Panasonic

Advanced Hybrid System

Installation Manual

KX-TA308
MODEL KX-TA616







Please read this manual before connecting the Advanced Hybrid System.

System Highlights

System Capacity

	<	<kx-1a308></kx-1a308>	<kx-ta616></kx-ta616>
Basic System	Extensions	8	16
	Outside (CO) lines	3	6
Expansion	Maximum extensions	24	24
	Maximum outside (CO) li	nes 6	6

Special System Points

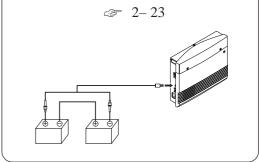
System Expansion

This system can expand the outside (CO) lines (KX-TA308 only) and extension capacity by installing an optional card.



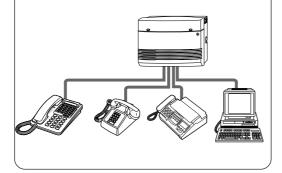
Direct Backup Power Supply

Car batteries can be connected directly to this system as a backup power supply in the event of a power failure. This system does not need an optional battery adaptor.



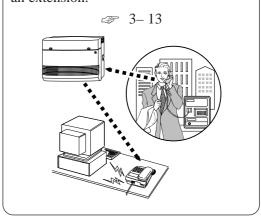
Hybrid

This system can accept Panasonic analog proprietary telephones. Also, single line devices such as single line telephones, facsimiles and data terminals can be connected.



Calling from the outside (Direct Inward System Access)

External callers can call extensions in the system. If you install an optional card, an outgoing message will greet the caller and give information about how to access an extension.



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 Advanced Hybrid System.
- This unit should be kept free of dust, moisture, high temperature (more than 40°C / 104°F) 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 telephone directly into the telephone line. If the telephone operates properly, do not reconnect the unit to the line until the trouble has been repaired. If the telephone does not operate properly, chances are that the trouble is in the telephone system, and not in the unit.
- Do not use benzine, thinner, or 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.

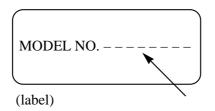
THE POWER SUPPLY CORD IS USED AS THE MAIN DISCONNECT DEVICE, ENSURE THAT THE SOCKET-OUTLET IS LOCATED/INSTALLED NEAR THE EQUIPMENT AND IS EASILY ACCESSIBLE.

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

Precautions

For your future reference			
SERIAL NO(found on the bottom of the unit)	DATE OF PURCHASE		
NAME OF DEALER			
DEALER'S ADDRESS			

Note • This Installation Manual does not show complete model number that indicate the country where your models should be used. The model number of your unit is found on the label affixed to the unit.



Introduction

Structure of the Manual

This manual consists of the following sections:

Section 1. Basic System Construction

Provides general information on the system including connection diagrams.

Section 2. Installation

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

Section 3. Features

Describes the optional and programmable features in alphabetical order. It also provides information about the conditions, required System Programming, connection references, related features and operating instructions references for every feature.

Section 4. System Programming

Describes the steps required to assign features to extensions or to the system.

Section 5. Appendix

Provides specifications and the default values of the System Programming.

Section 6. Troubleshooting

Provides information for system and telephone troubleshooting.

Section 7. Programming Tables

Provides programming tables for user-programmed data.

Description of the Symbols Mainly Used in this manual



Additional information and conditions.



The feature or program references.

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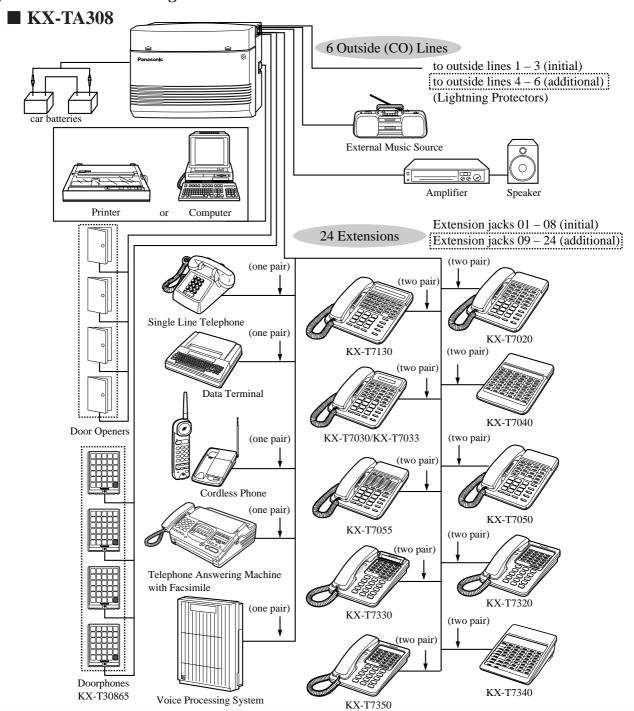
Section 1 Basic System Construction

