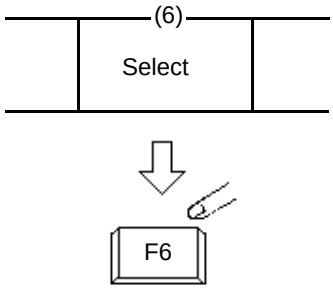


4. Move the cursor to Night Answer field by pressing the F4 key (↔).





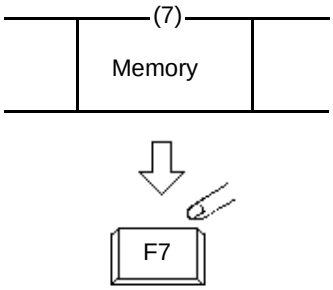
5. Move the cursor to the target CO ID by pressing the F2 key (↑) or the F3 key (↓).



6. Select “UNA1,” “UNA2” “Ext.” or “Remote” by pressing the F6 key (select).

   UNA 1 : External Pager 1
   UNA 2 : External Pager 2
   Ext. : Extension ☛
   Remote: Remote maintenance port

   ☛ If “EXT.” is selected, the extension directory number must be entered successively.



7. Press the F7 key (memory).

1.02 Switching of Day/Night Mode

Description

It is assignable to switch Day/Night mode either automatically at pre-assigned time or manually by the Operator 1 (Attendant Console or Extension) at any time desired.
If Manual Switching mode is selected, the attendant assigned as Operator 1 can switch day mode to night and vice versa by pressing the NIGHT key.
To utilize Manual Switching mode, set "System-Operation (3/3)" Night Service to "Manual."

The attendant assigned as Operator 1, however, can override the Auto Mode setting, that is Manual Mode is established, by dialing the feature number for "Night Service Manual Mode Set." To restore the Auto mode, dial the feature number for "Night Service Manual Mode Cancel."

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (3/3)", Night Service Auto Start Time	9-D-1.03	10-C-4.00
"System-Tenant", Night Service (Tenant 2) Auto Start Time	9-D-2.00	10-C-5.00
"System-Numbering Plan (08/11)", Night Mode Set Night Mode Cancel Night Service Manual Mode Set Night Service Manual Mode Cancel	9-D-6.08	10-C-10.00

Conditions

If tenant service is employed, night service assignment unique to each tenant (Tenant 1 and Tenant 2) can be programmed individually.
In this case, the assignment in "System-Operation (3/3)" is applied to Tenant 1 and the assignment in "System-Tenant" is applied to Tenant 2.

Operation

Changing DAY mode to NIGHT mode

While the NIGHT key indicator is off,

1. Press the NIGHT key for more than one second.

   - The indicator on the NIGHT key lights.
   - The system is now in NIGHT mode.

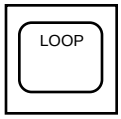
Changing NIGHT mode to DAY mode

While the NIGHT key indicator is lit in green,

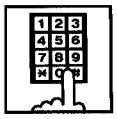
1. Press the NIGHT key for more than one second.

   - The indicator light on the NIGHT key goes out.
   - The system is now in DAY mode.

Changing to "Manual" mode from "Auto" mode



1. Press an idle LOOP key.

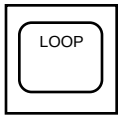


2. Dial the feature number for Night Service Manual Mode Set "71 #" (default).

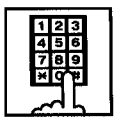
   - The following message appears on the message line:

Message: Night Service Manual Mode Set

Changing to "Auto" mode from "Manual" mode



1. Press an idle LOOP key.



2. Dial the feature number for Night Service Manual Mode Cancel "71#" (default).

   - The following message appears on the message line:

Message: Night Service Manual Mode Cancel

2.00 Account Code Entry

Description

When placing an outgoing call or during a conversation, account codes can be recorded on the SMDR (Station Message Detail Recording) by entering an account code (up to 10 digits) for accounting and billing purposes.
Assigning the ACCOUNT key to a programmable key must be done by Attendant Management screen.

Programming

Attendant Management	Reference
ACCOUNT key	6-C-10.00

Conditions

You can enter an account code during or after a call before hanging up.

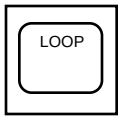
Only numbers 0 through 9 can be entered as an account code.

Entering 11 or more digits as an account code without the delimiter is invalid and causes alarm tone.

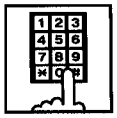
Enter “#” as the delimiter to conclude an account code.

Operation

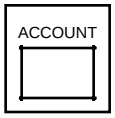
Entering an account code when calling an outside party.



1. Press an idle LOOP key.
   - The SRC indicator lights, dial tone sounds .

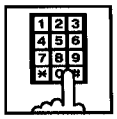


2. Dial the feature number for “ARS/Local CO Line Access.”
   - Dial tone 2 sounds.

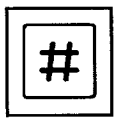


3. Press the ACCOUNT key (programmable key).
   - Dial tone sounds.
   - The following message appears on the message line in I/O field:

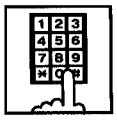
Message: Enter account code



4. Dial an account code (0 through 9, up to 10 digits).
   - The account code appears on the message line in I/O field.



5. Dial “#.”
   - The account code is stored.
   - The message on the Input/Output field disappears, and dial tone sounds .



6. Dial the telephone number of the outside party.

(Supplement)

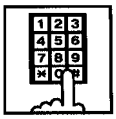
To correct input errors in step 4, enter an account code again after pressing “* .”

Entering an account code during a conversation with an outside party

1. Press the ACCOUNT key (programmable key).

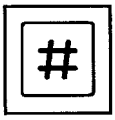
   • The following message appears on the message line in I/O field:

   Message: Enter Account Code



2. Dial an account code (0 through 9, up to 10 digits).

   • The account code appears on the message line in I/O field.

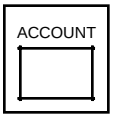


3. Dial "#."

   • The account code is stored and the messages on the message line disappears.

Note: You can continue a conversation while entering the account code.

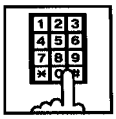
Entering an account code after finishing conversation before going on-hook



1. While hearing reorder tone, press the ACCOUNT key (programmable key).

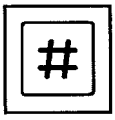
   • Dial tone sounds and the following message appears:

   Message: Enter Account Code



2. Dial an account code (0 through 9, up to 10 digits).

   • The account code appears on the message line in I/O field.

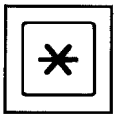


3. Dial "#."

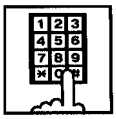
   • The account code is stored and the messages on the message line disappear.
   • Reorder tone sounds again.

Correcting an input error

While entering an account code (before entering the delimiter "#")



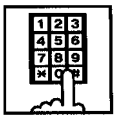
1. Dial "* ."



2. Dial the intended account code.

After entering the delimiter "#"

1. Press the ACCOUNT key (programmable key).



2. Dial the intended account code.

(Supplement)

Correcting the error after entering the delimiter "#" is possible only when making a call or during a conversation.

Canceling the account code before entering "#" key

1. Press the ACCOUNT key (programmable key).

3.00 Secret Dialing

Description

During speed dialing or calling by Extension Directory, all or part of the telephone numbers that appear on the CRT screen can be concealed. The secret portion appears with " ■ ."

The dialing numbers are registered by "System-Speed Dial-System." When storing a number, bracket the secret part that you want to hide with [ ]. Then the part does not appear on the CRT screen.

It is assignable to print out the secret part onto SMDR (Station Message Detail Recording) by assigning "System-Operation", Print Secret Dial to Yes.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation", Print Secret Dial "System-Speed Dialing-System"	9-D-1.00 9-D-8.00	10-C-4.00 10-C-12.00

Conditions

When storing a speed dialing code, entering "[" only without entering "]", causes all the digits entered after "[" to be hidden.

Operation

None

4.00 Message Waiting

Description

Allows the attendant to indicate to an extension that a message is waiting for him or her, by turning on the MESSAGE indicator (button) on the called extension.
The extension user who received the message waiting indication can call back the message sender by simply going off-hook and pressing the red lit MESSAGE indicator (button).

This feature is useful when the called extension is busy or does not answer the call.

UP to 500 message waiting indications can be set for the whole system.

Programming

System Programming	Reference	
	VT	Dumb
"System-Tenant", Message Waiting Boundary	9-D-2.00	10-C-5.00
"System-Numbering Plan (07/11)", Message Cancel	9-D-6.07	10-C-10.00

Conditions

1. Suitable Telephones:

   (1) Message Sender

   - Attendant Console
   - A PITS telephone with a MESSAGE button.*
   - Any Single Line Telephone

   (2) Message Receiver

   - A PITS telephone with a MESSAGE button.*
   - A Single Line Telephone with MESSAGE lamp

* Refer to <Supplement> on page 4-I-17 for further information.

2. Reorder Tone
   The attendant who attempts to leave message waiting indication may hear the reorder tone in the following cases.

   (1) Receiver's extension is:

   - A PITS telephone without a MESSAGE button.
   - A Single Line Telephone without MESSAGE lamp.

   (2) The maximum number of message waiting indications available for the system or tenant 1/2 has been assigned.
   In this case, the following message is shown on the message is line of Attendant Console screen:

Message: MW(Message Waiting) isn't accepted.

3. Tenant Service
   The maximum number of message waiting indications available for Tenant 1 and 2 is determined by "System–Tenant" Message Waiting Boundary.

4. Setting of the multiple message waiting indications

   (1) More than one message sender can leave message waiting indications to the same extension at the same time.

   (2) Even if the same message sender sets message waiting indications to the same extension more than once, this leaves only one message on the called extension.

5. The MESSAGE indicator on the message receiver's extension will be turned off when:

   (1) The message receiver calls back the message sender by pressing the red lit MESSAGE button or by dialing the feature number for "Message Waiting Reply", and it was answered by the message sender (or by another extension using Call Pickup or an SDN button).*1

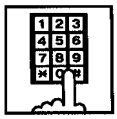
   (2) Message waiting indication is canceled by the message sender.*1

   (3) Message waiting indications are canceled by the message receiver.*2

*1 The indicator may not be turned off, if there are other message waiting indications sent by other extensions.
*2 All message waiting indications are canceled at once.

Operation

Setting the Message Waiting Indication of another extension



1. Dial the extension number.

   - Ringback tone, busy tone or DND tone sounds.

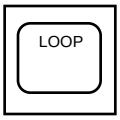
2. Press the MSG key.

   - After confirmation tone sounds, the following message is shown on the message line.

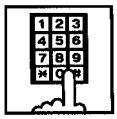
<Example>

Message: MW(Message Waiting) at EXT. 100

Canceling the Message Waiting Indication left on the extension



1. Press an idle LOOP key.



2. Dial the feature number for Message Cancel “#9” (default) and the extension number of the message receiver in succession.

5.00 Remote Station Feature Control

Description

Allows the attendant to cancel or set the following features assigned to each extension:

Features to be canceled:
- DND (Do Not Disturb)
- Electronic Station Lock Out
- FWD (Call Forwarding)

(It is also possible to cancel FWD temporarily.)

Features to be set:
- DND (Do Not Disturb)
- Electronic Station Lock Out

This operation can be done by employing one of the following ways.

<1> By employing Extension Management Screen
<2> By dialing the associated feature number

The attendant can also set or cancel the electronic station lock on each pickup group by employing Pickup Group Management Screen of the attendant console.
For further information, refer to Section 6-C-8.00 “Pickup Group Management Screen.”

Programming

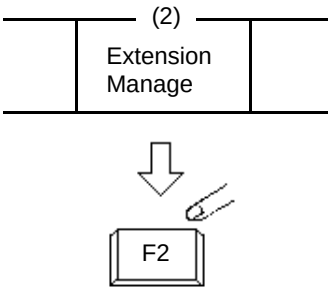
System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (08/11)”, Remote Station Lock Set Remote Station Lock Cancel Remote DND Set Remote DND Cancel Remote FWD Cancel Remote FWD Cancel-OneTime	9-D-6.08	10-C-10.00

Conditions

When an extension is locked by the operator, unlocking by the locked extension itself is impossible.

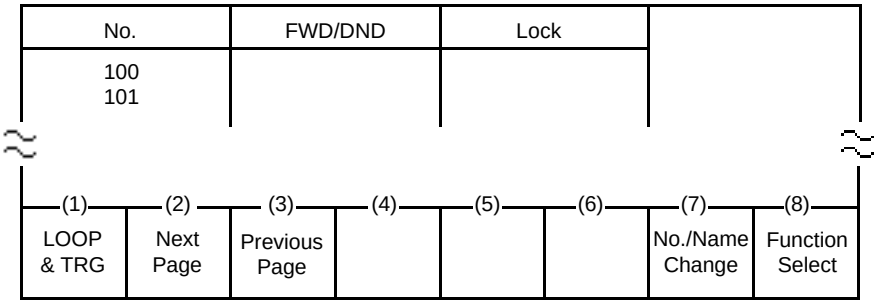
Operation

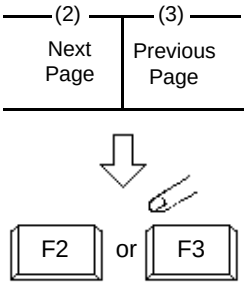
Setting/Canceling “DND”; and Canceling “FWD” by employing Extension Management screen



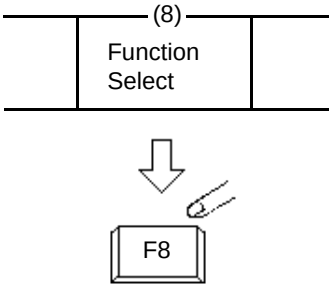
1. Press the F2 key (extension manage).

   • Extension Management screen appears on the display.



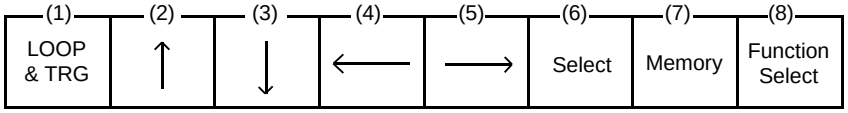


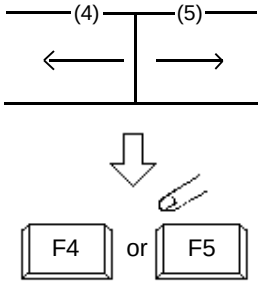
2. By pressing the F2 key (next page) or the F3 key (previous page), obtain the desired screen.



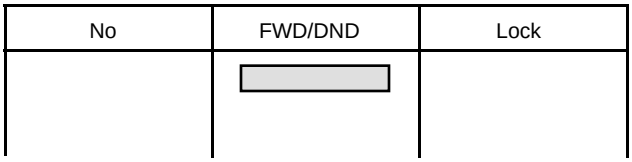
3. Press the F8 key (function select).

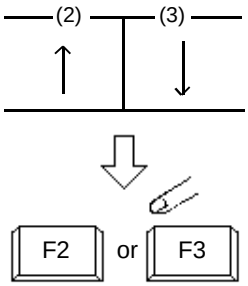
   • The following function field appears.





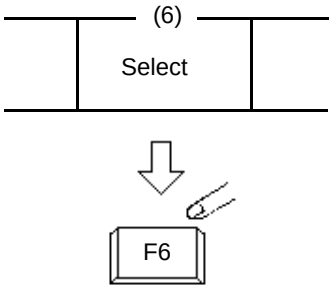
4. Move the cursor to the FWD/DND field by pressing the F4 key (←) or the F5 key (→).



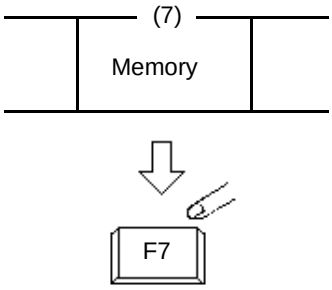


5. By pressing the F2 key (↑) or the F3 key (↓), move the cursor to the target extension number to be set/canceled “DND” or canceled “FWD.”

Note: Assigning FWD is unavailable by this operation.

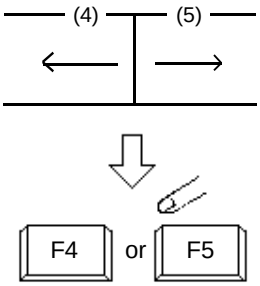


6. Select setting item by pressing the F6 key (select).
For canceling the function, select ▭ mark.



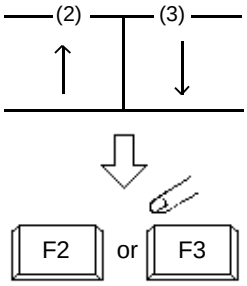
7. Press the F7 key (memory) to store the selected data.

Setting/Canceling “Electronic Station Lock Out” by employing Extension Management screen
For step 1 to 3, refer to the procedure for Setting/Canceling DND.

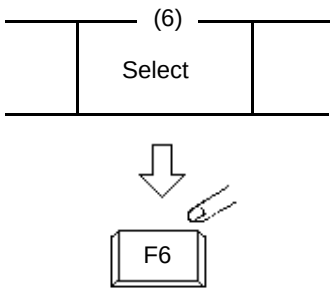


4. Move the cursor to Lock field by pressing the F4 key (←) or the F5 key (→).

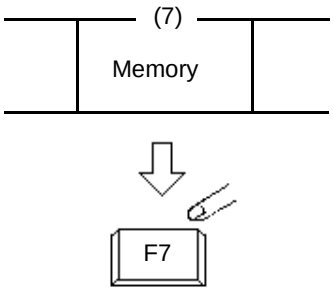
No	FWD/DND	Lock
100		



5. Move the cursor to the target extension number to be set/ canceled “Electronic Station Lock” by pressing the F2 key (↑) or the F3 key (↓).

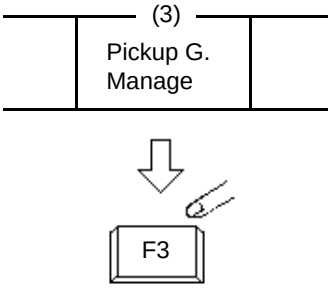


6. Select the setting item by pressing the F6 key (select).
For canceling “Electronic Station Lock,” select ☐ mark.



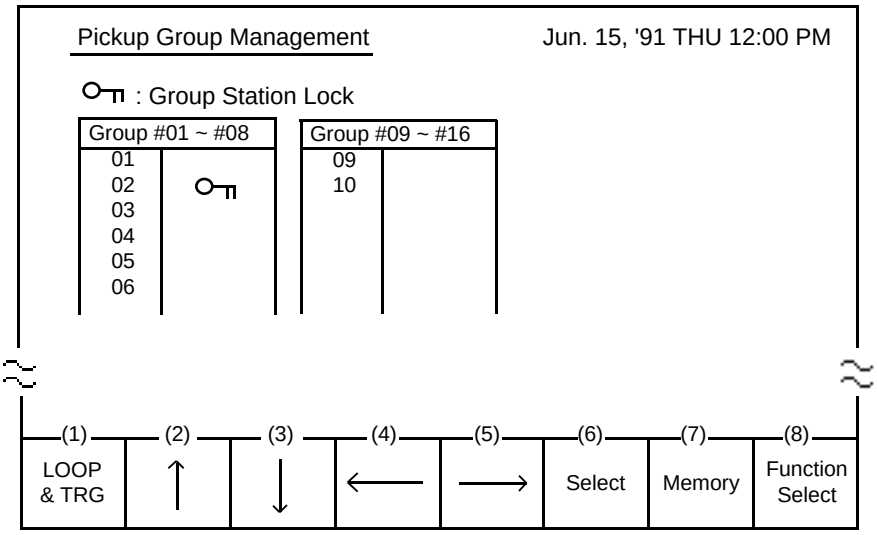
7. Press the F7 key (memory) to store the selected data.

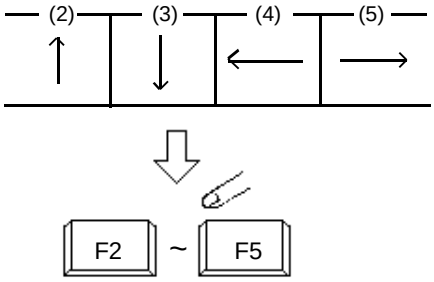
Setting/Canceling “Electronic Station Lock Out” to Pickup Group by employing Pickup Group Management screen



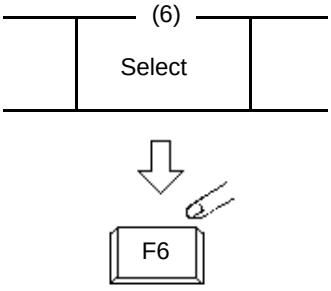
1. Press the F3 key (pickup G. manage).

   • Pickup Group Management screen appears on the display.

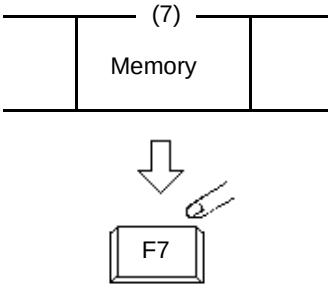




2. Move the cursor to the pickup group number to be set/canceled “Electronic Station Lock” by pressing the F2 key through the F5 keys (↑, ↓ , ←, →).

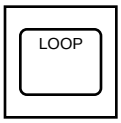


3. Select “ ” for locking , “ ” for canceling locking by pressing the F6 key (select).



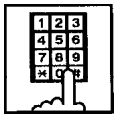
4. Press the F7 key (memory) to store the selected data.

Using the feature number for “Remote Station Lock Set”/“Remote Station Lock Cancel”



1. Press an idle LOOP key.

   • The SRC indicator lights and dial tone sounds.

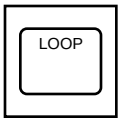


2-1 (For setting “Electronic Station Lock”)
Dial the feature number for “Remote Station Lock Set” and the extension number to be set Station Lock in succession.

2-2 (For canceling “Electronic Station Lock”)
Dial the feature number for “Remote Station Lock Cancel” and the extension number to be canceled electronic station lock in succession.

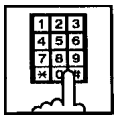
• Confirmation tone sounds, and the LOOP key is released automatically.

Using the feature number for “Remote DND Set”/ “Remote DND Cancel”



1. Press an idle LOOP key.

   • The SRC indicator of the LOOP key lights, and dial tone sounds.

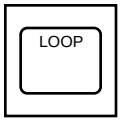


2-1 (For setting “DND”)
Dial the feature number for “Remote DND Set” and the extension number to be set DND in succession.

2-2 (For canceling “DND”)
Dial the feature number for “Remote DND Cancel” and the extension number to be canceled DND in succession.

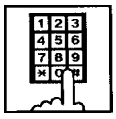
• Confirmation tone sounds, and the LOOP key is released automatically.

Using the feature number for “Remote FWD Cancel”



1. Press an idle LOOP key.

   • The SRC indicator lights and dial tone sounds.



2. Dial the feature number for “Remote FWD Cancel” and the extension number to be canceled FWD in succession.

   • Confirmation tone sounds and the LOOP key is released automatically.

(Supplement)

For canceling “FWD” feature temporarily, dial the feature number for “Remote FWD Cancel-One Time” and the extension number to be canceled FWD in succession.

6.00 Dial Tone Transfer

Description

The attendant can alter the toll restriction level of the extension user for only one call.

TOLL-CHG key must be assigned as a programmable key by the Attendant Management screen.

Programming

Attendant Management	Reference
TOLL-CHG key	6-C-10.00

Conditions

Toll restriction level to be assigned for an extension must be the same or lower than that of attendant console.

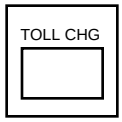
Operation

Altering the toll restriction level of the extension user for only one call

There comes an incoming extension call.

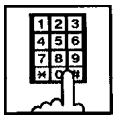
1. Press the ANSWER key.

   - The SRC indicator lights. Start conversation with the extension. The extension asks the attendant to change the toll restriction level.



2. Press the TOLL-CHG key (programmable key).

   - The extension is placed on hold.
   - The SRC indicator flashes in 60 wink, and the DES indicator lights.



3. Dial the desired toll restriction level (01 to 16).

   - The SRC indicator light goes out and the call is released from the console.
   - New dial tone is returned to the extension.

7.00 Search by Name/Department

Description

The attendant can search the desired extension number by entering the name and department of the extension in the Extension Directory screen.

The following three basic entry patterns are available for searching, assuming that number means extension number, name means extension name, and (CR) means pressing the RETURN key.

- Search Name (CR) - Seaching by specifying extension name only.
- Search/Department (CR) - Searching by specifying department only.
- Search Name/Department (CR) - Searching by specifying extension name and department.

Programming

Refer to Section 13-B “Extension Directory Mode.”

Conditions

The attendant can make an extension call after searching.

“*” can be entered as a wild card for searching extension names and departments.

- For displaying all contents of Extension Directory.

  SEARCH * (CR)
  SEARCH /* (CR)
  SEARCH */* (CR)

  This procedure assumes the following extensions are in the Extension Directory.

No.	Ext. Name	Department
1000	Jack	Account
1001	James	Project
1002	Betty	Sales

  Execute: SEARCH Ja * (CR).
  Extension name of “Jack” and “James” will be listed.

- For searching by specifying a part of extension name.

  SEARCH ○- - -○*
  Input a part of extension name

- For searching by specifying a part of department name.

  SEARCH / ΔΔ*
  Input a part of Department Name

- For searching by specifying a part of extension name and department name:

  SEARCH ○○* / ΔΔ*

Operation

Searching by specifying extension name and department name.

This procedure assumes the following extensions are in the Extension Directory.

No.	Ext. Name	Department
1000	Jack	Account
1001	James	Project
1002	Betty	Sales
2000	Jack	Account

1. Enter “SEARCH.”

   • The following message appears on the Input line:

   Input: SEARCH

2. Press the space key once, then enter the extension name “Jack.”

   • The following message appears on the Input line:

   Input: SEARCH Jack

3. Enter “/” and the department name “account.”

   • The following message appears on the Input line:

   Input: SEARCH Jack/account

4. Press the RETURN key.

   • The corresponding extensions will be searched and displayed on the Extension Directory screen.

Extension Name	Department	No. BLF
Jack	Account	1000
Jack	Account	2000

(Supplement)

In case several extensions match the search criteria, all subjects appear.

In case no extension match the search criteria, the following message appears on the message line.

Message: Cannot search by Name/Department

For calling the searched extension, refer to Section 6-D-3.02 “Inter Office Calling by Extension Directory Screen.”

8.00 Outgoing Message (OGM) Recording and Playing Back

Description

Up to four OGM's can be recorded by the Operator 1 (Attendant Console or PITS user) so that different messages can be used for different situations.

The following four types of OGM can be recorded respectively:

DISA, OGM1, OGM2 and W-UP (Wake-up)

OGM for outside parties

OGM for DISA is played to the outside party who called the system via DISA feature.
(See Section 3-D-2.02 "Direct Inward System Access (DISA).")

OGM for OGM1 and OGM2 are played to the outside party in conjunction with UCD feature.
(See Section 3-D-2.06 "Uniform Call Distribution (UCD)-with OGM.")

OGM for extension users

OGM for W-UP (Wake-up) can be used as a wake-up message for the extension user.
(See Section 3-F-13.00 "Timed Reminder with OGM (Wake-up Call).")

Each OGM can be up to 30 seconds long.

A DISA card is required to record OGM and up to four DISA cards can be installed to the system.

Usage of each DISA card is determined by the system programming.
(See Section 9-K-1.00 "Special Attended-DISA.")

Programming

System Programming	Reference	
	VT	Dumb
"System-Numbering Plan (09/11)",	9-D-6.09	10-C-10.00
OGM Record		
OGM Playback		
"Special Attended-DISA", For Use	9-K-1.00	10-C-40.00

Conditions

(1)Tenant Service
If tenant service is employed, the affiliation of each DISA card is determined by the system programming "Special Attendant-DISA" tenant. The Operator 1 of each tenant can record and play back the OGM within the same tenant.

(2) Recording of OGM
- OGM recording is executed by selecting an OGM type (usage of DISA card) from the following four types:

  1. OGM1 for UCD with OGM
  2. OGM2 for UCD with OGM
  3. OGM for DISA
  4. OGM for W-UP (Wake-up)

- If the type of multiple DISA cards are the same in a tenant, the same message is recorded for them at a time.

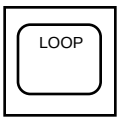
(3)Playing back of OGM
- The following two ways are available:

  A. By selecting an OGM type
  B. By designating the logical number of each DISA card directly.

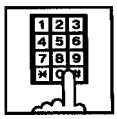
- If there are multiple DISA cards of the same type in the system or a tenant and the OGM type is selected to play back, playback starts from the lowest DISA card physical number.

Operation

Recording OGM



1. Press an idle LOOP key.
   - The SRC indicator lights and dial tone sounds.

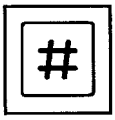


2. Dial the feature number for OGM Record “791” (default) and the resource number (1 to 4) in succession.
   (Resource number)
   1 : OGM1 for UCD
   2 : OGM2 for UCD
   3 : OGM for DISA
   4 : OGM for W-UP (Wake-up)
   - The following message appears on the screen and confirmation tone sounds.

Message: xxxxxxxx recording: 00 sec

UCD-OGM1 or
UCD-OGM2 or
DISA-OGM or
Wake Up OGM

3. Begin your message.



4. Dial “#” to conclude recording.
   - Playback starts automatically through the handset or headset, the following message appears on the screen.

Message: xxxxxxxx playing: 00 sec

   - After playback finishes, the SRC indicator remains lit, and no tone sounds.

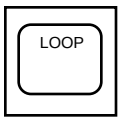
(Supplement)

In step 3 if 30 seconds is over, recording is terminated and playback starts automatically. Accordingly, it is not necessary to execute step 4 afterward.

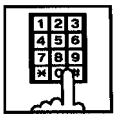
In step 3, if you wish to change the message during recording, you can start recording again by dialing “* .”

In Step 4, if you wish to interrupt and finish playback, dial “#.”

Playing back OGM



1. Press an idle LOOP key.
   - The SRC indicator lights and dial tone sounds.



2. Dial the feature number for OGM Playback “792” (default) and a number below in succession.
   (Resource number)
   1 : OGM1 for UCD
   2 : OGM2 for UCD
   3 : OGM for DISA
   4 : OGM for W-UP (Wake-up)

   (“* ” and DISA No.)
   * 1 : selects Card 1
   * 2 : selects Card 2
   * 3 : selects Card 3
   * 4 : selects Card 4
   - The following message appears on the screen. After confirmation tone sounds, playback starts.

Message: xxxxxxxx playing: 00 sec

UCD-OGM1 or
UCD-OGM2 or
DISA-OGM or
Wake Up OGM

   - After playback finishes, the SRC indicator remains lit, and no tone sounds.

(Supplement)

In step 2, if you wish to interrupt and finish playback, press “#.”

During playback you can start playback again from the beginning by dialing “* .”

9.00 Trunk Verify

Description

Allows the attendant to verify the status of specified trunk.

The TRG key (programmable key) must be assigned to the attendant console.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation", PITS Programming Password	9-D-1.03	10-C-5.00

Attendant Management	Reference
TRG key	6-C-10.00

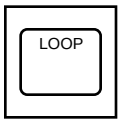
Conditions

The attendant can place a call by specifying a trunk but cannot hold or transfer it.

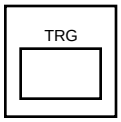
When specified trunk is busy, busy tone sounds.

Verifying a trunk can be done only when a call is placed from SRC side.

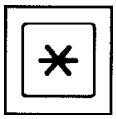
Operation



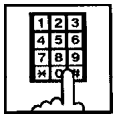
1. Press an idle LOOP key.
   - The SRC indicator lights and dial tone sounds.



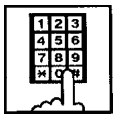
2. Press the TRG key (programmable key).



3. Dial "＊."



4. Dial the four-digit password (PITS programming password). ☛1



5. Dial the desired trunk port physical number (four digits) ☛2
   - Another dial tone sounds, and the specified trunk is seized.

☛1 The PITS programming password is used for PITS programming and Trunk Verify.

☛2 Refer to Section 14-F-4.00 "Testing the Ports" for details about trunk port physical number.

10.00 CO Access Control

Description

The attendant can control CO lines to prevent them from being accessed from extensions by employing CO Management screen.

If CO busy out is assigned to a CO line, both extensions and attendant consoles cannot access the line.
Refer to Section 3-F-8.00 “CO Busy Out” for further information.

If CO access ctrl is assigned to a CO line, extensions cannot access the line.

CO busy out can also be set by dialing the feature number for “Busy Out Trunk.”

Programming

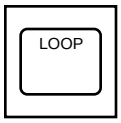
System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (09/11)”, Busy Out Trunk Unbusy Trunk	9-D-6.09	10-C-10.00

Conditions

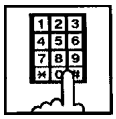
None

Operation

Setting CO busy out by dialing the feature number



1. Press an idle LOOP key.
   - The SRC indicator lights and dial tone sounds.

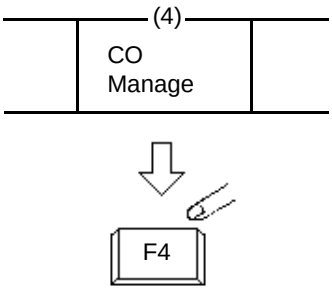


2. Dial the feature number for Busy Out Trunk “78 # ” (default) and trunk port physical number in succession.
   - Confirmation tone sounds and the LOOP key is released automatically.

Note:
To cancel “CO Busy Out,” dial the feature number for “Unbusy Trunk” and trunk port physical number in succession.

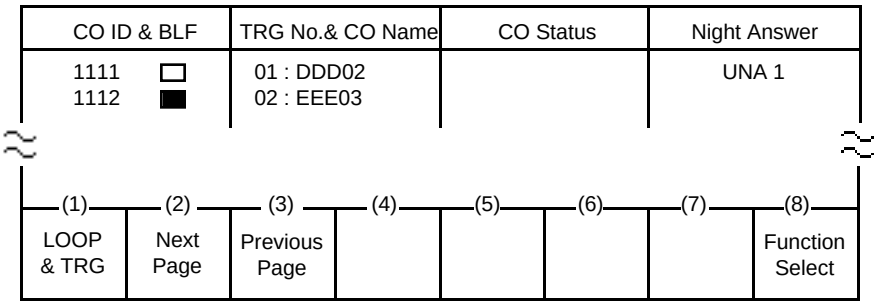
Operation

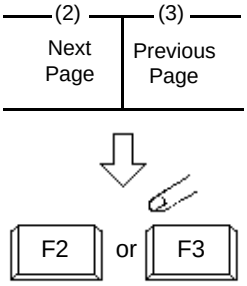
CO access control by employing CO Management screen



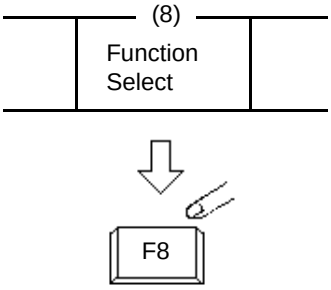
1. Press the F4 key (CO manage).

   • CO Management screen appears on the display.



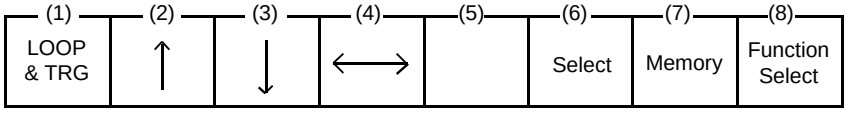


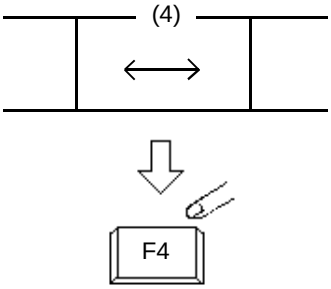
2. By pressing the F2 key (next page) or the F3 key (previous page), obtain the desired screen.



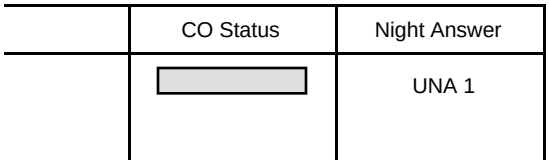
3. Press the F8 key (function select).

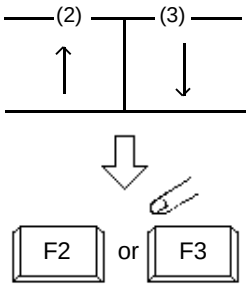
   • The following function field appears.



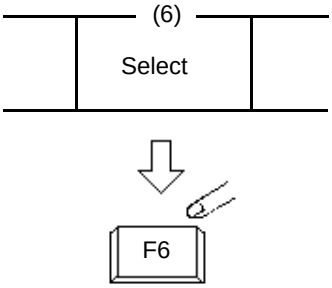


4. By pressing the F4 key (↔), move the cursor to the CO status field.

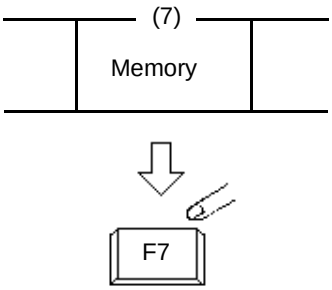




5. Move the cursor to the target CO ID by pressing the F2 key (↑) or the F3 key (↓).



6. Select “CO busy out” or “CO access ctrl” by pressing the F6 key (select).
   If ▭ mark is selected, the CO is returned to normal status.



7. Press the F7 key (memory).

   • Entered data is stored.

11.00 Power Failure Operation

Description

At the time of power failure, power is supplied to the attendant console from backup battery of the system.
During power failure, the attendant console can execute any other operations than the operations below:

- Operation using CRT display
- Operation using function keys (F1 through F8).
- Operation using full keyboard.

Programming

None

Conditions

When the backup battery is not provided, the attendant console is not operable.

Call processing is not interrupted when power is failed and when power is restored.

12.00 Intercept Routing-No Answer (IRNA)

Description

If an incoming CO call is not answered in a specified period, or if a held incoming CO call is not answered in a programmed period after Held Call Reminder or Unscreened Call Transfer Recall or Unattended Conference Recall, the calls can be transferred to an Attendant Console programmed.
The destination of Intercept Routing during day and night are assigned in “Group-Trunk Group”, Intercept Routing (Day) and Intercept Routing (Night) on a trunk group basis.
Set the time taken to start Intercept Routing in “System-System Timer”, Intercept Routing Time-Out (System) and Intercept Routing Time-Out (DISA) for DISA calls.
For details of DISA, refer to Section 3-D-2.02 “Direct Inward System Access (DISA)”.

Programming

System Programming	Reference	
	VT	Dumb
“Group-Trunk Group”, Intercept routing (Day) Intercept routing (Night)	9-E-1.01	10-C-14.00
“System-System Timer”, Intercept Routing Time-Out (System) Intercept Routing Time Out (DISA)	9-D-3.00	10-C-6.00

Conditions

Intercept Routing-No Answer works for the following incoming CO calls.

1. All incoming CO calls other than calls placed on DIL1 : N, Private CO, Attendant Consoles, Remote and UCD
2. Transfer Recall calls (except those to Attendant Consoles)
3. Held Call Reminder calls (except those to Attendant Consoles, calls on Exclusive Hold, calls on hold on Private CO lines)
4. An incoming outside call routed via DISA/ DID which comes in on an extension in DND mode.

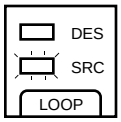
Call Forwarding and Do not Disturb are not effective for this function.

If the destination is not currently available to receive the transferred call, Intercept Routing does not work. However, Hunting function becomes active, if programmed.

If the destination extension of direct dialing-in CO calls is in the data line security mode, IRNA feature does not work on it.
Refer to Section 4-I-6.00 “Data Line Security” for further information.

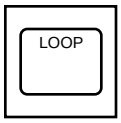
Operation

Answering an incoming call from trunk, un-screened call transfer recall, Held Call Reminder, or call park recall



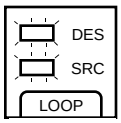
1. The SRC indicator is flashing.

2. Answer the incoming call by pressing the ANSWER key or the LOOP key.



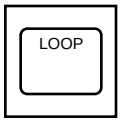
- The SRC indicator of the LOOP key changes from flashing to being lit.

Answering Unattended Conference Recall



1. Both SRC, DES indicators are flashing (SRC, DES are both CO lines).

2. Answer the calls by pressing the ANSWER key or the LOOP key.



- Both SRC, DES indicators of the LOOP key change from flashing to being lit.

3. Conference call is established. Begin speaking.

- If conference trunk or AGC trunk is not available, the SRC side party is held and conversation continues on the DES side.

13.00 Remote Timed Reminder – One Time

Description

Allows the Operator 1 or 2 (Attendant Console or PITS with display) to set “Timed Reminder” feature to any extension.
(Refer to Section 4-I-3.00, 5-G-3.00 “Timed Reminder.”)
If Timed Reminder with OGM is programmed beforehand, the extension user can hear the wake-up message.
(Refer to Section 3-F-13.00 “Timed Reminder with OGM (Wake-up Call).”)

Programming

System Programming	Reference	
	VT	Dumb
“System-Numbering Plan (09/11)”, Remote Timed Reminder Confirm Remote Timed Reminder Set Remote Timed Reminder Cancel	9-D-6.09	10-C-10.00

Conditions

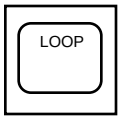
(1)The difference between “Timed Reminder” and “Remote Timed Reminder” is:

	Setting	Validity of the setting
Timed Reminder	by extenison itself	Once or everyday at the programmed time
Remote Timed Reminder	by Operator 1 or 2	Once

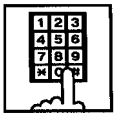
(2)At a single extension, only the latest setting is valid whether it was set by the extension itself (Timed Reminder) or by the Operator 1 or 2 (Remote Timed Reminder).

Operation

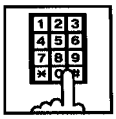
Setting Timed Reminder to an extension



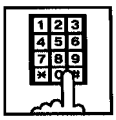
1. Press an idle LOOP key.
   - The SRC indicator lights and dial tone sounds.



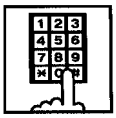
2. Dial the feature number for Remote Timed Reminder Set “7 # 1” (default) and the extension number to be set Timed Reminder in succession.



3. Dial “hour” with two digits: 01 to 12.



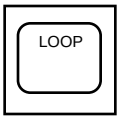
4. Dial “minute” with two digits: 00 to 59.



5. Dial “0” for a.m. or dial “1” for p.m..
   - The LOOP key is released automatically and the following message appears on the Message line.

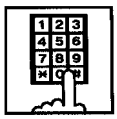
Message: Alarm Ext. 100 10:00 AM

Canceling Timed Reminder set to an extension



1. Press an idle LOOP key.

   • The SRC indicator lights and dial tone sounds.

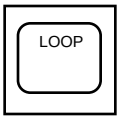


2. Dial the feature number for Remote Timed Reminder Cancel “7#” (default) and the extension number to be canceled Timed Reminder in succession.

   • The LOOP key is released automatically and the following message appears on the Message line.

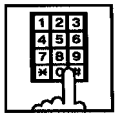
Message: Alarm Cancelled Ext. 100

Confirming the assigned alarm time



1. Press an idle LOOP key.

   • The SRC indicator lights and dial tone sounds.



2. Dial the feature number for Remote Timed Reminder Confirm “7* 0” (default) and the extension number to be confirmed the setting in succession.

   • The LOOP key is released automatically and the following message appears on the Message line.

Message: Alarm Ext. 100 10:00 AM

When no time is set:

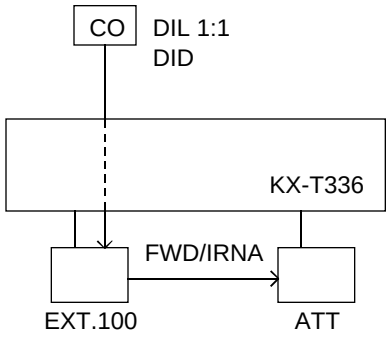
Message: Alarm Not Stored Ext.100

14.00 Call Display at Attendant Console

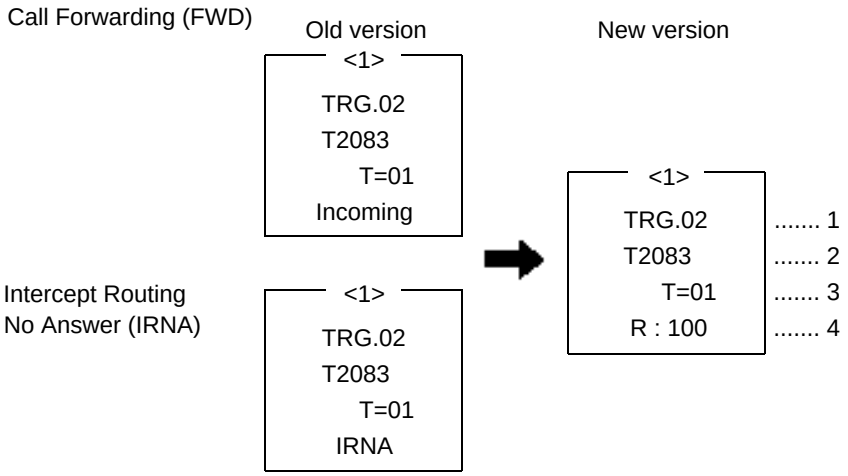
Description

Display of the following calls directed to an Attendant Console has been changed.

Call Forwarding and IRNA



Call Display at SRC area of a LOOP key



Item No.	Display	Description
1	TRG.02	The call is forwarded/redirected by IRNA to an Attendant Console via a CO line of Trunk Group (TRG) 02.
2	T2083	Name of a CO line mentioned in Item 1.
3	T=01	Toll Restriction Level of TRG.02 is 01.
4	R:100	The call is forwarded/redirected by IRNA to an Attendant Console from Ext.100.

Programming

None

Panasonic

KX-T336 SYSTEM

System Reference Manual
Vol. 2

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Contents

Section 7

Preparation for Programming and Maintenance

VT220 and Compatibles

(Section 7)

Preparation for Programming and Maintenance

VT220 and Compatibles

Contents

A. Introduction

1.00 On-Site Administration

Description

You can administer the system programming and maintenance of the system using a VT220 (100), Compatibles. For details about communication parameters, refer to Section 9-D-7.00 “Communication Interface.”

System Security

For security reasons, access to the administration capabilities of the system is controlled by a password. To prevent an unauthorized person from learning the password, the password characters are not displayed when they are entered.

Password

To gain access to the system administration feature, a valid password (four-digit, alphanumeric characters*) must be entered. To be recognized by the system, a password must be entered exactly as stored in memory. Factory programmed eight passwords are provided from the first to fourth levels for on-site operation and the first to fourth levels for operation from a remote location.

The followings are the functions available to each password level.

The 1st Level : To access to all levels
The 2nd Level : To set system level parameters.
The 3rd Level : To set port level parameters.
The 4th Level : To read parameters only.

When you log in to the system using the first level password, you can execute all functions, but are increasingly restricted when entering levels 2, 3 and 4.
Passwords are originally factory programmed, but may be changed when logging in to the system by entering the first level password.
Refer to Section 7-E “Changing Password.”

* Alphanumeric characters
  ASCII codes except special codes (DEL, ESC etc.) But entering “/” “~” are not available, because these characters cannot be displayed on the LCD of PITS.
  Both uppercase and lowercase characters can be recognized by the system.

Successful Login

When you enter the correct password, the terminal displays the Main Menu screen from which you can select administration functions. By selecting an item from the Main Menu, you enter a system programming area and can access specific system parameters and features.

2.00 System Administration from a Remote Location

Description

From a remote location, you can execute system programming, diagnosis and traffic measurements using a VT220 (100), Compatibles.
For details about communication parameters, refer to Section 9-D-7.00 “Communication Interface.”

Conditions

- RMT card (Modem) must be installed in the system and register the telephone number of modem in the System-Operation “Remote Directory Number” (FDN: three or four digits) for accessing the remote administration feature.
  For the assignment of Remote Directory Number, refer to Section 9-D-1.02 “Operation (2/3).”
- For remote access, a data terminal and modem are required at a remote location.
- Factory programmed four types of password from the first to fourth levels for remote operation are provided. Passwords are originally factory programmed, but may be changed at any time. (Refer to Section 7-E “Changing Password.”)
- You can execute remote system administration during on-line communication mode only. But when you load the system programming data from a remote location, the system shifts to off-line communication mode automatically.
  Refer to Section 17-B-2.02 “Loading Procedure” for further information.
- Starting up system administration from a remote location can be done only in Dumb mode, so to enter VT mode, press [CTR] key + [V] key simultaneously at the dumb mode initial screen.

Operation

Starting up system administration from a remote location can be done in the following ways:

- Dial “Remote Directory Number” using Direct Inward System Access (DISA) feature.
  For further information about “Remote Directory Number,” refer to Section 9-D-1.02 “Operation (2/3).”
  For further information about DISA feature, refer to Section 3-D-2.02 “Direct Inward System Access (DISA).”
- Program DID feature so that the incoming telephone number is converted to the “Remote Directory Number.”
  For further information about DID feature, refer to Section 3-D-2.03 “Direct Inward Dialing (DID).”
- Assign that a call from a remote-location can access the Remote Administration feature automatically using DIL (1:1) feature.
  For further information about DIL (1:1) feature, refer to Section 3-D-2.01 “Direct In Line (DIL).”
- Remote access by operator transfer
  The call from a remote location can be made on any trunk into the system, and be answered by the operator.
  The call is then placed on hold and the Remote Directory Number of the system dialed is received. The operator transfers the call after receiving the modem answer tone. The caller at a remote location will then hear the modem answer tone and can proceed with sign-on.
  Refer to Section 4-F-1.05 “Unscreened Call Transfer to Remote,” for further information.

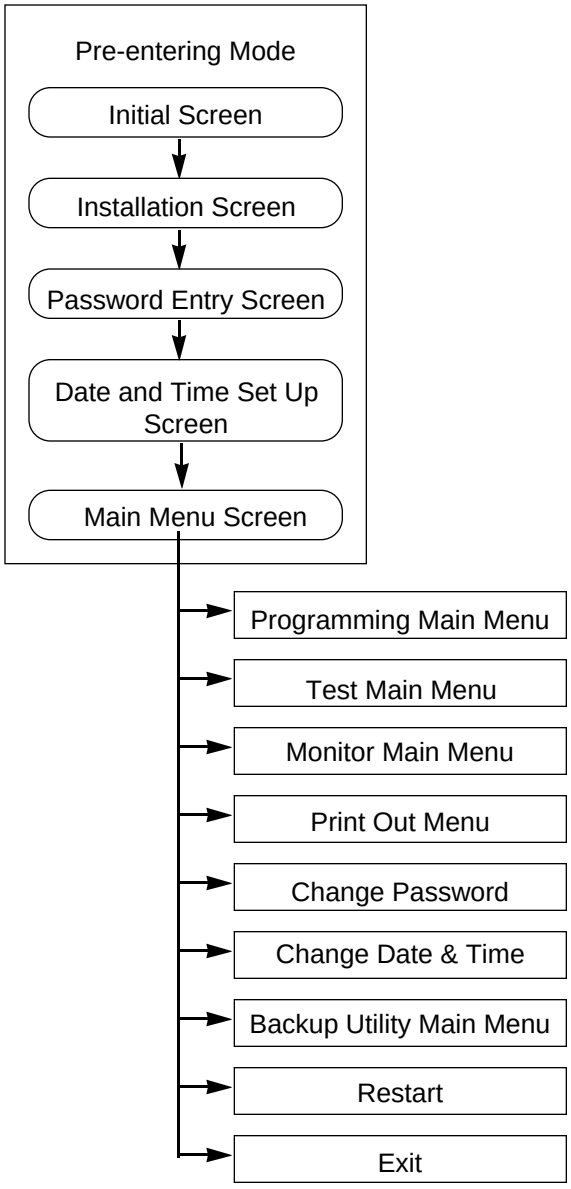
When the system administrator at a remote location accesses the system remote administration feature, the following message appears on the display of operator's telephone if display is provided:

1234: RMT Access

After you log in to the system from a remote location, you can operate the system in the same way as if you were on-site.
Only one system administration terminal can be connected to the system at a time.

3.00 Mode Structure

The administration using VT compatible terminal consists of the following modes.



Pre-entering Mode
Consists of five screens starting from Start Screen through Main Menu Screen.
For further details, refer to Section 7-B “Pre-entering Mode.”

Programming Main Menu
Consists of 10 submenu screens and allows you to administer system-wide programming parameters.
For further details, refer to Section 7-C-4.00 “Programming Main Menu.”

Test Main Menu Screen
Enables you to test the cards, ports, PIT’s and Attendant Consoles in on-line communication mode.
For further details, refer to Section 7-C-5.00 “Test Main Menu.”

Monitor Main Menu
Consists of three menus and allows you to see error log, device status and traffic measurements.
For further details, refer to Section 7-C-6.00 “Monitor Main Menu.”

Print Out Menu
Allows you to print out the system programming parameters and traffic information.
For further details, refer to Section 7-C-7.00 “Print Out.”

Change Password
Enables you to change the password for “On Site” and “Remote.”
For further details, refer to Section 7-C-8.00 “Change Password.”

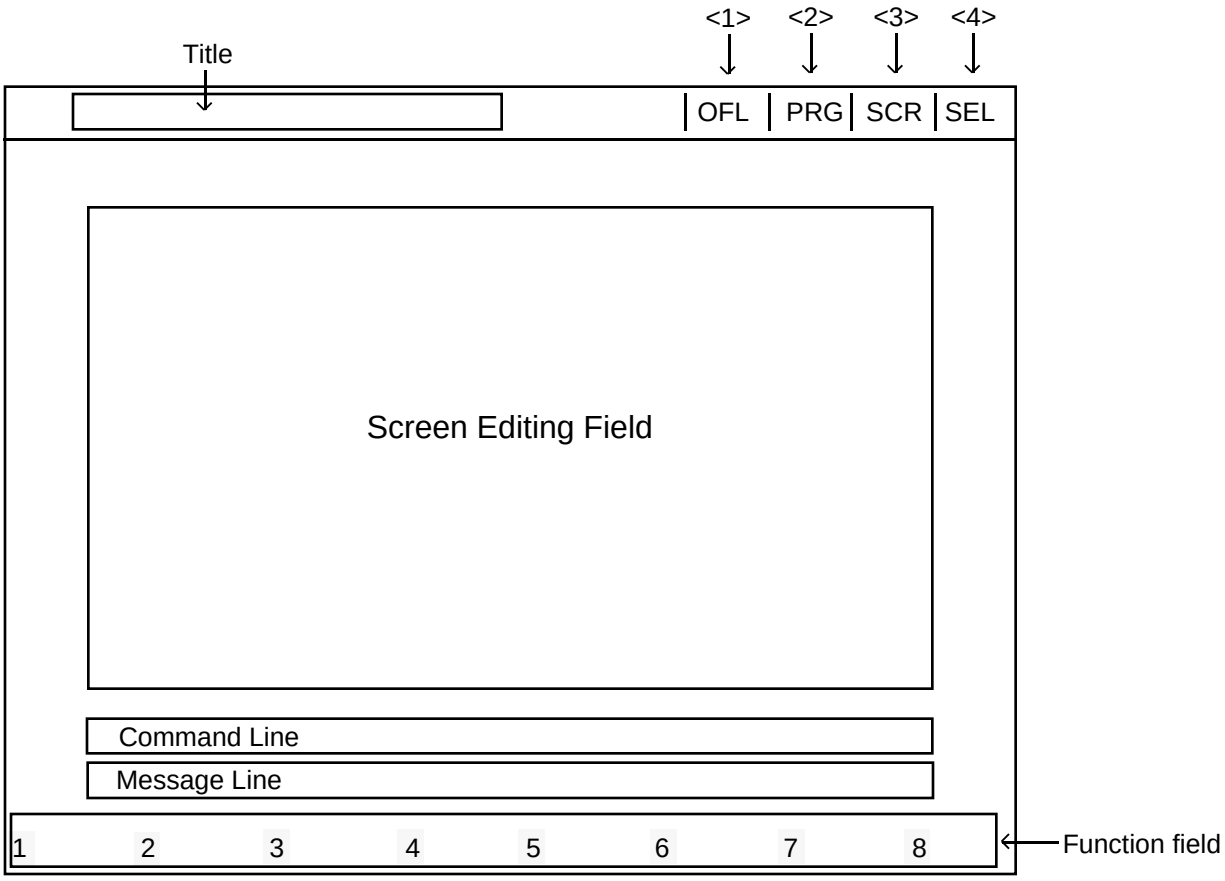
Change Date & Time
Enables you to change the date and time.
For further details, refer to Section 7-C-9.00 “Change Date and Time.”

Backup Utility Main Menu
Consists of two submenus, and enables you to save or load the system programming data and attendant console database.
For further details, refer to Section 7-C-10.00 “Backup Utility.”

Restart
Functions same as if you press the RESET button.
For further details, refer to Section 7-G-2.00 “Restart.”

Exit
Enables you to return to the initial screen.
For further details, refer to Section 7-G-1.00 “Exit.”

4.00 Layout of Screen



<1> Displays On-line or Off-line communication mode.

Display	Mode
ONL	On-line
OFL	Off-line

<2> Displays the stage selected in the main menu screen.

Display	Stage
PRG	Programming
TST	Test
MON	Monitor
PRT	Print Out
PSW	Change Password
D&T	Change Date & Time
BCK	Backup Utility

<3> Displays whether the cursor is in the Screen Editing Field or in the Command Line.

Display	Location
SCR	Screen Editing Field
LIN	Command Line

<4> Displays the entry method, select or direct.

Display	Entry Method
SEL	Select value by space key
DIR	Enter value directly

Title
Displays the title of the programming screen.

Screen Editing Field
Used for displaying or entering data.

Command Line
When pressing the menu number or function key, displays the messages to execute the function.

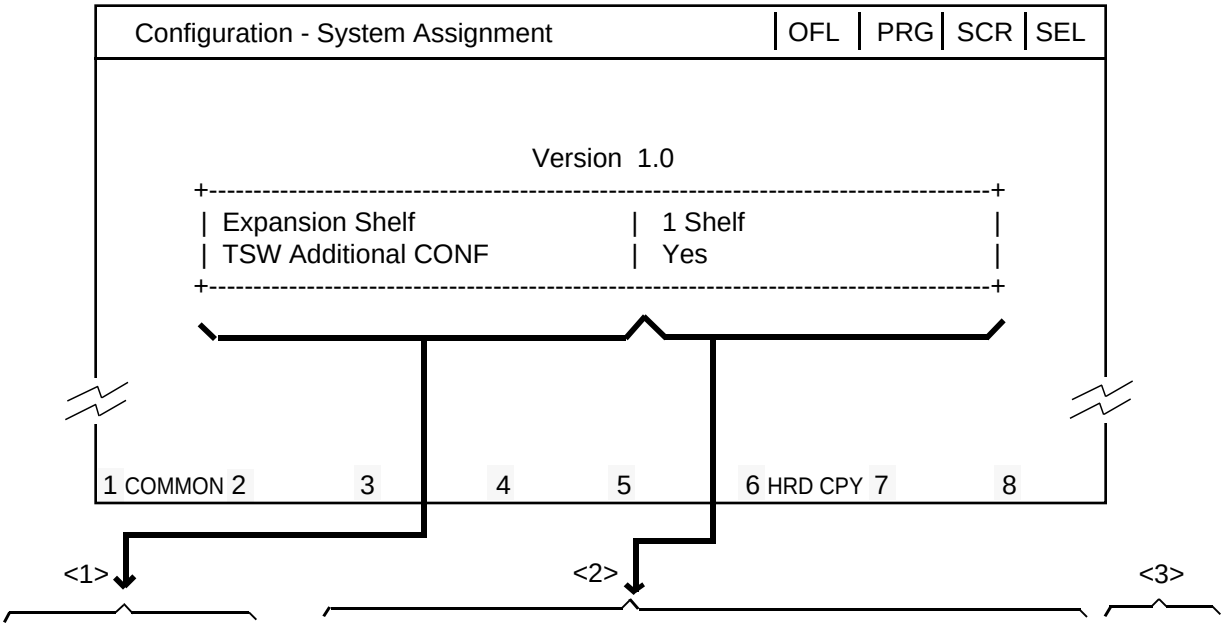
Message Line
Displays messages such as error messages in programming.

Function Field
Displays each function key.

5.00 Correspondence between Setting Screen and Explanation Table

When there are some assigning items in the screen, the explanation table describes the items in detail.

<Example> Configuration-System Assignment screen



Assigning Items	Default	Selection of Value	Reference
Expansion Shelf	Automatic set	No : expansion shelf not installed 1 Shelf : expansion shelf 1 available 2 Shelves: both expansion shelves 1 and 2 available	1-E-2.00
TSW Additional CONF	Automatic set	Yes : conference expansion card installed No : conference expansion card not installed	4-G-5.01 4-G-5.02 5-E-1.00 6-H-1.00

The relationship between the screen and the explanation table is shown by the arrows above.

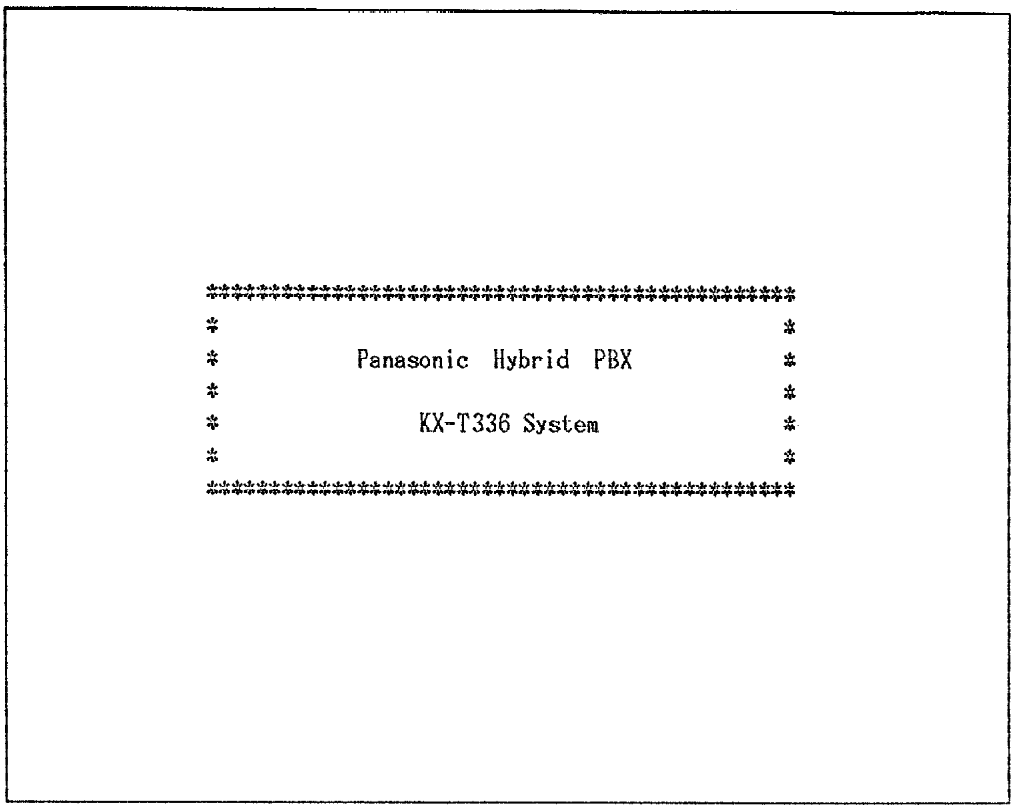
<1> Shows the assigning items which depend on the screen items.

<2> Shows the optional and default values.

<3> Shows the reference for the assigning items.
For example, interprets “4-G-11.00” as follows. “4” indicates section number, “G” indicates subsection number and “11.00” indicates title number.

B. Pre-entering Mode

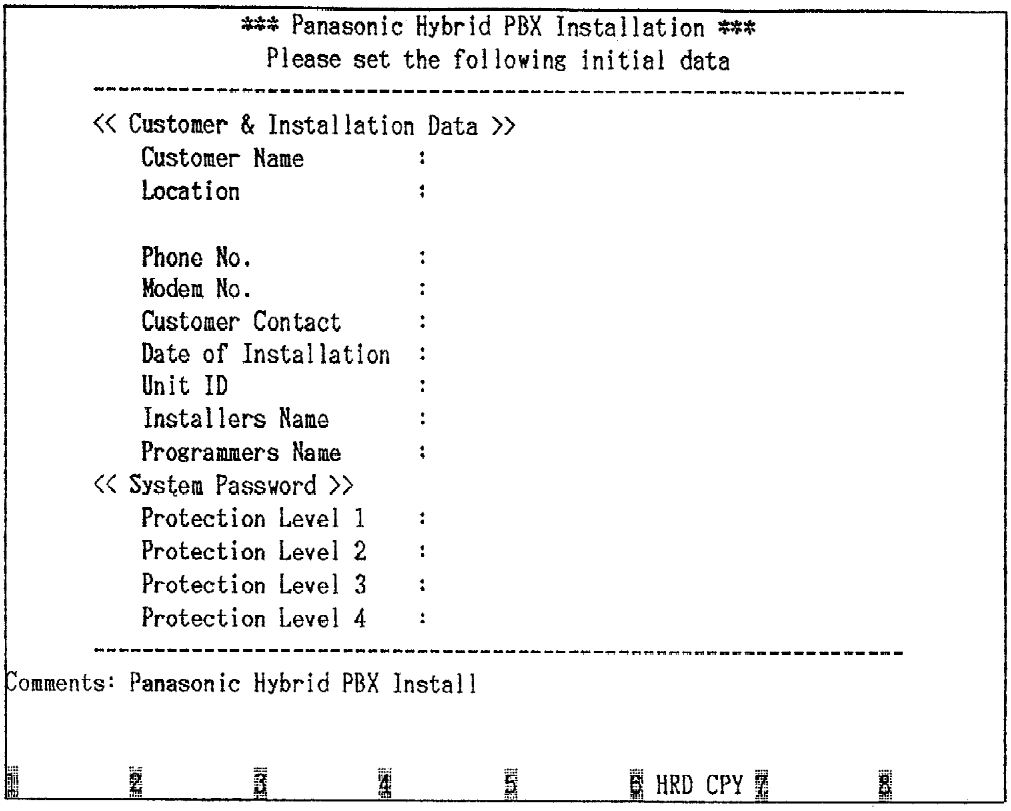
1.00 Initial Screen



Summary

This screen is displayed first when administration is activated.
To conclude this screen and advance to the next screen, press the RETURN key.

2.00 Installation Screen



Summary

A screen for setting various data relating to the installation of the system, and for setting system passwords.
This screen does not appear when administration data has already been assigned in on-line mode or if you start up the system when CPU Operation Switch (Mode) is set to 0 to 4 and 8 to 9. Refer to Section 2-F-2.00 “CPU Rotary-Switch Features” for details.
To advance to the next screen without any entry, press the PF2 key.

For storing the entered parameters, press the PF2 or the PF4 key. For storing operation, refer to Section 7-H “Key Functions.”

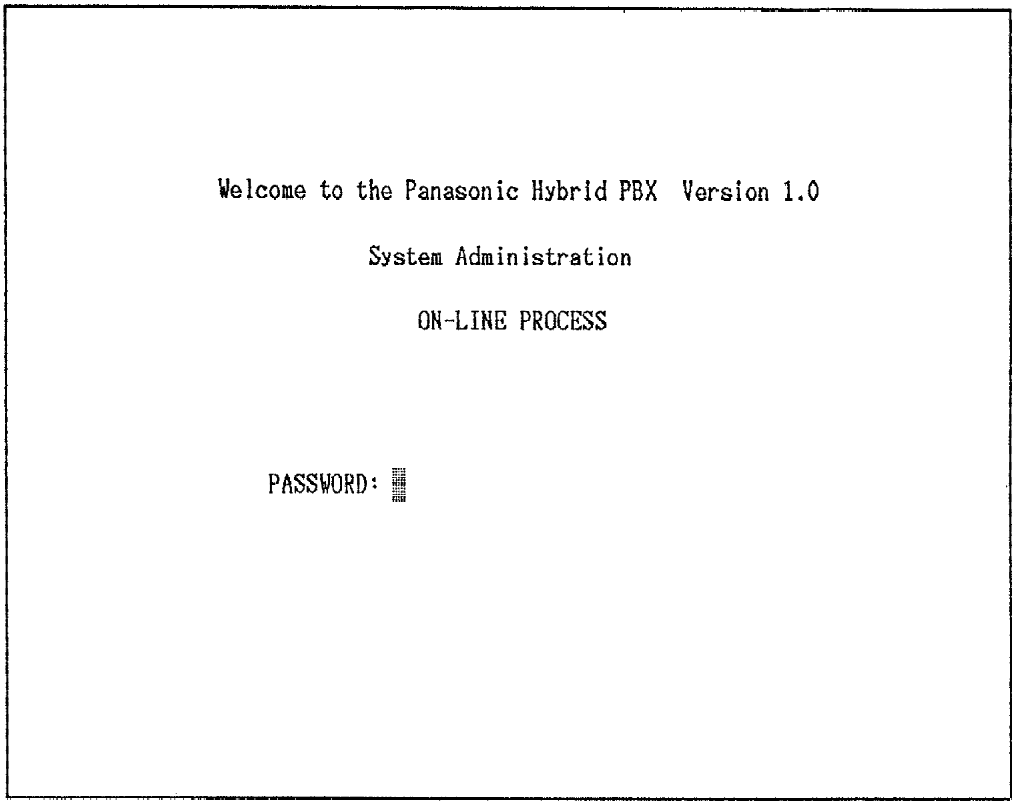
Assigning Items	Default	Selection of Value
<Customer & Installation Data>	blank	
Customer Name		Up to 32 letters, numbers or marks
Location		Up to 64 letters, numbers or marks
Phone No.		Up to 16 letters, numbers or marks
Modem No.		Up to 16 letters, numbers or marks
Customer Contact		Up to 32 letters, numbers or marks
Date of Installation		Up to 16 letters, numbers or marks
Unit ID		Up to 8 letters, numbers or marks
Installers Name		Up to 32 letters, numbers or marks
Programmers Name		Up to 32 letters, numbers or marks

Continued

Continued

Assigning Items	Default	Selection of Value
<System Password>		Four digits consisting of letters, numbers or marks
Protection Level 1	LVL 1	
Protection Level 2	LVL 2	
Protection Level 3	LVL 3	
Protection Level 4	LVL 4	
Comments	blank	Up to 70 letters, numbers or marks

3.00 Password Entry Screen



Summary

The screen is for entering passwords which is necessary to enter into system administration mode. Enter the passwords which are assigned in System Password “Protection level 1 to 4” of the installation.

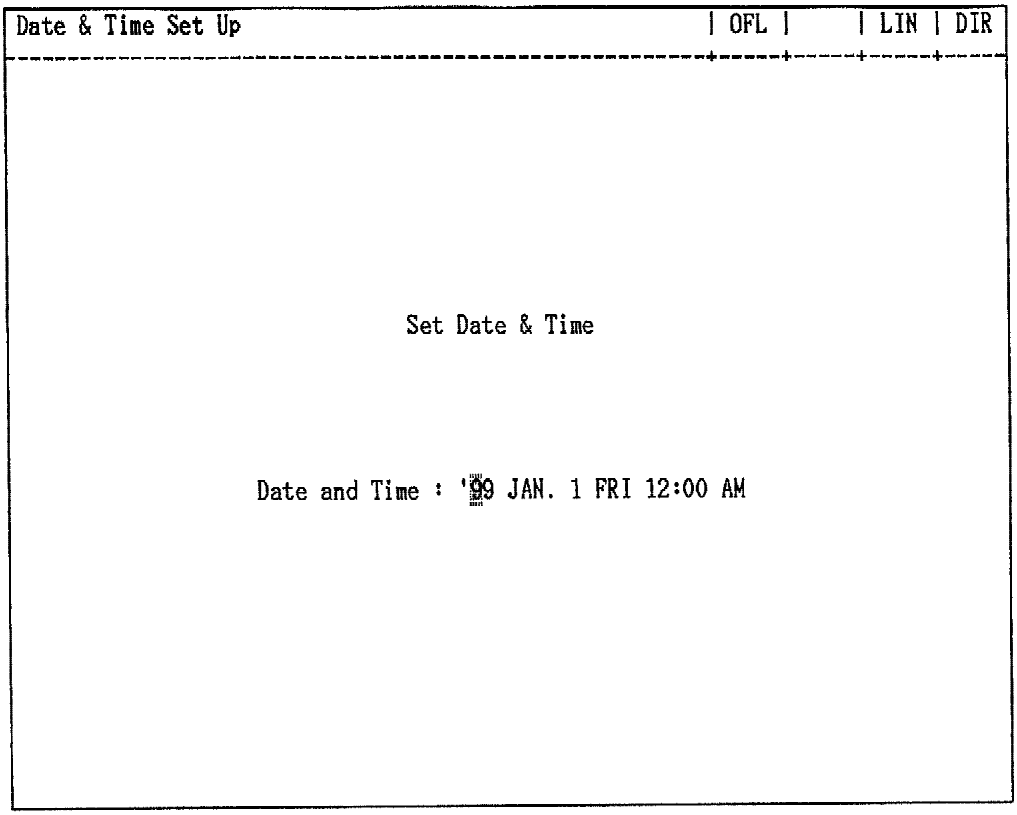
To prevent an unauthorized person from learning the password, the password characters are not displayed when they are entered.

Displays ON-LINE PROCESS screen in on-line mode, and OFF-LINE PROCESS screen in off-line mode.
The above screen appears when the system is in on-line mode.

If no characters are entered within 30 seconds after this screen is displayed, the display returns to the initial screen.

When you enter the correct password and press the RETURN key, the terminal displays the next screen.

4.00 Date and Time Set Up Screen



Summary

A screen for setting the date and time.

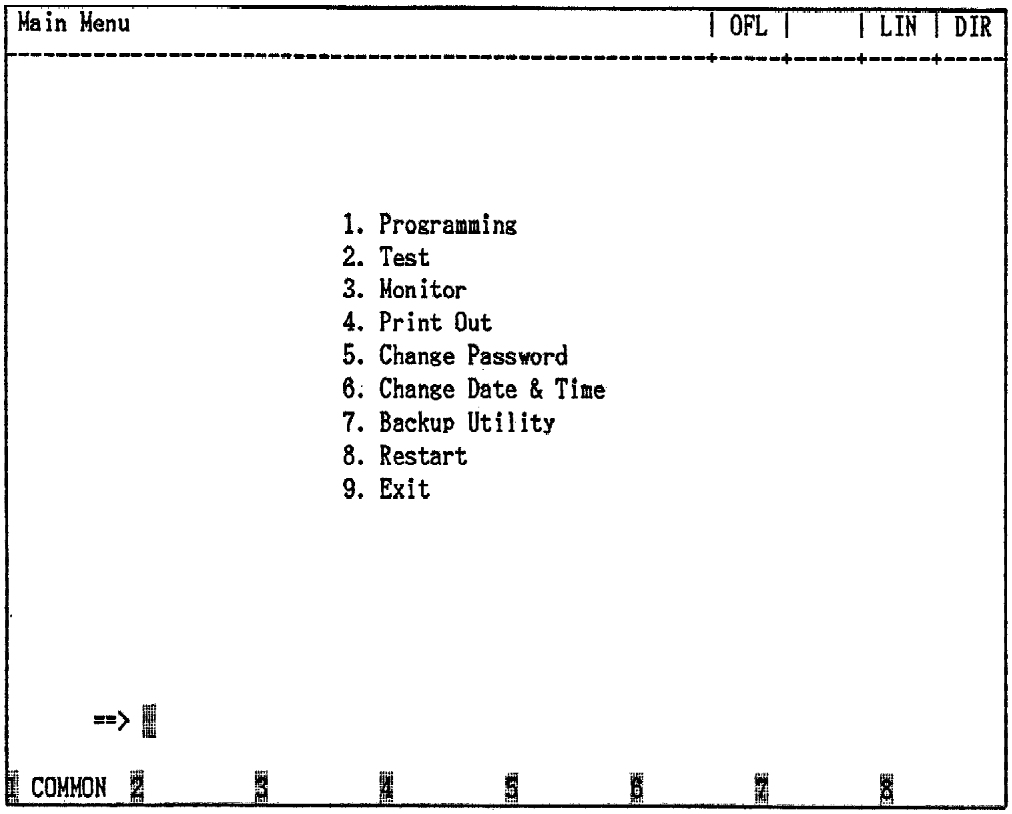
This screen may not appear depending on the setting of the CPU rotary switch. For setting of the CPU rotary switch, refer to Section 2-F-2.00 “CPU Rotary-Switch Features.”

Enter “Year,” “Day,” “Hour” and “Minute” directly and select “Month,” “Day of the Week,” AM/PM” by pressing the space key.

To advance to the next screen without entering the data, press the PF2 key.
To store the entered data, press the PF2 or PF4 key.
For the storing operation, refer to Section 7-H “Key Functions.”

Assigning Items	Default	Selection of Value
Year	99	Last two digits of the year
Month	JAN	JAN/FEB/MAR/APR/MAY/JUN/JUL/AUG/SEP/ OCT/NOV/DEC
Day	1	1 to 31 : day
Day of the week	FRI	SUN/MON/TUE/WED/THU/FRI/SAT
Hour	12	1 to 12 : hour
Minute	00	00 to 59 : minute
Morning/Afternoon	AM	AM : morning PM : afternoon/evening

5.00 Main Menu Screen



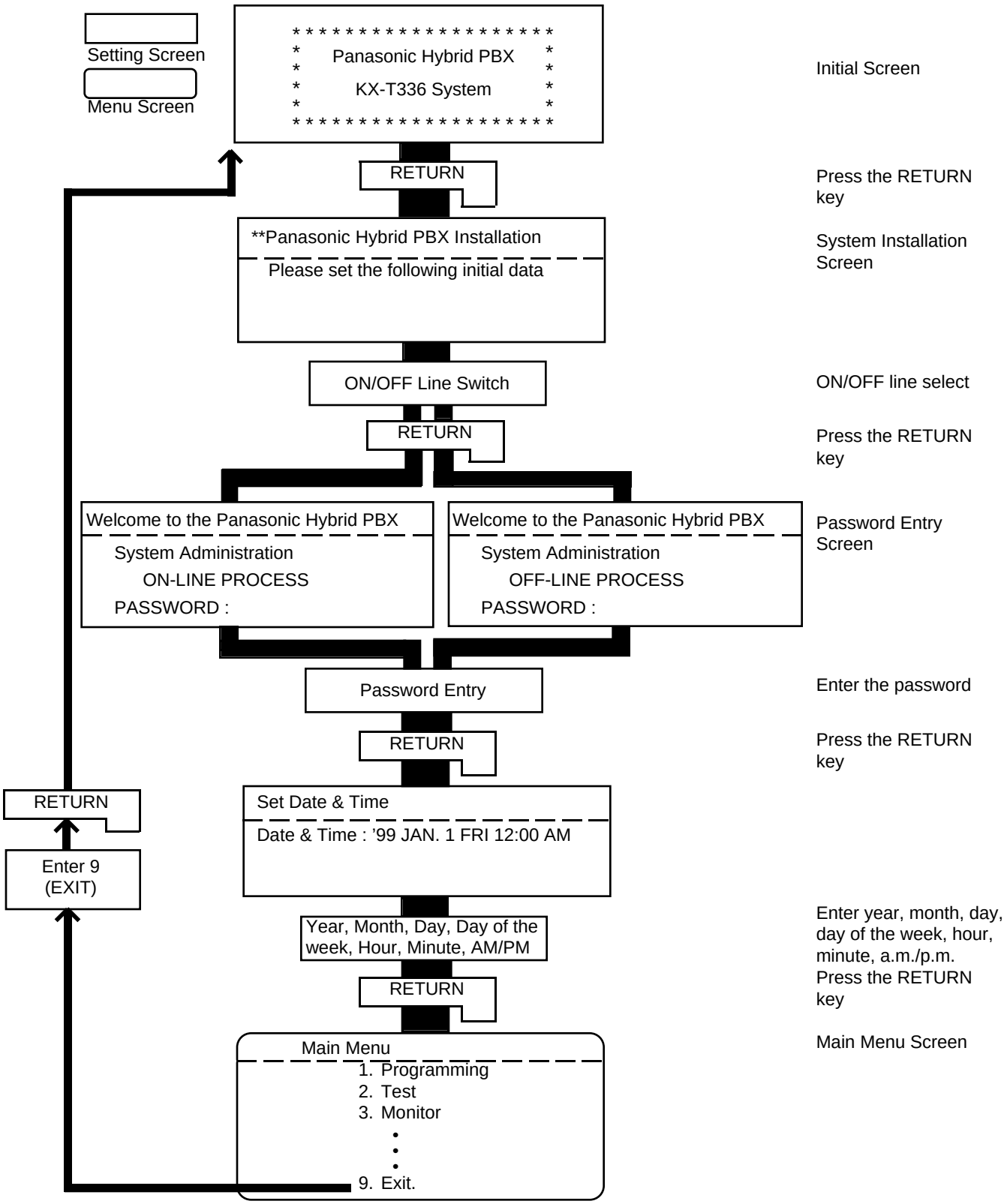
Summary

By selecting an item from the Main Menu, you enter a system programming area and can access specific system parameters and features.

To select an item from the Main Menu, just type the number of the item you want followed by the return key.

Menu	Number	Reference
Programming	1	7-C-4.00
Test	2	7-C-5.00
Monitor	3	7-C-6.00
Print Out	4	7-C-7.00
Change Password	5	7-C-8.00
Change Date & Time	6	7-C-9.00
Backup Utility	7	7-C-10.00
Restart	8	7-C-11.00
Exit	9	7-C-12.00

6.00 Operating Flow Chart



C. Menu Screen

1.00 Introduction

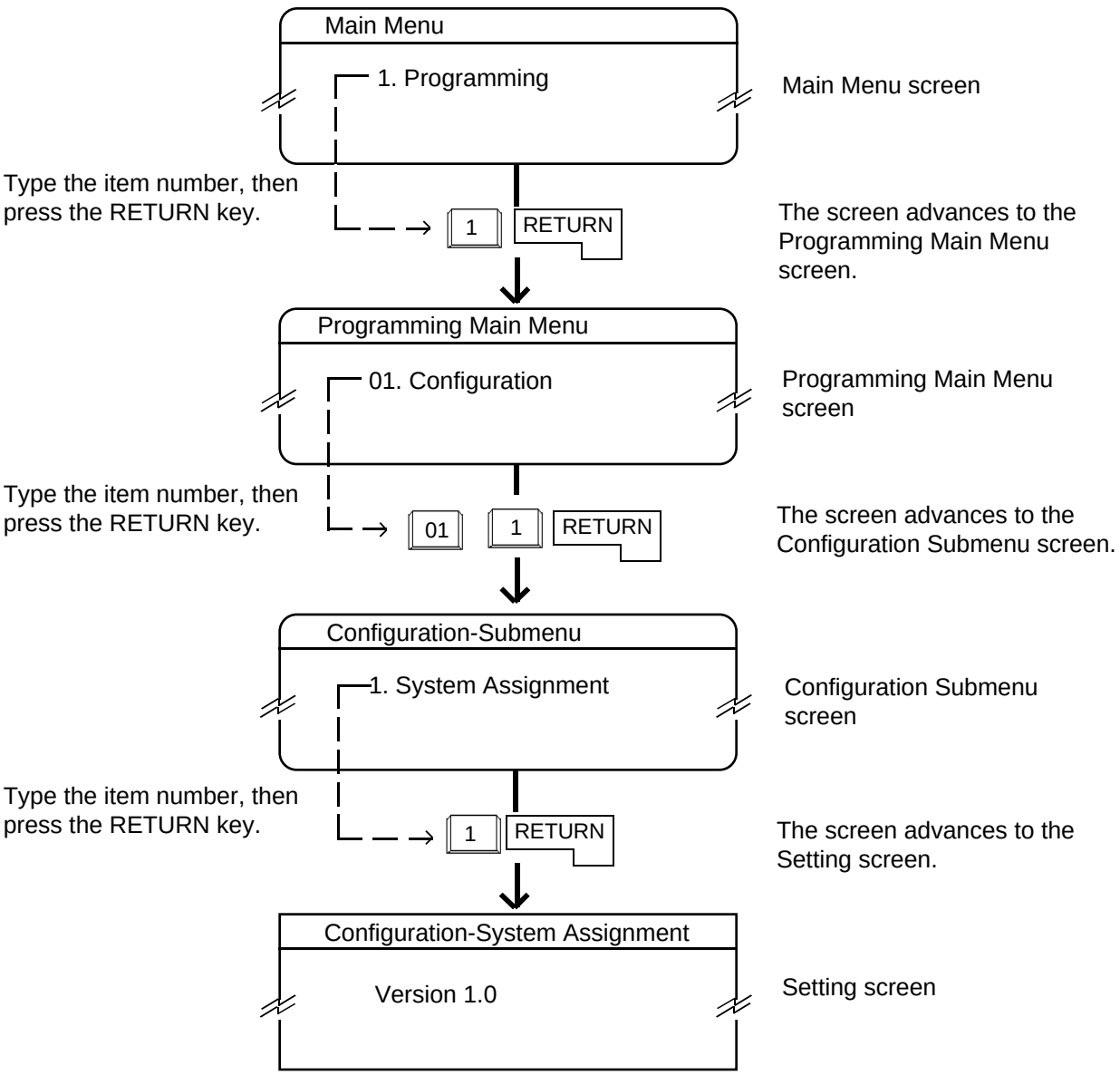
Enables you to assign or change system programming data by selecting the required screen. This section explains the procedures for starting from the menu screen through the programming main menu screen, to the sub menu screen.

2.00 Operation of Switching Screens

(A) Operation
Type the item number on the screen. Then press the RETURN key to advance to the next screen.

(B) Example
The illustration below shows the procedures for selecting a programming screen, starting from the Main Menu screen.

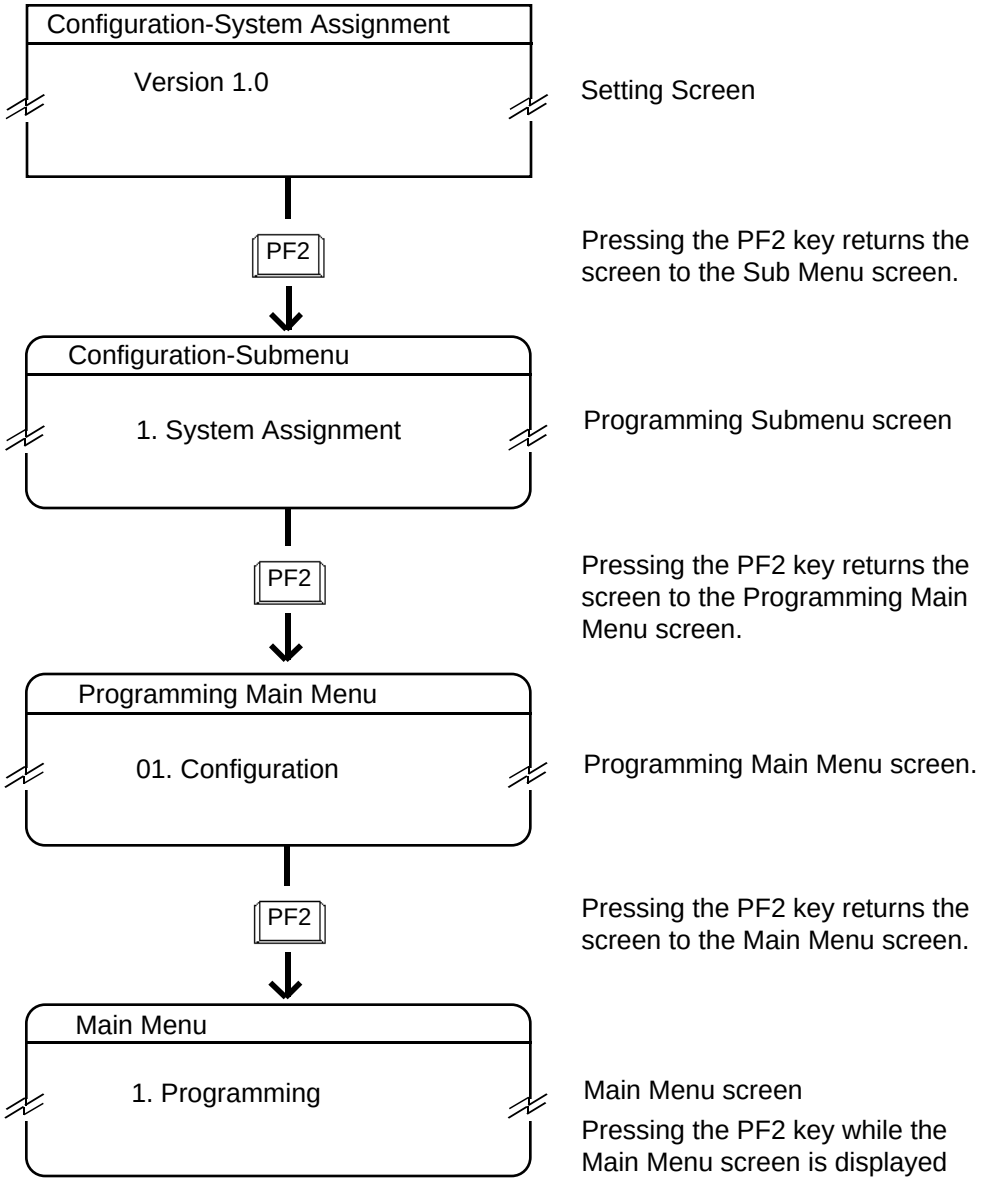
<Example>



3.00 Returning to Previous Screen

To return to the previous screen, press the PF2 key.
The illustration below shows the operation, staring from the Setting Screen and returning to the Main Menu screen.

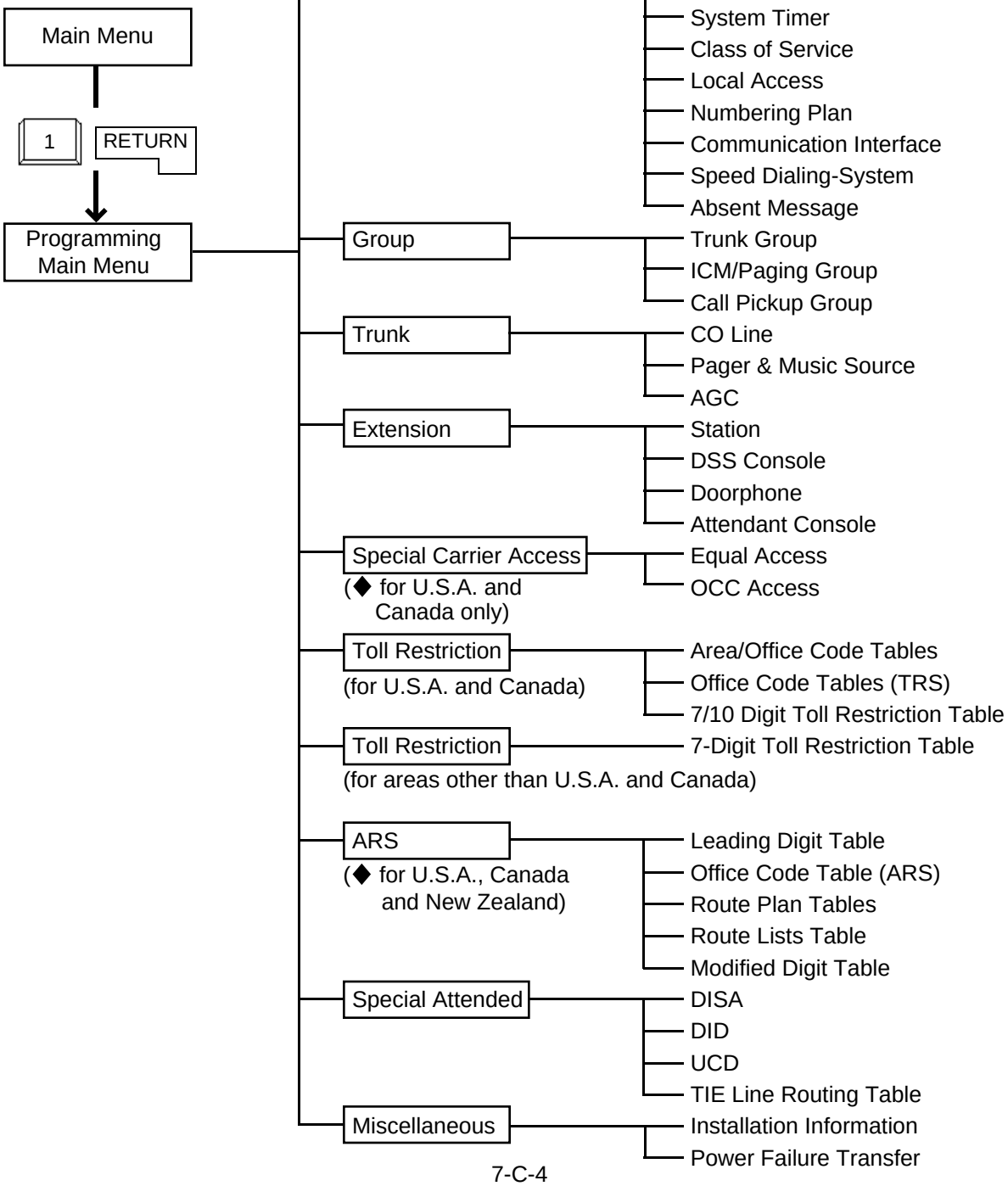
<Example>



4.00 Programming Main Menu

Type “1” and press the RETURN key in the Main Menu screen then the Programming Main Menu is displayed on the screen.

The illustration below shows the submenu screens and the setting screens of Programming Mainmenu.



Configuration
Assigns the data concerning cards, slots, T-1/E-1 channels and DNs (directory numbers).
For further details, refer to Section 9-C "Configuration Screen."

System
Assigns the elemental data common to the whole system.
For further details, refer to Section 9-O "System Screen."

Group
Assigns the data for trunk groups, ICM paging groups and pickup groups.
For further details, refer to Section 9-E "Group Screen."

Trunk
Assigns various parameters for CO lines, external pagers and music sources or tenant number for AGC (Automatic Gain Control).
Refer to Section 9-F "Trunk Screen."

Extension
Assigns the parameters for each extension, DSS consoles, Doorphones and Attendant consoles.
Refer to Section 9-G "Extension Screen."

Special Carrier Access (◆ for U.S.A. and Canada only)
Assigns available trunk groups and parameters necessary for making Equal Access or OCC (Other Common Carrier) Access calls.
Refer to Section 9-H "Special Carrier Access Screen."

Toll Restriction
Assigns parameters for Toll Restriction.
Refer to Section 9-I "Toll Restriction Screen."

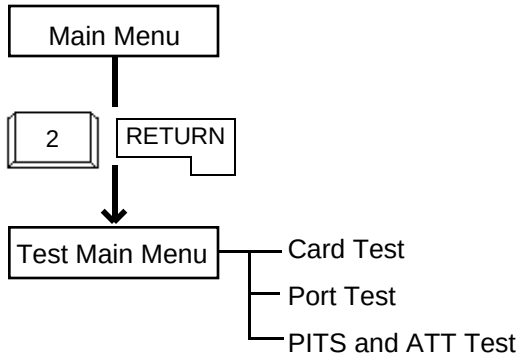
Automatic Route Selection (for U.S.A., Canada and New Zealand)
Assigns the parameters for Automatic Route Selection.
Refer to Section 9-J "Automatic Route Selection Screen."

Special Attended
Assigns parameters for DISA (Direct Inward System Access), DID (Direct Inward Dialing), UCD (Uniform Call Distribution) and TIE Line Routing Table.
Refer to Section 9-K "Special Attended Screen."

Miscellaneous
Assigns the installation information and cards for effectuating Power Failure Transfer.
Refer to Section 9-L "Miscellaneous Screen."

5.00 Test Main Menu

Type “2” and press the RETURN key in the Main Menu screen, then the Test Main Menu is displayed on the screen.
This menu consists of three submenus as illustrated below.



Card Test
Verifies the card conditions and enables you to detect whether troubles are caused by a card or telephone instruments.

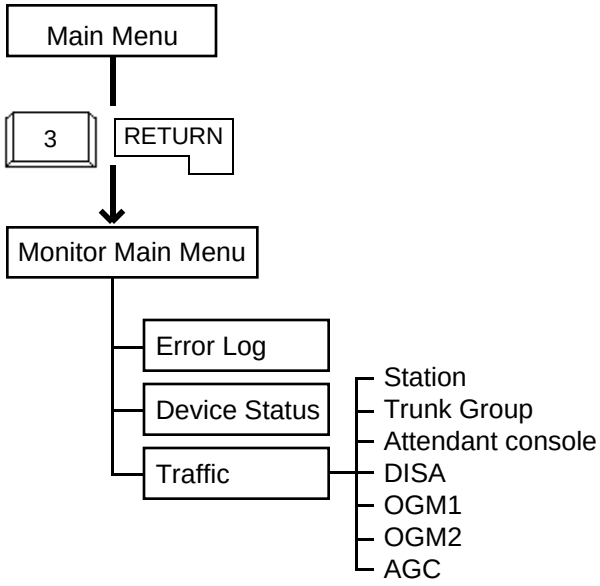
Port Test
Verifies the port conditions and enables you to detect troubles when telephone instruments don’t function well while card condition is good.

PITS and ATT Test
Verifies the conditions of PITS and the Attendant Console (ATT) and enables you to detect troubles when telephone instruments don’t function well while card condition is good.

For further details of testing, refer to Section 14-F “Functional Test by Entering Commands.”

6.00 Monitor Main Menu

Type “3” and press the RETURN key in the Main Menu screen, then the Monitor Main Menu is displayed on the screen.
The illustration below shows the submenu screen and the setting screens.



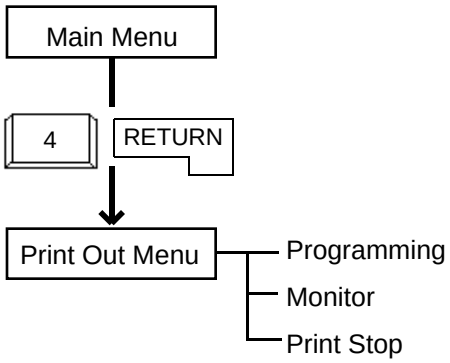
Error Log
Displays up to 15 major and minor alarms and up to 15 light alarms.
For further details, refer to Section 14-G-2.00 “Error Log screen.”

Device Status
Displays the status of the system, cards, ports and the conference trunk.
For further details, refer to Section 14-G-3.00 “Device Status screen.”

Traffic
Displays traffic measurements of extensions , trunk groups, attendant consoles and resources (DISA, OGM1, OGM2, AGC).
For further details, refer to Section 14-G-4.00 “Traffic Submenu screen.”

7.00 Print Out

Type “4” and press the RETURN key in the Main Menu screen, then the Print Out Menu screen is displayed on the screen.
This screen consists of the following three setting screens.



Programming
Programming Main Menu for printing out appears on the screen.

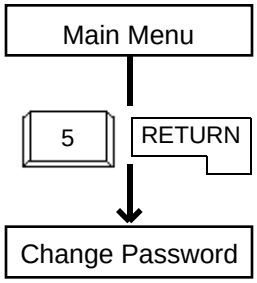
Monitor
Monitor Main Menu for printing out appears on the screen.

Print Stop
Enables you to stop printing.

For further details of printing out operations, refer to Section 7-D “Printing Out.”

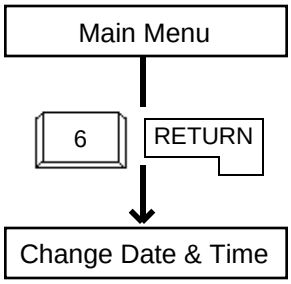
8.00 Change Password

Type “5” and press the RETURN key in the Main Menu screen, then the Change Password screen is displayed on the screen.
Allows you to change passwords for “On-Site operation” and “Remote operation” respectively.
For further details, refer to Section 7-E “Changing Password.”



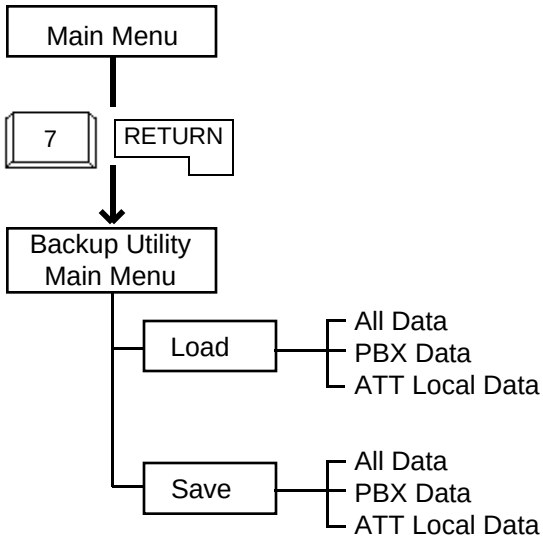
9.00 Change Date and Time

Type “6” and press the RETURN key in the Main Menu screen, then the Change Date & Time screen is displayed which is same as the Date & Time Set Up screen in pre-entering mode. However, you can change the date and time anytime in this screen.
For further details, refer to Section 7-F “Changing Date and Time.”



10.00 Backup Utility

Type “7” and press the RETURN key in the Main Menu screen, then the Backup Utility Main Menu is displayed on the screen.
The illustration below shows the submenu screens and the setting screens.



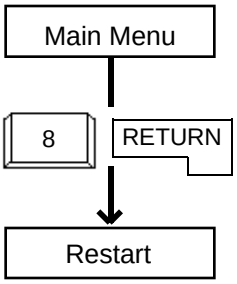
Load
Loading the system programming data and attendant console database from backup device to the system can be done during off-line mode only.

Save
Saving the system programming data and attendant console database from the system to the backup device can be done during on-line mode as well as off-line mode.

For further details of Backup Utility, refer to Section 16 “Backup Utility-On Site.”

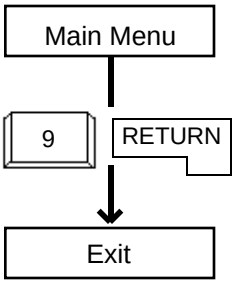
11.00 Restart

Type “8” and press the RETURN key in the Main Menu screen initializes the system and the initial screen is displayed, the result is the same as if you press the RESET button.
For further details, refer to Section 7-G-2.00 “Restart.”



12.00 Exit

Type “9” and press the RETURN key in the Main Menu screen, then the initial screen is displayed.
Refer to Section 7-G-1.00 “Exit.”



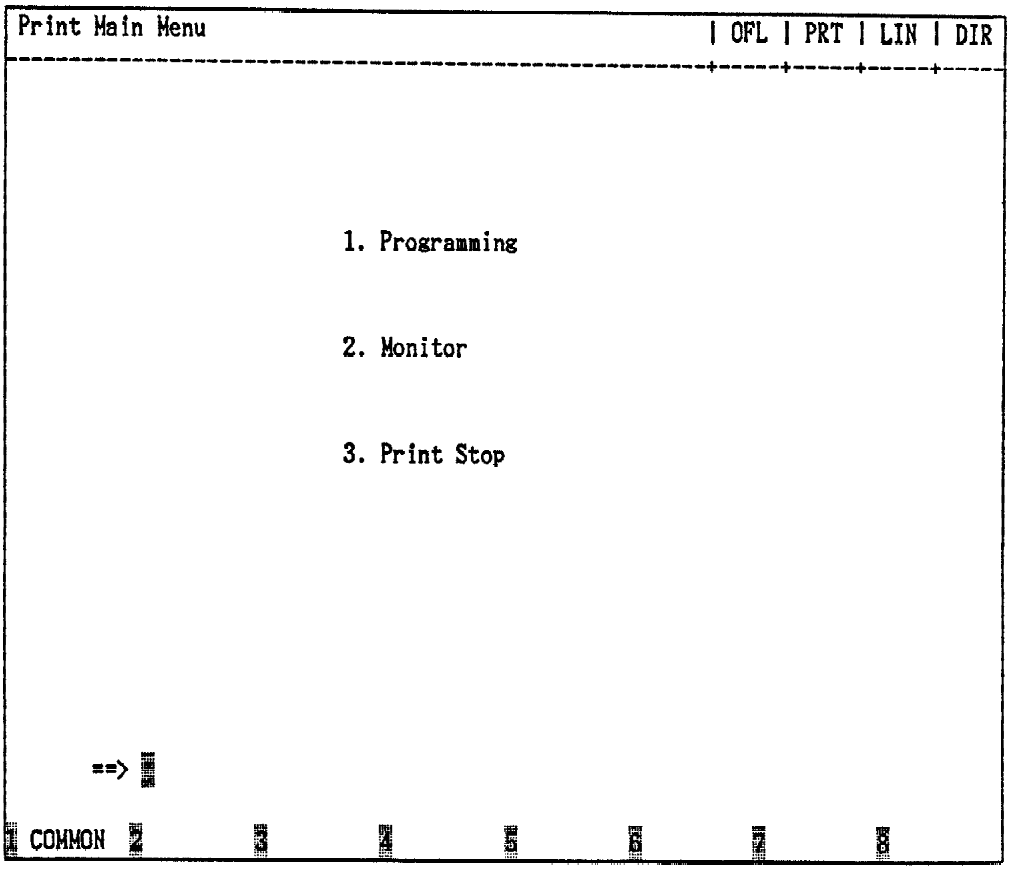
D. Printing Out

Description

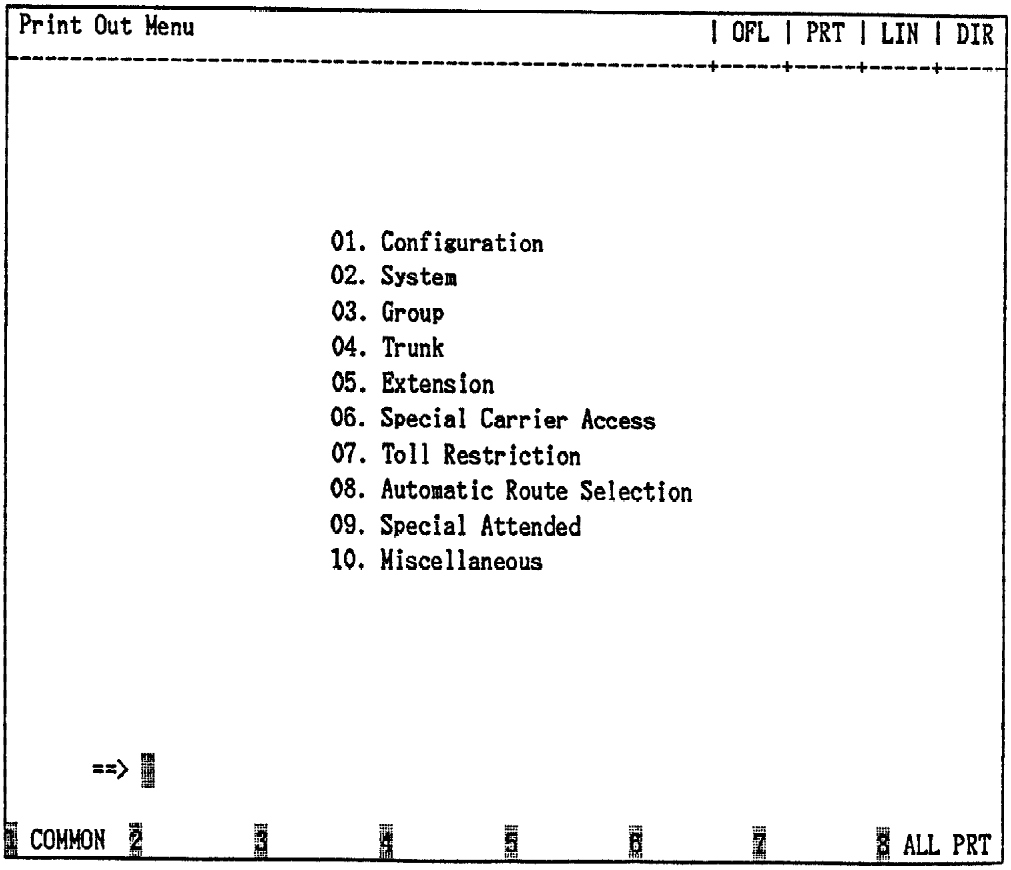
Enables you to print parameters of programming and monitor.
"System-Operation", SMDR should be assigned to "Yes."
Refer to Section 9-D-1.02 "Operation (2/3)" for the assignment of SMDR.
Connect your printer to SIO#2 port on the main unit of the system.
Refer to Section 9-D-7.00 "Communication Interface" for information about communication parameters.

Operation

1. When the following Print Out Menu screen appears, type "1" for Programming submenu screens.
   Type "2" for Monitor submenu screens, and "3" for stop printing. When you want to stop printing, return to this screen and type "3."



For example, when you select “1”, the following Print Out Menu screen appears.



2-1 When you want to print all programming, press the F8 (ALL PRT) key.

2-2 When you want to print each of the screen, press the key of the desired screen and the RETURN key. The submenu screen appears.

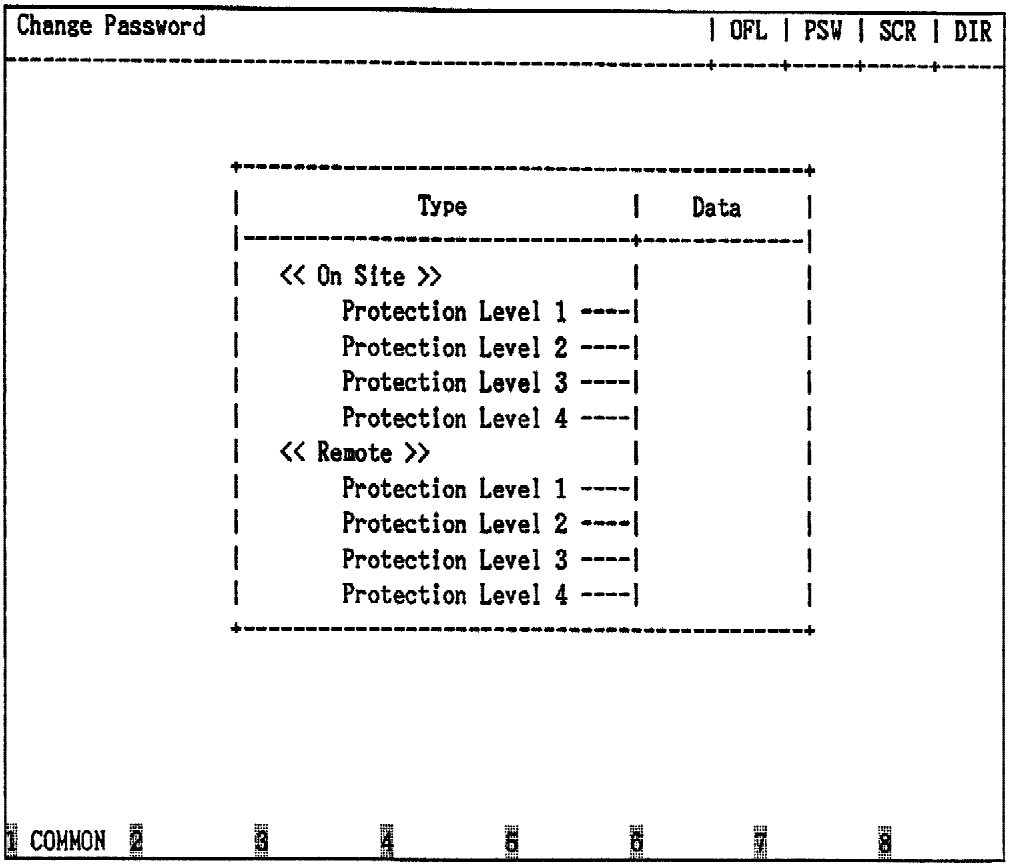
Note : In the following programming submenu screens, specifying the screen number is available.

- Class of Service
  ==> Class of Service No. (01-32) = [ ]
- Trunk Group
  ==> Trunk Group No. (01-16) = [ ]
- CO Line
  ==> Trunk Equipment No. (Physical No.) = [ ]
- Station
  ==> Station Equipment No. (Physical No./DNxxxx) = [ ]
- DSS Console
  ==> Station Equipment No. (Physical No.) = [ ]
- Equal Access
  ==> Equal Access No. (1-4) = [ ]
- OCC Access
  ==> OCC Access No. (1-4) = [ ]
- Area/Office Code Table (TRS)
  ==> Area/Office Code Table No. (1-8) = [ ]
- Office Code Table (TRS)
  ==> Office Code Table No. (01-64) = [ ]
- Office Code Table (ARS)
  ==> Office Code Table No. (01-32) = [ ]
- Route Plan Table
  ==> Route Plan Table No. (01-32) = [ ]

E. Changing Password

Description

Enables you to change passwords for “On Site” and “Remote.”



Operation

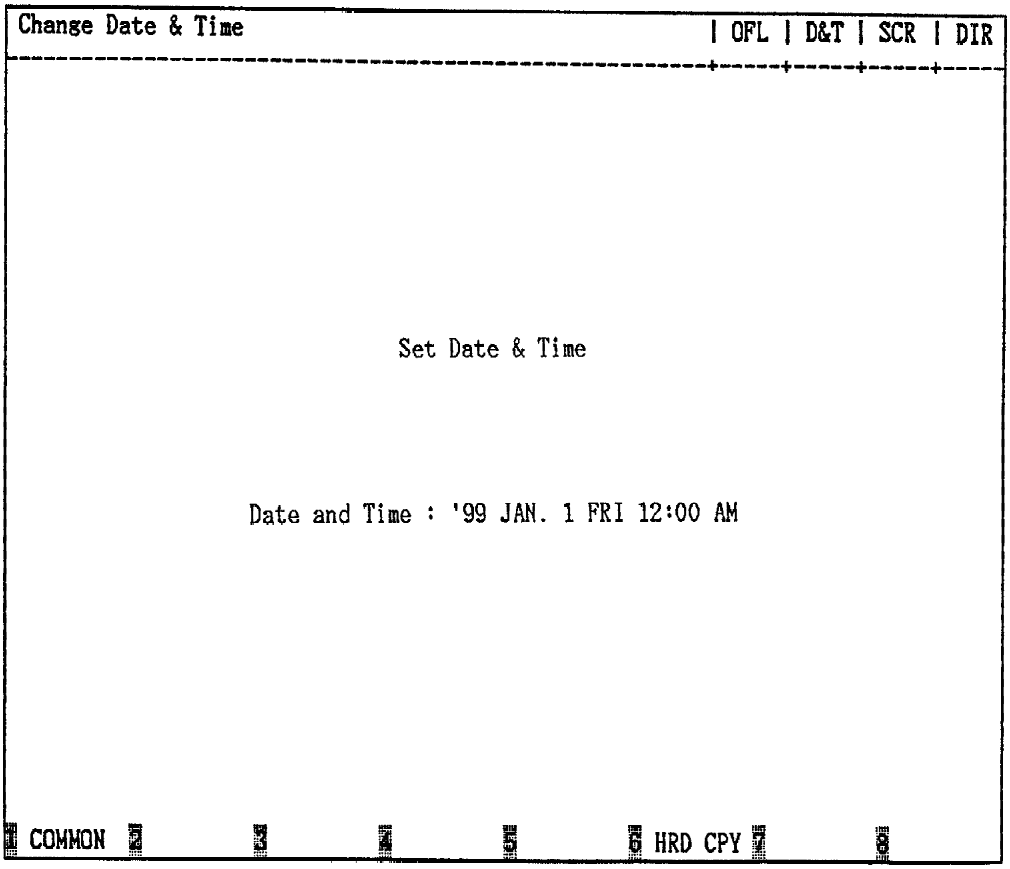
Enter four digit alphanumeric characters for each password if you want to change the factory setting default value.
Default values are as follows:

Items	Default	Items	Default
<On Site>		<Remote>	
Protection Level 1	LVL1	Protection Level 1	LVL1
Protection Level 2	LVL2	Protection Level 2	LVL2
Protection Level 3	LVL3	Protection Level 3	LVL3
Protection Level 4	LVL4	Protection Level 4	LVL4

F. Changing Date and Time

Description

Allows you to change the date and time.



Operation

Enter “Year”, “Day”, “Hour” and “Minute” directly
and select “Month”, “Day of the Week”, “AM/PM”
by pressing the space key.
For the input value, refer to the table below.

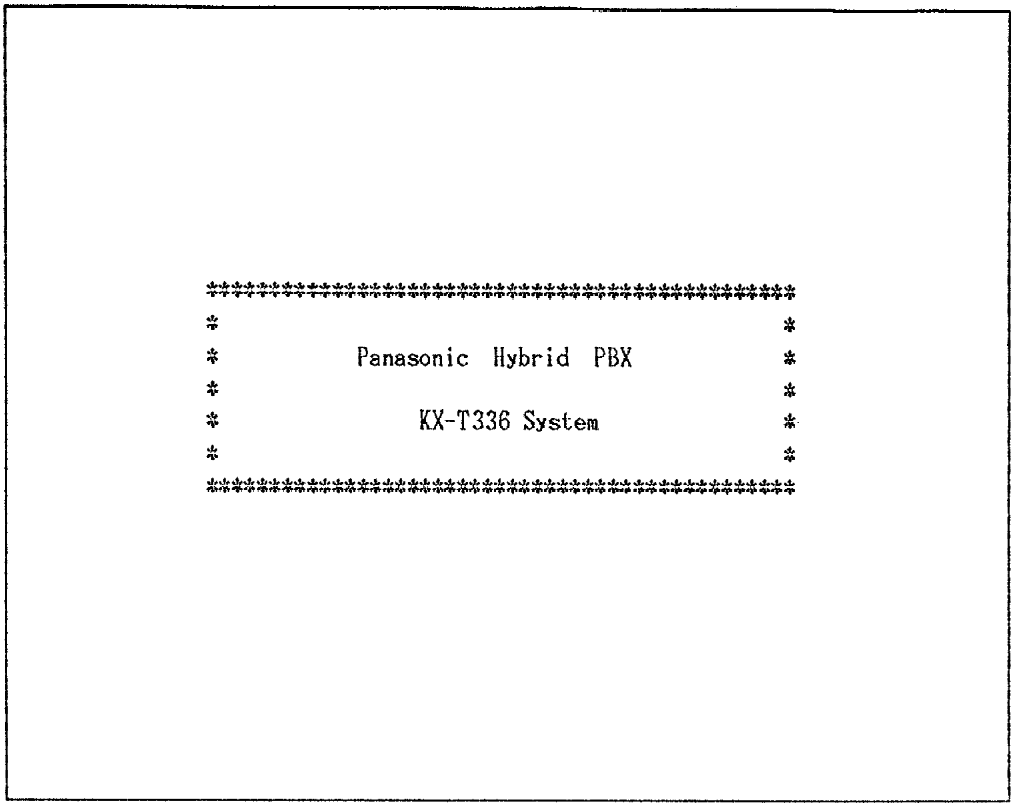
Assigning items	Default	Selection of Value
Year	99	last two digits of the year
Month	JAN	JAN/FEB/MAR/APR/MAY/JUN/JUL/AUG/SEP/OCT/NOV/DEC
Day	1	1 to 31 : day
Day of the week	FRI	SUN/MON/TUE/WED/THU/FRI/SAT
Hour	12	1 to 12 : hour
Minute	00	00 to 59 : minute
Morning/Afternoon	AM	AM : morning PM : afternoon/evening

G. Returning to Initial Screen

1.00 Exit

Description

Allows you to return to the initial screen and displays the screen below.



2.00 Restart

Description

Allows you to initialize the system.

Operation

When you execute Restart, the following message appears at the bottom of the screen.

Are you sure? (Y: yes/N: no)

Type “Y,” and press the RETURN key to restart. If you do not want to restart the system, type “N,” and press the RETURN key.

H. Key Functions

1.00 Moving Cursor by

[↑] [↓] [←] [→] [TAB] [B.S]

The cursor (▭) is displayed in reverse video on the screen and indicates the position for entering the setting values.
You can move the cursor only in the entry field.
You can move the cursor as follows.

- [↑] : Moves the cursor to the previous line.
- [↓] : Moves the cursor to the next line.
- [←] : Moves the cursor to left.
- [→] : Moves the cursor to right.
- [TAB] : Moves the cursor to the beginning of the next field or to the beginning of the field.
- [B.S] : Moves the cursor to left while deleting the displayed character.

2.00 Command Execution by RETURN or ENTER

To store the entered data in the line mode or in the function mode, press the RETURN key or the ENTER key.

3.00 Returning to Previous Menu Screen by PF2

To return to the previous menu screen, press the PF2 key.

When no data has been entered:

- Returns to the previous menu screen

When data has been entered, but not stored by pressing the PF4:

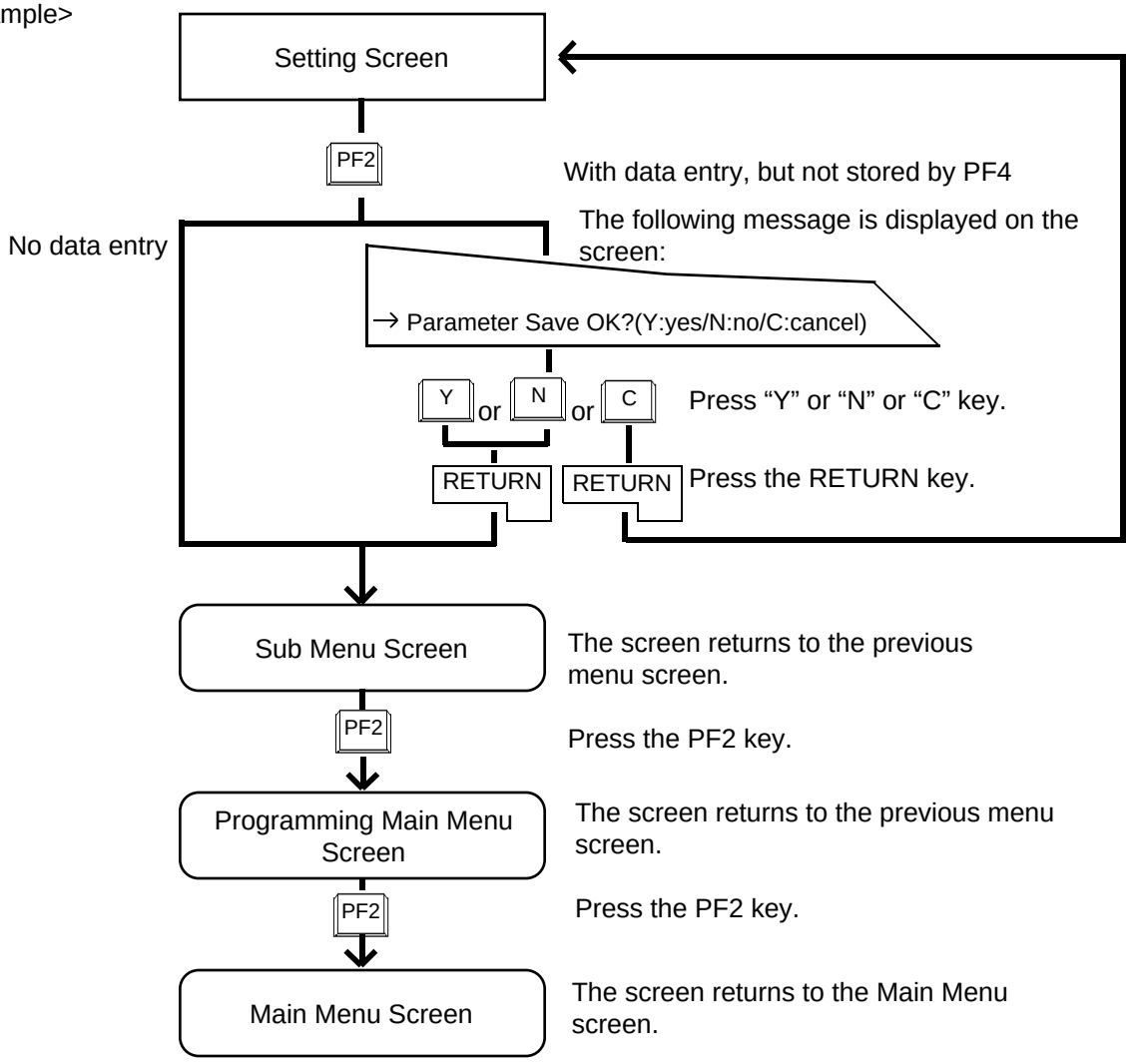
- The following message appears at the bottom of the screen.

  Parameter Save OK? (Y:yes/ N:no/ C:cancel)

1) To store entered data, enter “Y” and press the RETURN key.
   Not to save, enter N, then press the RETURN key.
   The screen returns to the previous screen.

2) To cancel the entered data, enter “C,” then press the RETURN key.
   The screen does not change.

<Example>



4.00 Entry of Value by SPACE or Directly

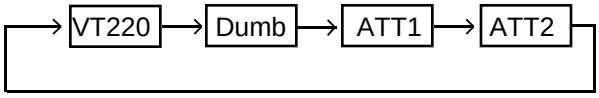
Entering the value directly or selecting it by pressing the SPACE key is available.
When “SEL” (Select Input) is displayed at the right end on the top line, pressing the SPACE key enables you to select the desired value from factory programmed parameters.

When the screen displays “DIR” (Direct Input), enter the appropriate parameters directly.

<Example>

1. (SEL) Select Input by SPACE key

In System-Operation (2/3) screen, the first item is System Administration Device. To select the desired device from the four options: VT220/ Dumb/ATT1/ATT2, press the SPACE key. One of the four options is displayed in the following order.



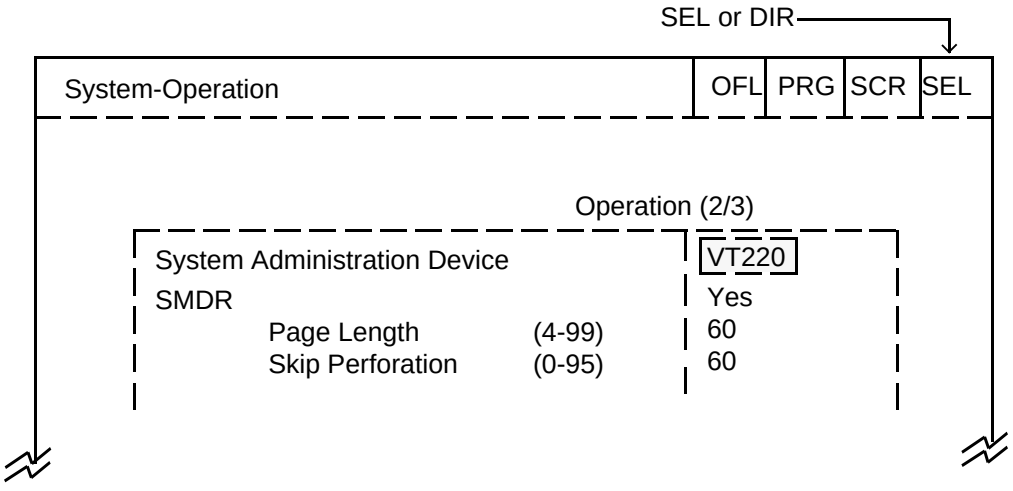
2. (DIR) Direct Input

1) After entering “Yes” for SMDR, move the cursor to Page Length field.

   • The display “SEL” changes to “DIR.”

2) Enter the appropriate number directly from 4 to 99 for Page Length .

When storing the entered data, press the PF2 or PF4 key.



5.00 Storage of Set Value by PF4

Storing the entered data

1. Press the PF4 key.

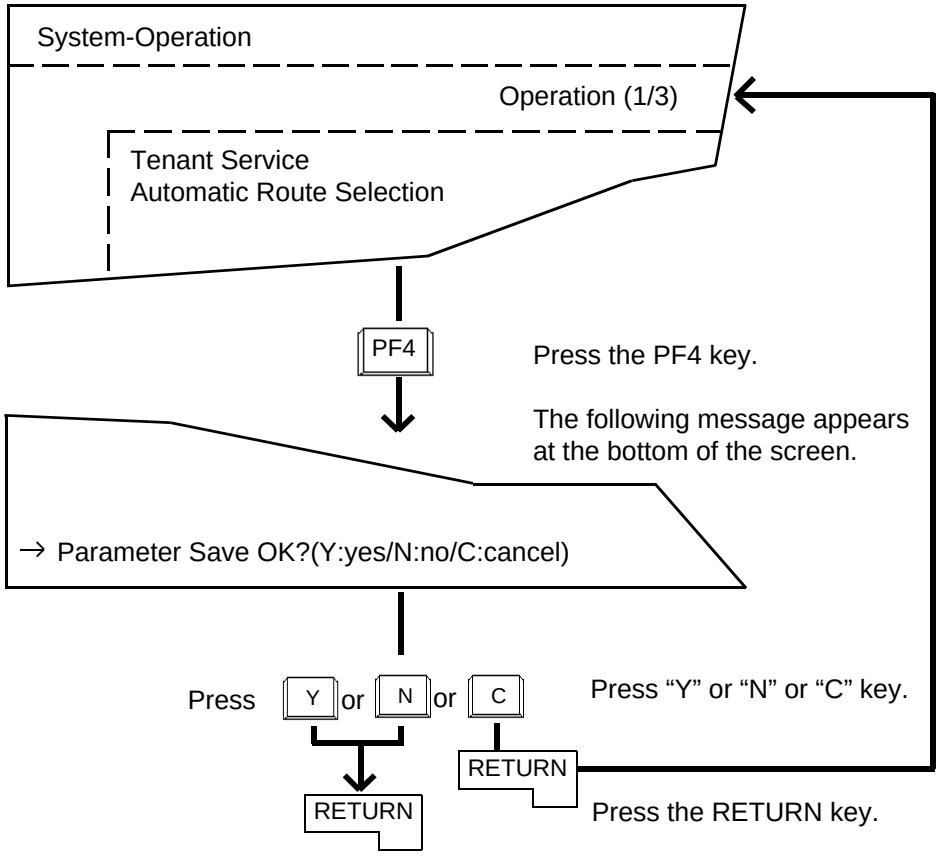
   • The following message appears at the bottom of the screen:

   Parameter Save OK?(Y:yes/N:no/C:cancel)

2. Press “Y” key when storing the entered data.
   Press “N” key when not storing the entered data.
   Press “C” key to cancel the entered data.

3. Press the RETURN key.

<Example>



6.00 Advancing to Next Screen by NEXT

To advance to the next page of the same setting screen, press the NEXT key.

When no data has been entered:

- Advances to the next page.

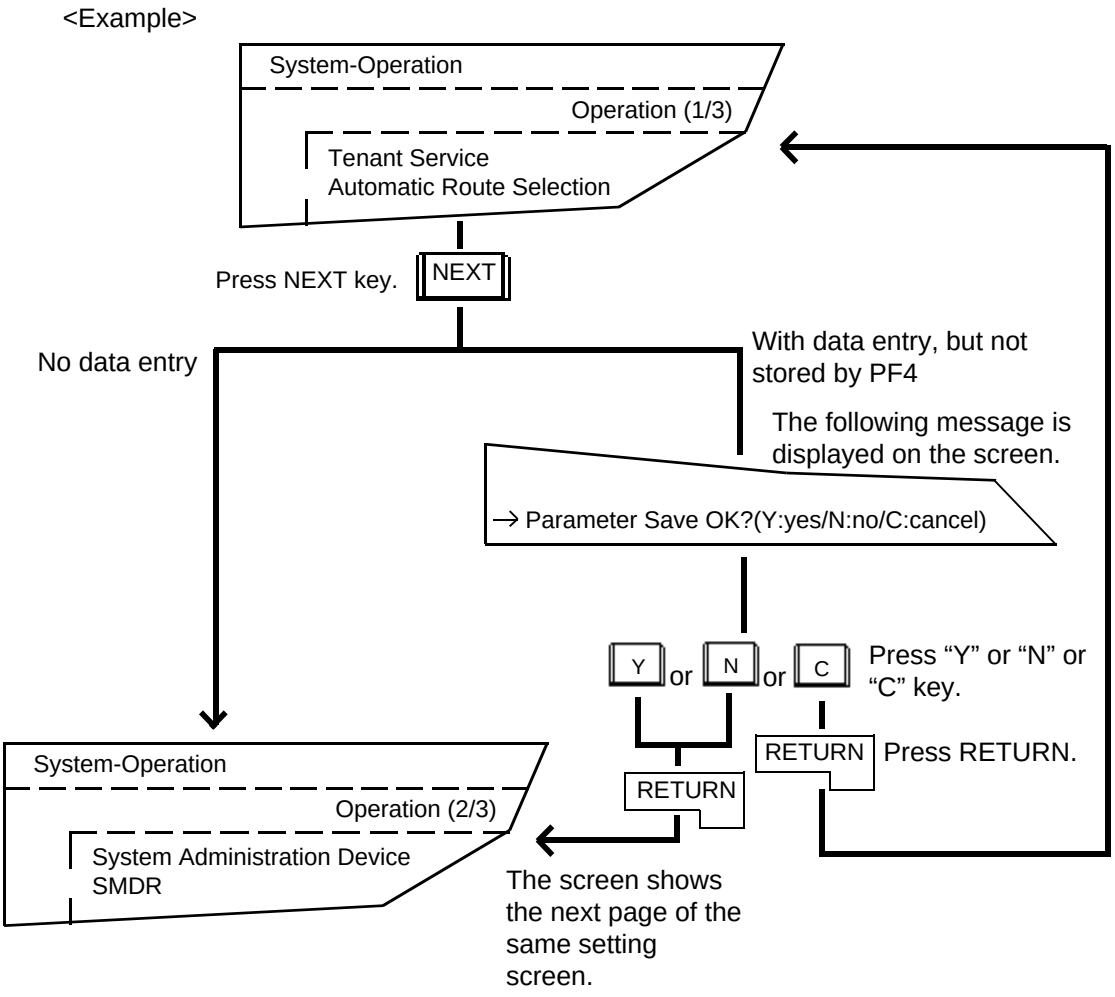
When data has been entered, but not stored by PF4:

- The following message appears at the bottom of the screen.

  Parameter save OK? (Y:yes/N:no/C:cancel)

1) To save the entered data, enter “Y,” then press the RETURN key.
   Not to save the entered data, enter “N,” then press the RETURN key.
   The screen advances to the next screen.

2) To cancel the entered parameters, press “C” key, then press the RETURN key. The screen does not change.



7.00 Returning to Previous Screen by PREV

To return to the previous page of the same setting screen, press the PREV key.

When no data has been entered:

- Returns to the previous page.

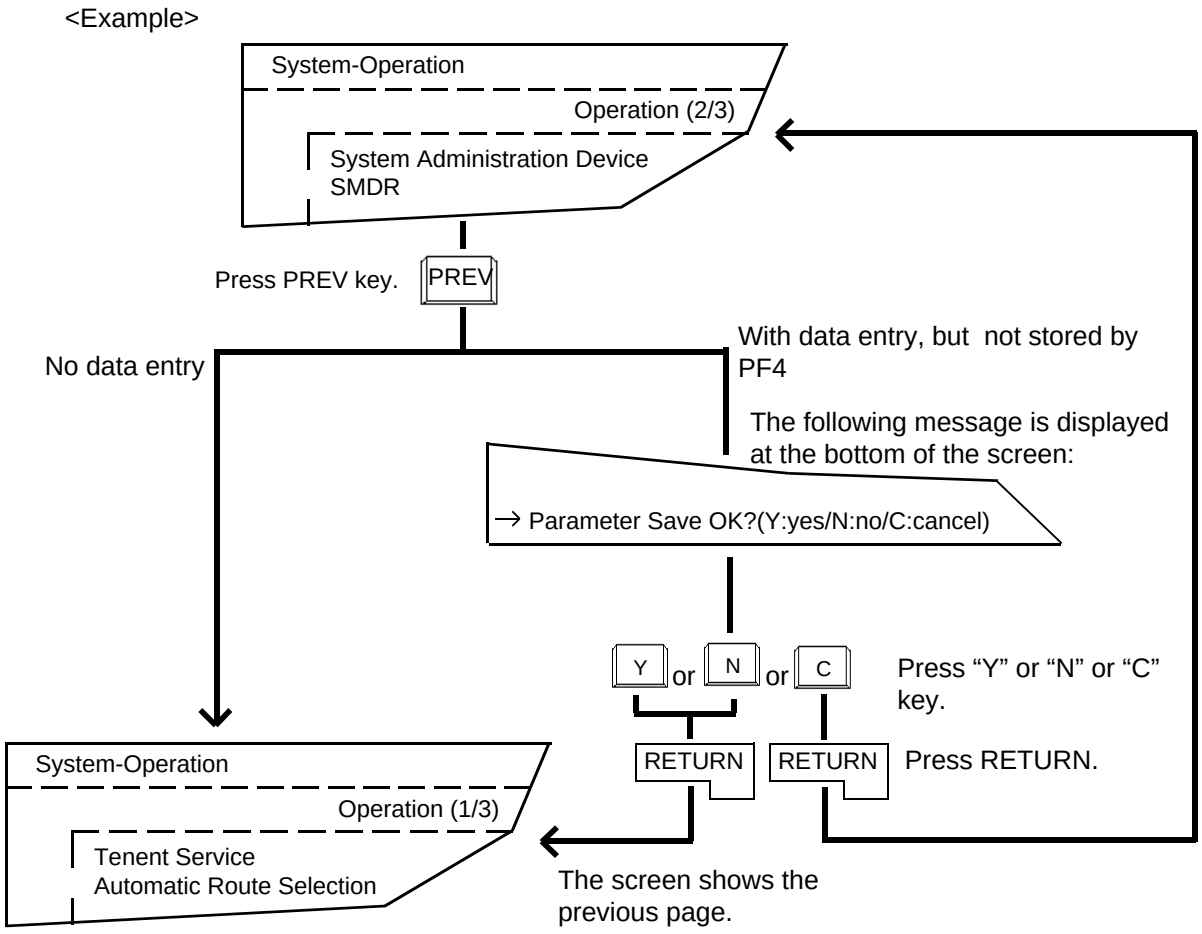
When data has been entered, but not stored by PF4 key:

- The following message appears at the bottom of the screen.

  Parameter Save OK ? (Y:yes/N:no/C:cancel)

1) To store the entered data, enter “Y” and not to store, enter “N.”
   Pressing the RETURN key causes the screen to return to the previous page.

2) To cancel the entered parameters, press “C” key, then the RETURN key.
   The screen does not change.



8.00 Canceling Set Value by PF3

To cancel the set values, move the cursor to the value to be canceled by using “TAB,” “ ↑ ,” “ ↓ ,” “⟵ ,” “⟶ ,” keys etc. Then press the PF3 key. The results are as follows:

- Canceling DIR data : becomes blank
- Canceling SEL data : default value appears on that position.

To change the entered values, move the cursor on that value, then enter the new value.

9.00 Concluding Function Mode by CTRL+C

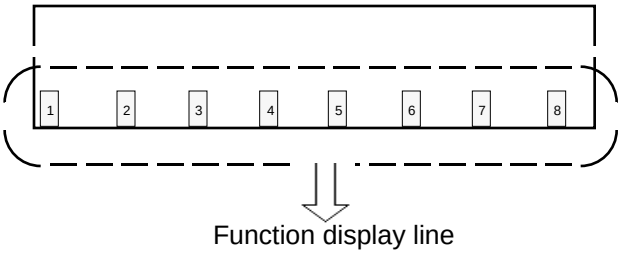
For concluding the function mode, press CTRL + C keys simultaneously.
For details about the function mode, refer to Section 7-I-3.00 “Function Mode.”

10.00 Key Operation Table for Various Terminals

FUNCTIONS	VT220	VT100	Attendant Console
(1) To previous screen	PREV / PF1 + ↑	PF1 + ↑	EMU + ← / EMU + PF1 , ↑
(2) To next screen	NEXT / PF1 + ↓	PF1 + ↓	EMU + → / EMU + PF1 , ↓
(3) Ending	PF2	PF2	EMU + PF2
(4) Canceling value	PF3	PF3	EMU + PF3
(5) Canceling command	CTRL + C	CTRL + C	CTRL + C
(6) Data storage	PF4	PF4	EMU + PF4
(7) Command execution	RETURN / ENTER	RETURN	RETURN
(8) Output stop	CTRL + S	CTRL + S	—
(9) Output Start	CTRL + Q	CTRL + Q	—
(10) Function key	PF1 ····· PF8 or PF1 + 1 … PF1 + 8	PF1 + 1 … PF1 + 8	PF1 ····· PF8 or PF1 + 1 … PF1 + 8
(11) Mode change	CTRL + V	CTRL + V	CTRL + V
(12) To previous selection value	CTRL + U	CTRL + U	CTRL + U

I. Operation of Function Keys

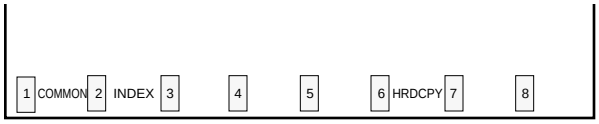
1.00 Relation between Function Keys and Screens



Numbers 1, 2, - - - - 8 displayed in the function field correspond to the function key 1, function key 2, - - - -, function key 8 respectively.
In the following explanations, F1 stands for function key 1, F2 stands for function key 2 and so on.

Usable function keys may change depending on the selected screen. For unavailable function keys, “space” appears in the function field.

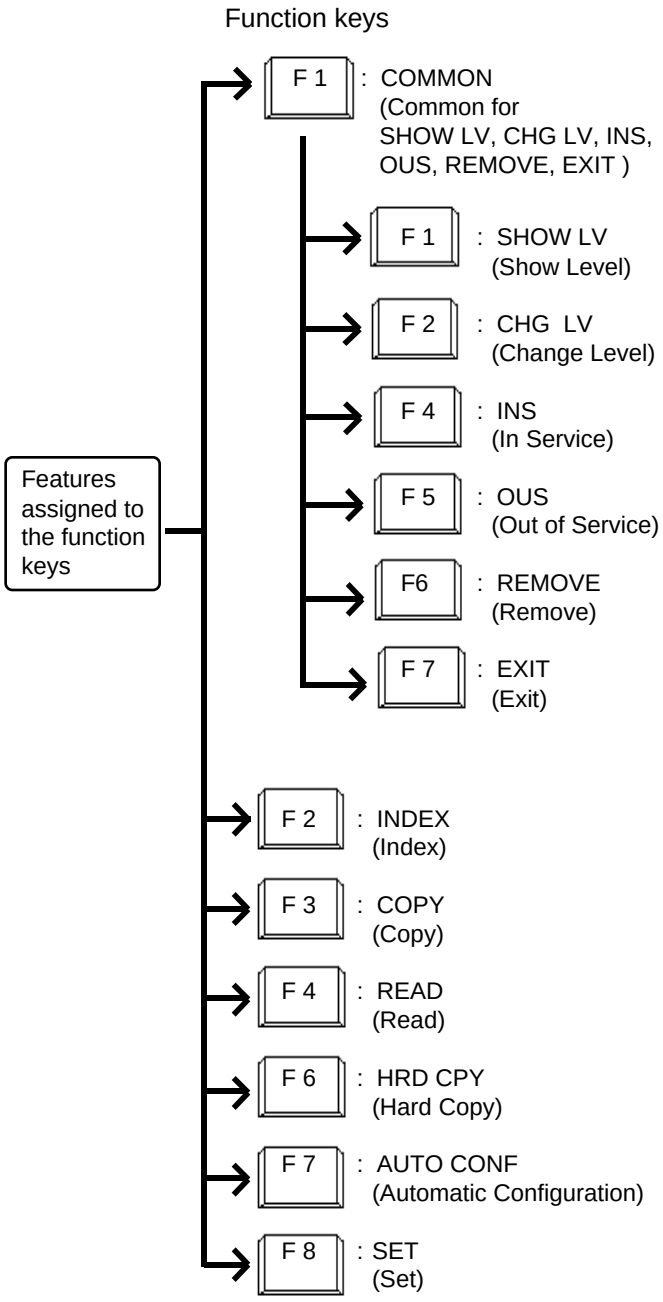
<Example>
In the System-Numbering Plan screen, the following display appears in the function field.



In this case, F1 is assigned to COMMON feature.
F2 is assigned to INDEX feature.
F6 is assigned to HRDCPY feature.
and F3, F4, F5, F7 and F8 are assigned to no feature.

2.00 Features Assigned to Function Keys

Features assigned to function keys are shown in the drawing below.
For details, refer to Section 7-J “Execution of Function.”



3.00 Function Mode

Pressing the function key creates a prompt at the bottom of the screen. The prompt that appears on the screen is called “Function Mode.”

- When pressing the following function keys, the prompts below are displayed.

Function key	Prompt
F1 COMMON	CMD>
F2 INDEX	INDEX>
F3 COPY	COPY>
F4 READ	READ>
F7 AUTO CNF	AUTOCNF>
F8 SET	SET>

- In function mode, the following keys are not available: NEXT, PREV, PF2 and PF4.

- To conclude function mode, press the EXIT (F7) key. Pressing CTRL and C keys simultaneously also concludes function mode or other modes such as SHOW LV, CHG LV and so on.

J. Execution of Function Modes

1.00 COMMON (F1) and EXIT (F7)

Description

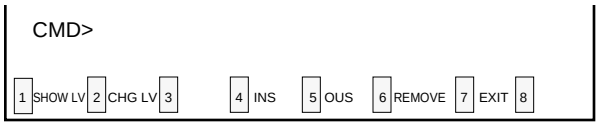
When you want to execute the functions SHOW LV (Show Level), CHG LV (Change Level), INS (In Service), OUS (Out of Service) and REMOVE (Remove), press the COMMON (F1) key. Pressing the EXIT (F7) key allows you to conclude the function mode.

Operation

Entering into COMMON mode

1. Press the F1 key. [F1]

   - The prompt (CMD>) appears and function mode is established.
     The cursor is flashing and you can choose a desired function from functions displayed on the function field as follows.



Concluding the function mode

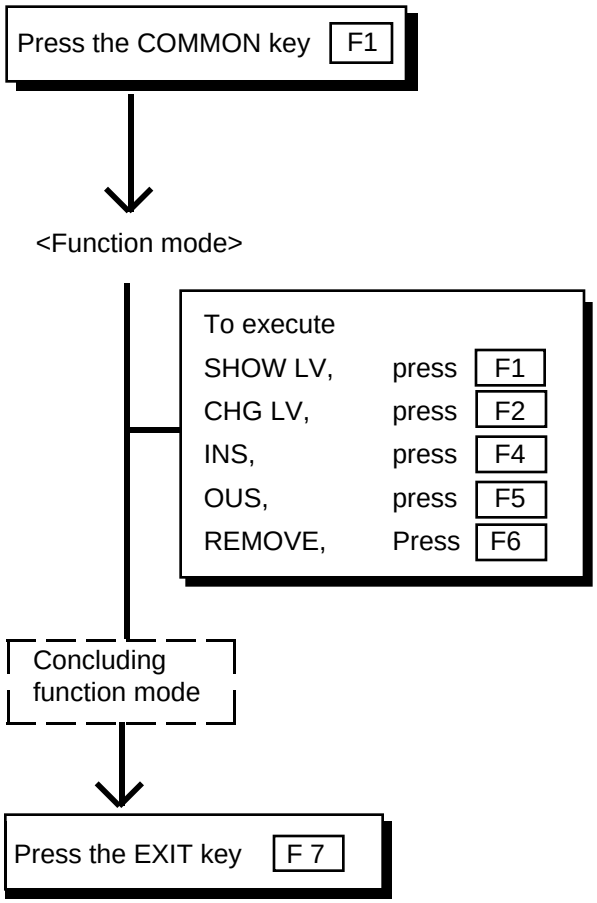
1. Press the F7 key. [F7]

   - The function mode is concluded.

Condition

Available for all the setting screens and all the menu screens.

Operation Chart



2.00 SHOW LV (Show Level)

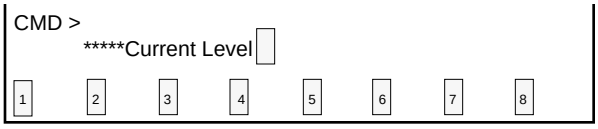
Description

Enables you to confirm the current password level by pressing the SHOW LV (F1) key after entering the COMMON mode.

Operation

Press the F1 key. F1

- The screen shows the current password level.



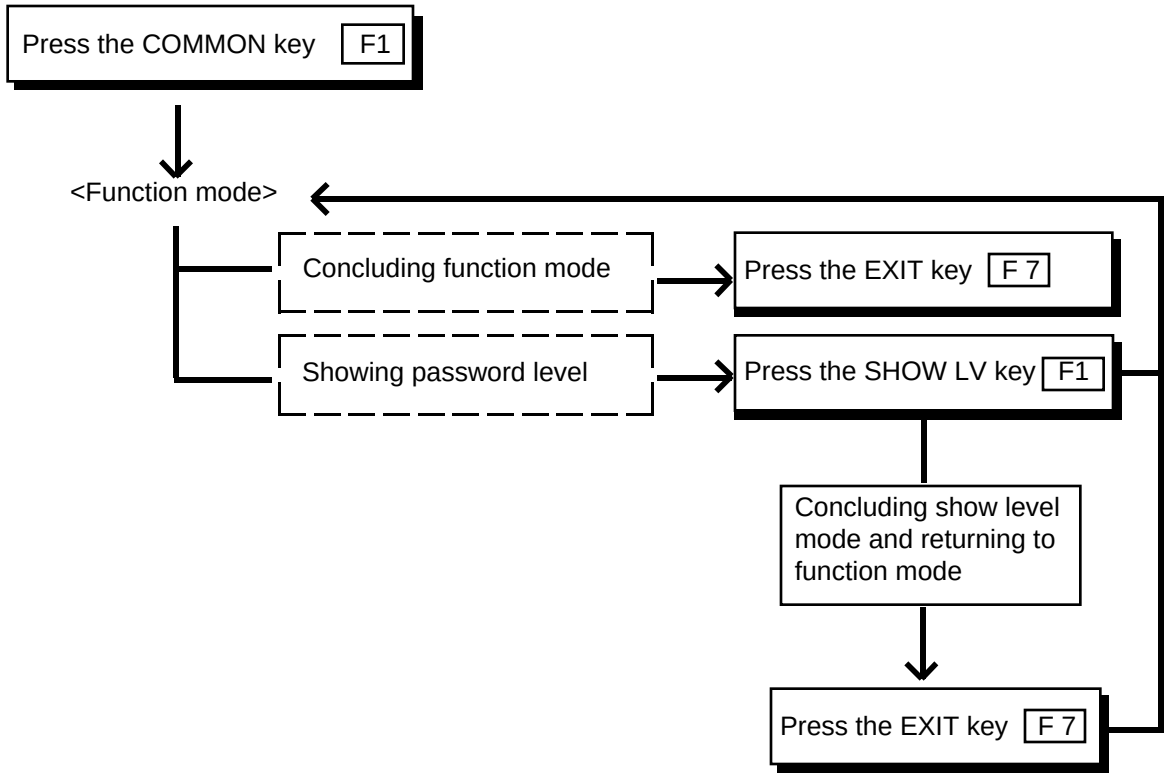
Conditions

Press the EXIT (F7) key to return to COMMON mode.

When back in COMMON mode, executing other COMMON mode functions is possible.

SHOW LV is available for all the menu screens and the setting screens.

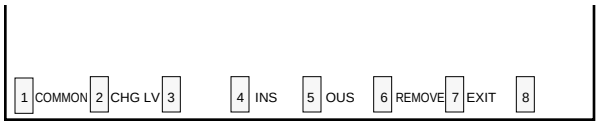
Operation Chart



3.00 CHG LV (Change Level)

Description

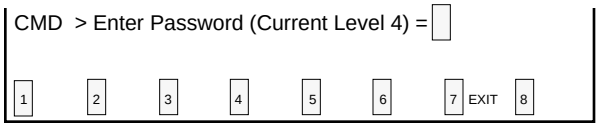
Enables you to raise or lower the current password level by pressing the CHG LV (F2) key after entering COMMON mode.



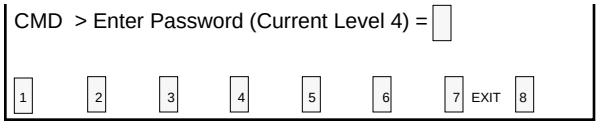
Operation

Raising a password level

1. Press the F2 key.

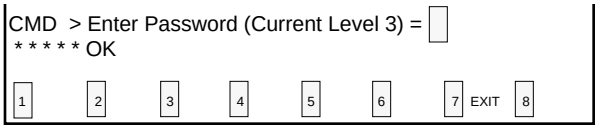


2. Enter 4-digit new password (one level higher than current level).



- To prevent an unauthorized person from learning the password, the password characters are not displayed when they are entered.

3. Press the RETURN key. RETURN



- When newly entered password is allowed by the system, " *****OK " appears and new password level is displayed.

Conditions

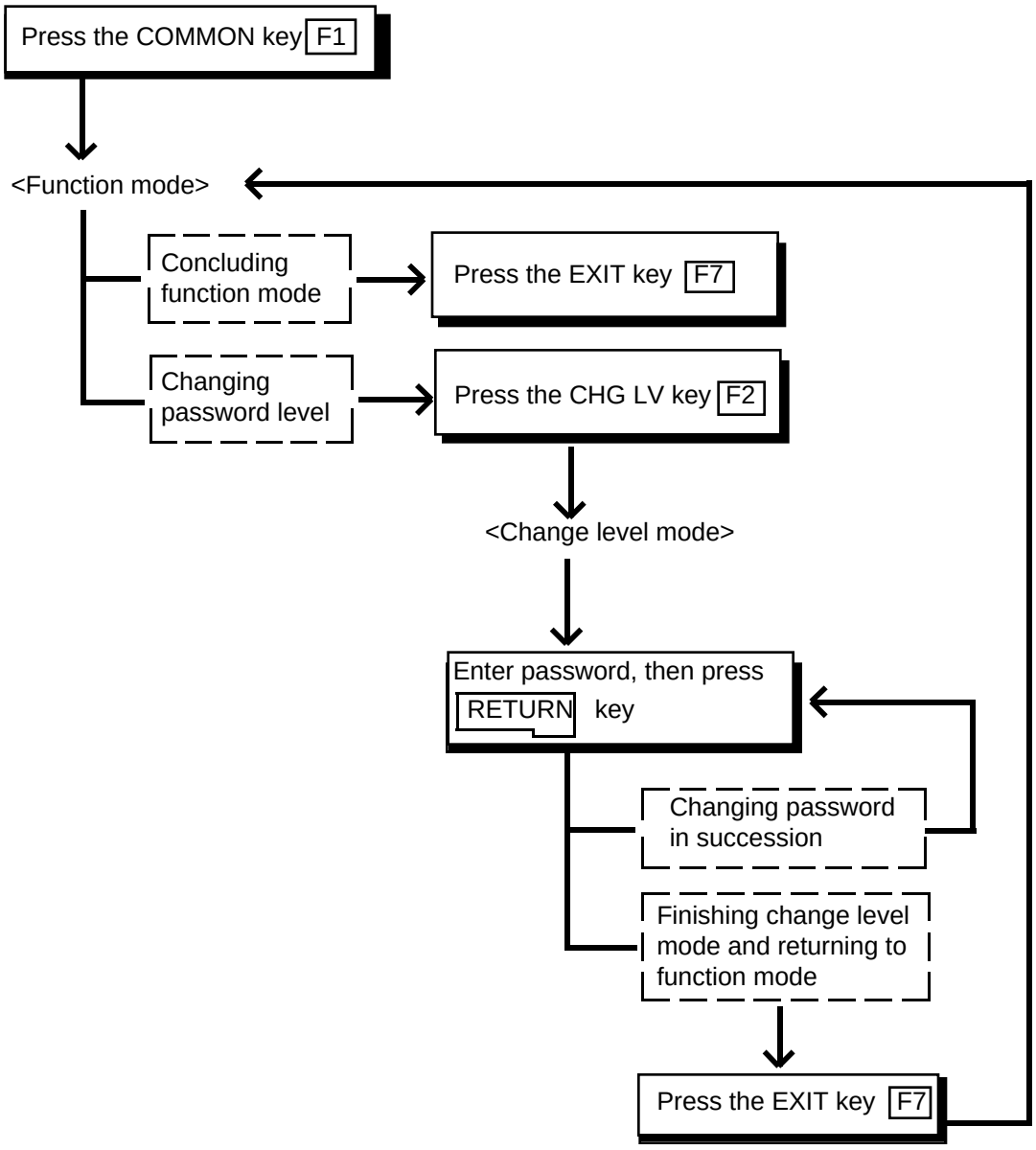
Password level can be raised one by one as follows: 4 ⟶ 3 ⟶ 2 ⟶ 1

To lower the current password level, simply press the RETURN key when "CMD>Enter Password (Current Level 1)=" is displayed.
By every pressing of the RETURN key, password level is lowered one by one as follows: 1⟶ 2⟶ 3 ⟶ 4

To return to the COMMON mode from the change level mode, press the EXIT (F7) key.

The Change Level function is available for all the menu screens and the setting screens.

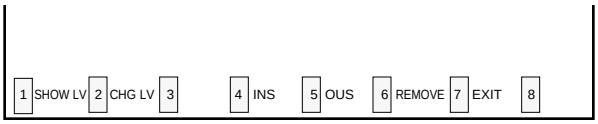
Operation Chart



4.00 INS (In Service)

Description

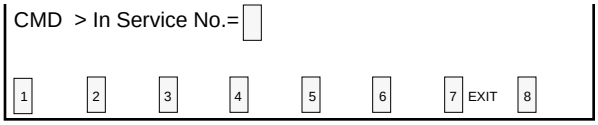
Allows you to change the status of shelves, cards and ports from “Out of Service” to “In Service” in the following screen, after pressing the COMMON (F1) key.



Operation

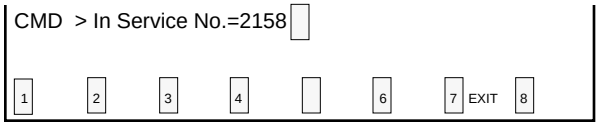
<Example>
Changing the status of station (physical number 2158) from “Out of Service” to “In Service.”

1. Press the F4 key. F4

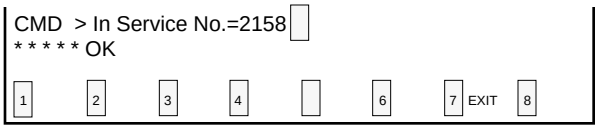


2. Enter the physical number of the station “2158.”

2 1 5 8



3. Press the RETURN key. RETURN



- “ * * * * * OK” appears when the station (physical number: 2158) becomes “In-Service.”

Conditions

The system should be in on-line communication mode.

For changing lower device such as station, port etc.. to “In Service,” upper device such as card and shelf should be In Service beforehand.

The table below shows the devices to be changed to “In Service” and their Entry numbers.

Elements In Service	Entry numbers
Shelf	physical number (1 to 3)
Card	physical number (101 to 315)
Port	physical number (1011 to 3158)
Station	extension directory number (DNxxxx: three or four digits), or physical number (1011 to 3158)
Attendant Console	A1, A2 or Port number (1011 to 3158)
DTMF Receiver	Rxxxy xxx : card physical number y : 1 for DTMF Receiver 1 2 for DTMF Receiver 2
Conference Trunk	Basic conference trunk number CFBxx (xx : 01 to 08) Optional conference trunk number CFOyy (yy : 01 to 64)

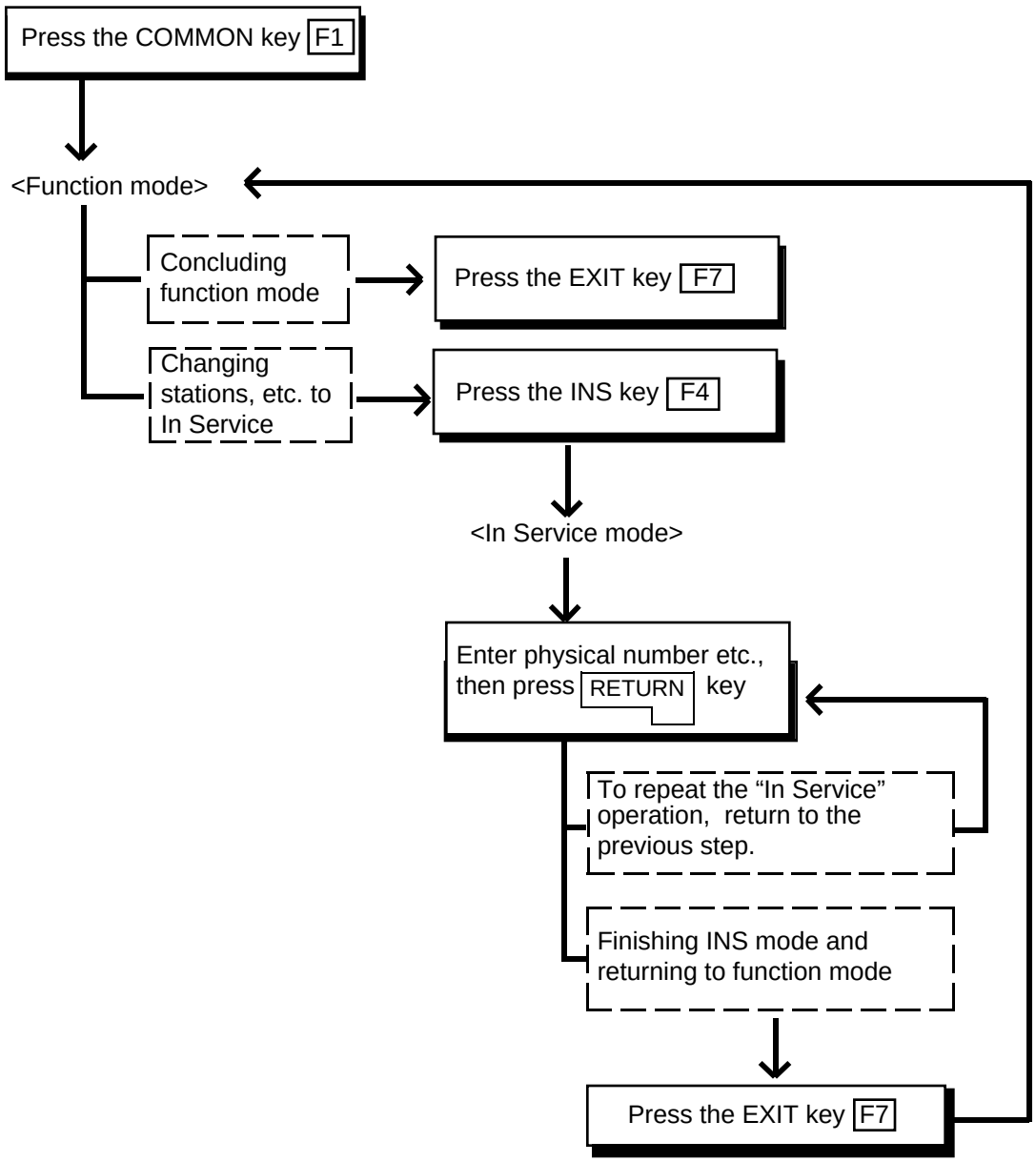
If it is impossible to execute the “In Service” operation, one of the following error messages appears on the screen.
The error message types depend on the situation.

***** ERROR : Illegal parameter
***** ERROR : Not installed
***** ERROR : Diagnostic failure
***** ERROR : Invalid status

For details about the error messages, refer to Section 9-M “Error Message Tables.”
To repeat the “In Service” operation, repeat from STEP 2.

To return to the COMMON mode, press the EXIT (F7) key.

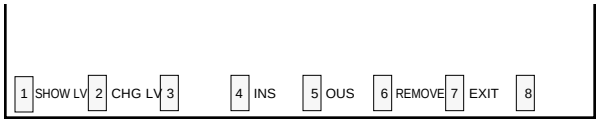
Operation Chart



5.00 OUS (Out of Service)

Description

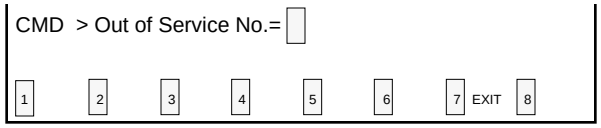
Allows you to change the status of shelves, cards and ports from “In Service” to “Out of Service” as shown below after pressing the COMMON (F1) key.



Operation

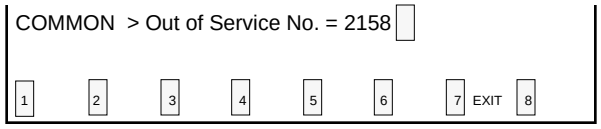
<Example>
Changing the status of the station (physical number 2158) from “In Service” to “Out of Service.”

1. Press the F5 key. F5

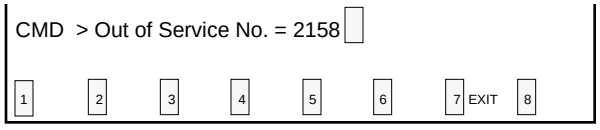


2. Enter the physical number of the station “2158.”

2 1 5 8



3. Press the RETURN key. RETURN



- “ * * * * * OK” appears when the station (physical number 2158) becomes “Out of Service.”

Conditions

The system should be in on-line communication mode.

Devices to be changed to “Out of Service” and their entry numbers are as same as that of “In Service.” Refer to Section 7-J-4.00 “INS (In Service).”

When setting the shelf or card to “Out of Service,” their lower device such as stations & ports become “Out of Service” simultaneously.

If it is impossible to set “Out of Service”, one of the following error messages appears on the screen.
A type of error message depends on the situation.

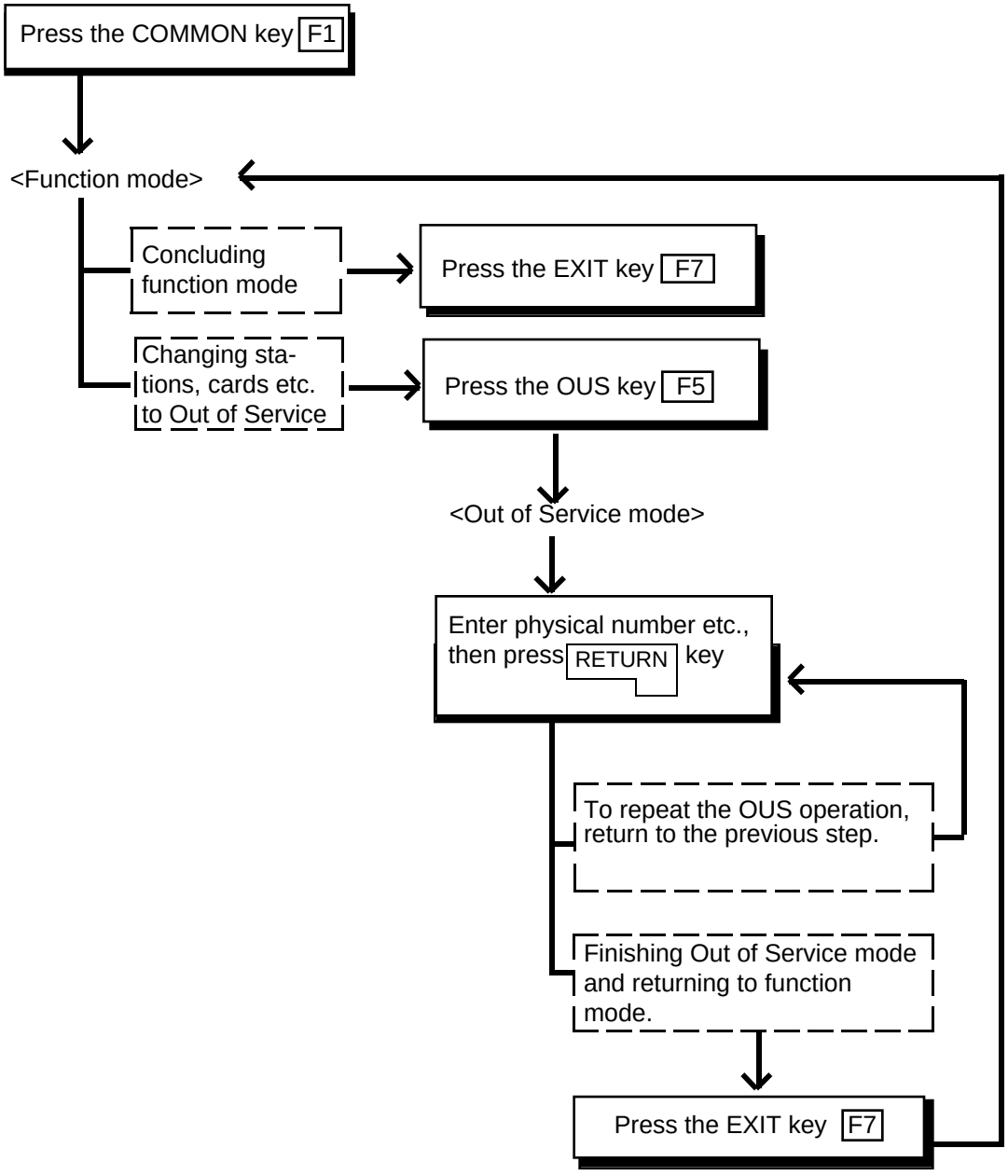
*****Error : Illegal parameter
*****Error : No installed
*****Error : Diagnostic failure
*****Error : Invalid status

For details about the error messages, refer to Section 9-M “Error Message Tables.”

To repeat the “Out of Service” operation, repeat from STEP 2.

To return to COMMON mode, press the EXIT (F7) key.

Operation Chart



6.00 REMOVE

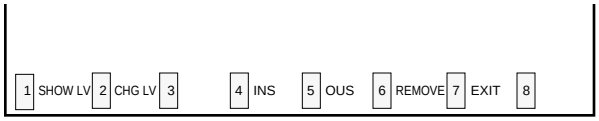
Description

Enables you to delete the stored data by specifying the devices. This operation should be done before actually removing the devices. This function is available in the screen where "REMOVE" is displayed on the function field.

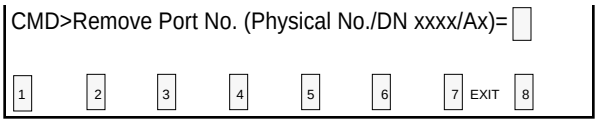
Operation

<Example>
Remove the programming data of an extension with physical number 1011.

1. Press the F1 key. [F1]

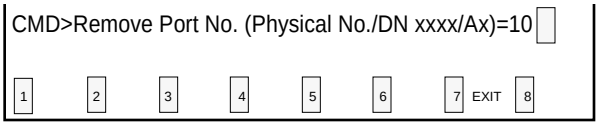


2. Press the F6 key. [F6]

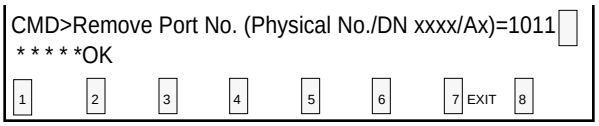


3. Enter the physical number 1011.

[1] [0] [1] [1]



4. Press the RETURN key. [RETURN]



- When the message below appears, the programming data of physical number 1011 is deleted without failure.
  *****OK

Conditions

The system should be in On-line communication mode.

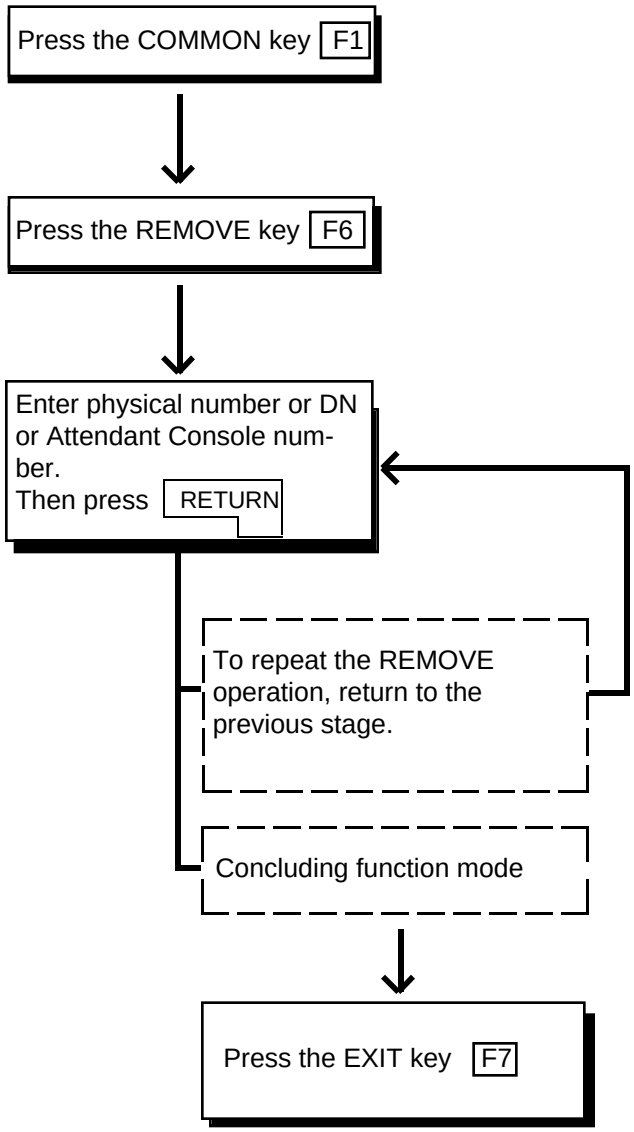
The specified terminal should be "Out of Service" or "Fault."

