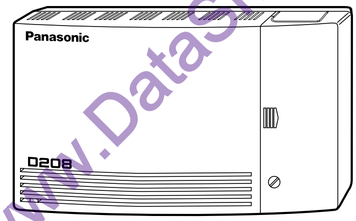
Panasonic

## Digital Super Hybrid System

# Operating Instructions

Model No. **KX-TD208CE**



**Please read this manual before using the Digital Super Hybrid System.**

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**Thank you for purchasing the Panasonic Telephone System.**

# *System Components*

| | Model No. | Description |
|---|---|---|
| Service Unit | KX-TD208 | Digital Super Hybrid System (Main Unit) |
| Optional Module | KX-TD20870 | 4 Extension Expansion Card |
| | KX-TD20880 | 1-ISDN Line Card |
| Optional Telephone | KX-T7230 | Digital Proprietary Telephone with 2 line display |
| | KX-T7235 | Digital Proprietary Telephone with 6 line display |
| | KX-T7250 | Digital Proprietary Telephone |
| | KX-T7425 | Digital Proprietary Telephone |
| | KX-T7433 | Digital Proprietary Telephone with 3 line display |
| | KX-T7436 | Digital Proprietary Telephone with 6 line display |
| | KX-T7450 | Digital Proprietary Telephone |
| User-supplied Equipment | Single Line Telephone | |

**NOTICE:**

- In this manual, the suffix “CE” or “CE-B” of each model number is omitted.
- A single line telephone is abbreviated as SLT.
- An ISDN telephone is abbreviated as ISDN-T.
- A digital proprietary telephone is abbreviated as DPT.
- IBM is a registered trademark of International Business Machines Corporation.
  MS-DOS® is registered trademark of Microsoft Corporation in the United States and/or other countries.
  All other trademarks identified herein are the property of their respective owners.

CE

| | |
|---|---|
| 73/23/EEC | “Low Voltage Directive” |
| 89/336/EEC | “Electromagnetic compatibility” (Basic EMC Publication) |
| 92/31/EEC | “Electromagnetic compatibility” (Supplement) |
| 93/68/EEC | “CE Mark” |
| 91/263/EEC | “Terminal Directive” |

# *Precautions*

- Keep the unit away from heating appliances and electrical noise generating devices such as fluorescent lamps, motors and televisions. These noise sources can interfere with the performance of the Digital Super Hybrid System.
- This unit should be kept free of dust, moisture, high temperature (more than 40˚C) 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 any trouble, disconnect the unit from the telephone line. Plug the ISDN telephone directly into the telephone line. If the ISDN telephone operates properly, do not reconnect the unit to the line until the trouble has been repaired. If the ISDN telephone does not operate properly, chances are that the trouble is in the ISDN telephone system, and not in the unit.
  If an ISDN telephone is not used, please consult with your dealer.
- Do not use benzine, thinner, or the like, or any abrasive powder to clean the cabinet. Wipe it with a soft cloth.

## WARNING

THIS UNIT MAY ONLY BE INSTALLED AND SERVED BY QUALIFIED SERVICE PERSONNEL.

WHEN A FAILURE OCCURS WHICH RESULTS IN THE INTERNAL PARTS BECOMING ACCESSIBLE, DISCONNECT THE POWER SUPPLY CORD IMMEDIATELY AND RETURN THIS UNIT TO YOUR DEALER.

DISCONNECT THE TELECOM CONNECTION BEFORE DISCONNECTING THE POWER CONNECTION PRIOR TO RELOCATING THE EQUIPMENT, AND RECONNECT THE POWER FIRST.

THIS UNIT IS EQUIPPED WITH AN EARTHING CONTACT PLUG. FOR SAFETY REASONS THIS PLUG MUST ONLY BE CONNECTED TO AN EARTHING CONTACT SOCKET WHICH HAS BEEN INSTALLED ACCORDING TO REGULATIONS.

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

THE POWER SUPPLY CORD IS USED AS THE MAIN DICONNECT DEVICE, ENSURE THAT THE SOCKET-OUTLET IS LOCATED/INSTALLED NEAR THE EQUIPMENT AND IS EASILY ACCESSIBLE.

## For your future reference

SERIAL NO. ____________________ DATE OF PURCHASE ____________________
(found on the bottom of the unit)

NAME OF DEALER ________________________________________________________

DEALER’S ADDRESS ______________________________________________________

# Introduction

## Structure of the Manual

This manual consists of the following sections:

**Section 1. System Outline**

Provides general information on the system including system capacity and connection diagrams.

**Section 2. Operations**

Describes the features and their operations. It also provides information about the programming required, conditions and connection references for every feature.

**Section 3. System Programming**

Describes system management features and the steps required to assign features to extensions or to the system. Programming tables for user-programmed data are also provided.

**Section 4. Installation**

Contains the system installation and wiring instructions, as well as how to install the optional card.

**Section 5. Appendix**

Provides a tones/ring tones list, LED identification, feature number list, default values of system programming, specifications and information for system and telephone troubleshooting.

## Description of Symbols Mainly Used

| | |
|---|---|
| ! | Additional information and conditions. |
| ☞ | The feature or program references. |

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# *Section 1*

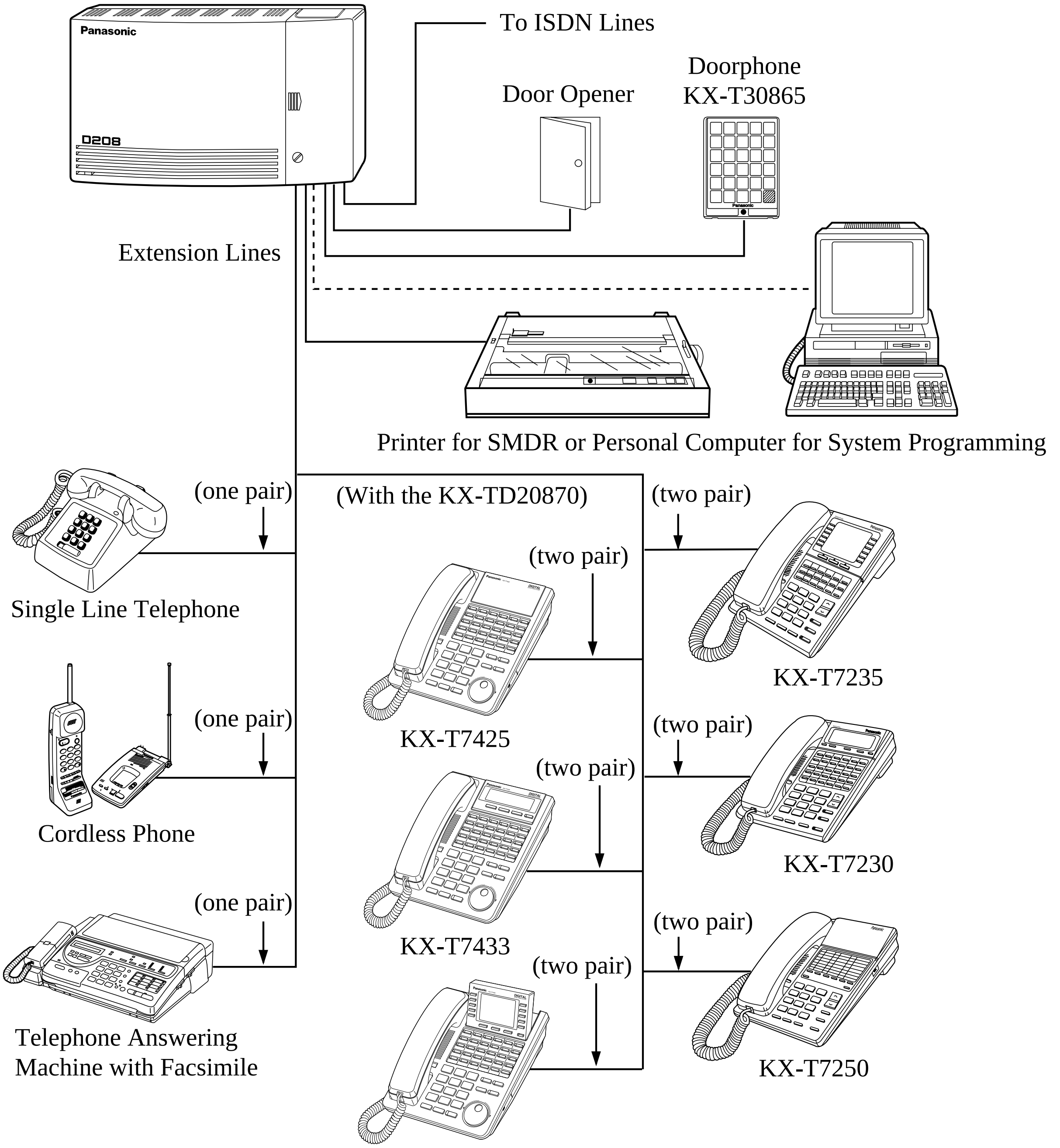
# *System Outline*

# 1.1 Basic System Construction

The KX-TD208 has a basic capacity of eight extensions and one ISDN line. Two Outside (CO) lines can be supported on one ISDN port basis. It is capable of supporting single line devices such as single line telephones, facsimiles and data terminals.

To expand its capabilities, the system can be equipped with optional components such as Panasonic digital proprietary telephones, or customer-supplied peripherals such as a door opener.

## System Connection Diagram


Panasonic
D208
To ISDN Lines
Door Opener
Doorphone
KX-T30865
Extension Lines
Printer for SMDR or Personal Computer for System Programming
(one pair)
Single Line Telephone
(one pair)
Cordless Phone
(one pair)
Telephone Answering
Machine with Facsimile
(With the KX-TD20870)
(two pair)
KX-T7425
(two pair)
KX-T7433
(two pair)
KX-T7436
(two pair)
KX-T7235
(two pair)
KX-T7230
(two pair)
KX-T7250

❋ A maximum of four digital proprietary telephones can be connected.

# 1.2 System Highlights

## System Capacity

| | | |
|---|---|---|
| **Basic System** | Extension lines | 8 |
| | ISDN line | 1 (2 CO lines) |
| **Expansion** | ISDN line | 1 (either for 8 extension lines or 2 CO lines) |
| **Maximum Capacity** | When an optional ISDN line is used for CO lines: | |
| | Extension lines | 8 |
| | CO lines | 4 |
| | When an optional ISDN line is used for extension lines: | |
| | Extension lines | 8 |
| | ISDN extension lines | 8 |
| | CO lines | 2 |

## Module Expansion

Expansion modules are used to increase the system capacity. The optional card, KX-TD20880, supports one ISDN line, whose port can be selected to be used for a CO line or extension line (Default: CO line).

## Digital Proprietary Telephones (DPT)

By installing the optional card, KX-TD20870, the system can support up to four proprietary telephones and four more single line telephones (max.). In this case, an XDP connection is required. Refer to "EXtra Device Port (XDP)" on the next page. Six different models of digital proprietary telephones, ranging from a monitor set to a large handsfree display version, are available.

## Account Management

Allows the user to manage the telephone charge by using certain features; such as Calling with Account Codes and Referring to the Charges. For details, refer to each feature.

## Automatic Route Selection (ARS)

Automatically selects the pre-programmed least expensive route for outgoing toll calls.

## Data Line Security

Communication between the extension and other end is protected from any signal such as Call Waiting, Hold Recall and Executive Busy Override.

## Executive Busy Override

Allows the pre-assigned extension user to enter into an existing call to establish a three-party conference.

## Uniform Call Distribution (UCD)

Allows an incoming call to be distributed uniformly to a specific group of extensions.

# 1.2 System Highlights

## EXtra Device Port (XDP)*

Extension jacks 1 through 4 in the system support the connection of a digital proprietary telephone and a single line device. The devices have different extension numbers and are treated as two completely different extensions.

## Parallelled Telephone Connection*

Extension jacks 1 through 4 in the system also support the parallel connection of a proprietary telephone and a single line device. They share the same extension number and are considered by the system to be one extension.

## Selecting the CLIP/COLP numbers

You can inform your CLIP/COLP number (which is classified as either business use or private use) to the other party or to the ISDN Network.

---

*: A 4 Extension Expansion Card (KX-TD20870) is required.

# *Section 2*

# *Operations*

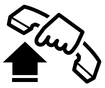
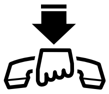
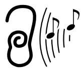
# 2.1 Before Operating

## What kind of telephone do you use?

In this manual, you will find your way to operate the feature depending on the telephone you use. If you use single line devices such as a single line telephone or data terminal, you will follow the steps which enter the feature number. If you use single line devices which do not have the "⁎" or "#" key, it is impossible to access features that have "⁎" or "#" in their feature numbers.
If you use a Panasonic proprietary telephone which has the special function button and/or the display, you will follow the operation with the button or display for easy access. If you use a Panasonic proprietary telephone which does not have the function button, you may change one of the unused buttons to another button. Refer to the Initial Settings (Section 2.2).
A Panasonic proprietary telephone has the Light Emitting Diode (LED) button indicators, so you can see the line conditions by the lighting patterns. Refer to LED Indication (Section 5.2).
Please use the proper operation for your telephone.

## Description of Symbols Used

In this manual, many symbols are used. Most symbols do not need a description, but some symbols do. They are as follows.

| | |
|---|---|
|  | Lift the handset, or press the SP-PHONE or MONITOR button. (Off-hook) |
|  | Replace the handset, or press the SP-PHONE or MONITOR button. (On-hook) |
| X Y | Number keys on the telephone vary depending on the condition. |
| R | RECALL button on a single line telephone. |
|  | Tones which vary depending on the condition.<br>(Refer to the Tones / Ring Tones in Section 5.) |

- For proprietary telephone operations, all button illustrations are based on the model KX-T7235.
- The button illustrations may be different if you use KX-T7400 series telephones.
  In this case, please check the button names.

# 2.1 Before Operating

## What is your contract with the telephone company?

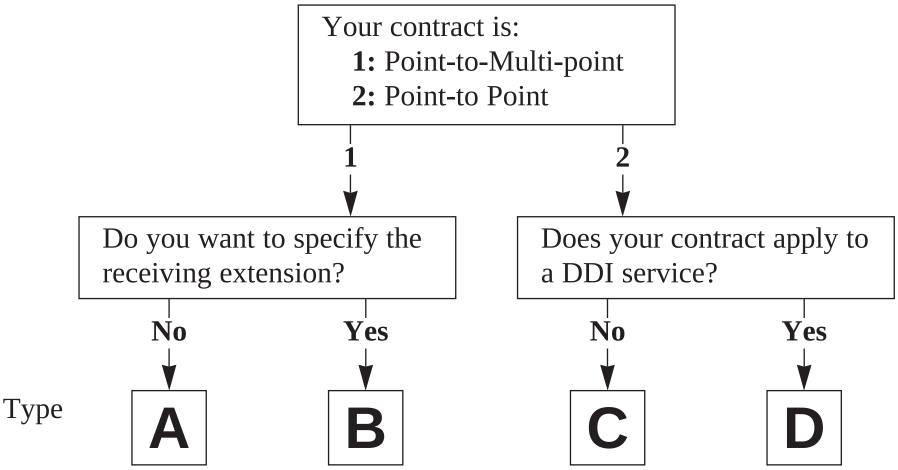
For basic PBX use, some programming is required.
You must check your contract with the telephone company first. Then follow the chart below.
For a description of each programming, please refer to Section 3.

### Before programming

A proprietary telephone or tone type Single Line Telephone (SLT) is required for system programming.
Connect the telephone to either of the following:

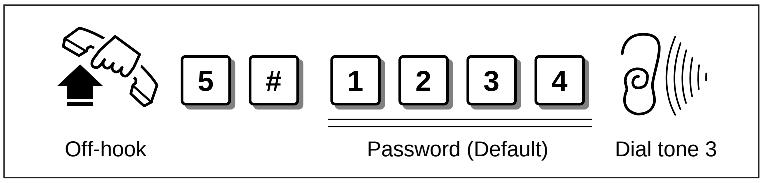
- Jack number 1 (Extension number 21)
- Jack number 2 (Extension number 22)

### Programming type selection


Your contract is:
1: Point-to-Multi-point
2: Point-to Point
1
2
Do you want to specify the receiving extension?
Does your contract apply to a DDI service?
No
Yes
No
Yes
Type
A
B
C
D

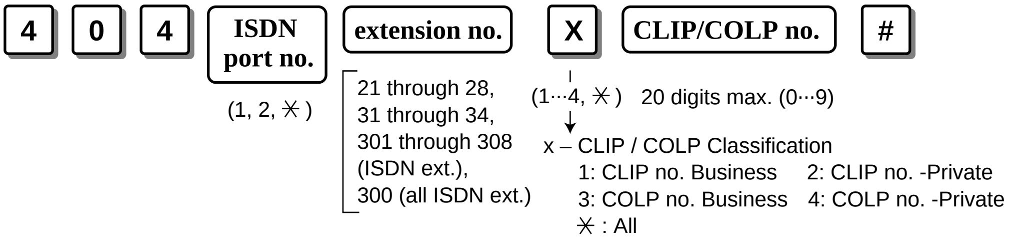
### Programming

#### Step 1. Enter into the programming mode.


5
#
1
2
3
4
Off-hook
Password (Default)
Dial tone 3

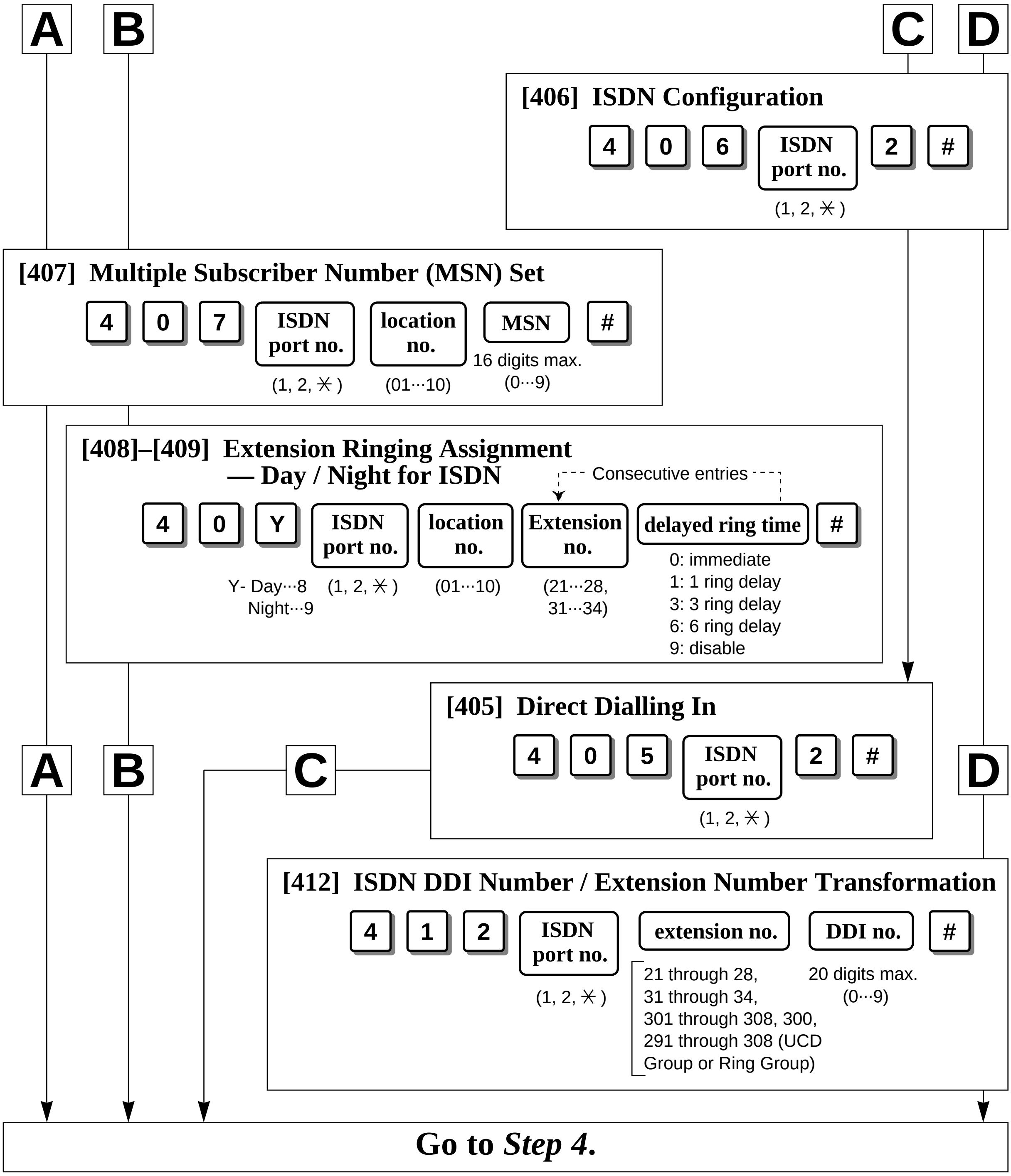
#### Step 2. Program [404] to all the types A, B, C, D.

**[404] CLIP/COLP Number Assignment**


4
0
4
ISDN port no.
extension no.
X
CLIP/COLP no.
#
(1, 2, *)
21 through 28,
31 through 34,
301 through 308 (ISDN ext.),
300 (all ISDN ext.)
(1···4, *)
20 digits max. (0···9)
x – CLIP / COLP Classification
1: CLIP no. Business
2: CLIP no. -Private
3: COLP no. Business
4: COLP no. -Private
* : All

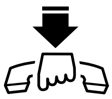
(Continued)

***Step 3. Follow the chart according to your programming type.***


A
B
C
D
[406] ISDN Configuration
4 0 6 ISDN port no. 2 #
(1, 2, ✳)
[407] Multiple Subscriber Number (MSN) Set
4 0 7 ISDN port no. location no. MSN #
(1, 2, ✳)
(01···10)
16 digits max.
(0···9)
[408]–[409] Extension Ringing Assignment — Day / Night for ISDN
Consecutive entries
4 0 Y ISDN port no. location no. Extension no. delayed ring time #
Y- Day···8
Night···9
(1, 2, ✳)
(01···10)
(21···28, 31···34)
0: immediate
1: 1 ring delay
3: 3 ring delay
6: 6 ring delay
9: disable
[405] Direct Dialling In
4 0 5 ISDN port no. 2 #
(1, 2, ✳)
A
B
C
D
[412] ISDN DDI Number / Extension Number Transformation
4 1 2 ISDN port no. extension no. DDI no. #
(1, 2, ✳)
21 through 28,
31 through 34,
301 through 308, 300,
291 through 308 (UCD Group or Ring Group)
20 digits max.
(0···9)
Go to Step 4.

***Step 4. Exit from the programming mode.***

#



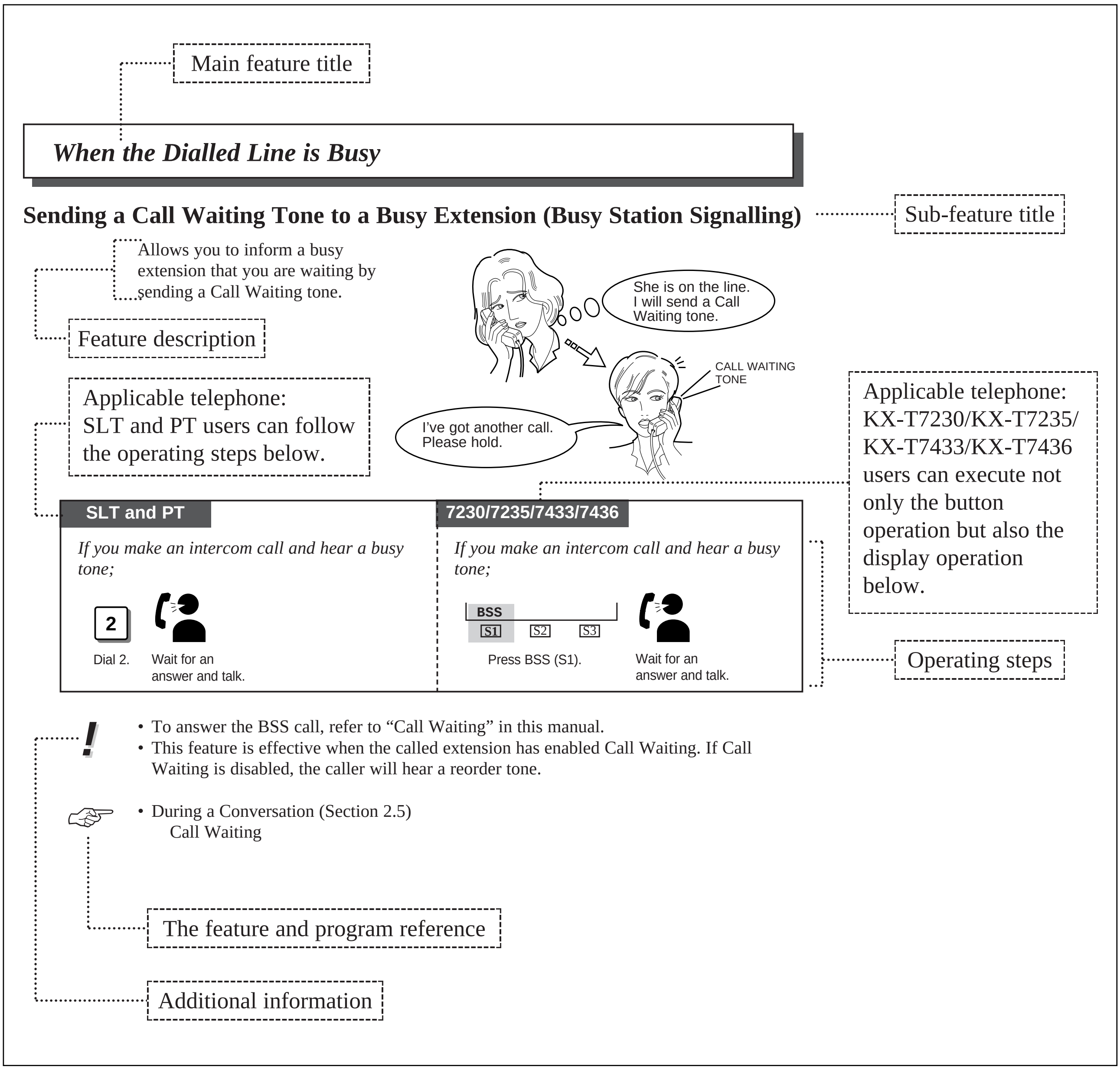
On-hook

Press RESET button.

# 2.1 Before Operating

## Operating example

Example: "When the dialled line is busy — Sending a Call Waiting Tone to a Busy Extension (Busy Station Signalling)"



Main feature title

***When the Dialled Line is Busy***

**Sending a Call Waiting Tone to a Busy Extension (Busy Station Signalling)**

Sub-feature title

Allows you to inform a busy extension that you are waiting by sending a Call Waiting tone.

Feature description

Applicable telephone:
SLT and PT users can follow the operating steps below.

She is on the line.
I will send a Call Waiting tone.
CALL WAITING TONE
I've got another call. Please hold.

Applicable telephone:
KX-T7230/KX-T7235/KX-T7433/KX-T7436 users can execute not only the button operation but also the display operation below.

| **SLT and PT** | **7230/7235/7433/7436** |
|---|---|
| *If you make an intercom call and hear a busy tone;* | *If you make an intercom call and hear a busy tone;* |
| 2 Dial 2.<br>Wait for an answer and talk. | BSS S1 S2 S3 Press BSS (S1).<br>Wait for an answer and talk. |

Operating steps

!

- To answer the BSS call, refer to "Call Waiting" in this manual.
- This feature is effective when the called extension has enabled Call Waiting. If Call Waiting is disabled, the caller will hear a reorder tone.

☞

- During a Conversation (Section 2.5)
  Call Waiting

The feature and program reference

Additional information

!

- If your telephone is not noted in the operating step box (ex. only "PT" is noted), this means your telephone does not have the ability to execute that feature.
- If your telephone has the ability to perform several operations for one feature, you can select the method according to your needs.
- If "Any telephone" is applicable with an operation, you can use SLTs, ISDN-Telephones and PTs for the operation.

# 2.2 *Initial Settings*

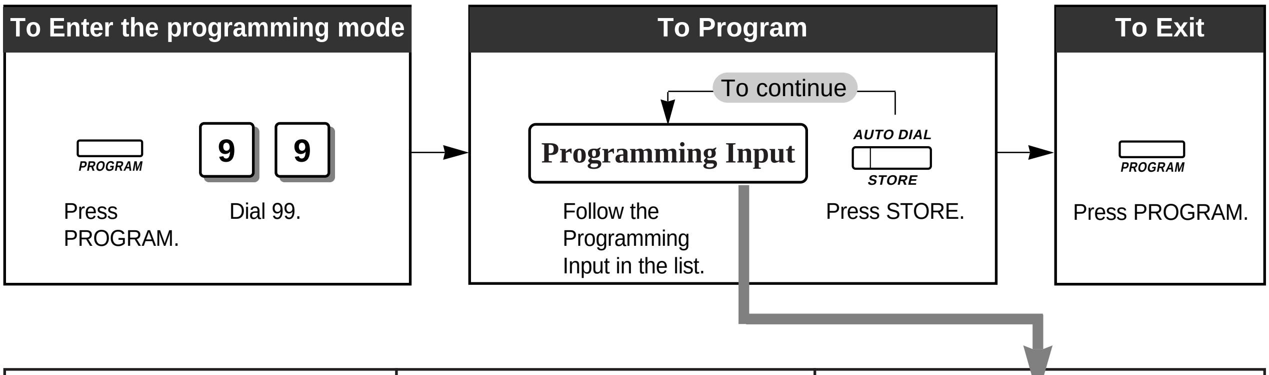
If you use a Panasonic proprietary telephone (see page 2), you can customise your telephone functions. For example, you can change the button functions on the telephone or the initial settings for your convenience.

- If you move your desk and change the extension line, reset as desired. The setting will not remain on your telephone but will remain in the previous extension user's memory.
- If your telephone has no **PROGRAM** button, use the **PAUSE** button instead.
- During the programming mode, your extension is treated as a busy extension.
- If no entry is entered within one minute, the programming mode is cancelled and the mode returns to the normal status.
- You can quit programming anytime by lifting up the handset.

## *Customising Your Telephone Functions*

### Changing the Initial Settings

You can change the initial settings of your telephone. Check the available items in the list and change the settings, if required.


To Enter the programming mode
PROGRAM
9
9
Press PROGRAM.
Dial 99.
To Program
To continue
Programming Input
AUTO DIAL
STORE
Follow the Programming Input in the list.
Press STORE.
To Exit
PROGRAM
Press PROGRAM.

| ITEM | SELECTION | PROGRAMMING INPUT |
|---|---|---|
| Which line do you prefer to seize when you go off-hook to make calls?<br>**(Preferred Line Assignment – Outgoing)** | ☐ No line selected. | 1 1 |
| | ☐ An idle outside line (CO) | 1 2 |
| | ☐ A pre-assigned ISDN port | 1 3 ISDN port no. (1···2) |
| | ☐ The intercom line **(Default)** | 1 INTERCOM |

# 2.2 Initial Settings

| ITEM | SELECTION | PROGRAMMING INPUT |
|---|---|---|
| Which line do you prefer to seize when you go off-hook to receive calls? **(Preferred Line Assignment – Incoming)** | ☐ No line selected. | 2 1 |
| | ☐ The ringing outside line (CO) **(Default)** | 2 2 |
| | ☐ A pre-assigned ISDN port | 2 3 **ISDN port no.** (1···2) |
| Which way do you prefer to dial the One-Touch Dialling feature? **(Full One-Touch dialling Assignment)** | ☐ Go Off-hook and then press the One-Touch Dialling button. | 3 1 |
| | ☐ Just press the One-Touch Dialling button. **(Default)** | 3 2 |
| Which way do you prefer to receive an intercom call? **(Intercom Alert Assignment)** | ☐ Ringing **(Default)** | 4 1 |
| | ☐ The party's voice is heard right after the confirmation tone. | 4 2 |
| Do you prefer to distinguish the Call Waiting Tone received from an outside line (CO) and intercom? **(Call Waiting Tone Type Selection)** | ☐ No. Use the same tone (tone 1). **(Default)** | 5 1 |
| | ☐ Yes. Use a different tone (tone 2). | 5 2 |
| Do you prefer a tone when pressing the dialling buttons? **(Key Click Tone Assignment)** | ☐ No. Turn off the tone. | 7 1 |
| | ☐ Yes. **(Default)** | 7 2 |
| Which receiving equipment will you use? **(Handset/Headset Selection — DPT only)** | ☐ Handset **(Default)** | 8 1 |
| | ☐ Headset | 8 2 |

!

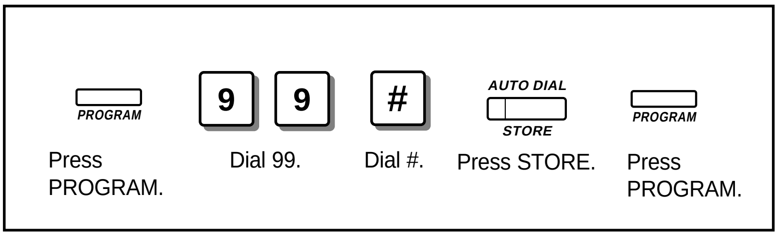
- **To confirm the stored function data;**
  The stored function data will be displayed by pressing the first digit of the Programming Input while in programming mode. If the function is not required to be changed, press the **HOLD** button to return to the initial programming display.

(Continued)

# 2.2 Initial Settings

## Clearing the Programmed Data

Allows you to clear all of the data in the list, so that each item returns to its initial setting.


PROGRAM
9
9
#
AUTO DIAL
STORE
PROGRAM

Press PROGRAM.

Dial 99.

Dial #.

Press STORE.

Press PROGRAM.

# 2.2 Initial Settings

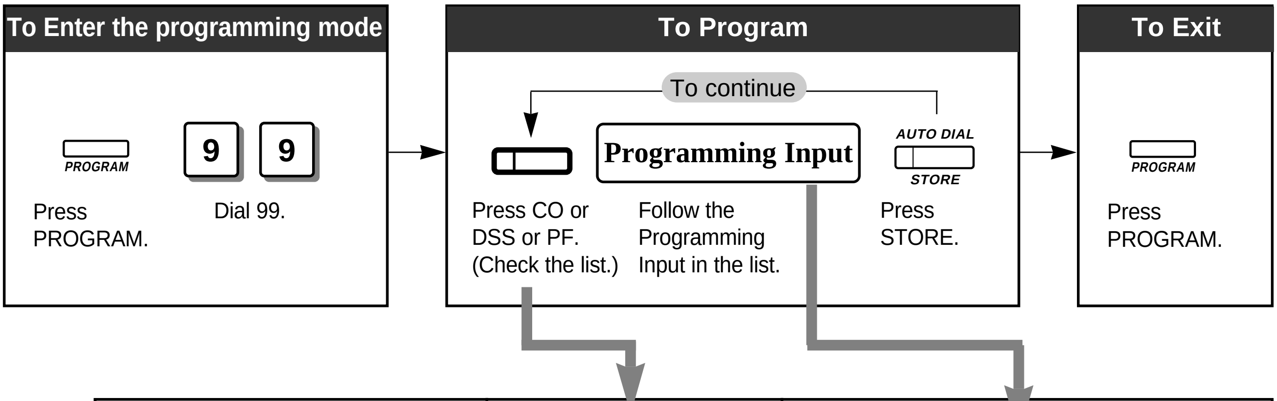
## *Customising the Buttons on Your Telephone*

### Changing the Flexible Buttons

You can change the flexible buttons on your telephone to certain function buttons.
For example, your telephone has more outside line (CO) buttons than available CO lines, so you may change unused CO buttons to one-touch dialling buttons, etc.
Programmable buttons are:

- Flexible CO button
- Flexible DSS button
- Programmable Function (PF) button

Check the required operation first, and if your telephone is not provided with the convenient button, you can assign the button here.


To Enter the programming mode
PROGRAM
9
9
To Program
To continue
Programming Input
AUTO DIAL
STORE
To Exit
PROGRAM

Press PROGRAM.

Dial 99.

Press CO or DSS or PF. (Check the list.)

Follow the Programming Input in the list.

Press STORE.

Press PROGRAM.

| **Function** | **Programmable Button** | | | **Programming Input** |
|---|---|---|---|---|
| | **CO** | **DSS** | **PF** | |
| Direct Station Selection (DSS) | ✔ | ✔ | | 1 **extension no.** |
| One-Touch Dialling | ✔ | ✔ | ✔ | 2 **desired no.** (16 digits max.) |
| MESSAGE | ✔ | ✔ | | 3 |
| FWD/DND (Forward/Do Not Disturb) | ✔ | ✔ | ✔ | 4 |
| SAVE | ✔ | ✔ | ✔ | 5 |

(Continued)

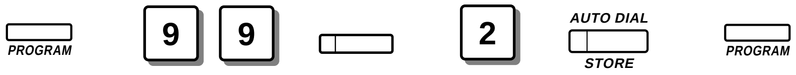
| Function | Programmable Button | | | Programming Input |
|---|---|---|---|---|
| | CO | DSS | PF | |
| Account | ✔ | ✔ | ✔ | 6 |
| CONFERENCE | ✔ | ✔ | ✔ | 7 |
| Log-In/Log-Out | ✔ | | | 8 0 |
| Terminate | ✔ | ✔ | ✔ | 9 |
| Single-outside line (CO) | ✔ | | | 0 **outside line no.** (1···4) |
| Loop-outside line (CO) | ✔ | | | ✳ |
| ISDN Service | ✔ | ✔ | ✔ | 8 9 **ISDN service no.** (0···9, ✳, #, 16 digits max.) |

- **When storing a One-Touch Dialling button;**
  — To store the telephone number of an outside party, the port access code (9, 81 or 82) must be stored as the leading digit.
  — You can use 0 through 9, ✳, #, PAUSE, RECALL, CONFERENCE, and INTERCOM as follows:
  RECALL: registers the recall signal
  PAUSE or ✳✳: pause
  CONFERENCE: - (hyphen) after the line access code
  INTERCOM: [ or ] (secret code) — Press the INTERCOM button before and after the part you wish to conceal when it is shown on the display when dialling.
- **To confirm the stored function data;**
  The stored data will be displayed by pressing the desired button while in the programming mode. If the data is not required to be changed, press the **HOLD** button to return to the initial programming display.
- ISDN service number depends on the services which you want to perform. For more information about the ISDN services or the specific numbers, please consult with your ISDN network suppliers.
- The availability of the ISDN services depends on your ISDN contract.

## 2.2 *Initial Settings*

### Clearing the Data on the Flexible Button

Allows you to clear the stored function.


PROGRAM
9
9
2
AUTO DIAL
STORE
PROGRAM

Press PROGRAM.

Dial 99.

Press the desired button.

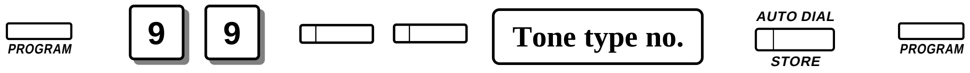
Dial 2.

Press STORE.

Press PROGRAM.

### Distinguishing the ringing tone for each CO button

You can change the ringing tone for each flexible CO button. There are eight ringing tone types. (Default: Tone type 2) Refer to the “Tones / Ring Tones” (Section 5).


PROGRAM
9
9
Tone type no.
AUTO DIAL
STORE
PROGRAM

Press PROGRAM.

Dial 99.

Press the desired CO button twice.

Enter the tone type number (1···8).

Press STORE.

Press PROGRAM.

# 2.3 Making Calls

## Intercom Calling

Allows you to make a call to another extension within the system.
All extensions have a fixed extension number as follows:

| | |
|---|---|
| **Standard Connection** | |
| **SLT/PT extension number:** | 21 through 28 (25 through 28 are available only for a SLT) |
| **ISDN extension number:** | 301 through 308 (300 for all ISDN extensions) |
| **XDP* Connection** | |
| **DPT extension number:** | 21 through 24 |
| **SLT extension number:** | 31 through 34 |

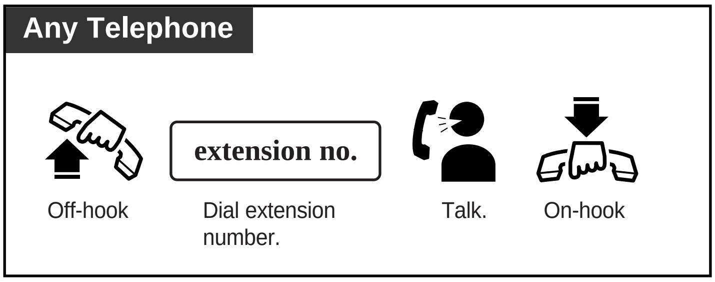
*A XDP (EXtra Device Port) expands the number of telephones available in the system by allowing an extension port to contain two telephones. Refer to System Management.

- You can alternate the calling mode, ring or voice, by pressing "✱", or the "Tone (S2)" or "Voice (S3)" button under the display (KX-T7230/T7235/T7433/T7436) after dialling. You can also select the way to receive intercom calls (Intercom Alert Assignment). Refer to "Customising Your Telephone Functions" in Initial Settings (Section 2.2).
- If your telephone has a display, you can enter and confirm the required numbers before going off-hook. You can erase a number by pressing "✱."
- If you want to dial and talk to the other party without lifting the handset, press the SP-PHONE button. To switch from the handsfree to handset mode, lift the handset.
- Proprietary telephone users can make an intercom call simply by pressing the DSS (Direct Station Selection) button, if assigned.
- With the KX-T7235, KX-T7433 and KX-T7436, you can make an intercom call with the display operation.
- An INTERCOM button provides the line status condition by the lighting pattern and colour indication. Refer to the "LED Indication" (Section 5).
- You may hear a special tone after dialling. In this case, refer to the "Tones / Ring Tones" (Section 5).

- Initial Settings (Section 2.2)
  Customising the Buttons on Your Telephone
- Display Operation (Section 2.7)
  Display Operation – Extension
- System Management (Section 3.1)
  EXtra Device Port (XDP)

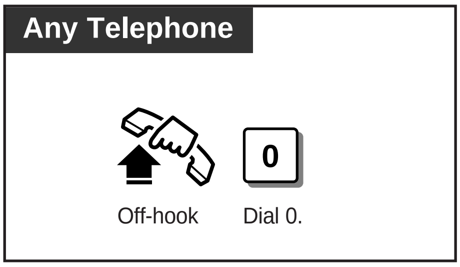
# 2.3 *Making Calls*

## Making an Intercom Call


Any Telephone
extension no.
Off-hook
Dial extension number.
Talk.
On-hook

## Calling an Manager (Manager Call)

Allows you to call a manager within the system.

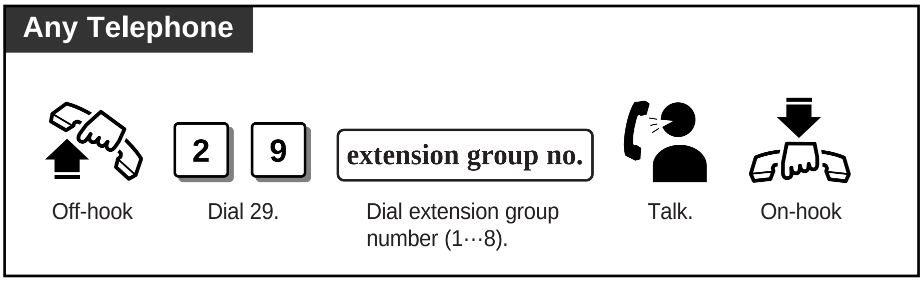

Any Telephone
0
Off-hook
Dial 0.

!

- Extension 21 is the manager extension.
  You can also dial "21" to call the manager.

## Calling an Extension Group (Ring Group)

All extensions in a ring group ring simultaneously by dialling the extension group number.


Any Telephone
2
9
extension group no.
Off-hook
Dial 29.
Dial extension group number (1···8).
Talk.
On-hook

!

- Types of calls whose destination can be the ring group are:
  Outside calls – DDI; IRNA
  Intercom calls – Extension; Transfer
- This feature requires a ring group assignment for a Station Hunting type in System Programming.

☞

- System Programming (Section 3.4)
  [102] Station Hunting Type
- Extension Programming (Section 3.9)
  [602] Extension Group Assignment

# 2.3 *Making Calls*

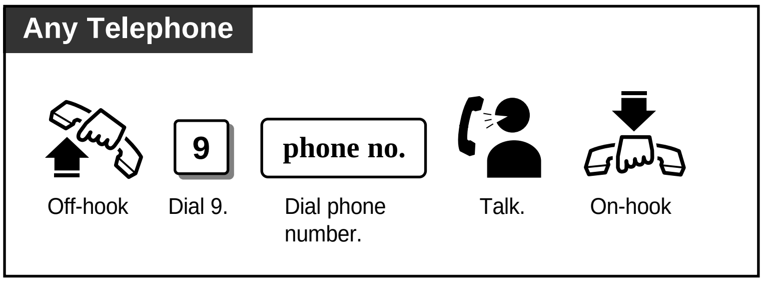
## *Outside Calling*

Allows you to make a call to an outside party.

- If you hear a reorder tone after seizing the outside line (CO), the call is denied by one of the following:
  - — The ISDN port you have attempted to access is not assigned.
  - — The extension has been locked by the extension user (Electronic Station Lockout) or the manager (Remote Station Lock Control).
  - — The extension may be restricted by the account code mode (Account Code Entry). In this case, it is required to enter an account code.
  - — The extension may be restricted from making toll calls (Toll Restriction).
- If your telephone has a display, you can enter and confirm the required numbers before going off-hook. You can erase a number by pressing "*."
- If you want to dial and talk to the other party without lifting the handset, press the SP-PHONE button. To switch from the handsfree to handset mode, lift the handset.
- A flexible CO button can be assigned as a Single-CO or Loop-CO button. A specific outside line (CO) can be assigned to a Single-CO button, while all CO lines can be assigned to a Loop-CO button. Pressing a Single-CO button works as individual line access, while pressing a Loop-CO button works as automatic line access. Default is as follows:
  CO 1,2 = Single-CO (ISDN port 1), CO 3,4 = Single-CO (ISDN port 2).
- CO buttons provide the line status condition by the lighting pattern and colour indication. Refer to the "LED Indication" (Section 5).
- You may hear a special tone after dialling. In this case, refer to the "Tones / Ring Tones" (Section 5).

- Initial Settings (Section 2.2)
  - Customising the Buttons on Your Telephone
- ISDN Port Programming (Section 3.7)
  - [400] ISDN Port Connection Assignment
- Extension Programming (Section 3.9)
  - [605]–[606] Outgoing Permitted ISDN Port Assignment — Day/Night

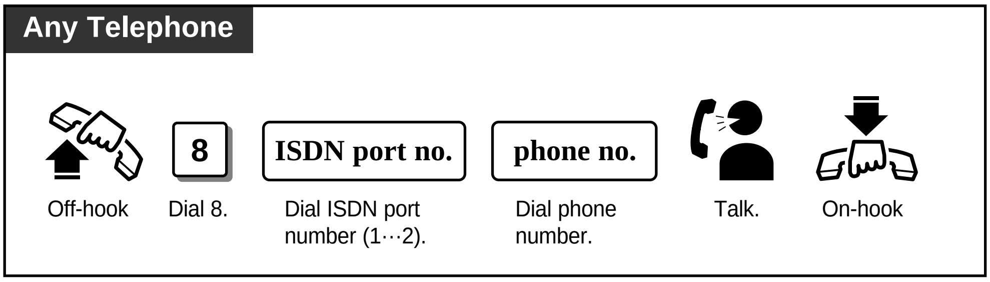
## Making Outside Calls by Automatic Line Access



## Making Outside Calls by Individual Line Access

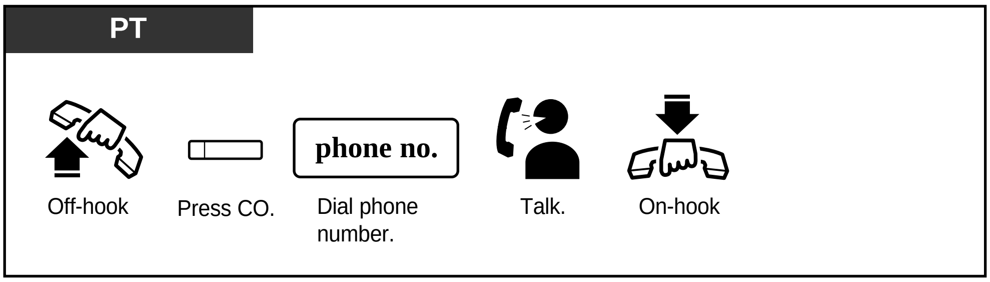
Allows you to access a pre-assigned outside line.

**Any Telephone**



Off-hook
Dial 8.
Dial ISDN port number (1···2).
Dial phone number.
Talk.
On-hook

**PT**

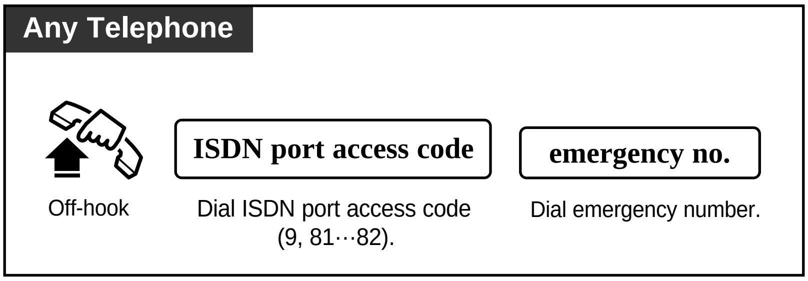


Off-hook
Press CO.
Dial phone number.
Talk.
On-hook

## Making Emergency Calls (Emergency Call)

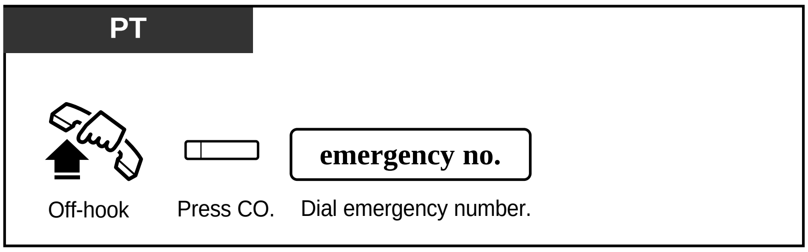
Allows you to make an emergency call. You can store up to four emergency numbers.

**Any Telephone**



Off-hook
Dial ISDN port access code (9, 81···82).
Dial emergency number.

**PT**



Off-hook
Press CO.
Dial emergency number.

- Emergency numbers can be called even in the following cases;
  — in Account Code – Verified mode
  — in any toll restriction level
  — in Electronic Station Lockout

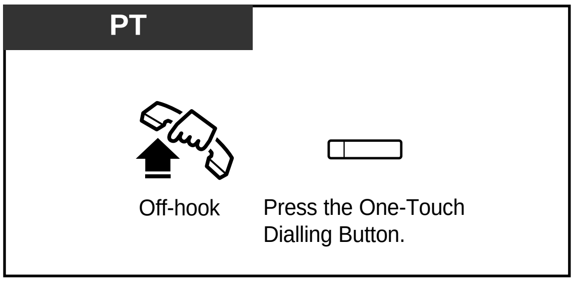
- Manager Programming (Section 3.3)
  [002] Emergency Dial Number Set

# 2.3 Making Calls

## Quick Dialling

### Dialling Simply by Pressing a Button (One-Touch Dialling)

Allows you to call a number or access a system feature with the touch of a button. This is done by storing an extension number, a telephone number or a feature number in a One-Touch Dialling button.

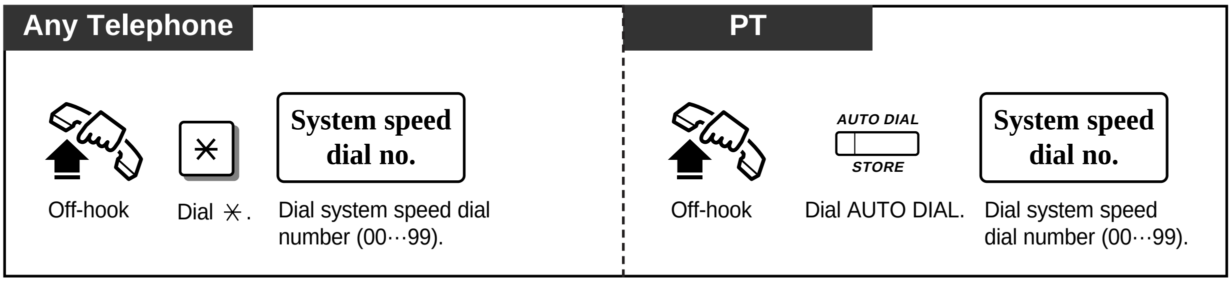


- To store numbers, refer to the Initial Settings.
- It is possible to store a number consisting of 17 digits or more by dividing it and storing it in two One-Touch Dialling buttons.
- You can also just press a One-Touch Dialling button (Full One-Touch Dialling).
  To change the assignment, refer to the Initial Settings.
- If there is a PAUSE in the assigned numbers, the numbers after the PAUSE are sent as DTMF signals.

- Initial Settings (Section 2.2)
  Customising Your Telephone Functions
  Customising the Buttons on Your Telephone

## Dialling with a System Speed Dialling Button (System Speed Dialling)

Allows you to make outside calls using speed dial numbers previously programmed.
The system supports 100 speed dial numbers which are available to all extension users.



**Any Telephone**

Off-hook

Dial *.

Dial system speed dial number (00···99).

**PT**

Off-hook

Dial AUTO DIAL.

Dial system speed dial number (00···99).

- System Speed Dial numbers must be stored by System Programming.
- Calls originated by System Speed Dialling are restricted depending on the extension's toll restriction level for System Speed Dialling (Toll Restriction Override for System Speed Dialling).
- With the KX-T7235, KX-T7433 and KX-T7436, you can execute this feature with the display operation.

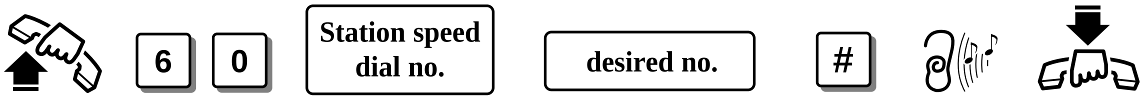
- Display Operation (Section 2.7)
  Display Operation – SYS Speed
- System Management (Section 3.1)
  Toll Restriction Override for System Speed Dialling
- Manager Programming (Section 3.3)
  [001] System Speed Dialling Number Set

## Dialling with a Station Speed Dialling Button (Station Speed Dialling)

Allows you to store up to ten speed dial numbers which are only available to you.

### Storing the phone number

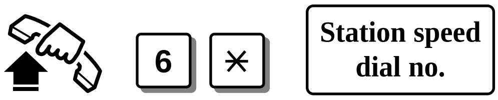
**Any Telephone**



Off-hook | Dial 60. | Dial station speed dial number (0···9). | Dial desired number. (16 digits max.) | Dial #. | Confirmation tone | On-hook

### Dialling

**Any Telephone**



Off-hook | Dial 6⚹. | Dial station speed dial number (0···9).

### SSD Table

| SSD No. | NUMBER |
|---|---|
| 0 | |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |

*You can write down and use the SSD Table for your reference.

- Up to 16 digits, consisting of "0 through 9" and "⚹", can be stored.
- Enter "⚹⚹" for a PAUSE.
- If there is a PAUSE in the assigned numbers, the numbers after the PAUSE are sent as DTMF signals.
- You can store an extension number, a telephone number, or a feature number.
- To store the telephone number of an outside party, the ISDN port access code (9, 81 or 82) must be stored as the leading digit.
- With the KX-T7235, KX-T7433 and KX-T7436, you can execute this feature with the display operation.

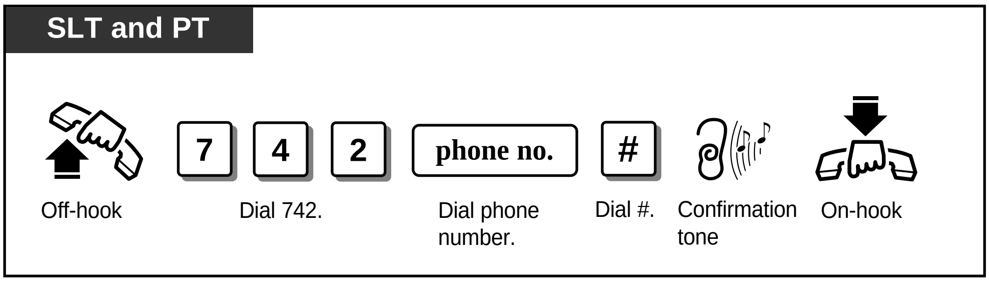
- Display Operation (Section 2.7)
  Display Operation – STA Speed
  Station Speed Dialling Number/Name Assignment

# 2.3 *Making Calls*

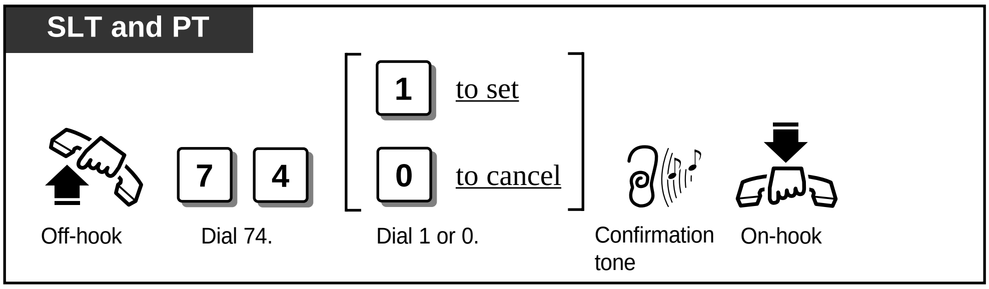
## Dialling Simply by Going Off-Hook (Pickup Dialling)

Allows you to make an outgoing call simply by going off-hook, if you have previously stored the telephone number.