1 Basic System Construction

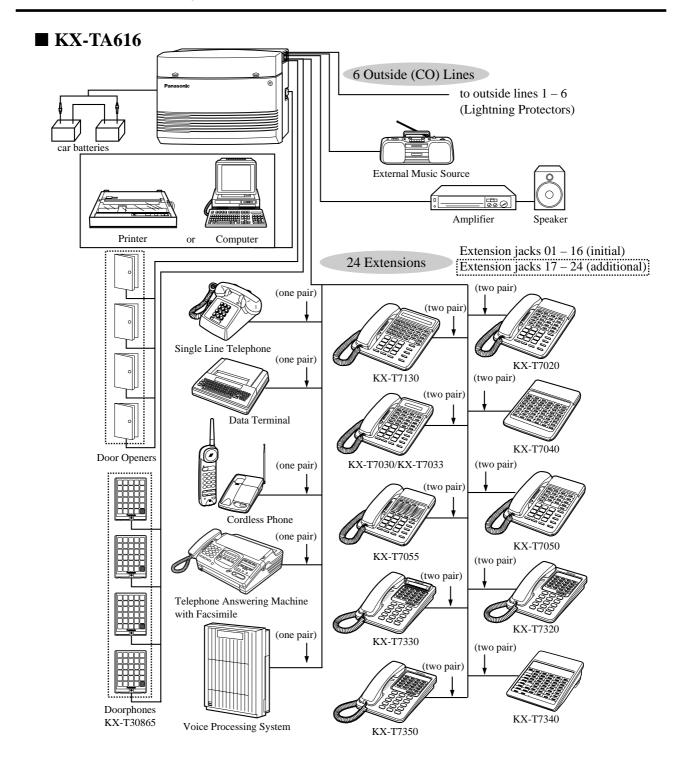
The KX-TA308 has a basic capacity of 8 extensions and 3 outside (CO) lines, and the KX-TA616 has 16 extensions and 6 outside (CO) lines. It is capable of supporting Panasonic analog proprietary telephones, and single line devices such as single line telephones, facsimiles and data terminals.

To expand its capabilities, the system can be equipped with optional components or customer-supplied peripherals such as an external speaker, external music source (e.g. a radio) and door opener.

System Connection Diagram



1 Basic System Construction



- We recommend connecting a display proprietary telephone at extension jack 01.
 - Parallel connection of telephone is possible. (\$\sigma\$ 2.11, Paralleled Telephone Connection)
 - A proprietary telephone cannot be connected to extension jacks 17 through 24. Only a single line telephone (SLT) can be connected.

Section 2 Installation

2.1 Before Installation

Please read the following notes concerning installation and connection before installing the system and terminal equipment.

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 system is designed for wall mounting only. Avoid installing in the following places. (Doing so may result in malfunction, noise, or discoloration.)

- 1. In direct sunlight and hot, cold, or humid places. (Temperature range: $0^{\circ}\text{C} 40^{\circ}\text{C} / 32^{\circ}\text{F} 104^{\circ}\text{F}$)
- **2.** Sulfuric gases produced in areas where there are thermal springs, etc. may damage the equipment or contacts.
- **3.** Places in which shocks or vibrations are frequent or strong.
- **4.** Dusty places, or places where water or oil may come into contact with the system.
- 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 system in the same room with the above equipment.)
- **7.** Install at least 1.8 m (6 feet) away from radios and televisions. (Both the system and Panasonic proprietary telephones)
- **8.** Do not obstruct area around the system (for reasons of maintenance and inspection be especially careful to allow space for cooling above and at the sides of the system).

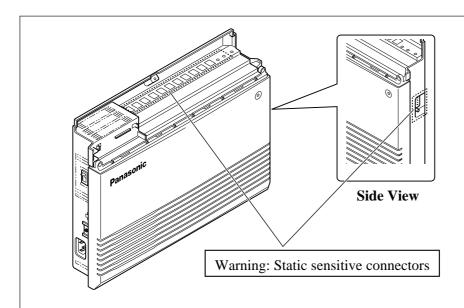
Wiring Precautions

Be sure to follow these instructions when wiring the unit:

- 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 to prevent the wires from being stepped on. Avoid wiring under carpets.
- **3.** Avoid using the same power supply outlet for computers, telexes, and other office equipment. Otherwise, the system operation may be interrupted by the induction noise from such equipment.