When it is impossible to execute "REMOVE" operation, one of the following error messages appears on the screen.
The error message type depends on the situation.

*****ERROR : Illegal parameter
*****ERROR : Parameter is not consecutive set
*****ERROR : Not installed
*****ERROR : Invalid status
*****ERROR : Parameter is empty

For details about the error messages, refer to Section 9-M "Error Message Tables."

Operation Chart



7.00 INDEX

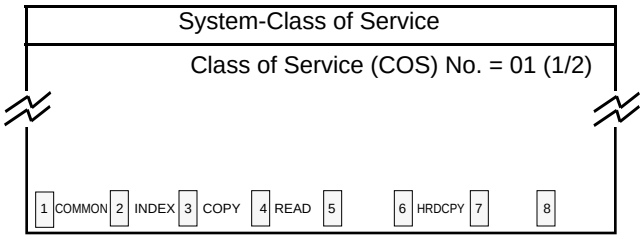
Description

Enables you to enter the desired screen immediately without using the NEXT or PREV key.

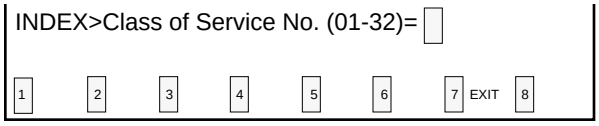
Operation

<Example>
Entering the Class of Service No.=32 screen.

The current screen is Class of Service (COS) No.=01

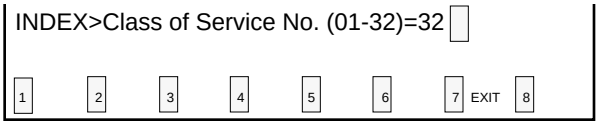


1. Press the F2 key. F2

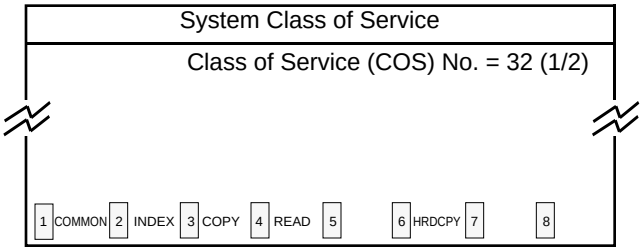


2. Enter COS number 32 that you want to enter.

3 2

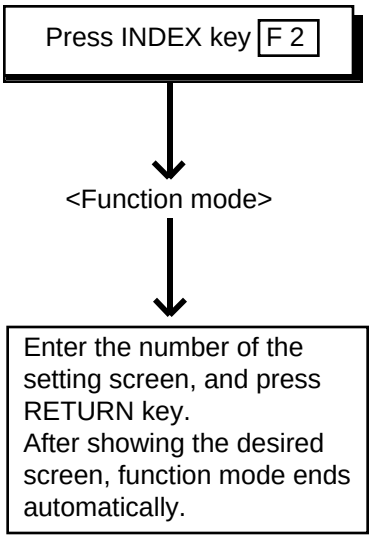


3. Press the RETURN key. RETURN



- COS No.=32 screen appears, and the function mode is finished automatically.

Operation Chart



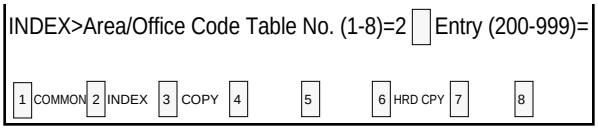
Condition

If “INDEX” operation cannot be executed, one of the following error messages appears on the screen.
A type of error message depends on the situation.

*****Error : Illegal parameter
*****Error : Not installed
*****Error : Please save data
*****Error : Parameter is empty

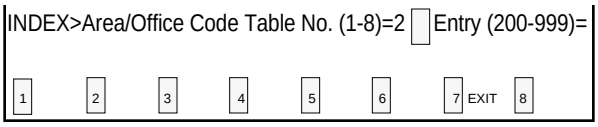
For details about the error messages, refer to Section 9-M “Error Message Tables.”

In the screen, Toll Restriction “Area/Office Code Table,” both Area/Office Code Table number and Entry number must be entered after depressing the INDEX (F2) key.

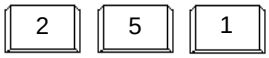


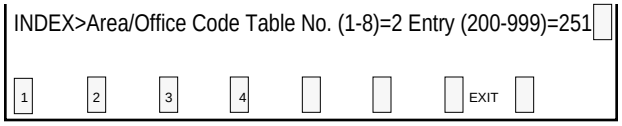
The example below shows the procedures to display the screen of Entry 251 of Area/Office code Table No.2.

1. Enter the Area/Office code table number 2.

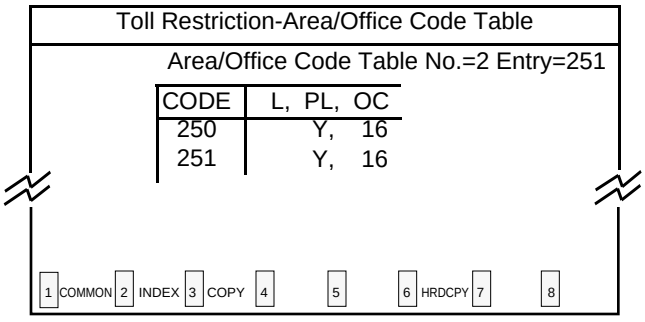


2. Enter 251 after moving the cursor to the Entry position by using → key.





3. Press the RETURN key.



- Area/Office Code Table No.=2 Entry=251 screen appears and the function mode finishes automatically.

Reference

The INDEX function is available for the screen listed below. For the input values, refer to Section 9 “System Programming (VT).”

- System-Class of Service (1/2) (2/2)
- System-Numbering Plan (1/8) to (8/8)
- System-Speed Dialing-System
- Group-Trunk Group (1/2) (2/2)
- Trunk-CO Line
- Extension-Station (1/3) (2/3) (3/3)
- Extension-DSS Console (1/3) (2/3) (3/3)
- Toll Restriction-Area/Office Code Table
- Toll Restriction-Office Code Tables
- Automatic Route Selection-Leading Digit Table
- Automatic Route Selection-Office Code Table
- Automatic Route Selection-Route Plan Tables
- Automatic Route Selection-Route List Table

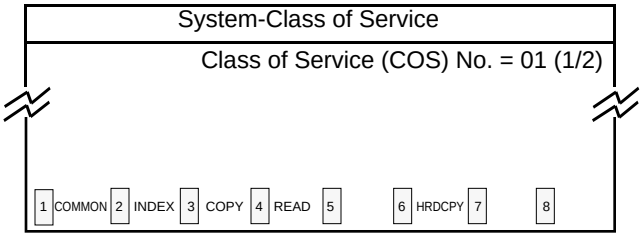
8.00 COPY

Description

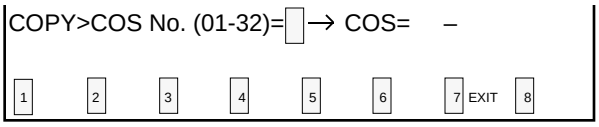
This function enables you to copy the desired system programming data from specified screen to multiple screens at a time, and is available in the screens where COPY is displayed in the function field.

Operation

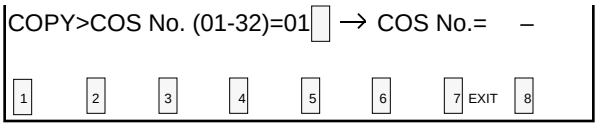
<Example>
Copying the data in System “Class of Service” No.01 to COS No.30 through No.32



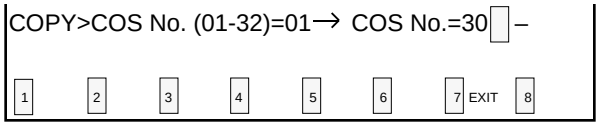
1. Press the F3 key. [F3]



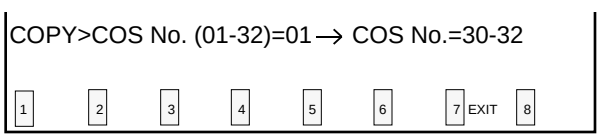
2. Enter the original COS number, 01. [0] [1]



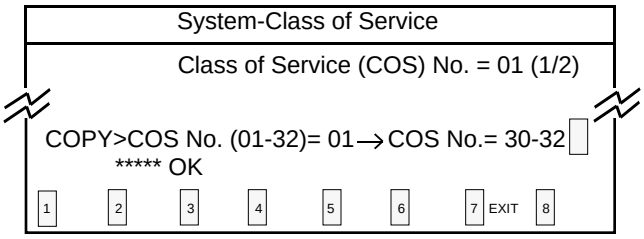
3. Move the Cursor to the first COS No. position to be copied by using [→]. Then enter the COS number, 30. [3] [0]



4. Move the cursor to the last COS No. position to be copied by using [→]. Then enter the COS number, 32 [3] [2]



5. Press the RETURN key. [RETURN]

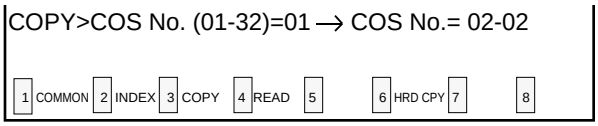


- The message below appears when the original data of COS No.=01 is properly copied to COS No.=30 through 32
  *****OK
- Press the EXIT (F7) key to finish this mode.

Conditions

To copy the original to only one destination, enter the same destination number in the first and last positions. In this case, READ function is useful.

<Example>
Copying COS No.=01 into COS No. 02



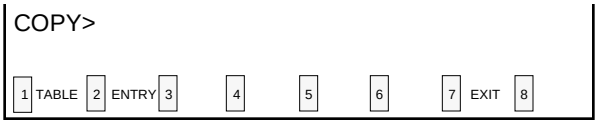
Enter the destination numbers in ascending order. To repeat the “COPY” operation, repeat from step 2. Then press the RETURN key.

If the COPY operation is unsuccessful, one of the error messages below appears.
Error message types depend on the situation.

*****Error : Illegal parameter
*****Error : Not installed

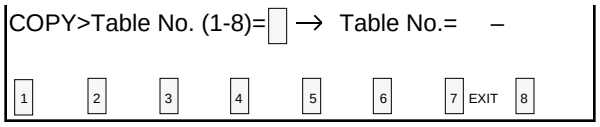
For details about the Error messages, refer to Section 9-M “Error Message Tables.”

In the Toll Restriction “Area/Office Code Table,” “TABLE” and “ENTRY” appear in the function display line as below after pressing the COPY (F3) key.
For copying the whole table, press the TABLE (F1) key and for copying entries in the same table, press the ENTRY (F2) key.



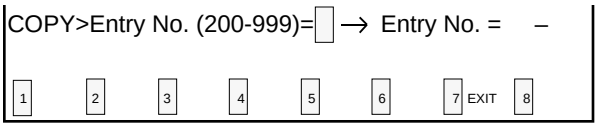
Copying the whole Table

Depress the F1 key. F1



Copying Entry

Depress the F2 key. F2

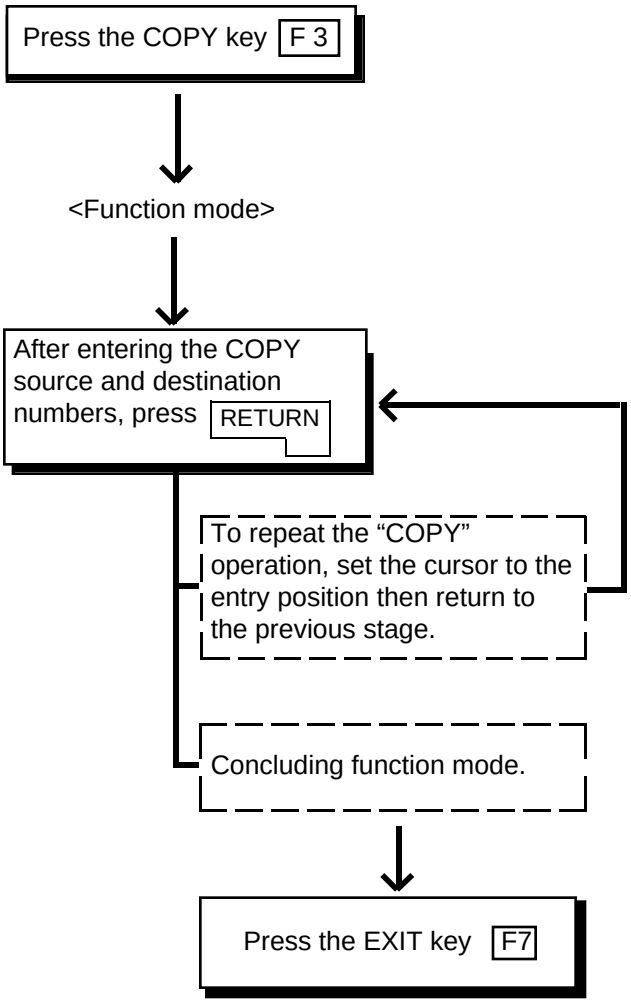


Reference

The Copy function is available in the following screens.
For the input values, refer to Section 9 “System Programming (VT).”

- System-Class of Service (1/2) (2/2)
- Toll Restriction-Area/Office Code Table
- Toll Restriction-Office Code Tables
- Automatic Route Selection-Leading Digit Table
- Automatic Route Selection-Office Code Table
- Automatic Route Selection-Route Plan Tables
- Automatic Route Selection-Route List Table

Operation Chart



9.00 READ

Description

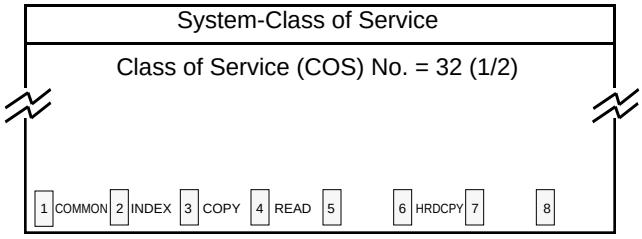
This function enables you to copy the desired system programming data from specified screen into the currently displayed screen quickly. This is available in the screens where READ is displayed in the function field.

Operation

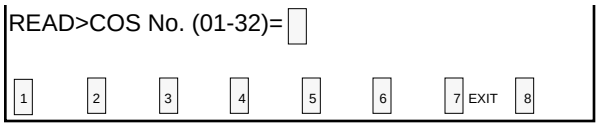
<Example>

Copying the system programming data of “Class of Service (COS) No.=01” into “COS No.=32.”

The current screen is Class of Service (COS) No.=32.

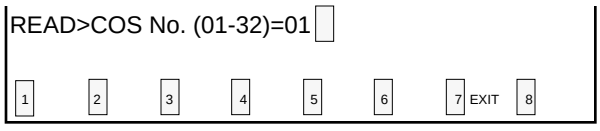


1. Press F4. [F4]

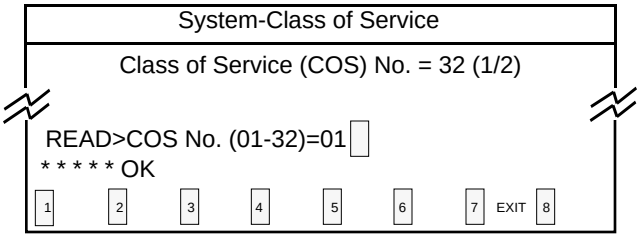


2. Enter the COS number 01 to copied.

[0] [1]



3. Press the RETURN key. [RETURN]



- The message below appears when the stored data of COS No.=01 is copied properly to COS No.=32.

  * * * * * OK

Conditions

To repeat “READ” operation, repeat from step 2.

When READ operation is unsuccessful, one of the following error messages appears on the screen: Error message types depend on the situation.

***** Error : Illegal parameter
***** Error : Not installed

For details about the error messages, refer to Section 9-M “Error Message Tables.”

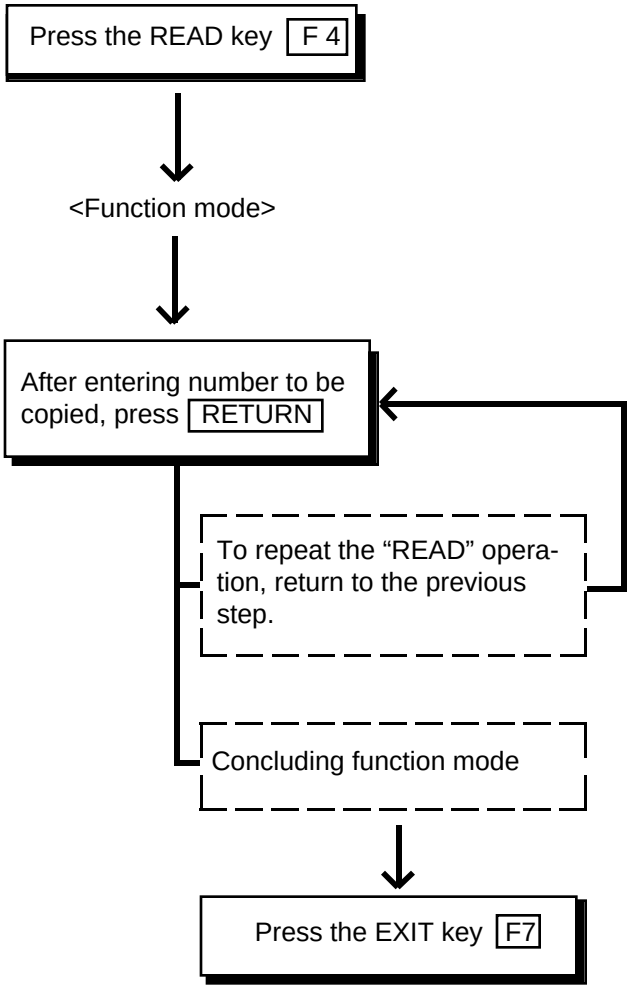
To store the copied data, press PF4 or PF2.
To conclude this mode, press the EXIT (F7) key.

Reference

The READ function is available in the screens listed below. For the input values, refer to Section 9 “System Programming (VT).”

- System-Class of Service (1/2) (2/2)
- Group-Trunk Group (1/2) (2/2)
- Trunk-CO Line
- Extension-Station (1/3) (2/3) (3/3)
- Extension-DSS Console (1/3) (2/3) (3/3)
- Automatic Route Selection-Route Plan Tables

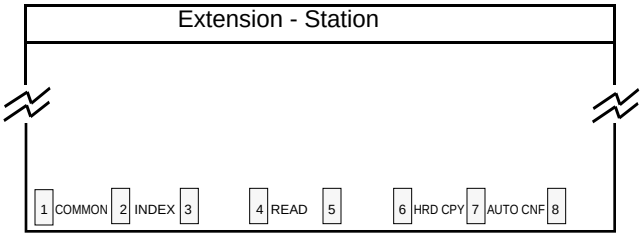
Operation Chart



10.00 HRD CPY (Hard Copy)

Description

When an output device such as printer provided with RS-232C interface etc., is connected to the system, it is possible to print out the data on the screen.
Refer to Section 9-D-7.00 “Communication Interface” for further information about communication parameters.
This function is available in the screens displaying HRD CPY on the function field.



Operation

1. Press the F6 key. 

   - All data displayed on the screen is printed out.

Condition

When HRD CPY operation is unsuccessful, one of the following error messages appears on the screen.
An error message type depends on the situation.

*****ERROR : Printer is not ready
*****ERROR : Service Violation

For details about the error contents, refer to Section 9-M “Error Message Tables.”

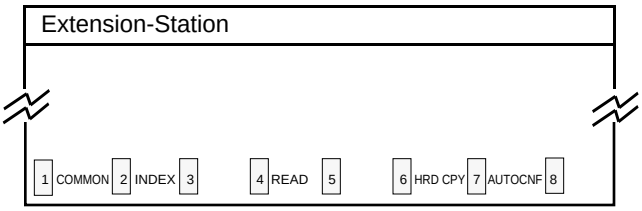
Reference

The HRD CPY operation is available in the System Installation screen and all setting screens.

11.00 AUTO CNF (Automatic Configuration)

Description

This function sets the telephone type and DSS consoles automatically. This function is available in the screens where AUTO CNF is displayed in the function field.



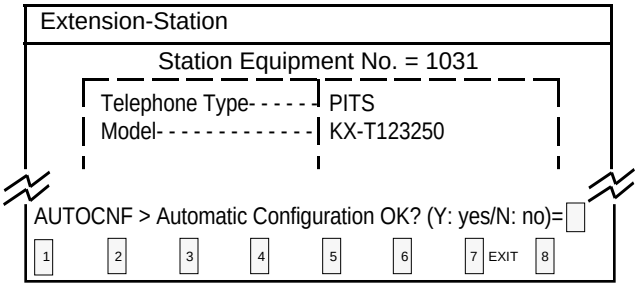
Operation

<Example>

When the Telephone Type is set to PITS in Extension-Station screen and actually SLT telephone is connected.

1. Press the F7 key. F7

   • The following message appears at the bottom of the screen.



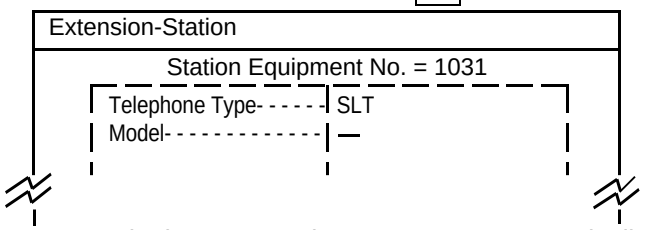
2. Press "Y" key to execute AUTO CNF.

   Y

   Press "N" key not to execute AUTO CNF.

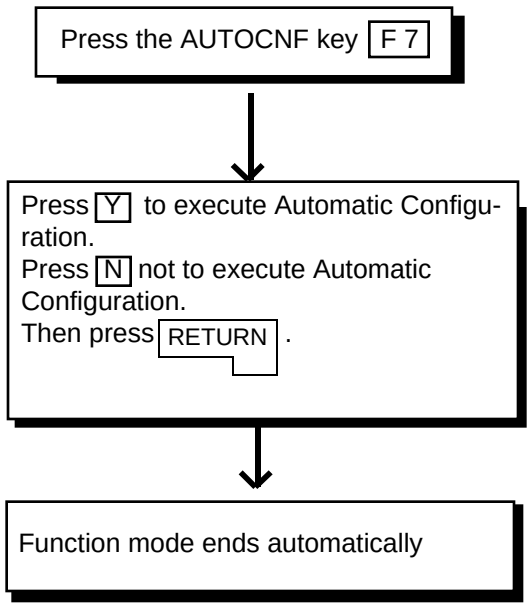
   N

3. Press the Return key. RETURN



• Telephone Type changes to SLT automatically.

Operation Chart



Conditions

When Automatic Configuration operation fails, one of the following error messages appears on the screen.
An error message type depends on the situation.

*****ERROR : Illegal parameter
*****ERROR : Not installed
*****ERROR : Diagnostic failure

For details of the error contents, refer to Section 9-M "Error Message Tables."

Reference

The AUTO CNF function is available in the following setting screens.

• Extension-Station (1/3)
• Extension-DSS Console (1/3)

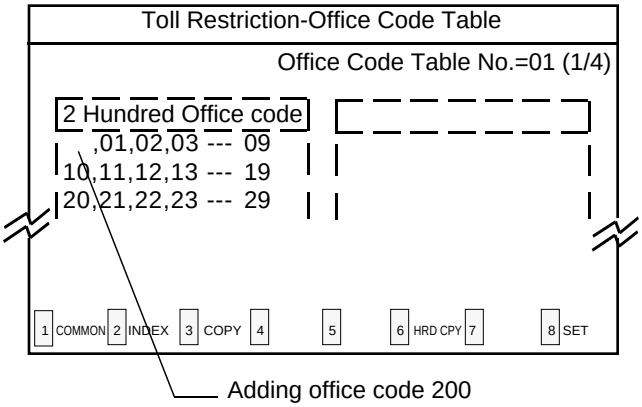
12.00 SET Function (F8) (◆ for U.S.A. and Canada only)

Description

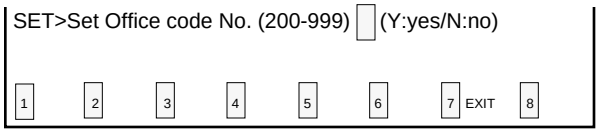
Enables you to add or delete office codes without moving the cursor to the code position. It also enables you to designate wide range of codes. This function is effective in the "Toll Restriction-Office Code Tables" and "Automatic Route Selection-Office Code Tables."

Operation

<Example 1>
Adding office code 200 in Toll Restriction Office Code Table

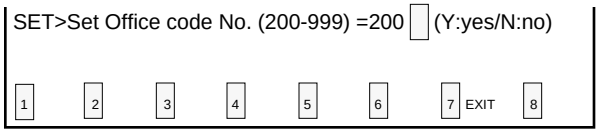


1. Press the F8 key. [F8]



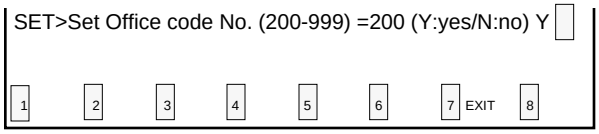
2. Enter the office code number 200.

[2] [0] [0]

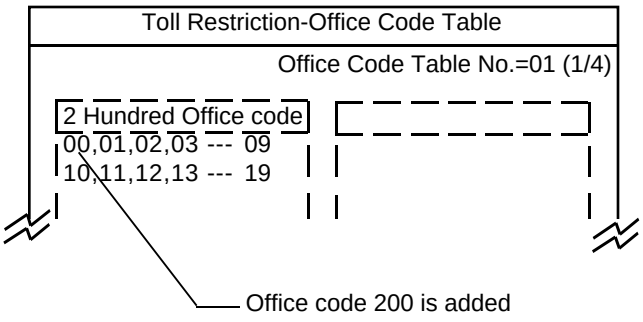


3. Move the cursor to the right by using "→", and depress Y.

[Y]



4. Press the RETURN key. [RETURN]

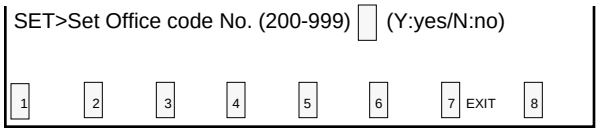


- "00" appears on the screen and Office code 200 is added. Also the message below appears to show that the code 200 is added properly:
  ***** OK

<Example 2>

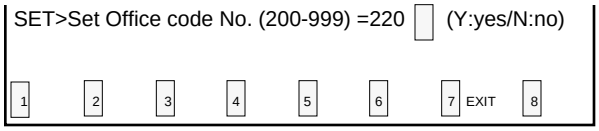
Deleting Office code 220 in Toll Restriction Office Code Table

1. Press the F8 key. [F8]



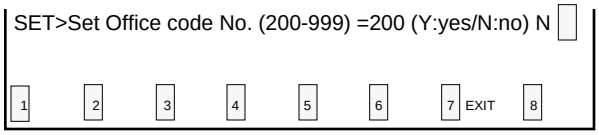
2. Enter the office code number 220.

[2] [2] [0]

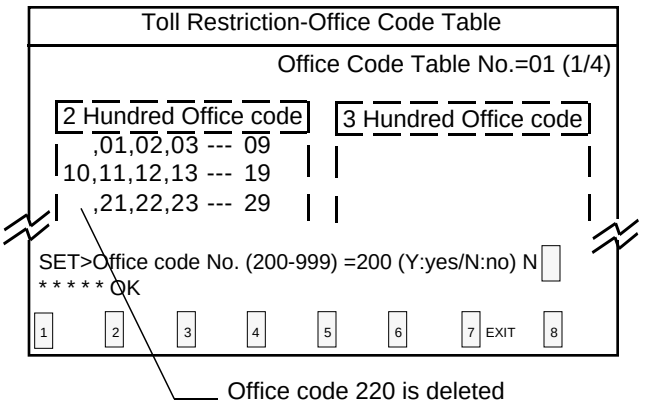


3. Move the cursor to the right by using " → ", and press N.

[N]



4. Press the RETURN key. [RETURN]



- Office code 220 is deleted and " " (blank) appears on the screen. Also the following message shows that code 220 is deleted properly:
  ***** OK

Conditions

When the SET operation is unsuccessful, the following error message appears:

***** ERROR: Illegal parameter

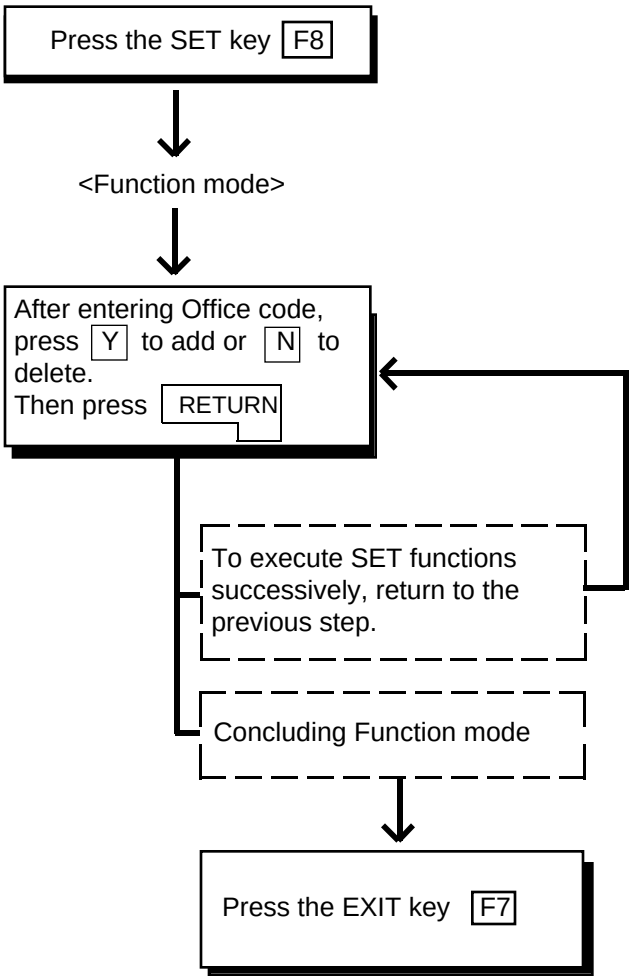
For details of the error contents, refer to Section 9-M "Error Message Tables."

It is also possible to designate wide range of office code by using N, P, X instead of the number:

N : 2 to 9
P : 0,1
X : 0 to 9

For example, then designating the office codes 200 through 209, enter : 20X

Operation Chart



Section 8

Preparation for Programming and Maintenance

Dumb Type Terminal

(Section 8)

Preparation for Programming and Maintenance

Dumb Type Terminal

Contents

A. Introduction

1.00 On-Site Administration

Description

You can administer the system programming and maintenance of the system using a Dumb terminal.
For details about communication parameters, refer to Section 9-D-7.00 “Communication Interface.”

System Security

For security reasons, access to the administration capabilities of the system is controlled by a password. To prevent an unauthorized person from learning the password, the password characters are not displayed when they are entered.

Password

To gain access to the system administration feature, a valid password (four-digit, alphanumeric characters*) must be entered. To be recognized by the system, the password must be entered exactly as stored in memory. Factory programmed eight passwords are provided from the first to fourth levels for on-site operation and the first to fourth levels for operation from a remote location.

The followings are the functions available to each password level.

The 1st Level : To access to all levels.
The 2nd Level : To set system level parameters.
The 3rd Level : To set port level parameters.
The 4th Level : To read parameters only.

When you log in to the system using the first level password, you can execute all functions, but are increasingly restricted when entering the levels 2, 3 and 4.
Passwords are originally factory programmed, but may be changed when logging in to the system by entering the first level password. Refer to Section 7-E “Changing Password.”

* Alphanumeric characters
  ASCII codes except special codes (DEL, ESC etc.) But entering “/” “~” are not available, because these characters cannot be displayed on the LCD (Liquid Crystal Display) of a PITS. Both uppercase and lowercase characters can be recognized by the system.

Successful Login

When you enter the correct password, the terminal displays the Main Menu screen from which you can select administration functions. By selecting an item from the Main Menu, you enter a system programming area and can access specific system parameters and features.

2.00 System Administration from a Remote Location

Description

From a remote location, you can execute system programming, diagnosis and traffic measurements using a Dumb terminal.
For details about communication parameters, refer to Section 9-D-7.00 “Communication Interface.”

Conditions

- RMT card (Modem) must be installed in the system and register the telephone number of modem in the System-Operation “Remote Directory Number” (FDN: 3 or 4 digits) for accessing the remote administration feature.
  For further information about “Remote Directory Number,” refer to Section 10-C-4.00 “Operation (OPR).”

- For remote access, a data terminal and modem are required at a remote location.

- Factory programmed 4 types of password from 1st to 4th level for remote operation are provided. Passwords are originally factory programmed, but may be changed at any time. Refer to Section 8-F-1.00 “Change Level (CHL).”

- You can execute remote system administration during on-line communication mode only. But when you load the system programming data from a remote location, the system shifts to off-line communication mode automatically.
  Refer to Section 17-B-2.02 “Loading Procedure” for details.

- Starting up system administration from a remote location can be done only in Dumb mode.

Operation

Starting up system administration from a remote location can be done in the following ways:

- Dial “Remote Directory Number” using Direct Inward System Access (DISA) feature.
  For further information about DISA feature, refer to 3-D-2.02 “Direct Inward System Access (DISA).”

- Program DID feature so that the incoming telephone number is converted to the “Remote Directory Number.”
  For further information about DID feature, refer to Section 3-D-2.03 “Direct Inward Dialing.”

- Assign that a call from a remote-location can access the Remote Administration feature” automatically using DIL (1:1) feature.
  For further information about DIL (1:1) feature, refer to Section 3-D-2.01 “Direct In Line (DIL).”

- Remote access by operator transfer
  The call from a remote location can be made on any trunk into the system, and be answered by the operator.
  The call is then placed on hold and the Remote Directory Number of the system dialed is received. The operator transfers the call after receiving the modem answer tone. The caller at a remote location will then hear the modem answer tone and can proceed with sign-on.
  Refer to Section 4-F-1.05 “Unscreened Call Transfer to Remote” for further information.

When the system administrator at a remote location accesses the system remote administration feature, the following message appears on the display of operator's telephone if display is provided.

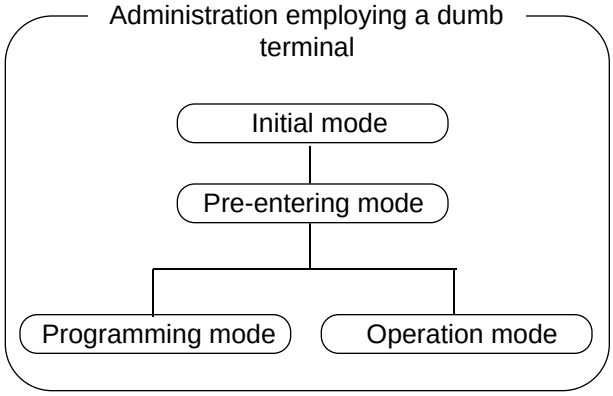
1234:RMT Access

After you log in to the system from a remote location, you can operate the system in the same way as if you were on-site.
Only one system administration terminal can access the system at a time.

3.00 Mode Structure

Administration employing a dumb terminal consists of the following four modes:

- Initial mode
- Pre-entering mode
- Programming mode
- Operation mode



When entering a mode except Initial mode, the prompt depending on the mode appears on the display. That is, the displayed prompt shows the current mode.

The table below shows the mode and the prompt displayed on the screen:

Mode	Prompt
Pre-entering mode	; >
Programming mode	; PRG >
Operation mode	; OPE >

4.00 Correspondence between Input Format and Explanation Table

The following example shows the relation between the input format and the explanation table.

Input Format

The ( ) mark above means that it can be omitted depending on the commands.

Enter SH, AT or BT

(Refer to Section 8-D-1.00 “Programming Mode” for details about SH, AT, and BT.

Index Number

Index Number	Explanation
X XX slot (01 to 15) shelf (1 to 3)	Physical number (101 to 315)

Enter the index number as explained in the table.

Input Value for Item

Item Number	Assigning Item	Input Value
1	Port 1	Three or four digit number : Directory number
2	Port 2	
3	Port 3	
4	Port 4	
5	Port 5	
6	Port 6	
7	Port 7	
8	Port 8	

Enter the item number depending on the assigning items.

When the assigning item appears, enter the value explained in “Input Value” of the table.

For example, if you assign DN of Port 1, enter Item Number 1 and when Port 1 appears, enter three or four-digit number.

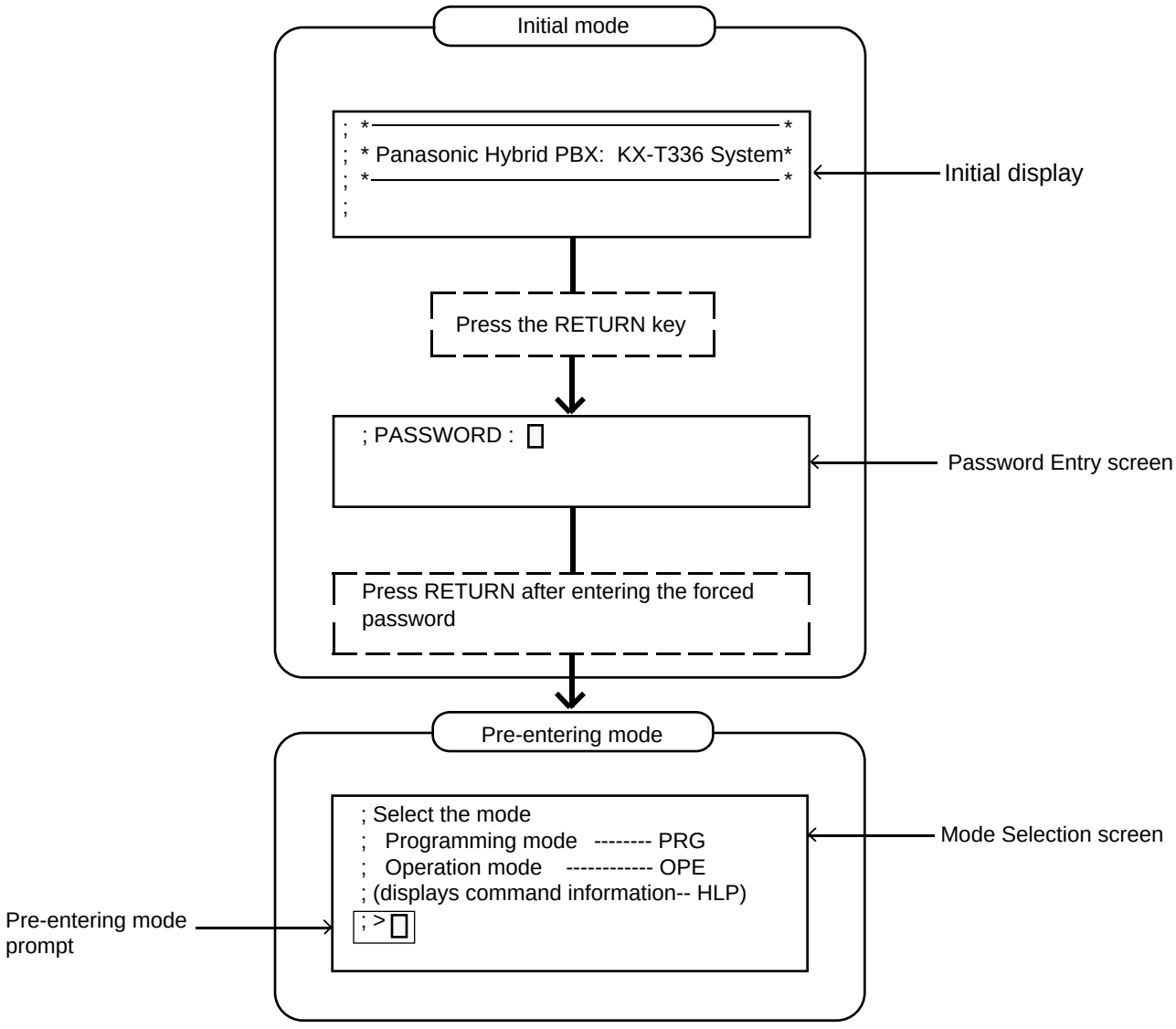
B. Entering/Finishing a Mode

1.00 Entering a Mode

1.01 Initial Mode

The mode before going into the Pre-entering mode is defined as “Initial mode.”
Entering the password level four (forced password) in the “Initial mode” advances the mode to “Pre-entering mode.”

The following flow chart illustrates the procedures for advancing the mode from “Initial mode” to “Pre-entering mode.”



Note :To prevent an unauthorized person from learning the password, the password characters are not displayed when they are entered.

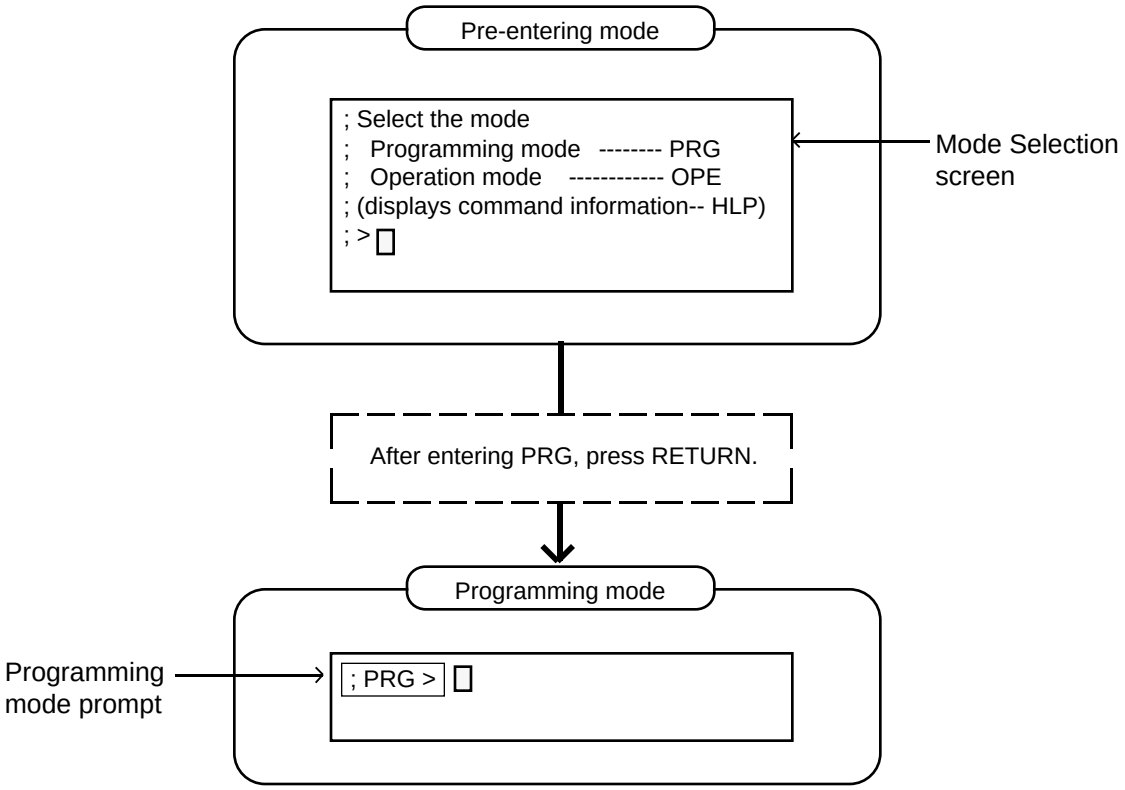
1.02 Pre-entering Mode

The mode before going into the Programming mode or Operation mode is defined as “Pre-entering mode,” that is, for entering the “Programming mode” or “Operation mode.”

1.03 Programming Mode

This mode is used to assign or change the system programming data.

The flow chart below illustrates the procedures for advancing the mode from “Pre-entering mode” to “Programming mode.”

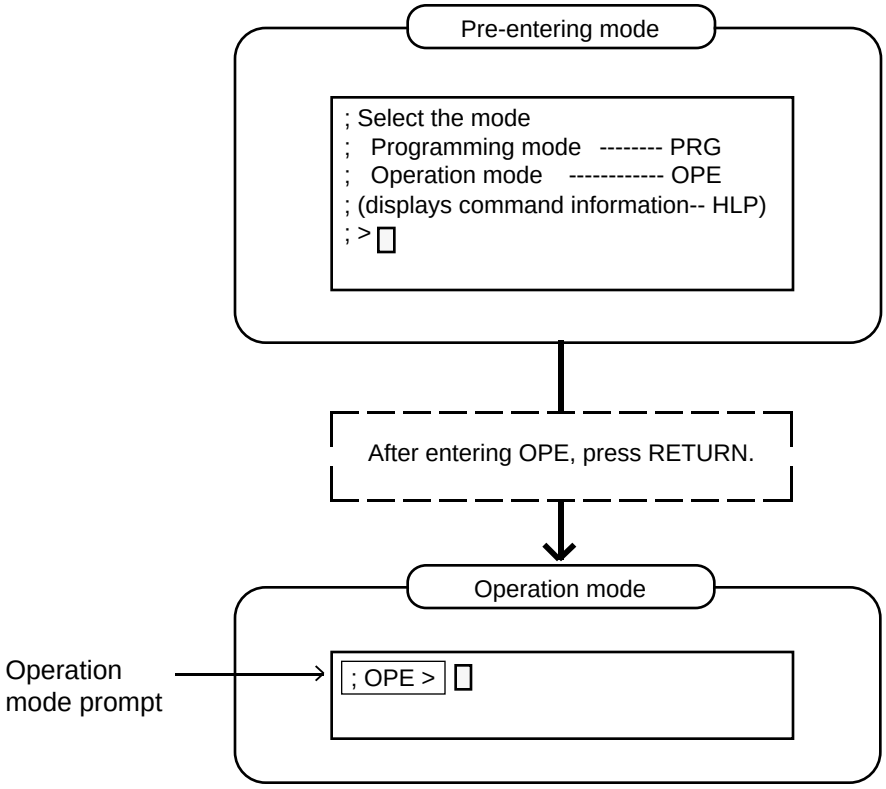


For details about operation in the Programming mode, refer to Section 8-D “Input Format-General” and Section 10 “System Programming (Dumb Type Terminal).”

1.04 Operation Mode

This mode is for confirming and changing the password level, system maintenance and monitor etc. except the programming for the system data.

The following flow chart illustrates the procedures for advancing the mode from “Pre-entering mode” to “Operation mode.”



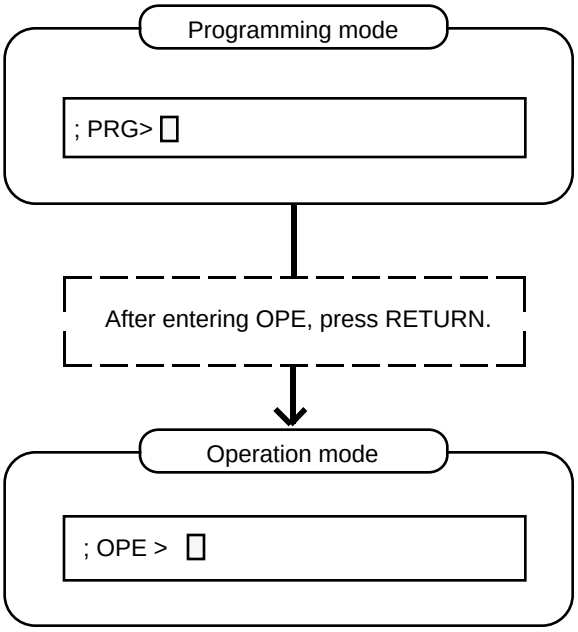
For details about operation in the Operation mode, refer to Section 8-E-2.00 “Operation Mode.”

1.05 Changing the Current Mode

It is possible to change “Programming mode” to “Operation mode” and vice versa.

The flow charts show the procedures.

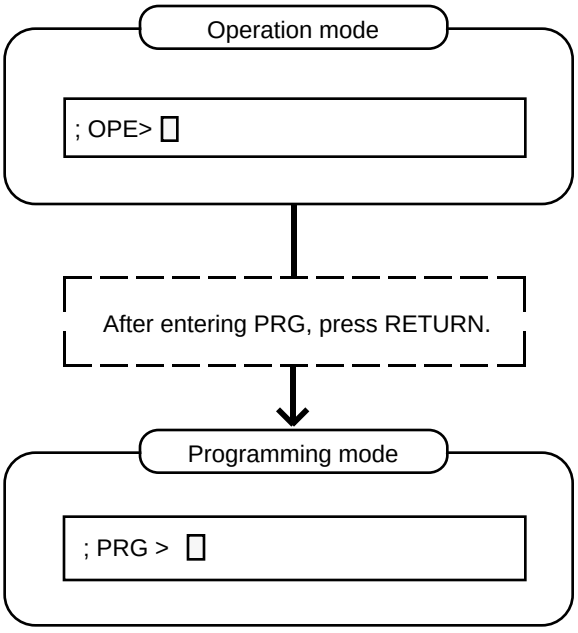
- Changing Programming mode to Operation mode



The system prompt changes from PRG> to OPE>.

The current mode now is the Operation Mode.

- Changing Operation mode to Programming mode



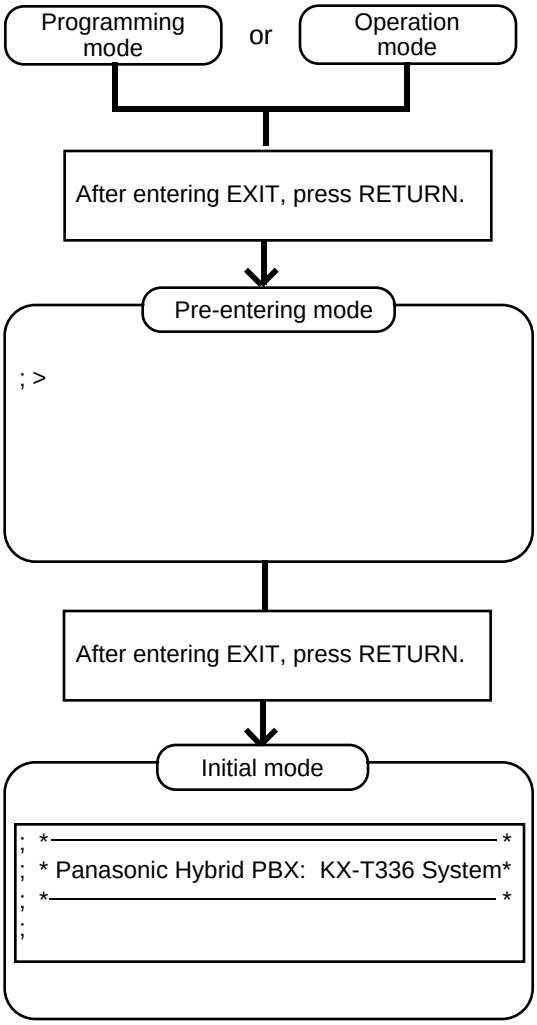
The system prompt changes from OPE> to PRG>.

The current mode now is the Programming Mode.

2.00 Finishing a Mode

2.01 EXIT

The flow chart below shows how to conclude the Programming mode or the Operation mode and return to the Initial mode.



2.02 Restart

Description

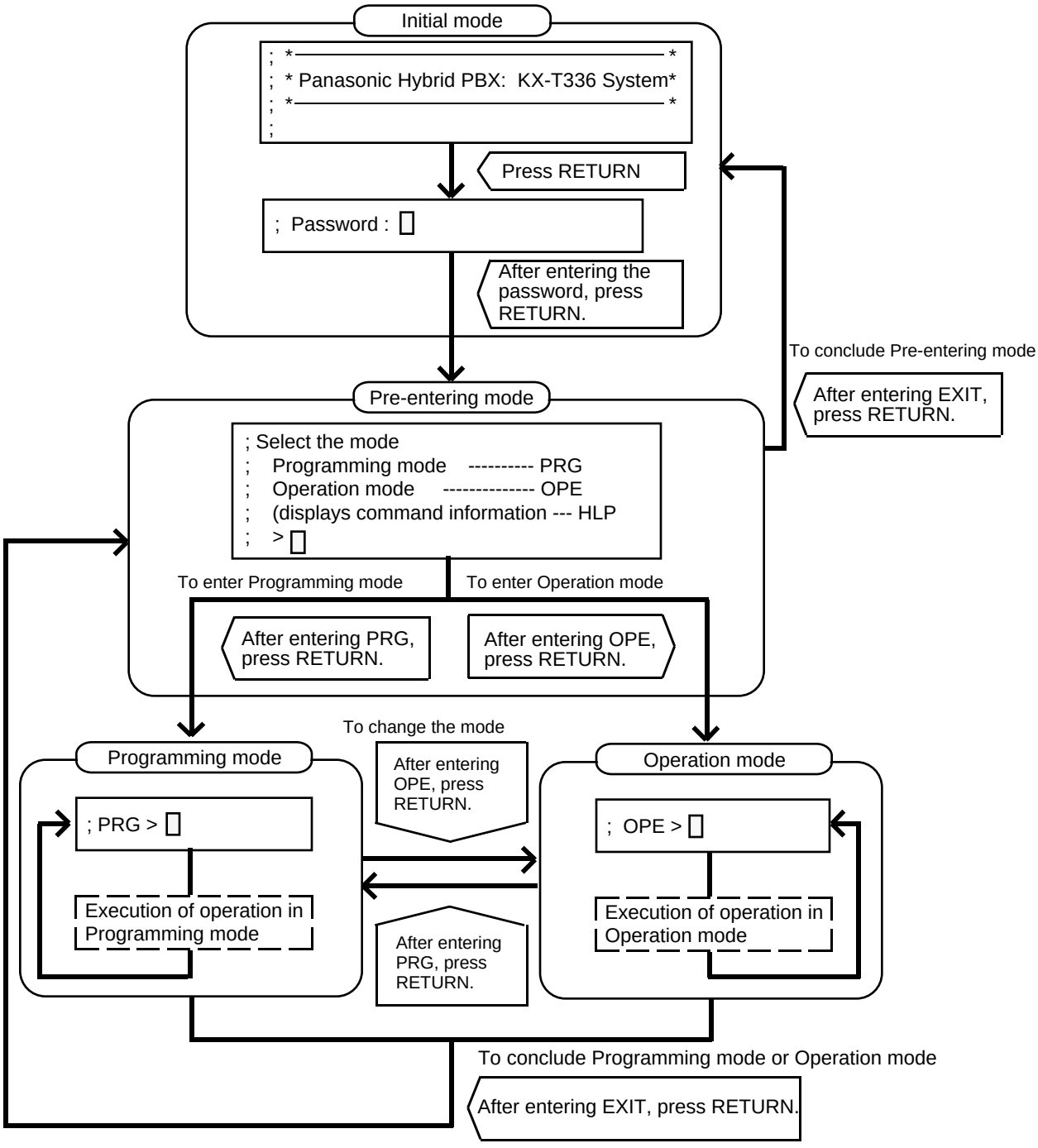
Initializes the whole system. Same condition as the RESET button is pressed.
(Password level : One)

Input Format

; OPE > RST ↵

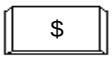
3.00 Flow Chart for Changing Modes

The procedure for changing modes is illustrated below:

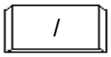


C. Fixed Key Operation

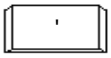
Moves the cursor one character left and deletes the character in that position.



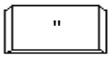
Function command key used for concluding AT or BT mode with characters ($EOD) or ($CPY) etc. For details, refer to Section 8-E “Function Commands.”



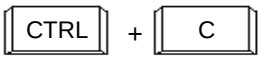
In BT mode, entered between indexes as a delimiter.



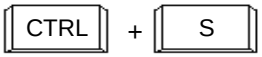
In BT mode, entered between items as a delimiter.



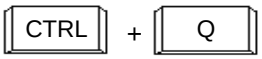
When entering characters such as names and locations etc., used for identifying them.



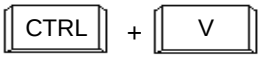
Cancels an operation during programming.



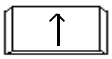
Stops scrolling information on the screen to let you view it.



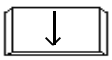
Resumes screen scrolling.



Changes the mode to VT mode.



Repeats the execution of the last entered command.



Cancels the command line and displays the prompt.

D. Input Format-General

1.00 Programming Mode

Input Format-General

In the programming mode (when PRG>▯ is displayed on the screen), enter as follows:

```
         1              2                   3
; PRG> [Command] [Type of Mode] [Index Number]
          4
        [Item Number] [Carriage Return (CR)↵]
```

Note: Be sure to enter one space between the items. The (   ) in the followings indicates pressing the RETURN key.

<Example>
Displaying "Operation (OPR)" command, SMDR (Index number 2, Item number 02)

Enter as follows:
; PRG>OPR SH 2 02 (   )

⇩ Displays the following:

```
; INDEX=2
;     02 : SMDR          →          Y
;  PRG>▯
```

1. Commands

The following programming commands are available in the programming mode.
For further information about programming, refer to Section 10 "System Programming-Dumb Type Terminal."

Programming	Command
System Assignment	SYA
Slot Assignment	SLA
DN Assignment	DNA
Channel Assignment	CHA
Operation	OPR
Tenant	TNN
System Timer	TIM
Class of Service 1	CS1
Class of Service 2	CS2
Local Access Group	LAG
Numbering Plan	NBP
Communication Interface	COM
Speed Dialing-System	SPD
Absent Message	ABS
Trunk Group (1/2)	TG1
Trunk Group (2/2)	TG2
ICM/Paging Group	IPG
Call Pickup Group	CPG
CO Line	COL
External Paging	PAG
Music Source	MUS
Auto Gain Control	AGC
Extension	EXT
DSS Console	DSS
DN Button Assignment	DNK
PF Button Assignment	PFK
DSS Button Assignment	DSK
Doorphone	DPH
Attendant Console	ATT
Attendant Queue Priority	AQP
Equal Access	EQU
OCC Access	OCC
TRS Area/Office Code Tables	TR1
TRS Office Code Tables	TR2
TRS 7/10 - Digit Table	TR3
ARS Leading Digit Table	AR1
ARS Office Code Tables	AR2
ARS Route Plan Tables	AR3
ARS Route Lists Table	AR4
ARS Modified Digit Table	AR5
DISA	DIS
DISA Code	DIC
DISA Password	DIP
DID	DID
UCD (1/2)	UC1
UCD (2/2)	UC2
TIE Line Routing Table	TIE
Installation Information	INF
Power Failure Transfer	PFT
Change Password	CHG
CPC Detect Time-Outgoing	CPC
World Select 1	WS1
World Select 2	WS2
Automatic Busy-out Count	ABC
World Select 3	WS3
CO Access Instantly	CAI
Account Code Verified	ACV
Account Code Entry on Long Distance Calls	ACL
Speed Dialing Boundary	SPB
Night Answer Group	NAG
Polarity Reversal Detection	PRD
Voice Mail Directory Number	VMD
Mail Box Number	MBN
Waiting for Second Dial Tone	WSD
Equal Access Code	EQC
World Select 4	WS4
TIE Account Code	TAC
Clock Mode	CLK
Clock Priority	CLP
TIE Trunk Relay Restriction	TRR
MFC Sequence Parameter	MFC
Charge Password	CPD
Charge Rate	RAT
Charge Limitation	CLT
E&M Selection	EMS
Tone Detection Mode	TDM
Line Hunting Sequence	LHS
ESF Frame Option	EFO
UCD Auto Log-out Operation	ULO
MFC-R2 Option (E-1)	MRO
E-1 Signaling Option	ESO
Limited Call Duration	LCD
Call Forwarding-Follow Me	CFM
Pulsed E&M	PEM
TIE Caller ID Integration	TCI
Answer Signal Wait Time	AWT

2.Type of Mode

Three types of Show type, Auto type and Batch type are available.

1) Show Type-SH

Enables you only to read the preset data.
The preset data cannot be changed by this type.

<Example>
Displaying the data in System Assignment

Enter:
; PRG>SYA SH (↵)

⇩ Displays the follows:

```
;   1   Expansion Shelf ⟶          N
;   2   Additional CONF ⟶          N

;   PRG>
```

2) Auto Type-AT

Enables you to show or edit the data in an interactive format.

Showing the data
Each item appears one by one by every pressing of the RETURN key.

Editing the data
If you do not want to change the data, press the RETURN key when ; INPUT>> is displayed.
If you want to change the data, enter the appropriate values after ; INPUT>>, then press the RETURN key.
To save the data after changing it, be sure to enter $EOD after ; INPUT>>, then press the RETURN key.

<Example>
Changing the data in System Assignment

Enter:
; PRG>SYA AT (↵)

⇩ Displays:

```
;     1 : Expansion shelf ⟶          N
;  INPUT>>
```

To change N to Y, enter Y (↵).

⇩ Next item appears:

```
;     2 : Additional CONF ⟶          Y
;  INPUT>>
```

To save the data of item 1, enter $EOD (↵):

⇩ Concludes AT mode

```
;     PRG>
```

3) Batch Type-BT

Enables you to edit the data in batch processing.

Entry of data by batch type
- Enter comma (,) between items.
- Enter slash (/) between indexes.
- Enter only comma (,) or slash (/) when not entering the parameter.
  The date of the parameter is not changed.
- To conclude BT mode in the middle of entry, enter $EOD after the entry of comma (,) or slash (/).

<Example 1>
Entering External Pager (PAG) in Batch type mode

Enter:
; PRG>PAG BT (↵)

⇩ Displays:

```
PAG BT
```

Enter the appropriate numbers and letters:

1, Y,1, Y, Y (↵)

⇩ Concludes Batch type mode

```
;   PRG
```

<Example 2>
Concluding entry in the middle of the entry of operation (OPR) in the Batch type mode

Enter:
; PRG>OPR BT 1 (↵)

⇩ Displays:

```
OPR BT 1
```

Enter the appropriate data and conclude in the middle:

Y, Y, 2, 2, $EOD (↵)

⇩ Concludes Batch type mode

```
;   PRG
```

3. Index Number

Enter the index number if required. For the commands without indexes and the commands which can omit the index numbers, entry of index number is not necessary. Refer to the list below.

When the index number is omitted, Item number should be also omitted.

(Commands without indexes)
SYA, TIM, LAG, NBP, ABS, ATT, TR3, INF, WS1, WS2, WS3

(Commands possible to omit the Index number)
SLA, COM, CPG, PAG, MUS, DPH, DIC, DIP, DID, UC1, UC2, PFT

4. Item Number

Enter when you want to specify an item number. Possible to be omitted in all commands.

2.00 Operation Mode

Input Format-General

In the operation mode (when ; OPE>□ is displayed on the screen), enter as follows:

; OPE> [Command]¹ ([Index Number]²) ([Item 1]³)
([item 2])····+ ([item n])
[Carriage Return (CR)(↵)]

Note: Be sure to enter one space between the items.
The (↵)in the followings indicates pressing the RETURN key.

<Example>
Displaying the first half of Traffic Information (Index number 1)

Enter:
; OPE>TFD 1 1 (↵)

⇩ The following information appears:

Traffic Information - Station (1/2)

Feb. 22 1990

Start Time ---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00AM	2:00AM
Incoming Calls ---	498	637	590	120	803	760
Answer Calls -----	360	503	476	88	711	662
Outgoing Calls ---	405	602	555	103	763	731
Completed Calls-	241	430	411	48	509	500
CCS-----------------	723	811	780	230	998	889

Start Time ---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Incoming Calls ---	632	721	611	598	420	311
Answer Calls -----	531	603	482	449	289	192
Outgoing Calls ---	600	654	600	531	301	191
Completed Calls-	442	488	503	461	188	119
CCS-----------------	800	830	762	750	680	620

1. Commands

The following operation commands are available in Operation mode. Enter a command depending on an operation.

Operation	Command
Test	TST
System Maintenance Monitor	SYM
In Service	INS
Out of Service	OUS
Remove	REM
Error Log Display	ERR
Traffic Display	TFD
Print Out	PRT
Set Date and Time	SDT
System Programming Data and Attendant Console Database Load	LOD
System Programming Data and Attendant Console Database Save	SAV
Change Level	CHL
Show Level	SHL
Restart	RST

2. Index Number
When the command is provided with indexes, enter the index number. For the command without indexes or the command which is able to omit the index number, entry of Index number is not necessary.

(Commands without indexes)
SDT, LOD, SAV, CHL, RST

(Command which is able to omit the index number)
PRT

3. Item 1 to item n

Enter the value depending on the item.
Do not enter the item number for the command without items.

(Commands without items)
SYM, PRT, CHL, SHL, RST

Reference

For details about the following commands, refer to:

TST	Section 15-E-3.00 “TST command (Test)
SYM ERR TFD	Section 15-F-1.00 “SYM command (System Maintenance Monitor) Section 15-D-1.02 “Error Log” Section 15-F-2.00 “TFD command (Traffic Display)”
SAV LOD	Section 16-B-4.01 “Saving Procedure” Section 17-B-2.01 “Saving Procedure” Section 16-B-4.02 “Loading Procedure” Section 17-B-2.02 “Loading Procedure”
RST	Section 8-B-2.02 “Restart”

E. Function Commands

In Auto type (AT) and Batch type (BT) modes of Programming mode, the following function commands are used for ending the modes, copying data and so on.
For details about types of modes, refer to Section 8-D-1.00 “Programming Mode.”

1.00 $ E O D

- In AT mode

  After storing data, concludes AT mode.
  Enter this command after “INPUT<<” is displayed.

- In BT mode

  Concludes BT mode in the middle of entry.
  Be sure to enter this command after comma (,) or slash (/).

2.00 $ J **Item Number**

In AT mode, this command enables you to read the desired item immediately.
This function is effective for all the commands provided with items.

<Example>
Reading Operation command Index 1, Item 17 (FDN for General Operator Call)

If the following is already displayed:

```
; INDEX=1
;     01 : Tenant Service          → Y
; INPUT>>
```

⇩

Enter:
$J17 (↵)

⇩ Displays:

```
; 17 : FDN for General Operator Call →

; INPUT>>
```

Every pressing of the RETURN key displays the next item. After the last item is displayed, the first item is displayed by pressing the RETURN key.

3.00 $ C L R

Clears data (no data setting) in AT and BT modes. This function is effective for the following item numbers of the respective command.
To execute the clearing function, make sure to enter $EOD after $CLR.

Command	Item number
OPR (Index 2)	13, 14, 17
TNN	04 to 19
LAG	03 to 18
NBP	01 to 87
SPD	2
ABS	07 to 16
TG1	02
TG2	10 to 25
COL	2
EXT	05, 06
DNK	04, 09, 14, 19, 24, 29, 34, 39, 44, 49, 54
PFK	02, 04, 06, 08, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32
DSK	02, 04, 06, 08, 10, ····, 64
EQU	02, 07, 09, 11
OCC	02, 07, 09, 11
AR2	001
AR3	01 to 32
AR4	01 to 14
AR5	2
DIP	1 to 8
DID	3
INF	01 to 10
PFT	1, 2

<Example>

Clearing “Operation” Index 2, Item 13 Start Time of Traffic Measurement.

- In AT mode

Enter as follows:
; PRG>OPR AT 2 13 (↵)

⇩ Displays the following:

```
; INDEX=2
;     13 : Start Time of Traffic Measurement ⟶ 09:00A
; INPUT>>
```

⇩

Enter:
$CLR (↵)

⇩ Displays:

```
;    14 : Start Time of Test          ⟶
; INPUT>>
```

⇩

Enter:
$EOD (↵)

⇩ The value “09: 00A” is cleared from “13: Start Time of Traffic Measurement” and concludes this mode:

```
;   PRG>
```

- In BT mode

Enter:
; PRG>OPR BT2 13 (↵)

⇩ Displays:

```
OPR   BT2     13
```

⇩

Enter
$CLR (↵)
The value of item 13 is cleared.

4.00 $ C P Y

In AT and BT modes, copies the setting data. This function is effective for the following index numbers of the respective command.

Command	Index number
CS1	01 to 32
CS2	01 to 32
TR1	1 to 8 *
	or Entry number 200 to 999
TR2	01 to 64
AR1	200 to 999
AR2	01 to 32
AR3	01 to 32
AR4	01 to 64

* See Note on the next page.

Input Format

$CPY XXX XXX- XXX
<1> <2> <3>

<1> Enter the index number of copy source data.
<2> <3> Enter the first and last index numbers.

Note: Enter the index numbers in ascending order. If you want to copy the source data to one destination, enter the same index numbers into <2> and <3> .

In AT mode, enter $CPY when the first item is displayed. Copying is unavailable after the entry of another item.

<Example>

Copying the data of “Class of Service No.1” to “Class of Service No.2.”

• In AT mode

Enter:
; PRG>CS1 AT 01 (↵)

⇩ Displays:

```
; Class of Service No. 01
;   01:Toll Restriction Level (Day)  ⟶   08
; INPUT>>
```

⇩

Enter:
$CPY 01 02-02 (↵)

⇩ CS No.1 is copied to No.2 and displays like the following:

```
; Class of Service No. 01
;   01:Toll Restriction Level (Day)  ⟶   08
; INPUT>>
```

• In BT (Batch type) mode

Enter:
; PRG>CS1 BT 01 (↵)

⇩ Displays:

```
CS1 BT01
```

⇩

Enter:
$CPY 01 02-02 (↵)
The data of “Class of Service No.1” is copied to that of No.2

Note: In TR1 command, copying by the Index number or the entry number is available. In this case, the input format is as follows:

$CPY 1 or 2 XXX XXX-XXX

Enter 1 to copy by the entry number.
Enter 2 to copy by the index number.

<Example>

Copying data of entry number 200 to entry numbers 201 through 900, enter as follows:

$CPY 1 200 201-900
└⟶ by Entry number

Copying data of Index numbers 1 to Index number 2 through 8, enter as follows:

$CPY 2 1 2-8
└⟶ by Index number

5.00 [$] [S] [E] [T] (◆ for U.S.A. and Canada only)

In AT and BT modes, used for the entry numbers 200 through 999 in TR 2 and AR2 commands, to set “Y” or “N” to all the entry numbers that you designated.

Input Format

$SET XXX Y/N
<1> <2>

<1> Enter the Entry number that you want to set. When you want to designate multiple numbers, use N, P, X.

N: designates 2 through 9
P: 0 and 1
X: 0 through 9.

<Example>

When specifying 200 through 209, enter:
20X
When specifying 200 through 999, enter:
NXX
When specifying 200, 300, 400, ⋯, 800, 900, enter:
N00

<2> Set “Y” or “N”.

In AT mode, enter the number while the first item is displayed.
$SET is ineffective after entering another item.

<Example>

Setting all the entry numbers in the Index number 1 of AR2 to “N.”

- In AT mode

Enter:
; PRG>AR2 AT 01 (↵)

⇩ Displays:

```
; Office Code Table No. 01
;   001 : Area code          →   Y
; INPUT>>
```

⇩

Enter:
$SET NXX N (↵)

⇩ All the entry numbers are set to “N” and displays:

```
; Office Code Table No. 01
;   001 : Area code          →   N
; INPUT>>
```

- In BT (Batch type) mode

Enter:
; PRG>AR2 BT 02 (↵)

⇩ Displays:

```
AR2 BT 02
```

⇩

Enter:
$SET NXX N (↵)
All the entry numbers are set to “N.”

6.00 $ C N F

Used in AT mode, and sets the Telephone Type of the extension and DSS consoles automatically.

<Example>
When the telephone type of DN 103 is set to “2” (PITS) and actually connected telephone type is “1” (SLT).

Enter:
; PRG>EXT AT DN 103 (↵)

⇩ Displays:

```
;     01 : Telephone Type          ⟶  2
;  INPUT >> □
```

⇩

Enter:
$CNF

⇩ Telephone Type changes to “1” automatically and displays:

```
;     01 : Telephone Type          ⟶  1
;  INPUT >> □
```

F. Maintenance Command

1.00 Change Level (CHL)

Description

Allows you to change the password level.
(Password level : Four or higher)

Input Format

; OPE> CHL ↵

After pressing the RETURN key and "= □ " appears, enter the password. However, the password characters are not displayed when they are entered.

2.00 Show Level (SHL)

Description

Allows you to confirm the current password level.
(Password level : Four or higher)

Input Format

; OPE> SHL ↵

3.00 In Service (INS)

Description

Allows you to change the status of shelves, cards, ports and stations from “Out of Service” to “In Service.”
The system should be in on-line communication mode.
For changing lower devices such as stations and ports etc. to “In Service,” upper devices such as cards and shelves should be “In Service” already. (Password level : Two or higher)
For further information about In Service, refer to Section 15-C-1.01 “INS (In Service) command.”

Input Format

; OPE> [INS] [Item Number] [↵]

Device	Item Number	Explanation
Shelf	1 to 3	Physical number 1: Basic Shelf 2: Expansion Shelf 1 3: Expansion Shelf 2
Card	101 to 315	Physical number 101 to 112: Service Cards in the Basic Shelf 201 to 215: Service Cards in the Expansion Shelf 1 301 to 315: Service Cards in the Expansion Shelf 2
Port	1011 to 3158	Physical number 1011 to 1128: Port number assigned to Service Cards in the Basic Shelf 2011 to 2158: Port number assigned to Service Cards in the Expansion Shelf 1 3011 to 3158: Port number assigned to Service Cards in the Expansion Shelf 2
Station	DNXXXX or 1011 to 3158	Extension directory number (XXXX: three or four digit number) Physical number
Attendant Console	A1 or A2 1011 to 3158	Attendant Console number Port physical number
DTMF Receiver	Rxxxy	xxx:card physical number (101 to 315) y:1 or 2
Conference Trunk	CFBxx(01 to 08) CFOyy(01 to 64)	Basic conference trunk number Optional conference trunk number

4.00 Out of Service (OUS)

Description

Allows you to change the status of cards, ports and stations from “In Service” to “Out of Service.” The system should be in on-line communication mode.
When setting the shelves or cards to “Out of Service,” then lower devices, such as stations, ports etc. become “Out of Service” automatically.
(Password level : Two or higher)

For further information about Out of Service, refer to Section 15-C-1.02 “OUS (Out of Service) command.”

Input Format

; OPE> [OUS] [Item Number] [↵]

Item numbers are same as those listed in 3.00 “In Service (INS)” on the previous page.

5.00 Remove (REM)

Description

Enables you to delete the stored system programming data by specifying stations, Attendant Consoles and so on.
The system should be in on-line communication mode.
Specified terminal must be in Out of Service.
(Password level:one)

Before you detach the installed devices, remove the system programming data of associated device using this command.

Input Format

; OPE> [REM] [Item Number] [↵]

Device	Item Number	Explanation
Port	1011 to 3158	Physical number
Station	DN XXXX or 1011 to 3158	Extension directory number (XXXX: three or four digit number) Physical number
Attendant console	A1 or A2 or 1011 to 3158	Attendant Console number Physical number

6.00 Print Out (PRT)

Description

You can print out the system programming data, system status, error log, and traffic information respectively by entering one of the print out commands described in the following Input Format.

Input Format

1. Printing out the system programming data associated with all commands of programming mode.

   ; OPE> [PRT] (↵)

2. Printing out the system programming data by specifying a command name.

(Example)

; OPE> [PRT] [Command Name] [↵]

; OPE> [PRT] [SLA] [↵]

3. Printing out the data by specifying the index number.

   ; OPE> [PRT] [Command Name] [Index number] [↵]

(Example)

; OPE> [PRT] [TFD] [1 to 7] [↵]

; OPE> [PRT] [EXT] [DN100] [↵]

4. Stopping the print out.

   ; OPE> [PRT] [0] [↵]

7.00 Set Date and Time (SDT)

Description

Allows you to set the date and time

Input Format

; OPE> [SDT] [Item 1] [Item 2] [Item 3] [Item 4] [Item 5] [Item 6] [Item 7] [↵]

All items from 1 through 7 must be entered.

Item	Assigning Item	Input Value
1	Year	XX: last two digits of the year
2	Month	01 to 12: Jan. through Dec.
3	Day	01 to 31
4	Week	1 : Sunday 2 : Monday 3 : Tuesday 4 : Wednesday 5 : Thursday 6 : Friday 7 : Saturday
5	Hour	01 to 12
6	Minute	00 to 59
7	AM/PM	1: a.m. 2: p.m.

For only reading the preset data, enter ;

OPE> [SDT] [↵]

G. Help Function

1.00 Programming Mode

Description

Used to display brief instructions and a list of commands available in the Programming Mode.

Input Format

; PRG> HLP ↵

Display

```
; PRG>hlp
; <<  Command + Type + ( Index ) + ( Item No.)  >>
; Command are..
;  SYA   ...System Assignment              SLA   ...Slot Assignment
;  DNA   ...DN Assignment                  CHA   ...Channel Assignment
;  OPR   ...Operation                      TNN   ...Tenant
;  TIM   ...System Timer                   CS1   ...Class of Service (1/2)
;  CS2   ...Class of Service (2/2)         LAG   ...Local Access Group
;  NBP   ...Numbering Plan                 COM   ...Communication Interface
;  SPD   ...Speed Dialing - System         ABS   ...Absent Message
;  TG1   ...Trunk Group (1/2)              TG2   ...Trunk Group (2/2)
;  IPG   ...ICM/Paging Group               CPG   ...Call Pickup Group
;  COL   ...CO Line                        PAG   ...External Paging
;  MUS   ...Music Source                   AGC   ...AGC
;  EXT   ...Station                        DSS   ...DSS Console
;  DNK   ...Station DN-Key Assignment      PFK   ...Station/DSS PF-Key Assignment
;  DSK   ...Station/DSS DSS-Key Assignment DPH   ...Doorphone
;  ATT   ...Attendant Console              AQP   ...Attendant Que Priority
;  EQU   ...Equal Access                   OCS   ...OCS Accessis
;  TR1   ...TRS Area/Office Code Table     TR2   ...TRS Office Code Tables
;  TR3   ...TRS 7/10 Digit Table           AR1   ...*RS Leading Digit Table
;  *R2   ...ARS Office Code Tables         AR3   ...*RS Route Plan Tables
;  *R4   ...ARS Route Lists Table          AR5   ...ARS Modified Digit Table
;  DIS   ...DISA                           DIC   ...DISA Code
;  DIP   ...DISA Password                  DID   ...DID
;  UC1   ...UCD (1/2)                      UC2   ...UCD (2/2)
;  TIE   ...TIE Line Routing Table         INF   ...Installation Information
;  PET   ...Power Failure Transfer         CHG   ...Change Password
;  CFC   ...CFC Defect Time - Outgoing     WS1   ...World Select 1
;  WS2   ...World Select 2                 ABC   ...Automatic Busy-Out Count
;  WS3   ...World Select 3                 CAI   ...CO Access Instatly
;  ACV   ...Account Code Verified          ACL   ...Account Code Longdistance
;  SPB   ...Speed Dial Boundary            NAG   ...Night Answer Group
;  PRD   ...Polarity Reverce Detection     VMD   ...Voice Mail DN
;  MBN   ...Mail Box Number                WSD   ...Waiting Second Dial Tone
;  EQC   ...Equal Access Code              WS4   ...World Select 4
;  TAC   ...TIE Account Code               CLK   ...Clock Mode
;  CLP   ...Clock Priority                 TRR   ...TIE Trunk Relay Restriction
;  MFC   ...MFC Sequence Parameter         CPD   ...Charge Password
;  RAT   ...Rate                           CLT   ...Charge Limitation
;  EMS   ...E&M Selection                  TDM   ...Tone Detect Mode (DISA/AGC)
;  LHS   ...Line Hunting Sequence          EFO   ...ESF Frame Option
;  DLS   ...DSP detect Level Set           DRD   ...DR2 max Receive Digit
;  ULO   ...UCD Auto Log-out Operation     MR2   ...MFC-R2 Option (E-1)
;  ESO   ...E1 Signaling Option            LCD   ...Limited Call Duration
;  CFM   ...Call Follow Me                 PEM   ...Pulsed E&M
;  TCI   ...TIE Caller ID Integration      AWT   ...Answer Signal Wait Time
; Type are..
;  SH...Show Type  AT...Auto Advance Set Type  BT...Batch Set Type
; PRG>
```

(Note)
In the list above, the commands in the shaded parts are not available for areas other than U.S.A. and Canada.

2.00 Operation Mode

Description

Used to display brief instructions and a list of commands available in the Operation Mode.

Input Format

; OPE> HLP ↵

Display

```
;OPE>HLP<CR>
;<< Command + (Index) + (Item No.1) + (Item No.2) + •••• + (Item No.n) >>
;Command are..
;  TST  ...Test                    SYM  ...System Maintenance Monitor
;  INS  ...In Service              OUS  ...Out of Service
;  REM  ...Remove                  ERR  ...Display Error Log
;  TFD  ...Traffic Display         PRT  ...Print Out
;  SDT  ...Set Date and Time       LOD  ...Initial Program Load
;  SAV  ...Program Data Save       CHL  ...Change Level
;  SHL  ...Show Level              RST  ...Restart
;  DTM  ...DTMF-G/R Diagnosis      LBT  ...Loop Back Test
;  VUP  ...ROM version up
; OPE>
```

Section 9

System Programming

VT220 and Compatibles

(Section 9)

System Programming

VT220 and Compatibles

Contents

A. Introduction

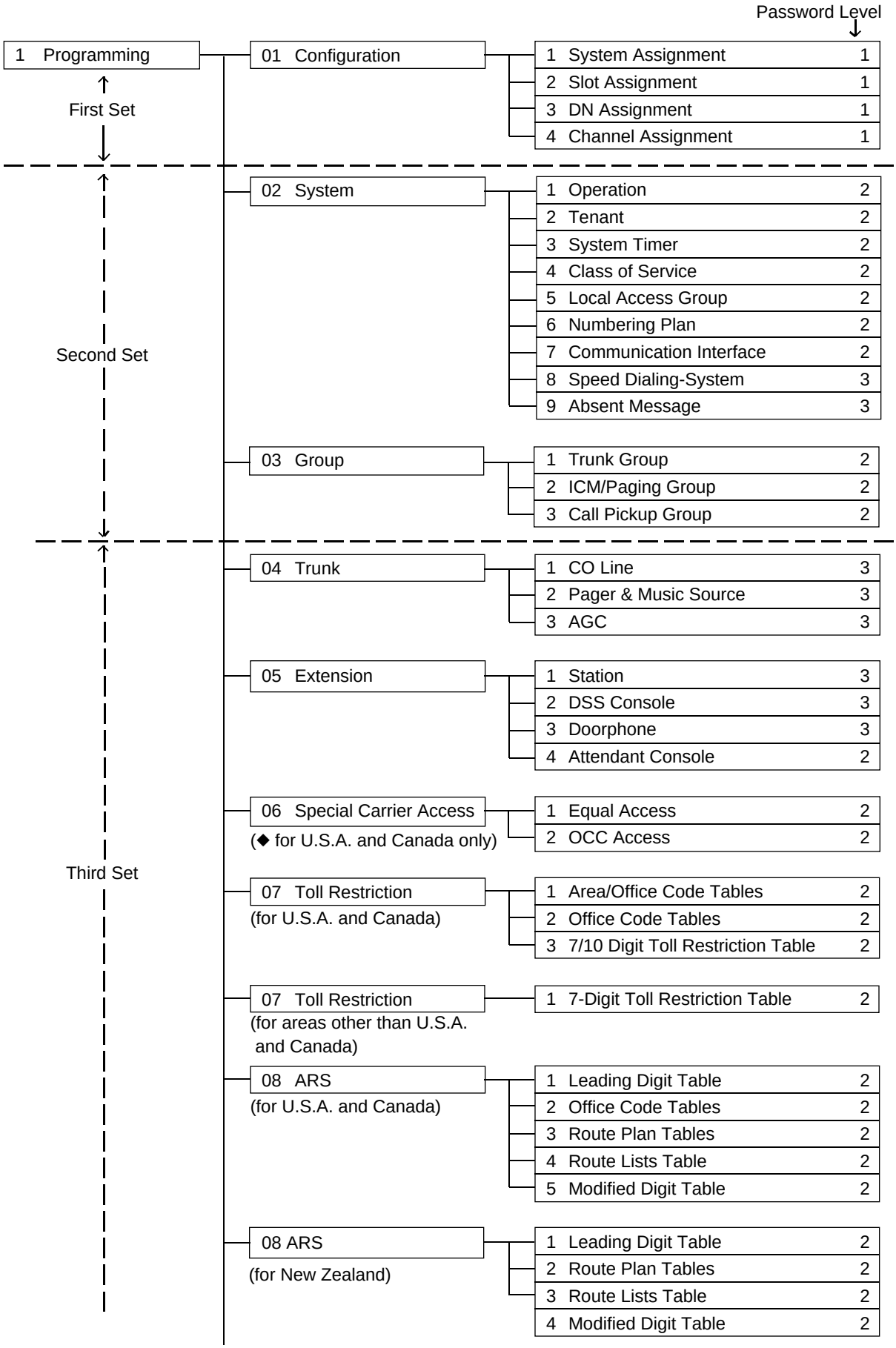
This section provides system programming using VT compatible terminals. Before starting system programming, Section 7 “Preparation for Programming and Maintenance (VT220 and Compatibles)” must be read. This section provides the basic operations required for system programming.
Programming consists of 10 submenu screens and each submenu consists of various setting screens.

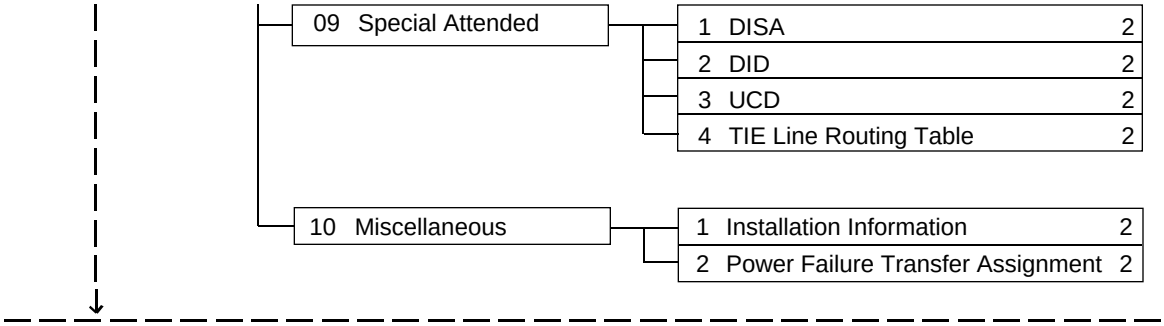
The setting screens are used to assign or change various parameters concerning the system administration such as Tenant, Class of Service, Numbering Plan and so on.

The setting screens should be programmed in order of “First Set,” “Second Set” and “Third Set” which is illustrated in “Construction of Programming Mode” on the following page. If you program a screen in the second set before setting the first-set screens, an error message will appear. For example, if you program “Extension” before programming “Configuration-DN Assignment,” an error message is displayed.

In this section, each setting screen is explained using a screen and an explanation table.

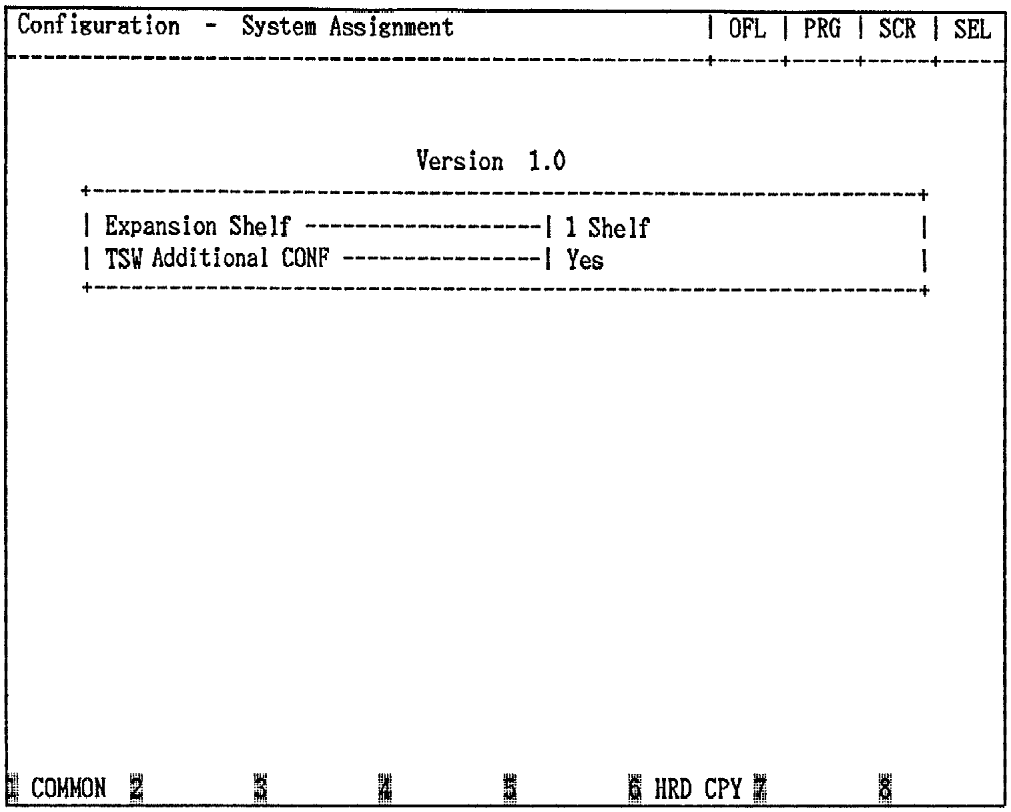
B. Construction of Programming Mode




09 Special Attended
1 DISA 2
2 DID 2
3 UCD 2
4 TIE Line Routing Table 2
10 Miscellaneous
1 Installation Information 2
2 Power Failure Transfer Assignment 2

C. Configuration Screen

1.00 System Assignment



Summary

This screen is used to configure the system for:

- Expansion shelf (1, or both 1 and 2)
- T-SW Conference Expansion Card

To expand the conference trunks, T-SW Conference Expansion Card (KX-T336104) must be installed.
(Password level : One)

Assigning Items	Default	Selection of Value	Reference
Expansion Shelf	Automatic set	No : expansion shelf not installed 1 Shelf : expansion shelf 1 available 2 Shelves: both expansion shelves 1 and 2 available	1-E-2.00
TSW Additional CONF	Automatic set	Yes : conference expansion card installed No : conference expansion card not installed	4-G-5.00 4-G-6.00 5-E-1.00 6-H-1.00 6-H-2.00

Description of Assigning Items

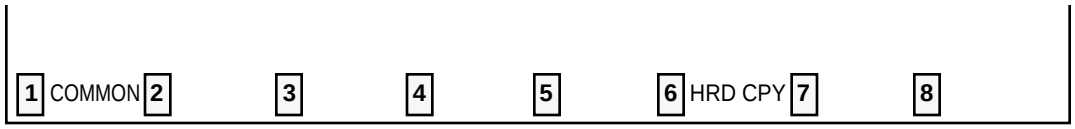
Expansion Shelf	Enables the expansion shelf 1 when set to “1 Shelf” and both expansion shelves 1 and 2 when set to “2 Shelves.”
TSW Additional CONF	Enables the expansion of conference trunks when set to “Yes.”

Conditions

None

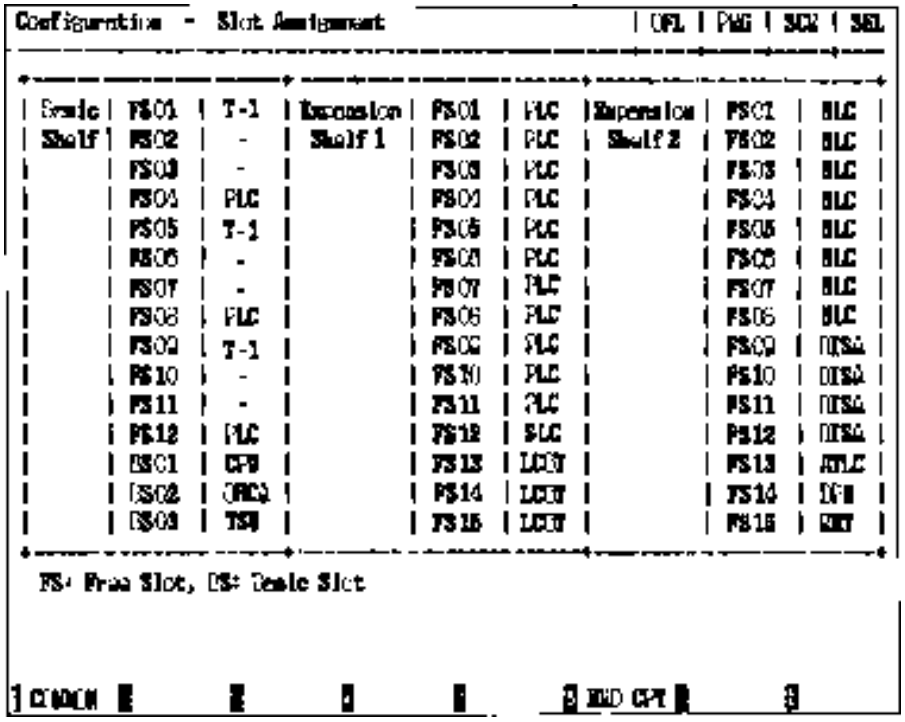
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

2.00 Slot Assignment



Summary

Assigns the type of service cards, inserted in the free slots in the basic and expansion shelves.

(Password level : One)

Assigning Items	Default	Selection of Value	Reference
Basic Shelf FS (Free Slot) (01 to 12)	Automatic set	Blank : Not assigned PLC : Proprietary Integrated Telephone System Line Circuit card HLC : Hybrid Line Circuit card SLC : Single Line Telephone Circuit card MSLC : SLC card with Message Waiting LCOT : Loop Start Central Office Trunk card GCOT : Ground Start Central Office Trunk card RCOT : LCOT card with Polarity Reversal Detection PCOT : LCOT card with Pay Tone Detection DID : Direct Inward Dialing card E&M : E&M Trunk card T-1 : T-1 DIGITAL TRUNK CARD E-1 : E-1 DIGITAL TRUNK CARD AGC : Automatic Gain Control card DISA : Direct Inward System Access card OPX : Off Premise Extension card ATLC : Attendant Console Line Circuit card DPH : Door Phone Circuit card RMT : Remote Circuit card (◆ GCOT is available for U.S.A. and Canada only)	1-A-5.00 1-E-1.00 to 2.00 1-E-7.00 to 27.00

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Basic Shelf BS (Basic Slot) (02)	Automatic set	Blank : Not assigned OHCA : T-SW Off-Hook Call Announcement card	1-A-5.00 1-E-1.00 to 2.00 1-E-7.00 to 21.00
Expansion Shelf 1 FS (01 to 15)	Automatic set	Same as Basic Shelf FS	
Expansion Shelf 2 FS (01 to 15)	Automatic set	Same as Basic Shelf FS	

Description of Assigning Items

Basic Shelf FS (01 to 12)	Defines the type of card installed in the free slots (01 to 12) of the basic shelf.
Basic Shelf BS (02)	Used to utilize the T-SW OHCA card or not.
Expansion Shelf 1 FS (01 to 15)	Defines the type of card installed in the free slots (01 to 15) of the expansion shelf 1.
Expansion Shelf 2 FS (01 to 15)	Defines the type of card installed in the free slots (01 to 15) of the expansion shelf 2.

Conditions

The cursor does not move to BS01 and BS03. In BS02, assignable value is OHCA or Blank.

T-1/E-1 card should be assigned to FS01, 05 or 09 of any shelf.
One T-1 card occupies three slots. If you assign a T-1 card to FS01, FS02 and FS03 are not available for other cards. A '– (hyphen)' is displayed in these two slots and the cursor skips them.
One E-1 card occupies four slots. If you assign an E-1 card to FS01, FS02 through FS04 are not available for other cards. A '– (hyphen)' is displayed in these three slots and cursor skips them.

If no CO trunk card is assigned, “Trunk-CO Line” screen cannot be selected.
If no Extension card is assigned, “Extension-Station” screen cannot be selected.

If AGC card is not assigned, “Trunk-AGC” screen cannot be selected.

If DPH card is not assigned, “Extension-Doorphone” screen cannot be selected.

If ATLC card is not assigned, “Extension-Attendant Console” screen cannot be selected.

If DISA card is not assigned, “Special Attended-DISA” screen cannot be selected.

If DID card is not assigned, “Special Attended-DID” screen cannot be selected.

When assigning a card, the card status is Out of Service (OUS). When utilizing the card, the card status should be set to In Service (INS).
For In Service (INS) and Out of Service (OUS), refer to Section 7-J-4.00 “INS (In Service)” and Section 7-J-5.00 “OUS (Out of Service).”
For confirming whether the card status is INS or OUS, refer to Section 14-G-3.02 “Card Status screen.”

When deleting (selecting blank) or changing the pre-assigned card type, the conditions should be the followings:

- The card status is OUS or Fault.
- All of the port data has been deleted.

However, if there exist port data, it is possible to change the cards as follows:

- PLC card ⟷ HLC card
- SLC card ⟷ HLC card

Deleting the ATLC card will be an error if there is one of the following assignments:

- "Group-Trunk Group",
  Incoming Mode (Day) is set to "ATT."
  Intercept Routing (Day) is set to "ATT."

- "Extension-Doorphone",
  Doorphone Call Assignment is set to "ATT."

Deleting the DISA card will be an error if there is one of the following assignments:

- "Group-Trunk Group",
  Incoming Mode (Day) is set to "DISA."
  Incoming Mode (Night) is set to "DISA."

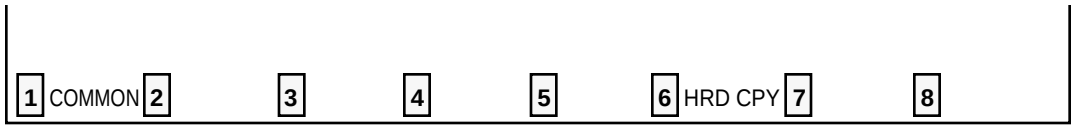
Deleting the HLC, SLC, LCOT or GCOT card will be an error if there is the following assignment to the slot to be deleted:

- Miscellaneous-Power Failure Transfer Assignment.

See Section 1-A-5.00 "Service Cards Description" for installing the cards in combination.

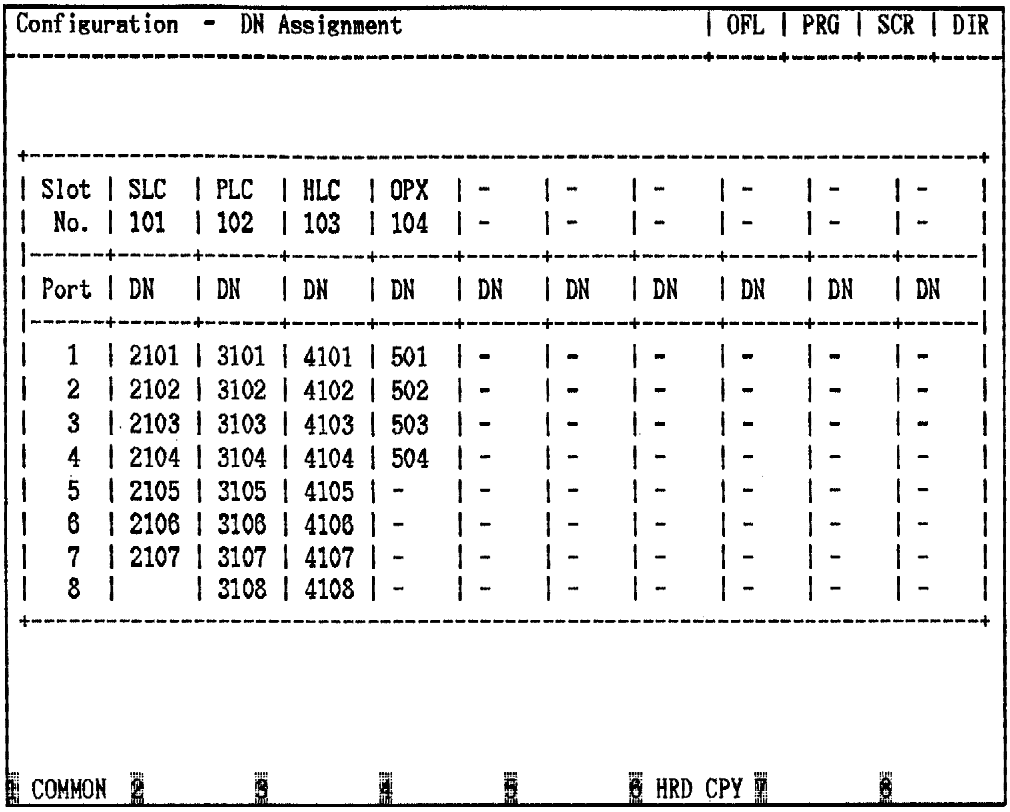
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I "Operation of Function Keys."

3.00 DN Assignment



Summary

Assigns a DN (directory number) to each extension port.
Four DN Assignment screens are provided.
(Password level : One)

Assigning Items	Default	Selection of Value	Reference
DN	100 to 387 in physical number order	Three or four numeric digits : directory number	3-B-2.00

Description of Assigning Item

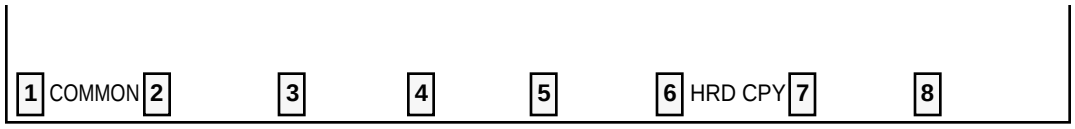
DN Assigns a default directory number to every port of installed extension cards.

Conditions

If no Extension card (PLC, SLC, HLC, OPX) is assigned, DN assignment screen will not be displayed.

Function

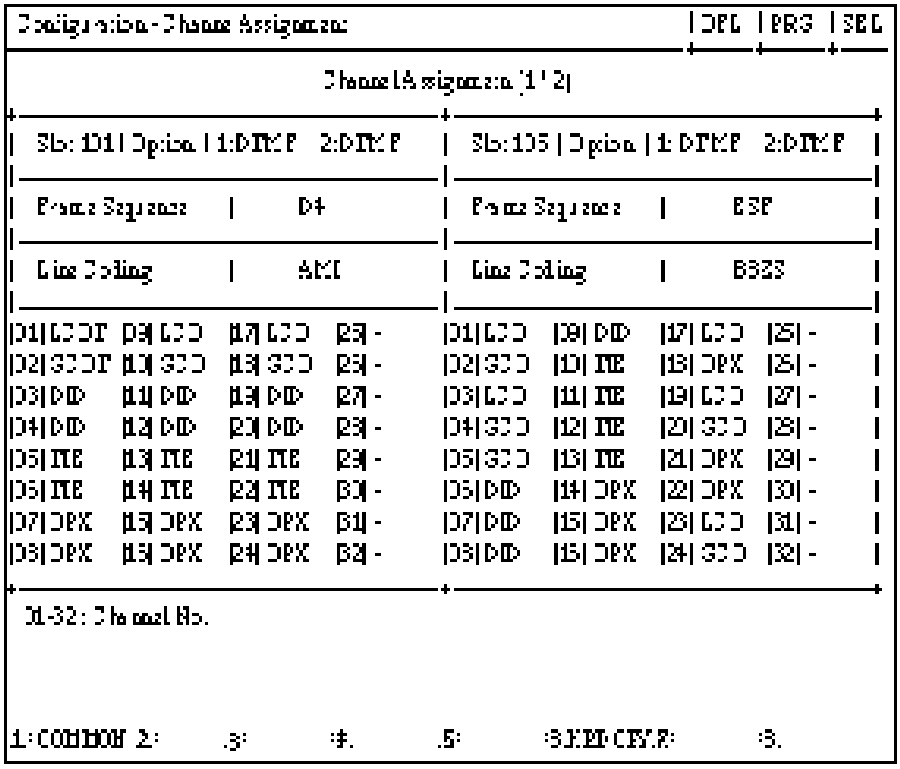
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

4.00 Channel Assignment

4.01 T-1 card



Summary

Assigns the type of T-1 interface to each channel. (Password level : One)

Assigning Items	Default	Selection of Value	Reference
Slot No.	Automatic set	Physical slot no. (101,105,109,201,205,209,301, 305,309)	3-F-15.00
Frame Sequence	ESF	D4 / ESF	10-C-64.04
Line Coding	B8ZS	AMI / B8ZS	3-F-15.00
Channel (01 to 24)	Blank: Not assigned	LCO / GCO / DID / OPX / TIE	

Description of Assigning Item

Frame Sequence Assigns the type of Frame Sequence for each T-1 card.

Line Coding Assigns the type of Line Coding for each T-1 card.

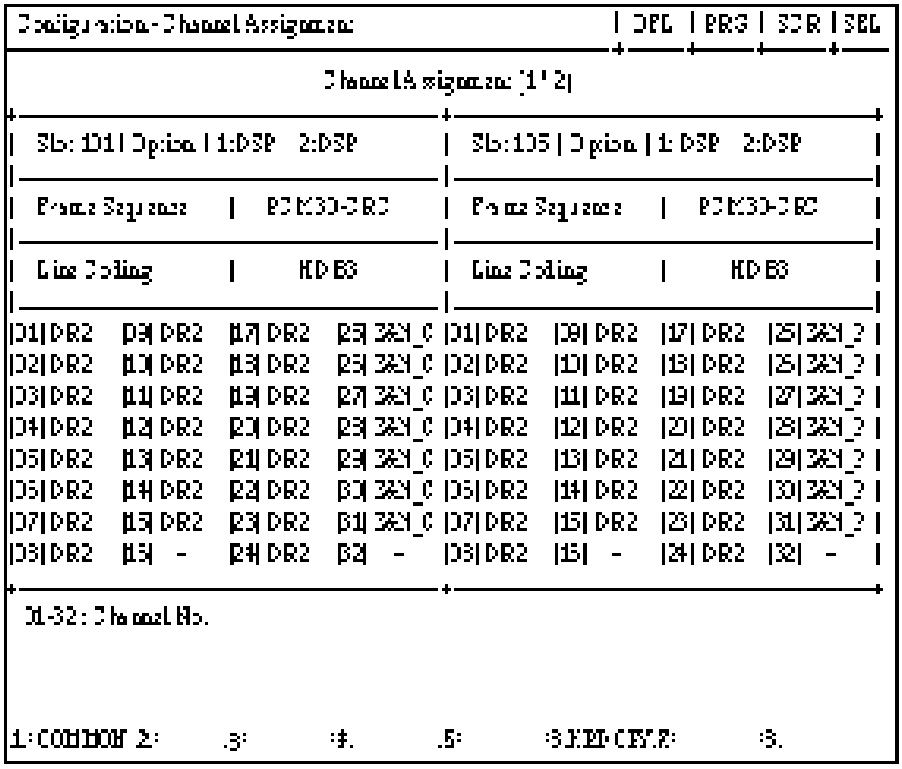
Channel (01 to 24) Assigns the type of T-1 interface to each channel.

Conditions

The number of “Channel Assignment screens” may vary depending on the number of T1 DIGITAL TRUNK cards installed to the system. Up to six T1 DIGITAL TRUNK cards can be installed to the system. Channel numbers 25 through 32 are not available. A “– (hyphen)” is displayed in these columns and the cursor skips them.

If you assign “OPX” to a channel, “DN Assignment” is also required. Refer to Section 9-C-3.00 “DN Assignment”.

4.02 E-1 card



Summary

Assigns the type of E-1 interface to each channel. (Password level : One)

Assigning Items	Default	Selection of Value	Reference
Slot No.	Automatic set	Physical slot no. (101,105,109,201,205,209,301, 305,309)	3-F-16.00
Frame Sequence	PCM30-CRC	PCM30 / PCM30-CRC	
Line Coding	HDB3	AMI / HDB3	
Channel (01 to 32)	Blank: Not assigned	DR2 / E&M-C (Continuous E&M) / E&M-P (Pulsed E&M)	

Description of Assigning Item

Frame Sequence Assigns the type of Frame Sequence for each E-1 card.

Line Coding Assigns the type of Line Coding for each E-1 card.

Channel (01 to 32) Assigns the type of E-1 interface to each channel.

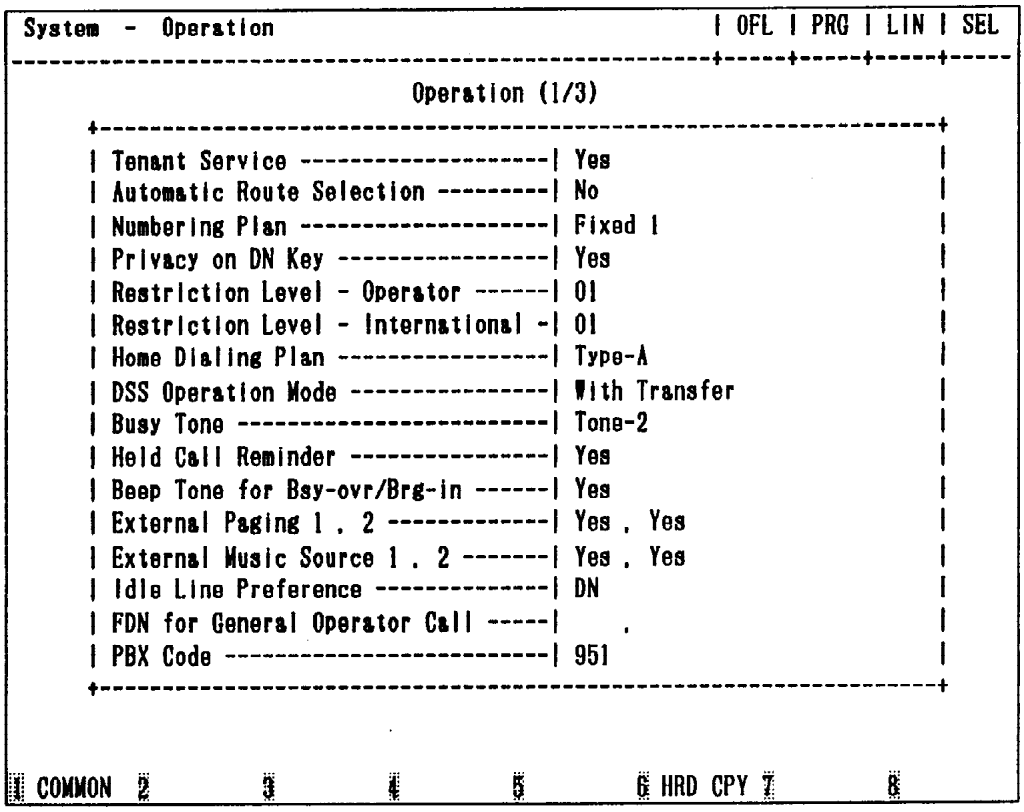
Conditions

The number of “Channel Assignment screens” may vary depending on the number of E1 DIGITAL TRUNK cards installed to the system. Up to four E1 DIGITAL TRUNK cards can be installed to the system.

D. System Screen

1.00 Operation

1.01 Operation (1/3)



Summary

Assigns elemental data common to the whole system, such as Tenant Service, Automatic Route Selection, etc., through the first System-Operation screen. This is the first of three screens.
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Tenant Service	No	No : Tenant Service is unavailable Yes : Tenant Service enabled	3-B-4.00
Automatic Route Selection (for U.S.A., Canada and New Zealand)	No	Yes : Automatic Route Selection enabled No : Automatic Route Selection is unavailable	3-C-2.00 4-C-3.01 5-A-1.01 6-D-1.01
Numbering Plan	Fixed 1	Flex : feature numbers can be changed Fixed 1: feature numbers are set to Default 1 Fixed 2: feature numbers are set to Default 2	3-B-1.00
Privacy on DN Key	Yes	No : barge in allowed (privacy disabled) Yes : barge in disallowed (privacy enabled)	4-G-1.00 4-G-2.00 4-G-3.00
Restriction Level-Operator (◆ for U.S.A. and Canada only)	01	01 to 16 : the restriction level for a telephone company operator call	3-C-1.05

Continued

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Assigning Items	Default	Selection of Value	Reference
Restriction Level-International (◆ for U.S.A. and Canada only)	01	01 to 16 : the restriction level for an international call	3-C-1.05
Home Dialing Plan (◆ for U.S.A. and Canada only)	Type-A	Type-A : 1+NXX+NXX+XXXX NXX+XXXX Type-B : NPX+NXX+XXXX NNX+XXXX Type-C : 1+NPX+NXX+XXXX 1+ NNX+XXXX NXX+XXXX Type-D : 1+NXX+NXX+XXXX NXX+NXX+XXXX NXX+XXXX Area Code Office Code Subscriber Number [N : 2 to 9, P : 0,1, X : 0 to 9]	3-C-1.02 3-C-1.04 3-C-1.06 3-C-1.07 3-C-2.00
DSS Operation Mode	With Transfer	With Transfer : hold and transfer Without Transfer : disconnect and call	4-I-12.01
Busy Tone	Tone-2	Tone-1 : busy tone 1 Tone-2 : busy tone 2	3-B-14.00
Held Call Reminder	Yes	Yes : Held Call Reminder is enabled. No : Held Call Reminder is not enabled.	3-E-2.00
Beep Tone for Bsy-ovr / Brg-in	Yes	Yes : overriding with beep tone No : overriding without beep tone	3-B-15.00 4-C-7.00 5-A-5.00 6-D-4.00
External Paging 1, 2	Yes, Yes	Yes : using external pager 1, 2 No : not using external pager 1, 2	2-D-1.00 3-B-8.02 3-D-2.04 4-D-4.00 4-H-1.03 4-H-1.04 4-H-2.00 5-B-2.00 5-F-1.03 5-F-1.04 5-F-2.00 6-I-1.03 6-I-1.04 6-I-2.00

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Continued

Assigning Items	Default	Selection of Value	Reference
External Music Source 1, 2 (for U.S.A. and Canada)	Yes, Yes	Yes : using external music source 1, 2 No : not using external music source 1, 2	2-D-2.00 3-E-1.00 4-H-2.00 4-I-4.00 5-F-2.00 6-I-2.00
External Music Source 1, 2 (for areas other than U.S.A. and Canada)	Yes, Yes	If the music source selector switch (See Section 2-D-2.00 “External Music Source”) is set to “INT MUS,” set to “No, Yes.”	
		If the music source selector switch is set to “MUS 2,” Yes : using external music source 1, 2 No : not using external music source 1, 2	
Idle Line Preference	DN	DN : Off-hook selects an idle line by DN CO : Off-hook selects an idle line by CO	4-C-1.02 12-C-4.00
FDN for General Operator Call	blank	Three or four numeric digits : floating directory number for general operator call 1, 2	3-B-3.00 3-D-2.02 3-D-2.03 3-D-2.05 3-D-2.06 4-F-2.00 5-D-2.00
PBX Code	blank	Up to three numeric digits (0-9)	3-F-14.01

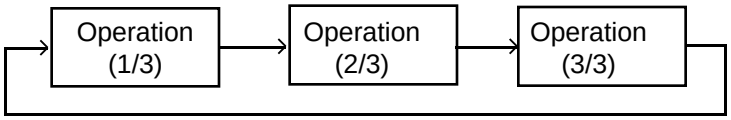
Description of Assigning Items

Tenant Service	Enables or disables the Tenant Service feature.
Automatic Route Selection	Enables or disables the ARS (Automatic Route Selection) feature.
Numbering Plan	Selects the type of numbering plan; The user can assign the desired feature numbers or use the default setting 1 or 2.
Privacy on DN Key	Determines whether or not a PITS telephone user is allowed to barge in on an existing conversation on a PDN, SDN or SCO button.
Restriction Level-Operator	Assigns the restriction level for calls to the telephone company operator from an extension.
Restriction Level-International	Assigns the restriction level for international calls from an extension.
Home Dialing Plan	Selects the home dialing plan. This setting applies to ARS, EQA and OCC calls.
DSS Operation Mode	When “With Transfer” is selected, allows the DSS console operator to transfer the CO call to an extension user by simply pressing the associated DN•DSS button on the DSS console. When “Without Transfer” is selected the CO call is disconnected when the DN•DSS button is pressed.
Busy Tone	Selects busy tone 1 or 2. Busy tone 2 has a unique pattern allowing users with automatic release SLT's an extended amount of time to enter codes when encountering a busy party.
Held Call Reminder	When assigned to Yes, the system reminds the user that there is a call on hold. When disabled there is no reminder tone given to the user. In either case the call will be disconnected after 30 minutes if it is not retrieved.
Beep Tone for Bsy-ovr/ Brg-in	If “Yes” is selected, a beep tone will be heard when executing Busy Override or Barge-in. If “No” is selected, there will not be any tone heard when Busy Override or Barge-in is executed.
External Paging 1, 2	Assigns external pagers 1 and 2 .
External Music Source 1, 2 (for areas other than U.S.A. and Canada)	Either Internal or External Music Source can be used depending on the selection of the Music Source Selector Switch.
Idle Line Preference	This assignment applies to a PITS telephone when “Idle Line Preference-Calling” is assigned on it. If “DN” is selected, an idle DN button is automatically seized by simply going off-hook, and an idle CO button is seized automatically if “CO” is selected.
FDN for General Operator Call	Assigns the FDN (Floating Directory Number) for General Operator Call. This is used for the following attendant-seeking calls: DID, DISA, Call Forwarding and Overflowed UCD calls. There are two entries to allow for two tenants.
PBX Code	Required when your KX-T336 is a part of a TIE Line Network.

Conditions

Tenant Service	If “No” is selected, some setting screens do not appear. Also some assigning items display “—,” which indicates programming is impossible. Setting screens which do not appear are: “System-Tenant” “Group-ICM/Paging Group” Assigning items which indicate “—” and cannot be programmed are: “Group-Trunk Group”, Tenant “Trunk-Pager & Music Source”, Tenant “Trunk-AGC”, Tenant “Extension-Doorphone”, Tenant “Special Attended-DISA”, Tenant
Automatic Route Selection	If set to “No,” it is impossible to program “Special Attended-DISA”, ARS Override (“—” is displayed).
Numbering Plan	If set to “Flex,” “System-Numbering Plan” is changeable.
Home Dialing Plan	Dialing Plan must be selected depending on the type of the area where this system is installed.
Held Call Reminder	If set to “ No,” Held Call Reminder does not function. However, programming the following items is possible: “System-System Timer”, Held Call Reminder/Held Call Reminder (ATT) “Extension-Attendant Console”, Held Call Reminder
External Paging 1, 2	If set to “No,” Paging through External Pagers does not function. However, it is possible to program the items below: “System-Class of Service”, External Paging 1/2 “System-Numbering Plan”, External Paging/External Paging Answer If either or both of the External Paging 1/2 are assigned to “No”, the following item cannot be programmed (“—” appears on the item): “Trunk-Pager & Music Source”, External Pager-Tone/BGM
External Music Source 1, 2	If either or both of the External Music Source 1/2 are assigned to “No,” the following item cannot be programmed (“—” appears on the item): “Trunk-Pager & Music Source”, Music Source-For Use If “No” is selected for all the four items of External Music Source 1/2, External Paging 1/2, the following screen does not appear: “Trunk-Pager & Music Source”

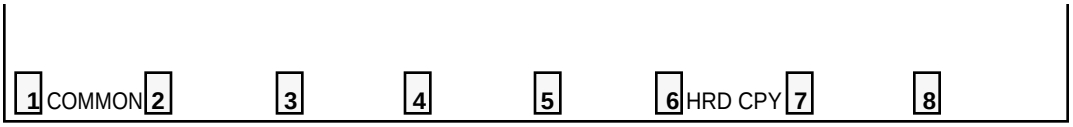
When pressing the NEXT key, this screen changes as follows:



Pressing the PREV key changes the screen in reverse order.

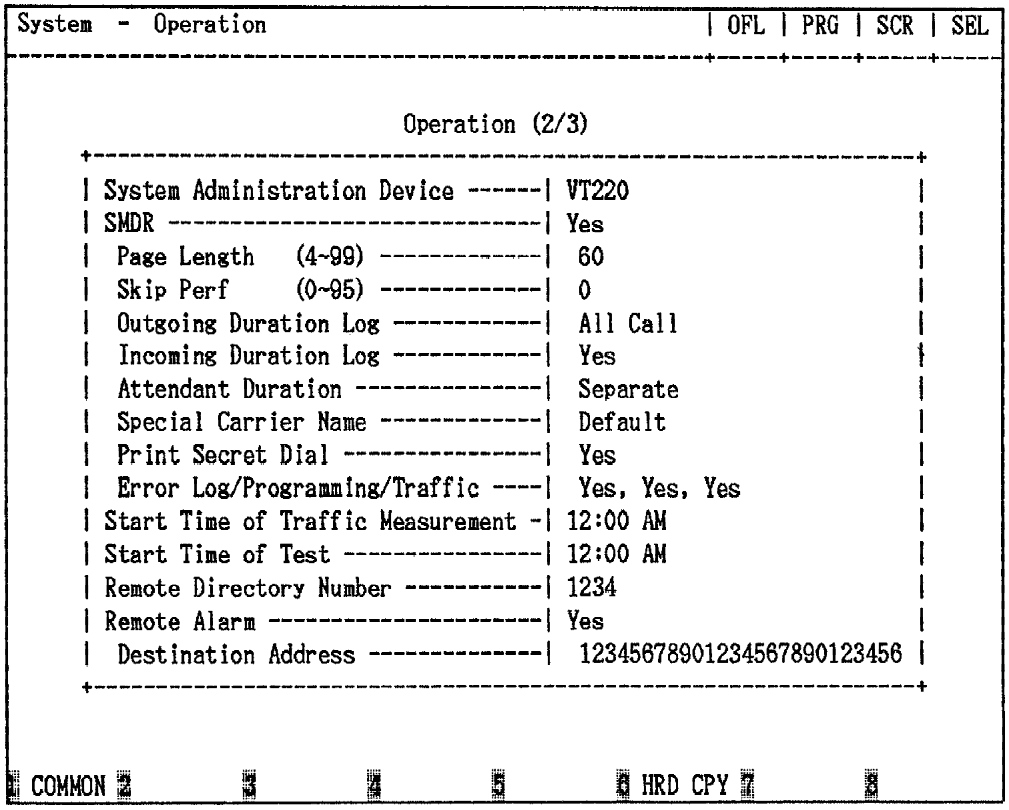
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

1.02 Operation (2/3)



Summary

Assigns elemental data common to the whole system, such as System Administration Device, SMDR (Station Message Detail Recording), parameters for SMDR, etc., through the second System-Operation screen.
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
System Administration Device	Automatic set	VT220 : VT100/VT220 Terminal Dumb : Dumb Terminal ATT 1 : Attendant Console 1 ATT 2 : Attendant Console 2	1-A-3.00
SMDR	No	No : not using SMDR (Station Message Detail Recording) Yes : using SMDR	3-F-1.00 9-D-7.00
Page Length (4 to 99)	blank	4 to 99 : page length (number of lines)	3-F-1.00

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
SMDR (cont.) Skip Perf (0 to 95)	blank	0 to 95: how many lines to skip • Note : in case of printing out system data : (page length) – (skip perforation) ≥ 23 in case of printing out call processing information : (page length) – (skip perforation) ≥ 6 in case of printing out error log (page length) – (skip perforation) ≥ 4	3-F-1.00
Outgoing Duration Log	blank	No : outgoing calls not printed All Call : print all outgoing calls Toll Only : print outgoing toll calls only (◆ "Toll Only" is available for U.S.A. and Canada only.*) *See "Note:" on page 9-D-9.	3-F-1.00
Incoming Duration Log	blank	No : incoming calls not printed Yes : print all incoming calls	3-F-1.00
Attendant Duration	blank	Separate : charge call duration to Attendant Console Summary : charge call duration to destination	3-F-1.00
Special Carrier Name (◆ for U.S.A. and Canada only)	blank	Default : print default name; OC 1- 4, EQ1- 4 User Name: print user's name Dial No. : print dialed number	3-F-1.00
Print Secret Dial	blank	No : not printed Yes : print the secret dial numbers	3-F-1.00 4-I-5.00 6-J-3.00
Error Log /Programming/ Traffic	blank	No : do not print out these items Yes : print each item	3-F-1.00 7-D 14-D-1.02 14-G 15-D-1.02
Start Time of Traffic Measurement	blank	1 to12 : hour 00 to 59 : minute AM/PM : a.m. / p.m.	14-G-4.00 15-F-2.00
Start Time of Test	blank	1 to12 : hour 00 to 59 : minute AM/PM : a.m. / p.m.	14-D-1.01 15-D-1.01
Remote Directory Number	399 :for "with RMT" blank : for "without RMT"	Three or four numeric digits: Floating Directory Number for the remote maintenance port	3-B-3.00 4-F-1.05 5-D-1.03 6-G-1.05 14-B-2.00 15-B-2.00
Remote Alarm	No	No : not providing Remote Alarm Yes : providing Remote Alarm	14-D-1.05 15-D-1.05
Destination Address	blank	Maximum 26 numeric digits : telephone (modem) number of the destination for Remote Alarm	

Description of Assigning Items

System Administration Device	Assigns the terminal device to be used for setting system administration data.
SMDR	Enables or disables SMDR (Station Message Detail Recording).
Page Length (4~99)	Assigns the printer page length (number of lines).
Skip Perf (0~95)	Determines the number of lines to be skipped and the number of lines to be printed on each page. The number of lines to skip is simply the number specified in this parameter. The number of lines printed is the difference between the page length number and the skip perforation number. If system data is being printed the difference must be equal to or greater than 23 to allow one full screen to be printed on each page. If SMDR data is being printed the difference must be equal to or greater than six to allow the header and at least one line of SMDR data to be printed.
Outgoing Duration Log	Determines which types of outgoing calls will be printed, if any. **Note:** "Toll Only" is not available from software version 9.5X or higher in all areas.
Incoming Duration Log	Determines if incoming calls will be printed or not.
Attendant Duration	Determines whether the attendant or the destination will be charged with the time for an attendant handled call. If "Separate" is selected, there will be two lines of SMDR for every attendant handled and transferred call.
Special Carrier Name	Assigns the special carrier name type to be printed out.
Print Secret Dial	Determines if secret dial numbers will be printed out.
Error Log /Programming/ Traffic	Determines if error logs will be printed out. Determines if programming data is printed out. Determines if traffic measurement data is printed out.
Start Time of Traffic Measurement	Assigns the starting time for traffic measurement.
Start Time of Test	Assigns starting time of the self- test. The system must be idle for the test to be performed.
Remote Directory Number	Assigns a floating directory number for the remote maintenance port. If "RMT" is not preset in the "Configuration-Slot Assignment" screen, the default value is blank.
Remote Alarm	If this option is enabled alarms will be automatically sent to the telephone number in the destination address.
Destination Address	The destination telephone number for remote alarms.

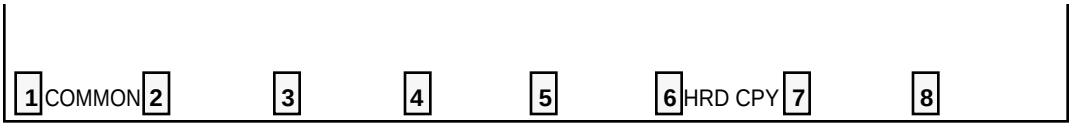
Conditions

SMDR	If set to “No,” the following items cannot be programmed (“—” appears on the items). “System-Operation”, Page Length (4~99) Skip Perf (0~95) Outgoing Duration Log Incoming Duration Log Attendant Duration Special Carrier Name Print Secret Dial Error Log/Programming/Traffic
Remote Directory Number	To assign this item, RMT card is necessary.
Remote Alarm Destination Address	If “RMT” is not assigned in the “Configuration-Slot Assignment” screen, these items cannot be programmed (“—” appears on the items). If Remote Alarm is set to “Yes,” Destination Address can be programmed. If Remote Alarm is set to “No,” Destination Address displays “—” and cannot be programmed.

To select this screen, press the NEXT key in the “System-Operation (1/3)” screen.

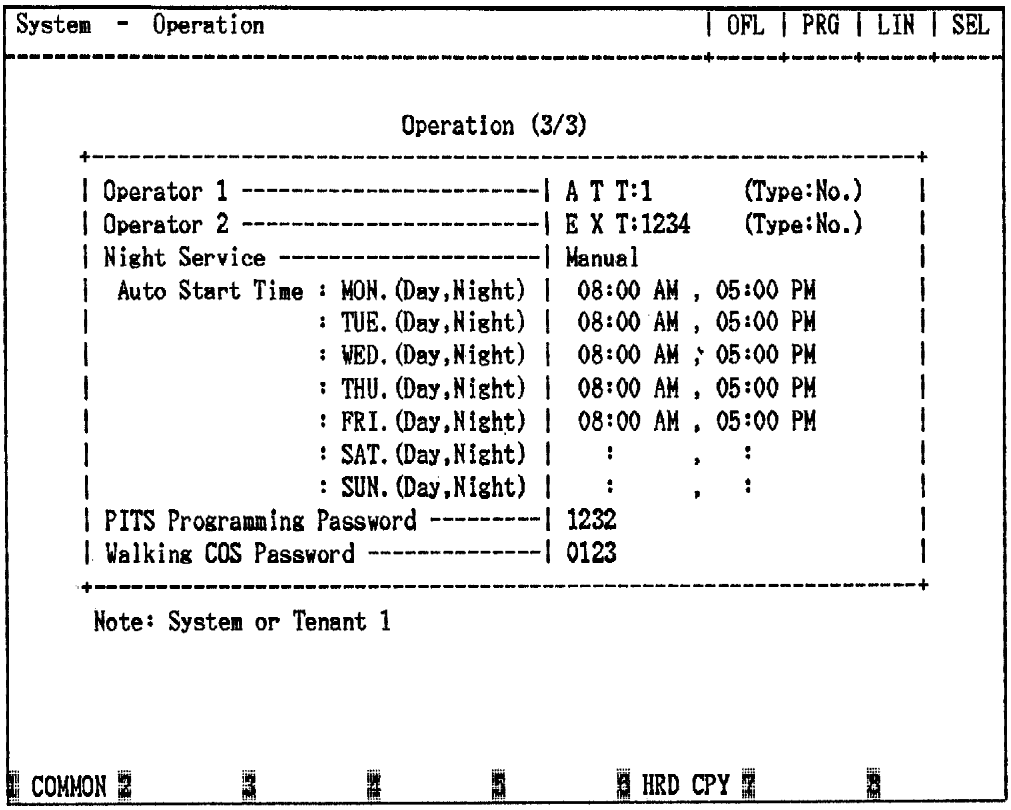
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

1.03 Operation (3/3)



Summary

Assigns elemental data common to the whole system, such as setting terminal type for operators, parameters for Night Service etc., through the third System-Operation screen. (Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Operator 1	ATT1 : for “with ATLC” EXT100 : for “without ATLC”	None / EXT / ATT : terminal type None : no operator EXT : setting an extension to Operator 1 ATT : setting Attendant Console to Operator1 Number:assign number when terminal type is set to "EXT" or "ATT" blank : when terminal type is set to "None" Three or four digit DN : when terminal type is set to "EXT" 1 or 2 : when terminal type is set to "ATT," select Attendant Console 1 or 2	3-B-5.00
Operator 2	ATT 2 : for “with ATLC” None : for “without ATLC”	Same as Operator 1.	3-B-5.00

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Night Service	Manual	Manual : an operator can set day or night service Auto : automatic change	3-B-8.00 4-I-1.00 5-G-1.00 6-J-1.00
Auto Start Time : MON. (Day, Night) : TUE. (Day, Night) : WED. (Day, Night) : THU. (Day, Night) : FRI. (Day, Night) : SAT. (Day, Night) : SUN. (Day, Night)	blank	1 to 12 : hour 00 to 59 : minute AM / PM : a.m. / p.m. blank : if “blank” is assigned for a day or days, the previously assigned values are maintained for the days until other values are set for another day.	
PITS Programming Password	1234	Four numeric digits : password	6-J-9.00 11-C-1.00
Walking COS Password	blank	Four numeric digits: password	4-C-9.00 5-A-7.00 11-C-8.00

Description of Assigning Items

Operator 1	Assigns the terminal device for operator 1. If selecting “EXT” for the terminal type, be sure to assign the directory number beforehand.
Operator 2	Same as Operator 1.
Night Service	If this is set to “Manual,” the operator 1 must dial the feature number for “Night Mode Set” for night service or “Night Mode Cancel” for day service. If this is set to “Auto,” the system will switch the day and night modes at the programmed time each day. The operator 1, however, can override the auto setting by dialing the feature number for “Night Service Manual Mode Set.” To restore the auto mode, the operator 1 must dial the feature number for “Night Service Manual Mode Cancel.”
Auto Start Time : MON. (Day, Night) : TUE. (Day, Night) : WED. (Day, Night) : THU. (Day, Night) : FRI. (Day, Night) : SAT. (Day, Night) : SUN. (Day, Night)	Assigns automatic change-over time for each day of the week for Day/Night Service.
PITS Programming Password	Assigns the password for PITS system programming. This password is used when a PITS allowed to program by COS wishes to change PITS system programming or an Attendant Console wishes to perform CO verify.
Walking COS Password	Assigns the password for Walking COS. Walking COS allows a user to temporarily change the COS of another extension to that of the user's extension. This is generally used for making toll calls from a toll restricted telephone.

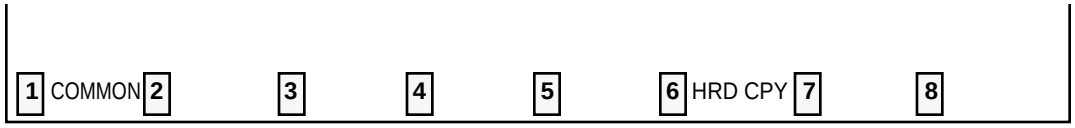
Conditions

Operator 1 Operator 2	This system can accommodate up to two Attendant Consoles. When Tenant Service is employed and if two Attendant Consoles are assigned to tenant 1, no Attendant Console operator can be assigned to tenant 2. If only one Attendant Console is accommodated, it must be always assigned to Operator 1.

To select this screen, press the NEXT key in the “System-Operation (2/3)” screen.

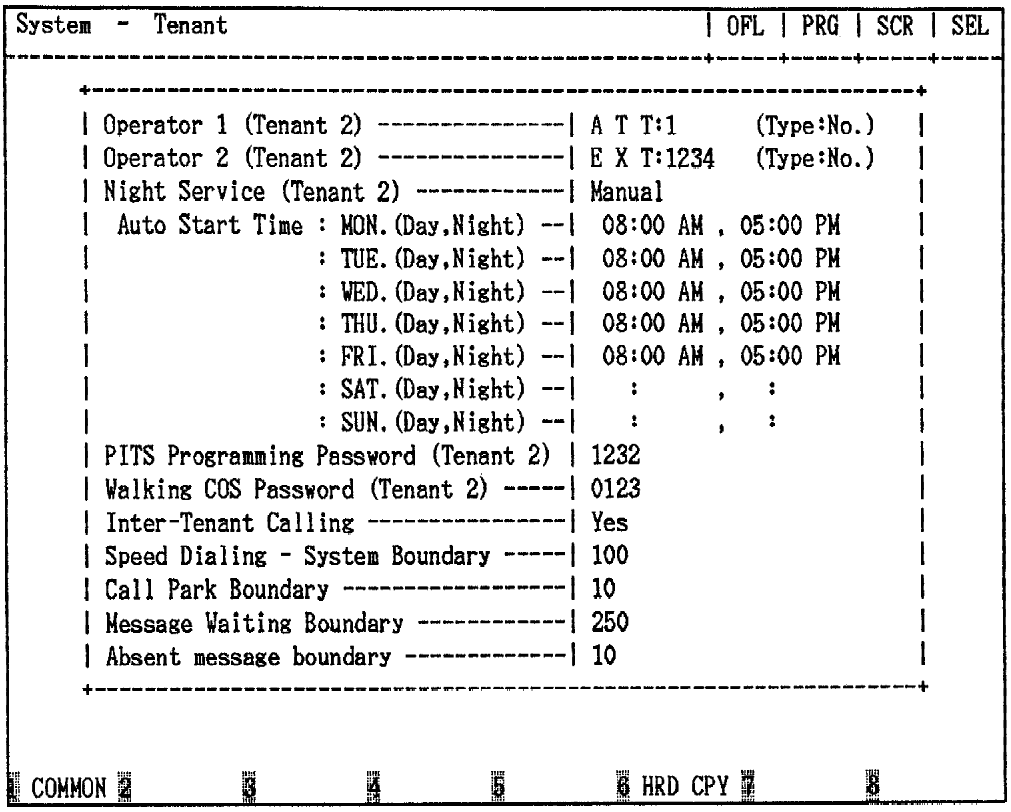
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

2.00 Tenant



Summary

Assigns parameters for tenant 2, such as terminal type for operators, method of changing Night Service, password for PITS programming etc.. Also assigns boundaries for functions, such as Speed Dialing, Call Park etc., which are split between tenant 1 and tenant 2. (Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Operator 1 (Tenant 2)	None	None / EXT /ATT: terminal type None : no operator EXT : setting an extension to Operator 1 ATT : setting Attendant Console to Operator 1 Number: Assign number when terminal type is set to "EXT" or "ATT" blank : when terminal type is set to "None" Three or four digit DN: when terminal type is set to "EXT" 1 or 2 : when terminal type is set to "ATT," selects Attendant Console 1 or 2	3-B-4.00 3-B-5.00

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Operator 2 (Tenant 2)	None	Same as Operator 1	3-B-4.00 3-B-5.00
Night Service (Tenant 2)	Manual	Manual : manual change Auto : automatic change	3-B-4.00 3-B-8.00 4-I-1.00 5-G-1.00 6-J-1.00
Auto Start Time : MON. (Day, Night) : TUE. (Day, Night) : WED. (Day, Night) : THU. (Day, Night) : FRI. (Day, Night) : SAT. (Day, Night) : SUN. (Day, Night)	blank	1 to 12 : hour 00 to 59 : minute AM / PM : a.m. / p.m. blank : if “blank” is assigned for a day or days, the previously assigned values are maintained for the days until other values are set for another day.	
PITS Programming Password (Tenant 2)	blank	Four numeric digits of numbers : password	3-B-4.00 6-J-9.00 11-C-1.00
Walking COS Password (Tenant 2)	blank	Four numeric digits of numbers : password	3-B-4.00 4-C-9.00 5-A-7.00 11-C-8.00
Inter - Tenant Calling	No	Yes : Inter-Tenant Calling is available No : Inter-Tenant Calling is unavailable	3-B-4.00
Speed Dialing - System Boundary	200	000 to 200 : boundary number 000 : tenant 2 only can use all the codes 200 : tenant 1 only can use all the codes	3-B-4.00 4-C-4.02 5-A-2.02 6-D-2.01
Call Park Boundary	20	00 to 20 : boundary number 00 : tenant 2 only can use all call park areas 20 : tenant 1 only can use all call park areas	3-B-4.00 4-E-5.01 5-C-4.01 6-F-3.00
Message Waiting Boundary	500	000 to 500 : boundary number 000 : tenant 2 only can use the whole capacity 500 : tenant 1 only can use the whole capacity	3-B-4.00 4-I-8.00 5-G-6.00 6-J-4.00
Absent Message Boundary	16	06 to16 : boundary number 06 : tenant 2 only can use all the numbers 16 : tenant 1 only can use all the numbers	3-B-4.00 4-I-7.00 5-G-5.00

Description of Assigning Items

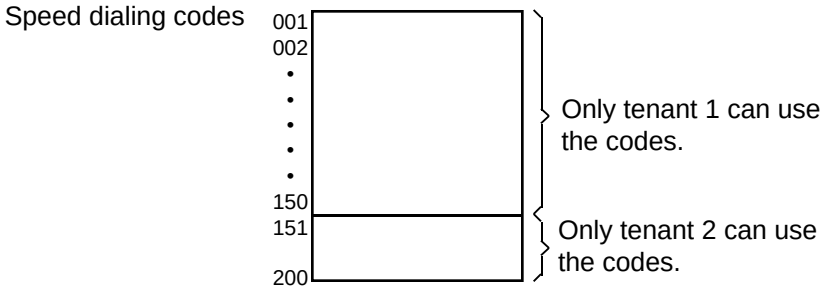
Operator 1 (Tenant 2)	Assigns a terminal device for operator 1.
Operator 2 (Tenant 2)	Assigns a terminal device for operator 2.
Night Service (Tenant 2)	If this is set to “Manual,” an operator must dial the feature number for “Night Mode Set” for night service or “Night Mode Cancel” for day service. If this is set to “Auto,” the system will switch the day and night modes at the programmed time each day. An operator,however, can override the auto setting by dialing the feature number for “Night Service Manual Mode Set.” To restore the auto mode, the operator must dial the feature number for “Night Service Manual Mode Cancel.”
Auto Start Time : MON. (Day, Night) : TUE. (Day, Night) : WED. (Day, Night) : THU. (Day, Night) : FRI. (Day, Night) : SAT. (Day, Night) : SUN. (Day, Night)	Assign automatic change-over time for each day of the week for Day/Night Service.
PITS Programming Password (Tenant 2)	Assigns the password for PITS programming. This password is used when a PITS allowed to program by COS wishes to change system programming or an attendant console wishes to perform CO verify.
Walking COS Password (Tenant 2)	Assigns the password for Walking COS. Walking COS allows a user to temporarily change the COS of another station to that of the user's station. This is generally used for making toll calls from a toll restricted telephone.
Inter-Tenant Calling	If this option is set to “Yes” then calling is allowed between extensions in different tenants. However, it is not possible for an operator to transfer calls to an extension in another tenant. If this option is set to “No” then no inter tenant calling is allowed.
Speed Dialing-System Boundary	Assigns tenant-boundary number for Speed Dialing (the last number of the codes that tenant 1 can use).
Call Park Boundary	Assigns tenant-boundary number for Call Park (the last number that Tenant 1 can use).
Message Waiting Boundary	Assigns tenant-boundary quantity for Message Waiting (the largest quantity that tenant 1 can use).
Absent message boundary	Assigns tenant-boundary number for Absent Message (the last number that tenant 1 can use).

Conditions

This screen does not appear if “System-Operation”, Tenant Service is assigned to “No.”

Operator 1 (Tenant 2) Operator 2 (Tenant 2)	This system can accommodate up to two Attendant consoles. If two Attendant Consoles are assigned to tenant 1, no Attendant consoles can be assigned to tenant 2.
Speed Dialing-System Boundary/Call Park Boundary/Message Waiting Boundary/Absent Message Boundary	If Tenant Service is available, the following items can be split between tenant 1 and tenant 2. The boundaries are to set tenant-boundary numbers. The last number that tenant 1 can use must be assigned in each boundary for the functions below: Speed Dialing-System Call Park-System Message Waiting Absent Message

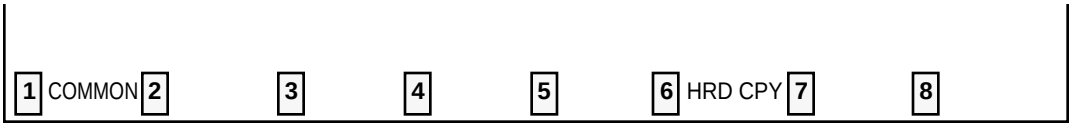
<Example>
Up to 200 speed dialing codes can be programmed for the system. If you wish to assign 150 codes to tenant 1 and 50 codes to tenant 2, enter “150” in Speed Dialing-System Boundary.



If tenant 1 uses no code and tenant 2 uses 200 codes, enter “000.”

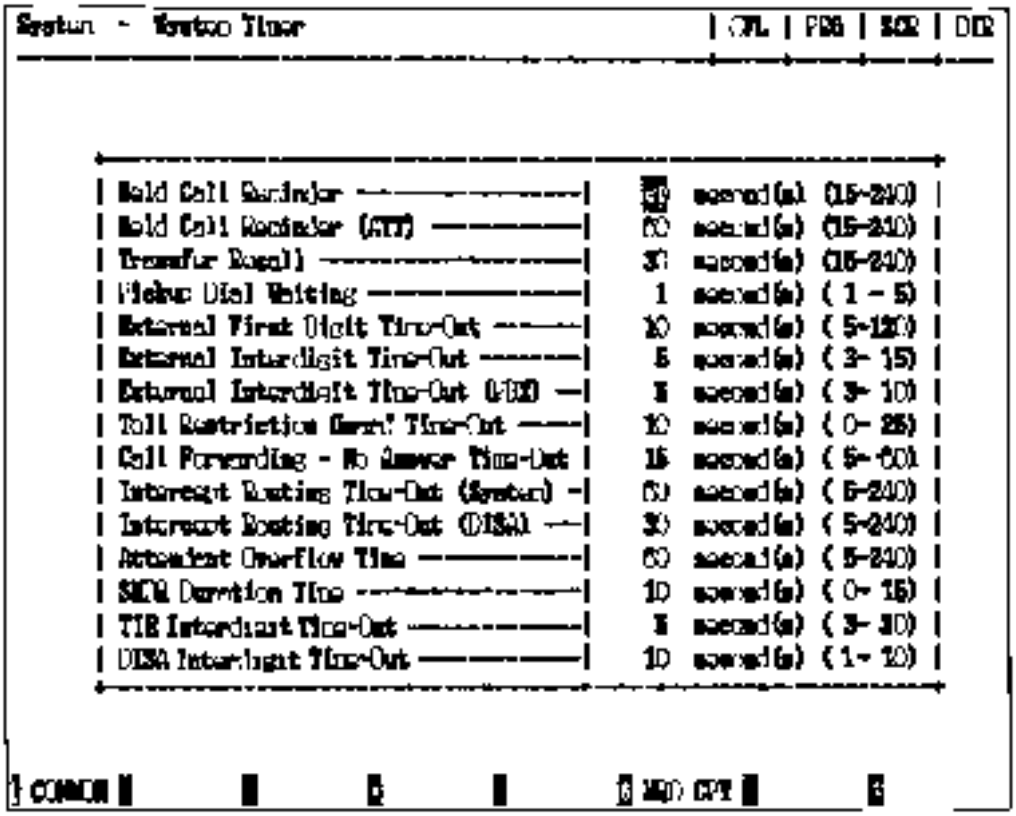
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

3.00 System Timer



Summary

Executes time-setting on various system timers.
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Held Call Reminder	60	15 to 240 : s	3-B-10.00 3-E-2.00
Held Call Reminder (ATT)	60	15 to 240 : s	3-B-10.00 3-E-2.00
Transfer Recall	30	15 to 240 : s	3-B-10.00 3-E-3.00 4-F-1.01 5-D-1.01 6-G-1.01 6-G-1.02
Pickup Dial Waiting	1	1 to 5 : s	3-B-10.00 5-A-2.04

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
External First Digit Time-Out	10	5 to 120 : s	3-B-10.00 3-B-12.00 3-F-12.00 10-C-58.00 10-C-61.00
External Interdigit Time-Out	5	3 to15 : s	3-B-10.00 3-B-12.00
External Interdigit Time-Out (PBX)	5	3 to10 : s	3-B-10.00 3-B-12.00
Toll Restriction Guard Time-Out	10	0 to 25 : s	3-B-10.00
Call Forwarding-No Answer Time-Out	15	5 to 60 : s	3-B-10.00 3-D-2.05 3-D-2.06 4-F-2.03 4-F-2.04 5-D-2.03 5-D-2.04
Intercept Routing Time-Out (System)	60	5 to 240 : s	3-B-10.00 3-F-5.00 6-J-12.00
Intercept Routing Time-Out (DISA)	30	5 to 240 : s	3-B-10.00 3-D-2.02 3-F-5.00
Attendant Overflow Time	60	5 to 240 : s	3-B-10.00 3-D-1.03 6-G-2.00 6-G-7.00 10-C-53.00
SMDR Duration Time	5	0 to 15 : s	3-B-10.00 3-F-1.00 4-A-4.03
TIE Interdigit Time-Out	5	3 to 30 : s	3-F-14.00
DISA Interdigit Time-Out	10	1 to 10 : s	3-D-2.02

Description of Assigning Items

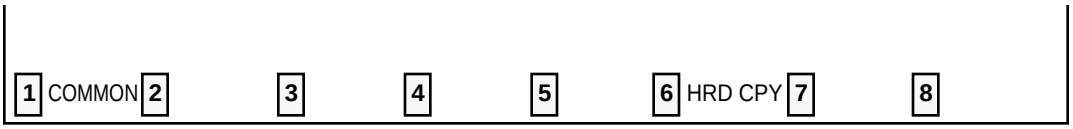
Held Call Reminder	Sets the time for Held Call Reminder for extensions. When this timer expires, the extension is alerted that there is a call held for an extended period of time
Held Call Reminder (ATT)	Sets the time for Held Call Reminder for the Attendant Console. When this timer expires, the Attendant is alerted that there is a call held for an extended period of time.
Transfer Recall	Sets the time for Transfer Recall on both extensions and Attendant consoles.
Pickup Dial Waiting	Sets the waiting time for Pickup Dialing. The waiting time gives the user an opportunity to dial digits prior to the automatic dialing taking place.
External First Digit Time-Out	Sets the maximum time allowed between CO dial tone or pseudo dial tone and the Time-Out first digit dialed.
External Interdigit Time-Out	Sets the maximum time allowed between digits on a CO call. This timer does not apply for CO operator calls.
External Interdigit Time-Out (PBX)	Sets the maximum time between dialed digits (Behind PBX).
Toll Restriction Guard Time-Out	Sets the time limit between dialing digits for CO operator calls. This prevents a user from attempting to defeat toll restriction.
Call Forwarding-No Answer Time	Sets the Call Forwarding-No Answer timer. This also functions as UCD--No Answer timer.
Intercept Routing Time-out (System)	Sets the time limit for Intercept Routing (System). This timer is used when an incoming CO call (DIL 1:1, DID, TAFAS or night answer and so on) is not answered. Call forward no answer will override this timer if an extension has enabled Call Forwarding-No Answer Time-Out.
Intercept Routing Time-Out (DISA)	Sets the time limit for Intercept Routing (DISA). This is used when a DISA destination does not answer.
Attendant Overflow Time	Sets the overflow time for the Attendant Console. When this timer expires, a call will be routed to the overflow destination.
SMDR Duration Time	Determines the length of the SMDR duration timer. This timer starts when the system has sent all the digits to the Central Office.
TIE Interdigit Time-Out	Sets the maximum time allowed between digits on a TIE call after it was received by the system.
DISA Interdigit Time-Out	Sets the maximum time allowed between digits on a DISA call after it was received by the system.

Conditions

Held Call Reminder Held Call Reminder (ATT)	If these items are programmed however “System-Operation” Held Call Reminder is not set to “Yes,” Held Call Reminder does not function.

Function

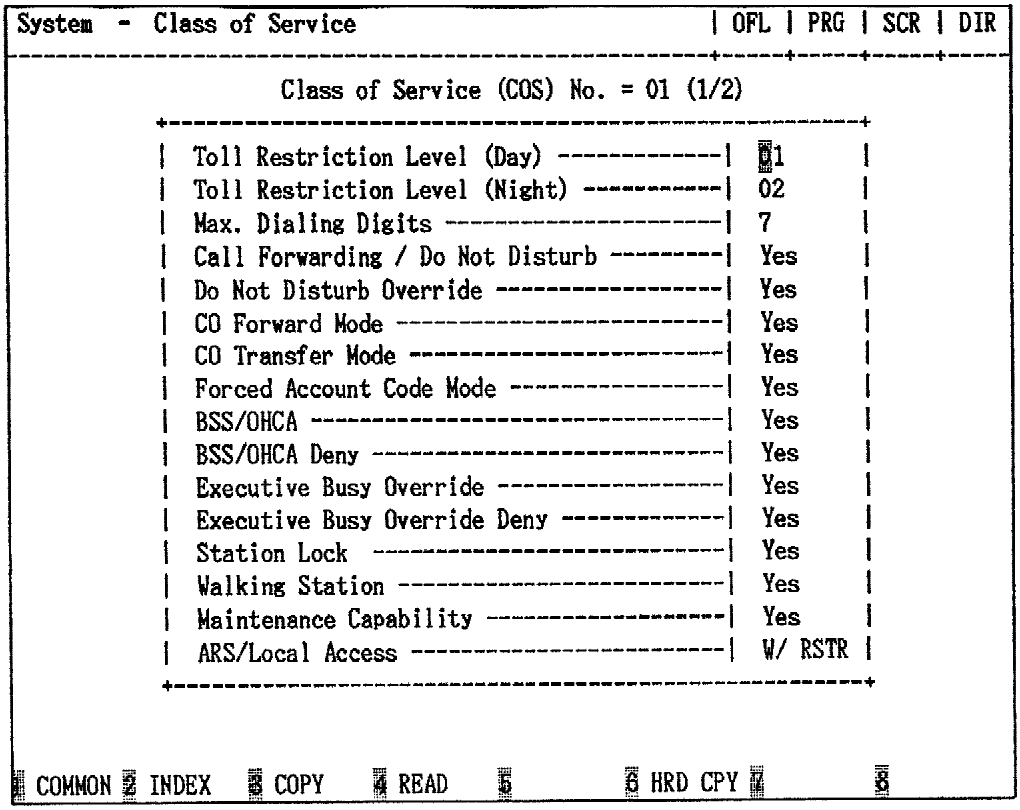
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

4.00 Class of Service

4.01 Class of Service (1/2)



Summary

Sets parameters for toll restriction level, maximum dialing digits, Call Forwarding, Do Not Disturb, Do Not Disturb Override, etc., in the first System-Class of Service screen, which consists of 32 groups, each of which has two screens. (Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Toll Restriction Level (Day)	Refer to Table of Defaults	01 to16 : toll restriction level (Day)	3-B-6.00 3-C-1.00
Toll Restriction Level (Night)		01 to16 : toll restriction level (Night)	3-B-6.00 3-C-1.00
Max. Dialing Digits		2 to 255 : possible to dial the [input value-1] digits 0 : no limit to the number of dialed digits 1 : internal calls only	3-B-6.00
Call Forwarding / Do Not Disturb		Yes : Call Forwarding / DND is available No : Call Forwarding / DND is unavailable	3-B-6.00 4-D-6.00 4-F-2.00 5-B-4.00 5-D-2.00

Continued

Assigning Items	Default	Selection of Value	Reference
Do Not Disturb Override	Refer to Table of Defaults	Yes : DND Override is available No : DND Override is unavailable	3-B-6.00 4-C-8.00 5-A-6.00
CO Forward Mode		Yes : Call Forwarding to CO is available No : Call Forwarding to CO is unavailable	3-B-6.00 4-F-2.05 5-D-2.05
CO Transfer Mode		Yes : Call Transfer to CO is available No : Call Transfer to CO is unavailable	3-B-6.00 4-F-1.03 4-G-6.00
Forced Account Code Mode		No : Account codes not required for outgoing CO calls Yes : User must enter an account code for outgoing CO calls	3-B-6.00 4-I-2.00 5-G-2.00
BSS / OHCA		No : Override is unavailable Yes : Override is available	3-B-6.00 4-C-5.04 4-C-5.05
BSS / OHCA Deny		No : Override Deny is impossible Yes : Override Deny is possible	3-B-6.00 4-D-2.03
Executive Busy Override		No : Executive Busy Override is unavailable Yes : Executive Busy Override is available	3-B-6.00 4-C-7.00 5-A-5.00
Executive Busy Override Deny		Yes : Executive Busy Override Deny is available No : Executive Busy Override Deny is unavailable	3-B-6.00 4-D-5.00 5-B-3.00
Station Lock		No : Station Lock is unavailable Yes : Station Lock is available	3-B-6.00 4-I-9.00 5-G-7.00
Walking Station		No : Walking Station is impossible Yes : Walking Station is possible	3-B-6.00 3-F-3.00
Maintenance Capability		Yes : PITS system programming is possible No : PITS system programming is impossible	3-B-6.00 11-A 11-C
ARS/Local Access		W/RSTR : ARS/Local Access is restricted ☛1 No RSTR : no restriction ☛2 No ACCS : calling is impossible	3-B-6.00 3-C-1.01 3-C-1.02

☛1 When an extension user attempts to make an outside call by “Local Trunk Dial Access” or “Automatic Route Selection (ARS),” available trunks are determined by both Local Hunt Sequence and “System-Class of Service”, Trunk Group Access.

☛2 Available trunks are determined by Local Hunt Sequence.

Table of Defaults

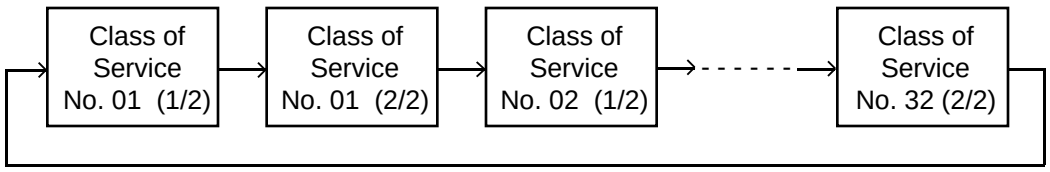
Assigning Items	COS 01	COS 02	COS 03 to 31	COS 32
Toll Restriction Level (Day)	01	01	01	16
Toll Restriction Level (Night)	01	01	01	16
Max. Dialing Digits	0	0	0	0
Call Forwarding / Do Not Disturb	Yes	Yes	Yes	No
Do Not Disturb Override	Yes	No	No	No
CO Forward Mode	Yes	No	No	No
CO Transfer Mode	Yes	No	No	No
Forced Account Code Mode	No	No	No	No
BSS / OHCA	Yes	Yes	Yes	No
BSS / OHCA Deny	No	No	No	No
Executive Busy Override	Yes	No	No	No
Executive Busy Override Deny	No	No	No	No
Station Lock	No	No	No	No
Walking Station	No	No	No	No
Maintenance Capability	Yes	No	No	No
ARS/Local Access	W/RSTR	W/RSTR	W/RSTR	No Accs

Description of Assigning Items

Toll Restriction Level (Day)	Sets toll restriction level (day).
Toll Restriction Level (Night)	Sets toll restriction level (night).
Max. Dialing Digits	Sets the maximum number of digits which can be dialed for a CO call.
Call Forwarding / Do Not Disturb	Assigns whether Call Forwarding / Do Not Disturb is possible or not.
Do Not Disturb Override	Assigns Do Not Disturb Override .
CO Forward Mode	Assigns whether Call Forwarding to CO is possible or not .
CO Transfer Mode	Assigns whether Call Transfer to CO is possible or not.
Forced Account Code Mode	Assigns whether entering Account Code in outgoing CO calls is necessary or not.
BSS/OHCA	Assigns whether BSS (Busy Station Signaling) and OHCA (Off Hook Call Announcement) are possible or not.
BSS/OHCA Deny	Assigns whether BSS / OHCA Deny is possible or not .
Executive Busy Override	Assigns whether Executive Busy Override is possible or not.
Executive Busy Override Deny	Assigns whether Executive Busy Override Deny is available or not.
Station Lock	Assigns whether Electronic Station Lock is possible or not.
Walking Station	Assigns whether Walking Station is possible or not.
Maintenance Capability	Enables the maintenance capability of PITS sets to perform operations such as time and date set, station name change , etc.
ARS/Local Access	Assigns whether ARS/Local Access is restricted or not.

Conditions

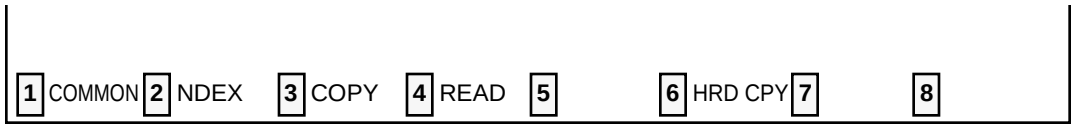
When pressing the NEXT key, this screen changes as follows:



Pressing the PREV key changes the screen in reverse order.

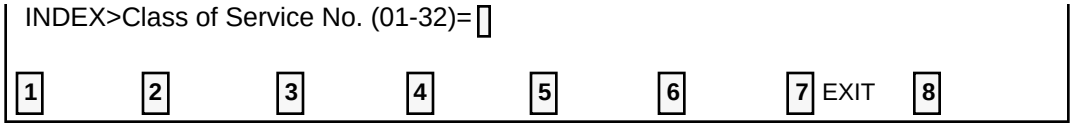
Function

The following functions appear on the function line of this setting screen.

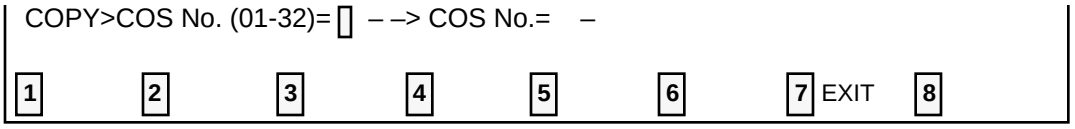


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. Other function keys such as INDEX, COPY and READ are also available in this setting screen. The operation of function keys are described in Section 7–I “Operation of Function Keys.” Only messages are provided here.

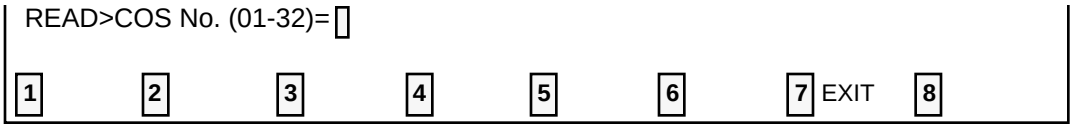
F2 :



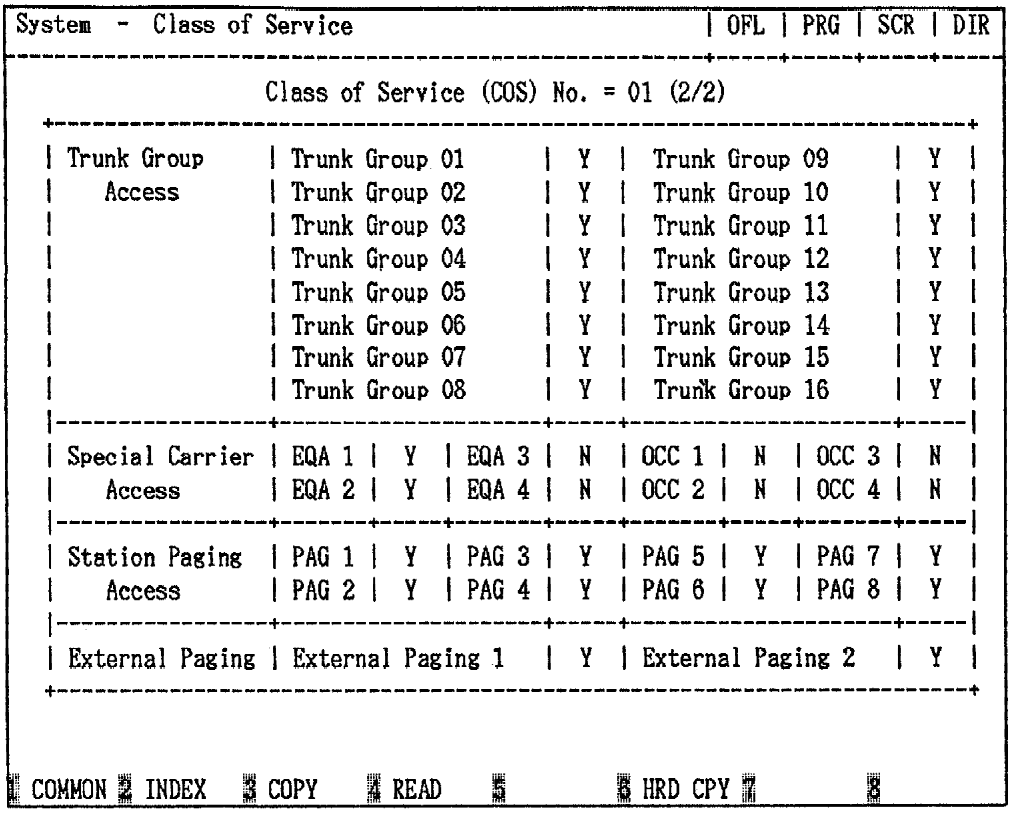
F3 :



F4 :



4.02 Class of Service (2/2)



Summary

The second screen of the System-Class of Service screen sets the trunk groups available for access and so on.

(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Trunk Group Access Trunk Group (01 to16)	Yes	Y : trunk group available for access N : trunk group unavailable for access	3-B-6.00 3-C-1.01 3-C-1.03 4-C-3.01 4-C-3.02 5-A-1.01 5-A-1.02
Special Carrier Access EQA (1 to 4) OCC (1 to 4) (◆ for U.S.A. and Canada only)	No	N : special carrier unavailable for access Y : special carrier available for access	3-B-6.00 3-C-1.04 4-C-3.03 5-A-1.03

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Station Paging Access PAG (1 to 8)	Yes	N : paging group unavailable for access Y : paging group available for access	3-B-6.00 4-H-1.01 4-H-1.02 4-H-1.04 5-F-1.01 5-F-1.02 5-F-1.04
External Paging (1 and 2)	Yes	N : not available to access external pager Y : available to access external pager	3-B-6.00 4-H-1.03 4-H-1.04 5-F-1.03 5-F-1.04

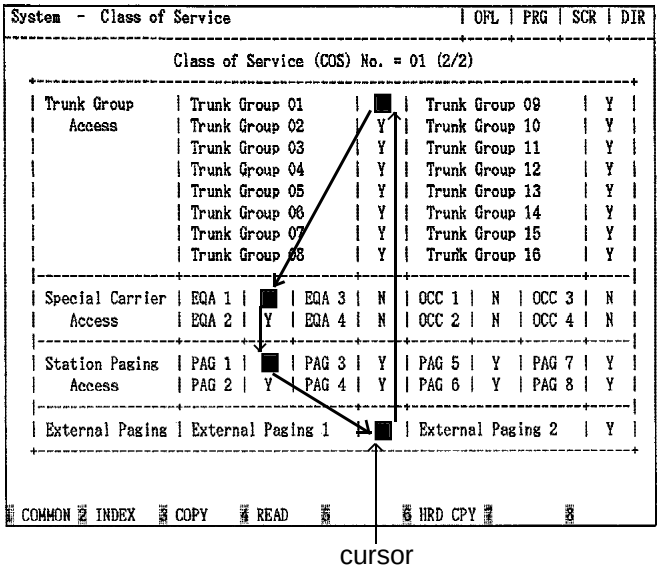
Description of Assigning Items

Trunk Group Access Trunk Group (01 to 16)	When set to “Yes,” the associated trunk group is available during direct trunk group access. When set to “No” the trunk group is not available during direct trunk group access.
Special Carrier Access EQA (1 to 4) OCC (1 to 4)	When set to “Yes” the Equal Access trunk group and OCC Access trunk group are available during virtual trunk group access. When set to “No,” the Equal Access trunk group and OCC access trunk groups are not available during virtual trunk group access.
Station Paging Access PGA (1 to 8)	Assigns which paging groups are available for access.
External Paging (1 and 2)	Assigns which external pagers are available for access.

Conditions

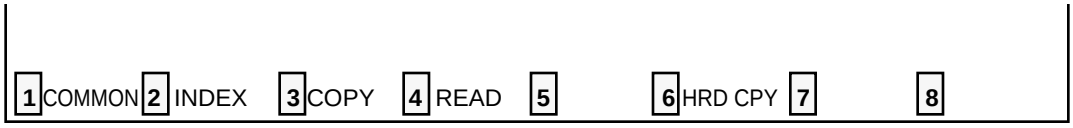
Special Carrier Access	If “Y” is selected but if “Special Carrier Access-Equal Access”, Service and “Special Carrier Access-OCC Access”, Service are set to “No,” Special Carrier Access via virtual trunk group access does not work. It is administrable to activate or deactivate the EQU access and/or OCC access features on a system-wide basis. Refer to Section 10-C-52 “World Select 2 (WS2)” for further information.
Station Paging Access	If an extension does not belong to the same tenant as the paging groups assigned to “Y,” the extension cannot access the paging groups.
External Paging	If “Y” is selected but if “System-Operation” External Paging 1/2 is set to “No,” paging through external pagers is impossible. If an extension belongs to the different tenant from the tenant of the External Paging 1 or 2 assigned to “Y,” the extension cannot access the external pager.

To select this screen, press the NEXT key in the “System-Class of Service (1/2)” screen.
Pressing the TAB key moves the cursor as follows:



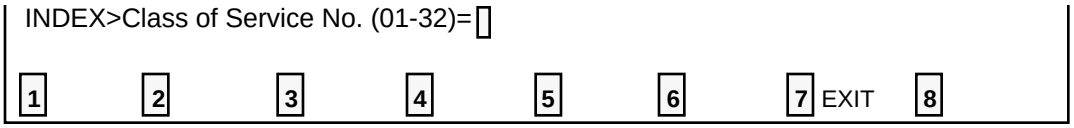
Function

The following functions appear on the function line of this setting screen.

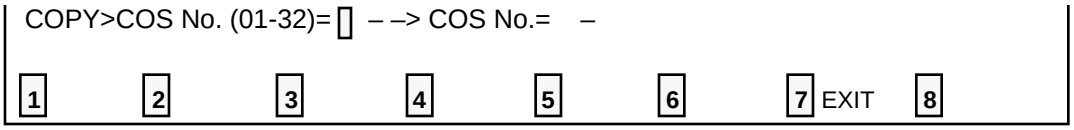


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. Other function keys such as INDEX, COPY and READ are also available in this setting screen. The operation of function keys are described in Section 7–I “Operation of Function Keys.” Only messages are provided here.

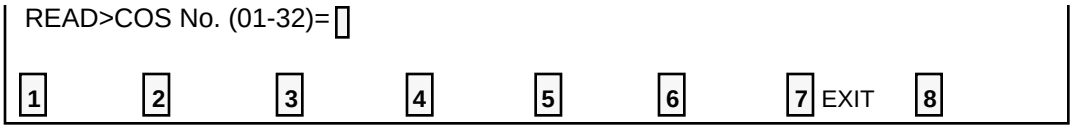
F2 :



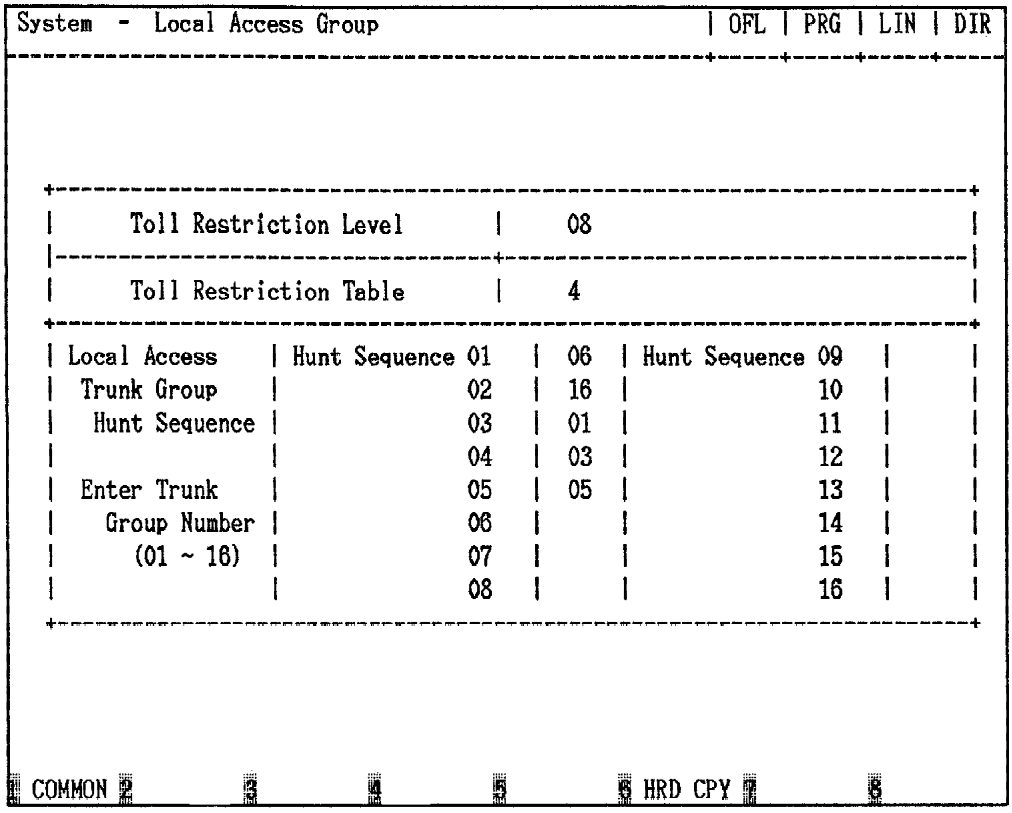
F3 :



F4 :



5.00 Local Access Group



Summary

Assigns toll restriction level and Area/Office Code Table number for outgoing CO calls and the hunting sequence for selecting idle trunk groups after automatic access to an idle CO line. (Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Toll Restriction Level	16	01 to 16 : restriction level	3-C-1.01 3-C-1.02
Toll Restriction Table (◆ for U.S.A. and Canada only)	1	1 to 8 : restriction table number	
Local Access Trunk Group Hunt Sequence Hunt Sequence 01	01	01 to 16 : trunk group number blank : not assigned	3-C-1.01 4-C-3.01 5-A-1.01 6-D-1.01
Hunt Sequence (02 to 16)	blank	Same as Hunt Sequence 01	

Description of Assigning Items

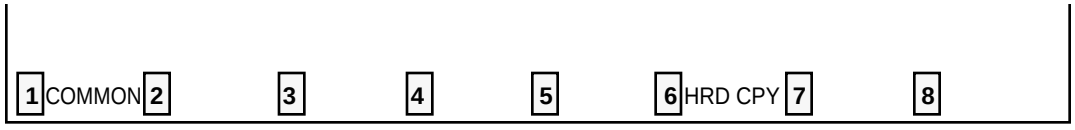
Toll Restriction Level	Assigns the toll restriction level. This is used during toll restriction to determine if calls will be allowed (if Extension toll restriction level is equal to or greater than local access toll restriction level) or whether they must pass through toll restriction checking.
Toll Restriction Table	Assigns the Area code/Office code toll restriction table number. This table is used during 3/6 digit toll restriction.
Local Access Trunk Group Hunt Sequence Hunt Sequence (01 to 16)	Determines the trunk group hunt sequence to be used when placing a CO call using local access. The sequence is used by both tenants but trunk groups will be skipped if they do not belong to the same tenant as the caller.