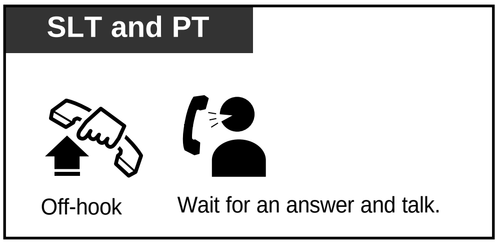
### Storing the phone number


SLT and PT
7
4
2
phone no.
#
Off-hook
Dial 742.
Dial phone number.
Dial #.
Confirmation tone
On-hook

### Setting / Cancelling


SLT and PT
1
to set
0
to cancel
7
4
Off-hook
Dial 74.
Dial 1 or 0.
Confirmation tone
On-hook

### Dialling


SLT and PT
Off-hook
Wait for an answer and talk.

**!**

- A rotary dial telephone without the “#” button cannot program this feature. To program the phone number, temporarily replace the rotary dial telephone with a telephone which has the “#” button.
- To store the telephone number of an outside party, the ISDN port access code (9, 81 or 82) must be stored as the leading digit.
- Up to 16 digits, consisting of “0 through 9” and “*”, can be stored.
- Enter “* *” for a PAUSE.
- If there is a PAUSE in the assigned numbers, the numbers after the PAUSE are sent as DTMF signals.
- While waiting after lifting the handset, you can dial another party, which overrides this feature. The waiting time is programmable.

☞

- Timer Programming (Section 3.5)
  [204] Pickup Dial Waiting Time

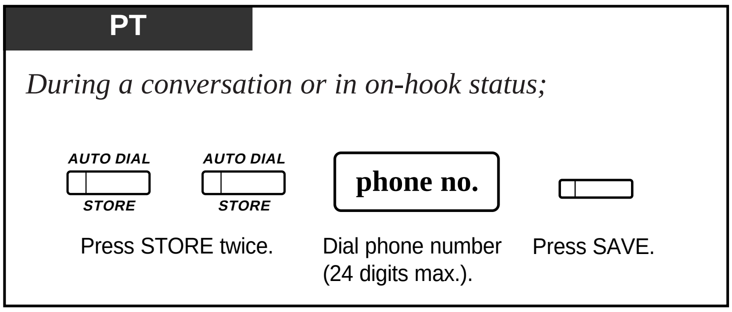
## Dialling the Stored Number with a SAVE Button (Notebook Function)

During a conversation with an outside party or in on-hook status, you can store an outside phone number without entering the ISDN port access number (9, 81 or 82) in memory. The stored number is dialled automatically through a CO line as follows:

If you store the phone number during a conversation – the same outside line (CO)
If you store the phone number while in on-hook status – the idle outside line (CO)

It is required to assign the SAVE button on your telephone beforehand.

### Storing the number



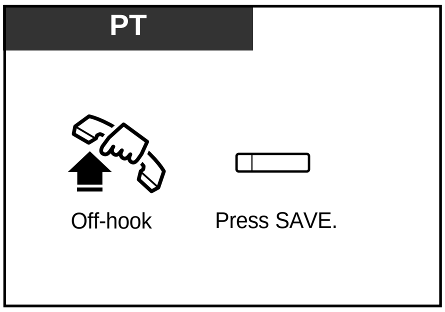
*During a conversation or in on-hook status;*

Press STORE twice.

Dial phone number (24 digits max.).

Press SAVE.

### Dialling



Off-hook

Press SAVE.

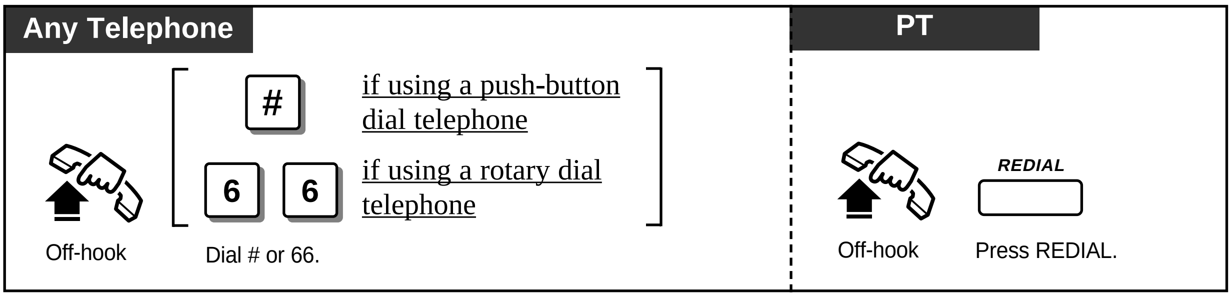
- You can select the desired outside line when dialling by pressing the desired CO button or dialling the ISDN port access number before pressing the SAVE button.
- If you dial in the handsfree mode (press SP-PHONE + SAVE button), redial will be repeated four times at 120 second intervals by default (Automatic Redial – DPT only). Repeating time and interval can be changed by System Programming.
- If there is a PAUSE in the assigned numbers, the numbers after the PAUSE are sent as DTMF signals.

- Initial Settings (Section 2.2)
  Customising the Buttons on Your Telephone
- Timer Programming (Section 3.5)
  [208] Automatic Redial Repeat Time
  [209] Automatic Redial Interval Time

## Redialling

### Redialling the Last Dialled Number (Last Number Redial)

Automatically saves the last outside number you dialled and allows you to make the same outgoing call again.


Any Telephone
#
6
6
if using a push-button dial telephone
if using a rotary dial telephone
Off-hook
Dial # or 66.
PT
REDIAL
Off-hook
Press REDIAL.

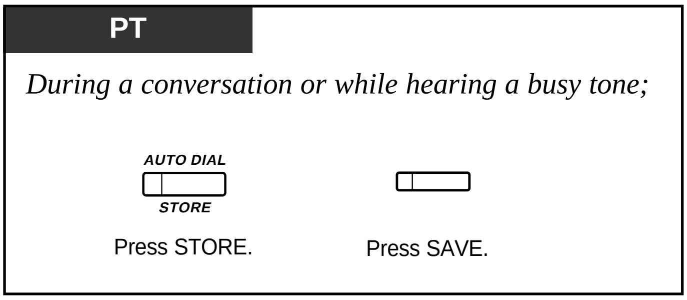
- A push-button dial telephone user can also use “66” for redialling, while a rotary dial telephone user can only use “66.”
- Up to 24 digits can be stored and redialled not including the ISDN port access code.
- The memorised telephone number is replaced by the next telephone number sent to a outside line (CO). Dialling only an ISDN port access code does not change the memorised number.
- If you dial in the handsfree mode (press SP-PHONE + REDIAL button), redial will be repeated four times at 120 second intervals by default (Automatic Redial – DPT only). Repeating time and interval can be changed by System Programming.
- If there is a PAUSE in the assigned numbers, the numbers after the PAUSE are sent as DTMF signals.

- Timer Programming (Section 3.5)
    [208] Automatic Redial Repeat Time
    [209] Automatic Redial Interval Time

## Redialling the Saved Number (Saved Number Redial)

During a conversation or while hearing a busy tone, you can store a dialled telephone number to automatically redial the number through the same outside line later. The saved number can be redialled until another one is stored.
It is required to assign the SAVE button on your telephone beforehand.

### Storing the number

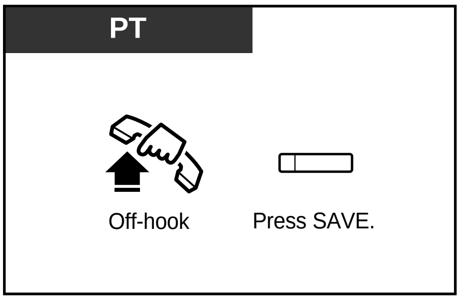


*During a conversation or while hearing a busy tone;*

Press STORE.

Press SAVE.

### Dialling



Off-hook

Press SAVE.

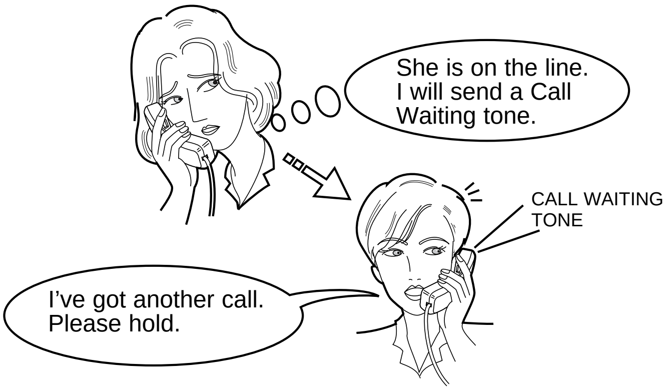
- Up to 24 digits can be stored and redialled not including the ISDN port access code.
- You can change the outside line when dialling. In this case, press the desired CO button or enter the ISDN port access number before pressing the SAVE button.
- If you dial in the handsfree mode (press SP-PHONE + SAVE button), redial will be repeated four times at 120 second intervals by default (Automatic Redial – DPT only). Repeating time and interval can be changed by System Programming.
- If there is a PAUSE in the assigned numbers, the numbers after the PAUSE are sent as DTMF signals.

- Initial Settings (Section 2.2)
  Customising the Buttons on Your Telephone
- Timer Programming (Section 3.5)
  [208] Automatic Redial Repeat Time
  [209] Automatic Redial Interval Time

## *When the Dialled Line is Busy*

### Sending a Call Waiting Tone to a Busy Extension (Busy Station Signalling)

Allows you to inform a busy extension that you are waiting by sending a Call Waiting tone.


She is on the line.
I will send a Call Waiting tone.
CALL WAITING TONE
I've got another call.
Please hold.

| SLT and PT | 7230/7235/7433/7436 |
|---|---|
| *If you make an intercom call and hear a busy tone;* | *If you make an intercom call and hear a busy tone;* |
| 2 ☎<br>Dial 2. Wait for an answer and talk. | **BSS** S1 S2 S3 ☎<br>Press BSS (S1). Wait for an answer and talk. |

!

- To answer the BSS call, refer to "Call Waiting" in this manual.
- This feature is effective when the called extension has enabled Call Waiting. If Call Waiting is disabled, the caller will hear a reorder tone.

☞

- During a Conversation (Section 2.5)
  Call Waiting

## Making Your Telephone Ring Back Automatically When a Line Becomes Free (Automatic Callback Busy – Camp On)

Allows you to be informed by callback ringing (Camp-On recall) when the called party or the selected outside line (CO) becomes free.

**Automatic Callback – Extension**

If you answer the callback ringing, the called extension automatically starts ringing.

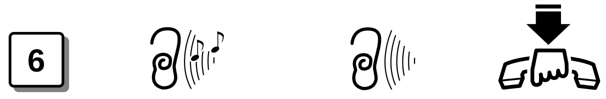
**Automatic Callback – outside line (CO)**

If you answer the callback ringing, the line is automatically selected to let you make an outside call.

### Setting

**SLT and PT**

*If you hear a busy tone;*

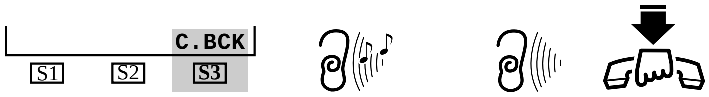


Dial 6. Confirmation tone Reorder tone On-hook

Wait for the Camp-On recall.

**7230/7235/7433/7436**

*If you hear a busy tone;*

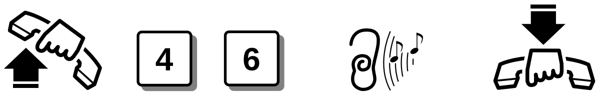


Press C.BCK (S3). Confirmation tone Reorder tone On-hook

Wait for the Camp-On recall.

### Cancelling

**SLT and PT**

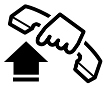


Off-hook Dial 46. Confirmation tone On-hook

### Answering an intercom recall

**SLT and PT**

*If you hear the Camp-On recall;*



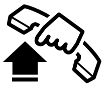
Off-hook

The called extension starts ringing.

### Answering an outside line (CO) recall

**SLT and PT**

*If you hear the Camp-On recall;*



**phone no.**

Off-hook Dial phone number.

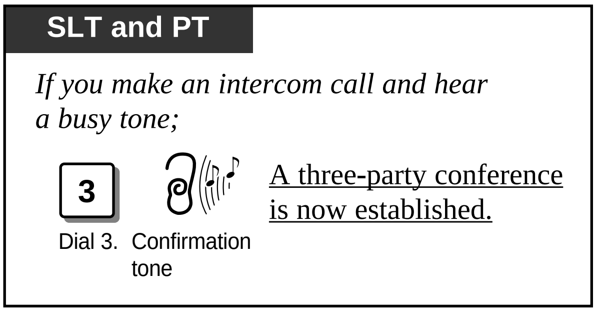
**!**

- If the Camp-On recall is not answered in four rings (within 10 seconds), this feature will be automatically cancelled.

## Interrupting an Existing Call (Executive Busy Override)

Allows the pre-assigned extension user to interrupt an existing call to establish a three-party conference call. You can also deny to be interrupted your conversation from other extension users.

### Interrupting an existing extension call


**SLT and PT**

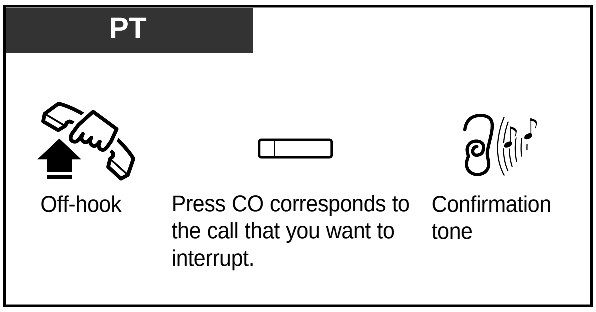
*If you make an intercom call and hear a busy tone;*

3 — Dial 3.

Confirmation tone

A three-party conference is now established.

### Interrupting an existing outside call

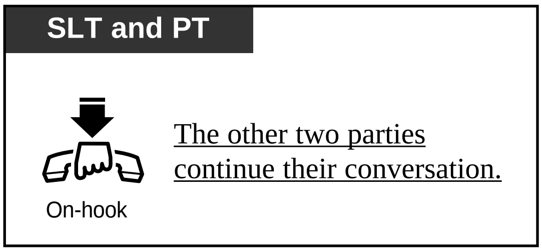

**PT**

Off-hook

Press CO corresponds to the call that you want to interrupt.

Confirmation tone

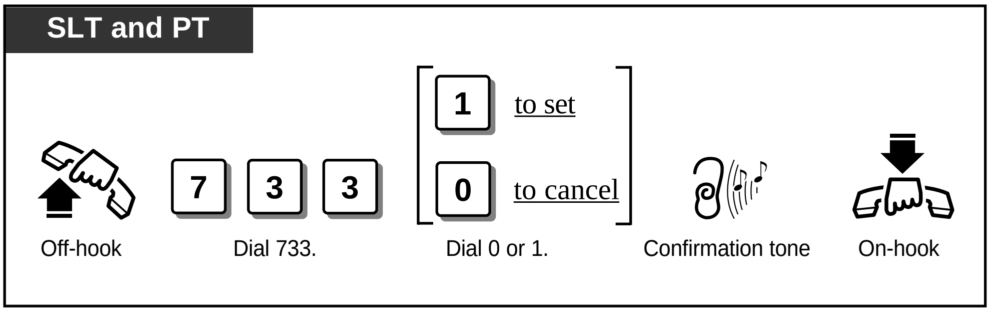
### To leave the conference


**SLT and PT**

On-hook

The other two parties continue their conversation.

### Denying an existing call to be interrupted (Executive Busy Override Deny)


**SLT and PT**

Off-hook

7 3 3 — Dial 733.

1 to set / 0 to cancel — Dial 0 or 1.

Confirmation tone

On-hook

- When interrupting an existing extension call, you must dial within 10 seconds while a busy tone is heard.
- Class of Service programming determines which extension users can perform this feature.
- This feature does not work if the extension has set Denying an existing call to be interrupted or Data Line Security.

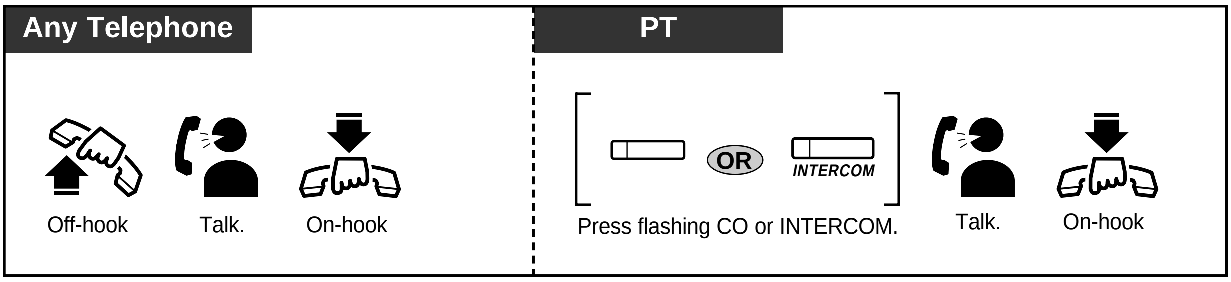
- COS Programming (Section 3.8)
  [514] Executive Busy Override
  [515] Executive Busy Override Deny

# 2.4 Receiving Calls

## *Receiving Calls*

### Receiving calls

Allows you to receive a call.



Any Telephone
Off-hook
Talk.
On-hook
PT
OR
INTERCOM
Press flashing CO or INTERCOM.
Talk.
On-hook

- If you want to answer an intercom call without going off-hook, press the AUTO ANSWER button (**Handsfree Answerback**). To cancel the Handsfree Answerback, press the AUTO ANSWER button again.

## *Picking up a Call*

### Picking up a Call Ringing at Another Extension (Call Pickup)

Allows you to answer an incoming call that is ringing at another telephone. The following types are available:

**Outside line (CO) Call Pickup:** Picks up an outside call.
**Directed Call Pickup:** Picks up the desired outside, intercom or doorphone call.
**Group Call Pickup:** Picks up an outside, intercom or doorphone call within your extension group.

You can also deny pick up calls from another extension.

#### Outside line (CO) Call Pickup

**SLT and PT**

Off-hook → [4] [✱] Dial 4✱. → Confirmation tone → Talk.

He's not in.
I'll answer it.
Hello.
Sorry, Mr. Smith is out of the office.

#### Directed Call Pickup

**SLT and PT**

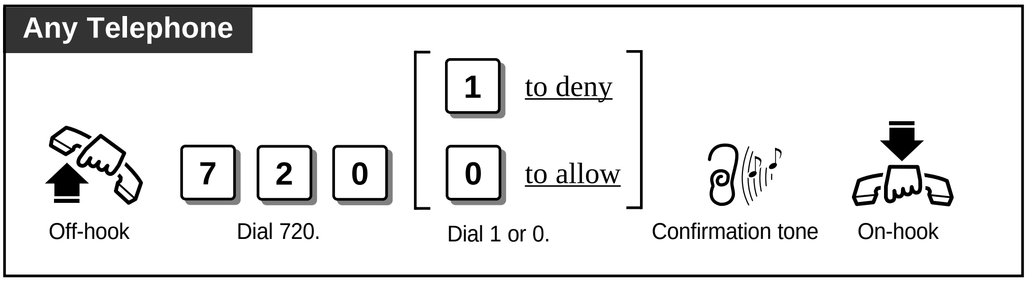
Off-hook → [4] [1] Dial 41. → [ringing extension no.] Dial ringing extension number. → Confirmation tone → Talk.

#### Group Call Pickup

**SLT and PT**

Off-hook → [4] [0] Dial 40. → Confirmation tone → Talk.

### Denying / allowing your call to be picked up (Call Pickup Deny)


Any Telephone
Off-hook
7
2
0
Dial 720.
1
to deny
0
to allow
Dial 1 or 0.
Confirmation tone
On-hook

!

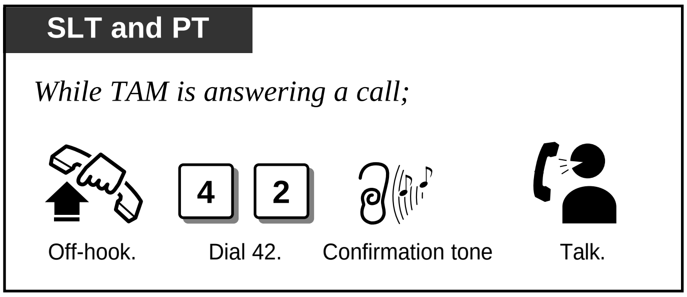
- A doorphone call can be picked up from any extension if it is not programmed to answer doorphone calls.
- If you set to deny the Call Pickup, Dial Tone 2 will be heard when you go off-hook.
- With the KX-T7235, KX-T7433 and KX-T7436, you can execute Group Call Pickup with the display operation.

☞

- Display Operation (Section 2.7)
  System Feature List
- Extension Programming (Section 3.9)
  [602] Extension Group Assignment
- Optional Programming (Section 3.12)
  [902] System Additional Information

## Picking Up a Call from Telephone Answering Machine (TAM) (Call Pickup from TAM)

Allows you to pick up an incoming call received by TAM.


SLT and PT
While TAM is answering a call;
Off-hook.
4
2
Dial 42.
Confirmation tone
Talk.

!

- An incoming intercom call, outside call and doorphone call can be picked up.
- When you try to pick up a call and hear a reorder tone, the call between the TAM and caller has finished.
- If a TAM extension is connected in parallel, a call received by another paralleled telephone can be also picked up.
- When TAM extensions are answering calls simultaneously, you can pick up the call from the extension with the lowest extension number.

☞

- Extension Programming (Section 3.9)
  [611] TAM Connection Assignment

# 2.5 During a Conversation

## *Placing a Call on Hold*

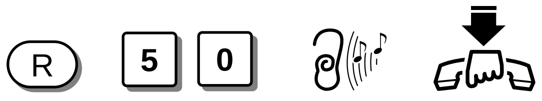
### Placing a Call on Hold (Call Hold)

Allows you to put a call on hold.

**Placing a call on hold**

**SLT**

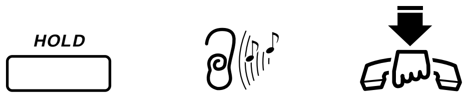
*During a conversation;*



Press RECALL. Dial 50. Confirmation tone On-hook

**PT**

*During a conversation;*

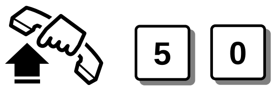


Press HOLD. Confirmation tone On-hook

**Retrieving a call on hold**

**SLT and PT**

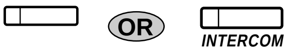
*During a conversation;*



Off-hook Dial 50.

**PT**

*During a conversation;*



Press flashing CO or INTERCOM.

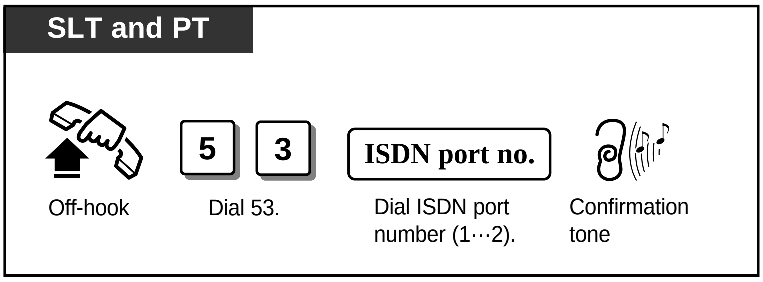
- If a held call is not retrieved in a specific period of time (default: 60 seconds), Hold Recall occurs.
- If an outside call is placed on hold and not retrieved in 15 minutes, it is automatically disconnected.
- Either one outside or intercom call can be placed on hold at the same time. (SLT only)
- While a party is on hold, music is sent automatically.
- If you do not want other extension users to retrieve your call, press the HOLD button twice. Then no one can retrieve your call at the other extension (Exclusive Hold). Exclusive Hold is available only for proprietary telephone users.

- Timer Programming (Section 3.5)
  [200] Hold Recall Time
- Optional Programming (Section 3.12)
  [902] System Additional Information

## Retrieving a Call on Hold from Another Telephone (Call Hold Retrieve)

Allows you to retrieve a call that has been placed on hold by another extension.

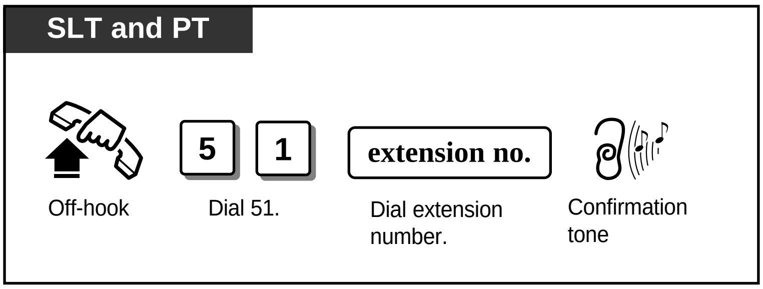
### Retrieving an outside call on hold from another telephone



**SLT and PT**

|  |  |  |  |
|---|---|---|---|
|  | 5 3 | ISDN port no. |  |
| Off-hook | Dial 53. | Dial ISDN port number (1···2). | Confirmation tone |

### Retrieving an intercom call on hold from another telephone



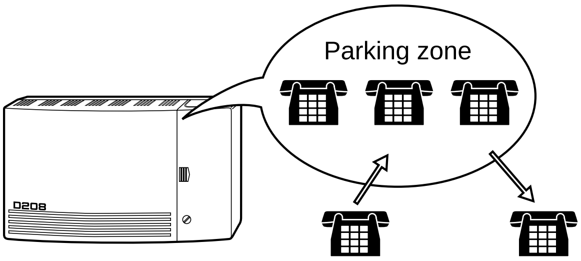
**SLT and PT**

|  |  |  |  |
|---|---|---|---|
|  | 5 1 | extension no. |  |
| Off-hook | Dial 51. | Dial extension number. | Confirmation tone |

# *2.5 During a Conversation*

## Placing a Call in a System Parking Area (Call Park)

Allows you to place a call on hold into a system parking area. This releases you from the parked call to perform other operations. The parked call can be retrieved by any extension user.



### Parking a call

**SLT**

*During a conversation;*

| | | | | | |
|---|---|---|---|---|---|
| R | | 5 2 | **parking zone no.** | | You can perform other operations. |
| Press RECALL. | Confirmation tone | Dial 52. | Dial parking zone number (0···9). | Confirmation tone | |

**PT**

*During a conversation;*

| | | | | | |
|---|---|---|---|---|---|
| TRANSFER | | 5 2 | **parking zone no.** | | You can perform other operations. |
| Press TRANSFER. | Confirmation tone | Dial 52. | Dial parking zone number (0···9). | Confirmation tone | |

### Retrieving a parked call

**SLT and PT**

| | | | | |
|---|---|---|---|---|
| | 5 2 | **parking zone no.** | | |
| Off-hook | Dial 52. | Dial parking zone number (0···9). | Confirmation tone | Talk. |

!

- Up to ten calls can be parked in the system.
- If the selected parking zone is full, a busy tone will be heard. In this case, enter the other parking zone number continuously until you hear a dial tone.
- If a parked call is not retrieved within the Transfer Recall time, Call Park Recall occurs. If a parked call is an outside call, it is possible to select whether the Call Park Recall will occur at the initiating extension or the manager through System Programming. If a parked call is an intercom call, the Call Park Recall will return to the initiating extension.
- If a Call Park Recall is not retrieved within 15 minutes, the held call is automatically disconnected.
- With the KX-T7235, KX-T7433 and KX-T7436, the manager can execute this feature with the display operation.

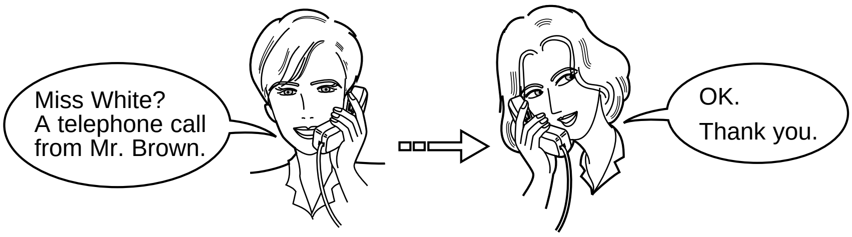
☞

- Display Operation (Section 2.7)
  System Feature List
- Timer Programming (Section 3.5)
  [201] Transfer Recall Time
- Optional Programming (Section 3.12)
  [902] System Additional Information

# 2.5 During a Conversation

## *Transferring Calls*

Allows you to transfer a call to another destination with or without an announcement.
You can transfer a call after making a paging announcement.
Please refer to “Paging” on page 2-38 for details about paging.


Miss White?
A telephone call
from Mr. Brown.
OK.
Thank you.

### Transferring a Call to an Extension (Call Transfer — to Extension)

**SLT**

*During a conversation;*

[Omit if not necessary.]

- R: Press RECALL.
- Confirmation tone
- **destination extension no.**: Dial destination extension number.
- Wait for an answer.
- Announce.
- On-hook

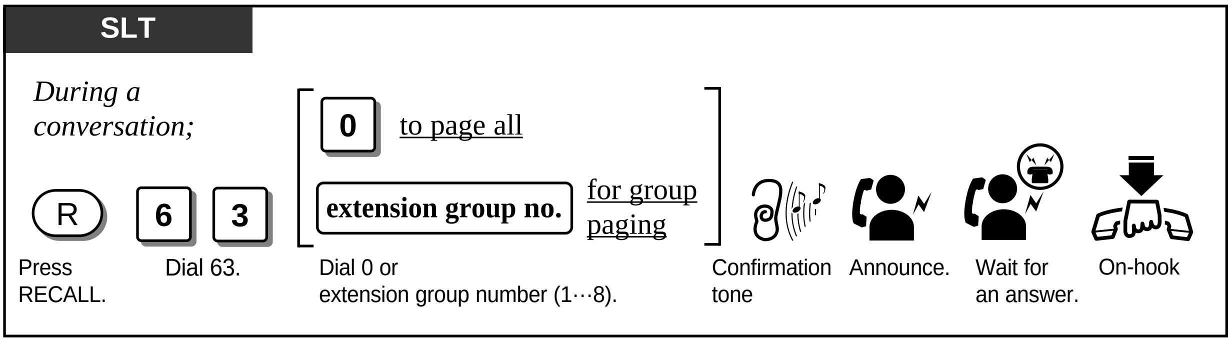
**PT**

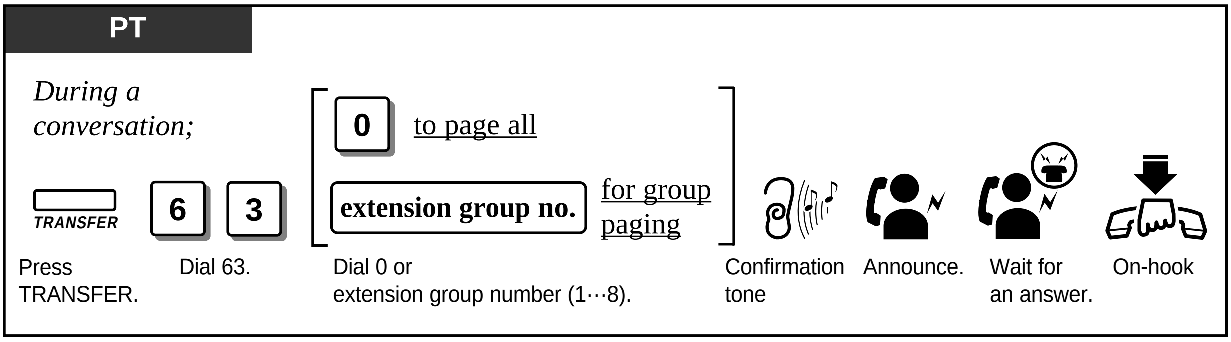
*During a conversation;*

[Omit if not necessary.]

- TRANSFER: Press TRANSFER.
- Confirmation tone
- **destination extension no.**: Dial destination extension number.
- Wait for an answer.
- Announce.
- On-hook

## Transferring a Call to an Extension after Paging

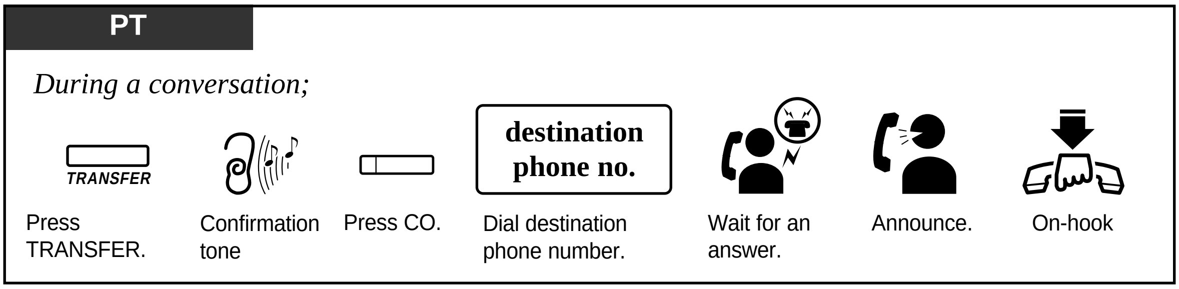

SLT
During a conversation;
R
6
3
0
to page all
extension group no.
for group paging
Press RECALL.
Dial 63.
Dial 0 or extension group number (1···8).
Confirmation tone
Announce.
Wait for an answer.
On-hook


PT
During a conversation;
TRANSFER
6
3
0
to page all
extension group no.
for group paging
Press TRANSFER.
Dial 63.
Dial 0 or extension group number (1···8).
Confirmation tone
Announce.
Wait for an answer.
On-hook

- If you want to return to the held call, press the RECALL button (for SLT/ISDN telephone), TRANSFER, corresponding CO or INTERCOM button (for PT) before the destination extension answers.
- **Transferring a call by the DSS button;**
  Proprietary telephone users can also transfer an outside call to an extension simply by pressing the DSS (Direct Station Selection) button, if assigned.
- If the destination extension does not answer the call within 12 rings (default), Transfer Recall occurs. If the transferred call is an outside call, it is possible to select whether the Transfer Recall will occur at the initiating extension or the manager through system optional programming.
- If you do not answer the Transfer Recall within 15 minutes, the line will be disconnected.
- It is system-programmable whether to send a ringback tone or music on hold to the caller while transferring.

- Initial Settings (Section 2.2)
  Customising the Buttons on Your Telephone
- Timer Programming (Section 3.5)
  [201] Transfer Recall Time
- Optional Programming (Section 3.12)
  [902] System Additional Information

## Transferring a Call to outside line (CO) (Call Transfer — to outside line (CO))



**PT**

*During a conversation;*

Press TRANSFER.
Confirmation tone
Press CO.
**destination phone no.** Dial destination phone number.
Wait for an answer.
Announce.
On-hook

- Instead of pressing the CO button, you can dial the ISDN port access code (9, 81 or 82).
- If you want to return to the held call, press the TRANSFER, corresponding CO, or INTERCOM button before the destination extension answers.
- Class of Service determines the extensions that can perform this feature.

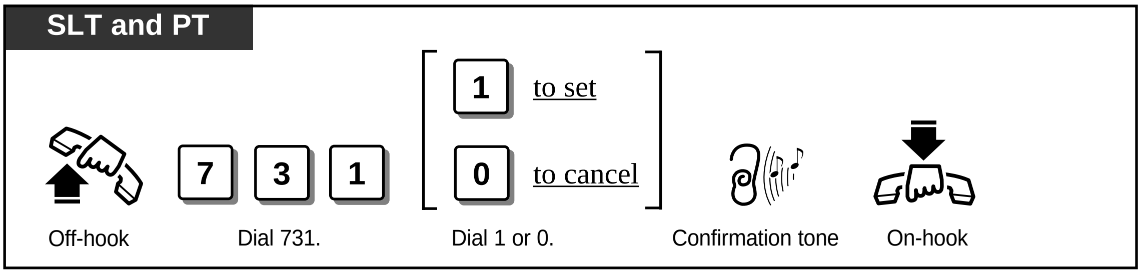
- COS Programming (Section 3.8)
  [503] Call Forwarding to outside line (CO)

## *Call Waiting*

During a conversation, a Call Waiting tone informs you that there is a call waiting. You may answer the second call by disconnecting or placing the current call on hold.

I've got another call. Please hold.
CALL WAITING TONE

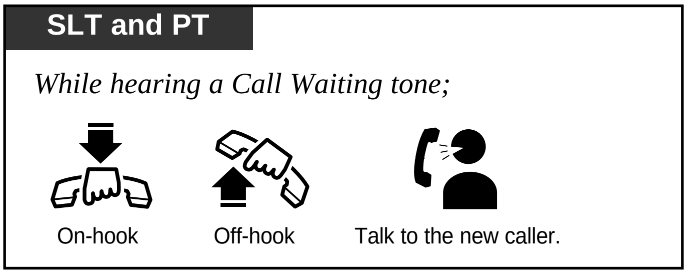
### Setting / Cancelling



**SLT and PT**

Off-hook
Dial 731.
Dial 1 or 0.
Confirmation tone
On-hook

### To talk to the new caller by terminating the current call



**SLT and PT**

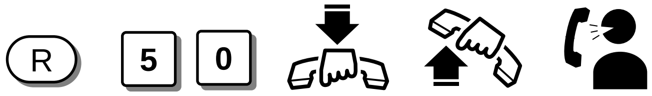
*While hearing a Call Waiting tone;*

On-hook
Off-hook
Talk to the new caller.

### To talk to the new caller by holding the current call

**SLT**

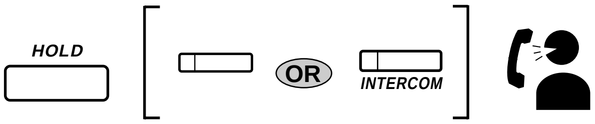
*While hearing a Call Waiting tone;*



Press RECALL. Dial 50. On-hook Off-hook Talk to the new caller.

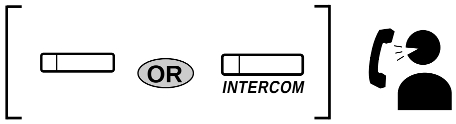
**PT**

*While hearing a Call Waiting tone;*



Press HOLD. Press flashing CO or INTERCOM. Talk to the new caller.

*While hearing a Call Waiting tone;*



Press flashing CO or INTERCOM. Talk to the new caller.

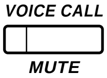
- A Call Waiting tone is generated when an outside call or doorphone call is received, or when another extension executes Busy Station Signalling.
- Setting Data Line Security temporarily cancels this feature.
- You can distinguish the Call Waiting tone received from a outside line (CO) and intercom (Call Waiting Tone Type Selection).

- Initial Settings (Section 2.2)
  Customising Your Telephone Functions

## Turning Off the Microphone

During a conversation, either when you are using the handset or in the handsfree mode, you can turn off the microphone so that you can consult privately with others in the room. And you will still be able to hear the other party.

### Turning on / off the handset microphone

| 7425 / 7433 / 7436 | 7450 |
|---|---|
| AUTO ANSWER<br>MUTE<br>Press MUTE. |   VOICE CALL<br>MUTE<br>Press MUTE. |

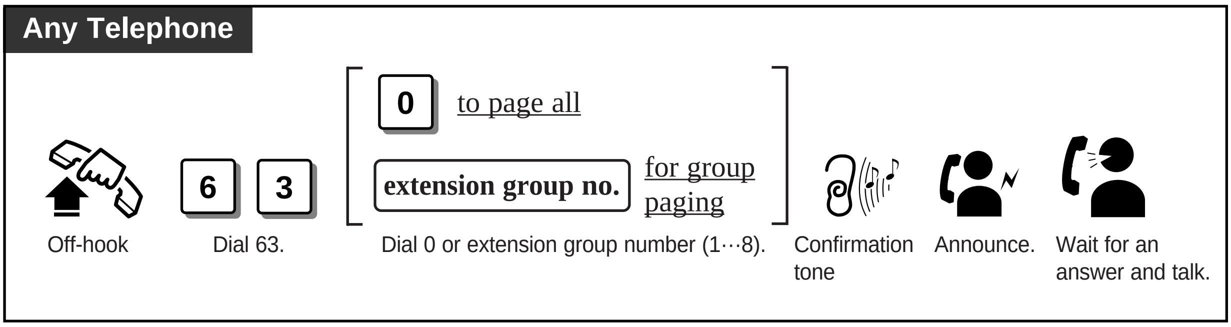
### Turning on / off the microphone for the handsfree mode

| PT |
|---|
| AUTO ANSWER<br>MUTE<br>Press MUTE. |

# Paging

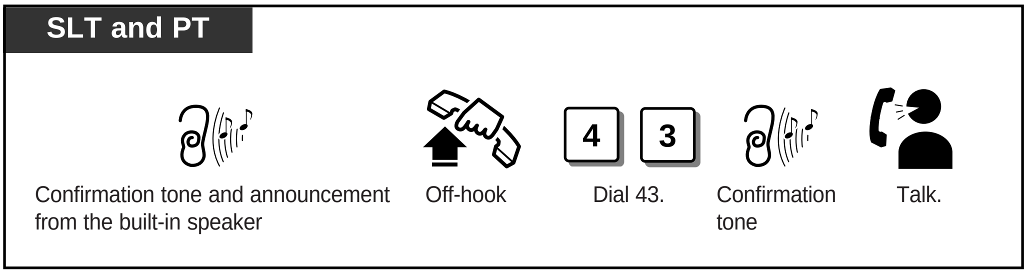
Allows you to make a voice announcement to several people at the same time.
Your message is announced over built-in speakers of all or a particular group of extensions.
The paged person can answer your page from any telephone. You can also transfer a call after paging or deny to be paged.

## Paging


Any Telephone
6
3
0
to page all
extension group no.
for group paging

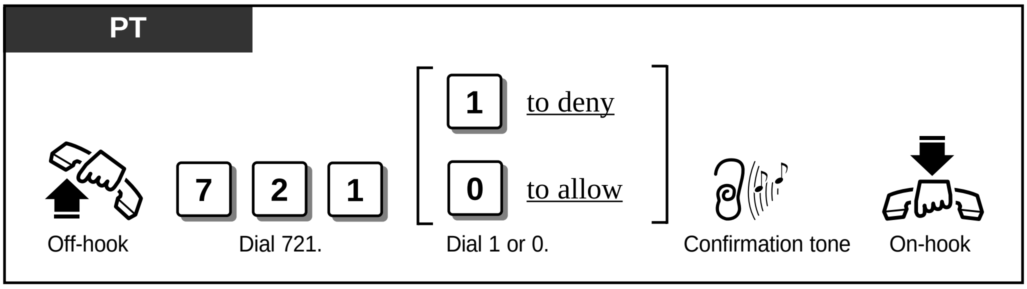
Off-hook
Dial 63.
Dial 0 or extension group number (1···8).
Confirmation tone
Announce.
Wait for an answer and talk.

## Answering the Page


SLT and PT
4
3

Confirmation tone and announcement from the built-in speaker
Off-hook
Dial 43.
Confirmation tone
Talk.

## Denying the Page


PT
7
2
1
1
to deny
0
to allow

Off-hook
Dial 721.
Dial 1 or 0.
Confirmation tone
On-hook

- With the KX-T7235, KX-T7433 and KX-T7436, you can execute the Group Paging feature with the display operation.

- Display Operation (Section 2.7)
  System Feature List
- Extension Programming (Section 3.9)
  [602] Extension Group Assignment

# 2.6 Others

## Before Leaving Your Desk

### Forwarding a Call (Call Forwarding)

Automatically transfers incoming calls to a pre-set destination.
The following types are available:

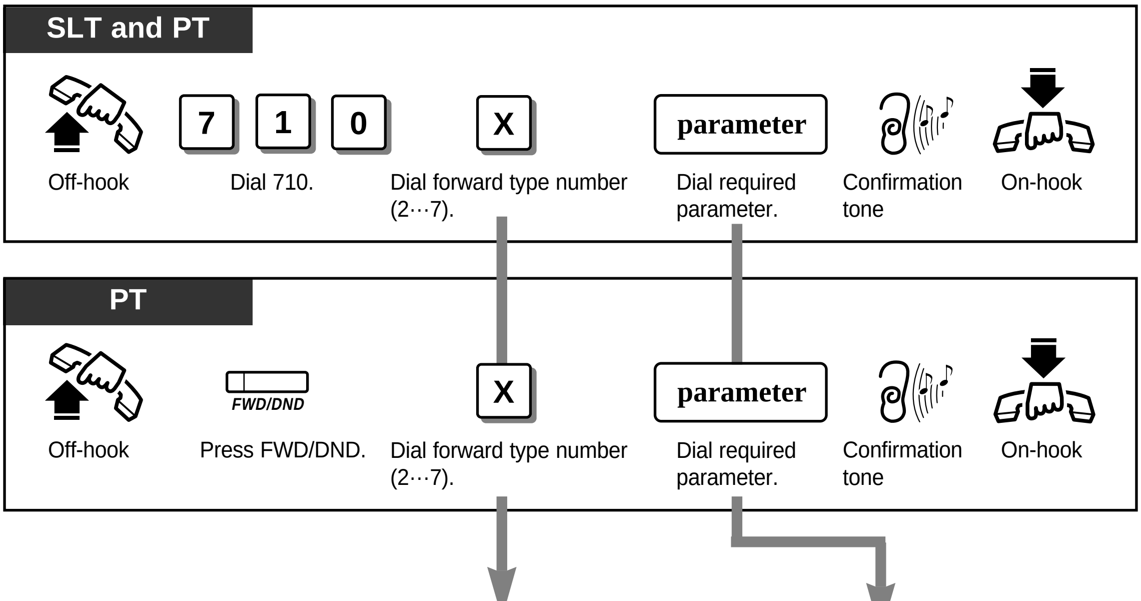
| Type | Description |
|---|---|
| All Calls | All calls are forwarded to another extension. |
| Busy | The calls are forwarded to another extension, when your extension is busy. |
| No Answer | The calls are forwarded to another extension if you don’t answer the call within the pre-set time. |
| Busy/No Answer | The calls are forwarded to another extension if your extension is busy or you don’t answer the call within the pre-set time. |
| To outside line (CO) | The calls are forwarded to a outside line (CO). |
| Follow Me | Allows you to set “Call Forwarding — All Calls” remotely from the destination extension. |
| By the ISDN Service – all calls* | All calls to your MSN number are forwarded by the ISDN network. |
| By the ISDN Service – when busy* | Calls to your MSN number are forwarded when you are busy, by the ISDN network. |
| By the ISDN Service – no Answer* | If you do not answer calls, calls to your MSN number will be forwarded by the ISDN network. |

- There can only be one stage of Call Forwarding.
- Class of Service determines the extensions that can perform Call Forwarding – to outside line (CO) / Follow Me functions.
- Setting one of the Call Forwarding functions cancels other Call Forwarding or DND functions, if any.
- A flexible button on the proprietary telephone can be assigned as the FWD/DND button.
- With the KX-T7235 and KX-T7436, you can set or cancel all of the Call Forwarding features.
- You can use “**” to store a PAUSE (0 through 9 and * are assignable.) — Call Forwarding to outside line (CO).

- Initial Settings (Section 2.2)
  Customising the Buttons on Your Telephone
- Display Operation (Section 2.7)
  Display Operation for FWD/DND Features (KX-T7235/KX-T7436 only)
- Timer Programming (Section 3.5)
  [202] Call Forwarding — No Answer Time
- COS Programming (Section 3.8)
  [503] Call Forwarding to outside line (CO)
  [511] Call Forwarding — Follow Me
  [517] Call Forwarding by ISDN Service

*: The availability of this feature depends on your local ISDN services.

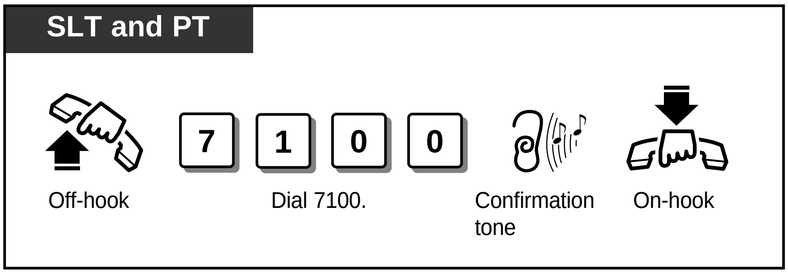
## Setting


SLT and PT
7
1
0
X
parameter
Off-hook
Dial 710.
Dial forward type number (2⋯7).
Dial required parameter.
Confirmation tone
On-hook
PT
FWD/DND
X
parameter
Off-hook
Press FWD/DND.
Dial forward type number (2⋯7).
Dial required parameter.
Confirmation tone
On-hook

| FORWARD TYPE | FORWARD TYPE No. | PARAMETER |
|---|---|---|
| All Calls | 2 | **destination extension no.**<br>Dial destination extension number. |
| Busy | 3 | |
| No Answer | 4 | |
| Busy / No Answer | 5 | |
| To outside line (CO) | 6 | 16 digits max.<br>**ISDN port access code** Dial ISDN port access code (9, 81⋯82).<br>**destination phone no.** Dial destination phone number.<br>**#** Dial #. |
| Follow Me | 7 | – at the destination extension<br>**your extension no.**<br>Dial your extension number. |
| By the ISDN Service – all calls | 9 2 | **ISDN port number** Dial ISDN port number (1, 2).<br>16 digits max.<br>**destination phone no.** Dial destination phone number.<br>**#** Dial #. |
| By the ISDN Service – when busy | 9 3 | |
| By the ISDN Service – no Answer | 9 4 | |

## Cancelling

### Cancelling Call Forwarding at your (original) extension

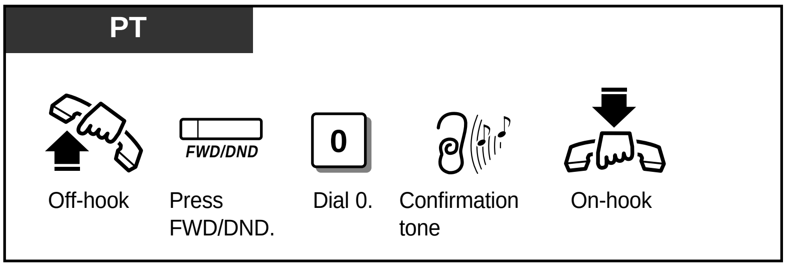

SLT and PT
7
1
0
0

Off-hook

Dial 7100.

Confirmation tone

On-hook



Off-hook

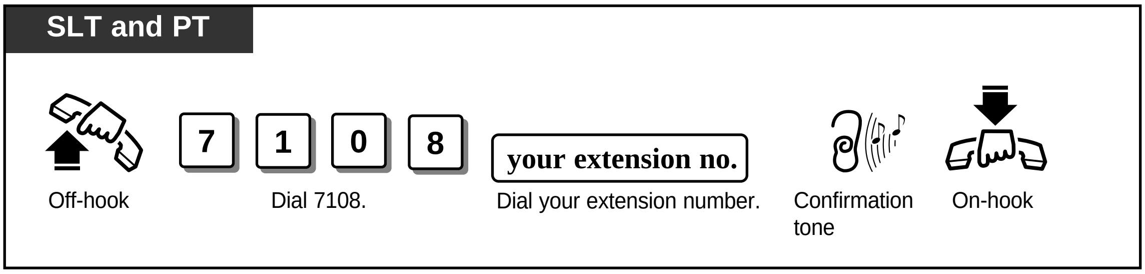
Press FWD/DND.

Dial 0.

Confirmation tone

On-hook

### Cancelling Call Forwarding at the destination extension – “Follow Me” only


SLT and PT
7
1
0
8
your extension no.

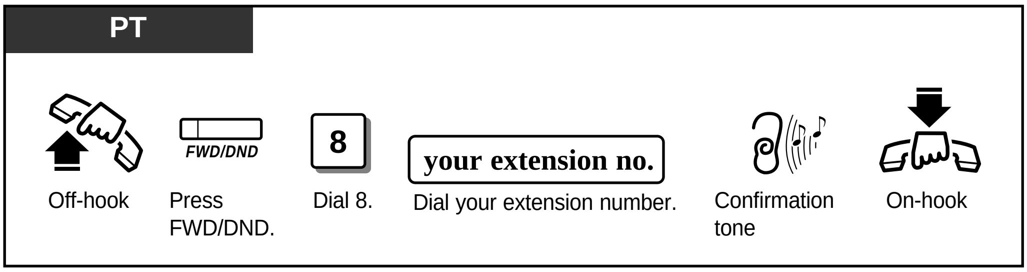
Off-hook

Dial 7108.

Dial your extension number.

Confirmation tone

On-hook


PT
FWD/DND
8
your extension no.

Off-hook

Press FWD/DND.

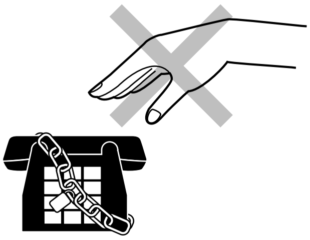
Dial 8.

Dial your extension number.

Confirmation tone

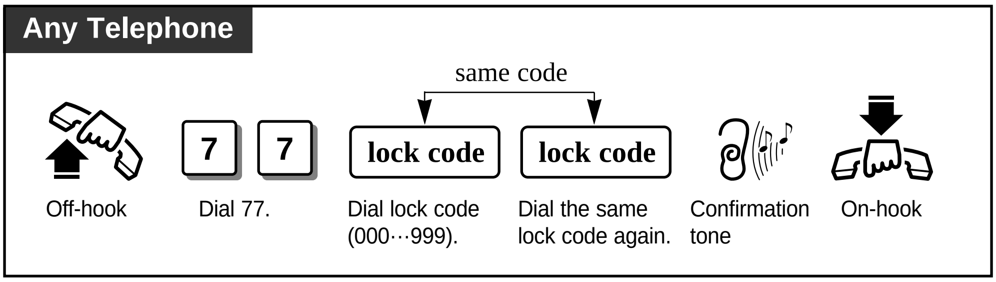
On-hook

## Locking Your Phone (Electronic Station Lockout)



Allows you to lock your extension so that other users cannot make outside calls. Any 3-digit numeric code is used to lock the extension. The same code is used to unlock the extension.

### Locking



Off-hook

Dial 77.

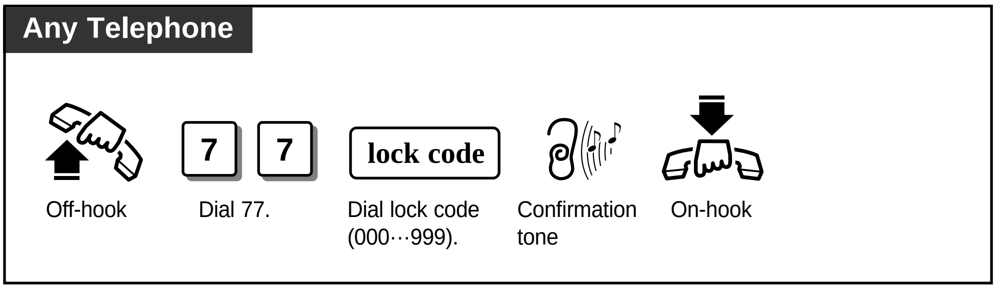
Dial lock code (000···999).

Dial the same lock code again.

Confirmation tone

On-hook

### Unlocking



Off-hook

Dial 77.

Dial lock code (000···999).

Confirmation tone

On-hook

- Making intercom calls and receiving intercom or outside calls are allowed on a locked extension.
- The manager can set and cancel this function for another extension (Controlling “Electronic Station Lockout” Remotely).
- The new setting overrides the old one. If the manager sets Remote Station Lock on an extension it has already been locked, you cannot unlock it.

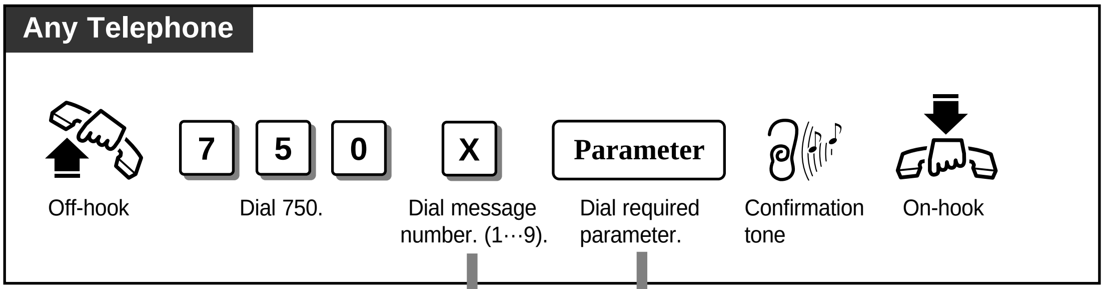
- Manager Operations (Section 2.8)
  Controlling “Electronic Station Lockout” Remotely (Remote Station Lock Control)

# 2.6 Others

## Showing Your Message on the Calling Party's Display (Absent Message Capability)

Callers with display telephones can receive a message why you are absent. There are six pre-programmed default messages. If required, messages 7, 8 and 9 can be programmed using a personal computer (PC Programming, Section 3.13).