2.1 Before Installation

- **4.** Please use one pair telephone wire for extension connection of (telephone) equipment such as single line telephones, data terminals, answering machines, computers, voice processing systems, etc., except Panasonic proprietary telephones (e.g. KX-T7330).
- **5.** Unplug the system during wiring. After all of the wiring is completed, plug in the system.
- **6.** Mis-wiring may cause the system to operate improperly. Refer to Section 6.1 "While Installing" and Section 6.2 "While Connecting".
- 7. If an extension does not operate properly, disconnect the telephone from the extension line and then connect again, or turn off the Power Switch of the system and then on again.
- **8.** 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. Do not defeat the purpose of the grounding-type plug.
- **9.** Outside (CO) lines should be installed with lightning protectors. For details, refer to Section 2.7 "Outside (CO) Line Connection", Installing Lightning Protectors.



Warning:

Static sensitive devices are used. To protect printed circuit boards from static electricity, do not touch connectors indicated to the left. To discharge body static, touch ground or wear a grounding strap.

2.2 Unpacking

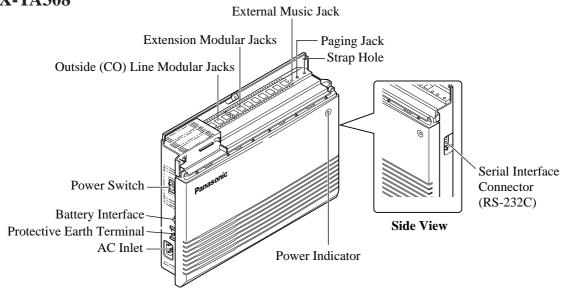
Unpack the box and check the items below.

Main Unit	1
AC Cord	1
Screws (Wall Mounting)	3
Washers (Wall Mounting)	3
Pager Connector	1

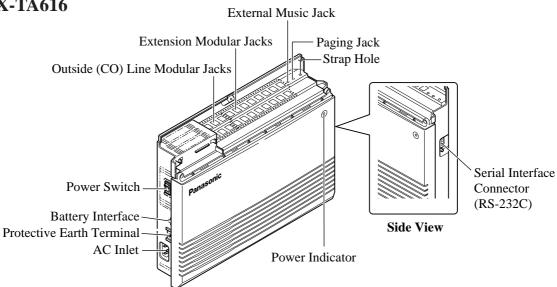
Music Source Connector	1
Plug Adaptor	1
Strap	1
Rivet	1

2.3 Names and Locations

■ KX-TA308



■ KX-TA616

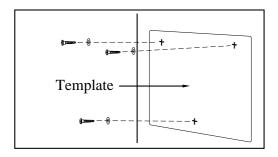


2.4 Wall Mounting

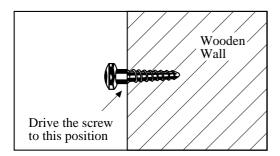
This set is designed for wall mounting only. The wall where the main unit is to be mounted must be able to support the weight of the main unit. If screws other than the ones supplied are used, use screws with the same diameter as the ones enclosed.

Mounting on a Wooden Wall

1. Place the template (on the last page) on the wall to mark the screw positions.



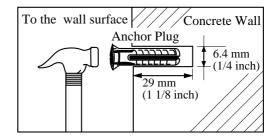
2. Install the screws (included) into the wall.



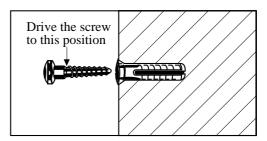
3. Hook the main unit on the screw heads.

Mounting on a Concrete or Mortar Wall

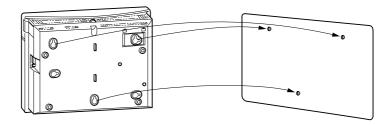
- **1.** Place the template (on the last page) on the wall to mark the screw positions.
- **2.** Drill holes and drive the anchor plugs (user-supplied) with a hammer, flush to the wall.



3. Install the screws (included) into the anchor plugs.



4. Hook the main unit on the screw heads.

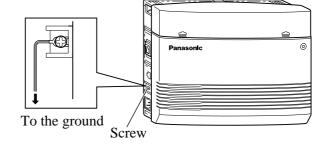


2.5 Frame Ground Connection

IMPORTANT!!!

Connect the frame of the main unit to the ground.

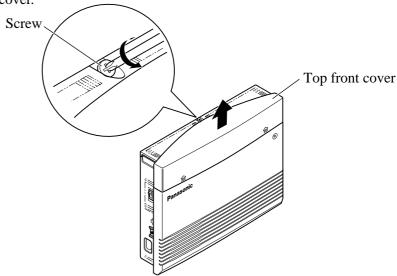
- 1. Loosen the screw.
- **2.** Insert the grounding wire (user-supplied).
- **3.** Tighten the screw.