Conditions

None

Function

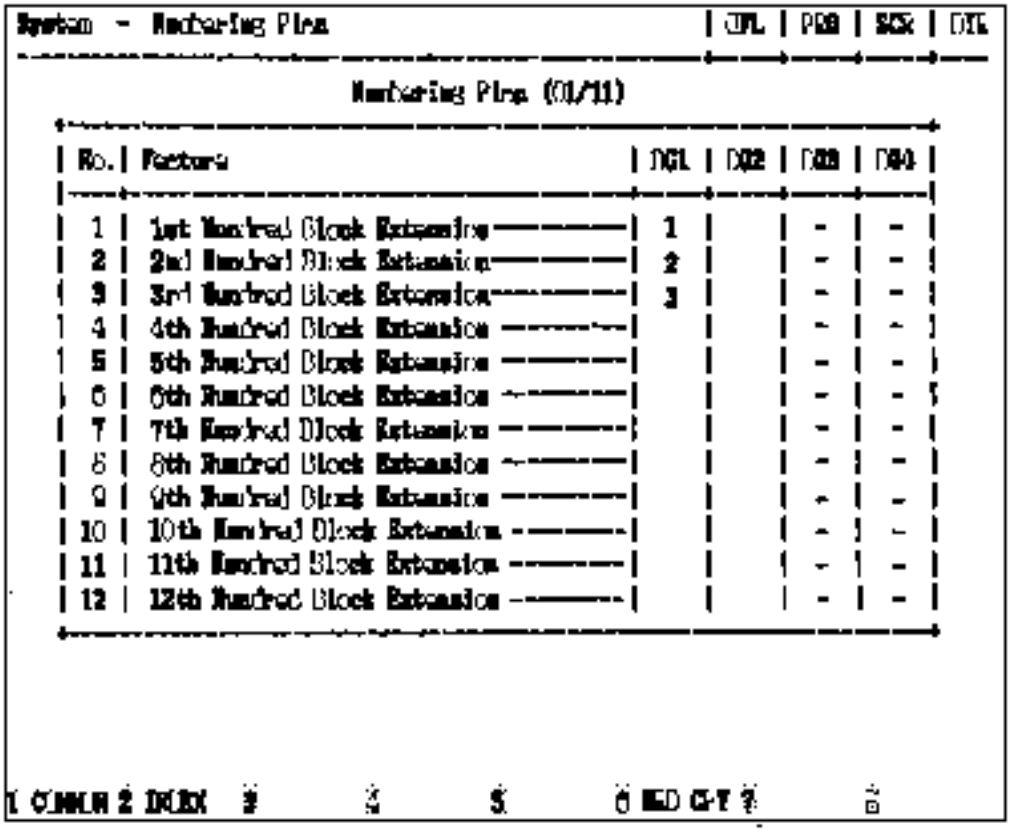
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

6.00 Numbering Plan

6.01 Numbering Plan (01/11)



Summary

The first screen of the System-Numbering Plan screen sets the extension numbers for the 1st through 12th Hundred Block Extension groups.

(Password level : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
1st Hundred Block Extension	1		0 to 9: set “DG1” and leave “DG2” blank when the extension numbers are to be composed of three digits, and set both “DG1” and “DG2” when the extension numbers are to be composed of four digits.	3-B-1.00 3-B-2.00
2nd Hundred Block Extension	2			
3rd Hundred Block Extension	3			
4th through 12th Hundred Block Extension	blank			

Description of Assigning Items

1st through 12th Hundred Block Extension	Assigns the leading one or two digits for extension DN (Directory Number). If the leading digit is not programmed, the DN assignment is not possible.

Conditions

"System-Numbering Plan" setting cannot be changed if "System-Operation", Numbering Plan is set to "Fixed 1" or "Fixed 2." If "Flex" is selected, this setting is changeable.

When entering "DG 1" to "DG 2," the cursor does not advance nor return automatically. Use the → and ← keys to move the cursor.

"Parameter Save OK?" will be displayed on this screen, if you attempt to exit this screen without saving the data change you've made.
Different from other screens, "Parameter Save OK?" is not displayed on this screen when you press the NEXT/PREV key.

Data storage is executed by the PF 4 (Memory) key or the PF 2 (End) key for all screens at the same time. Logical check is also performed according to the following logic:

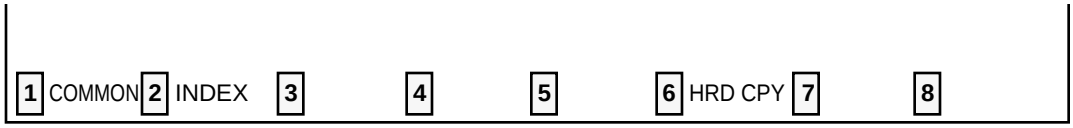
> Extension numbers and other PBX extension numbers are three or four digits and the leading one or two digits are assigned in "Numbering Plan" screens.
> Feature numbers may be one, two, three or four digits.
> Those numbers assigned in Numbering Plan screens cannot include the same number assigned to other feature number as the part or whole of it. For example, if the digit "2" is assigned to the feature number for "Trunk Group 01-08 Access" and another digits "21" is assigned for "Trunk Group 09-16 Access," it is checked at the time of data storage. Similarly, "35" and "351" cannot be present at the same time.

It is possible to store "0" through "9," "✱," "#," as the feature numbers.
However, if "✱" or "#" is included in the feature numbers, those features are not accessed by the rotary telephone extensions.

1st to 12th Hundred Block Extension	Extension numbers cannot include "✱" and "#."

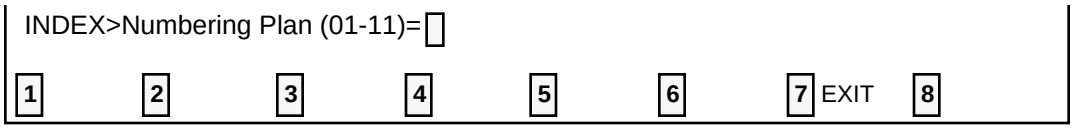
Function

The following functions appear on the function line of this setting screen.

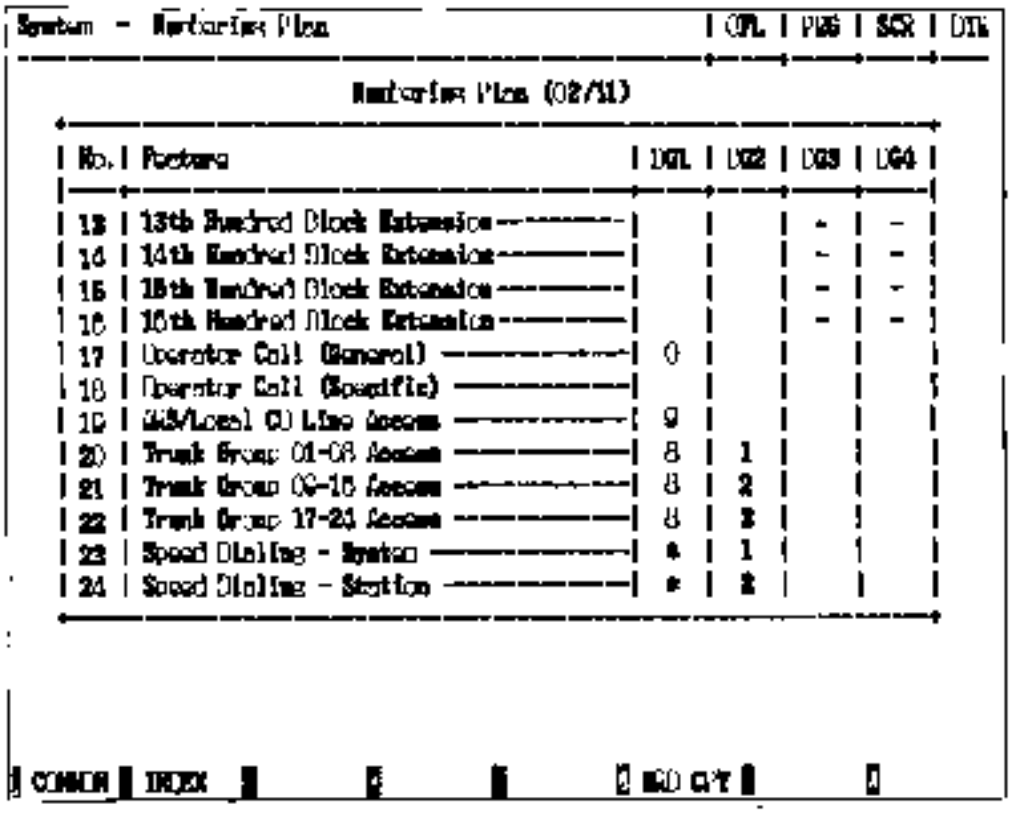


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX key is also available in this screen. The operation of function keys are described in Section 7–I “Operation of Function Keys.” Only a message is provided here.

F2 :



6.02 Numbering Plan (02/11)



Summary

The second screen of the System-Numbering Plan screen sets the numbers for 13th through 16th Hundred Block Extension groups and functions 17 to 24.

(Password level : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
13th Hundred Block Extension	blank		0 to 9: set “DG1” and leave “DG2” blank when the extension numbers are to be composed of three digits, and set both “DG1” and “DG2” when the extension numbers are to be composed of four digits.	3-B-1.00 3-B-2.00
14th Hundred Block Extension				
15th Hundred Block Extension				
16th Hundred Block Extension				
Operator Call (General)	0		Enter one through four digits number consisting of 0 through 9, ✱ and # .	3-B-1.00 3-B-5.00 4-C-10.00 5-A-8.00
Operator Call (Specific)	blank			
ARS/Local CO Line Access	9			3-B-1.00 3-C-2.00 4-C-3.01 5-A-1.01 6-D-1.01

Continued

Continued

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Trunk Group 01-08 Access	81		Enter one through four digits number consisting of 0 through 9, ✱, and #.	3-B-1.00 4-C-3.02 5-A-1.02 6-D-1.02
Trunk Group 09-16 Access	82			
Trunk Group 17-24 Access (◆ for U.S.A. and Canada only)	83			3-B-1.00 4-C-3.03 5-A-1.03 6-D-1.03
Speed Dialing-System	✱1	6✱1		3-B-1.00 5-A-2.02
Speed Dialing-Station	✱2	6✱2		3-B-1.00 5-A-2.01

Description of Assigning Items

13th through 16th Hundred Block Extension	Assigns the leading one or two digits for extension DN (Directory Number). If the leading digit is not programmed the DN assignment is not possible.
Operator Call (General)	Assigns the feature number for general operator calling. Calls will always arrive at an Attendant Console if it is connected to the system.
Operator Call (Specific)	Assigns the feature number for specific operator calling. The required operator is specified by dialing the feature number and "1" for operator 1 and "2" for operator 2.
ARS/Local CO Line Access	Assigns the feature number for Automatic Route Selection or local access.
Trunk Group 01-08 Access	Assigns the feature number for Individual Trunk Group Dial Access (01 to 08).
Trunk Group 09-16 Access	Assigns the feature number for Individual Trunk Group Dial Access (09 to 16).
Trunk Group 17-24 Access	Assigns the feature number for the specified EQA or OCC Trunk Group Access.
Speed Dialing-System	Assigns the feature number for Speed Dialing-System.
Speed Dialing-Station	Assigns the feature number for Speed Dialing-Station.

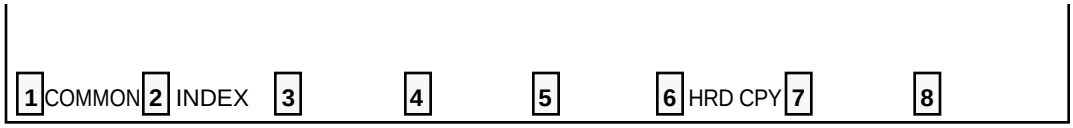
Conditions

Refer to "Numbering Plan (01/11)."

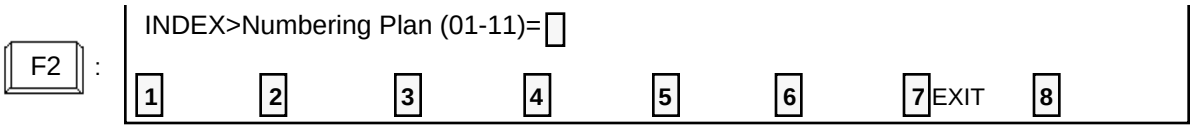
13th to 16th Hundred Block Extension	Extension numbers cannot include "*" and "#."

Function

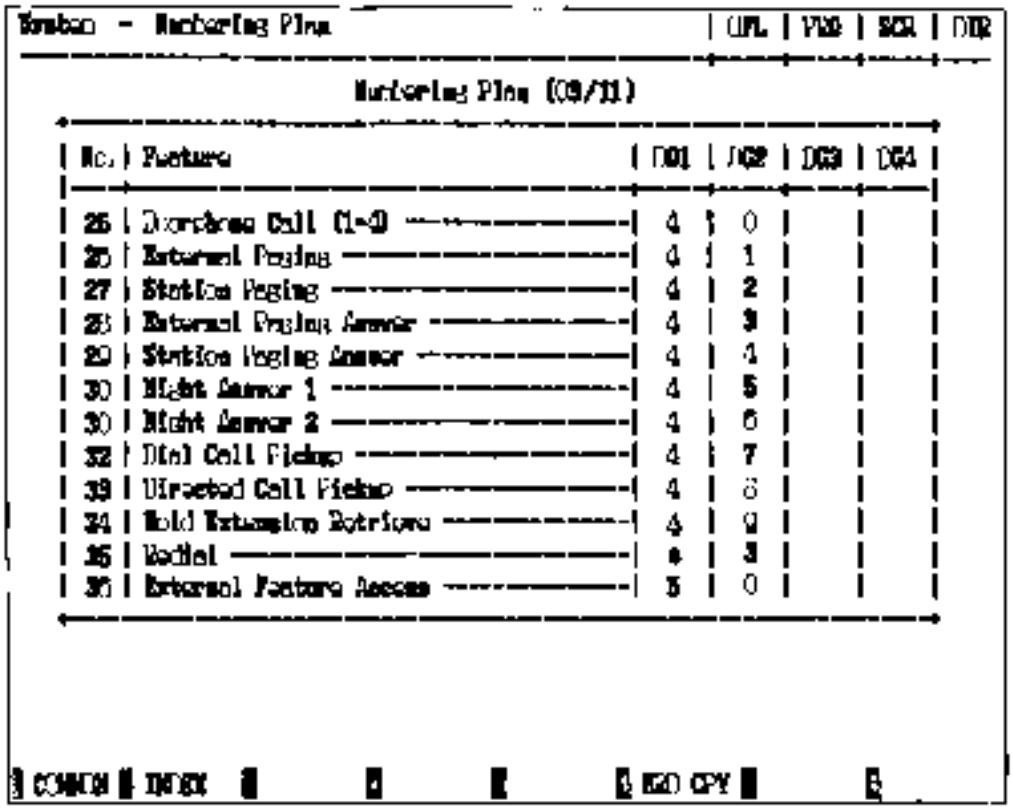
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX key is also available in this screen. The operation of function keys are described in Section 7–I “Operation of Function Keys.” Only a message is provided here.



6.03 Numbering Plan (03/11)



Summary

The third screen of the System-Numbering Plan screen sets the feature numbers for functions 25 to 36.

(Password level : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Doorphone Call (1~4)	40	640	Enter one through four digits number consisting of 0 through 9, ✱, and #.	3-B-1.00 4-G-7.00 5-E-2.00 6-H-4.00
External Paging	41	641		3-B-1.00 4-H-1.03 4-H-1.04 5-F-1.03 5-F-1.04 6-I-1.03 6-I-1.04

Continued

Continued

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Station Paging	42	642	Enter one through four digits number consisting of 0 through 9, ✱, and #.	3-B-1.00 4-H-1.01 4-H-1.02 4-H-1.04 5-F-1.01 5-F-1.02 5-F-1.04 6-I-1.01 6-I-1.02 6-I-1.04
External Paging Answer	43	643		3-B-1.00 4-H-1.03 4-H-1.04 5-F-1.03 5-F-1.04
Station Paging Answer	44	644		3-B-1.00 4-H-1.01 4-H-1.02 4-H-1.04 5-F-1.01 5-F-1.02 5-F-1.04
Night Answer 1	45	645		3-B-1.00 3-B-8.02 3-D-2.04 4-D-4.00 4-I-1.01 5-B-2.00 5-G-1.01
Night Answer 2	46	646		
Dial Call Pickup	47	647		3-B-1.00 4-D-3.01 5-B-1.01
Directed Call Pickup	48	648		3-B-1.00 4-D-3.02 5-B-1.02
Hold Extension Retrieve	49	649		3-B-1.00 4-E-4.00 5-C-3.00
Redial	✱3	6✱3		3-B-1.00 5-A-2.03
External Feature Access	50	650		3-B-1.00 4-G-9.00 5-E-3.00

Description of Assigning Items

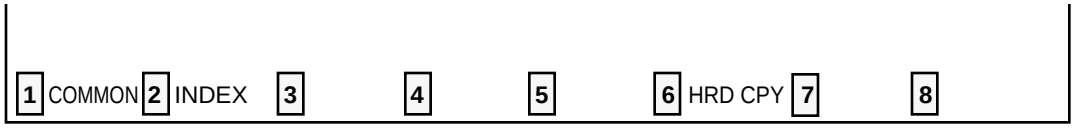
Doorphone Call (1~4)	Assigns the feature number for Doorphone calling. After dialing the feature number, dial 1 to 4 to specify the required doorphone.
External Paging	Assigns the feature number for External Paging. After dialing the feature number, dial 0 (external pagers 1 and 2), 1 (external pager 1), 2 (external pager 2), or ✻ (all extensions and external pagers).
Station Paging	Assigns the feature number for Internal Paging. After dialing the feature number, dial the paging group number (1 to 8), 0 (to page all internal zones) or ✻ (to page all internal and external zones).
External Paging Answer	Assigns the feature number for External Paging Answer. After dialing the feature number, dial 1 (for pager 1) or 2 (for pager 2).
Station Paging Answer	Assigns the feature number for Station Paging Answer.
Night Answer 1	Assigns the feature number for Night Answer 1. This feature number is used to answer calls assigned to UNA 1 in night service or TAFAS 1 in day service.
Night Answer 2	Assigns the feature number for Night Answer 2. This feature number is used to answer calls assigned to UNA 2 in night service or TAFAS 2 in day service.
Dial Call Pickup	Assigns the feature number for Dial Call Pickup. This allows a user to pickup a call arriving at an extension in the same pickup group.
Directed Call Pickup	Assigns the feature number for Directed Call Pickup (General). This allows an extension user to pickup a call ringing at any extension in the same tenant.
Hold Extension Retrieve	Assigns the feature number for Hold Retrieving. This allows an extension user to retrieve a call held at another extension in the same tenant.
Redial	Assigns the feature number for Redial. This is used by an SLT to redial the last CO number.
External Feature Access	Assigns the feature number for sending a switchhook flash to a host PBX or Centrex service.

Conditions

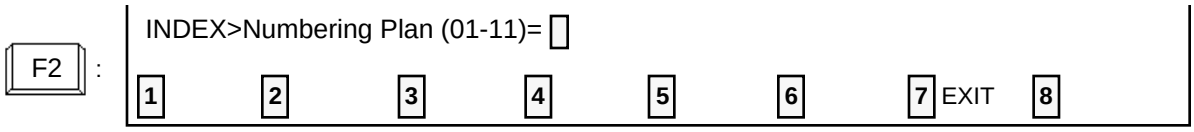
Refer to "Numbering Plan (01/11)."

Function

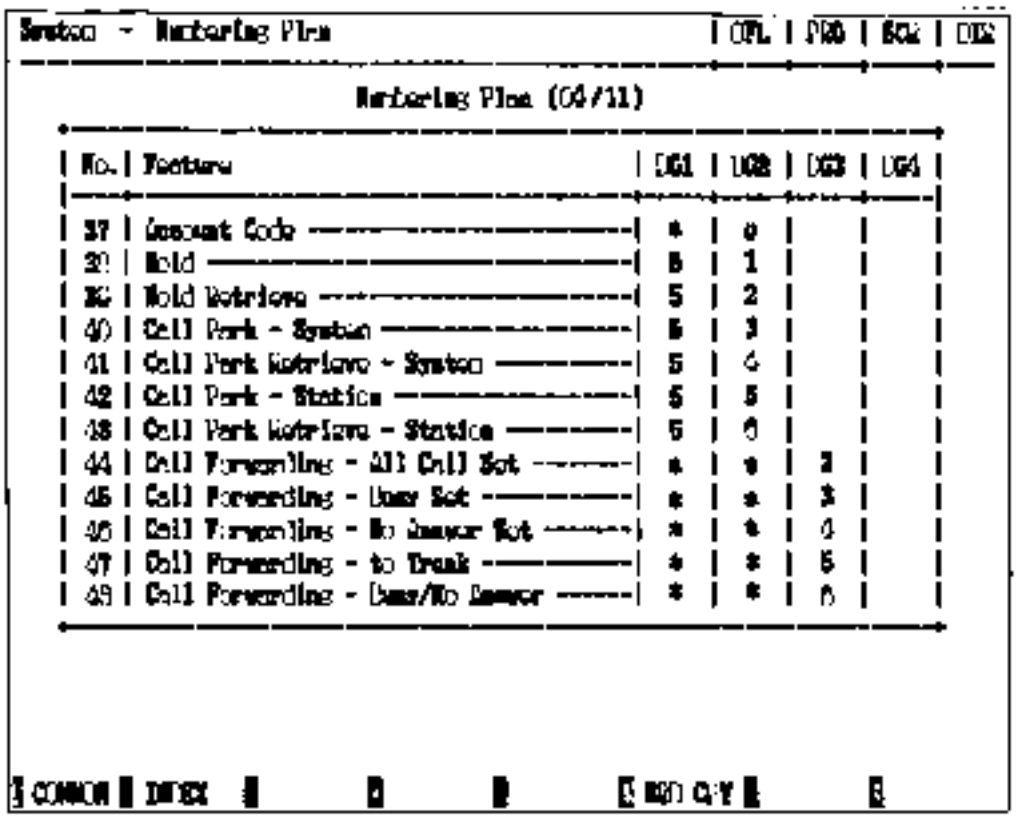
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX key is also available in this screen. The operation of function keys are described in Section 7–I “Operation of Function Keys.” Only a message is provided here.



6.04 Numbering Plan (04/11)



Summary

The fourth screen of the System-Numbering Plan sets the feature numbers for function 37 to 48.

(Password : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Account Code	*#	*#	Enter one through four digits number consisting of 0 through 9, *, and #.	3-B-1.00 4-I-2.00 5-G-2.00
Hold	51	651		3-B-1.00 5-C-1.00
Hold Retrieve	52	652		
Call Park-System	53	653		3-B-1.00 4-E-5.01 5-C-4.01
Call Park Retrieve-System	54	654		
Call Park-Station	55	655		3-B-1.00 4-E-5.02 5-C-4.02
Call Park Retrieve-Station	56	656		

Continued

Continued

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Call Forwarding-All Call Set	✱✱2		Enter one through four digits number consisting of 0 through 9, ✱, and #.	3-B-1.00 4-F-2.01 5-D-2.01
Call Forwarding-Busy Set	✱✱3			3-B-1.00 4-F-2.02 5-D-2.02
Call Forwarding-No Answer Set	✱✱4			3-B-1.00 4-F-2.03 5-D-2.03
Call Forwarding-to Trunk	✱✱5			3-B-1.00 4-F-2.05 5-D-2.05
Call Forwarding-Busy/No Answer	✱✱6			3-B-1.00 4-F-2.04 5-D-2.04

Description of Assigning Items

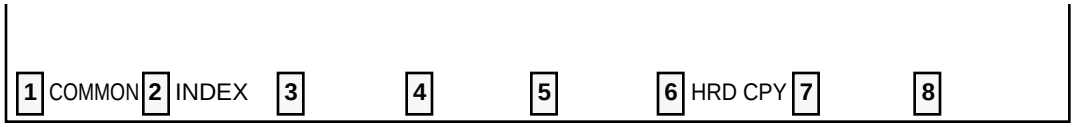
Account Code	Assigns the feature number for entering account codes which may be forced or optional depending on system programming (Class of Service).
Hold	Assigns the feature number for Hold. This is used by an SLT to place the other party on hold.
Hold Retrieve	Assigns the feature number for retrieving Hold. This is used by an SLT to retrieve a held call.
Call Park-System	Assigns the feature number for Call Park-System. This is used by any extension user to park a call in one of twenty system call park zones.
Call Park Retrieve-System	Assigns the feature number for retrieving a call parked by Call Park-System.
Call Park-Station	Assigns the feature number for Call Park-Station. This is used by any extension user to park a call in that extension's call park zone.
Call Park Retrieve-Station	Assigns the feature number for retrieving a call parked by Call Park-Station.
Call Forwarding-All Call Set	Assigns the feature number for Call Forwarding of all calls.
Call Forwarding-Busy Set	Assigns the feature number for Call Forwarding of calls to busy extensions.
Call Forwarding-No Answer Set	Assigns the feature number for Call Forwarding of calls to no answer extensions.
Call Forwarding-to Trunk	Assigns the feature number for Call Forward to an outside party.
Call Forwarding-Busy/No Answer	Assigns the feature number for Call Forwarding of calls to extensions which are in busy or no answer status.

Conditions

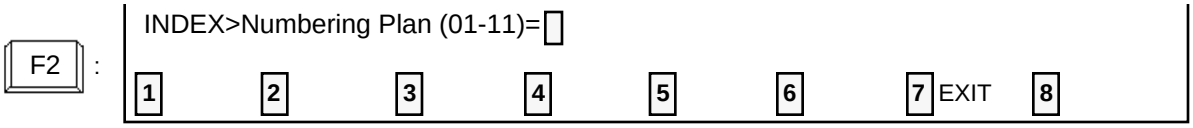
Refer to “Numbering Plan (01/11).”

Function

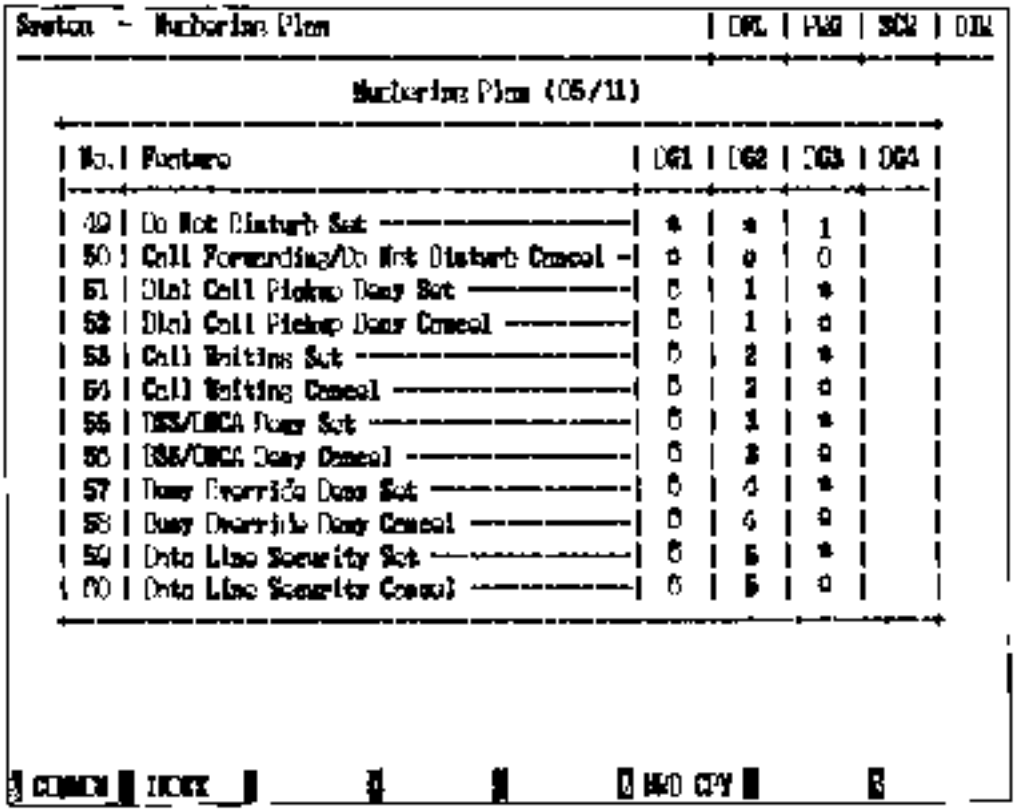
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX key is also available in this screen. The operation of function keys are described in Section 7–I “Operation of Function Keys.” Only a message is provided here.



6.05 Numbering Plan (05/11)



Summary

The fifth screen of the System-Numbering Plan screen, constructed with nine screens, sets feature numbers for executing or canceling various functions.
(Password level : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Do Not Disturb Set	＊＊1		Enter one through four digits number consisting of 0 through 9, ＊, and #.	3-B-1.00 4-D-6.00 5-B-4.00
Call Forwarding/Do Not Disturb Cancel	##0			3-B-1.00 4-D-6.00 4-F-2.01 to 2.05 5-B-4.00 5-D-2.01 to 2.05
Dial Call Pickup Deny Set	61＊			3-B-1.00 4-D-3.03 5-B-1.03
Dial Call Pickup Deny Cancel	61#			

Continued

Continued

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Call Waiting Set	62*		Enter one through four digits number consisting of 0 through 9 , *, and #.	3-B-1.00 4-D-7.00 5-B-5.00
Call Waiting Cancel	62#			
BSS/OHCA Deny Set	63*			3-B-1.00 4-D-2.03
BSS/OHCA Deny Cancel	63#			
Busy Override Deny Set	64*			3-B-1.00 4-D-5.00 5-B-3.00
Busy Override Deny Cancel	64#			
Data Line Security Set	65*			3-B-1.00 4-I-6.00 5-G-4.00
Data Line Security Cancel	65#			

Description of Assigning Items

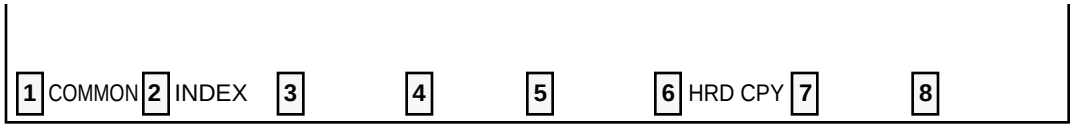
Do Not Disturb Set	Assigns the feature number for Do Not Disturb Set.
Call Forwarding/Do Not Disturb Cancel	Assigns the feature number for Call Forwarding /Do Not Disturb Cancel.
Dial Call Pickup Deny Set	Assigns the feature number for Dial Call Pickup Deny Set. This allows an extension user to prohibit other extensions from answering calls arriving at his extension.
Dial Call Pickup Deny Cancel	Assigns the feature number for Dial Call Pickup Deny Cancel.
Call Waiting Set	Assigns the feature number for Call Waiting Set. This allows an extension user to hear a call waiting tone when another call arrives during a conversation.
Call Waiting Cancel	Assigns the feature number for Call Waiting Cancel.
BSS / OHCA Deny Set	Assigns the feature number for BSS/OHCA Deny Set.
BSS / OHCA Deny Cancel	Assigns the feature number for BSS/OHCA Deny Cancel. BSS/OHCA Deny Cancel is used when the called extension is off-hook. BSS and OHCA allows a call to be made using the ICM button. BSS sets green 240 wink on the called party's ICM button while OHCA allows Hands-free Answerback to PITS KX-T7130, KX-T123230D or KX-T123235.
Busy Override Deny Set	Assigns the feature number for Busy Override Deny Set. Enabling this feature prevents other extensions from using Executive Busy Override on this extension.
Busy Override Deny Cancel	Assigns the feature number for canceling Busy Override Deny.
Data Line Security Set	Assigns the feature number for setting data communication mode. When set this feature prevents any call progress tones from being sent to the extension.
Data Line Security Cancel	Assigns the feature number for canceling data communication mode.

Conditions

Refer to “Numbering Plan (01/11).”

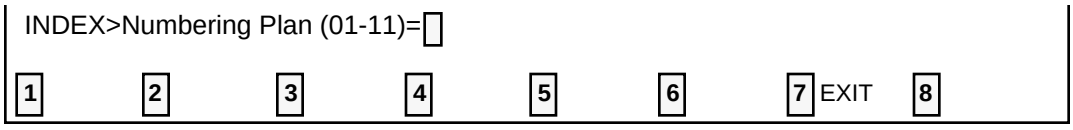
Function

The following functions appear on the function line of this setting screen.

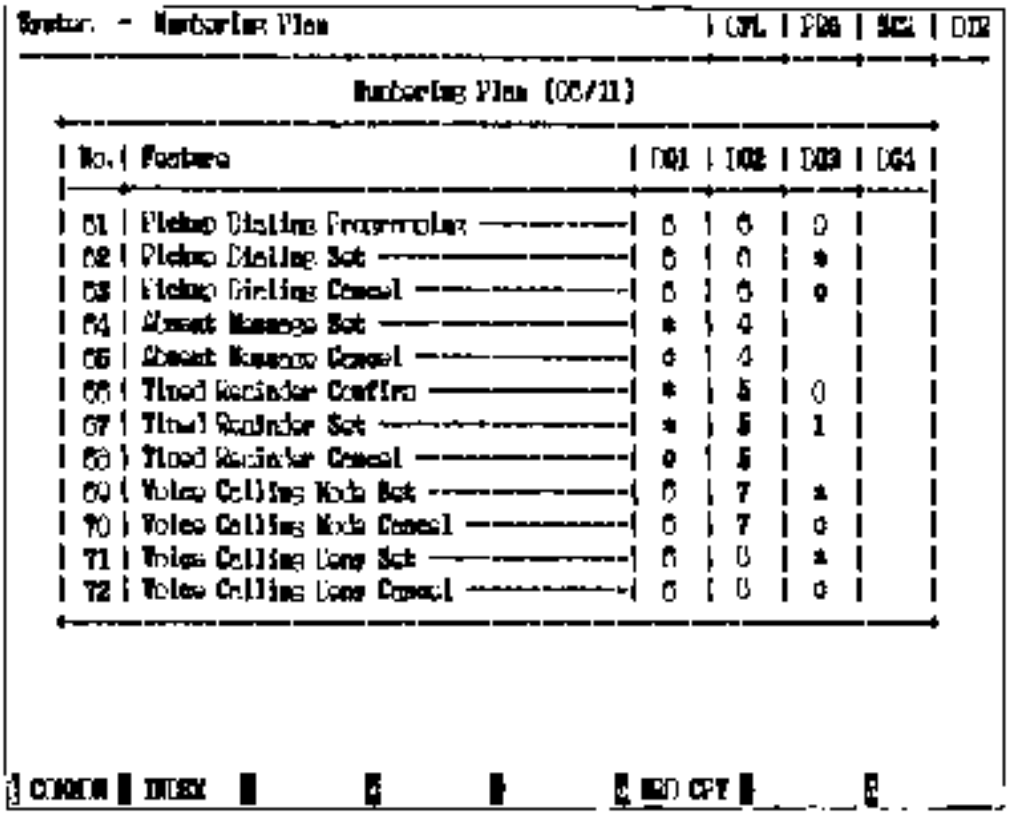


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX key is also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only a message is provided here.

F2 :



6.06 Numbering Plan (06/11)



Summary

The sixth screen of the System-Numbering Plan sets the feature numbers for executing or canceling various functions.

(Password level : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Pickup Dialing Programming	660		Enter one through four digits number consisting of 0 through 9, ✱, and #.	3-B-1.00 5-A-2.04
Pickup Dialing Set	66✱			
Pickup Dialing Cancel	66#			
Absent Message Set	✱4	6✱4		3-B-1.00 4-I-7.00 5-G-5.00
Absent Message Cancel	#4	6#4		
Timed Reminder Confirm	✱50			3-B-1.00 4-I-3.00
Timed Reminder Set	✱51			3-B-1.00 4-I-3.00 5-G-3.00

Continued

Continued

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Timed Reminder Cancel	#5	#50	Enter one through four digits number consisting of 0 through 9, ✱, and #.	3-B-1.00 4-I-3.00 5-G-3.00
Voice Calling Mode Set	67✱			3-B-1.00 4-C-5.03
Voice Calling Mode Cancel	67#			
Voice Calling Deny Set	68✱			3-B-1.00 4-D-2.02
Voice Calling Deny Cancel	68#			

Description of Assigning Items

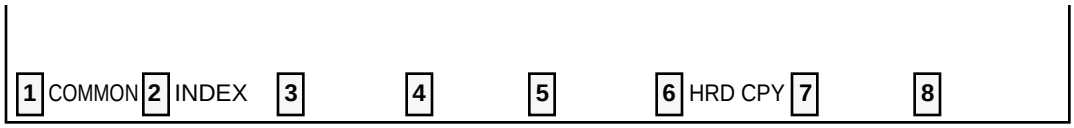
Pickup Dialing Programming	Pickup Dialing is a feature of SLT telephones which allows automatic calling when going off-hook. This feature allows the extension user to program the number to be called.
Pickup Dialing Set	This feature number enables Pickup Dialing.
Pickup Dialing Cancel	This feature number cancels Pickup Dialing.
Absent Message Set	Assigns the feature number for setting Absent Message. This is used by a user when he wants to inform callers of the reason he is away from his desk. The message will only appear on PITS equipped with display or Attendant Consoles.
Absent Message Cancel	Assigns the feature number for canceling Absent Message.
Timed Reminder Confirm	Assigns the feature number for confirming the time set by Timed Reminder. This feature is available only for PITS equipped with display.
Timed Reminder Set	Assigns the feature number for setting Timed Reminder.
Timed Reminder Cancel	Assigns the feature number for canceling Timed Reminder.
Voice Calling Mode Set	Assigns the feature number for setting Voice Calling Mode. This is set at the calling extension. Voice calling uses the ICM button to make an announcement through the speaker of the called extension when the called extension is idle.
Voice Calling Mode Cancel	Assigns the feature number for canceling Voice Calling Mode. This sets signal alerting.
Voice Calling Deny Set	Assigns the feature number for setting Voice Calling Deny. This is set by the called extension to deny voice calling. If “Voice Calling Deny” is set, the extension rings as usual (not voice alerted) when it receives a call.
Voice Calling Deny Cancel	Assigns the feature number for canceling Voice Calling Deny.

Conditions

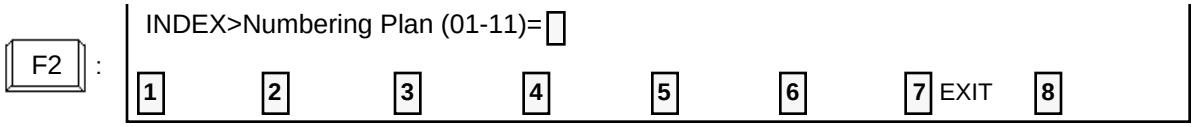
Refer to “Numbering Plan (01/11).”

Function

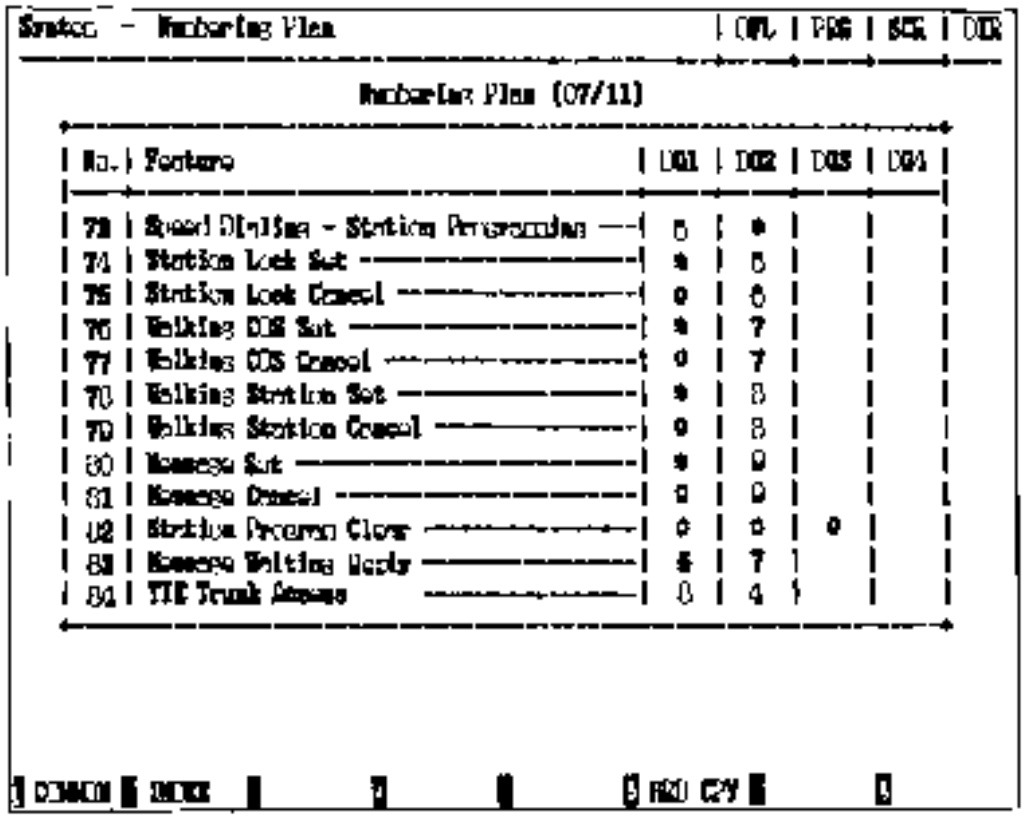
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX key is also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only a message is provided here.



6.07 Numbering Plan (07/11)



Summary

The seventh screen of the System-Numbering Plan sets feature numbers for executing or canceling various functions.

(Password level : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Speed Dialing-Station Programming	6*	6*5	Enter one through four digits number consisting of 0 through 9, *, and #.	3-B-1.00 5-A-2.01
Station Lock Set	*6	6*6		3-B-1.00 4-I-9.00 5-G-7.00
Station Lock Cancel	#6	6#6		
Walking COS Set	*7	6*7		3-B-1.00 4-C-9.00 5-A-7.00
Walking COS Cancel	#7	6#7		
Walking Station Set	*8	6*8		3-B-1.00 3-F-3.00

Continued

Continued

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Walking Station Cancel	#8	6#8	Enter one through four digits number consisting of 0 through 9 , ✱, and #.	3-B-1.00 3-F-3.00
Message Set	✱9	6✱9		5-G-6.00
Message Cancel	#9	6#9		3-B-1.00 4-I-8.00 5-G-6.00 6-J-4.00
Station Program Clear	# # #	# # #		3-B-1.00 4-I-10.00 5-G-8.00
Message Waiting Reply	57	657		5-G-6.00
TIE Trunk Access	84	7		3-F-14.00

Description of Assigning Items

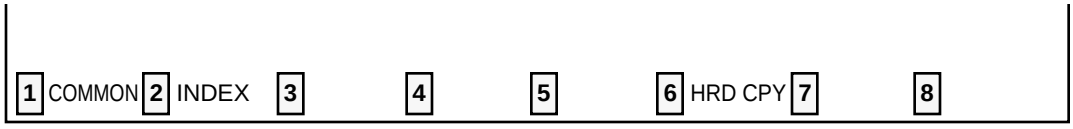
Speed Dialing-Station Programming	Assigns the feature number for setting Speed Dialing to SLT(Single Line Telephone).
Station Lock Set	Assigns the feature number for setting Electronic Station Lock. When set the extension user cannot place outgoing CO calls from that extension.
Station Lock Cancel	Assigns the feature number for canceling Electronic Station Lock.
Walking COS Set	Assigns the feature number for setting Walking COS. This allows an extension user to temporarily change the COS of an extension to that of another extension.
Walking COS Cancel	Assigns the feature number for canceling Walking COS.
Walking Station Set	Assigns the feature number for starting to move a telephone set to another location.
Walking Station Cancel	Assigns the feature number for canceling the moved extension.
Message Set	Assigns the feature number for setting Message Waiting indication. This feature number is available only for SLT's not for PITS's.
Message Cancel	Assigns the feature number for canceling Message Waiting indication.
Station Program Clear	Assigns the feature number for clearing data assigned by other feature numbers, such as Call Forwarding/Do Not Disturb/Timed Reminder, etc..
Message Waiting Reply	Assigns the feature number for replying the Message Waiting Indication set by other extensions. This feature number is available only for a Single Line Telephone with MESSAGE lamp.
TIE Trunk Access	Assigns the feature number for TIE Trunk Access.

Conditions

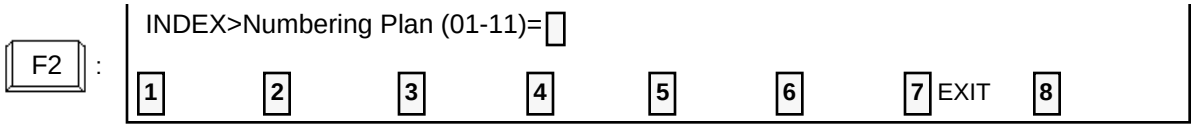
Refer to “Numbering Plan (01/11).”

Function

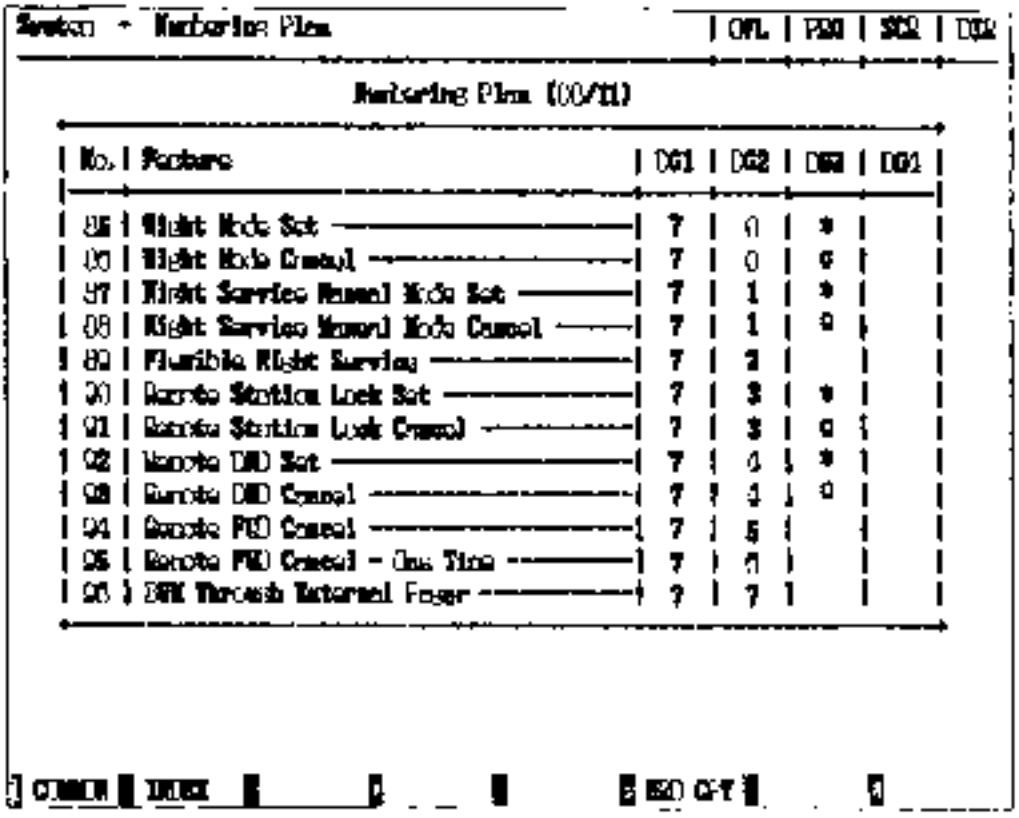
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX key is also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only a message is provided here.



6.08 Numbering Plan (08/11)



Summary

The eighth screen of the System-Numbering Plan sets feature numbers for executing or canceling various functions.

(Password level : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Night Mode Set	70*	69*	Enter one through four digits number consisting of 0 through 9, *, and #.	3-B-8.05 4-I-1.03 5-G-1.03
Night Mode Cancel	70#	69#		
Night Service Manual Mode Set	71*	51*		3-B-1.00 4-I-1.03 5-G-1.03 6-J-1.02
Night Service Manual Mode Cancel	71#	51#		
Flexible Night Service	72	520		3-B-1.00 3-B-8.03 4-I-1.02 5-I-1.02 6-J-1.01

Continued

Continued

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Remote Station Lock Set	73*	53*	Enter one through four digits number consisting of 0 through 9, *, and #.	3-B-1.00 4-I-11.00 5-G-9.00 6-J-5.00
Remote Station Lock Cancel	73#	53#		
Remote DND Set	74*	54*		
Remote DND Cancel	74#	54#		
Remote FWD Cancel	75	675		
Remote FWD Cancel- One Time	76	676		
BGM Through External Pager	77	677		3-B-1.00 4-H-2.00 5-F-2.00 6-I-2.00

Description of Assigning Items

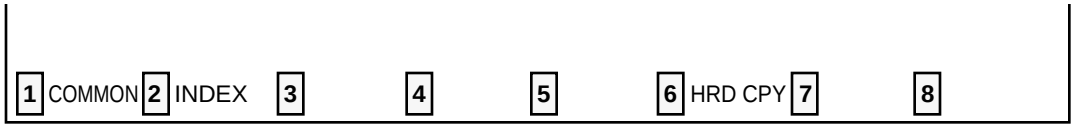
Night Mode Set	Assigns the feature number for setting Night mode manually (for operator 1 only). This is used when night mode is set to “Manual.”
Night Mode Cancel	Assigns the feature number for setting Day mode manually (for operator 1 only).
Night Service Manual Mode Set	Assigns the feature number for starting Night Service mode manually (for operator 1 only). This is used when night mode is set to “Auto.”
Night Service Manual Mode Cancel	Assigns the feature number for starting Night Service mode automatically (for operator 1 only).
Flexible Night Service	Assigns the feature number for setting an answering point in Night mode (for operator 1 only).
Remote Station Lock Set	Assigns the feature number for setting Electronic Station Lock to extensions (for operators 1 and 2 only).
Remote Station Lock Cancel	Assigns the feature number for unlocking extensions (for operators 1 and 2 only).
Remote DND Set	Assigns the feature number for setting Do Not Disturb to extensions (for operators 1 and 2 only).
Remote DND Cancel	Assigns the feature number for canceling Do Not Disturb for extensions (for operators 1 and 2 only).
Remote FWD Cancel	Assigns the feature number for canceling Call Forwarding feature for extensions (for operators 1 and 2 only).
Remote FWD Cancel-One Time	Assigns the feature number for canceling Call Forwarding feature for extensions only once (for operators 1 and 2 only).
BGM Through External Paging	Assigns the feature number for sending BGM (background music) through External Pager (for operator 1 only).

Conditions

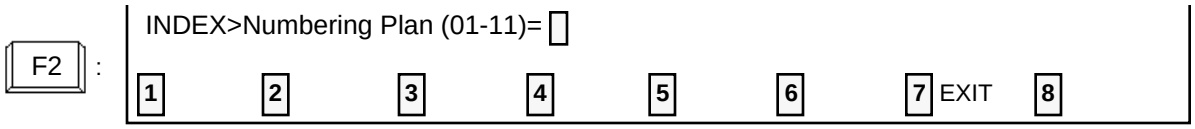
Refer to “Numbering Plan (01/11).”

Function

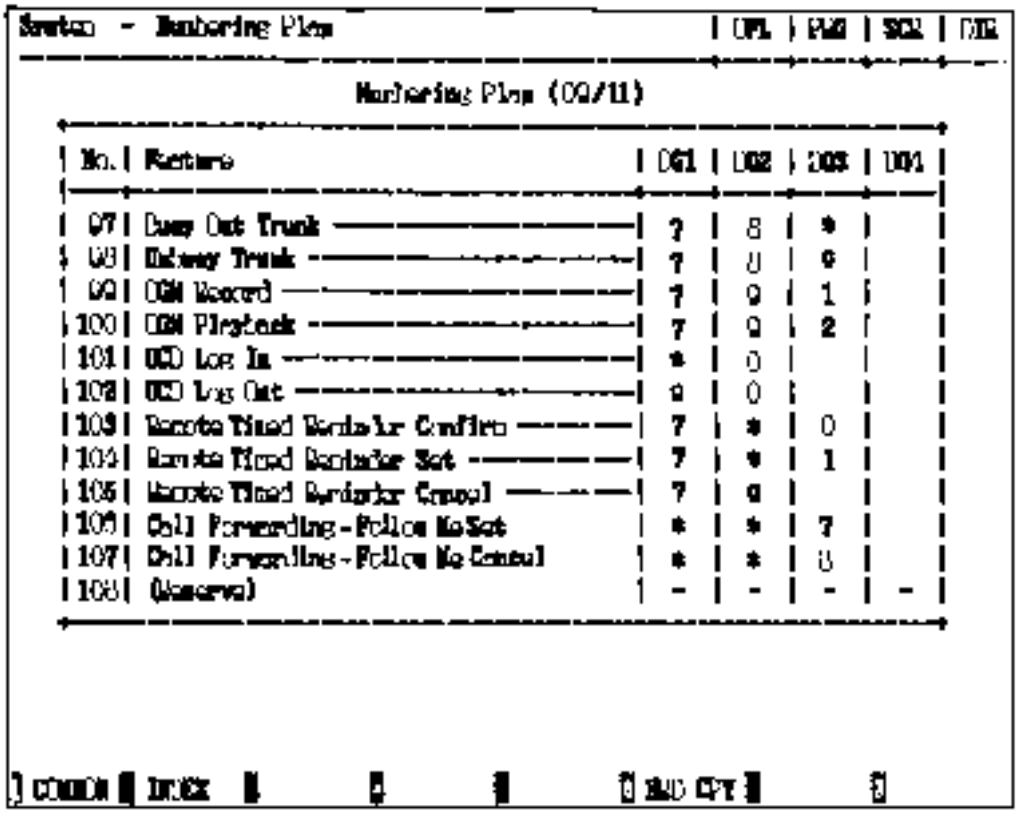
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX key is also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only a message is provided here.



6.09 Numbering Plan (09/11)



Summary

The ninth screen of the System-Numbering Plan sets feature numbers for executing or canceling various functions.
(Password level : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Busy Out Trunk	78*	57*	Enter one through four digits number consisting of 0 through 9, *, and #.	3-B-1.00 3-F-8.00 6-J-10.00
Unbusy Trunk	78#	57#		
OGM Record	791	691		3-B-1.00 3-F-4.00 6-J-8.00
OGM Playback	792	692		
UCD Log In	*0	6*0		3-B-1.00 4-D-8.00 5-B-6.00
UCD Log Out	#0	6#0		
Remote Timed Reminder Confirm	7*0	5*0		4-I-14.00 6-J-13.00
Remote Timed Reminder Set	7*1	5*1		
Remote Timed Reminder Cancel	7#	50#		

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Call Forwarding-Follow Me Set	✻✻7		Enter one through four digits number consisting of 0 through 9, ✻, and #.	4-F-2.06 10-C-68.00
Call Forwarding-Follow Me Cancel	✻✻8			5-D-2.05 10-C-68.00

Description of Assigning Items

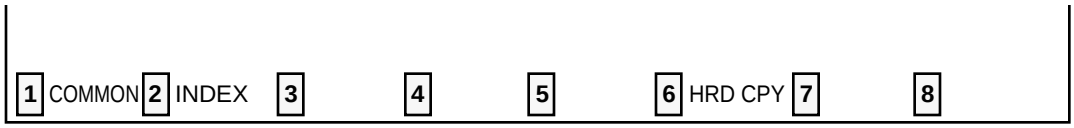
Busy Out Trunk	Assigns the feature number for manually putting a trunk into busy status (for operator 1 only).
Unbusy Trunk	Assigns the feature number for canceling Busy Out Trunk (for operator 1 only).
OGM Record	Assigns the feature number for recording OGM (for operator 1 only).
OGM Playback	Assigns the feature number for playback of OGM (for operator 1 only).
UCD Log In	Assigns the feature number for setting extensions to UCD (Uniform Call Distribution) service.
UCD Log Out	Assigns the feature number for removing extensions from UCD service.
Remote Timed Reminder Confirm	Assigns the feature number for confirming the time set by Remote Timed Reminder. This feature is available for the Operator 1 and 2 at the Attendant Consoles or PITS with display.
Remote Timed Reminder Set	Assigns the feature number for setting Remote Timed Reminder. This feature is available for the Operator 1 and 2 at the Attendant Consoles or PITS with display.
Remote Timed Reminder Cancel	Assigns the feature number for canceling Remote Timed Reminder. This feature is available for the Operator 1 and 2 at the Attendant Consoles or PITS with display.
Call Forwarding-Follow Me Set	Assigns the feature number for setting Call Forwarding-Follow Me feature.
Call Forwarding-Follow Me Cancel.	Assigns the feature number for canceling Call Forwarding-Follow Me feature.

Conditions

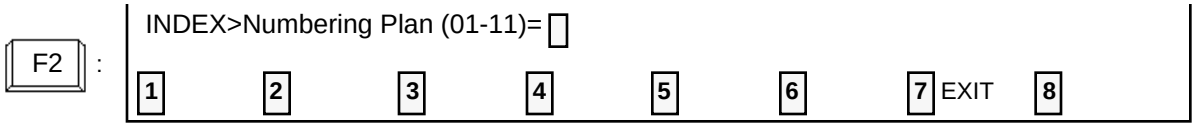
Refer to “Numbering Plan (01/11).”

Function

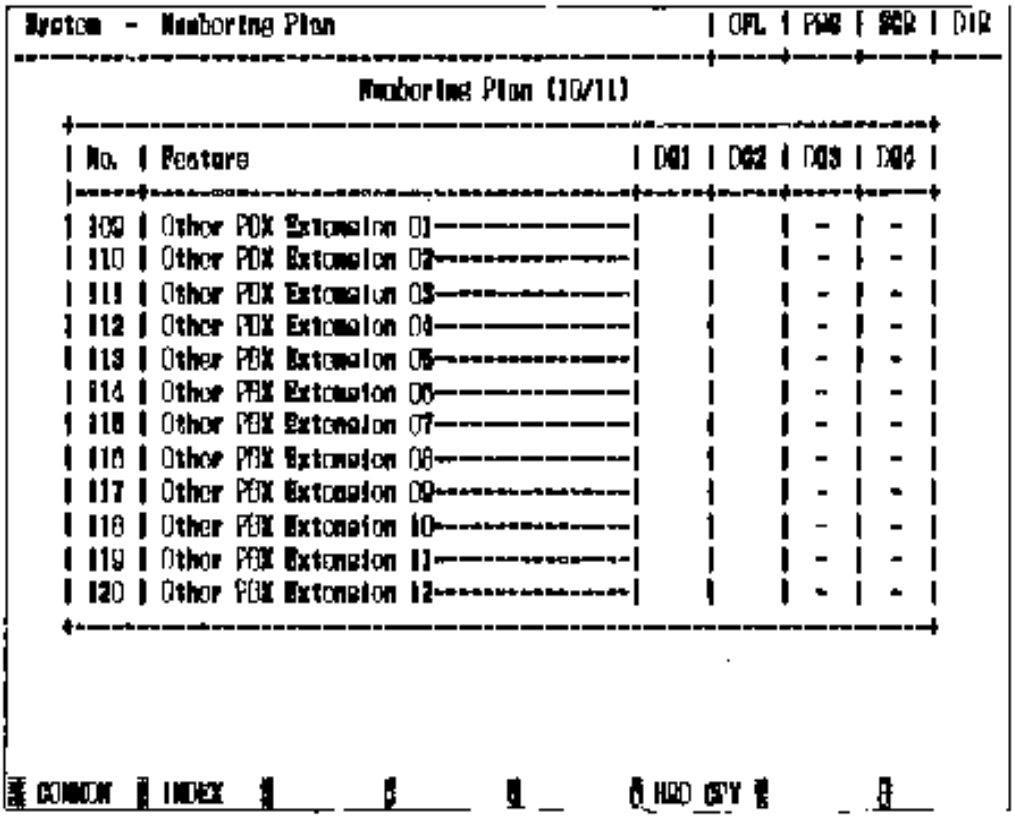
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX keys is also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only a message is provided here.



6.10 Numbering Plan (10/11)



Summary

The tenth screen of the System-Numbering Plan sets the other PBX extension numbers for 01 through 12.
(Password level : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Other PBX Extension 01 through 12	blank		0 to 9: set “DG1” and leave “DG2” blank when the other PBX extension numbers are to be composed of three digits, and set both “DG1” and “DG2” when the other PBX extension numbers are to be composed of four digits.	3-B-1.00 3-F-14.01

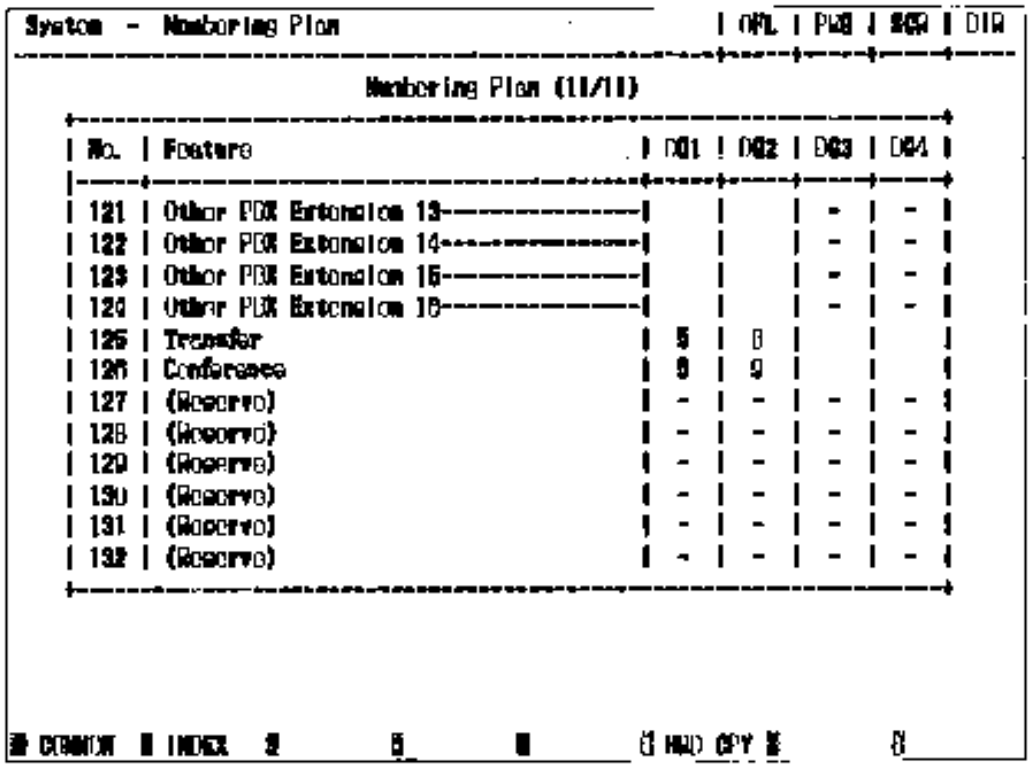
Description of Assigning Items

Other PBX Extension 01 through 12	Assigns the leading one or two digits of other PBX extension numbers. If you employ PBX Code method for TIE calls (See Section 3-F-14.00), this programming is not required.

Conditions

Other PBX Extension 01 through 12	Cannot include “*” and “#”.

6.11 Numbering Plan (11/11)



Summary

The eleventh screen of the System-Numbering Plan sets the other PBX extension numbers for 13 through 16 and feature number for Transfer and Conference.

(Password level : Two or higher)

Assigning Items	Default		Selection of Value	Reference
	Fixed 1	Fixed 2		
Other PBX Extension 13 through 16	blank		0 to 9: set “DG1” and leave “DG2” blank when the other PBX extension numbers are to be composed of three digits, and set both “DG1” and “DG2” when the other PBX extension numbers are to be composed of four digits.	3-B-1.00 3-F-14.01
Transfer	58		Enter one through four digits number consisting of 0 through 9, ✱,and #.	5-D-1.00
Conference	59			5-E-1.00

Description of Assigning Items

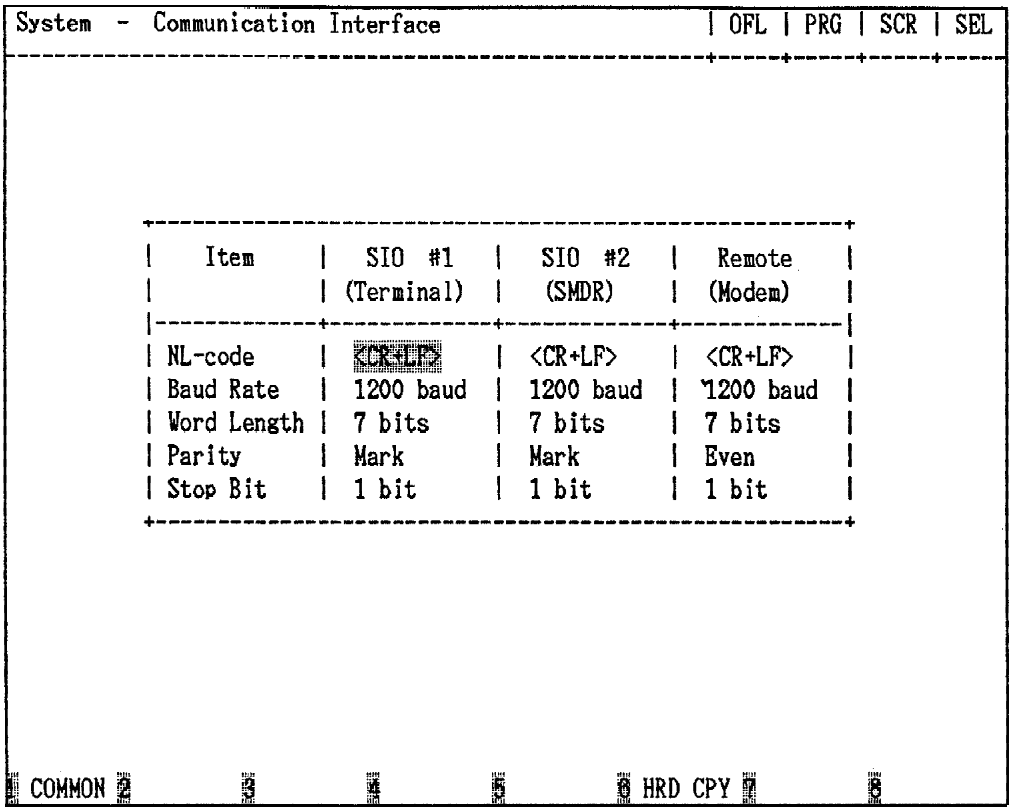
Other PBX Extension 13 through 16	Assigns the leading one or two digits of other PBX extension numbers. If If you employ PBX Code method for TIE calls (See Section 3-F-14.00), this programming is not required.
Transfer	Assigns the feature number for SLT Transfer Operation This feature number is available for an SLT user when “SLT Transfer Operation” (See section 10-C-53.00 “World Select 3 (WS3)”) is set to “Mode 2”.
Conference	Assigns the feature number for SLT Conference Operation. This feature number is available for an SLT user when “SLT Transfer Operation” (See section 10-C-53.00 “World Select 3 (WS3)”) is set to “Mode 2”.

Conditions

Refer to “Numbering Plan (01/11).”

Other PBX Extension 13 through 16	Cannot include “*” and “#”.

7.00 Communication Interface



Summary

Assigns parameters for the RS-232 C ports and
Modem (Modulator and Demodulator).
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
NL-Code	<CR+LF>	<CR+LF>: Carriage Return and Line Feed <CR> : Carriage Return	2-D-3.00 3-F-1.00 14-B-2.00 15-B-2.00 16 17
Baud Rate	1200 : for SIO#1,2 300 : for Remote	110/150/300/600/1200/2400/4800/9600 : Baud rate for SIO 300/1200 : Baud rate for Remote	
Word Length	7 bits : for SIO#1,2 8 bits : for Remote	7 bits/8 bits: number of bits for SIO 6 bits/7 bits/8 bits: number of bits for Remote	

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Parity	Mark : for SIO#1,2 None : for Remote	None/Mark/Space/Even/Odd : Parity for SIO None/Even/Odd : Parity for Remote	2-D-3.00 3-F-1.00 14-B-2.00 15-B-2.00 16 17
Stop Bit	1 bit	1 bit/2 bits : Stop bit for SIO 1 bit/1.5 bits/2 bits: Stop bit for Remote	

Description of Assigning Items

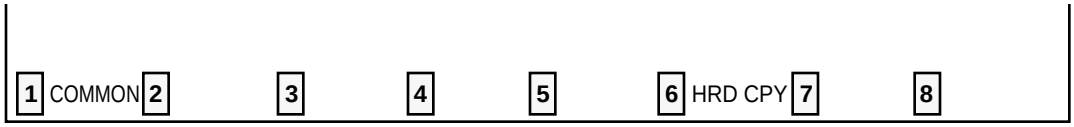
NL-Code	Assigns the New Line code, for Carriage Return, for SIO #1 (Terminal), SIO #2 (SMDR : Station Message Detail Recording) and Remote (MODEM).
Baud Rate	Assigns the Baud rate for SIO #1, SIO #2 and Remote. The baud rate is the number of bits transmitted per second between this system and the device.
Word Length	Assigns the data length for SIO #1, SIO #2 and Remote. The data length is the number of bits required per character.
Parity	Assigns the type of Parity check for SIO #1, SIO #2 and Remote. Mark and space means that there is a fixed polarity parity bit for each character. Even and odd means that the number of bits including the parity bits is even or odd. (1,3,5,7,9 etc. is odd 2,4,6,8, etc. is even)
Stop Bit	Assigns the number of Stop bit for SIO #1, SIO #2 and Remote. Stop bits are used to signal the end of a character and that the next bit received is the start bit of the next character.

Conditions

It is possible to change assigning items in “System-Communication Interface” while On-site administration or Remote administration is performed or SMDR is being printed out. New setting becomes effective when those operation modes are finished.

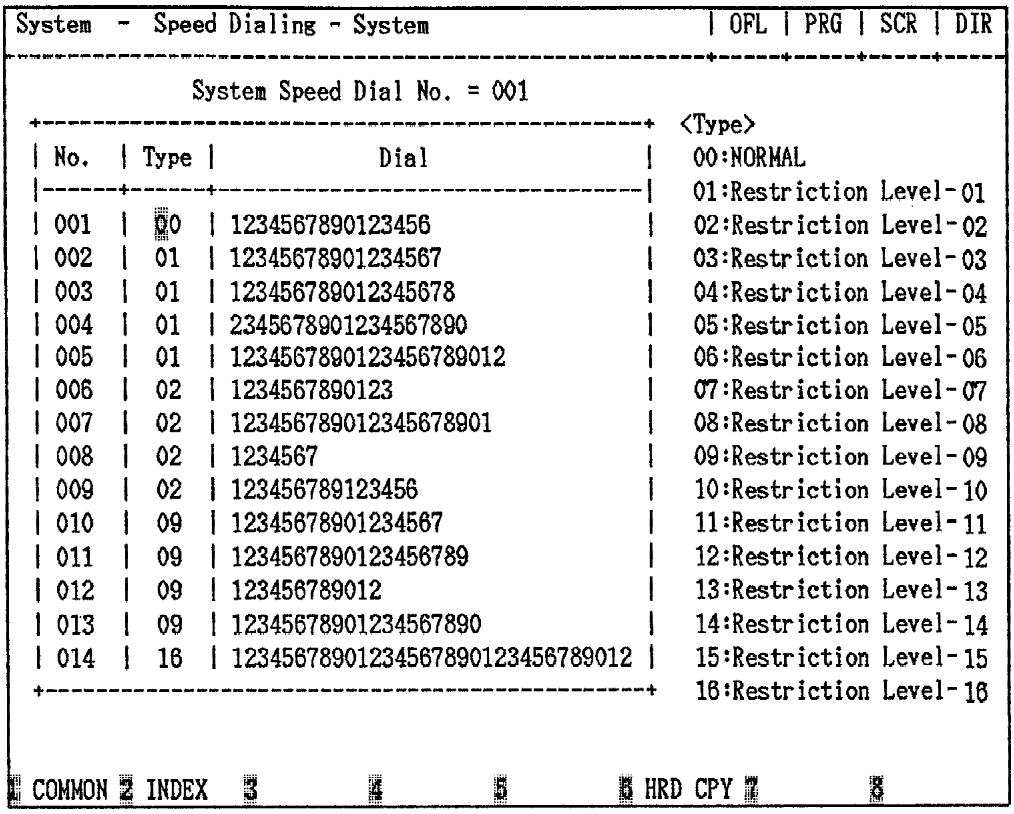
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7-I “Operation of Function Keys.”

8.00 Speed Dialing - System



Summary

Assigns toll restriction levels and speed dialing codes for Speed Dialing.
There are 15 screens provided for Speed Dialing-System.
(Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
Type	00	00 : checked against the system toll restriction feature 01 to 16 : first checked against toll restriction level of extension users.	4-C-4.02 5-A-2.02 6-D-2.01
Dial	blank	Maximum 32 digits composed of numbers, *, # and marks below: P (Pause) F (Flash) - (Hyphen) [(Start of secret dialing)] (End of secret dialing)	4-C-4.02 4-I-5.00 5-A-2.02 6-D-2.01 6-J-3.00

Description of Assigning Items

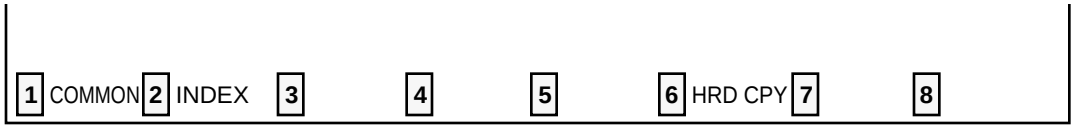
No.	Speed dialing codes appear on the CRT screen.
Type	Assigns the toll restriction level for each of the speed dialing codes.
Dial	Assigns the actual digits to be dialed including numbers, *, #, P, F, -, [,] . There is a maximum of 32 digits. For hiding the digits, surround them with brackets [ ]. The dialed digits are not appeared on the display of PITS (if provided) and SMDR call record.

Conditions

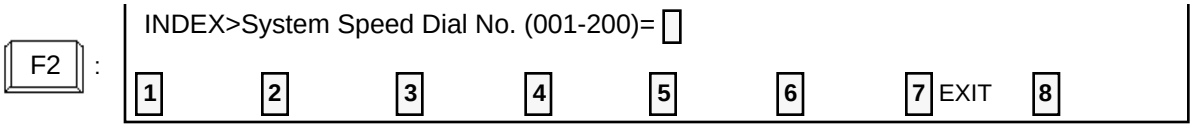
If “System-Operation”, Tenant Service is set to “Yes,” 200 speed dialing codes can be split between tenant 1 and tenant 2. To split them, “System-Tenant”, Speed Dialing-System Boundary must be executed.

Function

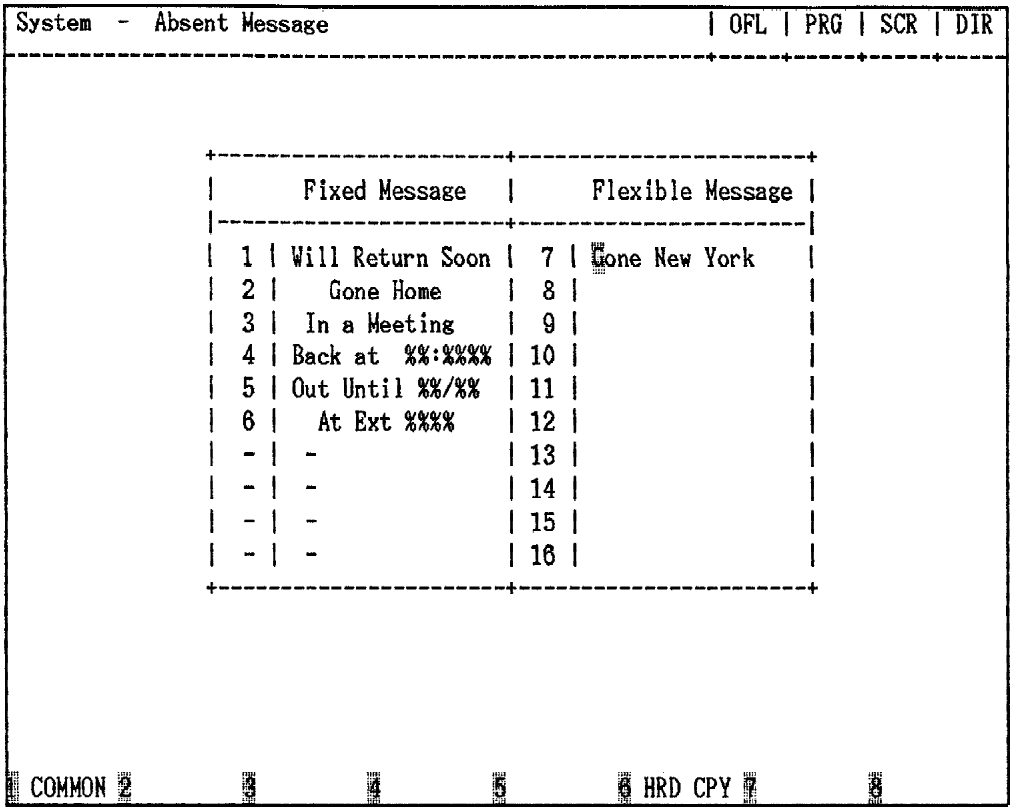
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX key is also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only a message is provided here.



9.00 Absent Message



Summary

Sets absent messages.
(Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
Fixed Message (1 to 6)	all displayed	Fixed messages which cannot be changed % : enter these at extensions	4-I-7.00 5-G-5.00
Flexible Message (7 to 16)	blank	Flexible message A maximum of 16 digits composed of characters, numbers, and up to five % % : enter these at extensions	

Description of Assigning Items

Fixed Message (1 to 6)	Fixed messages to be displayed on a PITS telephone with the display. These messages cannot be changed by system programming. Extension user can set the desired one to his or her PITS telephone set. If the message assigned contains parameters, these should be entered by the extension user.
Flexible Message (07 to 16)	Assigns variable messages to be displayed on a PITS telephone with the display. These messages can be assigned and changed by system programming. Extension user can set the desired one to his or her PITS telephone and if the message contains any parameters, these should be entered by the extension user.

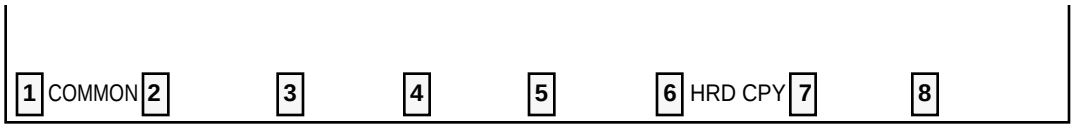
Conditions

If “System-Operation”, Tenant Service is assigned to “Yes,” 10 flexible messages (7 to 16) can be split between tenants 1 and 2. To split them, “System-Tenant”, Absent Message Boundary is used. Six fixed messages cannot be split between tenants. They are used by both tenants in common.

A flexible message in use by an extension user cannot be changed or deleted. If you attempt, the changed data cannot be saved and the following error message appears on the screen.
***** ERROR: Some extensions are using that message.

Function

The following functions appear on the function line of this setting screen.

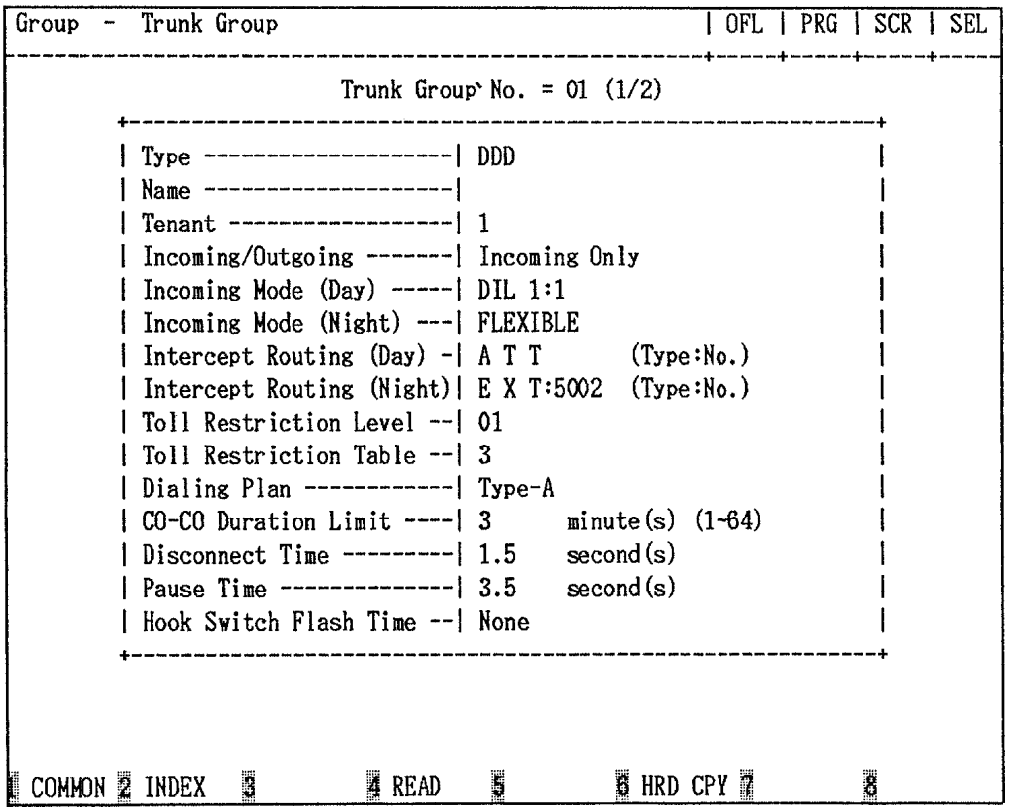


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7-I “Operation of Function Keys.”

E. Group Screen

1.00 Trunk Group

1.01 Trunk Group (1/2)



Summary

The Group-Trunk Group screen consists of 16 groups, each of which includes two screens. This screen is the first screen used to assign various data for trunk groups.
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Type	DDD	DDD : Direct Distance Dialing FEX : Foreign Exchange WATS : Wide Area Telecommunication Service PVL : Private Line PBX : Behind PBX DID : Direct Inward Dialing TIE : TIE Line	3-B-7.05 3-C-1.01 3-C-1.03 3-C-4.00 3-D-2.03 3-D-2.07 3-F-14.00
Name	CO	A maximum of three digits consisting of characters, numbers and marks : Trunk group name	3-B-7.05
Tenant	blank	1 or 2 : tenant number	3-B-7.05 3-B-4.00
Incoming/Outgoing	Both-Way	Incoming Only : for Incoming calls only Outgoing Only : for Outgoing calls only Both-Way : for both	3-B-7.05

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Incoming Mode (Day)	ATT: for "with ATLC" DIL 1:1 : for "without ATLC"	ATT : placing calls to the Attendant Console DIL 1:1 : placing calls by Direct In Line 1:1 DIL 1:N : placing calls by Direct In Line 1:N DISA : placing calls by Direct Inward System Access TAFAS 1 : placing calls by Trunk Answer from Any Station-1 TAFAS 2 : placing calls by Trunk Answer from Any Station-2	3-B-7.05 3-D-1.00 3-D-2.01 3-D-2.02 3-D-2.04 4-D-4.00 5-B-2.00
Incoming Mode (Night)	FLEXIBLE	Day Mode : placing calls in Day mode FIXED : placing calls to a Fixed destination FLEXIBLE : placing calls to a Flexible destination DISA : placing calls by Direct Inward System Access	3-B-7.05 3-B-8.00
Intercept Routing (Day)	None	(Type) None: not intercepting ATT : transferring to Attendant Console EXT : transferring to an extension	3-B-7.05 3-F-5.00 3-F-6.00
		(No.) : setting is unnecessary if "None" is selected for type Directory number: if "EXT" is selected for type	
Intercept Routing (Night)	None	(Type) None: not intercepting EXT : transferring to an extension	
		(No.) : if "None" is selected for type, setting is unnecessary Directory number: when "EXT" is selected for type	
Toll Restriction Level	16	01 to 16: toll restriction level	3-B-7.05 3-C-1.03
Toll Restriction Table (◆ for U.S.A. and Canada only)	1	1 to 8 : area office code table	3-B-7.05 3-C-1.03 9-I-1.00

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Dialing Plan (◆ for U.S.A. and Canada only)	None	Type-A : 1+NXX+NXX+XXXX NXX+XXXX Type-B : NPX+NXX+XXXX NNX+XXXX Type-C : 1+NPX +NXX+XXXX 1+ NNX+XXXX NNX+XXXX Type-D : 1+NXX +NXX+XXXX NXX+NXX+XXXX NXX+XXXX Area Code Office Code Subscriber Number None : no Toll Restriction [N: 2 to 9, P: 0,1, X : 0 to 9]	3-B-7.05 3-C-1.00 3-C-2.00
CO-CO Duration Limit	10	1 to 64 : CO-CO duration limit (minute(s))	3-B-7.05 3-B-10.00 3-D-2.02 4-F-1.03 4-F-2.05 4-G-6.01 4-G-6.02 5-D-2.05 6-G-1.04 6-H-2.00
Disconnect Time	1.5	1.5/4.0 : disconnecting time (second(s))	3-B-7.05 3-B-10.00 4-G-8.00 6-H-6.00
Pause Time	3.5	1.5/2.5/3.5/4.5 : pause time (second(s))	3-B-7.05 3-B-10.00 3-C-4.00
Hook Switch Flash Time	None	None : no Flash Service 80/300/600/900/1200 : Flash Service hooking time. (milliseconds)	3-B-7.05 3-B-10.00 4-G-9.00 5-E-3.00

Description of Assigning Items

Type	Assigns a type for each trunk group.
Name	Assigns a name to each trunk group.
Tenant	Assigns the tenant to which each trunk group belongs.
Incoming/Outgoing	Assigns each trunk group to incoming only, outgoing only, or both.
Incoming Mode (Day)	Assigns the destination for incoming calls during day service.
Incoming Mode (Night)	Assigns the destination for calls during night service.
Intercept Routing (Day)	Assigns the destination for Intercept Routing (Day).
Intercept Routing (Night)	Assigns the destination for Intercept Routing (Night).
Toll Restriction Level	Assigns TRLT (Toll Restriction Level of trunk group).
Toll Restriction Table	Assigns Area/Office code table number for Toll Restriction.
Dialing Plan	Selects the dialing plan, selecting “None” causes no Toll Restriction.
CO-CO Duration Limit	Sets the maximum duration for a CO-CO call.
Disconnect Time	Sets disconnecting time. This allows the CO time to release its resources before another call is placed outgoing from the PBX.
Pause Time	Sets the pause time used in speed dialing and hook switch below.
Hook Switch Flash Time	Assigns whether Flash Service is available or not. If available, set the hooking time (pause length).

Conditions

The assigning items:Type, Incoming Mode (Day/Night), Destination (DIL 1:N Only) Type and Number, CO Appearance Type can be changed only when all the trunks belonging to the trunk group are not in use. If any trunk is used, it is impossible to change.

Tenant	If “—” is displayed here, “System-Operation”, Tenant Service is set to “No.”
Incoming Mode (Day)	If “ATT” “DISA,” “TAFAS 1” or “TAFAS 2” is selected, the followings are checked: ATT: Checks whether ATLC card is equipped or not. DISA: Checks whether DISA card is equipped or not. TAFAS 1: Checks whether “System-Operation”, External Paging 1 is set to “Yes.” TAFAS 2: Checks whether “System-Operation”, External Paging 2 is set to “Yes.”

Incoming Mode (Night)

If “FIXED” or “FLEXIBLE” is changed to another option, it cancels all the settings of CO lines in “Trunk-CO Line”, Night Answer Point (Type:No.) which belong to the trunk group.
If “FLEXIBLE” is changed to “FIXED”, the Night Answer Points are not canceled.
If “FIXED” is changed to “FLEXIBLE”, the Night Answer Points are not canceled except that “NAG” is assigned as a Night Answer Point.

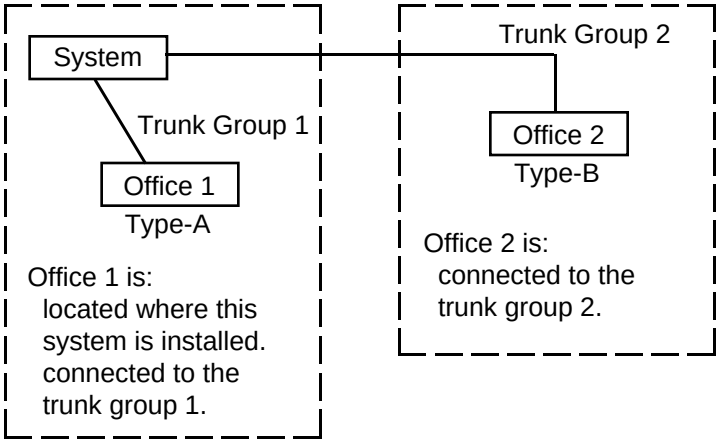
Dialing Plan

The difference between this and “System-Operation”, Home Dialing Plan is as follows:

“System-Operation”, Home Dialing Plan selects the type of the office where this system is installed.

“Group-Trunk Group”, Dialing Plan” selects the type of the office which each trunk group is connected to.

<Example>



In the example above, programming is as follows:

Assign “Type A” in “System-Operation”, Home Dialing Plan.
Assign “Type-A” for trunk group 1 and “Type-B” for trunk group 2 in “Group-Trunk Group”, Dialing Plan.

Relation between trunk group/CO line setting and PITS DN button setting

1. Private CO setting

If “Extension-Station”, Type is set to “PRV-CO” (Private CO) and Number is set to the physical number of a CO line,

(1) Conditions for assigning DN buttons

- The designated CO line is assigned to a trunk group by “Trunk-CO Line”, Trunk Group.
  The trunk group should have “Group-Trunk Group”, Type assigned to “PVL” (Private Line).

- The designated CO line should not be assigned by other extensions.

(2) Conditions for setting trunk groups

If a trunk group changes “Group-Trunk Group”, Type assigned to “PVL” (Private Line) to another type and if any CO lines belonging to the trunk group are selected to be “PRV-CO” (Private CO) in “Extension-Station, Type/Number, those CO lines are canceled from “Extension-Station”, Type/Number automatically.

2. Single CO, Group CO setting

If “Single CO” or “Group CO” is selected in “Extension-Station”, Type,

(1) Conditions of assigning DN buttons

- The designated CO line is assigned to a trunk group in “Trunk-CO Line”, Trunk Group.
  The trunk group should have “Group-Trunk Group”, Type assigned to other than “PVL” or “DID.”

(2) Conditions of setting “Incoming Mode (Day)”

1) If “Incoming Mode (Day)” is changed from “DIL 1:1” to another mode,
   The trunk group changed to another mode in “Group-Trunk Group”, Incoming Mode (Day) is assigned in “Trunk-CO Line”, Trunk Group. The “Trunk-CO Line”, Direct Termination setting is canceled.

2) If “Incoming Mode (Day)” is changed from “DIL 1:N” to another mode,
   “Group-Trunk Group”, Destination (DIL 1: N only) setting is canceled.

(3) Conditions of setting “Type”

Changing “Type” to “PVL” (Private Line) from any other modes cancels “Single CO” or “Group CO” assigned to a DN button of an extension belonging to this trunk group in “Extension-Station”, Type.

It is impossible to change from “DID” or “TIE” to any other modes and vice versa if any CO line in “Trunk-CO Line” belongs to the “Group-Trunk Group.”

3. Other Conditions

The following tabular listings of items by trunk group type shows the items that cannot be assigned ("—" is displayed) when Incoming/Outgoing mode of the trunk group is set to "Both-Way (default)."

Trunk Group(1/2)

Type	DDD FEX WATS	PVL	PBX	DID	TIE
Incoming/Outgoing	Both-Way				
Incoming Mode(Day)	ATT (1/2) or DIL 1:1	—	ATT (1/2) or DIL 1:1	—	—
Incoming Mode(Night)	FLEXIBLE	—	FLEXIBLE	—	—
Intercept Routing(Day)	blank	blank	blank	blank	—
Intercept Routing(Night)	blank	blank	blank	blank	—

Trunk Group(2/2)

Destination (DIL 1:N Only) Type and Number	blank	—	blank	—	blank
DID Digit Modification Table	—	—	—	1	—
PBX Access Code (No Restriction)	—	—	blank	—	—
PBX Access Code (Restriction)	—	—	blank	—	—
CO-TIE Restriction	Yes	Yes	Yes	Yes	—
TIE-CO Restriction	—	—	—	—	Yes
TIE Forced Account Code Mode	—	—	—	—	No
TIE Incoming Delete Digit	—	—	—	—	0
TIE Incoming Insert Dial	—	—	—	—	blank

* From software version 9.XX and above, Incoming/Outgoing mode of the trunk group with DID can be assigned to "Both-Way," "Incoming Only," or "Outgoing Only." However, please select "**Incoming Only**" if DID lines are available with only receiving incoming calls in your area.

[Note]
When "Incoming Only" is selected in the trunk group with DID, the following items are assignable but they do not work at all in Incoming Only mode.

- Disconnect Time
- Hook Switch Flash Time
- Pause Time
- Max. Dial No. after EFA Signal

(for areas other than U.S.A. and Canada)
In some areas, DID lines can be used for both receiving incoming calls and making outside calls. Both-way DID card (KX-T96182D) and DID card with MFC (KX-T96182CE) are provided for this usage.
Detailed information on KX-T96182D and KX-T96182CE are described in Reference Guide for KX-T96182D and KX-T96182CE respectively.

If the following types are selected for “Incoming/Outgoing,” the items below cannot be assigned:

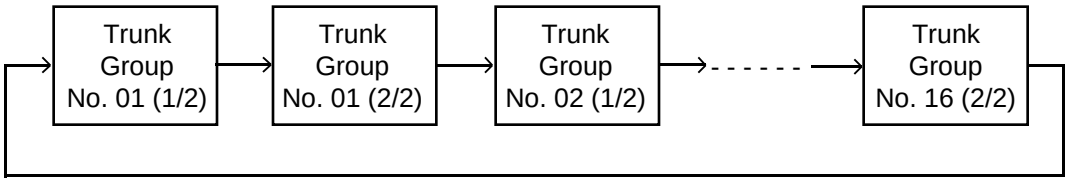
Incoming/Outgoing	Items Impossible to Assign
Incoming Only	Toll Restriction Level Toll Restriction Table Dialing Plan PBX Access Code (No Restriction), (Restriction)
Outgoing Only	Incoming Mode (Day), (Night) Destination (DIL 1:N Only)

If the following types are selected for “Incoming Mode (Day),” the item below cannot be assigned:

Incoming Mode (Day)	Items Impossible to Assign
ATT DIL 1:1 DISA TAFAS 1 TAFAS 2	Destination (DIL 1:N Only) Type and Number

If “System-Operation” External Paging 1, 2 is set to“No,” “TAFAS 1/TAFAS 2” cannot be assigned to “Incoming Mode (Day).”

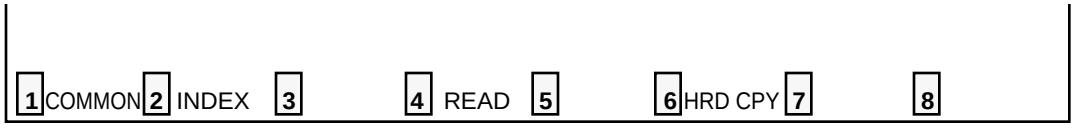
When pressing the NEXT key, this screen changes as follows:



Pressing the PREV key changes the screen in reverse order.

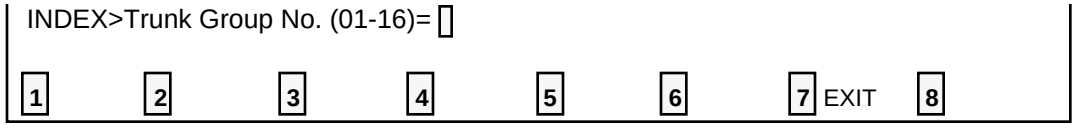
Function

The following functions appear on the function line of this setting screen.

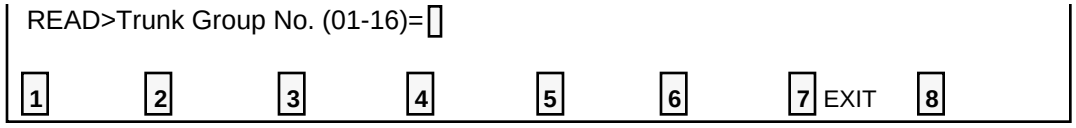


COMMON (SHO LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX, READ keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

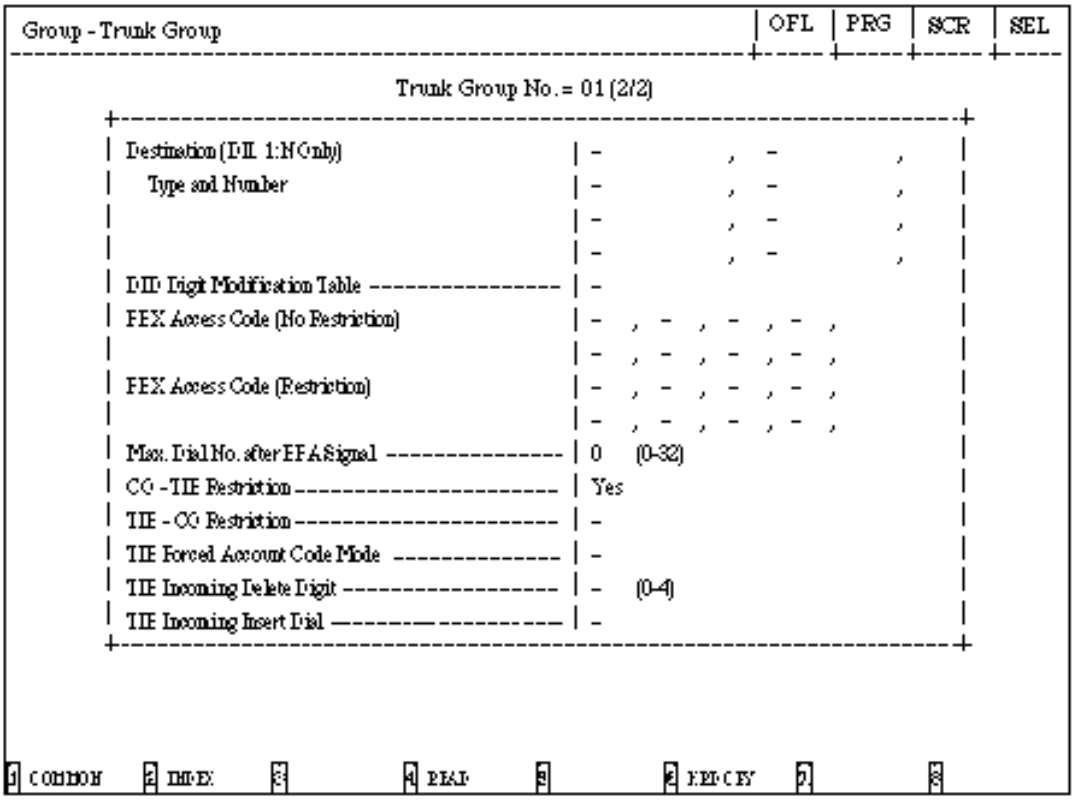
F2 :



F4 :



1.02 Trunk Group (2/2)



Summary

The Group-Trunk Group screen consists of a maximum of 16 groups, each of which includes two screens. This is the second screen used to assign various data for trunk groups. (Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Destination (DIL 1:N Only) Type and Number	blank	Type : destination blank : if not assigned ICM : selecting intercom group PCKUP : selecting pickup group EXT : selecting extension	3-B-7.05 3-D-2.01
	blank	Number blank : when “blank” is selected for type 01 to 32: pickup group number three or four digits : extension number 1 to 8 : intercom group number	
DID Digit Modification Table	blank	1 to 4 : table number	3-B-7.05 3-D-2.03 9-K-2.00

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
PBX Access Code (No Restriction)	blank	Host PBX access code A maximum of three digits composed of numbers Up to eight codes can be assigned. blank : not assigning	3-B-7.05 3-C-1.01 3-C-1.03 3-C-4.00
PBX Access Code (Restriction)	blank	Access codes with restriction A maximum of three digits composed of numbers Up to eight codes can be assigned. blank : not assigning	3-B-7.05 3-C-1.01 3-C-1.03 3-C-4.00
Max. Dial No. after EFA Signal	0	0 : dialing is not acceptable 1 to 32 : maximum dialing digit(s)	3-B-7.05 4-G-9.00 5-E-3.00
CO-TIE Restriction	Yes	Yes : CO-TIE connection is restricted. No : CO-TIE connection is allowed.	3-F-14.03
TIE-CO Restriction	Yes	Yes : TIE-CO connection is restricted. No : TIE-CO connection is allowed.	3-F-14.02
TIE Forced Account Code Mode	No	Yes : TIE callers are required to enter account code when making CO calls. No : Entering Account Code is not required.	3-F-14.02 10-C-65.02
TIE Incoming Delete Digit	0	0 : deleting no digit 1 to 4 : number of deleting digit(s)	9-K-4.00
TIE Incoming Insert Dial	blank	blank : Inserting no digit A maximum of four digits number composed of 0 through 9 can be entered.	

Description of Assigning Items

Destination (DIL 1:N only) Type and Number	Assigns destination type and number only when “Incoming Mode (Day)” is set to DIL 1: N (the function which enables an incoming call from one CO line in one trunk group to arrive at one to eight destinations simultaneously without assistance of operator). Orderly setting is not necessary and inserting blanks between the items is permissible.
DID Digit Modification Table	Assigns the digit modification table to be used for DID calls. This allows the DID incoming digits to be modified to match the numbering plan.
PBX Access Code (No Restriction)	In behind PBX or Centrex operation it is necessary for the system to send an access code to the host PBX or Centrex followed by a pause. This feature assigns the access code to be sent.
PBX Access Code (Restriction)	This is the same as PBX Access Code with Pause except that the digits following the access code are checked by the system for toll restriction.
Max. Dial No. after EFA Signal	Assigns maximum dialing digits after sending EFA (External Feature Access) signal.
<u>The following item is assignable when "Type" of the Trunk Group is set to any type other than "TIE."</u>	
CO-TIE Restriction	Used to restrict or not outside users from "Calling from CO to TIE." To restrict, set to "Yes." To allow, set to "No."
<u>The following four items are assignable when "Type" of the Trunk Group is set to "TIE."</u>	
TIE-CO Restriction	Used to restrict or not extension users from "Calling from TIE to CO." To restrict, set to "Yes." To allow, set to "No."
TIE Forced Account Code Mode	Used to allow certain extension users "Calling from TIE to CO." If set to "Yes", an extension user must enter a valid tie account code before "Calling from TIE to CO."
TIE Incoming Delete Digit*	Used to set the number of digit to be deleted from the digits received from other PBXs via TIE lines.
TIE Incoming Insert Dial*	Used to set one through four digits number to be added to the digits received from other PBXs via TIE lines.

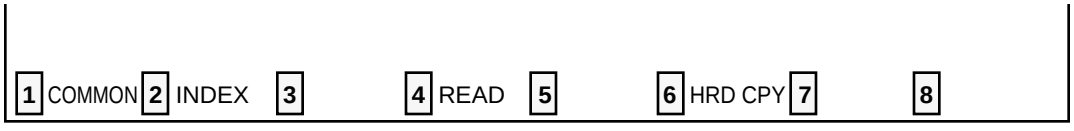
* Required when there is a need to modify the digits from other PBXs.

Conditions

Same as “Group-Trunk Group (1/2)” screen.

Function

The following functions appear on the function line of this setting screen.



COMMON (SHO LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX, READ keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

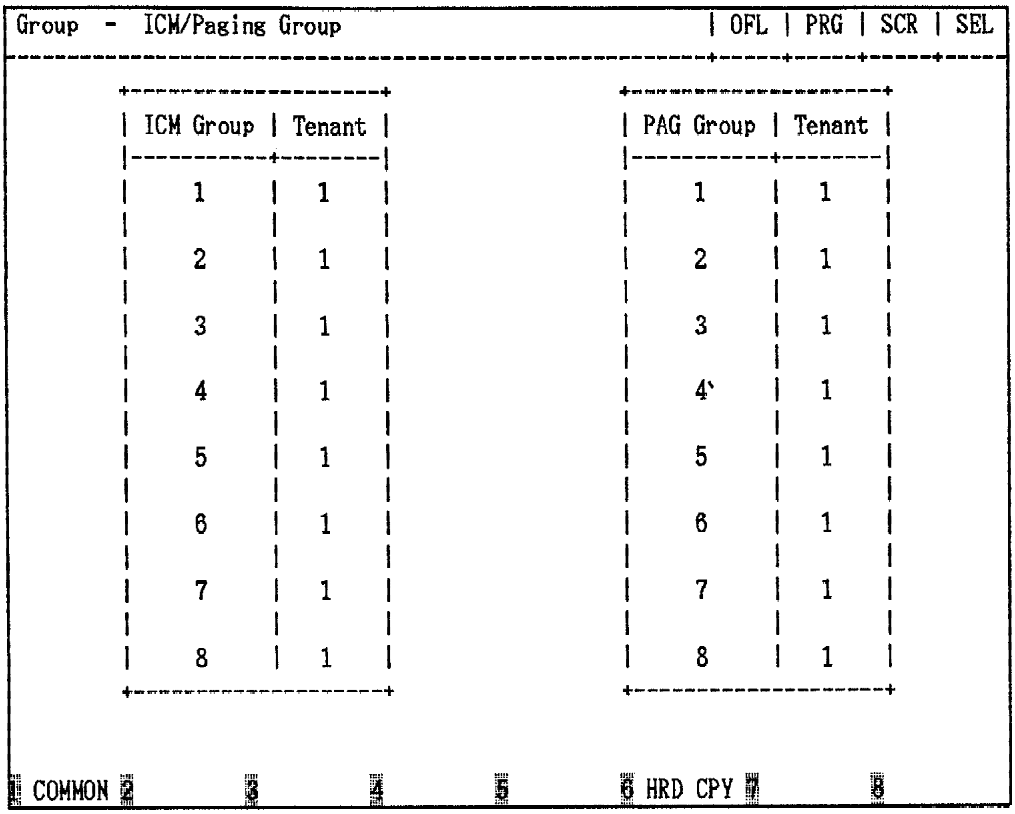
F2 :

```
INDEX>Trunk Group No. (01-16)=
1      2      3      4      5      6      7 EXIT   8
```

F4 :

```
READ>Trunk Group No. (01-16)=
1      2      3      4      5      6      7 EXIT   8
```

2.00 ICM / Paging Group



Summary

Assigns intercom groups and paging groups to
tenant 1 or 2
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
ICM Group (1 to 8) Tenant	1	1 or 2 : tenant number	3-B-7.01
PAG Group (1 to 8) Tenant	1	1 or 2 : tenant number	3-B-7.04 4-H-1.02 5-F-1.02 6-I-1.02

Description of Assigning Items

ICM Group (1 to 8)
Tenant — Assigns intercom groups from 1 to 8 to tenant 1 or 2.

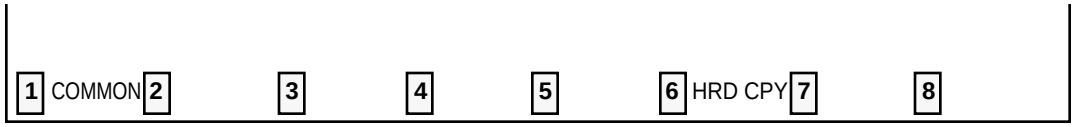
PAG Group (1 to 8)
Tenant — Assigns paging groups from 1 to 8 to tenant 1 or 2.

Conditions

This screen must be programmed before programming “Group-Call Pickup Group” screen. However, this screen does not appear if “System-Operation”, Tenant Service is set to “No.”

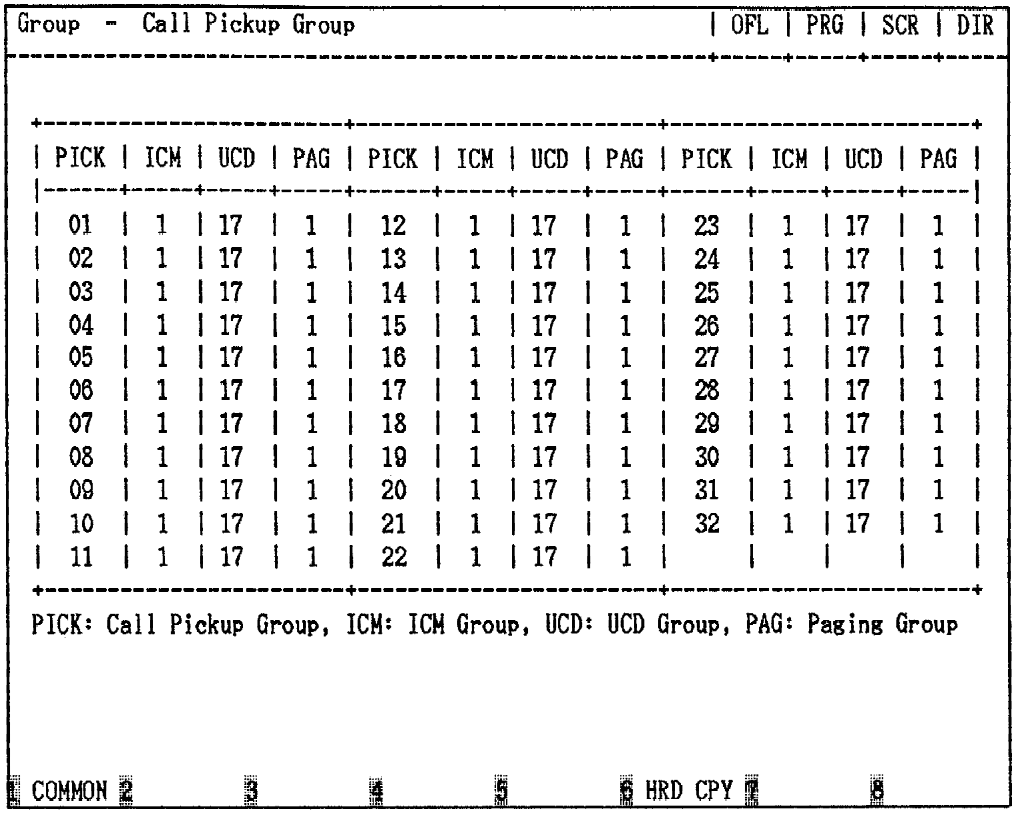
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7-I “Operation of Function Keys.”

3.00 Call Pickup Group



Group - Call Pickup Group | OFL | PRG | SCR | DIR

PICK	ICM	UCD	PAG	PICK	ICM	UCD	PAG	PICK	ICM	UCD	PAG
01	1	17	1	12	1	17	1	23	1	17	1
02	1	17	1	13	1	17	1	24	1	17	1
03	1	17	1	14	1	17	1	25	1	17	1
04	1	17	1	15	1	17	1	26	1	17	1
05	1	17	1	16	1	17	1	27	1	17	1
06	1	17	1	17	1	17	1	28	1	17	1
07	1	17	1	18	1	17	1	29	1	17	1
08	1	17	1	19	1	17	1	30	1	17	1
09	1	17	1	20	1	17	1	31	1	17	1
10	1	17	1	21	1	17	1	32	1	17	1
11	1	17	1	22	1	17	1				

PICK: Call Pickup Group, ICM: ICM Group, UCD: UCD Group, PAG: Paging Group

1 COMMON 2 3 4 5 6 HRD CPY 7 8

Summary

Assigns ICM (Intercom) group number, UCD (Uniform Call Distribution) group number and PAG (Paging) group number which the call pickup groups belong to.
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
PICK (01 to 32) ICM	1	Pickup group number 1 to 8 : intercom group number	3-B-7.01 3-B-7.02
UCD	blank	01 to 32 : UCD group number blank : the call pickup group does not belong to any UCD group	3-B-7.03 3-D-2.05 3-D-2.06
PAG	blank	1 to 8 : paging group number blank : the call pickup group does not belong to any paging group	3-B-7.04 4-H-1.02 5-F-1.02 6-I-1.02

Description of Assigning Items

PICK (01 to 32)

ICM	Assigns the intercom group number which the call pickup groups belong to.
UCD	Assigns the UCD (Uniform Call Distribution) group number which the call pickup groups belong to. UCD Group is comprised of more than one pickup group.
PAG	Assigns the paging group number which the call pickup groups belong to. Paging Group is comprised of more than one pickup group.

Conditions

If “System-Operation (1/3)”, Tenant Service is set to “Yes,” “Group-ICM/Paging Group” setting must be done before setting this screen.

Pickup Groups must belong to any of the ICM groups. The tenant of a pickup group is determined by the tenant of the ICM group to which the pickup group belongs.

When assigning a pickup group to a paging group, the tenant of the two groups must be the same.
A UCD Group is composed of multiple pickup groups.

Conditions of changing ICM Groups

1) The tenant of the old and new intercom groups must be the same, unless the system is off-line.

2) All the extensions which belong to the old and newly entered intercom groups must not be currently used.
If any line is used, it is impossible to change.

Conditions of changing UCD group

All the extensions which belong to the current and newly entered UCD groups must not be currently used.
If any line is used, it is impossible to change.

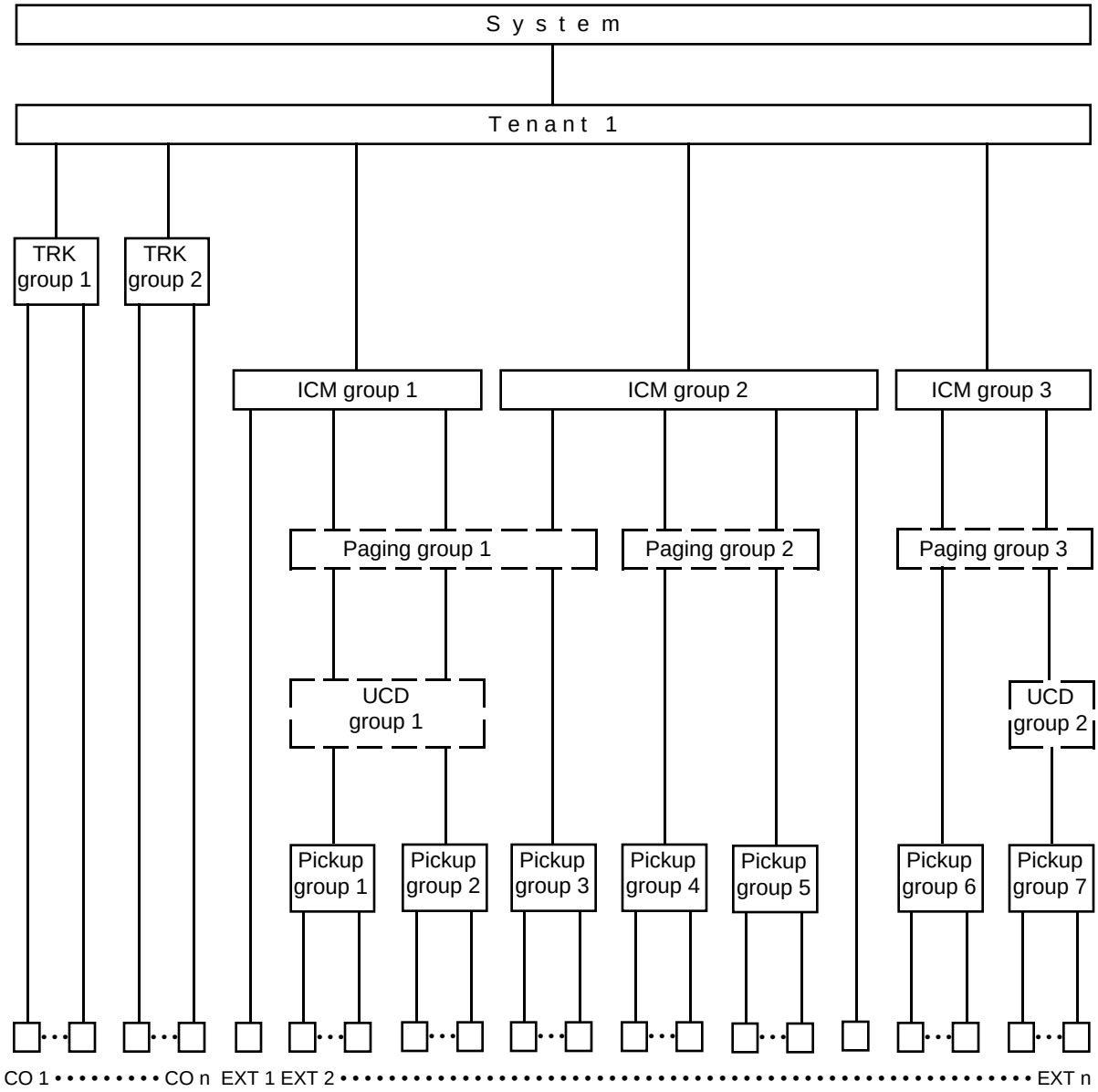
Conditions of changing paging group

1) The tenant of the old and new paging groups must be the same, unless the system is off-line.

2) All the extensions which belong to the old and newly entered paging groups must not be currently used.
If any line is in use, it is impossible to change.

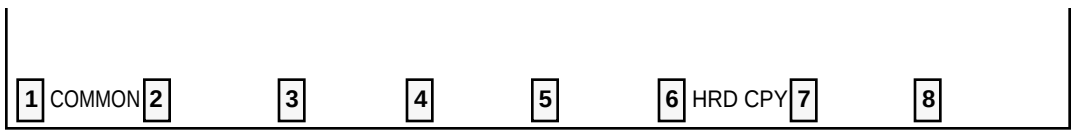
Table of relation between groups

A pickup group cannot belong to multiple intercom groups.
A paging group cannot belong to two tenants. A UCD group cannot belong to multiple ICM groups.



Function

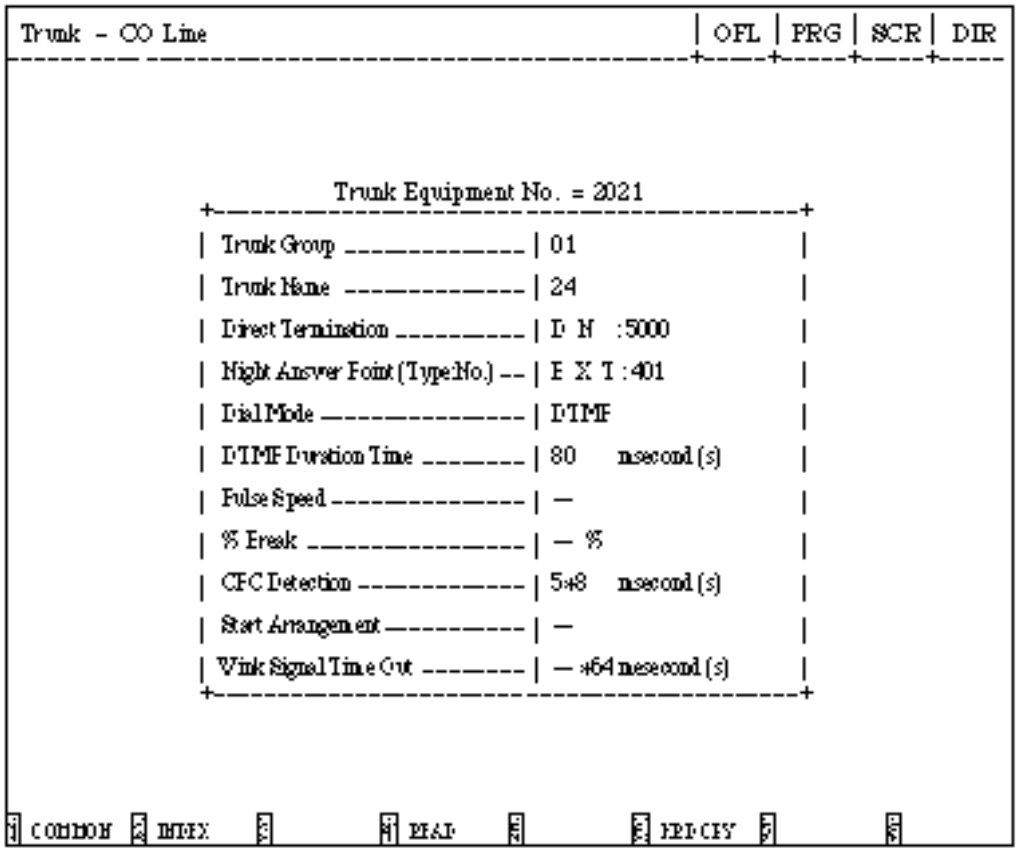
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7-I “Operation of Function Keys.”

F. Trunk Screen

1.00 CO Line



Summary

Assigns various parameters for CO lines.
This screen does not appear if any CO trunk card is not assigned in Configuration-Slot Assignment screen.

144 screens are provided for CO Line.
(Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
Trunk Group	01 : for CO 15 : for TIE 16 : for DID	01 to 16 : trunk group number	3-B-7.05
Trunk Name	TXXXX Physical number	A maximum of ten digits composed of letters, numbers and symbols blank : no trunk name programmed	4-A-4.04
Direct Termination	blank : for “with ATLC” Directory number : for “without ATLC” in physical number order of extensions paired with CO lines	DN and directory number (three or four digits): call destination (Extension, Remote FDN, UCD FDN) None : no direct termination	3-D-2.01

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Night Answer Point (Type : No.)	Directory number : for each extension in physical number order	Type (select input) None : no Night Answer Point UNA : Universal Night Answer EXT : Extension User RMT : Remote Administration NAG : Night Answer Group No. 1 or 2 : for “UNA” three or four digits : extension number for “EXT”	3-B-8.00 10-C-59.00
Dial Mode	(for U.S.A. and Canada) DTMF (for areas other than U.S.A. and Canada) Pulse	DTMF : DTMF mode Pulse : Pulse mode MFC-R2 : MFC-R2 mode	3-C-3.00 10-C-51.00
DTMF Duration Time	(for U.S.A. and Canada) 80 ms (for areas other than U.S.A. and Canada) blank	80 ms/160 ms : duration time	3-B-10.00
Pulse Speed	(for U.S.A. and Canada) blank (for areas other than U.S.A. and Canada) Low Speed	Low Speed/High Speed : pulse speed	None
% Break	(for U.S.A. and Canada) blank (for areas other than U.S.A. and Canada) 60%	60% / 67% : % break	10-C-51.00
CPC Detection	50 (400 ms)	00 : unavailable for CPC detection 01 : 6.5 ms detection 02 to 75 : 8 N ms detection	3-B-10.00 3-F-7.00 10-C-49.00
Start Arrangement	Send Delay Wink	Immediate Start : immediate start type Send Delay Wink : wink start type	3-D-2.03
Wink Signal Time–Out	16 (1.024 s)	1 : 64 ms 2 : 128 ms • • • 127 : 8.128 s	

Description of Assigning Items

Trunk Group	Assigns the trunk group number of the CO line.
Trunk Name	Assigns the name of the CO line. This will appear on the CRT screen of the Attendant Console and the display of PITS telephone (if provided) when making or receiving a CO call.
Direct Termination	Assigns the directory number of the destination, when the trunk group of the line is set to “DIL 1:1” in Incoming Mode (Day).
Night Answer Point (Type : No.)	Assigns Night Answer point when the “Incoming Mode (Night)” is assigned to “FIXED” or “FLEXIBLE.” “NAG” can be selected only when Trunk Group “Incoming Mode (Night)” is assigned to “FIXED.” If it is not assigned to “FIXED” nor “FLEXIBLE,” “—” appears in the setting field, and it is impossible to assign a destination.
Dial Mode	Assigns the dial type (DTMF, Pulse or MFC-R2). This is the output mode regardless of the dial mode of the telephone used. If Pulse is selected, refer to Section 10-C-51.00 “World Select 1 (WS1)” about the following items. • Interdigit Pause • Pulse Type • % Break Detect
DTMF Duration Time	Assigns the duration of the DTMF tones sent. It is possible to assign this option only when the “Dial Mode” is set to “DTMF. When the dial mode is set to “Pulse,” this field is blank.
Pulse Speed	Assigns the pulse speed. It is possible to assign this option only when the “Dial Mode” is set to “Pulse.” When the dial mode is set to “DTMF,” this field is blank.
% break	Assigns the % break for pulse digits. This is the ratio between on and off hook signals during digit transmission.
CPC Detection	Assigns the expected minimum duration for detecting CPC (Calling Party Control) signal.
Start Arrangement	Assigns DID/TIE/E&M start type. When the trunk group of the line is set to “DID/TIE/E&M”, there are two methods of initiating a call. One is immediate start where the system outpulses the digits as soon as the trunk is seized and the other is where the system waits for a signal (wink start) from the far end before any digits are sent.
Wink Signal Time-Out	Assignable when Start Arrangement is set to “Send Delay Wink.”

Conditions

Before setting this screen, “Group-Trunk Group” screen must be programmed.
This screen cannot be selected from Trunk-submenu screen, if no CO trunk card is programmed in “System-Configuration”, Slot Assignment. If any one of the CO trunk cards is programmed, this screen can be selected.

When selecting “1. CO Line” in Trunk submenu screen, the setting screen which has the smallest Trunk Equipment No. appears on the screen first.

If the “Group-Trunk Group” containing the CO line has “Type” assigned to “DID,” the following items cannot be entered : “ —” is displayed :

- Direct Termination
- Night Answer Point (Type : No)
- Dial Mode
- DTMF Duration Time
- Pulse Speed
- % Break
- CPC Detection

If “the Group-Trunk Group” containing the CO line has “Type” assigned to anything other than “DID” or "TIE", the following items cannot be entered : “ —” is displayed :

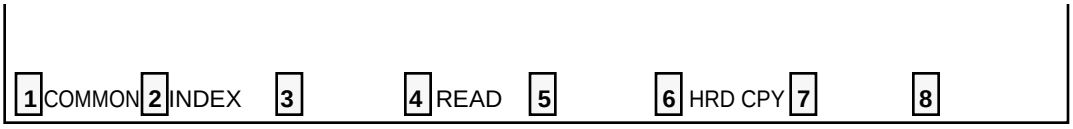
- Start Arrangement
- Wink Signal Time-Out

Direct Termination	This is assignable only when the “Group-Trunk Group” containing the CO line has “Incoming Mode (Day)” assigned to “DIL 1:1,” Otherwise, “ —” is displayed and setting is impossible.
Night Answer Point (Type : No)	This is assignable only when the “Group-Trunk Group” containing the CO line has “Incoming Mode (Night)” assigned to “FIXED” or “FLEXIBLE.” Otherwise, “ —” is displayed and setting is impossible.

When pressing the NEXT key, this screen appears in ascending order of Trunk Equipment number. After the largest number appears, the smallest one appears. Pressing the PREV key changes the screen in reverse order.

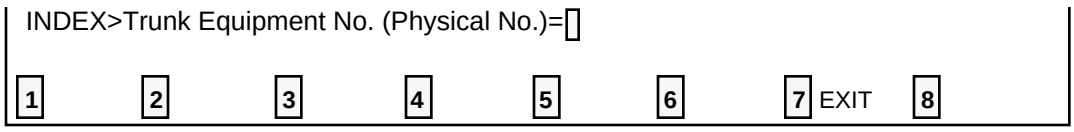
Function

The following functions appear on the function line of this setting screen.

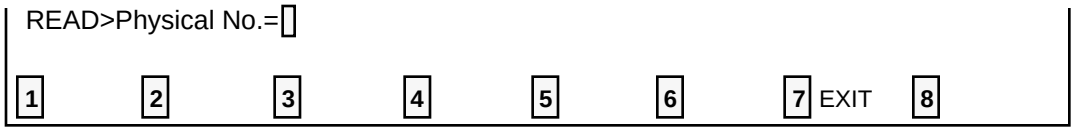


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and READ keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

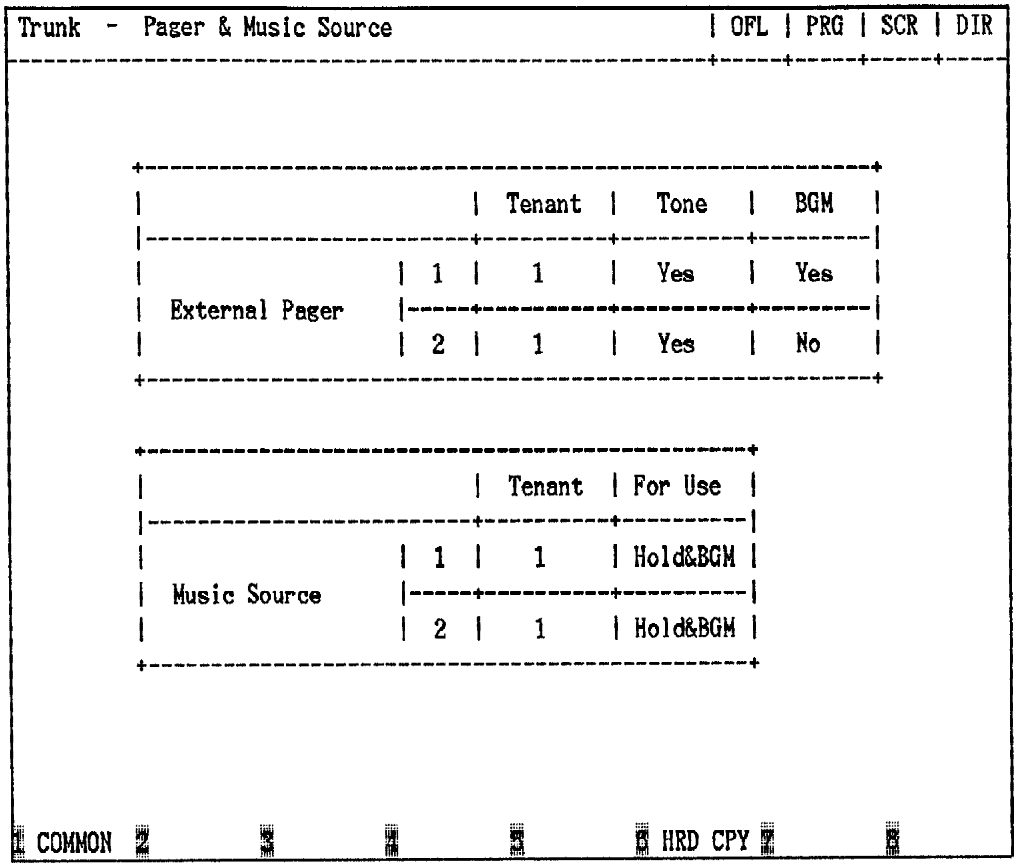
F2 :



F4 :



2.00 Pager and Music Source



Summary

Assigns external pagers and music sources. This screen does not appear when all the assigning items of “External Paging 1, 2” and “External Music Source 1, 2” are set to “No” in the System-Operation (1/3) screen.
(Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
External Pager 1/2 Tenant	1	1 : tenant 1 2 : tenant 2	3-D-2.04 4-D-4.00 4-H-1.03 4-H-1.04 4-H-2.00 5-B-2.00 5-F-1.03 5-F-1.04 5-F-2.00 6-I-1.03 6-I-1.04 6-I-2.00

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Assigning Items	Default	Selection of Value	Reference
External Pager 1/2 Tone	No	Yes : sending confirmation tone No : not sending confirmation tone	3-B-15.00 4-H-1.03 4-H-1.04 4-H-2.00 5-F-1.03 5-F-1.04 5-F-2.00 6-I-1.03 6-I-1.04 6-I-2.00
BGM	No	Yes : sending BGM No : not sending BGM	4-H-2.00 5-F-2.00 6-I-2.00
Music Source 1/2 Tenant	1	1 : tenant 1 2 : tenant 2	3-E-1.00 3-F-13.00 4-H-2.00 4-I-4.00 5-F-2.00 6-I-2.00
For Use	Hold & BGM	Hold : using for source of Music on Hold BGM : using for source of BGM Hold & BGM: using for source of Music on Hold or BGM	

Description of Assigning Items

External Pager 1/2 Tenant	Assigns the tenant number which the pager and music source belong to.
Tone	Determines whether confirmation tone will be sent or not at the beginning of using the external pager.
BGM	Assigns whether BGM will be sent or not when the external pager is idle.
Music Source 1/2 Tenant	Assigns the tenant number which the pager and music source belong to.
For Use	Assigns usage. This determines at which times the music sources will be used.

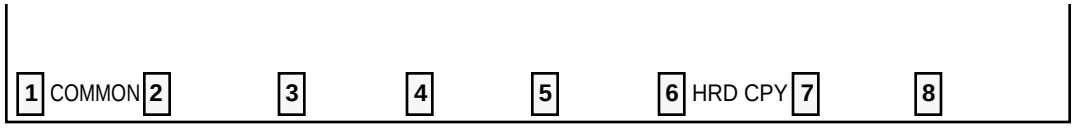
Conditions

This screen cannot be selected if “System-Operation”, External Paging 1, 2/External Music Source 1, 2 are all set to “No.”

External Pager Tenant	“—” will be displayed here if “System-Operation”, Tenant Service is set to “No.”
Tone/BGM	“—” will be displayed here if “System-Operation”, External Paging 1, 2 is set to “No.”
Music Source Tenant	“—” will be displayed here if “System-Operation”, Tenant Service is set to “No.”
For Use	“—” will be displayed here if “System-Operation”, External Music Source 1, 2 is set to “No.”

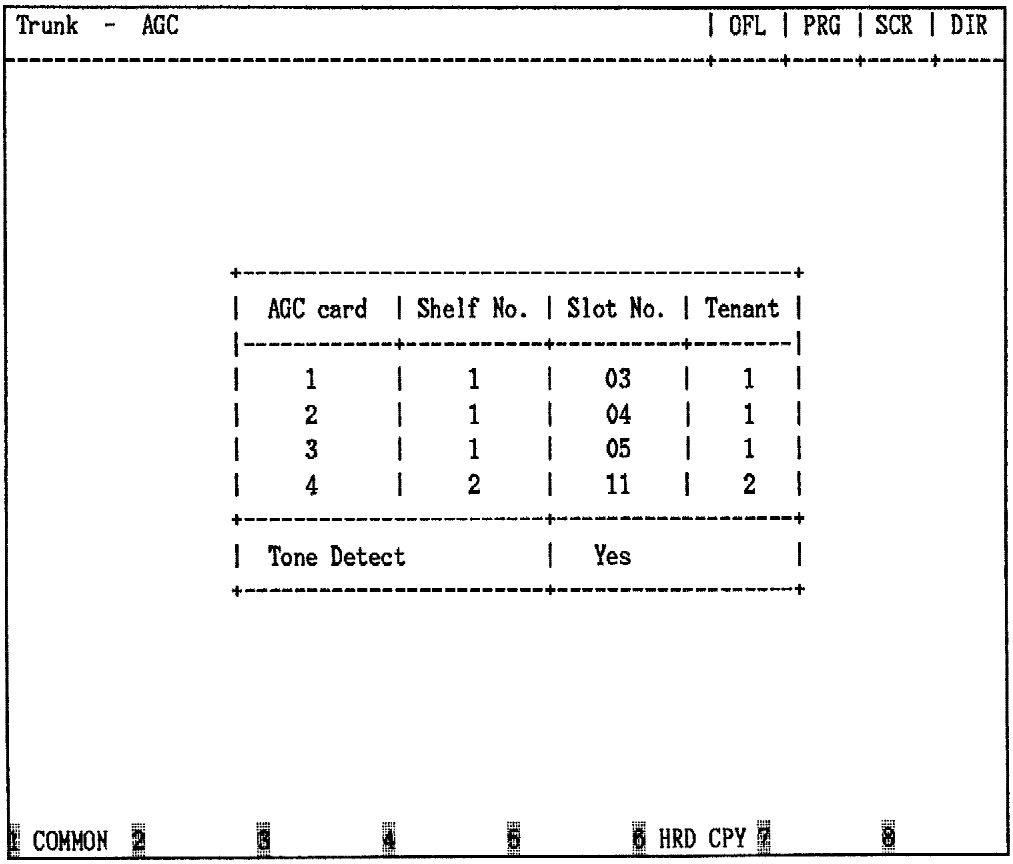
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7-I “Operation of Function Keys.”

3.00 AGC



Summary

Assigns tenant number which the AGC (Automatic Gain Control) card belongs to, and executing tone detection or not.

(Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
AGC card (1 to 4) Tenant	1	1 : tenant 1 2 : tenant 2	3-D-2.02 4-G-5.00 4-G-6.00 5-E-1.00 6-H-1.00 6-H-2.00
Tone Detect	Yes	Yes : tone detection is available No : tone detection is unavailable	

Description of Assigning Items

AGC card (1 to 4)

Tenant	Assigns the tenant number which the AGC card belongs to.
Tone Detect	Assigns whether detecting of the CPC (Calling Party Control) signal is done at the end of the CO-CO conversation or not.

Conditions

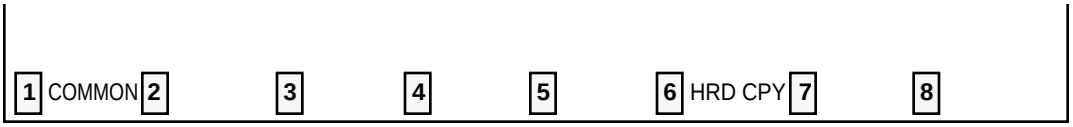
This screen cannot be selected if “System-Configuration,” Slot Assignment has no AGC card programmed.

AGC card

Tenant	“—” will be displayed here if “System-Operation”, Tenant Service is set “No.”

Function

The following functions appear on the function line of this setting screen.

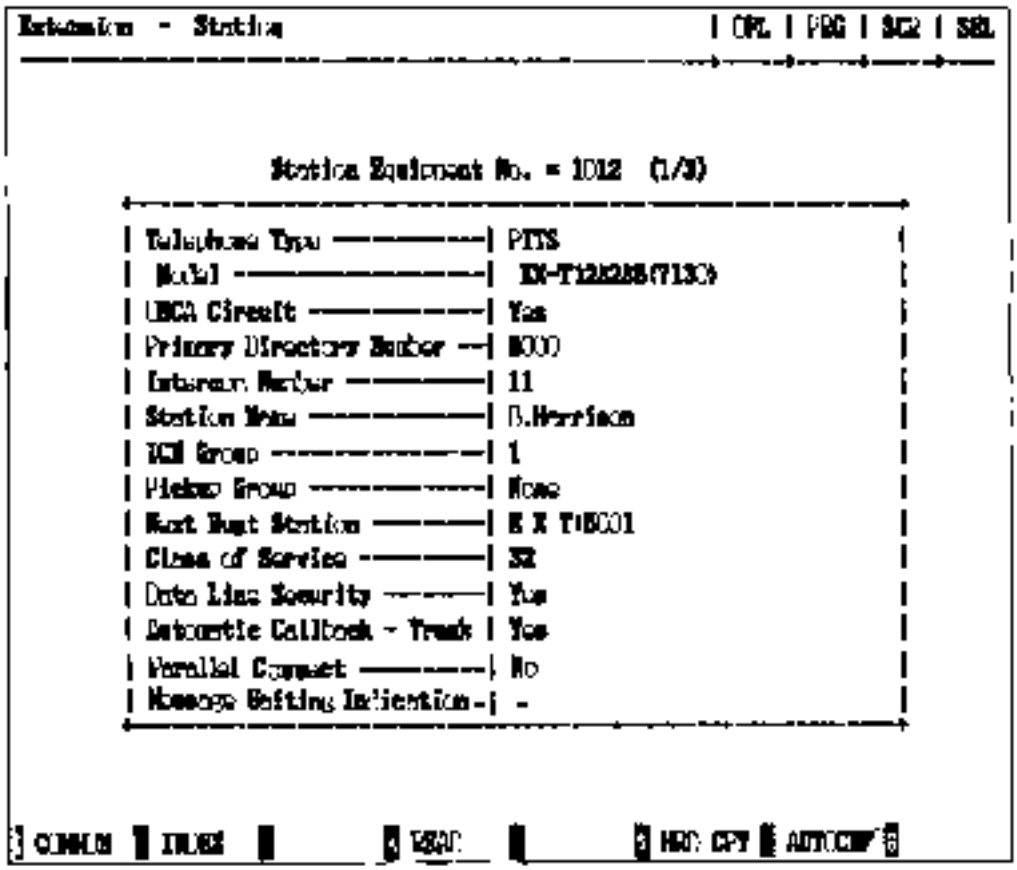


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7-I “Operation of Function Keys.”

G. Extension Screen

1.00 Station

1.01 Station (1/3)



Summary

This is the first screen of Extension-Station which sets the parameters for each extension. There are 288 screens are provided for Station, each of which has three screens. (Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
Telephone Type	SLT : for SLC PITS : for PLC and HLC OPX : for OPX	PITS: Proprietary Integrated Telephone System SLT : Single Line Telephone OPX: Off Premise Extension	3-B-9.00 3-F-2.00
Model	KX-T123235 (7130)	KX-T123250 KX-T123220 KX-T123230 KX-T123235 (7130) KX-T61650 KX-T61620 KX-T61630 KX-T30850 KX-T30820 KX-T30830 KX-T7050 KX-T7020 KX-T7030	4-A-2.00

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Assigning Items	Default	Selection of Value	Reference
OHCA Circuit	No	No : without OHCA circuit Yes : with OHCA circuit	4-C-5.05 4-G-11.00
Primary Directory Number	100~: for each extension number in physical number order	Three or four digit extension number	4-B-3.01
Intercom Number	blank	One or two digit intercom number blank : no intercom number	3-B-7.01 4-B-3.03 4-C-5.02 to 5.05
Station Name	blank	A maximum of ten digits using letters and/or numbers	4-A-4.06 11-C-5.00
ICM Group	1	1 to 8 : intercom group number	3-B-7.01 4-C-5.02 to 5.05
Pickup Group	None	Type (select input) None : when not in a pickup group pckup : when in a pickup group No. 01 to 32 : pickup group number when "Pickup" is selected	3-B-7.02 4-D-3.00 5-B-1.00 6-C-8.00
Next Hunt Station	None	Type (select input) None : no setting "Next Hunt Station" EXT : Next Hunt Station No. Three or four digits : extension directory number when setting "Next Hunt Station"	3.D-5.01 to 5.02
Class of Service	01 : for DN 100 02 : for the others	01 to 32: COS number	3-B-6.00
Data Line Security	No	Yes : Data Line Security mode is available No : Data Line Security mode is unavailable (normal mode only)	4-I-6.00 5-G-4.00
Automatic Callback-Trunk	Yes	Yes : Automatic Callback-Trunk is available No : Automatic Callback-Trunk is unavailable	4-C-6.01 5-A-4.01
Parallel Connect	No	Yes : Parallel Connection is available No : Parallel Connection is not available	2-C-4.00 3-F-9.00
Message Waiting Indication	None	None : The KX-T7051 can not receive the message waiting indication Lamp : The KX-T7051 can receive the message waiting indication	5-G-6.00

Description of Assigning Items

Telephone Type	Selects the telephone type to be connected.
Model	Selects the model number when PITS is set as the telephone type in the above item.
OHCA Circuit	Determines whether the selected phone supports OHCA or not.
Primary Directory Number	When a “DN” is assigned in the Configuration-DN Assignment screen, the PDN (Primary Directory Number) is assigned automatically. It is possible to select a new PDN provided it matches the numbering plan and there is no conflict.
Intercom Number	Assigns an intercom number. This field is optional.
Station Name	Assigns the station name of the extension. This is displayed on the CRT display of Attendant Console and display of PITS telephone (if provided).
ICM Group	Assigns the intercom group number of the extension.
Pickup Group	Assigns the pickup group number of the extension. This item is optional.
Next Hunt Station	Assigns the next hunting destination in the hunting sequence. This item is optional.
Class of Service	Assigns the COS (Class of Service) level for the extension.
Data Line Security	Assigns whether “Data Line Security mode” is available or not. When set to “No,” setting “Data Line Security mode” by dialing the feature number is impossible.
Automatic Callback-Trunk	Assigns whether the Automatic Callback-Trunk feature is available or not.
Parallel Connect	Assigns whether the Parallel connection of PITS and SLT is available or not.
Message Waiting Indication	Assigns whether a Single Line Telephone with MESSAGE lamp can receive the message waiting indication or not.

Conditions

This screen cannot be selected from Extension-submenu screen if “System-Configuration”, Slot Assignment does not have any of extension cards (PLC, SLC, HLC, OPX) programmed or if “System-Configuration”, DN Assignment does not have the extension number programmed.

If PITS telephone KX-T123230D is connected, select KX-T123235 (7130) for PITS Model. PITS KX-T123230D is functionally equivalent to KX-T123235 and KX-T7130.

If PITS telephone KX-T7130 is connected, select KX-T123235 (7130) for PITS Model.

If PITS telephone KX-T7320 is connected, select KX-T7020 for PITS Model.

If PITS telephone KX-T7330 is connected, select KX-T7030 for PITS Model.

If PITS telephone KX-T7350 is connected, select KX-T7050 for PITS Model.

Telephone Type

Assignable telephone types differ depending on the card types connected to the extensions, as follows:

Card Type	Telephone Type Assignable
PLC	PITS
SLC	SLT
HLC	PITS or SLT
OPX	OPX

If “SLT” or “OPX” is selected, “—” will appear in the following items in “Extension-Station (1/3)” screen and setting is impossible:

- Model
- OHCA Circuit
- Intercom Number
- Parallel Connect

OHCA Circuit

This setting applies not to executing side but to receiving side.

Intercom Number

Intercom numbers can be one or two digits.
Within an intercom group, if one digit intercom number is assigned, it is prohibited to use the digit as the leading digit of another two-digit intercom number.
For instance, if the digit “2” is assigned as an intercom number, the digits “20” cannot be assigned as another intercom number in the same intercom group.

Next Hunt Station

It is impossible to store the extension number of the setting extension, as well as the extension numbers assigned by other extensions as to be their Next Hunt Station.

Parallel Connect

Parallel Connection with SLT is available only when PITS telephone interfaced with HLC card is selected.
If PITS telephone interfaced with PLC card is selected, “ - ” will appear in Parallel Connect field and parallel connect assignment is not available.

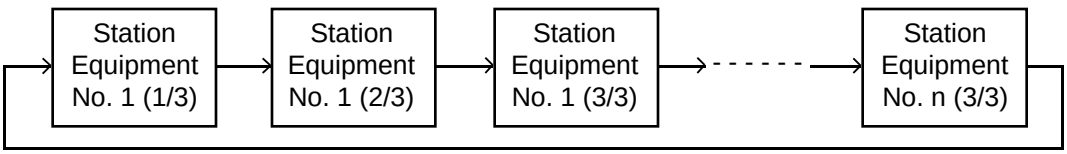
Message Waiting Indication

The setting of “Lamp” is valid only when the extension is an SLT with MESSAGE lamp which is interfaced with the KX-T96175 (SLC card with Message Waiting).

If an extension card other than the KX-T96175 is installed, “—” appears and this item cannot be assigned.

Note:
Be sure to select “None” for this setting if an SLT without MESSAGE lamp is interfaced with the KX-T96175.

When pressing the NEXT key, this screen changes as follows:

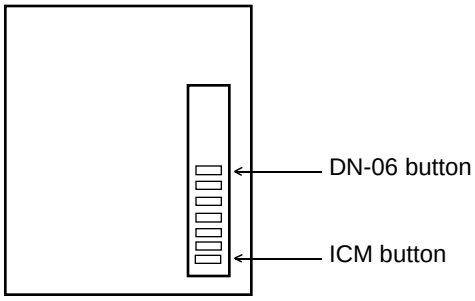


Pressing the PREV key changes the screen in reverse order.

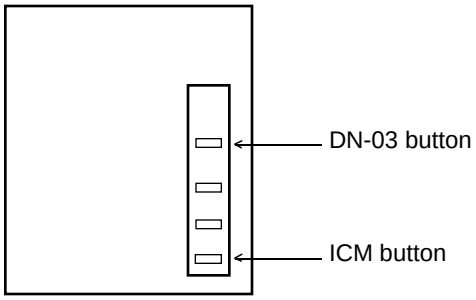
Conditions for Assigning the MESSAGE button

- KX-T1232XX series PITS's:
  The MESSAGE button cannot be assigned, for these PITS's are already provided with the MESSAGE button.

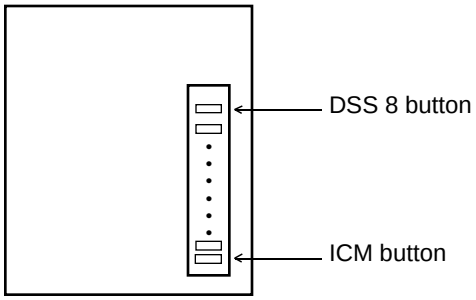
- KX-T616XX series PITS's:
  Assignable to the DN-06 button only.



- KX-T30820, KX-T30850
  Assignable to the DN-03 button only.

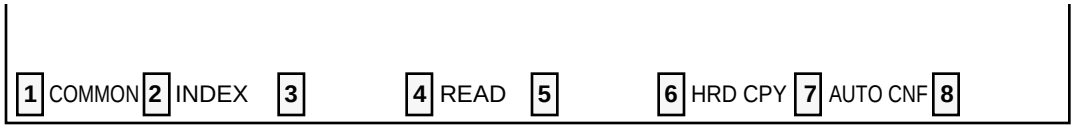


- KX-T30830
  Assignable to the DSS 8 button only.



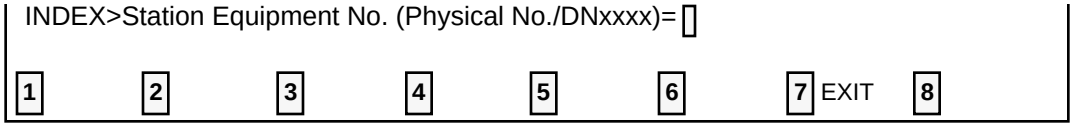
Function

The following functions appear on the function line of this setting screen.

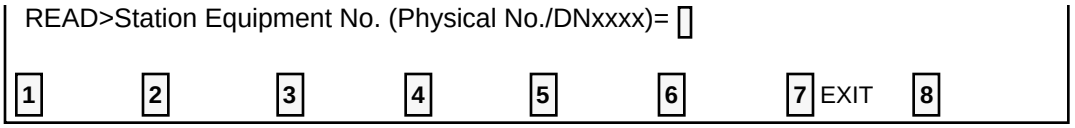


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX, READ and AUTO CNF keys are also available in this screen. The operation of function keys are described in Section 7-I "Operation of Function Keys." Only messages are provided here.

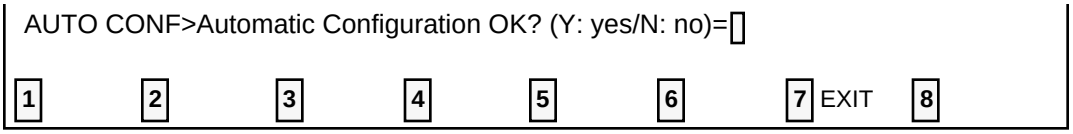
F2 :



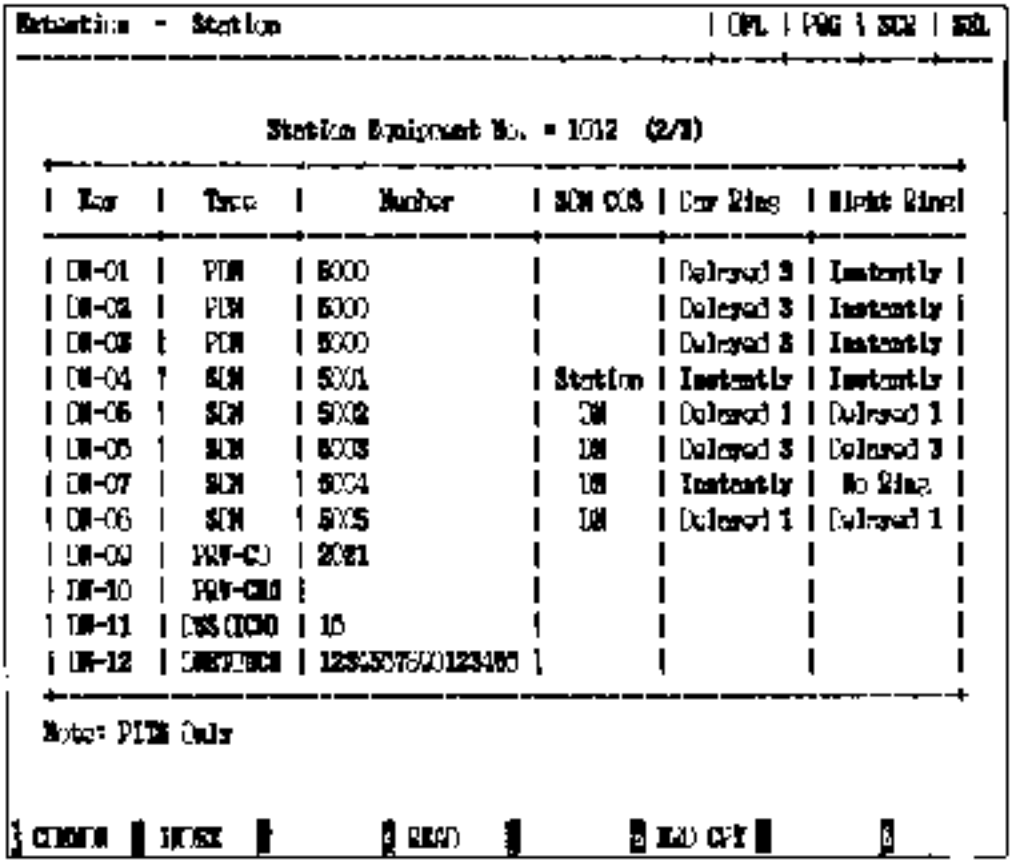
F4 :



F7 :



1.02 Station (2/3)



Summary

Assigns DN buttons when “Telephone Type” is set to “PITS” in the Extension-Station (1/3) screen.

(Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
DN-(01 to 12) Type	PDN for DN-01 blank for the others	PDN : Primary Directory Number button SDN : Secondary Directory Number button PRV-CO : Private CO button OHCA : Off Hook Call Announcement button MW : Message Waiting button LOGIN : UCD Log In button ALARM : Local Alarm button SINGLE CO: Single CO button GROUP CO: Group CO button CONF : Conference button DSS (DN) : Direct Station Selection (DN) button DSS (ICM) : Direct Station Selection (ICM) button ONETOUCH: One Touch button PRV-CHG : Privacy Change button EXT FEAT : External Feature Access button	3-D-2.07 to 2.09 4-B-2.00 4-B-3.00 4-C-3.04 4-C-4.01 4-D-8.00 4-E-5.01 4-E-5.02 4-E-6.00 4-F-1.04 4-G-2.00 4-G-3.00 4-G-9.00 (cont.)

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
DN-(01 to 12) (cont.) Type		CALL PAR : Call Park System button CALL STA : Call Park Station button RNG TRAN : Ringing Transfer button SPLIT : Call Split button FWD/DND : FWD/DND button TONE-BRK : Tone Through Break button SNR : Saved Number Redial button	(cont.) 4-G-12.00 4-I-8.00 14-D-1.05
Number	blank	Three or four digits : directory number for "PDN," "SDN", "DSS (DN)" 1011 to 3158 : physical number for "PRV-CO," "Single CO" One or two digits : intercom number for "DSS(ICM)" 01 to 16 : trunk group number for "Group CO" Maximum 16 digits : destination number for "ONETOUCH"	3-B-7.01 3-D-2.07 to 2.09 4-B-3.01 4-B-3.02 4-B-3.04 to 3.06 4-C-3.04 4-C-4.01
SDN COS	blank	Station : using COS of own extension DN : using COS of PDN	4-B-3.02
Day Ring	blank	No ring : with lamp only, not ringing Instantly : instantly ringing Delayed 1 : delayed 1 ring Delayed 3 : delayed 3 rings Delayed 6 : delayed 6 rings	3-B-10.00 3-D-3.01 to 3.02
Night Ring	blank	Same as "Day Ring"	

Description of Assigning Items

DN-(01 to 12)

Type	Assigns the use of the DN buttons. The DN-01 button is fixed to PDN and cannot be changed or deleted.
Number	Assigns the number for each DN button which is preset to “PDN,” “SDN,” “PRV-CO,” “DSS (DN),” “DSS (ICM),” “Group CO” or “ONETOUCH”
SDN COS	Assigns whether the COS of the SDN button is that of the extension (PDN-Primary Directory Number) or the COS of the SDN (Secondary Directory Number) extension.
Day Ring	Assigns whether incoming calls have immediate or delayed ringing on PDN, SDN, SCO or GCO buttons in Day mode. The ringing assignment of the first PDN can also be changed with this option.
Night Ring	Assign similarly as the above item except this applied in Night mode.

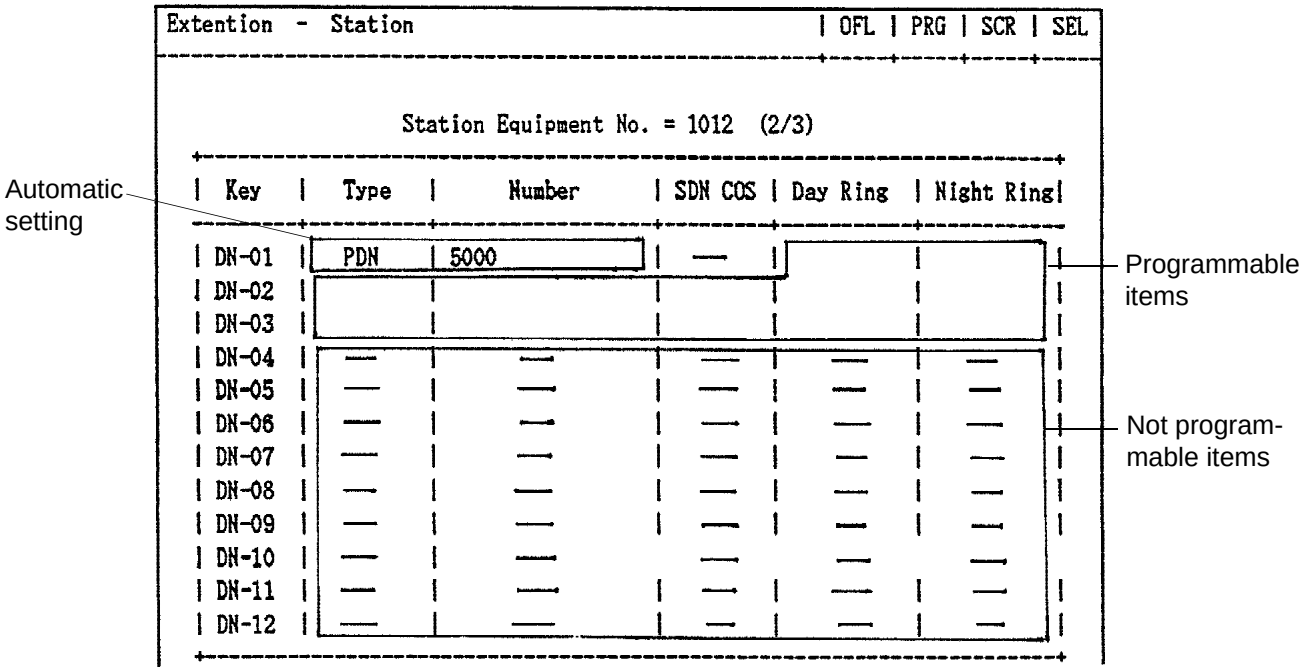
Conditions

This screen cannot be selected if “Extension-Station (1/3)”, Telephone Type is set to “SLT” or “OPX.”

Some items cannot be programmed depending on the setting of “Extension-Station (1/3)”, Model. They are indicated by “—.”

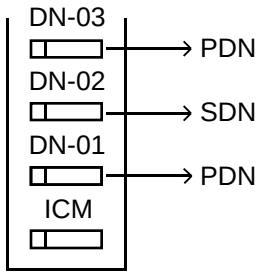
Assignable items are DN buttons of the programmed model. For example, if KX-T30830 is programmed as the model, assignable items will be as follows:

<Example>

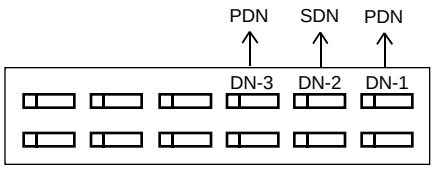


The DN-01 through 03 buttons are assigned as the PDN buttons automatically.
The DN-01 button is fixed to a PDN button and cannot be changed to another assignable feature button.
The PDN buttons assigned to the DN-02 and 03 buttons can be changed to another assignable feature button and vice versa.
When two or three PDN buttons are used, they must be arranged consecutively.

For example, it is not possible to program as follows:



(DN buttons on PITS type 20, 30 and 50)



(DN buttons on PITS 7000 series)

Type

If “PRV-CO” (Private CO) is selected, a physical number of the selected CO line must be programmed in “Number.”
The CO line of the physical number belongs to a “Trunk-CO Line”, Trunk Group.
The trunk group where the CO line belongs must have “Group-Trunk Group”, Type assigned to “PVL” (Private Line).

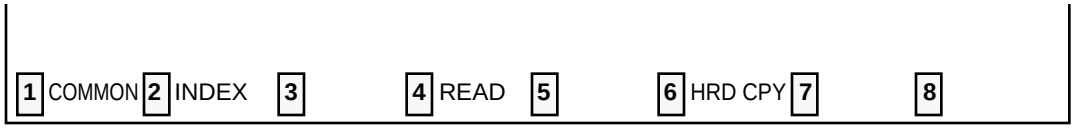
If “Single CO” is selected, a physical number of the selected CO line must be programmed in “Number.”
The CO line of the physical number belongs to a “Trunk-CO Line”, Trunk Group. The trunk group of the CO line must have “Group-Trunk Group”, Type assigned to “DDD” or “FEX” or “WATS”, or “PBX.”

If “Group CO” is selected, a trunk group number of the selected trunk group must be programmed in “Number.”
The programmed trunk group must have “Group-Trunk Group”, Type assigned to “DDD” or “FEX” or “WATS” or “PBX.”

To select this screen, press the NEXT key in the “Extension-Station (1/3)” screen.

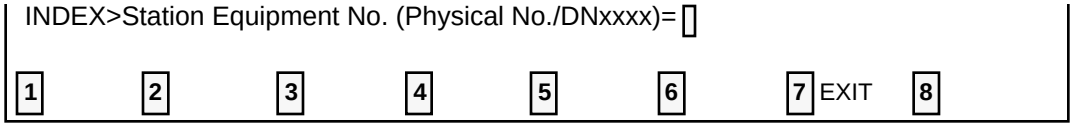
Function

The following functions appear on the function line of this setting screen.

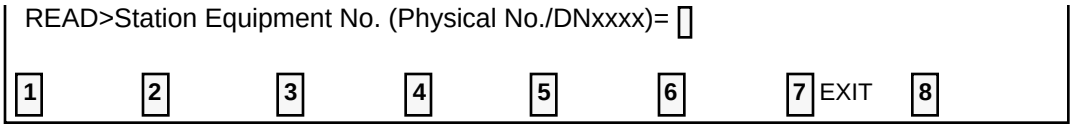


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and READ keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

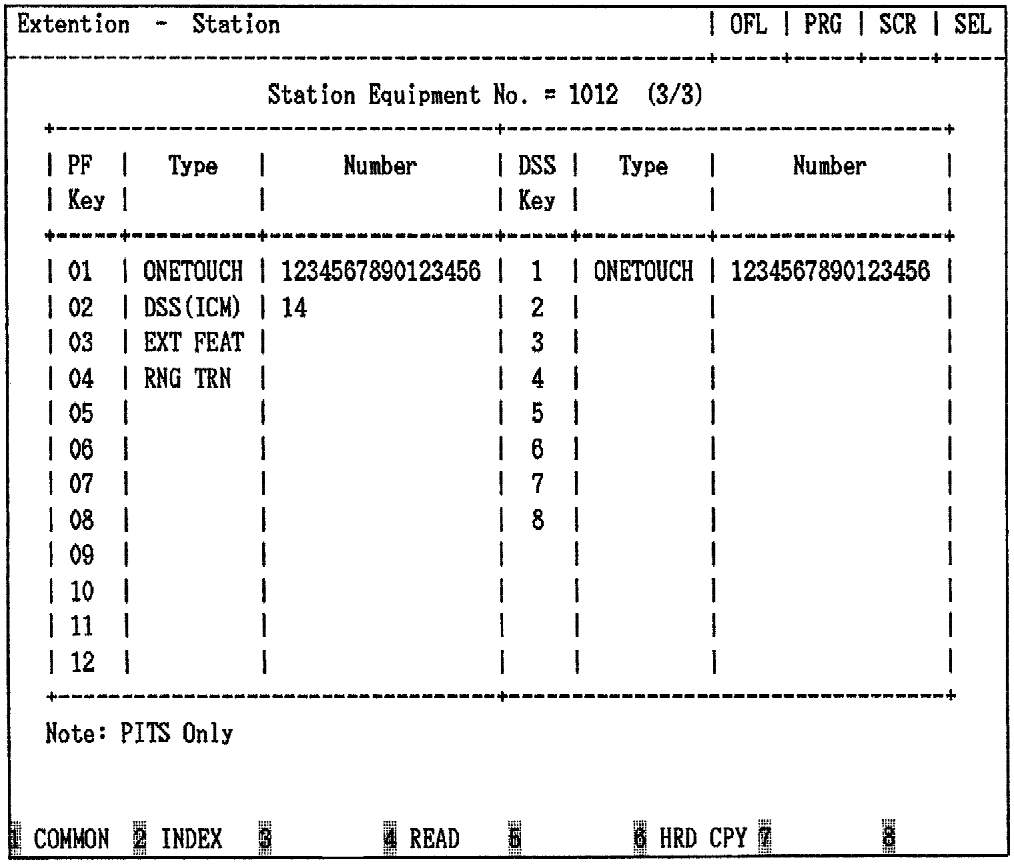
F2 :



F4 :



1.03 Station (3/3)



Summary

Assigns PF (Programmable Feature) buttons and DSS (Direct Station Selection) buttons (model KX-T30830 only) when “Telephone Type” is preset to “PITS” in the Extension-Station (1/3) screen.
This screen does not appear when “Telephone Type” is preset to any other type.
(Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
PF Key (01 to 16) Type	blank	DSS (ICM) : Direct Station Selection (ICM) button ONETOUCH : one touch button EXT FEAT : External Feature Access button CALL PAR : Call Park system button CALL STA : Call Park station button RNG TRAN : Ringing Transfer button FWD / DND : FWD/DND button SPLIT : Call Split button TONE-BRK : Tone Through Break button SNR : Saved Number Redial button	4-B-2.00 4-C-4.01 4-C-4.05 4-D-6.00 4-E-5.01 4-E-5.02 4-E-6.00 4-F-1.04 4-F-2.01 to 2.05 4-G-9.00 4-G-12.00
Number	blank	Maximum 16 digits: destination number for “ONETOUCH” One or two digits: intercom number for “DSS(ICM)”	3-B-7.01 4-C-4.01

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
DSS Key (1 to 8) Type	blank	MW : Message Waiting button LOGIN : UCD Log In button ALARM : Local Alarm button DSS(DN) : Direct Station Selection(DN) button DSS(ICM) : Direct Station Selection (ICM) button ONETOUCH : One Touch button PRV-CHG : Privacy Change button EXT FEAT : External Feature Access button CALL PAR : Call Park System button CALL STA : Call Park Station button RNG TRAN : Ringing Transfer button SPLIT : Call Split button TONE-BRK : Tone Through Break button blank : not assigned	4-B-2.00 4-C-4.01 4-D-8.00 4-E-5.01 4-E-5.02 4-E-6.00 4-F-1.04 4-G-2.00 4-G-3.00 4-G-9.00 4-G-12.00 4-I-8.00 14-D-1.05
Number	blank	Three or four digits: directory number for “DSS(DN)” One or two digits : intercom number for “DSS(ICM)” Maximum 16 digits : destination number for “ONETOUCH”	3-B-7.01 4-C-4.01

Description of Assigning Items

PF Key (01 to 16)

Type — Assigns the type of the programmable feature buttons.

Number — Assigns the number for individual PF button which is preset to “ONE TOUCH” or “DSS (ICM)” .

DSS Key (1 to 8)

Type — Assigns the type of the DSS buttons.

Number — Assign the number for each DSS button which is preset to “ONETOUCH,” “DSS (DN),” or “DSS (ICM)”.

Conditions

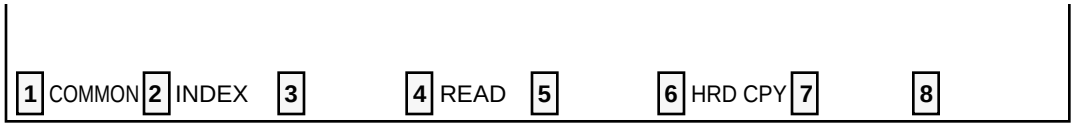
To select this screen, press the NEXT key in the “Extension-Station (2/3)” screen.

Only the PF3 button on PITS type 50 and KX-T7050 can be programmed to the FWD/DND button.

Only the PF1 button on PITS type 50, KX-T7020 and KX-T7030 can be programmed to the SNR button.

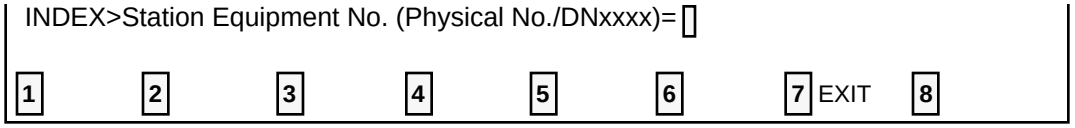
Function

The following functions appear on the function line of this setting screen.

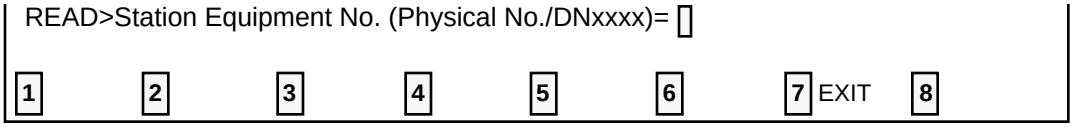


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and READ keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

F2 :

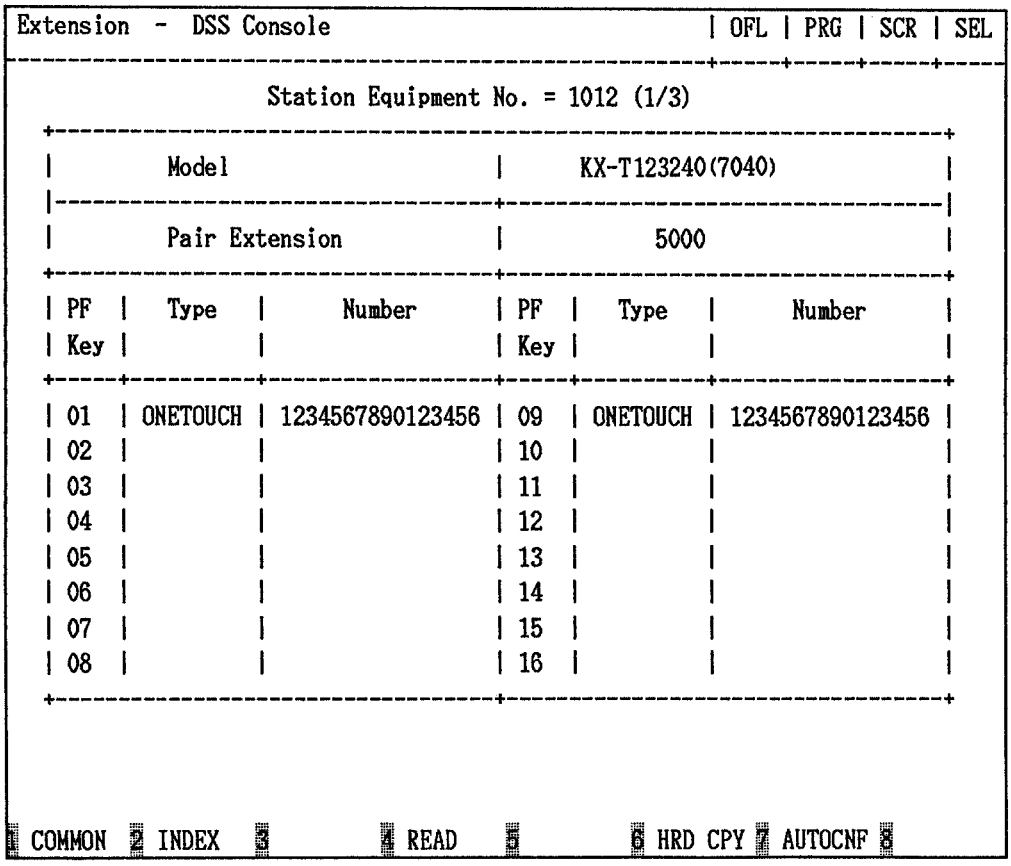


F4 :



2.00 DSS Console

2.01 DSS Console (1/3)



Summary

This is the first screen of Extension-DSS Console which assigns parameters and PF (Programmable Feature) buttons on DSS consoles.