### Setting the absent message



Off-hook
Dial 750.
Dial message number. (1···9).
Dial required parameter.
Confirmation tone
On-hook

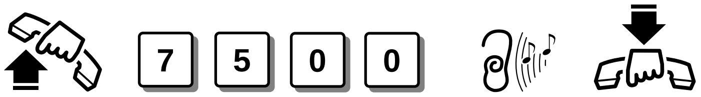
| Display Message | Message No. | Parameter |
|---|---|---|
| Will Return Soon | 1 | None |
| Gone Home | 2 | None |
| At Ext %% | 3 | **extension no.**<br>Dial extension number. |
| Back at %%:%% *(time)* | 4 | **hour** **minute**<br>Enter hour (00···23) and minute (00···59). |
| Out until %%/%% *(day/month)* | 5 | **day** **month**<br>Enter day (01···31) and month (01···12). |
| In a Meeting | 6 | None |
| (Programmable) | 7 | |
| (Programmable) | 8 | |
| (Programmable) | 9 | |

Note: % indicates the digit where you enter the desired parameter.

(Continued)

### Cancelling the absent message

**Any Telephone**



Off-hook

Dial 7500.

Confirmation tone

On-hook

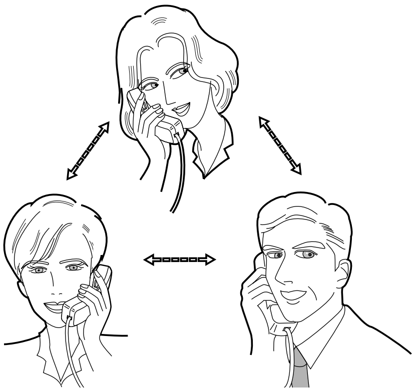
- The display telephone users can see the selected message every time they go off-hook.
- With the KX-T7235, KX-T7433 and KX-T7436, you can execute this feature with the display operation.

- Display Operation (Section 2.7)
  System Feature List
- PC Programming (Section 3.13)

# 2.6 Others

## Three-Party Conversation (Conference)

During a two-party conversation, you can add a third party to make a three-party conversation (Conference). You can also leave the conference with the other two parties remaining. If the other two parties are both CO lines, you can join in the conversation again.



!

- Up to four conference calls are allowed simultaneously.
- The KX-T7250 user can assign the CONFERENCE button as a flexible button.

☞

- Initial Settings (Section 2.2)
  Customising the Buttons on Your Telephone

### Establishing a Conference

**SLT**

*During a two-party conversation;*

| R | | **third party's phone no.** | | R | 3 | | A three-party conference is now established. |
|---|---|---|---|---|---|---|---|
| Press RECALL. | Confirmation tone | Dial third party's phone number. | Wait for an answer. | Press RECALL. | Dial 3. | Confirmation tone | |

**PT**

*During a two-party conversation;*

| CONF | | **third party's phone no.** | | CONF | | A three-party conference is now established. |
|---|---|---|---|---|---|---|
| Press CONFERENCE. | Confirmation tone | Dial third party's phone number. | Wait for an answer. | Press CONFERENCE. | Confirmation tone | |

!

- When you dial the telephone number of an outside party, you must dial the ISDN port access code (9, 81 or 82) as the leading digit.
- You can return to the original party before the third party answers by pressing the RECALL button or TRANSFER button.
- If you are having a conference with at least one outside party, you can put both parties on hold by pressing the HOLD button.

(Continued)

# 2.6 Others

## Making a three-party a two-party conversation

### Terminating one party and talking to the other (not available for three extension calls)

**PT**

[ OR INTERCOM ]

Press CO or INTERCOM you want to remain connected.

Confirmation tone

Conversation with the desired party is established and the other party is disconnected.

### Talking to the first caller while keeping the second call on hold

**SLT**

R

Press RECALL.

Confirmation tone

You can talk to the original party.

**PT**

TRANSFER

Press TRANSFER.

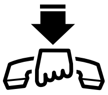
Confirmation tone

You can talk to the original party.

## Leaving the Conference

### Leaving the conference with the other two parties remaining (unless both are outside parties)

**SLT and PT**



On-hook

If the other two parties are both CO lines, they will be disconnected.

### Leaving the conference with the other two outside parties remaining (Unattended Conference)

**PT**

CONF

Press CONFERENCE.

## Rejoining an Outside Two Party Conference

**PT**

Press CO flashing green moderately.

!

- Class of Service determines the extensions that can perform Unattended Conference.

☞

- COS Programming (Section 3.8)
  [503] Call Forwarding to outside line (CO)

## Alarm Setting (Timed Reminder)

Each extension can be set to generate an alarm ringing at a preset time as a wake up alarm or a reminder. You can set this to be activated once or every day at a preset time.

### Setting

**SLT and PT**

Off-hook

**7** **6** **1** Dial 761.

**hour** Enter hour (00···23).

**minute** Enter minute (00···59).

**0** for a one time alarm
**1** for a daily alarm
Dial 0 or 1.

Confirmation tone

On-hook

### Cancelling

**SLT and PT**

Off-hook

**7** **6** **0** Dial 760.

Confirmation tone

On-hook

### Stopping the alarm

**SLT and PT**

Off-hook

### Checking the set time on the display

**PT with display**

Off-hook

**7** **6** **2** Dial 762.

The display shows the set time.

On-hook

!

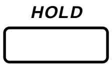
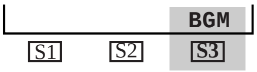
- The alarm ringing continues for 30 seconds.
- If you receive an incoming outside call in the 1:N status during the alarm, ringing starts after the alarm stops sounding.
- When the preset time comes during a call, the alarm starts after the call is completed.

# 2.6 Others

## Turning On the Background Music (Background Music (BGM))

Allows you to hear background music through the built-in speaker of the telephone while in on-hook status. The music stops whenever a call comes in or when you go off-hook.

### Turning on / off

| PT | 7230 / 7235 / 7433 / 7436 |
|---|---|
| <br> <br>Press HOLD. | <br> <br>Press BGM (S3). |

- Resource Programming (Section 3.11)
  [803] Music Source Use

# 2.6 Others

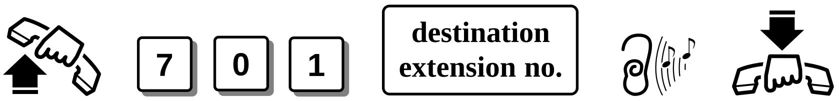
## Leaving a Message Notification (Message Waiting)

Allows you to inform the called party of a message waiting. For single line and ISDN telephone users, special ringing and Dial Tone 4 are provided to indicate that a message has been received. If your telephone is provided with a message waiting lamp (MESSAGE indicator), it gives visual indication of a message waiting.

Someone has left a message.
DIAL TONE 4

### Leaving a message notification

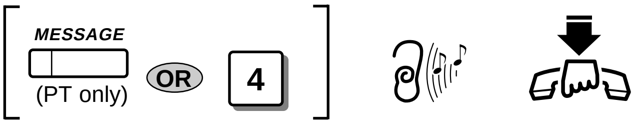
**SLT and PT**


7
0
1
destination extension no.

Off-hook — Dial 701. — Dial destination extension number. — Confirmation tone — On-hook

**SLT and PT**

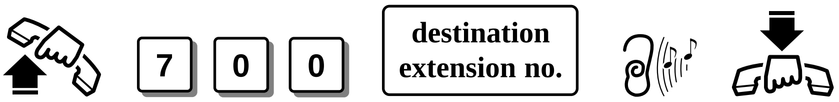
*If you make an intercom call and hear a busy, ringback or DND tone;*


MESSAGE
(PT only)
OR
4

Press MESSAGE or 4. — Confirmation tone — On-hook

### Cancelling a message notification

**SLT and PT**

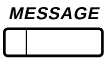

7
0
0
destination extension no.

Off-hook — Dial 700. — Dial destination extension number. — Confirmation tone — On-hook

### Checking and selecting a message by the receiver on the display

**PT with display**

*While in on-hook status;*

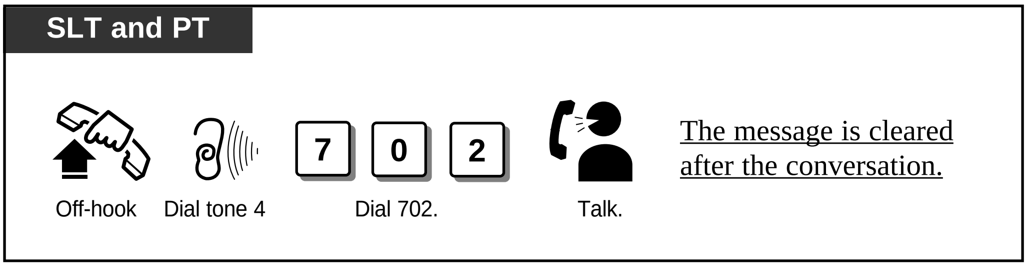


Press MESSAGE repeatedly.

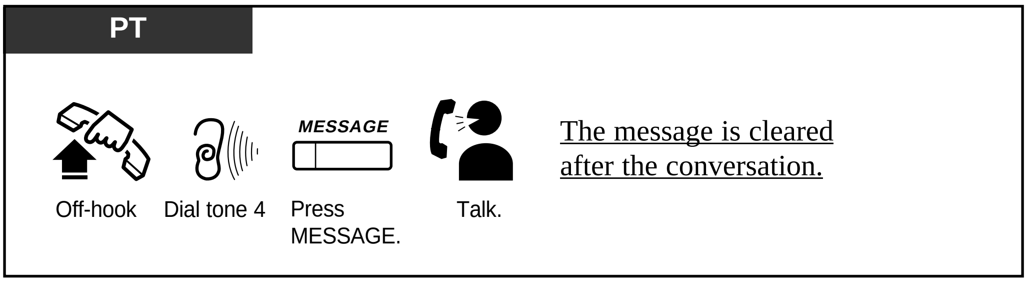
The message will appear in the received order.

# 2.6 Others

## Calling back the message sender

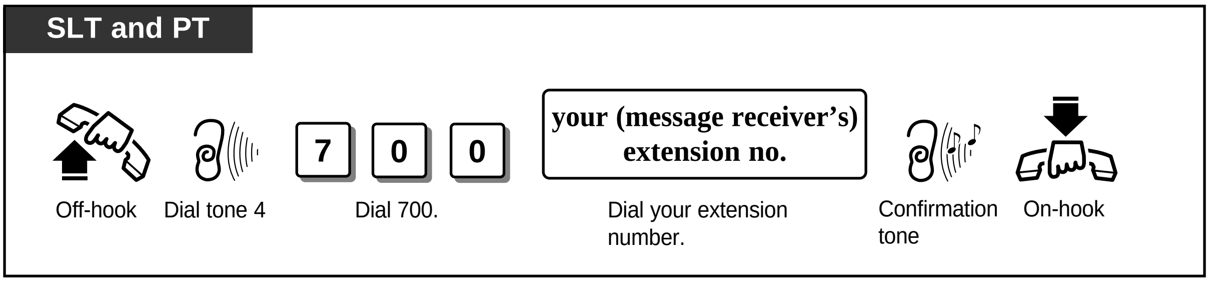

SLT and PT
Off-hook
Dial tone 4
7
0
2
Dial 702.
Talk.

The message is cleared after the conversation.


PT
Off-hook
Dial tone 4
MESSAGE
Press MESSAGE.
Talk.

The message is cleared after the conversation.

## Clearing all messages by the message receiver


SLT and PT
Off-hook
Dial tone 4
7
0
0
Dial 700.
your (message receiver's) extension no.
Dial your extension number.
Confirmation tone
On-hook

- If multiple messages are left at your extension, calling back is executed in the received order.
- The system supports a maximum of 64 simultaneous messages. If you try to set a 65th message, you will hear a reorder tone.
- The special ringing tone for single line rings three times at 5 second intervals. Then there is an interval whose length is programmable.
- A proprietary telephone user can assign the MESSAGE button on a flexible button.
- With the KX-T7235, KX-T7433 and KX-T7436, you can execute this feature with the display operation.

- Initial Settings (Section 2.2)
  Customising the Buttons on Your Telephone
- Display Operation (Section 2.7)
  System Feature List
- Timer Programming (Section 3.5)
  [207] Message Waiting Ring Interval Time

# 2.6 Others

## Calling with Account Codes (Account Code Entry)

An Account Code is used to identify outside calls for accounting and billing purposes. The account code is appended to the Station Message Detail Recording (SMDR) call record. For incoming outside calls, an account code is optional. For outgoing outside calls, there are three modes available to enter an account code as follows. One mode is selected on a Class of Service basis.

**In Verified - All Calls mode,** you must always enter a pre-assigned account code when making any of the following calls unless it has previously been stored in memory.

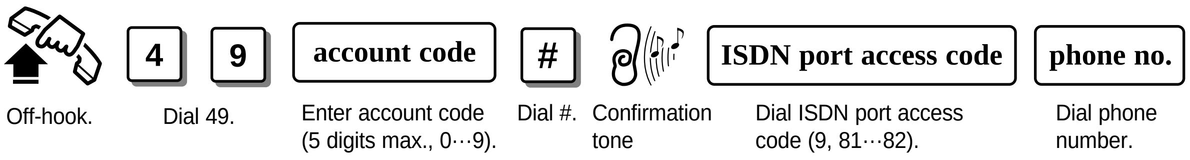
- Manual Dialling (Selecting an ISDN port)
- Call Forwarding — to outside line (CO)
- Pickup Dialling (SLT)
- One-Touch Dialling (PT)
- Last Number Redial
- Saved Number Redial (PT)
- Station Speed Dialling
- System Speed Dialling

**In Verified - Toll Restriction Override mode,** you must enter a pre-assigned account code to override toll restriction (Toll Restriction Override by Account Code Entry).

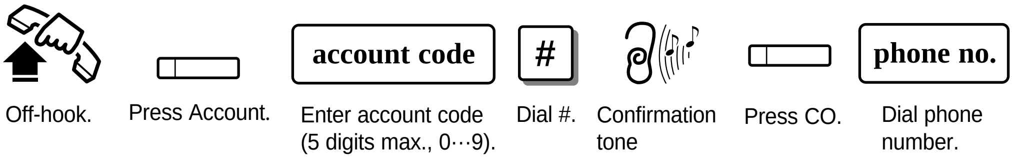
**In Option mode,** you can enter any account code when needed.

### Entering account codes before dialling

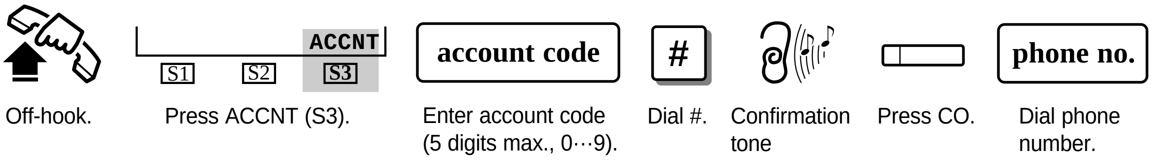
**Any Telephone**


4
9
account code
#
ISDN port access code
phone no.
Off-hook.
Dial 49.
Enter account code (5 digits max., 0···9).
Dial #.
Confirmation tone
Dial ISDN port access code (9, 81···82).
Dial phone number.

**PT**

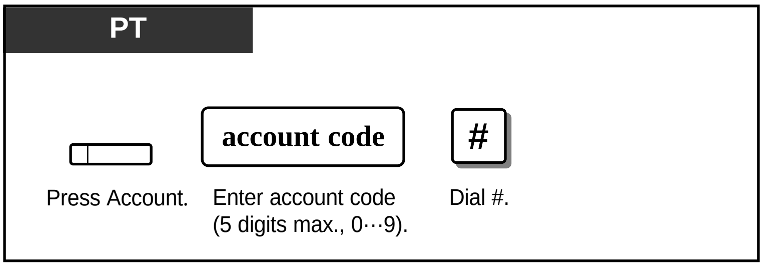

account code
#
phone no.
Off-hook.
Press Account.
Enter account code (5 digits max., 0···9).
Dial #.
Confirmation tone
Press CO.
Dial phone number.

**7230 / 7235 / 7433 / 7436**

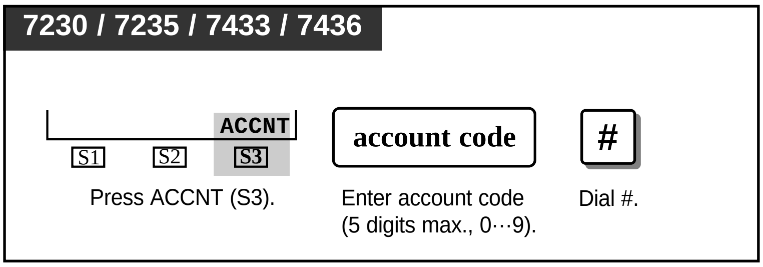

ACCNT
S1
S2
S3
account code
#
phone no.
Off-hook.
Press ACCNT (S3).
Enter account code (5 digits max., 0···9).
Dial #.
Confirmation tone
Press CO.
Dial phone number.

(Continued)

## Entering account codes during or after a conversation



Press Account. Enter account code (5 digits max., 0···9). Dial #.



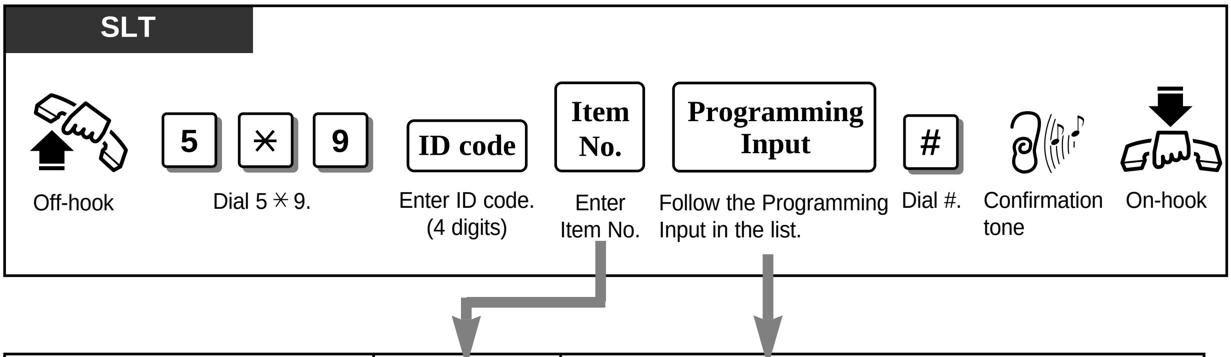
Press ACCNT (S3). Enter account code (5 digits max., 0···9). Dial #.

- Entering an account code after a conversation must be performed while hearing the reorder tone and completed within 15 seconds.
- Entering "⁎" while entering an account code allows you to clear the number and re-enter it again.
- The delimiter, "99," can be entered instead of "#" after entering an account code.
- An account code can be stored into Memory Dialling (e.g. System/Station Speed Dialling).
- If an entered account code does not match a stored account code in Verified – All Calls or Verified – Toll Restriction Override mode, a reorder tone is heard.
- The proprietary telephone user can assign the Account button on a flexible button.

- Initial Settings (Section 2.2)
  Customising the Buttons on Your Telephone
- System Programming (Section 3.4)
  [101] Account Codes
- COS Programming (Section 3.8)
  [505] Account Code Entry Mode

## Referring to the Charges (Charge Fee Reference)

Allows you to refer to the charges for each extension, outside line (CO), account code or department code. The data can be printed out by Station Message Detail Recording (SMDR) or cleared by each extension.


SLT
5
⚹
9
ID code
Item No.
Programming Input
#
Off-hook
Dial 5 ⚹ 9.
Enter ID code. (4 digits)
Enter Item No.
Follow the Programming Input in the list.
Dial #.
Confirmation tone
On-hook

| Item | Item No. | Programming Input |
|---|---|---|
| Clears the extension charge fee meter. | 1 | **extension no.**<br>Dial extension number. |
| Clears the account code charge fee meter. | 4 | **account code table no.**<br>Enter account code table number. (01···40) |
| Sets the new rate. (XXXXXXXX) | 5 | **ISDN port no.** (1···2, ⚹ )<br>**new rate (XXXXXXXX)** (The decimal point is a floating digit.) |
| Clears all charges except the extension charge. | 6 1 | None |
| Clears all extension charges. | 6 2 | None |
| Prints all charges except the extension charge. | 7 1 | None |
| Prints all extension charges. | 7 2 | None |
| Prints an extension charge. | 7 3 | **extension no.**<br>Dial extension number. |
| Clears the department code charge fee meter. | 9 | **department code**<br>Enter department code. (5 digits max) |

(Continued)

**PT**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PROGRAM | 9 | 9 | 9 | **ID code** | **Item No.** | **Programming Input** | HOLD | PROGRAM |
| Press PROGRAM. | | Dial 999. | | Enter ID code. (4 digits) | Enter Item No. | Follow the Programming Input in the list. | Press HOLD. | Press PROGRAM. |

| Item | Item No. | Programming Input |
|---|---|---|
| Refers to the extension charge fee. | 1 | **extension no.**<br>Dial extension number. |
| Clears the extension charge fee meter. | 1 | **extension no.**<br>Dial extension number.<br>TRANSFER<br>Press TRANSFER.<br>AUTO DIAL STORE<br>Press STORE. |
| Refers to the CO charge fee. | 2 | **ISDN port no.**<br>Dial ISDN port number (1···2). |
| Refers to the total charge fee. | 3 | None |
| Refers to the account code charge fee. | 4 | **account code table no.**<br>Enter account code table number. (01···40) |
| Clears the account code charge fee meter. | 4 | **account code table no.**<br>Enter account code table number. (01···40)<br>TRANSFER<br>Press TRANSFER.<br>AUTO DIAL STORE<br>Press STORE. |
| Sets the new rate. (XXXXXXXX) | 5 | **ISDN port no.**<br>(1···2, ✳)<br>**new rate (XXXXXXXX)**<br>(The decimal point is a floating digit.)<br>AUTO DIAL STORE<br>Press STORE. |
| Clears all charges except the extension charge. | 6 | AUTO DIAL STORE<br>Press STORE. |
| Clears all extension charges. | 6 | SP-PHONE<br>Press SP-PHONE.<br>AUTO DIAL STORE<br>Press STORE. |
| Prints all charges except the extension charge. | 7 1 | None |
| Prints all extension charges. | 7 2 | None |
| Prints an extension charge. | 7 3 | **extension no.**<br>Dial extension number. |

| ITEM | ITEM NO. | PROGRAMMING INPUT |
|---|---|---|
| Sets the new account code. | 8 | **account code table no.** — Enter account code table number. (01···40)<br>TRANSFER — Press TRANSFER.<br>**new account code** — Enter new account code.<br>AUTO DIAL / STORE — Press STORE. |
| Refers to the department code charge fee. | 9 | **department code** — Enter department code. (5 digits max) |
| Clears the department code charge fee meter. | 9 | **department code** — Enter department code. (5 digits max)<br>TRANSFER — Press TRANSFER.<br>AUTO DIAL / STORE — Press STORE. |

!

- Display telephone users can see the messages on the display and program by pressing following buttons.
  - TRANSFER: Erases an incorrect ID code.
  - SP-PHONE: Advances to the next extension, outside line (CO), account code table and department code number.
  - REDIAL: Returns to the step before or after entering the ID code.
  - AUTO ANSWER/MUTE: Alternates between the meter display and the charge display.
- Before referring to the total charge fee at an extension, the same charge rate must be set at each ISDN port. If the charge rate is not set, the charging cannot be done properly.

☞

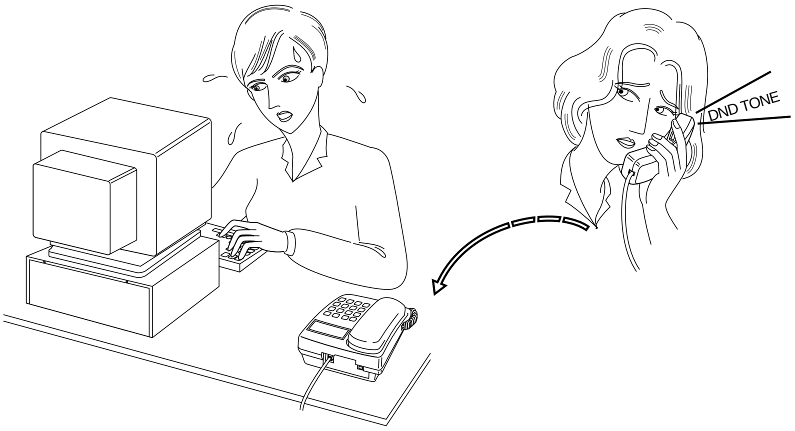
- System Programming (Section 3.4)
  - [101] Account Codes
  - [107] Charge Indication Selection
  - [108] Charge Verification ID Code Set
- Extension Programming (Section 3.9)
  - [613] Department Codes

# 2.6 Others

## *Denying Receiving Calls*

### Rejecting Incoming Calls (Do Not disturb (DND))

Allows you to reject incoming extension calls by sending the DND tone. Incoming outside calls will be automatically transferred to a pre-assigned extension.



#### Setting

**SLT and PT**

Off-hook

**7** **1** **0** **1**

Dial 7101.

| | |
|---|---|
| **destination extension no.** | to forward a call to the destination extension |
| **0** | to forward a call to a manager |
| **⁎** | to reject receiving incoming calls |

Dial destination extension number, 0 or ⁎.

Confirmation tone

On-hook

**PT**

Off-hook

FWD/DND

Press FWD/DND.

**1**

Dial 1.

| | |
|---|---|
| **destination extension no.** | to forward a call to the destination extension |
| **0** | to forward a call to a manager |
| **⁎** | to reject receiving incoming calls |

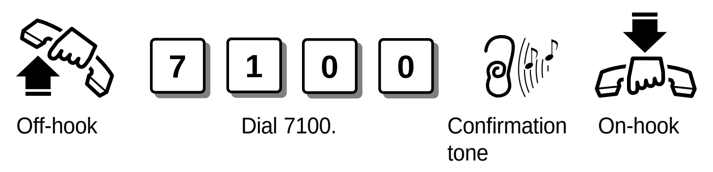
Dial destination extension number, 0 or ⁎.

Confirmation tone

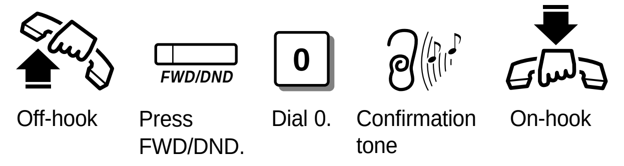
On-hook

## Cancelling

**SLT and PT**



**PT**



- DND does not work for the following calls: doorphone calls; recalls for hold; Timed Reminder alarm.
- An extension in the DND mode can be called by other extension users who are allowed to override DND in their Class of Service (Do Not Disturb Override).
- The following extensions cannot set DND: the manager, Call Forwarding (C.FWD) destination or the DND destination.
- When the extension has set the C.FWD, DND or DND for Direct Dialling In Calls, the extension cannot be a DND destination.
- Setting this feature cancels C.FWD or DND for Direct Dialling In Calls.
- A flexible button on a proprietary telephone can be assigned as the FWD/DND button.
- KX-T7235 and KX-T7436 users can set or cancel DND with the display operation.
- If an intercom call comes in, the caller hears a DND tone.

When you set DND by dialling "⁎";

- If an intercom call comes in, the caller hears a DND tone.
- If you receive an incoming outside call in the 1:N status, the CO button flashes red but does not ring.
- Your extension does not receive incoming outside calls in the 1:1 status.
- Depending on the kind of call received, the DND setting will work differently.

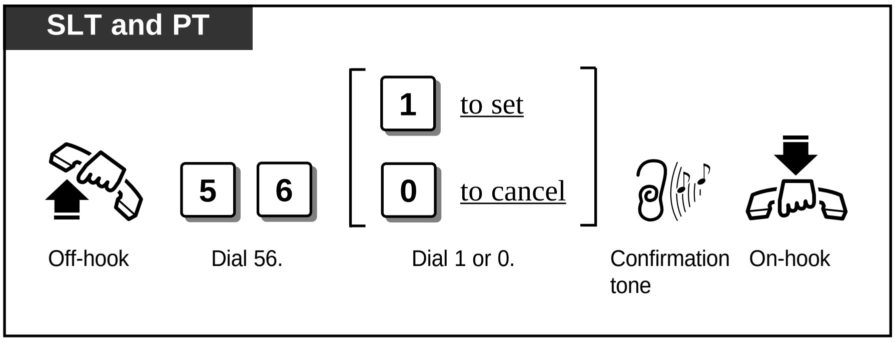
| Call Type | At your extension | At the other party's extension |
|---|---|---|
| Intercom Call | No ring | DND tone |
| Outside Call at 2 or more extensions (including your extension) | No ring. Informs you with a flashing CO button. | Ringback tone |
| Outside Call only at your extension | Not received | Busy tone |

- Initial Settings (Section 2.2)
  Customising the Buttons on Your Telephone
- Display Operation (Section 2.7)
  Display Operation for FWD/DND Feature

## Rejecting a Direct Dialling In Call (DND for DDI Calls)

Allows the pre-assigned extension user to reject a direct dialling in call (DDI call). The rejected call will be transferred to the manager. The manager cannot reject a DDI call. This feature is one of ISDN services.

### Setting / Cancelling



- Setting this feature cancels Call Forwarding or DND.
- Even if this feature is set, your extension doesn't deny DDI calls in the following cases:
  1) The destination of the DDI call is an UCD group or a Ring Group.
  2) The destination of the DDI call is a Hunting group member that is set to this feature.
- Setting this feature sends dial tone 2 when you lift the handset.
- Class of Service determines the extensions that can perform this feature.

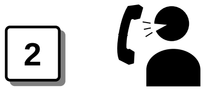
- COS Programming (Section 3.8)
  [510] Do Not Disturb for Direct Dialling In Call

## Calling an Extension which Denies Receiving Calls (Do Not Disturb Override)

Allows the pre-assigned extension user to call an extension which sets the Do Not Disturb (DND) feature.

**SLT and PT**

*If you make an intercom call and hear the Do Not Disturb (DND) tone;*

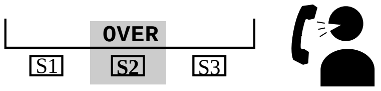


Dial 2.

Wait for an answer and talk.

**7230 / 7235 / 7433 / 7436**

*If you make an intercom call and hear the Do Not Disturb (DND) tone;*



Press OVER (S2).

Wait for an answer and talk.

- If you hear a reorder tone after dialling 2, this means the Do Not Disturb (DND) Override feature is not set at your extension.
- You must dial 2 within 10 seconds after hearing the Do Not Disturb (DND) tone.
- Class of Service determines the extensions that can perform this feature.

- COS Programming (Section 3.8)
  [504] Do Not Disturb Override

# 2.6 Others

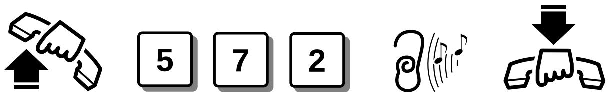
## Privacy Feature

### Restricting Displaying your Number to the Called Party (Calling Line Identification Restriction – CLIR)

Allows you to restrict displaying your number to the called party when making a call (Calling Line Identification Presentation, CLIP – case by case). You can set the called party to see your number on the display once or in succession. This feature is one of ISDN services.

#### To restrict displaying your number to the called party

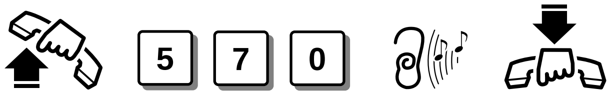
**Any Telephone**



Off-hook
Dial 572.
Confirmation tone
On-hook

#### To display your number to the called party

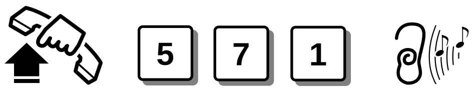
**Any Telephone**



Off-hook
Dial 570.
Confirmation tone
On-hook

#### To change the current setting at the time you make a call

**Any Telephone**



**ISDN port access code** **phone no.**

Off-hook
Dial 571.
Confirmation tone
Dial ISDN port access code (9, 81···82).
Dial phone number.

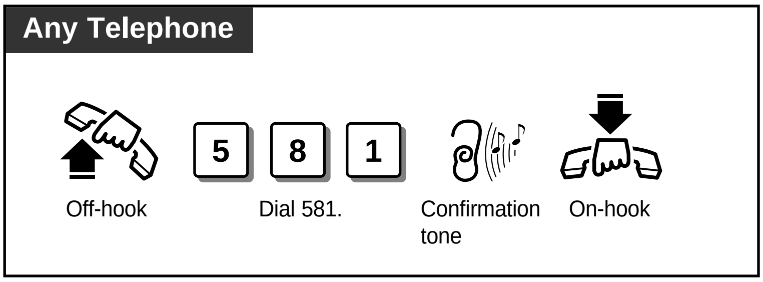
☞

- ISDN Port Programming (Section 3.7)
  [404] CLIP/COLP Number Assignment
- COS Programming (Section 3.8)
  [512] Calling Line Identification Restriction (CLIR)
- Please refer to “Caller Identification Services (for KX-T7230/KX-T7235/KX-T7433/KX-T7436)” (page 2-68) and “Setting the CLIP/COLP numbers” (page 2-76).

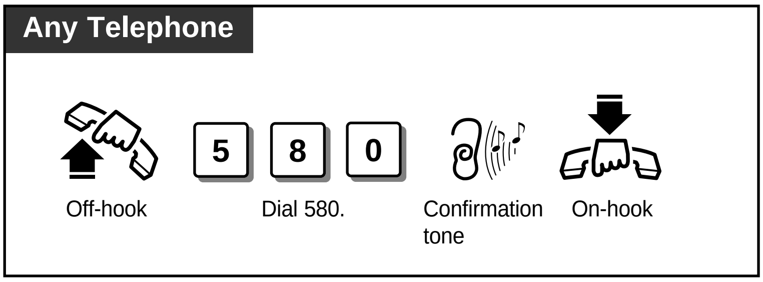
## Restricting Displaying your Number to the Calling Party (Connected Line Identification Restriction – COLR)

Allows you to restrict displaying your number to the calling party when you receive an incoming call. This feature is one of ISDN services.

### To restrict displaying your number to the calling party


Any Telephone
5
8
1
Off-hook
Dial 581.
Confirmation tone
On-hook

### To display your number to the calling party


Any Telephone
5
8
0
Off-hook
Dial 580.
Confirmation tone
On-hook

- ISDN Port Programming (Section 3.7)
  [404] CLIP/COLP Number Assignment
- COS Programming (Section 3.8)
  [513] Connected Line Identification Restriction (COLR)

# 2.6 Others

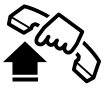
## Doorphone Call

If a visitor presses the Call button on the doorphone, pre-assigned extensions will ring. It is possible for any extension user to call a doorphone.

### Answering a doorphone call

**Any Telephone**

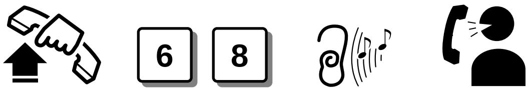
*When you hear the doorphone ring tone;*



Off-hook

### Calling a doorphone

**Any Telephone**



Off-hook

Dial 68.

Confirmation tone

Talk to the visitor.

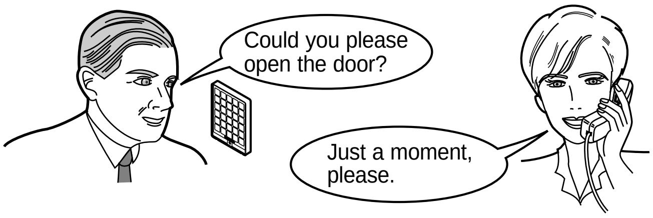
- It is necessary to install the KX-T30865 doorphone.
- It is necessary to program the extensions that can receive calls from the doorphone during day and night modes. Otherwise, the ISDN extensions cannot be programmed to receive doorphone calls. Calling a doorphone or picking up a doorphone call is possible for any extension.
- If no extension user answers an incoming doorphone call within 30 seconds, the call is cancelled.
- You can unlock the door from your extension to let the visitor in (Door Opener).

- Extension Programming (Section 3.9)
  [607]–[608]  Doorphone Ringing Assignment — Day/Night
- Connecting the Doorphone and Door Opener (Section 4.14)

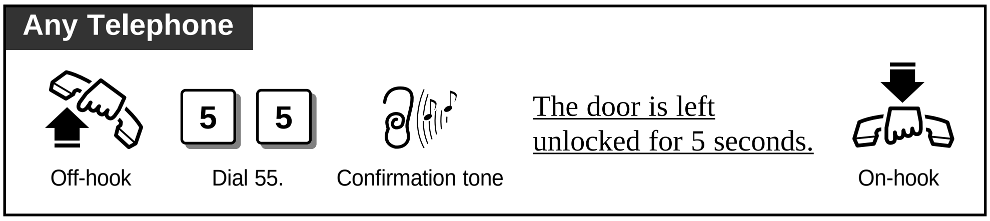
# 2.6 Others

## *Unlocking a Door (Door Opener)*

Allows you to unlock the door
for a visitor from your extension.

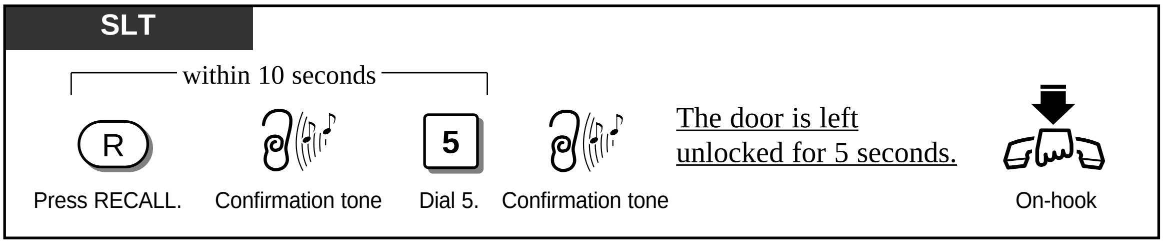

Could you please open the door?
Just a moment, please.

### To unlock the door

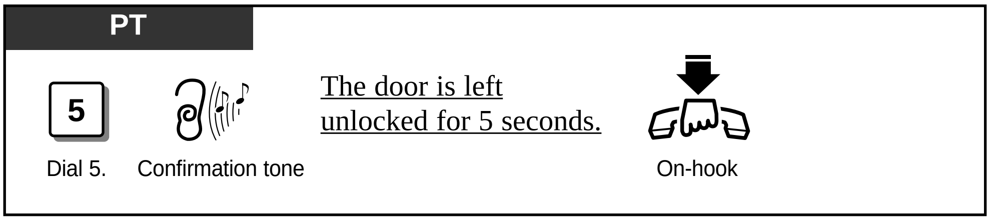

Any Telephone
Off-hook
5 5
Dial 55.
Confirmation tone
On-hook

The door is left unlocked for 5 seconds.

### To unlock the door while talking to the doorphone


SLT
within 10 seconds
R
Press RECALL.
Confirmation tone
5
Dial 5.
Confirmation tone
On-hook

The door is left unlocked for 5 seconds.


PT
5
Dial 5.
Confirmation tone
On-hook

The door is left unlocked for 5 seconds.

- It is necessary to install a user-supplied door opener at each door to be opened.
- When a visitor presses the Call button on the doorphone, the system may automatically open the door, if the doorphone has a built-in door opener. This is required to be set by System Programming.
- Class of service determines the extensions that can perform this feature.
- Unlocking the door while talking to the doorphone is not possible with ISDN telephones. You must hang up and unlock the door by entering the feature number “55.”
- You can change the door open time from 0 to 99 seconds by System Programming.

- System Programming (Section 3.4)
  - [105] Automatic Door Open Assignment
- Timer Programming (Section 3.5)
  - [206] Door Opener Time
- COS Programming (Section 3.8)
  - [508] Door Opener Access
- Connecting the Doorphone and Door Opener (Section 4.14)

## *Switching the Day/Night Calling Mode (Night Service)*

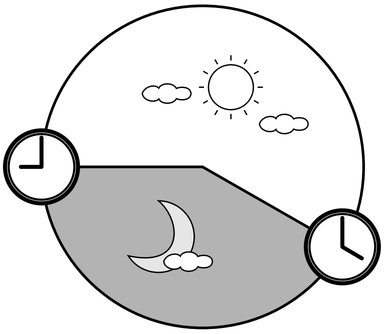
The system operation for originating and receiving calls can be different for day and night modes. Toll Restriction calls can be arranged separately to prevent unauthorised toll calls at night.

Day / Night mode can be switched either automatically at a pre-assigned time or manually at any time desired by pre-assigned extension or the manager.

Class of Service determines the extensions that can perform it.

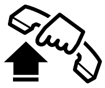
**Automatic Night Service:** Your system will switch on the Day / Night mode at the programmed time each day.

**Manual Night Service:** The manager and pre-assigned extension can switch on the Day / Night mode manually.



### Selecting the Night Service mode

**Any Telephone**



Off-hook

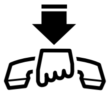
7 8

Dial 78.

- 0 for Automatic mode
- 1 for Manual-Day mode
- 2 for Manual-Night mode

Dial 0, 1 or 2.

Confirmation tone



On-hook

### Confirming the current mode on the display

**PT with display**

*When the telephone is idle;*

# The display shows the current mode for 3 seconds.

Dial #.

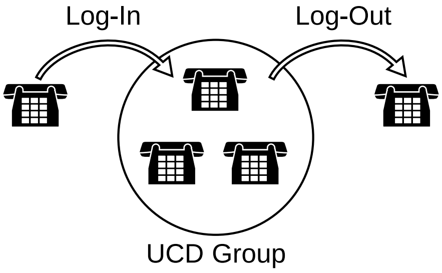
## 2.6 Others

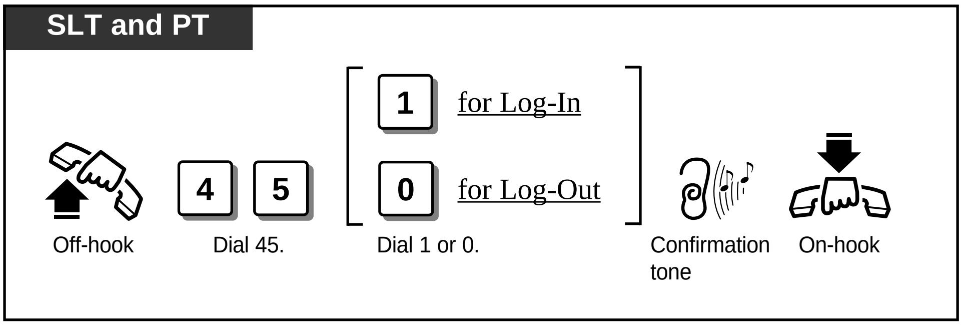
- The following items have separate day and night programming:
  1) Outgoing Permitted ISDN Port Assignment
  2) Direct In Lines (DIL)
  3) Doorphone Ringing Assignment
  4) Intercept Routing
  5) Delayed Ringing
  6) Toll Restriction Level
  7) Toll Restriction for System Speed Dialling
- With the KX-T7235, KX-T7433 and KX-T7436, the manager can execute this feature with the display operation.

- Display Operation (Section 2.7)
  System Feature List
- System Programming (Section 3.4)
  [100] Day/Night Service Starting Time
- COS Programming (Section 3.8)
  [509] Night Service Access

## Joining or Leaving a Call Distribution Group (Log-In / Log-Out)

Allows you to assign your extension to join (log-in) or leave (log-out) a hunting or UCD group. Extensions in log-out status do not receive calls by Station Hunting but can receive other calls, unlike the DND feature. Default is the log-in mode.





**SLT and PT**

Off-hook

Dial 45.

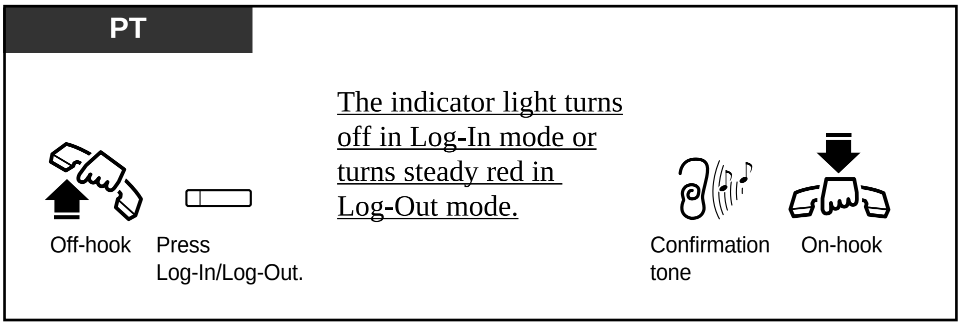
1 for Log-In

0 for Log-Out

Dial 1 or 0.

Confirmation tone

On-hook



**PT**

Off-hook

Press Log-In/Log-Out.

The indicator light turns off in Log-In mode or turns steady red in Log-Out mode.

Confirmation tone

On-hook

- There should be at least one extension that is in log-in status.
- When the extension is in log-out status, dial tone 2 is sent when you lift the handset.
- The proprietary telephone user can assign the Log-In/Log-Out button at a flexible CO button.

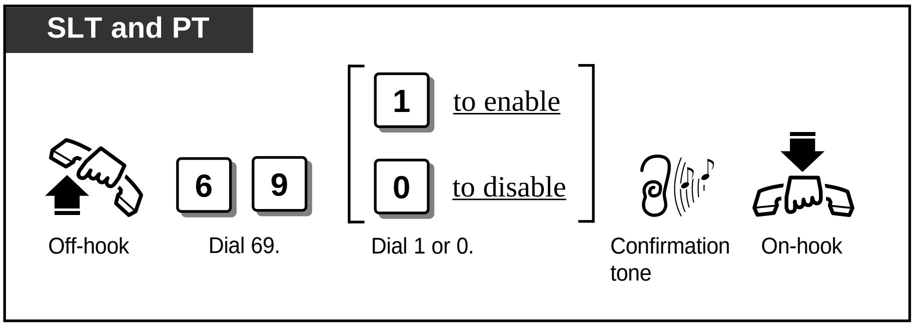
- Initial Setting (Section 2.2)
  Customising the Buttons on Your Telephone

# *2.6 Others*

## *Setting the Parallelled SLT to Ring (Parallelled Telephone Connection)*

A proprietary telephone (PT) can be connected in parallel with a standard single line telephone (SLT). This feature allows you to enable or disable SLT ringing. When a parallel connection is made, either telephone can be used.

### To enable / disable SLT ringing



- Default is “Parallel Off (SLT ringing disabled).”
- The PT can be used to perform normal operations whether or not an SLT is enabled.
- When receiving a call:
  - — If SLT ringing is enabled, then both the PT and the SLT ring except when the PT is in the “Handsfree Answerback” mode or Voice-Calling mode.
  - — If SLT ringing is disabled, then the PT rings but the SLT does not. However the SLT can answer the call.
- When the SLT is in use, the display and the indicators of the PT will show in the same way as if the PT is in use.
- If you go off-hook while your parallelled telephone is in use, the call will switch over to your telephone, and vice versa. (PT only)
- The “XDP*” feature is available. Refer to System Management.
- With the KX-T7235, KX-T7433 and KX-T7436, you can execute this feature with the display operation.

- Display Operation (Section 2.7)
  System Feature List
- System Management (Section 3.1)
  EXtra Device Port (XDP)
- Connecting the Telephones in Parallel (Section 4.10)

* A XDP (eXtra Device Port) expands the number of telephones available in the system by allowing an extension port to contain two telephones.

# *2.6 Others*

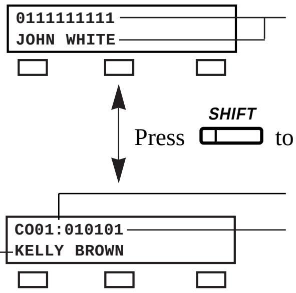
## *Caller Identification Services (for KX-T7230/KX-T7235/KX-T7433/KX-T7436)*

## Displaying the Caller's Information (Caller ID)

Provides you with the caller's telephone number and name if you have subscribed to the calling line identification service. You can record the caller's telephone number (and name if assigned) into the call log by pressing **`LOG` (S2)** button. The sample display is KX-T7230.

### Viewing the display (Receiving)

*While receiving an incoming outside call*



caller's number and name (the other party's CLIP no. and the name if assigned)

Press SHIFT to change the display.

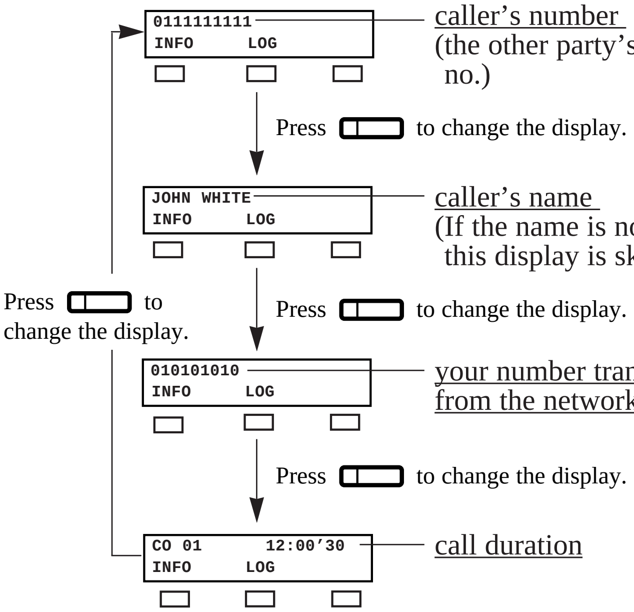
Outside line (CO) no.

your number transmitted from the network

your name at the received extension

---

Off hook or press SP-PHONE/MONITOR.



caller's number (the other party's CLIP no.)

Press to change the display.

caller's name (If the name is not stored, this display is skipped.)

Press to change the display.

Press to change the display.

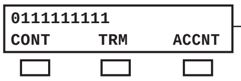
your number transmitted from the network.

Press to change the display.

call duration

**!**

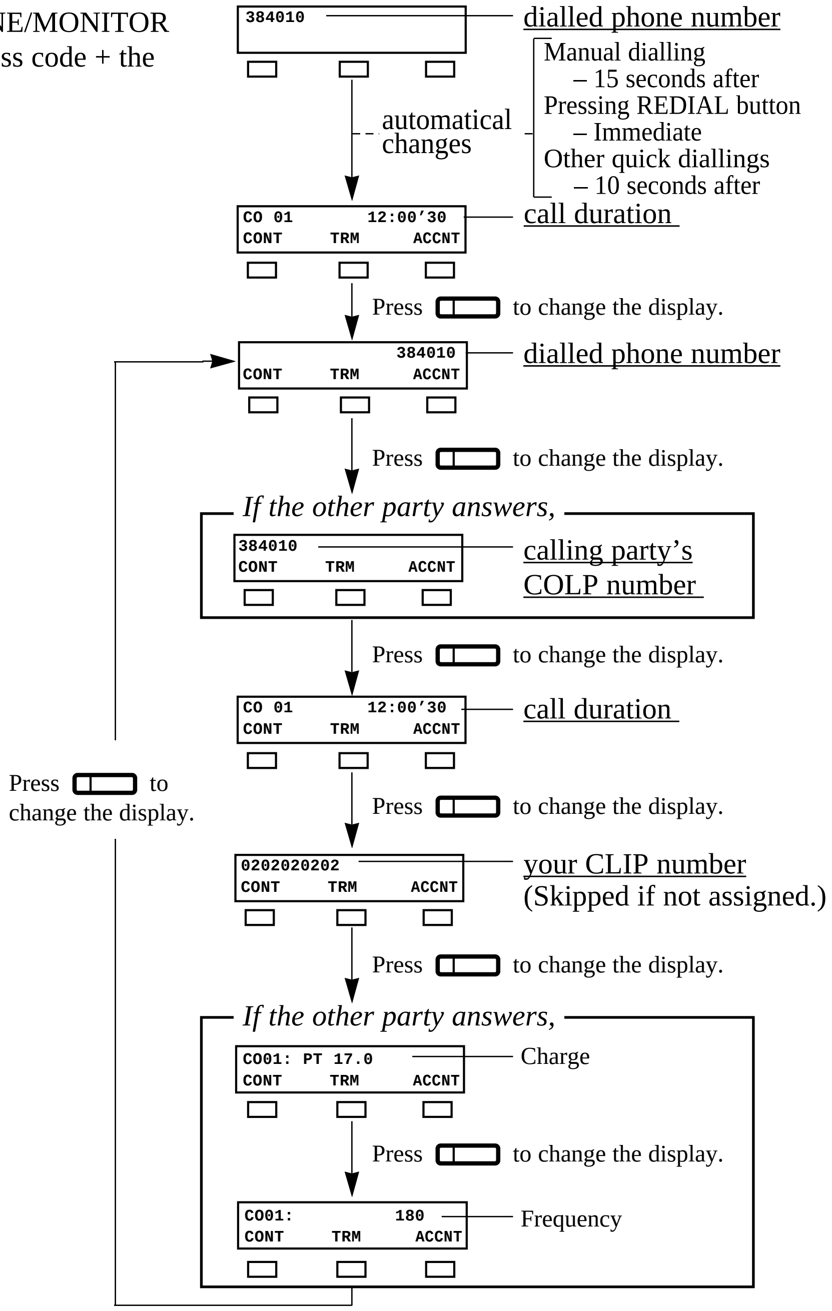
- To indicate the name on the display while receiving the call, the caller's name should be previously stored in the programming for the System Speed Dialling by PC. For further information, refer to "[001] System Speed Dialling Number Set" in 3.3 Manager Programming, and 3.13 PC Programming.
- You can use the **`INFO` (S1)** button to change the display instead of using the CO button.
- Press SHIFT button to change into the normal display after you go off-hook.



normal display indication

## Viewing the display (Dialling)

Off-hook or press SP-PHONE/MONITOR and dial an outside line access code + the phone number.


384010
dialled phone number
automatical changes
Manual dialling
– 15 seconds after
Pressing REDIAL button
– Immediate
Other quick diallings
– 10 seconds after
CO 01 12:00’30
CONT TRM ACCNT
call duration
Press to change the display.
384010
CONT TRM ACCNT
dialled phone number
Press to change the display.
If the other party answers,
384010
CONT TRM ACCNT
calling party’s COLP number
Press to change the display.
CO 01 12:00’30
CONT TRM ACCNT
call duration
Press to change the display.
0202020202
CONT TRM ACCNT
your CLIP number
(Skipped if not assigned.)
Press to change the display.
If the other party answers,
CO01: PT 17.0
CONT TRM ACCNT
Charge
Press to change the display.
CO01: 180
CONT TRM ACCNT
Frequency
Press to change the display.

- You can program whether the charge or the frequency comes first to be shown by the System Programming [107].
- If the other party doesn't answer, displays for the other party's COLP number and Charge Information are skipped.
- Your CLIP number is programmable by System Programming [404].
- Before the calling party answers, the calling party's COLP number and the charge information are not displayed.
- As soon as the charge information is received, the information is shown on the display and the display after this starts from the dialled phone number again. (See the above chart.)
- You can modify and call back the logged numbers. Refer to the "Recording the Caller's Information Automatically (Incoming Call Log)."

- Others (Section 2.6)
  Recording the Caller's Information Automatically
  (Incoming Call Log — KX-T7230/KX-T7235/KX-T7433/KX-T7436)
  Locking the Incoming Call Information Display
  (Incoming Call Log Lock — KX-T7230/KX-T7235/KX-T7433/KX-T7436)
- Manager Programming (Section 3.3)
  [001] System Speed Dialling Number Set
- System Programming (Section 3.4)
  [107] Charge Indication Selection
- ISDN Port Programming (Section 3.7)
  [404] CLIP/COLP Number Assignment
- PC Programming (Section 3.13)

* An ISDN line with the Caller ID feature provides you with a caller's information, such as his/her telephone number, on the outside line (CO) assigned to receive ISDN service calls.

# 2.6 Others

## Recording the Caller’s Information Automatically (Incoming Call Log — KX-T7230/KX-T7235/KX-T7433/KX-T7436)

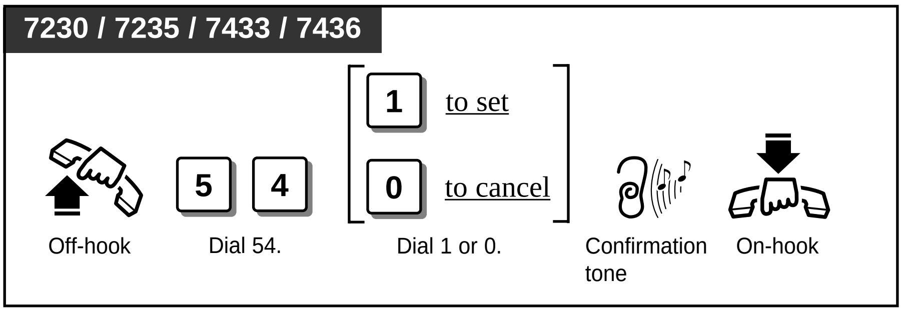
If you do not answer an incoming outside call or even if you answer the call, your extension automatically records the incoming outside call information from the Caller ID service*. The SHIFT button indicator lights and tells you that there are calls logged. Up to 15 calls can be logged per extension. When the call log is full (i.e. more than 15 calls), new call information is not logged. You can overwrite the data using the following feature, replacing the oldest call log with the newest one.
You can also modify and call back the logged numbers.