4. Connect the grounding wire to the ground.

2.6 Opening the Top Front Cover

- 1. Loosen the screw.
- 2. Remove the top front cover.

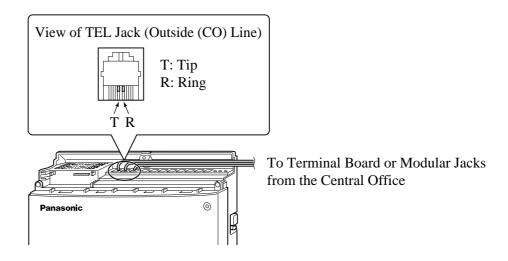


• The screw cannot be removed from the cover.

2.7 Outside (CO) Line Connection

Connection

- 1. Insert the modular plugs of the telephone line cords (2-conductor wiring) into the modular jacks (CO 1 through 3) on the system.
- 2. Connect the line cords to the terminal board or the modular jacks from the Central Office.



Installing Lightning Protectors

A lightning protector is a device to be installed on an outside (CO) line to prevent a dangerous surge from entering the building and damaging the equipment.

A dangerous surge can occur if a telephone line comes in contact with a power line. Problems due to lightning surges has been steadily increasing 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 (33 feet) above ground can be as high as 200,000 volts.

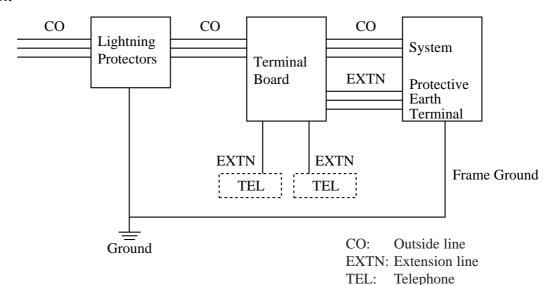
This system should be installed with lightning protectors. In addition, grounding (connection to earth ground) is very important to protect the system (\$\sigma\$ 2.5, Frame Ground Connection).

Recommended lightning protectors

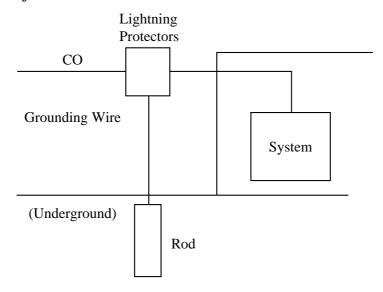
- TELESPIKE BLOK MODEL TSB (TRIPPE MFG. CO.)
- SPIKE BLOK MODEL SK6-0 (TRIPPE MFG. CO.)
- Super MAXTM (PANAMAX)
- MP1 (ITW LINK)

2.7 Outside (CO) Line Connection

Installation



Installation of an 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 (20 inches)
- 5) Size of the grounding wire Thickness more than 16 AWG

Note • The above example is only a recommendation.

• The length of the earth rod and required depth depend on the composition of the soil.

2.8 Extension Connection

Extension jacks 01 through 08 for the KX-TA308 and extension jacks 01 through 16 for the KX-TA616 can be used for all kinds of telephones.

Telephone Wiring

The maximum length of the extension line cord (twisted cable) which connects the system and the extension is as follows.

	Diameter of the line	Max. length
Single Line Telephone	22AWG	1798m (5900 feet)
(Station Loop Limit:	24AWG	1128m (3700 feet)
600 ohms including set)	26AWG	698m (2290 feet)
Proprietary Telephone	22AWG	360m (1180 feet)
(Station Loop Limit:	24AWG	229m (750 feet)
40 ohms)	26AWG	140m (460 feet)

2 or 4-conductor wiring is required for each extension as listed below. There are 4 pins possible for connection: "T" (Tip), "R" (Ring), "L" (Low) and "H" (High).

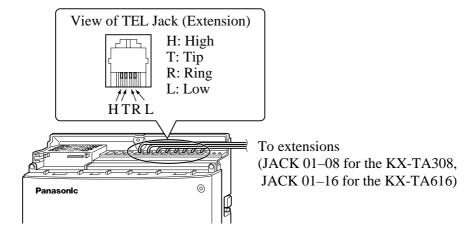
Telephone	Wiring
Single line telephones	1 pair wire (T, R)
Proprietary telephone (e.g., KX-T7330)	2 pair wire (L, H, T, R)



• If a telephone or answering machine with an A-A1 relay is connected to the system, set the A-A1 relay switch on the telephone or answering machine to the OFF position.