There are 16 screens provided for DSS Console, each of which has three screens. (Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
Model	KX-T123240 (7040)	KX-T123240 (7040) KX-T61640	1-B-2.00 4-I-12.00
Pair Extension	blank	Three or four digits : directory number	
PF Key (01 to 16) Type	blank	ONETOUCH: One Touch button DSS (ICM) : Direct Station Selection (ICM) button EXT FEAT : External Feature Access button CALL PAR : Call Park System button CALL STA : Call Park Station button RNG TRN : Ringing Transfer button SPLIT : Call Split button TONE-BRK : Tone Through Break button blank : not assigned	4-C-4.01 4-E-5.01 4-E-5.02 4-E-6.00 4-F-1.04 4-G-9.00 4-G-12.00

Continued

Continued

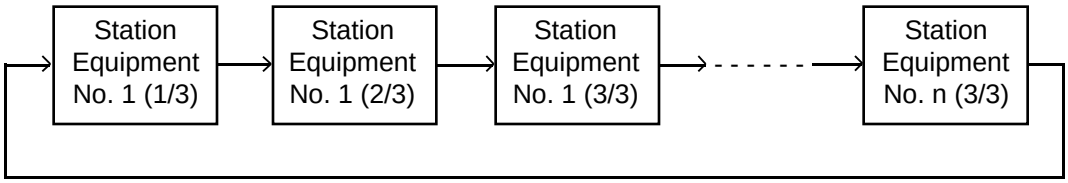
Assigning Items	Default	Selection of Value	Reference
PF key (01 to 16) (cont.) Number	blank	One or two digits : intercom number for “DSS(ICM)” Maximum 16 digits : destination number for “ONETOUCH”	3-B-7.01 4-C-4.01

Description of Assigning Items

Model	Assigns the type of DSS console used.
Pair Extension	Assigns the DSS Console and paired extension's directory number. A DSS Console does not work without this assignment.
PF key (01 to 16)	
Type	Assigns the type of each of the programmable feature buttons.
Number	When presetting each PF button to “ONETOUCH” or “DSS (ICM),” set the number . This assignment is not necessary when the PF key type is preset to any other types than “ONETOUCH” or “DSS (ICM)” and “—” appears in the setting field.

Conditions

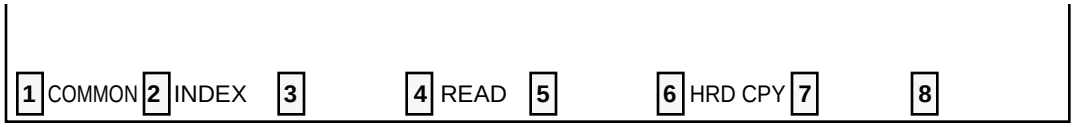
This screen is not displayed, if no DSS console is connected to the system.
When pressing the NEXT key, this screen changes as follows:



Pressing the PREV key changes the screen in reverse order.

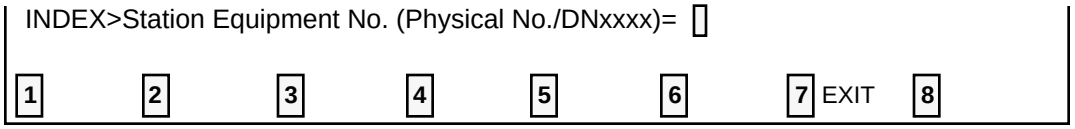
Function

The following functions appear on the function line of this setting screen.

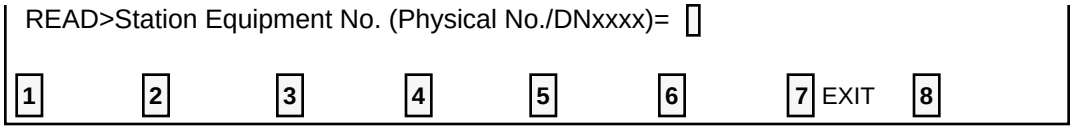


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX, READ and AUTO CNF keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

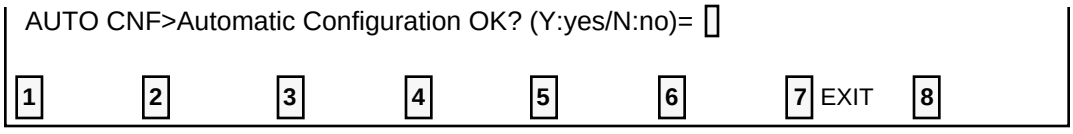
F2 :



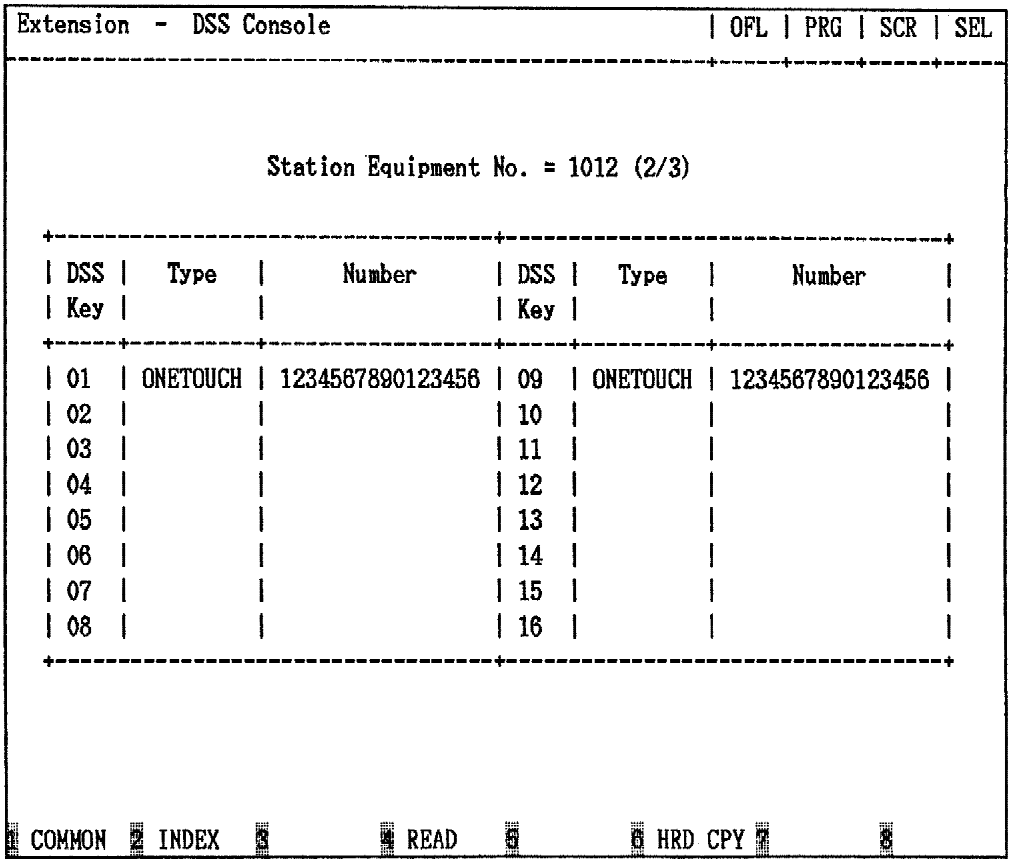
F4 :



F7 :



2.02 DSS Console (2/3)



Summary

This is the second screen of Extension-DSS Console used to assign DSS (Direct Station Selection) buttons from 01 to 16 on the DSS Console.
(Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
DSS Key (01 to 16) Type	blank	MW : Message Waiting button LOGIN : UCD Log In button ALARM : Local Alarm button DSS(DN) : Direct Station Selection(DN) button DSS(ICM) : Direct Station Selection (ICM) button ONETOUCH: One Touch button PRV-CHG : Privacy Change button EXT FEAT : External Feature Access button CALL PAR : Call Park System button CALL STA : Call Park Station button RNG TRAN : Ringing Transfer button SPLIT : Call Split button TONE-BRK : Tone Through Break button blank : not assigned	4-B-2.00 4-C-4.01 4-D-8.00 4-E-5.01 4-E-5.02 4-E-6.00 4-F-1.04 4-G-2.00 4-G-3.00 4-G-9.00 4-G-12.00 4-I-8.00 14-D-1.05

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
DSS Key (01 to 16) (cont.) Number	blank	Three or four digits : directory number for “DSS(DN)” One or two digits : intercom number for “DSS(ICM)” Maximum 16 digits : destination number for “ONETOUCH”	3-B-7.01 4-C-4.01

Description of Assigning Items

DSS Key (01 to 16)

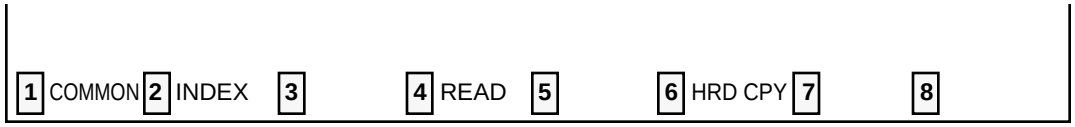
Type	Assigns the type for each of the DSS (Direct Station Selection) buttons.
Number	Used to set the number for each DSS button programmed to “ONETOUCH,” “DSS (DN)” or “DSS (ICM).”

Conditions

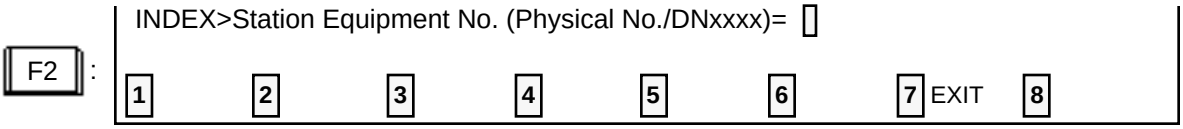
To select this screen, press the NEXT key in the “Extension-DSS Console (1/3)” screen.

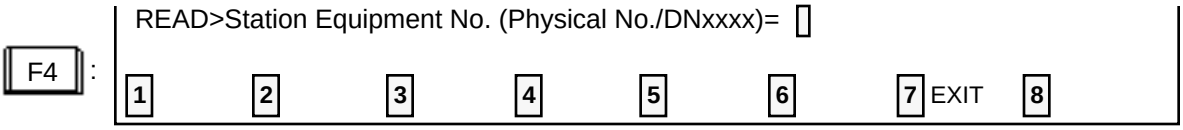
Function

The following functions appear on the function line of this setting screen.

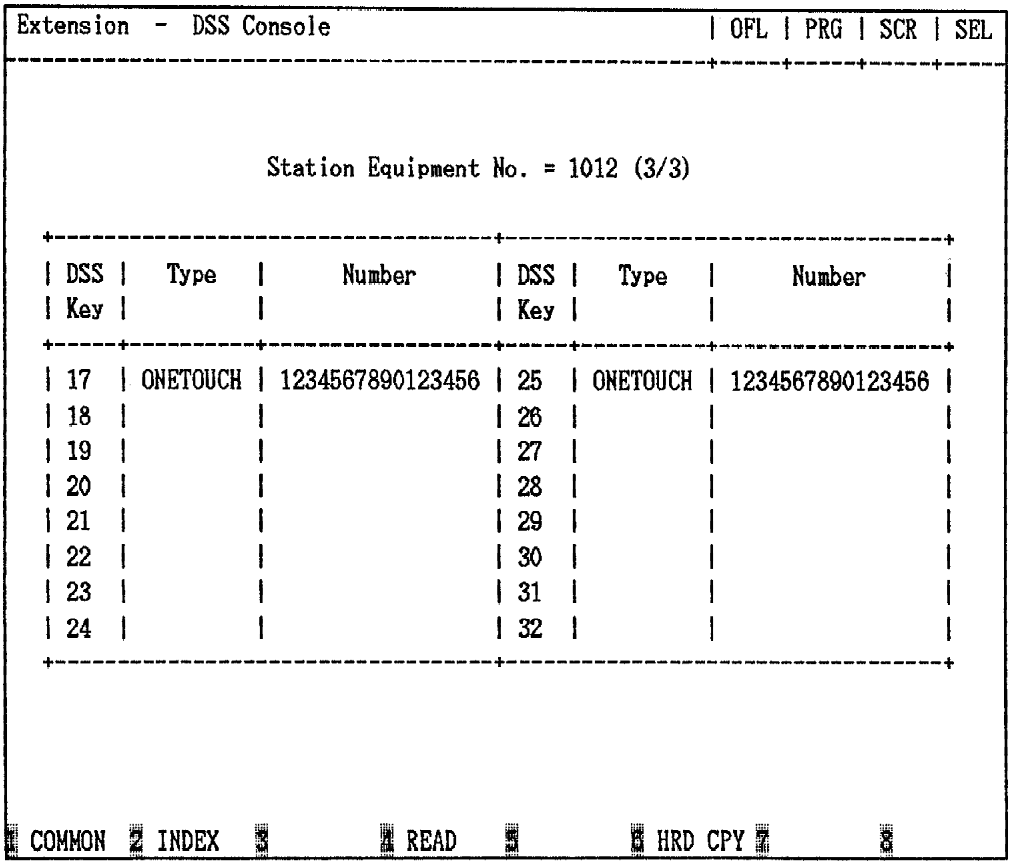


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and READ keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.





2.03 DSS Console (3/3)



Summary

The third screen of the Extension-DSS Console is used to assign DSS (Direct Station Selection) buttons from 17 to 32 on the DSS Console.

(Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
DSS Key (17 to 32) Type	blank	MW : Message Waiting button LOGIN : UCD Log In button ALARM : Local Alarm button DSS(DN) : Direct Station Selection (DN) button DSS(ICM) : Direct Station Selection (ICM) button ONETOUCH: One Touch button PRVT-CHG : Privacy Change button EXT FEAT : External Feature Access button CALL PAR : Call Park System button CALL STA : Call Park Station button RNG TRN : Ringing Transfer button SPLIT : Call Split button TONE-BRK : Tone Through Break button blank : not assigned	4-B-2.00 4-C-4.01 4-D-8.00 4-E-5.01 4-E-5.02 4-E-6.00 4-F-1.04 4-G-2.00 4-G-3.00 4-G-9.00 4-G-12.00 4-I-8.00 14-D-1.05

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
DSS Key (17 to 32) (cont.) Number	blank	Three or four digits : directory number for “DSS(DN)” One or two digits : intercom number for “DSS(ICM)” Maximum 16 digits : destination number for “ONETOUCH”	3-B-7.01 4-C-4.01

Description of Assigning Items

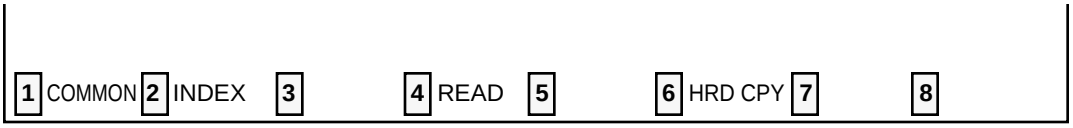
Type	Assigns the type for each of the DSS (Direct Station Selection) button.
Number	Used to set the number for each DSS button programmed to “ONETOUCH,” “DSS (DN)” or “DSS (ICM)”

Conditions

This screen does not appear if “Model” is assigned to “KX-T61640” in the Extension-DSS Console (1/3) screen.
To select this screen, press the NEXT key in the “Extension-DSS Console (2/3)” screen.

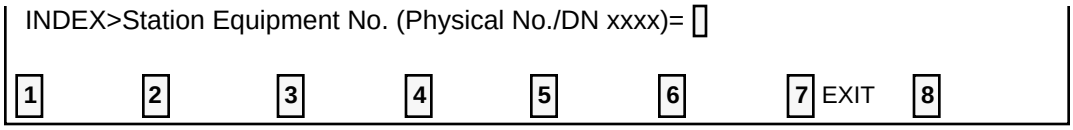
Function

The following functions appear on the function line of this setting screen.

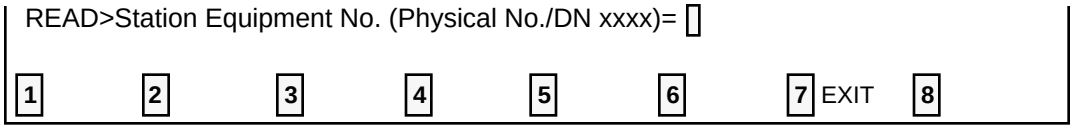


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and READ keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

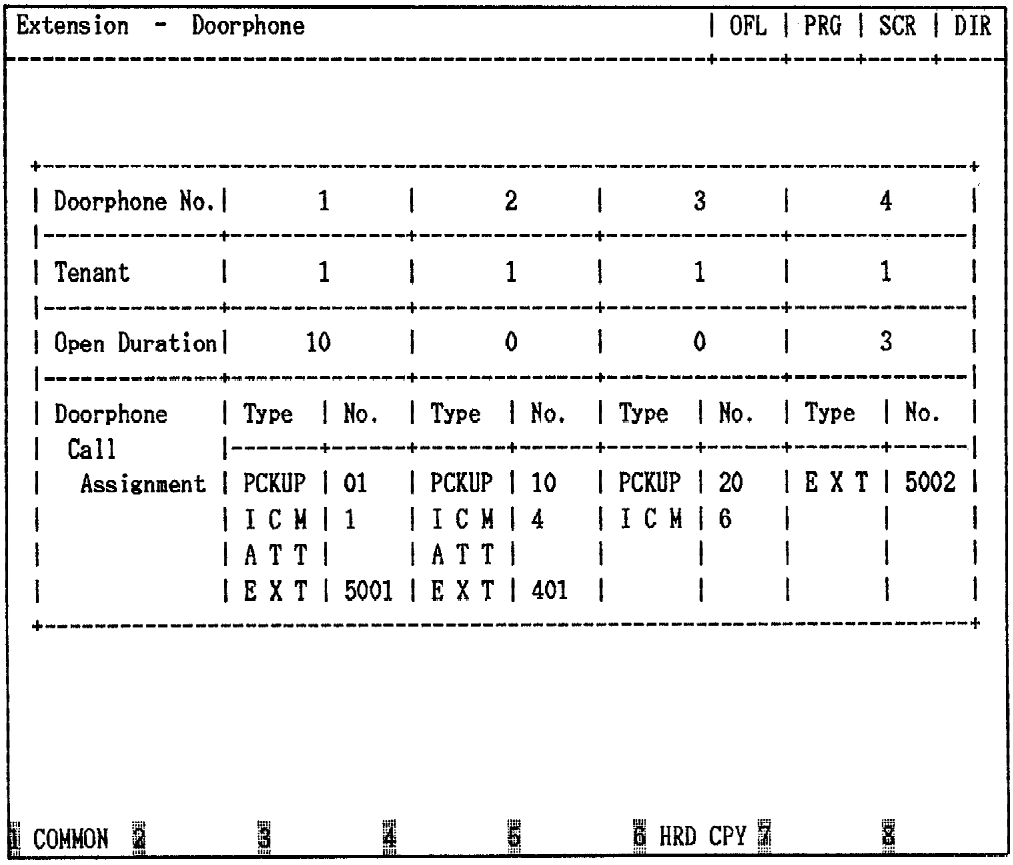
F2 :



F4 :



3.00 Doorphone



Summary

Assigns parameters for each doorphone.
(Password level : Three or higher)

Assigning Items	Default	Selection of Value	Reference
Doorphone No. (1 to 4) Tenant	1	1 : tenant 1 2 : tenant 2	4-G-7.00 5-E-2.00 6-H-4.00
Open Duration	0	1 to 10 : door opening duration in second 0 : Door cannot be opened.	
Doorphone Call Assignment Type	ATT : for "with ATLC" EXT 100 : for "without ATLC"	Call destination ICM : intercom group PICKUP: pickup group ATT : Attendant Console EXT : extension blank : not assigned	

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Doorphone Call Assignment (cont.) No.		1 to 8 : Intercom group number for “ICM” 01 to 32 : pickup group number for “PICKUP” 1 or 2 : Attendant console 1 or 2 Three or four digits : directory number for “EXT”	

Description of Assigning Items

Doorphone No. (1 to 4)

Tenant	Assigns the tenant number which the doorphone belongs to.
Open Duration	Assigns the door opening duration (seconds).

Doorphone call Assignment

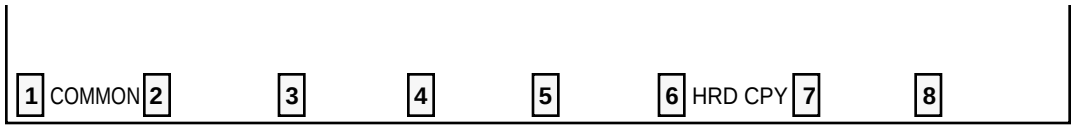
Type	Assigns the destination for incoming calls from doorphones.
No.	Assign group number or directory number when type of call placing is set to “ICM,” “PICKUP” or “EXT”. Assign the console number when the destination of the doorphone call is the Attendant Console.

Conditions

This screen cannot be selected if “System-Configuration”, Slot Assignment has no “DPH” card programmed.

Function

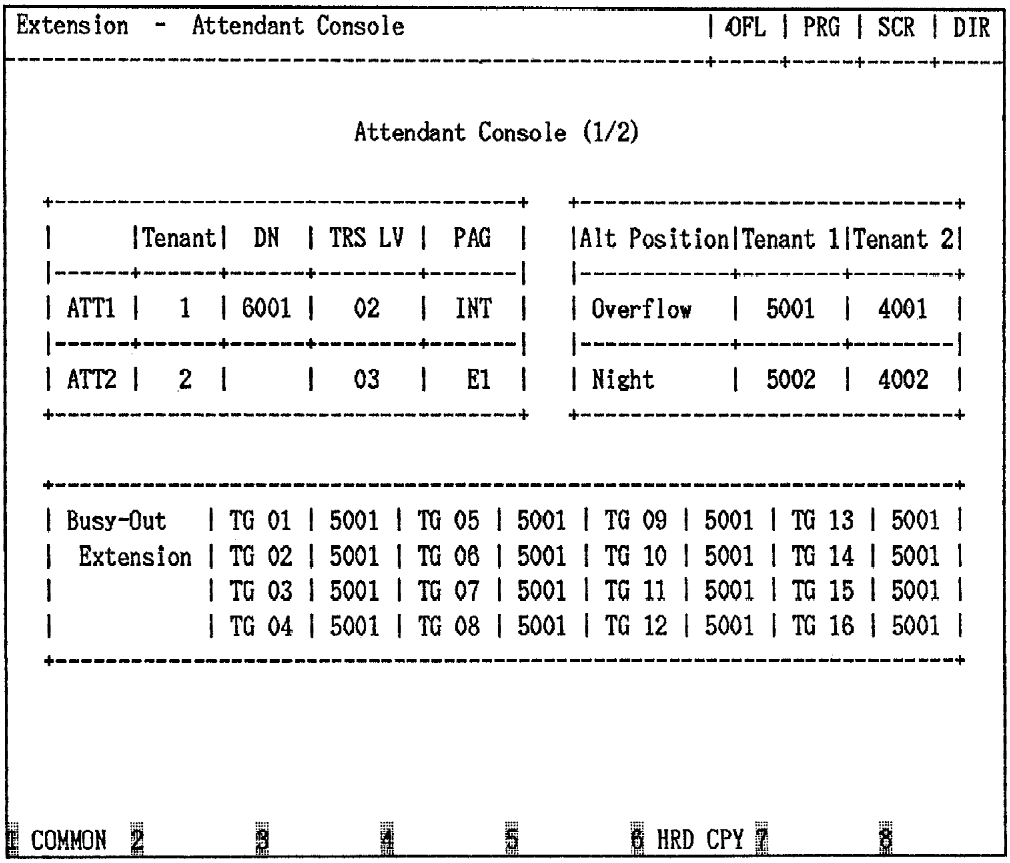
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.”

4.00 Attendant Console

4.01 Attendant Console (1/2)



Summary

The first screen of Extension-Attendant Console is used to assign parameters for the Attendant Consoles. The screen consists of two subscreens.

(Password level :Two or higher)

Assigning Items	Default	Selection of Value	Reference
ATT 1 & ATT 2 DN	blank	Three or four digits of numbers : Floating DN blank : not assigned	3-B-3.00
TRS LV	01	01 to 16 : toll restriction level	3-C-1.00
PAG	E1&E2	INT : Paging All Extensions E 1 : Paging External Pager 1 E 2 : Paging External Pager 2 E 1 & E 2 : Paging External Pagers 1 and 2 ALL : Paging All Extensions and External Pagers	6-I-1.05

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Alt Position Tenant 1 & Tenant 2 Overflow	blank	Three or four digit numbers : extension directory number blank : no destination	6-G-2.00
Night	blank	Three or four digit numbers : extension directory number blank : no destination	3-B-8.00
Busy-Out Extension	blank	Three or four digit numbers : extension directory number blank : no destination	6-A-1.00

Description of Assigning Items

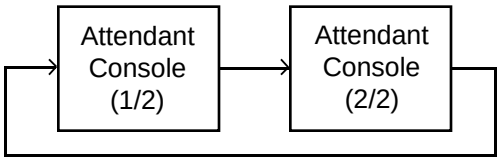
DN	Assigns the Floating DN of the Attendant Console. This is used to call the Attendant directly.
TRS LV	Assigns the toll restriction level for the Attendant Console.
PAG	Assigns the available Paging types for the Attendant Console. This can be set to internal, external or all. The types of External Paging are limited to those preset to "Yes" in the System-Operation (1/3) screen. If Paging External Pagers 1 and 2 are both preset to " No" in the screen, "—" appears on this item.
Overflow	Assigns the destination of Overflow calls in the Day mode. Overflow occurs when all the loop keys are active, another call arrives and one of the calls has exceeded the time allowed for overflow. The calls are queued at the overflow destination as well as the console.
Night	Assigns the destination of the attendant-seeking calls (DPH, DID, DISA, Extension) in the Night mode.
Busy-Out Extension	Assigns the destination of incoming calls, if the trunk group's call destination is programmed to Attendant Console but the Attendant Console is in Busy Out status (ATT-FWD switch on the attendant console is set to ON).

Conditions

This screen cannot be selected if "System-Configuration", Slot Assignment has no "ATLC" card programmed.

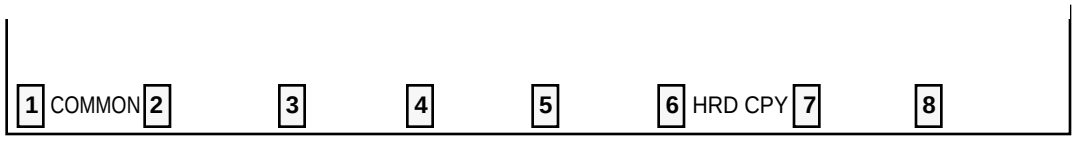
Tenant	"—" will be displayed if "System-Operation", Tenant Service is set to "No."

When pressing the NEXT key, this screen changes as follows:



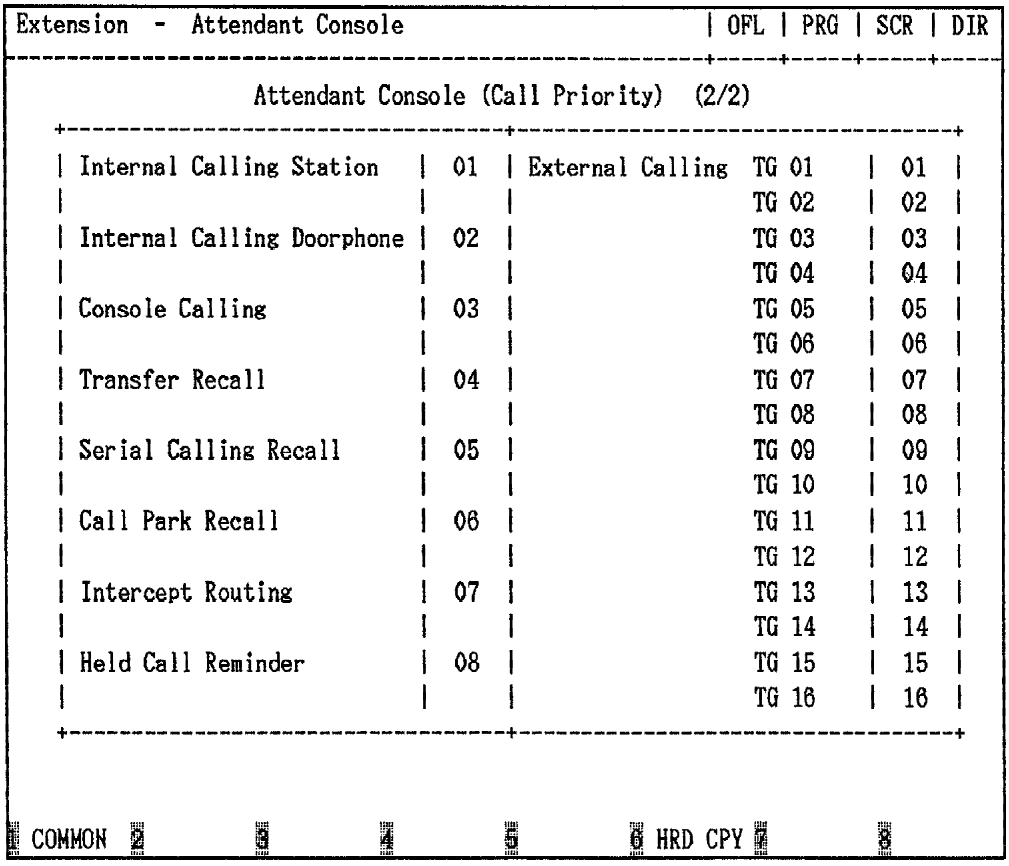
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen. The operation of function keys are described in Section 7-I "Operation of Function Keys."

4.02 Attendant Console (2/2)



Summary

Assigns the priority to incoming calls when the ANSWER key is used at the Attendant Console. Assignment is performed through the second screen of Extension-Attendant Console (Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Internal Calling Station	01	01 to 24 : Priority	6-E-1.00
Internal Calling Doorphone			
Console Calling			
Transfer Recall			
Serial Calling Recall			
Call Park Recall			
Intercept Routing			

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Held Call Reminder	01	01 to 24 : Priority	6-E-1.00
External Calling (TG 01 to TG 16)			

Description of Assigning Items

Internal Calling Station
Internal Calling Doorphone
Console Calling
Transfer Recall
Serial Calling Recall
Call Park Recall
Intercept Routing
Held Call Reminder
External Calling
(TG 01 to TG 16)

Assigns the call priority level for each of the 24 items.
"01" is the highest level, "24" is the lowest level.
It is permissible to assign the same level to multiple items. In this case calls are processed in FIFO (First In First Out) order.

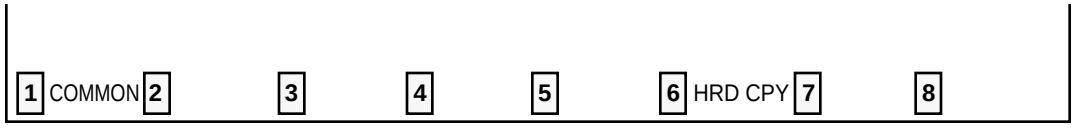
Conditions

This screen cannot be selected if "System-Configuration", Slot Assignment has no "ATLC" card programmed.

Held Call Reminder	Regardless of this program, Held Call Reminder will not function if "System-Operation", Held Call Reminder is not programmed to "Yes."

Function

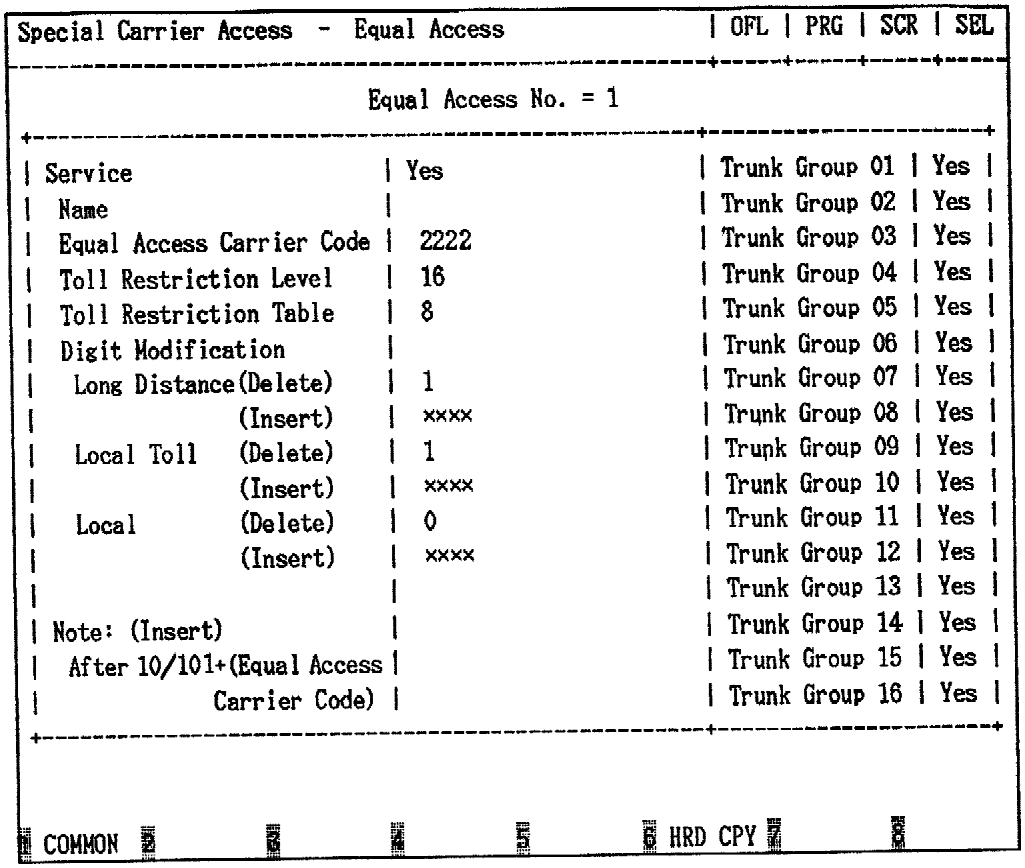
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen. The operation of function keys are described in Section 7-I "Operation of Function Keys."

H. Special Carrier Access Screen (◆ for U.S.A. and Canada only)

1.00 Equal Access (◆ for U.S.A. and Canada only)



Summary

Assigns available trunk groups and parameters necessary for making Equal Access calls.
Four screens are provided for Equal Access number from 1 to 4.
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Service	No	Yes : Equal Access is available No : Equal Access is unavailable	3-C-1.04 4-C-3.03 5-A-1.03 6-D-1.03
Name	blank	letters, numbers, marks within three digits blank: not assigning	
Equal Access Carrier Code	blank	three or tour digits number	
Toll Restriction Level	blank	01 to 16	
Toll Restriction Table	blank	1 to 8: Area/ Office Code table number	

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Digit Modification Long Distance Local Toll Local (Delete)	blank	1 to 4 : digits to be deleted 0 : deleting no digits	3-C-1.04 4-C-3.03 5-A-1.03 6-D-1.03
(Insert)	blank	maximum four digit number : dialing number to be inserted	
Trunk Group (01 to 16)	blank	Yes : calling is available No : calling is unavailable	

Description of Assigning Items

Service	Assigns whether Equal Access is available or not. If set to “No,” “—” appear in all the setting fields of this screen, and setting is impossible.
Name	Assigns the Carrier’s name to be used in making Equal Access calls.
Equal Access Carrier Code	Assigns the Carrier code for making Equal Access calls.
Toll Restriction Level	Assigns the toll restriction level on Special Carrier Access used for Toll Restriction.
Toll Restriction Table	Assigns the Area/ Office Code table number used for Toll Restriction.
Digit Modification Long Distance Local Toll Local	
(Delete)	Assigns the number of leading digits to be deleted.
(Insert)	Assigns the number to be inserted which follows the Carrier code.
Trunk group (01 to 16)	Assigns the available trunk groups for making Equal Access calls.

Conditions

Service	If “No” is selected, all the assigning items below this display “—” and setting is impossible. If “No” is assigned, it is possible to program “System-Class of Service”, Special Carrier Access. However, Equal Access of the screen which has “No” assigned will not be active. It is administrable to activate or deactivate the EQU access and/or OCC access features on a system-wide basis. Refer to Section 10-C-52.00 “World Select 2(WS2)” for further information.
Digit Modification	When making a long distance call using Equal Access function, the dialed number will be modified as the following example. <Example> Programmings are: Equal Access Carrier Code : 2222 Digit Modification Long Distance (Delete) : 1 (Insert) : blank Dialed number is: 1 201 123 4567

Modification procedures are:

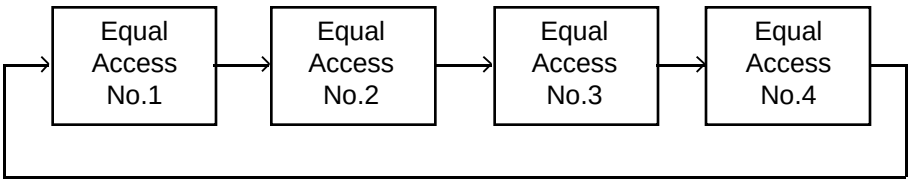
(1) Deletes the initial digit.
201 123 4567

(2) Inserts no digit.
201 123 4567

(3) The final digits to be sent to trunk are
101 2222 201 123 4567

[Note] Above example is based on a New Dialing Plan.
Refer to Section 10-C-63.00 “Equal Access Code (EQC)” for further information.

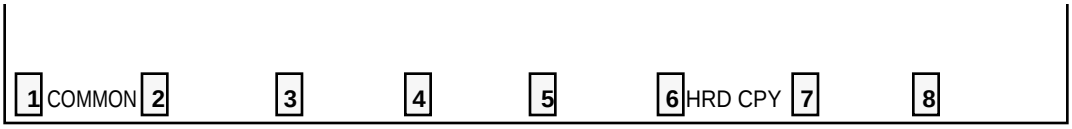
When pressing the NEXT key, this screen changes as follows:



Pressing the PREV key changes the screen in reverse order.

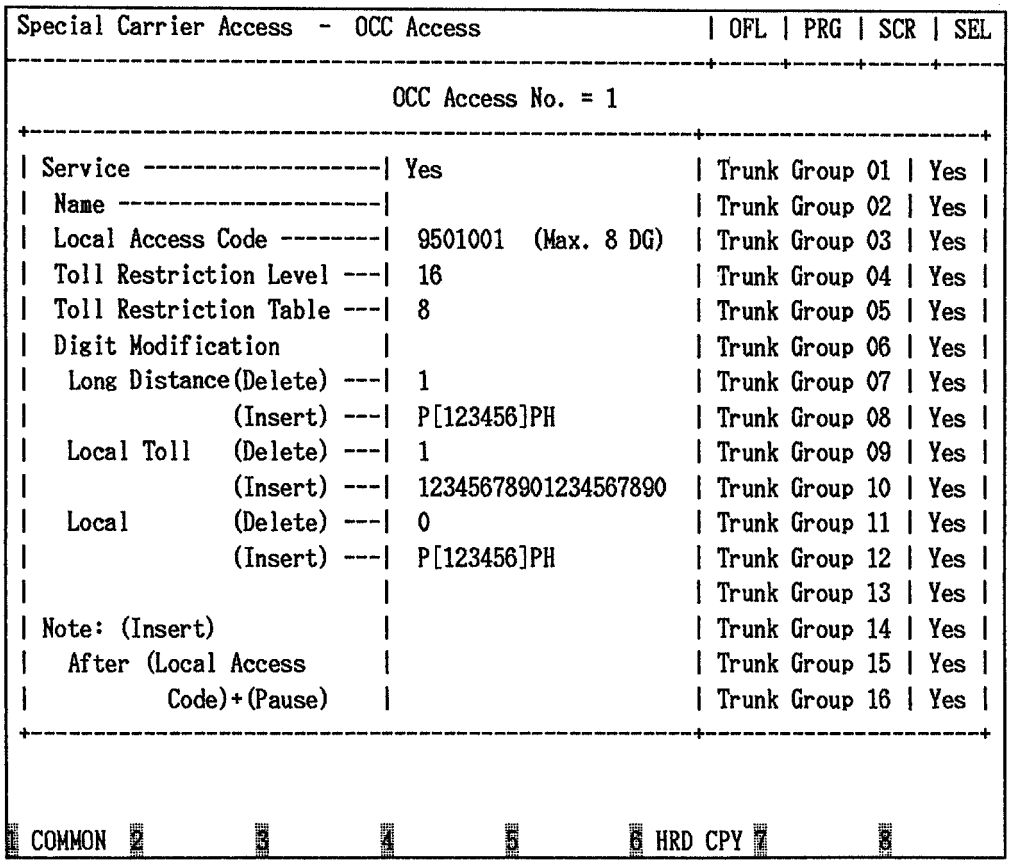
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7-I “Operation of Function Keys.”

2.00 OCC Access (◆ for U.S.A. and Canada only)



Summary

Assigns available trunk groups and parameters necessary for making OCC (Other Common Carrier) Access calls.

Four screens are provided for OCC Access numbers from 1 to 4.
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Service	No	Yes : OCC Access is available No : OCC Access is unavailable	4-C-3.03 5-A-1.03 6-D-1.03
Name	blank	three digit letters, numbers or marks blank: not assigned	
Local Access Code	blank	maximum eight digit numbers	
Toll Restriction Level	blank	01 to 16	3-C-1.04
Toll Restriction Table	blank	1 to 8: Area/ Office Code table number	3-C-1.04

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Digit Modification Long Distance, Local Toll, Local (Delete)	blank	1 to 15: number of digits to be deleted 0 : no digit deletion	4-C-3.03 5-A-1.03 6-D-1.03
(Insert)	blank	maximum of 20 digits consisting of numbers , * , # and marks below : H : Home position P : Pause D : Switch to DTMF [: start of secret number] : end of secret number (enter secret marks in a pair) - : Hyphen	
Trunk Group (01 to 16)	blank	Yes : calling is available No : calling is unavailable	3-C-1.03 4-C-3.03 5-A-1.03 6-D-1.03

Description of Assigning Items

Service	Assigns whether OCC Access is available or not.
Name	Assigns the Carrier's name to be used in making OCC calls.
Local Access Code	Assigns the Carrier code for making OCC Access calls.
Toll Restriction Level	Assigns the Toll Restriction level for special Carrier Access which is used for Toll Restriction.
Toll Restriction Table	Assigns the Area /Office Code table number used for Toll Restriction
Digit Modification Long Distance Local Toll Local	
(Delete)	Assigns the number of leading digits to be deleted.
(Insert)	Assigns the number to be inserted, which follows the Carrier code.
Trunk group (01 to 16)	Assigns the available trunk groups for making OCC Access calls.

Conditions

Service	If set to "No," all the assigning items below display "—" and setting is impossible. If set to "No," it is possible to program "System-Class of Service", Special Carrier Access. However, OCC Access of the screen which has "No" assigned will not be active.
Digit Modification	When making a call using OCC Access function, the dialed number will be modified as the following example.

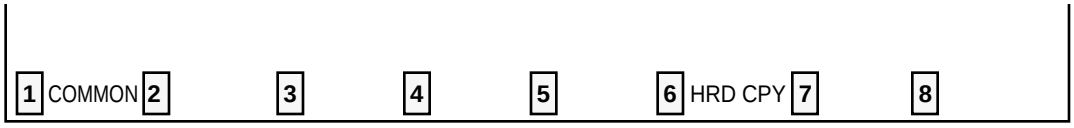
<Example 1>
Programmings are:
Local Access Code: 9501001
Digit Modification
Long Distance (Delete): 1
(Insert) : P123456 PH

Dialed number is :
1 201 123 4567

Modification procedures are :
(1) Deletes the initial digit.
201 123 4567
(2) Inserts the dial programmed.
P123456 P 201 123 4567
(3) The final digits to be sent to trunk are:
9501001 P P 123456 P 201 123 4567
↑
Automatically added.

Function

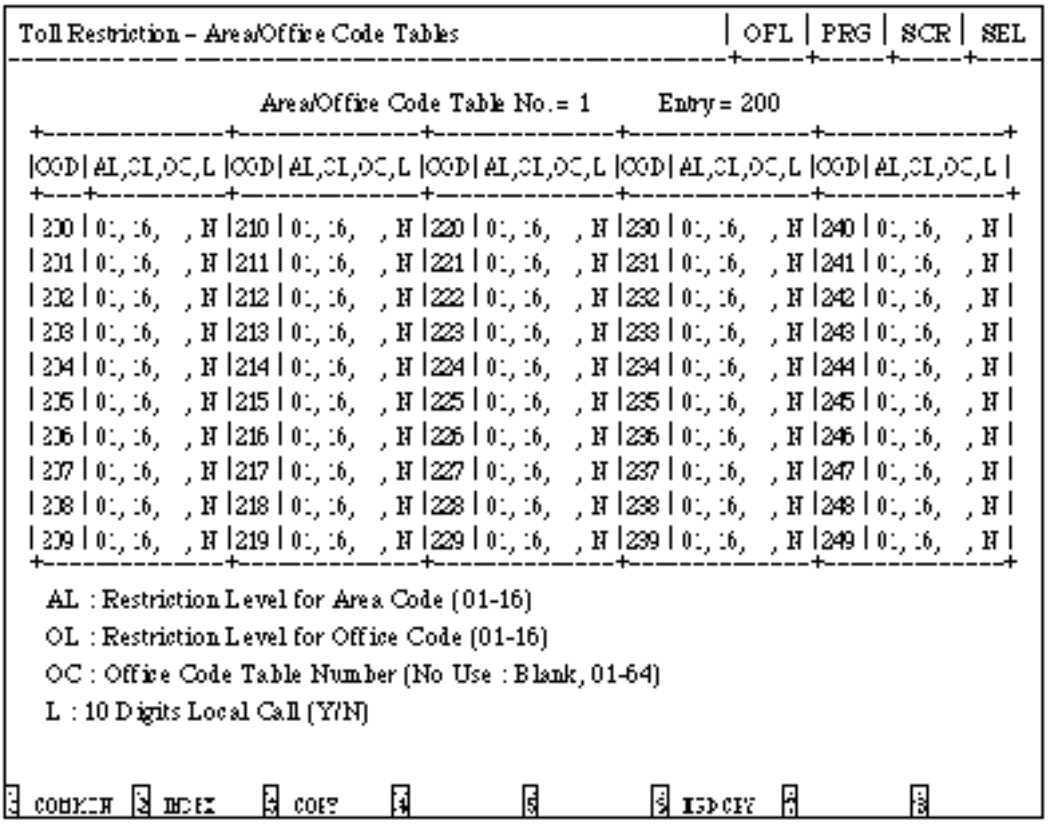
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7-I “Operation of Function Keys.”

I. Toll Restriction Screen (for U.S.A. and Canada)

1.00 Area/Office Code Tables (◆ for U.S.A. and Canada only)



Summary

Assigns local call control, toll restriction level and office code table number for area or office codes. Eight screens are provided for Area/Office Code Table numbers from 1 to 8.
(Password level : Two or higher)

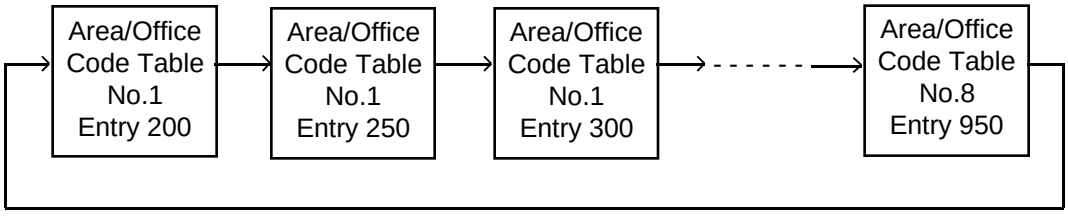
Assigning Items	Default	Selection of Value	Reference
AL	16: for 411, 800, 911, NNX 01: for NPX except the above codes	01 to 16 : toll restriction level for area code	3-C-1.06
OL	16	01 to 16 : toll restriction level for office code	
OC	blank	Office Code table number blank : for 3 digits Toll Restriction 01 to 64 : for 6 digits Toll Restriction	
L	N	Y: Area Code for 10 digits local call N: Not 10 digits local call This setting effective when dialing plan type-D is adopted.	

Description of Assigning Items

AL	Assigns toll restriction level for Area Code. This setting does not restrict the extension user when AL ≤ TRLE (toll restriction level of each extension). When “411” or “911” is dialed, it will be checked against the restriction level in “AL” field.
OL	Assigns toll restriction level for Office Code. This setting does not restrict the extension user when OL ≤ TRLE (toll restriction level of each extension)
OC	Office Code table number blank : Call is restricted if TRLE<AL 0 to 64 : Office Code table number, for 6 Digits Toll Restriction. If the office code dialed is found in the office code table, the call proceeds to 7/10 digit toll restriction. If it is not then the call is restricted.
L	Y: The leading 3 digits of the dialed number is checked against the restriction level in “AL” field. N: The leading 3 digits of the dialed number is checked against the restriction level in “OL” field.

Conditions

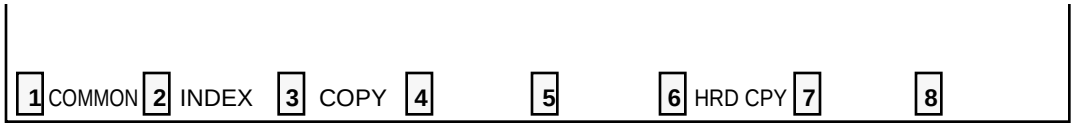
When pressing the NEXT key, this screen changes as follows:



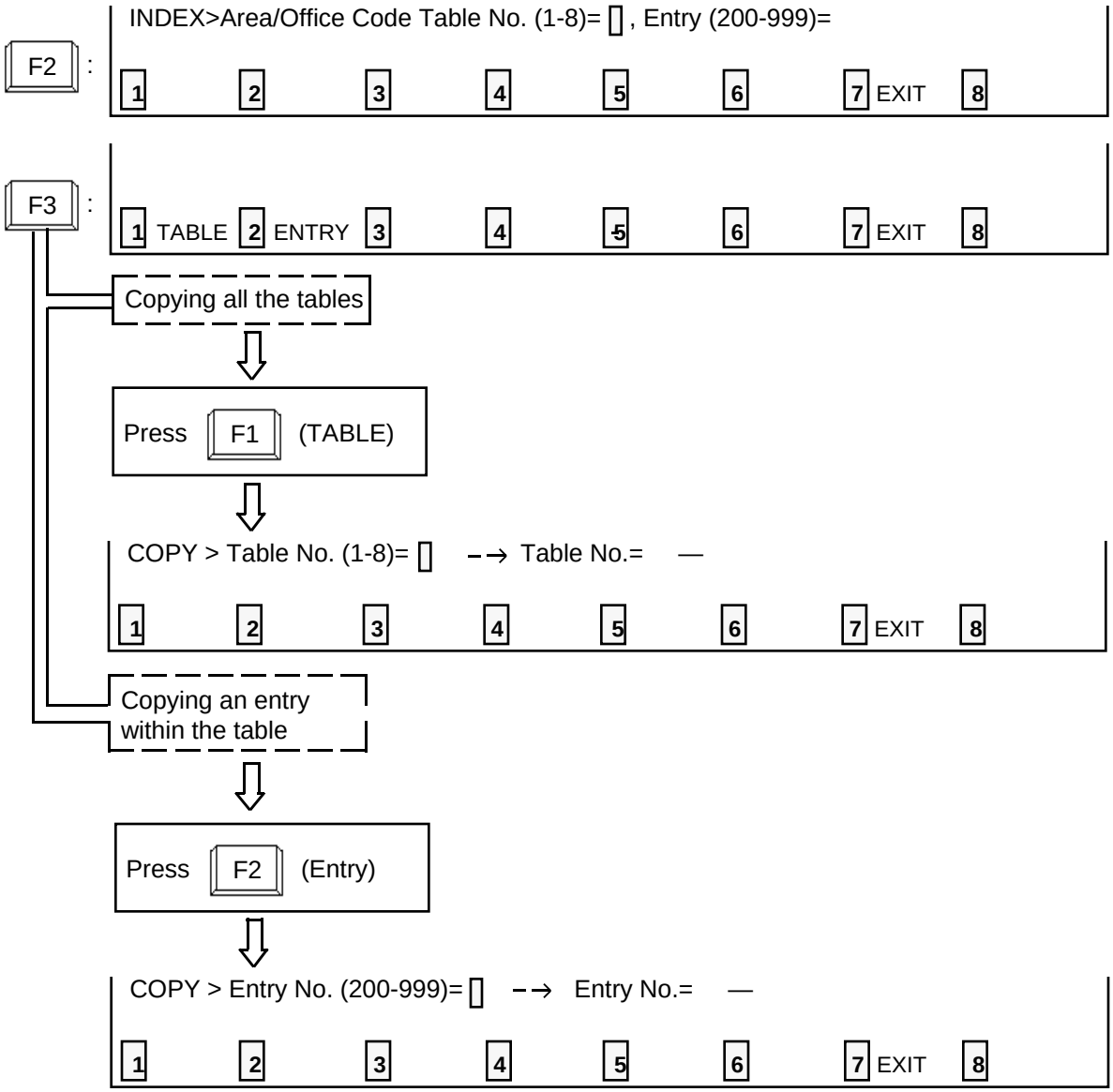
Pressing the PREV key changes the screen in reverse order.

Function

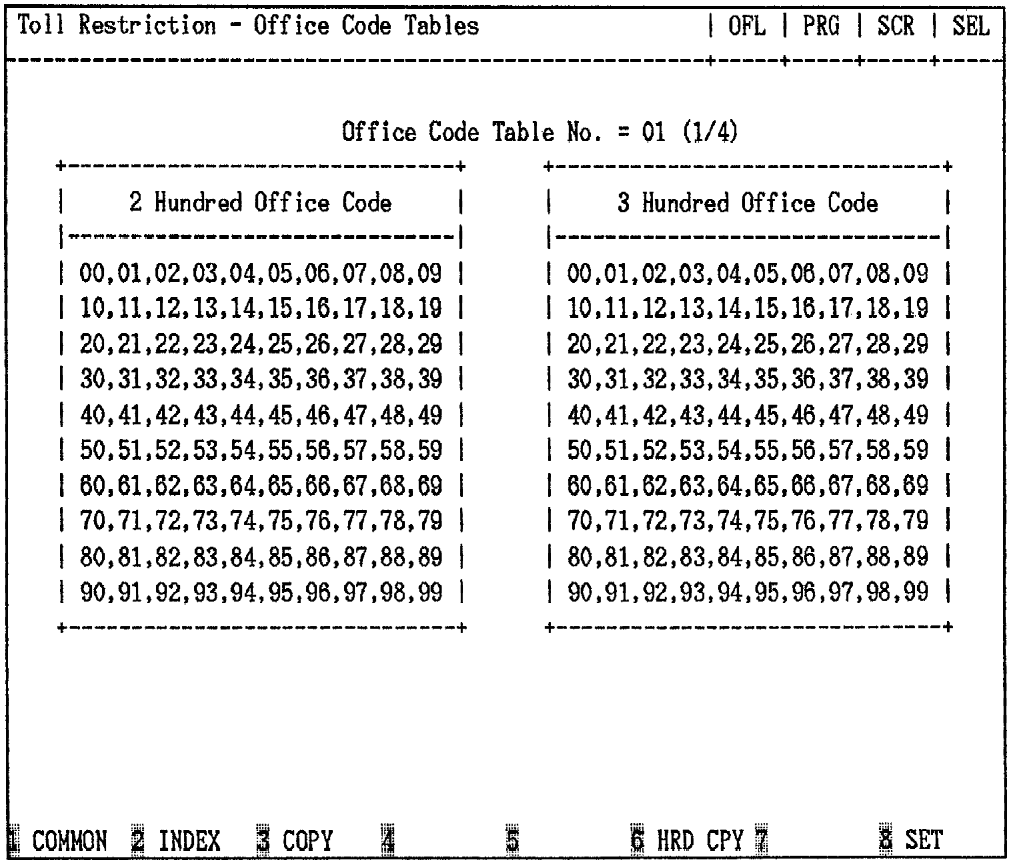
The following functions appear on the function line of this screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and COPY keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.



2.00 Office Code Tables (◆ for U.S.A. and Canada only)



Summary

Assigns the office codes which are restricted and which are allowed to proceed to the 7/10 digit restriction check.
64 screens are provided for Office Code Table numbers from 01 to 64, each of which consists of four screens.
(Password level : Two or higher)

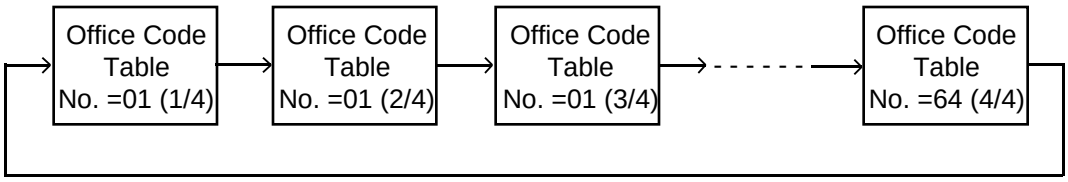
Assigning Items	Default	Selection of Value	Reference
Hundred Office Code	blank	blank : restricts 00 to 99: allowable number for outgoing calls	3-C-1.06

Description of Assigning Items

Hundred Office Code — Assigns office codes to be admitted for 6 Digits Toll Restriction.
blank :Call denied based on office code dialed.

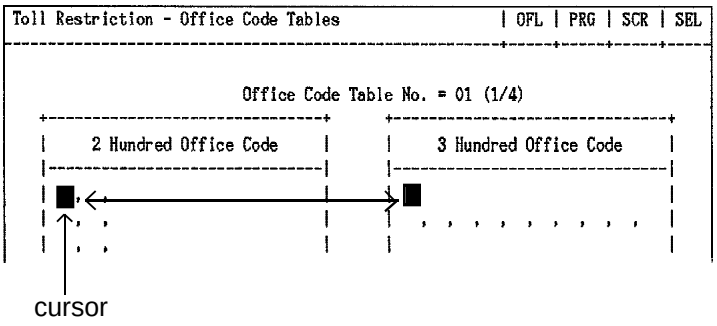
Conditions

Pressing the NEXT button changes this screen as follows:



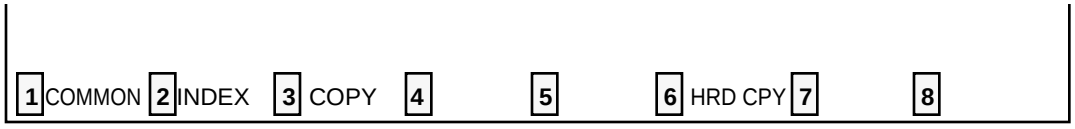
Pressing the PREV key changes the screen in reverse order.

Pressing the TAB key moves the cursor as follows:



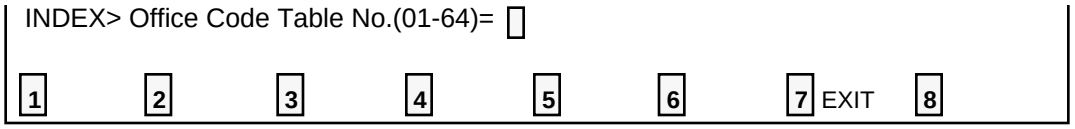
Function

The following functions appear on the function line of this screen.

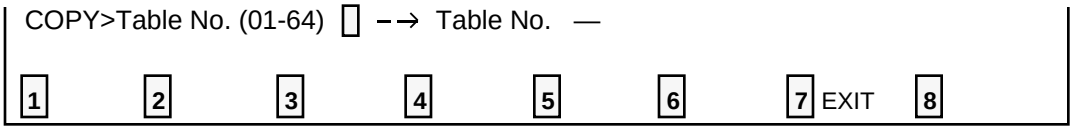


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and COPY keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

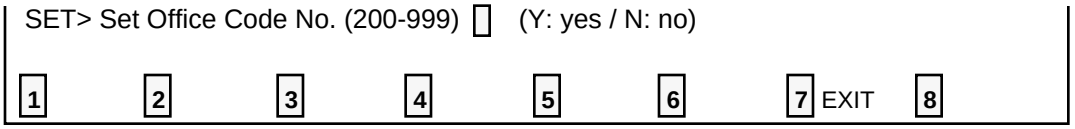
F2 :



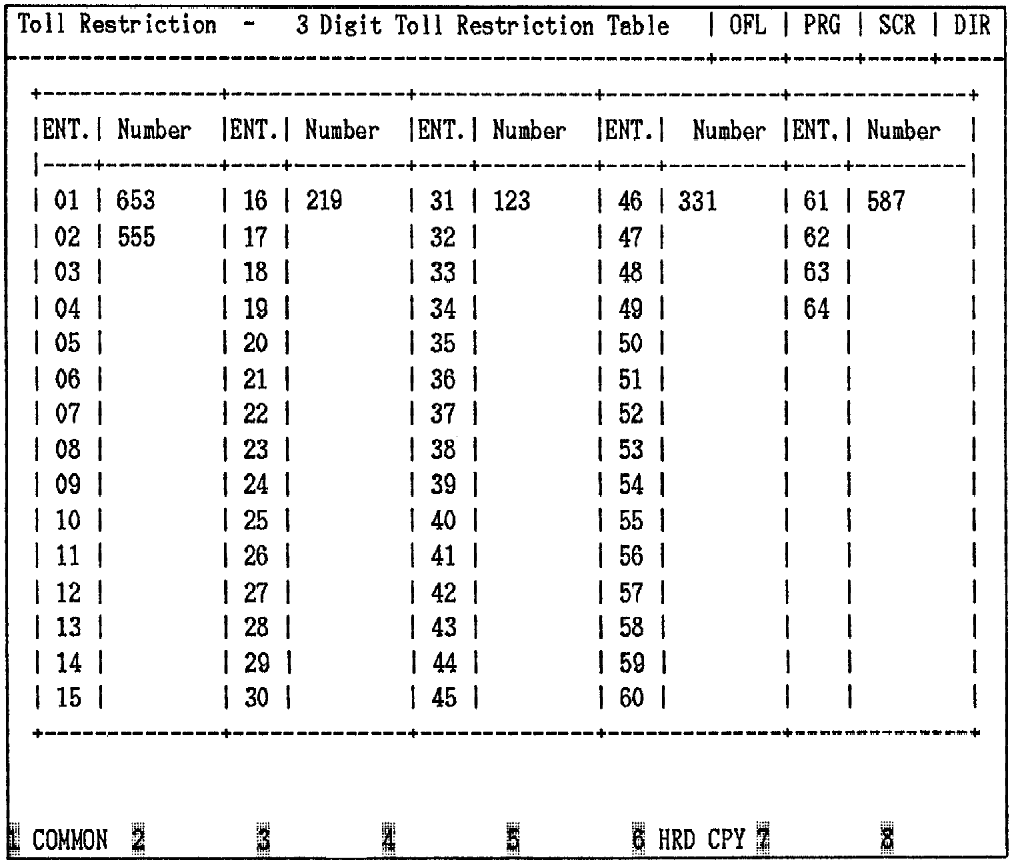
F3 :



F8 :



3.00 7/10 Digit Toll Restriction Table (◆ for U.S.A. and Canada only)



Summary

Assigns 10 Digit Toll Restriction when the call is a long distance call, and assigns 7 Digit Toll Restriction when the call is a local call.

(Password level : Two or higher)

Assigning Item	Default	Selection of Value	Reference
ENT. (Entry) Number (01 to 64)	blank	The last seven digits of the dialed number blank : not assigned	3-C-1.07

Description of Assigning Items

ENT. (Entry)

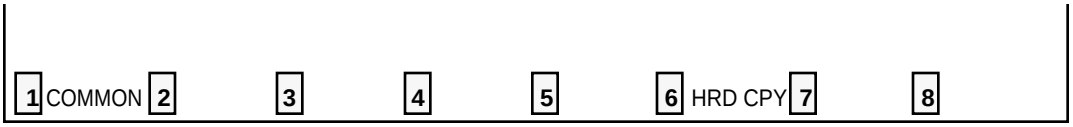
Number (01 to 64) Assigns the office code and subscriber number to be checked by toll restriction.

Conditions

None

Function

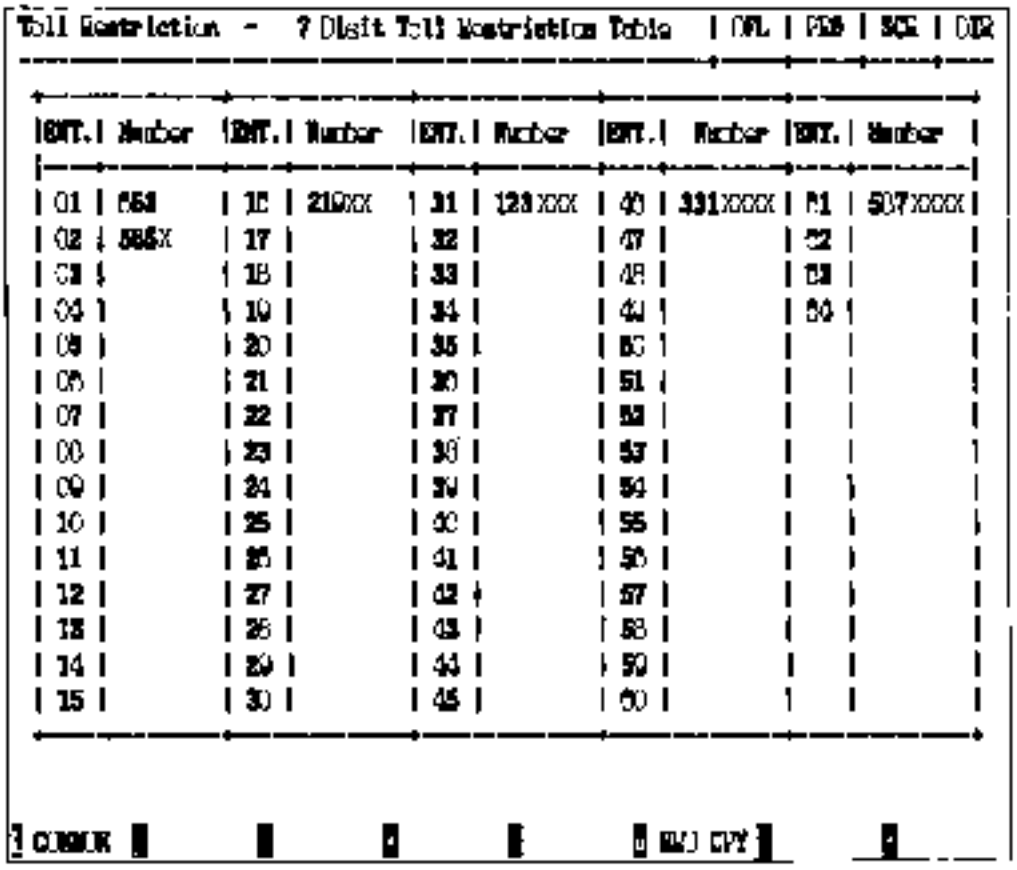
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

I. Toll Restriction Screen (for areas other than U.S.A. and Canada)

4.00 7-Digit Toll Restriction Table



Summary

Assigns 3 through 7-digit numbers to prevent extension users from making outgoing CO calls.
(Password level : Two or higher)

[Software Version 15.XX or higher]
3 through 7-digit number can be assigned.

[Others]
3-digit number can be assigned.

Assigning Item	Default	Selection of Value	Reference
ENT. (Entry) Number (01 to 64)	blank	3 through 7-digit number blank : not assigned	3-C-1.10

Description of Assigning Items

ENT. (Entry)
Number (01 to 64)

Assigns the first 3 through 7 digits of the dialed number to be checked by toll restriction. Three characters “N (2 to 9),” “P (0,1)” and X (0 to 9)” can be specified as a wild card character.

In the table on the previous page, each unit of four entry numbers corresponds with toll restriction levels 01 to 16 respectively as follows.

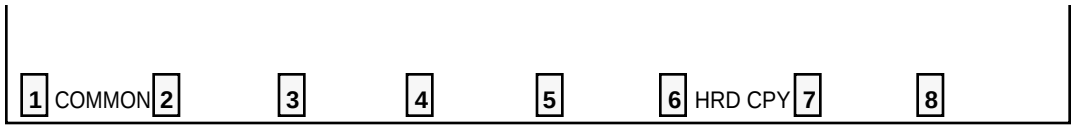
Entry Number	Registered Digits	Toll Restriction Level
01	653	1
02	555X	
03		
04		
05		2
06		
07		
08		
⋮	⋮	⋮
13		4
14		
15		
16	219XX	
⋮	⋮	⋮
61	587XXXX	16
62		
63		
64		

Conditions

None

Function

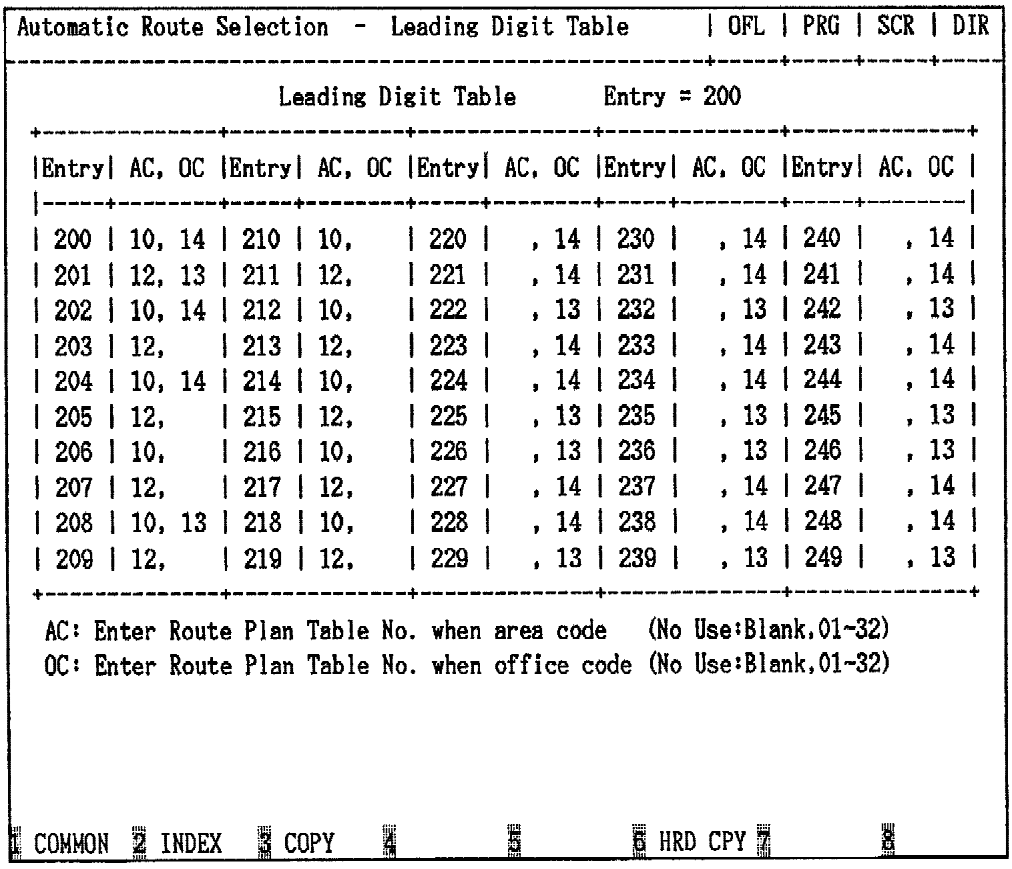
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

J. Automatic Route Selection Screen (for U.S.A. and Canada)

1.00 Leading Digit Table (for U.S.A. and Canada)



Entry	AC, OC	Entry	AC, OC	Entry	AC, OC	Entry	AC, OC	Entry	AC, OC
200	10, 14	210	10,	220	, 14	230	, 14	240	, 14
201	12, 13	211	12,	221	, 14	231	, 14	241	, 14
202	10, 14	212	10,	222	, 13	232	, 13	242	, 13
203	12,	213	12,	223	, 14	233	, 14	243	, 14
204	10, 14	214	10,	224	, 14	234	, 14	244	, 14
205	12,	215	12,	225	, 13	235	, 13	245	, 13
206	10,	216	10,	226	, 13	236	, 13	246	, 13
207	12,	217	12,	227	, 14	237	, 14	247	, 14
208	10, 13	218	10,	228	, 14	238	, 14	248	, 14
209	12,	219	12,	229	, 13	239	, 13	249	, 13

Summary

Assigns the route plan table number for the call according to the Area Code (AC) or Office Code (OC) dialed respectively.
16 screens are provided for Leading Digit Table.

(Password level : Two or higher)

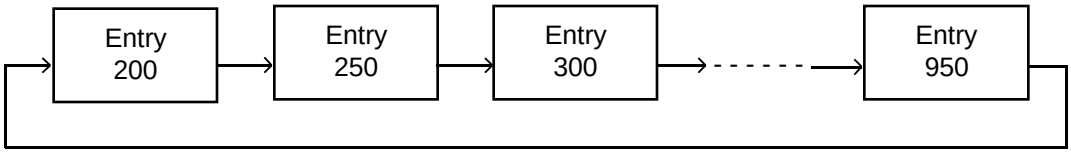
Assigning Items	Default	Selection of Value	Reference
AC	blank	blank : not using area code 01 to 32 : route plan table number	3-C-2.01
OC	blank	blank : not using office code 01 to 32 : route plan table number	

Description of Assigning Items

AC (Area code)	When the leading digits represent an Area code, this field assigns the Route Plan table number. When not dialing an Area code, leave “blank.” Also if the numbering plan is Type C, assign the Area code even if the leading digits represent a Local Toll dial.
OC (Office code)	When the leading digits represent an Office code, this field assigns the Route Plan table number. When not using the Office code, leave “blank .”

Conditions

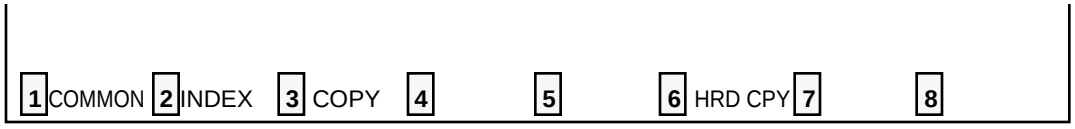
Pressing the NEXT button changes this screen as follows:



Pressing the PREV key changes the screen in reverse order.

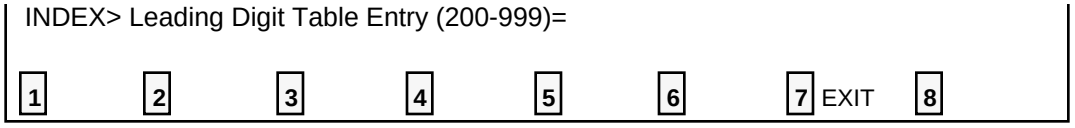
Function

The following functions appear on the function line of this setting screen.

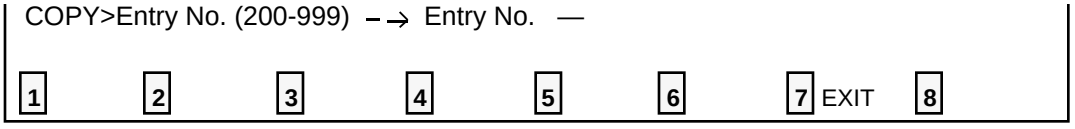


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and COPY keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

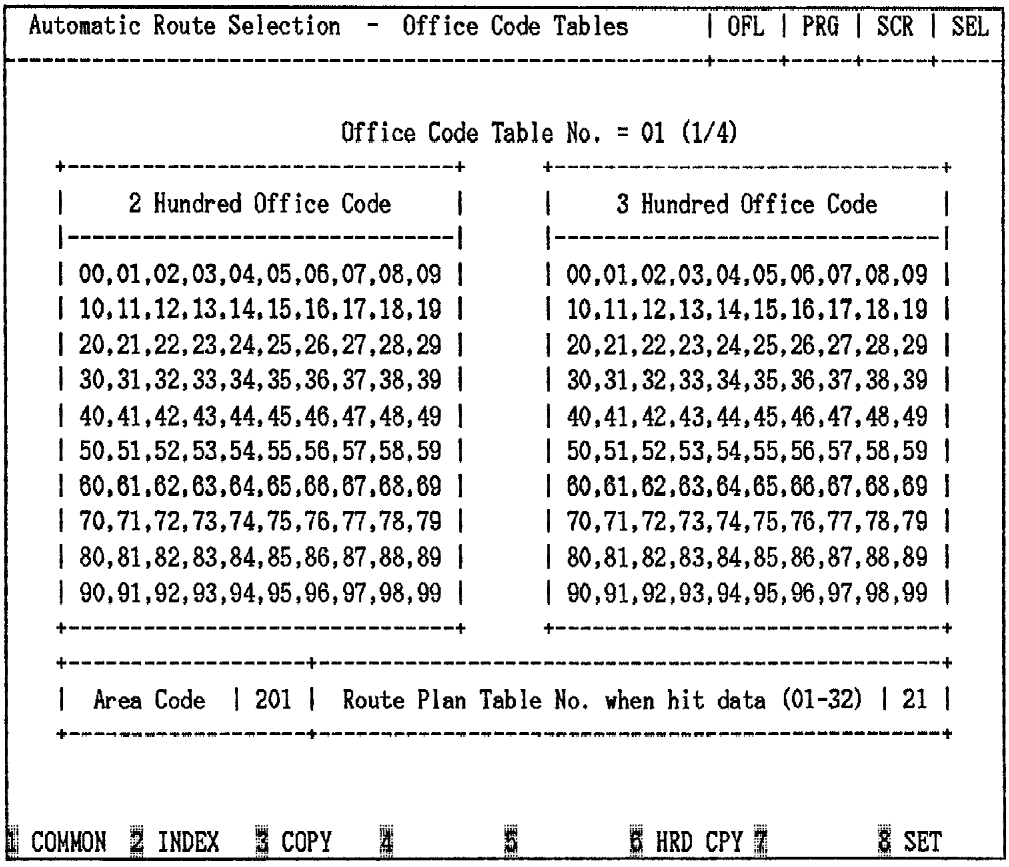
F2 :



F3 :



2.00 Office Code Tables (◆ for U.S.A. and Canada only)



Summary

Assigns all office codes used in each area code in every hundred unit.
32 screens are provided for Office Code Table numbers from 01 to 32, each of which consists of four screens.
(Password level : Two or higher)

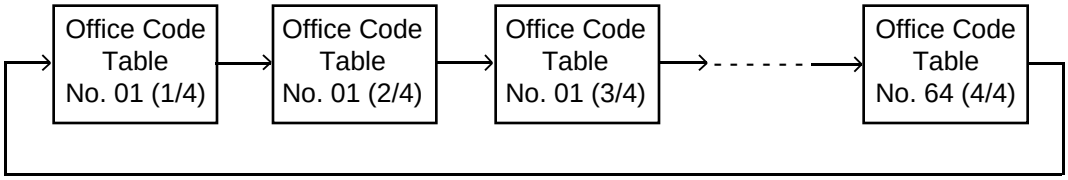
Assigning Items	Default	Selection of Value	Reference
Hundred Office Code	blank	blank : not using office code table 00 to 99 : office code	3-C-2.01
Area Code	blank	blank : not assigning area code 200 to 999: area code	
Route Plan Table No.	01	01 to 32 : route plan table number	

Description of Assigning Items

Hundred Office Code	Assigns all office codes corresponding to the area code.
Area Code	Assigns the area code.
Route Plan Table No.	Assigns route plan table number.

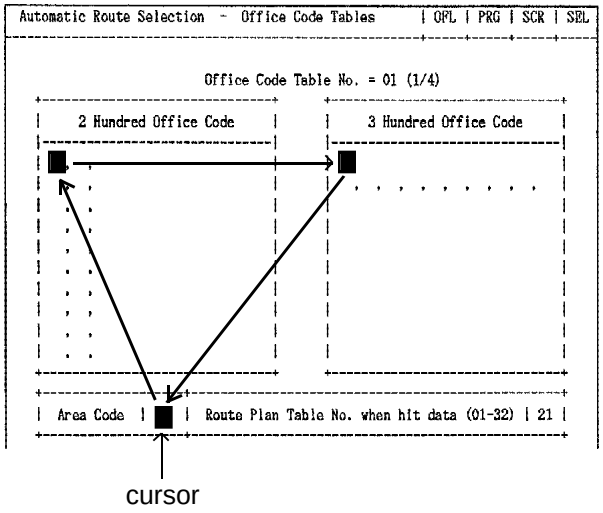
Conditions

Pressing the NEXT key changes this screen as follows:

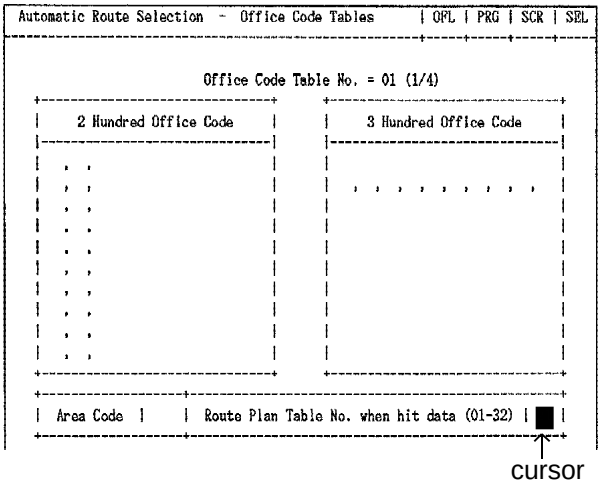


Pressing the PREV key changes the screen in reverse order.

Pressing the TAB key moves the cursor as follows:

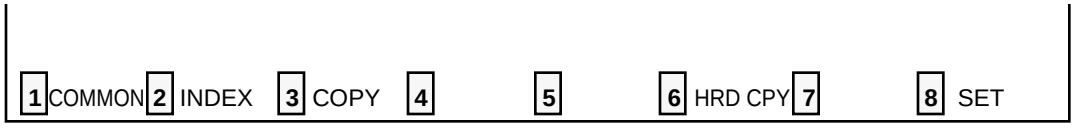


To move the cursor to “Route Plan Table No. when hit data (01-32),” use the → key when the cursor is located in “Area Code.”



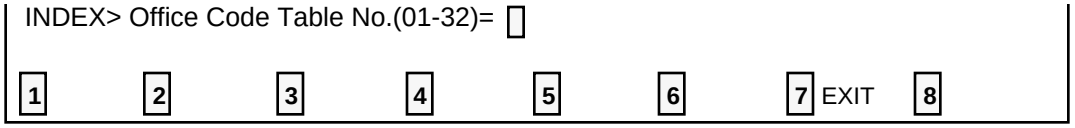
Function

The following functions appear on the function line of this setting screen.

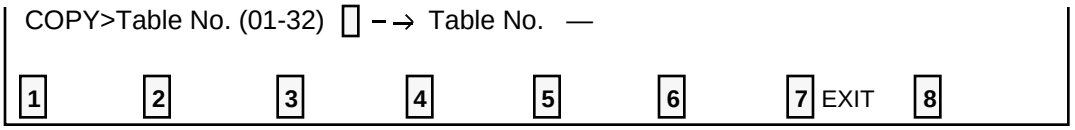


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and COPY keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

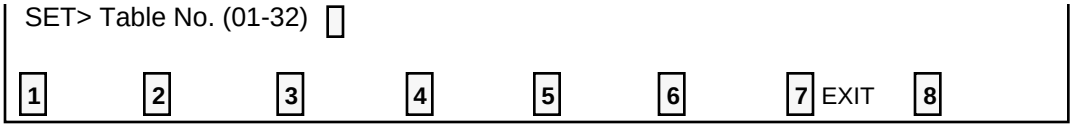
F2 :



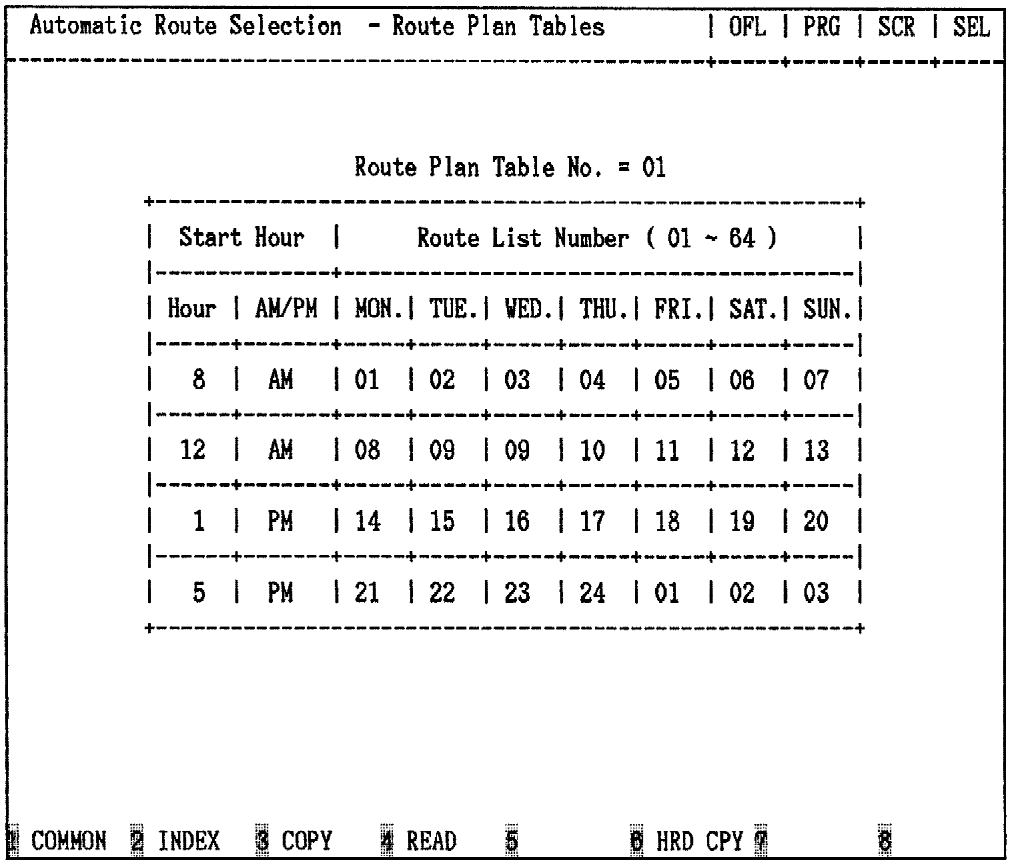
F3 :



F8 :



3.00 Route Plan Tables (for U.S.A. and Canada)



Summary

Sets route plan tables by assigning time zones and route list numbers applied to each time zone of each day of the week.

32 screens are provided for Route Plan Table numbers from 01 to 32.
(Password level: Two or higher)

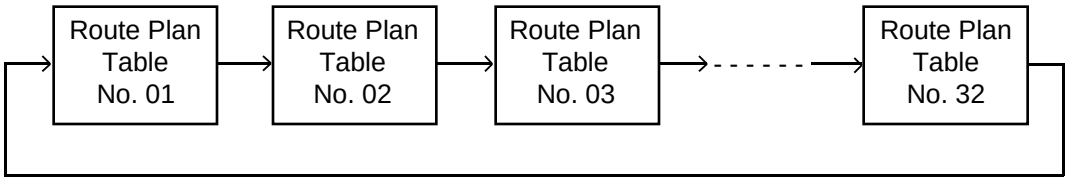
Assigning Items	Default	Selection of Value	Reference
Start Hour Hour	blank	01 to 12: hour	3-C-2.01
AM/PM	blank	AM/PM : a.m./p.m.	
Route List Number (01 to 64) MON. TUE. WED. THU. FRI. SAT. SUN.	blank	01 to 64: route list number	

Description of Assigning Items

Start Hour	
Hour	Assigns starting time of applied Route List. When assigning “Hour,” enter each item without leaving any “blank.”
AM/PM	Assigns a.m. or p.m. of the starting time.
Route list number(MON) Route list number(TUE) Route list number(WED) Route list number(THU) Route list number(FRI) Route list number(SAT) Route list number(SUN)	Assigns Route List number. Be sure to assign Route List number for each specified “Hour,” without leaving any “blank.”

Conditions

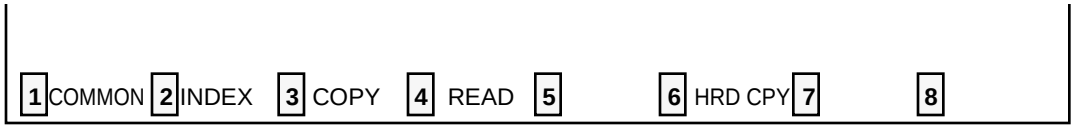
Pressing the NEXT key changes this screen as follows:



Pressing the PREV key changes the screen in reverse order.

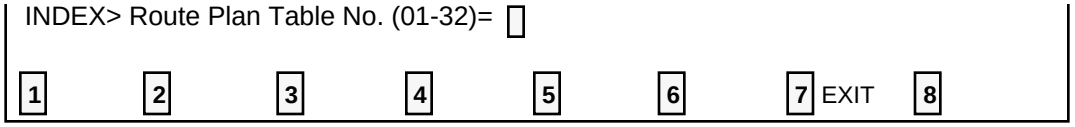
Function

The following functions appear on the function line of this setting screen.

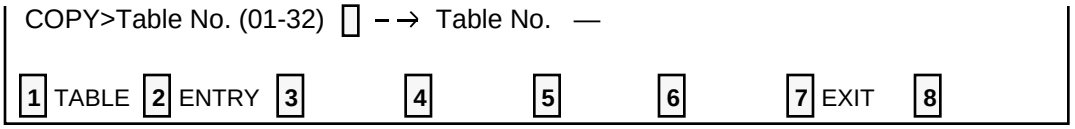


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX, COPY and READ keys are also available in this screen. The operation of function keys are described in Section 7-I "Operation of Function Keys." Only messages are provided here.

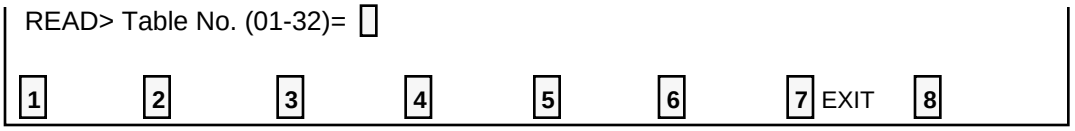
F2 :



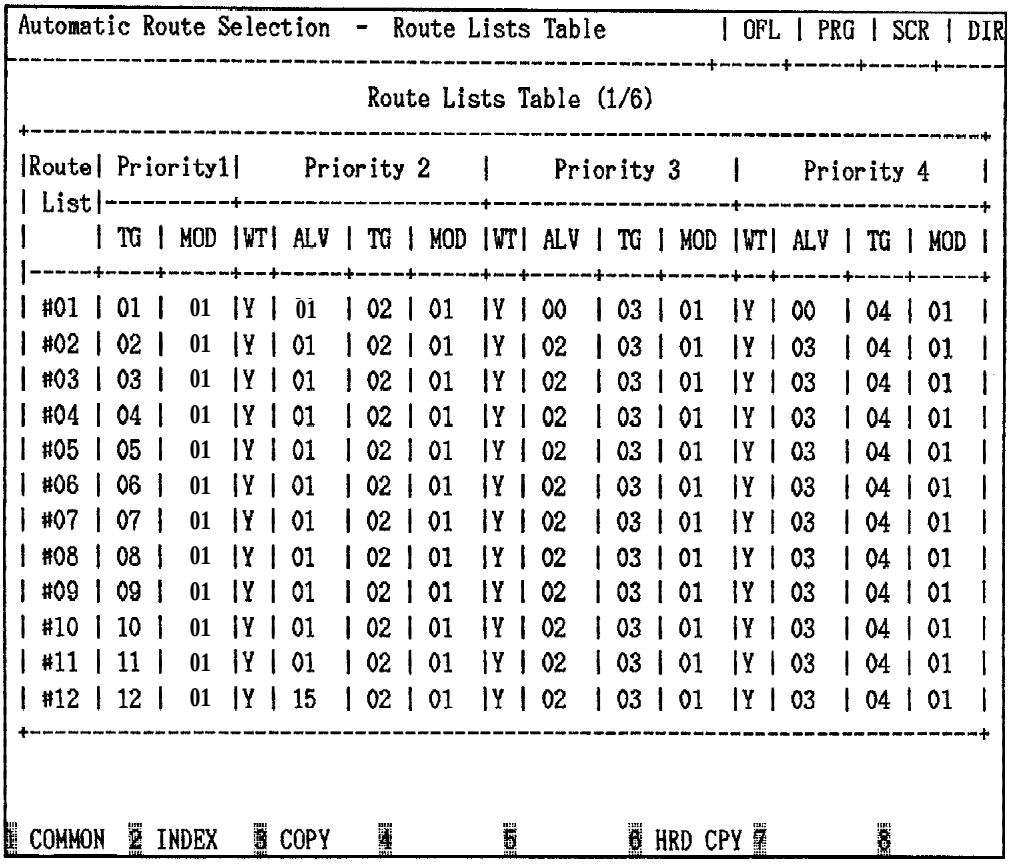
F3 :



F4 :



4.00 Route Lists Table (for U.S.A. and Canada)



```
Automatic Route Selection  -  Route Lists Table          | OFL | PRG | SCR | DIR
-------------------------------------------------------+-----+-----+-----+-----

                          Route Lists Table (1/6)

+-------------------------------------------------------------------------------+
|Route| Priority1|     Priority 2    |     Priority 3    |     Priority 4    |
| List|----------+-------------------+-------------------+-------------------+
|     | TG | MOD |WT| ALV | TG | MOD |WT| ALV | TG | MOD |WT| ALV | TG | MOD |
|-----+----+-----+--+-----+----+-----+--+-----+----+-----+--+-----+----+-----+
| #01 | 01 |  01 |Y | 01  | 02 | 01  |Y | 00  | 03 | 01  |Y | 00  | 04 | 01  |
| #02 | 02 |  01 |Y | 01  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
| #03 | 03 |  01 |Y | 01  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
| #04 | 04 |  01 |Y | 01  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
| #05 | 05 |  01 |Y | 01  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
| #06 | 06 |  01 |Y | 01  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
| #07 | 07 |  01 |Y | 01  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
| #08 | 08 |  01 |Y | 01  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
| #09 | 09 |  01 |Y | 01  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
| #10 | 10 |  01 |Y | 01  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
| #11 | 11 |  01 |Y | 01  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
| #12 | 12 |  01 |Y | 15  | 02 | 01  |Y | 02  | 03 | 01  |Y | 03  | 04 | 01  |
+-------------------------------------------------------------------------------+


 1 COMMON  2 INDEX   3 COPY    4         5         6 HRD CPY 7         8
```

Summary

Assigns trunk groups in order of economical priority (1 to 4) and parameters on each priority. The screen consists of six screens.

(Password level: Two or higher).

Assigning Items	Default	Selection of Value	Reference
Priority 1 TG	blank	blank : ARS not in use 01 to 16: real trunk	3-C-2.01
MOD	blank	blank : when “TG” is blank 01 to 32: modified digit table number	
Priority 2 WT	blank	blank : priority 2 not being used Y : sending warning tone N : without warning tone	
ALV	blank	blank : when “TG” is blank 01 to 16: restriction level	

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Priority 2 TG	blank	blank : priority 2 not being used 01 to 16: trunk group number	3-C-2.00
MOD	blank	blank : when “TG” is blank 01 to 32: modified digit table number	
Priority 3 WT	blank	blank : priority 3 not being used Y : sending warning tone N : without warning tone	
ALV	blank	blank : when “TG” is blank 01 to 16: restriction level	
TG	blank	blank : priority 3 not being used 01 to 16: trunk group number	
MOD	blank	blank : when “TG” is blank 01 to 32: modified digit table number	
Priority 4 WT	blank	blank : priority 4 not being used Y : sending warning tone N : without warning tone	
ALV	blank	blank : when “TG” is blank 01 to 16: restriction level	
TG	blank	blank : priority 4 not being used 01 to 16: trunk group number	
MOD	blank	blank : when “TG” is blank 01 to 32: modified digit table number	

Description of Assigning Items

Priority 1

TG	Assigns the most economical trunk group number.
MOD	Assigns modified digit table number to modify the digits to suitable ones for the preset trunk group.

Priority 2

WT	Assigns sending warning tone or not, before going around to the secondary economical trunk group.
ALV	Assigns restriction level of the secondary economical trunk group number.
TG	Assigns the secondary economical trunk group number.
MOD	Assigns modified digit table number for modifying the digits suitable ones for secondary economical trunk.

Priority 3

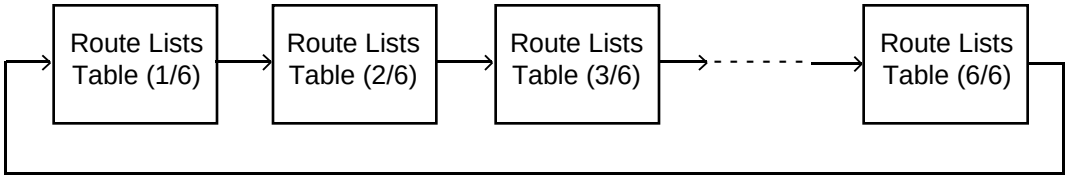
WT	Assigns sending warning tone or not, before going around to the third economical trunk group.
ALV	Assigns the thirdly economical trunk group.
TG	Assigns the thirdly economical trunk group.
MOD	Assigns the modified digit table number for making the most suitable digits for the thirdly economical trunk group.

Priority 4

WT	Assigns sending warning tone or not, before going around to the fourth economical trunk group.
ALV	Assigns the restriction level of the fourth economical trunk group.
TG	Assigns the fourth economical trunk group.
MOD	Assigns the modified digit table number for making the most suitable digits for the fourth economical trunk group.

Conditions

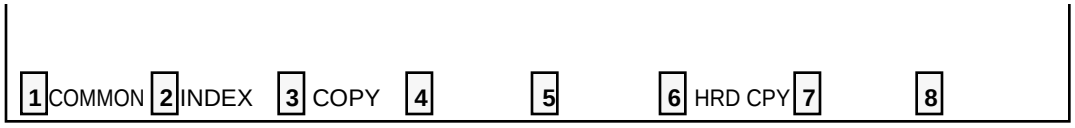
Pressing the NEXT key changes this screen as follows:



Pressing the PREV key changes the screen in reverse order.

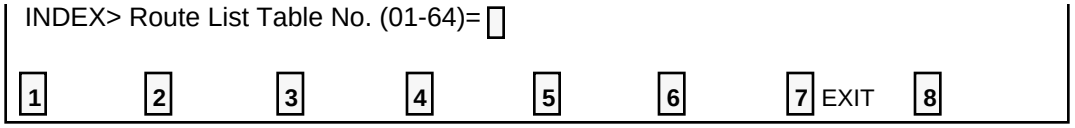
Function

The following functions appear on the function line of this screen.

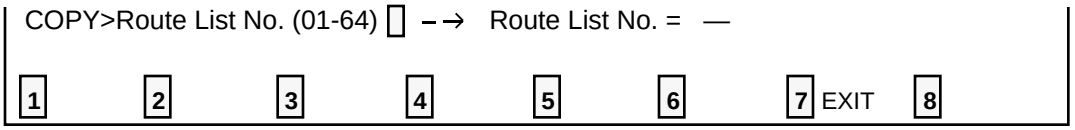


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and COPY keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

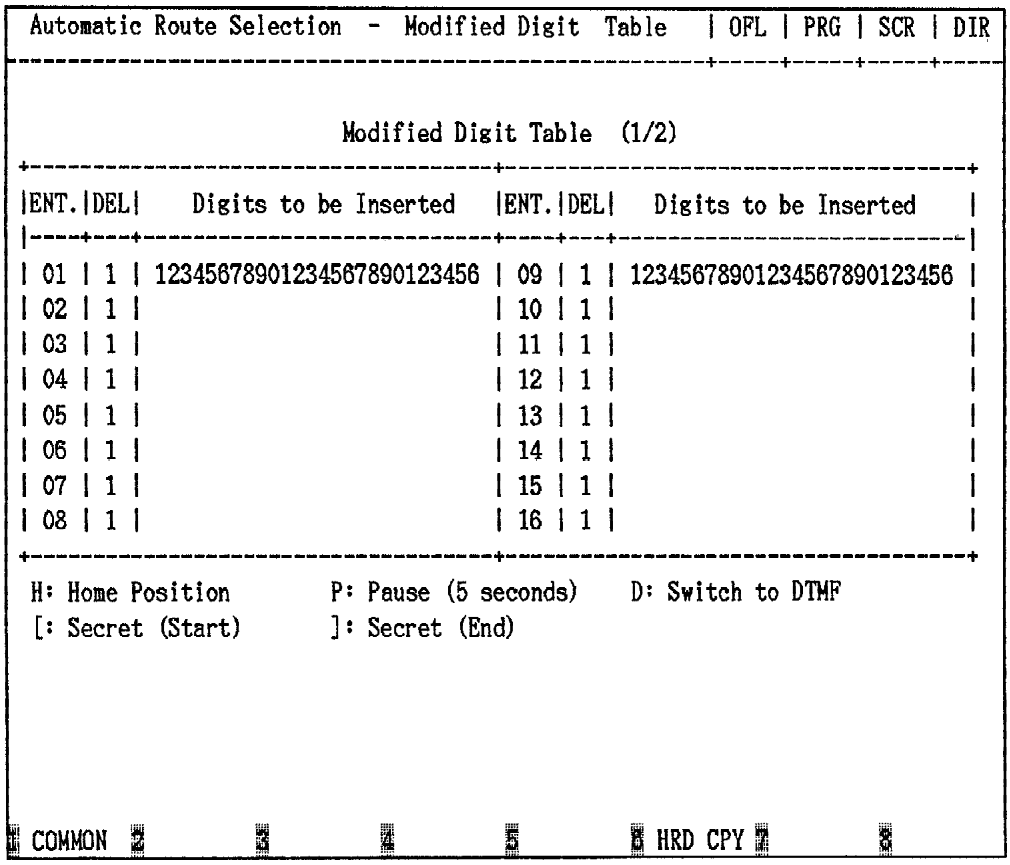
F2 :



F3 :



5.00 Modified Digit Table (for U.S.A. and Canada)



Summary

Assigns digits to be deleted and digits to be inserted. (Password level: Two or higher)
The screen consists of two screens.

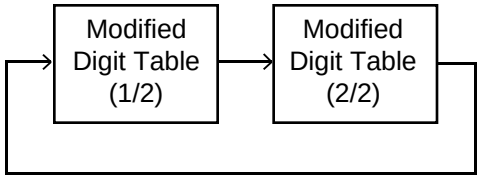
Assigning Items	Default	Selection of Value	Reference
DEL	0	0 to 9 : digit to be deleted	3-C-2.01
Digits to be Inserted	blank	Digits to be inserted Maximum 26 digits consisting of numbers, ＊, # and marks below : H: Home Position P: Pause D: Switch to DTMF [: Start of secret number] : end of secret number (Enter [ ] in a pair)	

Description of Assigning Items

Del	Assigns the number of the digits to be deleted from the dialed digits.
Digits to be inserted	Assigns numbers and marks to be added.

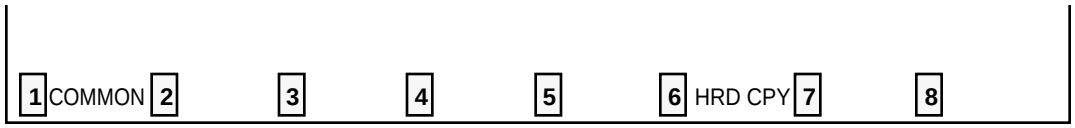
Conditions

Pressing the NEXT key changes this screen as follows:



Function

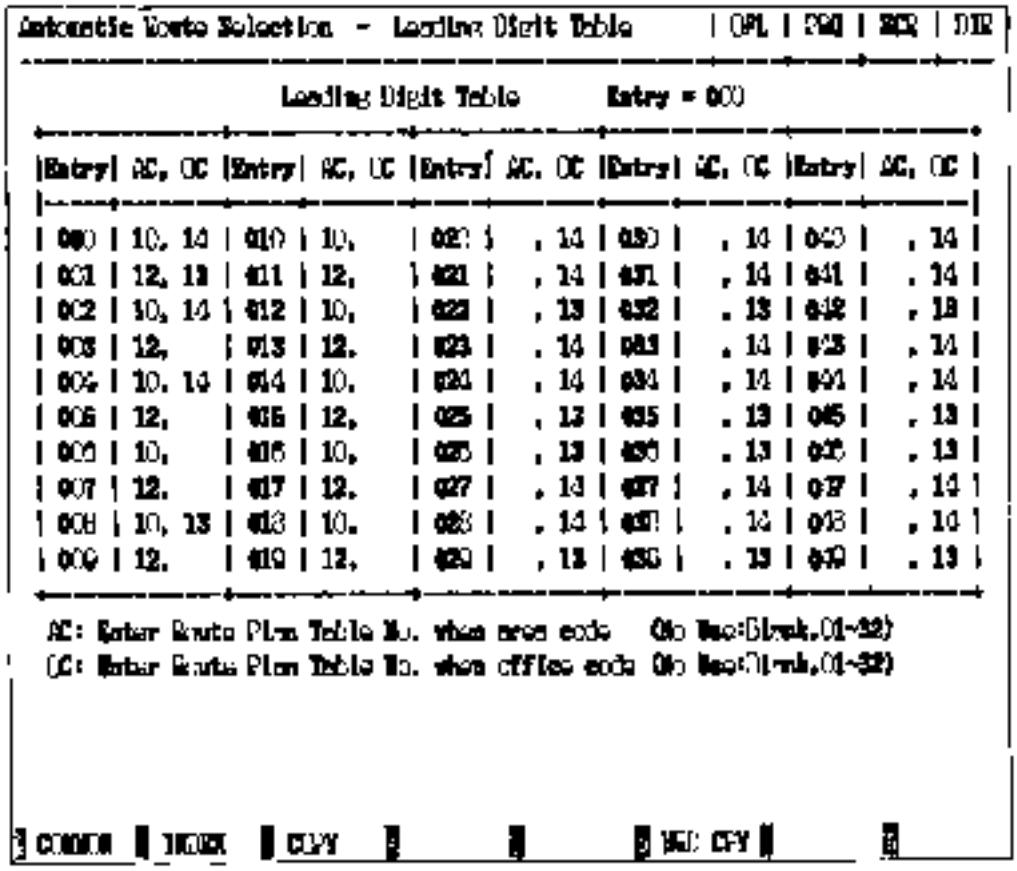
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

J. Automatic Route Selection Screen (for New Zealand)

6.00 Leading Digit Table (for New Zealand)



Summary

Assigns the route plan table number for the call according to the Area Code (AC) or Office Code (OC) dialed respectively.
20 screens are provided for Leading Digit Table.

(Password level : Two or higher)

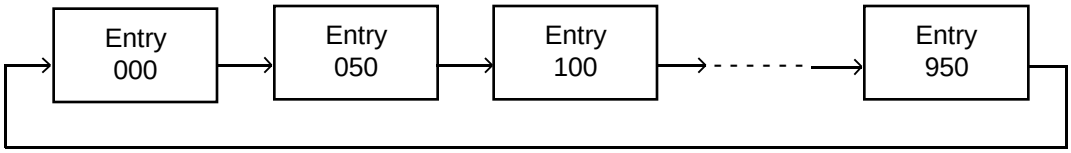
Assigning Items	Default	Selection of Value	Reference
AC	blank	blank : not using area code 01 to 32 : route plan table number	3-C-2.02
OC	blank	blank : not using office code 01 to 32 : route plan table number	

Description of Assigning Items

AC (Area code)	When the leading digits represent an Area code, this field assigns the Route Plan table number. When not using an Area code, leave “blank.”
OC (Office code)	When the leading digits represent an Office code, this field assigns the Route Plan table number. When not using the Office code, leave “blank .”

Conditions

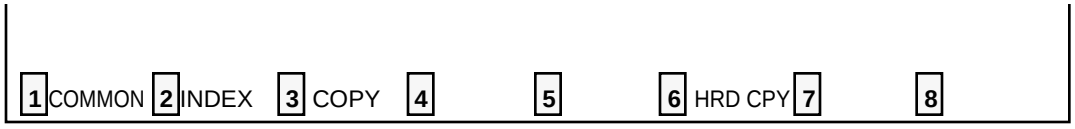
Pressing the NEXT button changes this screen as follows:



Pressing the PREV key changes the screen in reverse order.

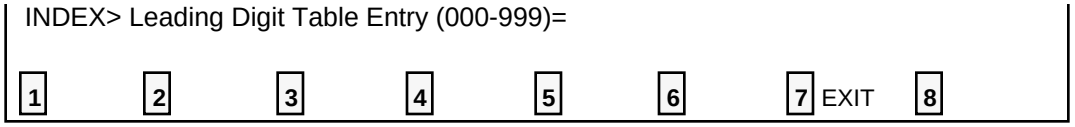
Function

The following functions appear on the function line of this setting screen.

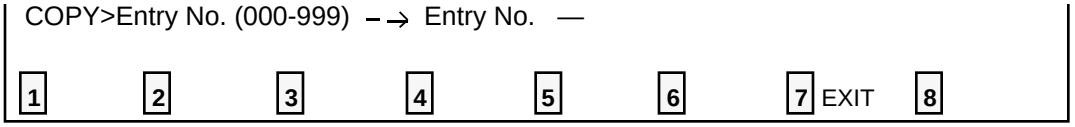


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and COPY keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

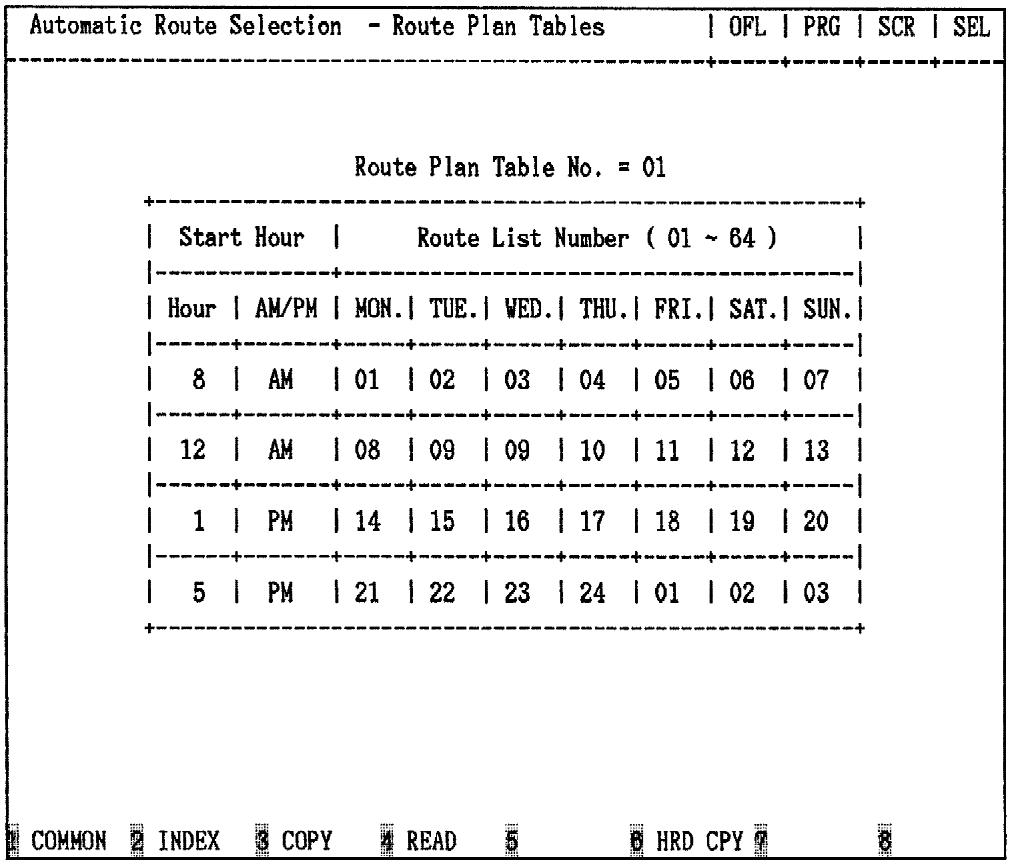
F2 :



F3 :



7.00 Route Plan Tables (for New Zealand)



Summary

Sets route plan tables by assigning time zones and route list numbers applied to each time zone of each day of the week.

32 screens are provided for Route Plan Table numbers from 01 to 32.
(Password level: Two or higher)

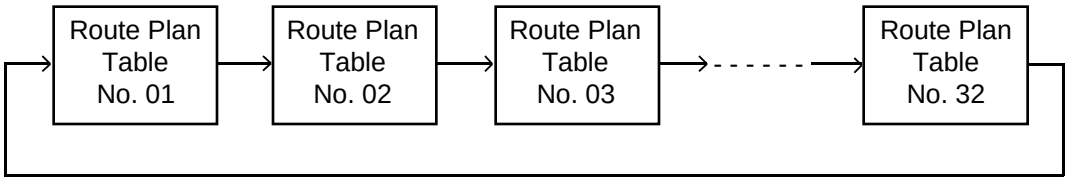
Assigning Items	Default	Selection of Value	Reference
Start Hour Hour	blank	01 to 12: hour	3-C-2.02
AM/PM	blank	AM/PM : a.m./p.m.	
Route List Number (01 to 64) MON. TUE. WED. THU. FRI. SAT. SUN.	blank	01 to 64: route list number	

Description of Assigning Items

Start Hour	
Hour	Assigns starting time of applied Route List. When assigning “Hour,” enter each item without leaving any “blank.”
AM/PM	Assigns a.m. or p.m. of the starting time.
Route list number(MON) Route list number(TUE) Route list number(WED) Route list number(THU) Route list number(FRI) Route list number(SAT) Route list number(SUN)	Assigns Route List number. Be sure to assign Route List number for each specified “Hour,” without leaving any “blank.”

Conditions

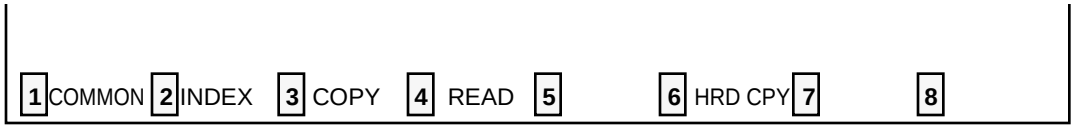
Pressing the NEXT key changes this screen as follows:



Pressing the PREV key changes the screen in reverse order.

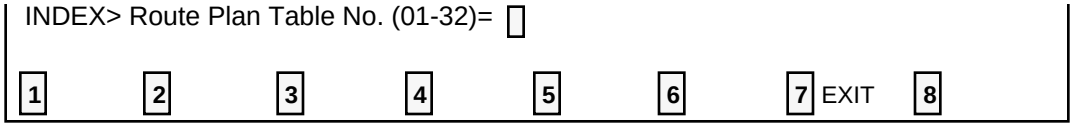
Function

The following functions appear on the function line of this setting screen.

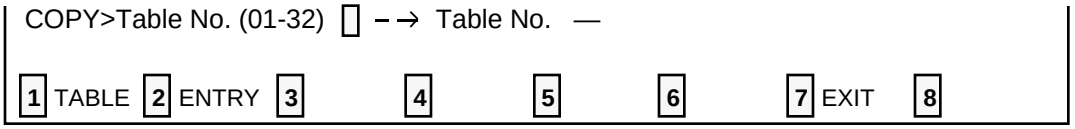


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX, COPY and READ keys are also available in this screen. The operation of function keys are described in Section 7-I "Operation of Function Keys." Only messages are provided here.

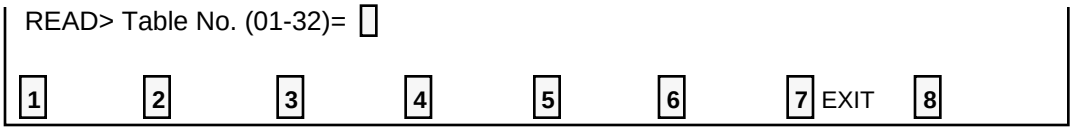
F2 :



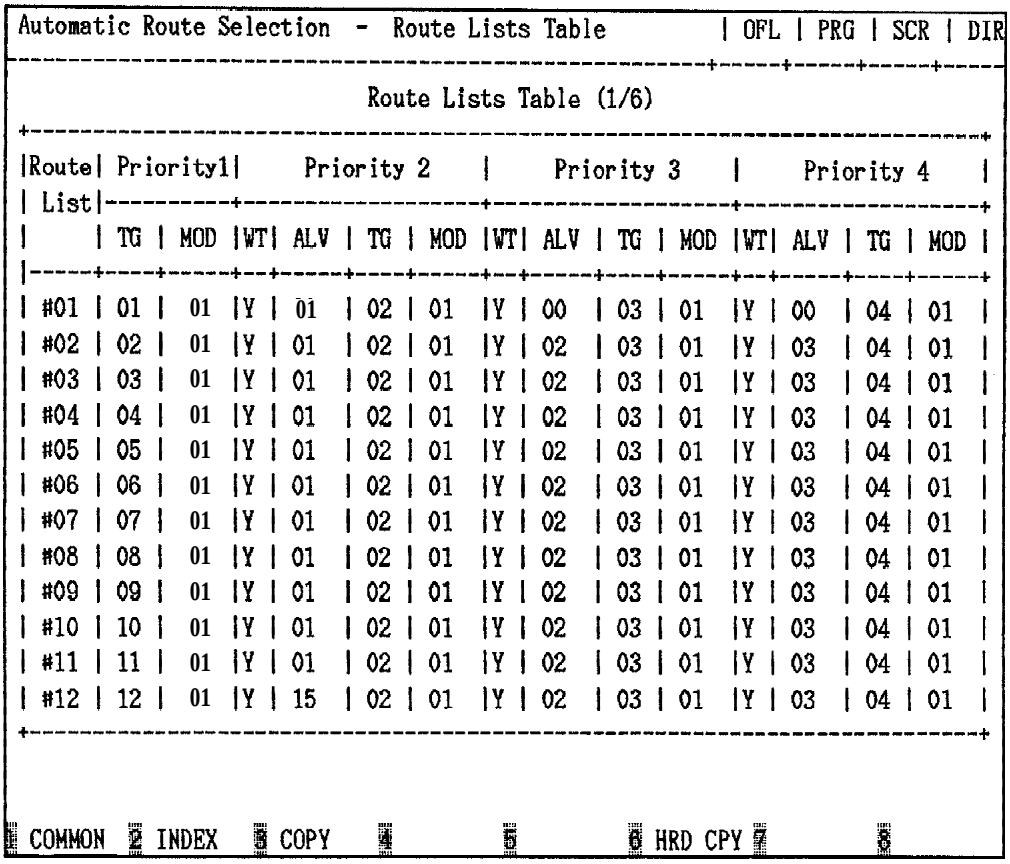
F3 :



F4 :



8.00 Route Lists Table (for New Zealand)



Automatic Route Selection - Route Lists Table | OFL | PRG | SCR | DIR

Route Lists Table (1/6)

Route List	Priority1 TG	Priority1 MOD	Priority1 WT	Priority1 ALV	Priority 2 TG	Priority 2 MOD	Priority 2 WT	Priority 2 ALV	Priority 3 TG	Priority 3 MOD	Priority 3 WT	Priority 3 ALV	Priority 4 TG	Priority 4 MOD
#01	01	01	Y	01	02	01	Y	00	03	01	Y	00	04	01
#02	02	01	Y	01	02	01	Y	02	03	01	Y	03	04	01
#03	03	01	Y	01	02	01	Y	02	03	01	Y	03	04	01
#04	04	01	Y	01	02	01	Y	02	03	01	Y	03	04	01
#05	05	01	Y	01	02	01	Y	02	03	01	Y	03	04	01
#06	06	01	Y	01	02	01	Y	02	03	01	Y	03	04	01
#07	07	01	Y	01	02	01	Y	02	03	01	Y	03	04	01
#08	08	01	Y	01	02	01	Y	02	03	01	Y	03	04	01
#09	09	01	Y	01	02	01	Y	02	03	01	Y	03	04	01
#10	10	01	Y	01	02	01	Y	02	03	01	Y	03	04	01
#11	11	01	Y	01	02	01	Y	02	03	01	Y	03	04	01
#12	12	01	Y	15	02	01	Y	02	03	01	Y	03	04	01

1 COMMON 2 INDEX 3 COPY 4 5 6 HRD CPY 7 8

Summary

Assigns trunk groups in order of economical priority (1 to 4) and parameters on each priority. The screen consists of six screens.

(Password level: Two or higher).

Assigning Items	Default	Selection of Value	Reference
Priority 1 TG	blank	blank : ARS not in use 01 to 16: real trunk	3-C-2.02
MOD	blank	blank : when “TG” is blank 01 to 32: modified digit table number	
Priority 2 WT	blank	blank : priority 2 not being used Y : sending warning tone N : without warning tone	
ALV	blank	blank : when “TG” is blank 01 to 16: restriction level	

Continued

Continued

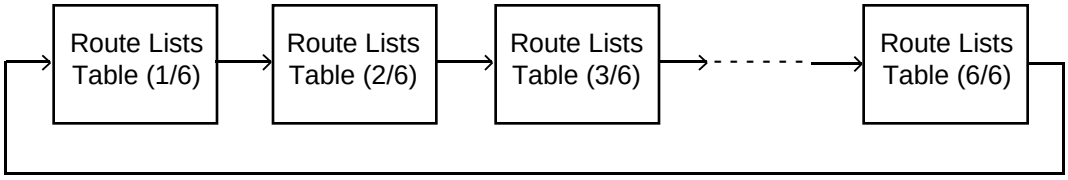
Assigning Items	Default	Selection of Value	Reference
Priority 2 TG	blank	blank : priority 2 not being used 01 to 16: trunk group number	3-C-2.02
MOD	blank	blank : when “TG” is blank 01 to 32: modified digit table number	
Priority 3 WT	blank	blank : priority 3 not being used Y : sending warning tone N : without warning tone	
ALV	blank	blank : when “TG” is blank 01 to 16: restriction level	
TG	blank	blank : priority 3 not being used 01 to 16: trunk group number	
MOD	blank	blank : when “TG” is blank 01 to 32: modified digit table number	
Priority 4 WT	blank	blank : priority 4 not being used Y : sending warning tone N : without warning tone	
ALV	blank	blank : when “TG” is blank 01 to 16: restriction level	
TG	blank	blank : priority 4 not being used 01 to 16: trunk group number	
MOD	blank	blank : when “TG” is blank 01 to 32: modified digit table number	

Description of Assigning Items

Priority 1	
TG	Assigns the most economical trunk group number.
MOD	Assigns modified digit table number to modify the digits to suitable ones for the preset trunk group.
Priority 2	
WT	Assigns sending warning tone or not, before going around to the secondary economical trunk group.
ALV	Assigns restriction level of the secondary economical trunk group number.
TG	Assigns the secondary economical trunk group number.
MOD	Assigns modified digit table number for modifying the digits suitable ones for secondary economical trunk.
Priority 3	
WT	Assigns sending warning tone or not, before going around to the third economical trunk group.
ALV	Assigns the thirdly economical trunk group.
TG	Assigns the thirdly economical trunk group.
MOD	Assigns the modified digit table number for making the most suitable digits for the thirdly economical trunk group.
Priority 4	
WT	Assigns sending warning tone or not, before going around to the fourth economical trunk group.
ALV	Assigns the restriction level of the fourth economical trunk group.
TG	Assigns the fourth economical trunk group.
MOD	Assigns the modified digit table number for making the most suitable digits for the

Conditions

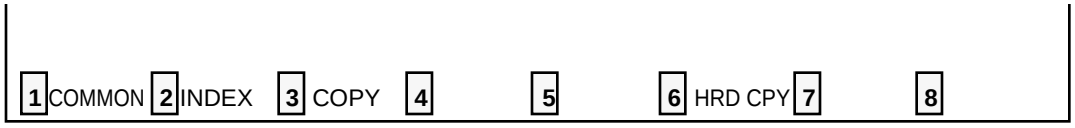
Pressing the NEXT key changes this screen as follows:



Pressing the PREV key changes the screen in reverse order.

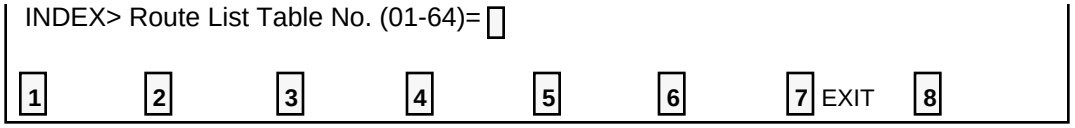
Function

The following functions appear on the function line of this screen.

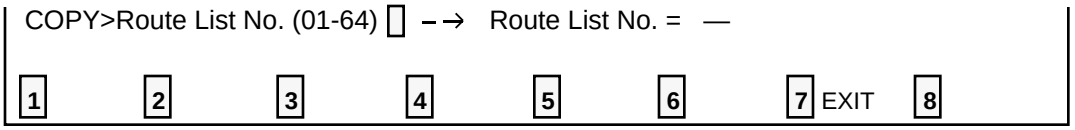


COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in all setting screens. INDEX and COPY keys are also available in this screen. The operation of function keys are described in Section 7-I “Operation of Function Keys.” Only messages are provided here.

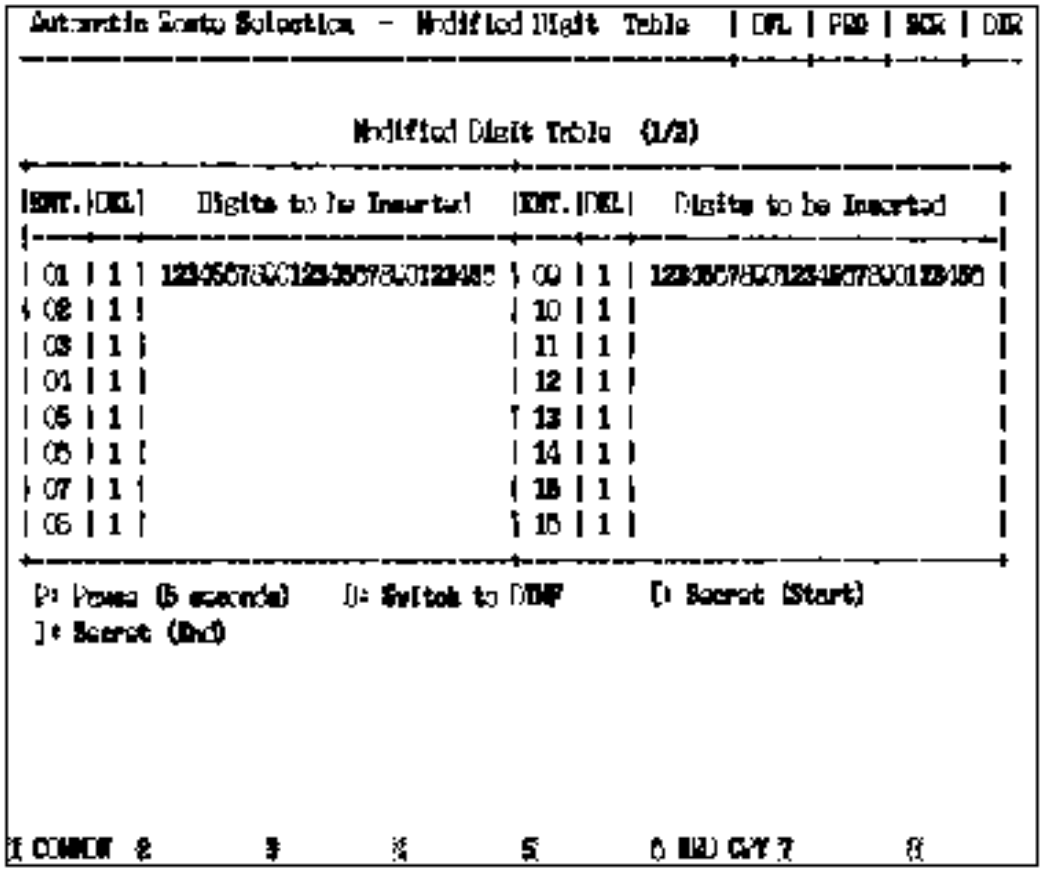
F2 :



F3 :



9.00 Modified Digit Table (for New Zealand)



Summary

Assigns digits to be deleted and digits to be inserted.
The screen consists of two screens.

(Password level: Two or higher)

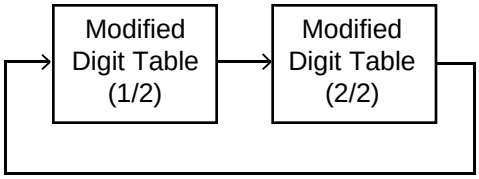
Assigning Items	Default	Selection of Value	Reference
DEL	0	0 to 9 : digit to be deleted	3-C-2.02
Digits to be Inserted	blank	Digits to be inserted Maximum 26 digits consisting of 0-9, *, # and marks below : P: Pause D: Switch to DTMF [: Start of secret number] : end of secret number (Enter [ ] in a pair)	

Description of Assigning Items

Del	Assigns the number of the digits to be deleted from the dialed digits.
Digits to be inserted	Assigns numbers and marks to be added.

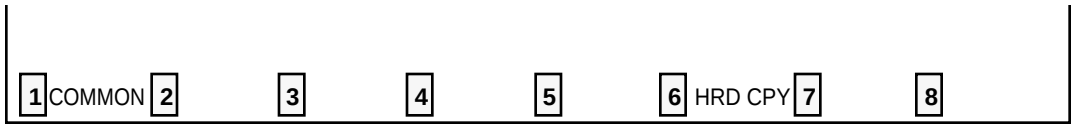
Conditions

Pressing the NEXT key changes this screen as follows:



Function

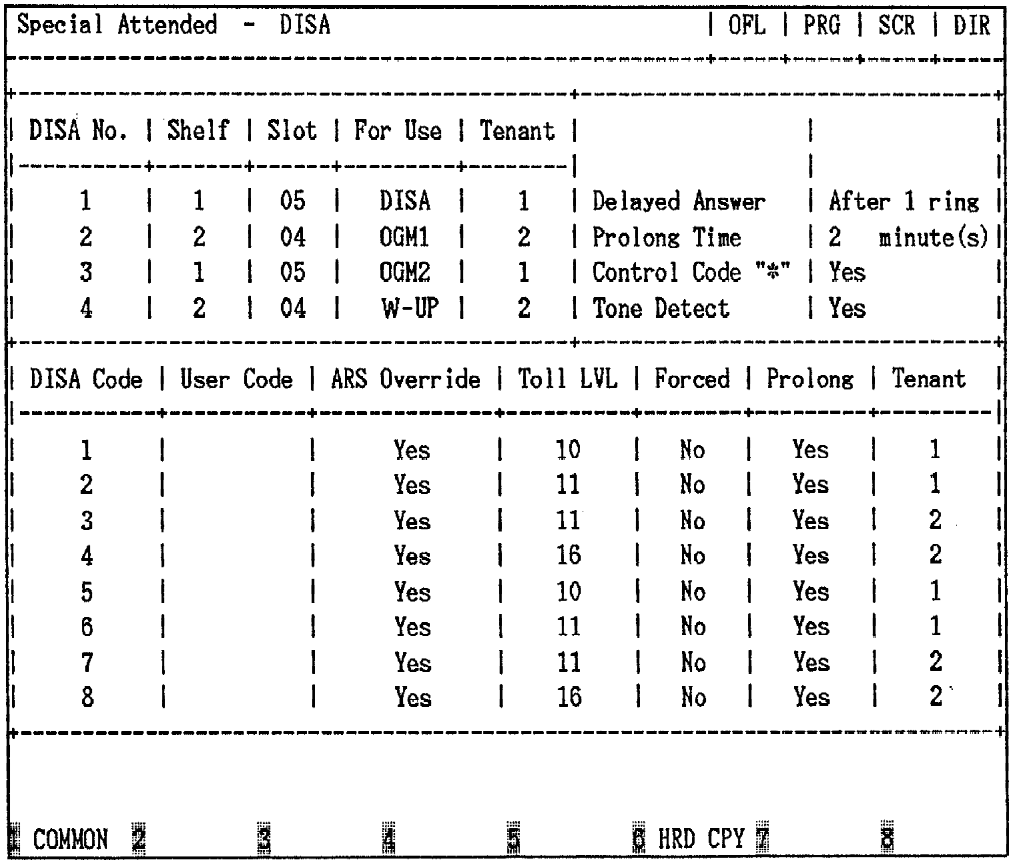
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

K. Special Attended Screen

1.00 DISA



Special Attended - DISA | OFL | PRG | SCR | DIR

DISA No.	Shelf	Slot	For Use	Tenant		
1	1	05	DISA	1	Delayed Answer	After 1 ring
2	2	04	OGM1	2	Prolong Time	2 minute(s)
3	1	05	OGM2	1	Control Code "*"	Yes
4	2	04	W-UP	2	Tone Detect	Yes

DISA Code	User Code	ARS Override	Toll LVL	Forced	Prolong	Tenant
1		Yes	10	No	Yes	1
2		Yes	11	No	Yes	1
3		Yes	11	No	Yes	2
4		Yes	16	No	Yes	2
5		Yes	10	No	Yes	1
6		Yes	11	No	Yes	1
7		Yes	11	No	Yes	2
8		Yes	16	No	Yes	2

1 COMMON 2 3 4 5 6 HRD CPY 7 8

Summary

Assigns parameters for effectuating DISA (Direct Inward System Access) function.

(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
DISA No. (1 to 4) For Use	DISA	DISA : For DISA feature OGM1 : For UCD-OGM 1 OGM2 : For UCD-OGM 2 W-UP : For Wake-up Call	3-D-2.02 3-D-2.06 3-F-4.00 3-F-13.00 4-I-13.00 6-J-8.00
Tenant	1	1 : tenant 1 2 : tenant 2	3-D-2.02
DISA Code (1 to 8) User Code	blank	Four digit numbers : DISA user code blank : not assigning	3-D-2.02
ARS Override (◆ for U.S.A. and Canada only)	No	Yes : specifying a trunk group is available No : specifying a trunk group is unavailable	3-D-2.02

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
DISA Code (1 to 8) (cont.) Toll LVL	01	01 to 16 : toll restriction level	3-D-2.02
Forced	No	Yes : forced No : option	3-D-2.02
Prolong	Yes	Yes : prolonging duration is available No : prolonging duration is unavailable	3-D-2.02
Tenant	1	1 : tenant 1 2 : tenant 2	3-D-2.02
Delayed Answer	After 2 rings	Immediately : immediately After 1 ring : 1 ringing After 2 rings : 2 ringings After 3 rings : 3 ringings	3-B-10.00 3-D-2.02
Prolong Time	5	0 to 7 : minute	3-B-10.00 3-D-2.02
Control Code “* ”	Yes	Yes : Control Code is available No : Control Code is unavailable	3-D-2.02
Tone Detect	Yes	Yes : executing tone detection No : not detecting tone	3-D-2.02

Description of Assigning Items

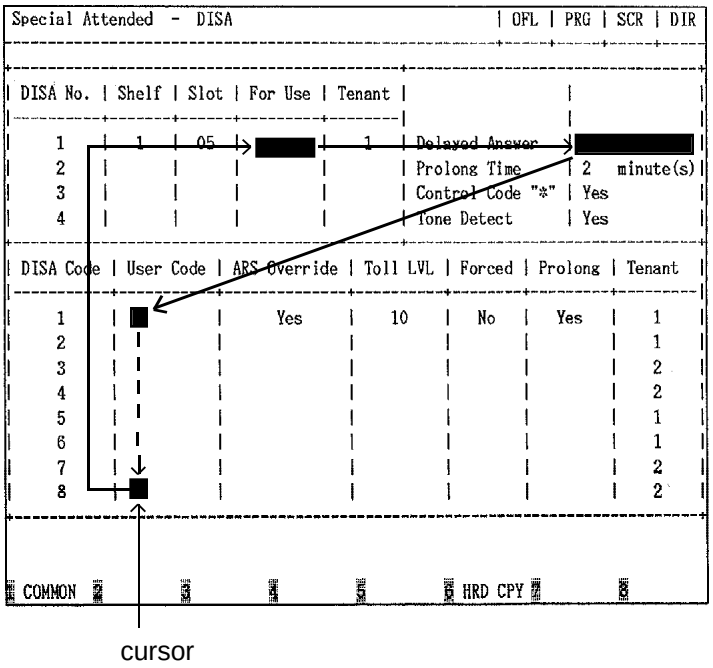
DISA No. (1 to 4)	
For use	Assigns the usage of DISA cards.
Tenant	Assigns Tenant number which each of the DISA cards one through four belongs to.
DISA Code	
User Code	Assigns User Code required for making outgoing CO call vial DISA feature.
ARS Override	Assigns whether admitting both calling by specifying a trunk group and local trunk calling or admitting only local trunk calling.
Toll LVL	Assigns toll restriction level in making outgoing calls.
Forced	Assigns account code input mode in making outgoing calls.
Prolong	Assigns admitting the prolonged duration of conversation between two outside parties.
Tenant	Assigns the tenant number which is able to use the User Codes.
Delayed Answer	Assigns the delayed answer time (from detection of DISA arriving to answer).
Prolong Time	Assigns allowable prolonged time limit for conversation between two outside parties.
Control Code "＊ "	Assigns recalling and disconnecting operation is possible or not by using "＊ " key.
Tone Detect	Assigns whether executing tone detection during CO-CO conversation or not.

Conditions

This screen cannot be selected from “Special Attended-Submenu,” if “Configuration-Slot Assignment” has no DISA card programmed.

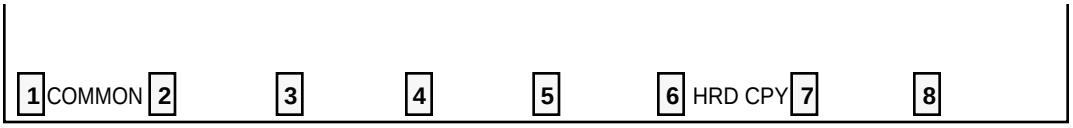
Tenant	Displays “—” if “System-Operation”, Tenant Service is set to “No.”
ARS Override	Displays “—” if “System-Operation”, Automatic Route Selection is set to “No.”

Pressing the TAB key moves the cursor as follows:



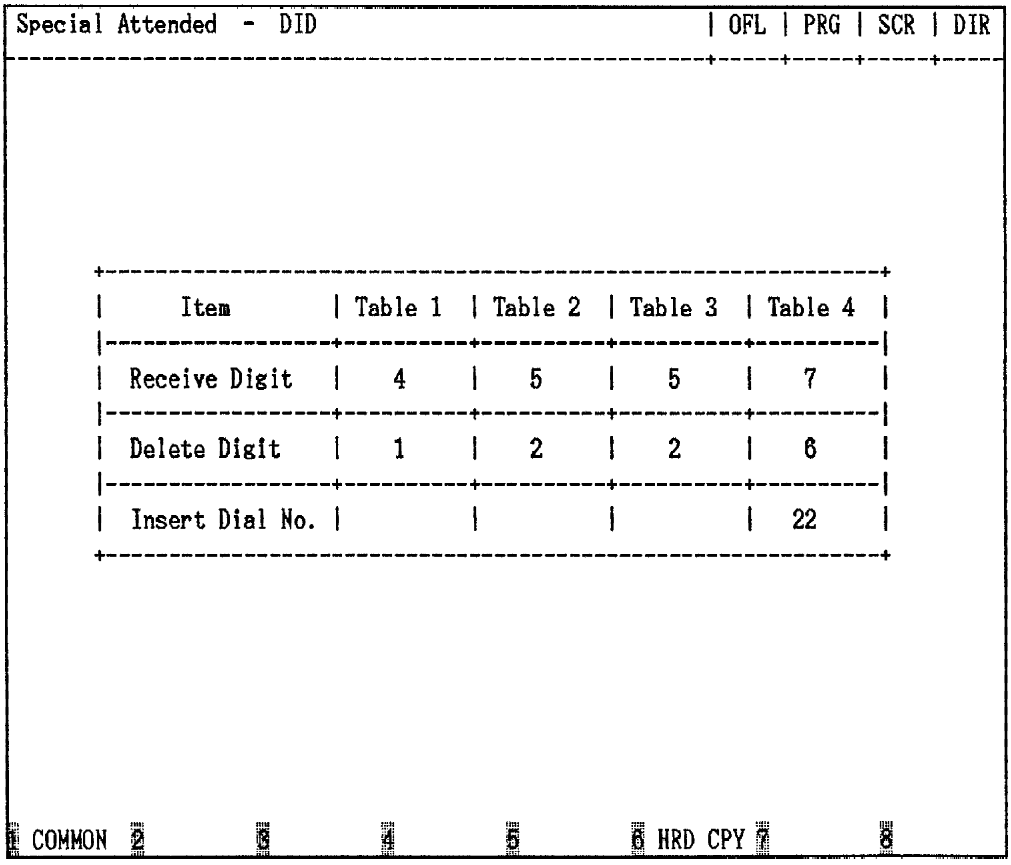
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

2.00 DID



Summary

Makes up the DID modification table for
effectuating DID (Direct Inward Dialing) function.
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Table (1 to 4) Receive Digit	1 : for Table 1 3 : for Tables 2 to 4	1 to 7 : number of receiving digit(s)	3-D-2.03
Delete Digit	0	1 to 6 : number of deleting digit(s) 0 : deleting no digit	
Insert Dial No.	blank	Maximum three digit numbers: dialing number to be added blank : inserting no digit	

Description of Assigning Items

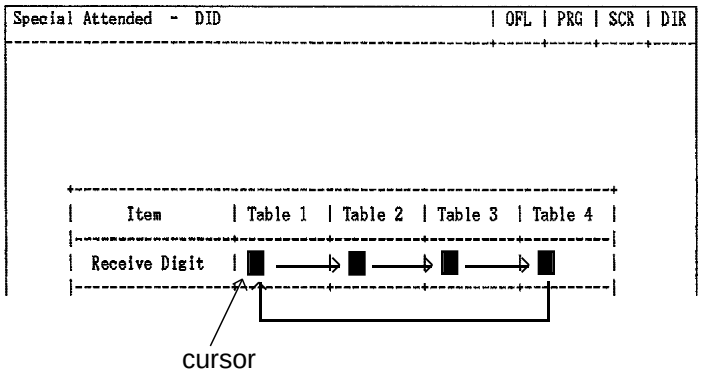
Table 1 to 4

Receive Digits	Assigns receiving dialing digits. Digits exceeding assigned digits are omitted.
Delete Digits	Assigns the leading digits to be deleted from received dialing number.
Insert Dial No.	Assigns dialing number to be inserted.

Conditions

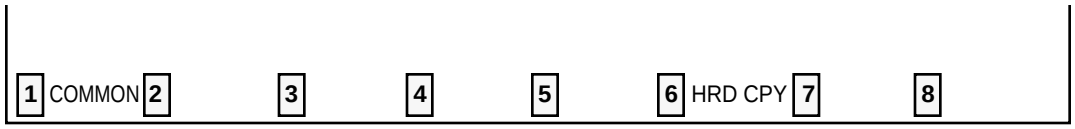
This screen cannot be selected from “Special Attended-Submenu,” if “Configuration-Slot Assignment” has no DID card programmed.

Pressing the TAB key moves the cursor as follows:



Function

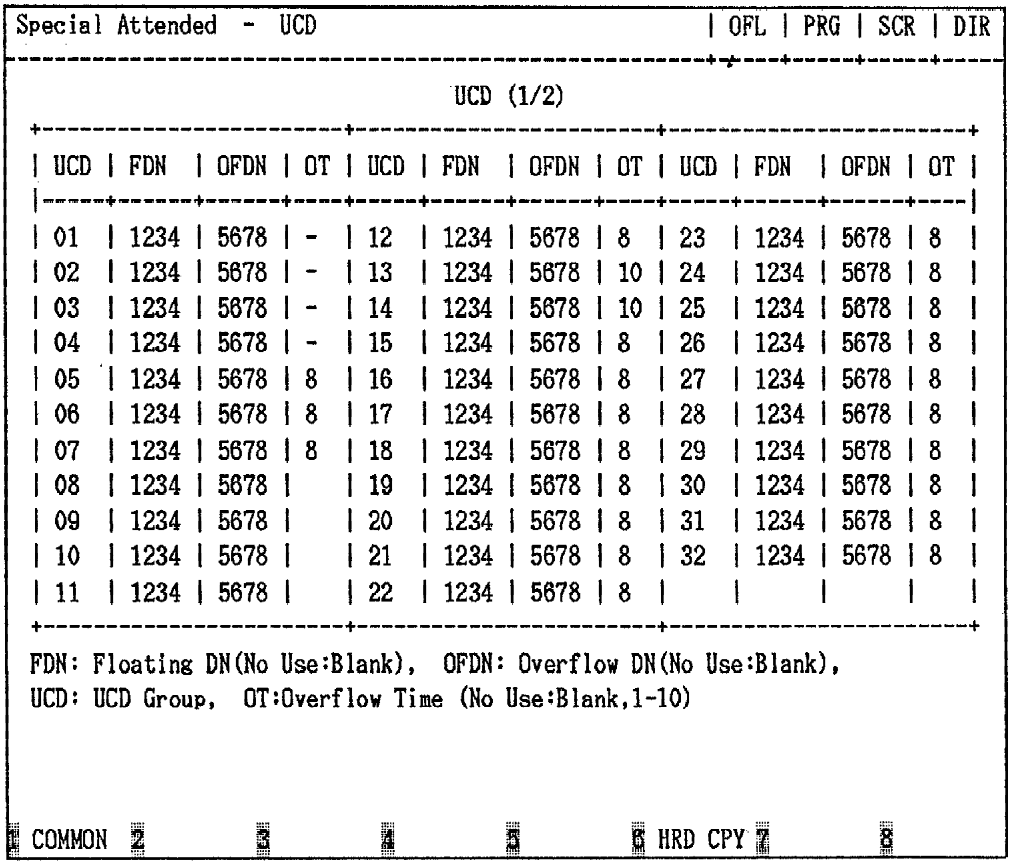
The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7-I “Operation of Function Keys.”

3.00 UCD

3.01 UCD (1/2)



```
Special Attended - UCD                                    | OFL | PRG | SCR | DIR
-----------------------------------------------------------+-----+-----+-----+-----

                                UCD (1/2)
 +---------------------+---------------------+---------------------+
 | UCD | FDN  | OFDN | OT | UCD | FDN  | OFDN | OT | UCD | FDN  | OFDN | OT |
 |-----+------+------+----+-----+------+------+----+-----+------+------+----|
 | 01  | 1234 | 5678 | -  | 12  | 1234 | 5678 | 8  | 23  | 1234 | 5678 | 8  |
 | 02  | 1234 | 5678 | -  | 13  | 1234 | 5678 | 10 | 24  | 1234 | 5678 | 8  |
 | 03  | 1234 | 5678 | -  | 14  | 1234 | 5678 | 10 | 25  | 1234 | 5678 | 8  |
 | 04  | 1234 | 5678 | -  | 15  | 1234 | 5678 | 8  | 26  | 1234 | 5678 | 8  |
 | 05  | 1234 | 5678 | 8  | 16  | 1234 | 5678 | 8  | 27  | 1234 | 5678 | 8  |
 | 06  | 1234 | 5678 | 8  | 17  | 1234 | 5678 | 8  | 28  | 1234 | 5678 | 8  |
 | 07  | 1234 | 5678 | 8  | 18  | 1234 | 5678 | 8  | 29  | 1234 | 5678 | 8  |
 | 08  | 1234 | 5678 |    | 19  | 1234 | 5678 | 8  | 30  | 1234 | 5678 | 8  |
 | 09  | 1234 | 5678 |    | 20  | 1234 | 5678 | 8  | 31  | 1234 | 5678 | 8  |
 | 10  | 1234 | 5678 |    | 21  | 1234 | 5678 | 8  | 32  | 1234 | 5678 | 8  |
 | 11  | 1234 | 5678 |    | 22  | 1234 | 5678 | 8  |     |      |      |    |
 +-----+------+------+----+-----+------+------+----+-----+------+------+----+
FDN: Floating DN(No Use:Blank), OFDN: Overflow DN(No Use:Blank),
UCD: UCD Group, OT:Overflow Time (No Use:Blank,1-10)



1 COMMON 2        3        4        5        6 HRD CPY 7        8
```

Summary

Assigns the parameters on each UCD (Uniform Call Distribution) group.
This is the first screen of two screens.

(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
UCD (01 to 32) FDN	blank	Three or four digits : Floating Directory Number blank : without FDN	3-B-3.00 3-D-2.05 to 2.06
OFDN	blank	Three or four digits : Overflow DN blank : without OFDN	3-D-2.05 to 2.06
UCD (05 to 32) OT	blank	1 to 10: minute(s) ; Overflow timer blank : without Overflow timer	3-D-2.05 to 2.06

Description of Assigning Items

UCD (01 to 32)

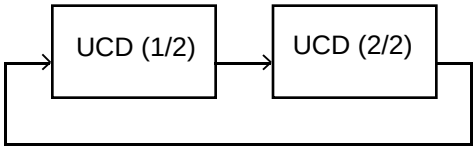
FDN	Assigns the pilot number of UCD groups.
OFDN	Assigns the call placing destination in case of overflowing.

UCD (05 to 32)

OT	Assigns the Overflow timer. Timer starts at the beginning of calls entering into the UCD queue.

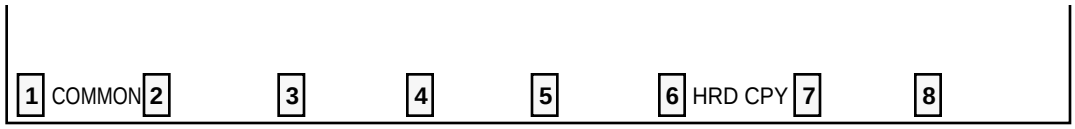
Conditions

Pressing the NEXT key changes this screen as follows:



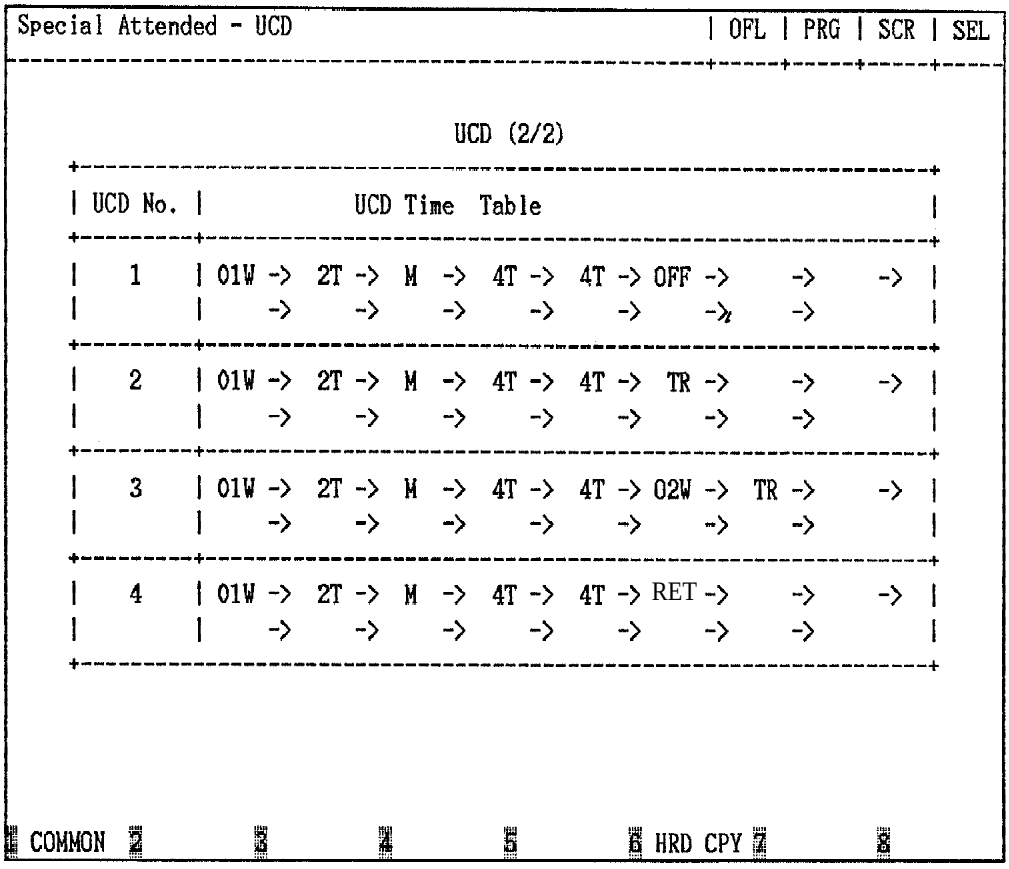
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen. For operation, refer to Section 7–I “Operation of Function Keys.”

3.02 UCD (2/2)



Summary

Assigns the parameters on the individual UCD (Uniform Call Distribution) group through the second screen.
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
UCD No. (1 to 4) UCD Time Table	blank	blank: stopper 1T : timer-15 seconds 2T : timer-30 seconds 3T : timer-45 seconds 4T : timer-60 seconds 01W : sending OGM (Outgoing Message) 1 (If busy, waiting until idle status) 02W : sending OGM 2 (If busy, waiting until idle status) 01S : sending OGM 1, (if busy, skipping) 02S : sending OGM 2, (if busy, skipping) H : sending Music on Hold TR : transferring to overflow destination OFF : disconnecting the line RET : returning to the first column	3-D-2.06

Description of Assigning Items

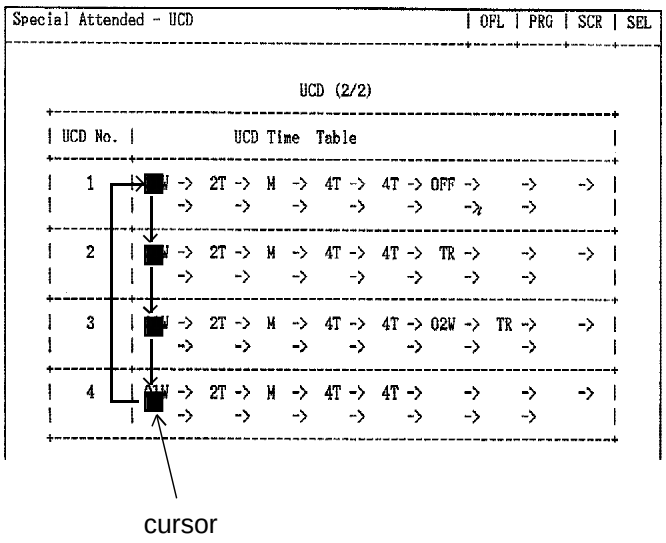
UCD No. (1 to 4)

UCD Time Table — Assigns type of treatment for the calls arrived through UCD and placed in the Busy queue.

Conditions

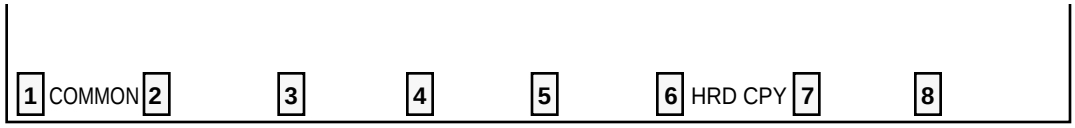
To select this screen, press the NEXT key in the “System Attended-UCD (1/2)” screen.

Pressing the TAB key moves the cursor as follows:



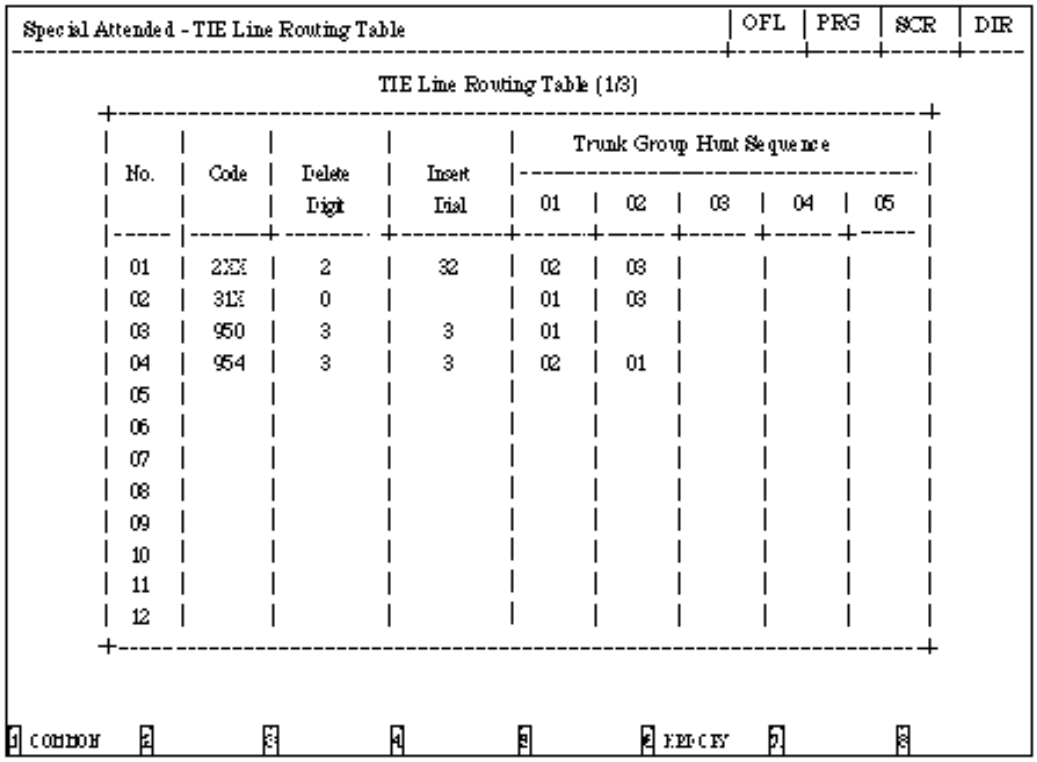
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen. For operation, refer to Section 7–I “Operation of Function Keys.”

4.00 TIE Line Routing Table



Summary

Assigns available trunk groups and parameters necessary for making TIE calls. Three screens are provided.

(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Code	blank	Up to three digits : 0 - 9, X (wild card)	3-F-14.00
Delete Digit	0	0 to 4 : number of deleting digit(s)	
Insert Dial	blank	Up to four digits : dialing number to be added	
Trunk Group Hunt Sequence	blank	01 to 16 : trunk group number	

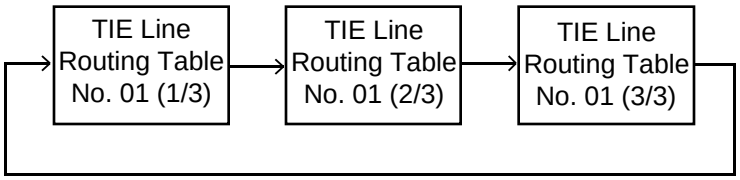
Description of Assigning Items

Up to 36 routing patterns can be programmed in this table.
This table is referenced by the system to identify the trunk route, when an extension user made a TIE call by dialing the feature number for “TIE Trunk Access” or “Other PBX Extension number”.
A routing pattern appropriate for each call is decided by the first three digits (except TIE trunk access code) of the dialed number.
The sequence is used by both tenants but the trunk group will be skipped if it does not belong to the same tenant as the caller.

Code	Assigns the leading one, two or three digits of the numbers for TIE calls. Used to determine which trunk group is used for a TIE call.
Delete Digit	Assigns the number of digits to be deleted from the beginning of the dialed digits.
Insert Dial	Assigns dialing number to be added to the beginning of the dialed digits.
Trunk Group Hunt Sequence (01 to 05)	Determines the trunk group hunt sequence to be used when placing a TIE call. The sequence is used by both tenants but trunk group will be skipped if it does not belong to the same tenant as the caller.

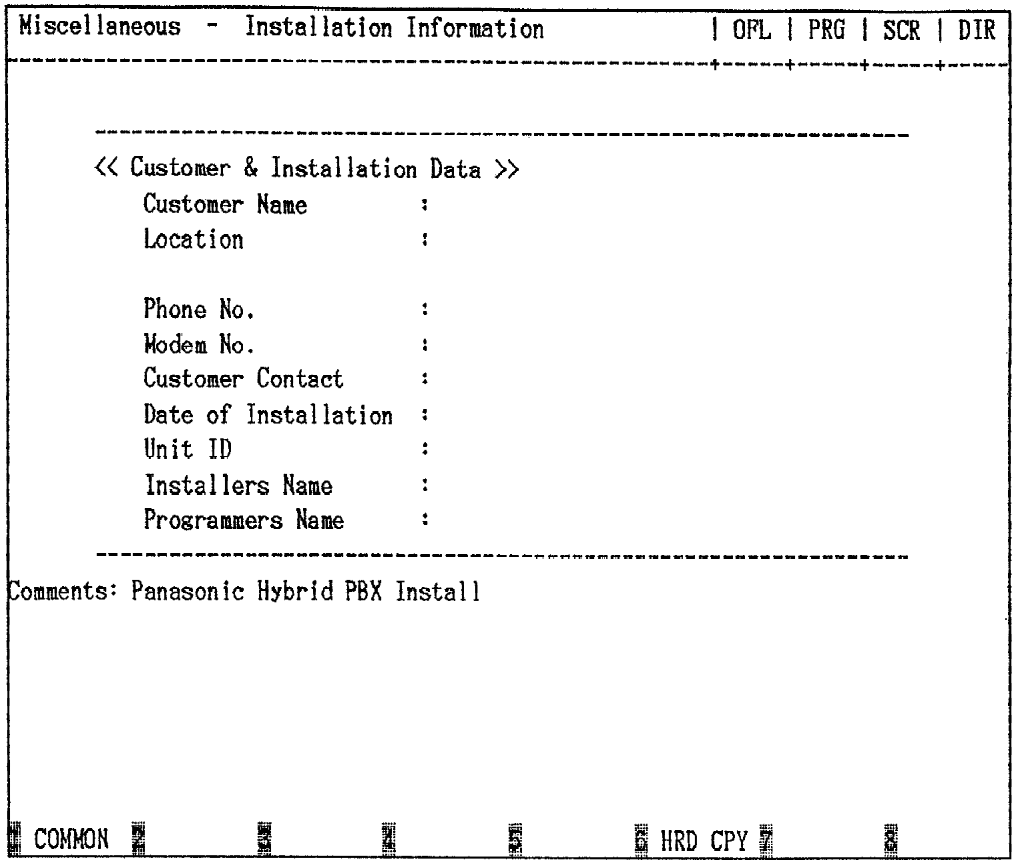
Conditions

By pressing the NEXT Key, TIE Line Routing Table screens change as follows.



L. Miscellaneous Screen

1.00 Installation Information



Summary

Assigns the customer's name, address, telephone number etc., of the installation point.
(Password level : Two or higher)

Assigning Items	Default	Selection of Value	Reference
Customer Name	blank	Letters, numbers, marks within 32 digits	None
Location	blank	Letters, numbers, marks within 64 digits	
Phone No.	blank	Letters, numbers, marks within 16 digits	
Modem No.	blank	Letters, numbers, marks within 16 digits	
Customer Contact	blank	Letters, numbers, marks within 32 digits	
Date of Installation	blank	Letters, numbers, marks within 16 digits	
Unit ID	blank	Letters, numbers, marks within eight digits	

Continued

Continued

Assigning Items	Default	Selection of Value	Reference
Installers Name	blank	Letters, numbers, marks within 32 digits	None
Programmers Name	blank	Letters, numbers, marks within 32 digits	
Comments	blank	Letters, numbers, marks within 70 digits	

Description of Assigning Items

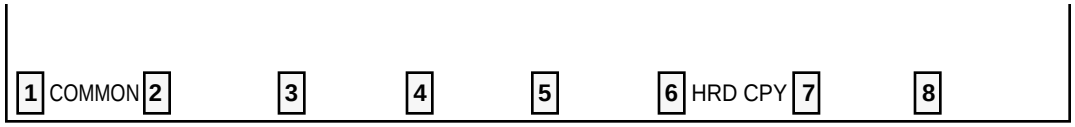
None

Conditions

None

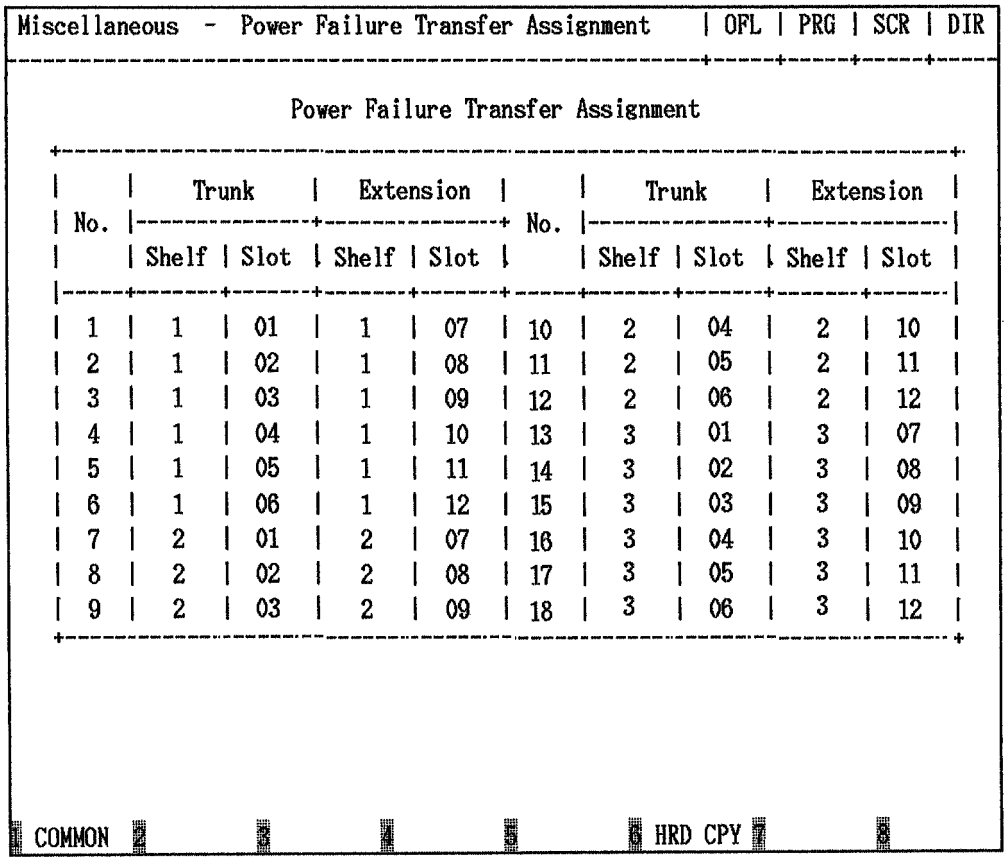
Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

2.00 Power Failure Transfer Assignment



Miscellaneous - Power Failure Transfer Assignment | OFL | PRG | SCR | DIR

Power Failure Transfer Assignment

No.	Trunk		Extension		No.	Trunk		Extension	
	Shelf	Slot	Shelf	Slot		Shelf	Slot	Shelf	Slot
1	1	01	1	07	10	2	04	2	10
2	1	02	1	08	11	2	05	2	11
3	1	03	1	09	12	2	06	2	12
4	1	04	1	10	13	3	01	3	07
5	1	05	1	11	14	3	02	3	08
6	1	06	1	12	15	3	03	3	09
7	2	01	2	07	16	3	04	3	10
8	2	02	2	08	17	3	05	3	11
9	2	03	2	09	18	3	06	3	12

1 COMMON 2 3 4 5 6 HRD CPY 7 8

Summary

For effectuating Power Failure Transfer, assigns LCOT (Loop Start Central Office Trunk) Card or GCOT (Ground Start Central Office Trunk) Card onto HLC (Hybrid Line Circuit) Card or SLC (Single Line Telephone Line Circuit) Card. (Password level : Two or higher).

Assigning Items	Default	Selection of Value	Reference
Trunk No. (1 to 18) Shelf	blank	1 : for Basic shelf 2 : for Expansion shelf 1 3 : for Expansion shelf 2 blank : not assigning	14-H-1.00
Slot	blank	01 to 12: for Basic shelf 01 to 15: for Expansion shelves 1 and 2 blank : not assigning	
Extension No. (1 to 18) Shelf	blank	1 : for Basic shelf 2 : for Expansion shelf 1 3 : for Expansion shelf 2 blank : not assigning	
Slot	blank	01 to 12: for Basic shelf 01 to 15: for Expansion shelves 1 and 2 blank : not assigning	

Description of Assigning Items

Trunk No. (1 to 18)

Shelf	Assigns shelf number of COT (LCOT, GCOT).
Slot	Assigns slot number of COT (LCOT, GCOT).

Extension No. (1 to 18)

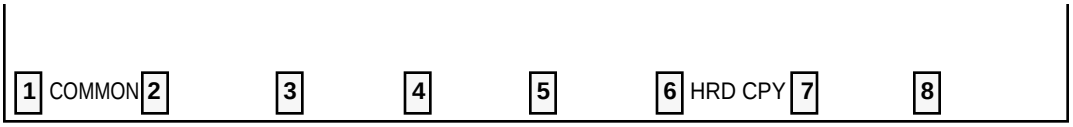
Shelf	Assigns shelf number of extensions (SLC, HLC).
Slot	Assigns slot number of extensions (SLC, HLC).

Conditions

None

Function

The following functions appear on the function line of this setting screen.



COMMON (SHOW LV, CHG LV, INS, OUS, REMOVE, EXIT) and HRD CPY keys are available in this setting screen.
For operation, refer to Section 7–I “Operation of Function Keys.”

M. Error Message Tables

1.00 Error Messages Related to the Assigning Items in the Same Screen

If there is a wrong entry in the displayed screen, the following appears on the message line when storing the entry: “Contradict the relative item internal (XXX).”

The (XXX) indicates one of the error message numbers shown below and possible causes of the errors and countermeasures for them are as follows.

Error Message No. (XXX)	Probable Cause	Countermeasure
010	(page length)-(skip length) < 6	Make (page length)-(skip length) ≧ 6.
011	(receive digit) ≧ (delete digit) is not established in - Special Attended DID screen.	Make (receive digit) ≧(delete digit).
012	Restriction Level-Operator ≦ Restriction Level -International is not established in - Operation (1/3) screen	Make Restriction Level-Operator≦ Restriction Level-International
020	Day-night combination in the incoming mode is not correct.	Check the day-night combination in incoming mode.
040	Combination of the terminals of operators 1, 2 is incorrect.	Check the combination of terminals for operators 1, 2.
050	DN is not installed.	Designate the installed DN.
051	Attempting to assign FDN's of UCD # 1 to # 4 for the overflow destination of UCD # 5 to # 32	Set FDN of other UCD, or extension directory number.
060	Attempting to assign its own extension number on the key which cannot be assigned to its own extension number. <example> DSS(ICM) DSS(DN) SDN	Specify the number except its own extension number.
070	Specifying UCD number incorrectly.	Assign UCD to only one ICM.
100	Date value is incorrect on the check of month, and leap year in the time and date setting screen.	Check the date setting.

2.00 Error Messages Related to the Assigning Items in the Other Screens

If there is a wrong entry related to the assigning items in the other screens, the following appears on the message line when storing the entry: "Contradict the relative item external (xxx)."

The (XXX) indicates an error message number shown below and possible causes of the errors and countermeasures for them are as follows.

Error Message No.	Probable Cause	Countermeasure
010	Setting DN which is not stored in the hundred block.	Enter data in hundred block. Or, set DN which is stored in hundred block.
011	Specified extension DN is not stored.	Store the extension DN.
012	Telephone type of the extension paired with DSS console is not PITS.	Paired extension should be changed to a PITS.
020	Setting DN to the DSS button.	Set DN to assignable port.
030	Setting trunk group except DID on CO-line on DID card. Or, assigning trunk group of DID to CO-line on the card except DID.	Assign trunk group to the correct kind of card.
040	Tenant is different.	Assign the same tenant.
041	As assigned to the destination of 1 : N of trunk group, impossible to change tenant.	Cancel the 1 : N destination.
042	As assigned to the destination of doorphone call, impossible to change tenant.	Cancel the doorphone call destination.
043	Setting one pickup group to ICM & PAG group belonging to different tenant.	Set it to the same tenant. Or, change tenant after deleting pickup group.
044	Changing tenant of ICM/PAG group without canceling extensions.	Change after canceling extensions. Impossible to move extensions to the other tenant.
045	As assigned to the destination of paging from attendant console, impossible to change Tenant.	Change the destination of attendant paging.
046	As assigned to call placing mode of Trunk group, impossible to change Tenant.	Change assigning of incoming mode.
047	As assigned to night answer point for CO-line, impossible to change Tenant.	Change assignment of night answer point.
048	Attempting to change the tenant of Trunk group without removing the CO lines which belong to the trunk group.	Change after removing the CO lines. Impossible to move CO lines to the other tenant.
049	Attempting to change the tenant of Trunk group without canceling the setting of 1:N destination for the trunk group.	Change after canceling 1: N destination.
050	Deleting is impossible because it is assigned in another item.	Change the item beforehand.