- The SHIFT indicator light may turn on when receiving a call. Pressing this button provides you with more information about the caller.
- To clear the displayed information, press the CLR (S2) button.
- You can modify the displayed telephone number before dialling. Use “✱” to erase and “0 to 9” to add numbers from the first digit.
- If you modify the displayed telephone number, the new number will be replaced.
- To return to the initial display, go off-hook and on-hook or press the MENU (S1) button.
- You can lock the display so that the recorded incoming outside call information is not shown on the display.

- Others (Section 2.6)
  Locking the Incoming Call Information Display
  (Incoming Call Log Lock — KX-T7230/KX-T7235/KX-T7433/KX-T7436)
- Manager Programming (Section 3.3)
  [001] System Speed Dialling Number Set

* The Caller ID service provides you with the caller’s information, such as his/her name and telephone number, on the outside line (CO) assigned to receive Caller ID service calls. Refer to System Programming.

### Overwriting the call log



## Confirming and calling back

### 7230 / 7433

*When the SHIFT button indicator is red, there are calls logged.*

```
  1 Jan  15:00
 OLD7    NEW5
 [S1]    [S2]    [S3]
```

Press OLD (S1) or NEW (S2).

- OLD: To see the confirmed information.
- NEW: To see the unconfirmed information.

**SHIFT**

Press SHIFT.

You can see the normal display.

You can see the caller's number.

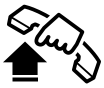
```
01:0111111111
 INFO   CLR    NEXT
 [S1]   [S2]   [S3]
```

Press INFO (S1). Press NEXT (S3).

You can confirm the other caller's information.

Pressing the INFO (S1) button provides you with more caller's information.

- once: The caller's name.
- twice: The date/time and number of times called (15 times max.).
- three times: The outside line (CO) number.



Off-hook.

```
01:0111111111
 CALL
 [S1]   [S2]   [S3]
```

Press CALL (S1).

You can call back the party on the display.

### 7235 / 7436

*When the SHIFT button indicator is red, there are calls logged.*

```
    1 Jan  15:00

Extension     STA Speed
Features      SYS Speed
Call Log
  OLD7     NEW5
  [S1]     [S2]     [S3]
```

Press OLD (S1) or NEW (S2).

- OLD: To see the confirmed information.
- NEW: To see the unconfirmed information.

**SHIFT**

Press SHIFT.

You can see the normal display.

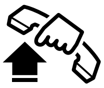
You can see the caller's information.

```
   CO02:
   0102030405
   BOB HANKS
   30 09:00
   SEQ01 2 Calls
MENU   CLR    NEXT
 [S1]   [S2]   [S3]
```

- outside line (CO) number
- caller's phone number
- caller's name
- date and time
- sequence number (01-15)/ number of times called (15 times max.)

Press NEXT (S3).

You can confirm the other caller's information



Off-hook.

```
 CALL
 [S1]   [S2]   [S3]
```

Press CALL (S1).

You can call back the party on the display.

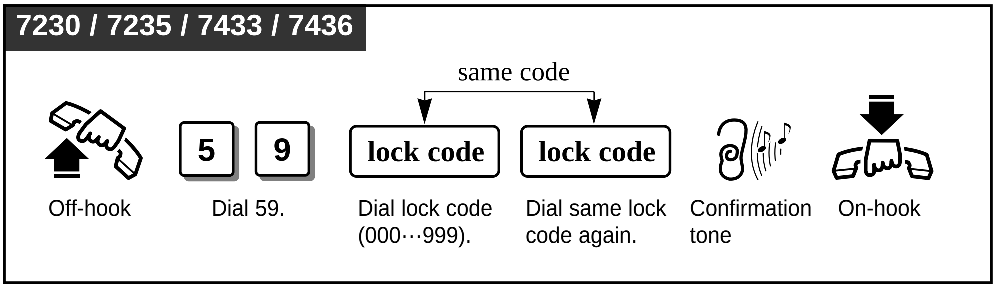
**!**

- If the first display indication is not the same as above, you must press the SHIFT button for changing the display.

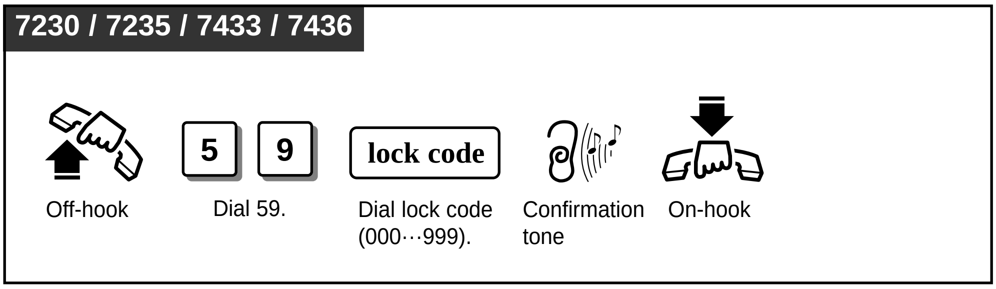
## Locking the Incoming Call Information Display (Incoming Call Log Lock — KX-T7230/KX-T7235/KX-T7433/KX-T7436)

Allows you to lock the display of your extension so that incoming outside call information is not shown on the display.

### Locking


7230 / 7235 / 7433 / 7436
same code
5
9
lock code
lock code
Off-hook
Dial 59.
Dial lock code (000···999).
Dial same lock code again.
Confirmation tone
On-hook

### Unlocking


7230 / 7235 / 7433 / 7436
5
9
lock code
Off-hook
Dial 59.
Dial lock code (000···999).
Confirmation tone
On-hook

**!**

- The manager can unlock the call log display at any extension, if you forget your lock code.
- Once you have locked the extension with the lock code, you cannot release the lock with a different lock code.
- When you use a wrong lock code, you will hear a reorder tone.

☞

- Others (Section 2.6)
  Recording the Caller’s Information Automatically
  (Incoming Call Log — KX-T7230/KX-T7235/KX-T7433/KX-T7436)
- Manager Operations (Section 2.8)
  Unlocking “Incoming Call Log Lock” (Incoming Call Log Lock Control)

# 2.6 Others

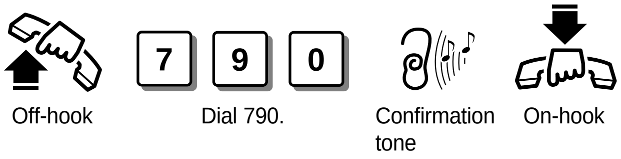
## *Cancelling the Feature Setting (Station Feature Clear)*

Allows you to reset the following station features to the default settings.

a) Absent Message Capability
b) Automatic Callback Busy (Camp-On)
c) Background Music (BGM)
d) Call Forwarding
e) Incoming Call Log – (Overwriting the data will be cancelled)
f) Call Pickup Deny
g) Call Waiting
h) Calling Line Identification Restriction (CLIR)
i) Connected Line Identification Restriction (COLR)
j) Do Not Disturb (DND)
k) Executive Busy Override Deny
l) Log-In mode
m) Message Waiting – (All messages will be removed)
n) Paging – Deny
o) Paralleled Telephone Connection
p) Pickup Dialling – (The stored telephone number will be removed)
q) Timed Reminder

### Clearing the current feature setting

**Any Telephone**

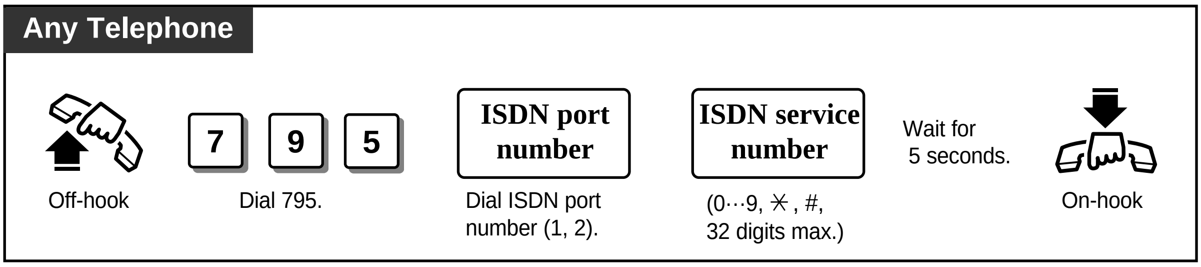


# 2.6 Others

## ISDN Network Service Access

Allows you to access a service which is provided from ISDN.

**Any Telephone**


7
9
5
ISDN port number
ISDN service number

Off-hook

Dial 795.

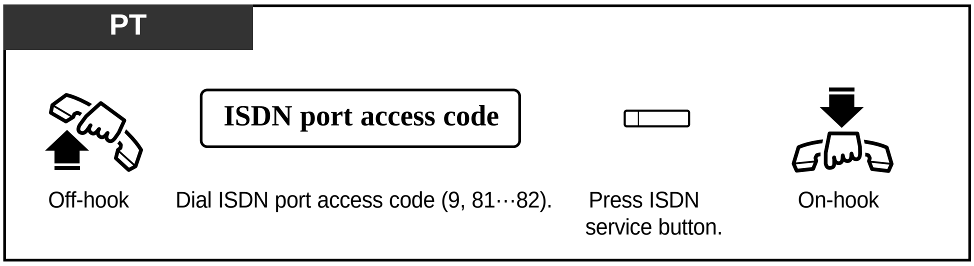
Dial ISDN port number (1, 2).

(0···9, ✳, #, 32 digits max.)

Wait for 5 seconds.

On-hook

**PT**


ISDN port access code

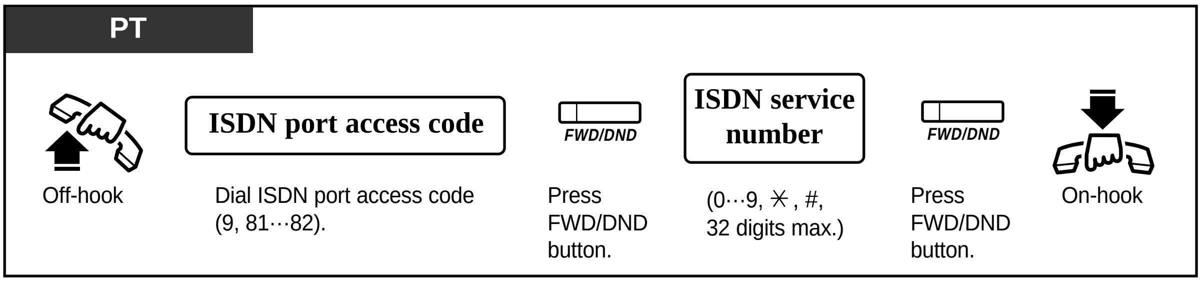
Off-hook

Dial ISDN port access code (9, 81···82).

Press ISDN service button.

On-hook

**PT**


ISDN port access code
FWD/DND
ISDN service number
FWD/DND

Off-hook

Dial ISDN port access code (9, 81···82).

Press FWD/DND button.

(0···9, ✳, #, 32 digits max.)

Press FWD/DND button.

On-hook

!

- To use the ISDN service button on a proprietary telephone, you must assign a flexible button as the ISDN service button first.
- You can press the CO button instead of entering an ISDN port access code.
- You can receive a confirmation message from ISDN if the network offers such services.
- You can use the ISDN service button after pressing a outside line (CO) access code or a CO button. You will hear a reorder tone if a wrong operation is done.
- The availability of this feature depends on your local ISDN services.

☞

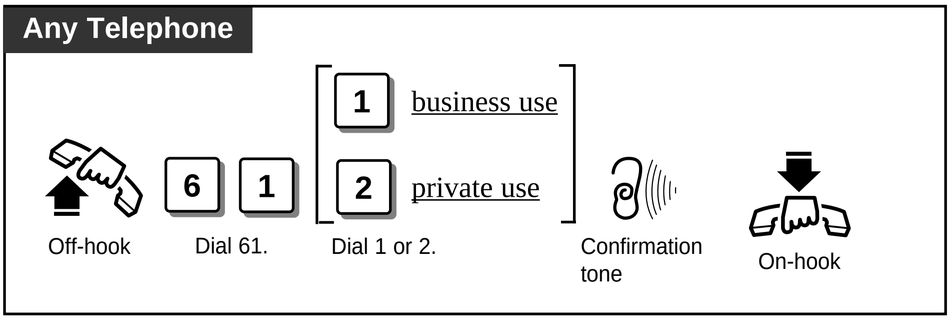
- Initial Settings (Section 2.2)
  Customising the Buttons on Your Telephone

# 2.6 Others

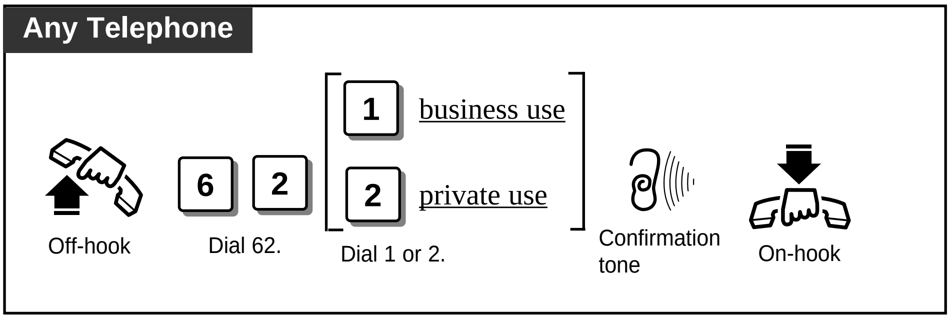
## Selecting the CLIP / COLP numbers

You can select the CLIP / COLP numbers to be displayed to the other party depending on business or private use.

### Setting the CLIP numbers


Any Telephone
Off-hook
6
1
Dial 61.
1
business use
2
private use
Dial 1 or 2.
Confirmation tone
On-hook

### Setting the COLP numbers


Any Telephone
Off-hook
6
2
Dial 62.
1
business use
2
private use
Dial 1 or 2.
Confirmation tone
On-hook

- Your CLIP number will be displayed if the number is assigned by the System Programming [404].
- Caller Identification (Caller ID) services can be denied depending on your COS level.
- If you select the same setting previously selected, a confirmation tone 2 and dial tone will be sent.

- ISDN Port Programmingg (Section 3.7)
  [404] CLIP/COLP Number Assignment
- COS Programming (Section 3.8)
  [512] Calling Line Identification Restriction (CLIR)
  [513] Connected Line Identification Restriction (COLR)
- Extension Programming (Section 3.9)
  [601] Class of Service

# *2.7 Display Operation (KX-T7235/KX-T7433/KX-T7436)*

Panasonic digital proprietary telephones with a display, KX-T7235, KX-T7433 and KX-T7436, allow you to make a call or operate the features using the display message. The display prompts you with information related to the desired feature.

## Features in the Idle Status

While idle, you can change the display by pressing the MODE or SHIFT button. Each model has a different operation (☞ See the next page). Available features are listed below.

— `Extension` (Extension Dialling)
`STA Speed`, `Station Speed` (Station Speed Dialling)
`SYS Speed`, `System Speed` (System Speed Dialling)
`Features` (System Feature Access) (☞ See page 2-83.)
— `Call Log` (Outgoing Call Log — Dialling the last five outgoing calls) (KX-T7235/KX-T7436 only)

## Station Speed Dialling Number/Name Assignment

## FWD/DND* Features (KX-T7235/KX-T7436 only)

By pressing the FWD/DND button after going off-hook, a new display appears. From this display, the following additional System Features can be operated.

— `FWD/DND Cancel` (Cancelling “FWD/DND”)
`Do Not Disturb` (Rejecting incoming calls)
`FWD-All Calls, FWD-Busy, FWD-No Answer` (Forwarding a call)
— `FWD-BSY/NA, FWD-CO Line` (Forwarding a call)
`FWD-From, FWD-From Cancel` (Forwarding all calls remotely)

* FWD/DND — FWD stands for Forwarding and means forwarding a call.
DND stands for Do Not Disturb and means rejecting a call.

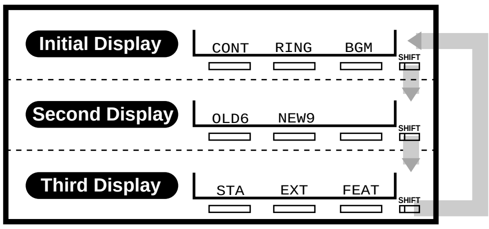
## Incoming Call Log (☞ See page 2-71.)

# 2.7 Display Operation (KX-T7235/KX-T7433/KX-T7436)

## Display View of the Features in the Idle Status

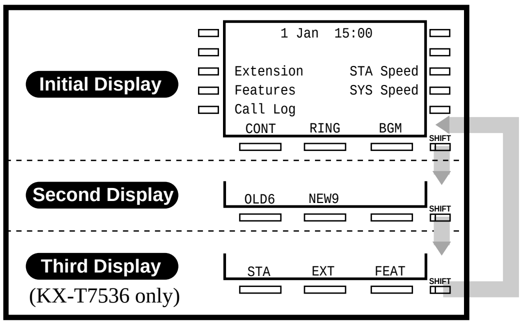
***– KX-T7433***

While idle, the bottom line of the display changes by pressing the SHIFT button as follows. The Jog Dial operation is available in the third display.


Initial Display
CONT
RING
BGM
SHIFT
Second Display
OLD6
NEW9
SHIFT
Third Display
STA
EXT
FEAT
SHIFT

***– KX-T7235 and KX-T7436***

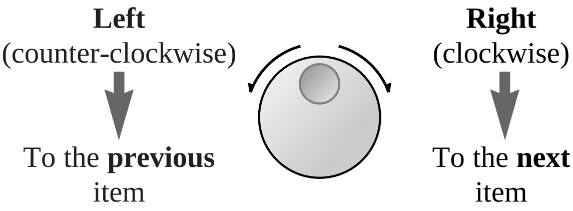
To use the Soft buttons, use the bottom line in the third display which appears by pressing the SHIFT button as follows. The Jog Dial operation of the KX-T7436 is available after pressing a Function button on third and fourth line.


Initial Display
1 Jan 15:00
Extension
STA Speed
Features
SYS Speed
Call Log
CONT
RING
BGM
SHIFT
Second Display
OLD6
NEW9
SHIFT
Third Display
(KX-T7536 only)
STA
EXT
FEAT
SHIFT

- The second display of the KX-T7235, KX-T7433 and KX-T7436 (KX-T7230 is also available.) is used to call back the caller by checking the call log data (Incoming Call Log). For operation, refer to page 2-72.

### *Jog Dial Operation for KX-T7400 series*

You can search for desired items by using the Jog Dial on the corresponding display menu. Rotate the Jog Dial in either direction as desired. The items will be displayed as follows.


**Left**
(counter-clockwise)
To the **previous** item
**Right**
(clockwise)
To the **next** item

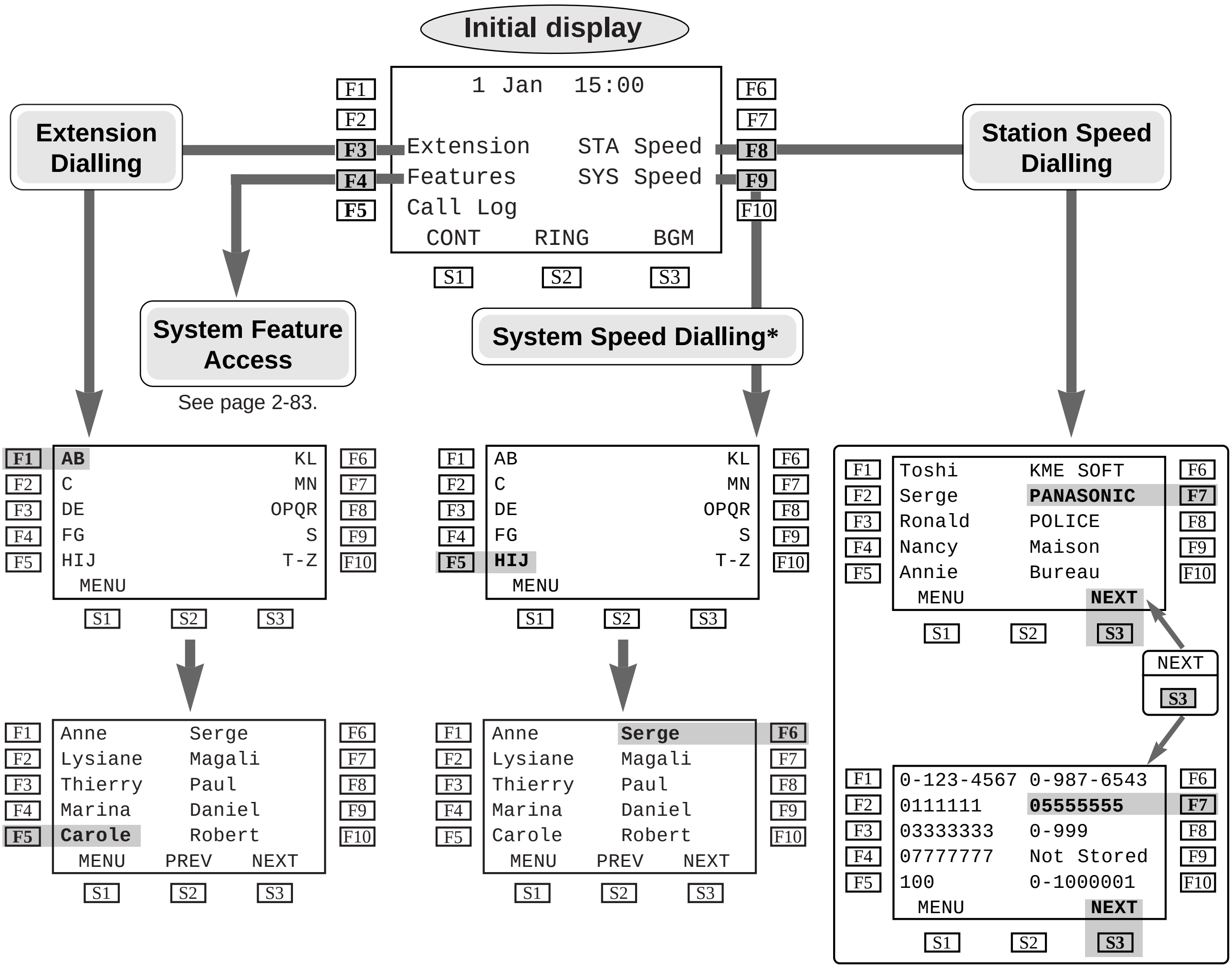
## Display Operation for the Features in the Idle Status

**Extension Dialling** | **Station Speed Dialling** | **System Feature Access** | **System Speed Dialling**

### — KX-T7235

### Using the Function button

You should press the desired button which is corresponding to the display message. The display changes step by step. The example operations are shown below.


Initial display
F1 F2 F3 F4 F5
1 Jan 15:00
Extension STA Speed
Features SYS Speed
Call Log
CONT RING BGM
F6 F7 F8 F9 F10
S1 S2 S3
Extension Dialling
Station Speed Dialling
System Feature Access
System Speed Dialling*
AB KL
C MN
DE OPQR
FG S
HIJ T-Z
MENU
Anne Serge
Lysiane Magali
Thierry Paul
Marina Daniel
Carole Robert
MENU PREV NEXT
Toshi KME SOFT
Serge PANASONIC
Ronald POLICE
Nancy Maison
Annie Bureau
MENU NEXT
NEXT
S3
0-123-4567 0-987-6543
0111111 05555555
03333333 0-999
07777777 Not Stored
100 0-1000001
MENU NEXT

See page 2-83.

- *"`SYS Speed`" is available only when the System Speed Dial name is assigned by your personal computer (PC).
- Storing extension numbers and names is available only by PC programming.

# 2.7 Display Operation (KX-T7235/KX-T7433/KX-T7436)

## — KX-T7433

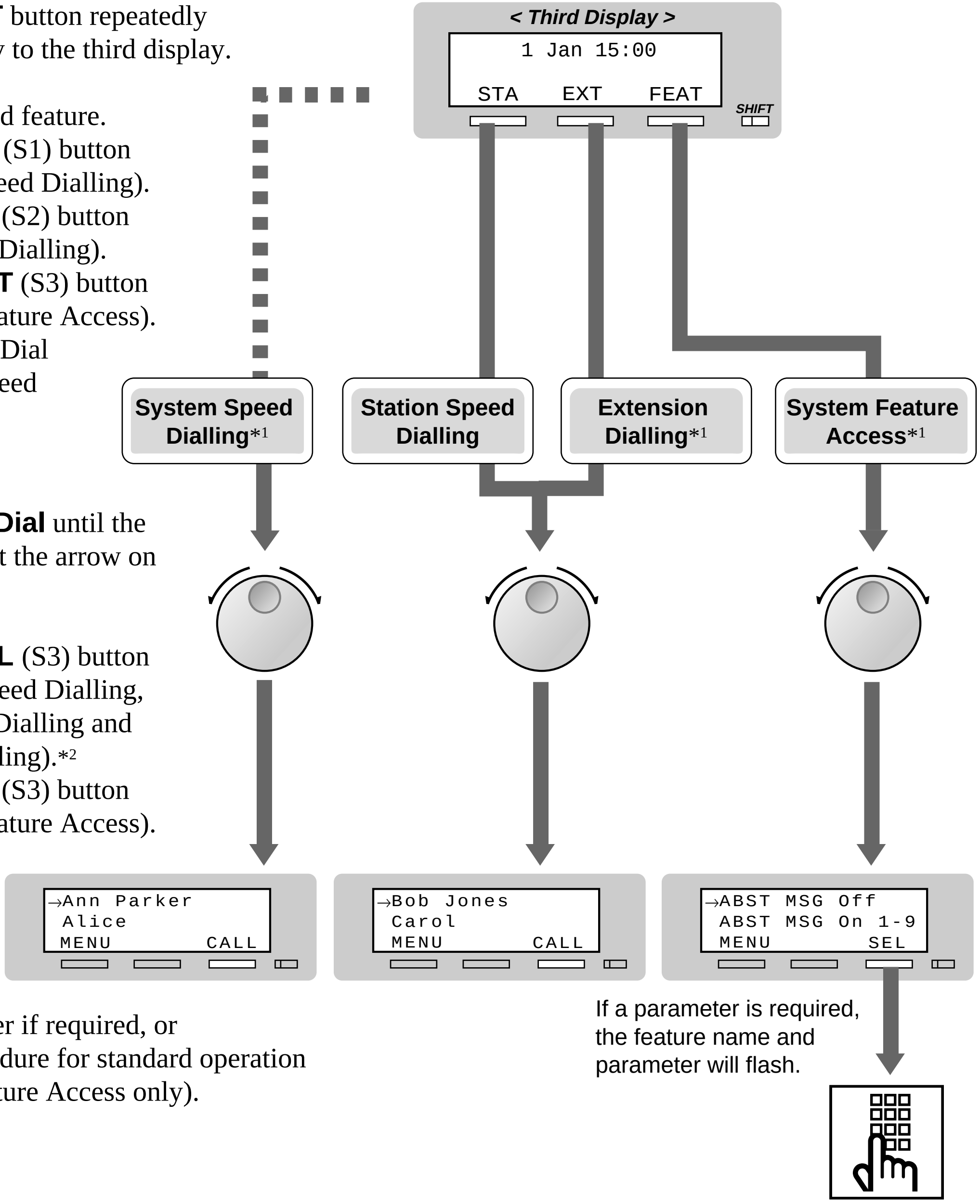
**1** Press the **SHIFT** button repeatedly to set the display to the third display.

**2** Select the desired feature.
- Press the **STA** (S1) button (for Station Speed Dialling).
- Press the **EXT** (S2) button (for Extension Dialling).
- Press the **FEAT** (S3) button (for System Feature Access).
- Rotate the Jog Dial (for System Speed Dialling).

**3** Rotate the **Jog Dial** until the desired item is at the arrow on the display.

**4**
- Press the **CALL** (S3) button (for System Speed Dialling, Station Speed Dialling and Extension Dialling).*2
- Press the **SEL** (S3) button (for System Feature Access).

**5** Enter a parameter if required, or follow the procedure for standard operation (for System Feature Access only).


< Third Display >
1 Jan 15:00
STA
EXT
FEAT
SHIFT
System Speed Dialling*1
Station Speed Dialling
Extension Dialling*1
System Feature Access*1
→Ann Parker
Alice
MENU
CALL
→Bob Jones
Carol
MENU
CALL
→ABST MSG Off
ABST MSG On 1-9
MENU
SEL

If a parameter is required, the feature name and parameter will flash.

---

*1 *For System Speed Dialling, Extension Dialling and System Feature Access, before rotating the Jog Dial, you can press the corresponding key search for the desired letter.*
*<Example> Press 2 two times to display "B" items.*

*2 *You can lift the handset or press the SP-PHONE button instead of the CALL (S3) button.*

## — KX-T7436

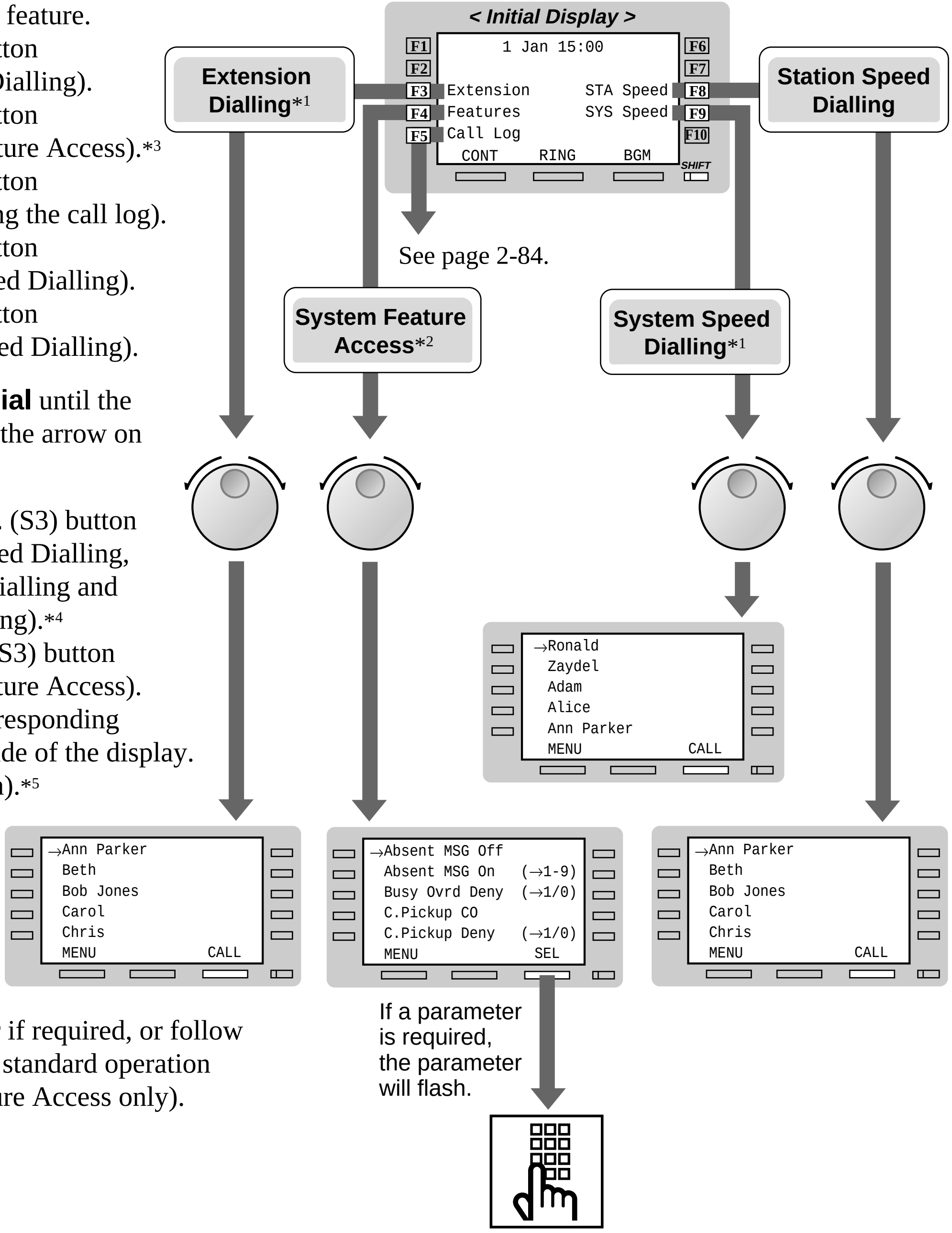
### Using the Function button

**1** Select the desired feature.
- Press the **F3** button (for Extension Dialling).
- Press the **F4** button (for System Feature Access).*3
- Press the **F5** button (for dialling using the call log).
- Press the **F8** button (for Station Speed Dialling).
- Press the **F9** button (for System Speed Dialling).

**2** Rotate the **Jog Dial** until the desired item is at the arrow on the display.

**3**
- Press the **CALL** (S3) button (for System Speed Dialling, Station Speed Dialling and Extension Dialling).*4
- Press the **SEL** (S3) button (for System Feature Access). Or press the corresponding buttons on the side of the display. (Function button).*5

**4** Enter a parameter if required, or follow the procedure for standard operation (for System Feature Access only).


< Initial Display >
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
1 Jan 15:00
Extension
STA Speed
Features
SYS Speed
Call Log
CONT
RING
BGM
SHIFT
Extension Dialling*1
Station Speed Dialling
System Feature Access*2
System Speed Dialling*1
→Ronald
Zaydel
Adam
Alice
Ann Parker
MENU
CALL
→Ann Parker
Beth
Bob Jones
Carol
Chris
MENU
CALL
→Absent MSG Off
Absent MSG On (→1-9)
Busy Ovrd Deny (→1/0)
C.Pickup CO
C.Pickup Deny (→1/0)
MENU
SEL
→Ann Parker
Beth
Bob Jones
Carol
Chris
MENU
CALL

See page 2-84.

If a parameter is required, the parameter will flash.

---

*1 For System Speed Dialling, Extension Dialling and System Feature Access, before rotating the Jog Dial, you can press the corresponding key search for the desired letter.
<Example> Press 2 two times to display "B" items.

*2 For System Feature List, see page 2-83.

*3 You can press the Function (F4) button in any display (initial through third).

*4 You can lift the handset or press the SP-PHONE button instead of the CALL (S3) button.

*5 You can press the Function button (F1 through F5) on the same line of the desired item instead of the SEL (S3) button.

### Using the Soft button or rotating the Jog Dial directly

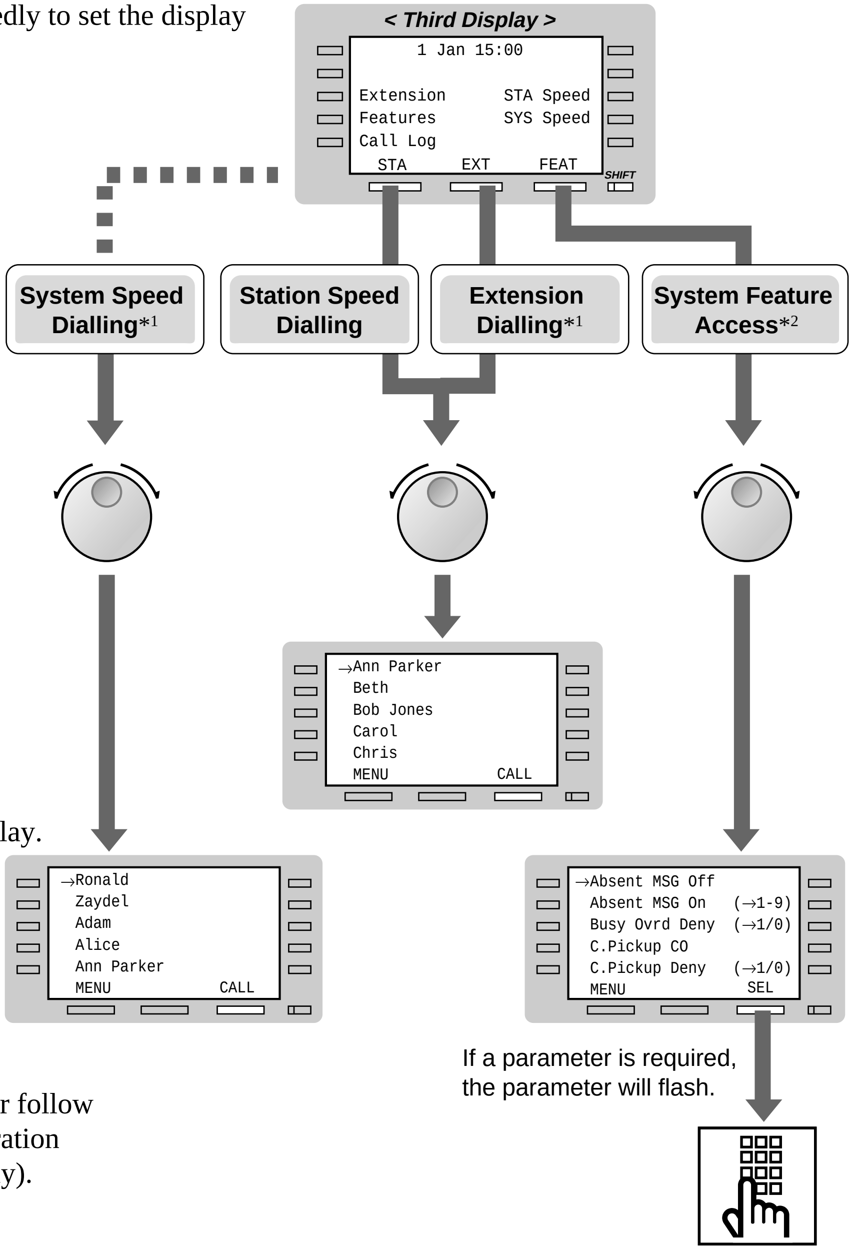
**1** Press the **SHIFT** button repeatedly to set the display to the third display.

**2** Select the desired feature.
- Press the **STA** (S1) button (for Station Speed Dialling).
- Press the **EXT** (S2) button (for Extension Dialling).
- Press the **FEAT** (S3) button (for System Feature Access).
- Rotate the **Jog Dial** (for System Speed Dialling).

**3** Rotate the **Jog Dial** until the desired item is at the arrow on the display.

**4**
- Press the **CALL** (S3) button (for System Speed Dialling, Station Speed Dialling and Extension Dialling).[*3]
- Press the **SEL** (S3) button (for System Feature Access). Or press the corresponding buttons on the side of the display. (Function button).[*4]

**5** Enter a parameter if required, or follow the procedure for standard operation (for System Feature Access only).



< Third Display >
1 Jan 15:00
Extension
Features
Call Log
STA Speed
SYS Speed
STA
EXT
FEAT
SHIFT
System Speed Dialling*1
Station Speed Dialling
Extension Dialling*1
System Feature Access*2
→Ann Parker
Beth
Bob Jones
Carol
Chris
MENU
CALL
→Ronald
Zaydel
Adam
Alice
Ann Parker
MENU
CALL
→Absent MSG Off
Absent MSG On (→1-9)
Busy Ovrd Deny (→1/0)
C.Pickup CO
C.Pickup Deny (→1/0)
MENU
SEL

If a parameter is required, the parameter will flash.

---

[*1] For System Speed Dialling, Extension Dialling and System Feature Access, before rotating the Jog Dial, you can press the corresponding key search for the desired letter.
<Example> Press 2 two times to display "B" items.

[*2] For System Feature List, see page 2-83.

[*3] You can lift the handset or press the SP-PHONE button instead of the CALL (S3) button.

[*4] You can press the Function button (F1 through F5) on the same line of the desired item instead of the SEL (S3) button.

# 2.7 Display Operation (KX-T7235/KX-T7433/KX-T7436)

## *System Feature List*

You can access the following features which are displayed in alphabetical order.
The parameters used in the list are for a telephone connected to a KX-TD208.

| DISPLAY (KX-T7235/KX-T7436) | DISPLAY (KX-T7433) | FEATURE DESCRIPTION |
|---|---|---|
| `Absent MSG Off` | `ABST MSG Off` | Cancel the absent message. |
| `Absent MSG On (→1-9)` | `ABST MSG On 1-9` | Set an absent message. |
| `Busy Ovrd Deny (→1/0)` | `BSY Ovr DNY 1/0` | Prevent others from interrupting your conversation on the line. |
| `C.Pickup CO` | `C.Pickup CO` | Pick up a call from an exchange line. |
| `C.Pickup Deny (→1/0)` | `C.PickupDNY 1/0` | Stopping your calls from being picked up. |
| `C.Pickup Direct (→ext)` | `C.PickupDRT ext` | Pick up a call from a specific extension. |
| `C.Pickup Group` | `C.Pickup GRP` | Pick up a call ringing at another telephone within your group. |
| `C.Waiting (→1/0)` | `C.Waiting 1/0` | Informs you that there is a call waiting using a tone. |
| `Call Park (→0-9)` | `Call Park 0-9` | Place a call on hold in a system parking area. |
| `Callback Busy Cancel` | `Callback Cancel` | Cancel the Automatic Callback Busy. |
| `Door Open` | `Door Open` | Open the door. |
| `Doorphone Call` | `Doorphone` | Call the doorphone. |
| `Log Lock Call (→abcabc)` | `Log Lock abcabc` | Prevent others from accessing your call log. |
| `Log Ovrt On/Off (→1/0)` | `Log Ovrt 1/0` | Overwrite or delete your call log. |
| `Login/Logout (→1/0)` | `Login/out 1/0` | Join or leave the hunt group. |
| `Message Off (→ext)` | `MSG Off ext` | Cancel a notification. |
| `Message On (→ext)` | `MSG On ext` | Leave a notification so that the called party may call you back. |
| `Night Auto/On/Off(→0-2)` | `Night Mode 0-2` | Change the day / night mode.* |
| `Page Deny On/Off (→1/0)` | `Page Deny 1/0` | Stopping reception of paging announcements. |
| `Page-GRP Answer` | `Page-GRP ANS` | Answer the page through a telephone in the same extension group. |
| `Paging Group (→0-8)` | `Page GRP 0-8` | Page to all or a particular extension group. |
| `Parallel On/Off (→1/0)` | `Parallel 1/0` | Set whether a single line telephone connected in parallel will ring not when receiving a call. |
| `Pickup Dialing (→1/0)` | `Pickup Dial 1/0` | Make a call without dialling. |
| `Pickup DL Prg (→..#)` | `Pickup DL PG ..#` | Assign the number for the Pickup Dialling. |
| `Station Lock (→abcabc)` | `St.Lock abcabc` | Prevent others from calling from your extension. |
| `Station Program Clear` | `STA Prog Clear` | Cancel the station programmed data. |
| `Timed Reminder` | `Timed Reminder` | Set an alarm call. |

For more details about the features and the required parameters, refer to the respective features in this manual.

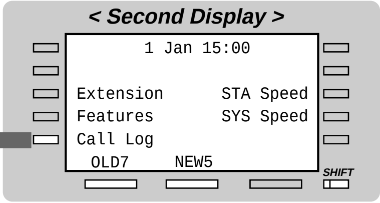
Only the Operator can carry out the feature marked with “*”.

**Outgiung Call Log**

## — KX-T7235 and KX-T7436

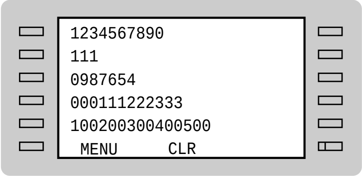
## Dialling the last five outgoing calls (Outgoing Call Log)

**1** Press the **SHIFT** button to set the display to the second display.


< Second Display >
1 Jan 15:00
Extension
STA Speed
Features
SYS Speed
Call Log
OLD7
NEW5
SHIFT

**Outgoing Call Log**
To make a call using the call log (last five outside calls you dialed).

**2** Press the corresponding button on the side of the display (for the outgoing call log).


1234567890
111
0987654
000111222333
100200300400500
MENU
CLR

## Station Speed Dialling Number/Name Assignment

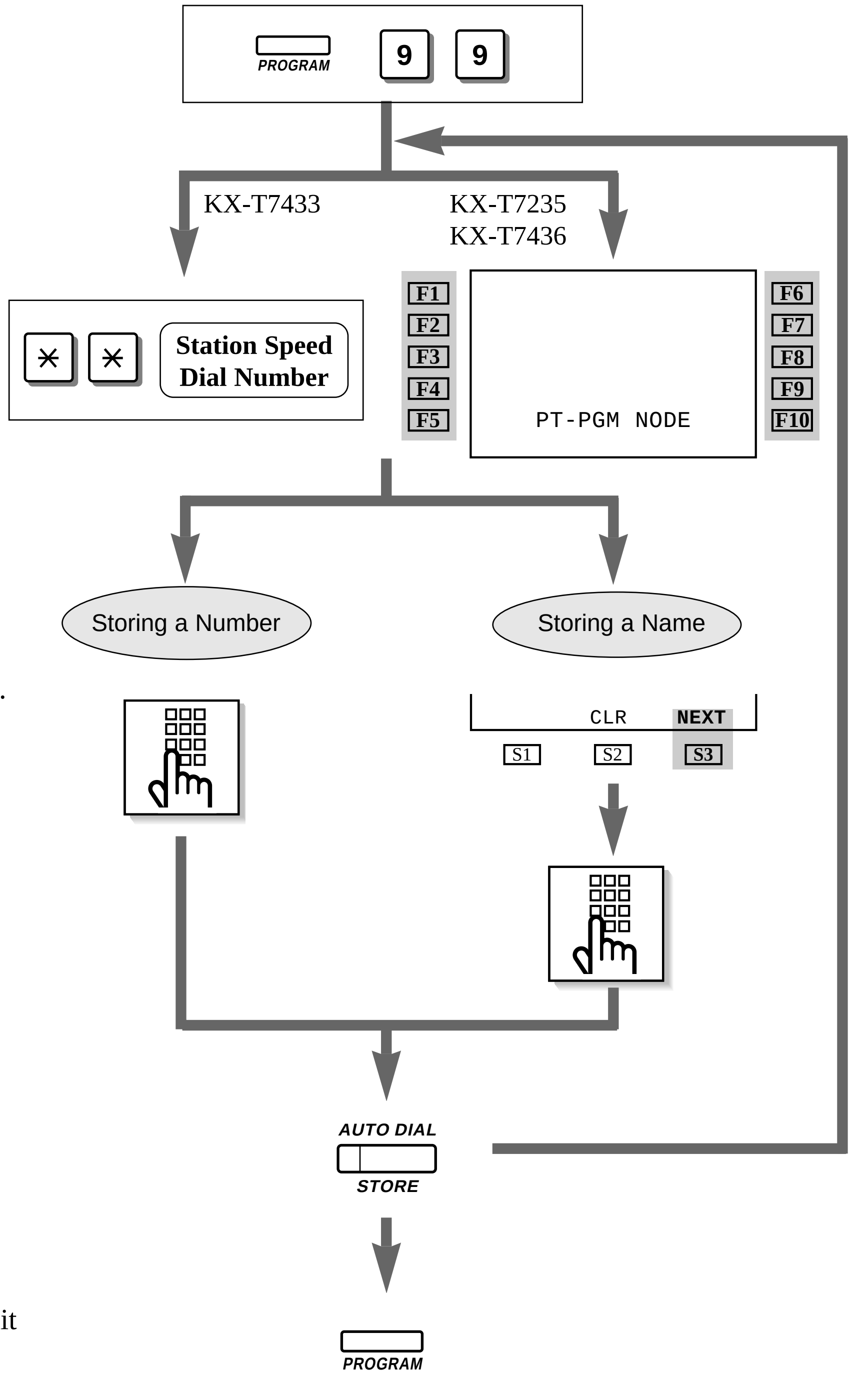
**1** Press the **PROGRAM** button and dial **99** to enter into the programming mode.

**2** For KX-T7433:
  Dial ✳ ✳ and the desired station speed dial number.
For KX-T7235 and KX-T7436:
  Press the desired Function button.

**3** Storing a number
  Dial the desired number. (16 digits max.).
Storing a name
  Press the **NEXT** (S3) button and enter the name* (10 digits max.).

**4** Press the **STORE** button.

**5** Press the **PROGRAM** button to exit the programming mode.


PROGRAM
9
9
KX-T7433
KX-T7235
KX-T7436
✳
✳
Station Speed Dial Number
F1
F2
F3
F4
F5
PT-PGM NODE
F6
F7
F8
F9
F10
Storing a Number
Storing a Name
CLR
NEXT
S1
S2
S3
AUTO DIAL
STORE
PROGRAM

---

*: See the Combination Table on page 2-87.

- To store numbers, you can use 0 through 9, ＊, #, PAUSE, RECALL, CONFERENCE and the INTERCOM button as follows:

  RECALL: registers the recall signal

  PAUSE or ＊＊: pause

  CONFERENCE : - (hyphen) after the outside line (CO) access code

  INTERCOM : [ or ] (secret code) – Press the INTERCOM button before and after the part you wish to conceal when it is shown on the display when dialling.

## Combination Table

Each character can be entered by using the dial key pad and some buttons, or the Jog Dial for storing names.

**Combination Table 1** shows the combination of keys and the number of times to press the SELECT (AUTO ANSWER/MUTE) button, or the combination of keys and the SHIFT and Soft buttons to enter characters. (The AUTO ANSWER/MUTE button becomes the SELECT button when using the overlay.)

To enter a character, find the key and number of times to press the SELECT button or the corresponding SHIFT and Soft button combination on the table. Press the corresponding key first, then press the SELECT button the required number of times. Or you can use the SHIFT button and the Soft button (S1 through S3) instead of the SELECT button.

**Combination Table 2** shows the combination of keys and the number of pulses to move the Jog Dial (click tones) to the right.

To enter a character, find the key and number pulses to rotate the Jog Dial. Press the corresponding key first, then rotate the Jog Dial the required number of times. Or, if you keep rotating the Jog Dial after pressing any dialling key, all of the characters in the table will be displayed.

Combination Table 1

| SHIFT & Soft Combination | | S1 | SHIFT+ S1 | S2 | SHIFT+ S2 | S3 | SHIFT+ S3 | SHIFT+ SHIFT+ S1 | SHIFT+ SHIFT+ S2 |
|---|---|---|---|---|---|---|---|---|---|
| Pressing SELECT (Times) / Keys | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | 1 | Q | q | Z | z | ! | ? | | |
| 2 | 2 | A | a | B | b | C | c | | |
| 3 | 3 | D | d | E | e | F | f | | |
| 4 | 4 | G | g | H | h | I | i | | |
| 5 | 5 | J | j | K | k | L | l | | |
| 6 | 6 | M | m | N | n | O | o | | |
| 7 | 7 | P | p | Q | q | R | r | S | s |
| 8 | 8 | T | t | U | u | V | v | | |
| 9 | 9 | W | w | X | x | Y | y | Z | z |
| 0 | 0 | | . | , | ’ | : | ; | | |
| ⚹ | ⚹ | / | + | - | = | < | > | | |
| # | # | $ | % | & | @ | ( | ) | | |

Combination Table 2

| Rotating Jog Dial (Pulses) / Keys | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | Q | q | R | r | S | s | T | t |
| 2 | 2 | A | a | B | b | C | c | D | d |
| 3 | 3 | D | d | E | e | F | f | G | g |
| 4 | 4 | G | g | H | h | I | i | J | j |
| 5 | 5 | J | j | K | k | L | l | M | m |
| 6 | 6 | M | m | N | n | O | o | P | p |
| 7 | 7 | P | p | Q | q | R | r | S | s |
| 8 | 8 | T | t | U | u | V | v | W | w |
| 9 | 9 | W | w | X | x | Y | y | Z | z |
| 0 | 0 | | ! | ? | . | , | ’ | : | ; |
| ⚹ | * | / | + | - | = | < | > | # | $ |
| # | # | $ | % | & | @ | ( | ) | A | a |

<Example>

— To enter “Mike” by using the SELECT button;
See Combination Table 1.

1. Press 6 and then press the SELECT button once to enter “M.”
2. Press 4 and then press the SELECT button six times to enter “i.”
3. Press 5 and then press the SELECT button four times to enter “k.”
4. Press 3 and then press the SELECT button four times to enter “e.”

— To enter “Mike” by using the SHIFT button and the Soft button;
See Combination Table 1.

1. Press 6 and then press the S1 button to enter “M.”
2. Press 4 and then press the SHIFT and S3 button to enter “i.”
3. Press 5 and then press the SHIFT and S2 button to enter “k.”
4. Press 3 and then press the SHIFT and S2 button to enter “e.”

— Using the Jog Dial (*With a KX-T7433/KX-T7436*)
See Combination Table 2.

1. Press 6 and then rotate the Jog Dial *one* pulse to enter “M”.
2. Press 4 and then rotate the Jog Dial *six* pulses to enter “i”.
3. Press 5 and then rotate the Jog Dial *four* pulses to enter “k”.
4. Press 3 and then rotate the Jog Dial *four* pulses to enter “e”.

OR

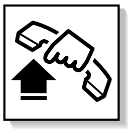
1. Press 2 and then rotate the Jog Dial until “M” appears.
2. Press 2 and then rotate the Jog Dial until “i” appears.
3. Press 2 and then rotate the Jog Dial until “k” appears.
4. Press 2 and then rotate the Jog Dial until “e” appears.

- Pressing the SHIFT button alternates between capital and lower case letters. Once this button is pressed, the SHIFT mode continues until it is pressed again.
- To erase the last word (to backspace), press the CONFERENCE button.
(The CONFERENCE button becomes the “←” (backspace) key when using the overlay.)
- To erase all of the data, press the CLR (S2) button.
- If you keep rotating the Jog Dial, all of the characters will be displayed in order.
<Example> If you rotate the Jog Dial after pressing 2, all of the characters will appear in the following order:
A a B b ···· Z z (space) ! ? . , ’ : ; * / + – = < > # $ % & @ ( ) A a B b ···
- The default is “Not Stored.”
- Up to ten dialling numbers and names can be assigned. Each dialling number has a maximum of 16 digits and each name has a maximum of ten characters.

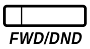
## Display Operation for FWD/DND Features (KX-T7235/KX-T7436 only)

After pressing the desired button which corresponds to the message on the display, you can set or cancel the feature with ease. The example operations are shown below.

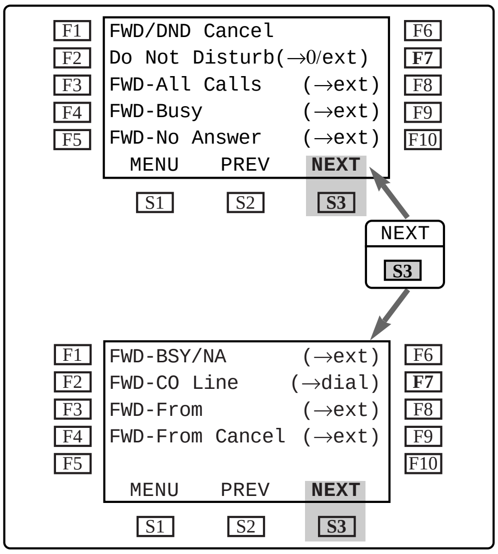
**1** Off-hook.



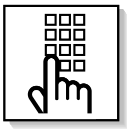
**2** Press the **FWD/DND** button.



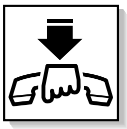
**3** Press the Function button (F1–F5) which is corresponding to the desired function.


F1
F2
F3
F4
F5
FWD/DND Cancel
Do Not Disturb(→0/ext)
FWD-All Calls (→ext)
FWD-Busy (→ext)
FWD-No Answer (→ext)
MENU
PREV
NEXT
F6
F7
F8
F9
F10
S1
S2
S3
NEXT
S3
F1
F2
F3
F4
F5
FWD-BSY/NA (→ext)
FWD-CO Line (→dial)
FWD-From (→ext)
FWD-From Cancel (→ext)
MENU
PREV
NEXT
F6
F7
F8
F9
F10
S1
S2
S3

**4** Enter parameters if required.



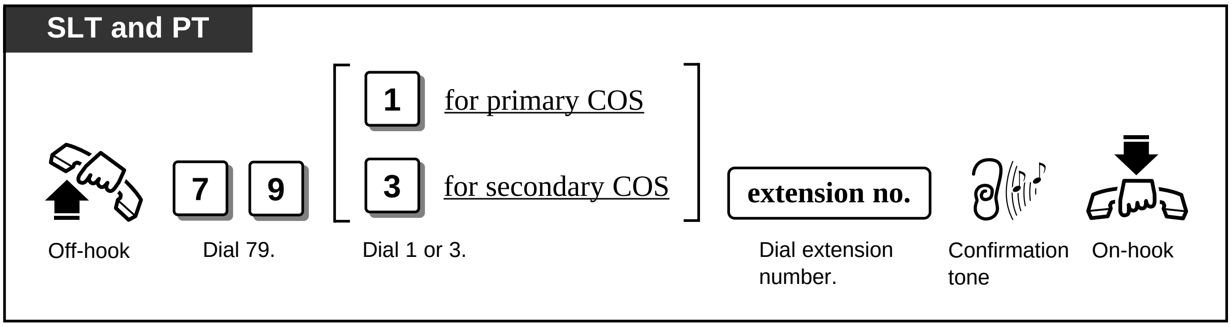
**5** On-hook.