Connection

Insert the modular plugs of the telephone line cords (2 or 4-conductor wiring) into the modular jacks on the system.



2.9 External Pager (Paging Equipment) Connection

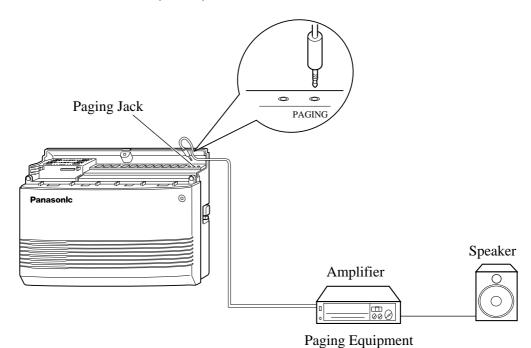
One external pager (user-supplied) can be connected to the system as illustrated below.

Use an EIAJ RC-6701 A plug (2-conductor, ø 3.5 mm in diameter).

• Output impedance: 600Ω

Maximum length of the cable

AWG 18 – 22: Under 10 m (33 feet)





• To adjust the sound level of the pager, use the volume control on the amplifier.



- Required System Programming Section 4.2, System Programming [106] External Paging Access Tone
- Feature Reference Section 3, Features Paging

2.10 External Music Connection

One music source, such as a radio (user-supplied), can be connected to the system as illustrated below.

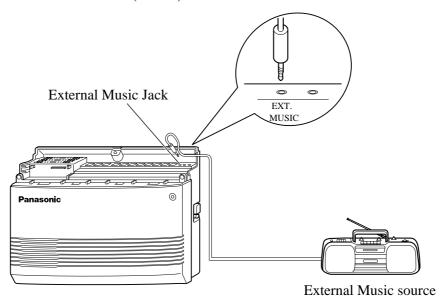
Insert the plug to the earphone/headphone jack on the external music source.

Use an EIAJ RC-6701 A plug (2-conductor, ø 3.5mm in diameter).

• Input impedance: 8Ω

Maximum length of the cable

AWG 18 – 22: Under 10 m (33 feet)





- System programming for the music sources used for Music on Hold and Background Music (BGM) is required.
- To adjust the sound level of the Music on Hold, use the volume control on the external music source.



• Required System Programming

Section 4.2, System Programming

[111] Hold Music Selection

• Feature Reference

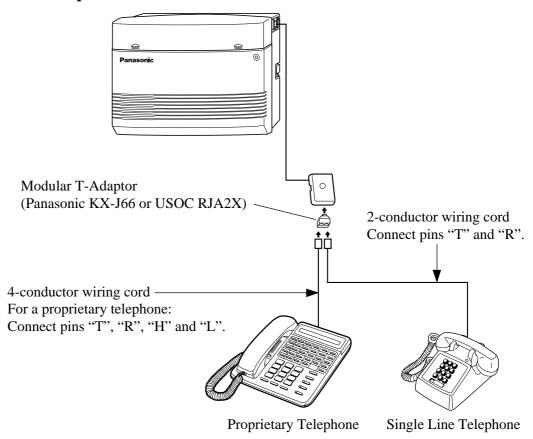
Section 3, Features

Music on Hold / Background Music (BGM)

2.11 Paralleled Telephone Connection

Any single line telephone can be connected in parallel with a proprietary telephone as follows.

Using a Modular T-Adaptor





- Required System Programming
 - **Section 4.2, System Programming**

[610] Paralleled Telephone Connection

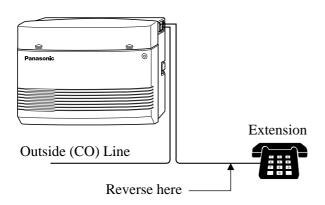
• Feature Reference

Section 3, Features

Paralleled Telephone Connection

2.12 Polarity Sensitive Telephone Connection

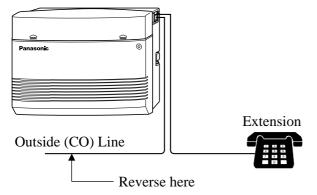
If your telephone is polarity sensitive, follow the procedure below:



- 1. Complete all the required extension wiring.
- Confirm that dialing can be done from all the extensions using a touch-tone telephone.If dialing fails, the polarity between the extension and the system must be reversed.
- **3.** Reverse as shown.
- **4.** Unplug the system.
- **5.** Connect all outside lines.
- **6.** Confirm that dialing can be done on the following extension using a tone telephone.