Error Message No.	Probable Cause	Countermeasure
052	Extension assigned to NEXT HUNT STATION is already assigned to NEXT HUNT STATION for another extension.	Assign another extension or clear the previous assignment.
053	Relation between ICM group and Pickup group assigned for an extension is incorrect.	Make them in proper relation.
054	As PRV-CO is assigned by PITS button assignment, impossible to change the type of the trunk group to any other than PRV.	Cancel the assignment of the PITS button.
055	As assigned to Single CO by PITS button assignment, impossible to change the 1:1 destination of the line to a different PITS.	Cancel the assignment of the PITS button.
056	Attempting to change the tenant of Trunk group without canceling the setting of 1:1 destination.	Change the tenant after clearing all 1:1 destinations of CO lines belonging to the group.
057	UCD group is not assigned.	Assign Pickup group to a UCD group.
058	Attempting to assign DID to Trunk group which has CO lines belonging to the group.	Assign DID after clearing all CO lines belonging to the group.
060	Attempting to assign the unstored ICM number to the DSS (ICM) button.	Assign stored ICM number.
070	Attempting to assign the ATT which is not registered as the operator to the maintenance device.	Register the ATT as an operator, or specify another device.
080	Specified CO line does not exist.	Specify proper CO line.
081	Specified CO line is not the PVL.	Specify proper CO line.
082	Specified CO line is already assigned as a DIL 1:1 or PRV-CO by another extension.	Specify another CO line or cancel the assignment of the desired line.
083	Impossible to assign because the programmings for specified CO does not satisfy the condition.	Change call placing type to 1:1, or change group type to unique type.
084	Impossible to assign because the programmings for specified CO does not satisfy the condition.	Change call placing type to 1:N, and group type to group.
090	Specified External Pager is not existing.	Specify an existing pager.
101	Attempting to delete the extension which is registered as an operator of the tenant.	Cancel the assignment as an operator.
102	Attempting to delete the extension which is registered as the destination of intercept routing for the Trunk group.	Cancel the assignment as the destination.
103	Attempting to delete the extension which is registered as an ATT busy out extension of Trunk group.	Cancel the assignment as an ATT busy out extension.

Error Message No.	Probable Cause	Countermeasure
104	Attempting to delete the extension which is registered as an ATT overflow extension for Trunk group.	Cancel the storage as an ATT overflow extension.
105	Attempting to delete the extension which is registered as an overflow extension for UCD group.	Cancel the storage as an overflow destination.
106	Attempting to delete the extension/RMT which is registered as a DIL 1:1 call destination of CO line.	Cancel the storage as a DIL 1:1 call destination.
107	Attempting to delete the extension which is registered as a night answer point of CO line.	Cancel the storage as a night answer point.
108	Attempting to delete the extension which is registered as a walking station.	Cancel the storage as a walking station.
109	Attempting to delete the PITS paired with DSS-console.	Change the PITS paired with DSS Console.
110	Attempting to delete the extension which is registered as a night answer point for tenant.	Cancel the storage as night answer point.
111	Attempting to delete the extension which is set to SDN.	Cancel the assignment of SDN.
113	Attempting to delete the ATT when the ATT is assigned for day incoming mode in Trunk group.	Change the incoming mode destination other than ATT.
114	Attempting to delete RMT when the RMT alarm is assigned.	Cancel the assignment of RMT alarm.
115	Attempting to delete the external pager which is registered as UNA point for CO line.	Change the night answer point.
116	Attempting to delete the external pager which is registered as a TAFAS for day/night incoming mode for Trunk group.	Change the incoming mode.
117	Attempting to delete the external pager which is registered as a paging destination for the ATT.	Change the paging destination.
118	Attempting to delete the ATT which is specified for maintenance device.	After changing maintenance device, delete the ATT.
119	When deleting ATT, combination of operators 1 and 2 is incorrect.	Check the combination of operators.
121	Impossible to delete the card, for all of the ports belonging to the card is not made pre-installed.	Delete all the ports belonging to the card.
122	Impossible to delete the card, for DN is assigned to an extension port.	Delete all the ports belonging to the card.

Error Message No.	Probable Cause	Countermeasure
123	Deleting the card is impossible, for it is assigned as a maintenance device.	Change the maintenance device.
124	Deleting the card is impossible, because it is assigned for the intercept routing destination for the Trunk group.	Change the intercept routing destination.
125	Deleting the card is impossible, because it is assigned for doorphone call destination.	Cancel the doorphone call destination.
126	Attempting to delete the ATT which is specified for incoming mode destination.	Change the incoming mode destination.
127	Attempting to delete the DISA which is specified for incoming mode.	Change the incoming mode.
128	Attempting to assign NAG as Night Answer Point of a CO line belonging to a Trunk Group whose Incoming Mode (Night) is not FIXED.	Assign Incoming Mode (Night) to FIXED.
130	Changing Tenant Service from “Yes” to “No” is impossible as all ATT's are not assigned to tenant 1.	Assign ATT's to tenant 1.
131	Changing Tenant Service from “Yes” to “No” is impossible as all music sources are not assigned to tenant 1.	Assign music sources to tenant 1.
132	Changing Tenant Service from “Yes” to “No” is impossible as all external pagers are not assigned to tenant 1.	Assign external pagers to tenant 1.
133	Changing Tenant Service from “Yes” to “No” is impossible as all doorphones are not assigned to tenant 1.	Assign doorphones to tenant 1.
134	Changing Tenant Service from “Yes” to “No” is impossible as all DISA's are not assigned to tenant 1.	Assign DISA's to tenant 1.
135	Changing Tenant Service from “Yes” to “No” is impossible as all AGC's are not assigned to tenant 1.	Assign AGC's to tenant 1.
136	Changing Tenant Service from “Yes” to “No” is impossible as all paging groups are not assigned to tenant 1.	Assign all paging groups to tenant 1.
137	Changing Tenant Service from “Yes” to “No” is impossible as all ICM groups are not assigned to tenant 1.	Assign all ICM groups to tenant 1.
138	Changing Tenant Service from “Yes” to “No” is impossible as all trunk groups are not assigned to tenant 1	Assign all trunk groups to tenant 1.
140	Deleting expansion shelf is impossible, as one or more cards are assigned to the expansion shelf.	Delete all the cards in the expansion shelf.

Error Message No.	Probable Cause	Countermeasure
141	Attempting to remove an extension or trunk port which is registered in Power Failure Transfer (PFT) assignment.	Cancel the PFT assignment of the corresponding card, and then delete the port.
150	Impossible to change the Numbering Plan to “Fixed,” because there exist DN's which should be blank in the “Fixed” mode in the Hundred Block.	Clear DN's which should be blank.
160	Impossible to change ICM/Paging group, for the pickup group belonging to the ICM/Paging group contains extensions.	Change after deleting all the extensions in the pickup group.

3.00 Other Error Messages

Error Message	Probable Cause	Countermeasure
Illegal parameter	Unacceptable value is assigned.	Assign an allowable value.
Parameter is not consecutive	Space exists between items.	Remove the space.
This parameter cannot assign	Assigned selection value is not for the item.	Set the assignable value.
Duplicate parameter definition internal	The number which is set previously in this screen is assigned again.	Set the number different from the previous number.
Duplicate parameter definition external	The number which is set previously in a different screen is assigned.	Set the number different from the previous number.
Not installed	Device is not installed.	Assign the installed device.
Invalid status	Status of the specified device does not accept this command.	Change the status of the device to be acceptable for the command.
Diagnostic failure	Diagnostic error is checked when In-Service command is executed.	Execute test.
Insufficient privilege	Privilege level is lower than specified level.	Increase the privilege level through the Change level function.
Failure	Port test is made during a card malfunction.	Repair the malfunctioning card.
Service violation	Specified service is not executed.	Check specified service.
Already accessed by another device	Another maintenance device (remote, PITS, system) is in use.	Wait until another device is finished or let him finish.
Printer is not ready	Printer is not connected to the system or the power is off.	Connect the printer, and make the power on.
Cannot print out in remote	Print out is unavailable from Remote.	Execute print out on-site.
Waiting	Changing of program data is suspended because call placement is going on.	Wait for a while or cancel the setting by “CTRL+C”
Calender IC trouble	Calendar IC malfunction.	Repair calender IC.
Device error	Backup device is not connected (only when maintenance device is ATT).	Connect the backup device to SIO # 1 Port.
Version error	Different version at the time of backup.	Match the backup version.
Checksum error	A checksum error has been detected.	Communication line is defective, or backup data is destroyed.

Error Message	Probable Cause	Countermeasure
Illegal code detected	Improper data is received.	Communication link is defective, or backup data is destroyed.
Off line	Execution is impossible during off-line.	Execute during on-line.
Status is already set	Impossible change such as [INS] ⟶ [INS], [OUS] ⟶ [OUS] is attempted.	Impossible.
Too many equipment assigned.	The number of equipment you attempt to assign is over the limit.	Assign the equipment within the limit of number.
Some extension are using that message	Attempting to change or delete the message which is in use by an extension user.	Change or delete the message after the extension cancels the setting.

Section 10

System Programming

Dumb Type Terminal

(Section 10)

System Programming

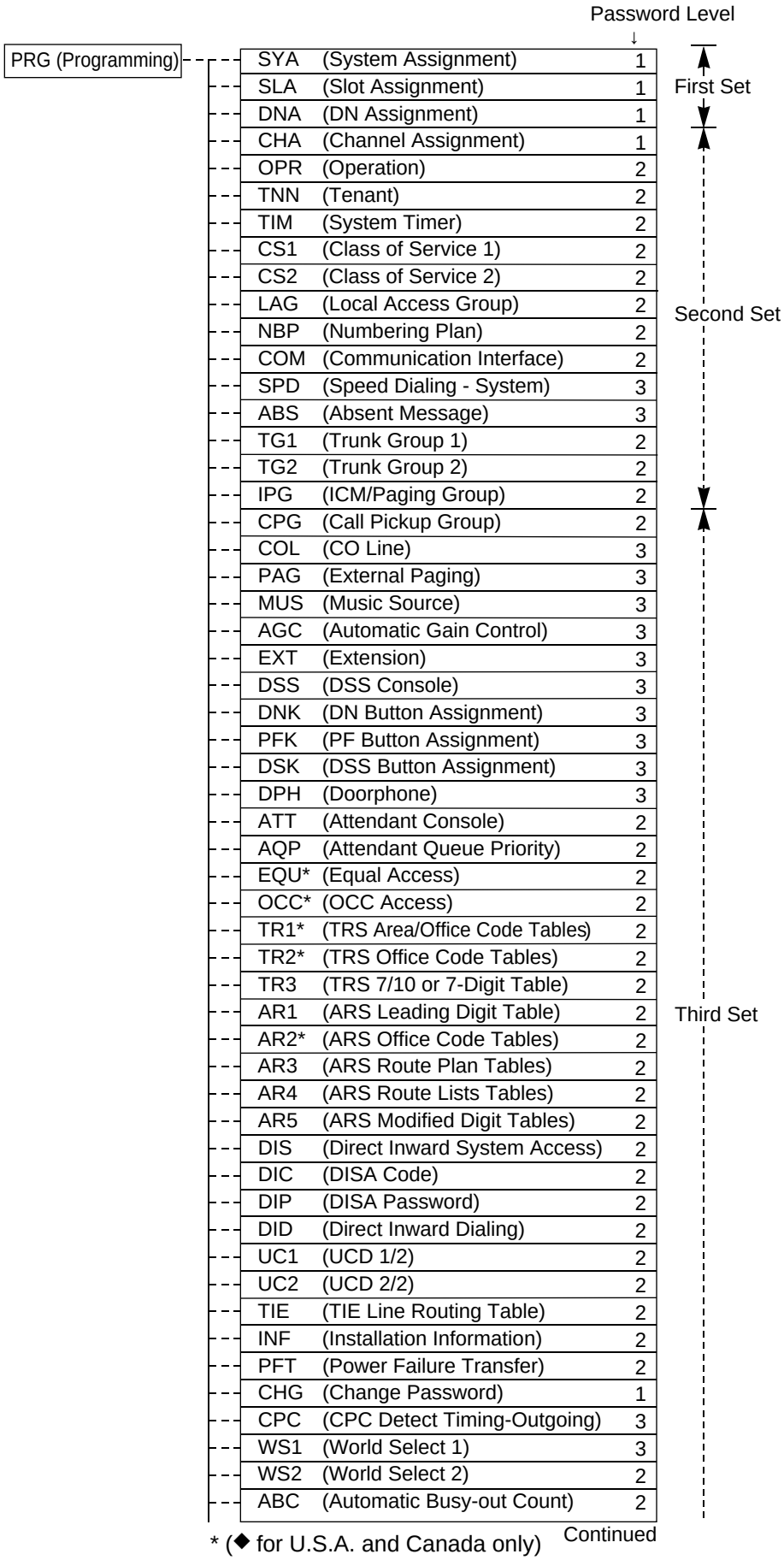
Dumb Type Terminal

Contents

A. Introduction

This section provides system programming using Dumb type terminal. Before starting system programming, Section 8 “Preparation for Programming and Maintenance (Dumb Type Terminal)” must be read. This section describes the basic operations for programming. Programming mode consists of a variety of commands, which enable users to assign or change various parameters concerning the system administration such as Tenant, Class of Service, Numbering Plan and so on. A list of all programming commands is provided on the following page.

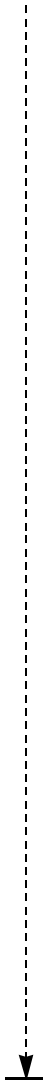
B. Construction of Programming Mode



* (◆ for U.S.A. and Canada only)

Continued

WS3	(World Select 3)	2
CAI	(CO Access Instantly)	2
ACV	(Account Code Verified)	2
ACL	(Account Code Entry on Long Distance Calls)	2
SPB	(Speed Dialing Boundary)	2
NAG	(Night Answer Group)	2
PRD	(Polarity Reversal Detection)	2
VMD	(Voice Mail DN)	2
MBN	(Mail Box Number)	2
WSD	(Waiting for Second Dial Tone)	2
EQC*	(Equal Access Code)	2
WS4	(World Select 4)	2
TAC	(TIE Account Code)	2
CLK	(Clock Mode)	2
CLP	(Clock Priority)	2
TRR	(TIE Trunk Relay Restriction)	2
MFC	(MFC Sequence Parameter)	2
CPD	(Charge Password)	2
RAT	(Charge Rate)	2
CLT	(Charge Limitation)	2
EMS	(E&M Selection)	2
TDM	(Tone Detection Mode (DISA/AGC))	2
LHS	(Line Hunting Sequence)	2
EFO	(ESF Frame Option)	2
ULO	(UCD Auto Log-out Operation)	2
MRO	(MFC-R2 Option (E-1))	2
ESO	(E-1 Signaling Option)	2
LCD	(Limited Call Duration)	2
CFM	(Call Forwarding-Follow Me)	2
PEM	(Pulsed E&M)	2
TCI	(TIE Caller ID Integration)	2
AWT	(Answer Signal Wait Time)	2



These programs must be done in order from “First Set” “Second Set” to “Third Set” shown in the table. For example, if you program Operation (OPE) before doing System Assignment (SYA) program, an error message appears.

C. Programming Commands

1.00 System Assignment (SYA)

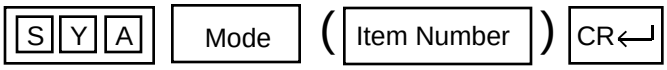
Description

This command is used to configure the system for:

- Expansion Shelf (1, or both 1 and 2)
- T-SW Conference Expansion Card

To expand the conference trunks, T-SW Conference Expansion Card (KX-T336104) must be installed.
(Password level : One)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Expansion Shelf	N: expansion shelf not installed 1: expansion shelf 1 available 2: both expansion shelves 1 and 2 available
2	TSW Additional CONF	Y: conference expansion card installed N: conference expansion card not installed

Conditions

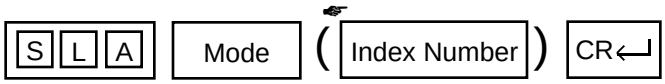
None

2.00 Slot Assignment (SLA)

Description

To assign the type of card equipped in each free slot on the basic and expansion shelves.
(Password level : One)

Input Format



☛ In the AT mode, to display or edit in the conversation style, do not enter the index number :

<Example>
When you enter; PRG>SLA AT (↵), the display starts from the slot number 101 and moves one by one.

Index Number

Index Number	Explanation
X XX slot (01 to 15) shelf (1 to 3)	Physical number (101 to 315)

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Card Type	XX (00 to 19) 00 : none 01 : PLC (Proprietary Integrated Telephone System Line Circuit) card 02 : HLC (Hybrid Line Circuit) card 03 : SLC (Single Line Telephone Circuit) card 04 : MSLC(SLC with Message Waiting) card 05 : RCOT (LCOT with Polarity Reversal Detection) card 06 : PCOT (LCOT with Pay Tone Detection) card 07 : LCOT (Loop Start Central Office Trunk) card 08 : GCOT (Ground Start Central Office Trunk) card 09 : DID (Direct Inward Dialing) card 10 : E&M (E&M Trunk) card 11 : T-1 (T1 DIGITAL TRUNK CARD)

Continued

Continued

Item Number	Assigning Items	Input Value
		12 : E-1 (E1 DIGITAL TRUNK CARD) 13 : AGC (Automatic Gain Control) card 14 : DISA (Direct Inward System Access) card 15 : OPX (Off Premise Extension) card 16 : ATLC (Attendant Console Line Circuit) card 17 : DPH (Doorphone Circuit) card 18 : RMT (Remote Circuit) card 19 : OHCA (Off-Hook Call Announcement) card (◆ 06: GCOT is available for U.S.A. and Canada only.)

Conditions

If “SLA” command is entered without index number, all physical slot numbers (except 113 and 115) will be displayed in ascending order (from 101 to 315).

It is impossible to select Index No.113 and 115, because Index No.113 is fixed to CPU card and 115 is fixed to T-SW card.

If Index No.114 is selected, assignable input value is limited to “00: none” or “19: OHCA.”

T-1/E-1 card should be assigned to FS01, 05 or 09 of any shelf.
- One T-1 card occupies three slots. If you assign a T-1 card to FS01, FS02 and FS03 are not available for other cards. “ ╪ ╪ ╪ ” is displayed in these two slots and the cursor skips them.
- One E-1 card occupies four slots. If you assign an E-1 card to FS01, FS02 through FS04 are not available for other cards. “ ╪ ╪ ╪ ” is displayed in these three slots and cursor skips them.

If no CO trunk card is assigned, it is not possible to program “CO Line (COL).”

If AGC card is not assigned, “Automatic Gain Control (AGC)” cannot be programmed.

If DPH card is not assigned, “Doorphone (DPH)” cannot be programmed.

If ATLC card is not assigned, it is not possible to program “Attendant Console (ATT)” and “Attendant Queue Priority (AQP).”

If DISA card is not assigned, it is not possible to program “DISA (DIS)”, “DISA Code (DIC)” and “DISA Password (DIP).”

If DID card is not assigned, it is not possible to program “DID (DID).”

When assigning a card, the card status is Out of Service (OUS). When using the card, the card status should be set to In Service (INS).
For “In Service (INS)” and “Out of Service (OUS)”, refer to Section 8-F-3.00 “In Service (INS)” and Section 8-F-4.00 “Out of Service (OUS).”
For confirming whether card status is INS or OUS, refer to Section 15-F-1.02 “Card Status Screen.”

When deleting or changing the pre-assigned card type, the conditions should be the followings:

- The card status is OUS or Fault.
- All of the port data has been deleted.

However, if there exist port data, it is possible to change the cards as follows:

- PLC card ⟷ HLC card
- SLC card ⟷ HLC card

Deleting the ATLC card will be an error if there exist the following assignments:

- "Trunk Group (TG1)",
  Incoming Mode (Day) is set to "1 (ATT)."
  Intercept Routing (Day) is set to "A (ATT)."
- "Doorphone (DPH)",
  Doorphone Assignment is set to "A(ATT)."

Deleting the DISA card will be an error if there exist the following assignments:

- "Trunk Group (TG1)",
  Incoming Mode (Day) is set to "4 (DISA)."
  Incoming Mode (Night) is set to "4 (DISA)."

Deleting the HLC, SLC, LCOT or GCOT card will be an error if there is the following assignment to the slot to be deleted:

- "Power Failure Transfer (PFT)"

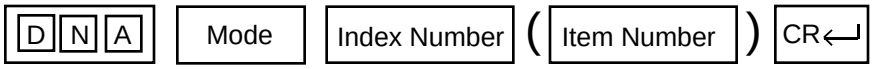
See Section 1-A-5.00 "Service Cards Description" for installing the cards in combination.

3.00 DN Assignment (DNA)

Description

To assign a DN (directory number) to each port.
(Password level : One)

Input Format



Index Number

Index Number	Explanation
X XX slot (01 to 15) shelf (1 to 3)	Physical number (101 to 315)

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Port 1	Three or four numeric digits: directory number
2	Port 2	
3	Port 3	
4	Port 4	
5	Port 5	
6	Port 6	
7	Port 7	
8	Port 8	

Conditions

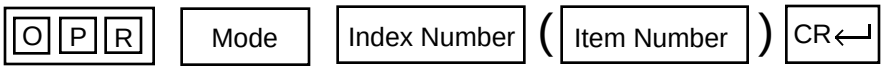
None

4.00 Operation (OPR)

Description

To assign data common to the whole system, by using indexes 1 and 2.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
1	The first Operation block

Input Value for Item Number

Item Number	Assigning Items	Input Value
01	Tenant Service	Y: Tenant Service is available N: Tenant Service is unavailable
02	Automatic Route Selection	Y: Automatic Route Selection is available N: Automatic Route Selection is unavailable
03	Numbering Plan	1 : Flex 2 : Fixed 1 3 : Fixed 2
04	Privacy on DN Key	1 : privacy enabled 2 : privacy disabled
05	Restriction Level - Operator (◆ for U.S.A. and Canada only)	01 to 16 : the restriction level for telephone company operator call
06	Restriction Level - International (◆ for U.S.A. and Canada only)	01 to 16 : the restriction level for international call

Continued

Continued

Item Number	Assigning Items	Input Value
07	Home Dialing Plan (◆ for U.S.A. and Canada only)	A : Type-A : 1+NXX+NXX+XXXX NXX+XXXX B : Type-B : NPX+NXX+XXXX NNX+XXXX C : Type-C : 1+NPX+NXX+XXXX 1+NNX+XXXX NXX+XXXX D : Type-D : 1+NXX+NXX+XXXX NXX+NXX+XXXX NXX+XXXX (N: 2 to 9, P: 0,1, X: 0 to 9)
08	DSS Operation Mode	1 : disconnect and call 2 : hold and transfer
09	Busy Tone	1 : busy tone 1 2 : busy tone 2
10	Held Call Reminder	Y: Held Call Reminder is enabled N: Held Call Reminder is disabled
11	Beep Tone for Bsy-ovr / Brg-in	Y: overriding with beep tone N: overriding without beep tone
12	External Paging 1	Y: using external pager 1 N: not using external pager 1
13	External Paging 2	Y: using external pager 2 N: not using external pager 2
14	External Music Source 1	Y: using external music source 1 N: not using external music source 1
15	External Music Source 2	Y: using external music source 2 N: not using external music source 2
16	Idle Line Preference	1 : off-hook selects an idle DN button 2 : off-hook selects an idle CO button
17	FDN for General Operator Call 1	0 : no FDN DN XXXX (XXXX: three or four numeric digits): FDN for general operator call 1
18	FDN for General Operator Call 2	0 : no FDN DN XXXX (XXXX: three or four numeric digits): FDN for general operator call 2
19	PBX Code	0 : no PBX code Up to three numeric digits can be entered.

Conditions

Item Number		
01	Tenant Service	If “N” is selected, the assigning items listed below cannot be programmed: “Trunk Group 1 (TG 1)”, Tenant “Pager (PAG)”, Tenant “Music Source (MUS)”, Tenant “AGC (AGC)”, Tenant “Doorphone (DPH)”, Tenant “DISA(DIS)”, Tenant
02	Automatic Route Selection	If set to “N,” it is impossible to program “DISA Code (DIC)”, ARS Override.
03	Numbering Plan	If set to “1,” “Numbering Plan (NBP)” is changeable.
07	Home Dialing Plan	Dial type must be selected depending on the type of the area where this system is installed.
10	Held Call Reminder	If set to “N,” Held Call Reminder does not function. However, it is possible to program the items below: “System Timer (TIM)”, Held Call Reminder/Held Call Reminder (ATT) “Attendant Queue Priority (AQP)”, Held Call Reminder
12, 13	External Paging 1,2	If both are set to “N,” Paging through External Pagers does not function and “Pager (PAG)” does not appear. However, it is possible to program the items below: “Class of Service 2 (CS2)”, External Paging 1/2 “Numbering Plan (NBP)”, External Paging/External Paging Answer If either is set to “N,” it is not possible to program its “Pager (PAG)”, Tone/ BGM.
14, 15	External Music Source 1,2	If both are set to “N,” “Music Source (MUS)” does not appear. If either is set to “N,” it is not possible to program its “Music Source (MUS)”, For Use. [Note] (for areas other than U.S.A. and Canada) Either Internal or External Music Source can be used depending on the selection of the Music Source Selector Switch. If set to “INT MUS,” assign “External Music Source 1” to “N” and “External Music Source 2” to “Y”.

Index Number

Index Number	Explanation
2	The second Operation block

Input Value for Item Number

Item Number	Assigning Items	Input Value
01	System Administration Device	1 : VT220/VT100 2 : Dumb terminal 3 : Attendant Console 1 4 : Attendant Console 2
02	SMDR	Y: SMDR enabled N: SMDR disabled
03	Page Length	04 to 99: page length (number of lines)
04	Skip Perf.	00 to 95: skip perforation • Note: if printing out system data: (page length)- (skip perforation)≧23 if printing out call processing information : (page length)- (skip perforation)≧6 if printing out error log data : (page length)- (skip perforation)≧4
05	Outgoing Duration Log	0 : do not print outgoing calls 1 : print outgoing toll calls only 2: print all outgoing calls (◆ Input Value “1” is available for U.S.A. and Canada only)
06	Incoming Duration Log	Y: print incoming calls N: do not print incoming calls
07	Attendant Duration	1 : Attendant Console duration recorded 2 : Attendant Console duration included with destination
08	Special Carrier Name (◆ for U.S.A. and Canada only)	1 : print out default value 2 : print out users name 3 : print out dialing number
09	Print Secret Dial	Y: print secret dial numbers N: do not print secret dial numbers
10	Print Error Log	Y: print the error log N: do not print the error log
11	Print Programming	Y: print programming N: do not print programming

Continued

Continued

Item Number	Assigning Items	Input Value
12	Print Traffic	Y: print traffic N: do not print traffic
13	Start Time of Traffic Measurement	XX: XXX 01 to 12: hour 00 to 59: minute A or P : a.m. or p.m.
14	Start Time of Test	XX: XXX 01 to 12: hour 00 to 59: minute A or P : a.m./p.m.
15	Remote Directory Number	0 : none DN XXXX (XXXX: three or four numeric digits) : Floating Directory Number
16	Remote Alarm	Y: Remote Alarm enabled N: Remote Alarm disabled
17	Destination Address	Maximum 26 numeric digits : telephone (modem) number of the destination for Remote Alarm

Conditions

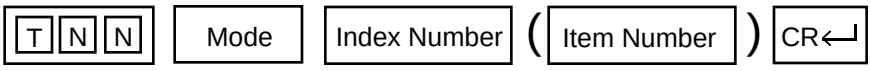
Item Number		
02	SMDR	If set to “N,” the following items cannot be programmed: “Operation (OPR)”, (Index Number 2) Page Length Skip Perf. Outgoing Duration Log Incoming Duration Log Attendant Duration Special Carrier Name Print Secret Dial Print Error Log Print Programming Print Traffic
15	Remote Directory Number	To assign this item, RMT card is necessary,
16, 17	Remote Alarm/ Destination Address	Impossible to program if “12”(RMT card) is not assigned in the “Slot Assignment (SLA).” If Remote Alarm is set to “N,” Destination Address cannot be programmed.

5.00 Tenant (TNN)

Description

To assign tenant data (specifying terminal type for the operators, the method to change over Night Service mode, the password for PITS programming etc.).
(Password level: Two or higher)

Input Format



Index Number

Index Number	Explanation
1 or 2	tenant number

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	Operator 1	Type of Terminal: 0 : no operator A1: Attendant Console 1 A2: Attendant Console 2 DN XXXX (XXXX: three or four numeric digits): extension directory number	
02	Operator 2	Same as operator 1	
03	Night Service	1 : manual change 2 : automatic change	
04	Auto Start Time: MON. (Day)	XX : XX X A or P : a.m./p.m. 00 to 59 : minute 01 to 12 : hour	○
05	Auto Start Time: MON. (Night)		○
06	Auto Start Time: TUE. (Day)		○
07	Auto Start Time: TUE. (Night)		○
08	Auto Start Time: WED. (Day)		○
09	Auto Start Time: WED. (Night)		○
10	Auto Start Time: THU. (Day)		○
11	Auto Start Time: THU. (Night)		○
12	Auto Start Time: FRI. (Day)		○
13	Auto Start Time: FRI. (Night)		○
14	PITS Programming Password		○
15			○
16	Walking COS Password		○
17			○

Continued

Continued

Item Number	Assigning Items	Input Value	CLR
18	PITS Programming Password	four numeric digits	○
19	Walking COS Password	four numeric digits	○
20	Inter-Tenant Calling	Y: Inter-Tenant calling is available N: Inter-Tenant calling is unavailable	
21	Speed Dialing-System Boundary	000 to 200 : boundary number 000 : all for tenant 2 200 : all for tenant 1	
22	Call Park Boundary	00 to 20 : boundary number 00 : all for tenant 2 20 : all for tenant 1	
23	Message Waiting Boundary	000 to 500 : boundary number 000 : all for tenant 2 500 : all for tenant 1	
24	Absent Message Boundary	06 to 16 : boundary number 06 : all for tenant 2 16 : all for tenant 1	

☛ The item numbers 20 through 24 are for tenant 2 only when tenant service is employed.

○ : clearing function is effective for the item

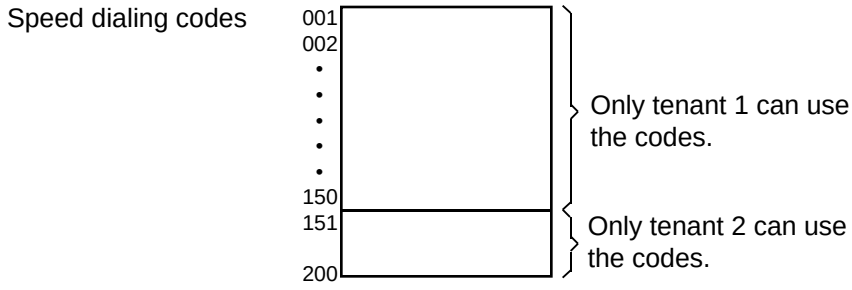
Conditions

Index Number 2 does not appear if “Operation (OPR)” Tenant Service is set to “N.”

Item Number

01, 02 Operator 1/2

This system can accommodate up to two Attendant Consoles. When Tenant Service is available and if two Attendant Consoles are assigned to tenant 1, no Attendant Console can be assigned to tenant 2.
If only one Attendant Console is accommodated, it must be assigned only to Operator 1.

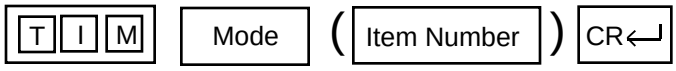
21 to 24	Speed Dialing-System Boundary/ Call Park Boundary/ Message Waiting Boundary/Absent Message Boundary	If Tenant Service is available, the following items can be split between tenant 1 and tenant 2. The boundaries are to set tenant-boundary numbers. The last number that tenant 1 can use must be assigned in each boundary for the functions below: Speed Dialing-System Call Park-System Message Waiting Absent Message <Example> Up to 200 speed dialing codes can be programmed for the system. If you wish to assign 150 codes to tenant 1 and 50 codes to tenant 2, enter "150" in Speed Dialing-System Boundary.  If tenant 1 uses no code and tenant 2 uses 200 codes, enter "000."

6.00 System Timer (TIM)

Description

To assign a value to the various system timers.
(Password level: Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value
01	Held Call Reminder	15 to 240 : s
02	Held Call Reminder (ATT)	15 to 240 : s
03	Transfer Recall	15 to 240 : s
04	Pickup Dial Waiting	1 to 5 : s
05	External First Digit Time-Out	5 to 120 : s
06	External Inter digit Time-Out	3 to 15 : s
07	External Inter digit Time-Out (PBX)	3 to 10 : s
08	Toll Restriction Guard Time-Out	0 to 25 : s
09	Call Forwarding-No Answer Time-Out	5 to 60 : s
10	Intercept Routing Time-Out (System)	5 to 240 : s
11	Intercept Routing Time-Out (DISA)	5 to 240 : s
12	Attendant Overflow Time	5 to 240 : s
13	SMDR Duration Time	0 to 15 : s
14	TIE Interdigit Time-Out	3 to 30 : s
15	DISA Interdigit Time-Out	1 to 10 : s

Conditions

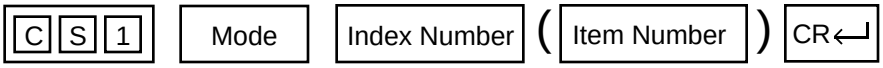
Item Number		
01 to 02	Held Call Reminder/ Held Call Reminder (ATT)	If these items are programmed but if “Operation (OPR)” Index Number 1, Held Call Reminder is set to “N,” Held Call Reminder does not function.

7.00 Class of Service 1 (CS1)

Description

This is the first Class of Service block which is used to assign toll restriction level, maximum dialing digits, Call Forwarding, Do Not Disturb, Do Not Disturb Override and so on.
(Password level: Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 32	Class of Service number

Input Value for Item Number

Item Number	Assigning Items	Input Value
01	Toll Restriction Level (Day)	01 to 16
02	Toll Restriction Level (Night)	01 to 16
03	Max. Dialing Digits	002 to 255 : maximum number of dialed digits [input value -1] 000 : no limit to digits dialed 001 : cannot dial
04	Call Forwarding/Do Not Disturb	Y: Call Forwarding/Do Not Disturb is available N: Call Forwarding/Do Not Disturb is unavailable
05	Do Not Disturb Override	Y: Do Not Disturb Override is available N: Do Not Disturb Override is unavailable
06	CO Forward Mode	Y: Call Forwarding to CO is available N: Call Forwarding to CO is unavailable
07	CO Transfer Mode	Y: Call Transfer to CO is available N: Call Transfer to CO is unavailable
08	Forced Account Code Mode	Y: account codes are required for outgoing CO calls N: account codes are optional for outgoing CO calls
09	BSS/OHCA	Y: Override is available N: Override is unavailable

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Item Number	Assigning Items	Input Value
10	BSS/OHCA Deny	Y: Override Deny is possible N: Override Deny is impossible
11	Executive Busy Override	Y: Executive Busy Override is available N: Executive Busy Override is unavailable
12	Executive Busy Override Deny	Y: Executive Busy Override Deny is available N: Executive Busy Override Deny is unavailable
13	Station Lock	Y: Station Lock is available N: Station Lock is unavailable
14	Walking Station	Y: Walking Station is possible N: Walking Station is impossible
15	Maintenance Capability	Y: PITS system programming is possible N: PITS system programming is impossible
16	ARS/Local Access	1: With restriction 2: No restriction 3: No access

Conditions

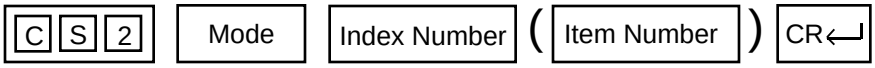
None

8.00 Class of Service 2 (CS2)

Description

This is the second Class of Service block which is used to assign the trunk groups available for access and so on.
(Password level: Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 32	Class of Service number

Input Value for Item Number

Item Number	Assigning Items	Input Value
01	Trunk Group 01	Y: trunk group available for access N: trunk group unavailable for access
02	Trunk Group 02	
03	Trunk Group 03	
04	Trunk Group 04	
05	Trunk Group 05	
06	Trunk Group 06	
07	Trunk Group 07	
08	Trunk Group 08	
09	Trunk Group 09	
10	Trunk Group 10	
11	Trunk Group 11	
12	Trunk Group 12	
13	Trunk Group 13	
14	Trunk Group 14	
15	Trunk Group 15	
16	Trunk Group 16	

Continued

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17*	EQA 1	Y: special carrier available for access N: special carrier unavailable for access
18*	EQA 2	
19*	EQA 3	
20*	EQA 4	
21*	OCC 1	
22*	OCC 2	
23*	OCC 3	
24*	OCC 4	
25	PAG 1	Y: paging group available for access N: paging group unavailable for access
26	PAG 2	
27	PAG 3	
28	PAG 4	
29	PAG 5	
30	PAG 6	
31	PAG 7	
32	PAG 8	
33	External Paging 1	Y: external paging group available for access
34	External Paging 2	N: external paging group unavailable for access

* (Item Numbers 17 through 24 are available for U.S.A. and Canada only.)

Conditions

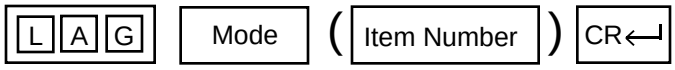
Item Number		
17 to 24	EQA 1 to 4 OCC 1 to 4	If “Y” is selected but if “Equal Access (EQU)”, Service and “OCC Access (OCC)”, Service are set to “N,” Special Carrier Access via virtual trunk group access does not work. It is administable to activate or deactivate the EQU Access and/or OCC Access features on a system-wide basis. Refer to Section 10-C-52.00 “World Select 2 (WS2)” for further information.
25 to 32	PAG 1 to 8	If an extension does not belong to the same tenant as the paging groups assigned to “Y,” the extension cannot access the paging groups.
33, 34	External Paging 1/2	If “Y” is selected but if “Operation (OPR)” Index 1, External Paging 1/2 is not set to “Y,” Paging through external pagers is impossible. If an extension belongs to the other tenant than that of the External Paging 1 or 2 assigned to “Y,” the extension cannot access the external paging group.

9.00 Local Access Group (LAG)

Description:

Assigns the toll restriction level and hunt sequence for idle trunk groups when using local access.
(Password level: Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	Toll Restriction Level	01 to 16 : restriction level	
02	Toll Restriction Table (◆ for U.S.A. and Canada only)	1 to 8 : restriction table number	
03	Hunt Sequence 01	01 to 16 : trunk group number	○
04	Hunt Sequence 02		○
05	Hunt Sequence 03		○
06	Hunt Sequence 04		○
07	Hunt Sequence 05		○
08	Hunt Sequence 06		○
09	Hunt Sequence 07		○
10	Hunt Sequence 08		○
11	Hunt Sequence 09		○
12	Hunt Sequence 10		○
13	Hunt Sequence 11		○
14	Hunt Sequence 12		○
15	Hunt Sequence 13		○
16	Hunt Sequence 14		○
17	Hunt Sequence 15		○
18	Hunt Sequence 16		○

○ : clearing function is effective for the item

Conditions

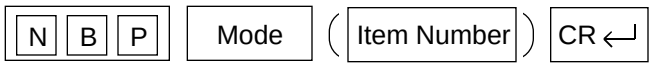
None

10.00 Numbering Plan (NBP)

Description

This is used for assigning the first one or two digits of extension numbers, and feature numbers. Entry is possible only when the "Numbering Plan" is assigned to "1 (manual)" in the Operation (OPR) program.
(Password level: Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
001	1st Hundred Block Extension	One or two numeric digits	○
002	2nd Hundred Block Extension		○
003	3rd Hundred Block Extension		○
004	4th Hundred Block Extension		○
005	5th Hundred Block Extension		○
006	6th Hundred Block Extension		○
007	7th Hundred Block Extension		○
008	8th Hundred Block Extension		○
009	9th Hundred Block Extension		○
010	10th Hundred Block Extension		○
011	11th Hundred Block Extension		○
012	12th Hundred Block Extension		○
013	13th Hundred Block Extension		○
014	14th Hundred Block Extension		○
015	15th Hundred Block Extension		○
016	16th Hundred Block Extension		○
017	Operator Call (General)	Maximum four digits consisting of numbers, * , #	○
018	Operator Call (Specific)		○
019	ARS/Local CO Line Access		○

Continued

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Item Number	Assigning Items	Input Value	CLR
020	Trunk Group 01-08 access	Maximum four digits consisting of numbers, ✱, #	○
021	Trunk Group 09-16 access		○
022	Trunk Group 17-24 access (◆ for U.S.A. and Canada only)		○
023	Speed Dialing-System		○
024	Speed Dialing-Station	Maximum four digits consisting of numbers, ✱	○
025	Doorphone Call (1-4)	Maximum four digits consisting of numbers, ✱, #	○
026	External Paging		○
027	Station Paging		○
028	External Paging Answer		○
029	Station Paging Answer		○
030	Night Answer 1		○
031	Night Answer 2		○
032	Dial Call Pickup		○
033	Directed Call Pickup		○
034	Hold Extension Retrieve		○
035	Redial		○
036	External Feature Access		○
037	Account Code		○
038	Hold		○
039	Hold Retrieve		○
040	Call Park-System		○
041	Call Park Retrieve-System		○
042	Call Park Station		○
043	Call Park Retrieve-Station		○
044	Call Forwarding-All Call Set		○
045	Call Forwarding-Busy Set		○
046	Call Forwarding-No Answer Set		○
047	Call Forwarding-to Trunk	Maximum four digits consisting of numbers, ✱	○

Continued

Continued

Item Number	Assigning Items	Input Value	CLR
048	Call Forwarding-Busy/No Answer	Maximum four digits consisting of numbers, * , #	○
049	Do Not Disturb Set		○
050	Call Forwarding/Do Not Disturb Cancel		○
051	Dial Call Pickup Deny Set		○
052	Dial Call Pickup Deny Cancel		○
053	Call Waiting Set		○
054	Call Waiting Cancel		○
055	BSS/OHCA Deny Set		○
056	BSS/OHCA Deny Cancel		○
057	Busy Override Deny Set		○
058	Busy Override Deny Cancel		○
059	Data Line Security Set		○
060	Data Line Security Cancel		○
061	Pickup Dialing Programming	Maximum four digits consisting of numbers, *	○
062	Pickup Dialing Set	Maximum four digits consisting of numbers, * , #	○
063	Pickup Dialing Cancel		○
064	Absent Message Set		○
065	Absent Message Cancel		○
066	Timed Reminder Confirm		○
067	Timed Reminder Set		○
068	Timed Reminder Cancel		○
069	Voice Calling Mode Set		○
070	Voice Calling Mode Cancel		○
071	Voice Calling Deny Set		○
072	Voice Calling Deny Cancel		○
073	Speed Dialing-Station Programming		○
074	Station Lock Set		○
075	Station Lock Cancel		○

Continued

Continued

Item Number	Assigning Items	Input Value	CLR
076	Walking COS Set	Maximum four digits consisting of numbers, * , #	○
077	Walking COS Cancel		○
078	Walking Station Set		○
079	Walking Station Cancel		○
080	Message Set		○
081	Message Cancel		○
082	Station Program Clear		○
083	Message Waiting Reply		○
084	TIE Trunk Access		○
085	Night Mode Set		○
086	Night Mode Cancel		○
087	Night Service Manual Mode Set		○
088	Night Service Manual Mode Cancel		○
089	Flexible Night Service		○
090	Remote Station Lock Set		○
091	Remote Station Lock Cancel		○
092	Remote DND Set		○
093	Remote DND Cancel		○
094	Remote FWD Cancel		○
095	Remote FWD Cancel-One Time		○
096	BGM Through External Paging		○
097	Busy Out Trunk		○
098	Unbusy Trunk		○
099	OGM Record		○
100	OGM Playback		○
101	UCD Log In		○
102	UCD Log Out		○
103	Remote Timed Reminder Confirm		○
104	Remote Timed Reminder Set		○
105	Remote Timed Reminder Cancel		○

○ : clearing function is effective for the item

Continued

Item Number	Assigning Items	Input Value	CLR
106	Call Forwarding-Follow Me Set	Maximum four digits consisting of numbers, ✻ , #	◯
107	Call Forwarding-Follow Me Cancel		◯
108	Other PBX Extension 01	One or two numeric digits	◯
109	Other PBX Extension 02		◯
110	Other PBX Extension 03		◯
111	Other PBX Extension 04		◯
112	Other PBX Extension 05		◯
113	Other PBX Extension 06		◯
114	Other PBX Extension 07		◯
115	Other PBX Extension 08		◯
116	Other PBX Extension 09		◯
117	Other PBX Extension 10		◯
118	Other PBX Extension 11		◯
119	Other PBX Extension 12		◯
120	Other PBX Extension 13		◯
121	Other PBX Extension 14		◯
122	Other PBX Extension 15		◯
123	Other PBX Extension 16		◯
124	Transfer	Maximum four digits consisting of numbers, ✻ , #	◯
125	Conference		◯

◯ : clearing function is effective for the item

Conditions

"Numbering Plan (NBP)" setting cannot be changed if "Operation (OPR)" Index 1, Numbering Plan is set to "2 (Fixed 1)" or "3 (Fixed 2)." If "1" is selected, this setting is changeable.

Logical check is performed by every storage according to the following logic:

> Extension numbers are three or four digits and the leading one or two digits are assigned in this screen.
> Feature numbers may be one, two, three or four digits.
> Those numbers assigned in this screen cannot include the same number assigned to other feature number as the part or whole of it. For example, the digit "2" is assigned to the feature number for "Trunk Group 01-08 Access" and another digits "21" is assigned for "Trunk Group 09-19 Access," it is checked at the time of data storage. Similarly, "35" and "351" cannot be present at the same time.

It is possible to store "0" through "9," "＃," "#," as the feature numbers. However, if "＃" or "#" is included in the feature numbers, those features are not accessed by the rotary telephone extensions.

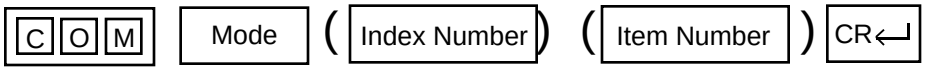
Item Number		
01 to 16	1st to 16th Hundred Block Extension	Extension numbers cannot include "＃" and "#."
108 to 123	Other PBX Extension 01 to 16	

11.00 Communication Interface (COM)

Description

To set parameters for the RS-232C and Modem (Modulator and Demodulator) ports.
(Password level: Two or higher)

Input Format



Index Number

Index Number	Explanation
1	SIO # 1 (terminal)
2	SIO # 2 (SMDR)
3	Remote

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	NL-code	1 : CR + LF 2 : CR
2	Baud Rate	110/150/300/600/1200/2400/4800/9600 : for SIO 300/1200 : for Remote
3	Word Length	6 : 6 bits (for Remote only) 7 : 7 bits 8 : 8 bits
4	Parity	1 : none 2 : mark (for SIO only) 3 : space (for SIO only) 4 : even 5 : odd
5	Stop Bit	1 : 1 bit 2 : 1.5 bits (for Remote only) 3 : 2 bits

Conditions

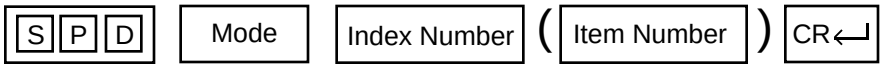
It is possible to change assigning items in “Communication Interface (COM)” while on-site administration or remote administration is performed or SMDR is being printed out. New setting becomes effective when those operation modes are finished.

12.00 Speed Dialing-System (SPD)

Description

To assign toll restriction levels and telephone numbers for speed dialing codes.
(Password level: Three or higher)

Input Format



Index Number

Index Number	Explanation
001 to 200	Speed dialing code

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
1	Restriction Level	00 : a call is checked against the system toll restriction feature 01 to 16 : a call is first checked against the toll restriction level of Extension Users	
2	Dial	Maximum 32 digits consisting of numbers, *, # and marks below : P : pause F : flash [: start of secret number] : end of secret number - : hyphen (Enter [ ] in a pair.)	○

○ : clearing function is effective for the item

Conditions

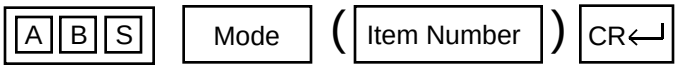
If “Operation (OPR)”, Tenant Service is set to “Y (Yes),” 200 speed dialing codes can be split between tenant 1 and tenant 2. To split them, “Tenant (TNN)”, Speed Dialing-System Boundary must be executed.

13.00 Absent Message (ABS)

Description

To assign absent messages.
(Password level: Three or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	Will Return Soon	Fixed messages % : must be input by the extension user	
02	Gone Home		
03	In a Meeting		
04	Back at % % : % % % %		
05	Out until % % / % %		
06	At Ext % % % %		
07 to 16		Flexible messages Maximum 16 digits Valid characters are letters, numbers and up to five % % : input by the extension user (Be sure to enter " before and after the message.)	○

○ : clearing function is effective for the item

Conditions

If “Operation (OPR)”, Tenant Service is assigned to “Y (Yes),” 10 flexible messages can be split between tenants 1 and 2. To split them, “Tenant (TNN)”, Absent Message Boundary is used. Six fixed messages cannot be split between tenants. They are used in common.

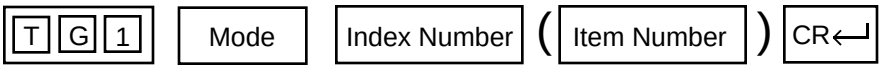
A flexible message in use by an extension user cannot be changed or deleted. If you attempt, the changed data cannot be saved and the following error message appears on the screen.
***** ERROR: Some extensions are using that message.

14.00 Trunk Group 1 (TG1)

Description

To assign information for the 16 trunk groups.
This is the first of two blocks.
(Password level: Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 16	Trunk group number

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	Type	1 : DDD(Direct Distance Dialing) 2 : FEX(Foreign Exchange) 3 : WATS (Wide Area Telecommunication Service) 4 : PVL (Private Line) 5 : PBX (Behind PBX) 6 : DID (Direct Inward Dialing) 7 : TIE (TIE Line)	
02	Name	Trunk group name Maximum three digits composed of characters, numbers, and marks (Enclose the name with double quotes ".)	○
03	Tenant	1/2: tenant number (not assignable when “Tenant Service” is set to “N”)	
04	Incoming/Outgoing	1 : incoming only 2 : outgoing only 3 : both way	

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Item Number	Assigning Items	Input Value	CLR
05	Incoming Mode (Day)	1 : ATT (Attendant Console) 2 : DIL 1:1 (Direct In Line 1:1) 3 : DIL 1:N (Direct In Line 1:N) 4 : DISA (Direct Inward System Access) 5 : TAFAS 1 (Trunk Answer From Any Station 1) 6 : TAFAS 2 (Trunk Answer From Any Station 2) (Not assignable when the Trunk Group type is DID or PVL, or CO line access is outgoing only)	
06	Incoming Mode (Night)	1 : same as Incoming Mode (Day) 2 : fixed 3 : flexible 4 : DISA (Not assignable when Trunk Group type is DID or PVL, or CO line access is outgoing only)	
07	Intercept Routing (Day)	0 : none A: transfer to the Attendant Console DN XXXX (XXXX: directory number) : transfer to an extension	
08	Intercept Routing (Night)	0 : none DN XXXX (XXXX: directory number) : transfer to an extension	
09	Toll Restriction Level	01 to 16 (Not assignable when CO line access is incoming only)	
10	Toll Restriction Table (◆ for U.S.A. and Canada only)	1 to 8 (Not assignable when CO line access is incoming only)	
11	Dialing Plan (◆ for U.S.A. and Canada only)	0 : none A: Type-A: 1+NXX+NXX+XXXX NXX+XXXX B: Type-B: NPX+NXX+XXXX NNX+XXXX C: Type-C: 1+NPX+NXX+XXXX 1+NNX+XXXX NXX+XXXX D: Type-D: 1+NXX+NXX+XXXX NXX+NXX+XXXX NXX+XXXX (N: 2 to 9, P: 0,1, X: 0 to 9) (Not assignable when CO line access is incoming only)	
12	CO-CO Duration Limit	01 to 64 : minute	
13	Disconnect Time	1 : 1.5 seconds 2 : 4.0 seconds	

Continued

Continued

Item Number	Assigning Items	Input Value	CLR
14	Pause Time	1 : 1.5 s 2 : 2.5 s 3 : 3.5 s 4 : 4.5 s	
15	Hook Switch Flash Time	0 : none 1 : 80 ms 2 : 300 ms 3 : 600 ms 4 : 900 ms 5 : 1200 ms	

○ : clearing function is effective for the item

Conditions

The assigning items:Type, Incoming Mode (Day/Night), Destination (DIL 1:N Only) and Type and Number can be changed only when all the trunks belonging to the trunk group are not in use. If any trunk is used, it is impossible to change.

Item Number		
03	Tenant	If "＊＊＊ " is displayed here, "Operation (OPR)", Tenant Service is set to "N (No)."
04	Incoming/Outgoing	When "Incoming Only" is selected in the trunk group with DID, the following items are assignable but they do not work at all in Incoming Only mode. • Disconnect Time • Pause Time • Hook Switch Flash Time • Max. Dial No. after EFA Signal For further information, refer to "3. Other Conditions" on page 9-E-7.
05	Incoming Mode (Day)	Refer to Section 9-E-1.01 "Trunk Group (1/2)."
06	Incoming Mode (Night)	If "2 (Fixed)" or "3 (Flexible)" is changed to another option, it cancels all the settings of CO lines in "CO Line (COL)", Night Answer Point (Type: No.) which belong to the trunk group. If "2 (Fixed)" is changed to "3 (Flexible)" and vice versa, the Night Answer Points are not canceled.
11	Dialing Plan	Refer to Section 9-E-1.01 "Trunk Group (1/2)."

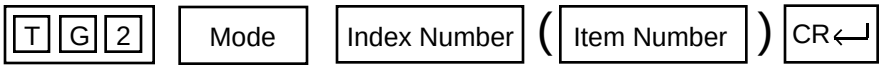
For the relation between trunk group/CO line setting and PITS DN button setting, refer to Section 9-E-1.01 "Trunk Group (1/2)."

15.00 Trunk Group 2 (TG2)

Description

This is the second block to assign various data for trunk groups.
(Password level: Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 16	Trunk group number

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01 to 08	Destination (DIL 1: N Only)	I X (X : 1 to 8): ICM group number P XX (XX : 01 to 32) : pickup group number DN XXXX (XXXX : three or four digits): extension number 0 : none (Assignable only when “Incoming Mode (Day)” is set to DIL 1: N)	
09	DID Digit Modification Table	1 to 4 : table number (Assignable when the Trunk Group type is DID)	
10 to 17	PBX Access Code (No Restriction)	Maximum three digit numbers (Assignable when the Trunk Group type is PBX, and CO line access is both way)	○
18 to 25	PBX Access Code (Restriction)	Maximum three digits of numbers (Assignable when the Trunk Group type is PBX, and CO line access is both way)	○
26	Max. Dial No. after EFA Signal	01 to 32: maximum dialing digits 00: cannot dial after external feature access	
27	CO-TIE Restriction	Y : CO-TIE connection is restricted N : CO-TIE connection is allowed	
28	TIE-CO Restriction	Y : TIE-CO connection is restricted N : TIE-CO connection is allowed	

Item Number	Assigning Items	Input Value	CLR
29	TIE Forced Account mode	Y : TIE callers are required to enter account code when making CO calls. N : Entering account code is not required.	
30	TIE Incoming Delete Digit	0 : deleting no digits 1 to 4 : number of deleting digit(s)	
31	TIE Incoming Insert Dial	blank : Inserting no digit A maximum of four digits number composed of 0 through 9 can be entered.	

○ : clearing function is effective for the item

Conditions

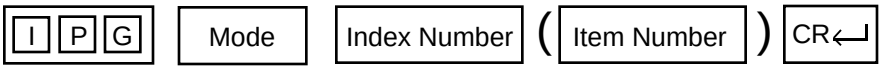
Refer to Section 10-C-14.00 “Trunk Group 1 (TG1).”

16.00 ICM/Paging Group (IPG)

Description

To assign intercom groups and paging groups to tenant 1 or 2.
(Password level: Two or higher)

Input Format



Index Number

Index Number	Explanation
1	For ICM groups
2	For PAG groups

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	ICM or PAG Group 1	1 : tenant 1 2 : tenant 2
2	ICM or PAG Group 2	
3	ICM or PAG Group 3	
4	ICM or PAG Group 4	
5	ICM or PAG Group 5	
6	ICM or PAG Group 6	
7	ICM or PAG Group 7	
8	ICM or PAG Group 8	

Conditions

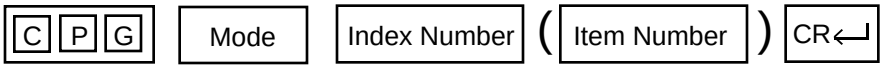
This screen does not appear if “Operation (OPR)”, Tenant Service is set to “N (No).”
This must be programmed before programming “Call Pickup Group (CPG)”.

17.00 Call Pickup Group (CPG)

Description

To assign the ICM (intercom) groups, UCD (Uniform Call Distribution) groups, and paging groups which call pickup groups belong to. (Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 32	Pickup group number

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	ICM Group Number	1 to 8 : ICM Group 1 to 8
2	UCD Group Number	01 to 32 : UCD Group 1 to 32 00 : none
3	Paging Group Number	1 to 8 : Paging Group 1 to 8 00 : none

Conditions

If “Operation (OPR)” Tenant Service is set to “Y (Yes)”, “ICM/Paging Group (IPG)” setting must be done before setting this screen.

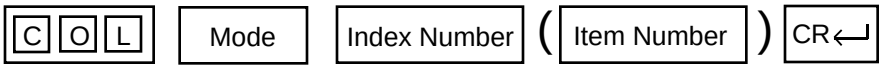
Refer to Section 9-E-3.00 “Call Pickup Group” for the other conditions.

18.00 CO Line (COL)

Description

To assign parameters on a CO line basis. DATA ERROR appears on the entry of parameters if no trunk card is assigned in the Slot Assignment (SLA) programming.
(Password level : Three or higher)

Input Format



Index Number

Index Number	Explanation
Four digit numbers (1011 to 3158)	Physical number of the CO line

Input Value for Item Number

Item Number	Assigning Items	Input Value
01	Trunk Group	01 to 16 : trunk group number
02	Trunk Name	Maximum ten digits consisting of letters, numbers and marks (Enclose the name with double quotes ".)
03	Direct Termination	DN XXXX(XXXX : three or four digits) : extension number 0 : none (Not assignable when the Trunk Group type is DID, PVL or TIE, or Incoming Mode (Day) is set to any mode except DIL 1:1)
04	Night Answer Point (Type : No.)	DN XXXX(XXXX : three or four digits) : extension number U1: universal night answer 1 U2: universal night answer 2 0 : none R : Remote Administration N : Night Answer Group Extensions (Not assignable in case of DID, TIE, or PVL, or outgoing only)
05	Dial Mode	1 : DTMF mode 2 : Pulse mode 3 : MFC-R2 mode
06	DTMF Duration Time	1 : 80 ms 2 : 160 ms (Not assignable when the dial type is pulse)
07	Pulse Speed	1 : low (10 pps) 2 : high (20 pps) (Not assignable when the dial type is DTMF)

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Item Number	Assigning Items	Input Value
08	% Break	1 : 60% break 2 : 67% break (Not assignable when the dial type is DTMF)
09	CPC Detection	00 : none 01 : 6.5 ms detection 02 to 75 : 8N ms detection (Not assignable when the Trunk Group type is DID or TIE)
10	Start Arrangement	1 : immediate start 2 : delayed wink start (Assignable when the Trunk Group type is DID or TIE)
11	Wink Signal Time-Out	1 : 64 ms 2 : 128 ms • • • 127 : 8.128 s

Conditions

Before setting this screen, “Trunk Group (TG1) (TG2)” must be programmed. This cannot be programmed if no CO trunk card is assigned in “Slot Assignment (SLA).” If any one of the cards is programmed, this screen can be programmed.
If the “Trunk Group (TG1)” containing the CO line has “Type” assigned to “6 (DID),” or “7 (TIE)” the following items cannot be entered : “ *** ” is displayed :

- Direct Termination
- Night Answer Point (Type : No)
- CPC Detection

If the “Trunk Group (TG1)” containing the CO line has “Type” assigned to anything other than “6 (DID),” or “7 (TIE)”, the following items cannot be entered : “ *** ” is displayed :

- Start Arrangement
- Wink Signal Time-Out

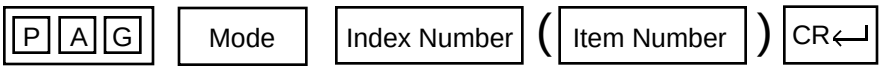
Item Number		
03	Direct Termination	This is assignable only when the “Trunk Group (TG1)” containing the CO line has “Incoming Mode (Day)” assigned to “2 (DIL 1:1).” Otherwise, “ *** ” is displayed and setting is impossible.
04	Night Answer Point (Type : No.)	This is assignable only when the “Trunk Group (TG1)” containing the CO line has “Incoming Mode (Night)” assigned to “2 (Fixed)” or “3 (Flexible).” Otherwise, “ *** ” is displayed and setting is impossible. “N (NAG)” can be selected only when Trunk Group “Incoming Mode (Night)” is assigned to “2 (Fixed).”
05	Dial Type	If “Pulse mode” is selected, refer to Section 10-C-51.00 “World Select 1 (WS1)” about the following items: • Interdigit Pause • Pulse Type • % Break Detect

19.00 Pager (PAG)

Description

To assign items concerning external pagers.
(Password level : Three or higher)

Input Format



Index Number

Index Number	Explanation
1 or 2	External pager number

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Tenant	1 : tenant 1 2 : tenant 2
2	Tone	Y: sending confirmation tone when accessing the external pager N: no confirmation tone
3	BGM	Y: BGM heard over external paging N: BGM not heard

Conditions

This cannot be programmed if “Operation (OPR)”, External Paging 1/2 are set to “N (No).”

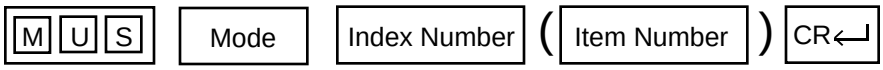
Item number 1 “Tenant” cannot be assigned if “Operation (OPR)”, Tenant Service is set to “N (No).”

20.00 Music Source (MUS)

Description

To assign items concerning the music source.
(Password level : Three or higher)

Input Format



Index Number

Index Number	Explanation
1 or 2	Music source number

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Tenant	1 : tenant 1 2 : tenant 2
2	For Use	1 : used when a call is put on hold 2 : used for BGM 3 : used for hold + BGM

Conditions

This cannot be programmed if “Operation (OPR)”, External Music Source 1/2 are set to “N (No).”

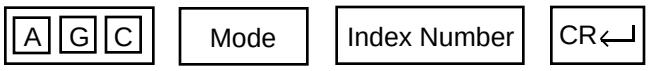
Item number 1 “Tenant” cannot be assigned if “Operation (OPR)”, Tenant Service is set to “N (No).”

21.00 Automatic Gain Control (AGC)

Description

To assign the tenant number for the AGC (Automatic Gain Control) card, and to determine if the tone detection is executed.
(Password level : Three or higher)

Input Format



Index Number

Index Number	Explanation
X X X slot (01 to 15) shelf (1 to 3)	Physical card location (101 to 315)
000	Tone detect

Input Value for Item Number

Assigning Items	Input Value
Slot No. XXX	1 : tenant 1 2 : tenant 2
Tone Detect	Y: with tone detection N: without tone detection

Conditions

This cannot be programmed if “Slot Assignment (SLA)” has no AGC card programmed.

Slot No. XXX
Physical number

“***” will be displayed here if “Operation (OPR)”, Tenant Service is set “N (No).”

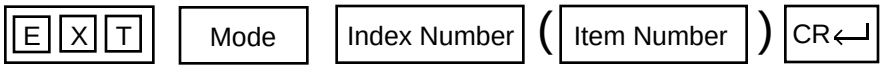
To assign Tone Detect only, enter “000” as the index number.

22.00 Extension (EXT)

Description

To assign extension parameters.
(Password level : Three or higher)

Input Format



Index Number

Index Number	Explanation
DN XXXX or Four digit number (1011 to 3158)	Extension directory number (XXXX : three or four digits) Physical location of extension

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	Telephone Type	1 : SLT (Single Line Telephone) 2 : PITS (Proprietary Integrated Telephone System) 3 : OPX (Off Premise Extension)	
02	PITS Model	01 : KX-T123250 02 : KX-T123220 03 : KX-T123230 04 : KX-T123235 / KX-T7130 05 : KX-T61650 06 : KX-T61620 07 : KX-T61630 08 : KX-T30850 09 : KX-T30820 10 : KX-T30830 11 : KX-T7050 / KX-T7350 12 : KX-T7020 / KX-T7320 13 : KX-T7030 / KX-T7330 (for “PITS” only)	
03	OHCA Circuit	Y : with OHCA circuit N : without OHCA circuit (for “PITS” only)	
04	Primary Directory Number	Three or four digit extension directory number	
05	Intercom Number	One or two digit number (Assignable only for “PITS”)	○

Continued

Continued

Item Number	Assigning Items	Input Value	CLR
06	Station Name	Maximum ten digits consisting of letters and/or numbers (Surround each entry with double quotes ".)	
07	ICM Group	1 to 8 : ICM group number	
08	Pickup Group	00 : none 01 to 32 : pickup group number	
09	Next Hunt Station	0 : none DN XXXX (XXXX: three or four digits) : extension directory number	
10	Class of Service	01 to 32 : COS number	
11	Data Line Security	Y : Data Line Security is available N : Data Line Security is disabled	
12	Automatic Callback-Trunk	Y : Automatic Callback-Trunk is available N : Automatic Callback-Trunk is unavailable	
13	Parallel Connect	Y : Parallel Connection is available N : Parallel Connection is not available	
14	Message Waiting Indication	1(None) : The KX-T7051 cannot receive the message waiting indication. 2(Lamp) : The KX-T7051 can receive the message waiting indication.	

◯ : clearing function is effective for the item

Conditions

This screen does not appear if “Slot Assignment (SLA)” does not have any of PLC, SLC, HLC, OPX cards programmed or if “DN Assignment (DNA)” does not have the extension number programmed.

Index Number

01 Telephone Type

Assignable telephone types differ depending on the card types connected to the extensions, as follows:

Card Type	Telephone Type Assignable
PLC	PITS
SLC	SLT
HLC	PITS or SLT
OPX	OPX

If “SLC” or “OPX” is selected, “*** ” will appear in the following items and cannot be assigned:

- Model
- OHCA Circuit
- Intercom Number
- Parallel Connect

02	PITS Model	If PITS telephone KX-T123230D is connected, select 04: KX-T123235 (7130), for PITS Model. PITS KX-T123230D is functionally equivalent to KX-T123235 and KX-T7130 If PITS telephone KX-T7130 is connected, select 04:KX-T123235 (7130) for PITS Model. If PITS telephone KX-T7320 is connected, select 12:KX-T7020 for PITS Model. If PITS telephone KX-T7330 is connected, select 13:KX-T7030 for PITS Model. If PITS telephone KX-T7350 is connected, select 11:KX-T7050 for PITS Model.

For OHCA Circuit, Intercom Number, Next Hunt Station, refer to Section 9-G-1.01 “Station (1/3).”

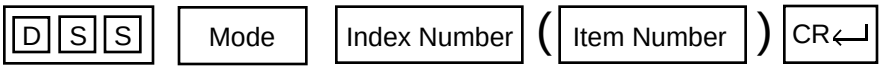
13	Parallel Connect	Parallel connection assignment is available only when PITS telephone interfaced with HLC card is selected. If PITS telephone interfaced with PLC card is selected, “***” will appear in Parallel Connect field and parallel connection assignment is not available.
14	Message Waiting Indication	The setting of "2 (Lamp)" is valid only when the extension is an SLT with MESSAGE lamp which is interfaced with the KX-T96175 (SLC card with Message Waiting). If an extension card other than KX-T96175 is installed, “***” appears and this item cannot be assigned. **Note:** Be sure to select “1 (None)” for this setting if an SLT without MESSAGE lamp is interfaced with the KX-T96175.

23.00 DSS Console (DSS)

Description

To assign parameters for DSS consoles.
(Password level : Three or higher)

Input Format



Index Number

Index Number	Explanation
Four digit number	Physical number of the extension port

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	DSS Console Model	1 : KX-T123240 (7040) 2 : KX-T61640
2	Pair Extension	DN XXXX (XXXX : three or four digits) : extension directory number 0 : none

Conditions

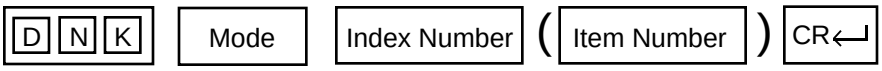
If HLC (Hybrid Line Circuit) or PLC (Proprietary Line Circuit) is not assigned in the "Slot Assignment (SLA)" program, DATA ERROR appears on the screen.

24.00 DN Button Assignment (DNK)

Description

This is used to assign the function of the DN buttons when the telephone type is set to “2 (PITS)” in the Extension (EXT) program.
(Password level : Three or higher)

Input Format



Index Number

Index Number	Explanation
DN XXXX or Four digit number	Extension directory number (XXXX : three or four digits) Physical location of extension

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	DN-01 Day Ring	1 : lamp indication only (no ringing) 2 : ring immediately 3 : delayed 1 ring 4 : delayed 3 rings 5 : delayed 6 rings	
02	DN-01 Night Ring		
03	DN-02 Type	01 : DSS (DN) button 02 : DSS (ICM) button 03 : One Touch button 04 : Privacy Change button 05 : External Feature Access button 06 : Call Park System button 07 : Call Park Station button 08 : Ringing Transfer button 09 : Call Split button 10 : FWD/DND button 11 : Tone Through Break button 12 : SNR button 13 : PDN button 14 : SDN button 15 : Private CO button 16 : OHCA button 17 : Message Waiting button 18 : UCD Log In button 19 : Local Alarm button 20 : Single CO button 21 : Group CO button 22 : CONF button	

Continued

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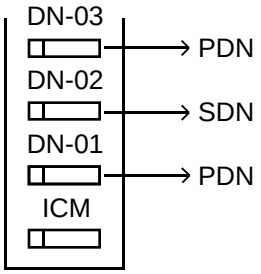
Item Number	Assigning Items	Input Value	CLR
04	DN-02 Number	Three or four digits: directory number for “PDN,” “SDN,” “DSS (DN)” One or two digits : intercom number for “DSS (ICM)” Maximum 16 digits: destination number for “One Touch” Four digit number : physical location for “Private CO” and “Single CO” 01 to 16 : trunk group number for “Group CO”	○
05	DN-02 SDN COS	1 : use the COS of the station 2 : use the COS of the PDN	
06	DN-02 Day Ring	Same as the items 01 and 02	
07	DN-02 Night Ring		
08-12	DN-03	Same as the items from 03 to 07	
13-17	DN-04		
18-22	DN-05		
23-27	DN-06		
28-32	DN-07		
33-37	DN-08		
38-42	DN-09		
43-47	DN-10		
48-52	DN-11		
53-57	DN-12		

○ : clearing function is effective for the item

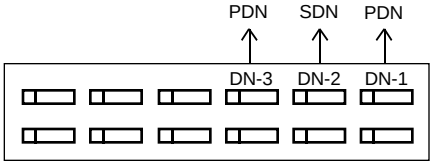
Conditions

When "＊＊＊ "s appear, they cannot be assigned.

The DN-01 through 03 buttons are assigned as the PDN buttons automatically.
The DN-01 button is fixed to a PDN button and cannot be changed to another assignable feature button.
The PDN buttons assigned to the DN-02 and 03 buttons can be changed to another assignable feature button and vice versa.
When two or three PDN buttons are used, they must be arranged consecutively.
For example, it is not possible to program as follows:



(DN buttons on PITS type 20, 30 and 50)



(DN buttons on PITS 7000 series)

DN-XX Type

If "PRV-CO" (Private CO) is selected, a physical number of the selected CO line must be programmed in "Number."
The CO line of the physical number belongs to a "CO Line (COL)", Trunk Group.
The trunk group where the CO line belongs must have "Trunk Group 1 (TG1)", Type assigned to "4 PVL (Private Line)."

If "Single CO" is selected, a physical number of the selected CO line must be programmed in "Number."
The CO line of the physical number belongs to a "CO Line (COL)", Trunk Group. The trunk group of the CO line must have "Trunk Group 1 (TG1)", Type assigned to "1 (DDD)" or "2 (FEX)" or "3 (WATS)", or "5 (PBX)."

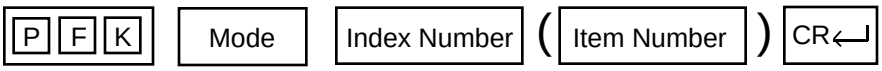
If "Group CO" is selected, a trunk group number must be programmed in "Number."
The programmed trunk group must have "Trunk Group 1 (TG1)", Type assigned to "1 (DDD)" or "2 (FEX)" or "3 (WATS)" or "5 (PBX).

25.00 PF Button Assignment (PFK)

Description

This is used to assign the function of the PF (programmable feature) buttons of PITS telephones and DSS consoles.
(Password level : Three or higher)

Input Format



Index Number

Index Number	Explanation
DN XXXX or Four digit number	Extension directory number (XXXX : three or four digits) Physical location of extension

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	PF-01 Type	00 : not assigned 02 : DSS (ICM) button 03 : One Touch button 05 : External Feature Access button 06 : Call Park System button 07 : Call Park Station button 08 : Ringing Transfer button 09 : Call Split button 10 : FWD/DND button 11 : Tone Through Break button 12 : SNR (Saved Number Redial) button	
02	PF-01 Number	One or two digits : intercom number for “DSS (ICM)” Maximum 16 digits : destination number for “One Touch”	○
03,04	PF-02	Same as the items 01 and 02	
05,06	PF-03		
07,08	PF-04		
09,10	PF-05		
11,12	PF-06		

Continued

Continued

Item Number	Assigning Items	Input Value
13,14	PF-07	Same as the items 01 and 02
15,16	PF-08	
17,18	PF-09	
19,20	PF-10	
21,22	PF-11	
23,24	PF-12	
25,26	PF-13 (DSS console only)	
27,28	PF-14 (DSS console only)	
29,30	PF-15 (DSS console only)	
31,32	PF-16 (DSS console only)	

○ : clearing function is effective for the item

Conditions

If “Extension (EXT)”, Telephone Type is not assigned to “2 (PITS)”, DATA ERROR appears on the screen.

Only the PF3 button on PITS type 50 and KX-T7050 can be programmed to the FWD/DND button.

Only the PF1 button on PITS type 50, KX-T7020 and KX-T7030 can be programmed to the SNR button.

In case of a PITS telephone, Item Nos. 25 through 32 cannot be selected.

26.00 DSS Button Assignment (DSK)

Description

This is used to assign the function of the DSS (Direct Station Selection) buttons on a DSS console and PITS KX-T30830.
(Password level : Three or higher)

Input Format

[D][S][K] [Mode] [Index Number] ([Item Number]) [CR↵]

Index Number

Index Number	Explanation
DN XXXX or Four digit number	Extension directory number (XXXX : three or four digits) Physical location of extension

Input Value for Item Number

Item Number	Assigning Items	Input Value
01	DSS-01 Type	00 : not assigned 01 : DSS (DN) button 02 : DSS (ICM) button 03 : One Touch button 04 : Privacy Change button 05 : External Feature Access button 06 : Call Park System button 07 : Call Park Station button 08 : Ringing Transfer button 09 : Call Split button 11 : Tone Through Break button 17 : Message Waiting button 18 : UCD Login button 19 : Local Alarm button
02	DSS-01 Number	Three or four digits: directory number for “PDN,” “SDN,” “DSS (DN)” One or two digits : intercom number for “DSS (ICM)” Maximum 16 digits: destination number for “One Touch”
03,04	DSS-02	Same as the items 01 and 02
05,06	DSS-03	
07,08	DSS-04	

Continued

Continued

Item Number	Assigning Items	Input Value
09,10	DSS-05	Same as the items 01 and 02
11,12	DSS-06	
13,14	DSS-07	
15,16	DSS-08	
17,18	DSS-09 (DSS console only)	
19,20	DSS-10 (DSS console only)	
21,22	DSS-11 (DSS console only)	
23,24	DSS-12 (DSS console only)	
25,26	DSS-13 (DSS console only)	
27,28	DSS-14 (DSS console only)	
29,30	DSS-15 (DSS console only)	
⋮	⋮ (DSS console only)	
63,64	DSS-32 (DSS console only)	

Conditions

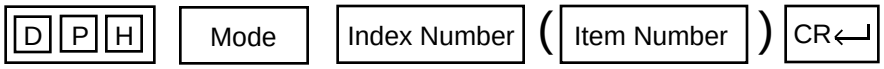
In case of PITS KX-T30830, Item Nos.17 through 64 cannot be selected.

27.00 Doorphone (DPH)

Description

To assign parameters for doorphones.
(Password level : Three or higher)

Input Format



Index Number

Index Number	Explanation
1 to 4	Doorphone number

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Tenant	1 : tenant number 1 2 : tenant number 2 (not assignable when “Tenant Service” is assigned to “N”)
2	Open Duration	01 to 10 : door opening duration (seconds) 00 : door opening disabled
3	Doorphone Assignment	Doorphone call destination 0 : none P XX : pickup group number (XX : 01 to 32) I X: ICM group number (X :1 to 8) A : Attendant Consoles DN XXXX : extension directory number (XXXX: three or four digits)
4	Doorphone Assignment	
5	Doorphone Assignment	
6	Doorphone Assignment	

Conditions

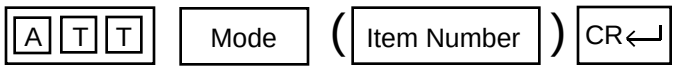
If DPH (Doorphone) card is not assigned in the “Slot Assignment (SLA)” program,
DATA ERROR appears on the screen.

28.00 Attendant Console (ATT)

Description

To assign parameters for Attendant Consoles.
(Password level : Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value
01	ATT 1 Tenant Number	Not assignable (fixed to tenant 1)
02	ATT 1 FDN	DN XXXX (XXXX : three or four digit number) : FDN 0 : none
03	ATT 1 TRS LV	01 to 16: toll restriction level
04	ATT 1 PAG	1 : Paging All Extensions 2 : External Pager 1 3 : External Pager 2 4 : External Pager 1 & 2 5 : Paging All Extensions and External Pagers
05	ATT 2 Tenant Number	Not assignable (fixed to tenant 2)
06	ATT 2 FDN	DN XXXX(XXXX : three or four digit number) : FDN 0 : none
07	ATT 2 TRS LV	01 to 16: toll restriction level
08	ATT 2 PAG	Same as the item 04
09	Tenant 1 Overflow	DN XXXX (XXXX : three or four digit number): extension directory number 0 : none
10	Tenant 1 Night	DN XXXX (XXXX : three or four digit number): extension directory number 0 : none
11	Tenant 2 Overflow	DN XXXX (XXXX : three or four digit number): extension directory number 0 : none (Not assignable when “Tenant Service” is assigned to “N”)

Continued

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Item Number	Assigning Items	Input Value
12	Tenant 2 Night	DN XXXX (XXXX : three or four digit number) : extension directory number 0 : none (Not assignable when “Tenant Service” is assigned to “N”)
13	Busy-Out TG 01	
14	Busy-Out TG 02	
15	Busy-Out TG 03	
16	Busy-Out TG 04	
17	Busy-Out TG 05	
18	Busy-Out TG 06	
19	Busy-Out TG 07	
20	Busy-Out TG 08	DN XXXX (XXXX : three or four digit number) : extension directory number
21	Busy-Out TG 09	0 : none
22	Busy-Out TG 10	
23	Busy-Out TG 11	
24	Busy-Out TG 12	
25	Busy-Out TG 13	
26	Busy-Out TG 14	
27	Busy-Out TG 15	
28	Busy-Out TG 16	

Conditions

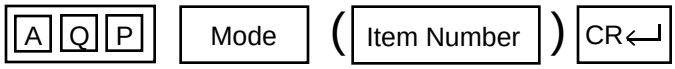
If ATLC (Attendant Console Line Circuit) card is not assigned in the “Slot Assignment (SLA)” program, DATA ERROR appears on the screen.

29.00 Attendant Queue Priority (AQP)

Description

To assign incoming call priority when several calls arrive at the Attendant Console at the same time.
(Password level : Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value
01	Internal Calling Station	01 to 24 : call priority
02	Internal Calling Doorphone	
03	Console Calling	
04	Transfer Recall	
05	Serial Calling Recall	
06	Call Park Recall	
07	Intercept Routing	
08	Held Call Reminder	
09	External Calling TG 01	
10	External Calling TG 02	
11	External Calling TG 03	
12	External Calling TG 04	
13	External Calling TG 05	
14	External Calling TG 06	
15	External Calling TG 07	
16	External Calling TG 08	
17	External Calling TG 09	
18	External Calling TG 10	
19	External Calling TG 11	
20	External Calling TG 12	
21	External Calling TG 13	
22	External Calling TG 14	
23	External Calling TG 15	
24	External Calling TG 16	

Conditions

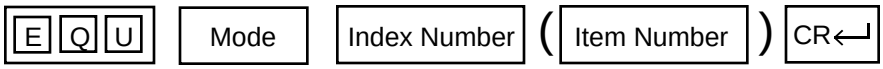
If ATLC card is not assigned in the “Slot Assignment (SLA)” program, DATA ERROR appears on the screen.
Regardless of the assignment of Held Call Reminder, Held Call Reminder does not function if “Operation (OPR)”, Held Call Reminder is assigned to “N.”

30.00 Equal Access (EQU) (◆ for U.S.A. and Canada only)

Description

To assign parameters and trunk groups necessary for making Equal Access calls.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
1 to 4	Equal Access number

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	Service	Y : Equal Access service is available N : Equal Access service is not available (If “Service” is assigned to “N,” all items below are not assignable.)	
02	Name	Up to three digits consisting of letters, numbers and marks (Enclose the name with double quotes ".)	○
03	Equal Access Carrier Code	Three or four digits number	
04	Toll Restriction Level	01 to 16	
05	Toll Restriction Table	1 to 8: Area/Office Code table number	
06	Long Distance (Delete)	1 to 4: number of digits to be deleted to a maximum of four 0 : no digits deleted	
07	Long Distance (Insert)	Up to four digits to be inserted	○
08	Local Toll (Delete)	1 to 4: number of digits to be deleted to a maximum of four 0 : no digits deleted	
09	Local Toll (Insert)	Up to four digits to be inserted	○

Continued

Continued

Item Number	Assigning Items	Input Value	CLR
10	Local (Delete)	1 to 4: number of digits to be deleted to a maximum of four 0 : no digits deleted	
11	Local (Insert)	Up to four digits to be inserted	◯
12	Trunk Group 01	Y : trunk group is available N : trunk group is unavailable	
13	Trunk Group 02		
14	Trunk Group 03		
15	Trunk Group 04		
16	Trunk Group 05		
17	Trunk Group 06		
18	Trunk Group 07		
19	Trunk Group 08		
20	Trunk Group 09		
21	Trunk Group 10		
22	Trunk Group 11		
23	Trunk Group 12		
24	Trunk Group 13		
25	Trunk Group 14		
26	Trunk Group 15		
27	Trunk Group 16		

◯ : clearing function is effective for the item

Conditions

If “N (No)” is assigned to “Service”, “Class of Service 2 (CS2)”, EQA 1 to 4 can be programmed. However, Equal Access which has “N” assigned here does not function.

For conditions on Item Numbers 06 to 11, refer to Section 9-H-1.00 “Equal Access.”

It is administrable to activate or deactivate the Equal access feature on a system-wide basis.
Refer to Section 10-C-52.00 “World Select 2 (WS2)” for further information.

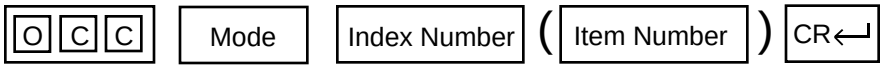
Under a New Dialing Plan, equal access code has changed from “10XXX” to "101XXXX". Refer to Section 10-C-63.00 “Equal Access Code (EQC)” for further information.

31.00 OCC Access (OCC) (◆ for U.S.A. and Canada only)

Description

To assign parameters and trunk groups necessary for OCC (Other Common Carrier) Access calls.
(Password level : Three or higher)

Input Format



Index Number

Index Number	Explanation
1 to 4	OCC Access number

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	Service	Y : OCC Access service is available N : OCC Access service is not available (If “Service” is assigned to “N,” all items below are not assignable.)	
02	Name	Up to three digits consisting of letters, numbers and marks (Enclose the name with double quotes ".)	○
03	Local Access Code	Maximum eight digit number	
04	Toll Restriction Level	01 to 16	
05	Toll Restriction Table	1 to 8 : Area/Office Code table number	
06	Long Distance (Delete)	00 to 15 : number of digits to be deleted to a maximum of four 00 : no digits deleted	
07	Long Distance (Insert)	Digits to be inserted up to a maximum of 20 digits consisting of numbers, *, # and marks below: H: home position [: start of secret number] : end of secret number P: pause D: switch to DTMF - : hyphen (Enter [ ] in a pair.)	○

Continued

Continued

Item Number	Assigning Items	Input Value	CLR
08	Local Toll (Delete)	Same as the Item 06	
09	Local Toll (Insert)	Same as the Item 07	○
10	Local (Delete)	Same as the Item 06	
11	Local (Insert)	Same as the Item 07	○
12	Trunk Group 01	Y : trunk group is available N : trunk group is not available	
13	Trunk Group 02		
14	Trunk Group 03		
15	Trunk Group 04		
16	Trunk Group 05		
17	Trunk Group 06		
18	Trunk Group 07		
19	Trunk Group 08		
20	Trunk Group 09		
21	Trunk Group 10		
22	Trunk Group 11		
23	Trunk Group 12		
24	Trunk Group 13		
25	Trunk Group 14		
26	Trunk Group 15		
27	Trunk Group 16		

○ : clearing function is effective for the item

Conditions

If “N (No)” is assigned to “Service,” “Class of Service 2 (CS2)”, OCC 1 to 4 can be programmed. However, OCC Access which has “N” assigned here does not function.

For conditions on Items Numbers 06 to 11, refer to Section 9-H-2.00 “OCC Access.”

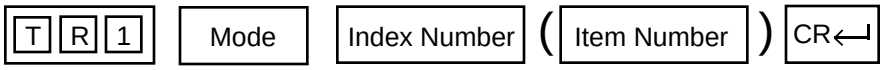
It is available to activate or deactivate the OCC access feature on a system-wide basis by system programming.
Refer to Section 10-C-52.00 “World Select 2 (WS2)” for further information.

32.00 Toll Restriction 1 (TR1) (◆ for U.S.A. and Canada only)

Description

To assign local call control, toll restriction level, and office code table number for area or office codes.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
1 to 8	Area/office code table number

Input Value for Item Number

Item Number	Assigning Items	Input Value
0001	Entry=200 Restriction Level for AC	01 to 16 : toll restriction level for area code 00 : none
0002	Entry=200 Restriction Level for OC	01 to 16 : toll restriction level for office code 00 : none
0003	Entry=200 Office Code Table Number	01 to 64 00 : not used
0004	Entry=200 10 Digits Local Call	Y : The leading 3 digits of the dialed number is checked against the restriction level for AC. N : The leading 3 digits of the dialed number is checked against the restriction level for OC. (This setting is effective for Type-D only)
0005 • • • 3200	Entry=201 Restriction Level for AC • • • Entry=999 10 Digits Local Call	Same as the items from 0001 to 0004

Conditions

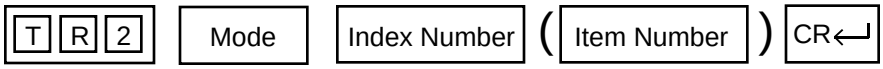
None

33.00 Toll Restriction 2 (TR2) (◆ for U.S.A. and Canada only)

Description

Used to assign yes or no to entry numbers in an office code table.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 64	Office code table number

Input Value for Item Number

Item Number	Assigning Items	Input Value
001	Entry=200	Y: applicable N: not applicable
002 • • • 800	Entry=201 • • • Entry=999	Same as the item 001

Conditions

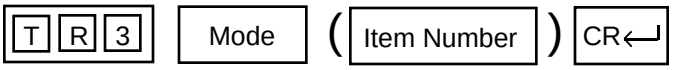
None

34.00 Toll Restriction 3 (TR3) (for U.S.A. and Canada)

Description

To assign 10-digit toll restriction for a long distance call and to assign 7-digit toll restriction for a local call.
(Password level : Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value
01 to 64	Number	7-digit number

Conditions

None

34.00 Toll Restriction 3 (TR3) (for areas other than U.S.A. and Canada)

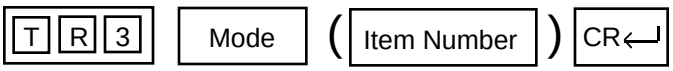
Description

Assigns 7-digit number to prevent extension users from making unauthorized outgoing CO calls.
(Password level : Two or higher)

[Software version 15.XX or higher]
3 through 7-digit number can be assigned.

[Others]
3-digit number can be assigned

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value
01 to 64	Number	3 through 7-digit number

Conditions

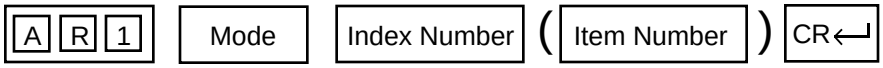
None

35.00 Automatic Route Selection 1 (AR1)

Description

To assign the route plan table number for dialed area or office codes.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
200 to 999 (for U.S.A.and Canada) 000 to 999 (for New Zealand)	Entry number

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Route Plan Table No. When Area Code	00 : not using area codes 01 to 32 : route plan table number
2	Route Plan Table No. When Office Code	00 : not using office codes 01 to 32 : route plan table number

Conditions

None

36.00 Automatic Route Selection 2 (AR2) (◆ for U.S.A. and Canada only)

Description

To assign all the office codes used in each area code. (Password level : Two or higher)

Input Format

A R 2 | Mode | Index Number | (| Item Number |) | CR↵

Index Number

Index Number	Explanation
01 to 32	Office code table number

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
001	Area Code	200 to 999 : area code	○
002	Route Plan Table No.	01 to 32 : route plan table number	
003	Entry=200	Y: usable as an office code N: not usable	
004 • • • 802	Entry=201 • • • Entry=999	Same as the item 003	

○ : clearing function is effective for the item

Conditions

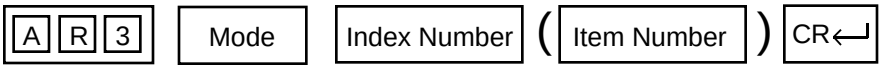
None

37.00 Automatic Route Selection 3 (AR3)

Description

To make up route plan tables by assigning time zones and route list numbers to each time zone for each day of the week.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 32	Route plan table number

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	Start Hour 1	X X X : starting time for the time zone A or P : a.m./p.m. 01 to 12: hour	○
02	Route List Number MON.	01 to 64 : route list table number	○
03	Route List Number TUE.		
04	Route List Number WED.		
05	Route List Number THU.		
06	Route List Number FRI.		
07	Route List Number SAT.		
08	Route List Number SUN.		
09	Start Hour 2	Same as the item 01	
10 to 16	Route List Number (MON. to SUN.)	Same as the items from 02 to 08	
17	Start Hour 3	Same as the item 01	
18 to 24	Route List Number (MON. to SUN.)	Same as the items from 02 to 08	
25	Start Hour 4	Same as the item 01	
26 to 32	Route List Number (MON. to SUN.)	Same as the items from 02 to 08	

○ : clearing function is effective for the item

Conditions

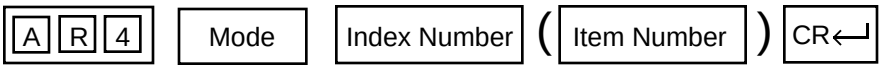
None

38.00 Automatic Route Selection 4 (AR4)

Description

To assign trunk groups in order of economical priority (1 to 4) and assign parameters on each priority.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 64	Route lists table number

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
01	Priority 1 Trunk Group No.	01 to 16	○
02	Priority 1 Modified List No.	01 to 32 : modified digit table number	○
03	Priority 2 Warning Tone	Y : send warning tone N : do not send warning tone	
04	Priority 2 ARS Restriction Level	01 to 16	○
05	Priority 2 Trunk Group No.	Same as the item 01	○
06	Priority 2 Modified List No.	Same as the item 02	○
07	Priority 3 Warning Tone	Same as the item 03	○
08	Priority 3 ARS Restriction Level	Same as the item 04	○
09	Priority 3 Trunk Group No.	Same as the item 01	○
10	Priority 3 Modified List No.	Same as the item 02	○
11	Priority 4 Warning Tone	Same as the item 03	○
12	Priority 4 ARS Restriction Level	Same as the item 04	○
13	Priority 4 Trunk Group No.	Same as the item 01	○
14	Priority 4 Modified List No.	Same as the item 02	○

○ : clearing function is effective for the item

Conditions

None

39.00 Automatic Route Selection 5 (AR5)

Description

To make up modified digit tables.
(Password level : Two or higher)

Input Format

[A][R][5] [Mode] [Index Number] ([Item Number]) [CR↵]

Index Number

Index Number	Explanation
01 to 32	Modified digit table number

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
1	Delete Digits	1 to 9 : number of digits to be deleted to a maximum of nine 0 : no deletion	
2	Insert Digit	Digits to be inserted up to a maximum of 26 digits consisting of numbers, ✱, # and marks listed below : H: home position (◆for U.S.A. and Canada only) P: pause D: switch to DTMF [: start of secret number] : end of secret number - : hyphen (Enter [ ] in a pair.)	○

○ : clearing function is effective for the item

Conditions

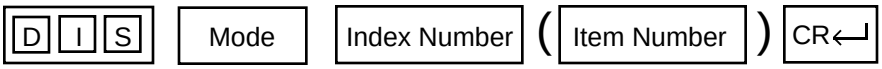
None

40.00 DISA (DIS)

Description

To assign parameters for the DISA (Direct Inward System Access) feature.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
000	Block 1
Physical Number (101 to 112, 201 to 215, 301 to 315)	Physical slot number for Block 2

Input Value for Item Number

	Item Number	Assigning Items	Input Value
Block 1	1	Delayed Answer	1 : 1 ring 2 : 2 rings 3 : 3 rings 4 : immediately
	2	Prolong Time	1 to 7 : minute(s)
	3	Control Code “*”	Y: control code entry is possible N: control code entry is not allowed
	4	Tone Detect	Y: executing tone detection N: no tone detection
Block 2	1	For Use	1 : DISA 2 : OGM1 3 : OGM2 4 : W-UP
	2	Tenant	1 : Tenant 1 2 : Tenant 2

Conditions

If a DISA card is not assigned in the “Slot Assignment (SLA)” program, DATA ERROR appears on the screen.

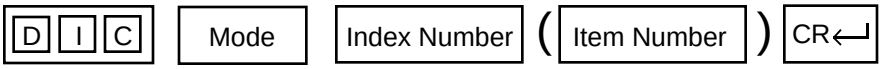
Tenant — Not assignable, if “Operation (OPR) ” Index 1, Tenant Service is set to “N (No).”

41.00 DISA Code (DIC)

Description

To assign parameters on each DISA code.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
1 to 8	DISA code number

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	ARS Override (◆ for U.S.A. and Canada only)	Y: specifying a trunk group is available N: specifying a trunk group is unavailable
2	Toll Restriction Level	01 to 16
3	Account Code	Y: forced N: optional
4	Prolong	Y: prolonging is available N: prolonging is not available
5	Tenant	1 : tenant 1 2 : tenant 2 (not assignable if “Tenant Service” is preset to “N”)

Conditions

If a DISA card is not assigned in the “Slot Assignment (SLA)” program, DATA ERROR appears on the screen.

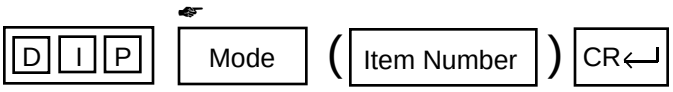
Item Number		
1	ARS Override	Not assignable if “Operation (OPR)” Index 1, Automatic Route Selection is set to “N (No).”

42.00 DISA Password (DIP)

Description

To assign the users' passwords for DISA required for making outgoing CO call via DISA feature.
(Password level : Two or higher)

Input Format



☛ Show Mode is denied.

Input Value for Item Number

Item Number	Assigning Items	Input Value	
1 to 8	DISA Password	Four digit number (Not displayed on the screen)	○

○ : clearing function is effective for the item

Conditions

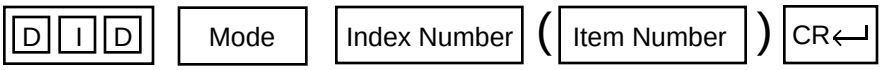
If the DISA card is not assigned in the “Slot Assignment (SLA)” program, DATA ERROR appears on the screen.

43.00 DID (DID)

Description

To define the characteristics of the DID (Direct Inward Dialing) modification table.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
1 to 4	DID modification table number

Input Value for Item Number

Item Number	Assigning Items	Input Value	
1	Receive Digit	1 to 7: number of received digit(s)	
2	Delete Digit	1 to 6: number of digits to be deleted to a maximum of six 0 : no digits to be deleted	
3	Insert Dial No.	The digits to be inserted to a maximum of three	○

○ : clearing function is effective for the item

Conditions

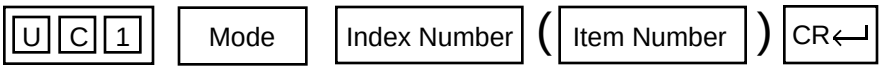
This is impossible to program if “Slot Assignment (SLA)” has no DID card programmed.

44.00 UCD 1 (UC1)

Description

To assign UCD (Uniform Call Distribution) group parameters.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 32	UCD group number

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Floating DN	DN XXXX (XXXX : three or four digit number) : Floating DN 0 : no Floating DN
2	Overflow DN	DN XXXX (XXXX : three or four digit number) : Overflow DN 0 : no Overflow DN
3	Overflow Time	01 to 10 : minute(s) ; Overflow timer 00 : no Overflow timer (Not assignable for UCD groups 01 to 04)

Conditions

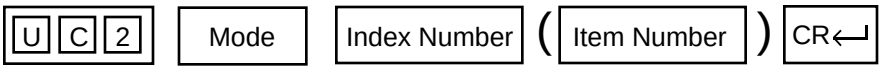
None

45.00 UCD 2 (UC2)

Description

To specify the treatment of calls that are placed on the UCD groups and queued into the busy queue.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
1 to 4	UCD group number

Input Value for Item Number

Item Number	Assigning Items	Input Value
01	Time Table # 01	00 : stopper 01 : timer (15 secs) 02 : timer (30 secs) 03 : timer (45 secs) 04 : timer (60 secs) 05 : sending OGM 1 (if busy, waiting until idle status) 06 : sending OGM 2 (if busy, waiting until idle status) 07 : sending OGM 1 (if busy, skipping) 08 : sending OGM 2 (if busy , skipping) 09 : sending Music on Hold 10 : transferring to the overflow destination 11 : disconnecting the line 12 : returning to the first column
02	Time Table # 02	
03	Time Table # 03	
04	Time Table # 04	
05	Time Table # 05	
06	Time Table # 06	
07	Time Table # 07	
08	Time Table # 08	
09	Time Table # 09	
10	Time Table # 10	
11	Time Table # 11	
12	Time Table # 12	
13	Time Table # 13	
14	Time Table # 14	
15	Time Table # 15	
16	Time Table # 16	

Conditions

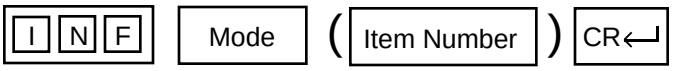
None

46.00 Information (INF)

Description

To assign the customer's name, address,
telephone number etc..
(Password level : Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value ☛	CLR
01	Customer Name	Up to 32 letters, numbers or marks	○
02	Location	Up to 64 letters, numbers or marks	○
03	Phone No.	Up to 16 letters, numbers or marks	○
04	Modem No.	Up to 16 letters, numbers or marks	○
05	Customer Contact	Up to 32 letters, numbers or marks	○
06	Data of Installation	Up to 16 letters, numbers or marks	○
07	Unit ID	Up to 8 letters, numbers or marks	○
08	Installers Name	Up to 32 letters, numbers or marks	○
09	Programmers Name	Up to 32 letters, numbers or marks	○
10	Comments	Up to 70 letters, numbers or marks	○

☛ Be sure to enclose all entries with quotation marks.

Conditions

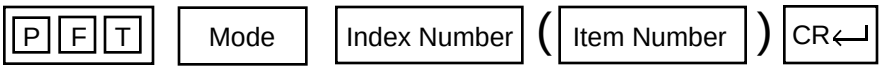
None

47.00 Power Failure Transfer (PFT)

Description

To assign the relationship between CO lines (LCOT, GCOT) and extensions (HLC, SLC) during a power failure.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 18	Power Failure Transfer number

Input Value for Item Number

Item Number	Assigning Items	Input Value	CLR
1	Trunk Slot No.	Physical slot number (three digit number) : 101 to 315	○
2	Extension Slot No.	Physical slot number (three digit number) : 101 to 315	○

○ : clearing function is effective for the item

Conditions

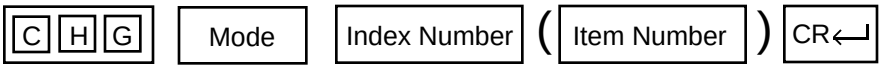
None

48.00 Change Password (CHG)

Description

To assign passwords for each level.
(Password level : One)

Input Format



Index Number

Index Number	Explanation
1	On-Site
2	Remote

Input Value for Item Number

Item Number	Assigning Items	Input Value ☛
1	Protection Level 1 Password	Four digits consisting of letters or numbers
2	Protection Level 2 Password	Four digits consisting of letters or numbers
3	Protection Level 3 Password	Four digits consisting of letters or numbers
4	Protection Level 4 Password	Four digits consisting of letters or numbers

☛ Enclose all entries in quotation marks.

Conditions

None

49.00 CPC Signal Detect Timing- Outgoing CO Calls (CPC)

Description

CPC command is used to make CPC (Calling Party Control) signal detection effect on outgoing CO calls as well as on incoming CO calls.
Refer to Section 3-F-7.00 “Calling Party Control (CPC) Signal Detection” for further information.
(Password level: Three or higher)

Input Format

C P C	Mode	Index Number	CR ↵

Index Number

Index Number	Explanation
1011 to 3158	Physical Number of the Trunk Port

Input Value for Item Number

Item Number	Assigning Items	Input Value
None	CPC signal detect timing (for outgoing CO calls)	00 : CPC signal is not detected 01 : 6.5 ms 02 : 16 ms (8 N ms N=2 to 75) • • • 75 : 600 ms (Default = 00)

Conditions

Some switching system of central office may send CPC-like signal in dialing sequence and the attempt of making a call may be terminated.
If your switching system does not send CPC-like signal in dialing sequence, we recommend to make CPC signal detection work on outgoing CO calls.

CPC signal detection can be assigned to incoming CO calls only or both on incoming and outgoing CO calls. If CPC signal detection is assigned to outgoing CO calls only, it does not function.

50.00 Automatic Busy-out Count (ABC)

Description

It is administrable to busy out the invalid CO line automatically to prevent extension users from accessing it by monitoring the loop current sent through CO line.
(Password level: Three or higher)

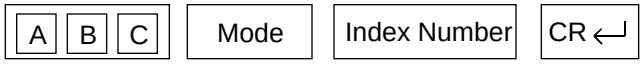
One of the following three options is assignable on a CO line basis.

(1) N=0
On CO calls, the system monitors a loop current sent through the CO line, and if a loop current is not detected, busy tone is sent to the caller.

(2) N=1 to 240
On CO calls, the system monitors a loop current sent through the CO line, and if a loop current is not detected pre-assigned times (1 to 240) consecutively, busy tone is sent to the caller.
Then the system busies out the corresponding CO line automatically.

(3) N=241
On CO calls, the system does not monitor the loop current sent through the CO line, therefore, CO line is always seized by extension users whether loop current is running or not.
Refer to Section 52.00 “WS 2” L-COT/G-COT Busy Out Looprelay.

Input Format



Index Number

Index Number	Explanation
1011 to 3158	Physical Number of the Trunk Port

Input Value for Item Number

Item Number	Assigning Items	Input Value		
None	Automatic Busy-out Count	xxx (0 to 241)		
			(Loop Current Detection)	(Automatic Busy-out)
		0:	Yes	No
		1 to 240 :	Yes	Yes if loop current is not detected by the pre-assigned times (1 to 240)
		241 :	No	No
		(Default = 241)		

51.00 World Select 1 (WS1)

Description

"WS1" command provides the following assignments.
(Password level: Two or higher)

(1) **Interdigit Pause (For Dial Pulse Trunk)**
Interdigit Pause is used to distinguish between pulse signals. To meet the requirements of your central office, select the appropriate value that represents the delay between dial pulses.This setting is only required when using dial pulse trunks.

(2) **Pulse Type (For Dial Pulse Trunk)**
The system supports the following three types of dial pulse signaling. Select the appropriate option to your area.This setting is only required when using dial pulse trunks.

(3) **Automatic Redial Retry Count**
Used to set the number of times Automatic Redial is tried. Automatic redialing of the last dialed number is done up to the specified number of times.

(4) **Automatic Redial Retry Interval**
Used to set the interval time between Automatic Redial attempts.Refer to Section 4-C-4.04 "Automatic Redial" for further information.

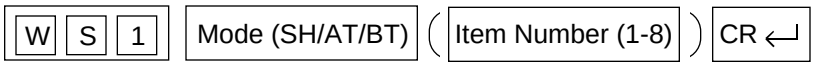
(5) **% Break Detect (SLT)**
Dialed digits from dial pulse type Single Line Telephone (SLT) is transmitted to the system by making and breaking a loop current (dc path), thereby interrupting loop current.Duration time required to detect the number of breaks depends on the SLT connected and can be administered to "16 to 96 ms" or "16 to 136 ms" by this command.

(6) **Flash Detect (SLT)**
It is assignable that the Flash signal transmitted from SLT is detected or not by the system.If "0=No" is selected, the system does not detect the Flash signal transmitted from SLT.

(7) **Flash Detect (TIE)**
Assigns the length of the flash time which applies to calls on TIE trunks.
This is the time the system needs to detect the flash signal sent from the other PBX of a TIE Line Network. Duration time required is determined by the other PBXs.

(8) **Answer Decision Timer**
This entry applies to calls on TIE trunks.
This is the time the system needs to recognize the off-hook signal sent from the other PBX before connecting the voice path.
The entry is entered in 32 ms increments.

Input Format



Index Number
None

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Interdigit Pause	1 : 630 ms 2 : 830 ms 3 : 1030 ms (Default=2)
2	Pulse Type	1 : Normal 2 : New Zealand 3 : Sweden (Default = 1 — Areas other than New Zealand 2 — New Zealand)
3	Automatic Redial Retry Count	01 : 1 time • • • 32 : 32 times (Default = 15 — U.S.A. 10 — Areas other than U.S.A.)
4	Automatic Redial Retry Interval	01 : 10 s • • • 32 : 320 s (Default = 04 — U.S.A. and Canada 06 — Areas other than U.S.A. and Canada)
5	% Break Detect	1 : 16 to 96 ms 2 : 16 to 136 ms (Default = 1)
6	Flash Detect (SLT)	0 : No 1 : Yes (Default = 1)

Continued

Item Number	Assigning Items	Input Value
7	Flash Detect (Tie)	0 : Disabled (no detection) (200ms~ : On-hook) 1 : 200 ms to 1 s (1 s ~ : On-hook) 2 : 80 ms to 1 s (1 s ~ : On-hook) 3 : 200 ms to 1.5 s (1.5 s ~ : On-hook) 4 : 80 ms to 1.5 s (1.5 s ~ : On-hook) (Default = 1)
8	Answer Decision Timer	001: 32 ms 002: 64 ms • • • 255 : 8.16 s (Default = 001)

52.00 World Select 2 (WS2)

Description

"WS2" command provides the following assignments.
(Password level: Two or higher)

(1) **First Dial Timer**
On outgoing CO calls, the system waits at least 0.5 seconds after seizing the CO line, before sending the dialing digits required by the central office. This allows the central office enough time to accept the dialing digits correctly. Default setting is 1.0 second and can be ranged from 0.5 to 8.0 seconds.

(2) **First Dial Timer (DID)** (for areas other than U.S.A. and Canada)
Available when "Type" of a Trunk Group is set to "DID" or "TIE".

(3) **EQU Access** (◆ for U.S.A. and Canada only)
Used to activate or deactivate the EQU Access feature on a system-wide basis. If "N" is selected by this command, programming screen of "Special Carrier Access" Equal Access is not accessible.

(4) **OCC Access** (◆ for U.S.A. and Canada only)
Used to activate or deactivate the OCC Access feature on a system-wide basis. If "N" is selected by this command, programming screen of "Special Carrier Access" OCC Access is not accessible.

(5) **Outgoing CO Back Tone**
On outgoing CO calls, dialed number is toned out, which informs the extension users that dialed number has been dialed.
CO Dialing Tone is usually toned out by default setting, select "N" to turn off the CO dialing tone.

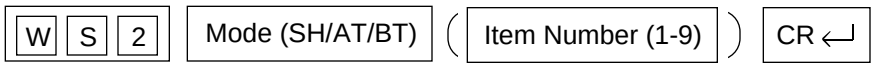
(6) **L-COT Busy Out Looprelay**
When CO line is busied out either manually by the operator or automatically by the system, the state of Loop Relay is controlled by this setting.

(7) **G-COT Busy Out Looprelay** (◆ for U.S.A. and Canada only)
When CO line is busied out either manually by the Operator 1, or automatically by the system, the state of Loop Relay and Ring-FG are controlled by this setting.

(8) **Pay Tone Frequency**
Used to select the appropriate pay tone frequency depending on the local CO. Available when PCOT card (KX-T96189) is installed in the system.

(9) **Pay Tone Gain**
Used to select the appropriate pay tone gain depending on the local CO. Available when PCOT card (KX-T96189) is installed in the system.

Input Format



Index Number

None

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	First Dial Timer	01 : 0.5 s 02 : 1.0 s • • 16 : 8.0 s (Default=02)
2	First Dial Timer (DID)	001 : 32 ms 002 : 64 (32X2) ms • • 255 : 8.16 (32X255) s (Default=002)
3	EQU Access (◆ for U.S.A. and Canada only)	Y: EQU Access is allowed N: EQU Access is not allowed (Default = Y — U.S.A., N — Canada)
4	OCC Access (◆ for U.S.A. and Canada only)	Y: OCC Access is allowed N: OCC Access is not allowed (Default = Y — U.S.A., N — Canada)
5	Outgoing CO Back Tone	Y: Dialed digits is toned out N: Dialed digits is not toned out (Default = Y)
6	L-COT Busy Out Looprelay	Y: Loop Relay ON N: Loop Relay OFF (Default = N)
7	G-COT Busy Out Looprelay (◆ for U.S.A. and Canada only)	1 : Loop Relay ON + Ring-FG Open 2 : Loop Relay OFF + Ring-FG Close 3 : Loop Relay OFF + Ring-FG Open (Default = 3)
8	Pay Tone Frequency	1 : 16 KHz 2 : 12 KHz (Default = 1)
9	Pay Tone Gain	01 : 0 dB 02 : 1 dB • • 10 : 9 dB • • 32 : 31 dB (Default = 10)

53.00 World Select 3 (WS3)

Description

"WS3" command provides the following assignments.
(Password level: Two or higher)

---

(1) **DIL 1: N CO Key Only (PITS only)**
It is programmable that an incoming CO call routed via "DIL 1: N" feature arrives at "CO button only" or "CO button or PDN button" as follows.

(Parameters)
Y : An incoming CO call routed via DIL 1: N feature only arrives at a PITS telephone which has associated CO button (SCO, GCO).
If no CO button is assigned on a PITS, an incoming CO call will not arrive at that extension.

N : An incoming CO call routed via DIL 1: N feature arrives at CO button (SCO, GCO) or PDN button.
If no CO button is available on a PITS, an incoming CO call will arrive at PDN button available. (default)

---

(2) **EXT Off-hook BLF (PITS only)**
The status indicator on DSS (DN) button reflects the idle/busy status of the associated extension user under one of the following settings. This selection also applies to "Busy Lamp Field" screen of an Attendant Console.

(Parameters)
Y : DSS indicator lights when all PDN buttons of the associated extension are busy or Off-Hook. (default)

N : DSS indicator lights only when all PDN buttons of the associated extension are busy.

---

(3) **DTMF-Tone Integration**
On extensions with the Voice Mail Port parameter enabled, the KX-T336 system can send codes (DTMF tones) to indicate the state of the call (busy, answered, ringing, disconnect, etc.) in addition to the normal call progress tones. These codes enable the Voice Processing system to immediately recognize the current state of the call and improve its call handling performance.

(Parameters)
Y : The KX-T336 system sends codes (DTMF tones) to the VPS.

N : The KX-T336 system does not send codes (DTMF tones) to the VPS. (default)

---

(4) **SLT On-hook Operation Mode**

In single line telephone procedures, active call is put on consultation hold when the switchhook is pressed down for approximately 1/2 second and released.

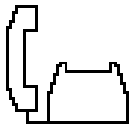
In this case, consultation hold recall tone will ring immediately if you replace the handset on the switchhook without dialing any digits.
Then you may hear recorder tone when you lift the handset to reply this ringing

This may happen sometimes if the handset is replaced on the switchhook after hopping on it.

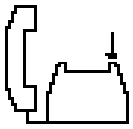
To prevent such unexpected consultation hold tone from ringing, select “2” for this setting.

When setting “2” is selected,
a call put consultation hold will be disconnected if you replace the handset on the switchhook without dialing any digits.

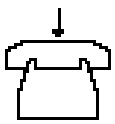
When “1” is selected. — default



(1) Talking
Talking with a caller.



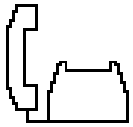
(2) Hooking
A call is put on consultation hold.



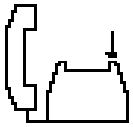
(3) On-hook
Without dialing any digits.

(4) Recall
Consultation hold tone rings.

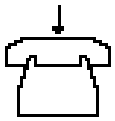
When “2” is selected



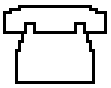
(1) Talking
Talking with a caller.



(2) Hooking
A call is put on consultation hold.



(3) On-hook
Without dialing any digits.



(4) Disconnection
A call on consultation hold is disconnected.

(Note)

To hang up and make another call right away, an SLT user should be sure to hold down the switchhook for more than two seconds.

(Parameters)

1 : Hang-up causes ringing of consultation hold recall tone. (default)

2 : Hang-up disconnects a call on consultation hold.

(5) **Mode Selection of Calls Arriving at ATT**

When two attendant consoles are connected to the system, one of the following three types of Incoming Mode can be selected.
Options 2 and 3 work only for the incoming outside call routed via a CO line which belongs to the Trunk Group whose Incoming Mode (Day) is assigned as “ATT.”

(Parameters)

1. Load Sharing
   Incoming outside calls are distributed evenly to two attendant consoles so that they can share the same load. (default)
2. Simultaneous Ringing
   An incoming outside call rings at two attendant consoles simultaneously.
3. Interconsole IRNA
   If an incoming outside call ringing at one attendant console is not answered within a specified time period (Attendant Overflow Time), it will be automatically transferred to another attendant console automatically.

(6) **Centrex ARS Mode**

In ARS mode, not only a 7-digit or 10-digit number but a number equal to or less than 6-digit (such as CENTREX feature access code) that follow the ARS access code (default: 9) can be routed via an outside line.

A number equal to or less than 6-digit is routed via Local Trunk Dial Access procedure after passing toll restriction process.

A 7-digit or 10-digit number is routed via ARS procedure after passing toll restriction process.

(Parameters)

Y : A number equal to or less than 6-digit can be routed via an outside line in ARS mode.

N : A number equal to or less than 6-digit can not be routed via an outside line in ARS mode. (default)

(7) **Waiting for Second Dial Tone Mode**

In some area, upon completion of facility access code entry, the extension user must ensure the reception of the second dial tone from the Central Office before continuing to dial the telephone number.

(Parameters)

Y : The system waits for the second CO dial tone.

N : The system does not wait for the second CO dial tone. (default)

(8) **Polarity Reversal Mode**

With an R-LCOT card (KX-T96183), the system determines the start and completion of calls by detecting a reversal of CO line polarity.
In some areas, however, CO doesn’t send a reverse signal when a certain type of special telephone number is dialed.
In this case, select “1. Special Mode.”
When “1. Special Mode” (default) is selected, the system connects a speech path when “External Interdigit Timer” (5 s - default) expires, or when it detects a reversal of CO line polarity.

(Parameters)

1. Special Mode (default)
   The system connects a speech path when “External Interdigit Timer” expires, or it detects a reversal of CO line polarity. Call duration time counting starts when the system detects a reversal of CO line polarity.
2. Normal Mode
   The system connects a speech path and starts counting the call duration time when it detects a reversal of CO line polarity.

---

(9) ＊/# **Allow Mode**

Used to determine if the dialed “＊” and/or “#” in the leading 3 digits will be checked by Toll Restriction. This assignment is required for certain central offices (CO) to prevent toll fraud. Some CO ignore the user-dialed “＊” and/or “#.” If your CO is such a type, select “N” (Restricted).

(Parameters)

Y : Not restricted

N : Restricted (default)

---

(10) **Message Waiting Lamp Off-Control — Voice Mail**

Used to determine whether the system turns off the Message Waiting lamp or the VPS does when the VPS answers the callback from the message receiver.

(Parameters)

1. Normal Mode
   The system turns off the Message Waiting lamp. (default)
2. Voice Mail Mode 1
   Only the VPS port that turned on the Message Waiting lamp can turn it off.
3. Voice Mail Mode 2
   Any VPS port can turn off the Message Waiting lamp.

---

(11) **μ-law—A-law (E-1 only)**

Used to select the appropriate PCM(Pulse Code Modulation) conversion mode. This setting is valid only when E-1 DIGITAL TRUNK card (KX-T96188) is installed to the system.

(Parameters)

1: μ-law

2: A-law (default)

---

(12) **SLT Transfer Operation**

If set to “Mode 2”, the following operations become available with the SLT users.

- Screened Call Transfer to Trunk (Section 5-D-1.06)
- Call Transfer by using the feature number for “Transfer.” (Section 5-D-1.01 through 1.05)
- Establishing a conference call by dialing the feature number for “Conference.” (Section 5-E-1.00)

(Parameters)

1: Mode 1 (default)

2: Mode 2

---

(13) **Ringback Tone While Transfer**

Used to select the type of sound source during an unscreened call transfer to an extension.
By default, the caller hears Music on Hold (if provided) while the caller is being transferred to another location. However, if no music source is provided with the system, the caller hears no sound. In this case, we recommend changing the setting to “Y(Ringback Tone).”

(Parameters)
Y : Ringback Tone

N : Music on Hold (default)

---

(14) **Charge Display**

Used to select the initial display format of Charge Fee Reference, Charge Meter or Charge Fee. By default, duration time of an outside call is shown on the display of PITS.
This assignment is valid when “Charge Management” feature (Section 3-F-19.00) is utilized.

(Parameters)
1: Duration Display (default)

2: Charge Meter Display

3: Charge Fee Display

---

(15) **Tone Except Idle Status (MFC-R2)**

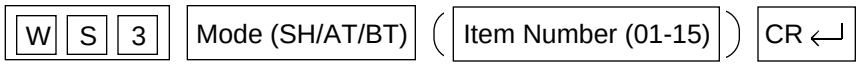
Used to select the type of tone by which the caller knows the status of the destination party.

(Parameters)
1: Idle : Ringback tone
Busy : Busy tone
Other status : Reorder tone (default)

2: Idle : Ringback tone
Other status : Busy tone

3: Idle : Ringback tone
Other status : Reorder tone

Input Format



Index Number

None

Input Value for Item Number

Item Number	Assigning Items	Input Value
01	DIL 1: N CO Key Only	Y: Arrives at CO button only N: Arrives at CO button or PDN button (Default = N)
02	EXT Off-hook BLF	Y: DSS indicator lights when all PDN buttons of the associated extension are busy or Off-Hook N: DSS indicator lights only when all PDN buttons of the associated extension are busy (Default = Y)
03	DTMF-Tone Integration	Y: The KX-T336 system sends codes (DTMF tones) to the VPS. N: The KX-T336 system does not send codes (DTMF tones) to the VPS. (Default = N)
04	SLT On-hook Operation mode	1 : Hang-up causes ringing of consultation hold recall tone. 2 : Hang-up disconnects a call on consultation hold. (Default = 1)
05	Mode Selection of Calls Arriving at ATT	1 : Load Sharing 2 : Simultaneous Ringing 3 : Interconsole IRNA (Default = 1)
06	Centrex ARS Mode	Y: A number equal to or less than 6-digit can be routed via an outside line in ARS mode. N: A number equal to or less than 6-digit can not be routed via an outside line in ARS mode. (Default = N)
07	Waiting for Second Dial Tone	Y: The system waits for the second CO dial tone. N: The system does not wait for the second CO dial tone. (Default = N)

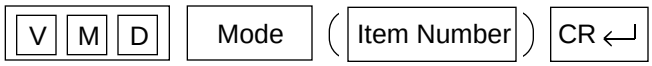
Item Number	Assigning Items	Input Value
08	Polarity Reversal Mode	1 : Special Mode 2 : Normal Mode (Default = 1)
09	＋/# Allow Mode	Y: Not restricted N: Restricted (Default = N)
10	Message Waiting Lamp Off Control — Voice Mail	1 : Normal Mode 2 : Voice Mail Mode 1 3 : Voice Mail Mode 2 (Default = 1)
11	μ-law—A-law (E-1 only)	1 : μ-law 2 : A-law (Default = 2)
12	SLT Transfer Operation	1 : Mode 1 2 : Mode 2 (Default = 1)
13	Ringback Tone While Transfer	Y : Ringback Tone N: Music on Hold (Default = N)
14	Charge Display	1 : Duration Display 2 : Charge Meter Display 3 : Charge Fee Display (Default = 1)
15	Tone Except Idle Status (MFC-R2)	1 : Idle : Ringback tone Busy : Busy tone Other status : Reorder tone 2: Idle : Ringback tone Other status : Busy tone 3: Idle : Ringback tone Other status : Reorder tone (Default=1)

54.00 Voice Mail Directory Number (VMD)

Description

Used to assign DN of a Voice Mail port (the extension port to which the Voice Mail system is connected.)
This means the KX-T336 system will send the mailbox number of the extension (on which a call forwarding feature is assigned) with DTMF tones to a Voice Mail port, when a call forwarded to a Voice Mail port is answered. Calls from any Voice Mail port will not be forwarded, if forwarding destination is another Voice Mail port.

Input Format



Index Number

None

Input Value for Item Number

Item Number	Assigning Items	Input Value
01 • • 16	Voice Mail DN	DNxxxx: Directory Number 0: None (Default = 0)

Programming

(Example)
When DN 109 to 112 are connected to the Voice Mail ports.

To assign the Voice Mail DN

1. At the programming prompt (PRG>), type:
   → ; PRG>VMD AT 01 ( )

   The screen displays the Input prompt (INPUT >>) as follows:

   ; PRG> VMD AT 01
   ; 01: Voice Mail DN.....0
   → ; INPUT >>

2. At Input prompt (INPUT >>), type:

   ; PRG> VMD AT 01
   ; 01: Voice Mail DN.....0
   → ; INPUT >> DN109 ( )

   The screen displays the next Input prompt (INPUT >>) as follows:

   ; PRG> VMD AT 01
   ; 01: Voice Mail DN.....0
   ; INPUT >> DN109
   ; 02: Voice Mail DN.....0
   → ; INPUT >>

3. Follow the step 2 for each Voice Mail DN you want to store.

4. To store the assigned voice mail DN to the system,
   at Input prompt (INPUT >>), type:

```
; PRG> VMD AT 01
;    01: Voice Mail DN.....0
;      INPUT >> DN109
;    02: Voice Mail DN.....0
;      INPUT >> DN110
;    03: Voice Mail DN.....0
;      INPUT >> DN111
;    04: Voice Mail DN.....0
;      INPUT >> DN112
;    05: Voice Mail DN.....0
→ ;      INPUT >>  $EOD    (   )
```

   This assigns the Voice Mail DN to the system, and the programming prompt (PRG >) appears again.

To confirm the assignments

At the programming prompt (PRG >), type:

```
→ ; PRG> VMD SH    (   )
```

The screen displays the Voice Mail DN assignments as follows.

```
; PRG> VMD SH    (   )
;    01: Voice Mail DN.....DN109
;    02: Voice Mail DN.....DN110
;    03: Voice Mail DN.....DN111
;    04: Voice Mail DN.....DN112
;    05: Voice Mail DN.....0
;    06: Voice Mail DN.....0
                :
                .
;    16: Voice Mail DN.....0
; PRG >
```

To remove the existing Voice Mail DN

1. At the programming prompt (PRG >), type:

```
→ ; PRG> VMD AT 01    (   )
```

   The screen displays the Input prompt (INPUT >>) as follows:

```
; PRG> VMD AT 01
;    01: Voice Mail DN.....DN109
→ ;      INPUT >>
```

2. At input prompt (INPUT >>), type:

```
; PRG> VMD AT 01
;    01: Voice Mail DN.....DN109
→ ;      INPUT >>  $CLR    (   )
```

The screen displays the next Input prompt (INPUT >>) as follows:

```
; PRG> VMD AT 01
;    01: Voice Mail DN.....DN109
;      INPUT >>  $CLR
;    02: Voice Mail DN.....DN110
→ ;    INPUT >>
```

3. Follow the step 2 for each Voice Mail DN you want to remove.

4. To store the changed data to the system,
   at Input prompt (INPUT >>), type:

```
; PRG> VMD AT 01
;    01: Voice Mail DN.....DN109
;      INPUT >>  $CLR
;    02: Voice Mail DN.....DN110
;      INPUT >>  $CLR
;    03: Voice Mail DN.....DN111
;      INPUT >>  $CLR
;    04: Voice Mail DN.....DN112
;      INPUT >>  $CLR
;    05: Voice Mail DN.....0
→ ;    INPUT >>  $EOD    (   )
```

   This assigns the changed data to the system, and the programming prompt (PRG >) appears again.

To finish the programming

At the programming prompt (PRG >), type:

→ ; PRG> EXIT ( )

The screen displays the initial prompt (>) of the Dumb programming mode as follows.

```
  ; PRG> EXIT
→ ; >
```

To return to the VT programming mode

At initial prompt (>), press:

→ CTRL and V keys simultaneously.

The screen displays the Main Menu of the VT programming mode.

55.00 Mailbox Number (MBN)

Description

This program tells the KX-T336 system what mailbox number is assigned for each extension.
By default, mailbox number identical with each extension number is assigned to all extensions.
That is, mailbox number for DN100 extension is 100.
This means when a call is forwarded (via DN100) to a port that is assigned as a voice mail port, the system will sent 100 with DTMF tones automatically when the voice mail port answers the call.

Input Format

M B N	Mode	Index Number	CR ↵

Index Number	Explanation
DN XXXX or Four-digit number (1011 to 3158)	Extension directory number (XXXX : three or four digits) Physical location of extension

Index Number

Item Number	Assigning Items	Input Value
None	Mailbox Number	Up to 10 digits of numeric characters (0-9), "*" and "#" (Default = Same as the extension number)

Input Value for Item Number

Mailbox number specific to each extension (Same as the extension number) is assigned to all extensions by default.

Programming

To change the default setting

1. At the programming prompt (PRG>), type:

   → ; PRG> MBN AT DN100 ( )

   The screen displays the Input prompt (INPUT >>) as follows:

   ; PRG> MBN AT DN100
   ; 1: Mail Box Number.....100
   → ; INPUT >>

2. At Input prompt (INPUT >>), type:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
→ ;      INPUT >> 200    (   )
```

The screen displays the next Input prompt (INPUT >>) as follows:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
;      INPUT >> 200
;      1: Mail Box Number.....200
→ ;      INPUT >>
```

3. To store the new Mailbox Number to the system, at Input prompt (INPUT >>), type:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
;      INPUT >> 200
;      1: Mail Box Number.....200
→ ;      INPUT >> $EOD    (   )
```

This assigns the new Mailbox Number to the system, and the programming prompt (PRG >) appears again.

To change the default setting for another extension

4. At the programming prompt (PRG >), type:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
;      INPUT >> 200
;      1: Mail Box Number.....200
;      INPUT >> $EOD
→ ; PRG> MBN AT DN101    (   )
```

The screen displays the next Input prompt as follows:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
;      INPUT >> 200
;      1: Mail Box Number.....200
;      INPUT >> $EOD
; PRG> MBN AT DN101
;      1: Mail Box Number.....101
→ ;      INPUT >>
```

5. At Input prompt (INPUT >>), type:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
;       INPUT >> 200
;      1: Mail Box Number.....200
;       INPUT >> $EOD

; PRG> MBN AT DN101
;      1: Mail Box Number.....101
→ ;      INPUT >> 201     (    )
```

The screen displays the next Input prompt (INPUT >>) as follows:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
;       INPUT >> 200
;      1: Mail Box Number.....200
;       INPUT >> $EOD

; PRG> MBN AT DN101
;      1: Mail Box Number.....101
;       INPUT >> 201
;      1: Mail Box Number.....201
→ ;      INPUT >>
```

6. To store the new Mailbox Number to the system, at Input prompt (INPUT >>), type:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
;       INPUT >> 200
;      1: Mail Box Number.....200
;       INPUT >> $EOD

; PRG> MBN AT DN101
;      1: Mail Box Number.....101
;       INPUT >> 201
;      1: Mail Box Number.....201
→ ;      INPUT >> $EOD
```

This assigns the new Mailbox Number to the system, and the programming prompt (PRG >) appears again.

To remove the existing Mailbox Number

1. At the programming prompt (PRG>), type:

```
; PRG> MBN AT DN100     (    )
```

The screen displays the Input prompt (INPUT >>) as follows:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
→ ;      INPUT >>
```

2. At Input prompt (INPUT >>), type:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
→ ;      INPUT >> $CLR     (    )
```

The screen displays the next Input prompt as follows:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
;       INPUT >>  $CLR
;      1: Mail Box Number.....
→ ;       INPUT >>
```

3. To store the changed data to the system,
at Input prompt (INPUT >>), type:

```
; PRG> MBN AT DN100
;      1: Mail Box Number.....100
;       INPUT >> $CLR
;      1: Mail Box Number.....
→ ;       INPUT >> $EOD     (    )
```

This assigns the changed data to the system, and the programming prompt (PRG >) appears again.

To finish the programming

At the programming prompt (PRG >), type:

```
→ ; PRG> EXIT     (    )
```

The screen displays the initial prompt (>) of the Dumb programming mode as follows:

```
; PRG> EXIT
→ ; >
```

To return to the VT programming mode

At initial prompt (>), press:

CTRL and V keys simultaneously.

The screen displays the Main Menu of the VT programming mode.

56.00 Account Code Verified

Description

Account Code Verified is used to prevent the extension users from making unauthorized outside calls by checking the validity of the entered account code.
In default mode, the validity of the entered account code is not checked by the system.
When Account Code Verified is utilized, account code entered before making an outside call is checked against the list of system account codes.
If the entered account code matches one of the codes on the list, the outside call is completed after passing through the toll restriction procedure.
If not found on this list, reorder tone is returned to the extension user and the outside call is restricted.
◆ From Software version 15.XX or higher, toll restriction procedure for Account Code verified calls has changed.
See “Additional Information” on page 10-C-92 for further information.

System Account Codes for this feature can be registered in the Speed Dialing Screen by dividing it into two areas using SPB command.
This feature is applied to the extension user whose Class of Service No. is assigned to “Y” by entering ACV command at dumb programming mode.
System Account Codes are not assignable, if Tenant Service is employed.

To utilize this feature, the following programming should be done beforehand.

(1) Programming the System Account Codes-Speed Dialing Boundary (SPB)

To register the System Account Codes, first divide the System Dialing Screen into two areas by entering SPB command.
When divided, the first area is used to register Speed Dialing Codes and the second area is used to register System Account Codes.

SPB command is available only when tenant service is not employed.

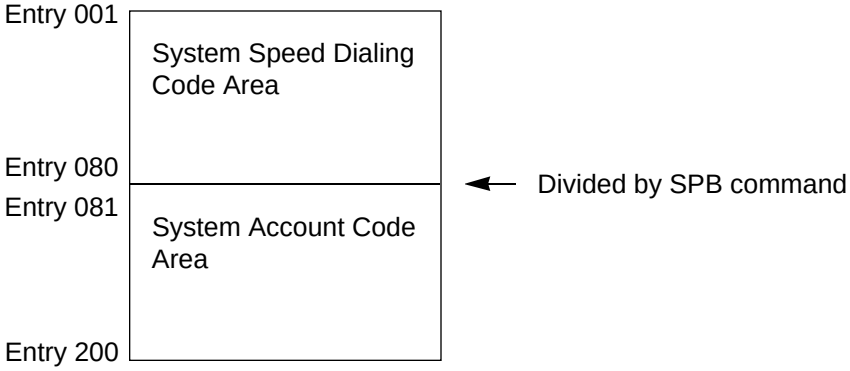
<Example>

To assign 80 Speed Dialing Codes and 120 System Account Codes in the Speed Dialing Screen, enter as follows.

```
; PRG>SPB  AT<CR>
; Speed  Dial  Boundary ---------- 200
;         INPUT>> 080  <CR>
; Speed  Dial  Boundary ---------- 080
;         INPUT>> $EOD  <CR>

; PRG>
```

As a result, System Speed Dialing area will be divided into two areas as follows.



Boundary number is ranging from “000” to “200.”

If “000” is entered in Speed Dial Boundary, whole system speed dialing screen is used to register the System Account Codes.
If “200” is entered in Speed Dial Boundary, whole system speed dialing screen is used to register a number for Speed Dialing.

After Speed Dial Boundary is determined, register System Account Codes at “System-Speed Dialing-System” screen.

(2) Assigning Account Code Verified (ACV) Feature to the Extension

ACV command is used to assign Account Code Verified feature to each extension user on a basis of COS No. for that extension.

When Account Code Verified feature is assigned “Yes” to COS No.2, the account code entered is checked against the System Account Code List. If match is found on the table, a call is completed, if not found, a call is stopped and reorder tone is sent.

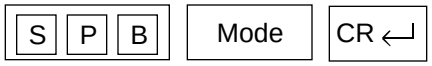
To program Account Code Verified feature, enter ACV command as follows. Then enter “Y” to activate this feature, or enter “N” to deactivate this feature.

<Example>

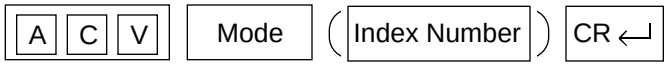
```
; PRG>ACV  AT<CR>
; Class of Service No. 01 ----------  N
;         INPUT>> Y  <CR>
; Class of Service No. 02 ----------  N
;         INPUT>> Y  <CR>
; Class of Service No. 03 ----------  N
;         INPUT>> Y  <CR>
; Class of Service No. 04 ----------  N
;         INPUT>> $EOD  <CR>
; PRG>
```

Input Format

(1)



(2)



Index Number

(1) None

(2)

Index Number	Explanation
01 to 32	COS (Class of Service) Number

Input Value for Index Number

(1)

Item Number	Assigning Items	Input Value
None	Speed Dial Boundary	000 to 200 : Boundary Number 000 : Up to 200 System Account Codes can be registered 200 : Up to 200 Speed Dialing Codes can be registered (Default = 200)

(2)

Item Number	Assigning Items	Input Value
None	Account Code Verified Mode	Y : Enabled N : Disabled (Default = N)

Reference

It is helpful to use this feature together with ACL feature.
Refer to Section 3-F-11.00 “Call Accounting Summary” for further information.

Additional Information

Toll Restriction procedure for Account Code Verified calls.
An Account Code Verified call is completed under the following conditions:

<Software old version>

TRLE ≥ TRLL / TRLT

<Software version 15.XX or higher>

TRLA ≥ TRLL / TRLT

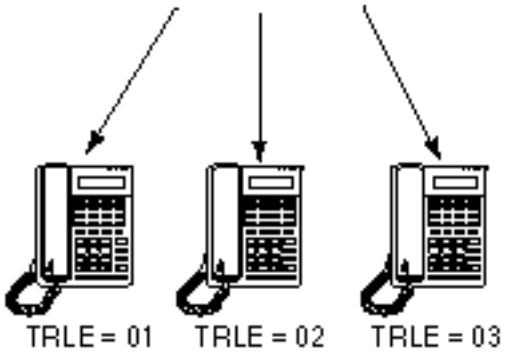
(Legend)
TRLE = Toll Restriction Level of Extension
TRLL = Toll Restriction Level of Local access
TRLT = Toll Restriction Level of Trunk group
TRLA = Toll Restriction Level of Account code

Note:
TRLA can be assigned per System Account Code in System Speed Dialing screen when Account Code Verified feature is utilized.

Example:

<Software old version>

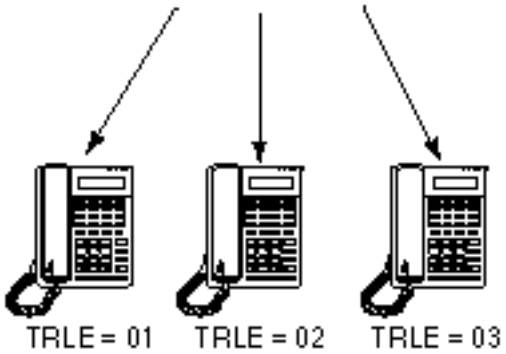
Account code (111)



Toll Restriction is executed according to the TRLE of each extension.

<Software version 15.XX or higher>

Account code (111 = TRLA 01)



Toll Restriction is executed according to the TRLA of account code entered regardless of TRLE of each extension.

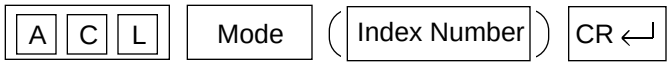
57.00 Account Code Entry on Long Distance Calls (ACL)

Description

(for U.S.A. and Canada)
Used to allow the extension user to override the restrictions on numbers programmed by the Toll Restriction Table.
When this feature is utilized, the call is completed even if the last 7-digit of the dialed outside number is found on the table, by entering the appropriate account code before making an outside call.
This feature works on a basis of COS (Class of Service) assigned to each extension.
To utilize this feature, the extension user must enter an account code before making an outside call.
The validity of the account code entered, however, is not checked by the system.
To check the validity, assign “Account Code Verified (ACV)” feature.

(for areas other than U.S.A. and Canada)
Used to allow the extension user to override the restrictions on numbers programmed by “3-Digit Toll Restriction Table.”
When this feature is utilized, the call is completed even if the first 3-digit of the dialed outside number is found on the table, by entering the appropriate account code before making an outside call.
This feature works on a basis of COS (Class of Service) assigned to each extension.
To utilize this feature, the extension user must enter an account code before making an outside call.
The validity of the account code entered, however, is not checked by the system.
To check the validity, assign “Account Code Verified (ACV)” feature.

Input Format



Index Number

Index Number	Explanation
01 to 32	COS (Class of Service) Number

Input Value for Index Number

Assigning Items	Input Value
Account Code on Long Distance Calls	Y : Enabled N : Disabled (Default = N)

Assigning Account Code Entry on Long Distance Calls (ACL)

To activate this feature, enter ACL command and then “Y (Yes)” as follows.

<Example>

```
; PRG>ACL  AT<CR>
; Class of Service No 01 ----------  N
;         INPUT>> Y  <CR>
; Class of Service No 02 ----------  N
;         INPUT>> Y  <CR>
; Class of Service No 03 ----------  N
;         INPUT>> Y  <CR>
; Class of Service No 04 ----------  N
;         INPUT>> $EOD  <CR>
; PRG>
```

Conditions

None

Reference

Section 3-C-1.00 “Toll Restriction”

Section 3-F-11.00 “Call Accounting Summary”

Section 4-I-2.00 “Account Code Entry”

Section 5-G-2.00 “Account Code Entry”

Section 10-C-56.00 “Account Code Verified”

It is helpful to use this feature together with ACV feature.
Refer to Section 3-F-11.00 “Call Accounting Summary” for further information.

58.00 CO Access Instantly (CAI)

Description

When an extension user makes an outside call, the system seizes a CO line (if available) and sends out dial signal after the toll restriction procedure in default mode.
In some region, CO dial tone is returned to the system in a delayed timing.
If you want to send out dial signal after receiving the CO dial tone, program CO Access Instantly feature.
When this feature is activated, a CO line is seized (if available) directly after pressing a CO button or dialing a CO line access code.
Then the extension user can send dial signal to the central office after receiving CO dial tone.
This feature is programmable on a trunk group basis.
In case of Local Trunk-Dial Access, system decides the mode by the top trunk group of Local Trunk Hunt Sequence.

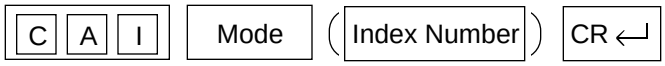
(1) Assigning "CO Access Instantly" on a Trunk Group

This feature can be assigned on a trunk group basis by entering CAI command at dumb programming mode as follows.
Then enter "Y" to activate this feature, and enter "N" to deactivate this feature.

<Example>

```
; PRG>CAI  AT<CR>
; Trunk Group No. 01 ----------  N
;         INPUT>> Y  <CR>
; Trunk Group No. 02 ----------  N
;         INPUT>> Y  <CR>
;Trunk Group No. 03 ----------  N
;         INPUT>> Y  <CR>
; Trunk Group No. 04 ----------  N
;         INPUT>> $EOD  <CR>
; PRG>
```

Input Format



Index Number

Index Number	Explanation
01 to 16	Trunk Group Number

Input Value for Index Number

Item Number	Assigning Items	Input Value
None	CO Access Instantly	Y : Enabled N : Disabled (Default = N — U.S.A. and Canada, Y — Areas other than U.S.A. and Canada)

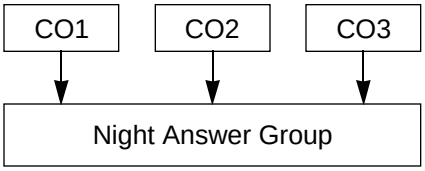
Conditions

(External First Digit Time-Out timer assignment)
When CO Access Instantly is utilized, we recommend to set System-System Timer “External First Digit Time-Out” timer longer than length of CO dial tone delay.
This setting can be ranged from 5 to 120 seconds.
Refer to Section 9-D-3.00 “System Timer” or
Section 10-C-6.00 “System Timer (TIM).”

59.00 Night Answer Group (NAG)

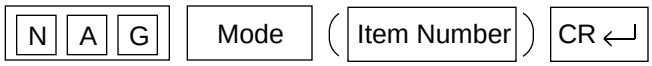
Description

A single group of extensions (called the Night Answer Group) can be created to receive calls at night. Calls from more than one CO line may arrive at this group.
The size limit of the group is 32 extensions.



Refer to Section 3-B-8.01 “Directed Night Answer” and Section 3-B-8.04 “Fixed Night Service” for further information.

Input Format



Index Number

None

Input Value for Item Number

Item Number	Assigning Items	Input Value
01 to 32	Destination (Night Answer Group Extensions)	DN XXXX (XXXX : three or four digits): extension number 0 : none (Available only when Trunk Group “Incoming Mode (Night)” is set to “FIXED”) (Default = 0)

Programming

(Example)

To assign the Night Answer Group Extensions

1. At the programming prompt (PRG>), type:

   → ; PRG> NAG AT ( )

   The screen displays the Input prompt (INPUT >>) as follows:

   ; PRG> NAG AT
   ; 01: Night Answer EXT.....0
   → ; INPUT >>

2. At Input prompt (INPUT >>), type:

   ; PRG> NAG AT
   ; 01: Night Answer EXT.....0
   → ; INPUT >> DN109 ( )

The screen displays the next Input prompt (INPUT >>) as follows:

```
; PRG> NAG AT
;    01: Night Answer EXT.....0
;      INPUT >> DN109
;    02: Night Answer EXT.....0
➔ ;      INPUT >>
```

3. Follow the step 2 for each Night Answer Group Extensions you want to assign.

4. To store the assignments to the system, at Input prompt (INPUT >>), type:

```
; PRG> NAG AT
;    01: Night Answer EXT.....0
;      INPUT >> DN109
;    02: Night Answer EXT.....0
;      INPUT >> DN110
;    03: Night Answer EXT.....0
;      INPUT >> DN111
;    04: Night Answer EXT.....0
;      INPUT >> DN112
;    05: Night Answer EXT.....0
➔ ;      INPUT >>  $EOD    (   )
```

This assigns the Night Answer Group Extensions to the system, and the programming prompt (PRG >) appears again.

To confirm the assignments

At the programming prompt (PRG >), type:

➔ ; PRG> NAG SH ( )

The screen displays the current assignments as follows.

```
; PRG> NAG SH    (   )
;    01: Night Answer EXT.....DN109
;    02: Night Answer EXT.....DN110
;    03: Night Answer EXT.....DN111
;    04: Night Answer EXT.....DN112
;    05: Night Answer EXT.....0
;    06: Night Answer EXT.....0
                 :
                 .
;    32: Night Answer EXT.....0
; PRG >
```

To remove the existing Night Answer Group Extensions

1. At the programming prompt (PRG >), type:

➔ ; PRG> NAG AT ( )

The screen displays the Input prompt (INPUT >>) as follows:

```
; PRG> NAG AT
;    01: Night Answer EXT.....DN109
➔ ;      INPUT >>
```

2. At input prompt (INPUT >>), type:

```
; PRG> NAG AT
;    01: Night Answer EXT.....DN109
→ ;      INPUT >>  $CLR     (    )
```

The screen displays the next Input prompt (INPUT >>) as follows:

```
; PRG> NAG AT
;    01: Night Answer EXT.....DN109
;      INPUT >>  $CLR
;    02: Night Answer EXT.....DN110
→ ;      INPUT >>
```

3. Follow the step 2 for each Night Answer Group Extension you want to remove.

4. To store the changed data to the system,
at Input prompt (INPUT >>), type:

```
; PRG> NAG AT
;    01: Night Answer EXT.....DN109
;      INPUT >>  $CLR
;    02: Night Answer EXT.....DN110
;      INPUT >>  $CLR
;    03: Night Answer EXT.....DN111
;      INPUT >>  $CLR
;    04: Night Answer EXT.....DN112
;      INPUT >>  $CLR
;    05: Night Answer EXT.....0
→ ;      INPUT >>  $EOD     (    )
```

This assigns the changed data to the system, and the programming prompt (PRG >) appears again.

To finish the programming

At the programming prompt (PRG >), type:

```
→ ; PRG> EXIT     (    )
```

The screen displays the initial prompt (>) of the Dumb programming mode as follows.