# 2.8 Manager Operations

## Switching the Extension's "Class of Service" (Class of Service Switch)

Each extension is assigned a primary and secondary COS numbers. The manager can switch the extension's COS between a primary and secondary number.

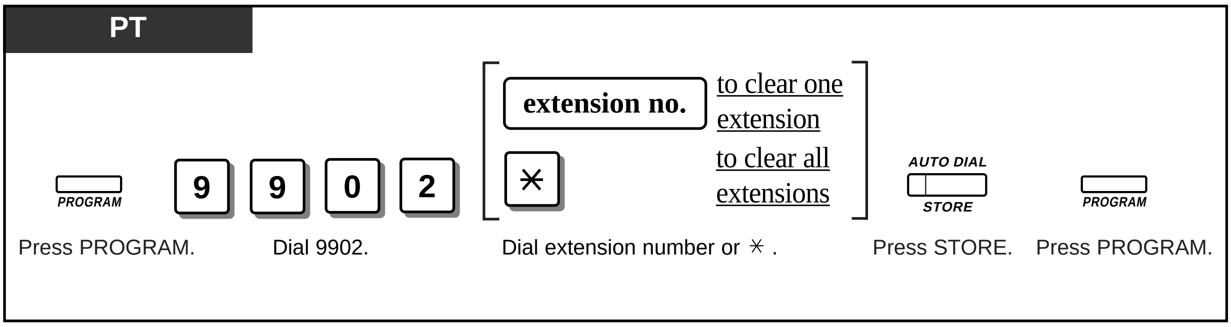

SLT and PT
1
for primary COS
3
for secondary COS
7
9
extension no.
Off-hook
Dial 79.
Dial 1 or 3.
Dial extension number.
Confirmation tone
On-hook

- With the KX-T7235, KX-T7433 and KX-T7436, the manager can execute this feature with the display operation.

- Display Operation (Section 2.7)
  Display Operation for the System Feature Access Menu — COS Primary/Secondary
- System Management (Section 3.1)
  Class of Service

## Unlocking "Incoming Call Log Lock" (Incoming Call Log Lock Control)

The manager can clear the "Incoming Call Log Lock" feature at any extension.

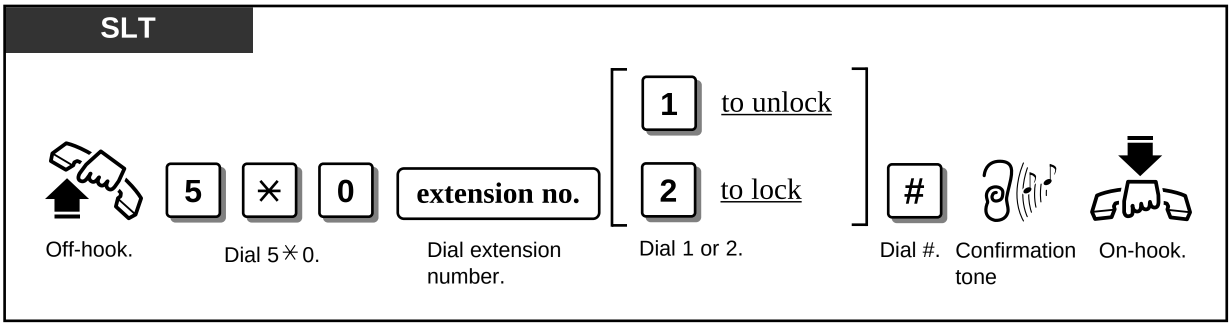

PT
extension no.
to clear one extension
to clear all extensions
PROGRAM
9
9
0
2
⚹
AUTO DIAL
STORE
PROGRAM
Press PROGRAM.
Dial 9902.
Dial extension number or ⚹ .
Press STORE.
Press PROGRAM.

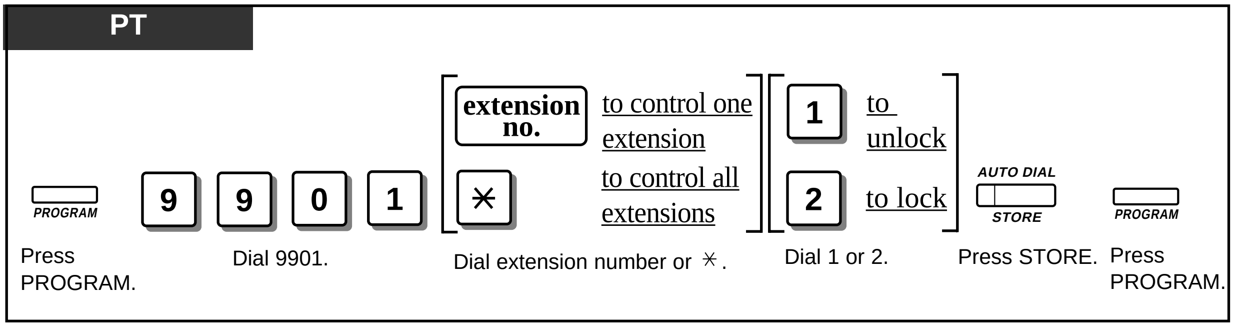
- If your proprietary telephone has no **PROGRAM** button, use the PAUSE button instead.

- Others (Section 2.6)
  Recording the Caller's Information Automatically
  (Incoming Call Log — KX-T7230/KX-T7235/KX-T7433/KX-T7436)

## Controlling "Electronic Station Lockout" Remotely (Remote Station Lock Control)

The manager is given the privilege of controlling Electronic Station Lockout at any extension. If Station Lockout has already been set by the extension user and Remote Station Lock is set by the manager, cancelling the lock is only possible by the manager.


SLT
5
*
0
extension no.
1
to unlock
2
to lock
#
Off-hook.
Dial 5*0.
Dial extension number.
Dial 1 or 2.
Dial #.
Confirmation tone
On-hook.


PT
PROGRAM
9
9
0
1
extension no.
to control one extension
*
to control all extensions
1
to unlock
2
to lock
AUTO DIAL
STORE
PROGRAM
Press PROGRAM.
Dial 9901.
Dial extension number or *.
Dial 1 or 2.
Press STORE.
Press PROGRAM.

- If your proprietary telephone has no PROGRAM button, use the PAUSE button instead.

- Others (Section 2.6)
  Locking Your Phone (Electronic Station Lockout)

# *Section 3*

# *System Programming*

**<Note>**

**Description of Symbol Used**

| SLT | ISDN-T | PT |
|---|---|---|
| ✔ | ✔ | ✔ |

"✔" indicates that the feature in this square is applicable to the single line telephone (SLT), ISDN telephone (ISDN-T) and proprietary telephone (PT).

## Accessing to Other types of network connected to the ISDN network

| SLT | ISDN-T | PT |
|---|---|---|
| ✔ | ✔ | ✔ |

To access other types of network from the ISDN network, sending out DTMF may be needed. To send out the dialled number in DTMF, you must insert a PAUSE (“✱✱”). Any digits following the PAUSE will be sent as DTMF.

Some examples of services requiring DTMF – Alternative carriers using analogue networks, Electronic banking

- This feature does not work when manually dialling.
- It is necessary to store a PAUSE in either the ARS Carrier Code or Authorization Code.

- Making Calls (Section 2.3)
  - Quick Dialling
  - Redialling
- System Management (Section 3.1)
  - Automatic Route Selection (ARS)
- Manager Programming (Section 3.3)
  - [001] System Speed Dialling Number Set
- Timer Programming (Section 3.5)
  - [205] DTMF Sending PAUSE Time
- ARS Programming (Section 3.10)
  - [701] ARS Carrier Code
  - [703] ARS Authorization Code
  - [704] ARS Itemized Bill Code

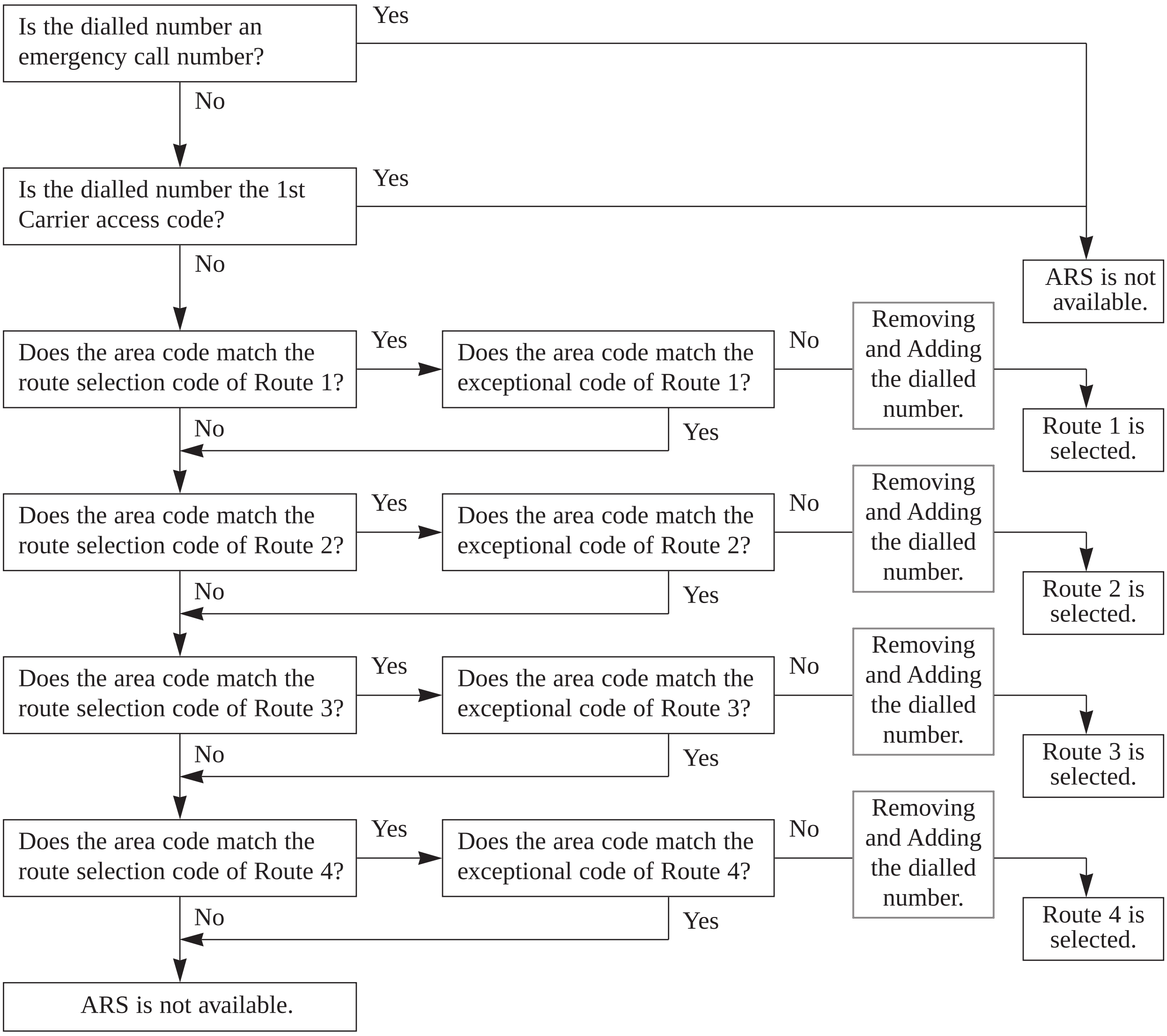
## Automatic Route Selection (ARS)

| SLT | ISDN-T | PT |
|---|---|---|
| ✔ | ✔ | ✔ |

Automatic Route Selection (ARS) is a system programmable feature that automatically selects the least expensive route available at the time a long distance call is made. It is not necessary to dial the access code of the least expensive carrier.

The chart below shows the procedure of the ARS feature.

### Flow Chart of ARS


Is the dialled number an emergency call number?
Yes
No
Is the dialled number the 1st Carrier access code?
Yes
No
ARS is not available.
Does the area code match the route selection code of Route 1?
Yes
Does the area code match the exceptional code of Route 1?
No
Removing and Adding the dialled number.
Route 1 is selected.
No
Yes
Does the area code match the route selection code of Route 2?
Yes
Does the area code match the exceptional code of Route 2?
No
Removing and Adding the dialled number.
Route 2 is selected.
No
Yes
Does the area code match the route selection code of Route 3?
Yes
Does the area code match the exceptional code of Route 3?
No
Removing and Adding the dialled number.
Route 3 is selected.
No
Yes
Does the area code match the route selection code of Route 4?
Yes
Does the area code match the exceptional code of Route 4?
No
Removing and Adding the dialled number.
Route 4 is selected.
No
Yes
ARS is not available.

(Continued)

ARS Programming consists of the following items:

**Common Table**

(1) **ARS Mode** (Program [700])

This program is used to turn on or off the ARS mode. If turned on, calls are sent to the least expensive route to be used. (Default=Disable)

(2) **1st Carrier Access Code Set** (Program [705])

This program is used to store the 1st Carrier Access Code. (Default=Not stored) If the code is dialled, 1st Carrier is always selected even if the ARS mode is enabled.

**ARS Routing Plan Tables (Routes 1 through 4)**

(1) **ARS Carrier Code** (Program [701])

This is used to store each carrier's access code.

(2) **ARS Route Selection Code** (Program [702])

This is used to store area codes used for the ARS feature.

(3) **ARS Authorization Code** (Program [703])

This is used to register an authorization code applied to each ISDN line and each route.

(4) **ARS Itemized Bill Code** (Program [704])

This is used to assign whether to send an itemised bill code of an extension to each ISDN line or not. The itemised bill code corresponds to each extension number 21-28, 30 and 31-34.

(5) **ARS Route Exceptional Code** (Program [706])

This is used to store dialling numbers that are excepted from ARS routing plans of a specified carrier.

(6) **ARS Modify Removed Digit** (Program [708])

This is used to remove the digits of the dialled number before sending to the exchange line.

(7) **ARS Modify Added Number** (Program [709])

This is used to add the number to the dialled number before sending to the exchange line.

The dialled number is modified for sending out to the least expensive carrier. See below as an example.

Dialled Number
092-477-7777
→ By [708] LCR Modify Removed Digit, 1 digit is removed. →
92-477-7777
→ By [709] LCR Modify Added Number, 123 are added. →
The number transmitted to the network
12392-477-7777

* For the example above, the carrier code, authorization code and itemized bill code are omitted.

!

- Emergency dial numbers are not applied to ARS and Toll Restriction.
- If you dial the carrier code directly, the numbers you dial after the carrier code will not be affected by either the ARS Modify Removed Digit or ARS Modify Added Number.

☞

- Manager Programming (Section 3.3)
  - [002] Emergency Dial Number Set
- ARS Programming (Section 3.10)
  - [700] ARS Mode
  - [701] ARS Carrier Code
  - [702] ARS Route Selection Code
  - [703] ARS Authorization Code
  - [704] ARS Itemized Bill Code
  - [705] 1st Carrier Access Code
  - [706] ARS Route Exceptional Code
  - [708] ARS Modify Removed Digit
  - [709] ARS Modify Added Number

# 3.1 System Management

## Budget Management

| SLT | ISDN-T | PT |
|---|---|---|
| ✓ | ✓ | ✓ |

Limits the telephone usage to a pre-assigned amount. For example, the limit may be the amount deposited at check-in. If the pre-assigned limit is reached, the extension user cannot make further calls until he/she receives authorization from the manager.

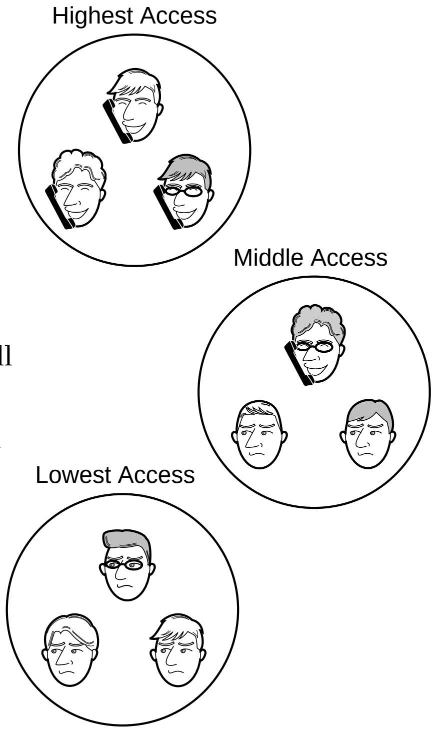
- Manager Programming (Section 2.3)
  [003] Budget Management

## Class of Service (COS)

| SLT | ISDN-T | PT |
|---|---|---|
| ✓ | ✓ | ✓ |

COS is used to define the features which are allowed for a group of extensions. Each extension is assigned a primary and secondary COS numbers. Four classes are available.

- The manager can switch the extension's COS between a primary and secondary number.
- The programmable items are shown below:
  1) Outgoing call restriction level
     (Day mode / Night mode)
  2) Forwards a call to an outside party
  3) Overrides Do Not Disturb of the called extension
  4) Account Code Entry operation
  5) Sets Executive Busy Override
  6) Denies Executive Busy Override
  7) System speed dialling call restriction level
     (Day mode / Night mode)
  8) Unlocks the door
  9) Switches Day/Night mode
  10) Sets Do Not Disturb for Direct Dialling In Call
  11) Sets Call Forwarding – Follow Me
  12) Sets Connected Line Identification Restriction
  13) Sets Calling Line Identification Restriction



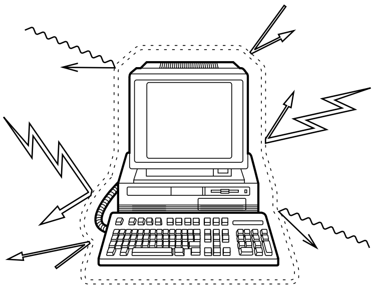
- COS Programming (Section 3.8)
  - [500]–[501] Toll Restriction Level — Day/Night
  - [503] Call Forwarding to outside line (CO)
  - [504] Do Not Disturb Override
  - [505] Account Code Entry Mode
  - [506]–[507] Toll Restriction Level for System Speed Dialling — Day/Night
  - [508] Door Opener Access
  - [509] Night Service Access
  - [510] Do Not Disturb for Direct Dialling In Call
  - [511] Call Forwarding — Follow Me
  - [512] Calling Line Identification Restriction (CLIR)
  - [513] Connected Line Identification Restriction (COLR)
  - [514] Executive Busy Override
  - [515] Executive Busy Override Deny
  - [517] Call Forwarding by ISDN Service
- Extension Programming (Section 3.9)
  - [601] Class of Service

## *Data Line Security*

| SLT | ISDN-T | PT |
|---|---|---|
| ✓ |  | ✓ |

Once set, communication between the extension and the other party is protected from any signals such as Call Waiting, Hold Recall and Executive Busy Override. Data equipment or a facsimile may be connected to an extension jack so that the user can perform data communications. During communication, Data Line Security maintains secure data transmission against tones or interruptions from other extensions.

- If one extension in a conversation has set Data Line Security, it applies to both extensions.
- ISDN telephones are always in the data line security mode. This feature cannot be changed.



- Extension Programming (Section 3.9)
  - [612] Data Line Security

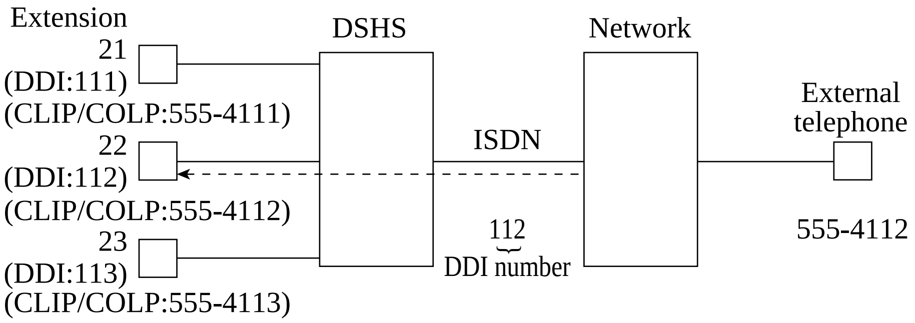
## Direct Dialling In (DDI)

| SLT | ISDN-T | PT |
|---|---|---|
| ✓ | ✓ | ✓ |

Allows the external caller to connect to an extension in the system directly. Assignable destinations are: Manager, extension, or extension group. This requires a DDI number transmitted from the ISDN network. The DDI number is converted to a specific extension number by using a pre-programmed conversion table.

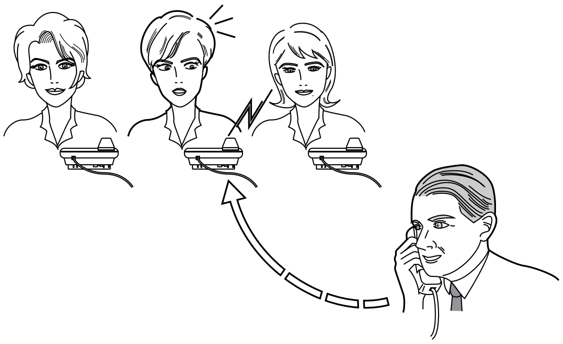
**Explanation**

1. An incoming call from the ISDN network reaches your DSHS (Digital Super Hybrid System). The ISDN network informs DSHS of the DDI number.
2. DSHS converts the DDI number to an extension number and directs the call to the extension.


Extension
21
(DDI:111)
(CLIP/COLP:555-4111)
22
(DDI:112)
(CLIP/COLP:555-4112)
23
(DDI:113)
(CLIP/COLP:555-4113)
DSHS
ISDN
112
DDI number
Network
External telephone
555-4112

- You can store a DDI number (20 digits maximum) by System Programming.
- To reach an extension group, the group must have been previously set-up through System Programming.
- If a wrong number is entered, the call will be transferred to the manager.
- It is possible to use DND on a DDI call if the class of service permits.
- You can check the DDI number transmitted from the network by System Programming or PC Programming.

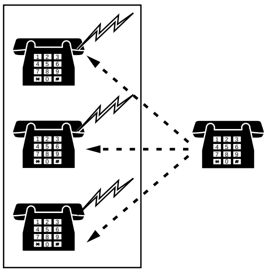
- ISDN Port Programming (Section 3.7)
  - [404] CLIP/COLP Number Assignment
  - [405] Direct Dialling In
  - [412] ISDN DDI Number/Extension Number Transformation
- COS Programming (Section 3.8)
  - [510] Do Not Disturb for Direct Dialling In Call
- Optional Programming (Section 3.12)
  - [902] System Additional Information, Area 1 – Field (04) Area 4 – Field (05–06)
  - [903] Received Number Check



## Direct In Lines (DIL)

| SLT | ISDN-T | PT |
|---|---|---|
| ✓ | | ✓ |

Enables an incoming outside call to go directly to multiple answering points (**DIL 1:N**). Assignable destinations are extensions only. DIL 1:N can have different destinations for day and night modes (Night Service).



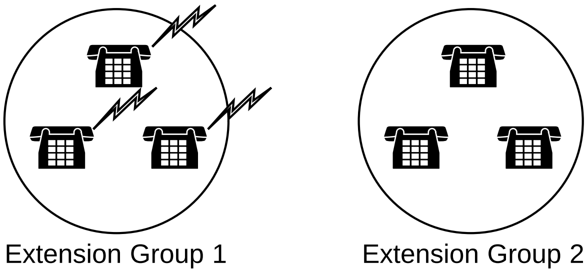
☞

- Extension Programming (Section 3.9)
  [603]–[604] DIL 1:N Extension and Delayed Ringing — Day/Night

## Extension Group

| SLT | ISDN-T | PT |
|---|---|---|
| ✓ | | ✓ |

The system supports eight extension groups. Any member of an extension group can pick up a call directed to another group member (Group Call Pickup). In addition, there are Ring Group, Station Hunting and Uniform Call Distribution (UCD) features.



!

- Every extension should belong to an extension group but cannot belong to more than one group.

☞

- System Programming (Section 3.4)
  [102] Station Hunting Type
- Extension Programming (Section 3.9)
  [602] Extension Group Assignment

## EXtra Device Port (XDP)

| SLT | ISDN-T | PT |
|---|---|---|
| ✔ |  | ✔ |

An EXtra Device Port (XDP) expands the number of telephones available in the system by allowing an extension jack to contain two telephones. A digital proprietary telephone (DPT) and a single line telephone (SLT) can be connected to the same jack but have different extension numbers so that they can act as completely different extensions. All extension numbers in the XDP mode are fixed as follows:

DPT extension number 21 — SLT extension number 31
DPT extension number 22 — SLT extension number 32
DPT extension number 23 — SLT extension number 33
DPT extension number 24 — SLT extension number 34

- XDP requires previous programming of the individual extension. You can enable the XDP mode for the desired extension number by extension programming. Immediately after changing the assignment, the changed setting may not work for a maximum of eight seconds.
- If XDP is disabled for the extension, DPT and SLT may be used as Parallelled Telephones.

- Others (Section 2.6)
  Setting the Parallelled SLT to Ring (Parallelled Telephone Connection)
- Extension Programming (Section 3.9)
  [600] EXtra Device Port
- Connecting the Telephones in EXtra Device Port (XDP) (Section 4.11)

## Forwarding a Doorphone Call to the Outside Line

| SLT | ISDN-T | PT |
|---|---|---|
| ✔ | ✔ | ✔ |

You can automatically transfer an incoming doorphone call to a preset outside destination.

- This feature works separately from other Call Forwarding settings.
- If there is no answer while the call is being forwarded, the forwarding will stop in one minute.
- Toll restriction and other restrictions such as an account code are not activated.
- A call is not recorded by SMDR for the Call Forwarding.
- There are two different modes for day and night. A different destination can be set in each mode. This feature can be set by System Programming.
- The CLIP number displayed at other party's extension is the number assigned at Extension 21.

- Extension Programming (Section 3.9)
  [614]-[615] Doorphone Call Forwarding – Day/Night

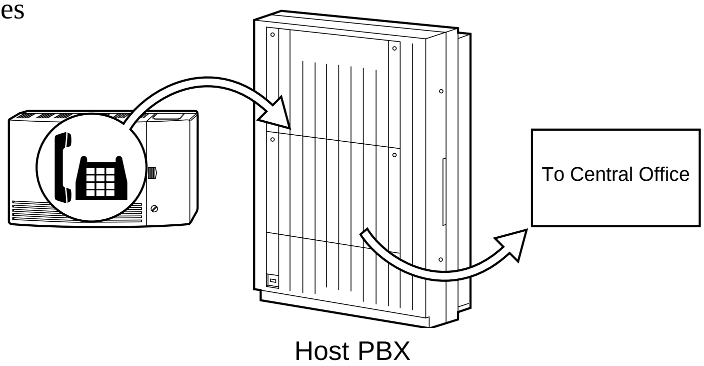
## Host PBX Access

| SLT | ISDN-T | PT |
|---|---|---|
| ✔ | ✔ | ✔ |

The system may be installed behind an existing host PBX which supports an Internal ISDN. This is performed by connecting a line from the host to a outside line (CO) in the system.

- To enable Host PBX Access, put the host PBX line on a outside line (CO). The user accesses the host PBX by selecting that outside line (CO).
- A Host PBX Access Code is required to access CO lines of the host PBX.

- ISDN Port Programming (Section 3.7)
  [403] Host PBX Access Codes



## Integrated Services Digital Network (ISDN)

| SLT | ISDN-T | PT |
|---|---|---|
| ✔ | ✔ | ✔ |

The system can assign which subscriber number is answered and which extension receives a call by ISDN point-to-multi-point configuration. A maximum of ten Multiple Subscriber Numbers (MSN) can be assigned to each ISDN bus with point-to-multi-point configuration.

**Point-to-point**

A call sent through one ISDN port reaches the pre-assigned extension directly with a Direct Dialling In (DDI) contract.

**Point-to-multi-point**

A call sent through one ISDN port reaches the multiple extensions. It is possible to assign multiple telephone numbers on an ISDN port basis.

When a call through the ISDN line with point-to-multi-point configuration reaches your unit;

- The call is refused if the dialled number does not match with the stored MSN.
- The call is connected to the pre-assigned extension if the dialled number is matched with the stored MSN.

If a MSN is not stored, the call sent through the ISDN line with a point-to-multi-point configuration reaches the extension by the standard method.

☞

- ISDN Port Programming (Section 3.7)
  - [406] ISDN Configuration
  - [407] Multiple Subscriber Number Set
  - [408]–[409] Extension Ringing Assignment — Day/Night for ISDN
  - [410]–[411] ISDN Extension Ringing Assignment — Day/Night for ISDN
- ISDN Line Connection Structure (Section 4.7)
- Outside line (CO) Connection (Section 4.8)
- Expanding the ISDN Line Connection (Section 4.13)

## Integrated Services Digital Network (ISDN) Extension

| SLT | ISDN-T | PT |
|---|---|---|
|  | ✔ |  |

The system supports terminal equipment such as ISDN telephones, G4 Facsimiles and personal computers. A maximum of eight terminal equipments can be connected to the ISDN bus.
To use your ISDN extension within this system, program each ISDN extension number as follows:

**Point-to-multi-point**

– To have an individual ISDN extension number: **301 through 308**

– To have one ISDN extension number for all: **300**

**Point-to-point**

– To have one ISDN extension number: **30**

The following bearer capabilities can be supported:

| Transfer Mode | Transfer Capability |
|---|---|
| Circuit | Unrestricted digital |
| Circuit | Speech |
| Circuit | 3.1 kHz Audio |

!

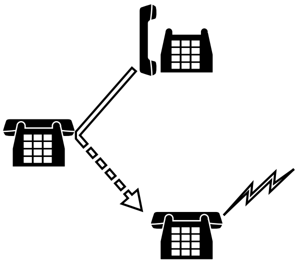
- Class of Service, department code, outgoing permission and IRNA assignment for the ISDN port apply to all terminal equipments on the same bus.

☞

- Manager Programming (Section 3.3)
  [003] Budget Management
- ISDN Port Programming (Section 3.7)
  [406] ISDN Configuration
- ISDN Line Connection Structure (Section 3.7)
- Expanding the ISDN Line Connection (Section 4.13)

## Intercept Routing

| SLT | ISDN-T | PT |
|---|---|---|
| ✓ | ✓ | ✓ |



Provides automatic redirection of incoming outside calls. There are two types that Intercept Routing occurs. In the first case, a call cannot be placed to the desired party. This is called Rerouting. In the second case, the call is not answered within a programmed time period. This is called Intercept Routing – No Answer (IRNA).

- Intercept Routing applies to DDI calls, DIL 1:N, Call Forwarding, and Station Hunting.
- The final destination of intercepted calls must be programmed for day and night modes. There are three possible destinations: extension, UCD group and Ring Group.
- If the destination is in Do Not Disturb, the call is redirected to the manager.
- IRNA can be enabled or disabled in program [610] “IRNA Assignment” (default: enabled). If enabled, rerouting is enabled.

- Timer Programming (Section 3.5)
  [203] Intercept Time
- ISDN Port Programming (Section 3.7)
  [401]–[402] Intercept Extension — Day/Night
- Extension Programming (Section 3.9)
  [610] IRNA Assignment

## Station Hunting

| SLT | ISDN-T | PT |
|---|---|---|
| ✔ | | ✔ |

If a called extension is busy, Station Hunting redirects the incoming call to an idle member of the extension group. Idle extensions are automatically hunted according to the programmed type. The following four hunting types are available;

**Circular hunting:** The extensions are hunted until an idle one is found, regardless of the jack number.

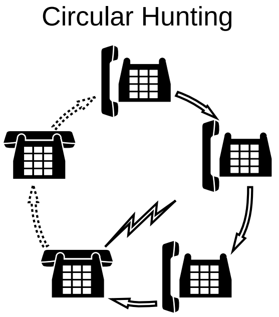
**Termination hunting:** The extensions are hunted until reaching the extension which has the highest jack number in the group.

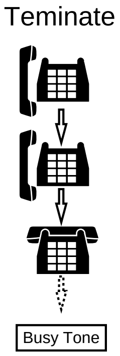
**UCD:** Refer to Uniform Call Distribution (UCD) in this section.

**Ring Group:** All extensions in a ring group ring simultaneously.

One of the hunting types is selected for each extension group.

To leave the hunting group temporarily, use the Log-Out function. To re-join, use the Log-In function.





- If all of the hunted extensions are busy, a busy tone is sent to the caller.
- If the called extension has set Do Not Disturb, Call Forwarding or Log-Out, Station Hunting skips the extension.
- If UCD is set, Hunting is performed as a setting of UCD.

- System Programming (Section 3.4)
  [102] Station Hunting Type
- Extension Programming (Section 3.9)
  [602] Extension Group Assignment

## Station Message Detail Recording (SMDR)

| SLT | ISDN-T | PT |
|---|---|---|
| ✔ | ✔ | ✔ |

Station Message Detail Recording (SMDR) automatically records detailed call information for outside calls. A printer connected to the Serial Interface (RS-232C) port can be used to print incoming and outgoing outside calls and charge fees as well as print a hard copy of System Programming. To print a record of System Programming items that have been assigned, use the program [802] “System Data Printout.” To print the charge fee, use Station Programming. To print the call records, use the program [800] “SMDR Incoming/Outgoing Call Log Printout,” which allows you to print out the following records.

- All outgoing outside calls or outgoing toll calls
- Incoming outside calls

### An example of printed call records:

```
  Date      Time    Ext    Dpc     Port     Dial Number        Duration     Cost:ZL    Acc      CD
--------------------------------------------------------------------------------------------------
10/02/99   10:00    21    12345     1       0344853233         00:05'12      12.00    12345
10/02/99   10:10    23    00001     2      <INCOMING>          00:05'56       0.00
10/02/99   10:20    24    10        1      <INCOMING>          00:20'12       0.00    43121
10/02/99   10:38    295             1      <INCOMING>          00:10'01       0.00    43212     TR
10/02/99   13:40    28              1      <INCOMING>          00:09'18       0.00    001       FW
10/02/99   14:42    21              2       <Private>          00:03'10      17       11111
   .         .       .      .       .           .                  .            .        .       .
   .         .       .      .       .           .                  .            .        .       .
   .         .       .      .       .           .                  .            .        .       .
  (1)       (2)     (3)    (4)     (5)         (6)                (7)          (8)      (9)    (10)
```

**Example of a SMDR printout format:**

**Explanation**

(1) Date : the date of the call as Day / Month / Year.

(2) Time : the end time of a call as Hour:Minute.

(3) Ext : the extension number, floating number, etc. that engaged in the call.

(4) Dpc : the department code appended to the call.

(5) Port : the ISDN port number used for the call.

(6) Dial Number

**Outgoing call:** the other party’s telephone number (maximum 22 digits). Valid digits are 0 through 9, ⚹, #.

**Received call:** shows <INCOMING>. If the received call is a private call, <Private> is shown.

(7) Duration : the duration of the call as Hour / Minutes / Seconds.

(8) Cost: shows the amount of the charged fee; Pulse or ZL.

(9) Acc : the account code appended to the call.

(10) CD : the condition code.

TR : Transfer
FW : Call Forwarding to outside line (CO)

- "(8) Cost" is printed out as the charge indication of meter (no decimal point) or ZL. You can select the charge indication by System Programming.
- When programmed for outgoing toll calls only, printing occurs only for calls which start with the numbers stored in any Denied Code Table from levels 2 to 6.
- This system can store information on up to 100 calls. If more calls are initiated or received, stored records are deleted starting from the oldest one.
- This data is not deleted when you reset the system.
- If the account code stored in location 01 of the programming table is dialled, the dialled number is not printed out to SMDR (Private Call).

☞

- Manager Programming (Section 3.3)
  [000] Date and Time Set
- Resource Programming (Section 3.11)
  [800] SMDR Incoming / Outgoing Call Log Printout
  [801] SMDR Format
  [802] System Data Printout
  [804] Serial Interface (RS-232C) Parameters
- Connecting the Printer and PC (Section 4.15)

# 3.1 System Management

## System Data Default Set

| SLT | ISDN-T | PT |
|---|---|---|
| ✓ |  | ✓ |

This system allows re-initialisation of system-programmed data. If all of the programmed data is cleared, the system will restart using the default settings. You can select to clear **all of the programmed data** or **all of the programmed data except the ISDN data**. ISDN data which will not be cleared is as follows:

a) Station Speed Dialling Numbers
b) [001] System Speed Dialling Number Set
c) [404] CLIP/COLP Number Assignment
d) [405] Direct Dialling In
e) [406] ISDN Configuration
f) [407] Multiple Subscriber Number Set
g) [412] ISDN DDI Number/Extension Number Transformation

- The default setting for each programming item is listed in Section 4.4 “Default Values.”
- System re-initialisation causes the system to terminate all calls or programs in progress.

- Optional Programming (Section 3.12)
  [900] System Data All Clear
  [901] System Data Clear Except ISDN Data

## System Programming with a Personal Computer

| SLT | ISDN-T | PT |
|---|---|---|
|  |  |  |

This system can be programmed and administered using a personal computer (PC).
A floppy disk for PC programming (included) is required to perform this feature.

**On-Site Programming**

By connecting a PC to your system, system programming can be performed locally. Connect the PC to the Serial Interface (RS-232C) port provided.

- Only one access is allowed to System Programming at any one time.
- To access system administration, a valid password must be entered.
- System administration can be performed on-line.

- System Programming (Section 3.4)
  [103] System Password
- Connecting the Printer and PC (Section 4.15)

## Toll Restriction

| SLT | ISDN-T | PT |
|---|---|---|
| ✔ | ✔ | ✔ |

Toll Restriction is used in conjunction with the assigned Class of Service and can prohibit certain extension users from placing unauthorised toll calls.

Each Class of Service is programmed to have a toll restriction level for day mode and night mode.

There are eight toll restriction levels available. Toll restriction level 1 is the highest level and the level 8 is the lowest. Level 1 allows all toll calls and levels 7 and 8 prohibits all toll calls. Levels 2 through 6 are used to restrict calls by combining pre-programmed deny and excepted code tables.

Pre-assigned emergency numbers are allowed in any level.

### Denied Code Tables

An outgoing outside call made by an extension with a toll restriction level between 2 and 6 is checked first against the selected Denied Code Tables. If the leading seven digits of the dialled number (not including the line access code) are not found in the table, the call is made. There are five system programs for Denied Code Tables: **[300]-[304] TRS Denied Code Entry for Levels 2 through 6.**

Complete each table by storing numbers that are to be prohibited. These numbers are defined as denied codes. Each table can store up to 20 denied codes, each consisting of seven digits.

### Excepted Code Tables

These tables are used to override a programmed denied code. A call denied by the selected Denied Code Tables is checked against the selected Excepted Code Tables. If a match is found, the call is made. There are five system programs for these tables: **[305]–[309] TRS Excepted Code Entry for Levels 2 through 6.**

Complete each table by storing numbers that are exceptions to the denied codes. These numbers are defined as excepted codes. Each table can store up to 20 excepted codes, each consisting of seven digits.

Applicable Denied and Excepted Code Tables depend on the assigned toll restriction level of an extension as follows:

| | **Denied Code Tables** | **Excepted Code Tables** |
|---|---|---|
| Level 1 | None | None |
| Level 2 | Table for Level 2 | Tables for Levels 2 through 6 |
| Level 3 | Tables for Levels 2 and 3 | Tables for Levels 3 through 6 |
| Level 4 | Tables for Levels 2 to 4 | Tables for Levels 4 through 6 |
| Level 5 | Tables for Levels 2 to 5 | Tables for Levels 5 through 6 |
| Level 6 | Tables for Levels 2 to 6 | Tables for Level 6 |
| Level 7 | None | None |
| Level 8 | None | None |

(Continued)

**[Explanation]**

Level 1: allows all calls.

Level 2: denies the codes stored in the Denied Code Table for Level 2 except the codes stored in Excepted Code Tables for Levels 2 through 6.

Level 3: denies the codes stored in the Denied Code Tables for Levels 2 and 3 except the codes stored in Excepted Code Tables for Levels 3 through 6.

Level 4: denies the codes stored in the Denied Code Tables for Levels 2 through 4 except the codes stored in Excepted Code Tables for Levels 4 through 6.

Level 5: denies the codes stored in the Denied Code Tables for Levels 2 through 5 except the codes stored in Excepted Code Tables for Levels 5 and 6.

Level 6:
- denies the codes stored in the Denied Code Tables for Levels 2 through 6 except the codes stored in Excepted Code Table for Level 6.
- denies intercom calls except manager calls.

Level 7: allows intercom calls only.

Level 8: allows manager calls only.

**Example of Toll Restriction programming**

Here is an example to explain the procedures for Toll Restriction programming.

**1. Determining the application**

Determine the dialling numbers that should be denied for levels 2 through 6. (Levels 1, 7 and 8 are fixed and do not require programming.)

**[Entry Example]**

| Level | Denied Code | Excepted Code |
|---|---|---|
| 2 | 011 | None |
| 3 | 011<br>976<br>1xxx976 | None |
| 4 | 011<br>976<br>1xxx976<br>0 | None |
| 5 | 011<br>976<br>1xxx976<br>0<br>411<br>1xxx555 | None |
| 6 | 011<br>976<br>1xxx976<br>0<br>411<br>1xxx555<br>1<br>x0<br>x1 | 911<br>1911<br>130 |

Note: “x” can be substituted with a digit.

**2. Programming**

(1) [500]-[501] Toll Restriction Level — Day/Night

Assign a toll restriction level to each Class of Service (COS).

**[Example]**

| COS | Level (Day) | Level (Night) |
|---|---|---|
| 1 | 1 | 6 |
| 2 | 2 | 6 |
| 3 | 3 | 7 |
| 4 | 4 | 8 |

(2) [300]-[304] TRS Denied Code Entry for Levels 2 through 6

Depending on the application, enter the denied codes in the associated tables. You can use numeric characters and the wild card character "✳."

| **Level 2 Denied Code Table** | |
|---|---|
| **Location** | **Code** |
| 01 | 001 |
| : | |
| : | |
| 20 | |

| **Level 3 Denied Code Table** | |
|---|---|
| **Location** | **Code** |
| 01 | 976 |
| 02 | 1✳✳✳976 |
| : | |
| 20 | |

| **Level 4 Denied Code Table** | |
|---|---|
| **Location** | **Code** |
| 01 | 0 |
| : | |
| : | |
| 20 | |

| **Level 5 Denied Code Table** | |
|---|---|
| **Location** | **Code** |
| 01 | 411 |
| 02 | 1✳✳✳555 |
| : | |
| 20 | |

| **Level 6 Denied Code Table** | |
|---|---|
| **Location** | **Code** |
| 01 | 1 |
| 02 | ✳0 |
| 03 | ✳1 |
| : | |
| 20 | |

(3) [305]-[309] TRS Excepted Code Entry for Levels 2 through 6

Depending on the application, enter the excepted codes in the associated tables. You can use numeric characters and the wild card character "✳."

| **Level 6 Excepted Code Table** | |
|---|---|
| **Location** | **Code** |
| 1 | 911 |
| 2 | 1911 |
| 3 | 130 |
| : | |
| 20 | |

**[Explanation]**

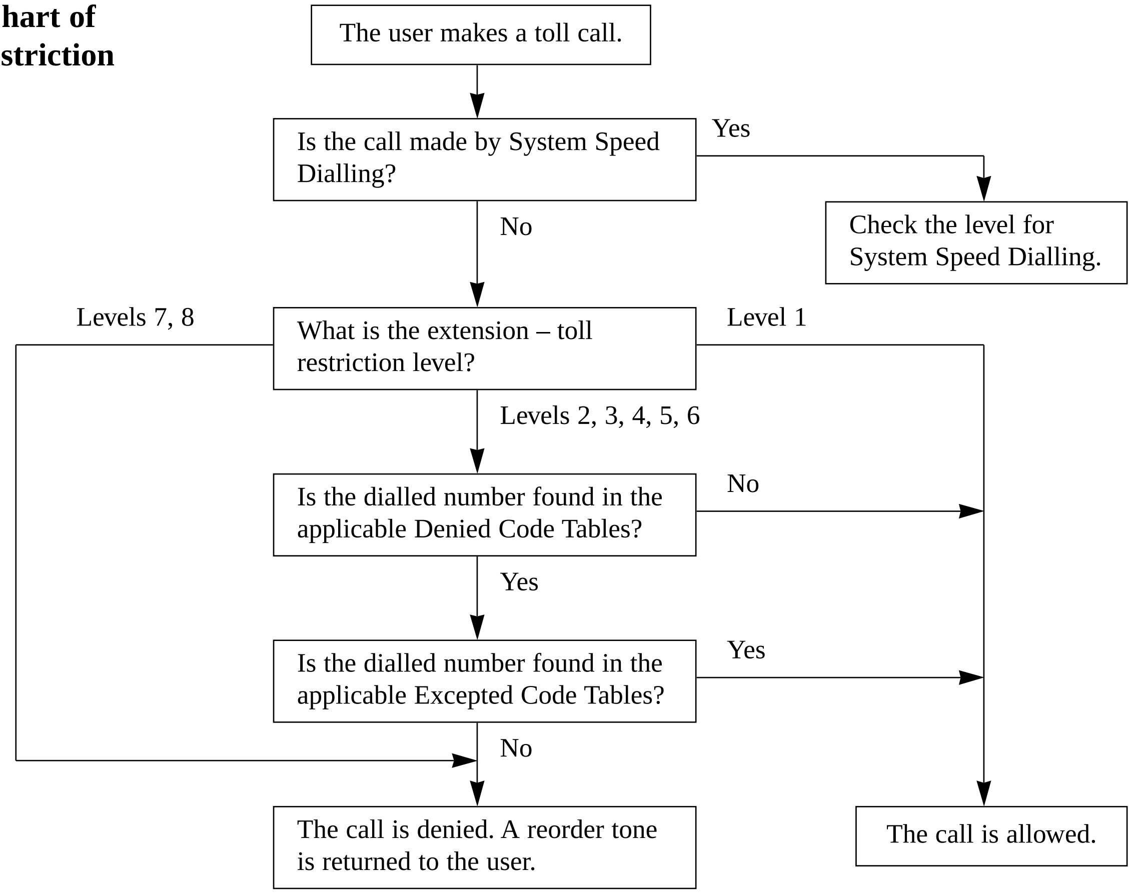
If your Toll Restriction Level is 6;

a) You cannot make a call whose toll call number is "201," because the number whose second digit "0" is one of the Denied Codes for Level 6.

b) You can make a call whose toll call number is "130." Though the number whose first digit "1" is one of the Denied Codes for Level 6, the number "130" is one of the Excepted Codes for Level 6. The Excepted Codes override the Denied Codes.

(Continued)

**Flow Chart of Toll Restriction**


The user makes a toll call.
Is the call made by System Speed Dialling?
Yes
Check the level for System Speed Dialling.
No
What is the extension – toll restriction level?
Levels 7, 8
Level 1
Levels 2, 3, 4, 5, 6
Is the dialled number found in the applicable Denied Code Tables?
No
Yes
Is the dialled number found in the applicable Excepted Code Tables?
Yes
No
The call is denied. A reorder tone is returned to the user.
The call is allowed.

!

- Toll restriction checks are applied to the following:
  - (1) Account Code Entry
  - (2) Dial Access, Automatic
  - (3) Line Access, Individual
- If a stored Host PBX access code is found in the dialled number, a toll restriction check starts from the following telephone number.
- Toll restriction for System Speed Dialling can be assigned in a Class of Service setting.
- It is programmable whether "⁎" or "#" dialled by the user is to be checked or not with the Toll Restriction code. This is useful to prevent unauthorised calls which could be possible through certain Central Offices' exchange systems.

☞

- TRS Programming (Section 3.6)
  - [300]–[304] TRS Denied Code Entry for Levels 2 through 6
  - [305]–[309] TRS Excepted Code Entry for Levels 2 through 6
- COS Programming (Section 3.8)
  - [500]–[501] Toll Restriction Level — Day/Night
  - [506]–[507] Toll Restriction Level for System Speed Dialling — Day/Night
- Optional Programming (Section 3.12)
  - [902] System Additional Information, Area 2 – Field (03)

## Toll Restriction Override by Account Code Entry

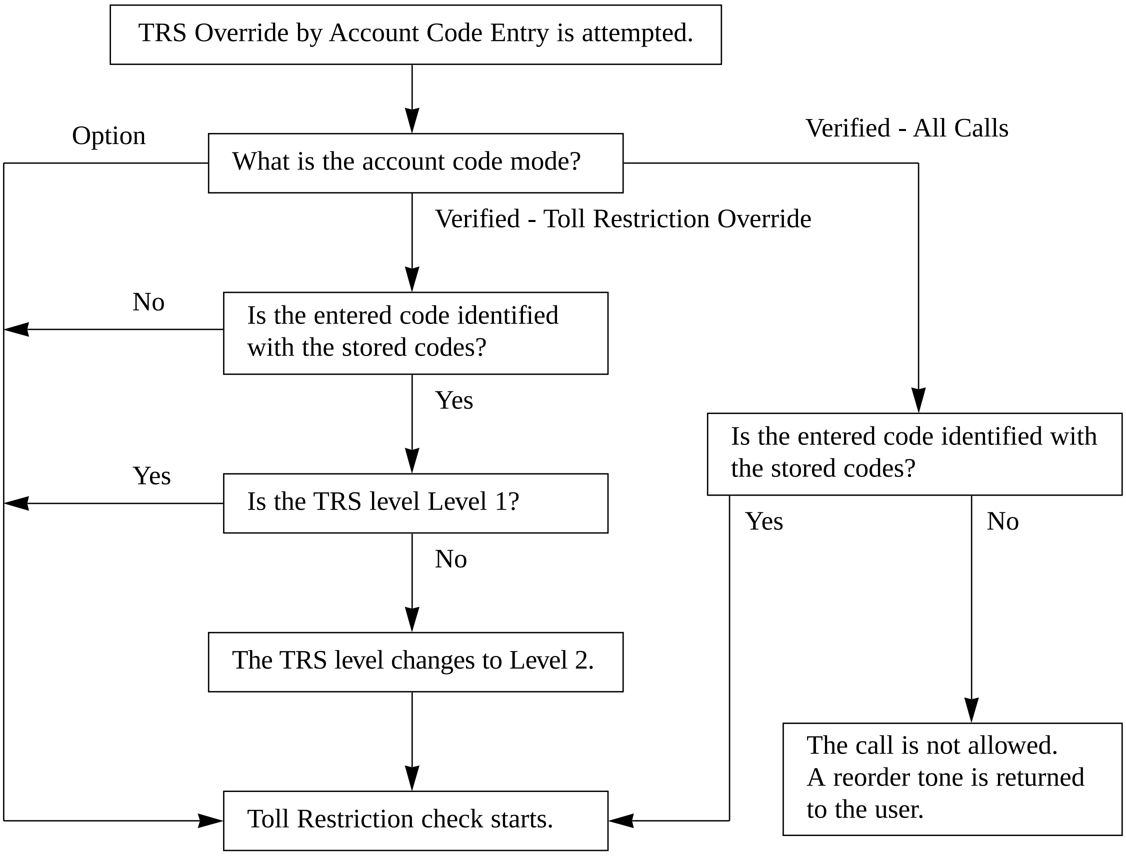
| SLT | ISDN-T | PT |
|---|---|---|
| ✓ | ✓ | ✓ |

Allows the extension user to override toll restriction temporarily to make a toll call from a toll-restricted telephone. The user can carry out this feature by entering the appropriate account code before dialling the telephone number.

- The toll restriction level of the user is changed to level 2 by this feature. Thus this can be used by extension users assigned to toll restriction levels 3 through 6. Levels 1 and 2 are not changed.
- A Class of Service which has assigned Account Code Entry – Verified Toll Restriction Override permits the class members to override their toll restrictions.
- If the user does not enter any account code or enters an invalid account code, an ordinary toll restriction check is done.

- COS Programming (Section 3.8)
  [505] Account Code Entry Mode

**Flow Chart of TRS Override by Account Code Entry**


TRS Override by Account Code Entry is attempted.
Option
What is the account code mode?
Verified - All Calls
Verified - Toll Restriction Override
No
Is the entered code identified with the stored codes?
Yes
Is the entered code identified with the stored codes?
Yes
Is the TRS level Level 1?
Yes
No
No
The TRS level changes to Level 2.
The call is not allowed. A reorder tone is returned to the user.
Toll Restriction check starts.

## Toll Restriction Override for System Speed Dialling

| SLT | ISDN-T | PT |
|---|---|---|
| ✓ | ✓ | ✓ |

Calls originated by System Speed Dialling are restricted depending on the extension's toll restriction level for System Speed Dialling.

☞

- Manager Programming (Section 3.3)
  - [001] System Speed Dialling Number Set
- COS Programming (Section 3.8)
  - [506]–[507] Toll Restriction Level for System Speed Dialling – Day/Night

## Uniform Call Distribution (UCD)

| SLT | ISDN-T | PT |
|---|---|---|
| ✓ |  | ✓ |

Allows incoming calls to be distributed uniformly to a specific group of extensions called an UCD group. Calls to an UCD group hunt for an idle extension in a circular way. This UCD feature is particularly helpful when a certain extension receives a high volume of calls compared with other extensions.

!

- Types of calls whose destination can be the UCD extension are:
  - Outside calls – DDI; IRNA
  - Intercom calls – Extension; Transfer
- This feature requires assignment of an UCD group for a Station Hunting type in System Programming. An extension cannot belong to two or more UCD groups.
- The floating number is assigned on an UCD group basis (291 through 298). The UCD group is based on the extension group.
- It is possible to set the log-in or log-out status on an extension basis.
- The extension which is assigned as a disconnect extension in program [609] should not belong to the extension group which is assigned as an UCD group.

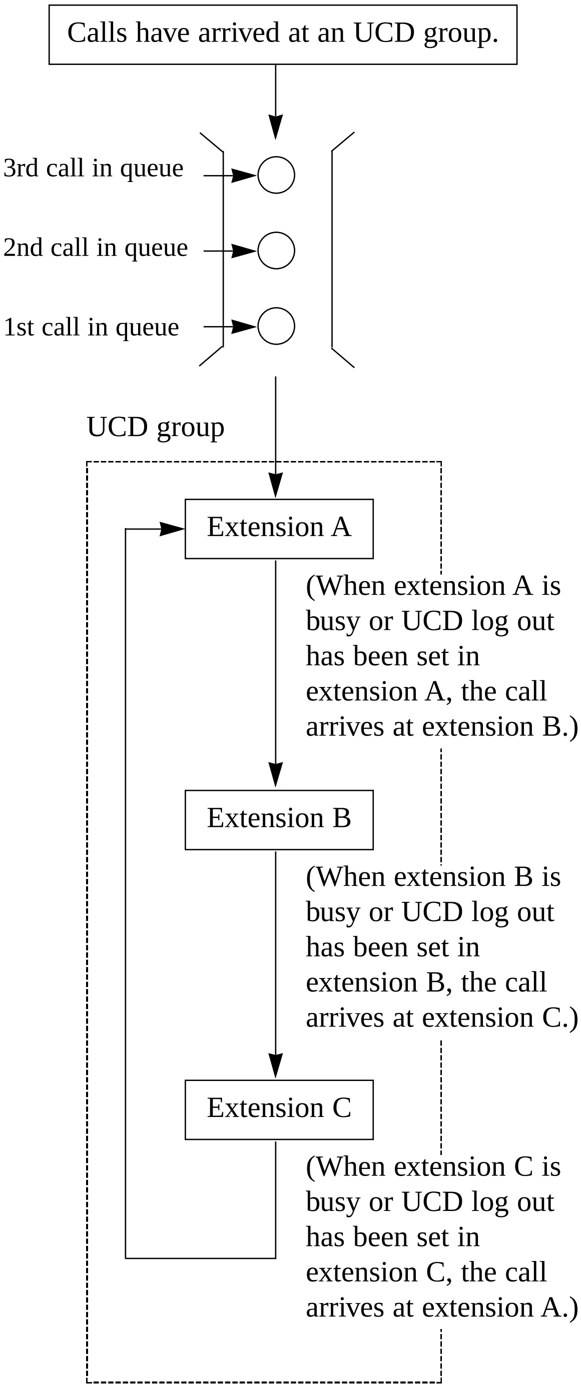
☞

- System Programming (Section 3.4)
  - [102] Station Hunting Type
- Extension Programming (Section 3.9)
  - [602] Extension Group Assignment

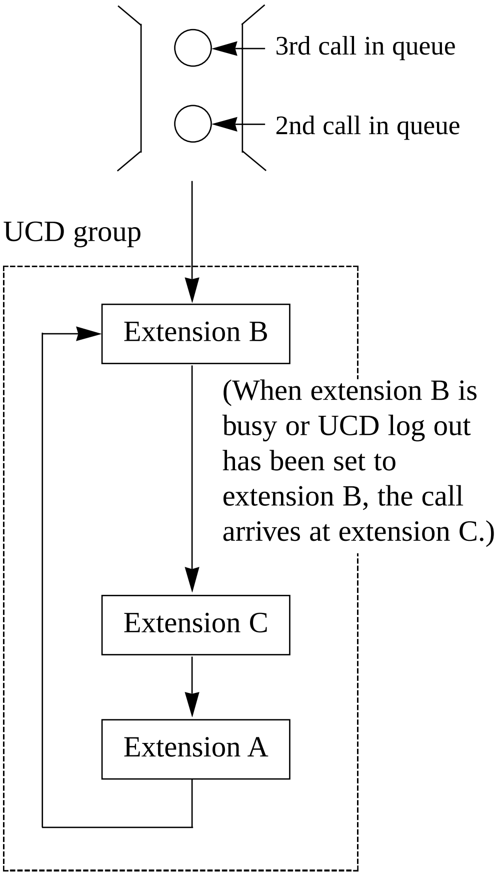
# 3.1 System Management

An outline sketch of an UCD is shown below.