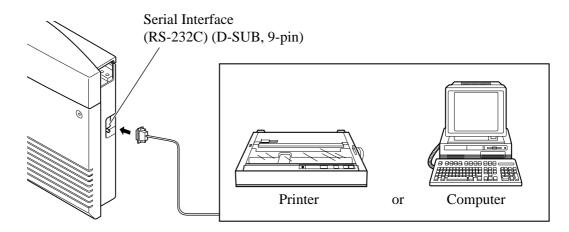
Extension (T, R) of jack 01: Outside (CO) line 1 If dialing fails, the polarity between the system and the outside line must be reversed.

- 7. Reverse as shown.
- **8.** Every time an extension telephone is replaced, repeat the procedure above.



2.13 Printer and PC Connection

A user-supplied printer or personal computer (PC) can be connected to the system. These are used to print out or refer to the SMDR call records and system programming data. Connect the printer cable or the PC cable to the Serial Interface (RS-232C) connector. The cable must be shielded and the maximum length is 2 m (6.5 feet).



Arrange the cables so that the printer will be connected to the system as shown in the appropriate chart on the following page.

The pin configuration of the Serial Interface (RS-232C) Connector is as follows.

Pin	Signal Name		Circuit Type		
No.			EIA	CCITT	
2	RXD	Received Data	BB	104	
3	TXD	Transmitted Data	BA	103	
4	DTR	Data Terminal Ready	CD	108.2	
5	SG	Signal Ground	AB	102	
6	DSR	Data Set Ready	CC	107	
7	RTS	Request To Send	CA	105	
8	CTS	Clear To Send	СВ	106	

2.13 Printer and PC Connection

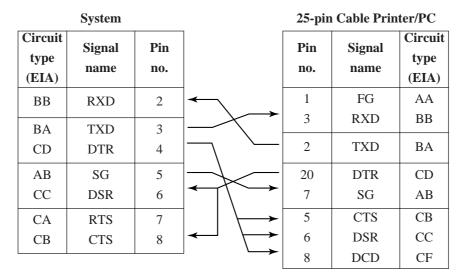
Connection Chart for a Printer / Personal Computer with the System

If you connect a printer or a PC with a 9-pin cable, follow the chart below.

	System			9-pin	Cable Print	er/PC
Circuit type (EIA)	Signal name	Pin no.		Pin no.	Signal name	Circuit type (EIA)
BB	RXD	2	$ \longleftarrow\rangle$	2	RXD	BB
BA	TXD	3		3	TXD	BA
CD	DTR*	4		4	DTR	CD
AB	SG	5	─	5	SG	AB
CC	DSR	6	—	6	DSR	CC
CA	RTS*	7		7	RTS	CA
СВ	CTS	8		8	CTS	СВ

^{*} RTS (7-pin) and DTR (4-pin) are connected to the board.

If you connect a printer or a PC with a 25-pin cable, follow the chart below.



2.13 Printer and PC Connection

Serial Interface (RS-232C) Signals

Frame Ground: FG

Connects the unit frame and the earth ground conductor of the AC power cord.

Transmitted Data: SD (TXD)(output)

Conveys signals from the unit to the printer. A "Mark" condition is held unless data or BREAK signals are being transmitted.

Received Data: RD (RXD)(input)

Conveys signals from the printer.

Request to Send: RS (RTS)(output)

This lead remains ON whenever DR (DSR) is ON.

Clear To Send: CS (CTS)(input)

When the CS (CTS) circuit is ON, it indicates that the printer is ready to receive data from the unit. The unit does not attempt to transfer data or receive data when the CS (CTS) circuit is OFF.

Data Set Ready: DR (DSR)(input)

When the DR (DSR) circuit is ON, it indicates the printer is ready. The DR (DSR) circuit being ON does not indicate that communication has been established with the printer.

Signal Ground: SG

Connects the DC ground of the unit for all interface signals.

Data Terminal Ready: ER (DTR)(output)

This signal line is turned ON by the unit to indicate that it is ON

LINE. The ER (DTR) circuit being ON does not indicate that communication has been established with the printer. It is switched OFF when the unit is OFF LINE.

Data Carrier Detect: CD (DCD)(input)

When ON, it indicates the data terminal (DTE) that the carrier signal is being received.



Required System Programming

Section 4.2, System Programming

[800] SMDR RS-232C Communication Parameters

[801] SMDR Parameter

• Feature Reference

Section 3, Features

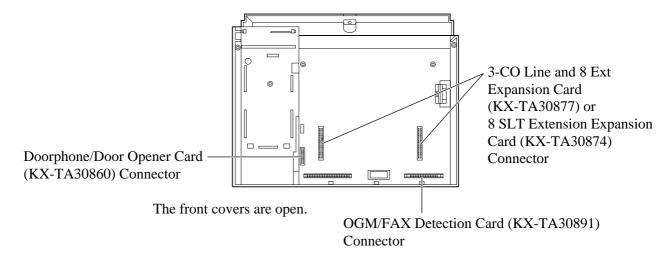
Station Message Detail Recording (SMDR)

2.14 Location of Optional Cards

The location of the optional cards is shown below.