```
; PRG> EXIT
→ ; >
```

To return to the VT programming mode

At initial prompt (>), press:

→ CTRL and V keys simultaneously.

The screen displays the Main Menu of the VT programming mode.

60.00 Polarity Reversal Detection (PRD)

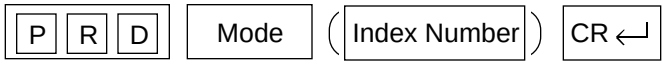
Description

When an R-LCOT card (KX-T96183) is installed, reversal of CO line polarity is monitored at each port by default.

The PRD command is used to deactivate this monitoring function, or to activate this monitoring function when it has been deactivated.

This command is not valid when an R-LCOT card (KX-T96183) is not installed in the system.

Input Format



Index Number

Index Number	Explanation
Four-digit number (1011 to 3158)	Physical number of the CO line port

Input Value for Item Number

Assigning Items	Input Value
Polarity Reversal Detection	(Y or N) Y: Detects reversal of CO line polarity. N: Does not detect reversal of CO line polarity. (Default=Y)

Programming

To enter the Dumb Programming mode

1. Press CTRL key and V key simultaneously when Main Menu screen is displayed at VT programming mode.
2. At the Dumb programming initial prompt (; >), type:

   ; > PRG ( )

   The screen displays the programming prompt (PRG>) as follows:

   ; PRG>

To change the default setting

(Deactivating the polarity reversal detection)

1. At the programming prompt (PRG>), type:

   → ; PRG> PRD AT ( )

   The screen displays the input prompt (INPUT >>) as follows:

   ; PRG> PRD AT
   ; Equipment No.2011.....Y
   → ; INPUT >>

2. At input prompt (INPUT >>), type:

   ; PRG> PRD AT
   ; Equipment No.2011.....Y
   → ; INPUT >> N ( )

   The screen displays the next input prompt (INPUT >>) as follows:

   ; PRG> PRD AT
   ; Equipment No.2011.....Y
   ; INPUT >> N
   ; Equipment No.2012.....Y
   → ; INPUT >>

3. Follow the step 2 for other CO line ports of an R-LCOT card.

4. To store the new assignments to the system,
   at input prompt (INPUT >>), type:

   ; PRG> PRD AT
   ; Equipment No.2011.....Y
   ; INPUT >> N
   ; Equipment No.2012.....Y
   ; INPUT >> N
   ⋮
   ; Equipment No.2018.....Y
   ; INPUT >> N
   ; Equipment No.2011.....N
   → INPUT >> $ EOD ( )

   This assigns the new setting to the system, and the programming prompt (PRG >) appears again.

To finish the programming

At the programming prompt (PRG >), type:

→ ; PRG> EXIT ( )

The screen displays the initial prompt (>) of the Dumb programming mode as follows:

; PRG> EXIT
→ ; >

To return to the VT programming mode

At initial prompt (>), press:

CTRL and V keys simultaneously.

The screen displays the Main Menu of the VT programming mode.

61.00 Waiting for Second Dial tone (WSD)

Description

In some areas, upon completion of area code entry, the extension user must ensure the reception of the second dial tone from the central office before continuing to dial the rest of the telephone number.

The WSD command is used to assign the area code and pause time required to support the above mentioned special dialing procedures. Refer to Section 3-F-12.00 “Waiting for Second Dial tone” for further information.

Programming Procedures

Register the facility access code required and pause time as follows.

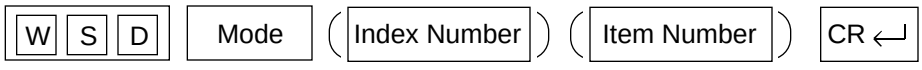
; PRG > WSD AT ( )
; Dial Entry Table No. 01
; 1 : Dial..... 811
; 2 : Pause..... 1

<Note>

(1) Dial
One through four digits number consisting of numeric characters 1 – 9 can be entered.
One character “X” can be used as a wild card character that substitutes any numeric character in its position.

(2) Pause
One digit (1–4) which indicates the number of pause characters.
A pause character may be used to help ensure the receipt of dial tone from Central Office.
Each pause character causes a fixed dialing delay of four and one-half (4.5) seconds.
Up to four pause characters may be used consecutively, if a longer pause is required.

Input Format



Index Number

Index Number	Explanation
01 to 32	Dial Entry Table No.

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Dial	One through four digits number consisting of numeric characters 1–9. “X” can be used as a wild card character. (Default= None)
2	Pause	One digit (1–4) which indicates the number of pause characters. Each pause character causes a fixed dialing delay of four and one-half (4.5) seconds. (Default=0)

62.00 World Select 4 (WS4)

Description

“WS4” command provides the following six assignments.
(Password level: Two or higher)

---

(1) **Dial Tone Frequency Selection**

Used to select an appropriate dial tone frequency depending on the standard in your country.

(Parameters)

1 : 350/440 Hz (default)

2 : 660 Hz

---

(2) **Paging Beep Tone Control**

Used to remove paging beep tone.
By default, a beep tone sounds at the paged extensions.

(Parameters)

Y : Enable (default)

N : Disable

---

(3) **TAFAS Confirmation Tone Control**

Used to remove TAFAS confirmation tone.
By default, this tone sounds when a TAFAS call is answered by an extension user.

(Parameters)

Y : Enable (default)

N : Disable

---

(4) **Paging Confirmation Tone Control**

Used to remove paging confirmation tone.
By default, this tone sounds when paging announcement is answered by an extension.

(Parameters)

Y : Enable (default)

N : Disable

---

(5) **Call Park Confirmation Tone Control**

Used to remove Call Park Confirmation Tone.
By default, this tone sounds when a call is parked successfully and a parked call is answered.

If you select “N,” confirmation tone does not sound when a parked call is answered.

(Parameters)

Y : Enable (default)

N : Disable

(6) **Call Pickup Confirmation Tone Control**

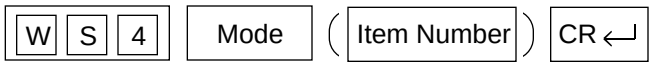
Used to remove Call Pickup Confirmation Tone.
By default, this tone sounds when the call ringing at an extension is answered by another extension.

(Parameters)

Y : Enable (default)

N : Disable

Input Format



Index Number

None

Input Value for Item Number

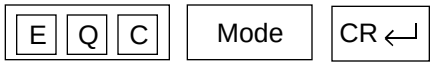
Item Number	Assigning Items	Input Value
1	Dial Tone Frequency Selection	X (1 or 2) 1 : 350/440 Hz 2 : 660 Hz (Default = 1)
2	Paging Beep Tone Control	(Y or N) Y: Enable N: Disable (Default = Y)
3	TAFAS Confirmation Tone Control	(Y or N) Y: Enable N: Disable (Default = Y)
4	Paging Confirmation Tone Control	(Y or N) Y: Enable N: Disable (Default = Y)
5	Call Park Confirmation Tone	(Y or N) Y: Enable N: Disable (Default = Y)
6	Call Pickup Confirmation Tone	(Y or N) Y: Enable N: Disable (Default = Y)

63.00 Equal Access Code (EQC) (◆ for U.S.A. and Canada only)

Description

Either “10XXX” or “101XXXX” can be selected as Equal Access Code.
(Password Level : Two or higher)
Refer to Section 10-H-1.00 “Equal Access” for further information.

Input Format



Index Number

None

Input Value

1: 10XXX (default)

2: 101XXXX

64.00 T-1/E-1 Related Commands

64.01 Channel Assignment (CHA) — T-1/E-1

Description

Assigns the type of T-1/ E-1 trunk interface to each channel.
(Password level: One)

Input Format

C H A | Mode (SH/AT/BT) | Index Number | (Item Number (01-35)) | CR

Index Number

Index Number	Explanation
X XX Slot No. (01,05 or 09) Shelf (1 to 3)	Physical number (101,105,109,201,205,209,301,305,309)

Input Value for Item Number

Item Number	Assigning Items	Input Value	
		T-1 card (KX-T96187)	E-1 card (KX-T96188)
01	Option	Automatic Set	
02	Frame Sequence	1: D4 2: ESF (Default=2)	3: PCM30 4: PCM30-CRC (Default=4)
03	Line Coding	1: B8ZS 2: AMI (Default=1)	2: AMI 3: HDB3 (Default=3)
04	Channel No. 01	0: none 1:LCO 2:GCO 3:DID 4:OPX 5:TIE (Default=0)	0: none 6: DR2 7: E&M-C (Continuous E&M) 8: E&M-P (Pulsed E&M) (Default=0)
05	Channel No. 02		
06	Channel No. 03		
07	Channel No. 04		
08	Channel No. 05		
09	Channel No. 06		
10	Channel No. 07	[Note] "# # #" will be displayed in the item numbers 28 through 35. These items cannot be assigned.	[Note] "# # #" will be displayed in the item numbers 19 and 35. These items cannot be assigned.
11	Channel No. 08		
12	Channel No. 09		
13	Channel No. 10		
14	Channel No. 11		

continued

Item Number	Assigning Items	Input Value	
		T-1 card (KX-T96187)	E-1 card (KX-T96188)
15	Channel No. 12	0:none 1:LCO 2:GCO 3:DID 4:OPX 5:TIE (Default=0)	0:none 6:DR2 7:E&M-C (Continuous E&M) 8:E&M-P (Pulsed E&M) (Default=0)
16	Channel No. 13		
17	Channel No. 14		
18	Channel No. 15		
19	Channel No. 16		
20	Channel No. 17		
21	Channel No. 18	[Note] "- - -" will be displayed in the item numbers 28 through 35. These items cannot be assigned.	[Note] "- - -" will be displayed in the item numbers 19 and 35. These items cannot be assigned.
22	Channel No. 19		
23	Channel No. 20		
24	Channel No. 21		
25	Channel No. 22		
26	Channel No. 23		
27	Channel No. 24		
28	Channel No. 25		
29	Channel No. 26		
30	Channel No. 27		
31	Channel No. 28		
32	Channel No. 29		
33	Channel No. 30		
34	Channel No. 31		
35	Channel No. 32		

64.02 System Clock Mode (CLK) — T-1/E-1

Description

Used to set the system clock mode to “External” or “Internal.”

- External clock mode …… The system synchronizes to a clock pulse provided by the Central Office.
- Internal clock mode …… The system synchronizes to a clock pulse provided by the internal TSW clock.

To utilize the T-1/E-1 lines, the system should synchronize to a clock pulse provided by the Central Office. However, if synchronization with External clock is lost, the system automatically switches to “Internal clock mode.”
(Password level : Two or higher)

Input Format

C L K	Mode (SH/AT/BT)	CR

Index Number

None

Input Value for Item Number

Item Number	Assigning Items	Input Value
None	TSW clock mode	1 : Internal clock 2 : External clock (Default = 1)

Note :

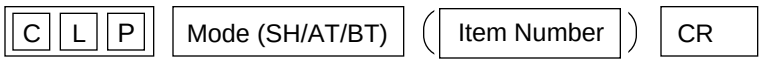
- When utilizing the T-1/E-1 lines, the clock mode cannot be changed unless all T1/E1 DIGITAL TRUNK Cards in the system turns to “OUS” or “FAULT” status.
- When the external clock has problems and is not working properly, the internal clock starts to work automatically.

64.03 Master Clock Priority (CLP) — T-1/E-1

Description

Used to decide to which external clock pulse the system synchronizes, when multiple T-1/E-1 cards are installed.
(Password level : Two or higher)

Input Format



Index Number

None

Input Value for Item Number

Item Number	Assigning Items	Input Value
1 to 6	Priority 1 to 6	T-1/E-1 card physical slot number (three digits number) (Default = None)

Note:
• You have to assign this item even if only one T-1/E-1 card is installed.

Conditions

When more than two T-1/E-1 cards are installed in the system, each of them should be registered by this command.

64.04 ESF Frame Option (EFO) — T-1 / E-1

Description

Used to define the values of C-bit and D-bit when Frame Sequence is ESF/PCM30/PCM30CRC in T-1/E-1 interface.
(Password level : Two or higher)

Input Format

E F O	Mode (SH/AT/BT)	Index Number	CR

Index Number

Index Number	Explanation
X XX Slot No. (01,05 or 09) Shelf (1 to 3)	Physical number (101,105,109,201,205,209,301,305,309)

Input Value for Item Number

Item Number	Assigning Items	Input Value
None	T-1 card Values for C-bit and D-bit	1: Option-4 (C=A, D=B) 2: Option-16 (C=0, D=0) 3: Option-16 (C=1, D=0) 4: Option-16 (C=0, D=1) 5: Option-16 (C=1, D=1) (Default=1)
	E-1 card Values for C-bit and D-bit	1: Option-16 (C=0, D=1) 2: Option-16 (C=1, D=1) 3: Option-4 4: Option-16 (C=0, D=0) 5: Option-16 (C=1, D=0) (Default=1)

64.05 MFC Sequence Parameter (MFC) — E-1 only

Description

Used to assign the MFC-R2 signal. When utilizing an E-1 “DR2 channel trunk” or KX-T96182CE (MFC-DID) whose Dial Mode is “MFC-R2”, signalling between your KX-T336 and the Central Office takes place using MFC-R2 signals.
(Password level: Two or higher)

Input Format

M F C | Mode (SH/AT/BT) | (Item Number (01-22)) | CR

Input Value for Item Number

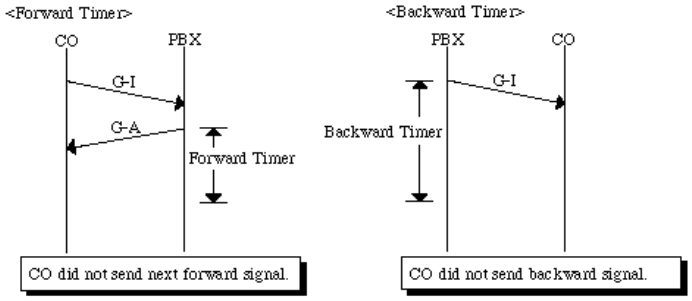
Item Number	Assigning Items	Input Value
01 02 03 04 05 06 07 08 09 10 11 12 13 14 15	Group-II- [01] Group-II- [02] Group-II- [03] Group-II- [04] Group-II- [05] Group-II- [06] Group-II- [07] Group-II- [08] Group-II- [09] Group-II- [10] Group-II- [11] Group-II- [12] Group-II- [13] Group-II- [14] Group-II- [15]	0:Not defined 1:Subscriber 2:Operator (Default = 1 — Item No.2 0 — Others)
16 17 18 19	Idle Code Busy Code Unallocated Code Congestion Code	01-15:Group-B Code (Default = 01 — Item No.16 02 — Item No.17 03 — Item No.18 04 — Item No.19)
20 21 22	Forward Timer Backward Timer Disappearance Timer	01-30:N*01 s (Default = 15 — Item No.20, 21 24 — Item No.22)

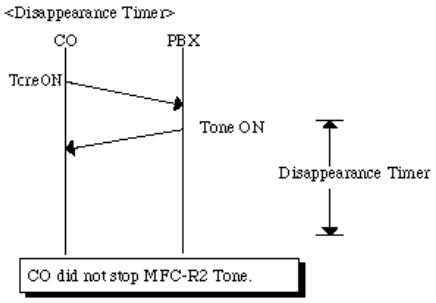
The following table shows the default values for Group-II and Group-B signals.

Forward Signal			Backward Signal	
No.	Group-I	Group-II	Group-A	Group-B
01	Digit [1]		Next digit	Idle
02	Digit [2]	Subscriber		Busy
03	Digit [3]		Digit completed	Unallocated
04	Digit [4]		Congestion	Congestion
05	Digit [5]			
06	Digit [6]			
07	Digit [7]			
08	Digit [8]			
09	Digit [9]			
10	Digit [0]			
11				
12				
13				
14				
15				

Note:

- When a Group-II signal for Subscriber is sent from CO:
  KX-T336 decides the extension to be called by analyzing this code, and sends the status code of the extension to CO. If the extension is idle, KX-T336 will ring it.
- When a Group-II signal for Operator is sent from CO:
  KX-T336 always sends “status code = idle” to CO and it will ring the operator extension (or attendant console).
- “Out of Service Code” and “Set up Speech Code” can be assigned using MRO command (Section 64.08).



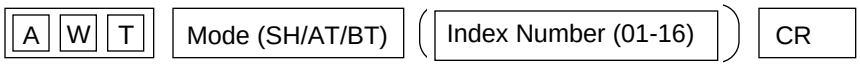


64.06 Answer Signal Wait Time (AWT) — E-1 only

Description

Used to compulsorily disconnect the outside call made by an extension user, if not answered by the destination party until a pre-selected time expires. This setting can be programmed on a trunk group basis.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 16	Trunk Group Number

Input Value for Item Number

Item Number	Assigning Items	Value Selection
None	No Answer Waiting Time	0: No limit 1: 1 min 2: 2 min 3: 3 min 4: 4 min (Default = 0)

Conditions:

• AWT command is valid for DR2 channel trunks only.

64.07 E-1 Signaling Option (ESO) — E-1 only

Description

Used to activate “Charge Management” feature. If activated, the KX-T336 displays the phone charge on the display of PITS by detecting the Meter Pulse sent from the Central Office.
(Password level : Two or higher)

Input Format

E S O | Mode (SH/AT/BT) | (Item Number (1-5)) | CR

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Meter Pulse Detect	0:No detection 1:Outgoing CO calls only 2:Both Incoming and Outgoing CO calls. (Default =1)
2	Meter Pulse Detect Position	A:Detect position is A-bit B:Detect position is B-bit (Default =B)
3	Meter Pulse Length	01- 60: 8 ✻ N ms (Default =16)
4	Dial Pulse Control Position	A:Dial Pulse is controlled by A-bit B:Dial Pulse is controlled by B-bit (Default =A)
5	Clear Back Signal Control Position	A:Clear back is controlled by A-bit B:Clear back is controlled by B-bit (Default =A)

Note:

• Item Nos. 4 and 5 are used for choosing the control bit (A or B) for each signal.

Conditions

• ESO command is valid for E-1 DR2 channel trunks only.

64.08 MFC-R2 Option (MRO) — E-1 only

Description

Used to turn ANI (Automatic Number Identification) service (Section 3-F-17.00) on or off.
When turned on, parameters on ANI service should also be programmed.
(Password level : Two or higher)

Input Format

M R O | Mode (SH/AT/BT) | (Item Number (1-8)) | CR

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	ANI service	0:ANI Service is off 1:Incoming CO calls only 2:Outgoing CO calls only 3:Both-way (Default = 0)
2	ANI Request Code	01-15:Group-A Code (Default = 05)
3	ANI Start Code	00:None 01-15:Group-I Code (Default = 14)
4	ANI Complete Code	01-15:Group-I Code (Default = 15)
5	ANI Reject Code	01-15:Group-I Code (Default = 12)
6	Out of Service Code	01-15:Group-B Code (Default = 04) If the called extension is “out of service”, the system sends this code to CO.
7	Set up Speech Code	01-15:Group-A Code (Default = 06) If the system receives this code, then the system sets up speech path.
8	Address Complete Code	01-15:Group-A Code (Default = 03)

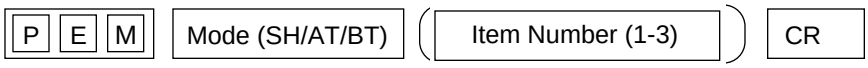
Note:
• Refer to “MFC command” (Section 10-C-64.05) for default values of Group-I, -II, -A, -B codes.
• Item Nos. 6 through 8 are provided for setting an optional status for MFC command.

64.09 Pulsed E&M (PEM) — E-1 only

Description

Used to select the type of pulse signal for E-1 TIE Lines.
This setting is valid for E&M-P channel trunks.
(Password level : Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Seizure Pulse	1. Short Pulse (150 ms) 2. Long Pulse (600 ms) (Default = 1)
2	Answer Pulse	1. Short Pulse (150 ms) 2. Long Pulse (600 ms) (Default = 2)
3	Clear Pulse	1. Short Pulse (150 ms) 2. Long Pulse (600 ms) (Default = 2)

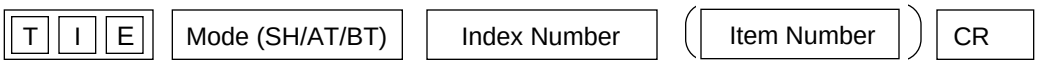
65.00 TIE Line Related Commands

65.01 TIE Line Routing Table (TIE)

Description

Used to determine the routing of calls over the TIE Line Network.
Up to 36 routing patterns can be programmed by this command.
Routing table is referenced by the system to identify the trunk route, when a TIE call is made by dialing the feature number for "TIE Trunk Access."
(Password level: Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 36	TIE Line Routing Table number

Input Value for Item Number

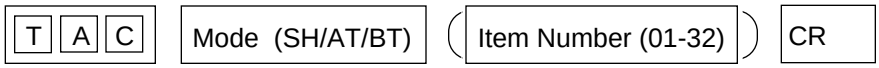
Item Number	Assigning Items	Input Value
1	Code	Up to three digits : 0 - 9, X (wild card) (Default = blank)
2	Delete digit	0 to 4 : number of deleting digit(s) (Default = 0)
3	Insert Dial	Up to four digits : dialing number to be added (Default = blank)
4	Trunk Group Hunt Sequence 01	01 to 16 : trunk group number whose type is set to TIE. (Default = blank)
5	Trunk Group Hunt Sequence 02	
6	Trunk Group Hunt Sequence 03	
7	Trunk Group Hunt Sequence 04	
8	Trunk Group Hunt Sequence 05	

65.02 TIE Account Code (TAC)

Description

TIE account codes registered by TAC command is used to prevent the tie callers from making unauthorized CO calls by checking the validity of the account code entered.
TIE callers must enter a TIE Account Code to make a CO call via TIE lines, if "TIE Forced Account Code Mode" is set to "Yes." Refer to Section 3-F-14.02 “Calling from TIE to CO” for further information.
(Password level : Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value
01 to 32	TIE Account Code	Four digits numeric number (0 - 9) (Default = blank)

65.03 TIE Trunk Relay Restriction (TRR)

Description

Used to allow or restrict the TIE trunk relay function on the trunk group basis.
Refer to Section 3-F-14.04 “Alternate Routing” for further information.
(Password level: Two or higher)

Input Format

T R R	Mode (SH/AT/BT)	Index Number	(Item Number)	CR

Index Number

Index Number	Explanation
01 to 16	Trunk Group Number (Call receiver side)

Input Value for Item Number

Item Number	Assigning Items	Input Value
None	Trunk Group Number (Call initiator side)	Y: Restricted N: Allowed (Default = N)

Conditions

TRR command is valid for the trunk group whose type is set to TIE.

Programming example

TIE Trunk Relay Restriction setting

In this case, if you want to restrict “TIE call relay from TG10 to TG11” program as follows:

; PRG > TRR AT 10 11 ( )
; Trunk Group No.10
; 11 : Trunk Group No.11.... N
; INPUT >> Y ( )

65.04 Line Hunting Sequence(LHS)

Description

Used to change the hunting sequence of idle lines on a TIE trunk group basis.
By default, idle TIE lines are seized from the smallest to the largest physical number in order at all locations when a TIE call is initiated by a user. This may cause a frequently busy situation between a certain two locations.
In this case, we recommend to change the hunting sequence at one location from "1"(smallest ⟶ largest) to "2" (largest ⟶ smallest).
(Password level : Two or higher)

Input Format

L H S | Mode (SH/AT/BT) | (Index Number (01-16)) | CR

Index Number

Index Number	Explanation
01 to 16	Trunk Group Number

Input Value for Item Number

Item Number	Assigning Items	Input Value
None	Line Hunting Sequence	1: From the smallest to the largest physical number of TIE lines 2: From the largest to the smallest physical number of TIE lines (Default = 1)

65.05 E&M Selection(EMS)

Description

Several physical requirements of an E&M card may differ depending on the regions.

EMS command is used to select the appropriate values for the following physical requirements.

1. E&M Interface Type
2. Voice Path Type
3. Voice Level (Transmit)
4. Voice Level (Receive)
5. Balance Network

(Password level: Two or higher)

Input Format

Index Number

Index Number	Explanation
1011 to 3154	Physical number of E&M trunk ports

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	E&M Interface Type	Should be fixed to "4". (Default = 4)
2	Voice Path Type	1: 2-wire 2: 4-wire (Default = 1)

Item Number	Assigning Items	Input Value
3	Voice Level(Transmit)*	1: -6dB 2: -3dB 3: 0 4: +3dB (Default = 2)
4	Voice Level (Receive)*	
5	Balance Network	Should be fixed to "1." (Default = 1)

* Valid when "Voice Path Type" is set to "2:4-wire."

Conditions

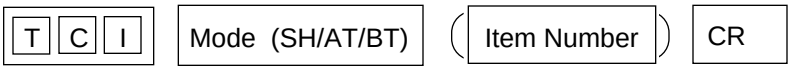
This command is valid only when E&M card(KX-T96184)is installed to the system.

65.06 TIE Caller ID Integration (TCI)

Description

Used to turn on/off “TIE Caller ID Integration” service (Section 3-F-14.05) on a TIE trunk group basis.
(Password level: Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value
01 | 16	TIE Caller ID Integration Service for Trunk Group 01-16	Y : Enabled N: Disabled (Default=N)

66.00 Charge Management Related Commands

66.01 Charge Management ID Code (CPD)

Description

Used to assign Charge Management ID Code. When Tenant Service is employed, Charge Management ID Code for Tenant 1 and 2 can be assigned individually. Refer to Section 3-F-19.00 “Charge Management” for further information.
(Password level: Two or higher)

Input Format

Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Charge Management ID Code for Tenant 1	Four digits numeric characters (Default = 1234)
2	Charge Management ID Code for Tenant 2	Four digits numeric characters (Default = 1234)

Note:
The Charge Management ID Code assigned by CPD command can be changed by an extension user in the PITS System Programming mode. Refer to Section 11-C-10.00 “Setting Charge Management ID Code” for further information.

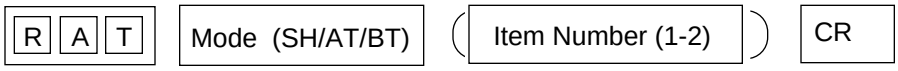
66.02 Charge Rate (RAT)

Description

1. Range (New Rate Set)
   Assigns an amount of charge fee per charge meter.
2. Denomination
   Assigns the currency denomination for your country.

(Password level : Two or higher)

Input Format



Input Value for Item Number

Item Number	Assigning Items	Input Value
1	Range	Up to eight digits numeric characters including". (decimal point)"can be entered. [Note] Press "✱" key to enter ". (decimal point)", in the PITS station Programming mode.
2	Denomination	Up to three digits of alphabetic characters or a sign can be entered. [Note] Enclose the input value with double quotation marks.

Note:

• Charge Rate can also be assigned in the PITS Station Programming mode (Section 12).

66.03 Charge Limitation (CLT)

Description

Used to determine the sum total of telephone charge allowable to extension users on an extension user basis. If the telephone charge on the extension exceeds the pre-assigned limitation, the extension user cannot make further CO calls until his or her charge meter is reset.
(Password level : Two or higher)

Input Format

C L T	Mode (SH/AT/BT)	Index Number	CR

Index Number

Index Number	Explanation
DNXXXX or Four-digit physical number	Extension directory number (XXXX : three or four digits) Physical location of extension

Input Value for Item Number

Item Number	Assigning Items	Input Value
None	Charge Limitation	0 : No limitation 1-99999 : The number of charge meter allowable for the extension (Default = 0)

Conditions

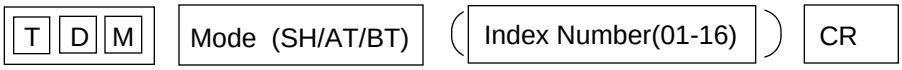
Charge limitation can also be set by an extension user (Charge Manager) in the PITS Station Programming mode. Refer to Section 12-C-9.11 “Setting Account Codes” for further information.

67.00 DISA/AGC Tone Detection Mode (TDM)

Description

When Tone Detection for DISA/AGC is set to"Yes", the system disconnects the lines if it detects any tones, regardless of tone type, during a trunk-to-trunk call (DISA or AGC).
This command is used to select a type of tones which applies to tone detection for DISA/AGC on a Trunk Group basis.
For example, if "2:cyclic tone only" is selected, the system disconnects the lines only when it detects cyclic tone during a trunk-to-trunk call (DISA or AGC).
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 16	Trunk Group Number

Input Value for Item Number

Item Number	Assigning Items	Input Value
None	Tone Detection Mode (DISA/AGC)	0: all tones (no tone, cyclic tone, continuous tone) 1: no tone or cyclic tone 2: cyclic tone only (Default = 0)

Conditions

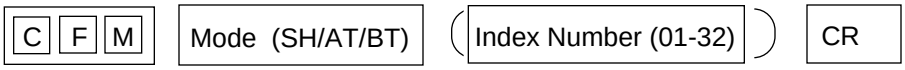
None

68.00 Call Forwarding-Follow Me (CFM)

Description

Used to allow or disallow each extension from setting "Call Forwarding-Follow Me" feature on a COS basis. Refer to Section 4-F-2.06 and Section 5-D-2.06 “Call Forwarding-Follow Me” for further information.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 32	COS (Class of Service) number

Input Value for Item Number

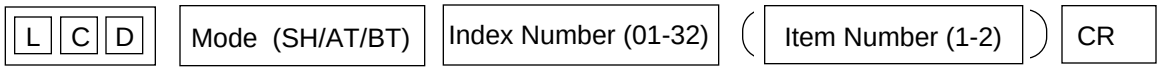
Item Number	Assigning Items	Input Value
None	Call Forwarding-Follow Me	Y: Enabled N: Disabled (Default=N)

69.00 Limited Call Duration (LCD)

Description

Used to set parameters on “Limited Call Duration” feature. This feature can be enabled or disabled on a COS basis. For further information, refer to Section 3-F-18.00 "Limited Call Duration".
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 32	COS (Class of Service) number

Input Value for Item Number

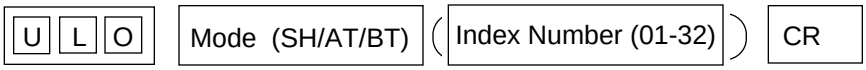
Item Number	Assigning Items	Input Value
1	Extension-CO call duration time	00: No Limitation 01-60: Limitation Time (Minutes) (Default=00)
2	Call type	0: Outgoing CO call only 1: Incoming CO call only 2: Both (Default=0)

70.00 UCD Auto Log-out Operation (ULO)

Description

Used to change “UCD Auto Log-out” setting.
See Section 3-D-2.06 “Uniform Call Distribution (UCD) — with/without OGM” for further information about UCD Auto Log-out.
(Password level : Two or higher)

Input Format



Index Number

Index Number	Explanation
01 to 32	UCD group number

Input Value for Item Number

Item Number	Assigning Items	Input Value
None	UCD Auto Log-out operation	Y: Auto Log-out is enabled. N: Auto Log-out is disabled. (Default=Y)

D. Error Message Tables

1.00 Error Messages Related to the Assigning Items in the Same Command

If there is a wrong entry in the displayed screen, the following appears on the message line when storing the entry: “DATA ERROR (XXX).”

The (XXX) indicates one of the error message numbers shown below and possible causes of the errors and countermeasures for them are as follows.

DATA ERROR No. (XXX)	Probable Cause	Countermeasure
100	(page length)-(skip length) < 6	Make (page length)-(skip length) ≧ 6.
101	(receive digit) ≧ (delete digit) is not established in - Special Attended DID screen.	Make (receive digit) ≧ (delete digit).
102	Restriction Level-Operator ≦ Restriction Level-International is not established in - Operation (1/3) screen	Make Restriction Level-Operation ≦ Restriction Level-International
110	Day-night combination in the incoming mode is not correct.	Change the day-night combination in incoming mode.
130	Combination of the terminals of operators 1, 2 is incorrect.	Change the combination of terminals for operators 1, 2.
140	DN is not installed.	Designate the installed DN.
141	Attempting to assign FDN's of UCD # 1 to # 4 for the overflow destination of UCD # 5 to # 32	Set FDN of other UCD, or extension directory number.
150	Attempting to assign its own extension number on the key which cannot be assigned to its own extension number. <example> DSS(ICM) DSS(DN) SDN	Specify the number except its own extension number.
160	Specifying UCD number incorrectly.	Assign UCD to only one ICM.
190	Date value is incorrect on the check of month, and leap year in the time and date setting screen.	Check the date setting.

2.00 Error Messages Related to the Assigning Items in the Other Commands

If there is a wrong entry related to the assigned by the other commands, the following appears on the message line when storing the entry: “DATA ERROR (xxx).”

The (XXX) indicates an error message number shown below and possible causes of the errors and countermeasures for them are as follows.

DATA ERROR No.	Probable Cause	Countermeasure
300	Setting DN which is not stored in the hundred block.	Enter data in hundred block. Or, set DN which is stored in hundred block.
301	Specified extension DN is not stored.	Store the extension DN.
302	Telephone type of the extension paired with DSS console is not PITS.	Paired extension should be changed to a PITS.
310	Setting DN to the DSS console.	Set DN to assignable port.
320	Setting trunk group except DID on CO-line on DID card. Or, assigning trunk group of DID to CO-line on the card except DID.	Assign trunk group to the correct kind of card.
330	Tenant is different.	Assign the same tenant.
331	As assigned to the destination of 1 : N of trunk group, impossible to change tenant.	Cancel the 1 : N destination.
332	As assigned to the destination of doorphone call, impossible to change tenant.	Cancel the doorphone call destination.
333	Setting one pickup group to ICM & PAG group belonging to different tenant.	Set it to the same tenant. Or, change tenant after deleting pickup group.
334	Changing tenant of ICM/PAG group without canceling extensions.	Change after canceling extensions. Impossible to move extensions to the other tenant.
335	As assigned to the destination of paging from attendant console, impossible to change Tenant.	Change the destination of attendant paging.
336	As assigned to call placing mode of Trunk group, impossible to change Tenant.	Change assigning of incoming mode.
337	As assigned to night answer point for CO-line, impossible to change Tenant.	Change assignment of night answer point.
338	Attempting to change the tenant of Trunk group without removing the CO lines which belong to the trunk group.	Change after removing the CO lines. Impossible to move CO lines to the other tenant.
339	Attempting to change the tenant of Trunk group without canceling the setting of 1:N destination for the trunk group.	Change after canceling 1: N destination.
340	Deleting is impossible because it is assigned in another item.	Change the item beforehand.

DATA ERROR No.	Probable Cause	Countermeasure
342	Extension assigned to NEXT HUNT STATION is already assigned to NEXT HUNT STATION for another extension.	Assign another extension or clear the previous assignment.
343	Relation between ICM group and Pickup group assigned for an extension is incorrect.	Make them in proper relation.
344	As PRV-CO is assigned by PITS button assignment, impossible to change the type of the trunk group to any other than PRV.	Cancel the assignment of the PITS button.
345	As assigned to Single CO by PITS button assignment, impossible to change the 1:1 destination of the line to a different PITS.	Cancel the assignment of the PITS button.
346	Attempting to change the tenant of Trunk group without canceling the setting of 1:1 destination.	Change the tenant after clearing all 1:1 destinations of CO lines belonging to the group.
347	UCD group is not assigned.	Assign Pickup group to a UCD group.
348	Attempting to assign DID to Trunk group which has CO lines belonging to the group.	Assign DID after clearing all CO lines belonging to the group.
350	Attempting to assign the unstored ICM number to the DSS (ICM) button.	Assign stored ICM number.
360	Attempting to assign the ATT which is not registered as the operator to the maintenance device.	Register the ATT as an operator, or specify another device.
370	Specified CO line does not exist.	Specify proper CO line.
371	Specified CO line is not the PVL.	Specify proper CO line.
372	Specified CO line is already assigned as a DIL 1:1 or PRV-CO by another extension.	Specify another CO line or cancel the assignment of the desired line.
373	Impossible to assign because the programmings for specified CO does not satisfy the condition.	Change call placing type to 1:1, or change group type to unique type.
374	Impossible to assign because the programmings for specified CO does not satisfy the condition.	Change call placing type to 1:N, and group type to group.
391	Attempting to delete the extension which is registered as an operator of the tenant.	Cancel the assignment as an operator.
392	Attempting to delete the extension which is registered as the destination of intercept routing for the Trunk group.	Cancel the assignment as the destination.
393	Attempting to delete the extension which is registered as an ATT busy out extension of Trunk group.	Cancel the assignment as an ATT busy out extension.
394	Attempting to delete the extension which is registered as an ATT overflow extension for Trunk group.	Cancel the storage as an ATT overflow extension.

DATA ERROR No.	Probable Cause	Countermeasure
395	Attempting to delete the extension which is registered as an overflow extension for UCD group.	Cancel the storage as an overflow destination.
396	Attempting to delete the extension/RMT which is registered as a DIL 1:1 call destination of CO line.	Cancel the storage as a DIL 1:1 call destination.
397	Attempting to delete the extension which is registered as a night answer point of CO line.	Cancel the storage as a night answer point.
398	Attempting to delete the extension which is registered as a walking station.	Cancel the storage as a walking station.
399	Attempting to delete the PITS paired with DSS-console.	Change the PITS paired with DSS Console.
400	Attempting to delete the extension which is registered as a night answer point for tenant.	Cancel the storage as night answer point.
401	Attempting to delete the extension which is set to SDN.	Cancel the assignment of SDN.
403	Attempting to delete the ATT when the ATT is assigned for day incoming mode in Trunk group.	Change the incoming mode destination other than ATT.
404	Attempting to delete RMT when the RMT alarm is assigned.	Cancel the assignment of RMT alarm.
405	Attempting to delete the external pager which is registered as UNA point for CO line.	Change the night answer point.
406	Attempting to delete the external pager which is registered as a TAFAS for day/night incoming mode for Trunk group.	Change the incoming mode.
407	Attempting to delete the external pager which is registered as a paging destination for the ATT.	Change the paging destination.
408	Attempting to delete the ATT which is specified for maintenance device.	After changing maintenance device, delete the ATT.
409	When deleting ATT, combination of operators 1 and 2 is incorrect.	Check the combination of operators.
411	Impossible to delete the card, for all of the ports belonging to the card is not made pre-installed.	Delete all the ports belonging to the card.
412	Impossible to delete the card, for DN is assigned to an extension port.	Delete all the ports belonging to the card.
413	Deleting the card is impossible, for it is assigned as a maintenance device.	Change the maintenance device.

DATA ERROR No.	Probable Cause	Countermeasure
414	Deleting the card is impossible, because it is assigned for the intercept routing destination for the Trunk group.	Change the intercept routing destination.
415	Deleting the card is impossible, because it is assigned for doorphone call destination.	Cancel the doorphone call destination.
416	Attempting to delete the ATT which is specified for incoming mode destination of a trunk group.	Change the incoming mode destination.
417	Attempting to delete a DISA card which is specified for incoming mode destination of a trunk group.	Change the incoming mode destination.
418	Attempting to assign NAG as Night Answer Point of a CO line belonging to a Trunk Group whose Incoming Mode (Night) is not FIXED.	Assign Incoming Mode (Night) to FIXED.
420	Changing Tenant Service from “Yes” to “No” is impossible as all ATT's are not assigned to tenant 1.	Assign ATT's to tenant 1.
421	Changing Tenant Service from “Yes” to “No” is impossible as all music sources are not assigned to tenant 1.	Assign music sources to tenant 1.
422	Changing Tenant Service from “Yes” to “No” is impossible as all external pagers are not assigned to tenant 1.	Assign external pagers to tenant 1.
423	Changing Tenant Service from “Yes” to “No” is impossible as all doorphones are not assigned to tenant 1.	Assign doorphones to tenant 1.
424	Changing Tenant Service from “Yes” to “No” is impossible as all DISA's are not assigned to tenant 1.	Assign DISA's to tenant 1.
425	Changing Tenant Service from “Yes” to “No” is impossible as all AGC's are not assigned to tenant 1.	Assign AGC's to tenant 1.
426	Changing Tenant Service from “Yes” to “No” is impossible as all paging groups are not assigned to tenant 1.	Assign all paging groups to tenant 1.
427	Changing Tenant Service from “Yes” to “No” is impossible as all ICM groups are not assigned to tenant 1.	Assign all ICM groups to tenant 1.
428	Changing Tenant Service from “Yes” to “No” is impossible as all trunk groups are not assigned to tenant 1	Assign all trunk groups to tenant 1.
430	Deleting expansion shelf is impossible, as one or more cards are assigned to the expansion shelf.	Delete all the cards in the expansion shelf.

DATA ERROR No.	Probable Cause	Countermeasure
431	Attempting to remove a card which is registered in Power Failure Transfer (PFT) assignment.	Cancel the PFT assignment of the card.
440	Impossible to change the Numbering Plan to “Fixed,” because there exist DN's which should be blank in the “Fixed” mode in the Hundred Block.	Clear DN's which should be blank.
450	Impossible to change ICM/Paging group, for the pickup group belonging to the ICM/Paging group contains extensions.	Change after deleting all the extensions in the pickup group.

3.00 Fixed Error Messages

DATA ERROR No.	Probable Cause	Countermeasure
003	Unacceptable value is assigned.	Assign an allowable value.
004	Space exists between items.	Remove the space.
005	Some items are left blank.	Assign all required items, or leave all items blank.
006	At least one blank should be left among multiple items.	Leave at least one blank.
007	Assigned selection value is not for the item.	Set the assignable value.
008	The number which is set previously in this screen is assigned again.	Set the number different from the previous number.
009	The number which is set previously in a different screen is assigned.	Set the number different from the previous number.
012	Device is not installed.	Assign the installed device.
013	Status of the specified device does not accept this command.	Change the status of the device to be acceptable for the command.
016	Privilege level is lower than specified level.	Increase the privilege level through the Change level function.
017	Diagnostic error has been detected when INS command is executed.	Verify the related device.
018	Specified service is not executed.	Check specified service.
019	Another maintenance device (remote, PITS, system) is in use.	Wait until another device is finished or let him finish.
020	Printer is not connected to the system or the power is off.	Connect the printer, and make the power on.
021	Print out is unavailable from Remote.	Execute print out on-site.
022	Entered parameters for Item or Index is out of the specified range.	Enter the parameters within the specified range.
023	“ , / ” or “ , <CR> ” is entered in BT (Batch) programming.	Correct the wrong entry.
024	Calendar IC malfunction.	Repair calender IC.
027	Backup device is not connected (only when maintenance device is ATT).	Connect the backup device to SIO # 1 Port.
029	Different version at the time of backup.	Match the backup version.

DATA ERROR No.	Probable Cause	Countermeasure
030	A checksum error has been detected.	Communication line is defective, or backup data is destroyed.
031	Improper data is received.	Communication link is defective, or backup data is destroyed.
040	Execution is impossible during off-line.	Execute during on-line.
041	Impossible change such as [INS] → [INS], [OUS] → [OUS] is attempted.	Impossible.
042	Some required items are omitted.	Enter the required items.
043	The number of equipment you attempt to assign is over the limit.	Assign the equipment within the limit of number.
045	Slot number you specified is not valid. (DTM, LBT, DSP commands)	Specify the slot in which T-1/E-1 card is installed.
046	Card type you specified is not valid. (DTM, LBT, DSP commands)	Specify the T-1/E-1 card.
047	The status of the card you specified is not valid. (DTM, LBT, DSP commands)	Change the status to valid one.
048	No DTMF Generator/Receiver is installed on the card you specified. (DTM, LBT commands)	Install the optional DTMF Generator/Receiver card.
049	You specified the DTMF Generator/Receiver of different cards.(DTM, LBT commands)	Specify the DTMF Generator/Receiver of the same card.

4.00 Other Error Messages

Error Message	Probable Cause	Countermeasure
PASSWORD ERROR	Assigned password is not correct.	Enter the correct password.
MODE ERROR	Selected mode is not correct.	Change the mode.
COMMAND ERROR	Entered command is not correct.	Enter the correct command.
TYPE ERROR	Selected type is not correct.	Select the correct type. (SH, AT, BT)
INDEX ERROR	Entered index number is not correct.	Enter the correct index number.
ITEM ERROR	Entered item number is not correct.	Enter the correct item number.
LOGICAL ERROR	Programming data assigned in off-line mode has some logical error.	Assign the correct data.
DATA ERROR	Assigned data is invalid.	Refer to the DATA ERROR No. list.

Section 11

System Programming

Proprietary Integrated Telephone System (PITS)

(Section 11)

System Programming

Proprietary Integrated Telephone System (PITS)

Contents

A. Introduction

Description

There are two programming types using PITS (Proprietary Integrated Telephone System):

1. PITS system programming
2. PITS station programming

PITS system programming is performed in PITS system programming mode. (Described in this section)

PITS station programming is performed in PITS station programming mode. (Described in Section 12)

PITS system programming is used to program the following system data:

1) Setting Date and Time
2) Storing Speed Dialing-System
3) Changing Extension Number
4) Changing Extension Name
5) Changing PITS System Program Mode Entry Password
6) Changing DISA User Code
7) Changing Walking COS Password
8) Setting Charge Limitation (for areas other than U.S.A. and Canada)
9) Setting Charge Management ID Code (for areas other than U.S.A. and Canada)

Conditions

The following are the conditions required to execute PITS system programming:

1) The extension must be assigned to “Yes” in “System-Class of Service”, Maintenance Capability.
   Refer to Section 9-D-4.01 “Class of Service (1/2)” for information on system programming.

2) It is recommended to use PITS telephones provided with the display, which are:

   KX-T7030, KX-T7130, KX-T123235, KX-T123230D, KX-T123230, KX-T61630, and KX-T30830.

3) The system is on-line communication mode.

4) Password for PITS system programming is required to enter into PITS system programming mode. The password is assigned in “System-Operation”, PITS Programming Password. (Refer to Section 9-D-1.03 “Operation (3/3).”) If Tenant Service is employed, the password for Tenant 2 is assigned in “System-Tenant”, PITS Programming Password (Tenant 2).

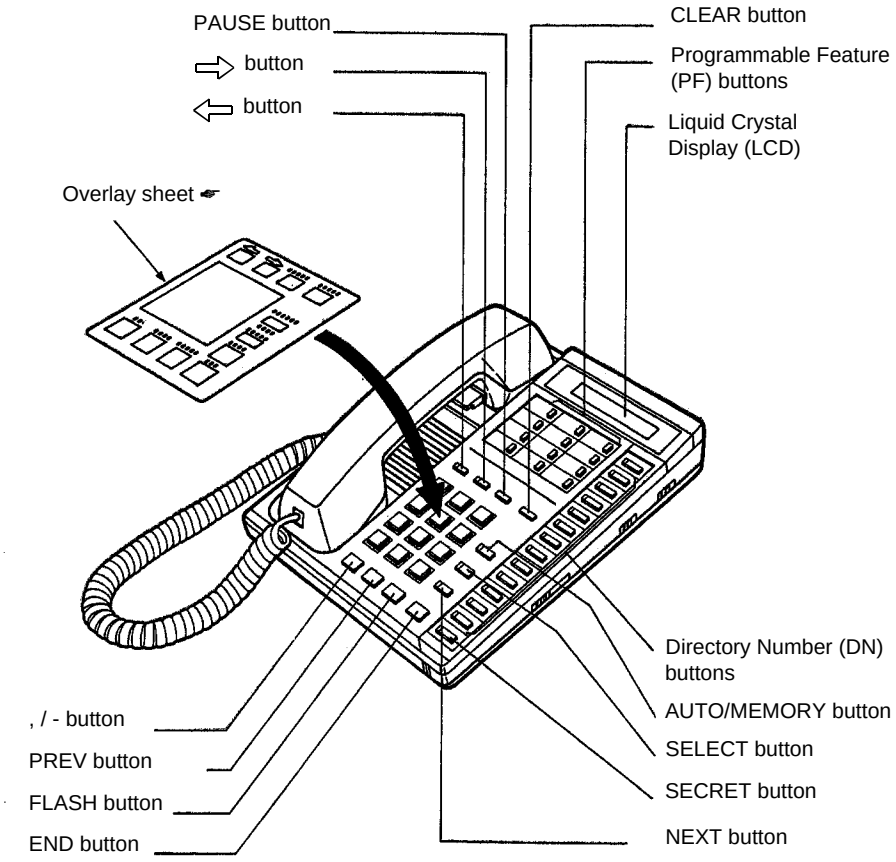
5) It is impossible to enter into PITS system programming mode if the system has already been accessed by other System Administration Devices, such as VT220, compatibles, Attendant Console, Dumb terminal, or if an extension in the same tenant is in PITS system programming.

6) To enter into PITS programming mode, the telephone set must be on-hook. If it is off-hook or in the state of speaker phone activated, programming mode is not established even if the MEMORY switch is set to the “PROGRAM” side.

B. Function of PITS Buttons in PITS Programming

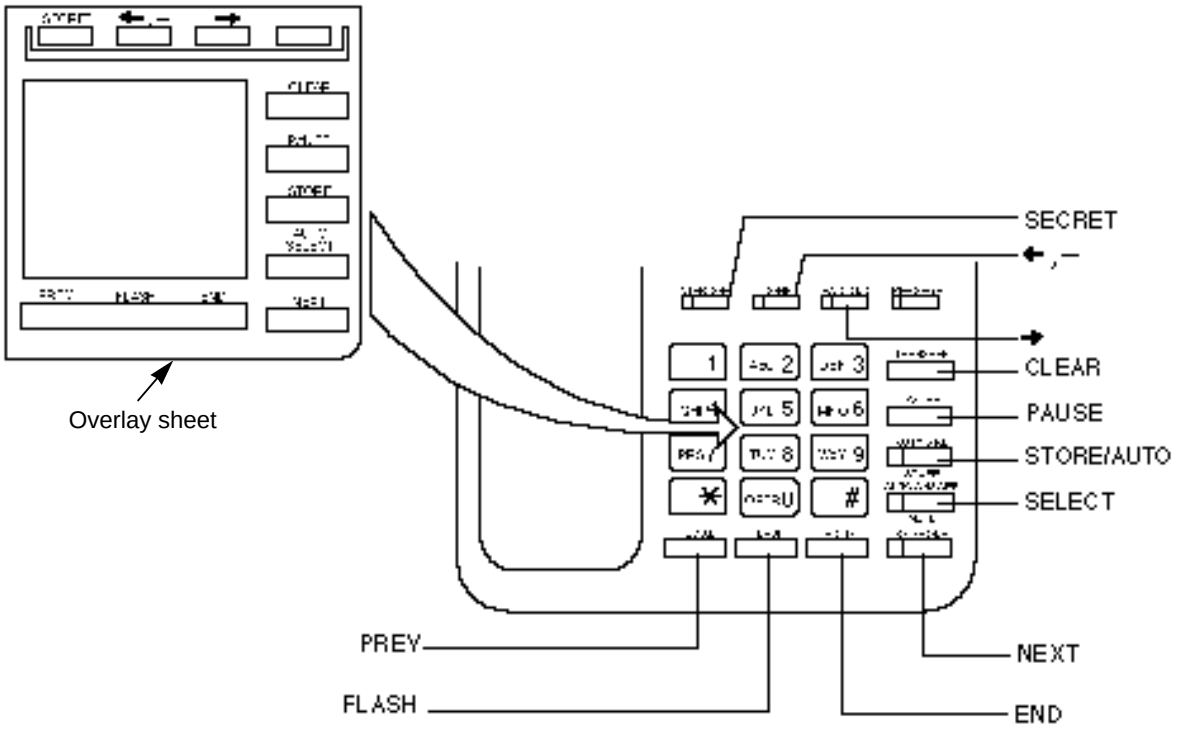
In PITS system and PITS station programming modes, the functions of the fixed feature buttons on a PITS are changed as illustrated below:

- For users with PITS type 30 (KX-T30830, KX- T61630, KX-T123230D, KX-T123230, KX-T123235);

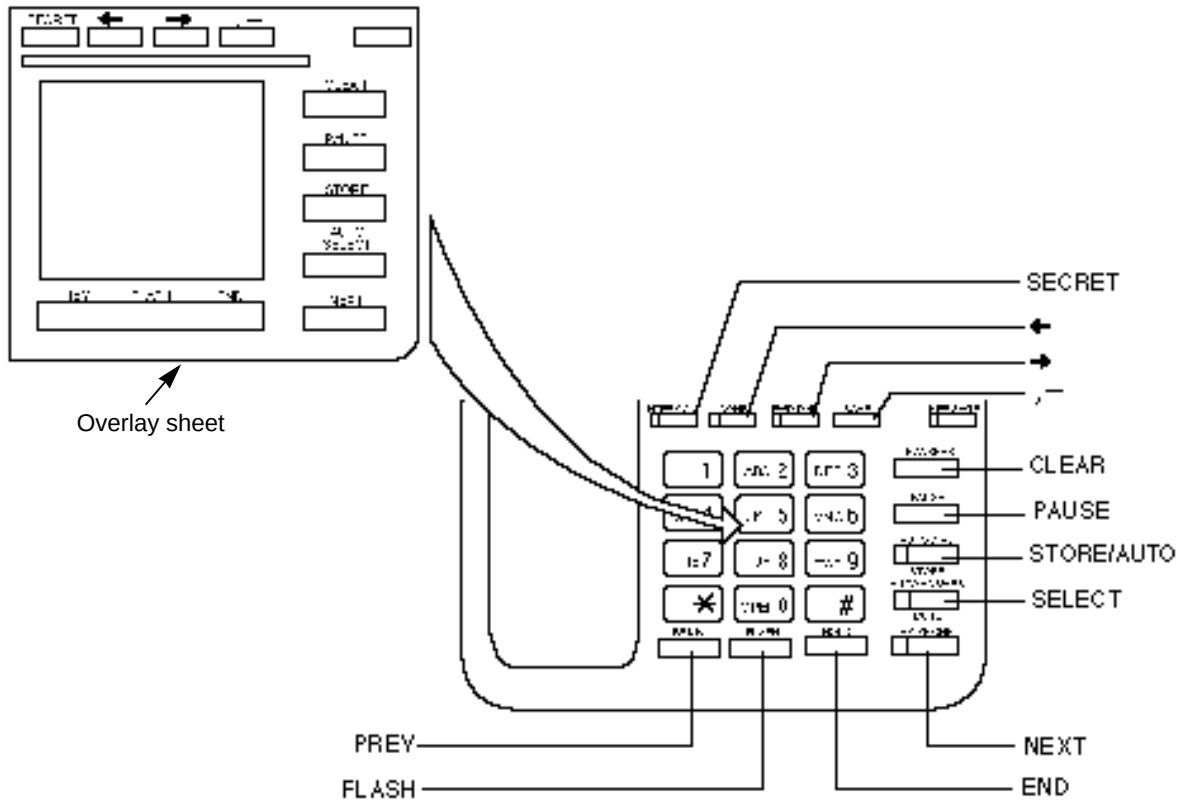


☛ For the convenience of PITS system/station programming, function names for programming are printed on the overlay sheet. This sheet is provided for PITS telephones equipped with the display.

- For users with PITS Model. KX-T7030.



- For users with PITS Model. KX-T7130.

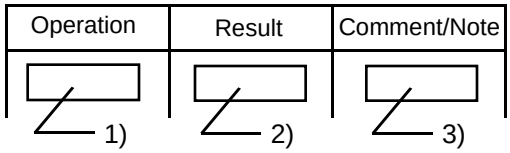


C. Operation

Introduction

Procedures for setting PITS system programming mode and performing PITS system programming are described in tables and operation charts.

The tables show the procedures in the following form:



1) Describes actual operation.
2) Shows the result from the operation.
3) Comment or note on the operation.

Operation charts are attached to the tables to help you to understand the flow.

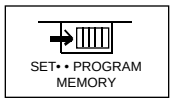
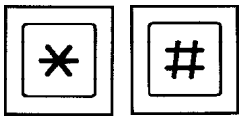
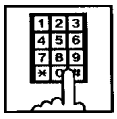
The procedures for setting PITS system programming mode are explained first in “Setting PITS System Programming Mode.”

The procedures for PITS system programming are explained in each programming item.

Note: The procedures in this section are described from the viewpoint of type 30 PITS telephone users. If KX-T7030 or KX-T7130 is used in PITS system programming mode, press the STORE button instead of MEMORY button.

1.00 Entering PITS System Programming Mode

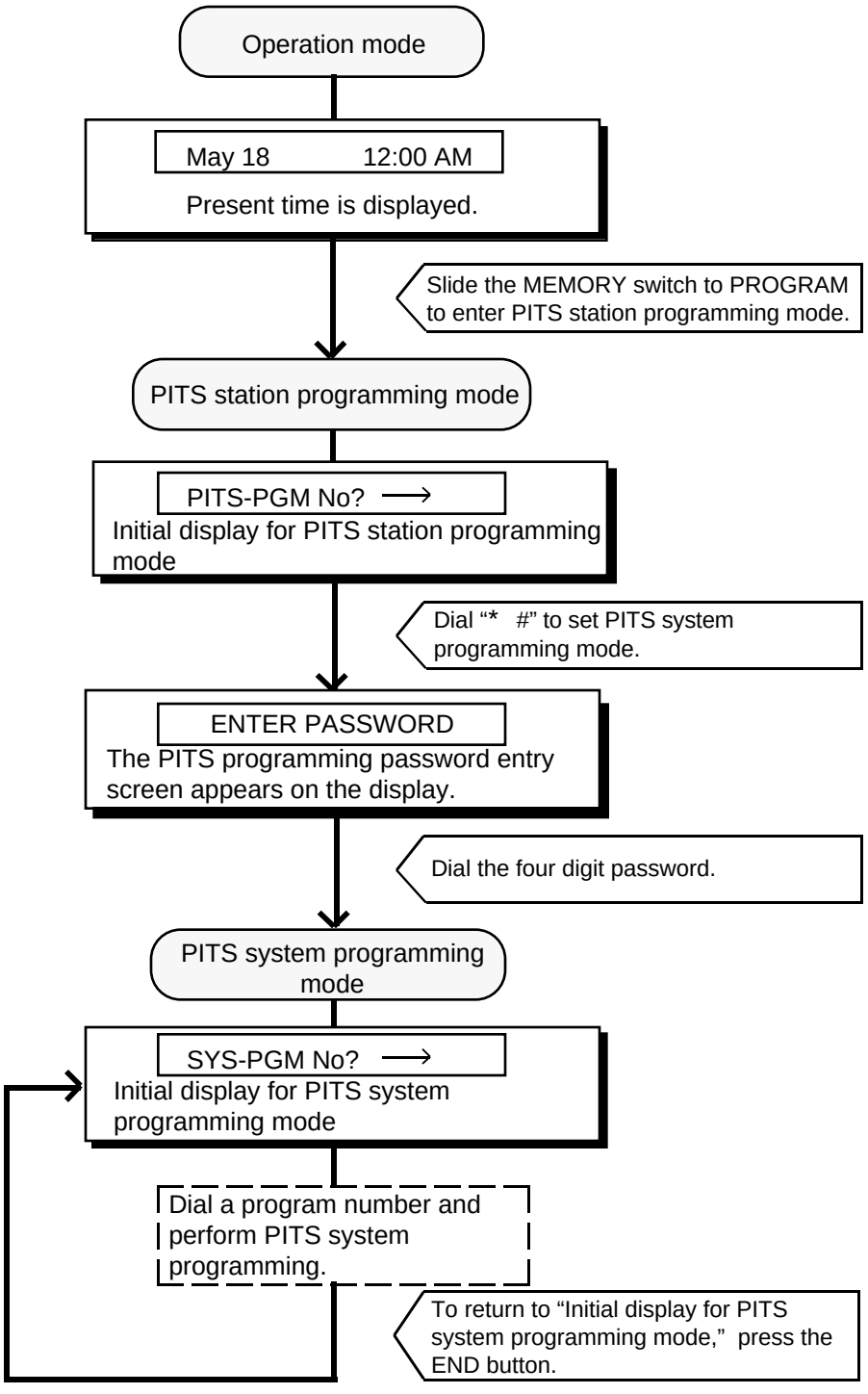
Procedures for setting PITS system programming mode :

Operation	Result	Comment/Note
1. Set the MEMORY switch at the rear of PITS to "PROGRAM."  	• The message below appears on the display: PITS-PGM No? ⟶ • The MEMORY button indicator lights in red.	• This display is called "Initial display for PITS station programming mode." • If the programming data of your PITS is already accessed by another system administration device, the following message appears on the display. Already Accessed
2. Dial "* #." (program number) 	• The PITS programming password entry screen appears on the display: ENTER PASSWORD • The MEMORY button indicator light goes out.	
3. Dial the PITS Programming Password: four digits. 	• The message below appears on the display: SYS-PGM No? • The MEMORY button indicator lights in red.	• This display is called "Initial display for PITS system programming mode." • The password characters are not displayed when they are entered for security reason. • Entry of an incorrect password causes an alarm tone. • If the following message appears, the system is already accessed by another administration device: Already Accessed

When nothing is entered within one minute after "Initial display for PITS system programming mode" is displayed, "Initial display for PITS station programming mode" is displayed again.

You can return to the operation mode whenever you slide the MEMORY switch to SET.

Operation chart for setting PITS system programming mode

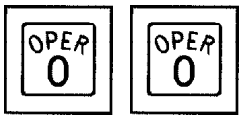
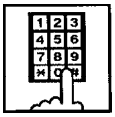
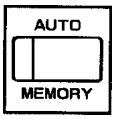


Note:
To finish PITS system programming mode and return to PITS station programming mode, press the END button while "Initial display for PITS system programming mode" is displayed.
In PITS system programming mode, you can return to "Initial display for PITS system programming mode" (status 1) by pressing the END button.

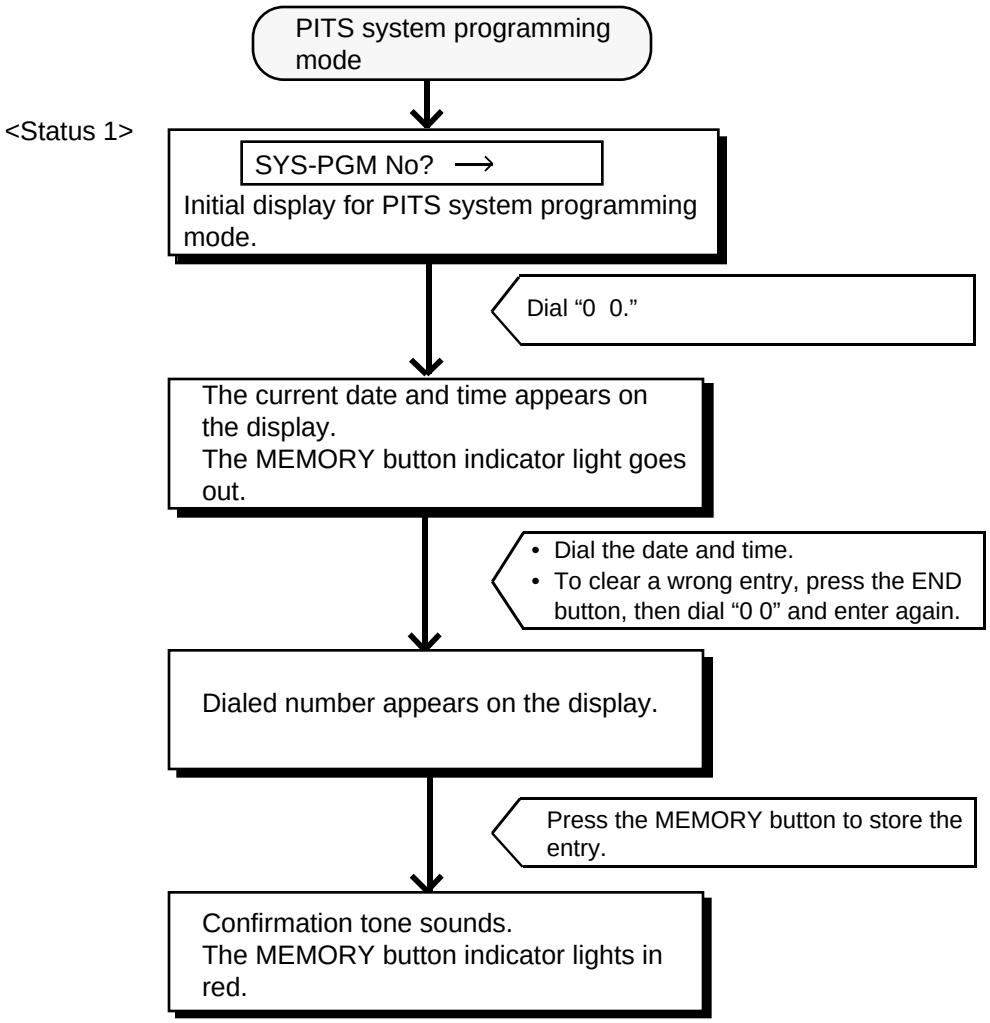
Operation
Result from the operation

2.00 Setting Date and Time

Used to change date and time.

Operation	Result	Comment/Note
1. Set PITS system programming mode.	• The message below appears on the display: SYS-PGM No? ⟶ • The MEMORY button indicator lights in red.	• Refer to Section 11-C-1.00 "Entering PITS System Programming Mode."
2. Dial "0 0." (program number) 	• The current date and time appears on the display: <Example> 88 01 01 4 12 : 00 0 → a.m./p.m.: 0: a.m. 1: p.m. → Minute : 00 to 59 → Hour : 01 to 12 → Day of the week : 0: SUN. 1: MON. 2: TUE. 3: WED. 4: THU. 5: FRI. 6: SAT. → Day : 01 to 31 → Month : 01 to 12 → Year : 00 to 99 • The MEMORY button indicator light goes out.	• Displayed details and conditions for entry are as follows:
3. Enter the current date and time. 	• Dialed digits appear in dialed order. <Example> When you set 9:00 a.m., July 6, Friday, 1990: 90 07 06 5 ↓ 90 07 06 5 9 : 00 0	• If you want to clear a wrong entry, press the END button and enter the data again from step 2. • Setting is completed when all the above items from "Year" to "a.m./ p.m." are entered.
4. Press the MEMORY button to store the entry. 	• The MEMORY button indicator lights in red. • Confirmation tone sounds.	• An incomplete entry returns alarm tone, and the MEMORY button indicator does not light.

Operation chart for setting date and time

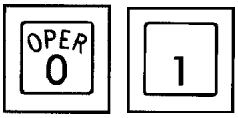
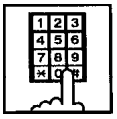
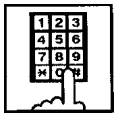


Note:
In PITS system programming mode, you can return to “Initial display for PITS system programming mode” (Status 1) by pressing the END button.

3.00 Storing Speed Dialing-System

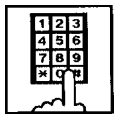
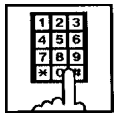
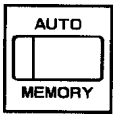
This is used to store telephone numbers for speed dialing which all the extension users in the system can use to call outside parties. Up to 200 speed dialing codes can be stored.

For further information about Speed Dialing feature, refer to Section 4-C-4.02 “Speed Dialing-System.”

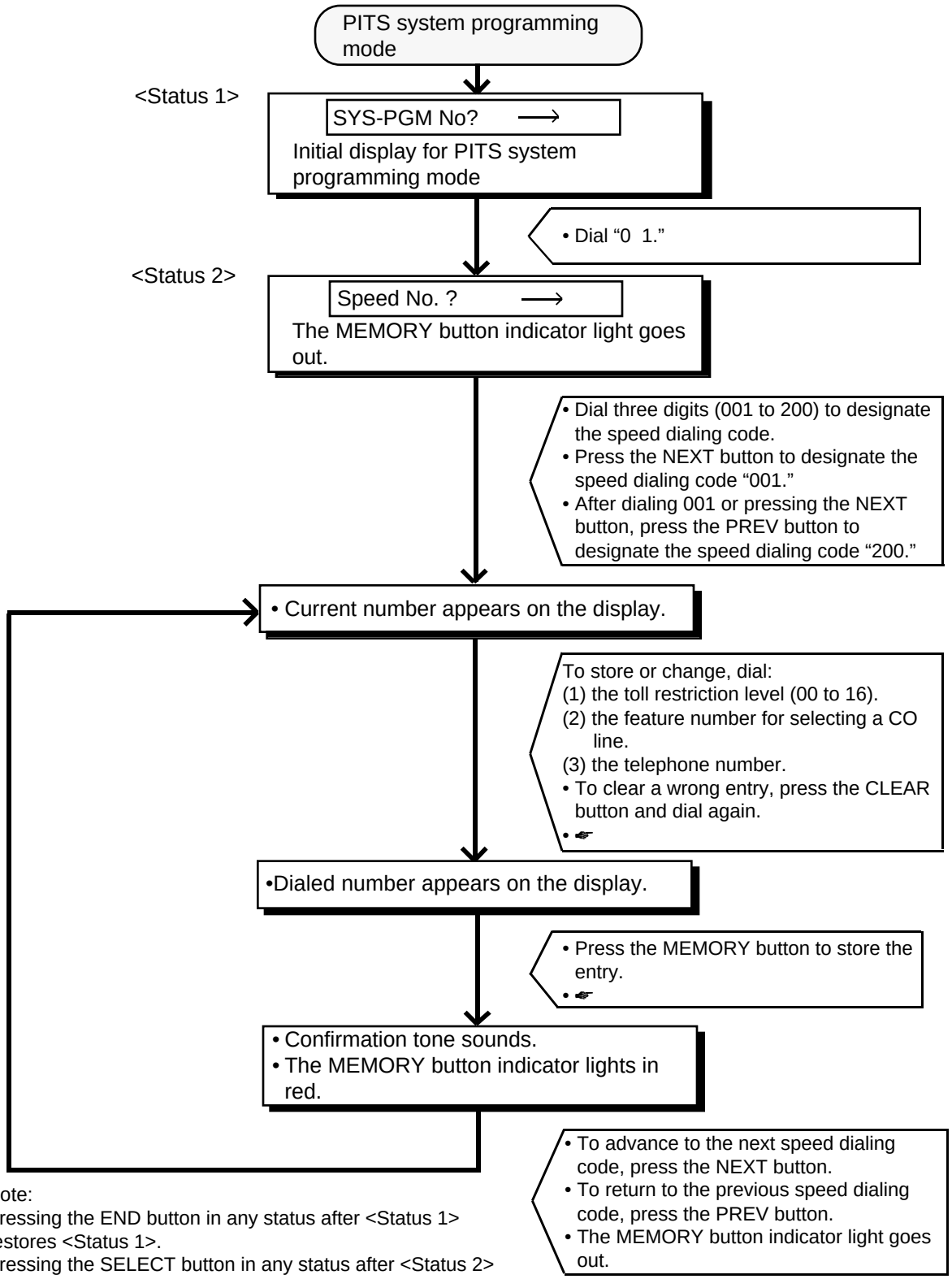
Operation	Result	Comment/Note
1. Set PITS system programming mode.	• The message below appears on the display: SYS-PGM No? ⟶ • The MEMORY button indicator lights in red.	• Refer to Section 11-C-1.00 “Entering PITS System Programming Mode.”
2. Dial “01.” (program number) 	• Speed dialing code entry screen appears on the display: Speed No? ⟶ • The MEMORY button indicator light goes out.	
3. Dial the appropriate speed dialing code: three digits (001 to 200). 	• Current entry for the selected code appears on the display: <Example> 100: 01, 9555-1212 100: Speed dialing code 01 : Toll restriction level 9 : Feature number for selecting the CO line 555-1212 : Telephone number • If nothing is stored: 100: Not Stored	• If the NEXT button is pressed, the number for the speed dialing code “001” appears. • After the current entry is displayed, pressing the PREV button displays the number of the previous speed dialing code. • When Tenant Service is employed,, you can store the speed dialing codes of your tenant. • When more than 10 digits are stored, it can be confirmed by scrolling the display with the ⟸ or ⟹ button.
4. Dial the toll restriction level: two digits (00 to 16). 	• Dialed digits appear on the display: <Example> 100: 16,	• After dialed number is displayed, “ , ” appears automatically.

Continued

Continued

Operation	Result	Comment/Note
5. Dial the feature number for selecting a CO line and, if necessary, trunk group specifying number (1 to 8). 	• Dialed number appears on the display: <Example> 100: 16, 9	• The feature numbers for selecting a CO line are: "ARS/Local CO Line Access" "Trunk Group 01-08 Access" "Trunk Group 09-16 Access" "Trunk Group 17-24 Access" (Virtual Trunk Group – ◆ for U.S.A. and Canada only)
6. Dial the telephone number. 	• Dialed number appears on the display: <Example> 100: 16, 9 5551212	• Up to 32 digits consisting of the feature number and telephone number can be stored. • You can enter : 0 to 9, * , #, Pause, Flash, — (hyphen), SECRET button. • If you want to clear a wrong entry, press the CLEAR button and dial again.
7. Press the MEMORY button to store the entry. 	• The MEMORY button indicator lights in red. • Confirmation tone sounds.	

Operation chart for storing speed dialing

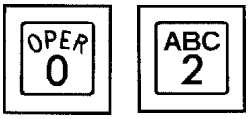
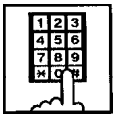
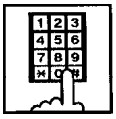
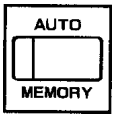


Note:
Pressing the END button in any status after <Status 1> restores <Status 1>.
Pressing the SELECT button in any status after <Status 2> restores <Status 2>.

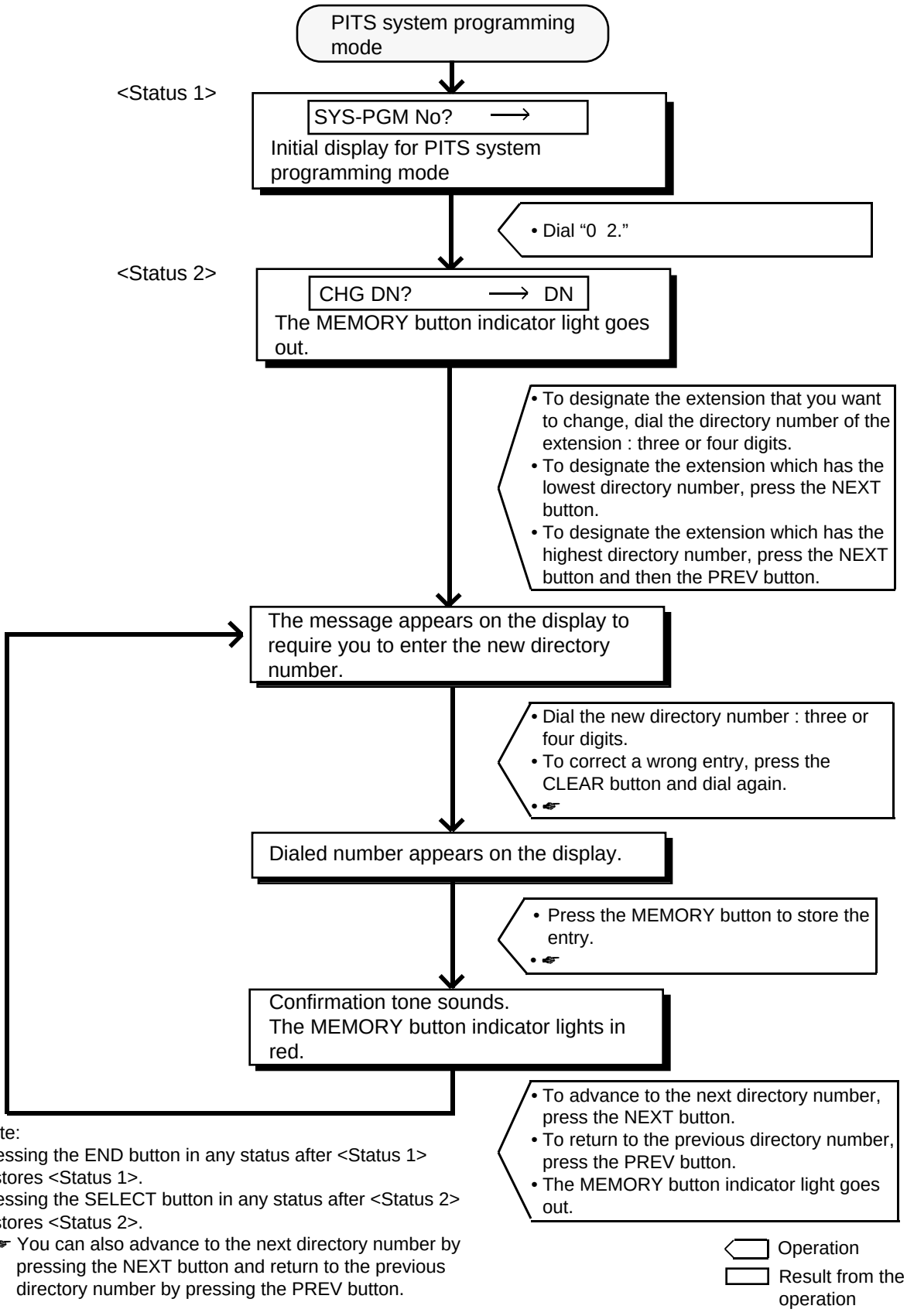
☛ You can also advance to the next speed dialing code by pressing the NEXT button and return to the previous code by pressing the PREV button.

4.00 Changing Extension Number

This is used to change extension directory numbers.
Before changing Extension Number, please read the following sub-sections.
Section 3-B-1.00 “Flexible Numbering”
Section 3-B-2.00 “Directory Number (DN)”

Operation	Result	Comment/Note
1. Set PITS system programming mode.	• The message below appears on the display: SYS-PGM No? ⟶ • The MEMORY button indicator lights in red.	• Refer to Section 11-C-1.00 “Entering PITS System Programming Mode.”
2. Dial “0 2.” (program number) 	• A message appears on the display, to require you to enter the directory number of the extension that you want to change: CHG DN? ⟶ DN • The MEMORY button indicator light goes out.	
3. Dial the directory number of the extension that you want to change : three or four digits. 	• The following message appears on the display and requires you to enter the new directory number. <Example> DN 100 => DN	
4. Dial the directory number that you want to set : three or four digits. 	• Newly entered number appears on the display as follows: DN 100 =>DN 2000	• If you want to correct a wrong entry, press the CLEAR button and dial again.
5. Press the MEMORY button to store the entry. 	• The MEMORY button indicator lights in red. • Confirmation tone sounds.	• If the directory number you are trying to assign is already assigned, you hear alarm tone.

Operation chart for changing extension number

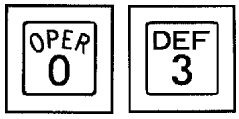
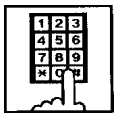
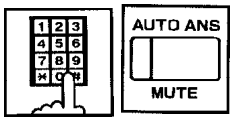
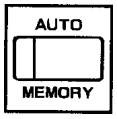


Note:
Pressing the END button in any status after <Status 1> restores <Status 1>.
Pressing the SELECT button in any status after <Status 2> restores <Status 2>.

☛ You can also advance to the next directory number by pressing the NEXT button and return to the previous directory number by pressing the PREV button.

5.00 Changing Extension Name

This is used to change extension names.

Operation	Result	Comment/Note
1. Set PITS system programming mode.	• The following message appears on the display: SYS-PGM No? ⟶ • The MEMORY button indicator lights in red.	• Refer to Section 11-C-1.00 "Entering PITS System Programming Mode."
2. Dial "03." (program number) 	• A message appears on the display and requires you to enter the directory number of the extension whose name you want to change. CHG Name? ⟶ DN • The MEMORY button indicator light goes out.	
3. Dial the directory number of the extension whose name you want to change: three or four digits. 	• Current entry appears: <Example> # 100: Smith	
4. Dial new name of the extension.  SELECT button	• Dialed name appears on the display: # 100: Jack	• To enter the name, use 0 through 9, *, #, and SELECT button. For further detail, refer to "Registration of extension name" on the next page: • When you dial, dialed number winks one by one on the display.
5. Press the MEMORY button to store the entry. 	• The MEMORY button indicator lights in red. • Confirmation tone sounds.	

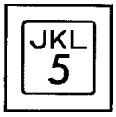
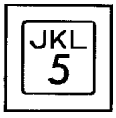
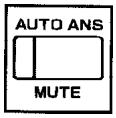
Registration of extension name

To enter extension names, use the buttons from “0” to “9,” “*” and “#” and the SELECT button. Multiple pressing of the SELECT button select a different column of letters, numbers or special characters.
For instance, dialing “1” and pressing the SELECT button once give the letter “Q.” Dialing “1” and pressing the SELECT button twice give the letter “q,” and so on.

Combination Table

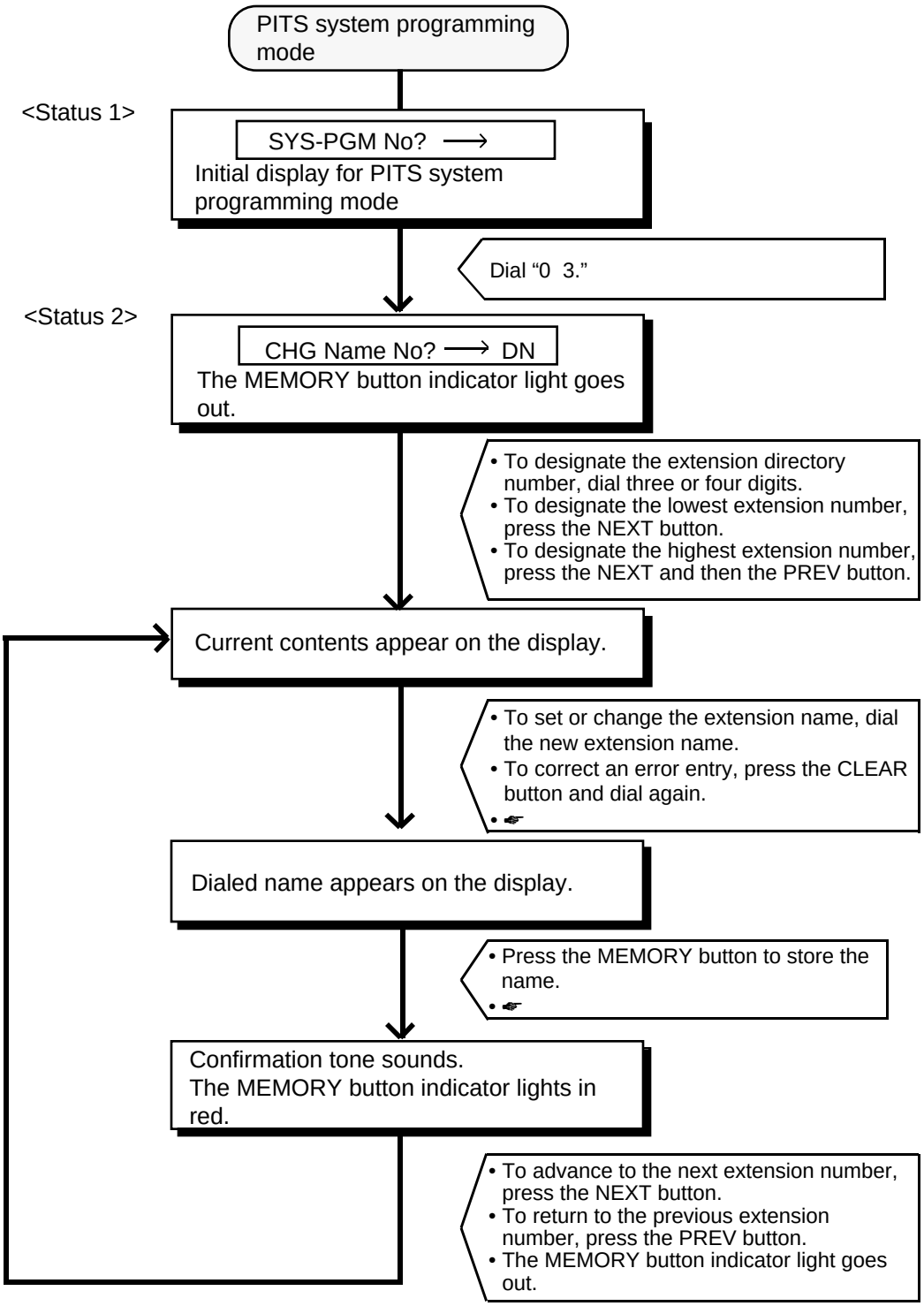
Pressing “SELECT” (Times) / Dial	0	1	2	3	4	5	6
Dial 1	1	Q	q	Z	z	!	?
Dial 2	2	A	a	B	b	C	c
Dial 3	3	D	d	E	e	F	f
Dial 4	4	G	g	H	h	I	i
Dial 5	5	J	j	K	k	L	l
Dial 6	6	M	m	N	n	O	o
Dial 7	7	P	p	R	r	S	s
Dial 8	8	T	t	U	u	V	v
Dial 9	9	W	w	X	x	Y	y
Dial 0	0		.	,	'	:	;
Dial *	*	"	+	-	=	<	>
Dial #	#	$	%	&	@	(	)

<Example>
Here is an example of changing a name to “Jack” at step 4 on the previous page.
Refer to Combination Table at left.

Operation	Display Resulted
1. Dial “5.” 	# 100: 5
2. Press the SELECT (AUTO ANS/MUTE) button once. 	Gives the letter “J.” # 100: J
3. Dial “2.” 	# 100: J2
4. Press the SELECT (AUTO ANS/MUTE) button twice. 	Gives the letter “a.” # 100: Ja
5. dial “2.” 	# 100: Ja 2
6. Press the SELECT (AUTO ANS/MUTE) button six times. 	Gives the letter “c.” # 100: Jac
7. Dial “5.” 	# 100: Jac 5
8. Press the SELECT (AUTO ANS/MUTE) button four times. 	Gives the letter “k.” # 100: Jack

Now “Jack” is entered.

Operation chart for changing extension name

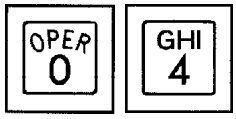
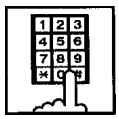
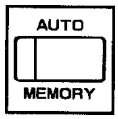


Note:
Pressing the END button in any status after <Status 1> restores <Status 1>.
Pressing the SELECT button in any status after <Status 2> restores <Status 2>.

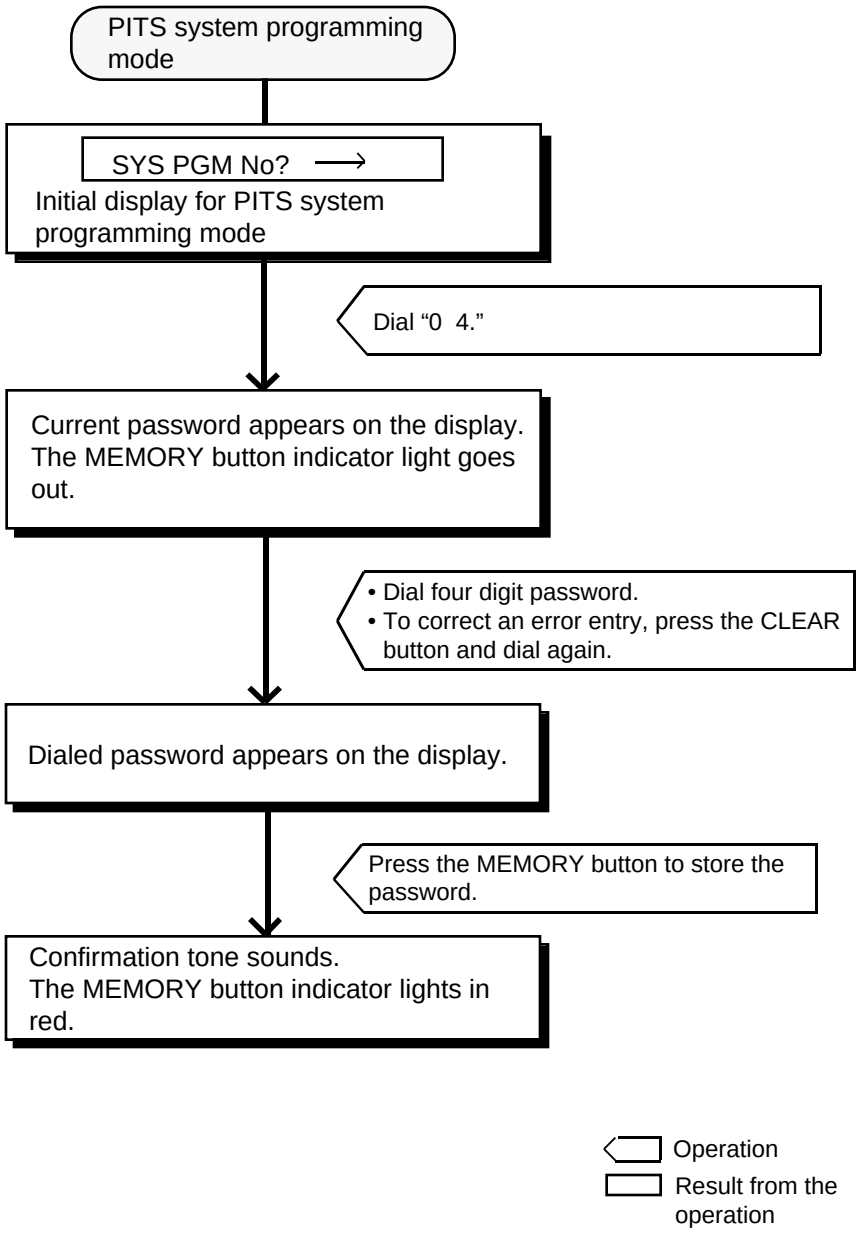
☛ You can also advance to the next extension number by pressing the NEXT button and return to the previous extension number by pressing the PREV button.

6.00 Changing PITS Programming Password

The following operation is used to change the PITS programming password which is required to enter into PITS system programming mode.

Operation	Result	Comment/Note
1. Set PITS system programming mode.	• The message appears on the display: SYS-PGM No? ⟶ • The MEMORY button indicator lights in red.	• Refer to Section 11-C-1.00 "Setting PITS System Programming Mode."
2. Dial "0 4." (program number) 	• Current password appears on the display. <Example> System PW: 1111 • The MEMORY button indicator light goes out.	
3. Dial new password: four digits. 	• Dialed password appears on the display. <Example> System PW: 5555	• Values from 0 to 9, *, # can be entered.
4. Press the MEMORY button to store the entry. 	• The MEMORY button indicator lights in red. • Confirmation tone sounds.	

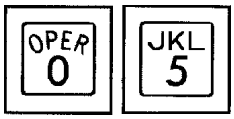
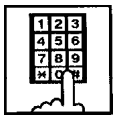
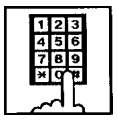
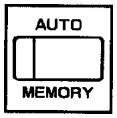
Operation chart for changing PITS programming password



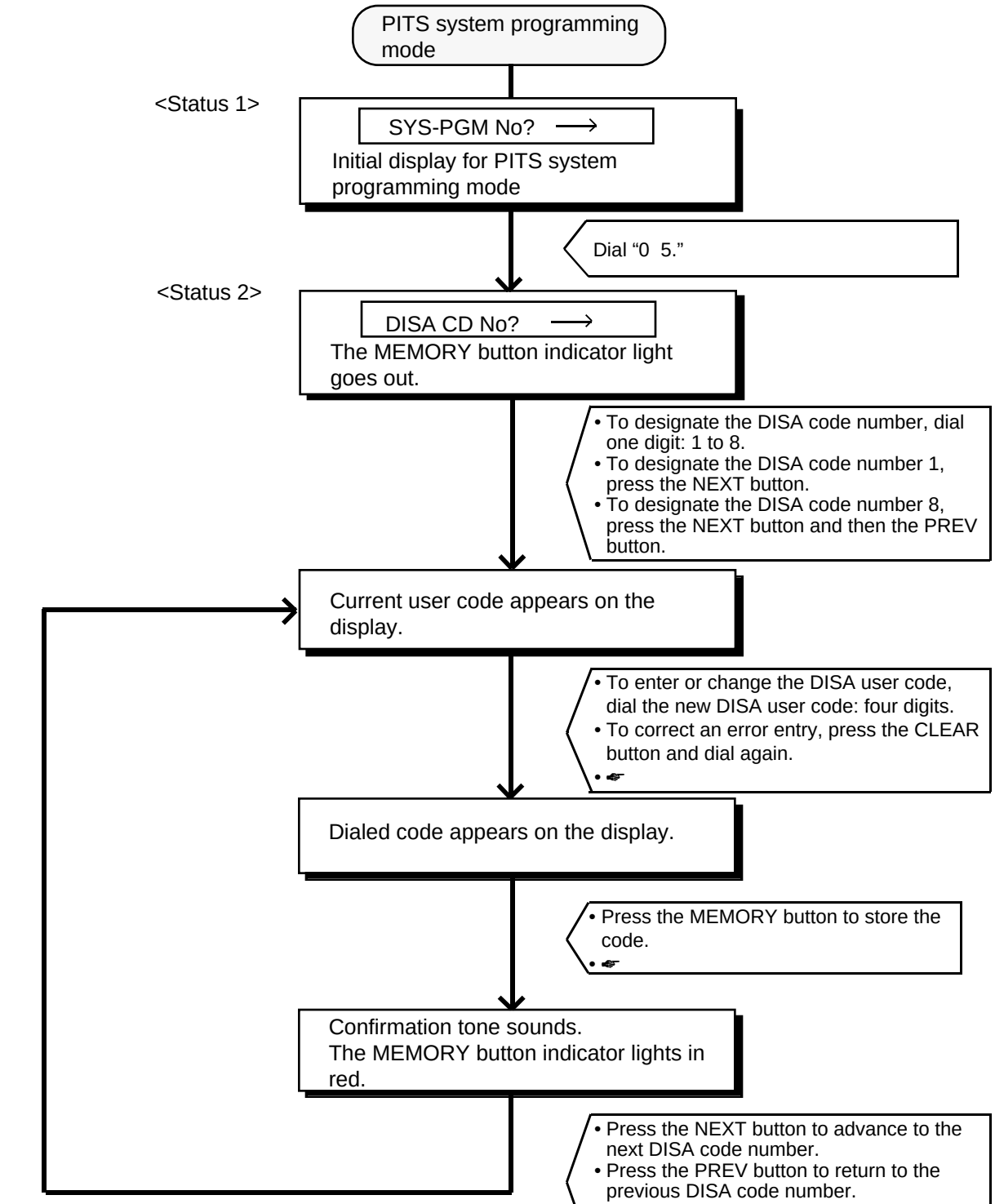
Note:
Pressing the END button in PITS system programming mode restores the Initial display for PITS system programming mode.

7.00 Changing DISA User Code

This is used to change the DISA user code. For further information about DISA feature, refer to Section 3-D-2.02 “Direct Inward System Access (DISA).”

Operation	Result	Comment/Note
1. Set PITS system programming mode.	•The following message appears on the display: SYS-PGM No? ⟶ •The MEMORY button indicator lights in red.	• Refer to Section 11-C-1.00 “Entering PITS System Programming Mode.”
2. Dial “0 5.” (program number) 	•A message appears on the display and requires you to enter the DISA code number: DISA CD No? ⟶ •The MEMORY button indicator light goes out.	
3. Dial DISA code number (1 to 8). 	•Current user code of the selected DISA code number appears on the display: <Example> USR CD 8 : 1234 8 : DISA code number 1234 : DISA user code •If nothing is stored: USR CD 8 :	
4. Dial DISA user code: four digits. 	• Dialed digits appear on the display: USR CD 8 : 5555	• Digits 0 through 9 can be entered as the DISA user code.
5. Press the MEMORY button to store the code. 	• The MEMORY button indicator lights in red. • Confirmation tone sounds.	

Operation chart for changing DISA user code

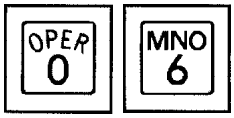
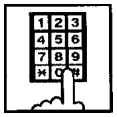
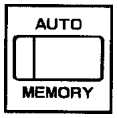


Note:
Pressing the END button in any status after <Status 1> restores <Status 1>.
Pressing the SELECT button in any status after <Status 2> restores <Status 2>.

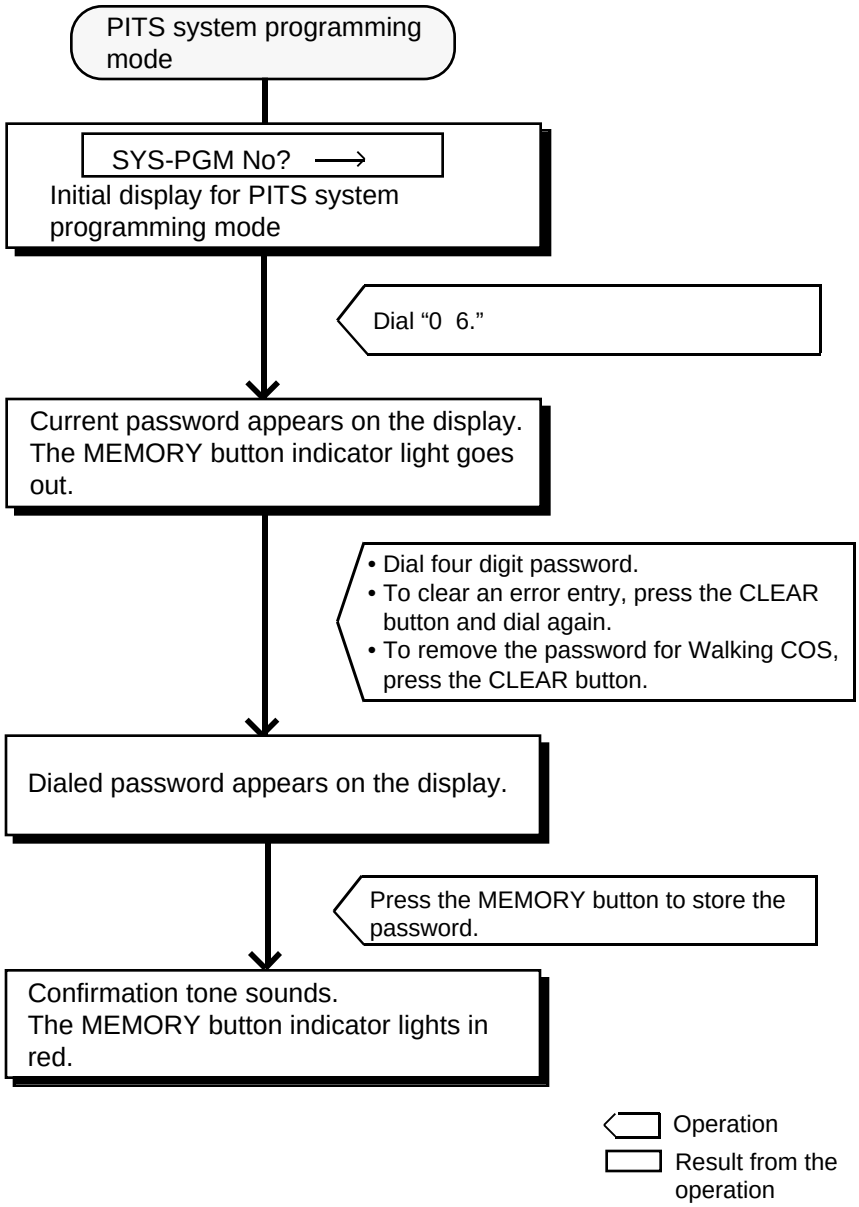
☛ You can also advance to the next DISA code number by pressing the NEXT button and return to the previous DISA code number by pressing the PREV button.

8.00 Changing Walking COS Password

This is used to change the walking COS password for performing Walking COS.
For further information about Walking COS, refer to Section 4-C-9.00 “Walking COS (Class of Service).”

Operation	Result	Comment/Note
1. Set PITS system programming mode.	• The message appears on the display: SYS-PGM No ?⟶ • The MEMORY button indicator lights in red.	• Refer to Section 11-C-1.00 “Entering PITS System Programming Mode.”
2. Dial “0 6.” (program number) 	• Current password appears on the display: <Example> Walk PW: 1111 • The MEMORY button indicator light goes out.	
3. Dial new password: four digits. 	• Dialed password appears on the display: <Example> Walk PW: 5555	• Values from 0 to 9, * , # can be entered for the password.
4. Press the MEMORY button to store the newly dialed password. 	• The MEMORY button indicator lights in red. • Confirmation tone sounds.	

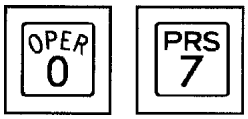
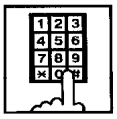
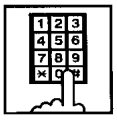
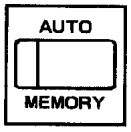
Operation chart for changing Walking COS password



Note:
Pressing the END button in PITS system programming mode restores the Initial display for PITS system programming mode.

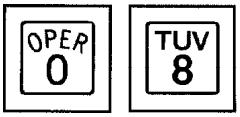
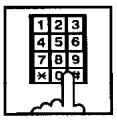
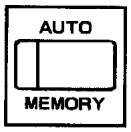
9.00 Setting Charge Limitation

Used to set the charge limitation on the extension basis (See Section 3-F-19.00 “Charge Management”).

Operation	Result	Comment/Note
1. Set PITS system programming mode.	• SYS-PGM No? → • The MEMORY indicator lights in red.	• Refer to Section 11-C-1.00 “Entering PITS System Programming Mode.”
2. Enter “07” (program number) 	• Charge Limit • The MEMORY indicator goes out.	
3. Press NEXT.	• EXT No? →	
4. Enter an extension directory number (DN): three or four digits. 	<Example> 100: 99999 → DN 100	• You can press NEXT to go to the lowest directory number.
5. Enter a charge limitation: 0 through 99999. 	<Example> 100: 30000	• To change the current entry, press CLEAR and enter the new value again.
6. Press MEMORY to store the entry. 	• The MEMORY indicator lights in red. • Confirmation tone sounds.	
To set another extension: 7. Press NEXT or PREV. or Press SELECT.	• EXT No? → • The next extension directory number is displayed. <Example> 101: 99999	• Repeat steps 3 through 7. • Repeat steps 4 through 7.
To finish the programming: 8. Press END.	• SYS-PGM No? → Initial Display of PITS System Programming Mode.	

10.00 Setting Charge Management ID Code

Used to set/change Charge Management ID code (See Section 3-F-19.00 “Charge Management”).

Operation	Result	Comment/Note
1. Set PITS system programming mode.	• SYS-PGM No? → • The MEMORY indicator lights in red.	• Refer to Section 11-C-1.00 “Entering PITS System Programming Mode.”
2. Enter “08” (program number) 	• Charge ID Code • The MEMORY indicator goes out.	
3. Press NEXT.	• Code: 1234	• Default: 1234
4. Enter four digits ID code: 0000 through 9999. 	<Example> Code: 3939	• To correct the current entry, press CLEAR and enter the new value again.
5. Press MEMORY to store the entry. 	• The MEMORY indicator lights in red. • Confirmation tone sounds.	
6. To finish the programming, press END.	• SYS-PGM No? → • Initial Display of PITS System Programming Mode.	

Section 12

Station Programming

Proprietary Integrated Telephone System (PITS)

(Section 12)

Station Programming

Proprietary Integrated Telephone System (PITS)

Contents

A. Introduction

Description

This section provides information for the programming of various features unique to each PITS telephone and DSS console in PITS station programming mode.

The assignable features are:

1) Assigning DN (Directory Number) Buttons
2) Assigning PF (Programmable Feature) Buttons on PITS and DSS console
3) Assigning DSS (Direct Station Selection) Buttons on PITS and DSS console
4) Automatic Line Hunting (Calling) Selection
5) Automatic Answering Selection
6) Call Waiting Tone Selection
7) Confirmation of Directory Number/Port Number
8) PITS Automatic Test (for areas other than U.S.A. and Canada)
9) Charge Management
   (See Section 3-F-19.00 “Charge Management”)

Note:
The assignment of PF and DSS buttons on the DSS console can be done using the associated PITS telephone.
In the programming procedures described in Section 12-C-2.00 “PF Button Assignment” and 12-C-3.00 “DSS Button Assignment,” press a PF or DSS button on the DSS console instead of pressing a PF or DSS button on the PITS telephone.
Refer to Section 4-B-2.00 “Assignable Feature Buttons” for further information about features assignable to DN buttons, PF buttons and DSS buttons.

Conditions

If the programming data of your PITS is already accessed by another administration device, the following message appears on the display:

Already Accessed

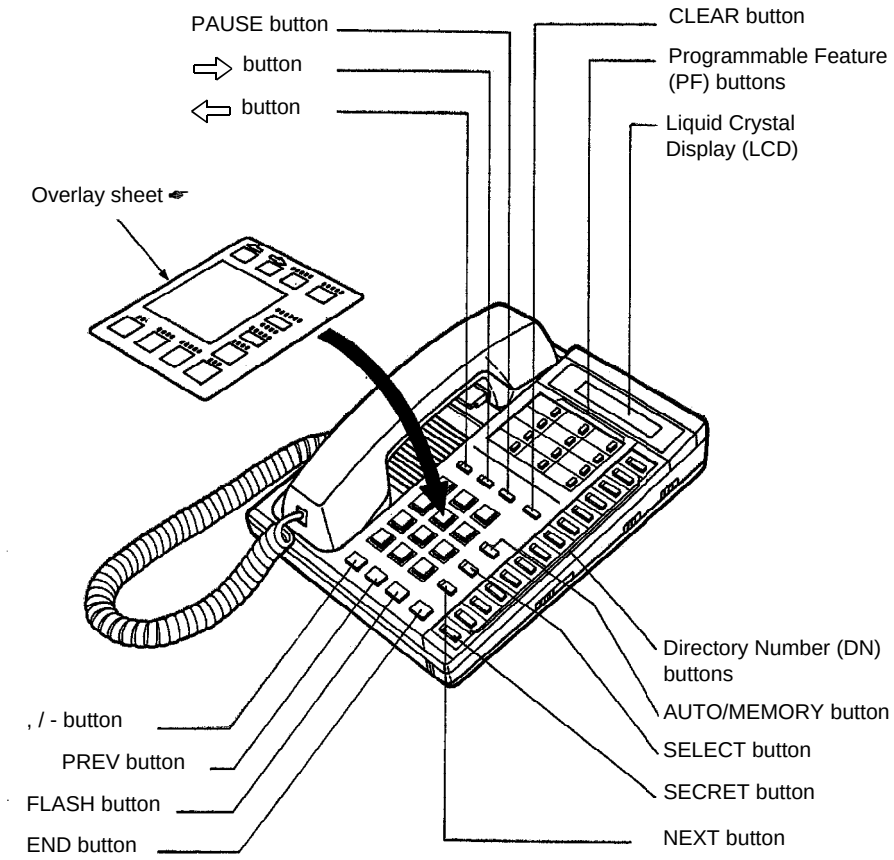
PITS station programming can be done at any extension simultaneously.

Be sure the handset is on the cradle and the SP-PHONE button is off. If it is off-hook or the speaker-phone is on, PITS programming mode is not established even if the MEMORY switch is set to the “PROGRAM” side.

B. Function of PITS Buttons in PITS Programming

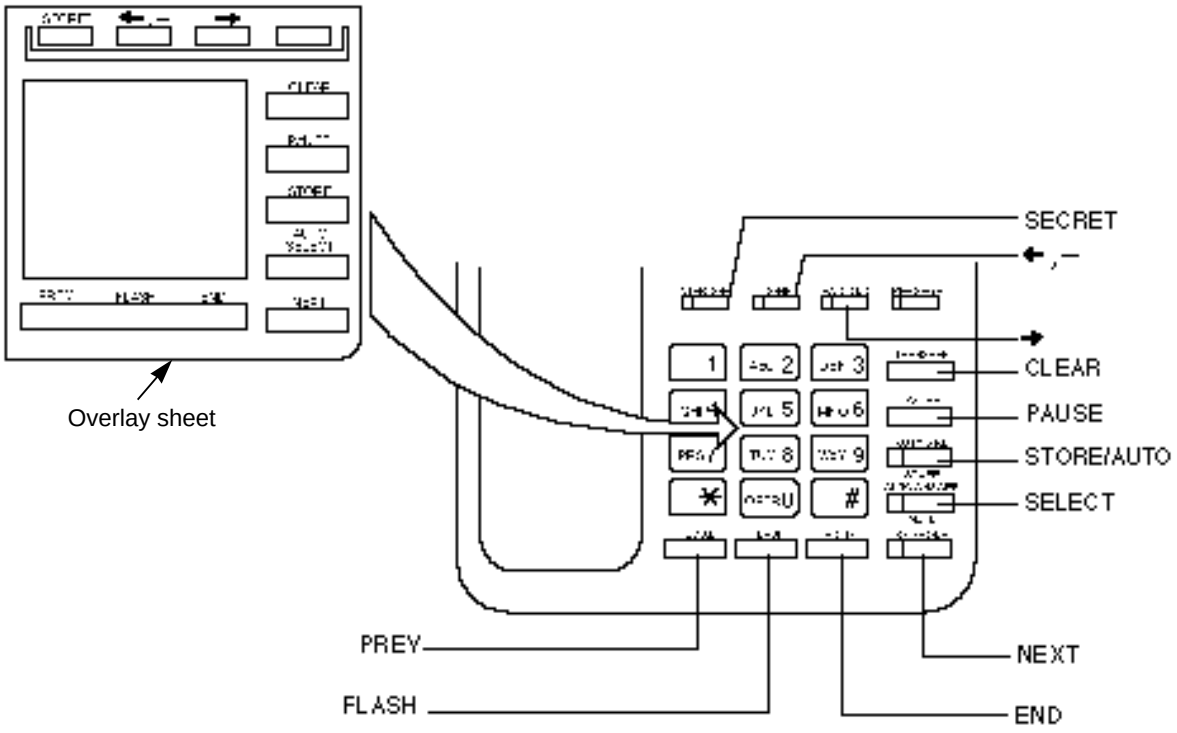
In PITS system and PITS station programming modes, the functions of the buttons are changed as illustrated below:

- For users with PITS type 30 (KX-T30830, KX-T61630, KX-T123230D, KX-T123230,KX-T123235);

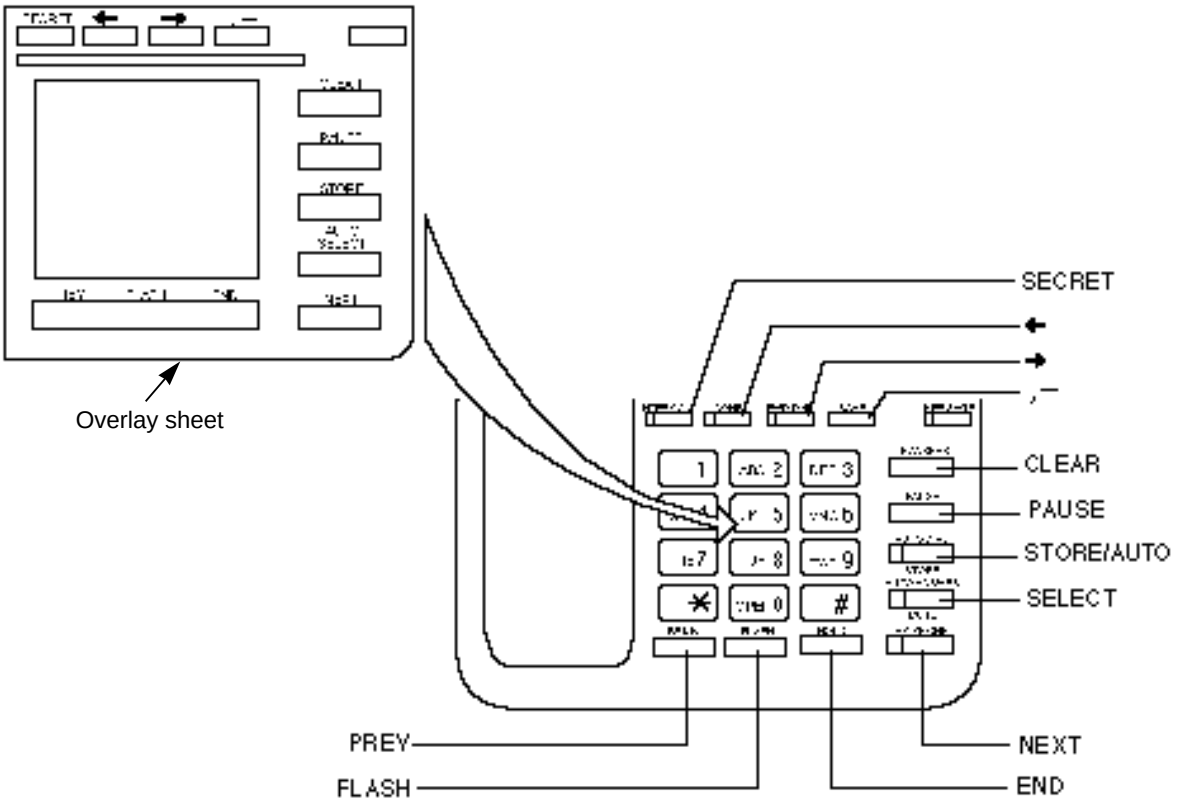


☛ For the convenience of PITS system/station programming, function names for programming are printed on the overlay sheet. This sheet is provided for PITS telephone equipped with display.

- For users with PITS Model. KX-T7030.



- For users with PITS Model. KX-T7130.

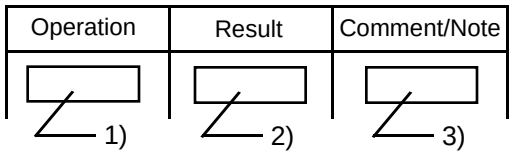


C. Operation

Introduction

Procedures for performing PITS station programming are described in tables and operation charts.

The tables show the procedures in the following form:



1) Describes actual operation.
2) Shows the result from the operation.
3) Comment or note on the operation.

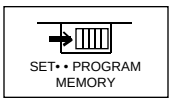
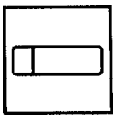
Operation charts are attached to the tables to help you to understand the flow.

Note:
The procedures in this section are described from the viewpoint of type 30 PITS telephone users. If KX-T7030 or KX-T7130 is used in PITS station programming mode, press the STORE button instead of MEMORY button.

1.00 DN (Directory Number) Button Assignment

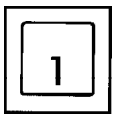
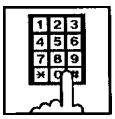
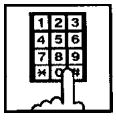
Assigning various features to the DN buttons of individual PITS telephone is explained here.

The explanation of the message display applies only to a PITS with the display.

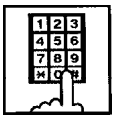
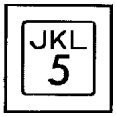
Operation	Result	Comment/Note
1. Set the MEMORY switch at the rear of PITS to "PROGRAM."  	• The following message appears on the display: PITS-PGM No.?→ • The MEMORY button indicator lights in red.	• This status is called "initial display for PITS station programming mode." • If the programming data of your PITS has already been accessed by another administration device, the following message appears on the display. Already Accessed • From now on in any status, pressing the END button restores this status.
2. Press the appropriate DN button. 	• Previously stored data appears on the display: <Example> DSS(DN):1011 • The MEMORY button indicator light goes out and the associated DN button indicator lights in red. • If nothing is entered within one minute after pressing the DN button, "Initial display for PITS station programming mode" is displayed again.	• When the following messages appears on the display, changing the assigned feature is impossible in this mode, and can be changed only by the system programming. <Example> PDN:DN 1011 (Primary Directory Number) <Example> SDN:DN 1012 (Secondary Directory Number) <Example> PRV-CO:P 2021 (Private CO) <Example> OHCA on DN (Off-Hook Call Announcement) <Example> UCD Log (UCD Log in) <Example> Local Alarm (Local Alarm)

Continued

Continued

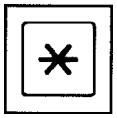
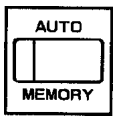
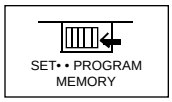
Operation	Result	Comment/Note
		<Example> Message Waiting (Message Waiting) <Example> CO:P 1011 (Single CO) <Example> Trunk Group:11 (Group CO) • If no feature is assigned to the DN button, the following message appears on the display : Not Stored
3. To change the preset feature, dial the program number corresponding to the desired feature. • To assign DSS (DN) feature, 1) Dial “1.”  	1) The following message appears on the display. DSS(DN):	
2) Dial a directory number (three or four digits). 	2) The dialed number appears on the display. <Example> DSS(DN):100	• If the dialed number does not exist as a directory number, alarm tone sounds. • If you want to clear a wrong entry, press the CLEAR button and dial the correct number.
• To assign DSS (ICM) feature, 1) Dial “2.”  	1) The following message appears on the display. DSS(ICM):	
2) Dial an ICM number (one or two digit(s)). 	2) The dialed number appears on the display. <Example> DSS(ICM):11	• If the dialed number does not exist as an ICM number, alarm tone sounds. • If you want to clear a wrong entry, press the CLEAR button and dial the correct number.

Continued

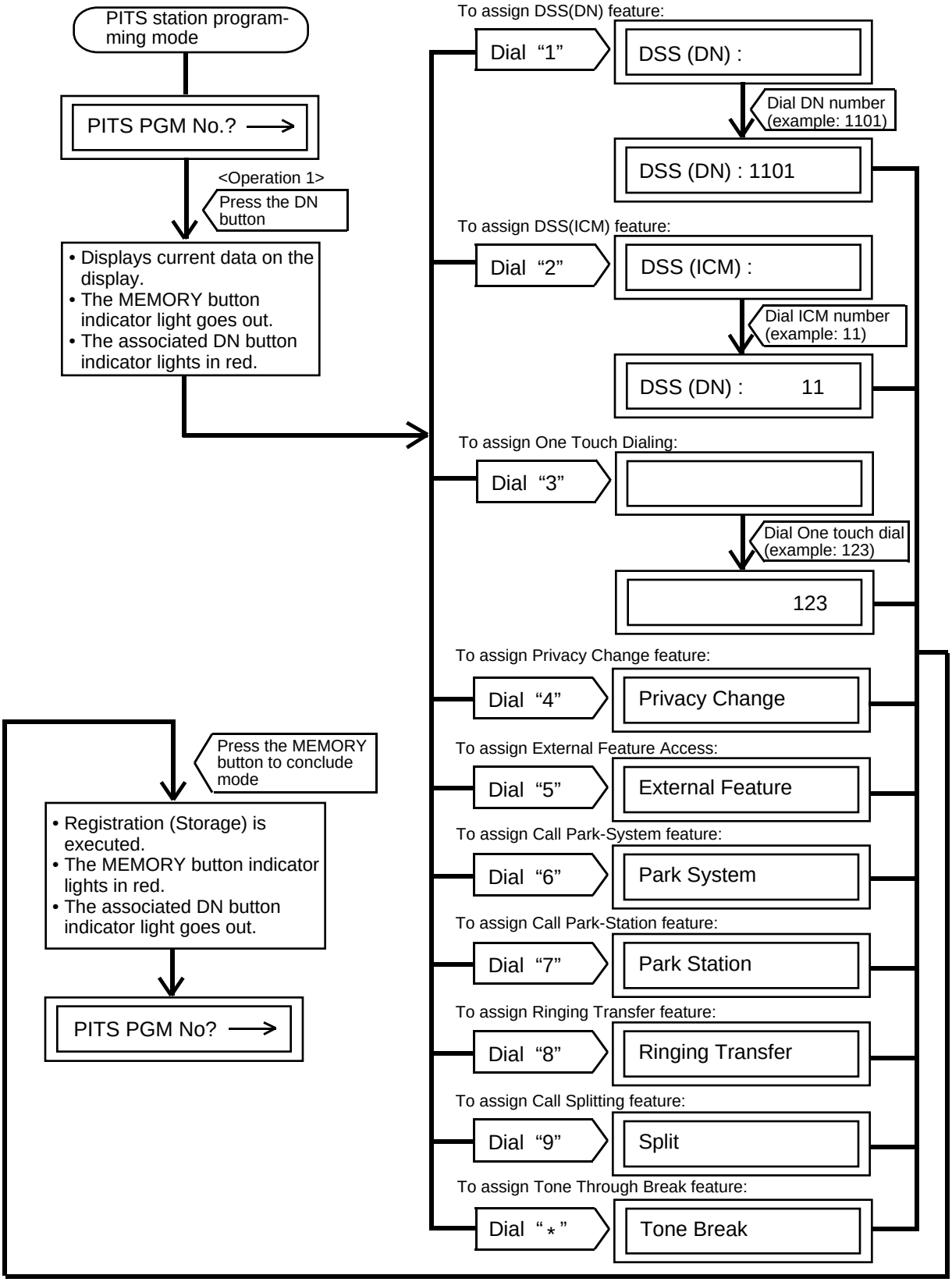
Operation	Result	Comment/Note
•To assign One Touch Dialing feature, 1) Dial “3,” 	1) No message appears on the display: [ ]	• Refer to Section 4-C-4.01 “One Touch Dialing” for further information .
2) Dial a telephone number or a feature number. 	2) The following message appears on the display: <Example 1> when dialing a telephone number: [1 2 3 4 5 6] <Example 2> when dialing a feature number: [01]	• Up to 16 digits can be entered. • If you want to clear a wrong entry, press the CLEAR button and dial the correct number.
• To assign Privacy Change feature, dial “4.” 	The following message appears on the display: [Privacy Change]	• Privacy Change feature is assignable to only one button among DN buttons and DSS buttons. • Refer to Section 4-G-2.00 “Privacy Release” and Section 4-G-3.00 “Privacy Attach” for further information about Privacy Change feature.
• To assign External Feature Access feature, dial “5.” 	The following message appears on the display: [External Feature]	• Refer to Section 4-G-9.00 “External Feature Access” for further information .
• To assign Call Park-System feature, dial “6.” 	The following message appears on the display: [Park System]	• Refer to Section 4-E-5.01 “Call Park-System” for further information .
• To assign Call Park-Station feature, dial “7.” 	The following message appears on the display: [Park Station]	• Refer to Section 4-E-5.02 “Call Park-Station ” for further information .
• To assign Ringing Transfer feature, dial “8.” 	The following message appears on the display: [Ringing Transfer]	• Refer to Section 4-F-1.04 “Ringing Transfer” for further information.

Continued

Continued

Operation	Result	Comment/Note
• To assign Call Splitting feature, dial “9.” 	The following message appears on the display: Split	• Refer to Section 4-E-6.00 “Call Splitting” for further information.
• To assign Tone Through Break feature, dial “*.” 	The following message appears on the display: Tone Break	• Refer to Section 4-G-12.00 “Tone Through (End to End DTMF Signaling)” for further information.
4. Press the MEMORY button to store the assignment. 	• The MEMORY button indicator lights in red. • The associated DN button indicator light goes out. • Confirmation tone sounds. • “Initial display for PITS station programming mode” is displayed again.	
5. To conclude the “PITS station programming mode,” slide the MEMORY switch to “SET.” 	• PITS station programming mode is concluded and returns to the operation mode.	

--Operation Chart--

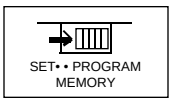
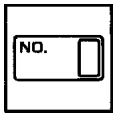


Note : In any status, pressing the END key restores <STATUS 1>.

2.00 PF (Programmable Feature) Button Assignment

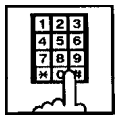
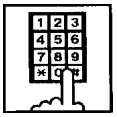
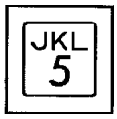
Assigning various functions to the PF buttons of the individual PITS telephone and DSS Console is explained here.

The explanation of the message display applies only to a PITS provided with the display.

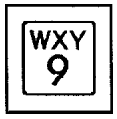
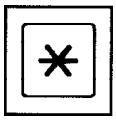
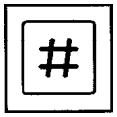
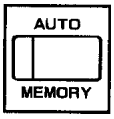
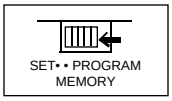
Operation	Result	Comment/Note
1. Set the MEMORY switch at the rear of PITS to "PROGRAM."  	• The following message appears on the display: PITS-PGM No.?→ • The MEMORY button indicator lights in red.	• This display is called "Initial display for PITS station programming mode." • From now on in any status, pressing the END button restores this status. • If the programming data of your PITS has already been accessed by another administration device, the following message appears on the display. Already Accessed
2. Press a PF button.  	• Previously stored data appears on the display. <Example> If preset to one touch dialing button M01/P: 9-1-201-123- • The MEMORY button indicator light goes out.	• Stored data as one touch dialing. • If nothing is stored, "Not Stored" appears. • To scroll, use the ← or → button. (Note) • "P" means PF button of the PITS. If PF button on DSS console associated with PITS is pressed, "C" appears instead of "P." • PF button number. • If nothing is entered within one minute after pressing a PF button, "Initial display for PITS station programming mode" is displayed again.

Continued

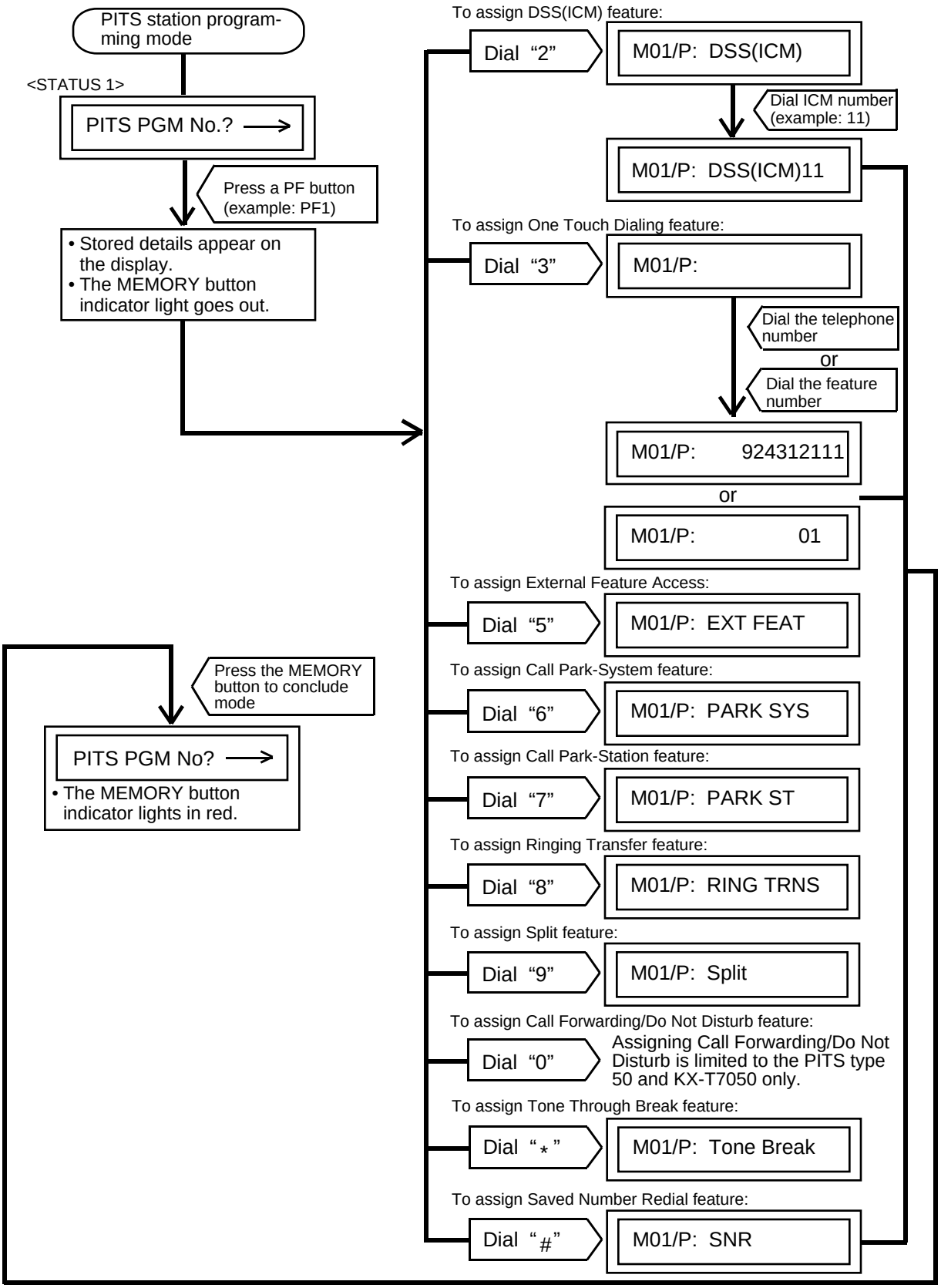
Continued

Operation	Result	Comment/Note
3. To change the previously stored data, dial the program number corresponding to the desired feature.		
• To assign DSS(ICM) feature,		
1) Dial "2." 	1) The following message appears on the display: M01/P : DSS(ICM)	
2) Dial ICM number (one or two digit(s)). 	2) The following message appears on the display: <Example> M01/P : DSS(ICM)11	• If the dialed number does not exist as an ICM number, alarm tone sounds. • If you want to clear a wrong entry, press the CLEAR button and dial the correct number.
• To assign One Touch Dialing feature,		
1) Dial "3." 	1) The following message appears on the display: M01/P :	
2) Dial a telephone number or a feature number. 	2) The following message appears on the display: <Example> when entering a telephone number: M01/P : 9123456 <Example> when entering a feature number: M01/P : 01	• Up to 16 digits can be stored. • You can enter: 0 to 9, * , #, Pause, Flash, - (hyphen), SECRET. • If you want to clear a wrong entry, press the CLEAR button and dial the correct number.
• To assign External Feature Access, dial "5." 	• The following message appears on the display: M01/P : EXT FEAT	
• To assign Call Park-System feature, dial "6." 	• The following message appears on the display: M01/P : PARK SYS	
• To assign Call Park-Station feature, dial "7." 	• The following message appears on the display: M01/P : PARK ST	

Continued

Operation	Result	Comment/Note
• To assign Ringing Transfer feature, dial “8.” 	• The following message appears on the display: M01/P : RING TRNS	
• To assign Call Splitting feature, dial “9.” 	• The following message appears on the display: M01/P : Split	
• To assign Call Forwarding /Do Not Disturb (FWD/DND) feature, dial “0.” 		• This feature is assignable only to the PF3 button of PITS type 50. Refer to Section 4-A-2.01 “Location of Feature Buttons” for further information.
• To assign Tone Through Break feature, dial “ * .” 	• The following message appears on the display: M01/P : Tone Break	
• To assign Saved Number Redial (SNR) feature, dial “#.” 	• The following message appears on the display: M01/P : SNR	• This feature is assignable only to the PF1 button of PITS type 50, KX-T7020 and KX-T7030.
4. Press the MEMORY button to store the assignment. 	• The MEMORY button indicator lights in red. • Confirmation tone sounds. • “Initial display for PITS station programming mode” is displayed again.	
5. To conclude PITS station programming mode, slide the MEMORY switch on the PITS to “SET.” 	• PITS station programming mode is concluded and returns to operation mode.	

--Operation Chart--

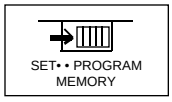
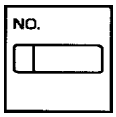
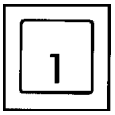
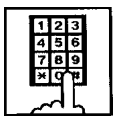


Note : In any status, pressing the END key restores <STATUS 1>.

3.00 DSS (Direct Station Selection) Button Assignment

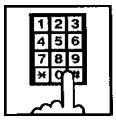
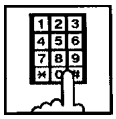
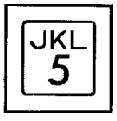
Assigning various functions to the DSS buttons on the KX-T30830 type PITS telephone and DSS console is explained here.

The explanation of the message display applies only to a PITS provided with the display.

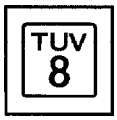
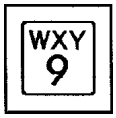
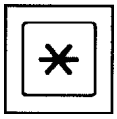
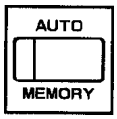
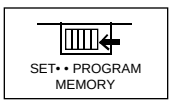
Operation	Result	Comment/Note
1. Set the MEMORY switch at the rear of PITS to "PROGRAM." 	• The following message appears on the display: PITS-PGM No.?→ • The MEMORY button indicator lights in red.	• This status is called "initial display for PITS station programming mode." • If the programming data of your PITS has already been accessed by another administration device, the following message appears on the display. Already Accessed • From now on in any status, pressing the END button restores this status.
2. Press a DSS button. 	• Previously stored data appears on the display. <Example> If DSS(DN) feature is assigned: DSS(DN):1011 • The MEMORY button indicator light goes out. The associated DSS button indicator lights.	• If the following message appears, Message Waiting feature is already assigned and changing the feature in this mode is impossible. Message Waiting • If nothing is entered within one minute after pressing a DSS button, "Initial display for PITS station programming mode" is shown on the display again.
3. To change the stored data, dial the program number corresponding to the desired feature. • To assign DSS (DN) feature, 1) Dial "1." 	1) The following message appears on the display: DSS(DN):	
2) Dial a directory number (three or four digits). 	2) The dialed directory number appears on the display: <Example> DSS(DN):100	• If the dialed number does not exist as a directory number, alarm tone sounds when MEMORY button is pressed. • To clear an error entry, press the CLEAR button and dial the correct number.

Continued

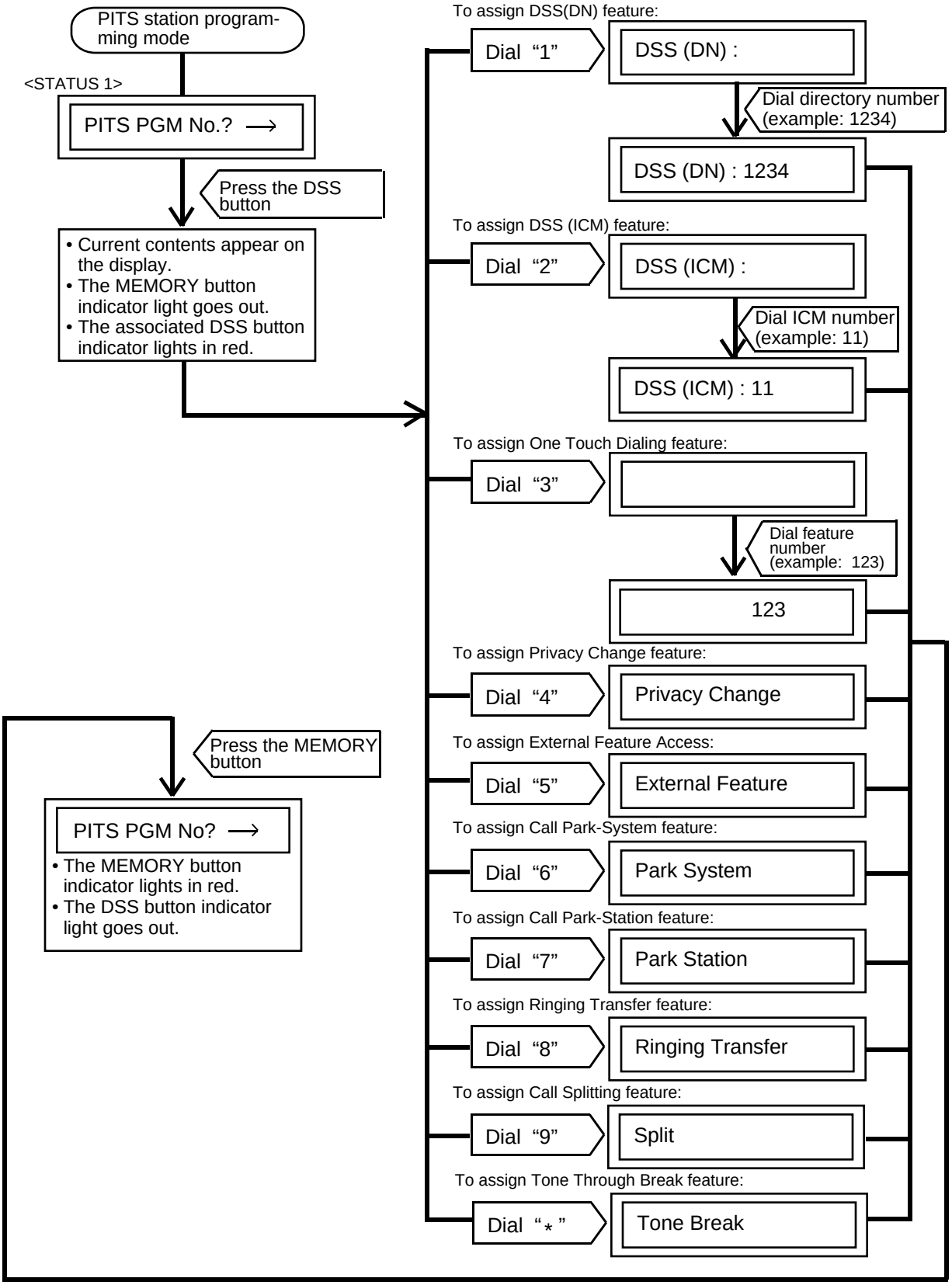
Continued

Operation	Result	Comment/Note
• To assign DSS (ICM) feature, 1) Dial “2.”  	1) The following message appears on the display: DSS(ICM):	
2) Dial ICM number (one or two digit(s)). 	2) The dialed ICM number appears on the display: DSS(ICM):11	• If the dialed number does not exist as an ICM number, alarm tone sounds when MEMORY button is pressed. • If you want to clear a wrong entry, press the CLEAR button and dial the correct number.
• To assign One Touch Dialing feature, 1) Dial “3.”  	1) No message appears on the display:	
2) Dial a telephone number or a feature number. 	2) The following message appears on the display: <Example 1> when entering a telephone number: 123456 <Example 2> when entering a feature number: 01	• Up to 16 digits can be stored. • If you want to clear a wrong entry, press the CLEAR button and dial the correct number.
• To assign Privacy Change feature, dial “4.”  	• The following message appears on the display: Privacy Change	• Privacy Change feature is assignable to only one button among DSS buttons and DN buttons.
• To assign External Feature Access, dial “5.”  	• The following message appears on the display: External Feature	
• To assign Call Park-System feature, dial “6.”  	• The following message appears on the display: Park System	

Continued

Operation	Result	Comment/Note
• To assign Call Park-Station feature, dial “7.” 	• The following message appears on the display: Park Station	
• To assign Ringing Transfer feature, dial “8.” 	• The following message appears on the display: Ringing Transfer	
• To assign Call Splitting feature, dial “9.” 	• The following message appears on the display: Split	
• To assign Tone Through Break feature, dial “* .” 	• The following message appears on the display: Tone Break	
4. Press the MEMORY button to store the assignment. 	• The MEMORY button indicator lights in red. • The associated DSS button indicator light goes out. • Confirmation tone sounds. • “Initial display for PITS station programming mode” is shown on the display.	
5. To conclude PITS station programming mode, slide the MEMORY switch to “SET.” 	• PITS station programming mode is concluded and returns to the operation mode.	

--Operation Chart--



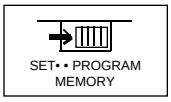
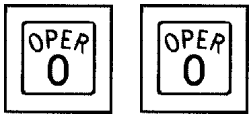
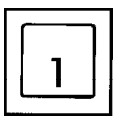
Note : In any status, pressing END key restores <STATUS 1>.

4.00 Automatic Line Hunting (Calling) Selection

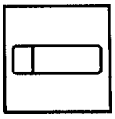
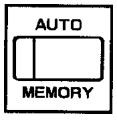
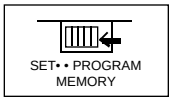
This feature automatically connects a PITS telephone to a pre-assigned line when an extension user lifts the handset or press the SP-PHONE to make calls.
There are two options by which an extension user may select a desired line:

- Prime Line Preference-Calling (Default)
- Idle Line Preference-Calling

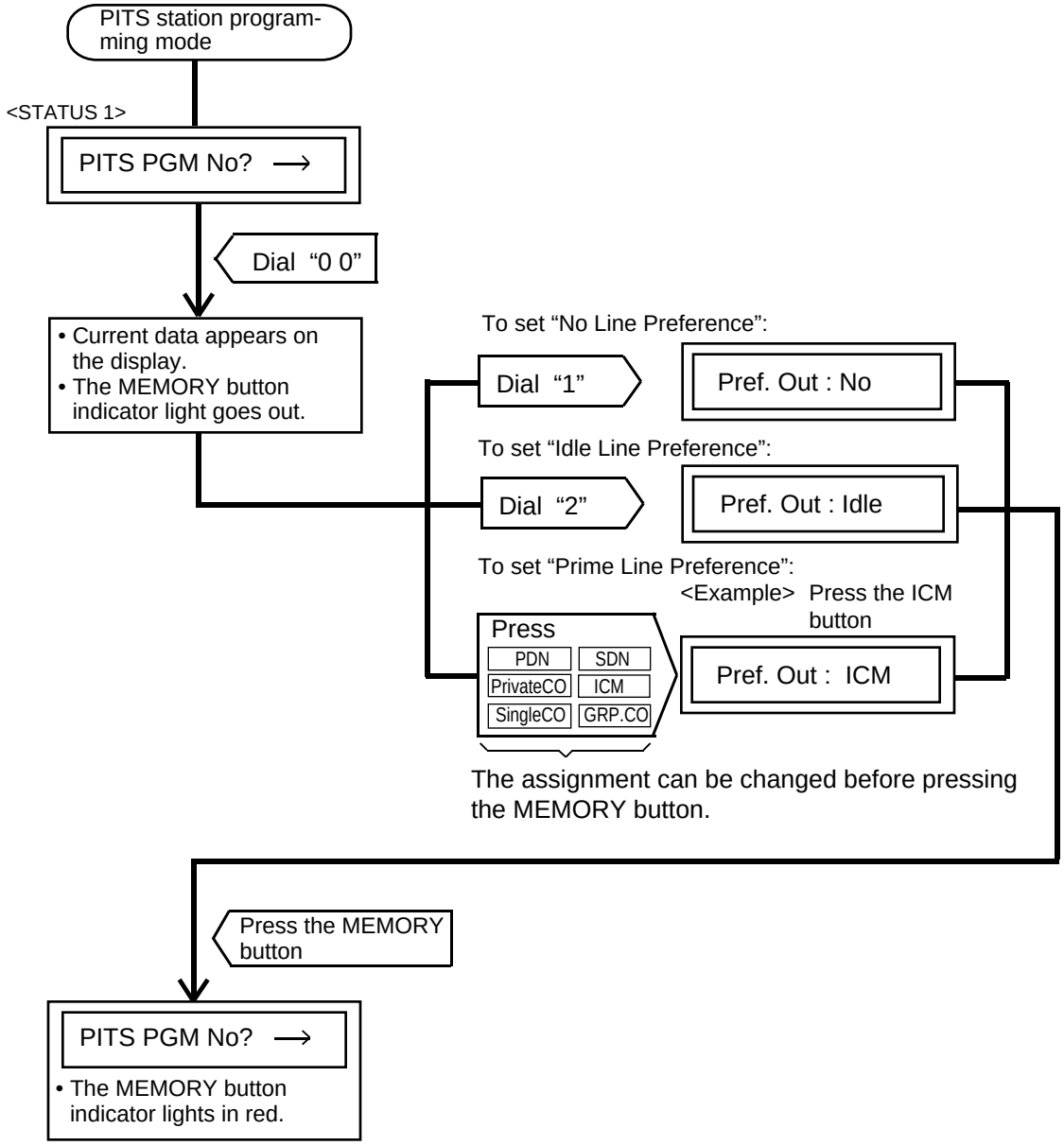
If "No Line Preference-Calling" is selected, no line is connected to a PITS telephone by lifting the handset or pressing the SP-PHONE button.
For further information about this feature, refer to Section 4-C-1.00 "Line Selection-Calling."
The table shows the operation for each programming. (The explanation of the message display applies only to a PITS provided with the display.)

Operation	Result	Comment/Note
1. Set the MEMORY switch at the rear of PITS to "PROGRAM." 	• The following message appears on the display: PITS-PGM No.?→ • The MEMORY button indicator lights in red.	• This status is called "Initial display for PITS-station programming mode." • If the following message appears on the display, the programming data of your PITS has already been accessed by another administration device: Already Accessed • From now on in any status, pressing the END button restores this status.
2. Dial "00." 	• Preset data appears on the display: <Example> If No Line Preference is preset: Pref. Out : No. • The MEMORY button indicator light goes out.	• If nothing is entered within one minute after dialing "00," "Initial display for PITS-station programming mode" is shown again on the display.
3. To change the preset feature, dial the appropriate program number corresponding to the desired feature.		• To change the assignment, simply dial the appropriate number again.
• To set "No Line Preference," dial "1." 	• The following message appears on the display: Pref. Out : No.	

Continued

Operation	Result	Comment/Note
• To set “Idle Line Preference,” dial “2.” 	• The following message appears on the display: Pref. Out : Idle	If “Idle Line Preference” is set, the system selects an idle button from the buttons assigned in “System Operation”, Idle Line Preference: DN (PDN,SDN) buttons or CO (Private CO, Single CO, Group CO) buttons.
• To set “Prime Line Preference,” press one of the following buttons: PDN SDN Private CO Single CO Group CO ICM 	<Example 1> When pressing one of the DN buttons, the DN number of the pressed button appears on the display: Pref. Out : DN-xx <Example 2> When pressing the ICM button, the following message appears on the display: Pref. Out : ICM	• Pressing a wrong button is cleared by pressing a correct button. • If an inaccessible button is pressed, alarm tone sounds.
4. Press the MEMORY button to store the assignment. 	• The MEMORY button indicator lights in red. • Confirmation tone sounds. • “Initial display for PITS station programming mode” is shown on the display.	
5. To conclude PITS station programming mode, slide the MEMORY switch to “SET.” 	• PITS station programming mode is concluded and returns to the operation mode.	

--Operation Chart--



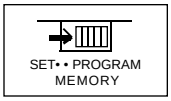
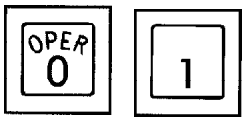
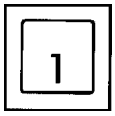
Note : In any status, pressing the END key restores <STATUS 1>.

5.00 Automatic Answering Selection

This feature automatically connects a PITS telephone to a pre-assigned line when an extension user lifts the handset or press the SP-PHONE to answer incoming calls.
There are two options by which an extension user may select a desired line.

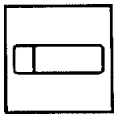
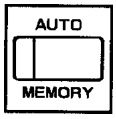
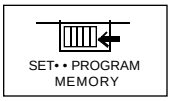
- Ringing Line Preference-Answering (Default)
- Prime Line Preference-Answering

If "No Line Preference-Answering" is selected, no line is connected to a PITS telephone by lifting the handset or pressing the SP-PHONE button.
For further information about this feature, refer to Section 4-D-1.00 "Line Selection-Answering."
The table shows the operation for each programming. (The explanation of the message display applies only to a PITS provided with the display.)

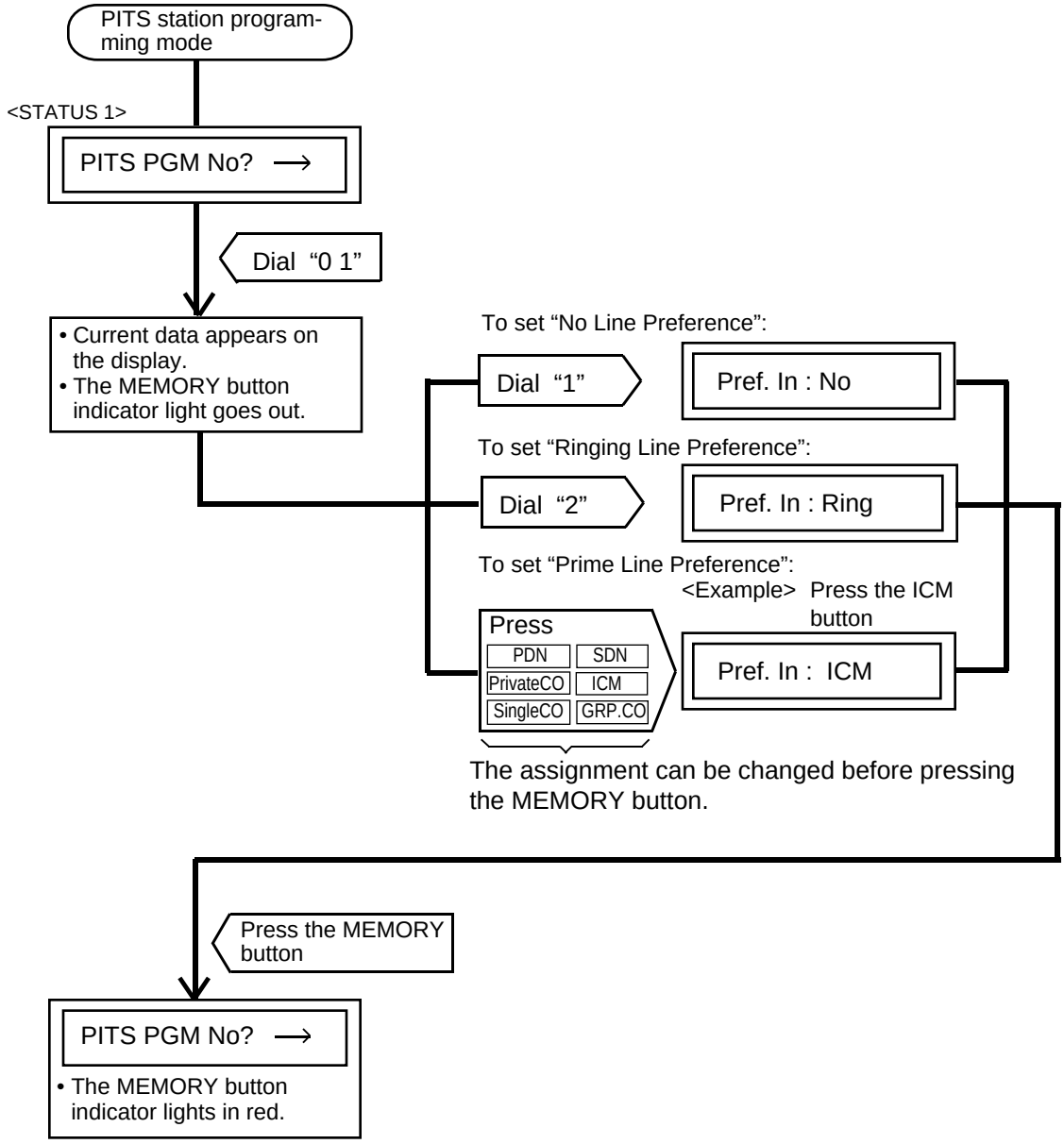
Operation	Result	Comment/Note
1. Set the MEMORY switch at the rear of PITS to "PROGRAM." 	• The following message appears on the display. PITS-PGM No.?→ • The MEMORY button indicator lights in red.	• This display is called "Initial display for PITS-station programming mode." • If the following message appears on the display, the programming data of your PITS has already been accessed by another administration device. Already Accessed • From now on, in any status, pressing the END button restores this status.
2. Dial "01." 	• Preset data appears on the display. <example> When "No Line Preference" is preset: Pref. In : No	• If nothing is entered within one minute after dialing "01," the "Initial display for PITS station programming mode" is shown on the display again.
3. To change the preset feature, dial the program number corresponding to the desired feature. • To set No Line Preference, dial "1." 	• The following message appears on the display: Pref. In : No.	• To change the assignment, simply dial the appropriate number again.
• To set Ringing Line Preference, dial "2." 	• The following message appears on the display: Pref. In : Ring	

Continued

Continued

Operation	Result	Comment/Note
• To set “Prime Line Preference,” press one of the following buttons. PDN SDN Private CO Single CO Group CO ICM 	<Example 1> When you press a DN button, the number of the pressed button appears on the display: Pref. In : DN-xx <Example 2> If you press the ICM button, the following message appears on the display: Pref. In : ICM	• Pressing a wrong button is cleared by pressing a correct button. • If an inaccessible button is pressed, alarm tone sounds.
4. Press the MEMORY button to store the programming. 	• The MEMORY button indicator lights in red. • Confirmation tone sounds. • “Initial display for PITS station programming mode” is displayed again on the display.	
5. To conclude PITS station programming mode, slide the MEMORY switch to “SET.” 	• PITS station programming mode is concluded and returns to the operation mode.	

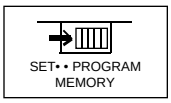
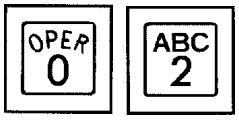
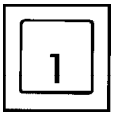
--Operation Chart--



Note : In any status, pressing the END key restores <STATUS 1>.

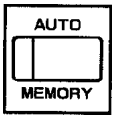
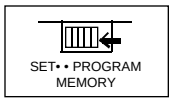
6.00 Call Waiting Tone Selection

Used to choose desired call waiting tone type from Tone 1 and Tone 2.
For further information about call waiting tone, refer to Section 4-D-7.00 “Call Waiting.”
The explanation of the message display applies only to a PITS provided with the display.

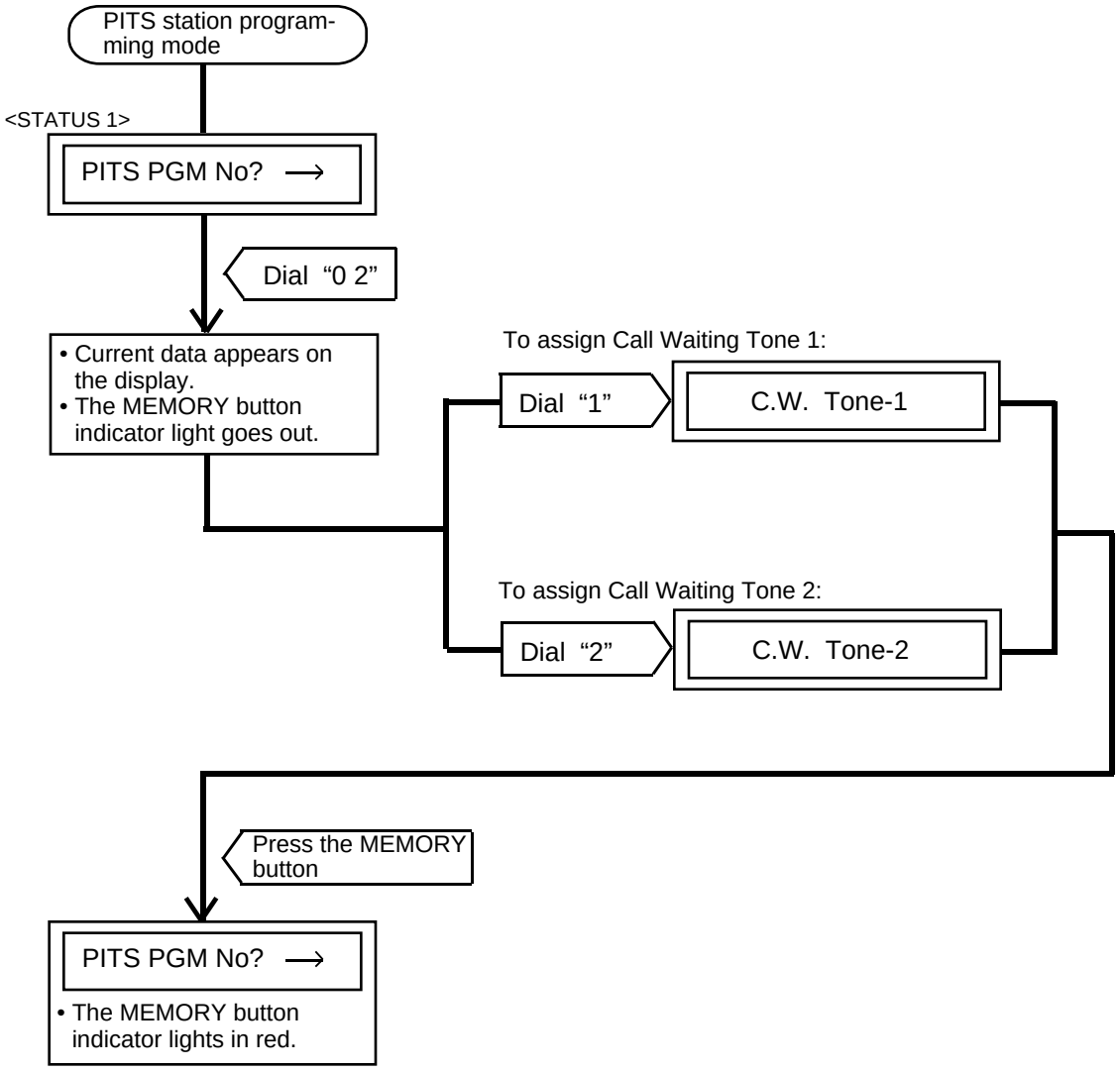
Operation	Result	Comment/Note
1. Set the MEMORY switch at the rear of PITS to “PROGRAM.”  	• The following message appears on the display: PIT-PGM No.?→ • The MEMORY button indicator lights in red.	• This display is called “Initial display for PITS station programming mode.” • If the following message appears on the display, the programming data of your PITS has already been accessed by another administration device. Already accessed • From now on, in any status, pressing the END button restores this status.
2. Dial “02.”  	• The preset tone type appears on the display: <Example> C.W. Tone-1 • The MEMORY button indicator light goes out.	• If nothing is entered within one minute after dialing “02,” “Initial display for PITS station programming mode” is shown again on the display.
3. To change the preset tone type, dial the number corresponding to the desired call waiting tone. • To set the call waiting tone 1, dial “1.”  • To set the call waiting tone 2, dial “2.”  	• The following message appears on the display: C.W. Tone-1 • The following message appears on the display: C.W. Tone-2	• To change the assignment, simply dial the appropriate number again.

Continued

Continued

Operation	Result	Comment/Note
4. Press the MEMORY button to store the entry. 	• The MEMORY button indicator lights in red. • The confirmation tone sounds. • “Initial display for PITS station programming mode” is shown on the display.	
5. To conclude “PITS station programming mode,” slide the MEMORY switch to “SET.” 	• PITS station programming mode is concluded and returns to the operation mode.	

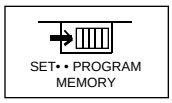
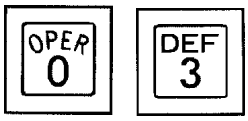
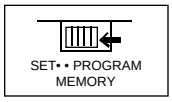
--Operation Chart--



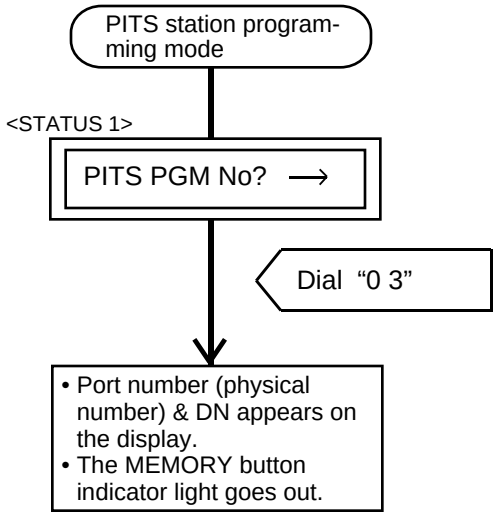
Note : In any status, pressing the END key restores <STATUS 1>.

7.00 Confirmation of Directory Number/Port Number

Enables an extension of a PITS with display to confirm its own directory number and port number (physical number) displayed on the display by the following operation:

Operation	Result	Comment/Note
1. Set the MEMORY switch at the rear of PITS to "PROGRAM."  	• The following message appears on the display: PITS-PGM No.?→ • The MEMORY button indicator lights in red.	• This display is called "Initial display for PITS station programming mode." • If the following message appears on the display, the programming data of your PITS has already been accessed by another administration device. Already Accessed • From now on, in any status, pressing the END button restores this status.
2. Dial "03."  	• The physical number and the directory number appear on the display: <Example> P1011↔ DN1111 • The MEMORY button indicator light goes out.	• If nothing is entered within one minute after dialing "03," "Initial display for PITS station programming mode" is shown again on the display.
• To conclude PITS station programming mode, slide the MEMORY switch to "SET."  	• PITS station program mode is concluded and returns to the operation mode.	

--Operation Chart--

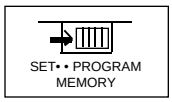
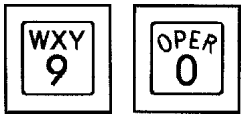


Note : In any status, pressing the END key restores <STATUS 1>.

8.00 PITS Automatic Test

Provides automatic test for normal operation of LCD (liquid crystal display), LED (light-emitting diode), and ringer tone on the PITS telephone.

Explanation of the message display applies only to a PITS with the display.

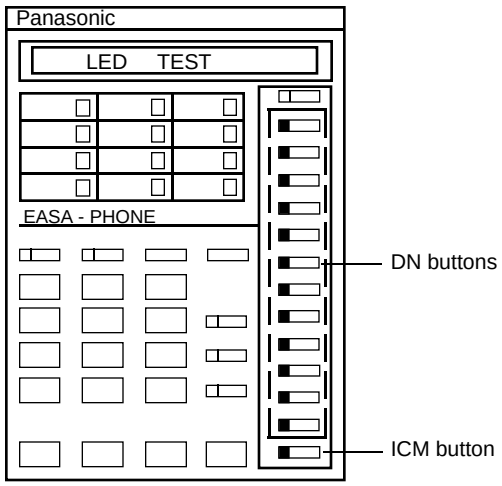
Operation	Result	Comment/Note
1. Set the MEMORY switch at the rear of PITS to "PROGRAM."  	• The following message appears on the display: PITS-PGM No.? → • The MEMORY button indicator lights in red.	• This status is called "Initial display for PITS station programming mode." • If the following message appears on the display, the programming data of your PITS has already been accessed by another administration device. Already Accessed • Before starting the test, set the RINGER switch on the right side of the PITS to LOW or HIGH.
2. Dial "90."  	• Test sequence is as follows: 1) LED Test 2) Ringer Test 3) LCD Test	• To stop the test, press the END button, and then "Initial display for PITS station programming mode" is shown again on the display.

Testing sequence after dialing “90” is given below by using an example of PITS model KX-T123230.

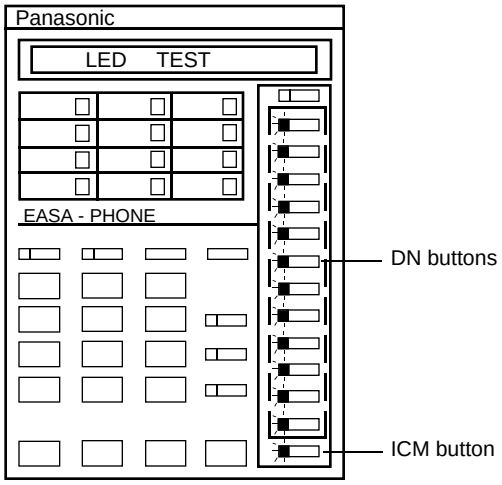
In LED test, “ ” means the light off, “ ” means the light on, “ ” means flashing.

LED test

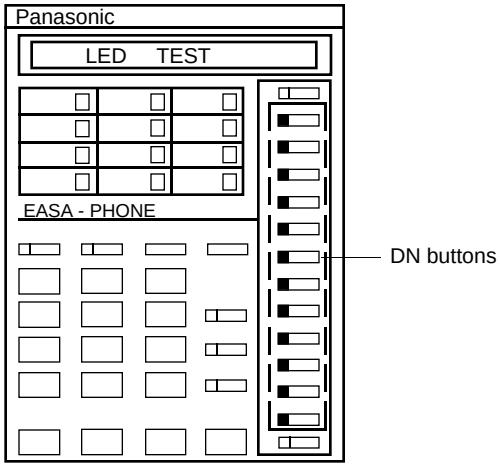
1) Testing the DN button indicators and the ICM button indicator for lighting in green.



2) Testing the DN button indicators and the ICM button indicator for flashing in green.

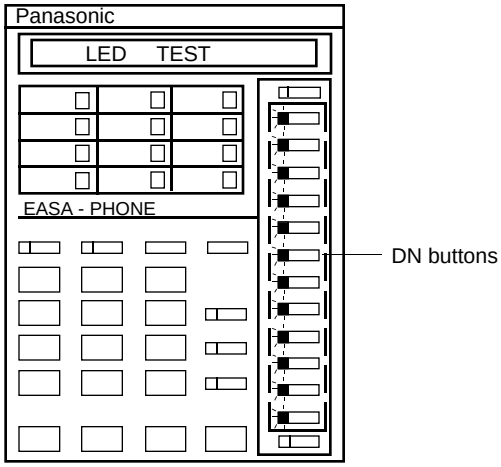


3) Testing the DN button indicators and the DSS button indicators for lighting in red.



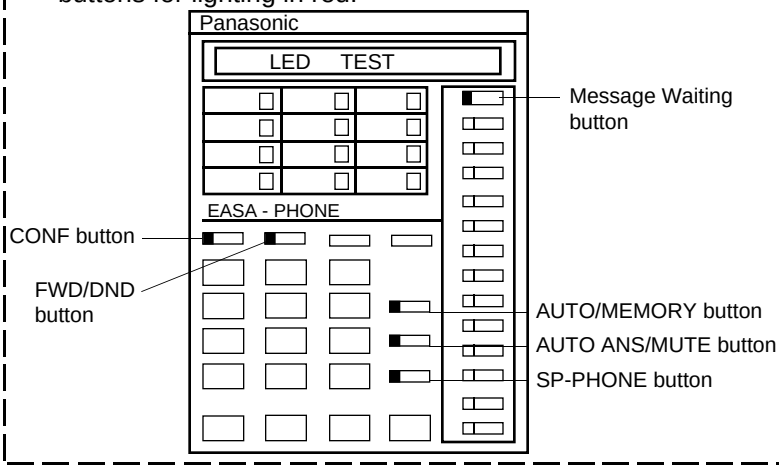
With the PITS model KX-T30830, the DSS button indicators also light in red.

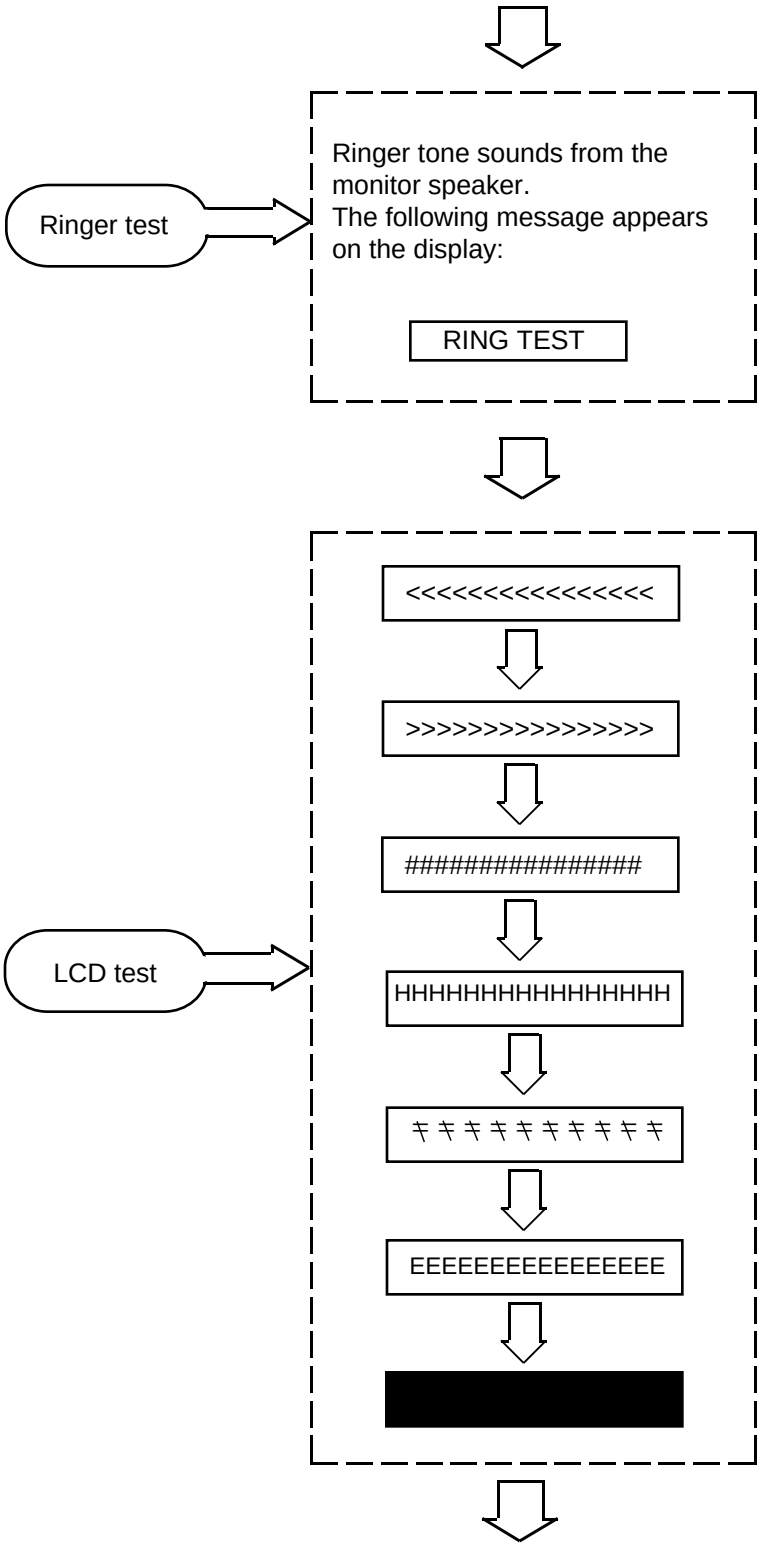
4) Testing the DN button indicators and the DSS button indicators for flashing in red.



With the PITS model KX-T30830, the indicators on the DSS buttons also flash in red.

5) Testing the indicators of the Message Waiting, CONF, FWD/DND, AUTO/MEMORY, AUTO ANS/MUTE, SP-PHONE buttons for lighting in red.





Conclusion of the test

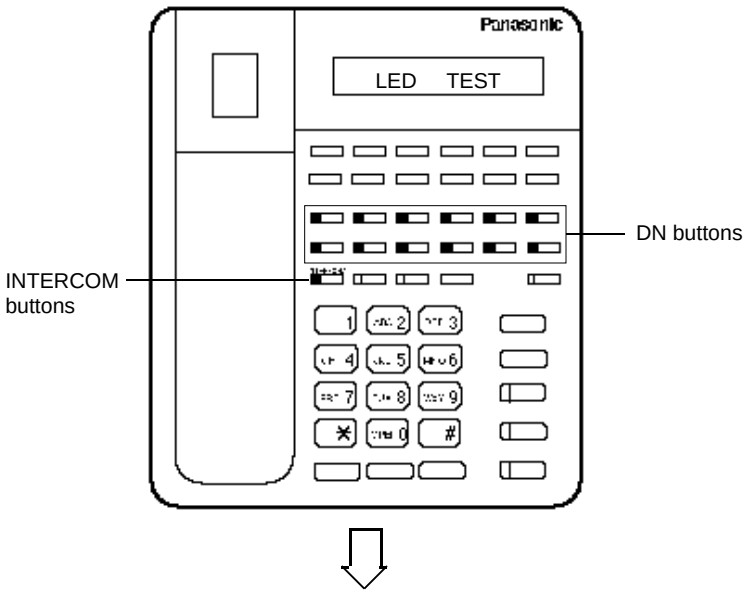
"Initial display for PITS station program mode" is displayed again on the display.

Testing sequence after dialing “90” is given below by using an example of PITS model KX-T7130.

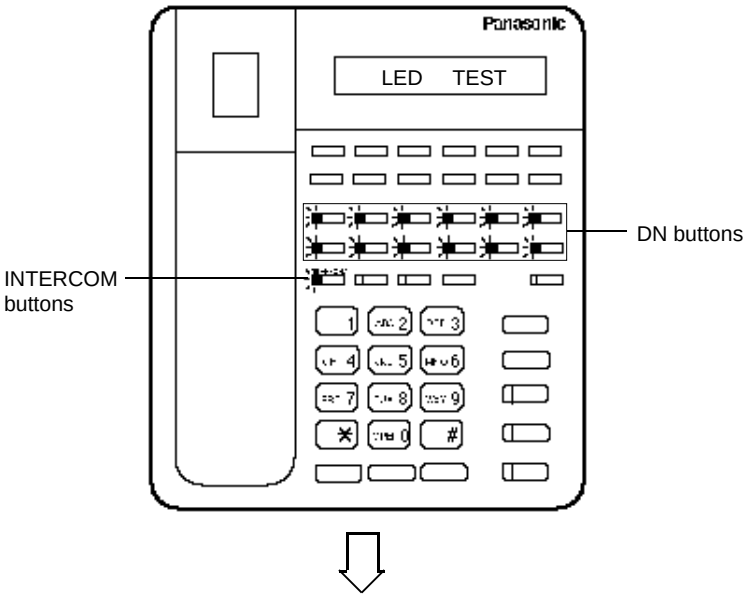
In LED test, “ ” means the light off, “ ” means the light on, “ ” means flashing.

LED test

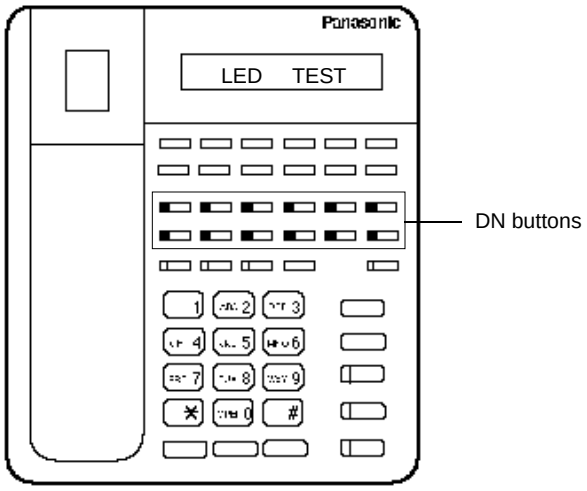
1) Testing the DN button indicators and the INTERCOM button indicator for lighting in green.



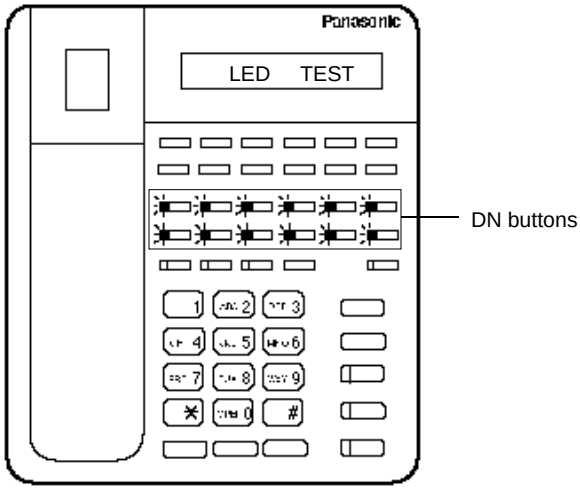
2) Testing the DN button indicators and the ICM button indicator for flashing in green.



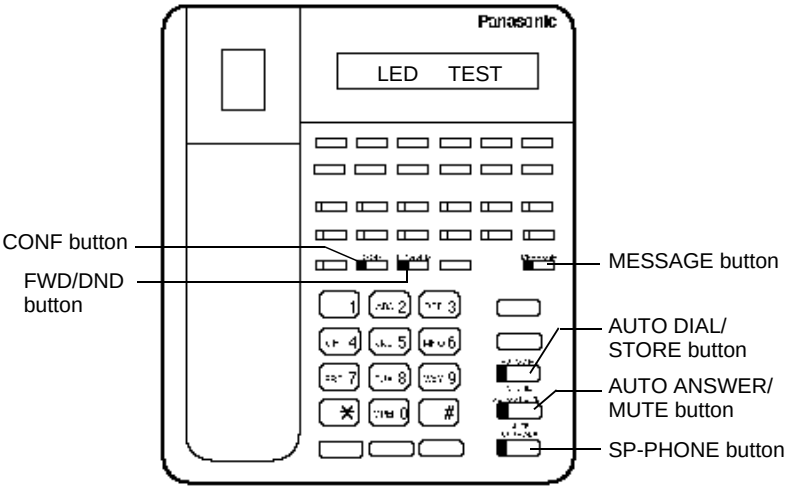
3) Testing the DN button indicators for lighting in red.

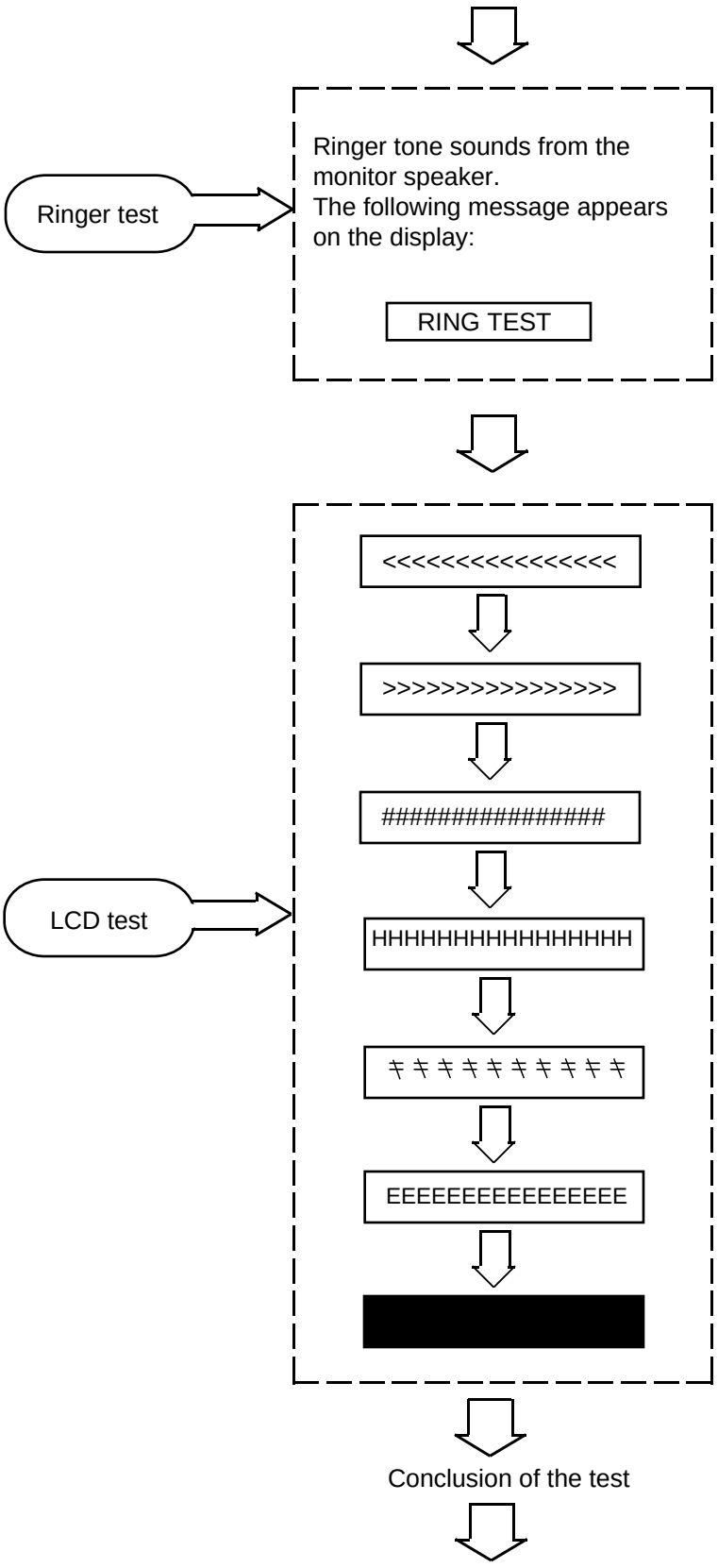


4) Testing the DN button indicators for flashing in red.



5) Testing the indicators of the MESSAGE, CONF, FWD/DND, AUTO DIAL/STORE, AUTO ANSWER/MUTE, SP-PHONE buttons for lighting in red.



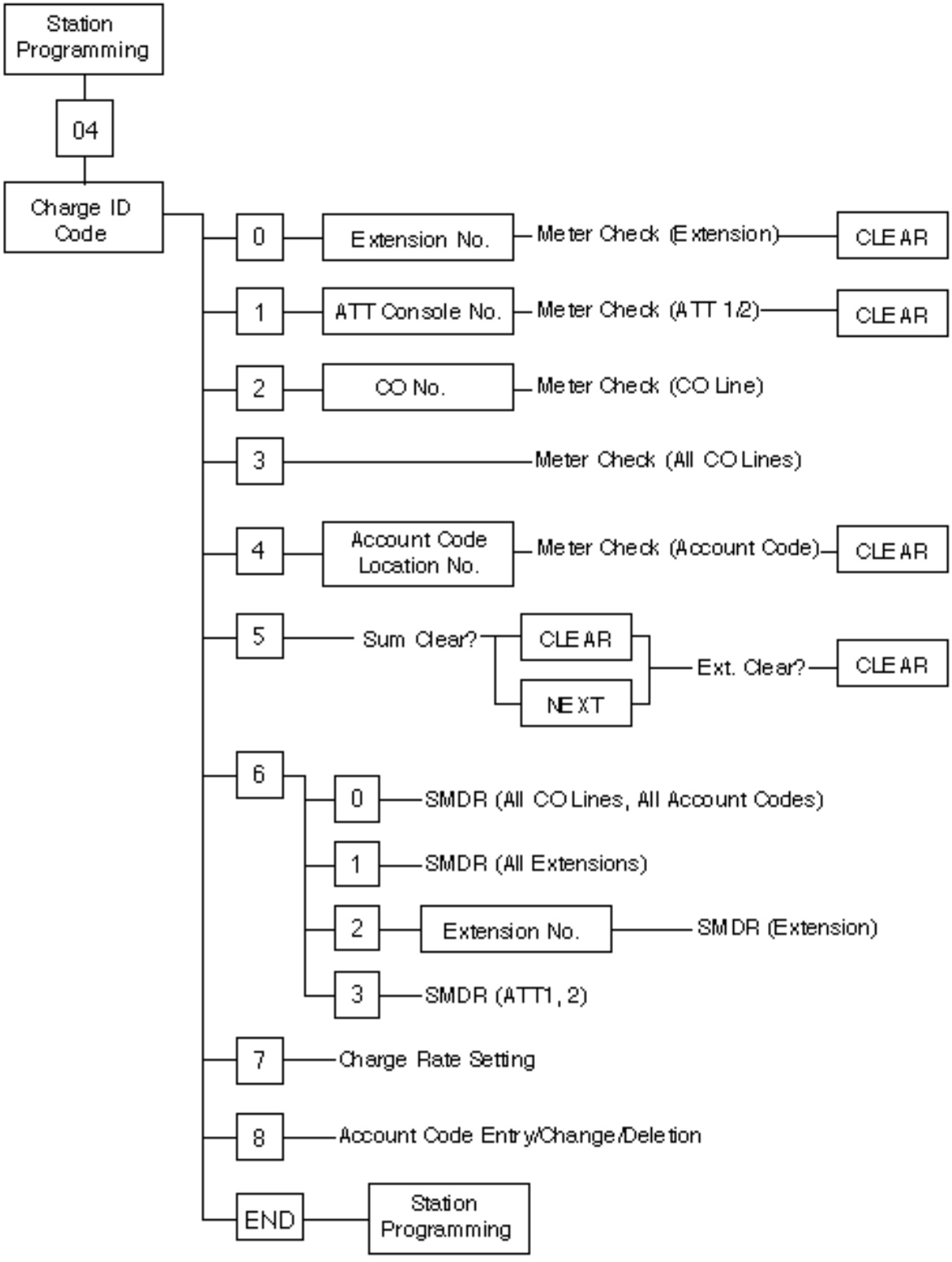


Conclusion of the test

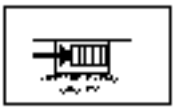
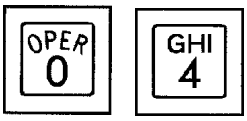
"Initial display for PITS station programming mode" is shown again on the display.

9.00 Charge Management

9.01 Charge Management Outline

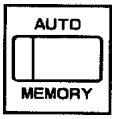


9.02 Entering Charge Management Mode

Operation	Result	Comment/Note
1. Set the MEMORY switch at the rear of PITS to "PROGRAM." 	• PITS-PGM No.? → • The MEMORY indicator lights in red.	• This display is called "Initial display for PITS station programming mode." • If the following message appears on the display, the programming data of your PITS has already been accessed by another administration device. Already Accessed • From now on, in any status, pressing the END button restores this status.
2. Enter "04." 	• ID Code?→	
3. Enter the Charge Management ID Code: four digits. 	• ID Code?→ 1234 ↓ • Charge Management Initial Display Charge Meter	• Default – 1234 Refer to Section 11-C-10.00 "Setting Charge Management ID Code" for further information. • If the ID code entered is not correct, you hear alarm tone. • This display is called "Initial display for Charge Management mode."

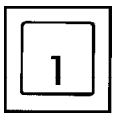
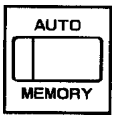
9.03 Checking/Clearing the Charge Meter–Extensions

Used to check and/or clear the charge meter of each extension.

Operation	Result	Comment/Note
1. Set Charge Management Mode.	• Charge Meter	• Refer to Section 12-C-9.02 “Entering Charge Management Mode.”
2. Enter “0.” 	• EXT No.?→	
3. Enter extension directory number. 	<Example> 100: 0000 → DN 100	• You can press NEXT to go to the lowest directory number.
4. Press SELECT to check the rate. • To alternate between the rate and the meter press SELECT.	<Example> 100: 00005. 100: 00001.15DM	
To reset the meter: 5. Press CLEAR	<Example> 100: 00000	
6. Press MEMORY to store the data change. 	• The MEMORY indicator lights in red.	
To check/clear another extension: 7. Press PREV. or Press NEXT.	• EXT No.?→ • Charge meter of the next extension directory number is displayed. <Example> 101: 00008	• Repeat steps 3 through 7. • Repeat steps 4 through 7.
To finish the programming: 8. Press END	• PITS–PGM No?→ Initial Display of PITS Station Programming Mode.	

9.04 Checking/Clearing the Charge Meter–ATT

Used to check and/or clear the charge meter of an ATT (Attendant Console).

Operation	Result	Comment/Note
1. Set Charge Management Mode.	• Charge Meter	• Refer to Section 12-C-9.02 "Entering Charge Management Mode."
2. Enter "1." 	• ATT No.? →	
3. Enter "1" (ATT 1)or "2" (ATT 2).	<Example> ATT1: 00005	• You can press NEXT to go to the lowest directory number.
4. Press SELECT to check the rate. • To alternate between the rate and the meter, press SELECT.	<Example> ATT1: 00005. ↓ ↑ ATT1: 00001.15DM	
To reset the meter: 5. Press CLEAR.	<Example> ATT1: 00000	
6.Press MEMORY to store the data change. 	• The MEMORY indicator lights in red.	
To check/clear another ATT: 7. Press NEXT.	<Example> ATT2: 00020	• Repeat steps 4 through 5.
To finish the operation: 8. Press END	• PITS–PGM No? → Initial Display of PITS Station Programming Mode.	

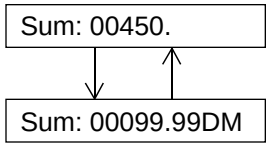
9.05 Checking the Charge Meter–CO Line

Used to check the charge meter of CO line on a single CO line basis.

Operation	Result	Comment/Note
1. Set Charge Management Mode.	• Charge Meter	• Refer to Section 12-C-9.02 “Entering Charge Management Mode.”
2. Enter “2.” 	• CO No.? →	
3. Enter CO line physical number: 1011 through 3158 • To alternate between the rate and the meter, press SELECT.	<Example> 1011: 00005. 1011: 00001.15DM	• You can press NEXT to go to the lowest CO line physical number.
To check other CO lines: 4. Press PREV. or Press NEXT.	CO No.? → • The meter of the next CO line physical number is displayed. <Example> 1012: 00020	• Repeat steps 3 and 4.
To finish the operation: 5. Press END.	• PITS–PGM No? → Initial Display of PITS Station Programming Mode	

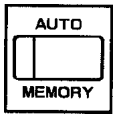
9.06 Checking the Charge Meter–All CO Lines

Used to check the total charge of all CO lines.

Operation	Result	Comment/Note
1. Set Charge Management Mode. 2. Enter “3.”  • To alternate between the rate and the meter, press SELECT. To finish the operation: 3. Press END.	• Charge Meter <Example>  • PITS–PGM No?→ Initial Display of PITS Station Programming Mode	• Refer to Section 12-C-9.02 “Entering Charge Management Mode.”

9.07 Checking/Clearing the Charge Meter–Account Code

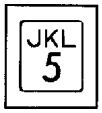
Used to check and/or clear the charge meter of each account code.

Operation	Result	Comment/Note
1. Set Charge Management Mode.	• Charge Meter	• Refer to Section 12-C-9.02 “Entering Charge Management Mode.”
2. Enter “4.” 	• Account Code.?→	
3. Enter account code location number:001 through 200. • To alternate between the rate and the meter press SELECT.	<Example> 001: 00005 001: 00001.15DM	• You can press NEXT to enter 001.
To reset the meter: 4. Press CLEAR.	<Example> 001: 00000	
5. Press MEMORY to store the data change. 	• The MEMORY indicator lights in red	• Repeat steps 3 through 6. • Repeat steps 4 and 6.
To check other account codes: 6. Press PREV. or Press NEXT.	• Account Code.? → <Example> 002: 00000	
To finish the programming: 7. Press END.	• PITS–PGM No?→ Initial Display of PITS Station Programming Mode	

9.08 Clearing All Charge Meters

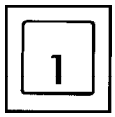
Used to clear the charge meter of “Sum” and/or “Ext.”

- Sum: All CO lines and account codes
- Ext: All extensions

Operation	Result	Comment/Note
1. Set Charge Management Mode.	• Charge Meter	• Refer to Section 12-C-9.02 “Entering Charge Management Mode.”
2. Enter “5.” 	• Meter Sum Clear?	
To reset “Sum” meter:		
3. Press CLEAR.	<Example>	
	21 Jan 95 14:30	
	This is the date when you last reset the meter.	
To go to “Ext”:		
4. Press NEXT.	Meter Ext Clear?	
To reset the meter:		
5. Press CLEAR.	<Example>	
	21 Jan 95 14:30	
	This is the date when you last reset the meter.	
6. Press MEMORY.	• 30 Jan 95 13:30	• The meter is reset and the current date is displayed.
7. Press END.	• PITS–PGM No?→	
	Initial Display of PITS Station Programming Mode.	

9.09 Printing Charge Information on SMDR

Used to print charge information on SMDR .

Operation	Result	Comment/Note
1. Set Charge Management Mode.	• Charge Meter	• Refer to Section 12-C-9.02 "Entering Charge Management Mode."
2. Enter "6." 	• Print Mode? →	
<All CO lines and account codes>		Error Messages • When the printer is not ready.
3-1. Enter "0." 	Total CHG Print	SMDR Not Ready
<All extensions>		• When the printer is in use.
3-2 Enter "1." 	Ext CHG Print	SMDR Busy
<Each extension>		
3-3. Enter "2." 		
• Enter extension directory number: three or four digits	<Example> 100: CHG Print	
<ATT Consoles>		
3-4. Enter "3." 	• ATT CHG Print	• Repeat steps 3 through 6. • Repeat steps 4 through 6.
4. Press END.	• PITS–PGM No?→ Initial Display of PITS Station Programming Mode.	

Examples of SMDR Printout

(1) All CO Lines and Account Codes

[Meter]

```
************************************************
*  Charge Meter Print Out - Total & all Account  *
************************************************
Total Charge : 00765

CO Line
1011 : 00194          1012 : 00073          1013 : 00161
1014 : 00033          1015 : 00023          1016 : 00054
1017 : 00087          1018 : 00004          1021 : 00000
1022 : 00056          1023 : 00043          1024 : 00008
1025 : 00013          1026 : 00004          1027 : 00005
1028 : 00000          1031 : 00000          1032 : 00000
1033 : 00007          1034 : 00000          1035 : 00000
1036 : 00000          1037 : 00000          1038 : 00000

Acount Code
001-12345 : 00010     002-11111 : 00005     003-12312 : 00000
004-00001 : 00000     005-      : *****     006-      : *****
007-      : *****     008-222   : 00034     009-      : *****
010-      : *****     011-      : *****     012-33333 : 00214
013-      : *****     014-      : *****     015-      : *****
016-      : *****     017-      : *****     018-      : *****
019-      : *****     020-      : *****     021-      : *****
022-      : *****     023-      : *****     024-      : *****
025-      : *****     026-      : *****     027-      : *****
028-      : *****     029-      : *****     030-      : *****
031-      : *****     032-      : *****     033-45    : 00000
034-93    : 00000     035-6792  : 00000     036-37    : 00000
```

[Charge]

```
************************************************
*  Charge Meter Print Out - Total & all Account  *
************************************************
Total Charge : 00175.95 DM

CO Line
1011 : 00044.62 DM    1012 : 00016.79 DM    1013 : 00037.03 DM
1014 : 00007.59 DM    1015 : 00005.29 DM    1016 : 00012.42 DM
1017 : 00020.01 DM    1018 : 00000.97 DM    1021 : 00000.00 DM
1022 : 00012.88 DM    1023 : 00009.89 DM    1024 : 00001.84 DM
1025 : 00002.99 DM    1026 : 00000.92 DM    1027 : 00001.15 DM
1028 : 00000.00 DM    1031 : 00000.00 DM    1032 : 00000.00 DM
1033 : 00000.00 DM    1034 : 00000.00 DM    1035 : 00000.00 DM
1036 : 00000.00 DM    1037 : 00000.00 DM    1038 : 00000.00 DM

Account Code
001-12345 : 00002.30 DM   002-11111 : 00001.15 DM   003-12312 : 00000.00 DM
004-00001 : 00000.00 DM   005-      : *****.**      006-      : *****.**
007-      : *****.**      008-222   : 00007.82 DM   009-      : *****.**
010-      : *****.**      011-      : *****.**      012-33333 : 00049.12 DM
013-      : *****.**      014-      : *****.**      015-      : *****.**
016-      : *****.**      017-      : *****.**      018-      : *****.**
019-      : *****.**      020-      : *****.**      021-      : *****.**
022-      : *****.**      023-      : *****.**      024-      : *****.**
025-      : *****.**      026-      : *****.**      027-      : *****.**
028-      : *****.**      029-      : *****.**      030-      : *****.**
031-      : *****.**      032-      : *****.**      033-45    : 00000.00 DM
```

(2) All Extensions

[Meter]

```
*********************************************
*  Charge Meter Print Out - All Extensions  *
*********************************************
Ext. 201 : 00765          Ext. 301 : 00010          Ext. 202 : 00005
Ext. 302 : 00034          Ext. 203 : 00014          Ext. 303 : 00044
Ext. 204 : 00027          Ext. 304 : 00034          Ext. 205 : 00765
Ext. 305 : 00010          Ext. 206 : 00005          Ext. 306 : 00034
    ~                         ~                         ~
Ext. 229 : 00765          Ext. 329 : 00010          Ext. 230 : 00005
Ext. 330 : 00034          Ext. 231 : 00014          Ext. 331 : 00044
Ext. 232 : 00027          Ext. 332 : 00034
```

[Charge]

```
*********************************************
*  Charge Meter Print Out - All Extensions  *
*********************************************
Ext. 201 : 00175.95 DM    Ext. 301 : 00002.30 DM    Ext. 202 : 00001.15 DM
Ext. 302 : 00007.82 DM    Ext. 203 : 00003.22 DM    Ext. 303 : 00010.12 DM
Ext. 204 : 00006.21 DM    Ext. 304 : 00007.82 DM    Ext. 205 : 00175.95 DM
Ext. 305 : 00002.30 DM    Ext. 206 : 00001.15 DM    Ext. 306 : 00007.82 DM
    ~                         ~                         ~
Ext. 229 : 00175.95 DM    Ext. 329 : 00002.30 DM    Ext. 230 : 00001.15 DM
Ext. 330 : 00007.82 DM    Ext. 231 : 00003.22 DM    Ext. 331 : 00010.12 DM
Ext. 232 : 00006.21 DM    Ext. 332 : 00007.82 DM
```

(3) Each Extension

[Meter]

```
****************************************
*  Charge Meter Print Out - Extension  *
****************************************
Ext. 234 : 00765
```

[Charge]

```
****************************************
*  Charge Meter Print Out - Extension  *
****************************************
Ext. 234 : 00175.95 DM
```

(4) Attendant Consoles

[Meter]

```
************************************************
*  Charge Meter Print Out - Attendant Console  *
************************************************
ATT 1 : 00765            ATT 2 : 12345
```

[Charge]