(1) When a number of calls have arrived at an UCD group, the 1st call arrives at extension A first.


Calls have arrived at an UCD group.
3rd call in queue
2nd call in queue
1st call in queue
UCD group
Extension A
(When extension A is busy or UCD log out has been set in extension A, the call arrives at extension B.)
Extension B
(When extension B is busy or UCD log out has been set in extension B, the call arrives at extension C.)
Extension C
(When extension C is busy or UCD log out has been set in extension C, the call arrives at extension A.)

(2) When the 1st call arrives at extension A, the 2nd call arrives at extension B.


3rd call in queue
2nd call in queue
UCD group
Extension B
(When extension B is busy or UCD log out has been set to extension B, the call arrives at extension C.)
Extension C
Extension A

(3) When the 2nd call arrives at extension C, the 3rd call will arrive at extension A.

# 3.2 Before System Programming

## Default Setting

This system has a default factory setting. If any of the programming needs to be changed, you can change the setting by System Programming. ✎ represents the default factory setting (DEFAULT) and user-programmed data (CHANGE). Any required changes can be written in the (CHANGE) space or Programming Tables listed on pages 3-60 through 3-79.

## Required Telephone Set

A proprietary telephone or tone type Single Line Telephone (SLT) is required for system programming.

Connect the telephone to either of the following:

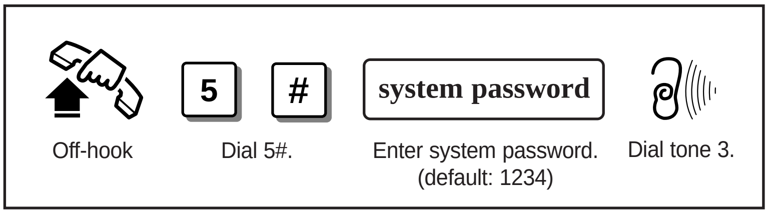
- Jack number 1 (Extension number 21)
- Jack number 2 (Extension number 22)

## Before entering the programming mode

Before entering the programming mode, confirm that:

- Your telephone is on-hook.
- No calls are on hold at your telephone.

## To enter the programming mode

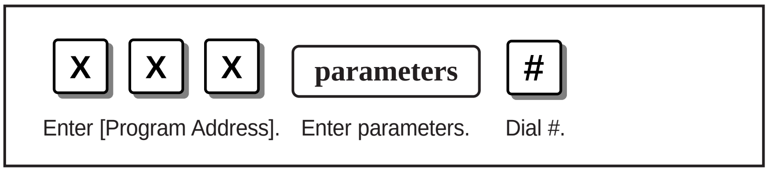


!

- The System Password can be changed by System Programming [103] “System Password.”
- During the programming mode, your extension is treated as a busy extension.
- Only one telephone can be in programming mode at any one time.

## Programming sequence

After entering the programming mode:



After pressing #, you will hear one of the following tones:

**Confirmation tone 1 and then dial tone 3 :** This informs you that storing is completed. You can continue programming by entering the same or another program address.

**Reorder tone :** This informs you that the entry is invalid. Replace the handset and lift it again. Then you will hear dial tone 3. You can restart programming by entering the program address.

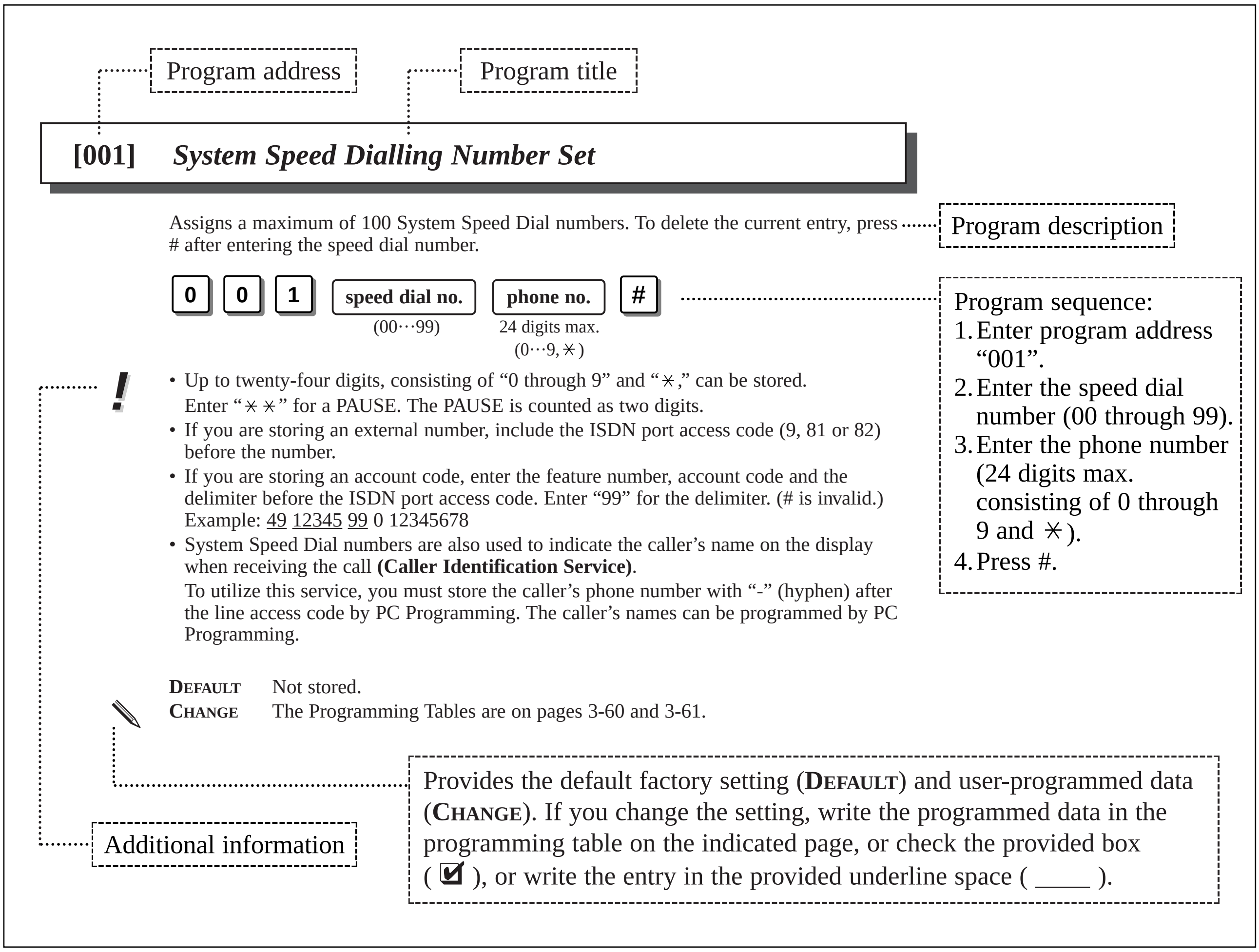
## To exit the programming mode

Press # while hearing dial tone 3.

# 3.2 Before System Programming

## Programming example

The following programming instructions assume that you have already entered the programming mode.
Example: Program [001] "System Speed Dialling Number Set"



**[001]** ***System Speed Dialling Number Set***

Assigns a maximum of 100 System Speed Dial numbers. To delete the current entry, press # after entering the speed dial number.

**0** **0** **1** **speed dial no.** (00⋯99) **phone no.** 24 digits max. (0⋯9, ⁎) **#**

!

- Up to twenty-four digits, consisting of "0 through 9" and "⁎," can be stored. Enter "⁎⁎" for a PAUSE. The PAUSE is counted as two digits.
- If you are storing an external number, include the ISDN port access code (9, 81 or 82) before the number.
- If you are storing an account code, enter the feature number, account code and the delimiter before the ISDN port access code. Enter "99" for the delimiter. (# is invalid.) Example: 49 12345 99 0 12345678
- System Speed Dial numbers are also used to indicate the caller's name on the display when receiving the call **(Caller Identification Service)**.
  To utilize this service, you must store the caller's phone number with "-" (hyphen) after the line access code by PC Programming. The caller's names can be programmed by PC Programming.

**DEFAULT** Not stored.
**CHANGE** The Programming Tables are on pages 3-60 and 3-61.

Program sequence:
1. Enter program address "001".
2. Enter the speed dial number (00 through 99).
3. Enter the phone number (24 digits max. consisting of 0 through 9 and ⁎).
4. Press #.

Provides the default factory setting (**DEFAULT**) and user-programmed data (**CHANGE**). If you change the setting, write the programmed data in the programming table on the indicated page, or check the provided box ( ☑ ), or write the entry in the provided underline space ( ____ ).

## Additional Information

- Jack numbers 1 through 8 correspond to extension numbers 21 through 28 respectively.
- If ISDN port 2 is assigned as an ISDN extension, the ISDN extension numbers can be 300, or 301 through 308.
- If you want to assign all extensions, ISDN ports, or COS to one selection, press ⁎ instead of entering the number.
- System Programming is also available using a personal computer. Refer to Section 3.13 "PC Programming."

## [000] *Date and Time Set*

Sets the current date and time.

| 0 | 0 | 0 | day | month | year | week* | hour | minute | # |
|---|---|---|---|---|---|---|---|---|---|
| | | | (01···31) | (01···12) | (00···99) | (1···7) | (00···23) | (00···59) | |

***** Day of the week selection number:
1 (Sunday) / 2 (Monday) / 3 (Tuesday) / 4 (Wednesday) /
5 (Thursday) / 6 (Friday) / 7 (Saturday)

- After changing an entry, you can press #. You do not have to perform the rest of the steps. For example, if you only want to change the month, enter [000][day][month][#].
- The time is adjusted automatically, if the first outgoing call is made via an ISDN line after three o'clock each morning.

**DEFAULT** 1 Jan '99 FRI 00:00

## [001] *System Speed Dialling Number Set*

Assigns a maximum of 100 System Speed Dial numbers. To delete the current entry, press # after entering the speed dial number.

| 0 | 0 | 1 | speed dial no. | phone no. | # |
|---|---|---|---|---|---|
| | | | (00···99) | 24 digits max.<br>(0···9, ⚹) | |

- Up to twenty-four digits, consisting of "0 through 9" and "⚹," can be stored. Enter "⚹ ⚹" for a PAUSE. The PAUSE is counted as two digits.
- If you are storing an external number, include the ISDN port access code (9, 81 or 82) before the number.
- If you are storing an account code, enter the feature number, account code and the delimiter before the ISDN port access code. Enter "99" for the delimiter. (# is invalid.) Example: 49 12345 99 0 12345678
- System Speed Dial numbers are also used to indicate the caller's name on the display when receiving the call **(Caller Identification Service)**.
  To utilize this service, you must store the caller's phone number with "-" (hyphen) after the line access code by PC Programming. The caller's names can be programmed by PC Programming.

**DEFAULT** Not stored.
**CHANGE** The Programming Tables are on pages 3-60 and 3-61.

## [002] Emergency Dial Number Set

Stores four emergency call numbers. To delete the current entry, press # after entering the emergency code number.

**0** **0** **2** **emergency code no.** **emergency no.** **#**

emergency code no.: (1···4)

emergency no.: 16 digits max. (0···9)

**DEFAULT** Not Stored.
**CHANGE** Code 1 ________ Code 2 ________ Code 3 ________ Code 4 ________

## [003] Budget Management

Assigns the total call charge limitation on an extension basis. If it is set “0,” no restriction is applied.

**0** **0** **3** **extension no.*** **charge limitation** **#**

charge limitation: (0···9999)

***** Extension number: 21 through 28, 31 through 34 (standard extension) /
30 (all ISDN extensions) / ⚹

**Default** 0 (No limitation)
**CHANGE** The Programming Table is on page 3-61.

## [100] Day/Night Service Starting Time

Sets the starting time on a day of the week basis, when automatic day/night switching is selected. To select the non-switching mode, press # after entering the day or night selection number.

| 1 | 0 | 0 | week* | X | hour | minute | # |
|---|---|---|---|---|---|---|---|
| | | | (1···7,✱ ) | (1···2) | (00···23) | (00···59) | |

***** Day of the week selection number number: 1 (Sunday) / 2 (Monday) / 3 (Tuesday) / 4 (Wednesday) / 5 (Thursday) / 6 (Friday) / 7 (Saturday) / ✱ (every day)

**X** – Day or night selection number: 1 (Day) / 2 (Night)

**DEFAULT** Every day – Day – 9:00 / Night – 17:00

**CHANGE**

| | Every day | Sun. | Mon. | Tue. | Wed. | Thu. | Fri. | Sat. |
|---|---|---|---|---|---|---|---|---|
| Day | | | | | | | | |
| Night | | | | | | | | |

## [101] Account Codes

Assigns a maximum of 40 account codes for the Account Code Entry, Verified – All Calls and Verified – Toll Restriction Override modes. To delete the current entry, press # after entering the location number.

| 1 | 0 | 1 | location no. | account code | # |
|---|---|---|---|---|---|
| | | | (01···40) | 5 digits max. (0···9) | |

!

- Account codes having "99" in any part or ending with "9" are invalid (e.g. 12993, 12349), as "99" is used as a delimiter when entering an account code.
- The entry location 01 is used as the account code for a Private Call.

**DEFAULT** Not stored.

**CHANGE** The Programming Table is on page 3-61.

## [102] Station Hunting Type

Assigns the Station Hunting type for each extension group. The available Station Hunting types are: Circular, Termination, Uniform Call Distribution (UCD) and Ring Group.

| 1 | 0 | 2 | extension group no. | hunting type no.* | # |
|---|---|---|---|---|---|
| | | | (1···8,✱ ) | (1···5) | |

***** Hunting Type number:
1 (no hunting) / 2 (Termination) / 3 (Circular) / 4 (UCD) / 5 (Ring Group)

**DEFAULT** All extension groups – No hunting

**CHANGE** The Programming Table is on page 3-61.

## [103] *System Password*

Assigns the password required for entering the System Programming mode and used for personal computer maintenance.

**1** **0** **3** **password** **#**

4 to 7 digits max.
(0···9)

**DEFAULT** 1234
**CHANGE** ________________

## [104] *Pulse Dial Reception Assignment*

Assigns whether the pulse dial from an extension can be received or not by the system.

**1** **0** **4** **X** **#**

(1···2)

**X** – Pulse dial reception selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** Enable
**CHANGE** ☐ Disable

## [105] *Automatic Door Open Assignment*

Assigns whether the door is automatically unlocked or not, when pressing the Call button on the doorphone.

**1** **0** **5** **X** **Y** **#**

(1···2) (1···2)

**X** – Day or night selection number: 1 (Day) / 2 (Night)
**Y** – Automatic door open selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** Both day and night – Disable
**CHANGE**
☐ Both day and night – Enable
☐ Day – Enable, Night – Disable
☐ Day – Disable, Night – Enable

## [107] *Charge Indication Selection*

Assigns the initial indication format of a charge fee on the SMDR.

1 0 7 X #

(1···2)

**X** – Charge indication selection number: 1 (Frequency) / 2 (Charge)

**DEFAULT** Charge
**CHANGE** ☐ Frequency

## [108] *Charge Verification ID Code Set*

Assigns an ID code required to refer to the charge information.

1 0 8 **ID code** #

4 digits
(0000···9999)

**DEFAULT** 1234
**CHANGE** ________________

## [109] *One-Touch Transfer by DSS Button Set*

Enables or disable the automatic outside call hold when a DSS button is pressed.

1 0 9 X #

(1···2)

**X** – Selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** Enable
**CHANGE** ☐ Disable

## [200] Hold Recall Time

Assigns the length of the Hold Recall timer. Select “0” if Hold Recall is not required.

**2** **0** **0** **time** **#**
(0···240 seconds)

**DEFAULT** 60 seconds
**CHANGE** ☐ ________ seconds ☐ No Hold Recall

## [201] Transfer Recall Time

Assigns the number of rings before Transfer Recall occurs.
One ring is equivalent to 5 seconds.

**2** **0** **1** **no. of rings** **#**
(3···48)

**DEFAULT** 12 rings
**CHANGE** ________ rings

## [202] Call Forwarding — No Answer Time

Assigns the number of rings for the Call Forwarding — No Answer feature.
One ring is equivalent to 5 seconds.

**2** **0** **2** **no. of rings** **#**
(1···12)

**DEFAULT** 3 rings
**CHANGE** ________ rings

## [203] *Intercept Time*

Assigns the number of rings for the Intercept Routing — No Answer (IRNA) feature. One ring is equivalent to 5 seconds.

**2** **0** **3** **no. of rings** **#**
(3···48)

**DEFAULT** 12 rings
**CHANGE** ________ rings

## [204] *Pickup Dial Waiting Time*

Assigns the number of seconds for Pickup Dialling. When the timer expires after lifting the handset, the programmed party is called automatically.

**2** **0** **4** **time** **#**
(1···8 seconds)

**DEFAULT** 1 second
**CHANGE** ________ seconds

## [205] *DTMF Sending PAUSE Time*

Assigns the starting time for sending out the DTMF signalling to the ISDN Network.

**2** **0** **5** **X** **#**
(1···6)

**X** – X + 0.5 sec.
**DEFAULT** 1.5 seconds (1 + 0.5 sec.)
**CHANGE** ________ seconds

## [206] *Door Opener Time*

Assigns the time to keep the door open. If “0” is assigned, the system will keep the door open until the controlling telephone hangs up.

**2** **0** **6** **time** **#**
(0···99 seconds)

**DEFAULT** 5 seconds
**CHANGE** ________ seconds

## [207] *Message Waiting Ring Interval Time*

Sets the Message Waiting ring interval time for a single line telephone.

**2** **0** **7** **time** **#**

(0···64 minutes)

- When the internal time is set “0”, the telephone does not ring for Message Waiting Notification.

**DEFAULT** 10 minutes
**CHANGE** _________ minutes

## [208] *Automatic Redial Repeat Time*

Sets the number or times Automatic Redial is tried. Automatic redialling of the last dialled or saved number is done up to the specified number of times.

**2** **0** **8** **number of times** **#**

(0···8 times)

**DEFAULT** 4 times
**CHANGE** _________ times

## [209] *Automatic Redial Interval Time*

Sets the interval time between Automatic Redial attempts.

**2** **0** **9** **time** **#**

3···120 (× 10 is the actual time)

**DEFAULT** 12 (× 10) seconds
**CHANGE** _________ seconds

## [300]–[304] *TRS Denied Code Entry for Levels 2 through 6*

These allow you to specify which numbers are toll-restricted for each toll restriction level as follows:

Program [300]: restricts levels 2 through 6
Program [301]: restricts levels 3 through 6
Program [302]: restricts levels 4 through 6
Program [303]: restricts levels 5 through 6
Program [304]: restricts level 6

To delete the current entry, press # after entering the location number.

| 3 | 0 | X | location no. | restricted no. | # |
|---|---|---|---|---|---|
| | | (0···4) | (01···20) | 7 digits max.<br>(0···9, ⚹)* | |

**X** – Program address selection number: 0 ([300]) / 1 ([301]) / 2 ([302]) / 3 ([303]) / 4 ([304])
***** The character "⚹" can be used as a wild card character.

**Default** All locations – Not stored.
**Change** The Programming Table is on page 3-62.

## [305]–[309] *TRS Excepted Code Entry for Levels 2 through 6*

These allow you to assign numbers which are exceptions to the toll restriction specified in programs [300] through [304] as follows:

Program [305]: applies to level 2
Program [306]: applies to levels 2 through 3
Program [307]: applies to levels 2 through 4
Program [308]: applies to levels 2 through 5
Program [309]: applies to levels 2 through 6

To delete the current entry, press # after entering the location number.

| 3 | 0 | X | location no. | excepted no. | # |
|---|---|---|---|---|---|
| | | (5···9) | (01···20) | 7 digits max.<br>(0···9, ⚹)* | |

**X** – Program address selection number: 5 ([305]) / 6 ([306]) / 7 ([307]) / 8 ([308]) / 9 ([309])
***** The character "⚹" can be used as a wild card character.

**Default** All locations – Not stored.
**Change** The Programming Table is on page 3-63.

## [400] *ISDN Port Connection Assignment*

Used to identify the ISDN ports which are connected to the system. This prevents users from originating a call from a line which is not connected.

**4** **0** **0** **ISDN port no.** (1⋯2,✱) **X** (1⋯2) **#**

**X** – ISDN port connection selection number: 1 (Connect) / 2 (Not connect)

**DEFAULT** ISDN port 1 – Connect / ISDN port 2 – Not connect
**CHANGE** The Programming Table is on page 3-62.

## [401]–[402] *Intercept Extension — Day/Night*

Assigns the destination extension number in day and night modes for Intercept Routing. To disable Intercept Routing, press # after entering the ISDN port number.

**4** **0** **X** (1⋯2) **ISDN port no.** (1⋯2,✱) **extension no.*** **#**

**X** – Program address selection number: 1 ([401] for day) / 2 ([402] for night)
***** Extension number: 21 through 28, 31 through 34 (standard extension) /
30 (all ISDN extensions) /
291 through 298 (UCD, Ring Group)

**DEFAULT** All ISDN ports – Disable
**CHANGE** The Programming Table is on page 3-62.

## [403] *Host PBX Access Codes*

Assigns Host PBX access codes. To delete the current entry, press # after entering the location number.

**4** **0** **3** **ISDN port no.** (1⋯2,✱) **location no.** (1⋯4) **access code** 1 or 2 digits (0⋯9) **#**

- If conflicting access codes (such as 8 and 81) are stored for the same ISDN port, only the 1-digit code (8) will be affected.

**DEFAULT** All ISDN ports – Not stored.
**CHANGE** The Programming Table is on page 3-62.

## [404] *CLIP/COLP Number Assignment*

Assigns the Calling Line Identification Presentation (CLIP) and Connected Line Identification Presentation (COLP) numbers. You can classify both CLIP and COLP numbers into the business and private modes.

| 4 | 0 | 4 | ISDN port no. | extension no.* | X | CLIP/COLP no. | # |
|---|---|---|---|---|---|---|---|
| | | | (1···2,⚹ ) | | (1··4, ⚹ ) | 20 digits max. (0··9) | |

***** Extension number: 21 through 28, 31 through 34 /
301 through 308 (ISDN extension) /
300 (all ISDN extensions)

**X** – CLIP / COLP Classification
1 : CLIP no. — Business
2 : CLIP no. — Private
3 : COLP no. — Business
4 : COLP no. — Private
⚹ : All

- To delete the entry, press # after CLIP / COLP Classification.

**DEFAULT** All CLIP/COLP numbers – Not stored.
**CHANGE** The Programming Table is on pages 3-63 through 3-65.

## [405] *Direct Dialling In*

Assigns the contract status of the Direct Dialling In (DDI) service on an ISDN port basis.

| 4 | 0 | 5 | ISDN port no. | X | # |
|---|---|---|---|---|---|
| | | | (1···2,⚹ ) | (1···2) | |

**X** – DDI service selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** All ISDN ports – Enable
**CHANGE** The Programming Table is on page 3-62.

## [406] *ISDN Configuration*

Assigns the configuration on an ISDN port basis as stated in the ISDN contract. If you change the assignment, reset the system so that the assignment will be activated.

| 4 | 0 | 6 | ISDN port no. | X | # |
|---|---|---|---|---|---|
| | | | (1···2,✱ ) | (1···4) | |

**X** – Configuration selection number: 1 (outside line (CO) / Point-to-multi-point)
2 (outside line (CO) / Point-to-point)
3 (Extension line / Point-to-multi-point)
4 (Extension line / Point-to-point)

**DEFAULT** All ISDN ports – outside line (CO) / Point-to-multi-point

**CHANGE** The Programming Table is on page 3-62.

## [407] *Multiple Subscriber Number Set*

Assigns a maximum of ten multiple subscriber numbers (MSN) on an ISDN port basis. To delete the current entry, press # after entering the location number.

| 4 | 0 | 7 | ISDN port no. | location no. | MSN | # |
|---|---|---|---|---|---|---|
| | | | (1···2,✱ ) | (01···10) | 16 digits max.<br>(0···9) | |

**DEFAULT** All locations – Not stored.

**CHANGE** The Programming Table is on page 3-64.

## [408]–[409] *Extension Ringing Assignment — Day/Night for ISDN*

Determines which extension receives a call and the notification method on a multiple subscriber number (MSN) basis for the ISDN port in the day and night modes.
You can continuously program up to eight extensions before pressing #. To delete the current entry, press # after entering the location number.

| 4 | 0 | X | ISDN port no. | location no. | extension no. | Y | # |
|---|---|---|---|---|---|---|---|
| | | (8···9) | (1···2,✱ ) | (01···10) | (21···28, 31···34) | (0, 1, 3, 6, 9) | |

**X** – Program address selection number: 8 ([408] for day) / 9 ([409] for night)
**Y** – Delayed ringing selection number: 0 (Immediate ringing) / 1 (1 ring delay) /
3 (3 rings delay) / 6 (6 rings delay) / 9 (disable)

**DEFAULT** All locations – All extensions – Immediate ringing (in both modes)

**CHANGE** The Programming Table is on pages 3-65 through 3-68.

## [410]–[411] *ISDN Extension Ringing Assignment — Day/Night for ISDN*

Determines which ISDN extension receives a call on a multiple subscriber number (MSN) basis for the ISDN port in the day and night modes. To delete the current entry, press # after entering the location number.

| | | | | | | |
|---|---|---|---|---|---|---|
| **4** | **1** | **X** | **ISDN port no.** | **location no.** | **ISDN extension no.*** | **#** |
| | | (0···1) | (1···2,✲ ) | (01···10) | | |

**X** – Program address selection number: 0 ([410] for day) / 1 ([411] for night)
***** ISDN extension number: 301 through 308 (ISDN extension) /
300 (all ISDN extensions)

**DEFAULT** All locations – Not stored.
**CHANGE** The Programming Table is on page 3-69.

## [412] *ISDN DDI Number/Extension Number Transformation*

Used to convert a DDI number to an extension number in order to put an incoming DDI call to a specific extension.

| | | | | | | |
|---|---|---|---|---|---|---|
| **4** | **1** | **2** | **ISDN port no.** | **extension no.*** | **DDI no.** | **#** |
| | | | (1···2,✲ ) | | 20 digits max. (0··9) | |

***** Extension number: 21 through 28, 31 through 34 (standard extension) /
291 through 298 (UCD Group or Ring Group) /
301 through 308 (ISDN extension) /
300 (all ISDN extensions)

- Please see [903] for your reference.
- To delete the entry, press # after the extension number.

**DEFAULT** All DDI numbers – Not stored.
**CHANGE** The Programming Table is on page 3-70.

## [500]–[501] *Toll Restriction Level — Day/Night*

Assigns the toll restriction value for each Class of Service (COS) in the day or night mode.

| | | | | | |
|---|---|---|---|---|---|
| 5 | 0 | X | COS no. | level no. | # |
| | | (0···1) | (1···4,✳ ) | (1···8) | |

**X** – Program address selection number: 0 ([500] for day) / 1 ([501] for day)

**DEFAULT** All COS – Level 1 (in both modes)
**CHANGE** The Programming Table is on page 3-71.

## [503] *Call Forwarding to Outside Line (CO)*

Enables or disables the Call Forwarding to a outside line (CO) function on a Class of Service (COS) basis.

| | | | | | |
|---|---|---|---|---|---|
| 5 | 0 | 3 | COS no. | X | # |
| | | | (1···4,✳ ) | (1···2) | |

**X** – Selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** All COS – Enable
**CHANGE** The Programming Table is on page 3-71.

## [504] *Do Not Disturb Override*

Enables or disables the Do Not Disturb Override function on a Class of Service (COS) basis.

| | | | | | |
|---|---|---|---|---|---|
| 5 | 0 | 4 | COS no. | X | # |
| | | | (1···4,✳ ) | (1···2) | |

**X** – Selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** All COS – Disable
**CHANGE** The Programming Table is on page 3-71.

## [505] *Account Code Entry Mode*

Determines the account code mode to be used on a Class of Service (COS) basis.

| | | | | | |
|---|---|---|---|---|---|
| 5 | 0 | 5 | COS no. | X | # |
| | | | (1···4,✳ ) | (1···3) | |

**X** – Account code entry mode selection number:
1 (Option) / 2 (Verified – All Calls) / 3 (Verified – Toll Restriction Override)

**DEFAULT** All COS – Option mode
**CHANGE** The Programming Table is on page 3-71.

## [506]–[507] *Toll Restriction Level for System Speed Dialling — Day/Night*

Assigns the toll restriction value used in System Speed Dialling for each Class of Service (COS) in the day or night mode.

| | | | | | |
|---|---|---|---|---|---|
| 5 | 0 | X | COS no. | level no. | # |
| | | (6···7) | (1···4,* ) | (1···8) | |

**X** – Program address selection number: 6 ([506] for day) / 7 ([507] for night)

**DEFAULT** All COS – Level 1 (in both modes)
**CHANGE** The Programming Table is on page 3-71.

## [508] *Door Opener Access*

Assigns whether each extension has access to the door opener or not.

| | | | | | |
|---|---|---|---|---|---|
| 5 | 0 | 8 | COS no. | X | # |
| | | | (1···4,* ) | (1···2) | |

**X** – Selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** All COS – Enable
**CHANGE** The Programming Table is on page 3-71.

## [509] *Night Service Access*

Enables or disables switching the Day/Night service on a Class of Service (COS) basis. The manager can switch the mode regardless of the setting.

| | | | | | |
|---|---|---|---|---|---|
| 5 | 0 | 9 | COS no. | X | # |
| | | | (1···4,* ) | (1···2) | |

**X** – Selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** All COS – Enable
**CHANGE** The Programming Table is on page 3-71.

## [510] *Do Not Disturb for Direct Dialling In Call*

Enables or disables the Do Not Disturb for Direct Dialling In Call function on a Class of Service (COS) basis. The manager cannot reject a call regardless of the setting.

**5** **1** **0** **COS no.** (1···4,✱) **X** (1···2) **#**

**X** – Selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** All COS – Disable

**CHANGE** The Programming Table is on page 3-72.

## [511] *Call Forwarding — Follow Me*

Enables or disables the Call Forwarding – Follow Me function on a COS basis.

**5** **1** **1** **COS no.** (1···4,✱) **X** (1···2) **#**

**X** – Selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** All COS – Enable

**CHANGE** The Programming Table is on page 3-72.

## [512] *Calling Line Identification Restriction (CLIR)*

Enables or disables the Calling Line Identification Restriction (CLIR) service on a Class of Service (COS) basis.

**5** **1** **2** **COS no.** (1···4,✱) **X** (1···2) **#**

**X** – Selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** All COS – Disable

**CHANGE** The Programming Table is on page 3-72.

## [513] *Connected Line Identification Restriction (COLR)*

Enables or disables the Connected Line Identification Restriction (COLR) service on a Class of Service (COS) basis.

**5** **1** **3** **COS no.** (1···4,✱) **X** (1···2) **#**

**X** – Selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** All COS – Disable

**CHANGE** The Programming Table is on page 3-72.

## [514] *Executive Busy Override*

Enables or disables the Executive Busy Override function on a Class of Service (COS) basis.

**5** **1** **4** **COS no.** **X** **#**

COS no. (1···4,✳) X (1···2)

**X** – Selection number: 1 (Enable) / 2 (Disable)

| | |
|---|---|
| **DEFAULT** | All COS – Disable |
| **CHANGE** | The Programming Table is on page 3-72. |

## [515] *Executive Busy Override Deny*

Enables or disables the Executive Busy Override Deny function on a Class of Service (COS) basis.

**5** **1** **5** **COS no.** **X** **#**

COS no. (1···4,✳) X (1···2)

**X** – Selection number: 1 (Enable) / 2 (Disable)

| | |
|---|---|
| **DEFAULT** | All COS – Enable |
| **CHANGE** | The Programming Table is on page 3-72. |

## [517] *Call Forwarding by ISDN Service*

Enables or disables the Call Forwarding by ISDN service function on a Class of Service (COS) basis.

**5** **1** **7** **COS no.** **X** **#**

COS no. (1···4,✳) X (1···2)

**X** – Selection number: 1 (Enable) / 2 (Disable)

- The availability of this feature depends on your local ISDN services.

| | |
|---|---|
| **DEFAULT** | All COS – Disable |
| **CHANGE** | The Programming Table is on page 3-72. |

## [600] EXtra Device Port

Assigns which extensions have the Extra Device Port (XDP).

| | | | | | |
|---|---|---|---|---|---|
| 6 | 0 | 0 | extension no. | X | # |
| | | | (21···24) | (1···2) | |

**X** – Selection number: 1 (Enable) / 2 (Disable)

- You cannot enter your own extension number.

**DEFAULT** All extensions – Disable
**CHANGE** The Programming Table is on page 3-72.

## [601] Class of Service

Programs each extension a Class of Service (COS). There are a maximum of four Class of Services. A primary and a secondary COS number can be assigned per extension.

| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | 0 | 1 | extension no.* | primary COS no. | secondary COS no. | # |
| | | | | (1···4) | (1···4) | |

***** Extension number: 21 through 28, 31 through 34 (standard extension) /
30 (all ISDN extensions) / ⚹

- Every extension must be assigned to a Class of Service and is subject to COS Programming for programs [500] through [514].

**DEFAULT** All extensions – COS 1
**CHANGE** The Programming Table is on page 3-72.

## [602] Extension Group Assignment

Assigns each extension to an extension group. There is a maximum of eight extension groups. Each extension can belong to only one group.

| | | | | | |
|---|---|---|---|---|---|
| 6 | 0 | 2 | extension no.* | extension group no. | # |
| | | | | (1···8) | |

***** Extension number: 21 through 28, 31 through 34 (standard extension) / ⚹

**DEFAULT** All extensions – Extension group 1
**CHANGE** The Programming Table is on page 3-72.

## [603]–[604] DIL 1:N Extension and Delayed Ringing — Day/Night

Assigns the ringing extensions and the notification method in the day or night mode for each ISDN port which is assigned to the Direct In Lines (DIL) 1:N function.

| | | | | | | |
|---|---|---|---|---|---|---|
| **6** | **0** | **X** | **extension no.*** | **ISDN port no.** | **Y** | **#** |
| | | (3···4) | | (1···2,⚹ ) | (0, 1, 3, 6, 9) | |

**X** – Program address selection number: 3 ([603] for day) / 4 ([604] for night)

**Y** – Delayed ringing selection number: 0 (Immediate ringing) /1 (1 ring delay) / 3 (3 ring delay) / 6 (6 ring delay) / 9 (Disable)

***** Extension number: 21 through 28, 31 through 34 (standard extension) / ⚹

**DEFAULT** All extensions – All ISDN ports – Immediate ringing (in both modes)

**CHANGE** The Programming Table is on page 3-73.

## [605]–[606] Outgoing Permitted ISDN Port Assignment — Day/Night

Determines which ISDN port can be accessed by an extension in both the day and night modes.

| | | | | | | |
|---|---|---|---|---|---|---|
| **6** | **0** | **X** | **extension no.*** | **ISDN port no.** | **Y** | **#** |
| | | (5···6) | | (1···2,⚹ ) | (1···2) | |

**X** – Program address selection number: 5 ([605] for day) / 6 ([606] for night)

**Y** – Selection number: 1 (Enable) / 2 (Disable)

***** Extension number: 21 through 28, 31 through 34 (standard extension) / 30 (all ISDN extensions) / ⚹

**DEFAULT** All extensions – All ISDN ports – Enable (in both modes)

**CHANGE** The Programming Table is on page 3-73.

## [607]–[608] Doorphone Ringing Assignment — Day/Night

Assigns which extensions will ring when a doorphone call is received during the day and night modes.

| | | | | | |
|---|---|---|---|---|---|
| **6** | **0** | **X** | **extension no.*** | **Y** | **#** |
| | | (7···8) | | (1···2) | |

**X** – Program address selection number: 7 ([607] for day) / 8 ([608] for night)

**Y** – Selection number: 1 (Enable) / 2 (Disable)

***** Extension number: 21 through 28, 31 through 34 (standard extension) / ⚹

**DEFAULT** Extension 21 – Enable (in both modes) /
Other extensions – Disable (in both modes)

**CHANGE** The Programming Table is on page 3-73.

## [609] *Extension Connection Assignment*

Assigns whether the extension can perform all accesses or not. The extension of jack number 1 should be set to “Connect”.

6 0 9 extension no.* X #
(1···2)

**X** – Selection number: 1 (Connect) / 2 (Not connect)
***** Extension number: 22 through 28, 31 through 34 (standard extension) / ⚹

**DEFAULT** All extensions – Connect
**CHANGE** The Programming Table is on page 3-74.

## [610] *IRNA Assignment*

Enables or disables Intercept Routing – No Answer (IRNA) on an extension basis.

6 1 0 extension no.* X #
(1···2)

**X** – Selection number: 1 (Enable) / 2 (Disable)

***** Extension number: 21 through 28, 31 through 34 (standard extension) /
30 (all ISDN extensions) / ⚹

**DEFAULT** All extensions – Enable
**CHANGE** The Programming Table is on page 3-74.

## [611] *TAM Connection Assignment*

Assigns which extensions are connected to TAMs.

6 1 1 extension no.* X #
(1···2)

**X** – Selection number: 1 (Enable) / 2 (Disable)
***** Extension number: 21 through 28, 31 through 34 (standard extension) / ⚹

**DEFAULT** All extensions – Disable
**CHANGE** The Programming Table is on page 3-74.

## [612] *Data Line Security*

Enables or disables the Data Line Security mode on an extension basis.

6 1 2 extension no.* X #

(1···2)

**X** – Selection number: 1 (Enable) / 2 (Disable)

***** Extension number: 21 through 28, 31 through 34 (standard extension) / ⚹

**DEFAULT** All extensions – Disable

**CHANGE** The Programming Table is on page 3-74.

## [613] *Department Codes*

Assigns the department codes. To delete the current entry, press # after entering the extension number.

6 1 3 extension no.* department no. #

5 digits max. (0···9)

***** Extension number: 21 through 28, 31 through 34 (standard extension)
30 (all ISDN extensions) / ⚹

**DEFAULT** All extensions – Not stored.

**CHANGE** The Programming Table is on page 3-74.

## [614]–[615] *Doorphone Call Forwarding – Day/Night*

Assigns the destination phone number to the system for forwarding an incoming doorphone call. To delete the current entry, press # after entering the programming address.

6 1 X **ISDN port access code** (9, 81, 82) + **destination phone no.** #

(4, 5) (20 digits max. 0···9,⚹ )

**X** – Program address selection number: 4 ([614] for day) / 5 ([615] for night)

- Enter "⚹ ⚹" for a PAUSE. The PAUSE is counted as two digits.
- To delete the current entry, press # after entering the programming address.

**DEFAULT** Not stored.

**CHANGE** ISDN port access code + destination phone no.
for day ______________________
for night ______________________

## [700] ARS Mode

Assigns whether each ISDN port can perform the ARS feature or not.

**7** **0** **0** **ISDN port no.** **X** **#**

(1···2,*) (1···2)

**X** – ARS mode selection number: 1 (Enable) / 2 (Disable)

**DEFAULT** Both ISDN ports –Disable

**CHANGE**
- ❑ Both ISDN ports – Enable
- ❑ ISDN Port 1 – Enable, ISDN Port 2 – Disable
- ❑ ISDN Port 1 – Disable, ISDN Port 2 – Enable

## [701] ARS Carrier Code

Assigns the carrier access code for each route.

**7** **0** **1** **route no.** **carrier code** **#**

route no.: (1···4)
carrier code: 10 digits max. (0··9, *)

- To delete the current entry, press # after entering the route number.
- Enter * * to pause then send the remaining digits as DTMF.

**DEFAULT** All routes – Not stored.

**CHANGE** The Programming Table is on page 3-75.

## [702] ARS Route Selection Code

Assigns the area codes for each route.

**7** **0** **2** **route no.** **area no.** **area code** **#**

route no.: (1···4)
area no.: (00···79)
area code: 7 digits max. (0··9, *)

- To delete the current entry, press # after entering the area number.
- * is used as a wildcard character that stands for any digit in a phone number.

**DEFAULT** All routes – All area numbers – Not stored.

**CHANGE** The Programming Table is on pages 3-76 and 3-77.

## [703] *ARS Authorization Code*

Registers the authorization code applied to an ISDN line.

| 7 | 0 | 3 | route no. | ISDN port no. | authorization code | # |
|---|---|---|---|---|---|---|
| | | | (1···4) | (1···2,* ) | 20 digits max.<br>(0··9, *) | |

- To delete the current entry, press # after entering the ISDN port number.
- Enter * * to pause then send the remaining digits as DTMF.

**DEFAULT** All routes – All ISDN ports – Not stored.
**CHANGE** The Programming Table is on page 3-75.

## [704] *ARS Itemized Bill Code*

Assigns whether to send an itemized code or not.

| 7 | 0 | 4 | route no. | ISDN port no. | X | # |
|---|---|---|---|---|---|---|
| | | | (1···4) | (1···2,* ) | (1···2) | |

**X** – Itemized bill code selection number: 1 (send) / 2 (Not send)

**DEFAULT** All routes – All ISDN ports – Not send.
**CHANGE** The Programming Table is on page 3-75.

## [705] *1st Carrier Access Code*

Stores the 1st Carrier access code.

| 7 | 0 | 5 | 1st Carrier access code | # |
|---|---|---|---|---|
| | | | 5 digits max. (0···9) | |

- To delete the current entry, press # after entering the programming address.

**DEFAULT** Not stored.
**CHANGE** ________________

## [706] ARS Route Exceptional Code

Assigns dialling numbers that are excepted from ARS routing plans of the specified carrier.

| | | | | | | |
|---|---|---|---|---|---|---|
| 7 | 0 | 6 | **route no.** | **area no.** | **excepted code** | # |
| | | | (1···4) | (00···79) | 7 digits max.<br>(0··9, *) | |

- To delete the current entry, press # after entering the area number.
- * is used as a wildcard character that stands for any digit in a phone number.

| | |
|---|---|
| **Default** | All routes – All area numbers – Not stored. |
| **Change** | The Programming Table is on pages 3-78 and 3-79. |

## [708] ARS Modify Removed Digit

Determines how the dialled number should be modified before sending to the exchange line. The digits are deleted from the beginning of the dialled number.

| | | | | | |
|---|---|---|---|---|---|
| 7 | 0 | 8 | **route no.** | **number of digits to be deleted** | # |
| | | | (1···4) | (0···9) | |

- Only the numbers assigned in [702] can be deleted even if you assign more digits than these numbers in [708].

| | |
|---|---|
| **Default** | All routes – 0 digit (no deletion) |
| **Change** | The Programming Table is on page 3-75. |

## [709] ARS Modify Added Number

Determines how the dialled number should be modified before sending to the exchange line. Numbers are added to the beginning of the dialled number.

| | | | | | |
|---|---|---|---|---|---|
| 7 | 0 | 9 | **route no.** | **number to be added** | # |
| | | | (1···4) | (0···9, 20 digits maximum) | |

- To delete the current entry, press # after entering the route number.
- The ARS Modify Added Number will be added to the number after deleting the digits assigned in programming [708] “ARS Modify Removed Digit”.

| | |
|---|---|
| **Default** | All routes – Not stored. |
| **Change** | The Programming Table is on page 3-75. |

## [800] *SMDR Incoming/Outgoing Call Log Printout*

Determines which calls will produce an SMDR printout.

| | | | | | |
|---|---|---|---|---|---|
| 8 | 0 | 0 | X | Y | # |
| | | | (1···3) | (1···2) | |

**X** – Selection number for Outgoing calls: 1 (All calls) / 2 (Toll calls only) / 3 (No printing)
**Y** – Selection number for Incoming calls: 1 (All calls) / 2 (No printing)

- If "Toll calls only" is selected, the system will print out all of the calls starting from the numbers stored in programs [300]–[304] "TRS Denied Code Entry for Levels 2 through 6".

**DEFAULT** Outgoing calls / Incoming calls – No printing
**CHANGE** Outgoing calls – ☐ All calls ☐ Toll calls only ☐ No printing
Incoming calls – ☐ All calls ☐ No printing

## [801] *SMDR Format*

Used to match the SMDR output with the paper size being used in the printer. Page length determines the number of lines per page. Skip perforation determines the number of lines to be skipped at the end of every page.

| | | | | | |
|---|---|---|---|---|---|
| 8 | 0 | 1 | page length | skip perforation | # |
| | | | (04···99) | (00···95) | |

- The page length should be at least 4 lines longer than the skip perforation length.
- The programmed format becomes valid only if a Serial Interface (RS-232C) cable is connected. If a printer is already connected, disconnect it and connect again. Otherwise, the previous format becomes valid.

**DEFAULT** Page length – 66 lines / Skip perforation – 0 line
**CHANGE** Page length – ________ lines / Skip perforation – ________ lines

## [802] *System Data Printout*

Starts or stops printing all of the current system-programmed data.

| | | | | |
|---|---|---|---|---|
| 8 | 0 | 2 | X | # |
| | | | (1···2) | |

**X** – Selection number: 1 (Start) / 2 (Stop)

## [803] *Music Source Use*

Assigns the music source to be used for Music on Hold and Background Music (BGM).

8 0 3 X Y #

(1···2) (1···2)

**X** – Selection number for Music on Hold: 1 (Music source) / 2 (No music source)

**Y** – Selection number for BGM: 1 (Music source) / 2 (No music source)

**DEFAULT** Both – Music source

**CHANGE**
- ☐ Both – No music source
- ☐ Music on Hold – Music source, BGM – No music source
- ☐ Music on Hold – No music source, BGM – Music source

## [804] *Serial Interface (RS-232C) Parameters*

Assigns the communication parameters for the Serial Interface (RS-232C).

**New line code:** Selects the code for your printer or personal computer. If your printer or personal computer automatically feeds lines with a carriage return, select “CR”. If not, select “CR+LF”.

**Baud rate:** The baud rate code indicates the data transmission speed from the system to the printer or personal computer.

**Word length:** The word length code indicates how many bits compose a character.

**Parity:** The parity code indicates what type of parity is used to detect an error in the string of bits composing a character. Make an appropriate selection depending on the requirements of your printer or personal computer.

**Stop bits:** The stop bit code indicates the end of a bit string which composes a character. Select the appropriate value depending on the requirements of your printer or personal computer.

8 0 4 **new line code no.*[1]** **baud rate no.*[2]** **word length no.*[3]** **parity no.*[4]** **stop bit no.*[5]** #

(1···2) (1···7) (1···2) (1···5) (1···2)

*[1] New line code number: 1 (CR+LF) / 2 (CR) (CR=Carriage Return, LF=Line Feed)

*[2] Baud rate (baud) number: 1 (150) / 2 (300) / 3 (600) / 4 (1200) / 5 (2400) / 6 (4800) / 7 (9600)

*[3] Word length number: 1 (7 bits) / 2 (8 bits)

*[4] Parity number: 1 (None) / 2 (Mark) / 3 (Space) / 4 (Even) / 5 (Odd)

*[5] Stop bit number: 1 (1 bit) / 2 (2 bits)

- The following combinations are invalid.

| Parity | Word Length | Stop Bit |
|---|---|---|
| Mark | 8 | 2 |
| Space | 8 | 1 |
| Space | 8 | 2 |

**DEFAULT** New line code – CR+LF / Baud rate – 9600 baud / Word length – 8 bits / Parity – None / Stop bits – 1 bit

**CHANGE** New line code – ________ / Baud rate – ________ baud /
Word length – _______ bits / Parity – _________ / Stop bits – _______ bits

## [900] *System Data All Clear*

Clears all of the current system-programmed data. This program causes the system to terminate all calls or programs in progress.

9 0 0 #

## [901] *System Data Clear Except ISDN Data*

Clears all of the current system-programmed data except the ISDN data.
Data which will not be cleared is as follows:

a) Station Speed Dialling Numbers
b) [001] System Speed Dialling Number Set
c) [404] CLIP/COLP Number Assignment
d) [405] Direct Dialling In
e) [406] ISDN Configuration
f) [407] Multiple Subscriber Number Set
g) [412] ISDN DDI Number/Extension Number Transformation

This program causes the system to terminate all calls or programs in progress.

9 0 1 #

## [902] System Additional Information

Assigns the additional programming items, if required. There are 01 through 15 fields in each Area 1 through 4.

| | | | | | | |
|---|---|---|---|---|---|---|
| 9 | 0 | 2 | **area code** | **field no.** | **selection no*** | # |
| | | | (1···4) | (00···15) | (0···1) | |

* Refer to “**Selection**” shown in the lists.

**DEFAULT** Refer to “**Default**” shown in the lists.
**CHANGE** Write the change, if any, into “**Change**” shown in the lists.

### Explanation for Area 1

| Field | Description | Selection | Default | Change | Reference |
|---|---|---|---|---|---|
| 00 | Sound source during transfer. | **0** : ringback tone<br>**1** : call hold tone or hold music | 1 | | Call Transfer to Extension |
| 01 | Result of pressing the Recall button and then replacing the handset (during an outside call). | **0** : Consultation hold<br>**1** : disconnect | 0 | | Call Hold |
| 03-02 | Unused | | | | |
| 04 | Selects the destination when the DDI number does not match. | **0** : DIL 1:N<br>**1** : Manager | 1 | | Direct Dialling In (DDI) |
| 15-05 | Unused | | | | |

(Continued)

### Explanation for Area 2

| Field | Description | Selection | Default | Change | Reference |
|---|---|---|---|---|---|
| 00 | If an outside party is transferred and unanswered, assigns whether Transfer Recall occurs at the originating transfer extension or the manager. | **0** : extension<br>**1** : manager | 0 | | • Call Transfer to Extension<br>• Call Park |
| 01 | Unused | | | | |
| 02 | Allows you to remove confirmation tone 4. By default, a beep tone sounds when a three-party conference is started / ended. | **0** : disable<br>**1** : enable | 1 | | Confirmation Tone |
| 03 | Determines if the dialled “⁎” and “#” will be checked by Toll Restriction. This assignment is required for certain central offices (CO) to prevent toll fraud. Some CO’s ignore the user-dialled “⁎” and “#”. If your CO is such a type, select “0” (no check). | **0** : no check<br>**1** : check | 1 | | Toll Restriction |
| 04 | Unused | | | | |
| 05 | Allows you to remove Confirmation Tone 3. This tone is sent when a conversation is established just after dialling the feature numbers to access the following: Call Pickup, Hold Retrieve and Call Park Retrieve. | **0** : disable<br>**1** : enable | 1 | | Confirmation Tone |
| 07-06 | Unused | | | | |
| 08 | Assigns the initial display of the digital large display proprietary telephone (KX-T7235) for Station Speed Dialling. | **0** : names<br>**1** : numbers | 0 | | Display Operation with the KX-T7235 |
| 11-09 | Unused | | | | |
| 12 | Selects the intercom dial tone frequency.<br>To make this assignment effective, you must press the system reset switch after programming. | **0** : normal<br>**1** : distinctive | 0 | | None |
| 13 | Selects the maximum extension - hooking signal detection time. | **0** : ~ 1012ms<br>**1** : ~ 140ms | 0 | | None |
| 14 | Selects the minimum extension - hooking signal detection time. | **0** : 80ms ~<br>**1** : 116ms ~ | 0 | | None |
| 15 | Unused | | | | |

### Explanation for Area 3

| Field | Description | Selection | Default | Change | Reference |
|---|---|---|---|---|---|
| 01-00 | Unused | | | | |
| 02 | Assigns if pressing the HOLD button twice acts as an Exclusive Hold or Hold Retrieve. | **0** : Hold Retrieve<br>**1** : Exclusive Hold | 1 | | • Call Hold<br>• Call Hold, Retrieve |
| 03 | Selects the first information to appear on the display while receiving an incoming call (Ext. 21). | **0** : Other party's CLIP no. and name<br>**1** : Called party's no. and name | 0 | | • Caller Identification Services |
| 04 | Selects the first information to appear on the display while receiving an incoming call (Ext. 22). | **0** : Other party's CLIP no. and name<br>**1** : Called party's no. and name | 0 | | |
| 05 | Selects the first information to appear on the display while receiving an incoming call (Ext. 23). | **0** : Other party's CLIP no. and name<br>**1** : Called party's no. and name | 0 | | |
| 06 | Selects the first information to appear on the display while receiving an incoming call (Ext. 24). | **0** : Other party's CLIP no. and name<br>**1** : Called party's no. and name | 0 | | |
| 09–07 | Selects the currency unit. | **000** : Polish (ZL)<br>**001** : Hungarian* (Ft)<br>**010** : Czech (Kc)<br>**011** : Slovenian (KM)<br>**100** : Yugoslavian (DI)<br>**101** : Croatian (kn)<br>**110, 111** : Not Stored | 000 | | None |
| 11–10 | Unused | | | | |
| 12 | Selects whether a tone or internal music is used for music on hold. | **0** : tone<br>**1** : music | 0 | | |
| 13 | Unused | | | | |
| 14 | Changes all ROT into BT | **0** : ROT into ROT<br>**1** : ROT into BT | 0 | | None |
| 15 | Unused | | | | |

*If the Hungarian currency is selected;

| field | 09 | 08 | 07 |
|---|---|---|---|
| Area 3 | 0 | 0 | 1 |

### Explanation for Area 4

| Field | Description | Selection | Default | Change | Reference |
|---|---|---|---|---|---|
| 04-00 | Unused | | | | |
| 05 | Selects the destination during the night mode, when the operator number is sent as a Direct Dialling In number. | **0** : DIL 1:N<br>**1** : Operator | 1 | | Direct Dialling In (DDI) |
| 06 | Selects the destination during the day mode, when the operator number is sent as a Direct Dialling In number. | **0** : DIL 1:N<br>**1** : Operator | 1 | | Direct Dialling In (DDI) |
| 09-08 | Unused | | | | |
| 10 | Assigns whether the system displays the secret dial number or not. | **0** : do not display<br>**1** : display | 0 | | None |
| 15-11 | Unused | | | | |

## [903] *Received Number Check*

Indicates the number of the last outside incoming call which was transmitted from the ISDN network on PC or on the display of the PT.

9 0 3 X #
(1⋯2)

**X** – Selection number: 1 (indicates the leading 16 digits) / 2 (indicates from 17th to 20th digit)

- You can also check this number by PC.
  (1) Starts PC programming on PC.
  (2) Selects “Received Number Check”.

# 3.13 PC Programming

You can program the system data using the special application software which is available for the IBM-PC AT or compatible personal computer. The system programming data can be stored either on the floppy disk or on your hard disk.

To set up for PC programming, you must have MS-DOS (or equivalent) version 5.0 or later. A minimum of 450KB of free conventional memory is required.

## *File Configuration*

The file name: TD208.EXE (Execution file)

You may store the following files if desired.

**Database file:** *.DBE
**ASCII file:** *.DBA
**Screen save file:** P208.PRT

- Substitute your file name with the * mark.

## *Setup*

(1) Insert the floppy disk into drive A.
(2) Change the current directory to drive A.
(3) Type ***TD208*** after confirming the sign ">" and press the ***Enter*** key.
– The initial screen appears.

- After the initial screen appears, you can remove the included disk and insert a database file disk to save the data.
- If your monitor is monochrome and you cannot see a cursor well, exit the program mode and re-type ***TD208/MONO***.
- If you need an explanation of the system and it's operations, press F4 (Help) on the initial screen.
- This program is guaranteed to work with MS-DOS only. It is not guaranteed with MS-DOS in Windows.