Precaution

To protect the printed circuit boards (P-boards) from static electricity, do not touch parts on the P-boards in the main unit and on the optional cards. If accessing the parts is required, wear a grounding strap.



2.15 OGM/FAX Detection Card Installation

An optional OGM/FAX Detection Card (KX-TA30891) can be installed to the system.

The OGM/FAX Detection Card supports the following.

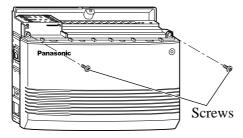
Direct Inward System Access (DISA) with OGM:

One of the system features. An outgoing message greets the external caller and gives information so that the caller can access an extension(s) directly.

Facsimile detection:

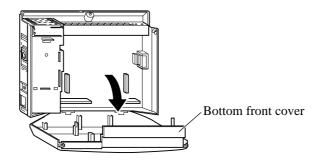
When the system receives a facsimile transmission signal by DISA, it automatically connects the specified facsimile extension.

1. Loosen the 2 screws.

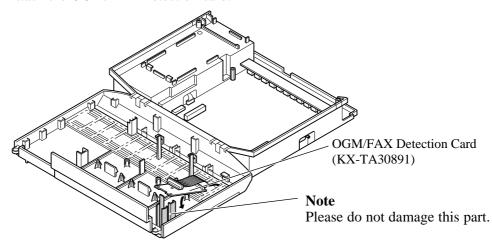


2.15 OGM/FAX Detection Card Installation

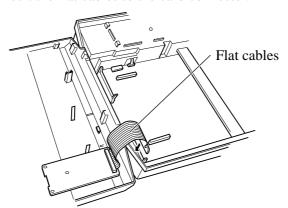
2. Open the bottom front cover.



3. Attach the OGM/FAX Detection card.



4. Insert the flat cables to the card connector.



5. Replace the cover.



• Required System Programming

See 'Required System Programming' in Section 3, Features "Direct Inward System Access (DISA)"

• Feature References

Section 3, Features

Direct Inward System Access (DISA)

Outgoing Message (OGM)

2.16 Doorphone and Door Opener Connection

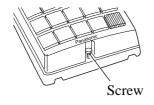
Four doorphones (KX-T30865) and 4 door openers (user-supplied) can be installed.

Maximum cable length

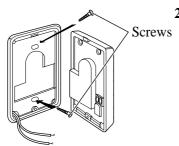
The maximum length of the doorphone and door opener line cord which connects the system is as follows.

	Diameter of the line	Max. length
Doorphone	22AWG	180m (590 feet)
(Station Loop Limit:	24AWG	113m (370 feet)
20 ohms)	26AWG	70m (230 feet)
Door Opener	22AWG	180m (590 feet)

Installing the Doorphone

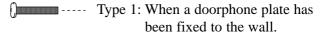


1. Loosen the screw to open the doorphone unit.



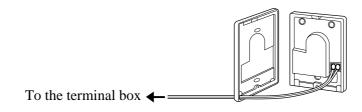
2. Attach the base cover to a wall using 2 screws.

Note Two kinds of screws are included. Please choose the appropriate one depending on your type of wall.



Type 2: When you wish to install the doorphone directly to the wall.