```
************************************************
*  Charge Meter Print Out - Attendant Console  *
************************************************
ATT 1 : 00175.95 DM      ATT 2 : 12345.78 DM
```

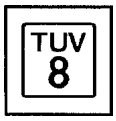
9.10 Setting Charge Rate

Used to set the charge rate of a telephone call per meter.

Operation	Result	Comment/Note
1. Set Charge Management Mode.	• Charge Meter	• Refer to Section 12-C-9.02 “Entering Charge Management Mode.”
2. Enter “7.” 	<Example> Rate: 0.23	
3. Enter a charging rate: up to eight digits including “.” (decimal point).	<Example> Rate: 1.10	• Press “#” key to enter a decimal point. • Press CLEAR to delete the current entry and enter the new one.
4. Press MEMORY to store the entry.	• The MEMORY indicator lights in red. • Confirmation tone sounds.	
5. Press END	• PITS–PGM No? → Initial Display of PITS Station Programming Mode.	

9.11 Setting Account Codes

Used to set a new account code for charge management feature.

Operation	Result	Comment/Note
1. Set Charge Management Mode.	• Charge Meter	• Refer to Section 12-C-9.02 “Entering Charge Management Mode.”
2. Enter “8.” 	• Account Code? →	
3. Enter an account code location number: 001 through 200.	<Example> 001: 23456 If not stored: 001: Not Stored	• You can press NEXT to enter 001.
4. Enter a new account code: up to five digits	<Example> 001: 10001	• Press CLEAR to delete the current entry and enter the new one.
5. Press MEMORY to store the entry.	• The MEMORY indicator lights in red. • Confirmation tone sounds.	
6. Press END	• PITS–PGM No? → Initial Display of PITS Station Programming Mode.	

Section 13

Station Programming

Attendant Console

(Section 13)

Station Programming

Attendant Console (ATT)

Contents

A. Preparation

1.00 Outline of Local Mode

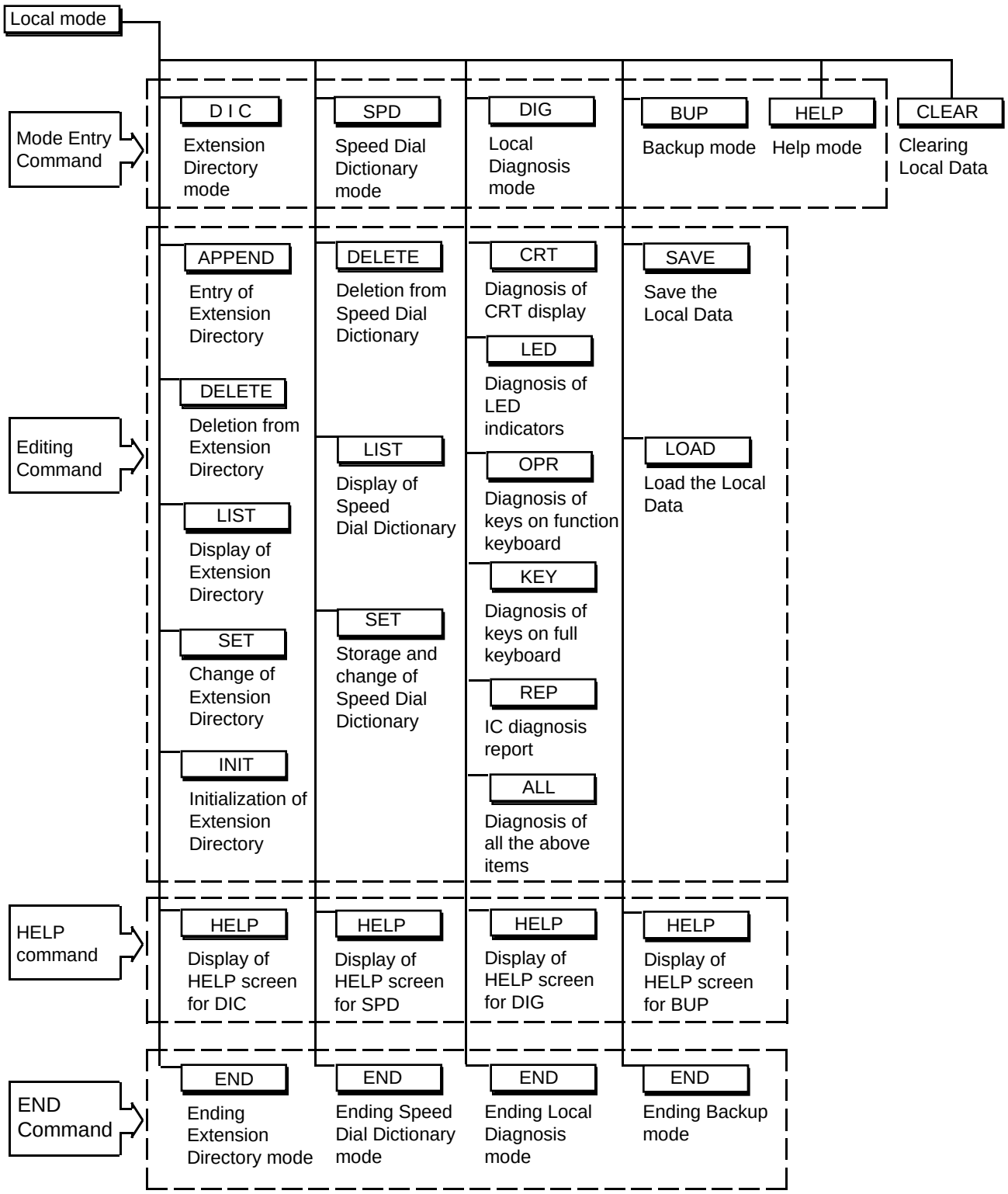
Attendant Console Local Mode is used to edit the local data dedicated to the attendant console. Attendant Console Local Mode is operated independently from the main unit.
The operator at Attendant Console can utilize the following modes on local mode for programming, diagnosis, and backup.

- Extension Directory mode
- Speed Dial Dictionary mode
- Local Diagnosis mode
- Backup mode

In addition, CLEAR mode is provided for clearing the programmed local data.
Before entering the above modes, HELP command will help you to see which commands are available in local mode.

2.00 Command System

Command System in the local mode is shown below:



3.00 Basic Operation

3.01 Starting Local Mode

To enter the Local Mode, set the LOCAL switch (on the right side of the Attendant Console) to "ON" when call processing mode of the attendant console is displayed, then the Local Mode Main Menu is displayed on the screen. (See the illustration below)
The prompt "$" is displayed on this screen and you can enter the desired mode by entering the appropriate command.

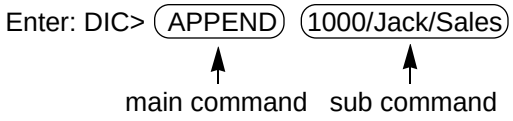
3.02 Ending Local Mode

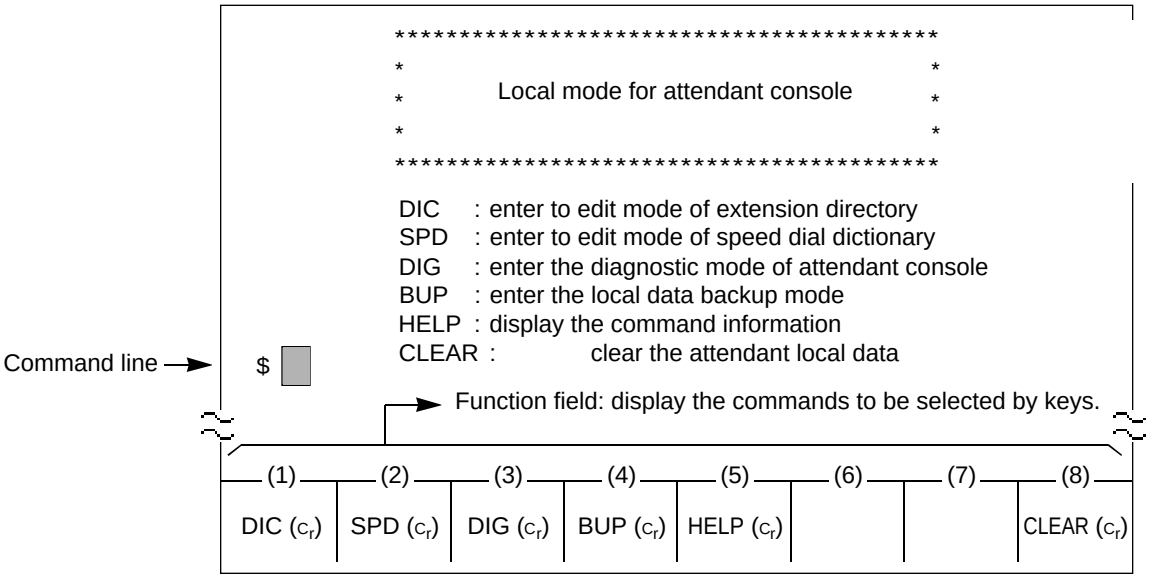
To end the Local Mode, set the LOCAL switch (on the right side of the Attendant Console) to "OFF" when prompt "$" is displayed on the screen, then call processing mode of attendant console is obtained automatically.

3.03 Command Entry

Each Main Command can be entered either by simply pressing the associated function key or by entering each command character at Full keyboard.
If Sub Command is required, type it directly at Full keyboard.
The function keys at the top of the Function keyboard are command-entry specific.
Their functions depend on the mode you are in.
The entered command is displayed on the command line.
To execute a command line, press the RETURN key after entering the Main Command and Sub Command (if required).

<Example>
In Extension Directory mode:





Local Mode Main Menu Screen

3.04 Control Key Combinations

You can perform specific operations by using the CTRL key in combination with certain other keys as follows.
To use a CTRL key combination, hold down the CTRL key, and press the other key.

CTRL + S : suspends the display scrolling to let you view it.

CTRL + Q : restarts the display scrolling suspended by CTRL + S

CTRL + C : terminates the execution of entered command. Then allows you to enter a command again.

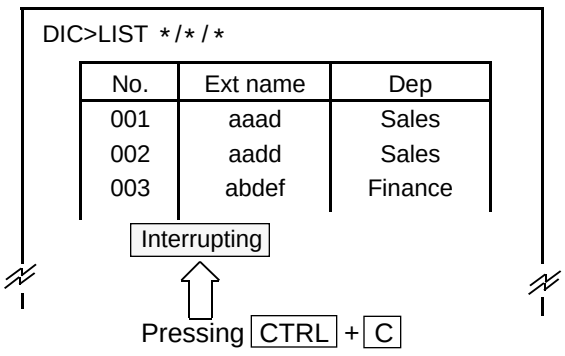
CTRL + A : establishes the insert mode. Pressing CTRL + A again cancels the insert mode.

CTRL + → : moves the cursor to the beginning of the next word.

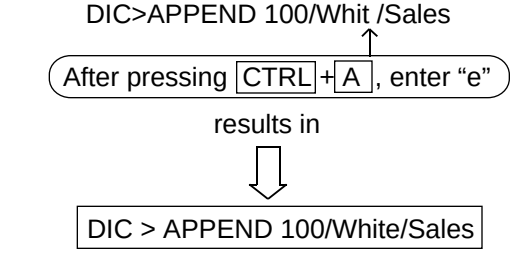
CTRL + ← : moves the cursor to the beginning of the previous word.

CTRL + DEL : deletes the line.

<Example>
While displaying the list in the Extension Directory mode, pressing CTRL + C terminates the display as follow:



<Example>



3.05 Special Keys

The following special keys are used to edit the command line:

DEL : deletes the character at the current cursor position. The cursor does not move.

BS : moves the cursor one character left and deletes the character in that position.

TAB : moves the cursor one space to the right and adds a space to a line.

→ : moves the cursor one character right.

← : moves the cursor one character left.

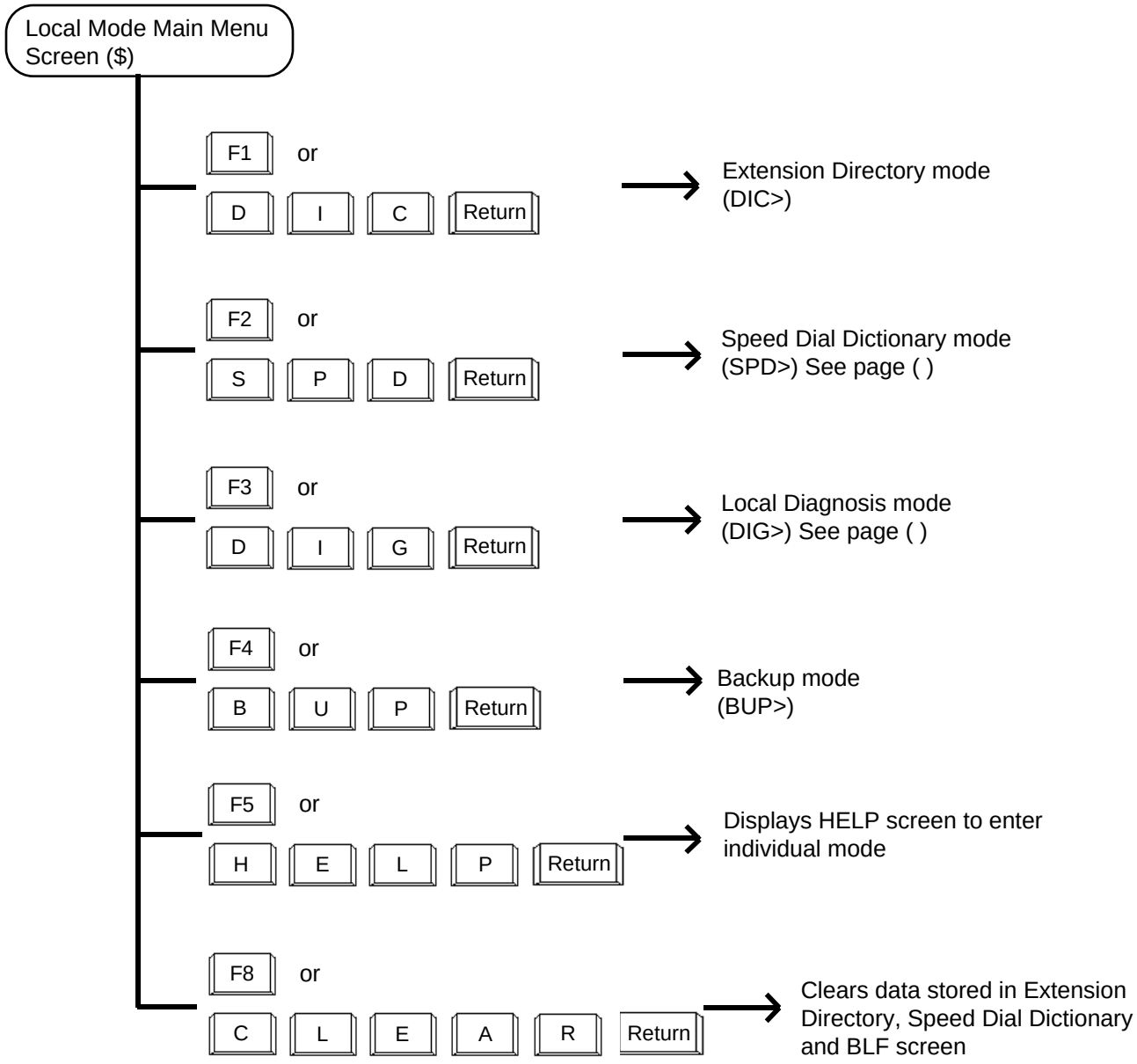
↑ : recalls a command which was already executed by pressing the RETURN key in reverse order. When the oldest command is recalled, recalls again from the newest command.

↓ : recalls a command which was already executed by pressing the RETURN key in entered order. When the newest command is recalled, recalls again from the oldest command.

4.00 Entering a Mode

To enter the desired mode, either press the appropriate function key, or enter the appropriate command and press the RETURN key at Local Mode Main Menu screen.
Then the prompt associated with the entered mode is displayed on the screen.

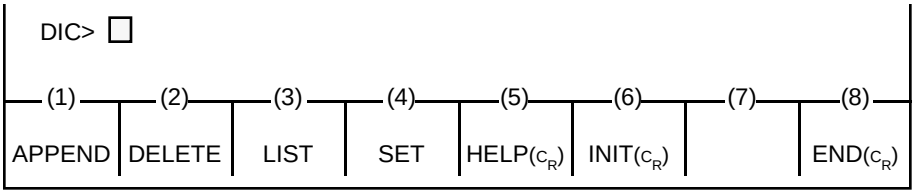
The flow chart below shows how to enter each mode and ( ) in the chart shows the prompt displayed in each mode.



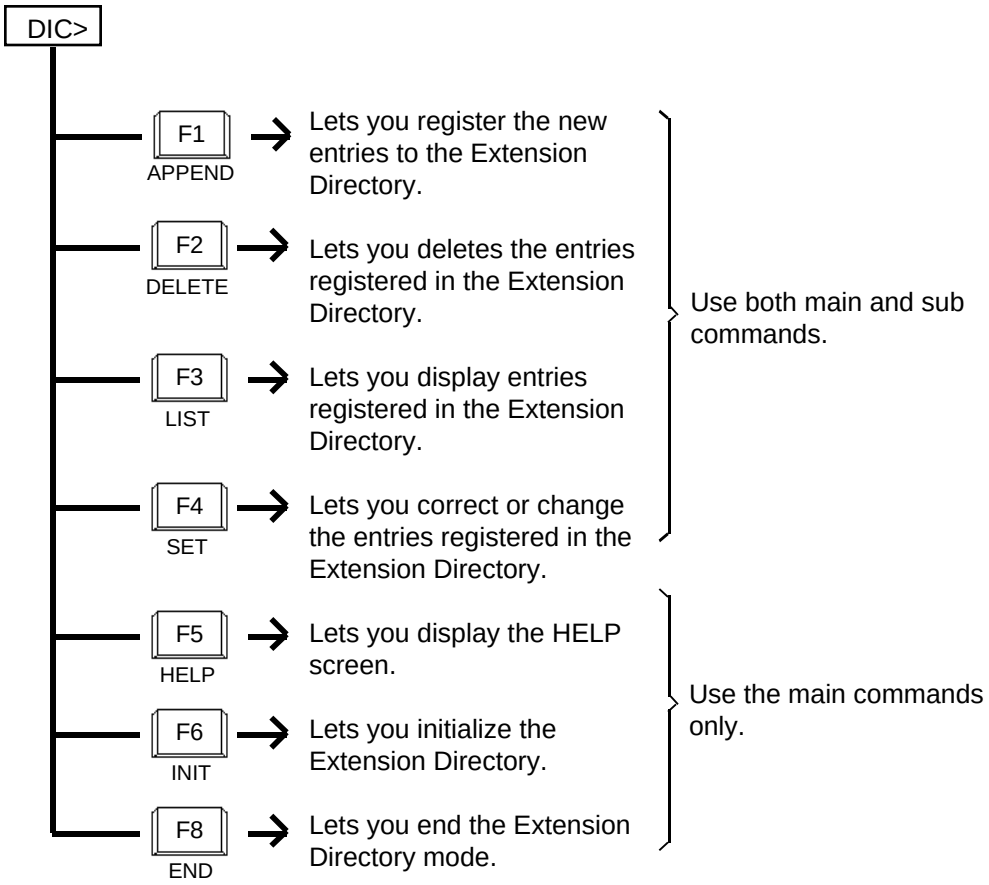
B Extension Directory Mode

1.00 Summary

Extension Directory mode allows you to edit the extension directory for the Attendant Console. It is possible to store, add, delete, and change extension names and departments in this mode.
Pressing the F1 key or entering DIC (CR) command in the local mode main menu screen introduces the function field below, which indicates a command entry needed.



To start editing, press the function key associated with the desired operation, or enter the desired command directly at the full keyboard.



2.00 APPEND Command

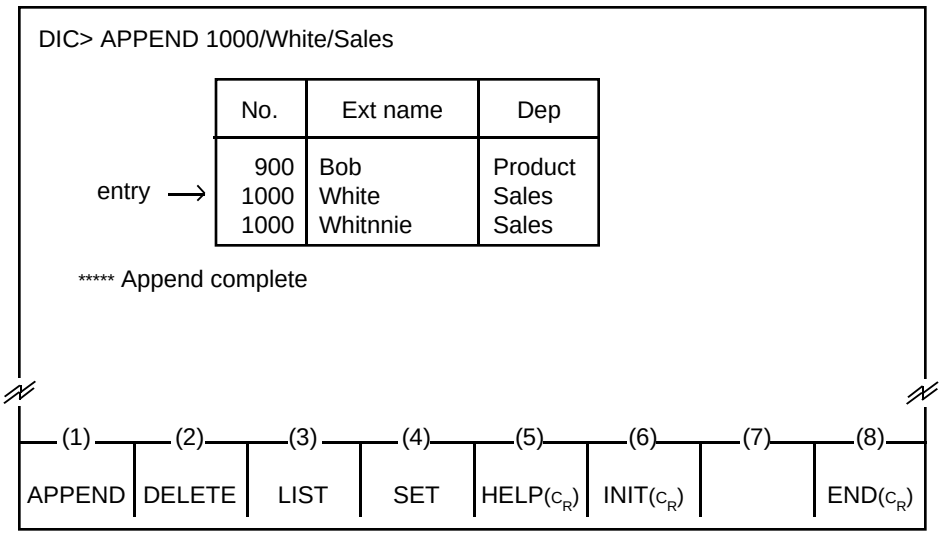
Description Used to register the new entries to Extension Directory.
Up to 500 entries can be registered.

Input Format There are three types of input formats in APPEND Command, as follows:

	Contents	Format
1	Stores extension number, name, department.	DIC>APPEND Number/Name/ Department
2	Stores extension number, name (without designating department)	DIC>APPEND Number/Name/
3	Stores extension number, department (without designating extension name)	DIC>APPEND Number//Department

Input Examples To store the extension number “1000,” name “Bob,” department “Sales,” enter:
DIC>APPEND 1000/Bob/Sales
To store the extension number “1001,” name “Steven,” no department, enter:
DIC>APPEND 1001/Steven/
To store the extension number “1002,” no name, department “Sales”; enter:
DIC>APPEND 1002//Sales

Display Example To store the extension number “1000,” name “White,” department “Sales”:



Conditions An extension number consists of three or four digits.

An extension name consists of up to 16 characters including letters, numbers and special characters (except ", *, /, ~), and the first digit should be a letter.

A department name consists of up to eight characters including letters, numbers and special characters (except ", *, /, ~), and the first digit should be a letter.

Each entry should always include the extension number.
For example, entering: DIC>APPEND /Jack/Sales displays an error message.

Be sure not to leave a space within a sub command.
For example, entering: DIC>APPEND 1001/Jack Smith/Sales displays an error message. Instead of a space, special characters such as “-” can be used to separate words as “Jack-Smith.”

The same extension number can be registered in the multiple number of entries if extension name and/or department name are/is different.

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.
***** Error: Input data already exist	Entered data has already been stored.
***** Append complete	Storing is completed.
***** Error: Append deny (already 500 data entry)	500 data entries have already been stored.

3.00 DELETE Command

Description Used to delete the entries registered in the Extension Directory.

Input Format There are 10 types of input formats, as follows:

	Contents	Format
1	Specifies extension number, name, department	DIC> DELETE Number/Name/ Department
2	Specifies extension number, name (for a data which has no department stored)	DIC> DELETE Number/Name/
3	Specifies extension number, name (regardless of which department)	DIC> DELETE Number/Name/*
4	Specifies extension number, department (for which there is no name stored)	DIC> DELETE Number//Department
5	Specifies extension number, department (regardless of which extension name)	DIC> DELETE Number/*/Department
6	Specifies name, department (regardless of extension number)	DIC> DELETE */Name/Department
7	Specifies extension number only	DIC> DELETE Number/*/*
8	Specifies extension name only	DIC> DELETE */Name/*
9	Specifies department only	DIC> DELETE */*/Department
10	Deletes all	DIC> DELETE */*/*

Input Examples To delete the extension number “1000,” name “Jack,” department “Project,” enter:

DIC > DELETE 1000/Jack/Project

To delete the extension number “1001,” name “Betty,” no department stored, enter:

DIC > DELETE 1001/Betty/

To delete all entries which include the department “Project,” enter:

DIC > DELETE */*/Project

Display Example To delete the extension number “1000,” name “White,” department “Sales”:

DIC> DELETE 1000/White/Sales

delete data		
No.	Ext name	Dep
1000	White	Sales

***** Total 1 entry
***** Delete OK ? (Y/N) => Y
***** Delete complete

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
APPEND	DELETE	LIST	SET	HELP(C_R)	INIT(C_R)	APPEND	END(C_R)

When “Delete OK ? (Y/N)” appears on the screen, press “Y” key, then the RETURN key to delete the displayed data.
Press “N” key, then the RETURN key, if you do not wish to delete the data.

Conditions

Usage of Wild Card Character

One character "*" can be used as a wild card character which substitutes any character in that position.

<Example 1>
If the followings are registered:

No.	Ext name	Dep
100		Sales
100	Jack	Sales

Entering: DIC/DELETE 100/*/Sales deletes both of the above entries.

<Example 2>
To delete any entry which includes the extension numbers from 1000 to 1999, enter:

DIC > DELETE 1*/*/*

If the extension number is three digits, enter "0" at the beginning of the number.

<Example 3>
To delete any entry which includes the extension numbers from 310 to 319, enter:

DIC > DELETE 031*/*/*/

Take care not to delete the data that you do not intend to delete when you use the wild card * for the input formats 3 and 5 through 10.

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.
***** Error: Input data do not exist.	Entered data has not been stored.
***** Delete complete	Deleting is completed.
***** Delete abort	Deleting is not executed yet.
***** Delete OK? (Y/N)	Confirmation message.
***** Total 3 entries	There are three entries to be deleted.

4.00 LIST Command

Description Used to display all entries registered in the Extension Directory.

Input format There are 10 types of Input formats as follows:

	Contents	Format
1	Specifies extension number, name, department	DIC > LIST Number/Name/
2	Specifies extension number, name (for an entry which has no department stored)	Department DIC > LIST Number/Name/
3	Specifies extension number, name (regardless of department)	DIC > LIST Number/Name/*
4	Specifies extension number, department (for an entry which has no name stored)	DIC > LIST Number//Department
5	Specifies extension number, department (regardless of name)	DIC > LIST Number/*/Department
6	Specifies name, department (regardless of extension number)	DIC > LIST */Name/Department
7	Specifies extension number only	DIC > LIST Number/*/*
8	Specifies name only	DIC > LIST */Name/*
9	Specifies department only	DIC > LIST */*/Department
10	Lists all entries	DIC > LIST */*/*

Input Examples To display the extension number “1000,” name “Jack,” department “Project,” enter:

DIC > LIST 1000/Jack/Project

To display the extension number “1001,” name “Betty,” no department stored, enter:

DIC > LIST 1001/Betty/

To display all the entries which include the extension number “1002,” enter:

DIC > LIST 1002/*/*

To display all the entries which include the department “Project,” enter:

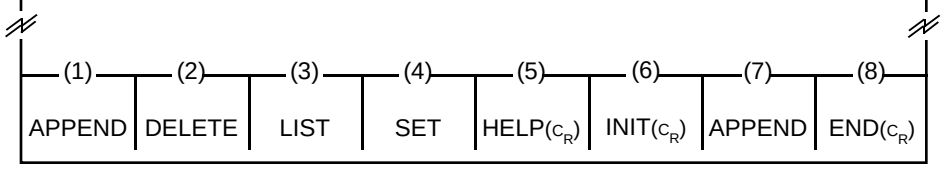
DIC > LIST */*/Project

Display Example To display all the entries which include the extension number “1000” and the extension name whose initial is “J”:

DIC> LIST 1000/J*/*

No.	Ext name	Dep
1000	James	Sales
1000	Jennifer	Product
1000	Joanna	Product
1000	Jone	Sales

***** Total 4 entries



Conditions

Usage of Wild Card Character

One character "*" can be used as a wild card character which substitutes any character in that position

If the following entries are stored:

<Example 1>

No.	Ext name	Dep
100		Sales
100	Jack	Sales

Entering: DIC > LIST 100/*/Sales displays both the above entries.

<Example 2>
To list up 1000 through 1999, enter:

DIC > LIST 1*/*/*

If the extension number is three digits, "0" should be entered as the leading digit.

<Example 3>
To list up extension numbers from 310 through 319, enter:

DIC > LIST 031*/*/*

Listing Order

LIST command is used to list all entries in alphabetical order of extension names first, then alphabetical order of departments, and then ascending order of extension numbers.

<Example 1>

DIC>LIST */*/*

No.	Ext name	Dep
1002	Betty	Sales
1003	Jack	Product
1001	Smith	Account

Listing order may be altered depending on input format types. For instance, the above list can be changed in ascending order of extension numbers by entering: DIC > LIST 100*/*/*, as follows:

<Example 2>

DIC>LIST 100*/*/*

No.	Ext name	Dep
1001	Smith	Account
1002	Betty	Sales
1003	Jack	Product

That is, preferential order is determined by the sub parameters which are not substituted by wild card character “*.”

Listing all entries

All stored entries may be listed by entering LIST command only. Up to 14 entries can be displayed on the screen at a time.

For example, if 30 entries are stored, the first execution of LIST will display the first 14 entries and the second execution of LIST will display the second 14 entries and the third execution of LIST will display the remaining two entries.

Entering: LIST */*/* lists all the stored entries.

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.
***** Error: Input data do not exist.	Entered data has not been stored.
***** Total 3 entries	There are three entries to be listed.
***** No data is entered.	No data stored.

5.00 SET Command

Description

Used to correct or change the entries registered in the Extension Directory.

Input Format

Basic format for SET command is to enter:
DIC>SET [original data] [new data].

There are 10 types of input formats for it as shown below.
The < > mark in the table indicates that the data in the < > may be skipped.
The ␣ mark in the table indicates a space.

	Contents	Format
1	Specifies extension number, name, department	DIC>SET␣Number /Name/ Department␣ <Number>/<Name>/ <Department>
2	Specifies extension number, name (for data which has no department stored)	DIC>SET␣Number /Name/␣ <Number>/<Name>/<Department>
3	Specifies extension number, name (regardless of department)	DIC>SET␣Number /Name/* ␣ <Number>/<Name>/<Department>
4	Specifies extension number, department (for data which has no name stored)	DIC>SET␣Number //Department ␣ <Number>/<Name>/<Department>
5	Specifies extension number, department (regardless of name)	DIC>SET␣ Number /*/Department ␣ <Number>/<Name>/<Department>
6	Specifies name, department (regardless of extension number)	DIC>SET␣*/Name/Department ␣ <Number>/<Name>/<Department>
7	Specifies extension number only	DIC>SET␣ Number /*/* ␣ <Number>/ <Name>/<Department>
8	Specifies name only	DIC>SET ␣*/Name/* ␣ <Number>/ <Name>/<Department>
9	Specifies department only	DIC>SET␣ */*/Department ␣ <Number>/<Name>/<Department>
10	Changes all entries	DIC>SET ␣*/*/* ␣<Number>/<Name>/ <Department>

Input Example

To change the department from “Sales” to “Account” for the extension number “1000,” name “Jack,” department “Sales,” enter :

DIC > SET 1000/Jack/Sales 1000/Jack/Account

To change the entry which has the extension number “1001,” name “Betty,” no department to the extension number “2000,” name “Smith,” department “Account,” enter :

DIC > SET 1001/Betty/ ␣2000/Smith/Account

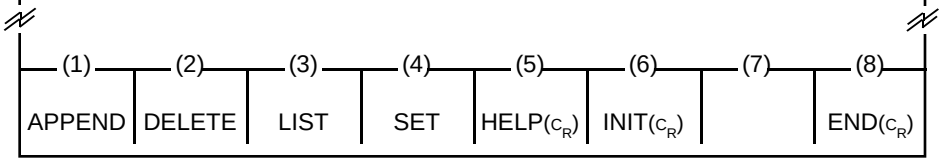
Display Example

To change the extension number “1000,” name “James,” department “Sales” to “1000, White, Product” :

DIC > SET 1000/James/Sales 1000/White/Product

source data			exchanged data		
No.	Ext name	Dep	No.	Ext name	Dep
1000	James	Sales	1000	White	Product

***** Total 1 entry
***** Set complete



Conditions

An extension number can be three or four digits.

An extension name can be up to 16 characters including letters, numbers and special characters (except ", *, /, ~), and the first digit should be a letter.

A department can be up to eight characters including letters, numbers and special characters (except ", *, /, ~), and the first digit should be a letter.

Make sure not to leave a space within a sub command.
For example, if you enter: SET 1000/James/Sales ␣1001/James/Div 4, an error message appears on the screen and you cannot change the data.
In this case use special characters such as “-” to separate words as “Div-4.”.

Usage of Wild Card Character

One character “*” can be used as a wild card character which substitute any character in that position.
The wild card character cannot be used for sub parameters of new data.

<Example 1>
If the following entries are stored:

No.	Ext name	Dep
100	Betty	Project
101	Jack	Project

To change the extension numbers of the entries which include department “Project” to 200, enter :

DIC > SET */*/Project 200//

The specified entries will be changed as follows:

No.	Ext name	Dep
200	Betty	Project
200	Jack	Project

<Example 2>
To change all the extension numbers from 1000 through1999 to 1000, enter:

DIC > SET 1*/*/* 1000//

If the extension number is three digits, “0” must be entered as the leading digit.

<Example 3>
To change all the extension numbers from 310 through 319 to 400, enter :

DIC > SET 031*/*/* 400//

As shown in formats 3 and 5 through 10, the wild card character “*” is used to change data without specifying sub parameters.

Insert one space between original data and new data.

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.
***** Error: Input data do not exist.	Entered data has not been stored.
***** Set complete	Changing the data is completed.
***** Total 3 entries	There are three entries to be changed.

6.00 HELP Command

Description Used to display brief instructions and a list of command related to the Extension Directory mode.

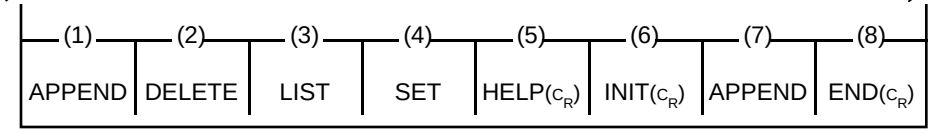
Input Format DIC>HELP

Display Example

```
DIC> HELP

******* Help for editing extension directory*****

   append an entry          =>APPEND number/name/dep
   delete an entry          =>DELETE number/name/dep
   list an entry            =>LIST number/name/dep
   change an entry          =>SET number/name/dep number/name/dep
   initialize the directory =>INIT
   return to the local menu =>END
   help for using command   =>HELP
```



Displayed Message

Displayed Message	Meaning
***** Error : Illegal main command	There is an error in the main command.
***** Error : Illegal sub command	There is an error in the sub command.

7.00 INIT Command

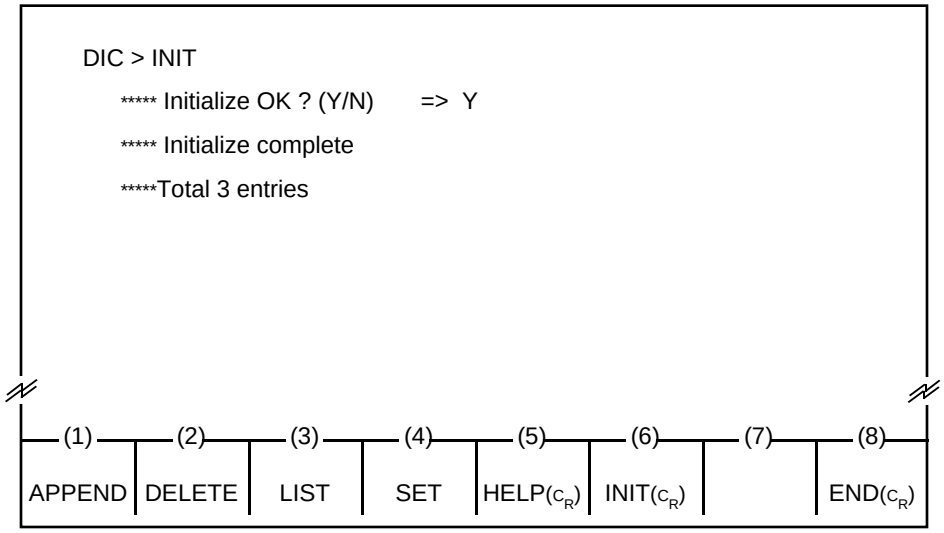
Description

Used to initialize the entries in the Extension Directory, and the extension names and numbers assigned in the system programming are copied to the Extension Directory screen at the same time.

Input Format

DIC> INIT

Display Example



When “Initialize OK? (Y/N)” appears on the screen, press “Y” key then the RETURN key to execute.

Not to execute, press “N” key, then the RETURN key.

Conditions

Extension names to be copied can include letters, numbers and special characters (except ", *, /, ~), and the first digit should be a letter.

Both number and name of the extension will not be copied, if the first digit of the extension name is a numeric character other than a letter.

Displayed Message

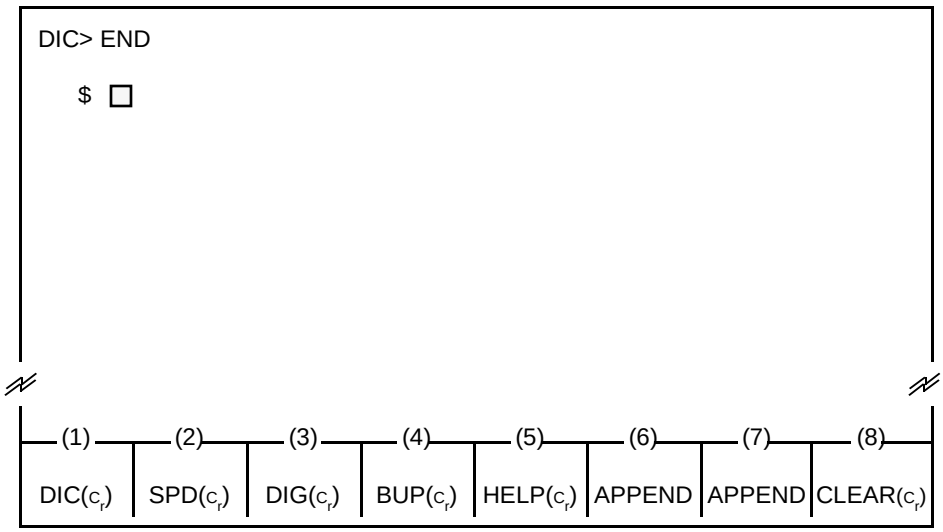
Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.
***** Initialize OK ? (Y/N) =>	Confirmation message.
***** Initialize complete	Initialization is completed.
***** Initialize abort	Did not initialize.
***** Total 3 entries	There are three entries to be copied.

8.00 END Command

Description Used to conclude the Extension Directory mode.

Input Format DIC>END

Display Example



Conditions Entry of END command concludes Extension Directory mode, and displays the prompt “$” which indicates that you can enter another command.

Displayed Message

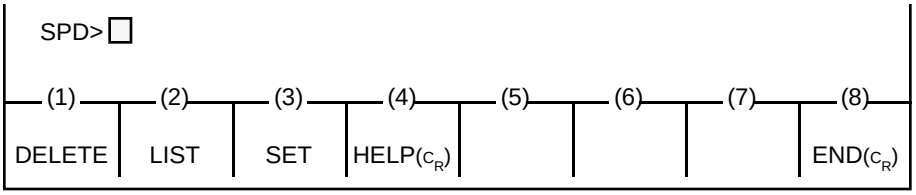
Displayed Message	Meaning
*****Illegal main command *****Illegal sub command	There is an error in the main command. There is an error in the sub command.

C Speed Dial Dictionary Mode

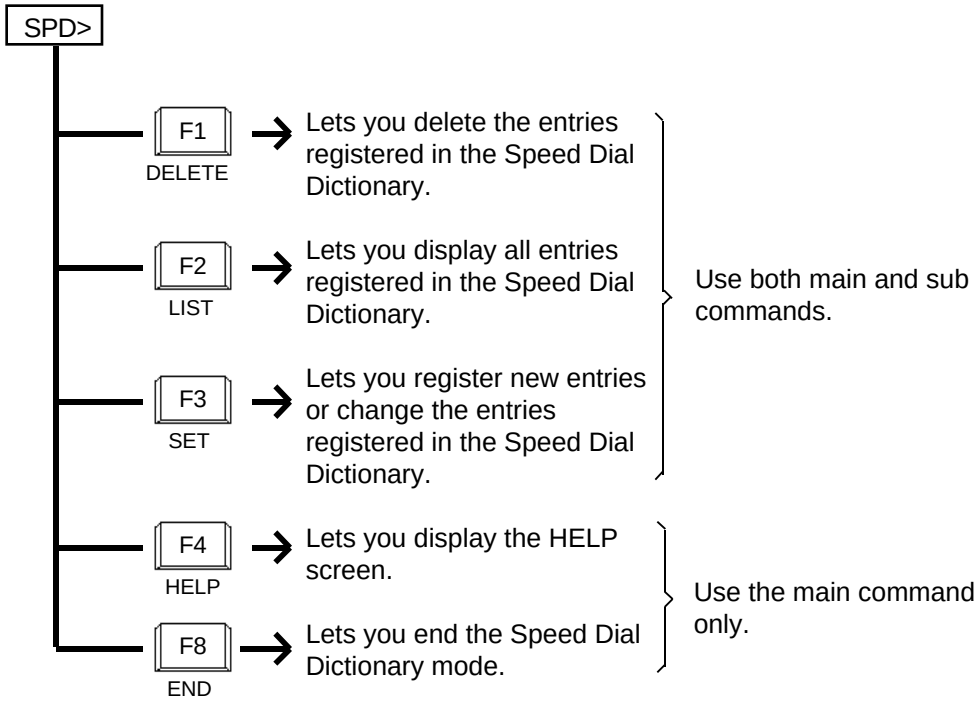
1.00 Summary

This mode is used to edit the Speed Dial Dictionary for the Attendant Console.
It is used for storing, deleting and changing a speed dial name.

Pressing the F2 key “SPD (C_R)” in the local mode main menu screen displays the function field below. The “SPD> □” shows that you may enter further commands.



To start editing, press the function key associated with the desired operation, or enter the desired command directly at the full keyboard.



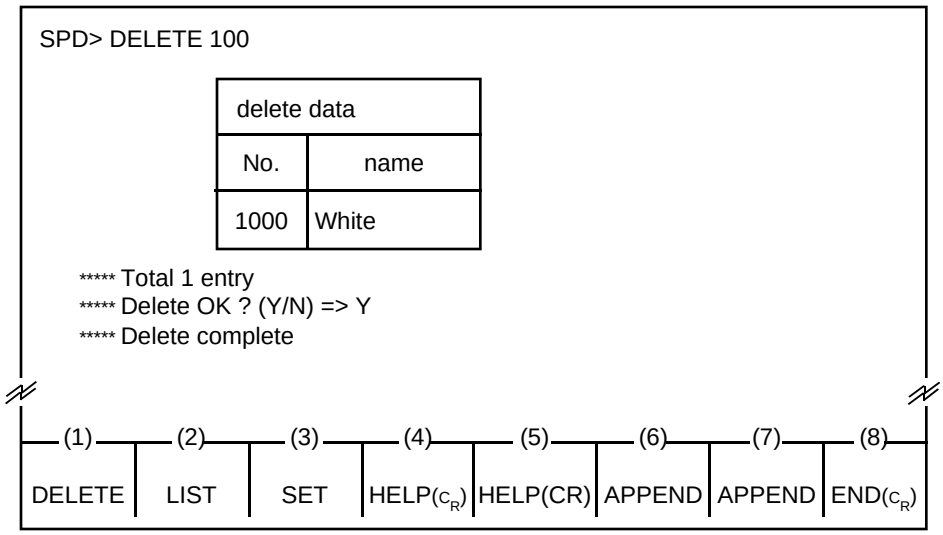
2.00 DELETE Command

Description Used to delete the entries registered in the Speed Dial Dictionary.

Input Format SPD > DELETE 001 to 200 (speed dial code)

Input Example To delete speed dial code 100, enter :
SPD > DELETE 100

Display Example When deleting speed dial code 100 :



When the message “Delete OK? (Y/N) =>” appears, press “Y” then the RETURN key to delete the data.
Not to delete the data, press “N” then the RETURN key.

Conditions

Usage of Wild Card Character

One character “*” can be used as a wild card character which substitutes any character in that position.

<Example>
To delete the speed dial code from 100 through 199, enter :
SPD > DELETE 1*

This function deletes the speed dial codes and the names from the Speed Dial Dictionary screen, but does not affect the data in the system programming.

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.
***** Delete OK ? (Y/N) =>	Confirmation message
***** Delete complete	Deleting is completed.
***** Error: Input data do not exist	Entered data does not exist.
***** Delete abort	Did not delete the specified data.
***** Total 3 entries	There are three entries to be deleted.

3.00 LIST Command

Description Used to display all entries registered in the Speed Dial Dictionary.

Input Format There are four types of input formats as follows :

	Contents	Format
1	Specifies speed code and name	SPD > LIST Number / Name
2	Specifies speed code (regardless of name)	SPD > LIST Number/*
3	Specifies name (regardless of number)	SPD > LIST */ Name
4	Lists all entries	SPD > LIST */*

Input Example To list the speed dial code100 and name Jones, enter :

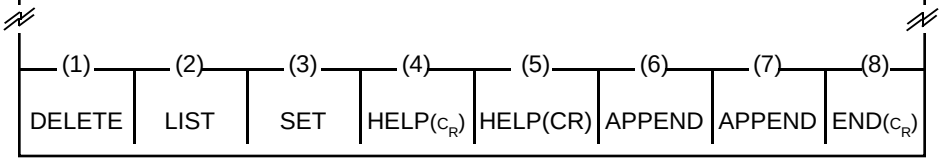
SPD > LIST 100 / Jones

Display Example To list speed dial name which starts with J :

SPD> LIST */J*

No.	name
100	James
001	Jennifer
200	Joanna
150	Jone

***** Total 4 entries



Conditions

Usage of Wild Card Character

One character “*” can be used as a wild card character which substitutes any character in that position..

<Example>
To list the speed dial code from 100 through 199, enter :

SPD > LIST 1*/*

Listing Order

LIST command is used to list all entries in alphabetical order of the extension names and in ascending order of the speed dial codes.

<Example>

SPD>LIST */*

No.	name
102	Betty
103	Jack
101	Smith

The listing order can be altered by changing the input format.
For instance, in the example above, to list the entries in ascending order of the speed dial codes, enter :

SPD>LIST 10*/*

The specified entries will be displayed as follow :

SPD>LIST 10*/*

No.	name
101	Smith
102	Betty
103	Jack

That is, data is listed in the order of the code or the name which is not specified by one wild card *.

Listing All Entries

All stored entries may be listed by entering LIST command only.
Up to 14 entries can be displayed on the screen at a time.

For instance, if 30 entries are stored, the first execution of LIST will display the first 14 entries and the second execution of LIST will display the second 14 entries and the third execution of LIST will display the remaining two entries.

When you want to list all the stored entries, enter :

LIST */*

Displayed Message

Displayed Message	Meaning
***** Error : Illegal main command	There is an error in the main command.
***** Error : Illegal sub command	There is an error in the sub command.
***** Error : Input data do not exist	Entered data does not exist.
***** Error : No data is entered	No data is stored.
***** Total 3 entries	Three entries are listed.

4.00 SET Command

Description Used to register or change the entries in the Speed Dial Dictionary.
If newly registered speed dial code has been already registered, previous entry will be overwritten by the new one.
Up to 200 entries (001 to 200) can be registered.

Input Format SPD > SET speed dial code/name

Input Example To store the speed dial code “120” and the name “James,” enter :
SPD>SET 120/James
If the speed dial code 120 has already been stored, the preset name is changed to James.

Display Example To store the speed dial code 100 and the name “Bob” (when the speed dial code 100 has not been stored before) :

SPD> SET 100/Bob

set data	
No.	name
100	Bob

***** Total 1 entry
***** SET complete

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
DELETE	LIST	SET	HELP(C_R)	HELP(CR)	APPEND	APPEND	END(C_R)

Conditions A speed dial code should be three digits (001 to 200).

A speed dial name consists of up to 20 characters including letters, numbers and special characters (except ", *, /, ~).
The beginning of the name should be a letter.

Make sure not to insert a space into each sub command of speed dial code and name.
For example entering : SET 100/ABC Food displays an error message after pressing the RETURN key.
However, it is possible to use special characters such as “-” to separate words as “ABC-Food.”

Only one speed dial name can be stored for one speed dial code.

Usage of Wild Card Character

One character “*” can be used as a wild card character which substitutes any character in that position.

<Example>
To change the name of speed code from 001 through 099 to Panasonic, enter :
SPD > SET 0*/Panasonic

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.
***** Set complete	Data has been stored or changed.
***** Error: Input data do not exist	Entered data does not exist.
***** Error: Set deny (speed dial number=001-200)	Entered speed dial code is out of the range of 001 to 200
***** Total 3 entries	There are three entries to be stored or changed.

5.00 HELP Command

Description Used to display brief instructions and a list of command related to the Speed Dial Dictionary mode.

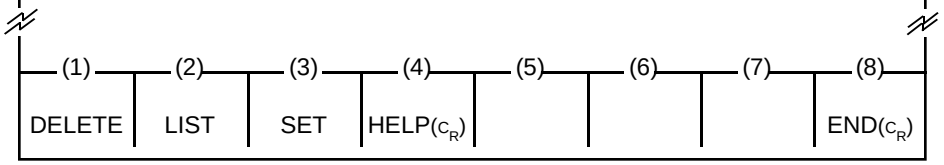
Input Format SPD > HELP

Display Example

```
SPD> HELP

     ***** Help for editing speed dial dictionary *****

        delete an entry          => DELETE number
        list an entry            => LIST number/name
        append/change an entry   => SET number/name
        return to the local menu => END
        help for using command   => HELP
```



Displayed Message

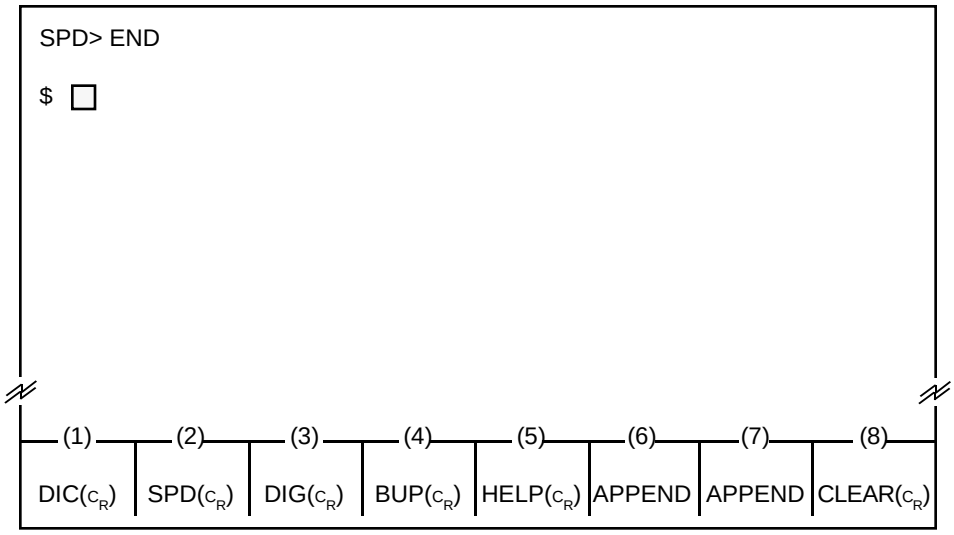
Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.

6.00 END Command

Description Used to conclude the Speed Dial Dictionary mode.

Input Format SPD > END

Display Example



Conditions Entering END command concludes Speed Dial Dictionary mode and displays the prompt “$” which indicates that you can enter another command.

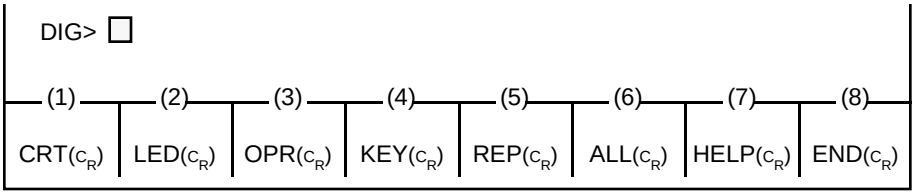
Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command ***** Error: Illegal sub command	There is an error in the main command. There is an error in the sub command.

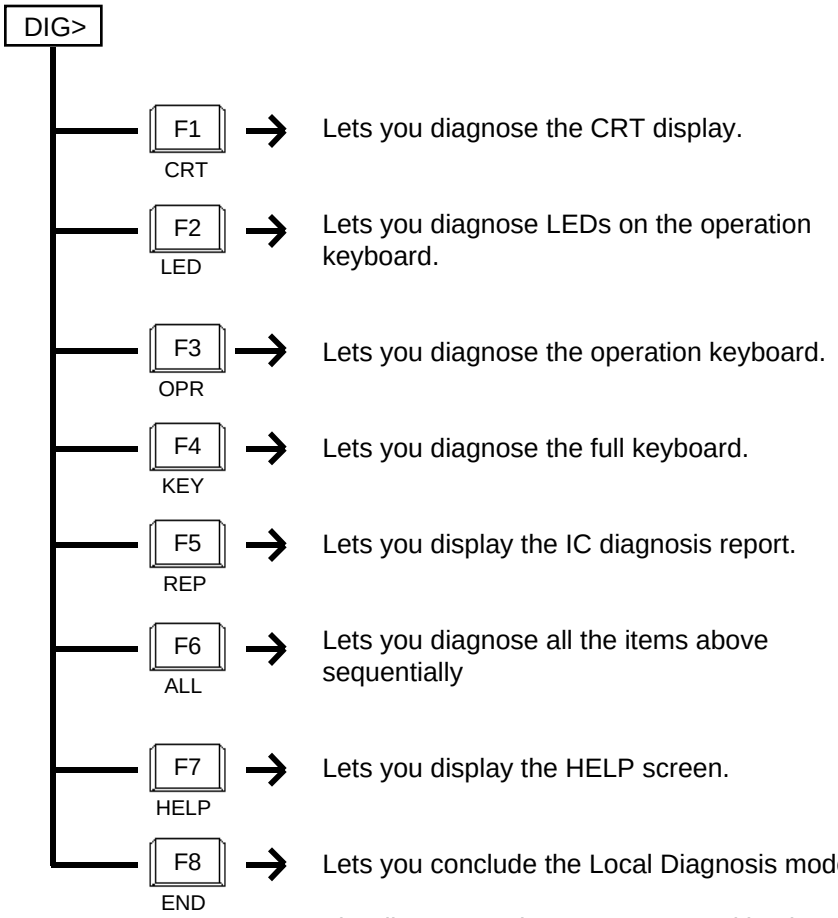
D. Local Diagnosis Mode

1.00 Summary

Local Diagnosis mode is used to diagnose the CRT, LEDs on the operation keyboard, the operation keyboard and the full keyboard of the Attendant Console.
Pressing the F3 key “DIG (CR)” introduces the following function field, and waits for command entry.



Press the function key for the desired command or directly enter the command from the full keyboard.



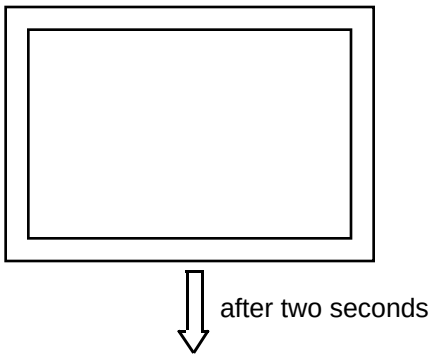
2.00 Diagnosis of CRT

Description Used to diagnose the CRT display.

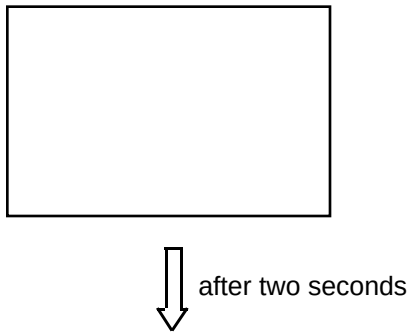
Input Format DIG>CRT

Diagnostic Method Follow the subsequent procedures for diagnosis of CRT.

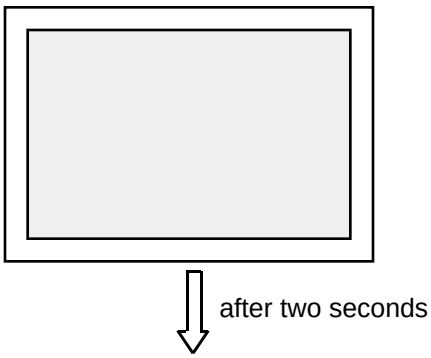
1) When the following outer frame appears, confirm the distortion of vertical and horizontal lines.



2) The outer frame disappears and nothing appears for approximately two seconds.



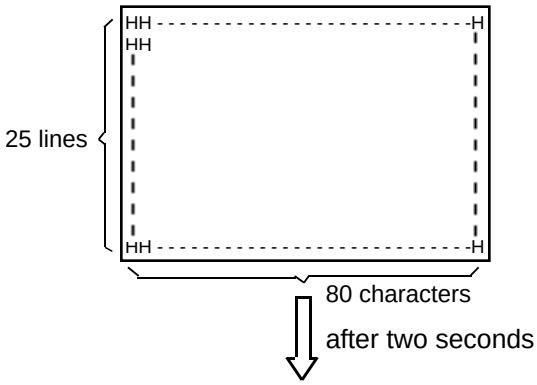
3) The outer frame appears in reverse video.



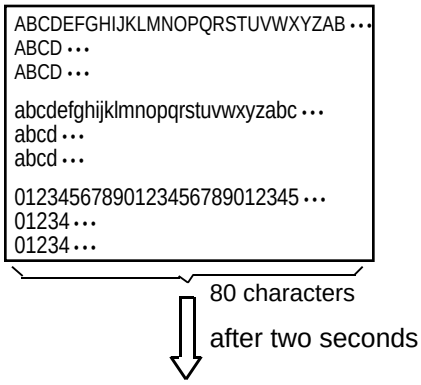
(Continued)

(Continued)

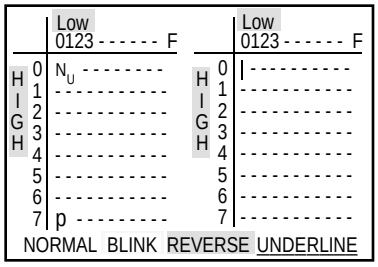
4) The letters “H”s appear.



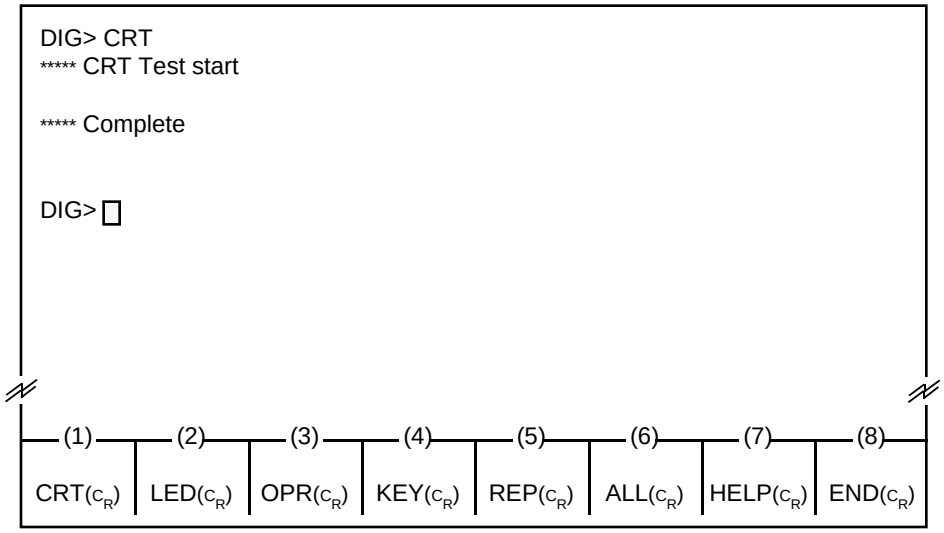
5) Letters and numbers appear.



6) The character generator codes and the attributes appear.



7) After the diagnosis of the CRT display ends, the following display appears and waits for command entry.



Note : Pressing the F8 key or CRTL + C key during the diagnosis stops the diagnosis and displays “Abort.”

Displayed Message

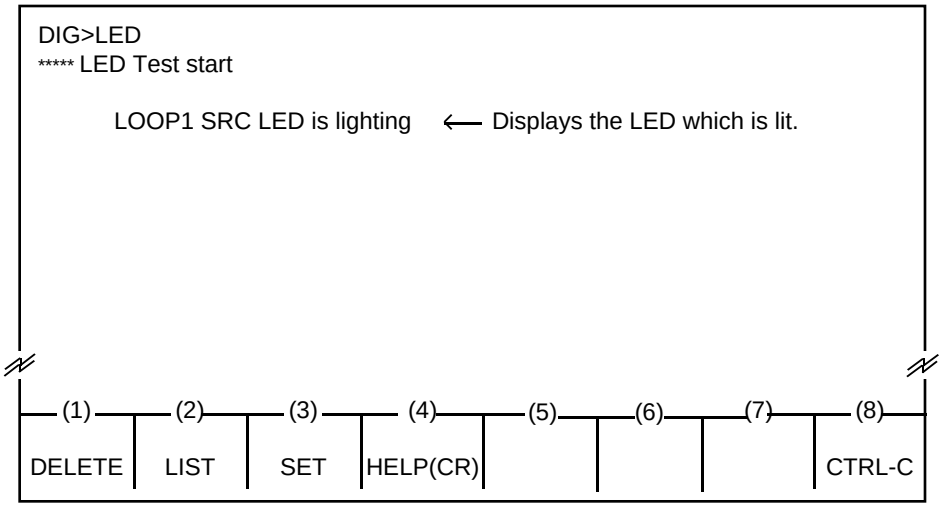
Displayed Message	Meaning
***** Error: Illegal main command ***** Error: Illegal sub command	There is an error in the main command. There is an error in the sub command.

3.00 Diagnosis of LEDs

Description Used to diagnose the LEDs on the operation keyboard.

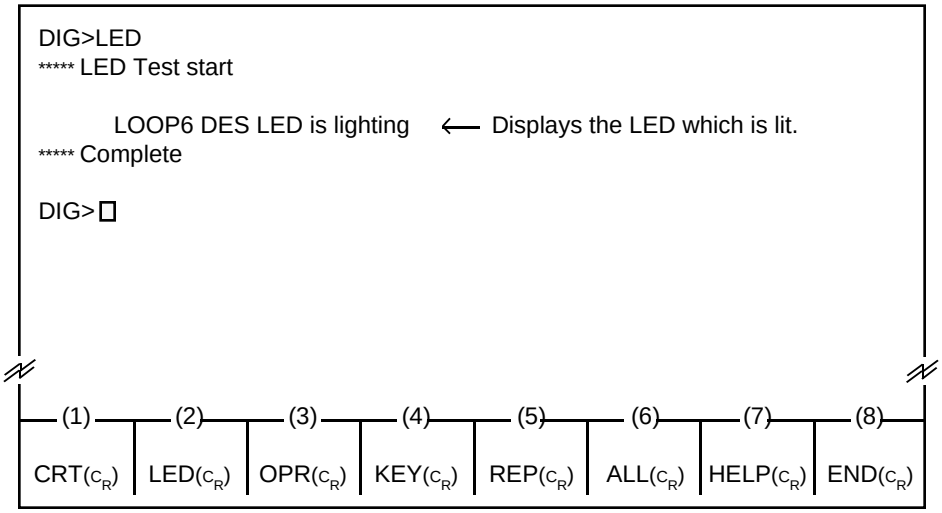
Input Format DIG>LED

Diagnosis Method 1) ALL LEDs on the operation keyboard light in the following order:
SRC-LOOP 1, LOOP 2, LOOP 3, LOOP 4, LOOP 5, LOOP 6,
NIGHT, ALARM, DES-LOOP 1, LOOP 2, LOOP 3, LOOP 4,
LOOP 5, LOOP 6
Confirm LEDs corresponding to the display on the screen.



Note : Pressing the F8 key or CTRL + C key during the diagnosis stops the diagnosis and displays “ABORT.”

2) After the diagnosis of LED ends, “Complete” appears and waits for command entry.



Displayed Message

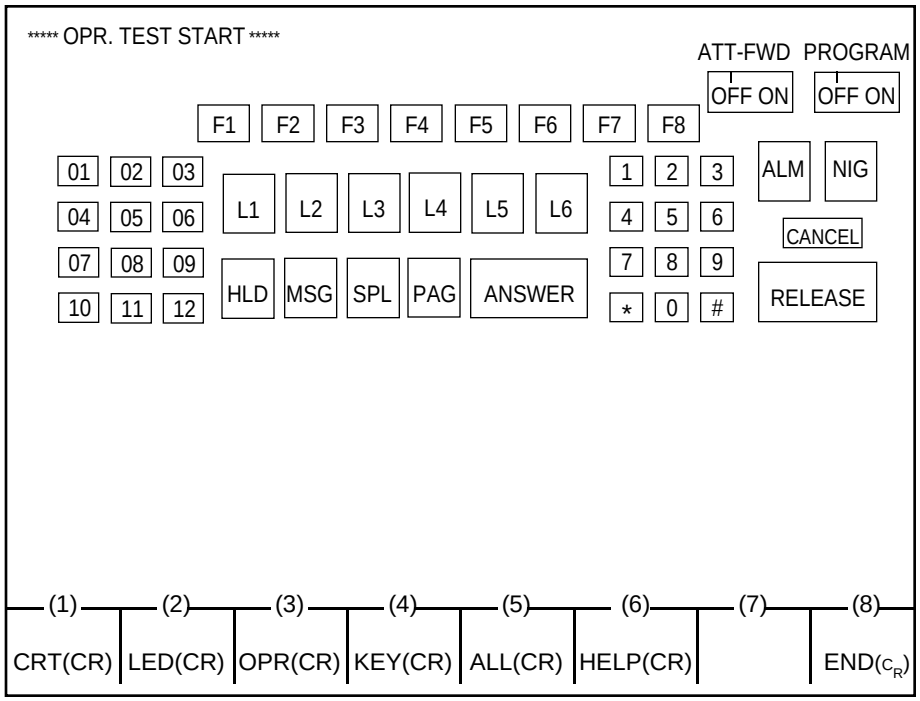
Displayed Message	Meaning
***** Error: Illegal main command ***** Error: Illegal sub command	There is an error in the main command. There is an error in the sub command.

4.00 Diagnosis of Operation Keyboard

Description Used to diagnose the operation keyboard.

Input Format DIG>OPR

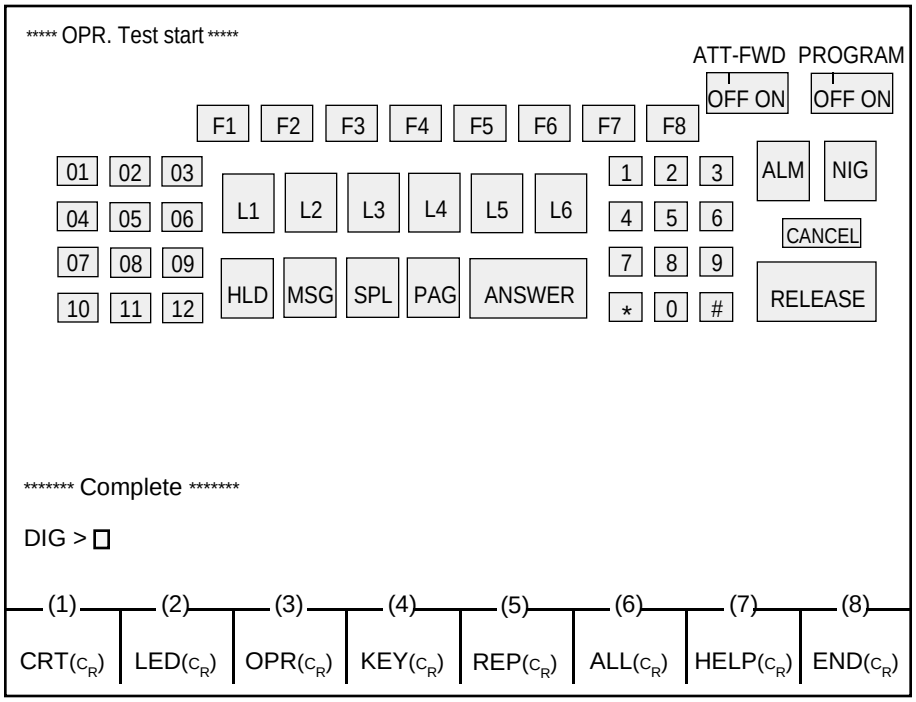
Diagnosis Method 1) When the arrangement of the operation keyboard appears on the CRT screen, confirm that the key pressed on the operation keyboard is displayed in reverse video on the CRT screen.



Note : Pressing the F8 key or the CTRL + C key during the diagnosis stops diagnosis, and displays “ABORT.”

Displaying all keys in reverse video means the conclusion of diagnosis of operation keyboard.

2) After the diagnosis ends, “Complete” appears and waits for the entry of the next command.



Displayed Message

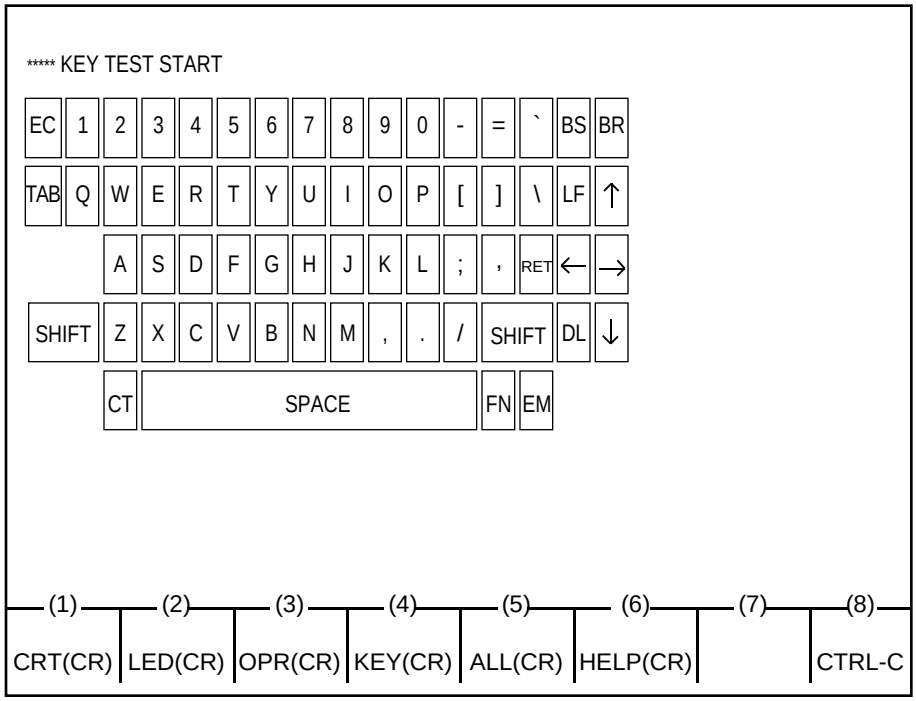
Displayed Message	Meaning
***** Error: Illegal main command ***** Error: Illegal sub command	There is an error in the main command. There is an error in the sub command.

5.00 Diagnosis of Full Keyboard

Description Used to diagnose the full keyboard.

Input Format DIG>KEY

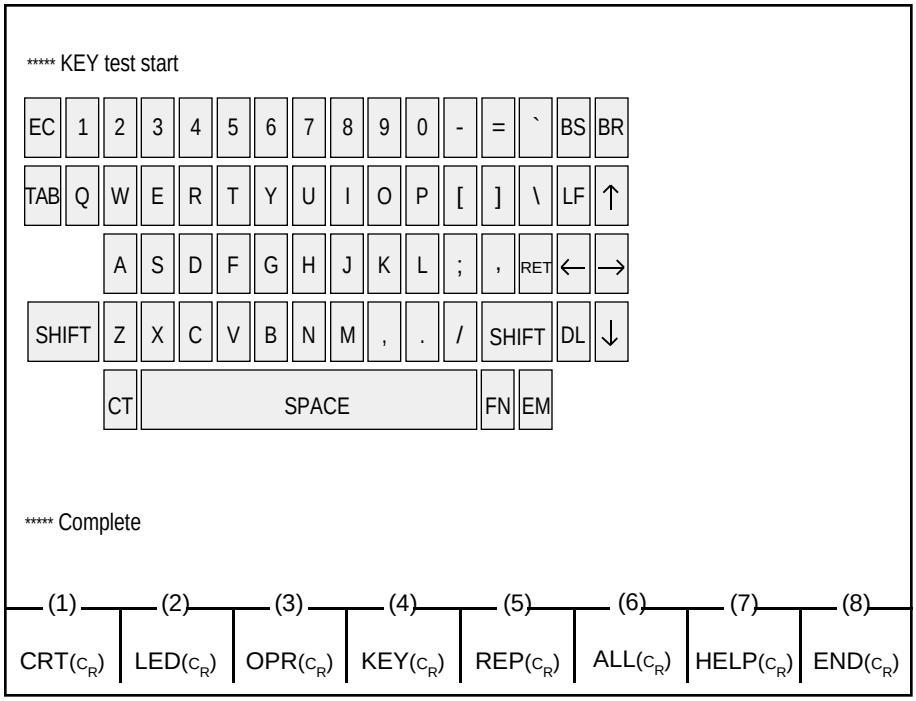
Diagnosis Method 1) When the arrangement of the full keyboard appears on the CRT screen, confirm that the key pressed on the full keyboard is displayed in reverse video on the CRT screen.



Note : Pressing the F8 key or CTRL + C key during the diagnosis, stops the diagnosis, and displays “ABORT.”

Displaying all keys in reverse video means the conclusion of diagnosis of full keyboard.

2) After the diagnosis ends, “COMPLETE” appears and waits for the entry of the next command.



Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command ***** Error: Illegal sub command	There is an error in the main command. There is an error in the sub command.

6.00 REP Command

Description Displays IC diagnosis report performed when the Attendant Console is switched on.

Input Format DIG > REP

Display Example

```
DIG> REP

      ***** Report the result of IC diagnostic *****

            1. ROM          (IC- 3) ----------  OK
            2. RAM  RAM #1(IC- 4) ----------  OK
                    RAM #2(IC- 5) ----------  OK
                    VRAM   (IC-56) ----------  OK
            3. I/O  8259A  (IC-9) ----------  OK
                    8253A  (IC-9) ----------  OK
                    8255A  (IC-9) ----------  OK
                    89322  (IC-10) ----------  OK
                    8255   (IC-43) ----------  OK
                    8952   (IC-11) ----------  NG
```

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.

7.00 All Diagnosis

Description Used to diagnose CRT, LED, OPR, KEY and REP sequentially.

Input Format DIG>ALL

Diagnosis Performs diagnosis in order from CRT, LED, OPR, KEY and REP.
After conclusion of all diagnosis, “Complete” appears and waits for the entry of the next command.

Note : Pressing the F8 key or the CTRL + C key stops the current diagnosis with displaying “Abort” and advances to the next diagnosis.

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.

8.00 HELP Command

Description

Used to display the brief instructions and a list of command related to the Local Diagnosis Mode.
After displaying the HELP screen, prompt “DIG>” is displayed on the screen, and you can perform desired diagnosis by entering the command associated with it.

Input Format

DIG>HELP

Display Example

```
DIG>HELP

***** Help for Diagnostic mode command *****

        CRT(CR) : To diagnose CRT.
        LED(CR) : To diagnose LED.
        OPR(CR) : To diagnose operation keyboard.
        KEY(CR) : To diagnose full keyboard.
        REP(CR) : To diagnose the diagnostic result of memory and I/O.
        ALL(CR) : To diagnose all items.
        HELP(CR) :        To diagnose the command information.
        END(CR) : To quite the diagnostic mode.

 DIG>
```

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CRT (CR)	LED (CR)	OPR (CR)	KEY (CR)	REP (CR)	ALL (CR)	HELP (CR)	END (CR)

Displayed Message

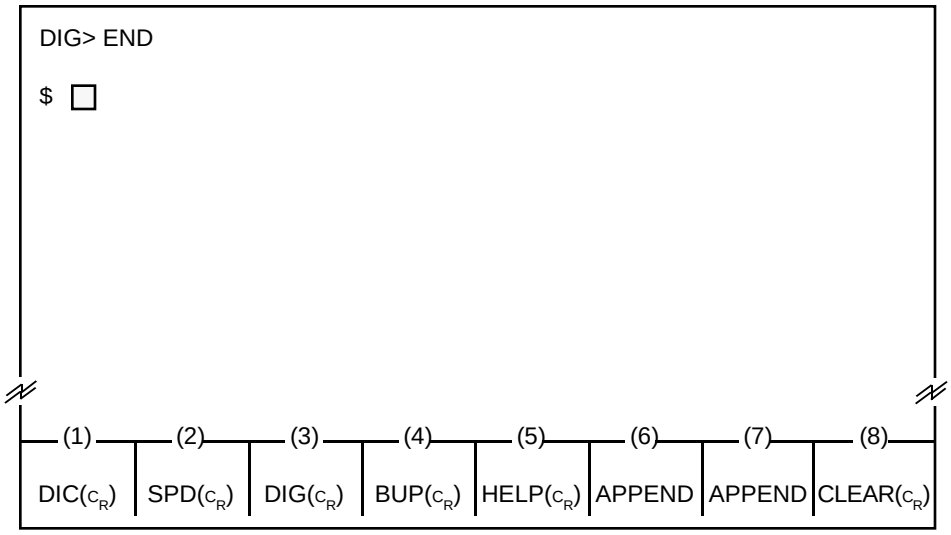
Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.

9.00 END Command

Description Used to conclude the Local Diagnosis mode.

Input Format DIG>END

Display Example



Condition Entering END command concludes Local Diagnosis mode and displays the prompt “$” which indicates that you can enter another command.

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command ***** Error: Illegal sub command	There is an error in the main command. There is an error in the sub command.

E. Backup Mode

1.00 Summary

(Saving Procedure)

Backup mode is used to make a backup copy of the user-programmable attendant console database on a memory location of the PBX for security reason.
The SAVE command is used to initiate the saving procedure.

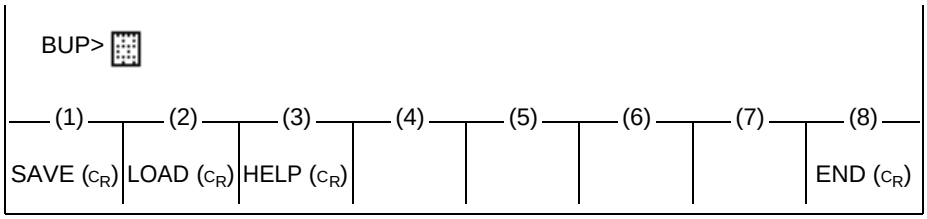
(Loading Procedure)

If it becomes necessary to re-program the attendant console database, it will be faster to load the saved data form the system memory than manual re-input.
The LOAD command is used to initiate the loading procedure.

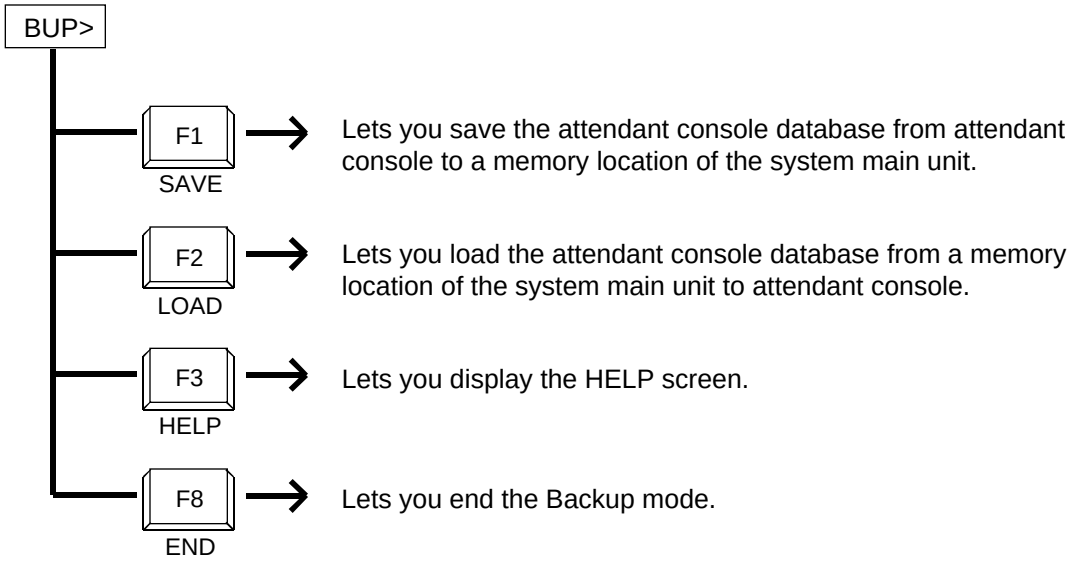
Attendant console database consists of Extension Directory data and Speed Dial Dictionary data programmed in the attendant console local mode.

A backup copy of the attendant console database in the system memory location can be saved on an external device, and loaded in to system memory when required.
Refer to Section 16 “Backup Utility-On-site” and Section 17 “Backup Utility-Remote Location” for further information.

Pressing the F4 key “BUP(c_R)” in the local mode main menu screen displays the function field below, that shows you four commands available in Backup mode. The “BUP> ” indicates that you may enter any one of those commands.Press the function key for the desired command, or directly enter the command from the full keyboard.



Press the function key for the desired command, or directly enter the command from the full keyboard.



2.00 SAVE Command

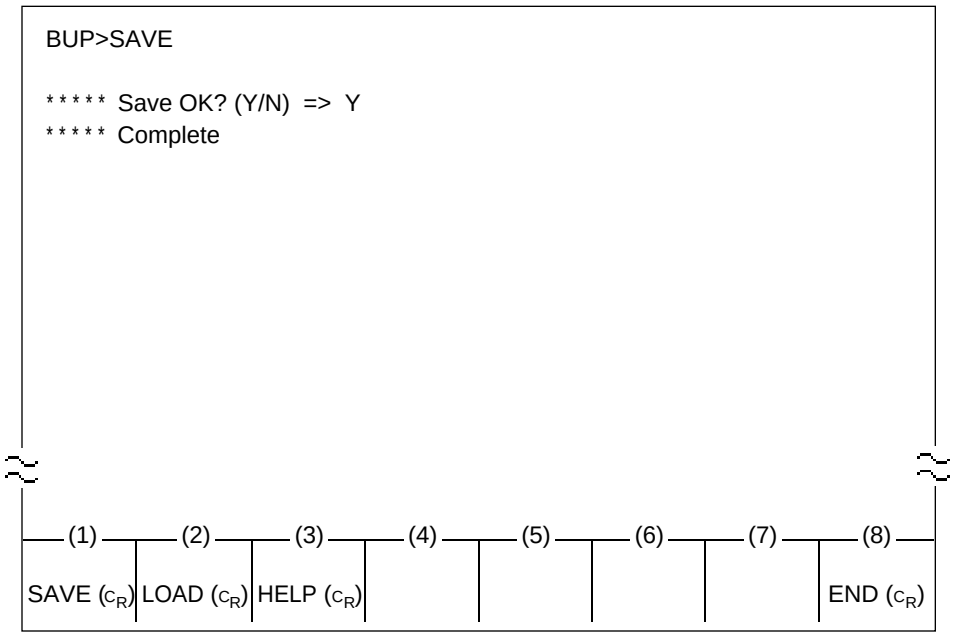
Description

The SAVE command is used to make a backup copy of the attendant console database on the memory location of the system main unit.

Input Format

BUP>SAVE

Display Example



When “SAVE OK? (Y/N)” is displayed on the screen, press “Y” key to put the data into storage on PBX.

Not to save, press “N” key and then the RETURN key.

Conditions

A backup copy of the attendant console database can be saved on an external device for further security.
Refer to Section 16 “Backup Utility-On-Site” and Section 17 “Backup Utility-Remote Location” for further information.

Displayed Message

Displayed Message	Meaning
***** Save OK? (Y/N) =>	Confirmation Message.
***** Complete	Saving is executed successfully.
***** Save abort	Saving is interrupted.
***** Error :Illegal main command	There is an error in the main command.
***** Error :Illegal sub command	There is an error in the sub command.
***** Error :Can't save	Saving is executed unsuccessfully.

3.00 LOAD Command

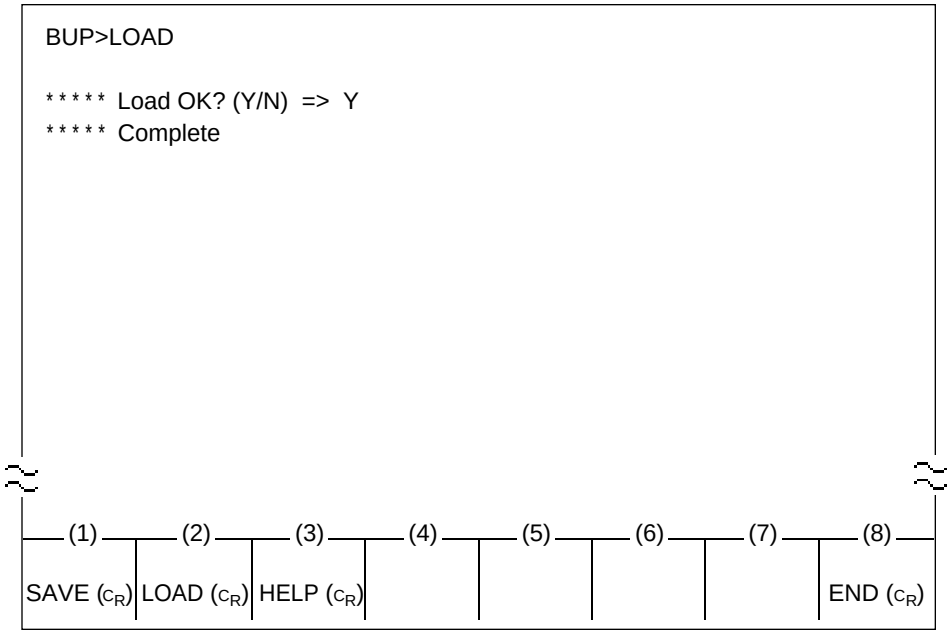
Description

The LOAD command is used to load a backup copy of the attendant console database that has been stored in the system memory location to the memory location of the attendant console.

Input Format

BUP>LOAD

Display Example



When “LOAD OK? (Y/N)” is displayed on the screen, press “Y” key to read the data from the main unit to Attendant Console.

Not to read, press “N” key and then RETURN key.

Conditions

If the loading operation is performed successfully, a copy of the entire attendant console database is made in attendant console, erasing whatever was previously in it.

Displayed Message

Displayed Message	Meaning
***** Load OK? (Y/N) =>	Confirmation Message.
***** Complete	Loading is executed successfully.
***** Load abort	Loading is interrupted.
***** Error :Illegal main command	There is an error in the main command.
***** Error :Illegal sub command	There is an error in the sub command.
***** Error :Can't Load	Loading is executed unsuccessfully.

4.00 HELP Command

Description Used to display brief instructions and a list of command related to the Backup Mode.

Input Format BUP>HELP

Display Example

```
BUP>HELP

***** Help for local data backup mode command *****

        SAVE(CR) :      To save local data to PBX.
        LOAD(CR) :      To load local data from PBX.
        HELP(CR) :      To display the command information.
        END(CR) : To quit backup mode.

 BUP>
```

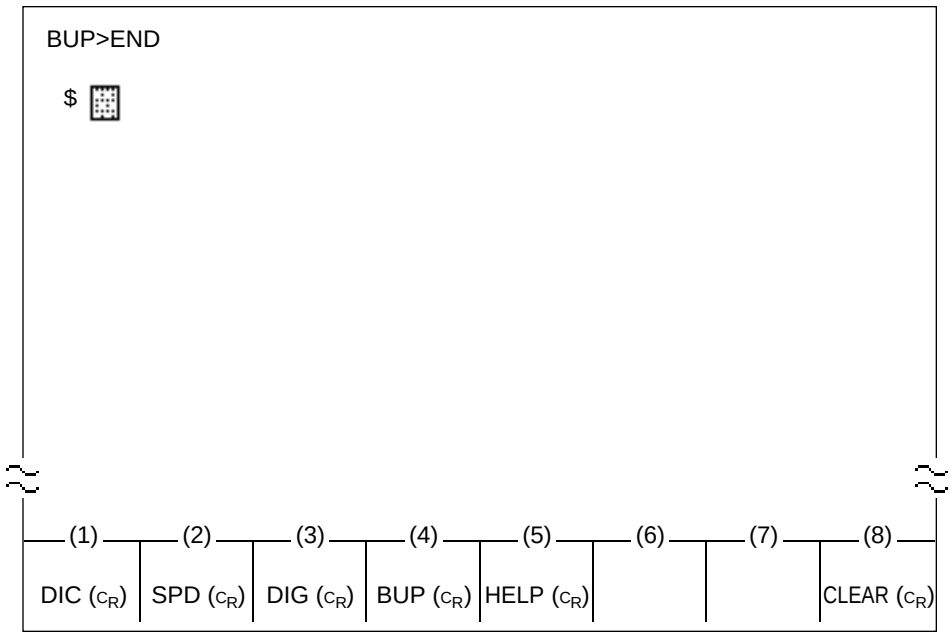
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
SAVE (c_R)	LOAD (c_R)	HELP (c_R)					END (c_R)

5.00 END Command

Description Used to conclude the Backup mode.

Input Format BUP>END

Display Example



Conditions Entry of END command concludes Backup mode, and display the prompt “$” which indicates that you can enter another command.

Displayed Message

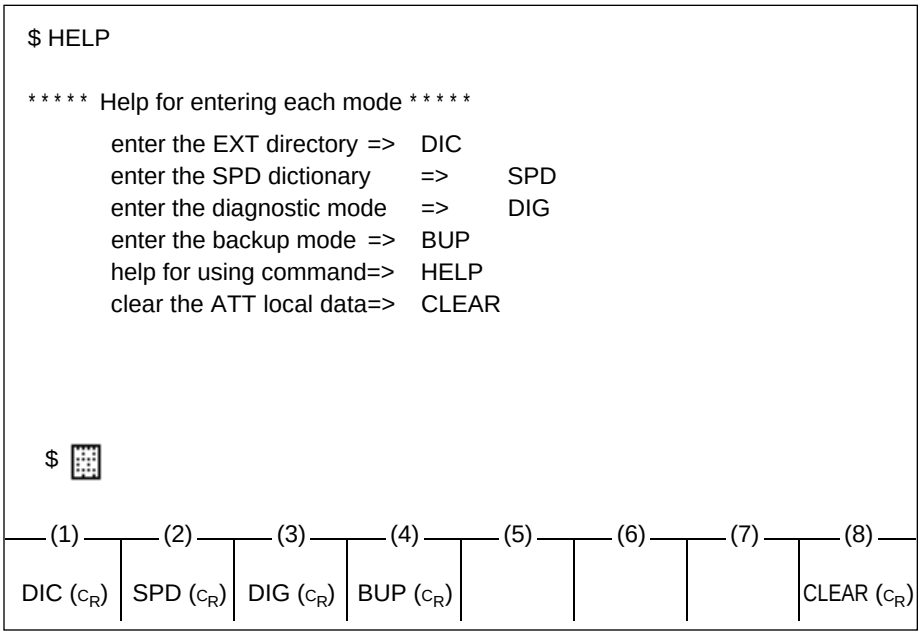
Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.

F. HELP Mode

Description Used to display brief instructions and a list of command related to the entry of various modes.

Input Format $ HELP

Display Example



Conditions After displaying the HELP screen, prompt “$” is displayed on the screen and you can enter the desired mode by entering the command associated with it.

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.

G. Clear Mode

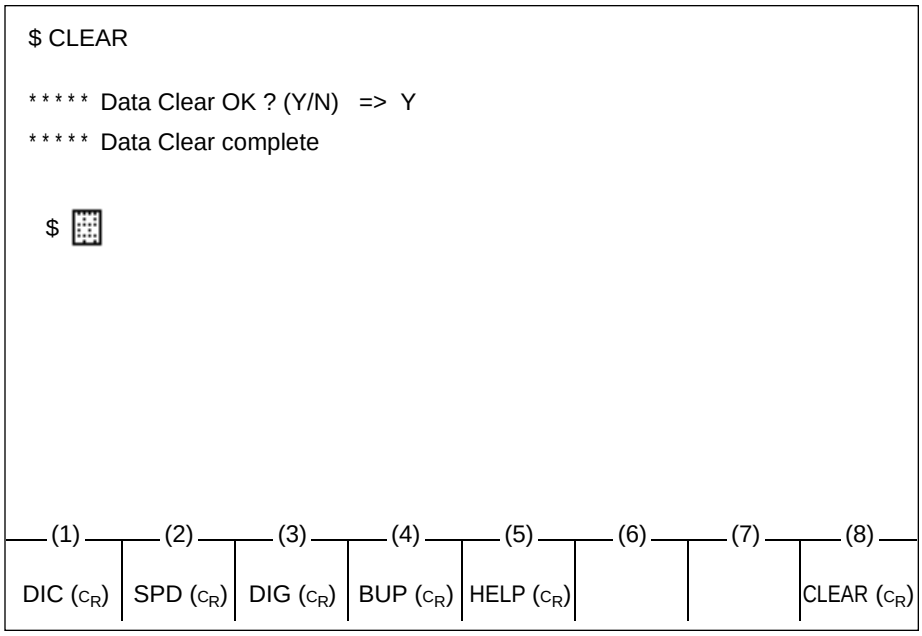
Description

Used to clear the entire database programmed in the attendant console local mode.

Input Format

$ CLEAR

Display Example



When “Data Clear OK ? (Y/N)” appears, press “Y” then the RETURN key to clear the data.
If you do not clear, press “N” then the RETURN key.

After the above operation, prompt “$” is displayed on the screen and you can enter the desired mode by entering the appropriate command.

Conditions

The followings are cleared by executing this command:

- All entries in the Extension Directory (same as if DIC > DELETE * /* /*)
- All entries in the Speed Dial Dictionary (same as if SPD > DELETE * /*)
- All extension numbers in the BLF screen

Displayed Message

Displayed Message	Meaning
***** Error: Illegal main command	There is an error in the main command.
***** Error: Illegal sub command	There is an error in the sub command.
***** Data Clear OK ? (Y?N) =>	Confirmation message.
***** Data Clear complete	Clear is completed.
***** Data Clear abort	Data is not cleared.

Section 14

Maintenance

VT220 and Compatibles

(Section 14)

Maintenance

VT220 and Compatibles

Contents

A. Introduction

This section describes the information necessary for monitoring, testing, and maintaining the system using VT220 (VT100) or Compatibles in interactive format.
The modular self-testing capabilities of the system allow most maintenance to be reduced to simple procedures.
You can administer the system programming and maintenance of the system using a VT220 (VT100), Compatibles, Dumb terminals or an Attendant Console.
Only one terminal can be performing system administration at any one time.
Changing the System Administration Device is done by programming.
To execute the change, you must exit system administration mode and then reenter system administration mode.

B. System Administration

1.00 On-Site Administration

1.01 Logging in to the System

Description

You can administer the system programming and maintenance of the system using a VT220 (100), Compatibles. For details about communication parameters, refer to Section 9-D-7.00 “Communication Interface.”

System Security

For security reasons, access to the administration capabilities of the system is controlled by a password. To prevent an unauthorized person from learning the password, the password characters are not displayed when they are entered.

Password

To gain access to the system administration feature, a valid password (four-digit, alphanumeric characters*) must be entered.
To be recognized by the system, the password must be entered exactly as stored in memory.
You must assign eight passwords from the first to fourth levels for on-site operation and the first to fourth levels for operation from a remote location.

The followings are the functions available to each password level.

The 1st Level : To access to all levels
The 2nd Level : To set system level parameters.
The 3rd Level : To set Port level parameters.
The 4th Level : To read parameters only.

When you log in to the system using the first level password, you can execute all functions, but are increasingly restricted when entering levels 2, 3 and 4.
Those passwords are originally factory programmed, but may be changed when logging in to the system by entering the first level password.
(Refer to Section 7-E “Changing Password.”)

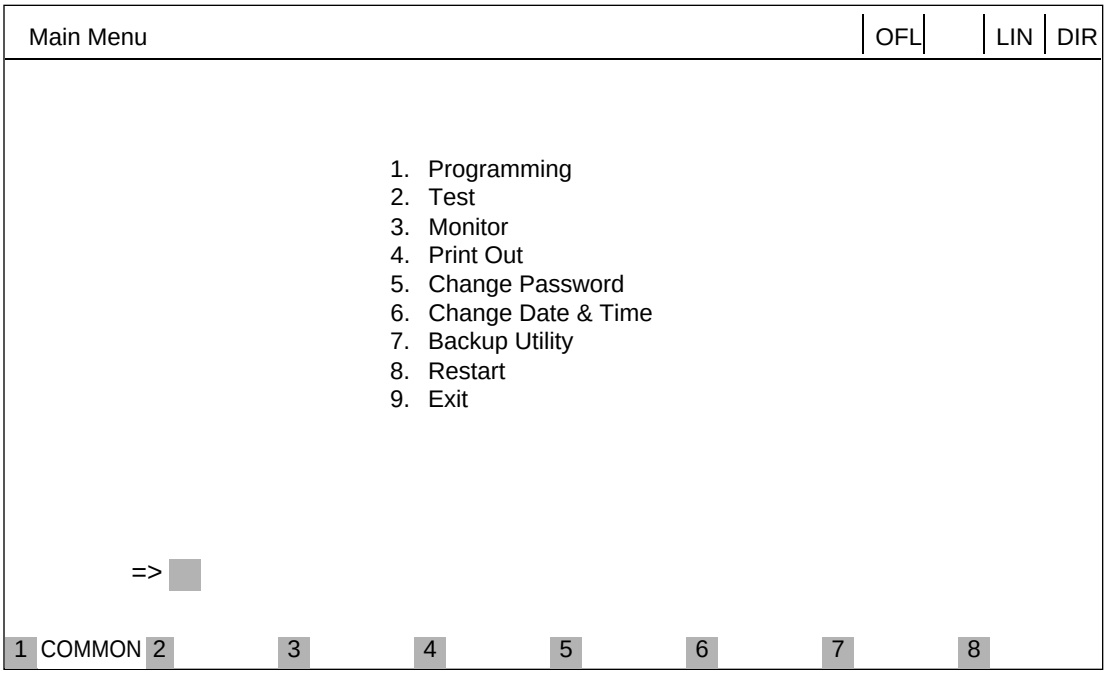
* Alphanumeric characters
  ASCII codes except special codes (DEL, ESC etc.). However, entering “/”, “~” are not available, because these characters cannot be displayed on the display of PITS.
  Both uppercase and lowercase characters can be recognized by the system.

Successful Login

When you enter the correct password, the terminal displays the Main Menu screen from which you can select administration functions. By selecting an item from the Main Menu, you enter a system programming area and can access specific system parameters and features.

1.02 Administration Main Menu screen

Main Menu Screen



Main Menu Items

The following list describes the features you can administer through each of the Main Menu Items: To select an item from the Main Menu, just type the number of the item you want followed by the return key.

1. Programming
   Allows you to administer system-wide programming parameters.

2. Test
   Allows you to test the status of cards, ports, resources and so on.

3. Monitor
   Allows you to display the error log, card/port/resource status and traffic measurements.

4. Print Out
   Allows you to print out the system programming parameters and traffic information.

5. Change Password
   Allows you to change the current password.

6. Change Date & Time
   Allows you to change the date and time.

7. Backup Utility
   Allows you to save and load the system programming data and the Attendant Console database.

8. Restart
   Allows you to reset the system.

9. Exit
   Allows you to exit the administration mode.

2.00 System Administration from a Remote Location

Description

From a remote location, you can execute system programming, diagnosis and traffic measurements using a VT220 (100), Compatibles or Dumb terminals.
Refer to Section 9-D-7.00 “Communication Interface.”

Conditions

- RMT card (Modem) must be installed in the system and register the telephone number of modem in the System-Operation “Remote Directory Number” (FDN: 3-4 digits) for accessing the remote administration feature.
  For assignment of Remote Directory Number, refer to Section 9-D-1.02 “Operation (2/3).”

- For remote access, a data terminal and modem are required at a remote location.

- Factory programmed 4 types of password from 1st to 4th level for remote operation are provided. Passwords are originally factory programmed, but may be changed at any time. (Refer to Section 7-E “Changing Password.”)

- You can execute remote system administration during on-line communication mode only. But when you load the system programming data from a remote location, the system shifts to off-line communication mode automatically.
  Refer to Section 17-B-2.02 “Loading Procedure” for details.

- Starting up system administration from a remote location can be done only in Dumb mode, so to enter VT mode, press [CTR] key + [V] key simultaneously at the dumb mode initial screen.

Operation

Starting up system administration from a remote location can be done in the following ways:

- Dial “Remote Directory Number” using Direct Inward System Access (DISA) feature.
  For further information about “Remote Directory Number,” refer to Section 9-D-1.02 “Operation (2/3).” And for further information about DISA feature, refer to Section 3-D-2.02 “Direct Inward System Access (DISA).”

- Program DID feature so that the incoming telephone number is converted to the “Remote Directory Number.”
  For further information about DID feature, refer to Section 3-D-2.03 “Direct Inward Dialing (DID).”

- Assign that a call from a remote-location can access the Remote Administration feature automatically using DIL (1:1) feature.
  For further information about DIL (1:1) feature, refer to Section 3-D-2.01 “Direct In Line (DIL).”

- Remote access with assistance of the operator
  The call from a remote location can be made on any trunk into the system, and be answered by the operator.
  The call is then placed on hold and the Remote Directory Number of the system dialed is received. The operator transfers the call after receiving the modem answer tone. The caller at a remote location will then hear the modem answer tone and can proceed with sign-on.
  For further information, refer to Section 4-F-1.05 “Unscreened Call Transfer to Remote.”

When the system administrator at a remote location accesses the system remote administration feature, the following message appears on the display of operator's telephone if display is provided.

1234:RMT Access

After you log in to the system from a remote location, you can operate the system in the same way as if you were on-site.
Only one system administration terminal can access the system at a time.

C. Device Status

1.00 Service Commands and Their Functions

COMMON

Displays the command function mode.

SHOW LV

Lets you display the current password level.

CHG LV

Lets you change the password level.

INS

Changes the status of the target shelf, card, or station to “In Service.”

OUS

Changes the status of the target shelf, card, or station to “Out of Service.”

REMOVE

Removes the programmed parameters of target device (when removing a device).

EXIT

Exits the general command mode and displays the current command function screen.

INDEX

Lets you enter a specific programming screen.

COPY

Lets you copy programming parameters.

READ

Lets you read parameters from any programming screen.

HRD CPY

Lets you print out the displayed programming parameters.

AUTOCNF

Lets you assign the telephone type to the system.

Refer to Section 7-J “Execution of Function Modes” for details about command functions.

1.01 INS (In Service) Command

Description

Changes the status of the target device (shelf, card, port, station etc.) to “In Service” in on-line communication mode.

Conditions

The status of the specified devices (shelf, card, port, station) should be “OUS” or “FAULT.”
When you change the status of a lower device (port, station) to “INS,” the upper device (shelf, card) should be changed to “INS” status beforehand.
If you try to change the lower device (port, station) status to “INS” while upper device (shelf, card) is in “OUS” status, the error message “Invalid Status” appears on the screen.

Operation

Press the function key INS.

```
CMD> In Service No. = xxxxxx

1      2      3
```

Enter the number of the desired device.
For input values, see below:

Device	Input Value
Shelf	1 to 3 (physical number)
Card	101 to 315 (physical number)
Port	1011 to 3158 (physical number)
Station	DNxxxx (xxxx: extension number; three or four digits) or Physical number: four digits
ATT	A1 or A2 or Physical number: four digits
DTMF	Rxxxy (xxx:Card number; y: 1 or 2)
CNF	CFBxx or CFOyy (xx: 01 to 08, yy: 01 to 64)

Refer to Section 14-F “Functional Test by Entering Commands” for details about test command.

When you change the status of an upper device, the status of lower devices changes as follows.

Upper device	OUS → INS
Lower device	OUS → INS
	Fault → Fault

Upper device	Fault → INS
Lower device	Fault → INS
	OUS → OUS

Normal operation
The following message appears on the screen.

***** OK

Operation failed
An error message appears on the screen in the following cases.

- Parameter error
- Not installed
- Status error
- INS failure (Diagnostic error)

1.02 OUS (Out of Service) Command

Description

Changes the status of the target device (shelf, card, station etc.) to “Out of Service” in on-line communication mode.

Conditions

The status of target devices (shelf, card, port, station) should be “INS.”

If the system administration terminal is an Attendant Console (ATT), do not change the status of the following devices from “INS” to “OUS.”

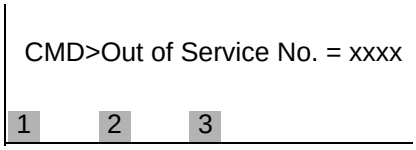
- Shelf in which ATLC card is installed
- ATLC card
- Attendant console assigned as the System Administration Terminal

During a remote operation, do not change the status of the following devices from “INS” to “OUS.”

- Shelf in which RMT card is installed
- RMT card (Modem)

Operation

Press the function key OUS.



Enter the number of the desired device. Four input values, see below:

Device	Input Value
Shelf	1 to 3 (physical number)
Card	101 to 315 (physical number)
Port	1011 to 3158 (physical number)
Station	DNxxxx (xxxx: extension number; three or four digits) or Physical number: four digits
ATT	A1 or A2 or Physical number: four digits
DTMF	Rxxxy (xxx:Card number; y: 1 or 2)
CNF	CFBxx or CFOyy (xx: 01 to 08, yy: 01 to 64)

Refer to Section 14-F “Functional Test by Entering Commands” for details about the test command.

When you change the status of an upper device (shelf, card), the status of lower devices (port, station) changes as follows.

Upper device	INS	→ OUS
Lower device	INS	→ OUS
	Fault	→ Fault

Normal operation
The following message appears on the screen.

***** OK

Operation failed
An error message appears on the screen in the following cases.

- Parameter error
- Not installed
- Status error

2.00 Definition of Operating Status

2.01 Shelf, Slot, Resource

Not-Installed:

Programming data for the target device are not entered at all. In other words, even if the device is physically installed in the system, no programming has been performed.

Out of Service (OUS):

Programming data for the target device is entered, but the target device is not assigned to the system.

In Service (INS):

The target device is operating normally.

Fault (FLT):

The device is defective (hardware).
In this case the LED indicator on the card is lit.

2.02 Port

Not-Installed:

The slot (upper device of port) is not programmed even though the card may be physically installed.

Pre-Installed

Programming data for the slot (upper device of port) is entered, but programming data for the port is not entered.

Out of Service (OUS):

Programming data for the target device is entered, but the target device is not assigned to the system.

In Service (INS):

The target device is operating normally.

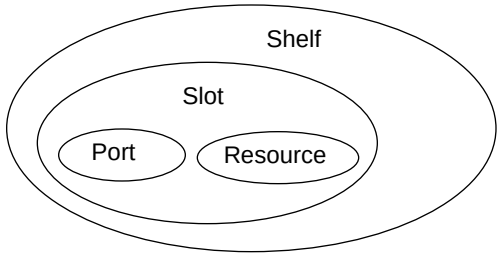
Fault (FLT):

Defective device (hardware).

2.03 Interactions among Devices

Interactions among Shelf, Slot, Port and Resource are as follows.

Shelf>Slot>Port, or Shelf>Slot>Resource
(See the illustration below)



* The resource is a lower device of a slot. There are no interactions between resources and ports.

(Example)
PB receiver on the SLC (Single Line Telephone Circuit) card.

2.04 Changes of the Shelf Status

Removing the Expansion Shelf

When attempting to remove the expansion shelf, the status of devices (slot, port, resource) in the target shelf should be changed to “Not-installed” beforehand.
When you change the status of target shelf, the status of devices in the shelf changes as follows.

1. INS → OUS

Expansion Shelf	INS → OUS
Slot	INS → OUS
Port	INS → OUS
Resource	INS → OUS

No changes in other status

2. OUS → INS

Expansion Shelf	OUS → INS
Slot	OUS → INS Fault (defective device)
Port	OUS → INS Fault (defective device)
Resource	OUS → INS Fault (defective device)

No changes in other status

3. INS → Fault

Expansion Shelf	INS → Fault
Slot	INS → Fault
Port	INS → Fault
Resource	INS → Fault

No changes in other status.

4. Automatic recovery (Fault → INS)

Device in “Fault” status becomes in good status without any special care.

Expansion Shelf	Fault → INS
Slot	Fault → INS
Port	Fault → INS
Resource	Fault → INS

No changes in other status.

In case of “2. OUS → INS” and “3. INS → Fault”, don't care about “Fault” status of lower device.

(Note)
Up to two optional Expansion Selves (1 and 2) can be connected to the system for enlargement of system's ability.

2.05 Changes of the Slot Status

Canceling the Slot Assignment

Before canceling the slot assignment, the status of ports or resources assigned to the target slot should be changed to “Not-installed” or “Pre-installed” beforehand.

Slot Assignment

The status of ports and resources installed in the target slot.

HLC → Pre-installed
PLC → Pre-installed
SLC → Pre-installed
LCOT → Pre-installed
GCOT → Pre-installed
DID → Pre-installed
ATLC → Pre-installed
OPX → Pre-installed
DPH → Pre-installed
DISA → OUS
AGC → OUS
RMT → OUS
Resource (DTMF receiver) → OUS

When you change the status of target slot, the status of devices (port, resource) in the slot changes as follows.

1. INS → OUS

Slot	INS → OUS
Port	INS → OUS
Resource	INS → OUS

No changes in other status.

FIFO communication is terminated.

2. OUS → INS

Slot	OUS → INS
Port	OUS → INS Fault (defective device)
Resource	OUS → INS Fault (defective device)

No changes in other status.

3. INS → Fault

Slot	INS → Fault
Port	INS → Fault
Resource	INS → Fault

No changes in other status.

FIFO communication is terminated.

4. Fault → INS

Slot	Fault → INS
Port	Fault → INS
Resource	Fault → INS

No changes in other status.

FIFO communication begins.

In case of “3. INS → Fault,” “4. Fault → INS” the “OUS” status of lower devices doesn’t change.

D. Self-Test (System-Detected Troubles)

1.00 Error Record Display

1.01 Start Time of Self-Test

Built-in diagnostic self-test program monitors the troubles generated by hardware or software.
To perform the self-test, assign the desired start time of self-test in “System-Operation” Start Time of Test.
Be careful not to access the system during this test.
Refer to Section 9-D-1.02 “Operation (2/3)” for programming.

1.02 Error Log

When a system maintenance object begins to fail periodic testing, the system automatically generates an error record. (Refer to Section 14-G-2.00 “Error Log screen.”)
Depending on the severity, the record is stored in one of two tables in the Error Log.

The two tables are:

Error Log (1/2) (Major and Minor Alarm)
Up to 15 major or minor error records are stored in this error log.The error tables are organized by time of occurrence.The newest error record appears on the top of the screen.
If more than 15 errors have occurred in that time, error records already stored in the error log will be overwritten, starting with the first.

Error Log (2/2) (Light Alarm)
Up to 15 light error records can be stored in this error log.
Other conditions are the same as error log (1/2).

Each error log screen (1/2)(2/2) exists independently.

Deleting Error Log records (available only when logged in to the system by entering the 1st Level Password only)
When you exit the error log screen, the following message appears on the screen.

=> Error Log clear ? (Y/N)

Error log records can be deleted by entering “Y.”

1.03 Printing Out the Automatic Failure Reporting

The error log records can be printed out.
First connect the printer to the SIO #2 port on the basic shelf using RS-232C cable, then set “System-operation” SMDR-Error Log to “Yes” by the system programming.
Refer to Section 9-D-1.02 “Operation (2/3)” for programming.

1.04 Local Alarm

Description

When the system detects a problem during on-line communication, an alarm message will be displayed on the screen of the Attendant Console or on the display of PITS (if provided) whose owner is assigned as operator 1 by pressing the ALARM key.

Programming

ALARM key (button) assignment

(Attendant Console)
ALARM key (Fixed feature key)

(PITS)

System Programming	Reference	
	VT	Dumb
"Extension-Station (2/3)," DN key Type	9-G-1.02	10-C-24.00
"Extension-Station (3/3)," DSS key Type	9-G-1.03	10-C-26.00

Condition

1. When the system has detected the error, the ALARM LED on the Attendant Console or PITS (Operator 1) automatically flashes in red (Major Alarm) or is lit steady in red (Minor Alarm).

2. Local alarm is not shown if the Operator 1 is an SLT user.

3. If the ALARM button is not assigned to a PITS, the local alarm doesn't show.

4. The local alarm occurs only with operator 1 of each tenant.

5. In case of a PITS without the display, the ALARM LED is lit when the system detects an error. To clear the error message press the ALARM button twice.

6. When multiple troubles occur at a time, only the most serious trouble appears on the screen of attendant console or display of PITS (if provided).

7. The alarm message on the display of PITS (if provided) disappears if making a call from that telephone; an incoming call arrives at that telephone; held call reminder occurs.
   The alarm message reappears on the display when the PITS goes to on-hook.

Operation

To display the alarm message, press the ALARM key (button) while ALARM LED is flashing or lit steady.
If local alarm occurred during a conversation, press the ALARM key (button) after replacing the handset then the alarm message will be displayed.

- An example of the alarm display

(Attendant Console)
JAN-25-91 6:31 AM MAJOR•ALARM #0410
Basic Shelf power down

(PITS)

ERR 0410 POW DWN

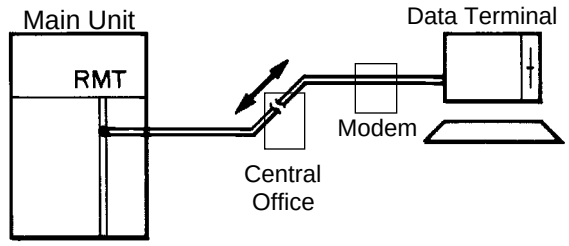
To clear the displayed alarm message, press the ALARM key (button) when the alarm message is displayed. The ALARM LED will be turned off and the alarm message on the display of PITS (if provided) or CRT screen of the Attendant Console disappears.

1.05 Remote Alarm

Description

When the system detects a problem during on-line communication, an error message appears on the screen of the remote maintenance device. For remote access, a data terminal and modem are required at a remote location.

Remote Configuration



Programming

To execute this feature, set “System-Operation,” Remote Alarm to “Yes” and register the telephone (Modem) number of the remote administration device in “Destination Address.” Installing the RMT card is required for this feature.

System Programming	Reference	
	VT	Dumb
“System-Operation (2/3)” Remote Alarm, Destination Address	9-D-1.02	10-C-4.00

Conditions

Setting “System-Operation (2/3)” Remote Alarm to “Yes” is not available if the RMT card is not installed.
All system-detected error messages are displayed in the error log, but concerning “Local Alarm,” or “Remote Alarm”, some error messages are displayed and some are not. Refer to Section 14-D-2.03 “Background Diagnostic Error List” for details.

2.00 Clearing System-Detected Troubles

2.01 Introduction

Most system-detected troubles are reported via the alarm LED (light-emitting diode) indicators located on the top shelf, each circuit card, Attendant Console and PITS. The following covers general trouble-clearing techniques and recommended procedures for identifying and clearing a variety of specific system troubles.

You can detect, report, and clear troubles in the following three ways.

(1) Error Log
(2) LED indicators on the Main Units
(ALARM LED on the Top shelf, LEDs on the cards)
(3) User-Reported Error
(Including Automatic Failure Reporting, Local Alarm, Remote Alarm)

2.02 Consulting the Error Log

Consulting the error log should be the first step in diagnosing system-related troubles.
The error log is read by logging in to the system administration terminal, selecting the Main Menu item “3. Monitor,” and then selecting “1. Error Log.”
Refer to Section 14-G-2.00 “Error Log Screen.”
The error log is comprised of the following two error tables.

Error Log (1/2) (Major and Minor Alarms)
Error Log (2/2) (Light Alarms)

Each error record is reported as one line on the screen.
Error Log (1/2) and Error Log (2/2) use the same format and exist independently.
These error records provide the location of the error, the date and time of the occurrence, and a description of the error.

A typical error record from the error log is as follows:

Error Log (1/2)

MAR-20-90 8:39 AM	MAJOR ALARM	#0400	Basic shelf power down
1	2	3	4

This record is interpreted as follows:

1. The year, month, date and time of the occurence.

2. The severity of the error

   MAJOR ALARM-Error Log (1/2)
   MINOR ALARM-Error Log (1/2)
   Blank-Light Error-Error Log (2/2)

3. Error Code
   Each error record has a specific error code. You can clear the troubles via the troubleshooting guide corresponding to the error code.
   (Refer to Section 14-E-3.00 “Troubleshooting via Error Log Records.”)

4. Description
   A description of the nature of the error.

2.03 Background Diagnostic Error List

ERRORS	ERROR LOG	AUTO REPORT	LOCAL ALARM	REMOTE ALARM	OTHERS
CPR RAM failure	X	X	X(MJ)	X	LED (ALARM)
CPR runaway (watchdog timer overflow)	X				
CPR runaway (software timer overflow)	X				
TSW clock down	X	X	X(MJ)		PFT, LED
Basic shelf DC power down	X				PFT
Basic shelf AC power down	X	X	X(MJ)	X	LED
Expansion shelf DC power down	X	X	X(MJ)	X	PFT, LED
Expansion shelf AC power down	X	X	X(MJ)	X	LED
Progress tone failure (CPU card)	X	X	X(MJ)	X	LED
Check date/time	X	X	X(MJ)	X	LED
Conference trunk failure (1 trunk)	X	X			
(all trunk)	X	X	X(MJ)	X	LED
CPU shared memory error	X	X	X(MJ)	X	LED
CPU RAM backup battery down	X	X	X(MJ)	X	LED
Device not connect for SMDR	X		X(MJ)	X	LED
Communication failure (LPR)	X	X	X(MJ)	X	LED
LPR ROM checksum error	X	X	X(MJ)	X	LED
LPR RAM failure	X	X	X(MJ)	X	LED
TSW disconnect	X	X	X(MJ)		LED
Card disconnect	X	X	X(MJ)	X	LED
Modem failure	X	X	X(MJ)		LED
LPR memory checksum error	X	X			
Card type error	X	X			
LPR runaway	X	X			
OGM CPU runaway	X	X			
OGM lost	X	X	X(MJ)		
OPX power down	X	X	X(MJ)	X	
OPX power down (bell)	X	X	X(MJ)	X	
DTMF generator failure	X	X	X(MJ)	X	
DTMF receiver failure	X	X	X(MJ)	X	
Tone detector failure	X	X	X(MJ)	X	
HDLC failure	X	X	X(MJ)	X	
Communication failure (ATT/PITS/DPH)	X	X			
OHCA SW failure	X	X	X(MJ)	X	LED
OHCA not installed	X	X			
TSW DTMF generator/receiver failure	X	X	X(MJ)	X	LED

Legend:

MJ-Major Alarm — X : applied
MN-Minor Alarm — Blank : not applied
PFT-Power Failure Transfer
LED-Refer to Section 14-E-2.00 “Troubleshooting via the LED indicators.”

E. Troubleshooting Guide

1.00 Introduction

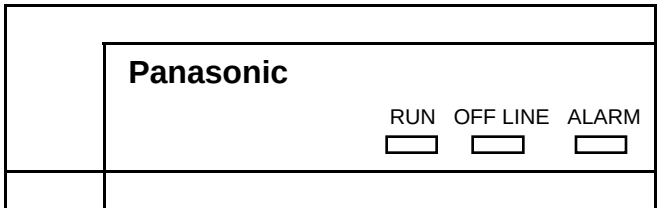
This subsection uses system troubleshooting flow charts to guide the service personnel in efficient and systematic testing and fault location.
The system troubleshooting flow charts provides service personnel with a step-by-step sequence to use for system evaluation. Isolated steps in a flow chart should never be used out of context, since any step assumes that proper results were obtained on all previous tests.

2.00 Troubleshooting via the LED Indicators

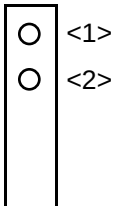
When the system detects a problem, the alarm LED indicator located on the top shelf will turn red.
(Refer to the figure below)
If the detected trouble is generated by a card, the alarm LED indicator on the card will light up simultaneously.
(Refer to the table below)

When the trouble is cleared, the alarm LED indicator located on the top shelf goes off automatically.

LED Indicators on the Top Shelf



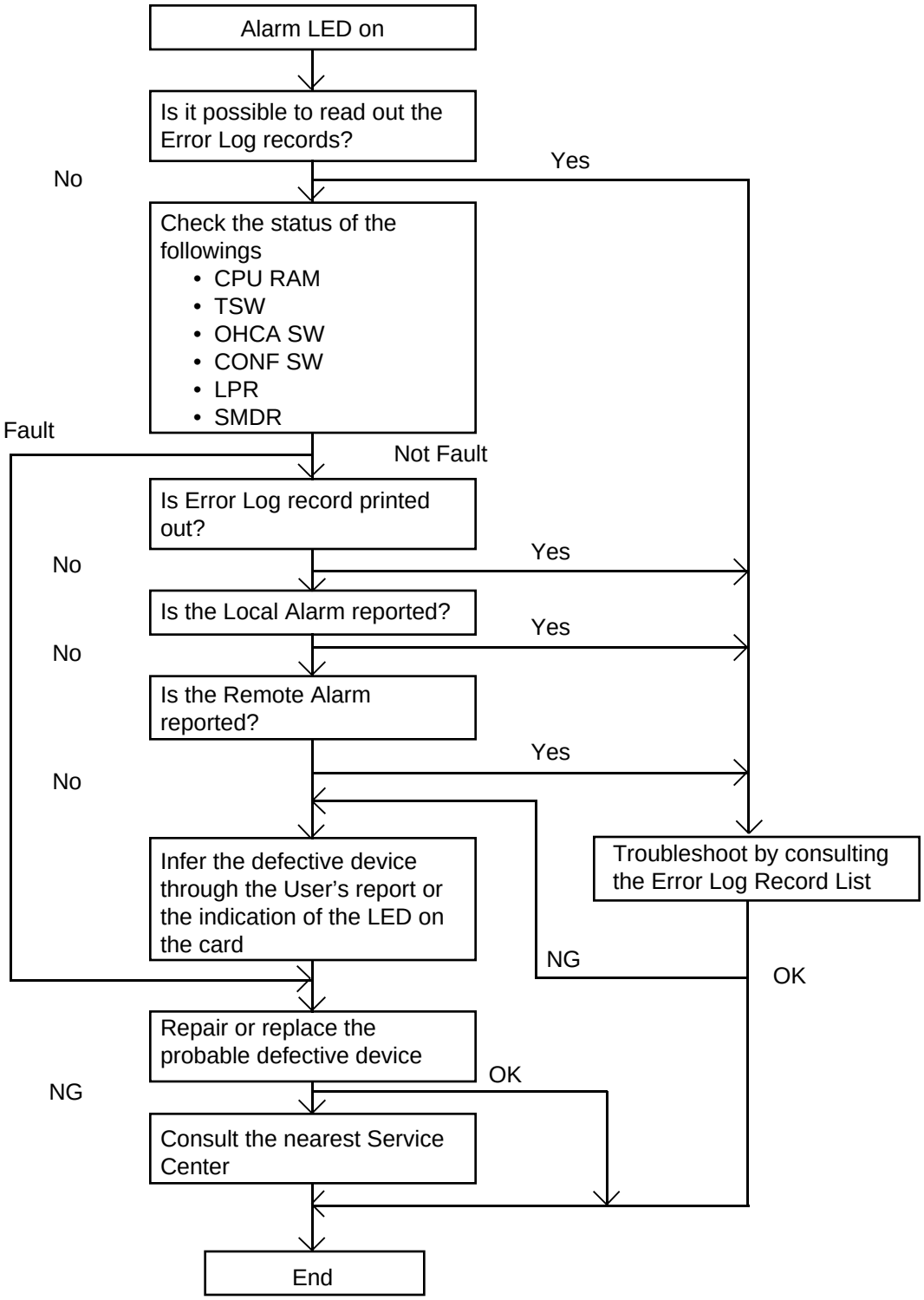
LED indicators on the CPU card



Location of LED Indicators on the Card

Alarm LED on the Top Shelf	LED on the Card	Possible contents	Error Code
ON	ON (CPU<1>)	System Down	None
	ON (CPU<2>)	RAM	0Axx
		Calendar	0700
		Backup Battery	0C00
	ON (TSW)	Clock	0300
		Progress Tone	0600
		Optional Conference TSW	0900
		OHCA TSW	D000
		DTMF G/R for test	FFFF
	ON (LPR)	Link	10xx
		Card Type Error	21xx
		ROM	11xx
		RAM	12xx
		MODEM	14xx
	None	Card is not installed	13xx
		AC/DC Power Supply	0410 0500 0510
		SMDR Communication	0B00

Troubleshooting via the LED indicators



3.00 Troubleshooting via Error Log Records

3.01 Error Log Record List

Background Diagnostic Errors

ERR CODE	Sever-ity	AUTOMATIC FAILURE REPORT (SMDR) MESSAGE	LOCAL ALARM MESSAGE		COMMENTS
			ATT	PITS	
0100	MJ				WDT overflow
0200	MJ				soft timer overflow
0300	MJ	TSW clock down	TSW Clock Down	TSW DWN	internal clock down
0301	MJ	TSW clock down	TSW Clock Down	TSW DWN	external clock down
0400	MJ	Basic shelf power down			DC power down
0410	MN	Basic shelf power down	B-Shelf POW Down	POW DWN	AC power down
050n	MJ	Expansion shelf n (1/2) power down	E-Shelf POW Down	POW DWN	DC power down
051n	MN	Expansion shelf n (1/2) power down	E-Shelf POW Down	POW DWN	AC power down
0600	MN	Progress tone failure	Tone Failure	DIAL TN	
0700	MN	Check date/time	Check Date/Time	CLCK IC	
0800	MN	Conference trunk failure	CONF TRK Failure	CONF TK	all basic trunk failure
08bb	--	Conference trunk failure			trunk failure
0900	MN	Conference trunk failure	CONF TRK Failure	CONF TK	all optional trunk failure
09tt	--	Conference trunk failure			trunk failure
0Azz	MN	System memory error	SYS Memory Error	SYS MEM	read error
	MJ	System memory error	SYS Memory Error	SYS MEM	write/read error
0B00	MN		SMDR Not Connect	SMDR	
0C00	MN	CPU RAM backup battery down	Battery Down	BATTERY	
10xx	MN	Card link failure	Card Link Failure	CRD LNK	
11xx	MN	LPR ROM checksum error	LPR ROM Failure	CRD ROM	
12xx	MN	LPR RAM failure	LPR RAM Failure	CRD RAM	
1300	MJ	Card disconnect	Card Disconnect	DISCNCT	TSW card
13xx	MN	Card disconnect	Card Disconnect	DISCNCT	
14xx	MN	Modem failure	MODEM Failure	MODEM	
20xx	--	LPR memory checksum error			loaded data failure
21xx	--	Card type error			card type error
22xx	--	LPR runaway			LPR runaway
31xx	MN	DSP-1 failure	DSP1 Failure	DSP1	E-1 card DSP failure
32xx	MN	DSP-2 failure	DSP2 Failure	DSP2	E-1 card DSP failure
33xx	MN	DSP-1 link failure	DSP1 Link Failure	DSP1 LNK	E-1 card DSP failure
34xx	MN	DSP-2 link failure	DSP2 Link Failure	DSP2 LNK	E-1 card DSP failure
50xx	--	OGM CPU runaway			OGM CPU runaway
51xx	MN	OGM lost	OGM Lost	OGM LOS	
60xx	MN	OPX power down	OPX Power Down	OPX POW	
61xx	MN	OPX power down (bell)	OPX Power Down	OPX POW	
70xx	MN	Digital trunk failure	D-Trunk Failure	D-TRK	line trouble (out of synchronization)
71xx	MN	Digital trunk failure	D-Trunk Failure	D-TRK	line trouble (RAI signal reception)

Legend:
MJ-Major Alarm
MN-Minor Alarm

72xx	MN	Digital trunk failure	D-Trunk Failure	D-TRK	line trouble (AIS signal reception)
75xx	MN	Digital trunk failure	D-Trunk Failure	D-TRK	line trouble (frame trouble)
80xx	MN	DTMF generator failure	DTMF G. Failure	DTMF G.	
9rxx	MN	DTMF receiver failure	DTMF R. Failure	DTMF R.	
Ayxx	MN	Tone detector failure	Tone Detector	TN DTCT	
Byxx	MN	HDLC failure	HDLC Failure	HDLC	
Cyxx	--	Port link failure			
D000	MN	OHCA SW failure	OHCA sw Failure	OHCA SW	
Dyxx	--	OHCA not installed			
FFFF	MN	TSW DTMF G./R. failure	TSW Failure	TSW FLT	

Legend:
MJ-Major Alarm
MN-Minor Alarm

3.02 System Reset caused by CPU Runaway (Restart Procedure)

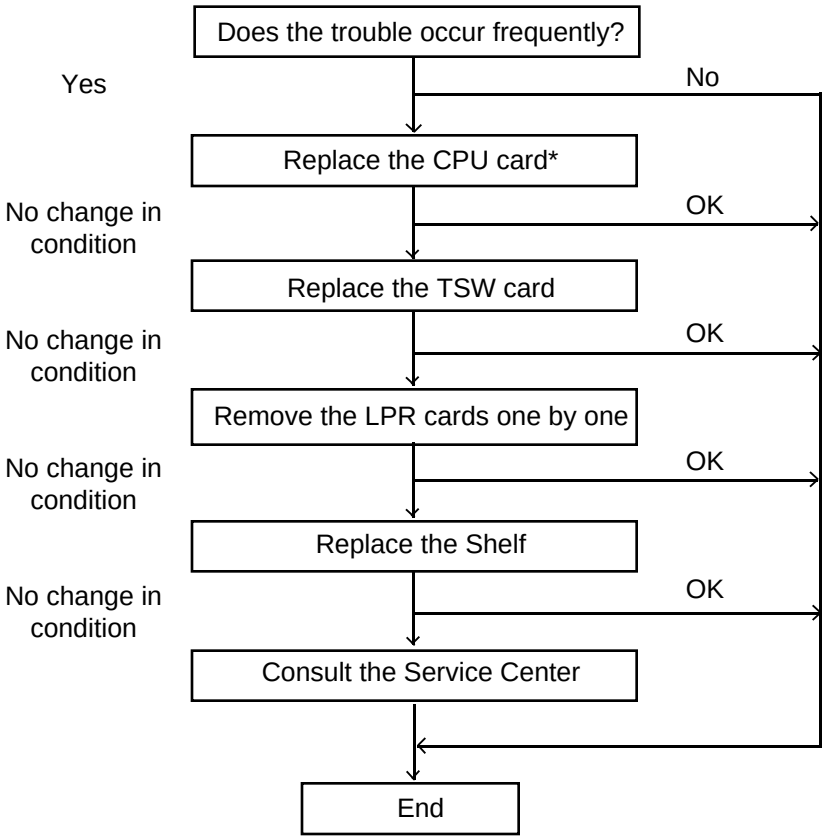
Error Code

0100 = Overflow of the watch dog timer.
0200 = Software Infinite Loop

Possible cause of the malfunction

1) External circumstance, such as introduced noise
2) Hardware is defective

Countermeasures



Note

1) If a reset occurs 16 times/in one hour due to overflow of the watch dog timer, the restart procedure is not activated and the system will be shut down. Press the RESET button to restart the procedure.

*It is recommended to have a current copy of the program on disk or tape to facilitate accurate and rapid recovery.

3.03 TSW clock down (Internal/External)

(1) Internal clock down

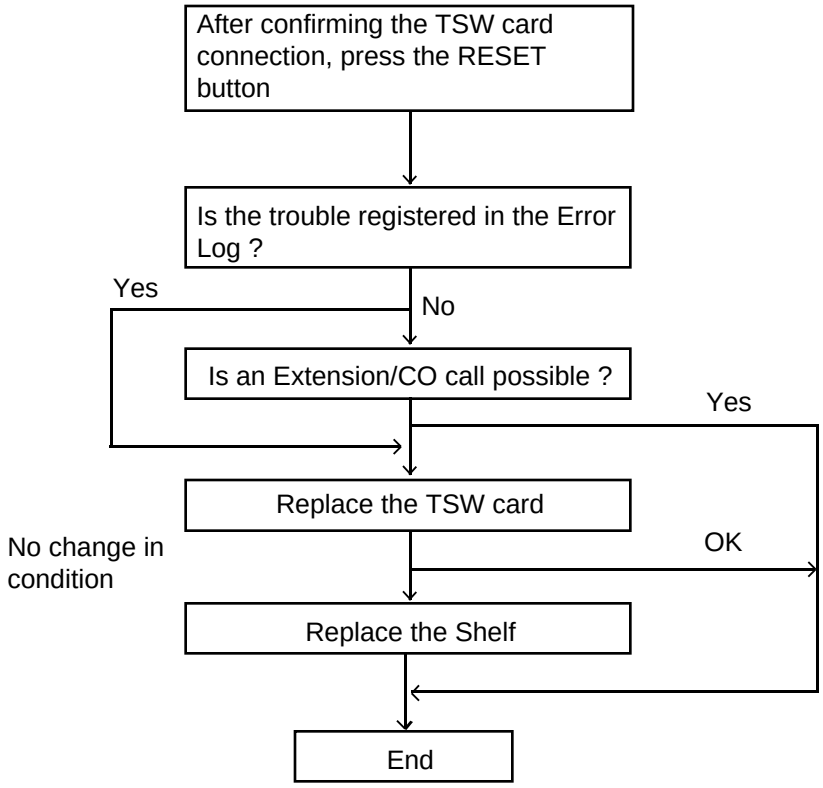
Error Code

0300

Possible cause of the malfunction

1) TSW card connection error
2) TSW card clock link failure (Internal)

Countermeasures



Note

If the TSW clock malfunction occurs:
1) The attendant console does not function.
   (Communication to the LPR becomes impossible)
2) Calling becomes impossible
3) Power Failure Transfer will be activated

(2) External clock down

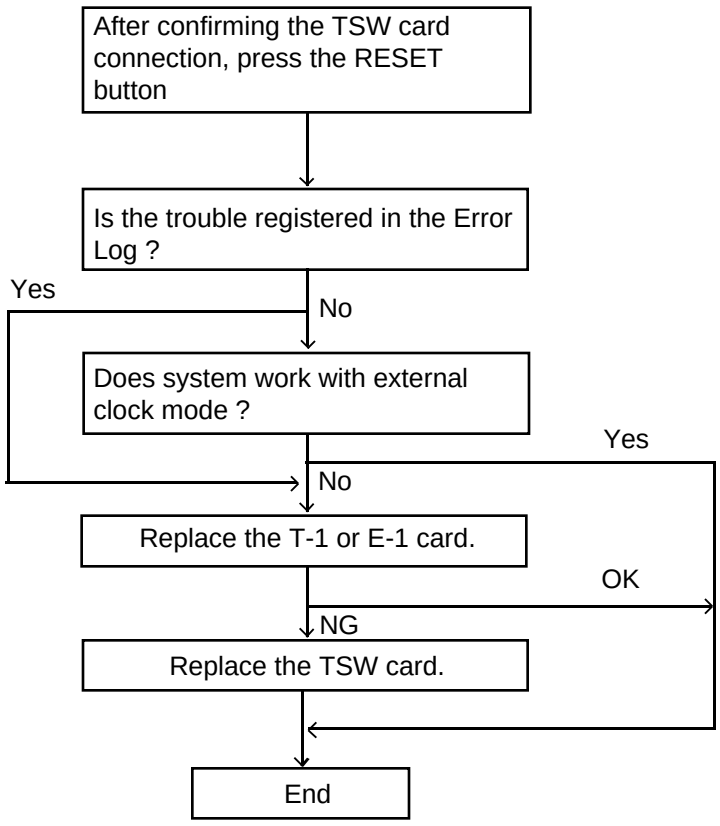
Error Code

0301

Possible cause of the malfunction

1) TSW card connection error
2) TSW card clock link failure (External)
"TSW external clock down "has occurred, and the T-1 or E-1 master card does not synchronize with the clock time sent from the Central office.

Countermeasures



Note

Another T-1 or E-1 card with next priority will work as a master card, if more than two T-1 or E-1 cards were registered to the system by CLP command (Refer to Section 64.03) beforehand. Otherwise, the system will synchronize with the system internal clock.

3.04 Basic shelf power down (DC)

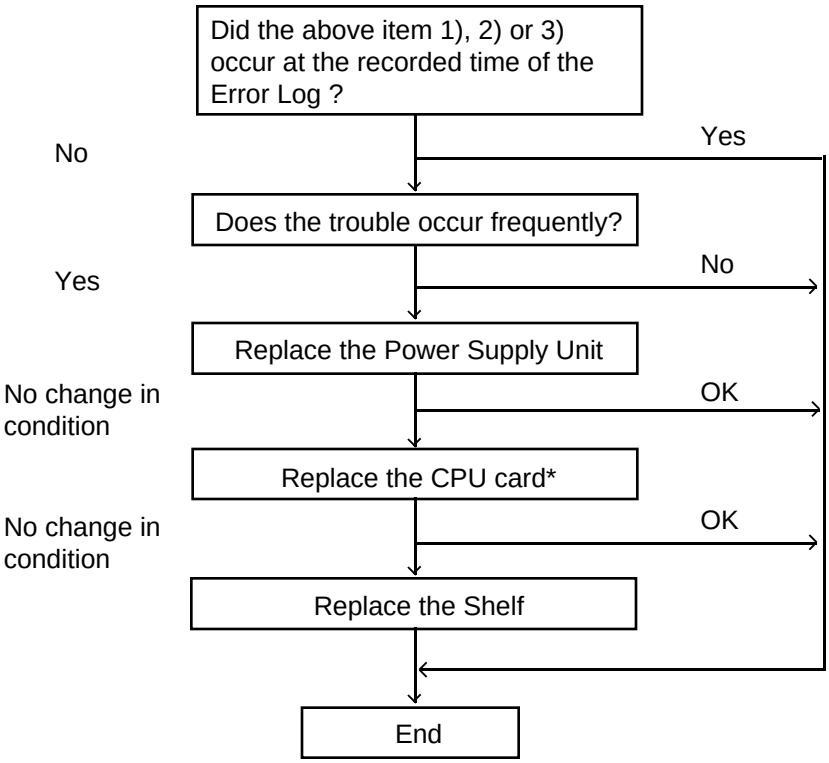
Error Code

0400

Possible cause of the malfunction

1) AC power cord is unplugged
2) Power Failure
3) Power Switch is turned off
4) Malfunction in the Power Supply Unit of the Basic Shelf, or the trouble with the Power Supply System (Backboard, CPU card) of the Shelf

Countermeasures



Note

*It is recommended to have a current copy of the program on disk or tape to facilitate accurate and rapid recovery.

3.05 Basic shelf power down (AC)

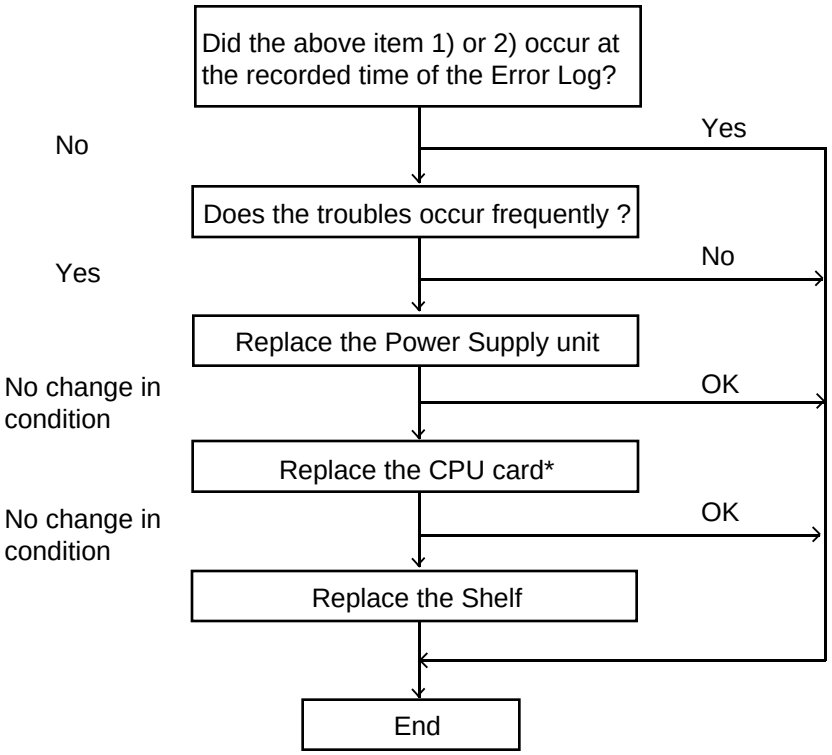
Error Code

0410

Possible cause of the malfunction

1) AC power cord is unplugged
2) Power Failure
3) Malfunction of Power Unit of the Basic Shelf or Power Supply System (Backboard, CPU card) failure of the Shelf.

Countermeasures



Note

1) It is desirable to store the system programming data on a floppy disc or tape to facilitate accurate and rapid recovery, considering the limited running time (about 3 years) of the backup battery in case the Power Failure continues for a long time.

3.06 Expansion shelf power down (DC)

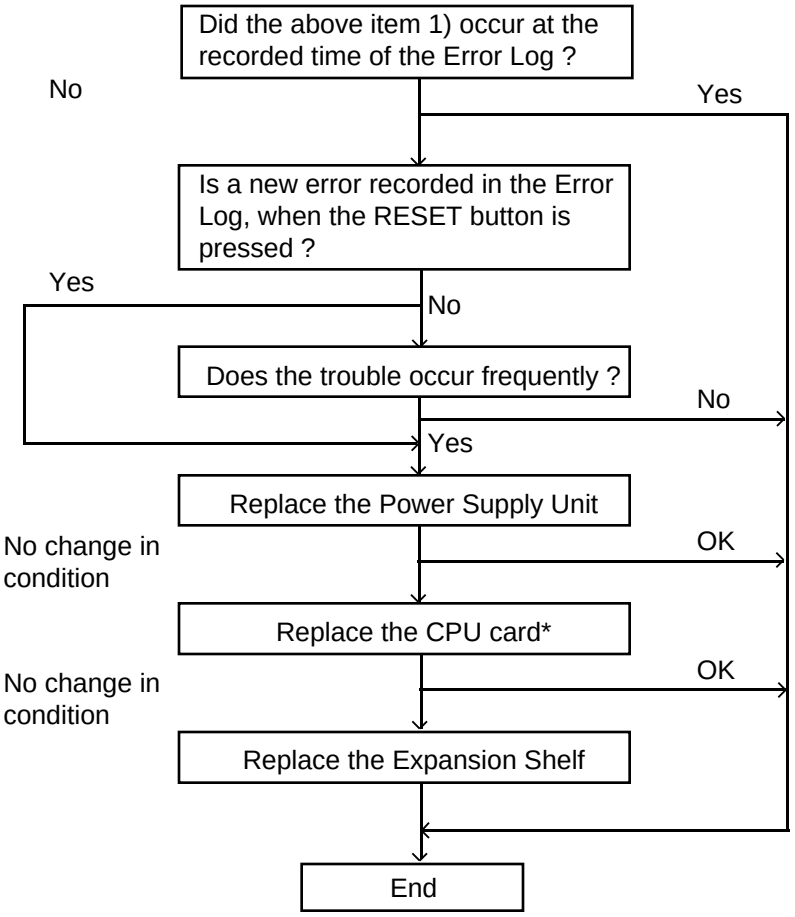
Error Code

050n
n = 1 : Expansion Shelf 1
2 : Expansion Shelf 2

Possible cause of the malfunction

1) Power switch of the Expansion Shelf n (n=1 or 2) is turned off.
2) Malfunction of Power Supply Unit of the Expansion Shelf, or trouble with the Power Supply System(Backboard, CPU card) of the shelf

Countermeasures



Note

*It is recommended to have a current copy of the program on disk or tape to facilitate accurate and rapid recovery.

3.07 Expansion shelf power down (AC)

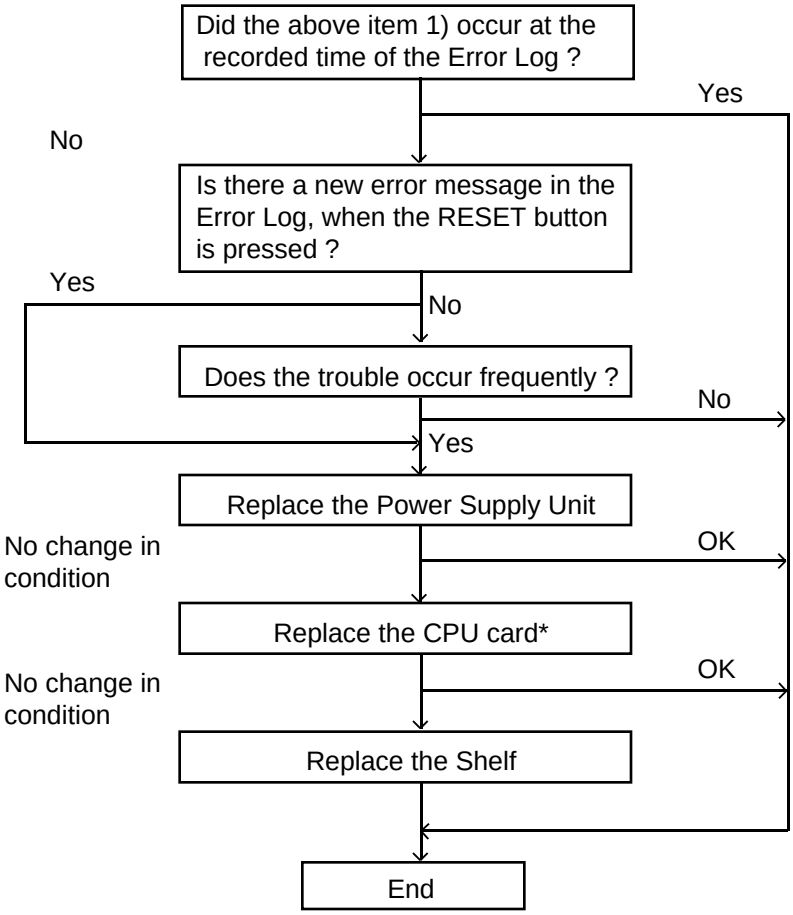
Error Code

051n
n = 1 : Expansion Shelf 1
2 : Expansion Shelf 2

Possible cause of the malfunction

1) Power failure
2) Power Supply Unit malfunction of the Expansion Shelf n (n=1 or 2), or trouble with the Power Supply System (Backboard, CPU card) of the Shelf

Countermeasures



Note

*It is recommended to have a current copy of the program on disk or tape to facilitate accurate and rapid recovery.

3.08 Progress tone failure (TSW card)

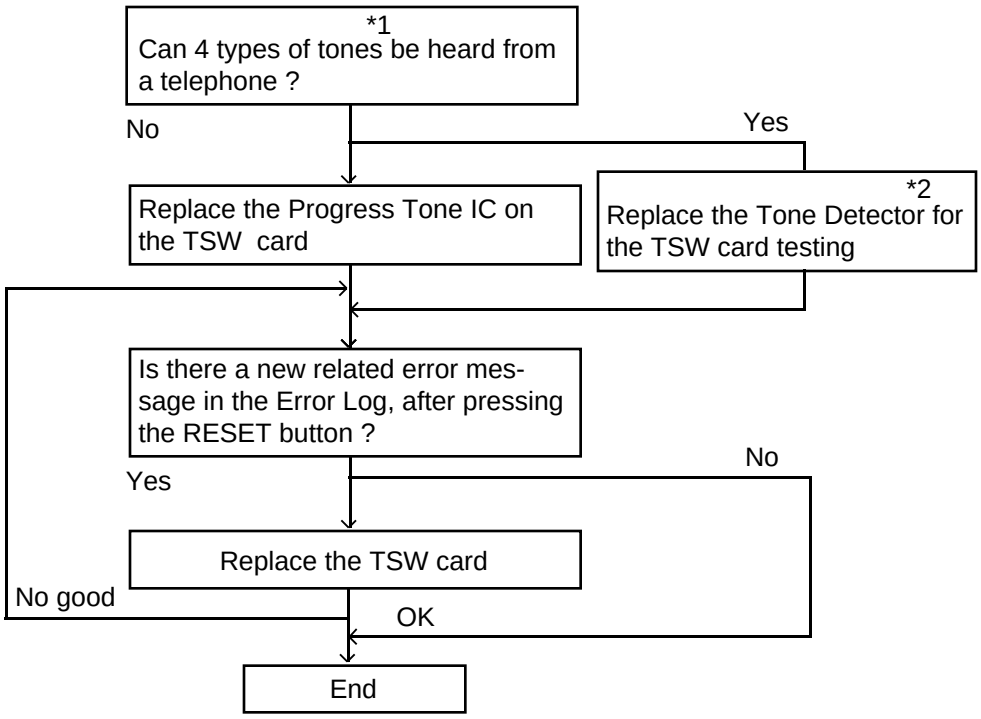
Error Code

0600

Possible cause of the malfunction

1) Defective progress tone IC on the TSW card
2) Defective Tone Detector on the TSW card

Countermeasures



Note

1) Unless the Call Progress Tone failure is cleared, the following item is not executed
   - Tone Detector for the DISA / AGC card

*1.Refer to Section 3-B “Basic Features” for details about the 4 types of tones
*2.Consult the nearest service center

3.09 Check date / time (Real Time Clock IC)

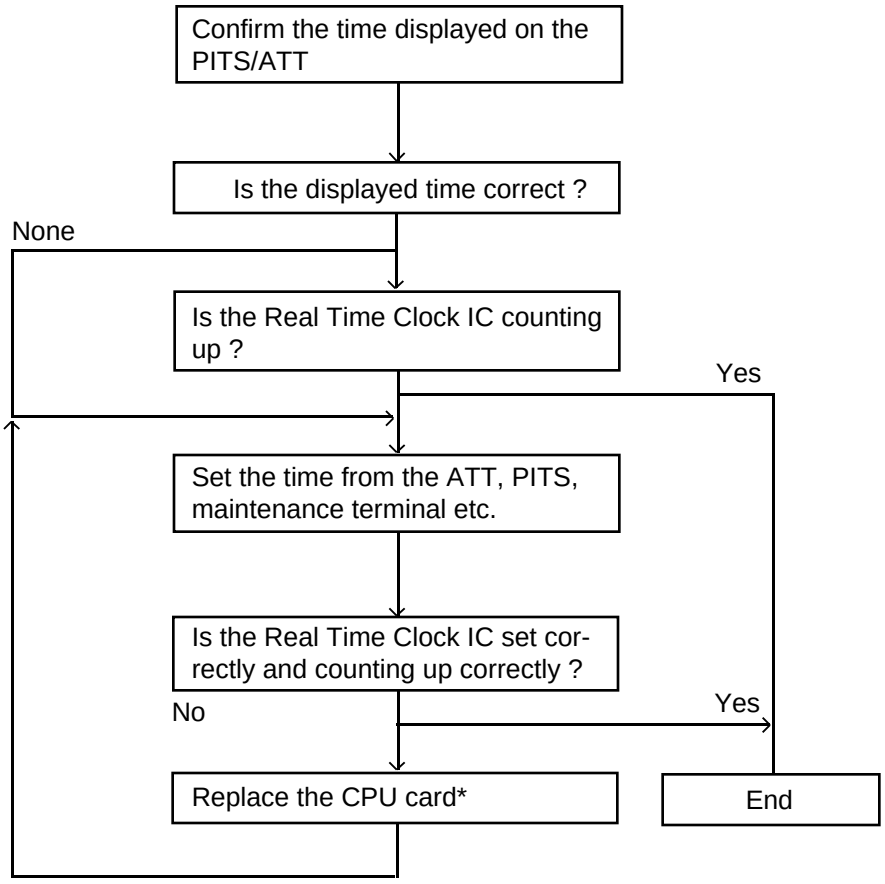
Error Code

0700

Possible cause of the malfunction

1) Count up of the Real Time Clock IC is stopped
2) Variances between the CPU clock and the calender clock became greater than ±30 minutes per 12 hours

Countermeasures



Note

*It is recommended to have a current copy of the program on disk or tape to facilitate accurate and rapid recovery.

3.10 Conference trunk failure (Basic)

Error Code

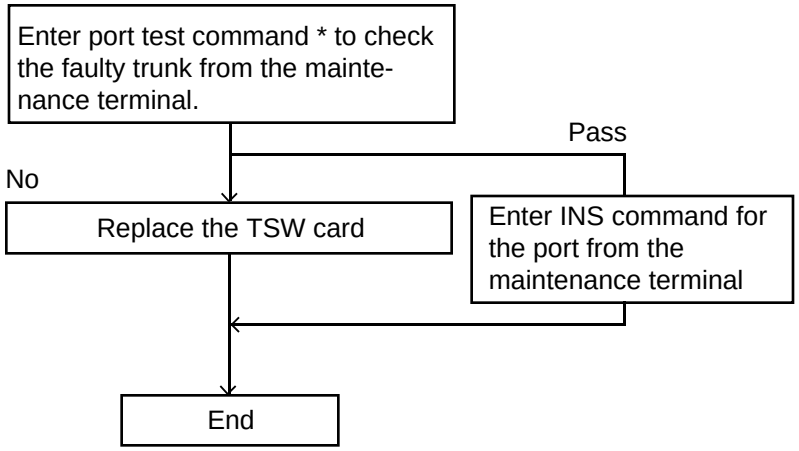
080x

x= 0 : for all basic conference trunks (1 to 8)
1 to 8 : for individual basic conference trunk 1 to 8

Possible cause of the malfunction

1) Basic conference trunk on TSW card failure.

Countermeasures



Note

* Refer to Section 14-F-4.03 “Port Test procedure.”

3.11 Conference trunk failure (Option)

Error Code

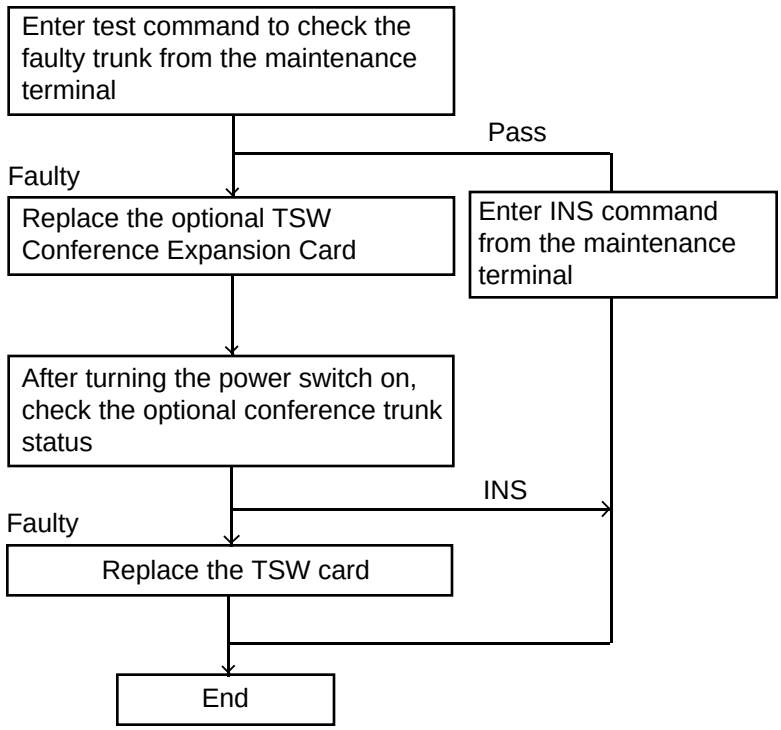
09 xx

xx= 00 : for all optional conference trunks (01 to 64).
01 to 64 : for individual optional conference trunk 01 to 64.

Possible cause of the malfunction

1) Optional TSW Conference Expansion card on the TSW card is defective.
2) Malfunction of the TSW card.

Countermeasures



Note

None

3.12 System memory error (Major)

Error Code

0Axx

xx= 01 : RAM IC 1

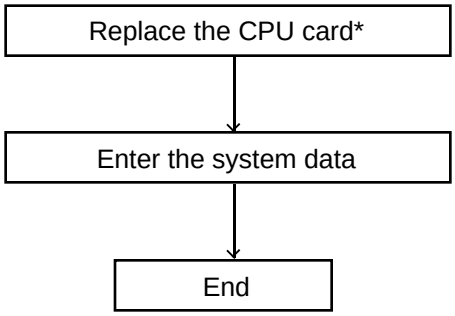
〉 〉

08 : RAM IC 8

Possible cause of the malfunction

1) RAM IC of the CPU card failure.
(Including Input/Output bus)

Countermeasures



Note

*It is recommended to have a current copy of the program on disk or tape to facilitate accurate and rapid recovery.

3.13 System memory error (Minor)

Error Code

0Axx

xx= 01 : RAM IC 1

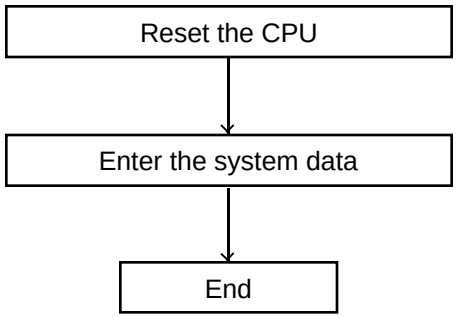
〃 〃

08 : RAM IC 8

Possible cause of the malfunction

1) Intermittent defect of RAM IC on the CPU card.
   (Including Input/Output bus)
2) Introduced noise.

Countermeasures



Note

None

3.14 Device not connect for SMDR

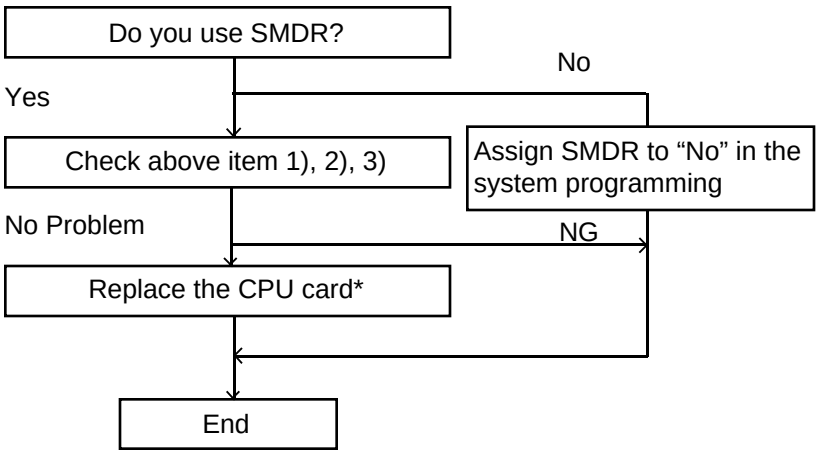
Error Code

0 B 0 0

Possible cause of the malfunction

1) RS-232C cable is not connected.
2) RS-232C cable is defective.
3) Printer is turned off. (including out of paper)

Countermeasures



Note

*It is recommended to have a current copy of the program on disk or tape to facilitate accurate and rapid recovery.

3.15 CPU RAM backup battery down

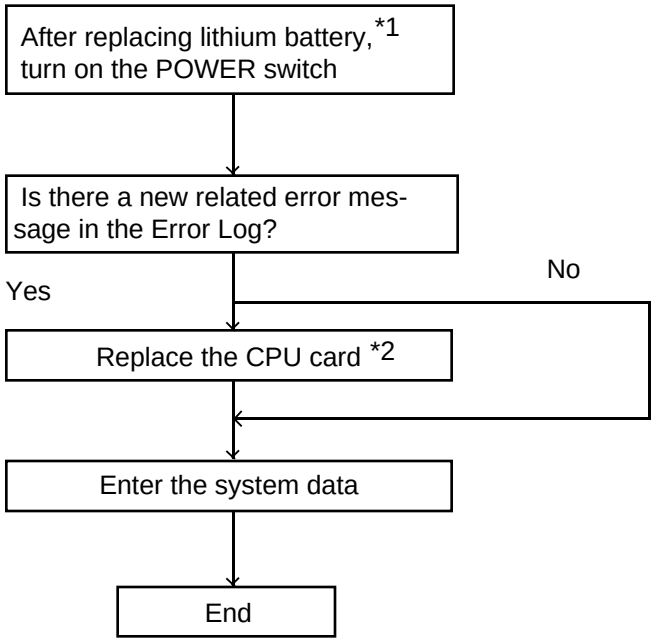
Error Code

0C00

Possible cause of the malfunction

1) Defective rechargeable lithium battery on the CPU card
2) Defective CPU card

Countermeasures



Note

*1.Consult the nearest service center
*2.It is recommended to have a current copy of the program on disk or tape to facilitate accurate and rapid recovery.

3.16 Card link failure (LPR)

Error Code

10xx

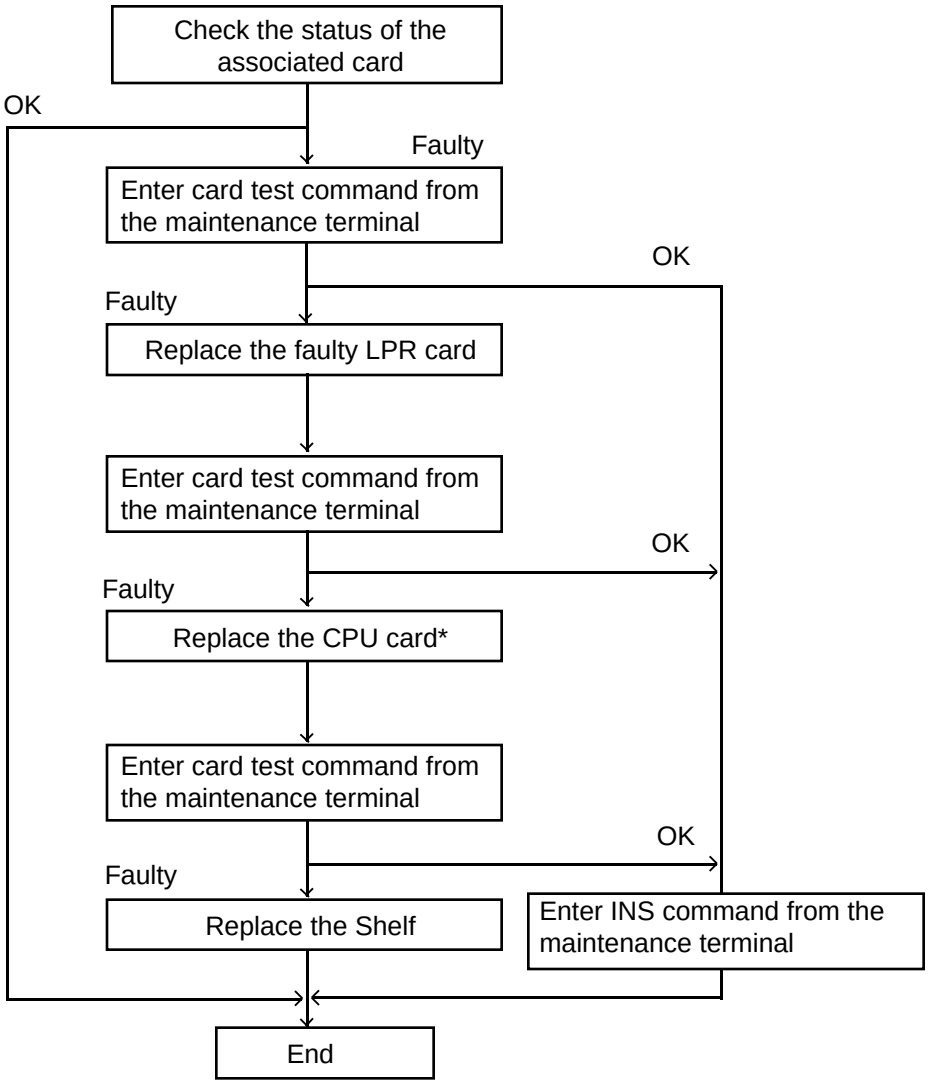
xx= 01 to 42 : Slot number

01 to 12	Basic Shelf
13 to 27	Expansion Shelf 1
28 to 42	Expansion Shelf 2

Possible cause of the malfunction

1) Defective FIFO (First In First Out) trouble in LPR.
2) Input/Output trouble (CPU card, Shelf).

Countermeasures



Note

*It is recommended to have a current copy of the program on disk or tape to facilitate accurate and rapid recovery.

3.17 LPR ROM checksum error

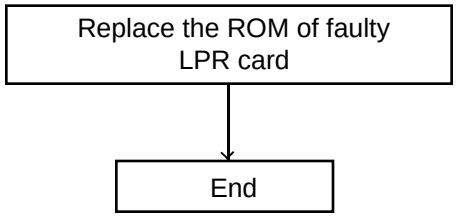
Error Code

11xx
xx= 01 to 42 : Slot number

Possible cause of the malfunction

1) LPR ROM checksum error

Countermeasures



Note

None

3.18 LPR RAM failure

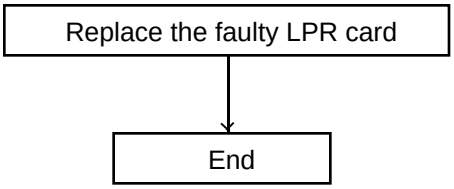
Error Code

12xx
xx= 01 to 42 : Slot number

Possible cause of the malfunction

1) LPR RAM failure

Countermeasures



Note

None

3.19 Card disconnect

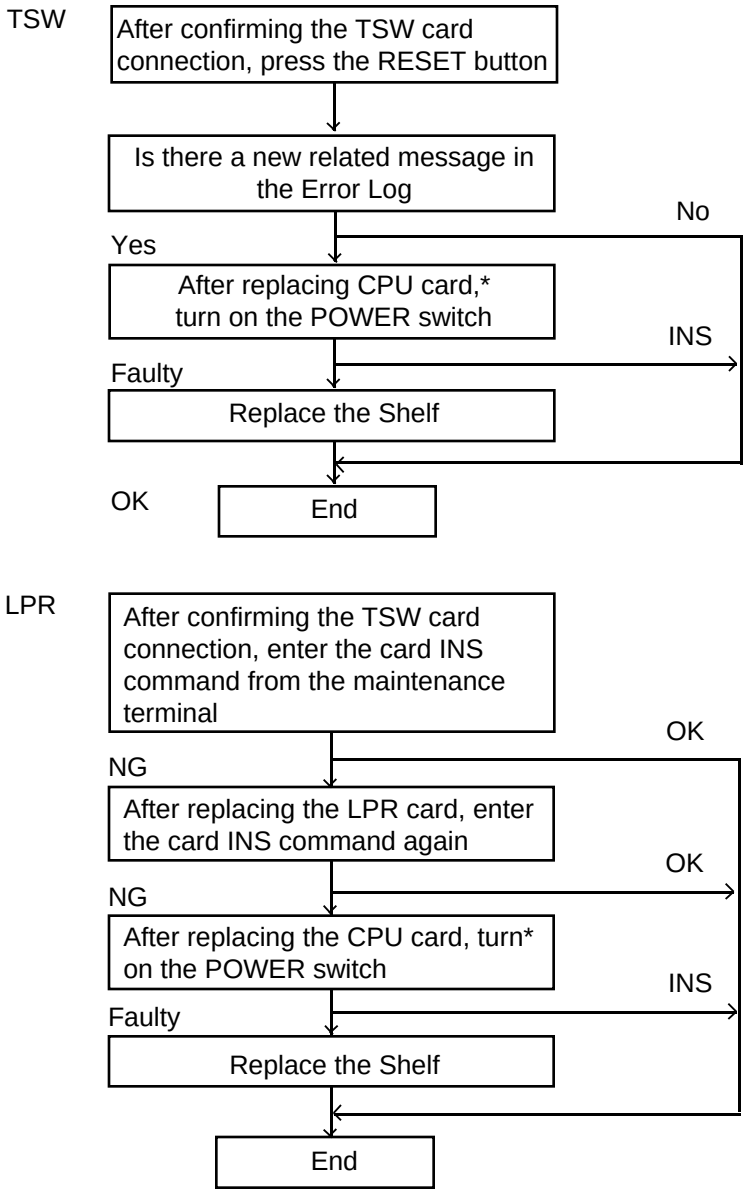
Error Code

13xx
xx= 00 : TSW
01 to 42 : Slot number

Possible cause of the malfunction

1) Card connection error
2) Defective CPU card

Countermeasures



Note

*It is recommended to have a current copy of the program on disk or tape to facilitate accurate and rapid recovery.

3.20 Modem failure (RMT card)

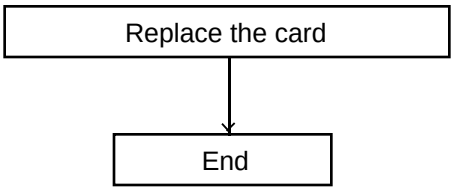
Error Code

14xx
xx= 01 to 42 : Slot number

Possible cause of the malfunction

1) Modem failure

Countermeasures



Note

None

3.21 LPR memory checksum error

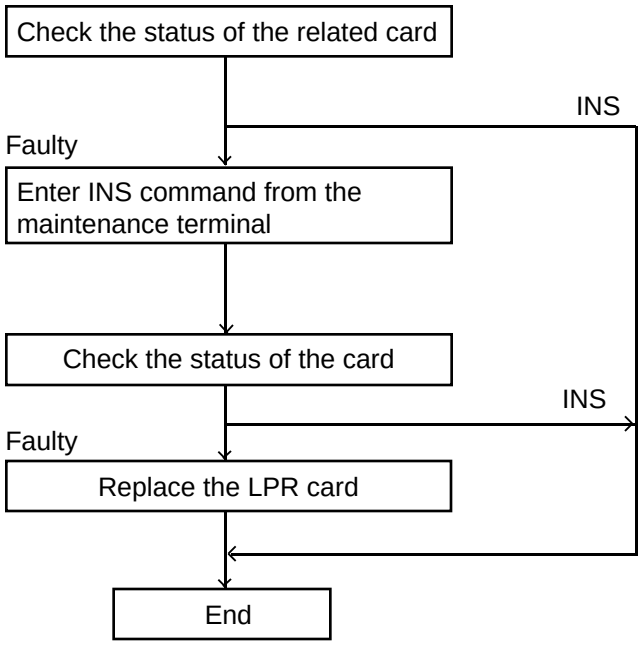
Error Code

20xx.
xx= 01 to 42 : Slot number

Possible cause of the malfunction

1) Defective LPR RAM

Countermeasures



Note

None

3.22 Card type error (LPR)

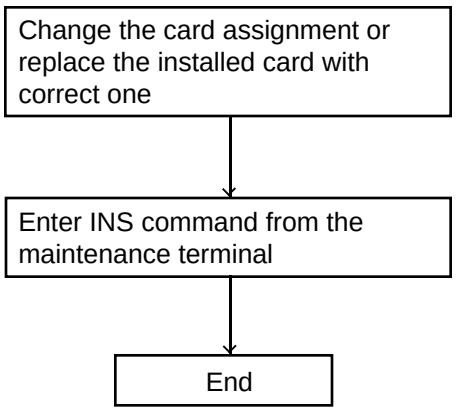
Error Code

21xx.
xx= 01 to 42 : Slot number

Possible cause of the malfunction

1) Assigned card type doesn't correspond to the installed card type.

Countermeasures



Note

None

3.23 LPR runaway

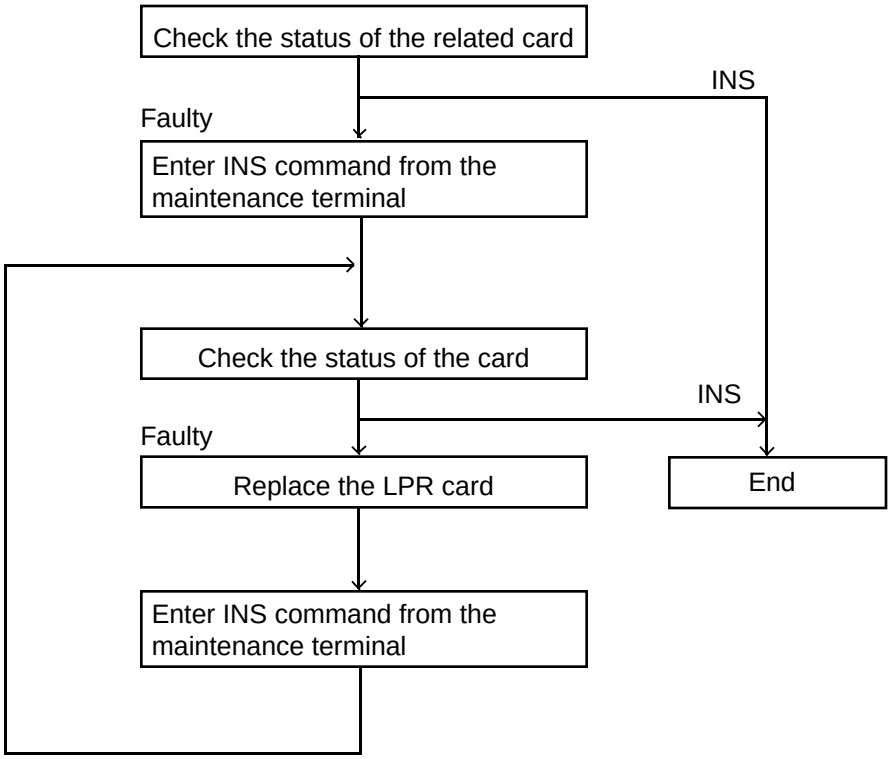
Error Code

22xx
xx= 01 to 42 : Slot number

Possible cause of the malfunction

1) LPR is reset

Countermeasures



Note

None

3.24 OGM CPU runaway (DISA)

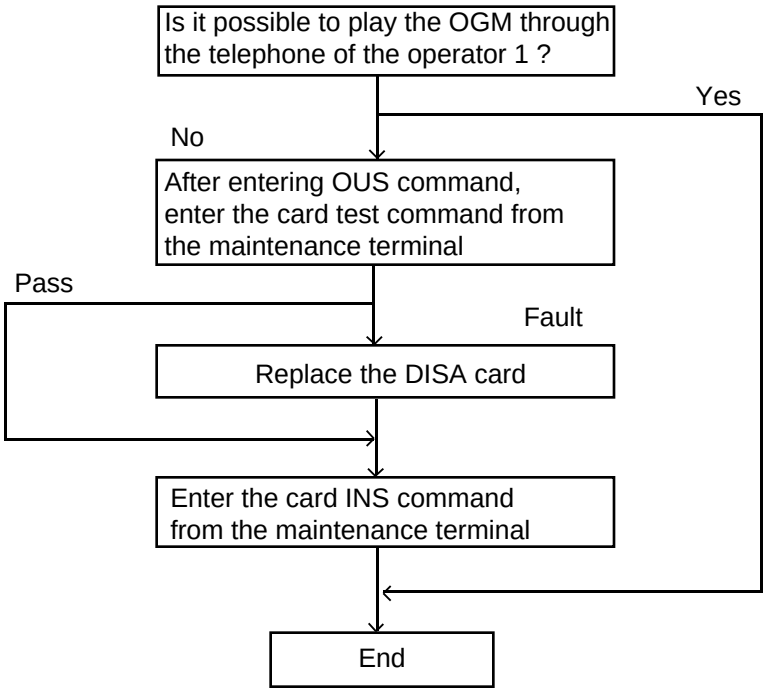
Error Code

50 xx
xx= 01 to 42 : Slot number

Possible cause of the malfunction

1) Runaway of the OGM (CPU) of the DISA card

Countermeasures



Note

None

3.25 OGM lost (DISA)

Error Code

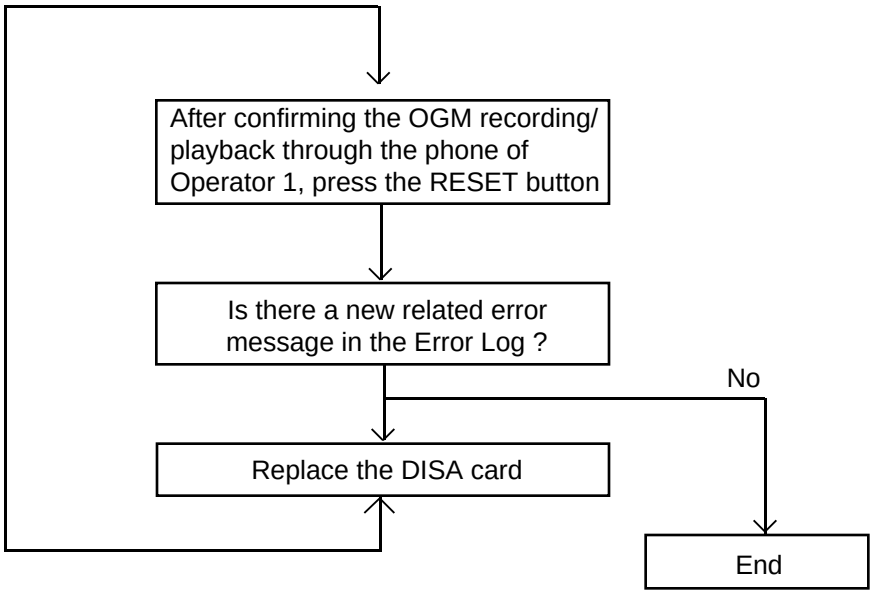
51xx

xx= 01 to 42 : Slot number

Possible cause of the malfunction

1) Power failure or power-off for long duration (6~7 days).
2) Defective backup battery for DISA card.
3) OGM was not recorded after the installation.

Countermeasures



Note

None

3.26 OPX power down

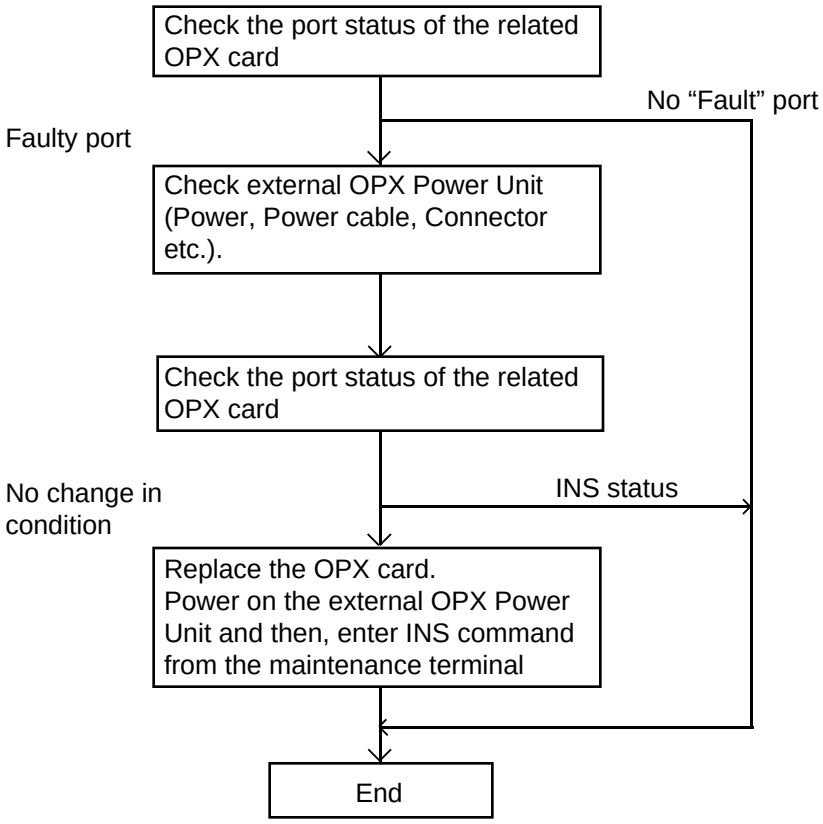
Error Code

60 xx
xx= 01 to 42 : Slot number

Possible cause of the malfunction

1) Power-off of external OPX Power Unit.
2) Defective OPX card.

Countermeasures



Note

None

3.27 DTMF generator failure (COT card)

Error Code

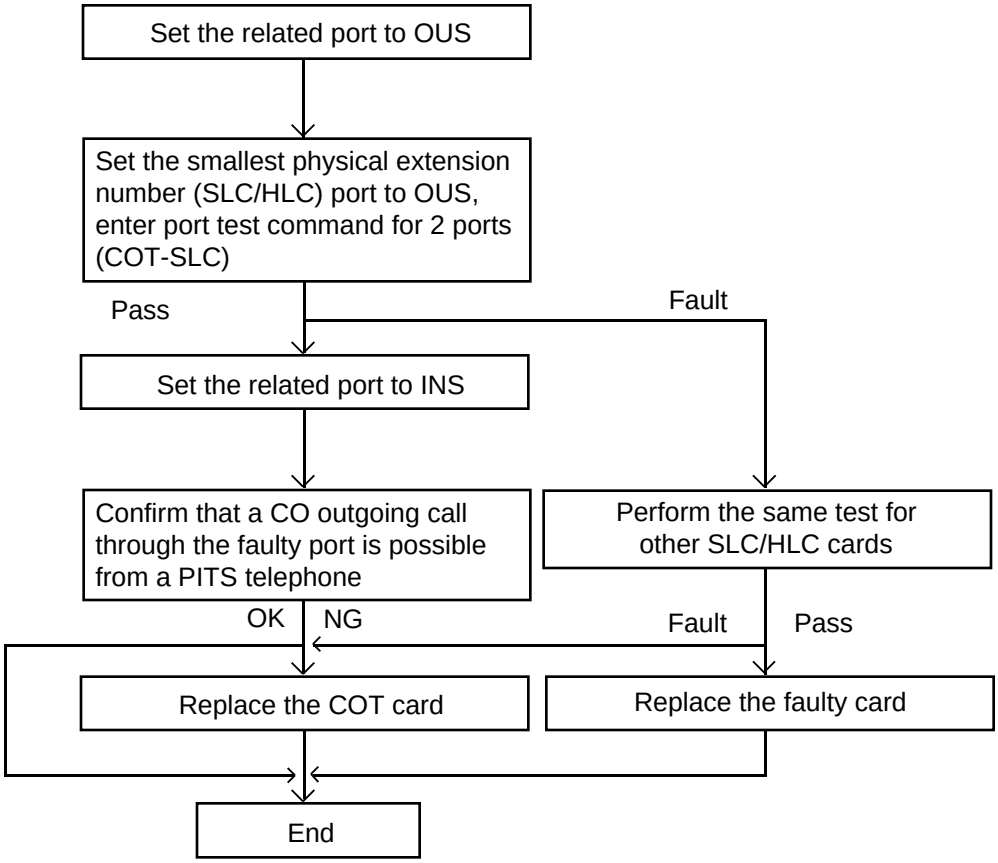
80 xx

xx= 01 to 42 : Slot number

Possible cause of the malfunction

1) DTMF generator on the LCOT/GCOT card is defective.
2) DTMF signal transmission path is defective.

Countermeasures



Note

None

3.28 DTMF receiver failure (SLC/HLC/OPX card)

Error Code

9 rxx

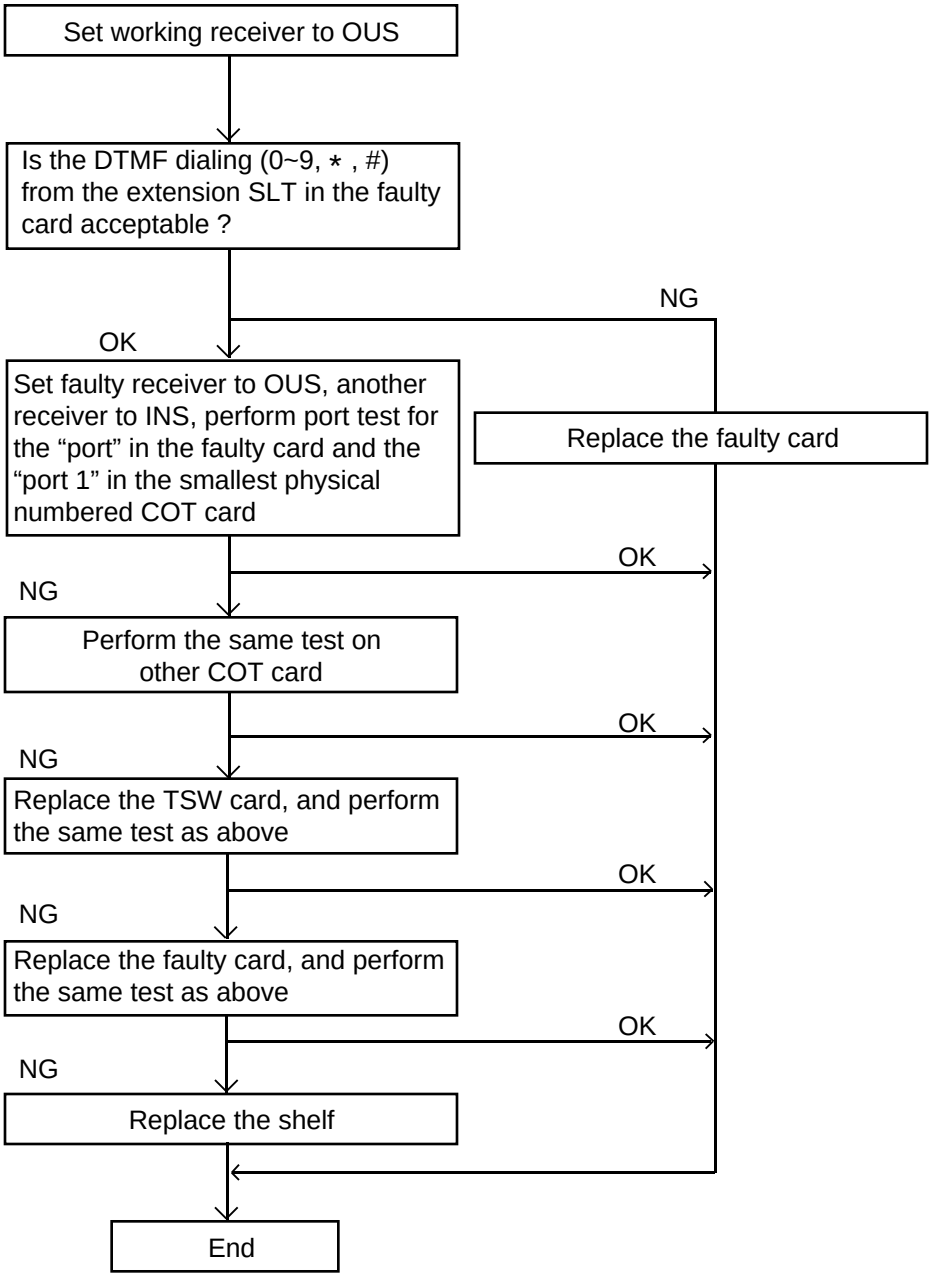
xx= 01 to 42 : Slot number

r= 1 to 2 : DTMF Receiver number

Possible cause of the malfunction

1) Defective DTMF receiver.
2) Defective path for the DTMF receiver from the faulty port.

Countermeasures



Note

None

3.29 Tone detector failure (DISA/AGC card)

Error Code

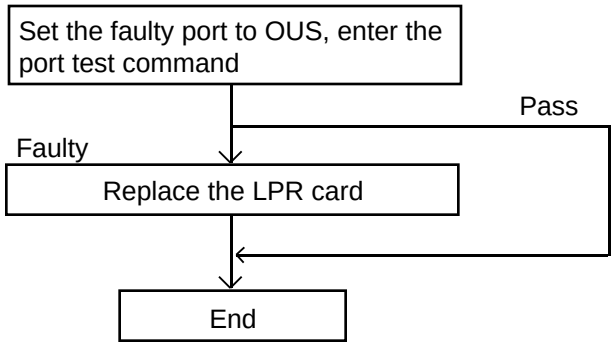
A yxx

xx= 01 to 42 : Slot number
y= 1 to 4 : Port number

Possible cause of the malfunction

1) Tone detector failure
2) Defective tone receiving path from the faulty port.

Countermeasures



Note

None

3.30 HDLC failure (ATLC card)

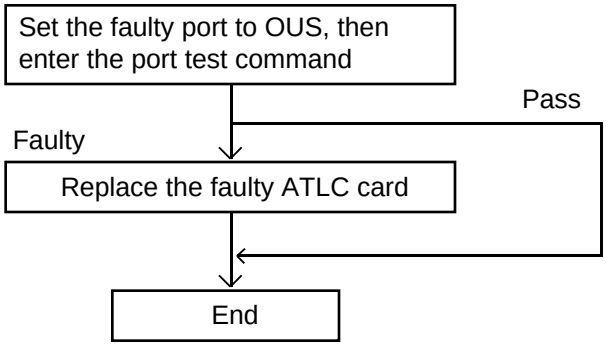
Error Code

B yxx
xx= 01 to 42 : Slot number
y= 1 to 2 : Port number

Possible cause of the malfunction

1) Defective HDLC IC

Countermeasures



Note

None

3.31 Port link failure (ATT/DPH)

Error Code

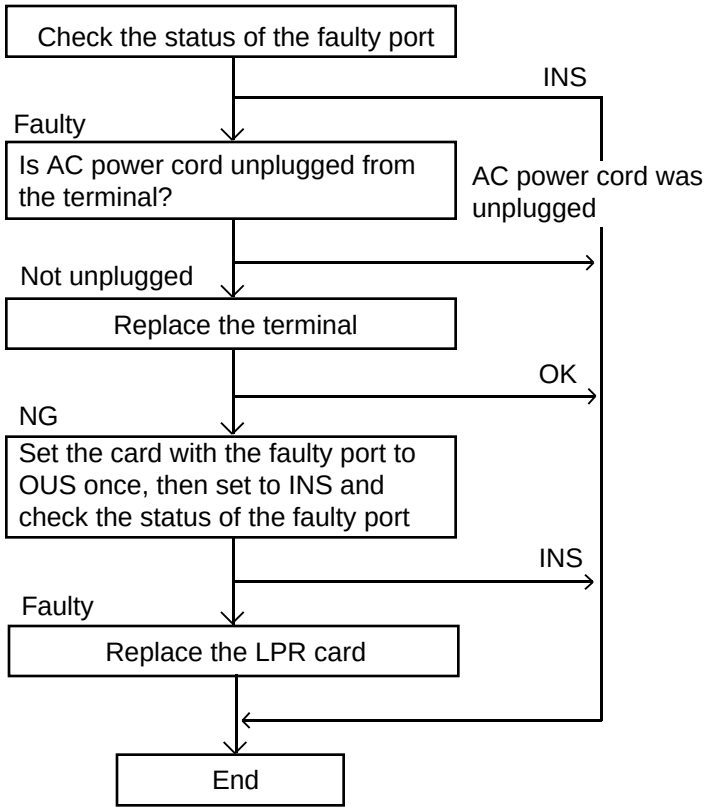
C yxx

xx= 01 to 42 : Slot number
y= 1 to 8 : Port number

Possible cause of the malfunction

1) Communication disconnection due to unplugged terminal etc.

Countermeasures



Note

None

3.32 OHCA SW failure (TSW card)

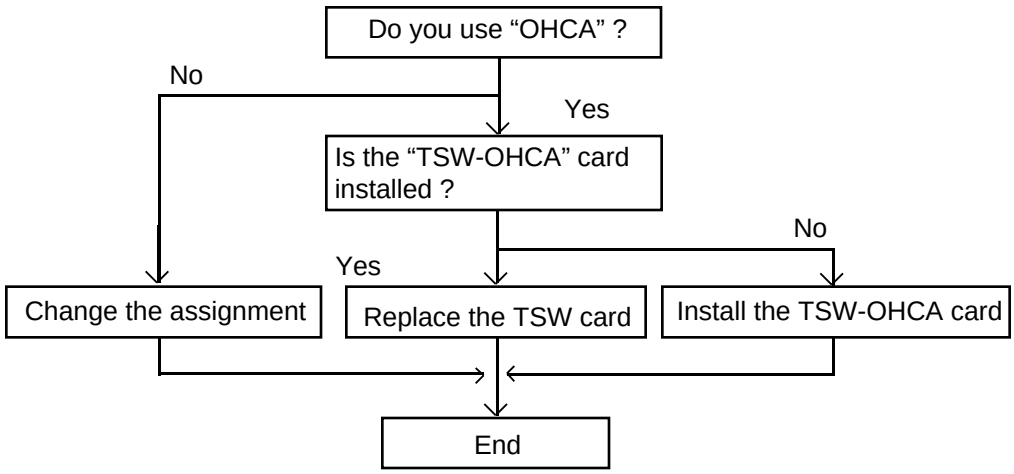
Error Code

D 000

Possible cause of the malfunction

1) “OHCA” is assigned to BS02 in the slot assignment, but TSW-OHCA card (KX-T336105) is not installed

Countermeasures



Note

None

3.33 OHCA not installed (PLC/HLC)

Error Code

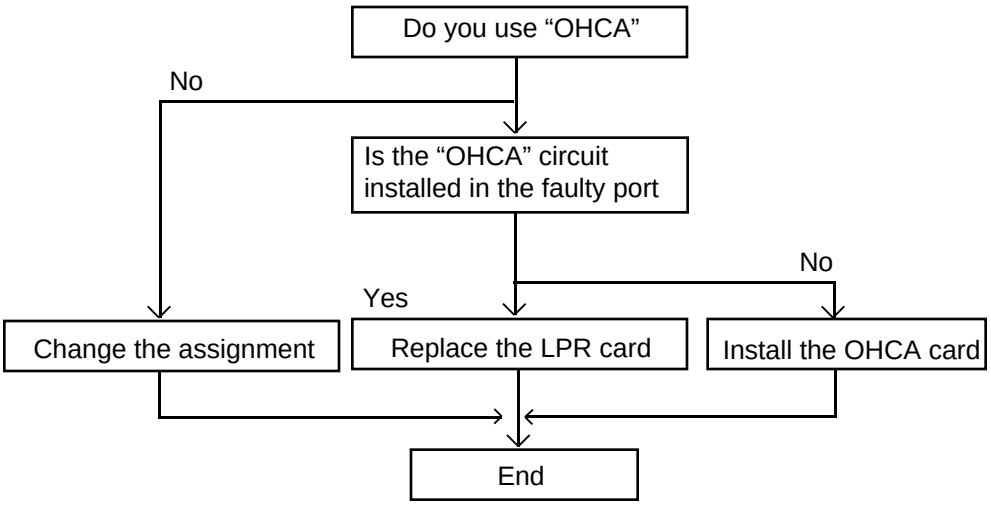
D yxx

xx= 01 to 42 : Slot number
y= 1 to 8 : Port number

Possible cause of the malfunction

1) In spite of assigning “OHCA” to “Yes” in the station programming, OHCA circuit card (KX-T96136) is not installed.

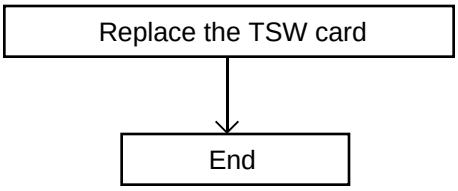
Countermeasures



Note

None

3.34 TSW DTMF G./R. failure

Error Code	FFFF
Possible cause of the malfunction	1) DTMF Generator or Receiver for test is defective
Countermeasures	
Note	None

3.35 Digital trunk failure (out of synchronization)

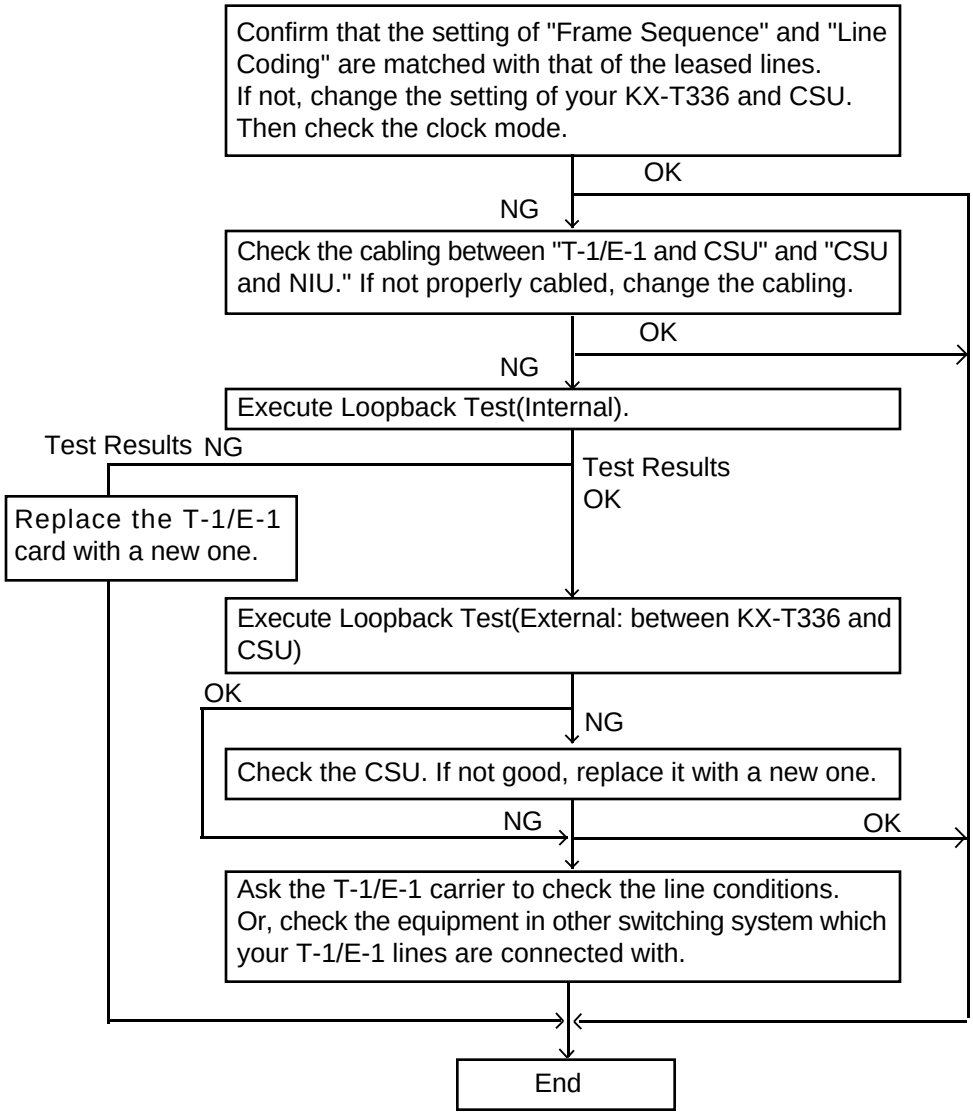
Error Code

70xx xx=01 to 42 : Slot number

Possible cause of the malfunction

T-1/E-1 card (physical number xx) lost the synchronization with the clock time sent from the Central Office.

Countermeasures



Note

Another T-1/E-1 card with next priority will work as a master card, if more than two T-1/E-1 cards were registered to the system by CLP command (Refer to Section 64.03) beforehand. Otherwise, the system will synchronize with the system internal clock.

3.36 Digital trunk failure (RAI signal reception)

Error Code	71xx xx=01 to 42 : Slot number
Possible Cause of the malfunction	T-1/E-1 card (physical number xx) received the RAI (Remote Alarm Indication) signal sent from the Central Office.
Countermeasures	Ask the T-1/E-1 carrier to check the line conditions. Or, check the equipment in other switching system which your T-1/E-1 lines are connected with.
Note	None

3.37 Digital trunk failure (AIS signal reception)

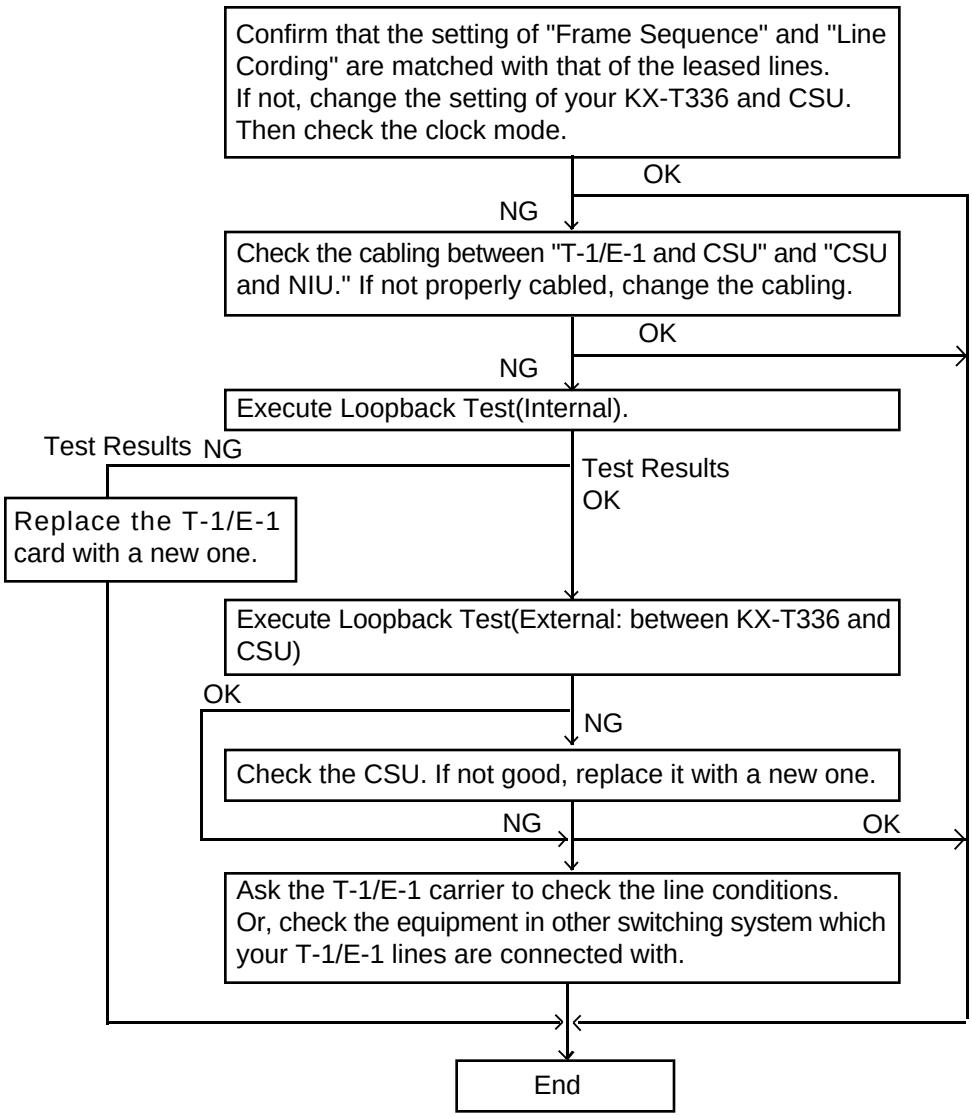
Error Code

72xx xx=01 to 42 : Slot number

Possible cause of the malfunction

T-1/E-1 card (physical number xx) received the AIS (Alarm Indication Signal) signal from the Central Office.

Countermeasures



Note

Another T-1/E-1 card with next priority will work as a master card, if more than two T-1/E-1 cards were registered to the system by CLP command (Refer to Section 64.03) beforehand. Otherwise, the system will synchronize with the system internal clock.

3.38 Digital trunk failure (frame trouble)

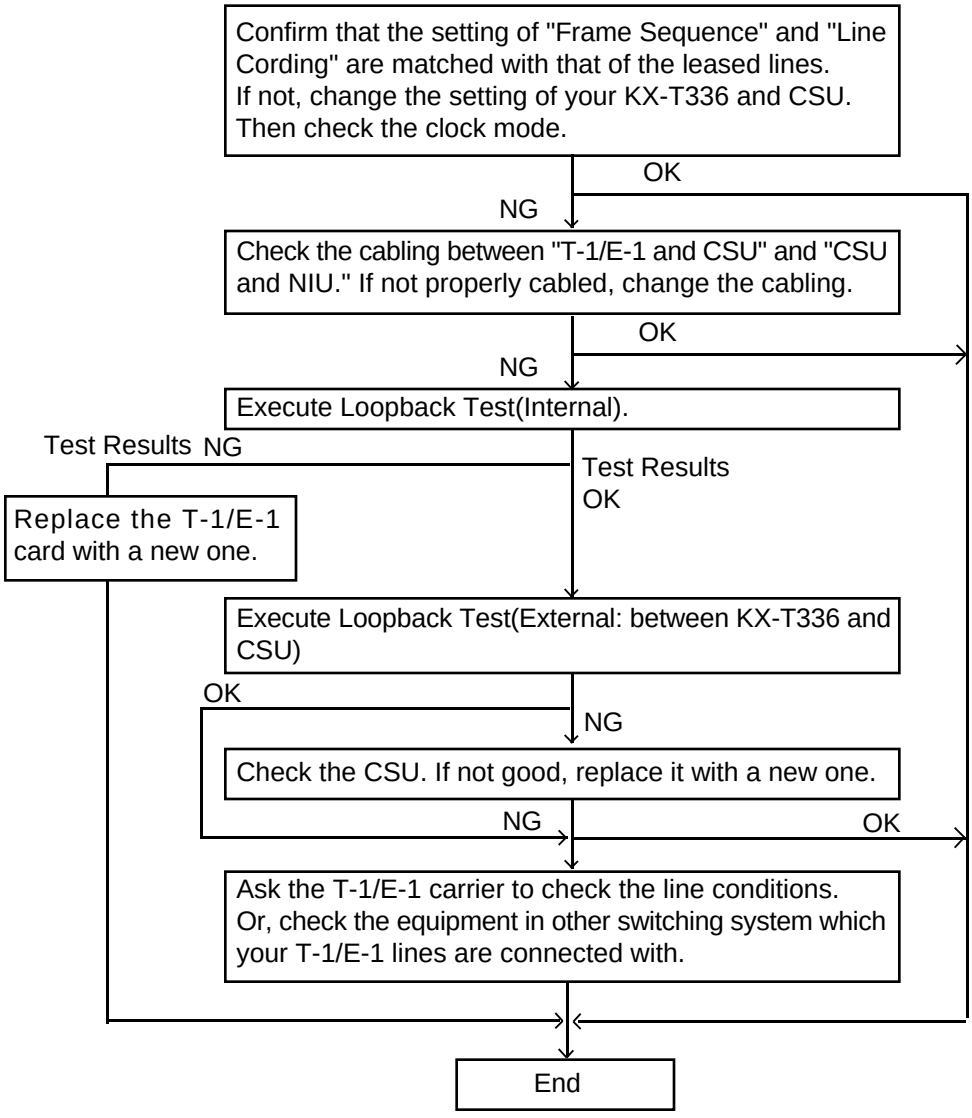
Error Code

75xx xx=01 to 42 : Slot number

Possible cause of the malfunction

On booting-up of T-1/E-1 card (physical number xx), it failed to synchronize with the clock time sent from the Central Office.

Countermeasures



Note

Another T-1/E-1 card with next priority will work as a master card, if more than two T-1/E-1 cards were registered to the system by CLP command (Refer to Section 64.03) beforehand. Otherwise, the system will synchronize with the system internal clock.

3.39 DSP Failure / DSP Link Failure

Error Code

3XYY X=1 : an option card-1 (DSP-1) error is detected in on-line mode.
X=2 : an option card-2 (DSP-2) error is detected in on-line mode.
X=3 : an option card-1 (DSP-1) error is detected during card boot-up.
X=4 : an option card-2 (DSP-2) error is detected during card boot-up.

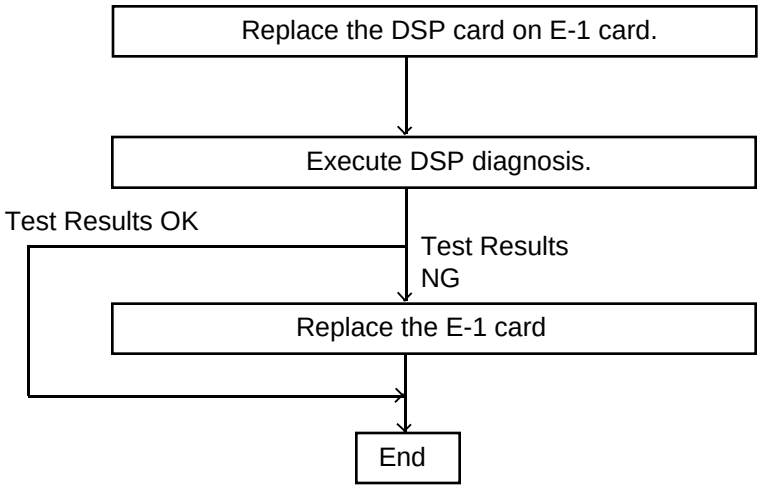
YY=01 to 42 : Slot Number

Possible cause of the malfunction

DSP Failure : Option card (DSP) does not work.

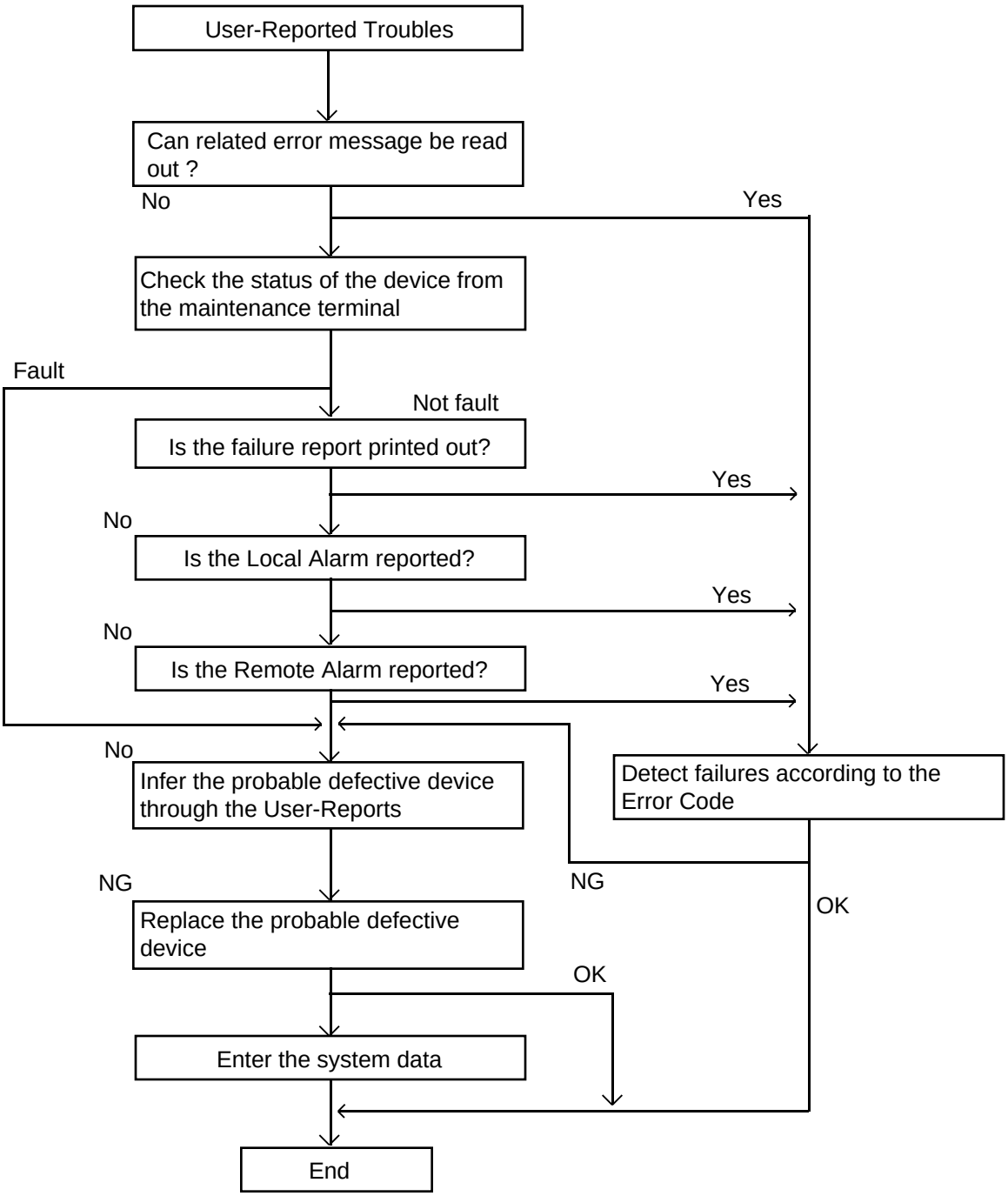
DSP Link Failure : Communication Error between Option card (DSP) and E-1 card.

Countermeasures



4.00 Troubleshooting via User-Reported Troubles

If a problem is not detected by the system, a report from the user is very useful to determine the trouble.
The basic procedure to determine the cause of the trouble according to a report from the user is shown in the following flow chart.



F. Functional Test by Entering Commands

1.00 Introduction

1. You can execute diagnostic testing during on-line communication by entering test commands at the maintenance terminal (VT220, VT100, Compatibles, Dumb terminal, Attendant Console).

2. Execute this functional test in the following cases.

   - When new devices are installed
   - When the device combination is changed
   - When system detects an alarm or an error message appears in the error log
   - When device status becomes “Fault”
   - When a number of telephone instruments don't function properly

3. There are three kinds of tests as follows.

   (a)Card Test
   If multiple numbers of extensions do not function well, you can detect whether troubles are caused by the card or the telephone instruments by this test.
   (b)Port Test
   (c) PITS and ATT (Attendant Console) Test

   * Test (b), (c) are executed to detect troubles when telephone instruments don't function well while card status is good.

4. This functional test must be done during on-line communication mode both at on-site and from a remote location. For remote access, a data terminal and modem are required at a remote location, and you must install the RMT card in the system and assign Remote Directory Number to the system in system programming operation “Remote Directory Number.”
   Refer to Section 14-B-2.00 “System Administration from a Remote Location” for details.

5. Functional test can be done only when you log in to the system by entering the 1st level password.

6. When you perform a device (shelf, card, port, resource) test, the status of the device to be tested must be changed to “Out of service” by entering the OUS command in advance.
   If an attempt is made to test a device in “INS” status, the following message appears on the screen.

   “Invalid Status”

7. You can test a device in “Fault” status.

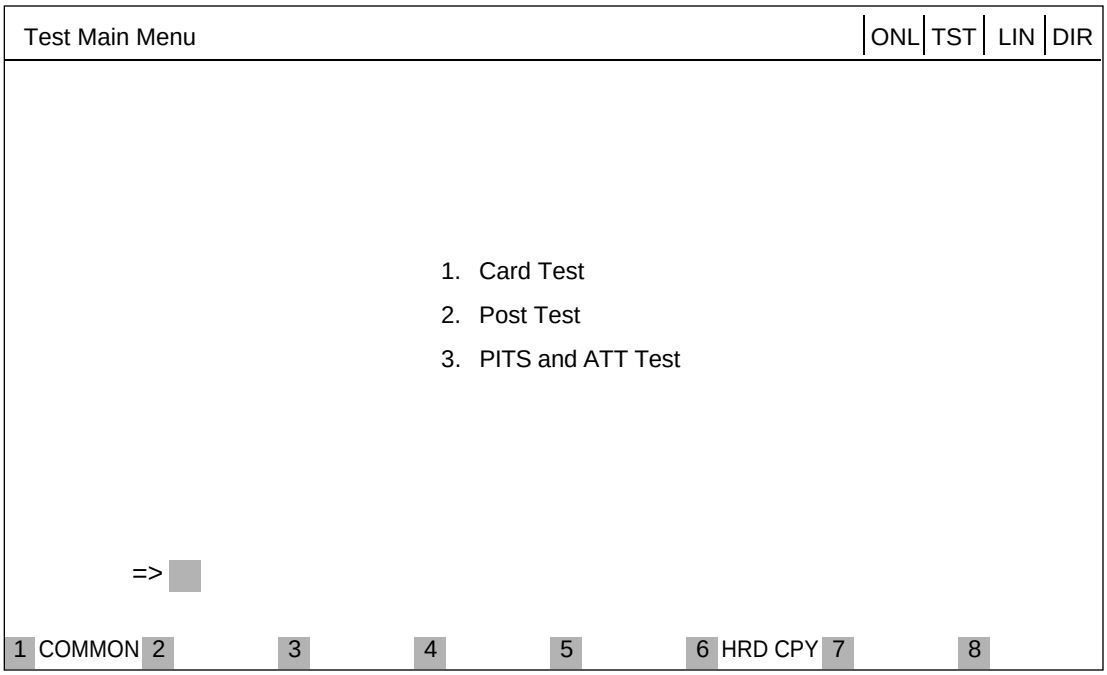
8. If the device test results in failure, first change the status of the device to “Fault” and replace it with a normal one if necessary.

9. It is impossible to execute functional test during off-line communication mode.

10. The <CANCEL>, <NEXT> or <PREV> keys do not function during the test.

2.00 Test Main Menu

From the Main Menu screen, select “2. Test”; then the following “Test Main Menu” appears on the screen.



Description

1. Card Test -------Verifies the card status.
2. Port Test --------Verifies the port status.
3. PITS and ATT Test -----Verifies the PITS and ATT(Attendant Console) status.

3.00 Testing the Cards

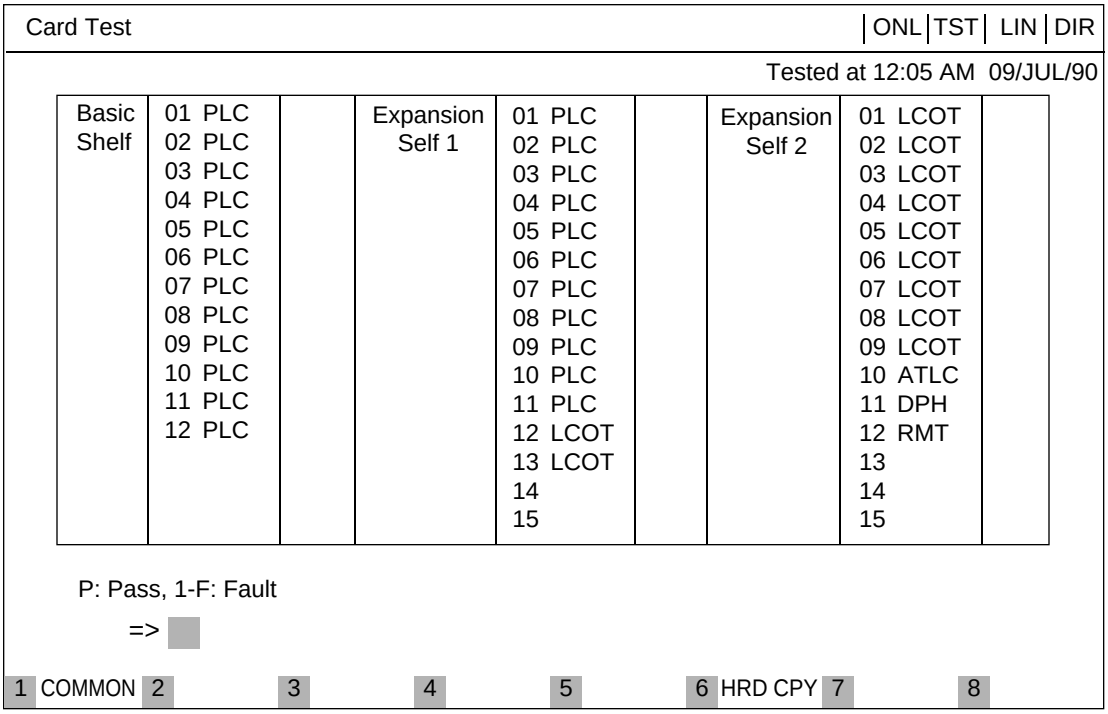
3.01 Functions to be Verified

This test verifies the status of each card for the items listed below:

Card to be verified	Item	Remarks
SLC PLC HLC LCOT GCOT DID ATLC AGC	Link Card type ROM RAM	Card to be verified should be “OUS” or “FAULT.”
OPX	Link Card type ROM RAM Power Supply	
DISA	Link Card type ROM RAM OGM Rec/Play	
RMT	Link Card type ROM RAM Modem	
DPH	Card Type	

3.02 Card Test Initial screen

From the test main menu screen, select “1. Card Test ” then the following “Card Test” initial screen appears on the screen.



(Note) In the above screen, no indication means no card is installed.

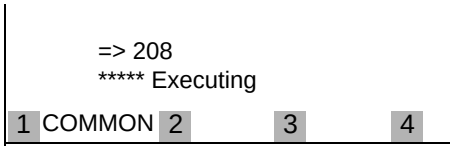
3.03 Card Test procedure

Enter the test command according to the card test format below.