- Connecting the Printer and PC (Section 4.15)

# 3.14 Programming Tables

| **[001] System Speed Dialling Number Set** | | | |
|---|---|---|---|
| Default: All – Not Stored | | | |
| SPD No. | Telephone Number (24 digits max.) | SPD No. | Telephone Number (24 digits max.) |
| 00 | | 40 | |
| 01 | | 41 | |
| 02 | | 42 | |
| 03 | | 43 | |
| 04 | | 44 | |
| 05 | | 45 | |
| 06 | | 46 | |
| 07 | | 47 | |
| 08 | | 48 | |
| 09 | | 49 | |
| 10 | | 50 | |
| 11 | | 51 | |
| 12 | | 52 | |
| 13 | | 53 | |
| 14 | | 54 | |
| 15 | | 55 | |
| 16 | | 56 | |
| 17 | | 57 | |
| 18 | | 58 | |
| 19 | | 59 | |
| 20 | | 60 | |
| 21 | | 61 | |
| 22 | | 62 | |
| 23 | | 63 | |
| 24 | | 64 | |
| 25 | | 65 | |
| 26 | | 66 | |
| 27 | | 67 | |
| 28 | | 68 | |
| 29 | | 69 | |
| 30 | | 70 | |
| 31 | | 71 | |
| 32 | | 72 | |
| 33 | | 73 | |
| 34 | | 74 | |
| 35 | | 75 | |
| 36 | | 76 | |
| 37 | | 77 | |
| 38 | | 78 | |
| 39 | | 79 | |

# 3.14 Programming Tables

**[001] System Speed Dialling Number Set**

| SPD No. | Telephone Number (24 digits max.) | SPD No. | Telephone Number (24 digits max.) |
|---|---|---|---|
| 80 | | 90 | |
| 81 | | 91 | |
| 82 | | 92 | |
| 83 | | 93 | |
| 84 | | 94 | |
| 85 | | 95 | |
| 86 | | 96 | |
| 87 | | 97 | |
| 88 | | 98 | |
| 89 | | 99 | |

**[003] Budget Management**

Default : all – 0

| Extension No. | Charge Limitation (0···9999) |
|---|---|
| All extensions | 0 |
| Ext. 21 | |
| 22 | |
| 23 | |
| 24 | |
| 25 | |
| 26 | |
| 27 | |
| 28 | |
| 31 | |
| 32 | |
| 33 | |
| 34 | |
| ISDN extensions | |

**[101] Account Codes**

Default : all – Not Stored

| Location No. | Account Code (5 digits max.) | Location No. | Account Code (5 digits max.) | Location No. | Account Code (5 digits max.) |
|---|---|---|---|---|---|
| 01 | | 15 | | 29 | |
| 02 | | 16 | | 30 | |
| 03 | | 17 | | 31 | |
| 04 | | 18 | | 32 | |
| 05 | | 19 | | 33 | |
| 06 | | 20 | | 34 | |
| 07 | | 21 | | 35 | |
| 08 | | 22 | | 36 | |
| 09 | | 23 | | 37 | |
| 10 | | 24 | | 38 | |
| 11 | | 25 | | 39 | |
| 12 | | 26 | | 40 | |
| 13 | | 27 | | | |
| 14 | | 28 | | | |

**[102] Station Hunting Type**

| | Default | Extension group number (1···8, *: all) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | All | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | * |
| 1 (No hunting) | ✓ | | | | | | | | | |
| 2 (Termination) | | | | | | | | | | |
| 3 (Circular) | | | | | | | | | | |
| 4 (UCD) | | | | | | | | | | |
| 5 (Ring Group) | | | | | | | | | | |

# 3.14 Programming Tables

| | **[300]**<br>**TRS Denied Code Entry for Levels 2 – 6** | **[301]**<br>**TRS Denied Code Entry for Levels 3 – 6** | **[302]**<br>**TRS Denied Code Entry for Levels 4 – 6** | **[303]**<br>**TRS Denied Code Entry for Levels 5 – 6** | **[304]**<br>**TRS Denied Code Entry for Level 6** |
|---|---|---|---|---|---|
| Location No. | TRS Denied Code (7 digits max.) | | | | |
| Default | All: Not Stored | | | | |
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |

| | **[400]**<br>**ISDN Port Connection Assignment** | | **[401]**<br>**Intercept Extension — Day** | | **[402]**<br>**Intercept Extension — Night** | |
|---|---|---|---|---|---|---|
| ISDN Port No. | Connect | Not Connect | Disable | Extension No. | Disable | Extension No. |
| Default : all | ✓ | | ✓ | | ✓ | |
| All ISDN ports | | | | | | |
| ISDN Port 1 | | | | | | |
| 2 | | | | | | |

| | **[403]**<br>**Host PBX Access Codes** | **[405]**<br>**Direct Dialling In** | | **[406]**<br>**ISDN Configuration** | | | |
|---|---|---|---|---|---|---|---|
| | | | | Outside line (CO) | | Extension line | |
| ISDN Port No. | Access Code (1 or 2 digits) | Enable | Disable | P-MP | P-P | P-MP | P-P |
| Default : all | Not Stored | ✓ | | ✓ | | | |
| All ISDN ports | | | | | | | |
| ISDN Port 1 | | | | | | | |
| 2 | | | | | | | |

<Note> P-MP : Point-to-multi-point P-P : Point-to-point

# 3.14 Programming Tables

| | **[305]** **TRS Excepted Code Entry for Level 2** | **[306]** **TRS Excepted Code Entry for Levels 2 – 3** | **[307]** **TRS Excepted Code Entry for Levels 2 – 4** | **[308]** **TRS Excepted Code Entry for Levels 2 – 5** | **[309]** **TRS Excepted Code Entry for Levels 2 – 6** |
|---|---|---|---|---|---|
| Location No. | Excepted Code (7 digits max.) | | | | |
| Default | All: Not Stored | | | | |
| 01 | | | | | |
| 02 | | | | | |
| 03 | | | | | |
| 04 | | | | | |
| 05 | | | | | |
| 06 | | | | | |
| 07 | | | | | |
| 08 | | | | | |
| 09 | | | | | |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |

| **[404] CLIP/COLP Number Assignment** | | | | | |
|---|---|---|---|---|---|
| Default: all | Not Stored | | | | |
| | All CLIP/COLP no. (Business and Private) | | | All CLIP/COLP no. (Business and Private) | |
| | Port 1 | Port 2 | | Port 1 | Port 2 |
| Ext. 21 | | | Ext. 34 | | |
| 22 | | | 300 or 30 | | |
| 23 | | | 301 | | |
| 24 | | | 302 | | |
| 25 | | | 303 | | |
| 26 | | | 304 | | |
| 27 | | | 305 | | |
| 28 | | | 306 | | |
| 31 | | | 307 | | |
| 32 | | | 308 | | |
| 33 | | | | | |

# 3.14 Programming Tables

| [404] CLIP/COLP Number Assignment | | | | |
|---|---|---|---|---|
| Default : all | Not Stored | | | |
| | CLIP no. (Business) | | CLIP no. (Private) | |
| | Port 1 | Port 2 | Port 1 | Port 2 |
| Ext. 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |
| 28 | | | | |
| 31 | | | | |
| 32 | | | | |
| 33 | | | | |
| 34 | | | | |
| 300 or 30 | | | | |
| 301 | | | | |
| 302 | | | | |
| 303 | | | | |
| 304 | | | | |
| 305 | | | | |
| 306 | | | | |
| 307 | | | | |
| 308 | | | | |

| [407] Multiple Subscriber Number Set | | | |
|---|---|---|---|
| MSN Loc. No. | MSN No. (16 digits max.) | | |
| | Default : All – Not Stored | | |
| | All ISDN ports | ISDN Port 1 | ISDN Port 2 |
| 01 | | | |
| 02 | | | |
| 03 | | | |
| 04 | | | |
| 05 | | | |
| 06 | | | |
| 07 | | | |
| 08 | | | |
| 09 | | | |
| 10 | | | |

| [404] CLIP/COLP Number Assignment | | | | |
|---|---|---|---|---|
| Default : all | Not Stored | | | |
| | COLP no. (Business) | | COLP no. (Private) | |
| | Port 1 | Port 2 | Port 1 | Port 2 |
| Ext. 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |
| 28 | | | | |
| 31 | | | | |
| 32 | | | | |
| 33 | | | | |
| 34 | | | | |
| 300 or 30 | | | | |
| 301 | | | | |
| 302 | | | | |
| 303 | | | | |
| 304 | | | | |
| 305 | | | | |
| 306 | | | | |
| 307 | | | | |
| 308 | | | | |

| | | [408] Extension Ringing Assignment – Day for ISDN | | | | | | | | | | | | | | | [409] Extension Ringing Assignment – Night for ISDN | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MSN Loc. No. | Extension No. | All ISDN ports | | | | | ISDN port 1 | | | | | ISDN port 2 | | | | | All ISDN ports | | | | | ISDN port 1 | | | | | ISDN port 2 | | | | |
| | | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 |
| Default: all | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | |
| 01 | All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

<Note> 0 : Immediate, 1 : 1 ring delay, 3 : 3 ring delay, 6 : 6 ring delay, 9 : disable

| MSN Loc. No. | Extension No. | [408] Extension Ringing Assignment – Day for ISDN | | | | | | | | | | | | | | | [409] Extension Ringing Assignment – Night for ISDN | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | All ISDN ports | | | | | ISDN port 1 | | | | | ISDN port 2 | | | | | All ISDN ports | | | | | ISDN port 1 | | | | | ISDN port 2 | | | | |
| | | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 |
| Default: all | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | |
| 02 | All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 03 | All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 04 | All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

<Note> 0 : Immediate, 1 : 1 ring delay, 3 : 3 ring delay, 6 : 6 ring delay, 9 : disable

| | | **[408] Extension Ringing Assignment – Day for ISDN** | | | | | | | | | | | | | | | **[409] Extension Ringing Assignment – Night for ISDN** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MSN Loc. No. | Extension No. | All ISDN ports | | | | | ISDN port 1 | | | | | ISDN port 2 | | | | | All ISDN ports | | | | | ISDN port 1 | | | | | ISDN port 2 | | | | |
| | | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 |
| Default: all | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | |
| 05 | All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 06 | All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 07 | All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

<Note> 0 : Immediate, 1 : 1 ring delay, 3 : 3 ring delay, 6 : 6 ring delay, 9 : disable

| | | [408] Extension Ringing Assignment – Day for ISDN | | | | | | | | | | | | | | | [409] Extension Ringing Assignment – Night for ISDN | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MSN Loc. No. | Extension No. | All ISDN ports | | | | | ISDN port 1 | | | | | ISDN port 2 | | | | | All ISDN ports | | | | | ISDN port 1 | | | | | ISDN port 2 | | | | |
| | | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 |
| Default: all | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | |
| 08 | All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 09 | All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

<Note> 0 : Immediate, 1 : 1 ring delay, 3 : 3 ring delay, 6 : 6 ring delay, 9 : disable

# 3.14 Programming Tables

| | **[410] ISDN Extension Ringing Assignment – Day for ISDN** | | | **[411] ISDN Extension Ringing Assignment – Night for ISDN** | | |
|---|---|---|---|---|---|---|
| MSN Loc. No. | ISDN Extension No. (300, 301···308) | | | | | |
| | Default : All – Not Stored | | | | | |
| | All ISDN ports | ISDN Port 1 | ISDN Port 2 | All ISDN ports | ISDN Port 1 | ISDN Port 2 |
| 01 | | | | | | |
| 02 | | | | | | |
| 03 | | | | | | |
| 04 | | | | | | |
| 05 | | | | | | |
| 06 | | | | | | |
| 07 | | | | | | |
| 08 | | | | | | |
| 09 | | | | | | |
| 10 | | | | | | |

# 3.14 Programming Tables

| [412] ISDN DDI Number/Extension Number Transformation | | |
|---|---|---|
| Default : all | Not Stored | |
| | DDI no. (Port 1) | DDI no. (Port 2) |
| Ext. 21 | | |
| 22 | | |
| 23 | | |
| 24 | | |
| 25 | | |
| 26 | | |
| 27 | | |
| 28 | | |
| 31 | | |
| 32 | | |
| 33 | | |
| 34 | | |
| 291 | | |
| 292 | | |
| 293 | | |
| 294 | | |
| 295 | | |
| 296 | | |
| 297 | | |
| 298 | | |
| 300 or 30 | | |
| 301 | | |
| 302 | | |
| 303 | | |
| 304 | | |
| 305 | | |
| 306 | | |
| 307 | | |
| 308 | | |

# 3.14 Programming Tables

| | Selection | Default | COS No. | | | | |
|---|---|---|---|---|---|---|---|
| | | All | All COS | COS 1 | COS 2 | COS 3 | COS 4 |
| **[500] Toll Restriction Level – Day** | Level 1 | ✓ | | | | | |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| **[501] Toll Restriction Level – Night** | Level 1 | ✓ | | | | | |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| **[503] Call Forwarding to Outside Line (CO)** | Enable | ✓ | | | | | |
| | Disable | | | | | | |
| **[504] Do Not Disturb Override** | Enable | | | | | | |
| | Disable | ✓ | | | | | |
| **[505] Account Code Entry Mode** | Option | ✓ | | | | | |
| | Verify-All | | | | | | |
| | Verify-Toll | | | | | | |
| **[506] Toll Restriction Level for System Speed Dialling – Day** | Level 1 | ✓ | | | | | |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| **[507] Toll Restriction Level for System Speed Dialling – Night** | Level 1 | ✓ | | | | | |
| | 2 | | | | | | |
| | 3 | | | | | | |
| | 4 | | | | | | |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| **[508] Door Opener Access** | Enable | ✓ | | | | | |
| | Disable | | | | | | |
| **[509] Night Service Access** | Enable | ✓ | | | | | |
| | Disable | | | | | | |

| | Selection | Default | COS No. | | | | |
|---|---|---|---|---|---|---|---|
| | | All | All COS | COS 1 | COS 2 | COS 3 | COS 4 |
| **[510] Do Not Disturb for Direct Dialling In Call** | Enable | | | | | | |
| | Disable | ✓ | | | | | |
| **[511] Call Forwarding – Follow Me** | Enable | ✓ | | | | | |
| | Disable | | | | | | |
| **[512] Calling Line Identification Restriction (CLIR)** | Enable | | | | | | |
| | Disable | ✓ | | | | | |
| **[513] Connected Line Identification Restriction (COLR)** | Enable | | | | | | |
| | Disable | ✓ | | | | | |
| **[514] Executive Busy Override** | Enable | | | | | | |
| | Disable | ✓ | | | | | |
| **[515] Executive Busy Override Deny** | Enable | ✓ | | | | | |
| | Disable | | | | | | |
| **[517] Call Forwarding by ISDN Service** | Enable | | | | | | |
| | Disable | ✓ | | | | | |

| | **[600] Extra Device Port** | | **[601] Class of service** | | | | | | | | **[602] Extension Group Assignment** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Extension No. | Enable | Disable | Primary COS No. (1···4) | | | | Secondary COS No. (1···4) | | | | Extension Group No. (1···8) | | | | | | | |
| | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Default : all | | ✓ | ✓ | | | | ✓ | | | | ✓ | | | | | | | |
| All extensions | | | | | | | | | | | | | | | | | | |
| Ext. 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | | | | | |
| ISDN extensions | | | | | | | | | | | | | | | | | | |

## 3.14 Programming Tables

| | **[603] DIL 1:N Extension and Delayed Ringing – Day** | | | | | | | | | | | | | | | **[604] DIL 1:N Extension and Delayed Ringing – Night** | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Extension No. | All ISDN ports | | | | | ISDN port 1 | | | | | ISDN port 2 | | | | | All ISDN ports | | | | | ISDN port 1 | | | | | ISDN port 2 | | | | |
| | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 | 0 | 1 | 3 | 6 | 9 |
| Default: all | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | | ✓ | | | | |
| All exts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ext. 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

<Note> 0 : Immediate, 1 : 1 ring delay, 3 : 3 rings delay, 6 : 6 rings delay, 9 : Disable

| | **[605] Outgoing Permitted ISDN Port Assignment – Day** | | | | **[606] Outgoing Permitted ISDN Port Assignment – Night** | | | | **[607] Doorphone Ringing Assignment – Day** | | **[608] Doorphone Ringing Assignment – Night** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Extension No. | ISDN port 1 | | ISDN port 2 | | ISDN port 1 | | ISDN port 2 | | Enable | Disable | Enable | Disable |
| | Enable | Disable | Enable | Disable | Enable | Disable | Enable | Disable | | | | |
| Default: all | ✓ | | ✓ | | ✓ | | ✓ | | Ext. 21 – Enable,<br>Other extensions– Disable | | | |
| All extensions | | | | | | | | | | | | |
| Ext. 21 | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | |
| ISDN extensions | | | | | | | | | | | | |

## 3.14 Programming Tables

| | **[609] Extension Connection Assignment** | | **[610] IRNA Assignment** | | **[611] TAM Connection Assignment** | | **[612] Date Line Security** | | **[613] Department Codes** |
|---|---|---|---|---|---|---|---|---|---|
| Extension No. | Connect | Not Connect | Enable | Disable | Enable | Disable | Enable | Disable | Department code (5 digits max.) |
| Default: all | ✓ | | ✓ | | | ✓ | | ✓ | Not Stored |
| All extensions | | | | | | | | | |
| Ext. 21 | ✓ | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |
| 25 | | | | | | | | | |
| 26 | | | | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| ISDN extensions | | | | | | | | | |

# 3.14 Programming Tables

| | **[701]**<br>**ARS Carrier Code** | **[703]**<br>**ARS Authorization Code** | | |
|---|---|---|---|---|
| | Carrier code (10 digits max.) | Authorization code (20 digits max., 0···9,＊ ) | | |
| | | All ISDN ports | ISDN port 1 | ISDN port 2 |
| Default: all | Not Stored | Not Stored | | |
| Route 1 | | | | |
| Route 2 | | | | |
| Route 3 | | | | |
| Route 4 | | | | |

| **[704] ARS Itemized Bill code** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ISDN Port No. | Route 1 | | Route 2 | | Route 3 | | Route 4 | |
| | Send | Not send | Send | Not send | Send | Not send | Send | Not send |
| Default: all | All routes – All ISDN ports – Not send | | | | | | | |
| All ports | | | | | | | | |
| ISDN Port1 | | | | | | | | |
| ISDN Port2 | | | | | | | | |

| | **[708]**<br>**ARS Modify Removed Digit** | **[709]**<br>**ARS Modify Added Number** |
|---|---|---|
| | Number of digits to be deleted (0···9) | Number to be added (0···9, 20 digits maximum) |
| Default: all | 0 digit (no deletion) | Not Stored |
| Route 1 | | |
| Route 2 | | |
| Route 3 | | |
| Route 4 | | |

| **[702] ARS Route Selection Code** | | | | |
|---|---|---|---|---|
| Area No. | Area Code (7 digits max.) | | | |
| | Default : All – Not Stored | | | |
| | Route 1 | Route 2 | Route 3 | Route 4 |
| 00 | | | | |
| 01 | | | | |
| 02 | | | | |
| 03 | | | | |
| 04 | | | | |
| 05 | | | | |
| 06 | | | | |
| 07 | | | | |
| 08 | | | | |
| 09 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |
| 28 | | | | |
| 29 | | | | |
| 30 | | | | |
| 31 | | | | |
| 32 | | | | |
| 33 | | | | |
| 34 | | | | |
| 35 | | | | |
| 36 | | | | |
| 37 | | | | |
| 38 | | | | |
| 39 | | | | |

| [702] ARS Route Selection Code | | | | |
|---|---|---|---|---|
| Area No. | Area Code (7 digits max.) | | | |
| | Default : All – Not Stored | | | |
| | Route 1 | Route 2 | Route 3 | Route 4 |
| 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 | | | | |
| 65 | | | | |
| 66 | | | | |
| 67 | | | | |
| 68 | | | | |
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# 3.14 Programming Tables

| [706] ARS Route Exceptional Code | | | | |
|---|---|---|---|---|
| Area No. | Excepted Code (7 digits max.) | | | |
| | Default : All – Not Stored | | | |
| | Route 1 | Route 2 | Route 3 | Route 4 |
| 00 | | | | |
| 01 | | | | |
| 02 | | | | |
| 03 | | | | |
| 04 | | | | |
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| 38 | | | | |
| 39 | | | | |

| [706] ARS Route Exceptional Code | | | | |
|---|---|---|---|---|
| Area No. | Excepted Code (7 digits max.) | | | |
| | Default : All – Not Stored | | | |
| | Route 1 | Route 2 | Route 3 | Route 4 |
| 40 | | | | |
| 41 | | | | |
| 42 | | | | |
| 43 | | | | |
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# *Section 4*

# *Installation*

# 4.1 Before Installation

Please read the following concerning installation and connection before installing the system.

## 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.

## Installation Precautions

This set is exclusively made for wall mounting only. Avoid installing in the following places. (Doing so may result in malfunction, noise, or discolouration.)

1. In direct sunlight and hot, cold, or humid places. (Temperature range: 0°C – 40°C)
2. Sulfuric gases produced in areas where there are thermal springs, etc. may damage the equipment or contacts.
3. Places where 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 equipment, as well as microwave ovens or air conditioners. (It is preferable not to install the unit in the same room with the above equipment.)
7. Install at least 1.8 m away from radios and televisions. (Both the main unit and proprietary telephones)
8. Do not obstruct area around the main unit (for maintenance and inspection — be especially careful to allow space for cooling above and on the sides of the main unit).

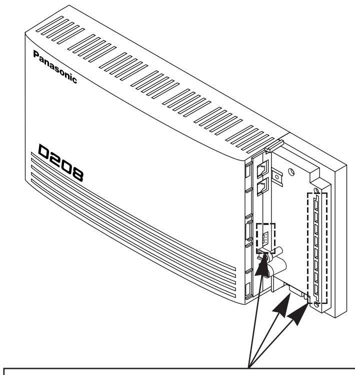
## Wiring Precautions

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 using the same power supply outlet for computers, telexes, and other office equipment. Otherwise, system operation may be interrupted by the induction noise from such equipment.
4. Please use one pair telephone wire for extension connection of (telephone) equipment such as single line telephones, data terminals, answering machines, computers, etc.

5. Unplug the system during wiring. After all of the wiring is completed, plug in the system.
6. Mis-connection may cause the system to operate improperly.
   Refer to Section 4.7 “ISDN Line Connection Structure”.
7. Mis-wiring may cause the system to operate improperly.
   Refer to Section 5.6.1 “Installation and Operation” and Section 5.6.2 “Connection”.
8. If an extension does not operate properly, disconnect the telephone from the extension line and connect it again, or unplug the system and plug in the system again.
9. The system is equipped with a 3-wire grounding type plug. This is a safety feature.
   If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet.
10. Use an ISDN line cord (cross type) for outside line (CO) connection.
11. CO lines should be installed with lightning protectors. For details, refer to Section 5.16 “Installing the Lightning Protector”.

**Warning:**
Static sensitive devices are used.
To protect printed circuit boards from static electricity, do not touch the connector indicated to the right without first discharging body static by touching a ground or wearing a properly installed grounding strap.



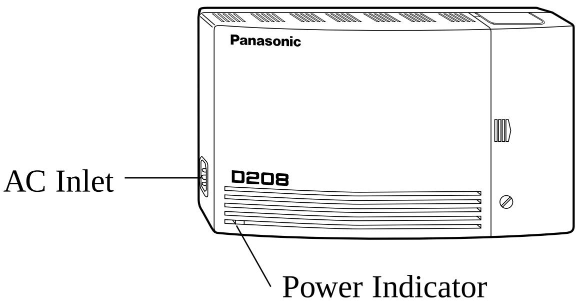
Warning : Static sensitive connector

## 4.2 Unpacking

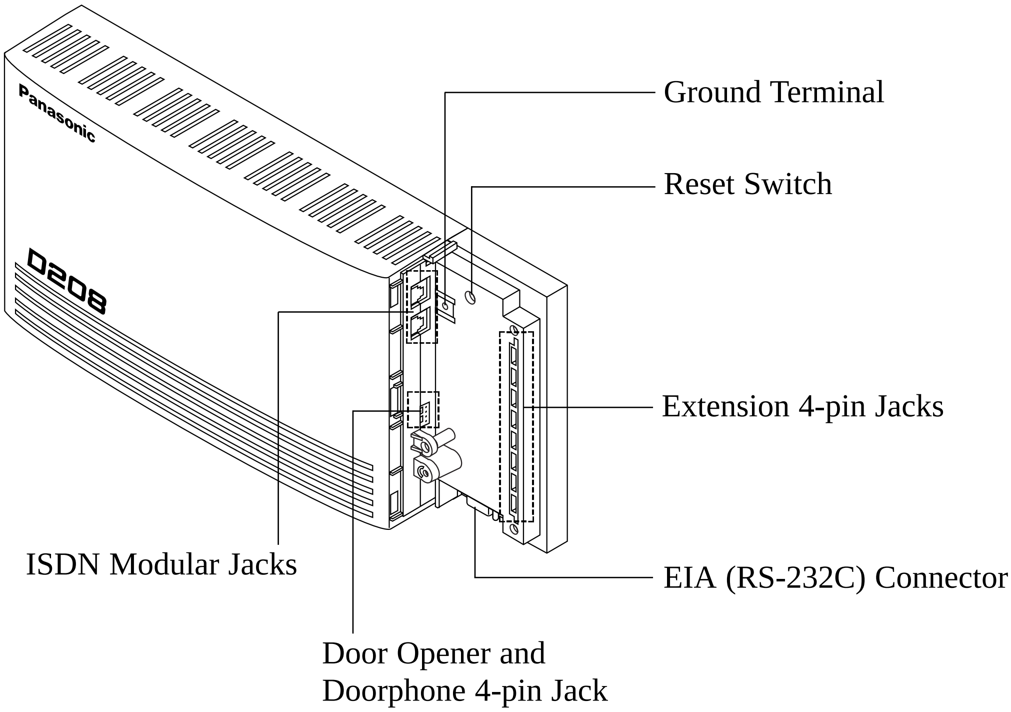
| | |
|---|---|
| Main Unit | one |
| AC Cord | one |
| ISDN Line Cord | one |
| Screws and Washers | three |
| 4-pin Plugs | eleven |
| Floppy Disk for PC Programming | one |

## 4.3 Names and Locations

### Overview of the Main Unit

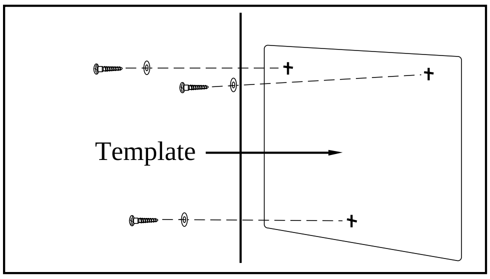

Panasonic
D208
AC Inlet
Power Indicator

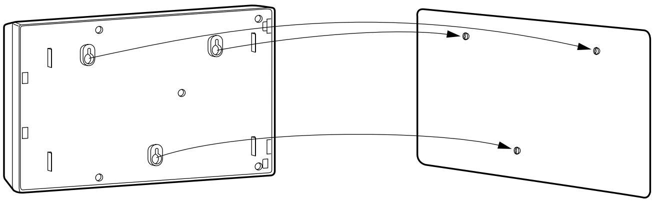
### Inside View of the Main Unit


Panasonic
D208
Ground Terminal
Reset Switch
Extension 4-pin Jacks
ISDN Modular Jacks
EIA (RS-232C) Connector
Door Opener and
Doorphone 4-pin Jack

# 4.4 Wall Mounting

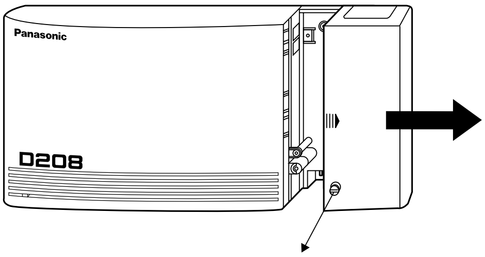
1. Place the template (on page 5-16) on the wall to mark the three screw positions.
2. Install the three screws and washers (included) into the wall.
3. Hook the main unit on the screw heads.





# 4.5 Opening the Front Cover

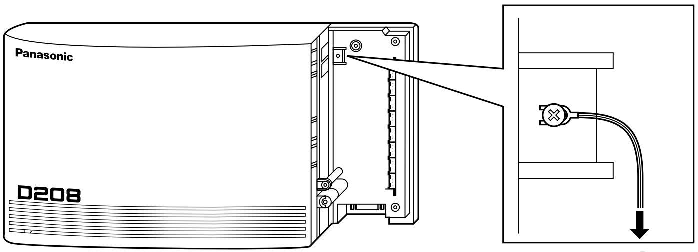
1. Loosen the screw.
2. Slide the cover in the direction of the arrow while pressing the arrow mark (⫼).



screw

# 4.6 Connecting the Frame Earth

**IMPORTANT!!!**
Connect the frame of the main unit to the earth.



To earth

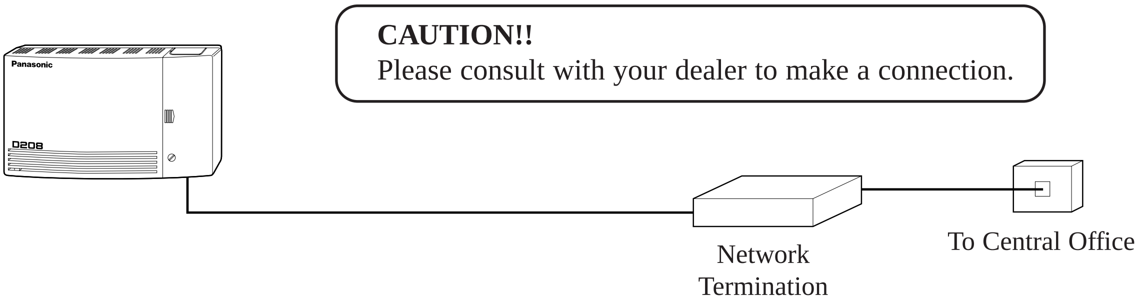
# 4.7 ISDN Line Connection Structure

The possible connection structures of ISDN lines for outside line (CO) use, depending on the contract, are shown below.

Because the Termination Register (TR) must be placed at the end of the connection, we recommend the B-2 connection. If the A and B-1 connections are necessary, you need to consult with your dealer.

## *A: When your contract is Point-to-Point*

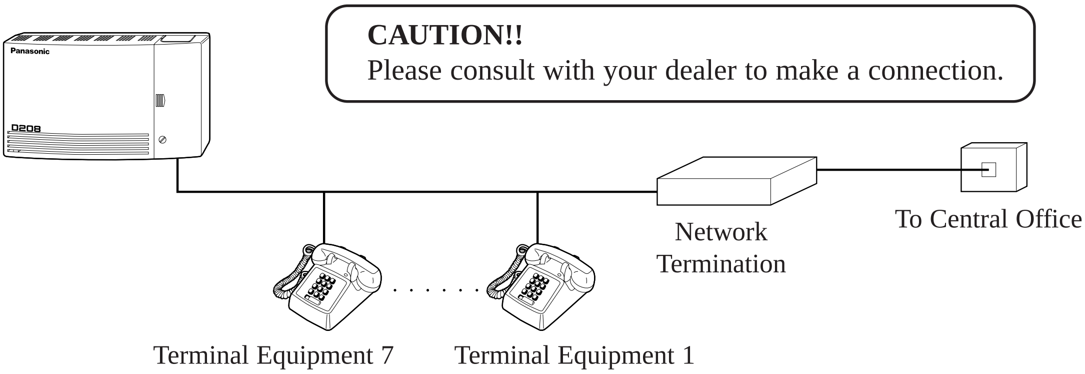
**CAUTION!!**
Please consult with your dealer to make a connection.


Panasonic
D208
Network Termination
To Central Office

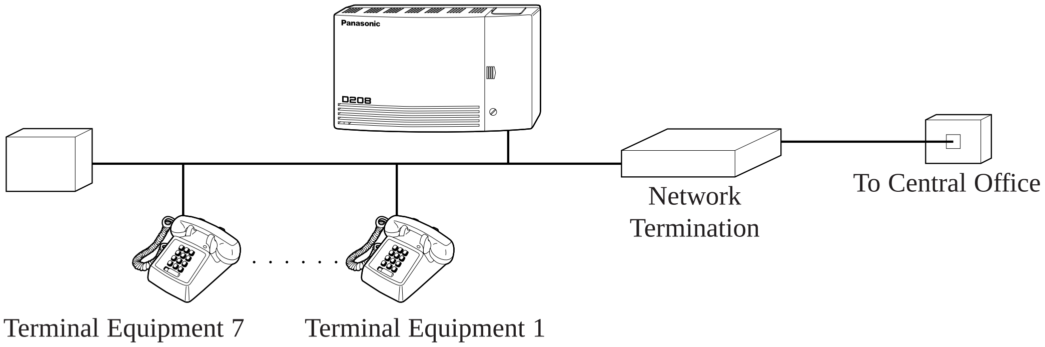
## *B: When your contract is Point-to-Multi-Point*

### ***B-1:*** *Your system is at the end of the connection*

**CAUTION!!**
Please consult with your dealer to make a connection.


Panasonic
D208
Network Termination
To Central Office
Terminal Equipment 7
Terminal Equipment 1

### ***B-2:*** *Your system is not at the end of the connection*


Panasonic
D208
Network Termination
To Central Office
Terminal Equipment 7
Terminal Equipment 1

# 4.8 Outside Line (CO) Connection

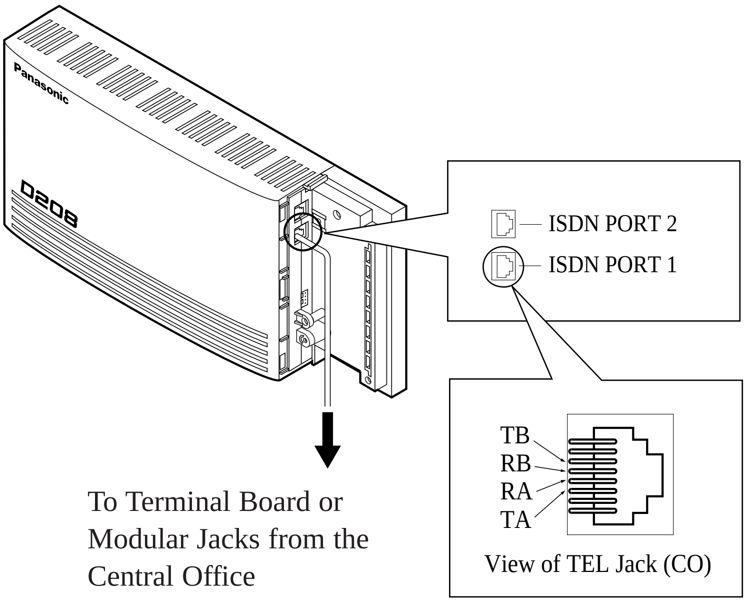
## Wire Specifications

When making a line connection, use an ISDN line cord (cross type) (included) for installation. The wire specifications are as follows:

| | |
|---|---|
| **Wire** | Solid wire |
| **Diameter of conductor** | 0.4 – 0.65 mm |
| **Diameter with coating** | 0.66 – 1.05 mm |

## Connection

Two CO lines can be connected to ISDN port 1.
Insert the modular plug of the ISDN line cord (8-conductor wiring) into ISDN port 1 on the system.



To Terminal Board or Modular Jacks from the Central Office

- Mis-connection may cause the system to operate improperly.
  See Section 5.6.1 “Installation and Operation” and 5.6.2 “Connection”.

# 4.9 Extension Connection

## Wire Specifications

The wire specifications are as follows:

| | |
|---|---|
| **Wire** | Solid wire |
| **Diameter of conductor** | 0.4 – 0.6 mm |

## Connection Cable

2 or 4-conductor wiring is required for each extension as listed below. Required pins are “T,” “R,” “L” and “H.”

| | |
|---|---|
| T: Tip | L: Low |
| R: Ring | H: High |

| Telephone | Wiring |
|---|---|
| Single line telephones | 1 pair wire (T, R) |
| KX-T7230, KX-T7235, KX-T7250<br>KX-T7425, KX-T7433, KX-T7436 | 1 pair wire (L, H) or<br>2 pair wire (L, H, T, R) for XDP |

## Connection

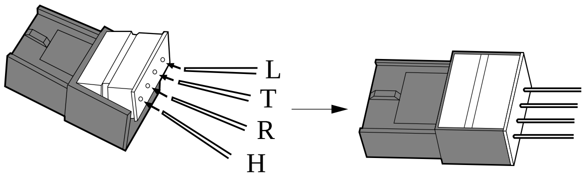
Use a 4-pin plug (eight included) to connect extension lines.

EXTN. 1 through EXTN. 4 jacks can be used for all telephones, while EXTN. 5 through EXTN. 8 jacks can only be used for Single Line Telephones (SLTs).
To connect proprietary telephones, a 4 Extension Expansion Card (KX-TD20870) is required to be installed beforehand.

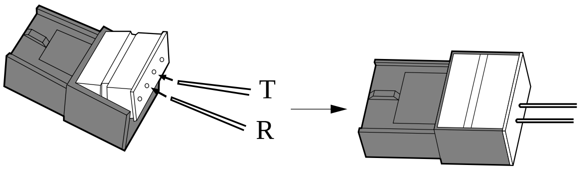
EXTN. 1 through EXTN. 8 jacks correspond to extension numbers 21 through 28 respectively.

1. Lift the transparent part of the plug.
2. Insert the required telephone wires into the holes of the plug.
   Then press the transparent part back into the black part.
   **Note:** Do not strip the wires. Insert the wires all the way into the plug.

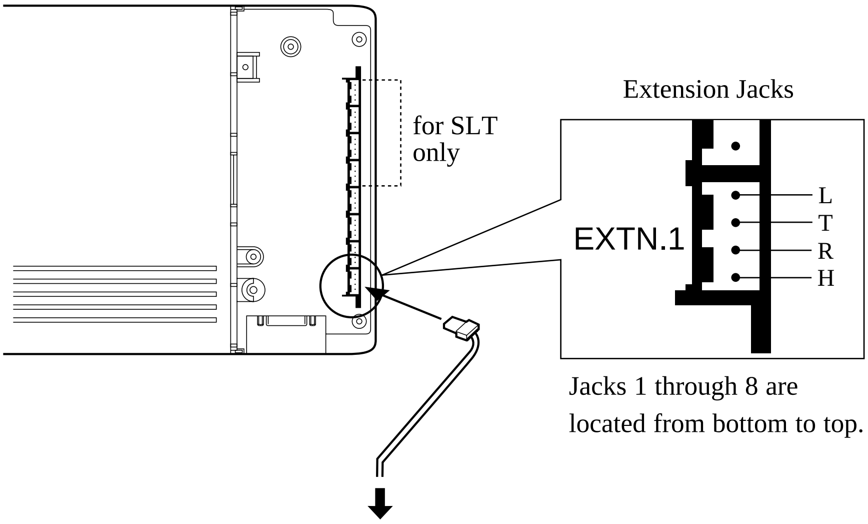
4-pin plug for 2 pair wire



4-pin plug for 1 pair wire

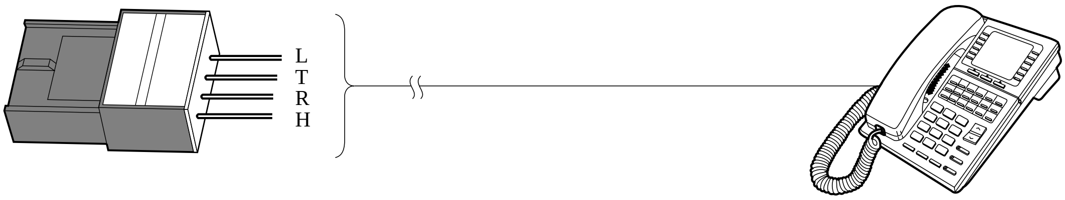


3. Insert the plug into an extension jack in the main unit.


Extension Jacks
for SLT only
EXTN.1
L
T
R
H
To extensions

Jacks 1 through 8 are located from bottom to top.

4. Connect the extensions.

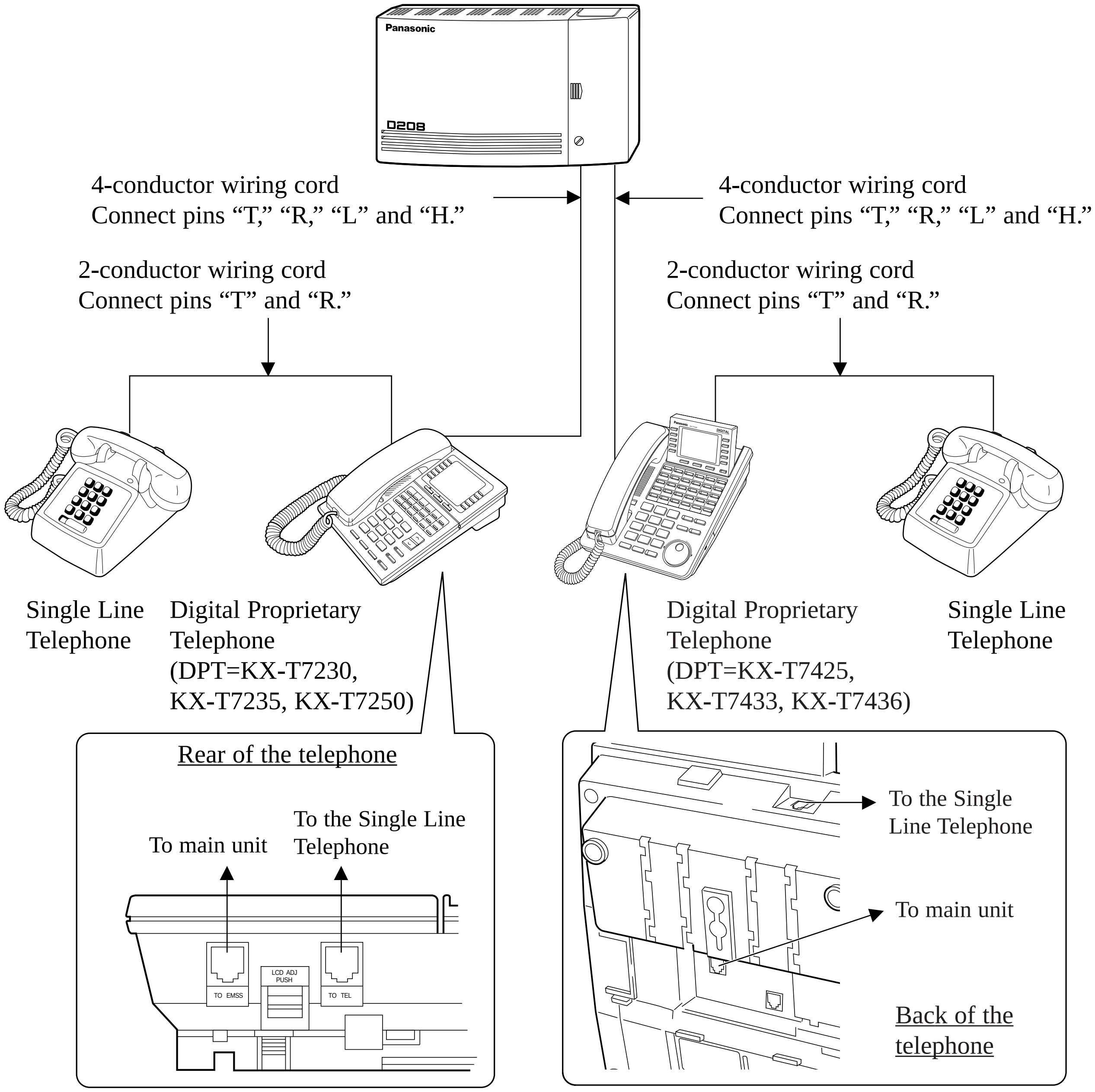


- To connect proprietary telephones, a 4 Extension Expansion Card (KX-TD20870) is required to be installed.
- The maximum length of the extension line cord (twisted cable) that connects the main unit and the extension is as follows:

| | **Diameter of the line** | **Maximum length** |
|---|---|---|
| **SLT** | 0.5 mm | 620 m |
| **PT** | 0.5 mm | 240 m |

# 4.10 Connecting the Telephones in Parallel

A single line telephone can be connected in parallel, using one extension number, with any proprietary telephone.



4-conductor wiring cord
Connect pins “T,” “R,” “L” and “H.”

4-conductor wiring cord
Connect pins “T,” “R,” “L” and “H.”

2-conductor wiring cord
Connect pins “T” and “R.”

2-conductor wiring cord
Connect pins “T” and “R.”

Single Line Telephone

Digital Proprietary Telephone (DPT=KX-T7230, KX-T7235, KX-T7250)

Digital Proprietary Telephone (DPT=KX-T7425, KX-T7433, KX-T7436)

Single Line Telephone

Rear of the telephone

To main unit

To the Single Line Telephone

To the Single Line Telephone

To main unit

Back of the telephone

!

- Not only a single line telephone but a single line device such as an answering machine, facsimile, modem, (personal computer) etc. can be connected in parallel with a digital proprietary telephone.

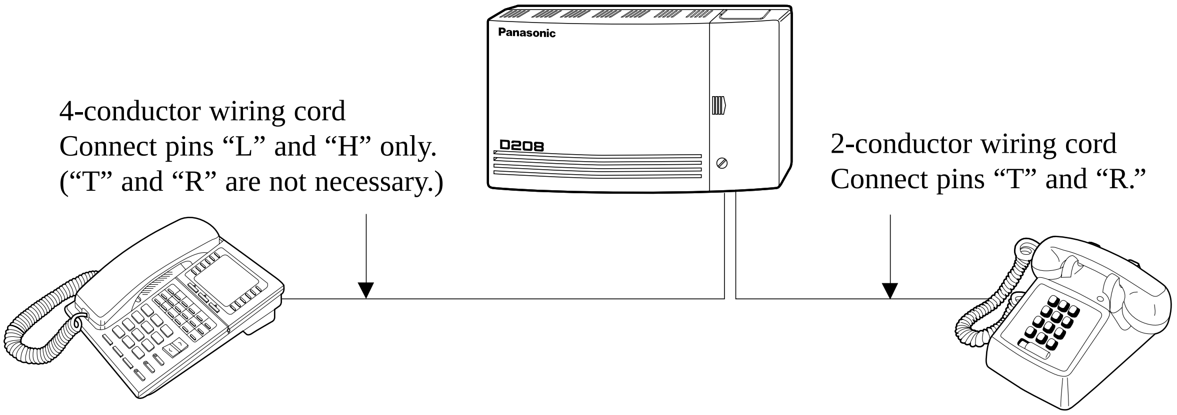
☞

- Others (Section 2.6)
  Setting the Parallelled SLT to Ring (Parallelled Telephone Connection)

# 4.11 Connecting the Telephones in EXtra Device Port (XDP)

With the EXtra Device Port (XDP) connection, a single line telephone and a digital proprietary telephone can be connected to the same extension jack and have different extension numbers. System programming is required.

## Method 1



4-conductor wiring cord
Connect pins “L” and “H” only.
(“T” and “R” are not necessary.)

2-conductor wiring cord
Connect pins “T” and “R.”

Digital Proprietary Telephone
(DPT=KX-T7230, KX-T7235, KX-T7250,
KX-T7425, KX-T7433, KX-T7436)

Single Line Telephone

## Method 2

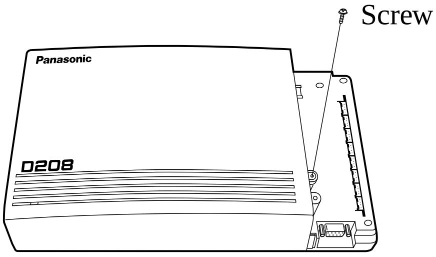
Section 4.10 “Connecting the Telephones in Parallel” is also available for XDP connection.

- System Management (Section 3.1)
  EXtra Device Port (XDP)
- Extension Programming (Section 3.9)
  [600] EXtra Device Port

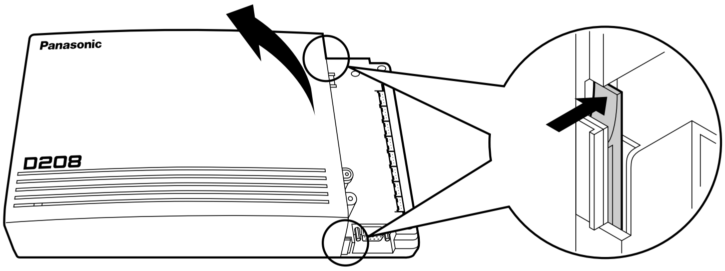
# 4.12 Installing the Optional Cards

1. Disconnect the AC cord from the system.

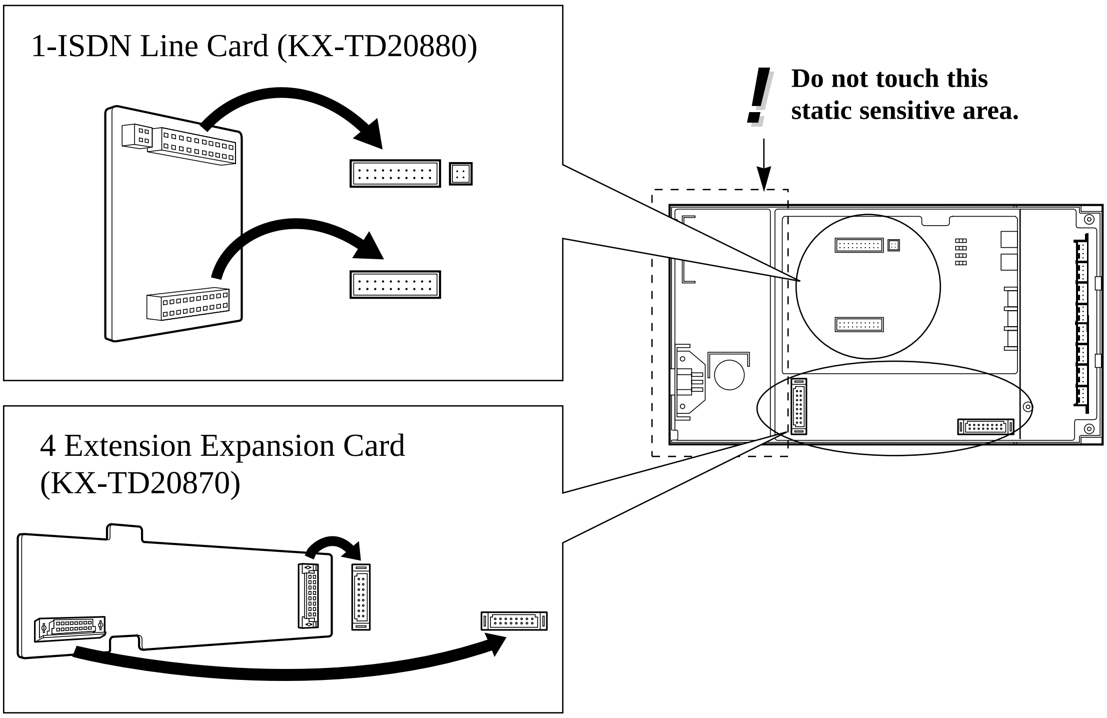
2. Loosen the screw.


Screw
Panasonic
D208

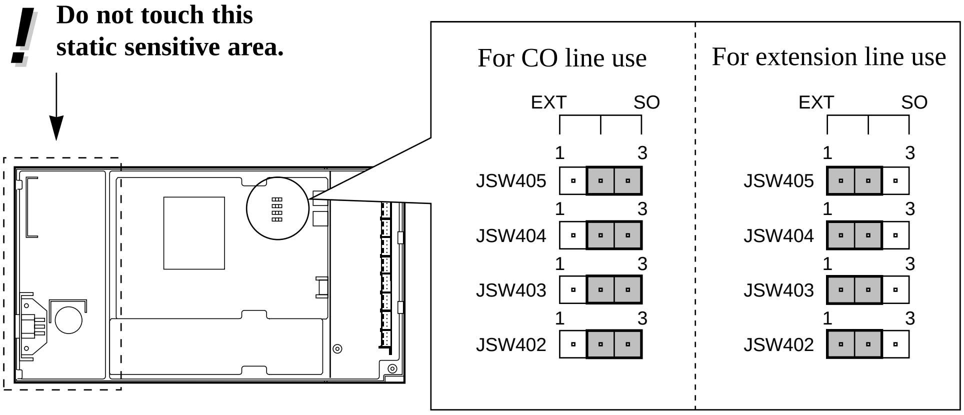
3. Remove the cover by pressing both tabs and lifting up.


Panasonic
D208

4. Attach the ISDN Line Card to the marked connector.


1-ISDN Line Card (KX-TD20880)
Do not touch this static sensitive area.
4 Extension Expansion Card (KX-TD20870)

5. If 1-ISDN Line Card is installed, adjust the extension/outside line (CO) switch socket depending on how the card, outside line (CO) or extension line (default: outside line (CO)), is used.
   If installing a 4 Extension Expansion Card, skip this step.



**Do not touch this static sensitive area.**

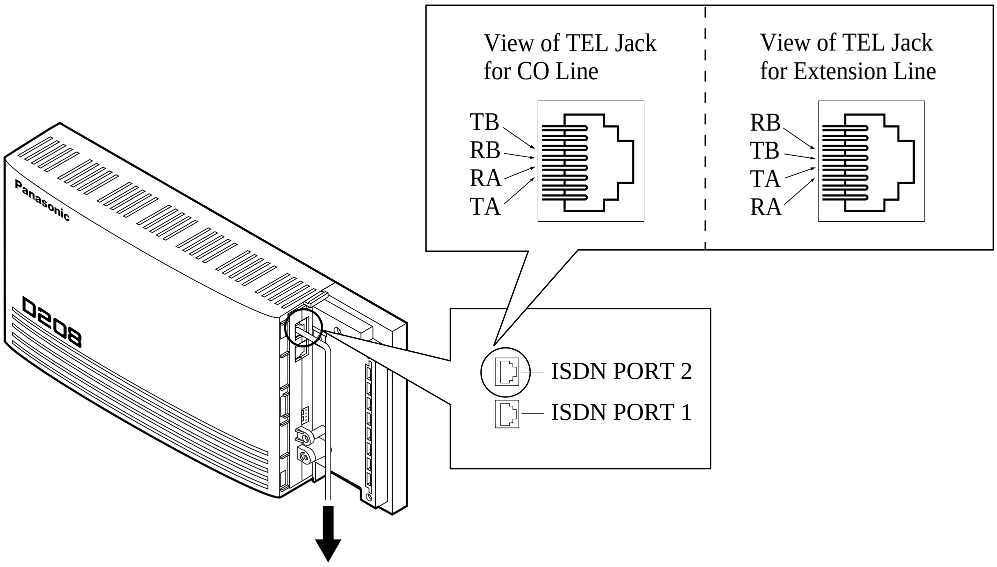
For CO line use
EXT
SO
1
3
JSW405
JSW404
JSW403
JSW402
For extension line use
EXT
SO
1
3
JSW405
JSW404
JSW403
JSW402

6. Replace the cover and secure the screw.

7. Connect the AC cord again.

# 4.13 Expanding the ISDN Line Connection

After installing the ISDN Line Card (KX-TD20880), two CO lines or eight ISDN extension lines can be connected on ISDN port 2.
When making a line connection, use an ISDN line cord (cross type) (included) for installation. Insert the modular plug of the ISDN line cord (8-conductor wiring) into ISDN port 2 on the system.


View of TEL Jack for CO Line
TB
RB
RA
TA
View of TEL Jack for Extension Line
RB
TB
TA
RA
Panasonic
D208
ISDN PORT 2
ISDN PORT 1

To Terminal Board or Modular Jacks from the Central Office, or ISDN extensions.

!

- System Programming is required depending on the port type.

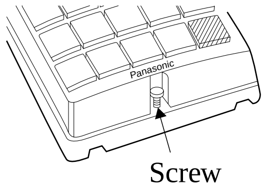
  **Outside line (CO):**
  - Select “Connect” for ISDN port 2 in program [400] “ISDN Port Connection Assignment” (default: Not connect).
  - Select the configuration for ISDN port 2 in program [406] “ISDN Configuration” (default: Outside line (CO) / Point-to-multi-point).

  **Extension line:**
  - Select the configuration for ISDN port 2 in program [406] “ISDN Configuration” (default: Outside line (CO) / Point-to-multi-point).
- Refer to Section 4.8 “Outside Line (CO) Connection” for the wire specifications.
- Mis-connection may cause the system to operate improperly. See Section 5.6.1 “Installation and Operation” and 5.6.2 “Connection.”
- The pin number assignment changes depending on how the extension/outside line (CO) switch socket is adjusted. (Refer to page 5-13.)

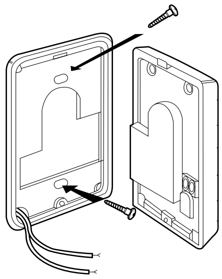
# 4.14 Connecting the Doorphone and Door Opener

One doorphone (KX-T30865) and/or user-supplied door opener can be connected to the system. For doorphone connection, prepare for the doorphone beforehand.

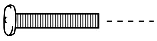
## *Installing the Doorphone*



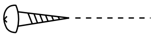
1. Loosen the screw to separate the doorphone into halves.



2. Attach the base cover to the wall with two screws.
   **Note:** Two kinds of screws are included; choose the appropriate one depending on your wall type:

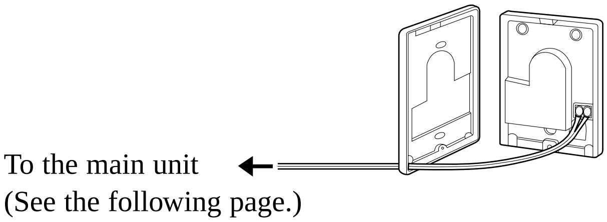


Type 1: When a doorphone plate has been fixed to the wall.



Type 2: When you wish to install the doorphone directly to the wall.