```
=> x y y
   |  |  |
   |  |  Card No. (01-15, or ** )
   |  Shelf No. (1: Basic  2: Expansion 1
   |                3: Expansion 2)
```

(Note) "* " can be used as a wild card character
"* " or "** " means "All"
1** means all cards in the basic shelf

(Example)
Executing card No. 208 test



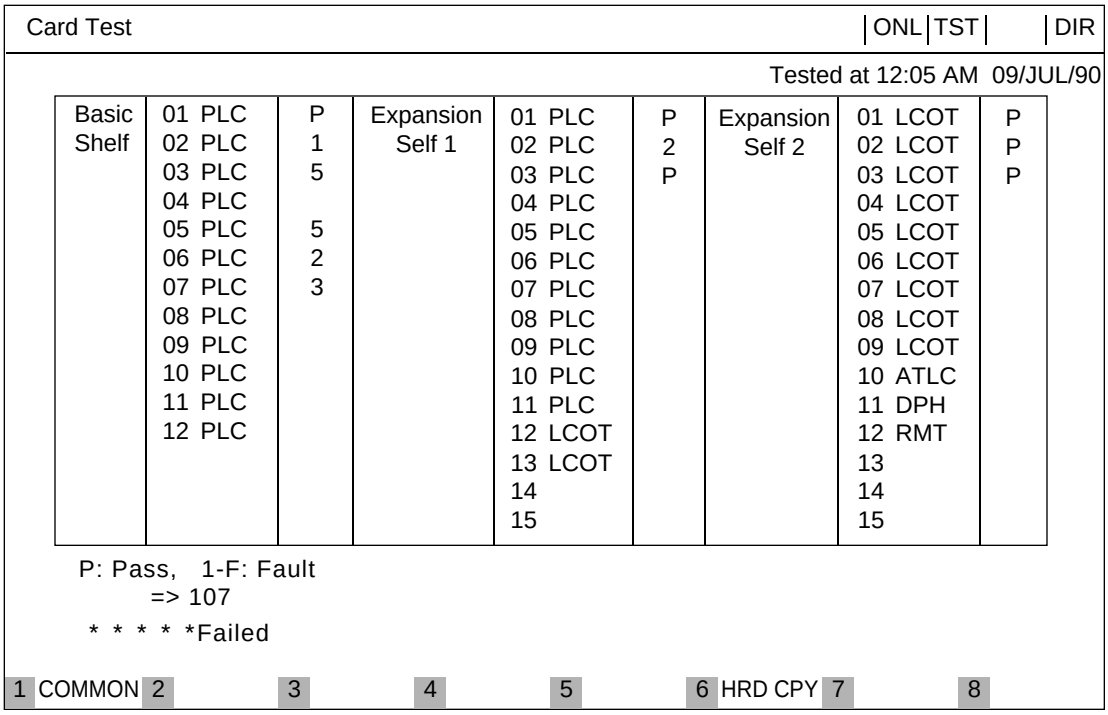
(Note) When you test the DISA card, the following message appears on the screen

=> 105 <OGM Test ? Y/N/C>

When you select "Y", the previously recorded OGM message is erased.

When you finish the card test, go to the Test Main Menu by pressing the <END> key.

3.04 Card Test Results screen



Description

Card Test Error Code List

Error Code	Description
1	A card is not installed in the specified slot.
2	Card link error
3	Assigned card type doesn't correspond to the installed card type
4	Card ROM error
5	Card RAM error
6	RMT card failure (Modem failure)
7	— —
8	— —
9	OPX power down
A	OPX power down (Bell)
B	OGM Recording/Playing back failure
C	— —
D	— —
E	— —
F	TSW card PB generator/PB receiver failure

4.00 Testing the Ports

4.01 Functions to be Verified

This test verifies the status of the ports for the functions listed below.

1. By entering the physical port number (Except pairs of extension and CO ports)

Card	Functions	Remarks
PLC HLC	OHCA Detect	Port to be tested should be “OUS” or “FAULT”
ATLC	HDLC	
DISA	Speech Path DTMF Receiver Tone Detector	
AGC	Speech Path Repeater Tone Detector	

2. By entering the physical port number of extension and CO ports in pairs.

Card	Functions	Remarks
LCOT	Speech Path Loop Current Bell Detect DTMF Dial (DTMF Generator) Pulse Dial	2 ports to be tested should be “OUS” or “FAULT.” SLC, HLC, OPX and DTMF receiver to be tested should be “OUS” or “FAULT.”
GCOT	Speech Path DTMF Dial (DTMF Generator) Pulse Dial	
SLC HLC OPX	Speech Path Bell DTMF Detector (DTMF Receiver) Pulse Detect	

4.02 Port Test Initial screen

Port Test ONL TST DIR

Tested at 12:05 AM 09/JUL/90

Slot	Basic Shelf 000000000111 123456789012	Expansion Shelf 1 000000000111111 123456789012345	Expansion Shelf 2 000000000111111 123456789012345
1	-- ---------	------- ---	-----------
2	-- ---------	------- ---	-----------
P 3	-- ---------	------- ---	-----------
o 4	-- ---------	------- ---	-----------
r 5	-- ---------	------- ---	-----------
t 6	-- ---------	------- ---	-----------
7	-- ---------	------- ---	-----------
8	-- ---------	------- ---	-----------

P: Pass, 1-F: Fault

=>

1 COMMON 2 3 4 5 6 HRD CPY 7 8

(Note) "-" mark in the above screen indicates that the port is not assigned or the card type is not LCOT, GCOT, SLC, PLC, HLC, OPX, DISA, AGC, or ATLC.

4.03 Port Test procedure

Enter the test command according to the following format.
(Refer to Section 14-F-4.01 “Functions to be Tested.”)

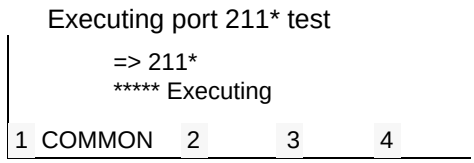
(a) When testing the port status on the following cards. (PLC, HLC, ATLC, DISA, AGC)

=> x y y z
- z: Port No. (1-8, or *)
- y y: Card No. (01-15 or **)
- x: Shelf No.(1: Basic 2: Expansion 1 3: Expansion 2)

(Note) “ *” or “**” means “All”

=> 2***.....All ports in the Expansion Shelf 1
=> 105* ....All ports assigned to the card No.05 in the Basic Shelf

(Example)



(b) When testing extension (SLC, HLC, OPX) port and CO trunk port (LCOT, GCOT) in pairs

=>Extension port No. & CO trunk port No.

(Example)
=> 1011&2011
=> DN4000&2012

(c) To verify the status of the speech path of the specified conference trunk, enter the conference trunk No. as follows.
Before testing, change the status of target conference trunk to “Out of Service” by entering OUS command.
Refer to Section 14-G-3.04 “Conference Trunk Status screen.”

(1) => C F B t t
- t t: Basic conference trunk No. (01-08)

(2) => C F O t t
- t t: Optional conference trunk No. (01-64)

(Example)
=> C F O 0 1

(Note) Conference trunk test can be done at the port test screen and the test result is displayed just under the entered command as follows.

=> C F B 0 1
*****Pass

4.04 Port Test Results screen

```
Port Test                                              |ONL|TST|    | DIR
                                    Tested  at  12:05  AM   09/JUL/90
   Slot      Basic  Shelf     Expansion  Shelf  1   Expansion  Shelf  2
            000000000111     000000000111111       000000000111111
            123456789012     123456789012345       123456789012345

        1   - - P- - - - - - - - -   - - - - - - -       - - -   - - - - - - - - - - -  P
        2   - - P- - - - - - - - -   - - - - - - -       - - -   - - - - - - - - - - -  P
   P    3   - - P- - - - - - - - -   - - - - - - -       - - -   - - - - - - - - - - -  P
   o    4   - - P- - - - - - - - -   - - - - - - -       - - -   - - - - - - - - - - -  P
   r    5   - - P- - - - - - - - -   - - - - - - -       - - -   - - - - - - - - - - -  P
   t    6   - - P- - - - - - - - -   - - - - - - -       - - -   - - - - - - - - - - -  P
        7   - - P- - - - - - - - -   - - - - - - -       - - -   - - - - - - - - - - -  P
        8   - - P- - - - - - - - -   - - - - - - -       - - -   - - - - - - - - - - -  2

  P: Pass, 1-F: Fault

        => 314 *
  ***** Failed
1 COMMON 2        3        4        5        6 HRD CPY 7        8
```

Port Test Error Code List

Code	Description	Port test	Pair test
1	Loop current failure	—	○
2	Bell detection failure	—	○
3	PB Generator failure	—	○
4	Dial pulse failure	—	○
5	PB Receiver 1 failure	○	○
6	PB Receiver 2 failure	—	○
7	Tone detection circuit 1 failure	○	—
8	Tone detection circuit 2 failure	○	—
9	HDLC failure	○	—
A	OHCA card is not installed	○	—
B	Pulse detection failure	—	○
C	Speech path failure	—	○
D	— — — — — — — —	—	—
E	— — — — — — — —	—	—
F	— — — — — — — —	—	—

When you have completed the port test, go to the test main menu by pressing <END> key.

(Note)
If you want to verify the status of the DTMF receiver (1 or 2), change it's status to "Out of Service" by entering OUS command and verify the status of a card which contains DTMF receivers.
SLC, HLC and OPX card contains two DTMF receivers respectively.
For further information about OUS command, refer to Section 14-C-1.02 "OUS command."

This port test is available only for ports on the following cards.
LCOT, GCOT, SLC, PLC, HLC, DISA, AGC, OPX, and ATLC card.

When you test the SLC, HLC, OPX, LCOT and GCOT cards, change the status of both extension port and CO port to "OUS."

If a trouble is caused by a card, an error message "Card Fault" appears on the screen.

Legend:
○ : applied
— : not applied

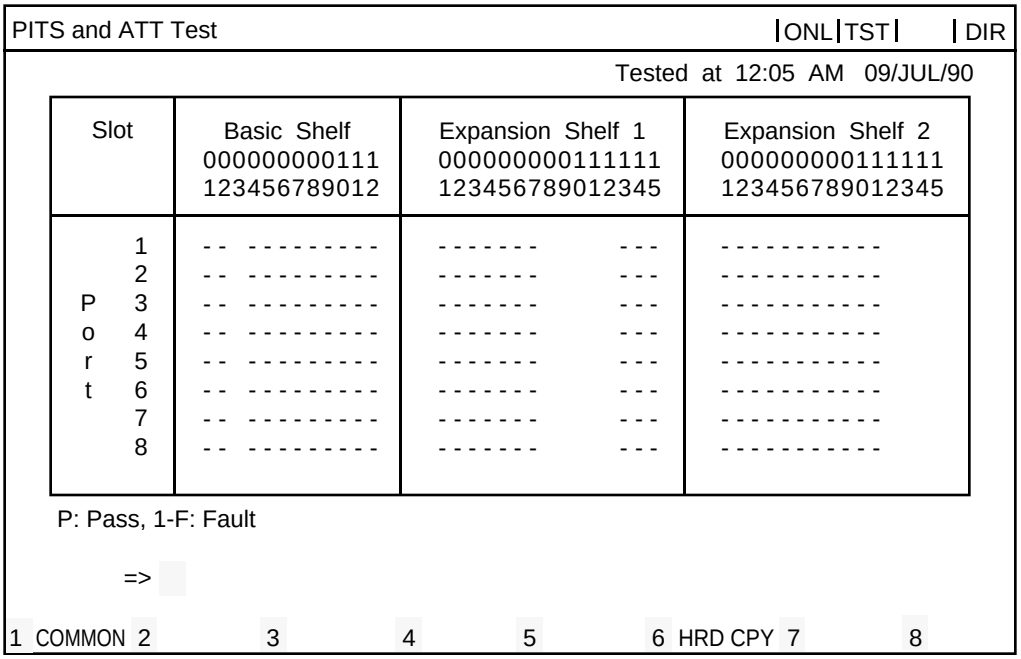
5.00 Testing PITS and ATT

5.01 Functions to be Verified

This test verifies the status of a PITS or an Attendant Console (ATT) for the functions listed below.

Card to be verified	Function	Remarks
PLC HLC	Link (All types of PITS) DTMF generator (KX-T123230D, KX-T123235 and KX-T7130)	Card to be tested should be “OUS”or “FAULT.”
ATLC	Link DTMF generator ROM RAM	

5.02 PITS and ATT Test Initial screen



(Note) “-” mark in above screen indicates that no ports are assigned to a PITS or an ATT (Attendant Console)

5.03 PITS and ATT Test procedure

A PITS and an ATT test can be done according to the following three test formats.

(a) => D N d d d d
Directory number (three or four digits)

(Example) => DN 4000

Executing DN4000 Port Test

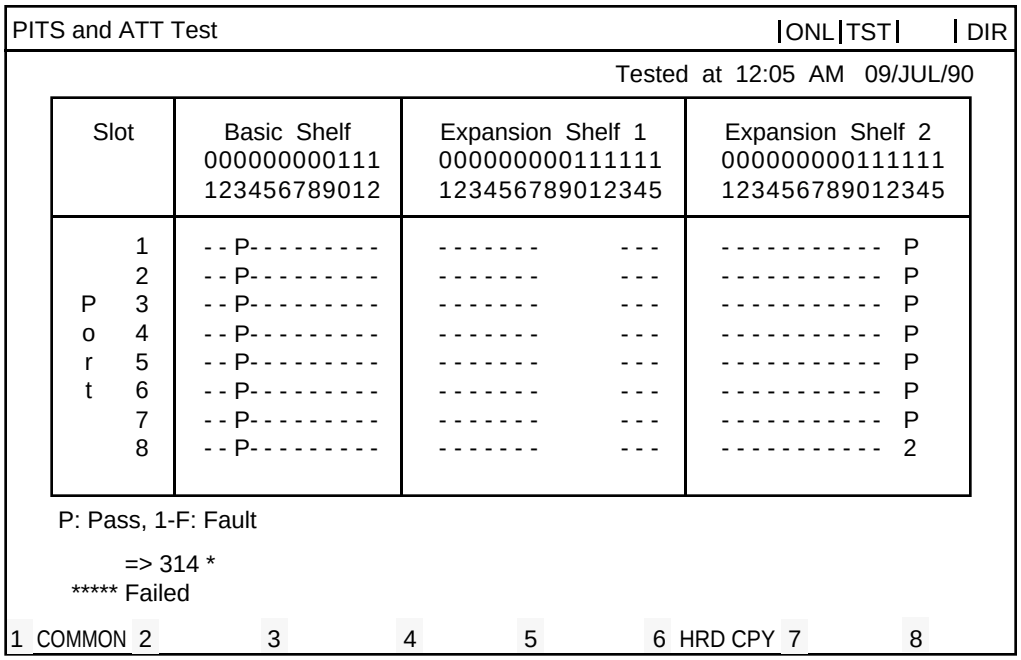
(b) => A a
Attendant console number (1,2 or *)

PITS and ATT test can be done by entering physical port number of PITS or ATT

(c) => x y y z
Port number (1 to 8, or *)
Card number (01 to 15 or **)
Shelf number (1: Basic 2: Expansion 1
3: Expansion 2)

5.04 PITS and ATT Test Results screen

When the test is finished, test result is displayed on the screen automatically.



Description

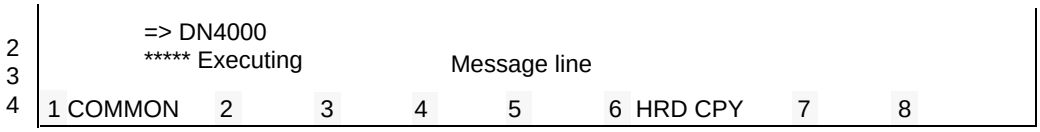
PITS and ATT Test Error Code List

Code	Description
1	PITS Link failure, ATT Link failure
2	PITS PB Generator failure, ATT PB Generator failure
3) 9	— — — — — — — — — — — —
A	— — — — — — — — — — — —
B	— — — — — — — — — — — —
C	Speech Path failure
D	— — — — — — — — — — — —
E	— — — — — — — — — — — —
F	— — — — — — — — — — — —

* If a trouble results from a card, an error message "Card Fault" appears on the screen.

6.00 Return Messages

Display on message line when executing test

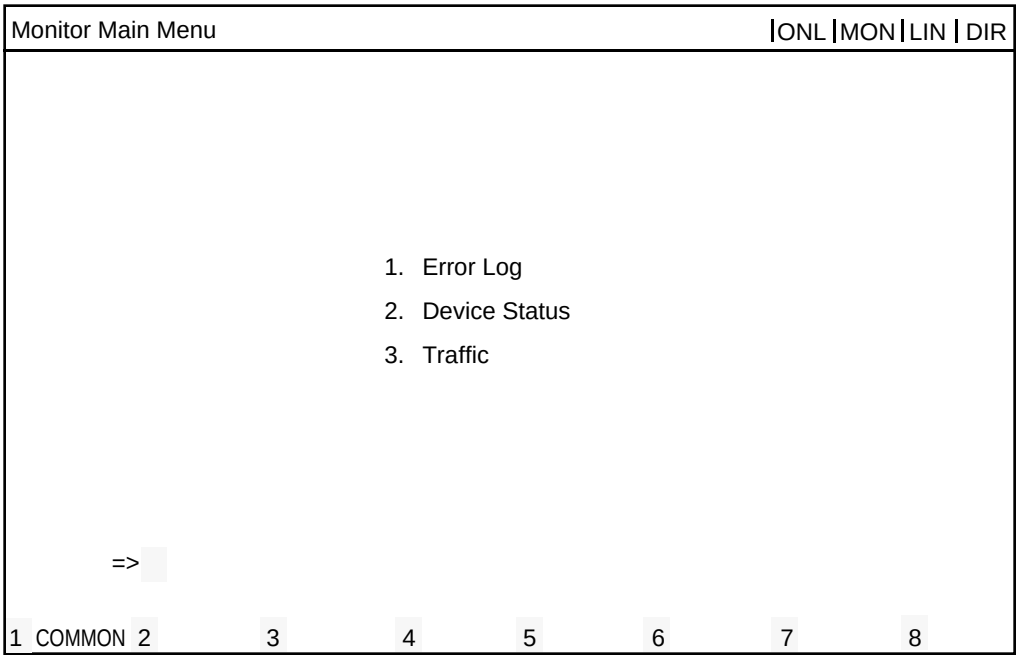


Message	Description
Executing	Executing device test
Illegal Parameter	Entered parameter is out of format or related device is not installed.
Invalid status	The status of the card or port being verified is not “OUS” or “Fault.”
Pass	Device status is good.
Failed	Device status is bad.

G. Monitor

1.00 Monitor Main Menu screen

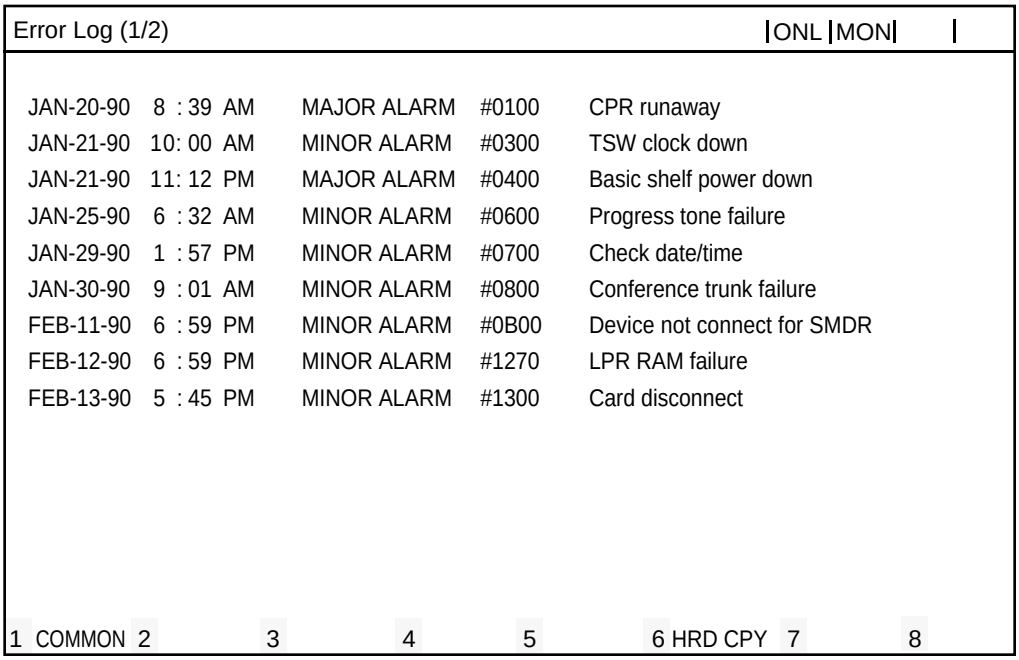
From the Main Menu screen, select “3. Monitor” then follow the Monitor Main Menu that appears on the screen.
By selecting an item from this screen, you can monitor the current operating information.



Description

(1) Error Log
Displays error records.
(2) Device status
Displays current device status.
(3) Traffic
Displays traffic measurement for extensions, CO trunks, attendant consoles and resources.

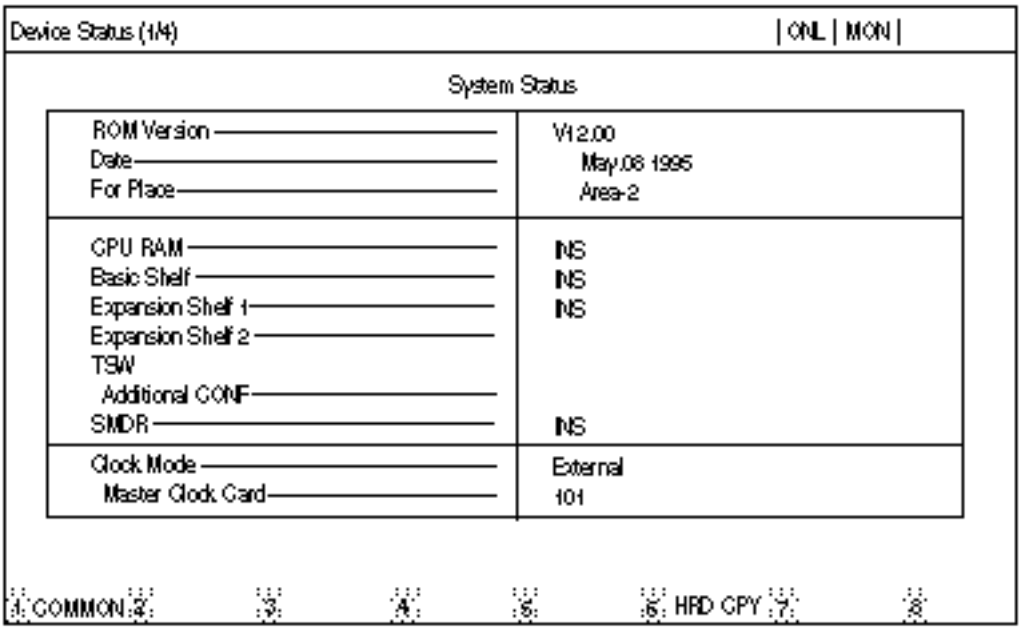
2.00 Error Log screen



Fur further informations about Error Log, refer to
Section 14-D-1.01 “Error Log.”

3.00 Device Status screen

3.01 System Status Initial screen

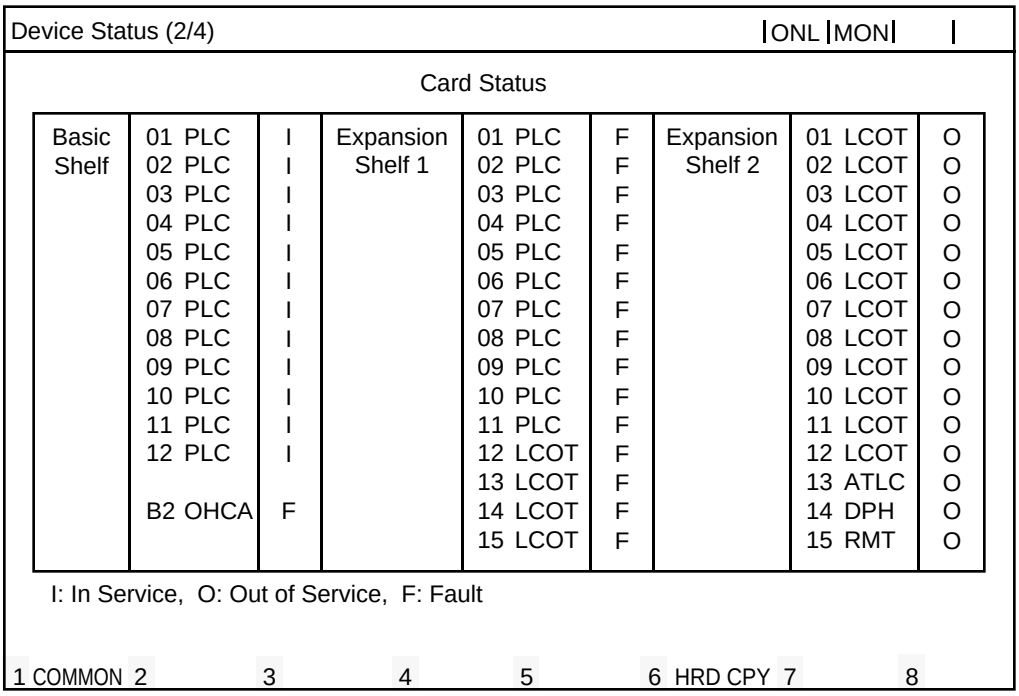


Description

ROM version	———	Software's version
Date	———	The date software was originated
For Place	———	Destination
CPU RAM	———	Current status of RAM area
Basic Shelf	———	Current status of Basic Shelf
Expansion Shelf 1	———	Current status of Expansion Shelf 1
Expansion Shelf 2	———	Current status of Expansion Shelf 2
TSW	———	Current status of TSW card
Additional CONF	———	Current status of optional Conference card
SMDR	———	Current status of SMDR device
Clock Mode	———	Displayed only when T-1 or E-1 trunk card is installed. "External" is displayed when the system synchronizes with the external clock. "Internal" is displayed when the system synchronizes with the internal clock. Refer to Section 10-C-64.02 "System Clock Mode (CLK)" for further information.
Master Clock Card	———	Displayed only when T1/E1 DIGITAL TRUNK card is installed. "XXX" (physical card No. of the master card) is displayed when the external clock mode is utilized. "—" is displayed when the internal clock mode is utilized. Refer to Section 10-C-64.03 "Master Clock Priority (CLP)" for further information.

❋ In above screen, "—" indicates that the device is not installed.

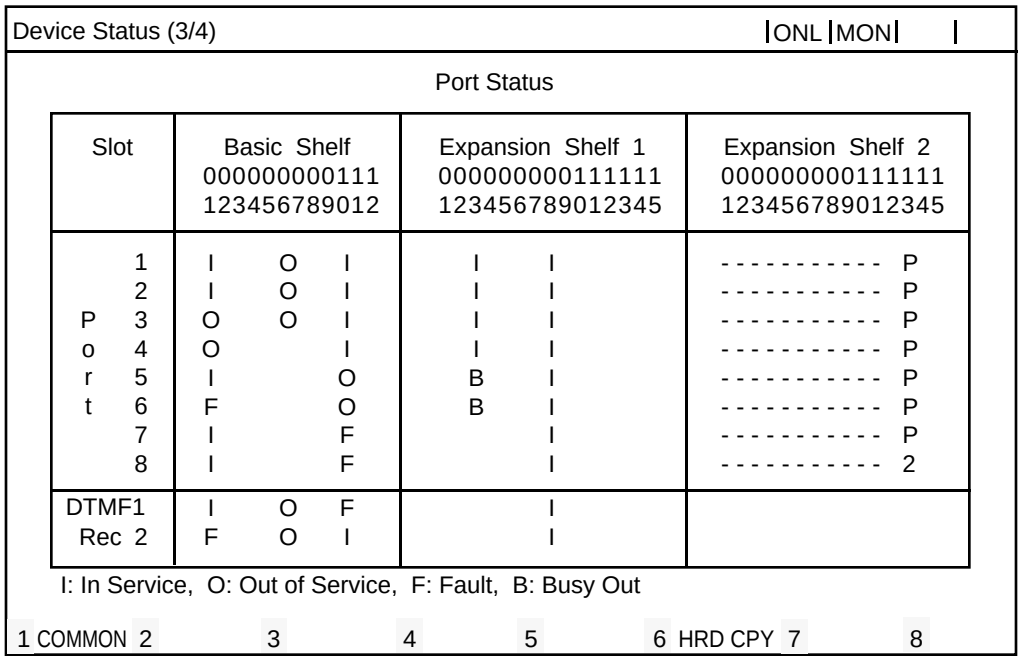
3.02 Card Status screen



Description

In the above screen, a blank indicates that a card is not installed in the slot.

3.03 Port Status screen



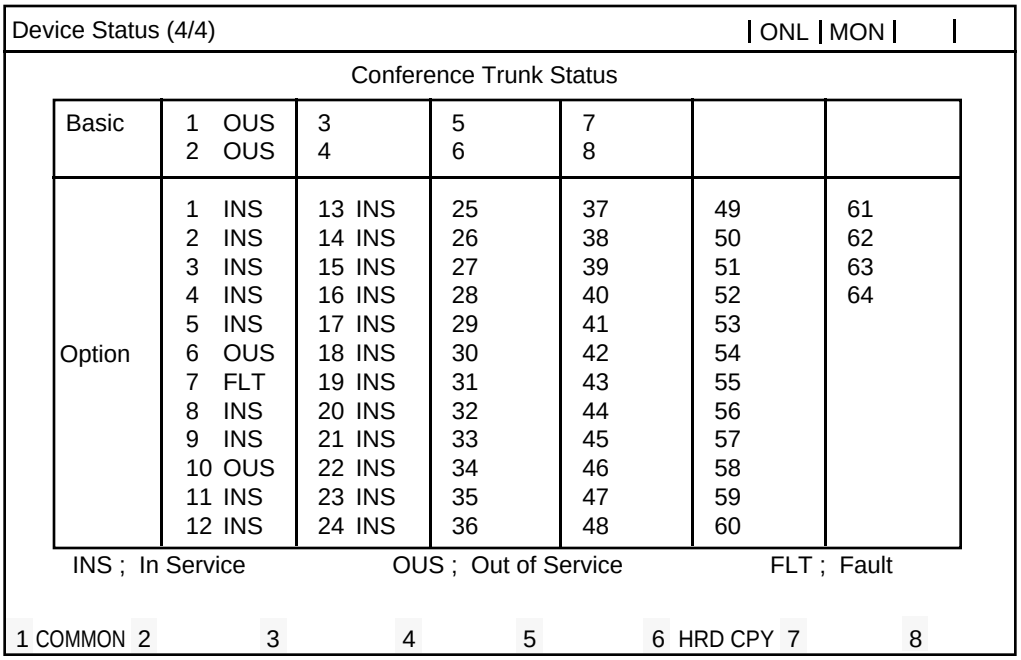
Description

DTMF Rec —— Status of DTMF receivers
Two DTMF receivers are provided on each SLC, HLC, OPX card respectively

The system administrator can change the status of a CO trunk port from “Busy Out” to “INS” by entering INS command.

In the above screen a blank indicates that a port is not assigned to the system.

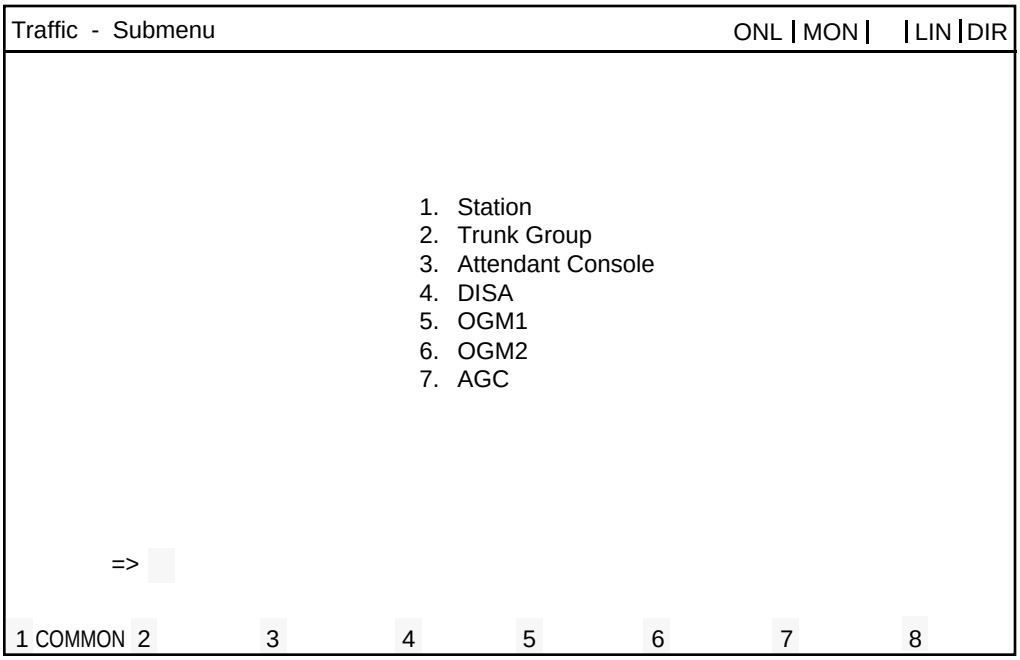
3.04 Conference Trunk Status screen



Description

This screen shows the current operating status of both basic and optional conference trunks.

4.00 Traffic Submenu screen



Description

1. Station
   Displays traffic measurements of all extensions.

2. Trunk Group
   Displays traffic measurements of each trunk group.

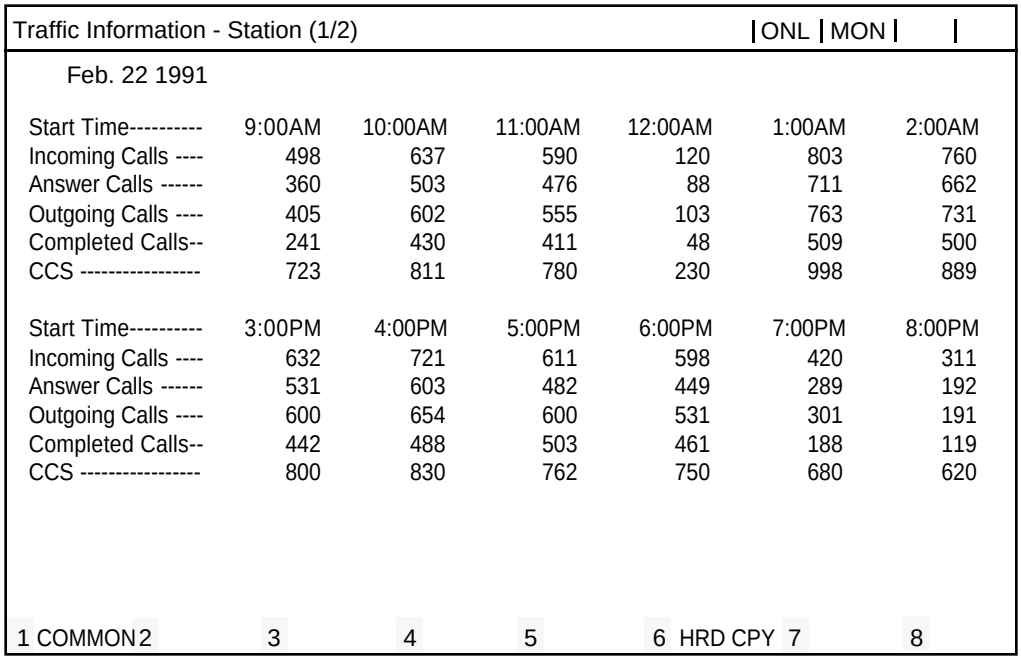
3. Attendant Console
   Displays traffic measurements of each attendant console.

4. DISA, OGM1, OGM2, AGC
   Displays traffic measurements of each resource. If tenant service is employed, traffic measurements of each resource will be displayed by each tenant individually.

Programming

System Programming	Reference	
	VT	Dumb
"System-Operation (2/3)" Start Time of Traffic Measurement	9-D-1.02	10-C-4.00

4.01 Station Initial screen



Traffic Information - Station (1/2) | ONL | MON | |

Feb. 22 1991

Start Time----------	9:00AM	10:00AM	11:00AM	12:00AM	1:00AM	2:00AM
Incoming Calls ----	498	637	590	120	803	760
Answer Calls ------	360	503	476	88	711	662
Outgoing Calls ----	405	602	555	103	763	731
Completed Calls--	241	430	411	48	509	500
CCS ----------	723	811	780	230	998	889

Start Time----------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Incoming Calls ----	632	721	611	598	420	311
Answer Calls ------	531	603	482	449	289	192
Outgoing Calls ----	600	654	600	531	301	191
Completed Calls--	442	488	503	461	188	119
CCS ----------	800	830	762	750	680	620

1 COMMON 2 3 4 5 6 HRD CPY 7 8

Description

Start Time — The system can be programmed to display traffic measurements of all extensions from up to 24 hours before the current time. In above screen, “9:00 AM” indicates the traffic measurement from 9:00 AM to 10:00 AM one day ago.

Incoming Calls — The number of incoming calls. (both extension and CO)

Answer Calls — The number of answered calls. (both extension and CO)

Outgoing Calls — The number of outgoing calls (both extension and CO) during the pre-set time period.

Completed Calls — The number of completed calls. (both extension and CO)

CCS — One hundred call seconds, or one hundred seconds of telephone conversation. One hour of telephone traffic is equal to 36 CCS.

4.02 Trunk Group Initial screen

Traffic Information - Trunk Group (1/2) | ONL | MON | |

Feb. 22 1991 Trunk Group No. = 01

Start Time----------	9:00AM	10:00AM	11:00AM	12:00AM	1:00AM	2:00AM
Incoming Calls ----	406	511	430	110	763	653
Answer Calls ------	232	362	291	65	580	572
Outgoing Calls ----	362	419	381	98	601	599
Completed Calls--	241	311	263	60	449	472
Busy Calls ---------	109	120	95	39	195	201
CCS ----------	700	801	755	215	932	831

Start Time----------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Incoming Call -----	613	555	529	511	412	311
Answer Calls ------	482	412	427	400	303	200
Outgoing Calls ----	499	400	395	382	291	183
Completed Calls--	362	282	312	300	162	99
Busy Calls ---------	139	99	112	95	68	35
CCS ----------	777	703	683	663	582	411

1 COMMON 2 INDEX 3 4 5 6 HRD CPY 7 8

Description

Busy Calls ——— The number of outgoing calls encountering a busy.

For a description of other items, refer to Section 14-G-4.01 “Station Initial screen.”

4.03 Attendant Console Initial screen

Traffic Information - Attendant Console (1/2) | ONL | MON |

Feb. 22 1991 Attendant No. = 01

Start Time----------	9:00AM	10:00AM	11:00AM	12:00AM	1:00AM	2:00AM
Incoming Calls ----	511	632	590	140	809	751
Answer Calls ------	412	488	476	99	680	612
Outgoing Calls ----	403	471	555	121	762	592
Completed Calls--	291	403	411	83	611	464
Handle Calls ------	300	381	299	69	491	391
CCS ----------	712	853	768	240	998	900

Start Time----------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Incoming Calls ----	721	700	683	592	483	301
Answer Calls ------	549	550	521	482	362	188
Outgoing Calls ----	611	603	549	468	411	165
Completed Calls--	455	423	401	352	348	100
Handle Calls ------	311	301	281	311	298	83
CCS ----------	881	862	800	762	700	583

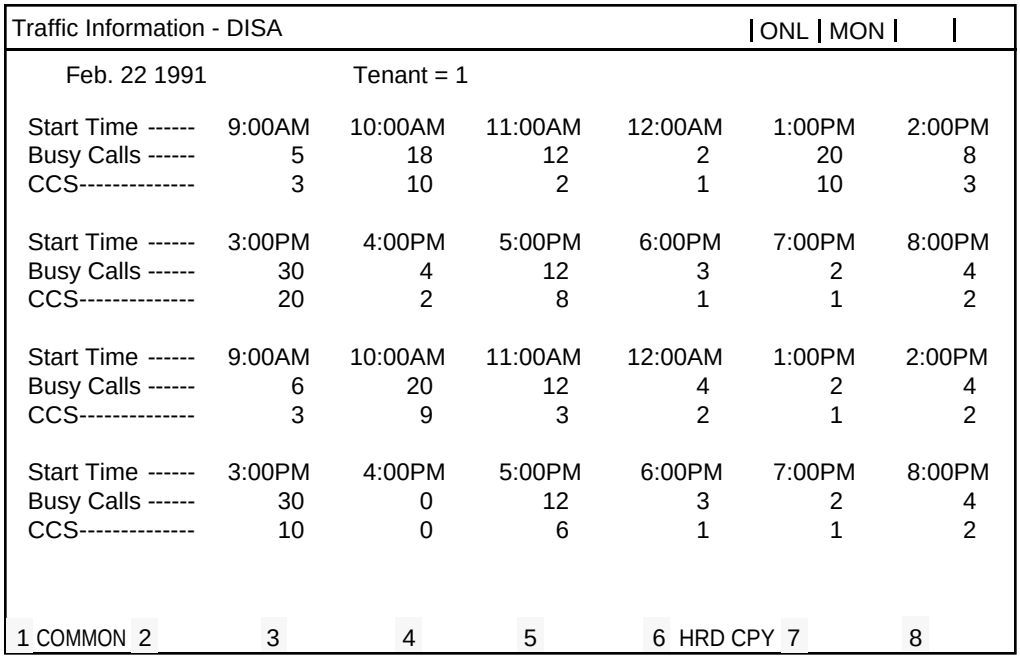
1 COMMON 2 3 4 5 6 HRD CPY 7 8

Description

Handled Calls ——— The number of calls transferred by the attendant console.

For a description of other items, refer to Section 14-G-4.01 “Station Initial screen.”

4.04 DISA screen



Traffic Information - DISA | ONL | MON |

Feb. 22 1991 Tenant = 1

Start Time ------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls ------	5	18	12	2	20	8
CCS----------	3	10	2	1	10	3
Start Time ------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls ------	30	4	12	3	2	4
CCS----------	20	2	8	1	1	2
Start Time ------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls ------	6	20	12	4	2	4
CCS----------	3	9	3	2	1	2
Start Time ------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls ------	30	0	12	3	2	4
CCS----------	10	0	6	1	1	2

1 COMMON 2 3 4 5 6 HRD CPY 7 8

Description

Start Time ——— Refer to Section 14-G-4.01 “Station Initial screen.”

Busy Calls ——— The number of DISA calls which failed to access any DISA resources.

CCS ——— One hundred call seconds, or one hundred seconds of telephone conversation.
One hour of telephone traffic is equal to 36 CCS.

Tenant ——— If tenant service is employed, this screen can be displayed by each tenant individually.
By pressing the <PREV> or <NEXT> key, you can enter into the previous or next screen.

4.05 OGM1 screen

Traffic Information - OGM1 | ONL | MON |

Feb. 22 1991 Tenant = 1

Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	5	20	12	3	2	4
CCS ----------	1	8	2	1	2	4

Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	5	12	8	2	4
CCS ----------	20	1	8	3	1	2

Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	6	18	12	3	2	4
CCS ----------	2	7	3	1	1	2

Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	0	12	7	2	4
CCS ----------	10	0	6	3	1	2

1 COMMON 2 3 4 5 6 HRD CPY 7 8

Description

Start Time ——— Refer to Section 14-G-4.01 “Station Initial screen.”

Busy Calls ——— The number of calls which failed to access any OGM1 resources.

CCS ——— One hundred call seconds, or one hundred seconds of telephone conversation.
One hour of telephone traffic is equal to 36 CCS.

Tenant ——— If tenant service is employed, this screen can be displayed for each tenant individually.
By pressing the <PREV> or <NEXT> key, you can enter into the previous or next screen.

4.06 OGM2 screen

Traffic Information - OGM2 | ONL | MON | |

Feb. 22 1991 Tenant = 1

Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	3	20	12	3	2	4
CCS ----------	1	11	2	1	2	4

Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	8	5	12	5	2	4
CCS ----------	2	2	8	2	1	2

Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	7	13	12	4	2	4
CCS ----------	3	6	3	2	1	2

Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	4	12	7	2	4
CCS ----------	10	1	6	4	1	2

1 COMMON 2 3 4 5 6 HRD CPY 7 8

Description

Start Time ——— Refer to Section 14-G-4.01 “Station Initial screen.”

Busy Calls ——— The number of calls which failed to access any OGM2 resources.

CCS ——— One hundred call seconds, or one hundred seconds of telephone conversation.
One hour of telephone traffic is equal to 36 CCS.

Tenant ——— If tenant service is employed, this screen can be displayed for each tenant individually.
By pressing the <PREV> or <NEXT> key, you can enter into the previous or next screen.

4.07 AGC screen

Traffic Information - AGC | ONL | MON | |

Feb. 22 1991 Tenant = 1

Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	3	10	12	3	2	4
CCS ----------	1	3	2	1	2	4

Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	8	12	4	2	4
CCS ----------	20	2	8	2	1	2

Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	30	9	12	3	2	4
CCS ----------	10	3	3	1	1	2

Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	8	12	8	2	4
CCS ----------	10	3	6	3	1	2

1 COMMON 2 3 4 5 6 HRD CPY 7 8

Description

Start Time ——— Refer to Section 14-G-4.01 “Station Initial screen.”

Busy Calls ——— The number of calls which failed to access any AGC resources.

CCS ——— One hundred call seconds, or one hundred seconds of telephone conversation.
One hour of telephone traffic is equal to 36 CCS.

Tenant ——— If tenant service is employed, this screen can be displayed for each tenant individually.
By pressing the <PREV> or <NEXT> key, you can enter into the previous or next screen.

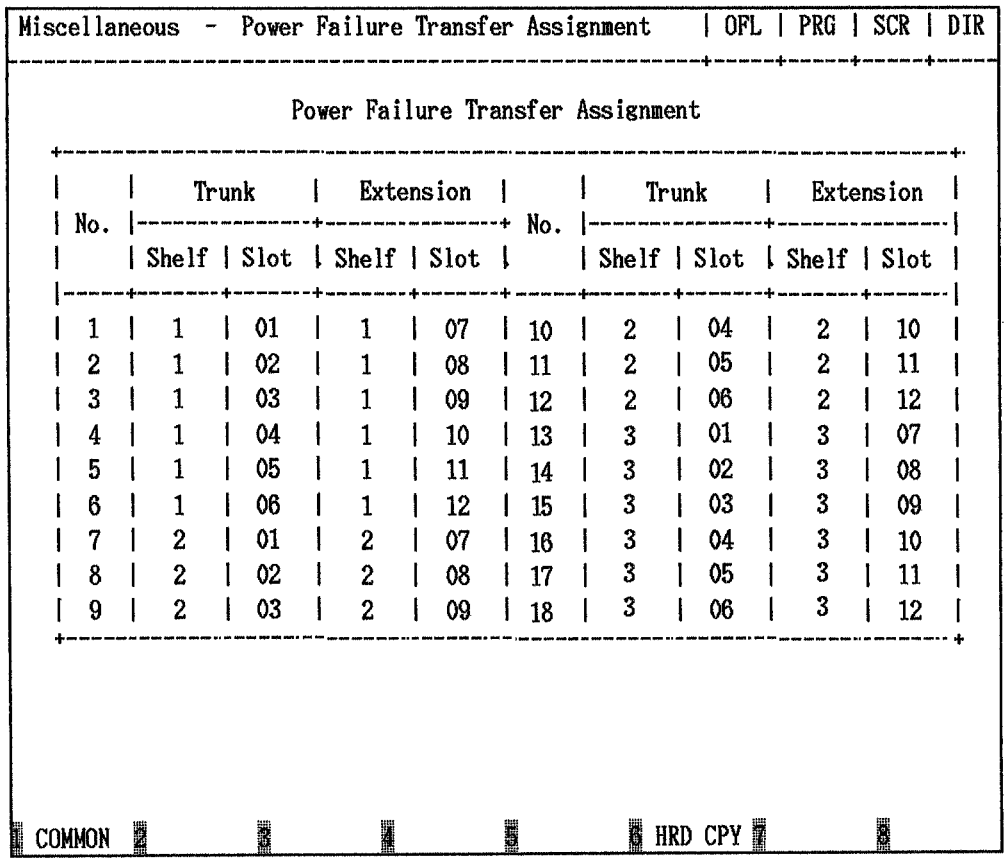
H. Other Features

1.00 Power Failure Transfer Assignment

Description

Provides up to 18 extension/CO cards pairs to maintain a conversation when power is restored or TSW recovery.
If this is not programmed then power restoration or TSW recovery drops any existing conversations.

From the main menu screen, first select "1. Programming," and select "10. Miscellaneous" then you can enter into the screen below by selecting "2. Power Failure Transfer."
To program this assignment, you must log in to the system by entering the 2nd level or higher password.



Miscellaneous - Power Failure Transfer Assignment | OFL | PRG | SCR | DIR

Power Failure Transfer Assignment

No.	Trunk		Extension		No.	Trunk		Extension	
	Shelf	Slot	Shelf	Slot		Shelf	Slot	Shelf	Slot
1	1	01	1	07	10	2	04	2	10
2	1	02	1	08	11	2	05	2	11
3	1	03	1	09	12	2	06	2	12
4	1	04	1	10	13	3	01	3	07
5	1	05	1	11	14	3	02	3	08
6	1	06	1	12	15	3	03	3	09
7	2	01	2	07	16	3	04	3	10
8	2	02	2	08	17	3	05	3	11
9	2	03	2	09	18	3	06	3	12

1 COMMON 2 3 4 5 6 HRD CPY 7 8

Conditions
In case of the KX-T96174X (SLC card), three ports (ports 1 through 3) are available for Power Failure Transfer Assignment.

Programming

Item			Description	Assignable Parameters	Default Parameters	How to input
No. 1 -18	Trunk	Shelf	Assign LCOT or GCOT card No. to the system which are available for power failure transfer.	1,2,3 or blank	Blank	D
		Slot		01-15 or blank	BlankBlank	D
	Extension	Shelf	Assign HLC or SLC card No. to the system which are available for power failure transfer.	1,2,3 or blank	Blank	D
		Slot		01-15 or blank	Blank	D

D: Enter appropriate parameters directly.
S: Select appropriate parameters from the factory-set options.

- Cursor is scrolled from left to right by pressing the return key.

- Assign extension card and trunk card for power failure transfer in pairs. To assign only a trunk or an extension is not possible.

Refer to Section 9-L-2.00 “Power Failure Transfer Assignment” for further information about programming.

Conditions

SLT telephones and some PITS telephones can be used during power failure if power failure transfer assignment had been done in advance.

The following PITS telephones can be used during power failure.

KX-T123230, KX-T123230D,
KX-T123235, KX-T61630, KX-T30830

When you are using above listed PITS telephones, set the POWER FAILURE switch to ON, when power failure occurs.
If dialing cannot be done, set the DIALING MODE selector to another position (PULSE or TONE).
When the power is restored, set the POWER FAILURE switch to OFF.
If the power is restored during a conversation, set the POWER FAILURE switch to OFF after conversation is completed.

Section 15

Maintenance

Dumb Type Terminal

(Section 15)

Maintenance

Dumb Type Terminal

Contents

A. Introduction

This section describes the information necessary for monitoring, testing, and maintaining the system using a Dumb terminal.
The modular self-testing capabilities of the system allow most maintenance to be reduced to simple procedures.
You can administer the system programming and perform maintenance using VT220(100), Compatibles, Dumb terminal and Attendant Console.
Only one terminal can be performing system administration at any one time.
Changing the System Administration Device is done in programming.
To execute the change, the user must exit system administration mode and then reenter system administration mode.

(Note)
The following subsections are defined in Section 14.

C. Device Status
  2.00 Definition of Operating Status
    2.01 Shelf, Slot, Resource
    2.02 Port
    2.03 Interactions among Devices
    2.04 Changes of the Shelf Status
    2.05 Changes of the Slot Status

D. Self-Test (System-Detected Troubles)
  2.00 Clearing System-Detected Troubles
    2.01 Consulting the Error Log

E. Troubleshooting Guide

B. System Administration

1.00 On-site Administration

1.01 Logging in to the System

Description

You can administer the system programming and maintenance of the system using a dumb terminal.
For details about communication parameters, refer to Section 9-D-7.00 “Communication Interface.”

System Security

For security reasons, access to the administration capabilities of the system is controlled by a password.
To prevent an unauthorized person from learning the password, the password characters are not displayed when they are entered.

Password

To gain access to the system administration feature, a valid password (4-digit, Alphanumeric characters *) must be entered.
To be recognized by the system, password must be entered exactly as stored in memory.
Factory programmed 8 passwords are provided from the 1st to 4th level for on-site operation and 1st to 4th level for operation from a remote location individually.
When you enter the correct password, the terminal displays the Dumb Initial Screen from which you can enter into programming mode or operation mode.

The followings are the functions available to each password level.

1st Level Access to all levels
2nd Level Set System level parameters
3rd Level Set Port level parameters
4th Level Read parameters only.

When you log in to the system using the 1st level password, you can execute all functions, but are increasingly restricted when entering level 2, 3 and 4.
Passwords are originally factory programmed, but may be changed when logging in to the system by entering the 1st level password.
Refer to Section 8-F-1.00 “Change Level (CHL)” for changing password level.

* Alphanumeric characters
  ASCII codes except special codes (DEL, ESC etc.)
  But entering “/” “~” are not available, because these characters cannot be displayed on the display of PITS.
  Both uppercase and lowercase characters can be recognized by the system.

1.02 Dumb Operation Mode

When you log in to the system administration terminal, “Select the Mode” screen appears on the display.
At initial prompt in this screen, you can enter into programming mode by entering PRG, and operation mode by entering OPE.
In programming mode, assigning and changing the system programming parameters can be done. In operation mode, monitoring, testing and maintaining the system can be done.
Refer to Section 8 “Preparation for Programming and Maintenance (Dumb Type Terminal)” for further details about Dumb operation mode.

2.00 System Administration from a Remote Location

Description

From a remote location, you can perform system programming, diagnosis and traffic measurements using a Dumb terminal.
For details about communication parameters, refer to Section 9-D-7.00 “Communication Interface.”

Conditions

- RMT card (Modem) must be installed in the system and assign the telephone number of modem to “Remote Directory Number” (FDN: 3-4 digits) in system programming for accessing the remote administration feature. Refer to Section 10-C-4.00 “Operation (OPR)” for programming.
- For remote access, a data terminal and modem are required at a remote location.
- Factory programmed 4 types of passwords from 1st to 4th level for remote administration are provided.
  Passwords are originally factory programmed, but may be changed at any time. (Refer to Section 8-F-1.00 “Change Level (CHL),” for changing password level.)
- You can execute the remote system administration during on-line communication mode only.
  But when you load the system programming data from a remote location, the system enters to off-line communication mode automatically. Refer to Section 17-B-2.02 “Loading Procedure” for details.
- Starting up system administration from a remote location can be done only in Dumb mode operation.

Operation

Starting up the system administration from a remote location can be done in the following ways.

- Dial “Remote Directory Number” using Direct Inward System Access (DISA) feature.
  For further information about “Remote Directory Number,” refer to Section 10-C-4.00 “Operation (OPR).”
  And for further information about DISA feature, refer to 3-D-2.02 “Direct Inward System Access (DISA).”
- Program DID feature so that the incoming telephone number is converted to the “Remote Directory Number.”
  For further information about DID feature, refer to Section 3-D-2.03 “Direct Inward Dialing (DID).”
- Assign that a call from a remote location can access the Remote Administration feature automatically using DIL (1:1) feature.
  For further information about DIL (1:1) feature, refer to Section 3-D-2.01 “Direct In Line (DIL).”
- Remote access with assistance of the operator
  The call from a remote location can be made on any trunk into the system, and be answered by the operator.
  The call is then placed on hold and the Remote Directory Number of the system dialed is received.
  The operator transfers the call after receiving the modem answer tone.
  The caller at a remote location will then hear the modem answer tone and can be proceed with sign-on.
  Refer to Section 4-F-1.05 “Unscreened Call Transfer to Remote” for further information.

When the system administrator at a remote location accesses the system remote administration feature, the following message appears on the display of operator's telephone if display is provided.

1234:RMT Access

After you log in to the system from a remote location, you can operate the system in the same way as if you were on-site.
Only one system administration terminal can access the system at a time.

C. Device Status

1.00 Service Commands and Their Functions

1.01 INS (In Service) command

Description

At the operation prompt (OPE>), enter INS command to change the status of the target device (shelf, card, station etc.) to “In Service” in on-line communication mode.

Command Format

OPE>INS + Item No. ↵

(Item)

Device	Input Value
Shelf	1 to 3 (physical number)
Card	101 to 315 (physical number)
Port	1011 to 3158 (physical number)
Station	DNxxxx (xxxx: extension number; three or four digits) or Physical number: four digits
ATT	A1 or A2 or Physical number: four digits
DTMF	Rxxxy (xxx:Card number; y: 1 or 2)
CNF	CFBxx or CFOyy (xx: 01 to 08, yy: 01 to 64)

Refer to Section 15-E-3.00 “TST Command (Test)” for details about test command.

Conditions

The status of specified devices (shelf, card, station) should be in “OUS” or “FAULT,” and system must be in on-line mode.
When you change the status of a lower device (port, station) to “INS,” the upper device (shelf, card) should be in “INS” status.
If you try to change the lower device status to “INS” while upper device is in “OUS” status, the error message “Invalid Status” appears on the screen.

When you change the status of an upper device (shelf, card), the status of lower devices (port, station) change as follows.

Upper device	OUS	→ INS
Lower device	OUS	→ INS
	Fault	→ Fault

Upper device	Fault	→ INS
Lower device	Fault	→ INS
	OUS	→ OUS

Normal operation
When this operation is executed without failure, initial “OPE>” prompt appears again on the screen.

Operation failed
The error message appears on the screen in the following cases.

- Parameter error
- Not installed
- Status error
- INS failure (Diagnosis error)

1.02 OUS (Out of Service) command

Description

At the operation prompt (OPE>), enter the OUS command to change the status of the target device (shelf, card, station etc.) to “Out of Service” in on-line mode.

Command Format

OPE> OUS + Item No. ↵

(Item)

Device	Input Value
Shelf	1 to 3 (physical number)
Card	101 to 315 (physical number)
Port	1011 to 3158 (physical number)
Station	DNxxxx (xxxx: extension number; three or four digits) or Physical number: four digits
ATT	A1 or A2 or Physical number: four digits
DTMF	Rxxxy (xxx:Card number; y: 1 or 2)
CNF	CFBxx or CFOyy (xx: 01 to 08, yy: 01 to 64)

Refer to Section 15-E-3.00 “TST command (Test)” for details about the test command.

Conditions

The status of target devices (shelf, card, station) should be “INS,” and the system must be in on-line communication mode.

When you change the status of an upper device (shelf, card), the status of lower devices (port, station) change as follows.

Upper device	INS → OUS
Lower device	INS → OUS
	Fault → Fault

Normal operation
When this operation is executed without failure, “OPE>” initial prompt appears again on the screen.

Operation failed
An error message appears on the screen in the following cases.

- Parameter error
- Not installed
- Status error

If the system administration terminal is an Attendant Console (ATT), do not change the status of the following devices from “INS” to “OUS.”

- Shelf in which ATLC card is installed
- ATLC card
- Attendant console assigned as the Maintenance Terminal

During remote operation, do not change the status of the following devices from “INS” to “OUS.”

- Shelf in which RMT card is installed
- RMT card (Modem)

D. Self-Test (System-Detected Troubles)

1.00 Error Record Display

1.01 Start Time of Self-Test

Built-in diagnostic test program of the system monitors the troubles generated by hardware or software. To perform the self-test, assign the desired start time of self-test in "System-Operation" Start Time of Test.
Be careful not to access the system during this test.
Refer to Section 10-C-4.00 "Operation (OPR)" for programming.

1.02 Error Log

When a system maintenance object begins to fail periodic testing, the system automatically generates an error record. (Refer to Section 14-G-2.00 "Error Log screen.")
Depending on the severity, the record is stored in one of two tables in the Error Log.

The two tables are:

Error Log (1/2) (Major and Minor Alarm)
Up to 15 major or minor error records are stored in this error log.The error tables are organized by time of occurrence.The newest error record appears on the top of the screen.
If more than 15 errors have occurred in that time, error records already stored in the error log will be overwritten, starting with the first.

Error Log (2/2) (Light Alarm)
Up to 15 light error records can be stored in this error log.
Other conditions are the same as error log (1/2)

Each error log screen (1/2)(2/2) exists independently.

The error log is accessible by entering the following command.

Command Format

OPE>ERR + Index + (Item)

(Index)
0 : Clears all error messages in the Error Log (1/2) (2/2)
1 : Displays error messages in the Error Log (1/2)
(Major and Minor Alarm)
2 : Displays error messages in the Error Log (2/2)
(Light Alarm)

(Item)
1 : Read only
2 : Displaying and clearing error log records

The error log is comprised of the following two error tables.

Error Log (1/2) (Major and Minor Alarm)
Error Log (2/2) (Light Alarm)

Refer to Section 14-G-2.00 "Error Log Screen."

1.03 Printing out the Automatic Failure Reporting

The error log records can be printed out.
First connect the printer to the SIO #2 port on the Main Unit using RS-232C cable, then set "System Operation" Print Error Log to "Y."
Refer to Section 10-4.00 "Operation (OPR) for Programming."

Command Format

PRG>OPR AT 2 

1.04 Local Alarm

Description

When the system detects a problem during on-line communication mode, an alarm message will be displayed on the screen of the Attendant Console or on the display of a PITS (if provided) whose owner is assigned as operator 1 by pressing the ALARM key.

Programming

ALARM key (button) assignment

(Attendant Console)
ALARM key (Fixed feature key)

(PITS)

System Programming	Reference	
	VT	Dumb
"Extension-Station (2/3)," DN key Type	9-G-1.02	10-C-24.00
"Extension-Station (3/3)," DSS key Type	9-G-1.03	10-C-26.00

Condition

1. If the system detects a trouble, the ALARM LED on the Attendant Console or PITS (Operator 1) flashes in red (Major Alarm) or is lit steadily in red (Minor Alarm).

2. Local alarm is not shown on the SLT.

3. If the ALARM button is not assigned to a PITS, the local alarm doesn't show.

4. The local alarm occurs only with operator 1 of each tenant.

5. On a PITS without the display, only the ALARM LED lights when the system detects an error.
   To clear it press the ALARM button twice.

6. When a number of troubles occur at the same time, only the most serious trouble appears on the screen of Attendant Console or display of PITS (if provided).

7. The alarm message on the display of PITS (if provided) disappears when placing a call from that telephone; when an incoming call arrives at that telephone; or if a held call reminder occurs with it. And the alarm message appears again when PITS goes to idle.

Operation

To display an alarm message, press the ALARM key (button) while ALARM LED is flashing or lit steadily.
If local alarm occured during a conversation, press the ALARM key (button) after replacing the handset then the alarm message will be displayed.

• An example of the alarm display

(Attendant Console)
JAN-25-91 6:31 AM MAJOR•ALARM #0410
Basic Shelf power down

(PITS)

ERR 0410 POW DWN

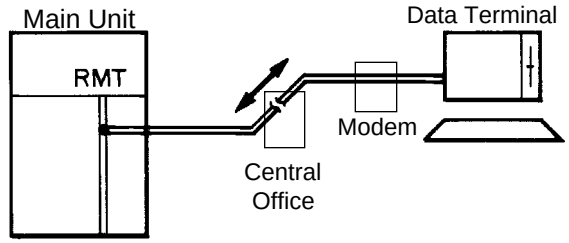
To clear the displayed alarm message, press the ALARM key (button) when the alarm message is displayed. ALARM LED will be turned off and the alarm display on the display of PITS (if provided) or CRT screen of the Attendant Console disappears.

1.05 Remote Alarm

Description

When the system detects a problem during on-line communication, an error message appears on the screen of the remote maintenance device. For remote access, RMT card must be installed in the system, and a data terminal and modem are required at a remote location.

Remote Configuration



Programming

To execute this feature, set “Remote Alarm” to “Y” and register the telephone (Modem) number of the remote administration device in “Destination Address.”

System Programming	Reference	
	VT	Dumb
“System-Operation (2/3),” Remote Alarm, Destination Address	9-D-1.02	10-C-4.00

Conditions

Setting “Remote Alarm” to “Y” is not available if the RMT card is not installed.
All system-detected error messages are displayed in the error log, but for “Local Alarm,” and “Remote Alarm”, some error messages are displayed and some are not.
Refer to Section 14-D-2.03 “Background Diagnostic Error List.”

Command Format

PRG>OPR AT2 ↵

E. Functional Test by Entering Commands

1.00 Introduction

1. You can execute diagnostic test during on-line communication mode by entering test commands at the maintenance terminal.

2. Execute this functional test in the following cases.

   - When new devices are installed
   - When the device combination is changed
   - When the system detects an alarm or an error message appears in the error log
   - When device status becomes “Fault”
   - When a number of telephone instruments don't function properly

3. There are following three types of Tests as follows.

   (a)Card Test
   If a number of telephone instruments do not function well, you can detect whether troubles are caused by the card or the telephone instruments by this test.
   (b)Port Test
   (c) PITS and ATT (Attendant Console) Test

   * Test (b), (c) are executed to detect troubles when telephone instruments don't function well when card status is good.

4. This functional test must be done during on-line communication mode both at on-site and from a remote location. For remote access, a data terminal and modem are required at a remote location, and you must install RMT card in the system and assign Remote Directory Number to the system in system programming operation “Remote Directory Number.”
   Refer to Section 14-B-2.00 “System Administration from a Remote Location” for details.

5. Functional test can be done only when you log in to the system by entering the 1st level password.

6. When you perform a device (shelf card, port, resource) test, the status of the device to be tested must be changed to “Out of service” by entering the OUS command in advance.
   If an attempt is mate to test a device in “INS” status, the following message appears on the screen. “Invalid Status”
7. You can test a device in “Fault” status.

8. If the device test results in failure, first change the status of the device to “Fault” and replace it with a normal one if necessary.

9. It is impossible to execute functional test during off-line communication mode.

2.00 Functions to be Verified

2.01 Card Test

This test verifies the status of each card for the items listed below.

Card to be tested	Item	Remarks
SLC PLC HLC LCOT GCOT DID ATLC AGC	Link Card type ROM RAM	Card to be tested should be “OUS” or “FAULT.”
OPX	Link Card type ROM RAM Power Supply	
DISA	Link Card type ROM RAM OGM Rec/Play	
RMT	Link Card type ROM RAM Modem	
DPH	Card Type	

2.02 Port Test

This test verifies the status of the following functions for each port of the indicated cards.

1. By entering physical port number (Except paired extension port and CO port)

Card	Functions	Remarks
PLC HLC	OHCA Detect	Port to be tested should be “OUS” or “FAULT”
ATLC	HDLC	
DISA	Speech Path DTMF Receiver Tone Detector	
AGC	Speech Path Repeater Tone Detector	

2. By entering the physical port number of extension port and CO port in pairs.

LCOT	Speech Path Loop Current Bell Detect DTMF Dial (DTMF Generator) Pulse Dial	2 ports to be tested should be “OUS” or “FAULT.” SLC, HLC, OPX and DTMF receiver to be tested should be “OUS” or “FAULT.”
GCOT	Speech Path DTMF Dial (DTMF Generator) Pulse Dial	
SLC HLC OPX	Speech Path Bell DTMF Detector (DTMF Receiver) Pulse Detect	

(Note)

- If you want to verify the status of the DTMF receiver (1 or 2), change it's status to “Out of Service” by entering OUS command and verify the status of a card which contains DTMF receivers.
  SLC, HLC and OPX card contains two DTMF receivers respectively.
  For further information about OUS command, refer to Section 15-C-1.02 “OUS command.”

- This port test is available only for ports on the following cards.
  LCOT, GCOT, SLC, PLC, HLC, DISA, AGC, OPX and ATLC cards.

- When you test the SLC, HLC, OPX, LCOT and GCOT cards, change the status of both extension port and CO trunk port to OUS.

- If trouble results from the card (not port), the following message appears on the screen.

  “Card Fault”

2.03 PITS and ATT Test

To verify the status of PITS or ATT the following functions are tested.

Card to be tested	Function	Remarks
PLC HLC	Link (All types of PITS) DTMF generator (KX-T123230D, KX-T123235 and KX-T7130)	Card to be tested should be “OUS”or “Fault.”
ATLC	Link DTMF generator ROM RAM	

3.00 TST command (Test)

Before executing the device test, change the status of the target device to “Out of Service” by entering OUS command.

(Refer to Section 15-C-1.00 “Service Commands and Their Functions.” for details about OUS and INS commands)

Command Format

OPE>TST + Index + Item1 + (& Item 2) ↵

Test		Index	Item 1	Item 2
Card Test		1	Physical No. (xyy)	
PORT TEST	PITS	2	Physical No. (xyyz) or DN (DN dddd)	
	ATT		Physical No. (xyyz) or ATT No. (Aa)	
	Extension & CO line SLC, HLC, OPX, LCOT, GCOT		(Extension) Physical No. (xyyz) or DN (DN dddd)	(CO line) Physical No. (xyyz)
			(CO line) Physical No. (xyyz)	(Extension) Physical No. (xyyz) or DN (DN dddd)
	Basic Conference Trunk		CFB tt (01 ~ 08)	
	Optional Conference Trunk		CFO tt (01 ~ 64)	
	DISA/AGC		Physical No. (xyyz)	
PITS & ATT	PITS	3	Physical No. (xyyz) or DN (DN dddd)	
	ATT		Physical No. (xyyz) or ATT No, (Ax)	

Description

x : Shelf No. (1: Basic 2: Expansion 1 3: Expansion 2)
yy : Slot No. (01~15, or **)
zz : Port No. (1~8, or *)
a : Attendant console No. (1~2, or *)
dddd : Directory No. (3~4 digits)
tt : Basic Conference Trunk No. (01~08)
tt : Optional Conference Trunk No. (01~64)

“*” can be used as a wild card character and substitutes any number from 0 to 9.

(Example)
1** ------- All cards installed in the Basic shelf
105* ----- All ports assigned to the card No.5 in the Basic shelf
2*** ------ All ports in the Expansion shelf 1

3.01 Loopback Test (LBT) - for T-1/E-1

Description

Used to verify the validity of the T-1/E-1 DIGITAL TRUNK cards and line connections.
Before performing Loopback Test, set the card status to “OUS”.

Command Format

(1) OPE>LBT + Item1 + Item2 ↵
(2) OPE>LBT + Item1 + Item2 + Item3 ↵

Command Format	Item1	Item2	Item3
(1)	1 or 2 1: Internal Loopback*1 2: External Loopback*2	101,105,109,201,205, 209,301,305,309 (Card No.)*3	None
(2)		G xxxyy (DTMF Generator No.) xxx : Card No. yy : 01 to 06 (T-1) 01 to 02 (E-1)	R xxxyy (DTMF Receiver No.) xxx: Card No. yy : 01 to 24 (T-1) 01 to 08 (E-1)

*1.Loopback test is done automatically inside the T-1/E-1 DIGITAL TRUNK card.
*2.Loopback test is done between the T-1/E-1 DIGITAL TRUNK card and the external equipment (CSU, DSU). In this case, loopback mode should be set at the external terminal beforehand.
*3.When a card No. is specified, DTMF Generator No.1 and DTMF Receiver No.1 of that card are used for the test.

Results Display

Error Indication	Description
OK	Normal
Voice error	Speech path failure
Signal error	Control signal path failure

3.02 DTMF-G/R Diagnosis (DTM) - for T-1/E-1

Description

Used to check the validity of DTMF Generators and Receivers on the T1/E1 DIGITAL TRUNK cards. Before executing the test, set the status of the card to “OUS”.

Command Format

(1) OPE>DTM + Item1 + Item2↵

Operation	Item1	Item2
G/R Status display	STS	101,105,109,201,205,209,301,305,309 (Card No.)
G/R OUS	OUS	G xxxyy (Generator No.) or R xxxyy (Receiver No.) xxx: Card No. yy : Generator No. (01 to 06 – T-1) (01 to 02 – E-1) or Receiver No. (01 to 24 – T-1) (01 to 08 – E-1)
G/R INS	INS	
G-R Test	TST	101,105,109,201,205,209,301,305,309 (Card No.)

Result Display

G/R status display

```
; OPE>DTM STS 101 ↵
;    DTMF-G 01  02  03  04  05  06
;           |   0   -   -   -   -
;    DTMF-R 01  02  03  04  05  06  07  08
;           |   0   |   |   |   0   |   0
;    DTMF-R 09  10  11  12  13  14  15  16
;           -   -   -   -   -   -   -   -
;    DTMF-R 17  18  19  20  21  22  23  24
;           -   -   -   -   -   -   -   -
```

Indication	Description
I	INS (In Service)
O	OUS (Out of Service)
—	Not installed

G/R test results display

```
; OPE>DTM TST 101 ↵
;    DTMF-G 01  02  03  04  05  06
;           OK  NG  -   -   -   -
;    DTMF-R 01  02  03  04  05  06  07  08
;           OK  OK  OK  NG  OK  OK  OK  NG
;    DTMF-R 09  10  11  12  13  14  15  16
;           -   -   -   -   -   -   -   -
;    DTMF-R 17  18  19  20  21  22  23  24
;           -   -   -   -   -   -   -   -
```

Indication	Description
OK	Normal
NG	Failure
—	Not installed

3.03 DSP Diagnosis (DSP) - for E-1

Description

Used to check the validity of DSP on the E1 DIGITAL TRUNK card.

Command Format

OPE>DSP + Item1 + Item2 ↵

Operation	Item1	Item2
DSP Test	TST	xxxy (xxx: Card No., y: DTMF-G No.= 1 or 2) When “xxx” is entered, diagnosis pattern 1 is executed. *1 When “xxxy” is entered, diagnosis pattern 2 is executed. *2
DSP INS	INS	xxxy (xxx: Card No., y: DSP No.= 1 or 2)
DSP OUS	OUS	
DSP Status	STS	xxx: Card No.

*1.DSP test is done using signals generated by DSP on the E1 DIGITAL TRUNK card.
*2.DSP test is done using signals generated by DTMF-G on the E1 DIGITAL TRUNK card.

Results Display

1.Test

Diagnosis Pattern 1

```
;OPE>DSP TST 101 ↵
; DSP-1      01  02  03  04  05  06  07  08
;             OK  OK  OK  OK  OK  OK  OK  NG
; DSP-2      01  02  03  04  05  06  07  08
;             OK  OK  NG  OK  OK  OK  OK  OK
;OPE>
```

Diagnosis Pattern 2

```
;OPE>DSP TST 1011 ↵
; DSP-1      01  02  03  04  05  06  07  08
;             OK  OK  OK  OK  OK  OK  OK  NG
; DSP-2      01  02  03  04  05  06  07  08
;             OK  OK  NG  OK  OK  OK  OK  OK
;OPE>
```

Note:
01 through 08: Channel No. of DSP

2.INS/OUS

```
;OPE>DSP INS 1011↵
; -- -- -- OK
;OPE>
```

3.Status check

```
;OPE>DSP STS 101↵
; DSP-1 INS
; DSP-2 OUS
;OPE>
```

4.00 Card Test Results Display

Card Test Results Display

```
;OPE>TST 1 101<CR>
;    101    ****** PASS
;OPE>TST 1 ***<CR>
;    101    ****** PASS
;    102    ****** PASS
;    103    ****** NO CARD
;    104    ****** LINK
;    105    ****** TYPE
;             |
;             |
;             |
;
;   214    ****** POWER
;   215    ****** TEST ABORT (TSW FAIL)
;OPE>
;
```

Description

Card Test Message List

Error Indication	Description
PASS	Card status is good
NO CARD	A card is not installed in the specified slot.
TYPE	Assigned card type doesn't correspond to the installed card type
LINK	Card link error
ROM	Card ROM error
RAM	Card RAM error
MODEM	RMT card failure (Modem failure)
OPX POW	OPX power down
BEL POW	OPX power down (Bell)
REC/PLY	OGM Recording/Playing back failure
TSW	TSW card PB generator/PB receiver failure

5.00 Port Test Results Display

```
;OPE>TST 2 1011<CR>
;    1011   ****** PASS
;OPE>TST 2 2013<CR>
;    2013   ****** NO CARD
;OPE>TST 2 1011&1021<CR>
;    1011    ****** PASS
;    1021    ****** FAULT05
;OPE>
;
```

Port Test Error Code List

Code	Description	Port test	Pair test
FAULT01	Loop current failure	—	○
FAULT02	Bell detection failure	—	○
FAULT03	PB Generator failure	—	○
FAULT04	Dial pulse failure	—	○
FAULT05	PB Receiver 1 failure	○	○
FAULT06	PB Receiver 2 failure	—	○
FAULT07	Tone detection circuit 1 failure	○	—
FAULT08	Tone detection circuit 2 failure	○	—
FAULT09	HDLC failure	○	—
FAULT0A	OHCA card is not installed	○	—
FAULT0B	Pulse detection failure	—	○
FAULT0C	Speech path failure	—	○
FAULT0D	— — — — — — — — —	—	—
FAULT0E	— — — — — — — — —	—	—
FAULT0F	— — — — — — — — —	—	—

Legend:

○ applied
— not applied

6.00 PITS and ATT Test Results Display

Description

```
;OPE>TST 3 A1<CR>
;    A1              ****** FAULT02
;OPE>TST 3 DN1012<CR>
;    DN1012****** PASS
;OPE>TST 3 2121<CR>
;    2121    ****** FAULT01
;OPE>TST 2 1011&1021<CR>
;    1011    ****** PASS
;    1021    ****** FAULT01
;OPE>
;
```

PITS and ATT Test Error Code List

Code	Description
FAULT01	PITS Link failure, ATT Link failure
FAULT02	PITS PB Generator failure, ATT PB Generator failure
FAULT03 ≀ FAULT09	— — — — — — — — — — — —
FAULT0A	— — — — — — — — — — — —
FAULT0B	— — — — — — — — — — — —
FAULT0C	Speech Path failure
FAULT0D	— — — — — — — — — — — —
FAULT0E	— — — — — — — — — — — —
FAULT0F	— — — — — — — — — — — —

* If trouble results from card, an error message "Card Fault" appears on the screen.

F. Monitor

1.00 SYM command (System Maintenance Monitor)

Current operating status of the following items can be displayed on the screen by entering SYM command.

Command Format

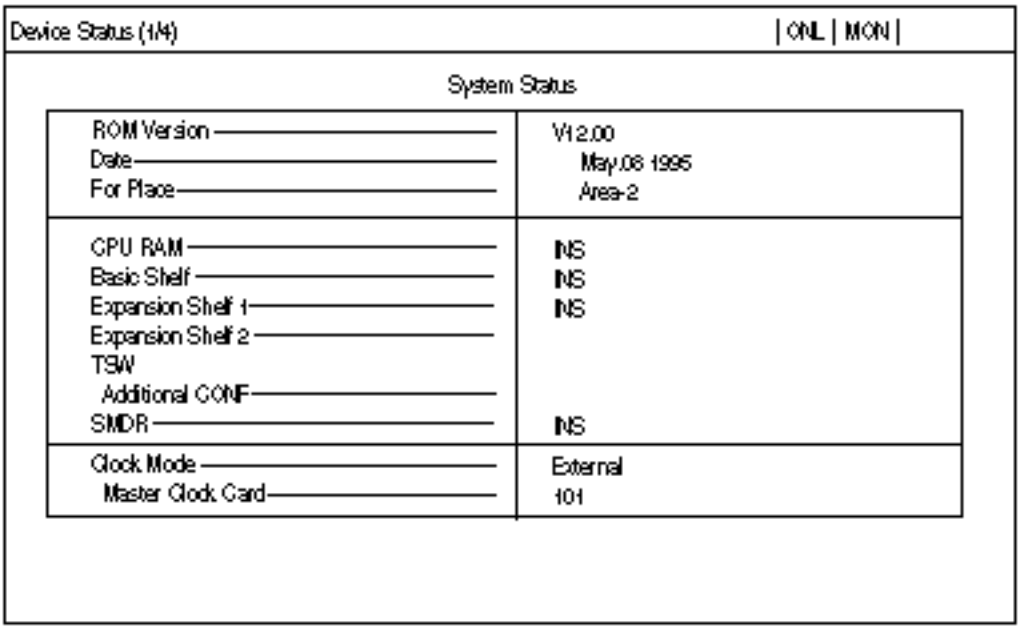
OPE>SYM + Index ↵

(Index)
1 : System Status
2 : Card Status
3 : Port Status
4 : Conference Trunk Status

1.01 System Status screen

Command Format

OPE>SYM 1



Description

ROM version	———	Software's version
Date	———	The date software was originated
For Place	———	Destination
CPU RAM	———	Current status of RAM area
Basic Shelf	———	Current status of Basic Shelf
Expansion Shelf 1	———	Current status of Expansion Shelf 1
Expansion Shelf 2	———	Current status of Expansion Shelf 2
TSW	———	Current status of TSW card
Additional CONF	———	Current status of optional Conference card
SMDR	———	Current status of SMDR device
Clock Mode	———	Displayed only when T-1 or E-1 trunk card is installed. "External" is displayed when the system synchronizes with the external clock. "Internal" is displayed when the system synchronizes with the internal clock. Refer to Section 10-C-64.02 "System Clock Mode (CLK)" for further information.
Master Clock Card	———	Displayed only when T1/E1 DIGITAL TRUNK card is installed. "XXX" (physical card No. of the master card) is displayed when the external clock mode is utilized. "—" is displayed when the internal clock mode is utilized. Refer to Section 10-C-64.03 "Master Clock Priority (CLP)" for further information.

※ In above screen, "—" indicates that the device is not installed.

1.02 Card Status screen

Command Format

OPE>SYM 2 ↵

Device Status (2/4) ONL MON

Card Status

Basic Shelf			Expansion Shelf 1			Expansion Shelf 2		
	01 PLC	I		01 PLC	F		01 LCOT	O
	02 PLC	I		02 PLC	F		02 LCOT	O
	03 PLC	I		03 PLC	F		03 LCOT	O
	04 PLC	I		04 PLC	F		04 LCOT	O
	05 PLC	I		05 PLC	F		05 LCOT	O
	06 PLC	I		06 PLC	F		06 LCOT	O
	07 PLC	I		07 PLC	F		07 LCOT	O
	08 PLC	I		08 PLC	F		08 LCOT	O
	09 PLC	I		09 PLC	F		09 LCOT	O
	10 PLC	I		10 PLC	F		10 LCOT	O
	11 PLC	I		11 PLC	F		11 LCOT	O
	12 PLC	I		12 LCOT	F		12 LCOT	O
				13 LCOT	F		13 ATLC	O
	B2 OHCA	F		14 LCOT	F		14 DPH	O
				15 LCOT	F		15 RMT	O

I: In Service, O: Out of Service, F: Fault

Description

In the above screen, a blank indicates that a card is not installed in the slot.

1.03 Port Status screen

Command Format

OPE>SYM 3 ↵

Device Status (3/4) |ONL |MON|

Port Status

Slot	Basic Shelf 000000000111 123456789012	Expansion Shelf 1 000000000111111 123456789012345	Expansion Shelf 2 000000000111111 123456789012345
Port 1	I O I	I I	
2	I O I	I I	
3	O O I	I I	
4	O I	I I	
5	I O	B I	
6	F O	B I	
7	I F	I	
8	I F	I	
DTMF Rec 1	I O F	I	
2	F O I	I	

I: In Service, O: Out of Service, F: Fault, B: Busy Out

Description

DTMF Rec —— Status of DTMF receiver
Two DTMF receivers are provided on the SLC, HLC and OPX cards.

The system administrator can change the status of a CO port from “Busy Out” to “INS” by entering INS command.

In the above screen a blank indicates that a port is not assigned to the system.

1.04 Conference Trunk Status screen

Command Format

OPE>SYM 4 ↵

Device Status (1/4)

Conference Trunk Status

Basic	1 OUS 2 OUS	3 4	5 6	7 8		
Option	1 INS 2 INS 3 INS 4 INS 5 INS 6 OUS 7 FLT 8 INS 9 INS 10 OUS 11 INS 12 INS	13 INS 14 INS 15 INS 16 INS 17 INS 18 INS 19 INS 20 INS 21 INS 22 INS 23 INS 24 INS	25 26 27 28 29 30 31 32 33 34 35 36	37 38 39 40 41 42 43 44 45 46 47 48	49 50 51 52 53 54 55 56 57 58 59 60	61 62 63 64

INS ; In Service OUS ; Out of Service FLT ; Fault

Description

This screen shows the current operating status of both basic and optional conference trunks.

2.00 TFD command (Traffic Display)

Displays traffic measurement for extensions, trunk groups, attendant consoles and resources.

Command Format

OPE>TFD + Index + Item1 + (Item2) ↵

	Index	Item1	Item 2
Station	1	The first half = 1 The second half = 2	
Trunk Group	2	Trunk Group No. (01~16)	The first half = 1 The second half = 2
ATT	3	ATT No. (1 or 2)	The first half = 1 The second half = 2
DISA OGM1 OGM2 AGC	4 5 6 7	The first half = 1 (Tenant 1) The second half = 2 (Tenant 2)	

Description

1. Station
   Displays traffic measurements of all extensions.

2. Trunk Group
   Displays traffic measurements of each trunk group.

3. Attendant Console
   Displays traffic measurements of each attendant console.

4. DISA, OGM1, OGM2, AGC
   Displays traffic measurements of each resource. If tenant service is assigned to the system, traffic measurements of each resource will be displayed by each tenant individually.

Programming

Set desired start time in “System-Operation” Start Time of Traffic Measurement.
Refer to Section 10-C-4.00 “Operation (OPR)” for programming.

2.01 Station screen

Command Format

OPE>TFD 1 (1 ~ 2) ↵

Traffic Information - Station

Feb. 22 1990

Start Time----------	9:00AM	10:00AM	11:00AM	12:00AM	1:00AM	2:00AM
Incoming Calls ----	498	637	590	120	803	760
Answer Calls ------	360	503	476	88	711	662
Outgoing Calls ----	405	602	555	103	763	731
Completed Calls--	241	430	411	48	509	500
CCS ----------	723	811	780	230	998	889

Start Time----------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Incoming Calls ----	632	721	611	598	420	311
Answer Calls ------	531	603	482	449	289	192
Outgoing Calls ----	600	654	600	531	301	191
Completed Calls--	442	488	503	461	188	119
CCS ----------	800	830	762	750	680	620

Description

Start Time ——— The system can be programmed to display traffic measurements of the extensions from up to 24 hours before the current time. In above example, “9:00 AM” indicates the traffic measurement from 9:00 AM to 10:00 AM one day ago.

Incoming Calls ——— The number of incoming calls (both extension and CO).

Answer Calls ——— The number of answered calls (both extension and CO).

Outgoing Calls ——— The number of outgoing calls (both extension and CO).

Completed Calls ——— The number of completed calls (both extension and CO).

CCS ——— One hundred call seconds, or one hundred seconds of telephone conversation. One hour of telephone traffic is equal to 36 CCS.

2.02 Trunk Group screen

Command Format

OPE>TFD 2 (01 ~ 16) (1 ~ 2) ↵

Traffic Information - Trunk Group (1/2)

Feb. 22 1990 Trunk Group No. = 01

Start Time----------	9:00AM	10:00AM	11:00AM	12:00AM	1:00AM	2:00AM
Incoming Calls ----	406	511	430	110	763	653
Answer Calls ------	232	362	291	65	580	572
Outgoing Calls ----	362	419	381	98	601	599
Completed Calls--	241	311	263	60	449	472
Busy Calls ----------	109	120	95	39	195	201
CCS ----------	700	801	755	215	932	831

Start Time----------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Incoming Call -----	613	555	529	511	412	311
Answer Calls ------	482	412	427	400	303	200
Outgoing Calls ----	499	400	395	382	291	183
Completed Calls--	362	282	312	300	162	99
Busy Calls ----------	139	99	112	95	68	35
CCS ----------	777	703	683	663	582	411

Description

Busy Calls —— The number of outgoing calls which encountered a busy line.

For a description of other items, refer to Section 15-F-2.01 “Station screen.”

2.03 Attendant Console screen

Command Format

OPE>TFD 3 (1 ~ 2) (1 ~ 2) ↵

Traffic Information - Attendant Console (1/2)

Feb. 22 1990 Attendant No. = 01

Start Time----------	9:00AM	10:00AM	11:00AM	12:00AM	1:00AM	2:00AM
Incoming Calls ----	511	632	590	140	809	751
Answer Calls ------	412	488	476	99	680	612
Outgoing Calls ----	403	471	555	121	762	592
Completed Calls--	291	403	411	83	611	464
Handle Calls-------	300	381	299	69	491	391
CCS ----------	712	853	768	240	998	900

Start Time----------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Incoming Calls ----	721	700	683	592	483	301
Answer Calls ------	549	550	521	482	362	188
Outgoing Calls ----	611	603	549	468	411	165
Completed Calls--	455	423	401	352	348	100
Handle Calls-------	311	301	281	311	298	83
CCS ----------	881	862	800	762	700	583

Description

Handled Call —— The number of calls transferred by the attendant console.

For a description of other items, refer to Section 15-F-2.01 “Station screen.”

2.04 DISA screen

Command Format

OPE>TFD 4 (1 ~ 2) ↵

Traffic Information - DISA

Feb. 22 1990 Tenant = 1

Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	5	18	12	2	20	8
CCS ----------	3	10	2	1	10	3
Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	4	12	3	2	4
CCS ----------	20	2	8	1	1	2
Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	6	20	12	4	2	4
CCS ----------	3	9	3	2	1	2
Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	0	12	3	2	4
CCS ----------	10	0	6	1	1	2

Description

Start Time ——— Refer to Section 15-F-2.01 “Station screen.”

Busy Calls ——— The number of DISA calls which failed to access any DISA resources.

CCS ——— One hundred call seconds, or one hundred seconds of telephone conversation.
One hour of telephone traffic is equal to 36 CCS.

Tenant ——— If tenant service is employed, DISA screen for each tenant is displayed individually.

2.05 OGM1 screen

Command Format

OPE>TFD 5 (1 ~ 2) ↵

Traffic Information - OGM1

Feb. 22 1990 Tenant = 1

Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	5	20	12	3	2	4
CCS ----------	1	8	2	1	2	4
Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	5	12	8	2	4
CCS ----------	20	1	8	3	1	2
Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	6	18	12	3	2	4
CCS ----------	2	7	3	1	1	2
Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	0	12	7	2	4
CCS ----------	10	0	6	3	1	2

Description

Start Time —— Refer to Section 15-F-2.01 “Station screen.”

Busy Calls —— The number of calls which failed to access any OGM1 resources.

CCS —— One hundred call seconds, or one hundred seconds of telephone conversation.
One hour of telephone traffic is equal to 36 CCS.

Tenant —— If tenant service is employed, OGM 1 screen for each tenant is displayed individually.

2.06 OGM2 screen

Command Format

OPE>TFD 6 (1 ~ 2) ↵

Traffic Information - OGM2

Feb. 22 1990 Tenant = 1

Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	3	20	12	3	2	4
CCS ----------	1	11	2	1	2	4
Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	8	5	12	5	2	4
CCS ----------	2	2	8	2	1	2
Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	7	13	12	4	2	4
CCS ----------	3	6	3	2	1	2
Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	4	12	7	2	4
CCS ----------	10	1	6	4	1	2

Description

Start Time —— Refer to Section 15-F-2.01 “Station screen.”

Busy Calls —— The number of calls which failed to access any OGM2 resources.

CCS —— One hundred call seconds, or one hundred seconds of telephone conversation.
One hour of telephone traffic is equal to 36 CCS.

Tenant —— If tenant service is employed, OGM 2 screen for each tenant is displayed individually.

2.07 AGC screen

Command Format

OPE>TFD 7 (1 ~ 2) ↵

Traffic Information - AGC

Feb. 22 1990 Tenant = 1

Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	3	10	12	3	2	4
CCS ----------	1	3	2	1	2	4
Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	8	12	4	2	4
CCS ----------	20	2	8	2	1	2
Start Time---------	9:00AM	10:00AM	11:00AM	12:00AM	1:00PM	2:00PM
Busy Calls --------	30	9	12	3	2	4
CCS ----------	10	3	3	1	1	2
Start Time---------	3:00PM	4:00PM	5:00PM	6:00PM	7:00PM	8:00PM
Busy Calls --------	30	8	12	8	2	4
CCS ----------	10	3	6	3	1	2

Description

Start Time ——— Refer to Section 15-F-2.01 “Station screen.”

Busy Calls ——— The number of calls which failed to access any AGC resources.

CCS ——— One hundred call seconds, or one hundred seconds of telephone conversation.
One hour of telephone traffic is equal to 36 CCS.

Tenant ——— If tenant service is employed, AGC screen for each tenant is displayed individually.

G. Other Features

1.00 PFT command (Power Failure Transfer)

Description

Provides up to 18 extension/CO cards pairs to maintain a conversation when power is restored or TSW recovery.
If this is not programmed then power restoration or TSW recovery drops any existing conversations.

Conditions

In case of the KX-T96174X (SLC card), three ports (ports 1 through 3) are available for Power Failure Transfer Assignment.

Command Format

PRG > PFT + AT+ (Index)

Index = PFT No. (01 ~ 18)

Screen display

```
; PRG > PFT  SH01 <CR>
;  PFT    No. 01
;       1 :  Trunk Slot No.------------------------------------ 101
;       2 :  Extension Slot No. ------------------------------ 107
;  PFT    No. 02
;       1 :  Trunk Slot No.------------------------------------ 102
;       2 :  Extension Slot No. ------------------------------ 108
;
;
;
;  PFT    No. 18
;       1 :  Trunk Slot No.------------------------------------ 206
;       2 :  Extension Slot No. ------------------------------ 212
; PRG >
```

Item	Data	Explanation
1	101~315	Assign LCOT, GCOT, RCOT or PCOT card No. which is available for power failure transfer
2	101~315	Assign HLC or SLC card No. which is available for power failure transfer

Refer to Section 10-C-47.00 “Power Failure Transfer (PFT),” for further information about programming.

Conditions

SLT telephones and some PITS telephones* can be used during power failure if power failure transfer assignment had been done in advance.

*Following PITS telephones can be used during power failure.

PITS-KX-T123230, KX-T123230D, KX-T123235, KX-T61630, KX-T30830

When you are using the PITS telephones available with power failure transfer, set the POWER FAILURE switch to ON, when power failure occurs.
If dialing cannot be done, set the DIALING MODE selector to another position (PULSE or TONE).
When the power is restored, set the POWER FAILURE switch to OFF.
If the power is restored during a conversation, set the POWER FAILURE switch to OFF after conversation is completed.

2.00 VUP command (Version-up)

Description

Used to initialize the RAM area of the newly added system memory while keeping the current settings intact.

This command is valid when one of the following version of ROM is replaced with a new version of ROM (version 12.XX and above).

• V.6.5X,V.8.XX,V.9.XX,V.10.XX

Command Format

OPE>VUP + old ROM Version No. (Vxxxx)*

* If your old ROM version is V.6.5X or lower, enter “V.6.50”.

If your old ROM version is V.7.XX, enter “V.8.00”.

Display Example

```
; OPE>VUP V10.50    <CR>
;       V10.50 -> V12.00 version up
;       Are You Sure? (Y; Yes, Other: No) =
;
; OK
; OPE >
```

Conditions

After replacing an old version of ROM with a new version of ROM (Version 12.XX or higher), “Additional System Memory Initialization” should be done before programming the newly added features. Then newly added system memory is initialized by default values.

Note:

• If you do not execute this operation after replacing the ROM, the system malfunction may occur.

Section 16

Backup Utility-On-Site

(Section 16)

Backup Utility-On-Site

Contents

A. Introduction

Introduction

Backup is a procedure where a copy of the system programming data and attendant console database is stored on an external storage medium, such as a floppy disk or magnetic tape. If it becomes necessary to re-initialize the system programming data and attendant console database, it will be faster to reload from tape or disk than by manual re-input.
This section describes a backup procedure of system programming data and attendant console database at on-site.

Backup Types

There are following two backup types.

1. Save (Main Unit → Backup Device)

   - Saving system programming data and attendant console database from the system to the backup device at on-site can be done during on-line mode as well as off-line mode.

   - When an attendant console is used as the system administration device, saving the system programming data and attendant console database can be done using a personal computer with external storage medium.

2. Load (Backup Device → Main Unit)

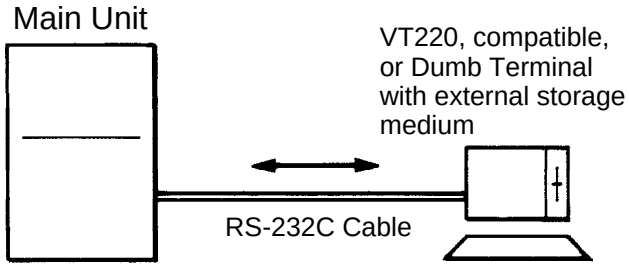
   - Loading system programming data and attendant console database from the backup device to the system can be done during off-line mode only.

   - When an attendant console is used as the system administration device, loading the system programming data and attendant console database can be done using a personal computer with external storage medium.

(Note)
To save/load the attendant console database, first save/load the data to the Main Unit and then save/load the attendant console database to the backup device.
Refer to Section 13-E “Backup Mode” for further information.

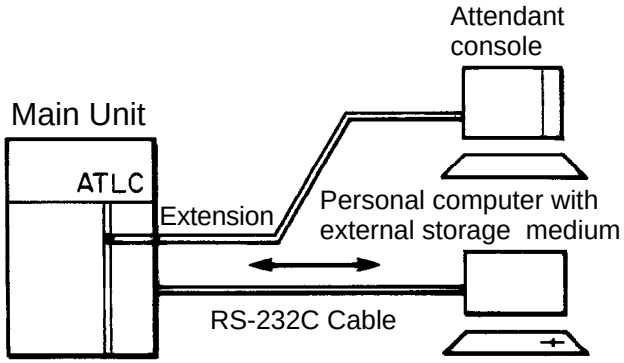
Backup Configuration

1. Maintenance Device = Operation device



The backup device is the same as the maintenance device.

2. Maintenance device = Attendant console



The backup device is a personal computer with external storage medium

B. Backup Utility Types

1.00 VT220, Compatibles, or Dumb Terminals

On-site backup is possible with the following terminals which have functions for saving system programming data and attendant console database sent via RS-232C cable to an external storage medium and loading the saved system programming data and attendant console database to the Main Unit.

- VT220, (VT100) terminal
- VT220 (VT100) compatible terminal
- Dumb terminal

Operating Mode Switching (VT220 → Dumb)

There are two methods for switching the mode from VT220 to Dumb.

1. First set “System-Operation (2/3)” System Administration Device to “Dumb” and save the change to memory.
   Change to Dumb mode is made when “9. Exit” is selected in the Main Menu and reenter the system administration mode, or when the communication is interrupted and reconnection is made to the system.

(Note)
When a Dumb mode is entered using the above procedure, return to VT mode is not possible even when CTRL key + V key are pressed simultaneously.
Return to VT mode is made by changing the System Administration Device name by operation in Dumb mode from Dumb to VT220 and using the exit command at the initial prompt “>” or interrupting the communication between the system and maintenance device once and then restarting communication.

2. When CTRL key + V key are pressed simultaneously while the Main Menu is being displayed in VT mode, the mode will be switched from VT220 to Dumb.
   When CTRL key + V key are pressed simultaneously while the initial prompt “>” is displayed in Dumb mode, the mode will be switched from Dumb to VT220.

(Note)
Even when System Administration Device name is changed to Dumb in VT mode, switching from VT220 to Dumb and from Dumb to VT220 by simultaneously pressing CTRL key + V key is possible until exit has been executed once or until the communication has been interrupted.

Operating Mode Switching (Dumb → VT220)

1. When the System Administration Device name is changed from Dumb to VT220 by operation in Dumb mode, VT mode will be obtained when the communication between the system and maintenance device is interrupted once and then started again.

(Note)
In the above case, return to VT mode will not be executed by simultaneously pressing CTRL key + V key in Dumb mode.

2.00 Before Beginning Backup

It will not be possible to save or load the system programming data and attendant console database correctly if the backup device's communications settings are not correct.

1. Are the baud rate, number of data bits, stop bit and parity settings correct? They must all be the same as the settings on the system side. (Is there a communications format setting? This must be set to full duplex.)

2. Is the backup device set up to sent X-on/X-off codes to control the flow of the data from the system? (X-on/X-off send)
   Also, is it set up to receive X-on/X-off codes sent from the system to control the flow of the data sent to the system? (X-on/X-off receive)
   Both are essential.

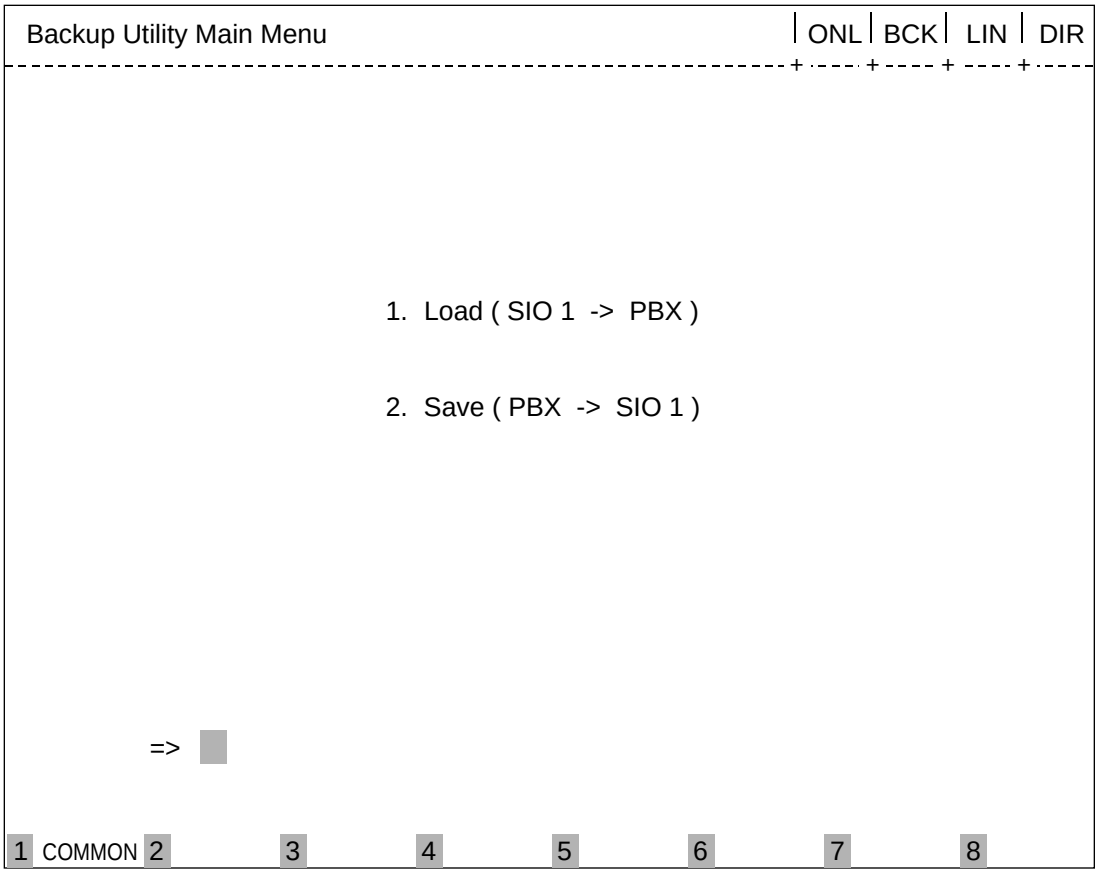
3. Is the backup device set so that all control codes corresponding to ASCII 00h-1Fh are transmitted and written to the storage device? Also, is the backup device set so that these stored control codes can be sent without limitation to the system?
   The above settings are necessary to ensure that the SOH, STX, EOT, ETX codes, etc. specified in the transmission format correspond to the control codes.
   In addition, in order to perform a backup with a protocol, the backup device must be set up so that all codes form 00h-FFh are received, stored and transmitted.

4. Does the setup specify automatic linefeeds (the linefeed code is automatically added to the data each time the data displayed reaches the 80th column at the far right of the screen)? If this function is enabled, the large number of extra codes added to the data will produce an "Illegal code detect" error whenever data is loaded. The automatic linefeed function must therefore be turned off.

3.00 Using VT220, Compatibles

3.01 Backup Main Menu

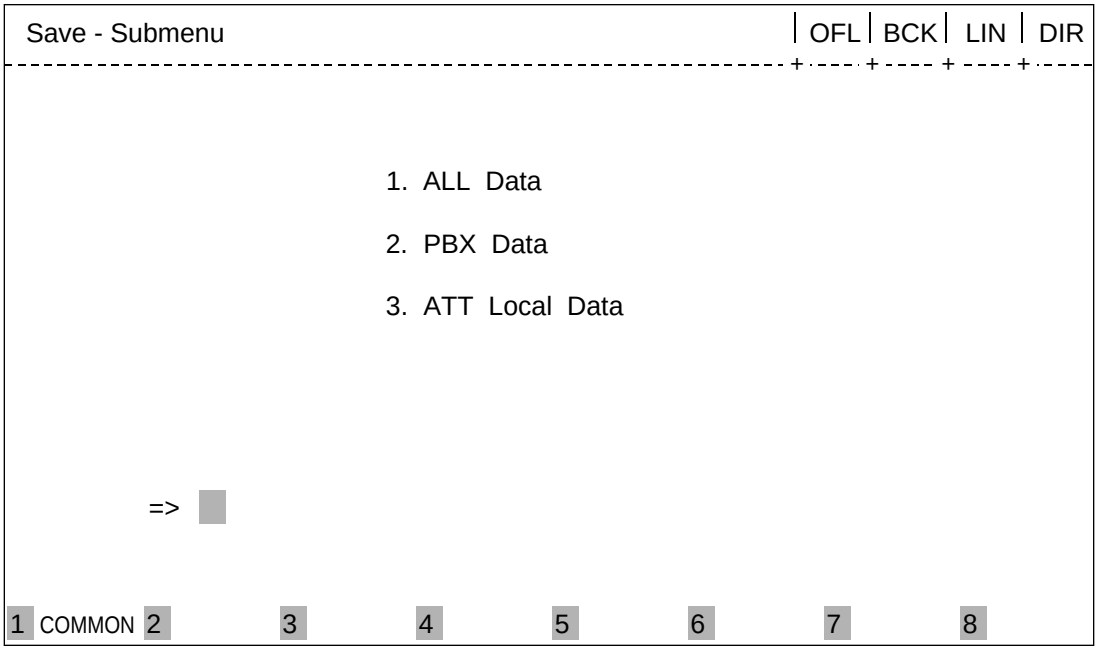
From the Main Menu Screen, Select “7. Backup Utility” then the following “Backup Utility Main Menu” appears on the screen.



Description

1. Load...Loading the saved data (system programming data and attendant console database) from backup device to the Main Unit.
2. Save...Saving the system programming data and attendant console database from the Main Unit to backup device.

3.02 Saving Procedure



1. First, confirm that the preparations for start of communication between sender and receiver have been made, like uniform communication parameters for sender and receiver etc.
2. Select “2. Save” from the Backup Utility Main Menu, then Save-Submenu screen appears on the screen. (See above)
3. Before selecting an area, prepare the terminal to receive data.
4. Select the area (1 to 3) with the submenu. (Refer to [Submenu Description].)
5. The saving start message “Transfer start” appears on the screen. Then the selected data is transferred as ASCII codes from the Main Unit to the backup device.
6. When saving is finished, the following message appears on the screen. “Transfer end”
7. Release the Data Receive mode of the backup device.

[Submenu Description]

1. All Data...Saves all data, system programming data and attendant console database (ATT1 or ATT2), from the Main Unit to backup device.

2. PBX Data...Saves PBX data (system programming data) from the Main Unit to backup device.

3. ATT Local Data .....Saves the database of attendant console (ATT1 or 2) from the Main Unit to backup device.

Note:

From software version 9.5X and above, the system can hold only one of two attendant console databases (ATT1 or 2) at a time.

If both databases of ATT1 and 2 should be saved/loaded respectively (e.g. Tenant Service), follow the procedure below.

Save

(1) ATT1 → System → Backup Device (Data 1)

(2) ATT2 → System → Backup Device (Data 2)

Load

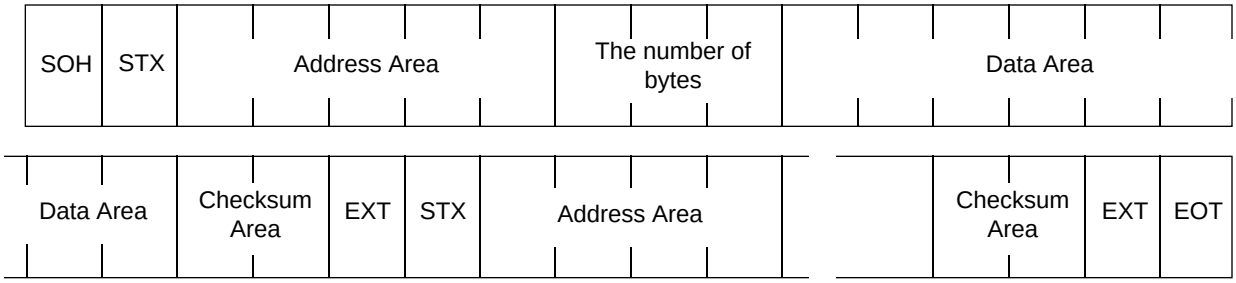
(1) Backup Device (Data 1) → System → ATT1

(2) Backup Device (Data 2) → System → ATT2

Saving/Loading of data between ATT1/2 and system can be done in ATT Local Mode.

Refer to Section 13 “Attendant Console – Local Mode” for further information.

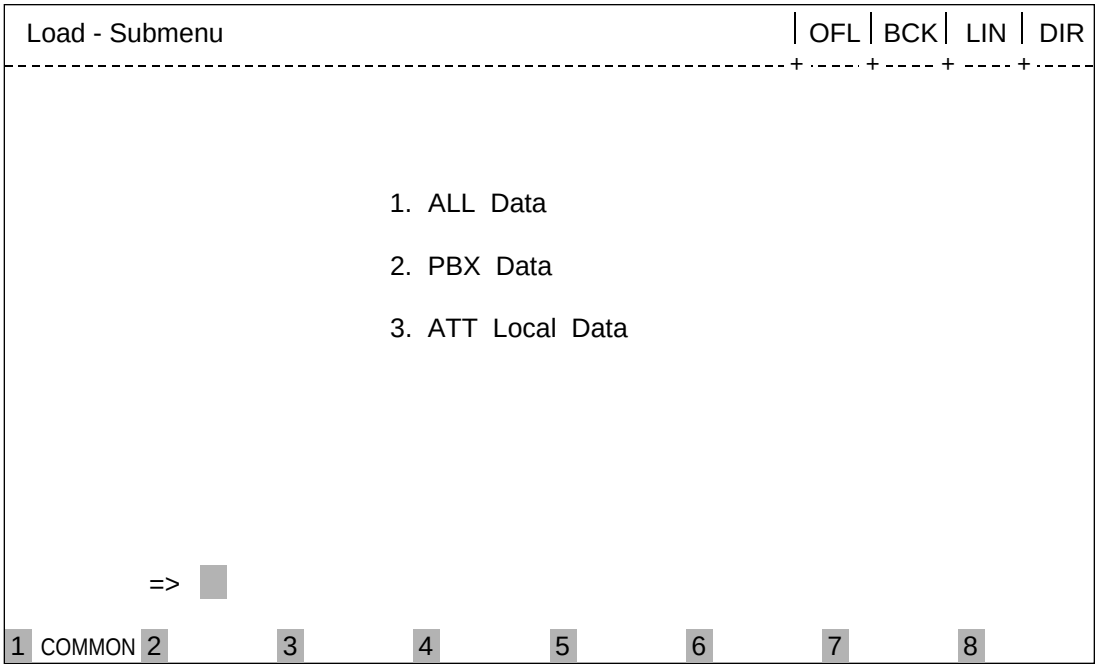
Transmission Format



SOH = Start of header
STX = Start of text
Address = System data address
(Is system address is “FFFFF h”, it would be software version) (ASCII code)
The number of byte = 1 to 256 (ASCII code)
Data area = System data (ASCII code)
Checksum = Address + The number of bytes + data

* The complement of the sum of all bytes (ASCII code)
ETX = End of text
EOT = End of data transfer

3.03 Loading Procedure



1. First, confirm that the preparations for start of communication between sender and receiver have been made, like uniform communication parameters for sender and receiver etc.
2. Select “1. Load” from the Backup Utility Main Menu, then Load-Submenu Screen appears on the screen. (See above)
3. Select the area (1 to 3) with the submenu. (Refer to [Submenu Description].)
4. The loading start message “Transfer start” appears on the screen, and the system waits for the data from the backup device.
5. Change the backup device to Data Send mode. Saved data is transmitted as ASCII codes from the backup device to the system.
6. When loading of the saved data is finished, the following message appears on the screen. “Transfer end”
7. Release the Data Send mode of the backup device.
8. You can edit the just loaded data in off-line mode.
   And if you want to restart the system (enters to on-line mode), set the Operation Switch (MODE) to on-line mode, and press the RESET button.

   For further information about Operation Switch, refer to Section 2-F-2.00 “CPU Rotary-Switch Features.”

[Submenu Description]

1. All Data Loads all data, system programming data and attendant console database (ATT1 or ATT2), from backup device to Main Unit.

2. PBX Data...Loads PBX data (system programming data) from backup device to Main Unit.

3. ATT Local Data*....Loads the database of attendant console (ATT1 or 2) from backup device to Main Unit.

*Refer to “**Note**:” on page 16-B-4.

(Note)
Loading the saved data is possible during off-line mode only. If you select “1. Load” in on-line mode, an error message appears on the screen and your selection becomes invalid. No other troubles occur.

4.00 Using Dumb Terminal

4.01 Saving Procedure

1. First, confirm that the preparations for start of communication between sender and receiver have been made, like uniform communication parameters for sender and receiver etc.
2. Change the system mode to Data Receive.
3. Select the area and enter the saving command.

   (a) Command format

   OPE>SAV + Item 1 + Item 2

   (b) Item explanation

   Item 1 : 1 to 3

   1.All Data
   2.PBX Data
   3.ATT Local Data*

   * Refer to "**Note**:" on page 16-B-4.

   Item 2 : 1 to 3

   1.No procedure (Hex)
   2.CRC-16 (binary code decimal) available only in remote operation
   3.CRC-CCITT (binary code decimal) available only in remote operation

(Note)
- Refer to Section 16-B-3.02 "Saving Procedure" about description of Item 1.
- To select the option 2, or 3 of Item 2 is available only when you are saving the system programming data and attendant console database from a remote location.

4. The saving start message "Transfer start" appears on the screen. Then the selected data is transferred as ASCII codes from the system to the backup device.
5. When saving is finished, the following message appears on the screen.
   "Transfer end"
6. Release the Data Receive mode of the backup device.

4.02 Loading Procedure

1. First, confirm that the preparations for start of communication between sender and receiver have been made, like uniform communication parameters for sender and receiver etc.
2. Enter the loading command.

   (a) Command format

   OPE>LOD + Item 1 + Item 2

   (b) Item explanation

   Item 1 : 1 to 3

   1.All Data
   2.PBX Data
   3.ATT Local Data*

   Item 2 : 1 to 3

   1.No procedure (Hex)
   2.CRC-16 (binary code decimal) available only in remote operation
   3.CRC-CCITT (binary code decimal) available only in remote operation

   * Refer to "**Note**:" on page 16-B-4.

(Note)
- Refer to Section 16-B-3.03 "Loading Procedure" about description of Item 1.
- To select the option 2, or 3 of Item 2 is available only when you are loading the saved data from a remote location.

3. The loading start message "Transfer start" appears on the screen, and the system waits for the data from the backup device.
4. Change the terminal to data send mode. Selected data is transferred as ASCII codes from the backup device to the system.
5. When loading is finished, the following message appears on the screen.
   "Transfer end"
6. Release the Data Send mode of the backup device.
7. When loading the selected data is finished, you can edit the loaded data in off-line communication mode.
   And if you want to restart the system (move to on-line mode), set the Operation Switch (MODE) to on-line mode, and press the RESET button.

(Note)
Loading the selected data is possible only in off-line mode. If you select "1. Load" in on-line mode, an error message appears on the screen and your selection becomes invalid. No other troubles occur.

C.Troubleshooting

1. If the following troubles should occur during backup operation, stop the operation and return to the initial screen.

   - When the communication cable connection has disconnected.
   - When the backup device has lost power.

   In above case stop the loading and boot the system with default values compulsorily.

2. Checksum error detection

   If checksum error is detected during loading the system programming data, an error message appears on the screen and loading is terminated.
   Then the system is reset and started with default values automatically.

Error Message List

Error Message	Contents	Countermeasures
Device error (VT220) DATA ERROR 027(Dumb)	Backup device is not connected (only when maintenance device is attendant console)	Connect the backup device to SIO # 1 Port.
Version* error (VT220) DATA ERROR 029(Dumb)	Different version* at the time of backup	Match the backup version.
Checksum error (VT220) DATA ERROR 030(Dumb)	A checksum error has been detected.	Communication line is defective or backup data is destroyed.
Illegal code detected (VT220) DATA ERROR 031(Dumb)	Incorrect data has been received.	Communication line is defective or backup data is destroyed.

* Version=System Data Version
The system firmware (ROM) needs to be changed only in case of a software update involving an alteration in the data format of the system area. The backup function does not allow compatibility between different system data versions. Data saved using the old version of the firmware can be used as is even if the firmware is updated, as long as the system programming data (RAM) is not changed.

Section 17

Backup Utility-Remote Location

(Section 17)

Backup Utility-Remote Location

Contents

A. Introduction

Introduction

This section describes a backup procedure of system programming data and attendant console database from a remote location.
To execute system programming, diagnosis, data backup, and traffic measurement in an interactive format via CO line from a remote location, RMT card (Modem) must be installed to the system.
Backup (Save and Load) from a remote location is possible only in Dumb mode.
For further information about switching of the operating modes, please refer to Section 16-B "Backup Utility Types."

The following conditions are required for remote operation.

- To have successful data communications with protocol, the communication parameters of both the system and remote maintenance terminal must be preset to the following fixed values.

  data = 8 bit
  parity = none
  stop = 1 bit

  * These fixed communication parameters do not apply to the data communication without protocol.

- For remote access, a data terminal and modem are required at a remote location.
  For further information about communication parameters, refer to Section 9-D-7.00 "Communication Interface."

- RMT card (Modem) must be installed to the system.

- To administer the system from a remote location, assign "System-Operation" "Remote Directory Number" in system programming.

- Backup (Save and Load) from a remote location is possible only in Dumb mode. (When system administration from a remote location is started, the system defaults to Dumb operation mode.)

  For further information about remote operation, refer to Section 14-B-2.00 "System Administration from a Remote Location."

Backup Types

There are following two backup types.

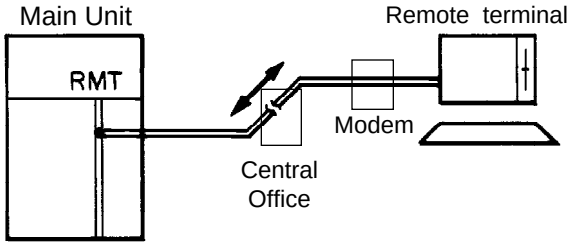
1. Save (Main Unit → Remote terminal)

   - Saving the system programming data and attendant console database from the system to remote terminal is possible during on-line communication mode only.

2. Load (Remote terminal → Main Unit)
   - When loading the system programming data and attendant console database from a remote terminal begins, the system automatically shifts to off-line mode while holding the speech path.

Backup Configuration

1. Maintenance device= RMT (remote) terminal



The backup device is the same as the maintenance device

B. Backup Utility Types

1.00 Before Beginning Backup

It will not be possible to save or load the system programming data and attendant console database correctly if the backup device's communications settings are not correct.

1. Are the baud rate, number of data bits, stop bit and parity settings correct? They must all be the same as the settings on the system side. (Is there a communications format setting? This must be set to full duplex.)

2. Is the backup device set up to sent X-on/X-off codes to control the flow of the data from the system? (X-on/X-off send) Also, is it set up to receive X-on/X-off codes sent from the system to control the flow of the data sent to the system?
   Both are essential.

3. Is the backup device set so that all control codes corresponding to ASCII 00h-1Fh are transmitted and written to the storage device? Also, is the backup device set so that these stored control codes can be sent without limitation to the system?
   The above settings are necessary to ensure that the SOH, STX, EOT, ETX codes, etc. specified in the transmission format correspond to the control codes.
   In addition, in order to perform a backup with a protocol, the backup device must be set up so that all codes form 00h-FFh are received, stored and transmitted.

4. Does the setup specify automatic linefeeds (the linefeed code is automatically added to the data each time the data displayed reaches the 80th column at the far right of the screen)? If this function is enabled, the large number of extra codes added to the data will produce an "Illegal code detect" error whenever data is loaded. The automatic linefeed function must therefore be turned off.

2.00 Using Dumb Terminal

2.01 Saving Procedure

First, confirm that the preparations for the start of communication have been made.

- The communication parameters must be the same for sender and receiver.
- The system will do an “auto baud” to adjust its baud rate to remote terminal (300 or 1200 baud).

Without the protocol

1. Change the terminal to data receive mode.
2. Select the area and enter the saving command.
   (a) Command format
   OPE>SAV + Item 1 + Item 2
   (b) Item explanation
   Item 1 : 1 to 3
   1. All Data
   2. PBX Data
   3. ATT Local Data*

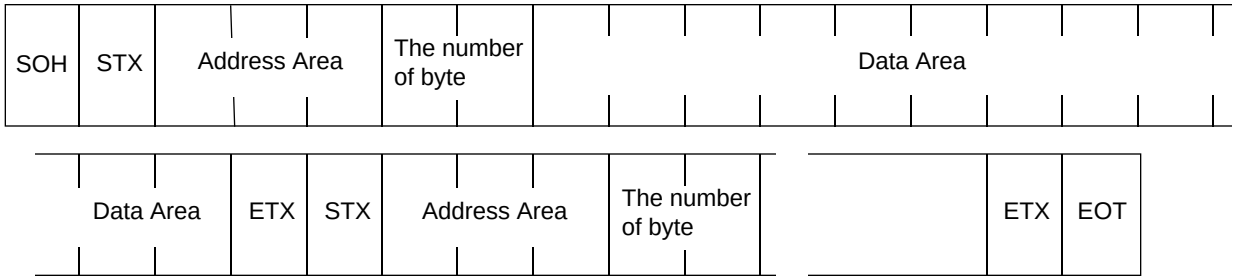
   * Refer to “**Note**:” on page 16-B-4.

   Refer to Section 16-B-3.02 “Saving Procedure” about description of Item 1.

   Item 2 : 1 to 3
   1. No procedure (Hex)
   2. CRC-16 (binary code decimal) only available in remote operation
   3. CRC-CCITT (binary code decimal) only available in remote operation
3. The saving start message “Transfer start” appears on the screen. Then the selected data is transferred as ASCII codes from the system to the remote terminal.
4. When the saving is finished, the following message appears on the screen. “Transfer end”
5. Release the Data Receive mode of the backup device.

Using the protocol CRC-16/CRC-CCITT

1. Select the area and enter the saving command. A message “Transfer start” appears on the screen, and the system will wait for protocol linking. Refer to the explanations for without the protocol on this page in regard to (a) Command format and (b) Item explanation.
2. Switch the terminal to protocol data receive mode. When the protocol link has been established, the selected data is transferred in binary format from the system to a remote terminal.
3. When saving is finished, the protocol link is disconnected automatically, and the mode changes to non-protocol communication mode, and the following message appears on the screen. “Transfer end”
4. Release Protocol Data Receive mode of the backup device.



Transmission Format

SOH = Start of header
STX = Start of text
Address = System data address
(Is system address is “FFFFF h”, it would be software version)
(Binary data)
The number of byte = 1 to 256 (Binary data)
Data area = System data (Binary data)
Checksum = Address + The number of bytes + data
ETX = End of text
EOT = End of data transfer

2.02 Loading Procedure

First, confirm that the preparations for the start of communication have been made.

- The communication parameters must be the same for sender and receiver.
- The system will do an “auto baud” to adjust its baud rate to the remote terminal (300 or 1200 baud).

Without the protocol

1. Enter the loading command.

   (a) Command format

   OPE>LOD + Item 1 + Item 2

   (b) Item explanation

   Item 1 : 1 to 3

   1. ALL Data
   2. PBX Data
   3. ATT Local Data*

   * Refer to “**Note**:” on page 16-B-4.

   Refer to Section 16-B-3.03 “Loading Procedure” about description of Item 1.

   Item 2 : 1 to 3

   1. No procedure (Hex)
   2. CRC-16 (binary code decimal) available only in remote operation
   3. CRC-CCITT (binary code decimal) available only in remote operation

2. The loading start message “Transfer start” appears on the screen, and the system waits for the data from the remote terminal.
3. Change the terminal to data send mode. Selected data is transferred as ASCII codes from the remote terminal to the system.
4. When loading the selected data from a remote terminal begins, the system automatically shifts to off-line mode while holding the speech path.
5. When loading the selected data is finished, the following message appears on the screen. “Transfer end”
6. Release the Data Send mode of the backup device.
7. When the remote operation is terminated, the system is reset automatically.

Using the protocol CRC-16/CRT-CCITT

1. Enter the loading command.
   Refer to the explanations for without protocol in regard to (a) Command format and (b) Item explanation.
2. The loading start message
   “Transfer start”
   appears on the screen, and the system waits for Protocol Linking.
3. Change the remote terminal to protocol data send mode.
   When the protocol link has been established, the selected data is transferred in binary format from the remote terminal to the system.
4. During the loading, the system automatically shifts to off-line mode while holding the speech path.
5. When loading the selected data is finished, the protocol link is disconnected automatically, and the protocol data send mode changes to non-protocol communication mode and the following message appears on the screen.
   “Transfer end”
6. Remove the terminal from protocol data send mode.
7. You can edit the loaded data from a remote location. And if you want to reset the system (enters to on-line mode), replace the handset and stop the data communication. After loading the selected data, if the system detects “no carrier,” the system is reset automatically.

C. Troubleshooting

1. If the following troubles should occur during backup operation, stop the operation and return to the initial screen.

   - When the communication cable has been disconnected.
   - When the remote terminal has lost power.

   In above case stop the loading and boot the system with default values compulsorily.

2. Checksum error detection

   If checksum error occurs during loading the saved data, an error message appears on the screen and loading is terminated.
   Then the system is reset and started with default values automatically.

Error Message List

Error Message	Contents	Countermeasures
Data error 027	Backup device is not connected. (only when maintenance device is attendant console)	Connect the backup device to SIO #1 Port.
Data error 029	Different version* at the time of backup.	Match the backup version.
Data error 030	A checksum error has been detected.	Communication line is defective or backup data is destroyed.
Data error 031	Incorrect data has been received.	Communication line is defective or backup data is destroyed.

* Version=System Data Version

The system firmware (ROM) needs to be changed only in case of a software update involving an alteration in the data format of the system area. The backup function does not allow compatibility between different system data versions. Data saved using the old version of the firmware can be used as is even if the firmware is updated, as long as the system programming data (RAM) is not changed.

Section 18

Abbreviations

Abbreviations

A

AGC	Automatic Gain Control
ARS	Automatic Route Selection
ATT	Attendant Console
ATLC	Attendant Console Line Circuit

B

BGM	Background Music
BLF	Busy Lamp Field
BSS	Busy Station Signaling

C

CHG	Change
CO	Central Office
COL	Central Office Line
CONF	Conference
COS	Class of Service
COT	Central Office Trunk
CPC	Calling Party Control
CPU	Central Processing Unit

D

DES	Destination
DID	Direct Inward Dialing
DIL	Direct In Lines
DISA	Direct Inward System Access
DN	Directory Number
DND	Do Not Disturb
DP	Dial Pulse
DPH	Doorphone Circuit
DSS	Direct Station Selection
DTMF	Dual-Tone Multifrequency

E

EFA	External Feature Access
EXT	Extension

F

FDN	Floating Directory Number
FWD	Call Forwarding

G

GCO	Group CO
GCOT	Ground Start Central Office Trunk

H

HLC	Hybrid Line Circuit

I

ICM	Intercom
INS	In Service
IRNA	Intercept Routing-No Answer

L

LCD	Liquid Crystal Display
LCOT	Loop Start Central Office Trunk
LED	Light Emitting Diode
LNR	Last Number Redial

M

MOD	Modification
MODEM	Modulator and Demodulator Unit
MSG	Message
MW	Message Waiting

O

OCC	Other Common Carrier
OFDN	Overflow Directory Number
OGM	Outgoing Message
OHCA	Off-Hook Call Announcement
OPX	Off Premise Extension
OUS	Out of Service

P

PB	Push Button
PBX	Private Branch Exchange
PCO	Private CO
PDN	Primary Directory Number
PF	Programmable Feature
PITS	Proprietary Integrated Telephone System
PLC	Proprietary Integrated Telephone System Line Circuit

R

RMT	Remote Circuit
RST	Restart

S

SCO	Single CO
SDN	Secondary Directory Number
SLC	Single Line Telephone Circuit
SLT	Single Line Telephone
SMDR	Station Message Detail Recording
SNR	Saved Number Redial
SRC	Source

T

TAFAS	Trunk Answer From Any Station
TG	Trunk Group
TSW	Time Sharing Switch

U

UCD	Uniform Call Distribution
UNA	Universal Night Answer

W

WT	Warning Tone

Section 19

I n d e x

I n d e x