3. Connect the wires from the main unit to the screws located in the front cover.

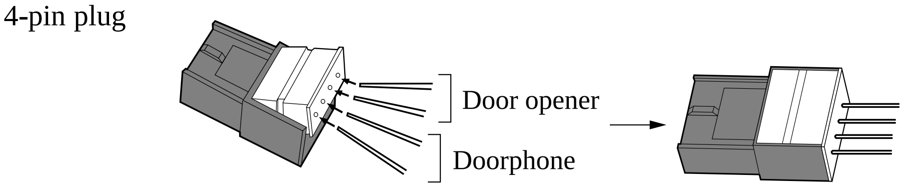


4. Re-attach the halves and re-install the screw.

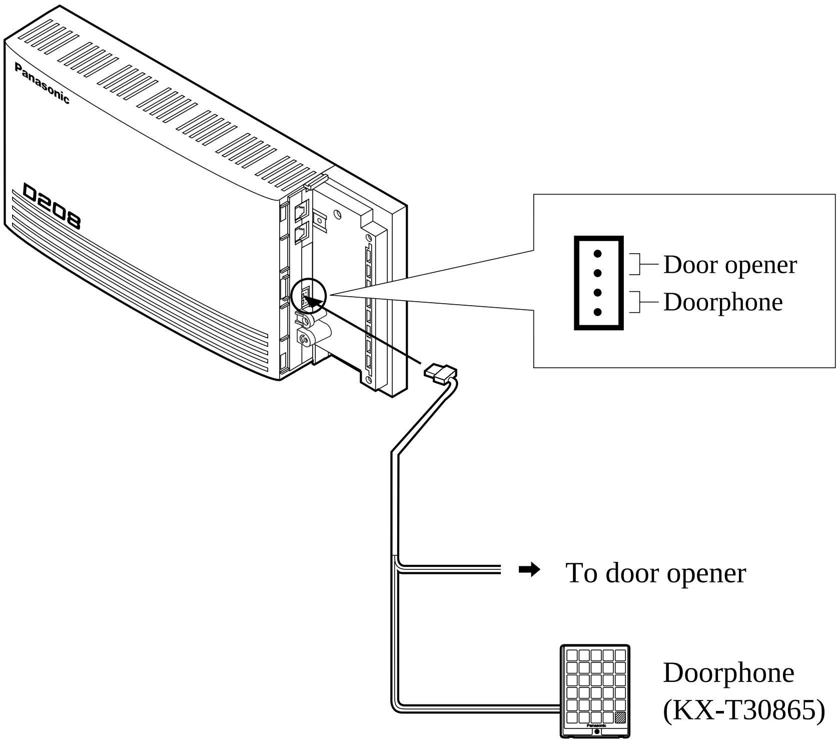
## *Connection*

Use a 4-pin plug (included) for connection.

1. Lift the transparent part of the plug.
2. Insert the required wires into the holes of the plug.
   Then press the transparent part back into the black part.
   **Note:** Do not strip the wires. Insert the wires all the way into the plug.



3. Insert the plug into the desired jack in the main unit.


Panasonic
D208
Door opener
Doorphone
To door opener
Doorphone
(KX-T30865)

!

- The maximum length of the doorphone and door opener line that connects to the main unit is as follows:

| **Diameter of the line** | **Maximum length** |
|---|---|
| 0.5 mm | 120 m |

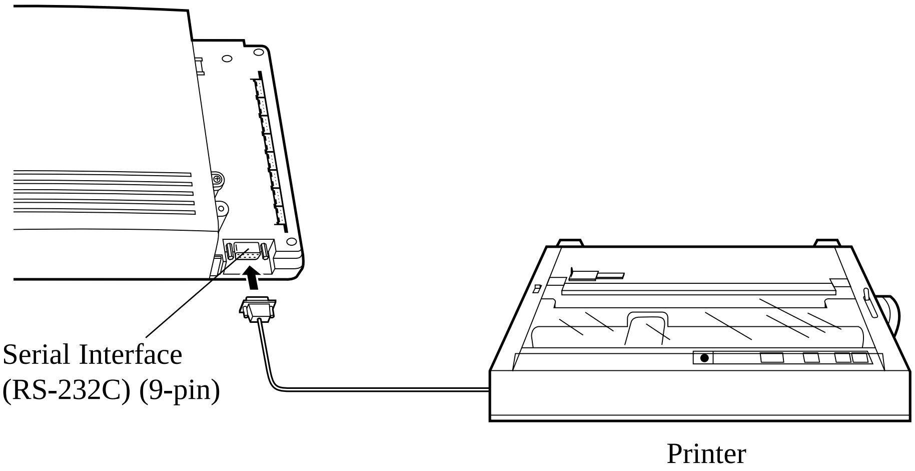
☞

- Others (Section 2.6)
  - Unlocking a Door (Door Opener)
  - Doorphone Call
- System Programming (Section 3.4)
  - [105] Automatic Door Open Assignment
- Extension Programming (Section 3.9)
  - [607]–[608] Doorphone Ringing Assignment — Day/Night

# 4.15 Connecting the Printer and PC

A user-supplied printer or personal computer (PC) can be connected to the Serial Interface (RS-232C) Connector (9-pin) on the main unit. The printer is used to print out SMDR call records and system programming data. The PC is used for system programming.

Connect the Serial Interface (RS-232C) connector of the printer or the PC to the Serial Interface Connector. Cables must be shielded and the maximum length is 2 m.



Arrange the cables so that the printer or the PC will be connected to the system as shown in the chart on the following page.

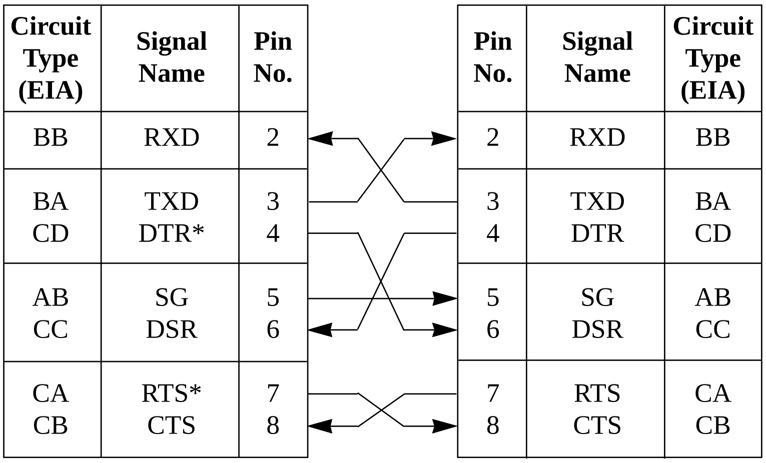
The pin configuration of the EIA (RS-232C) Connector is as follows:

| Pin No. | Signal Name | | Circuit Type | |
|---|---|---|---|---|
| | | | EIA | CCITT |
| 2 | RXD | Received Data | BB | 104 |
| 3<br>4 | TXD<br>DTR | Transmitted Data<br>Data Terminal Ready | BA<br>CD | 103<br>108.2 |
| 5<br>6 | SG<br>DSR | Signal Ground<br>Data Set Ready | AB<br>CC | 102<br>107 |
| 7<br>8 | RTS<br>CTS | Request To Send<br>Clear To Send | CA<br>CB | 105<br>106 |

# 4.15 Connecting the Printer and PC

## Connection Chart for Printer / IBM Personal Computer (9-pin)

If you connect a printer or an IBM-PC with a 9-pin EIA (RS-232C) connector to your system, see the chart below.



**EIA (RS-232C) port on the main unit (9-pin)**

| Circuit Type (EIA) | Signal Name | Pin No. |
|---|---|---|
| BB | RXD | 2 |
| BA<br>CD | TXD<br>DTR* | 3<br>4 |
| AB<br>CC | SG<br>DSR | 5<br>6 |
| CA<br>CB | RTS*<br>CTS | 7<br>8 |

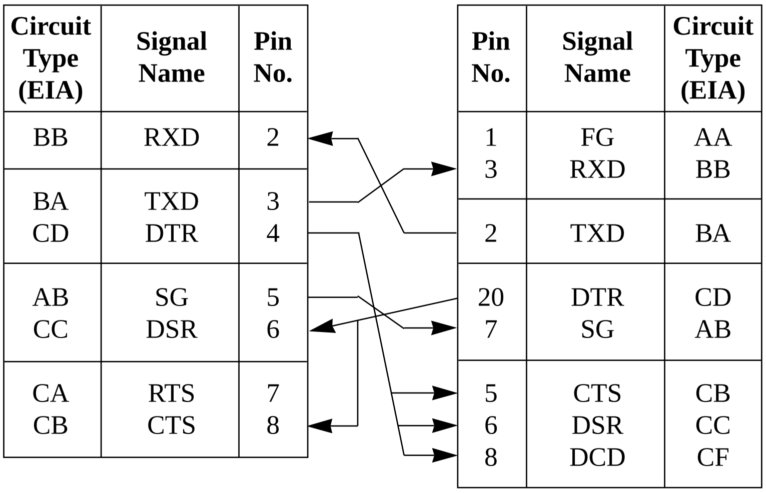
**EIA (RS-232C) port on the printer/IBM-PC (9-pin)**

| Pin No. | Signal Name | Circuit Type (EIA) |
|---|---|---|
| 2 | RXD | BB |
| 3<br>4 | TXD<br>DTR | BA<br>CD |
| 5<br>6 | SG<br>DSR | AB<br>CC |
| 7<br>8 | RTS<br>CTS | CA<br>CB |

*RTS (7-pin) and DTR (4-pin) are connected on the board.

## Connection Chart for Printer / Personal Computer (25-pin)

If you connect a printer or a PC with a 25-pin EIA (RS-232C) connector to your system, see the chart below.



**EIA (RS-232C) port on the main unit (9-pin)**

| Circuit Type (EIA) | Signal Name | Pin No. |
|---|---|---|
| BB | RXD | 2 |
| BA<br>CD | TXD<br>DTR | 3<br>4 |
| AB<br>CC | SG<br>DSR | 5<br>6 |
| CA<br>CB | RTS<br>CTS | 7<br>8 |

**EIA (RS-232C) port on the printer/PC (25-pin)**

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

# 4.15 Connecting the Printer and PC

## *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 or the PC. A "Mark" condition is held unless data or BREAK signals are being transmitted.

**Received Data: RXD** ....................................................................(input)
Conveys signals from the printer or the PC.

**Request to Send: RTS**.................................................................(output)
This lead is held ON whenever DSR is ON.

**Clear To Send: CTS** ......................................................................(input)
An ON condition for the circuit CTS indicates the printer or the PC is ready to receive data from the unit. The unit does not attempt to transfer data or receive data when the circuit CTS is OFF.

**Data Set Ready: DSR**....................................................................(input)
An ON condition for the circuit DSR indicates the printer or the PC is ready. Circuit DSR ON does not indicate that communication has been established with the printer or the PC.

**Signal Ground: SG**
Connects to the DC ground of the unit for all interface signals.

**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 or the PC. It is switched OFF when the unit is OFF LINE.

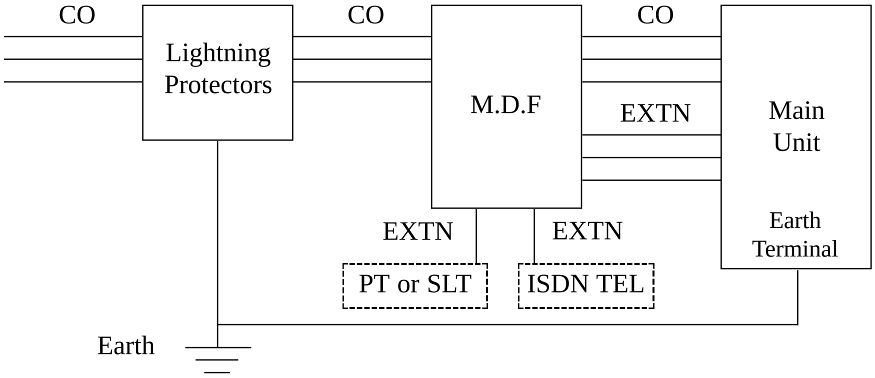
**Data Carrier Detect: DCD** ..........................................................(input)
The ON condition is an indication to the data terminal (DTE) that the carrier signal is being received.

☞
- System Management (Section 3.1)
  Station Message Detail Recording (SMDR)
  System Programming with a Personal Computer
- Resource Programming (Section 3.11)
  [800] SMDR Incoming/Outgoing Call Log Printout
  [801] SMDR Format
  [802] System Data Printout
  [804] Serial Interface (RS-232C) Parameters

# 4.16 Installing the Lightning Protector

A lightning protector is a device to be installed on a outside line (CO) to prevent a dangerous surge from entering the building and damaging equipment. A dangerous surge can occur if a telephone line comes in contact with a power line. Problems due to lightning surges have been showing a steady increase with the development of electronic equipment. In many countries, there are regulations requiring the installation of a lightning protector. A lightning strike to a telephone cable which is 10 m above ground can be as high as 200,000 volts. This system should be installed with lightning protectors. In addition, grounding (connection to an earth ground) is very important for the protection of the system.

## Installation Diagram

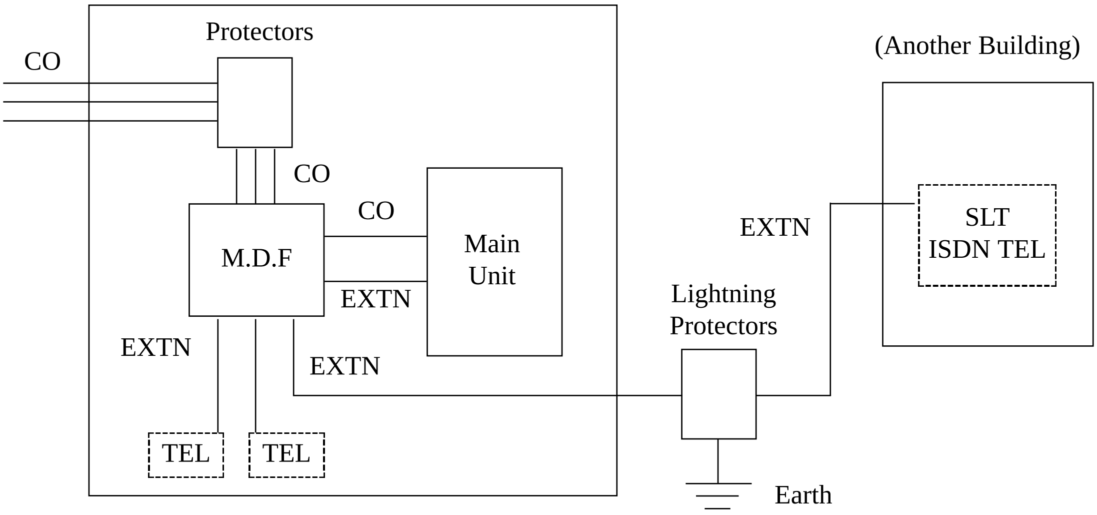

CO
Lightning Protectors
CO
M.D.F
CO
EXTN
Main Unit
Earth Terminal
EXTN
EXTN
PT or SLT
ISDN TEL
Earth

## Outside Installation Diagram

If you install an extension outside of the main building, the following precautions are recommended:

(1) Install the extension wire underground.

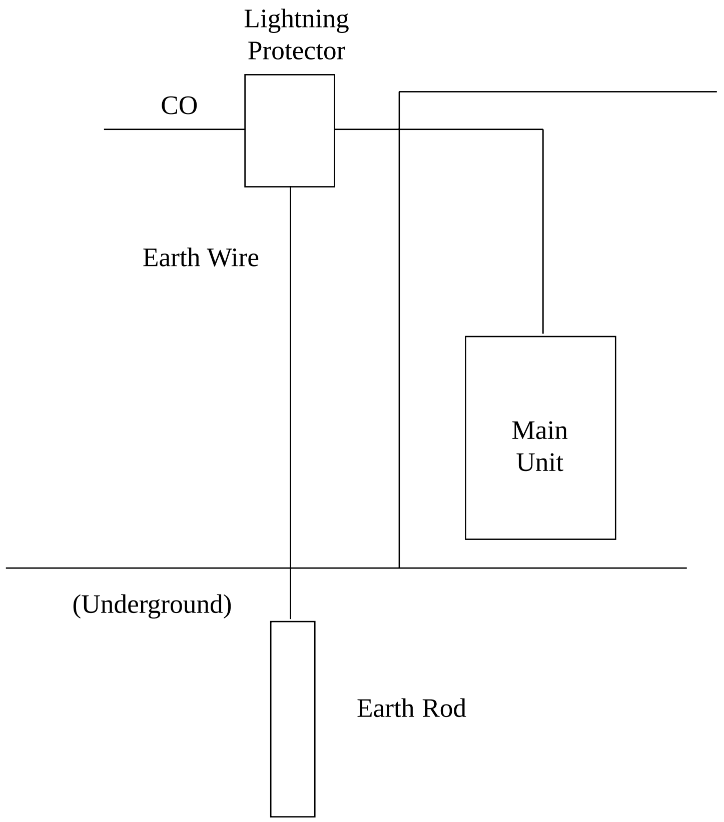
(2) Use a conduit to protect the wire.


Protectors
CO
CO
CO
M.D.F
Main Unit
EXTN
EXTN
EXTN
TEL
TEL
(Another Building)
EXTN
SLT
ISDN TEL
Lightning Protectors
Earth

# 4.16 Installing the Lightning Protector

## Installation of an Earth Rod

The length of the earth rod and required depth depend on the composition of the soil. Consider the following recommendations:

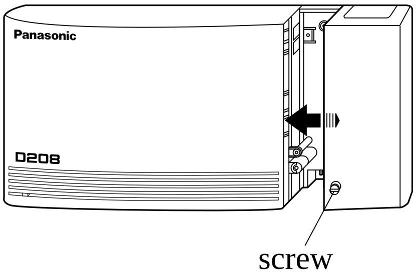

Lightning Protector
CO
Earth Wire
Main Unit
(Underground)
Earth Rod

| | |
|---|---|
| (1) Installation location of the earth rod ........... | Near the protector |
| (2) Check obstructions ...................................... | None |
| (3) Composition of the earth rod....................... | Metal |
| (4) Depth of the earth rod.................................. | More than 50 cm |
| (5) Size of the earth wire................................... | Thickness is greater than 1.6 mm |

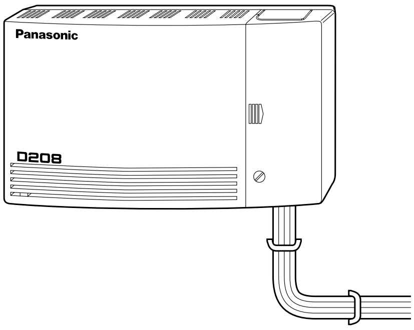
# 4.17 Closing the Front Cover

1. Slide the cover in the direction of the arrow.

2. Tighten the screw.

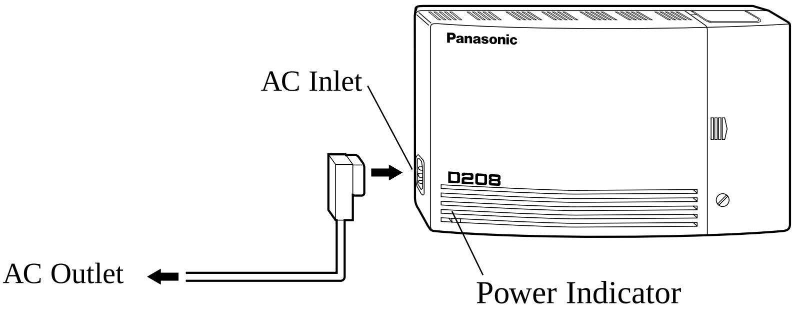

Panasonic
D208
screw

3. Tie together all of the connected cords and attach them to the wall so that the cords cannot be pulled out of the unit.


Panasonic
D208

# 4.18 Starting the System for the First Time

Plug the AC cord into the system and an AC outlet.
(The power indicator of the system is lit.)


AC Inlet
Panasonic
D208
AC Outlet
Power Indicator

!

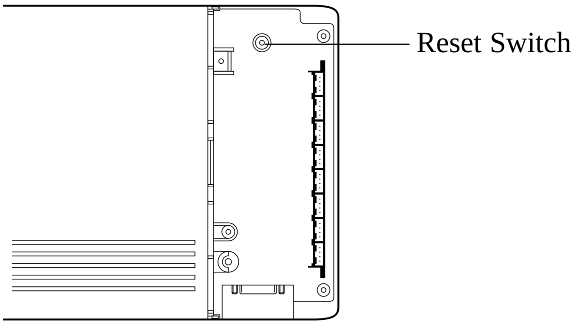
- Use only the supplied AC cord for the purpose of applying the EMC standard, if a KX-TD208 is connected.

# 4.19 Restarting the System

After starting the system, if the system does not operate properly, restart the system by pressing the Reset Switch with a pointed tool. System Restart causes the following:

- Camp-On is cleared.
- Calls on Hold are terminated.
- Calls in progress are terminated.
- Call Park is cleared.

All other data, except the above, are not cleared by System Restart.

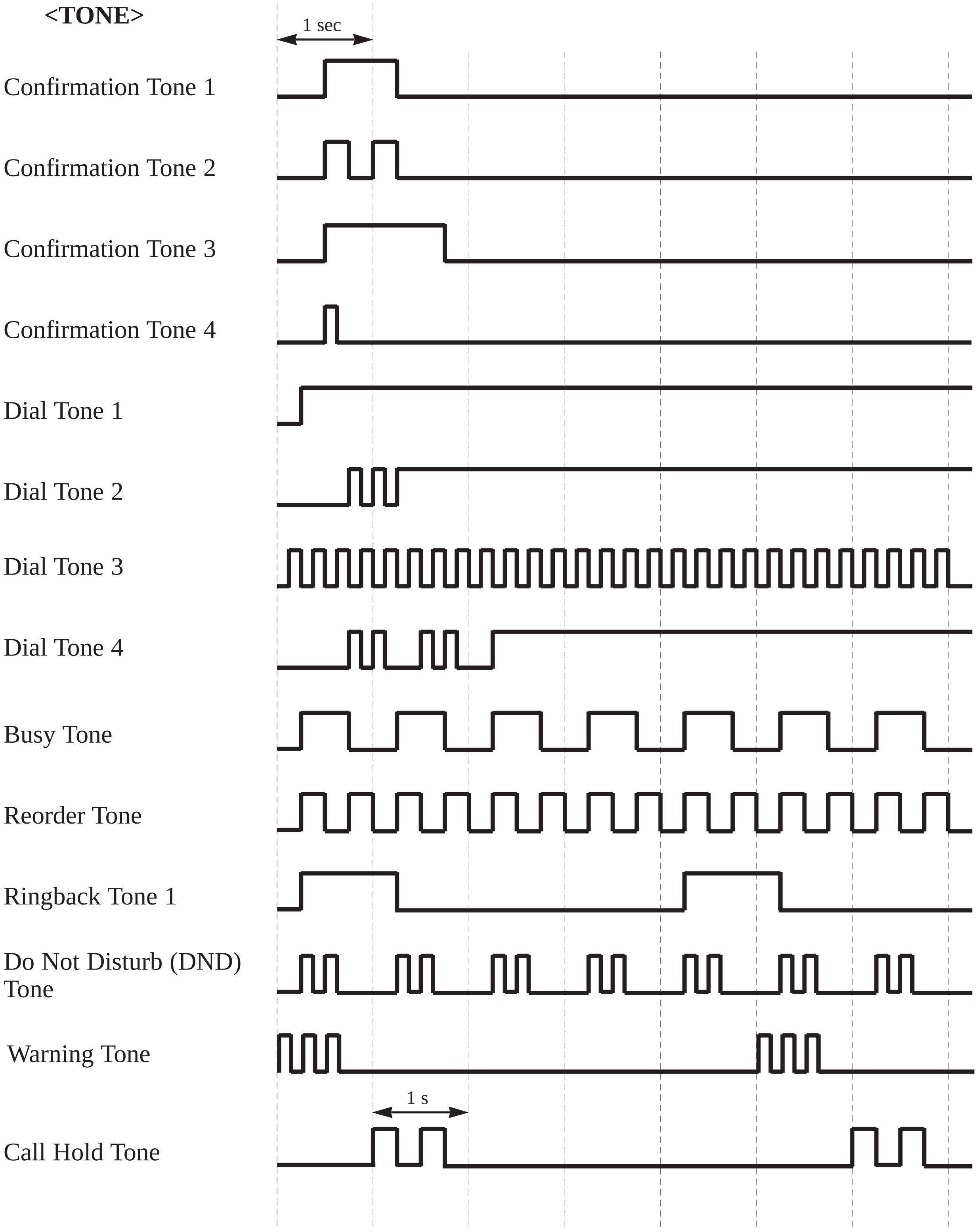


# *Section 5*

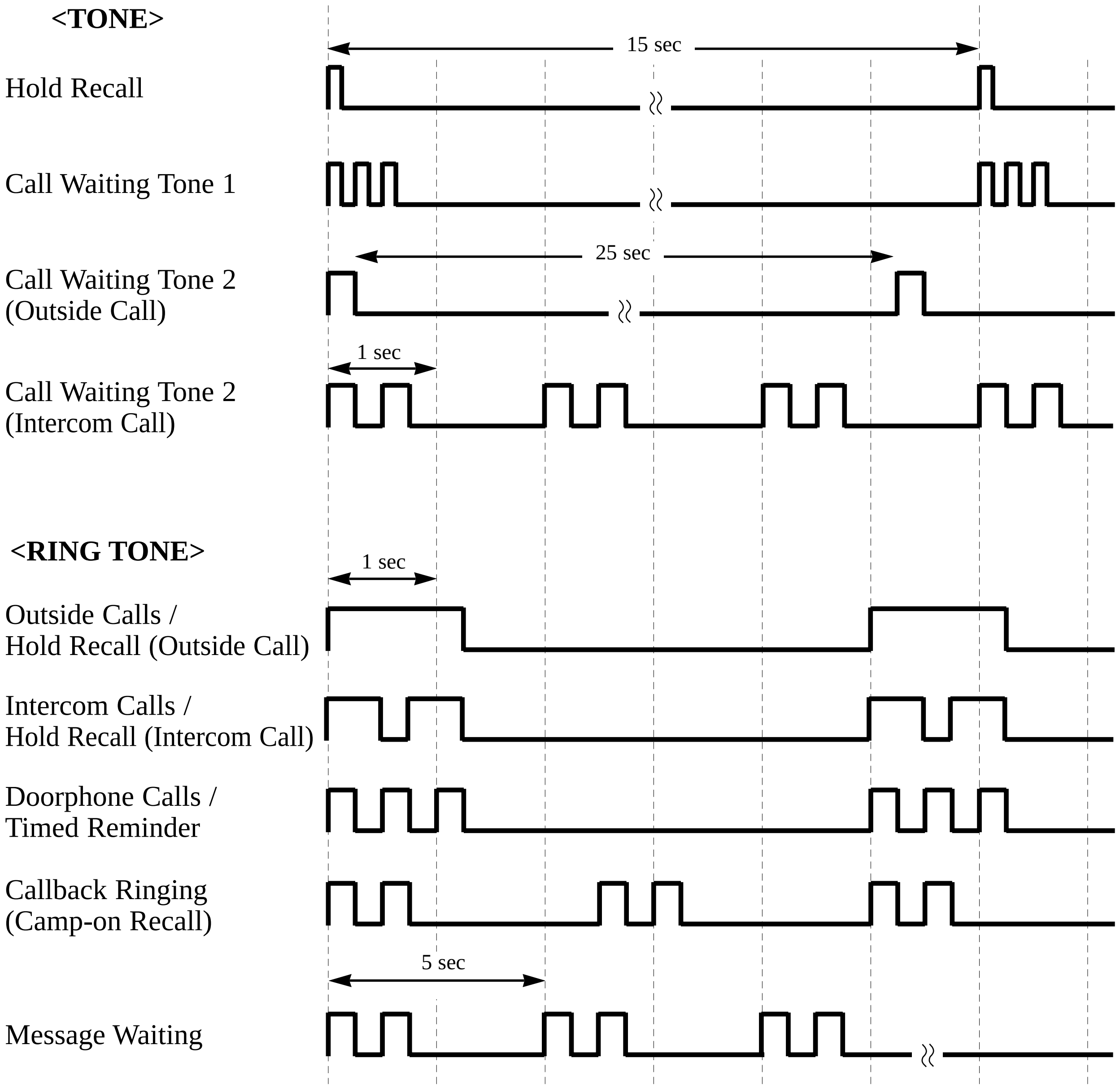
# *Appendix*

# 5.1 Tones / Ring Tones

**<TONE>**


1 sec
Confirmation Tone 1
Confirmation Tone 2
Confirmation Tone 3
Confirmation Tone 4
Dial Tone 1
Dial Tone 2
Dial Tone 3
Dial Tone 4
Busy Tone
Reorder Tone
Ringback Tone 1
Do Not Disturb (DND) Tone
Warning Tone
1 s
Call Hold Tone

# 5.1 Tones / Ring Tones


<TONE>
15 sec
Hold Recall
Call Waiting Tone 1
25 sec
Call Waiting Tone 2
(Outside Call)
1 sec
Call Waiting Tone 2
(Intercom Call)
<RING TONE>
1 sec
Outside Calls /
Hold Recall (Outside Call)
Intercom Calls /
Hold Recall (Intercom Call)
Doorphone Calls /
Timed Reminder
Callback Ringing
(Camp-on Recall)
5 sec
Message Waiting

## 5.1 Tones / Ring Tones

!

- The confirmation tone and the dial tone vary depending on the conditions as follows:

  **Confirmation tone 1**: (a) When the new setting differs from the previous setting.
  (b) Electronic Station Lockout is set or cancelled.
  It is possible to eliminate this tone by System Optional Programming.

  **Confirmation tone 2**: (a) When the new setting is identical to the previous setting.
  (b) Sent when various features are successfully performed or accessed. (e.g. Call Hold; Automatic Callback Busy)

  **Confirmation tone 3**: Sent when a conversation is established just after dialling.
  (e.g. Call Park Retrieve; Call Pickup; Call Hold Retrieve; Paging)
  It is possible to eliminate this tone by System Optional Programming.

  **Confirmation tone 4**: Sent when moving from a two-party call to a three-party call, and vice versa. (e.g. Conference) It is possible to eliminate this tone by System Optional Programming.

  **Dial tone 1** : A normal dial tone. None of the features listed below are enabled.

  **Dial tone 2** : Sounds when any one of the features below are set.
  - Automatic Callback Busy (Camp-On)
  - Call Pickup Deny
  - Call Waiting
  - Do Not Disturb (DND)
  - Electronic Station Lockout
  - Executive Busy Override Deny
  - Paralleled Telephone Connection
  - BGM
  - Remote Station Lock Control
  - Call Forwarding
  - CLIR
  - COLR
  - DND for DDI
  - Log-Out
  - Pickup Dialling
  - Timed Reminder
  - Paging – Deny
  - Incoming Call Log

  **Dial tone 3** : Sounds when answering the Timed Reminder or in the System Programming mode.

  **Dial tone 4** : Sounds when messages are waiting for the extension.

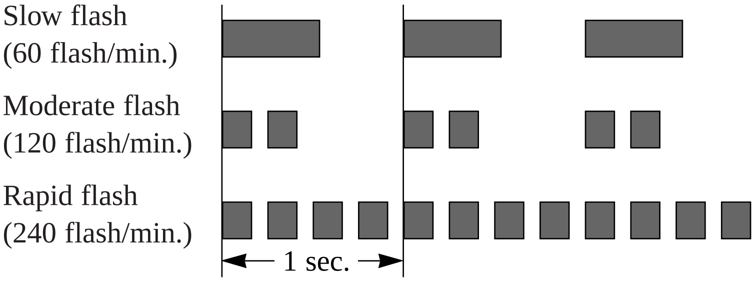
☞

- Optional Programming (Section 3.12)
  [902] System Additional Information

# 5.2 LED Indication

The Light Emitting Diode (LED) button indicators provide the line conditions by using lighting patterns.

### Flashing light patterns



### LED Indication on the INTERCOM Button

The table below shows the lighting patterns and the intercom line conditions.

| INTERCOM button | Intercom Line Condition |
|---|---|
| Off | Idle |
| Green on | Intercom call / Conference established |
| Green slow flash | Intercom call hold |
| Green moderate flash | Intercom call exclusive hold / Consultation hold |
| Green rapid flash | Incoming intercom/Doorphone call |

### LED Indication on CO Button

The table below shows the lighting patterns and the outside line (CO) conditions.

| CO Button | Outside Line (CO) Condition |
|---|---|
| Off | Idle |
| Green on | You are using the line. |
| Green slow flash | You are holding the line. |
| Green moderate flash | You have exclusive hold / Unattended Conference |
| Green rapid flash | Hold Recall / Incoming call |
| Red on | Another party is using the line. |
| Red slow flash | Another party is holding the line.* |

— The item marked with a * is available for a Single-CO button only.

### BLF on DSS Button

The Busy Lamp Field (BLF) indicates the status of the corresponding extension by lighting patterns: Red On/Off. BLF lights red when the corresponding extension is busy or has set the “Do Not Disturb (DND)” feature. BLF is unlit when it is idle. This is available for flexible CO buttons assigned as DSS buttons on proprietary telephones.

# 5.3 Feature Number List

| Feature | Number |
|---|---|
| Account Code Entry before dialling | 49 + account code + # (99)<br>+ ISDN port access code + phone no. |
| Absent Message Capability<br>Message 1: Will Return Soon set / cancel<br>Message 2: Gone Home set / cancel<br>Message 3: At Ext %% set / cancel<br>Message 4: Back at %%:%% set / cancel<br>Message 5: Out until %%/%% set / cancel<br>Message 6: In a Meeting set / cancel<br>Message 7, 8 and 9: (Programmable) set / cancel | <br>7501 / 7500<br>7502 / 7500<br>7503 + EXTN. / 7500<br>7504 + hour + minute / 7500<br>7505 + day + month / 7500<br>7506 / 7500<br>7507-9 + parameter / 7500 |
| Automatic Callback Busy (Camp-On) set / cancel | 6 / 46 |
| Busy Station Signalling | 2 |
| Call Forwarding — All Calls set / cancel | 7102 + EXTN. / 7100 |
| Call Forwarding — Busy set / cancel | 7103 + EXTN. / 7100 |
| Call Forwarding — No answer set / cancel | 7104 + EXTN. / 7100 |
| Call Forwarding — Busy/No answer set / cancel | 7105 + EXTN. / 7100 |
| Call Forwarding — To outside line (CO) set / cancel | 7106 + ISDN port access code + phone no. + # / 7100 |
| Call Forwarding — Follow Me set / cancel | 7107 + your EXTN. /<br>7100 (7108 + your EXTN.) |
| Call Hold place / retrieve /<br>From another – retrieve outside call / intercom call | (RECALL or HOLD) + 50 / 50 /<br>53 + ISDN port no. / 51 + EXTN. |
| Call Transfer – to ext / to ext after paging | (RECALL or TRNS) + EXTN. /<br>(RECALL or TRNS) + 63+ (0 / extension group no.) |
| CLIR set / cancel / change the setting | 572 / 570 /<br>571 + ISDN port access code + phone no. |
| Call Park park / retrieve | (RECALL or TRNS) + 52 + parking zone no. /<br>52 + parking zone no. |
| Call Pickup, outside line (CO) / Directed / Group / from TAM | 4✱ / 41 + EXTN. / 40 / 42 |
| Call Pickup Deny set / cancel | 7201 / 7200 |
| Call Waiting set / cancel / talk while holding the call | 7311 / 7310 / RECALL + 50 |
| Charge Fee Reference <SLT><br>– clear the extension charge fee meter<br>– clear the account code charge fee meter<br><br>– set the new rate<br>– clear all charges except the extension charge<br>– clear all extension charges<br>– print all charges except the extension charge<br>– print all extension charges<br>– print an extension charge<br>– clear the department code charge fee meter | <br>5✱9 + ID code + 1 + EXTN. + #<br>5✱9 + ID code + 4 + account code table no. + #<br>5✱9 + ID code + 5 + ISDN port access code<br>+ new rate + #<br>5✱9 + ID code + 61 + #<br>5✱9 + ID code + 62 + #<br>5✱9 + ID code + 71 + #<br>5✱9 + ID code + 72 + #<br>5✱9 + ID code + 73 + EXTN. + #<br>5✱9 + ID code + 9 + department code + # |

# 5.3 Feature Number List

| FEATURE | NUMBER |
|---|---|
| Charge Fee Reference <PT> | |
| – refer to the extension charge fee | P* + 1 + EXTN. + H* |
| – clear the extension charge fee meter | P* + 1 + EXTN. + TRNS + STORE + H* |
| – refer to the CO charge fee | P* + 2 + ISDN port no. + H* |
| – refer to the total charge fee | P* + 3 + H* |
| – refer to the account code charge fee | P* + 4 + account code table no. + H* |
| – clear the account code charge fee meter | P* + 4 + account code table no. + TRNS + STORE + H* |
| – set the new rate | P* + 5 + ISDN port no. + new rate + STORE + H* |
| – clear all charges except the extension charge | P* + 6 + STORE + H* |
| – clear all extension charges | P* + 6 + SP-PHONE + STORE + H* |
| – print all charges except the extension charge | P* + 71 + H* |
| – print all extension charges | P* + 72 + H* |
| – print an extension charge | P* + 73 + EXTN. + H* |
| – set the new account code | P* + 8 + account code table no. + TRNS + new account code + STORE + H* |
| – refer to the department code charge fee | P* + 9 + department code + H* |
| – clear the department code charge fee meter | P* + 9 + department code + TRNS + STORE + H* |
| CLIP number set | |
| – Business use | 611 |
| – Private use | 612 |
| COLP number set | |
| – Business use | 621 |
| – Private use | 622 |
| COLR set / cancel | 581 / 580 |
| Do Not Disturb (DND) cancel | 7100 |
| set – forward to the extension / manager / DND | 7101 + EXTN. / 71019 / 7101✱ |
| Do Not Disturb for Direct Dial In set / cancel | 561 / 560 |
| Do Not Disturb Override | 2 |
| Door Opener unlock / unlock while talking | 55 / (RECALL + 5) or 5 |
| Doorphone Call calling | 68 |
| Electronic Station Lockout lock / unlock | 77 + lock code twice / 77 + lock code |
| Executive Busy Override | 3 |
| Executive Busy Override Deny set / cancel | 7331 / 7330 |
| Incoming Call Log overwriting – set / cancel | 541 / 540 |
| Incoming Call Log Lock – lock / unlock | 59 + lock code twice / 59 + lock code |
| Incoming Call Log Lock Control | |
| – clear one extension / all extension | PGM + 9902 + EXTN. + STORE + PGM / PGM + 9902 + ✱ + STORE + PGM |
| ISDN Network Service Access | 795 + ISDN port no. + ISDN service no. |
| Log-In/Log-Out | 451 / 450 |
| Manager Call | 0 |

P* : PROGRAM + 999 + ID code
H* : HOLD + PROGRAM

# 5.3 Feature Number List

| FEATURE | NUMBER |
|---|---|
| Message Waiting set / cancel / callback / clear | 701 + EXTN. / 700 + EXTN. / 702 / 700 + your EXTN. |
| Night Service auto / manual–day / manual–night /<br>confirm | 780 / 781 / 782<br># |
| Outside Calling<br>– Line Access, Automatic<br>– Line Access, Individual | <br>9 + phone no.<br>(81 or 82) + phone no. |
| Paging<br>– paging all / group<br>– answering the page<br>– transferring after paging all / group<br>– denying the page deny / allow | <br>63 + 0 / extension group no.<br>43<br>(RECALL or TRNS) + 63 + 0 / extension group no.<br>7211 / 7210 |
| Parallelled Telephone Connection enable / disable | 691 / 690 |
| Pickup Dialling (Hot Line) store / set / cancel | 742 + phone no. + # / 741 / 740 |
| Last Number Redial | #(66) |
| Ring Group | 291 through 298 (floating number of extension group) |
| Station Feature Clear | 790 |
| Station Speed Dialling store | 60 + station speed dial no. + desired no. + # |
| Station Speed Dialling | 6* + station speed dial no. |
| System Speed Dialling | * + system speed dial no. |
| Timed Reminder set–one time / set–daily /<br>cancel / Checking the set time | 761 + hour + minute + 0 / 761 + hour + minute + 1/<br>760 / 762 |
| Class of Service (COS) Switch primary / secondary | 791 + EXTN. / 793 + EXTN. |
| Remote Station Lock Control <SLT><br>unlock / lock | <br>5*0 + EXTN. + 1 + # /<br>5*0 + EXTN. + 2 + # |
| Remote Station Lock Control <PT><br>– unlock one / all extension<br>– lock one / all extension | <br>PGM + 9901 + EXTN./* + 1 + STORE + PGM<br>PGM + 9901 + EXTN./* + 2 + STORE + PGM |

# 5.4 Default Values

| ADDRESS | PROGRAM | DEFAULT |
|---|---|---|
| | **Manager Programming** | |
| [000] | Date and Time Set | 1 Jan ’99 FRI 00:00 |
| [001] | System Speed Dialling Number Set | Not stored. |
| [002] | Emergency Dial Number Set | Not stored. |
| [003] | Budget Management | 0 (No limitation) |
| | **System Programming** | |
| [100] | Day/Night Service Starting Time | Every day – Day–9:00 / Night–17:00 |
| [101] | Account Codes | Not stored. |
| [102] | Station Hunting Type | All extension groups – No hunting |
| [103] | System Password | 1234 |
| [104] | Pulse Dial Reception Assignment | Enable |
| [105] | Automatic Door Open Assignment | Both day and night – Disable |
| [107] | Charge Indication Selection | Charge |
| [108] | Charge Verification ID Code Set | 1234 |
| [109] | One-Touch Transfer by DSS Button Set | Enable |
| | **Timer Programming** | |
| [200] | Hold Recall Time | 60 seconds |
| [201] | Transfer Recall Time | 12 rings |
| [202] | Call Forwarding — No Answer Time | 3 rings |
| [203] | Intercept Time | 12 rings |
| [204] | Pickup Dial Waiting Time | 1 second |
| [205] | DTMF Sending PAUSE Time | 1.5 seconds (1 + 0.5 seconds) |
| [206] | Door Opener Time | 5 seconds |
| [207] | Message Waiting Ring Interval Time | 10 minutes |
| [208] | Automatic Redial Repeat Time | 4 times |
| [209] | Automatic Redial Interval Time | 120 (12 x 10) seconds |
| | **TRS Programming** | |
| [300]–[304] | TRS Denied Code Entry for Levels 2 through 6 | All locations – Not stored. |
| [305]–[309] | TRS Excepted Code Entry for Levels 2 through 6 | All locations – Not stored. |
| | **ISDN Port Programming** | |
| [400] | ISDN Port Connection Assignment | ISDN port 1 – Connect /<br>ISDN port 2 – Not connect |
| [401]–[402] | Intercept Extension — Day/Night | All ISDN ports – Disable (Day/Night) |
| [403] | Host PBX Access Codes | All ISDN ports – Not stored. |
| [404] | CLIP/COLP Number Assignment | All CLIP/COLP numbers – Not stored. |
| [405] | Direct Dialling In | All ISDN ports – Enable |
| [406] | ISDN Configuration | All ISDN ports – Outside Line (CO) / Point-to-multi-point |
| [407] | Multiple Subscriber Number Set | All ISDN Ports – All locations – Not stored. |

## 5.4 Default Values

| Address | Program | Default |
|---|---|---|
| [408]–[409] | Extension Ringing Assignment — Day/Night for ISDN | All locations – All extensions – Immediate ringing (Day/Night) |
| [410]–[411] | ISDN Extension Ringing Assignment — Day/Night for ISDN | All ISDN Ports – All locations – Not stored. (Day/Night) |
| [412] | ISDN DDI Number/Extension Number Transformation | All DDI numbers – Not stored. |
| | **COS Programming** | |
| [500]–[501] | Toll Restriction Level — Day/Night | All COS – Level 1 (Day/Night) |
| [503] | Call Forwarding to outside line (CO) | All COS – Enable |
| [504] | Do Not Disturb Override | All COS – Disable |
| [505] | Account Code Entry Mode | All COS – Option mode |
| [506]–[507] | Toll Restriction Level for System Speed Dialling — Day/Night | All COS – Level 1 (Day/Night) |
| [508] | Door Opener Access | All COS – Enable |
| [509] | Night Service Access | All COS – Enable |
| [510] | Do Not Disturb for Direct Dialling In Call | All COS – Disable |
| [511] | Call Forwarding — Follow Me | All COS – Enable |
| [512] | Calling Line Identification Restriction (CLIR) | All COS – Disable |
| [513] | Connected Line Identification Restriction (COLR) | All COS – Disable |
| [514] | Executive Busy Override | All COS – Disable |
| [515] | Executive Busy Override Deny | All COS – Enable |
| [517] | Call Forwarding by ISDN Service | All COS – Disable |
| | **Extension Programming** | |
| [600] | Extra Device Port | All extensions (21 through 24) – Disable |
| [601] | Class of Service | All extensions – COS 1 |
| [602] | Extension Group Assignment | All extensions – Extension group 1 |
| [603]–[604] | DIL 1:N Extension and Delayed Ringing — Day/Night | All extensions – All ISDN ports – Immediate ringing (Day/Night) |
| [605]–[606] | Outgoing Permitted ISDN Port Assignment — Day/Night | All extensions – All ISDN Ports – Enable (Day/Night) |
| [607]–[608] | Doorphone Ringing Assignment —Day/Night | Extension 21 – Enable (Day/Night);<br>Other extensions – Disable (Day/Night) |
| [609] | Extension Connection Assignment | All extensions – Connect |
| [610] | IRNA Assignment | All extensions – Enable |
| [611] | TAM Connection Assignment | All extensions – Disable |
| [612] | Data Line Security | All extensions – Disable |
| [613] | Department Codes | All extensions – Not stored. |
| [614]-[615] | Doorphone Call Forwarding — Day/Night | Not stored. |

# 5.4 Default Values

| ADDRESS | PROGRAM | DEFAULT |
|---|---|---|
| | **ARS Programming** | |
| [700] | ARS Mode | Both ISDN ports – Disable |
| [701] | ARS Carrier Code | All routes – Not stored. |
| [702] | ARS Route Selection Code | All routes – All area numbers – Not stored. |
| [703] | ARS Authorization Code | All routes – All ISDN ports – Not stored. |
| [704] | ARS Itemized Bill Code | All routes – All ISDN ports – Not send. |
| [705] | 1st Carrier Access Code | Not stored. |
| [706] | ARS Route Exceptional Code | All routes – All area numbers – Not stored. |
| [708] | ARS Modify Removed Digit | All routes – 0 digit (no deletion) |
| [709] | ARS Modify Added Number | All routes – Not stored. |
| | **Resource Programming** | |
| [800] | SMDR Incoming/Outgoing Call Log Printout | Outgoing calls/Incoming calls – No printing |
| [801] | SMDR Format | Page length – 66 lines; Skip perforation – 0 line |
| [802] | System Data Printout | Not applicable. |
| [803] | Music Source Use | Both – Music source |
| [804] | Serial Interface (RS-232C) Parameters | New line code – CR+LF; Baud rate – 9600 baud;<br>Word length – 8 bits; Parity – None;<br>Stop bits – 1 bit |
| | **Optional Programming** | |
| [900] | System Data All Clear | Not applicable. |
| [901] | System Data Clear Except ISDN Data | Not applicable. |
| [902] | System Additional Information | See pages 2-55 through 2-57. |
| [903] | Received Number Check | Not applicable. |

# 5.5 Specifications

## 4.5.1 General Description

| | | | |
|---|---|---|---|
| **System Capacity** | **Basic System** | Extension lines | 8 |
| | | ISDN line | 1 (2 CO lines) |
| | **Expansion** | ISDN line | 1 (either for 8 extension lines or 2 CO lines) |
| | **Maximum Capacity** | When an optional ISDN line is used for CO lines: | |
| | | Extension lines | 8* |
| | | CO lines | 4 |
| | | When an optional ISDN line is used for extension lines: | |
| | | Extension lines | 8* |
| | | ISDN extension lines | 8 |
| | | CO lines | 2 |

*A DPT can be connected to an extension jack numbered 21-24. Each DPT can support an SLT by XDP connection.

**Control Method**

Stored Program CPU: 8 bits CPU

Control ROM: 1024 KB, Control RAM: 160 KB

**Switching**

Non Blocking PCM Time Sharing Switch

| | | |
|---|---|---|
| **Power Supplies** | Primary | 110 – 240 VAC, 50/60 Hz |
| | Secondary | Circuit Volt: + 5V, + 15V, + 30V |

**Dialling**

Dial Pulse (DP) 10 pps, 20 pps, Tone (DTMF) Dialling, DTMF-DP

| | | |
|---|---|---|
| **Connector** | ISDN lines | Modular connector (8-pin) |
| | Extensions | 4-pin connector |
| | Doorphone | 4-pin connector |

**Extension Connection Cable**

| | |
|---|---|
| Single line telephones | 1 pair wire (T, R) |
| KX-T7230, KX-T7235, KX-T7250, KX-T7425, KX-T7433, KX-T7436, KX-T7450 | 1 pair wire (D1, D2) or<br>2 pair wire (T, R, D1, D2) for XDP |

**SMDR (Station Message Detail Recording)**

| | |
|---|---|
| Interface | EIA (RS-232C) (D-SUB, 9-pin) |
| Output Equipment | Printer |
| Recording Details | Date, Time, Extension Number, Department Code, ISDN Port Number, Dial Number, Call Duration, Charge Fee, Account Code, Condition Code |

## 4.5.2 Characteristics

| | |
|---|---|
| **Station Loop Limit** | KX-T7230/KX-T7235/KX-T7250/KX-T7425/<br>KX-T7433/KX-T7436/KX-T7450...............40 ohms<br>Single Line Telephone .................................600 ohms including set<br>Doorphone....................................................20 ohms |
| **Minimum Leak Resistance** | 15 000 ohms |
| **Maximum Number of Station Instruments per Line** | **1** unit for KX-T7230, KX-T7235, KX-T7250, KX-T7425, KX-T7433, KX-T7436, KX-T7450 or a single line telephone.<br>**2** units by Parallel or an EXtra Device Port connection (a proprietary telephone and a single line telephone). |
| **Ring Voltage** | 90 Vrms at 25 Hz depends on the Ringing Load |
| **Primary Power** | 110 – 240 VAC, 50/60 Hz |
| **Central Office Loop Limit** | 1 600 ohms max. |
| **Environmental Requirements** | 0 – 40 °C, 10 – 90% |

## 4.5.3 System Capacity

**Lines, Cards, Station Equipment**

| Item | Max. Quantity |
|---|---|
| Service Unit | 1 |
| ISDN Line Expansion card | 1 |
| ISDN Line | 2 |
| Extension Jack | 8 |
| Station Terminal | 20 |
| Doorphone | 1 |
| Door Opener | 1 |

**System Data**

| Item | Max. Quantity | |
|---|---|---|
| Manager | 1 | (Ext. 21) |
| System Speed Dialling | 100 | |
| Station Speed Dialling | 10 | per extension |
| Call Park | 10 | |
| Toll Restriction Level | 8 | |
| Extension Group | 8 | |
| Class of Service | 4 | |
| Ring Group | 8 | |
| Uniform Call Distribution | 8 | |

# 5.6 Troubleshooting

## 4.6.1 Installation and Operation

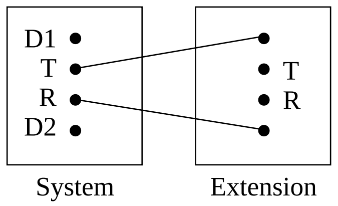
| PROBLEM | PROBABLE CAUSE | POSSIBLE SOLUTION |
|---|---|---|
| Extension does not operate. | Bad printed circuit board (Extension Card). | Exchange the printed circuit board with another printed circuit board. |
| | Bad connection between the system and extension. | Take that extension and plug it into the same extension port using a short telephone cord. If the telephone does not work, the connection between the system and the extension must be repaired. |
| | Bad extension. | Take that extension and plug it into another extension port that is working correctly. If the telephone does not work, replace the phone. |
| Improper operation. | | Press the Reset Switch.<br>System restart causes the following:<br>• Camp-On is cleared.<br>• Call Park is cleared.<br>• Calls on hold are terminated.<br>• Calls in progress are terminated.<br>All other data stored in memory, except the above, is secured. |
| Speed Dialling does not function. | Incorrect programming. | Enter the ISDN port access number (9, 81 or 82) into programming. |
| A power failure occurs and all the lines are disconnected. | The KX-TD208 does not work during a power failure. | Disconnect the ISDN telephone unit from the system and connect it directly to the ISDN line. Then you can make an outside call. A SLT cannot be used during a power failure. |
| Your single line rotary telephone does not function. | The pulse dial from your telephone is disabled by the system. | Select “Enable” in program [104] “Pulse Dial Reception Assignment.” |
| You forgot your own extension number. | | You can confirm your own extension number if your telephone is provided with a display.<br>Press [PROGRAM][99][6].<br>To exit from the mode, press [HOLD][PROGRAM]. |

## *4.6.2 Connection*

Can you dial an extension?

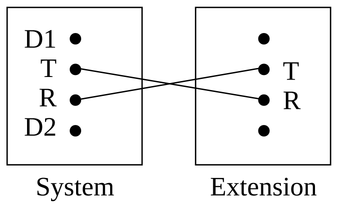
No

Connection between the KX-TD208 and a single line telephone:

| CAUSE | SOLUTION |
|---|---|
| T/R is connected to D1/D2.<br> | Use the correct cord (inner 2 wires are for T/R). |

D1
T
R
D2
T
R
System
Extension

Connection between the KX-TD208 and a single line telephone that is polarity-sensitive:

| CAUSE | SOLUTION |
|---|---|
| "T" is connected to "R."<br> | Reverse the T/R connection. |

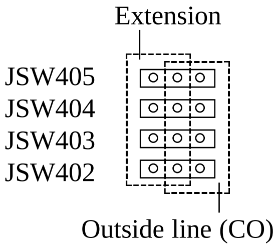
D1
T
R
D2
T
R
System
Extension

Yes

Can you dial out on a outside line (CO)?

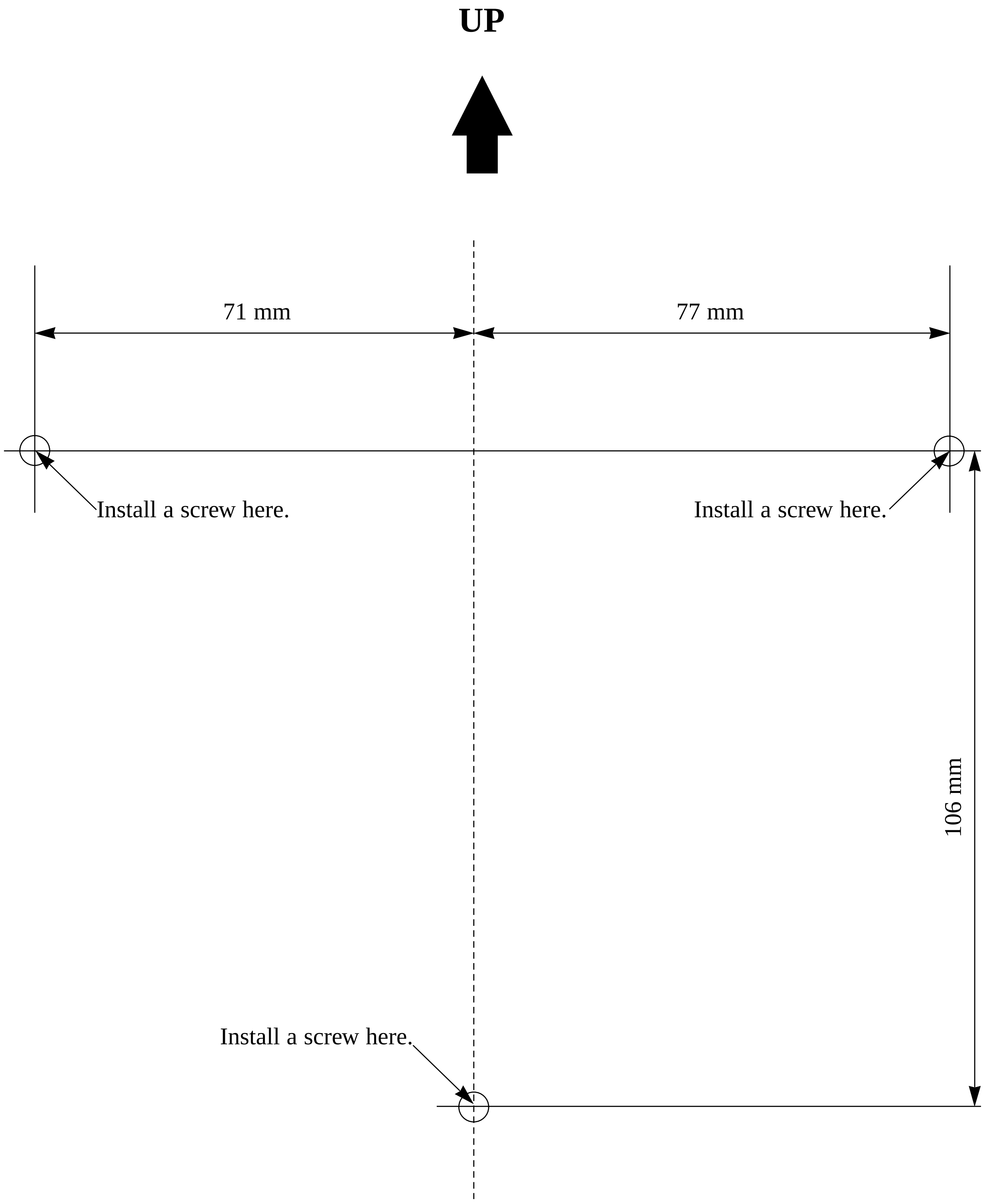
No

Connection between the central office and the system:

| CAUSE | SOLUTION |
|---|---|
| • A straight type ISDN line cord was used for outside line (CO) connection. | • Reconnect the CO lines with a cross type ISDN line cord. |
| • The adjustment of the extension/outside line (CO) switch socket is reversed. | • Adjust the extension/outside line (CO) switch socket as follows:<br> |

Extension
JSW405
JSW404
JSW403
JSW402
Outside line (CO)

# 5.7 Template


UP
71 mm
77 mm
Install a screw here.
Install a screw here.
106 mm
Install a screw here.

- Copy the template and place it on the wall before mounting the main unit.

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