3. Connect the wires to the screws located in the front cover.

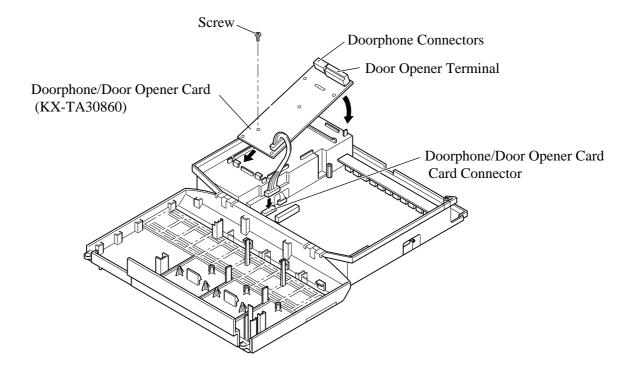


4. Put the doorphone together and re-install the screw.

2.16 Doorphone and Door Opener Connection

Doorphone/Door Opener Installation

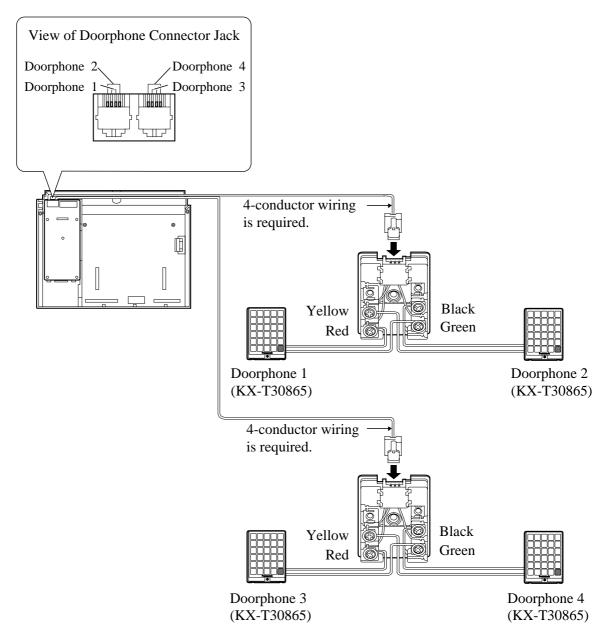
Attach the optional Doorphone/Door Opener Card to the main unit, connect the cord to the Doorphone/Door Opener Card Connector and secure the screw.



2.16 Doorphone and Door Opener Connection

Wiring of the Doorphone

- **1.** Connect the Doorphone/Door Opener Card to the terminal boxes using 4-conductor modular connectors.
- 2. Connect the wires of doorphones 1 and 3 to the red and green screws on the terminal box.
- **3.** Connect the wires of doorphones 2 and 4 to the yellow and black screws on the terminal box.

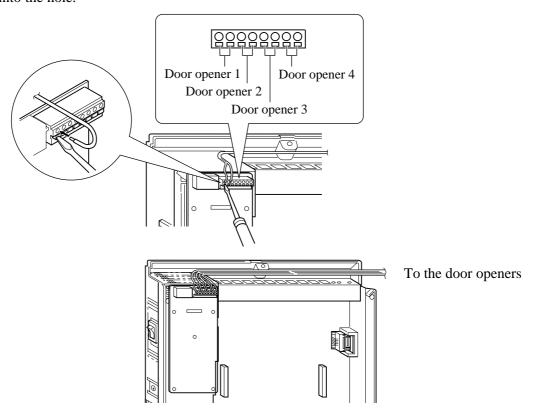


* The illustration on this page is a KX-TA308.

2.16 Doorphone and Door Opener Connection

Connecting Door Openers

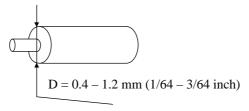
1. While pressing the button below a hole with a driver, insert the wire from the door opener into the hole.



2. Wrap the strap around all of the cords. (\$\sigma\$ 2.20, Securing the Cords)



- We recommend using UL1015 wire or the equivalent for wiring.
- The wire should be between 0.4 and 1.2 mm (1/64–3/64 inch) in diameter including the coating.





• Required System Programming

Section 4 System Programming

[700]–[702] Doorphone Ringing Assignment — Day/Night/Lunch

[703]–[705] Door Opener Assignment — Day/Night/Lunch

• Feature References

Section 3, Features

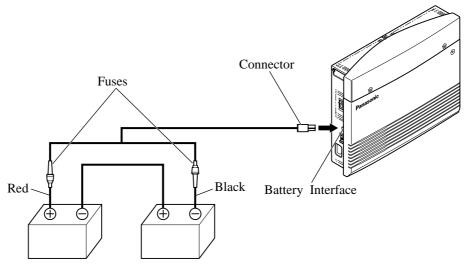
Door Opener, Doorphone Call

* The illustrations on this page are a KX-TA308.

2.17 Backup Batteries Connection

Two car batteries can be connected to the system as a backup power supply in the event of a power failure.

1. Attach the cables (KX-A227) and user-supplied 2 car batteries (12 VDC each) as shown below. Then insert the connector to the system.



Two Car batteries (12 VDC each)

3-CO Line and 8 Ext Expansion Card Installation (KX-TA30877) — for KX-TA308 only

To add 3 outside (CO) lines (outside (CO) lines 4 through 6) and 8 extensions (extension jacks 09 through 16), use an optional 3-CO Line and 8 Ext Expansion Card (KX-TA30877).

8 SLT Extension Expansion Card Installation (KX-TA30874)

To add 8 extensions (extension jacks 17 through 24), use an optional 8 SLT Extension Expansion Card (KX-TA30874).

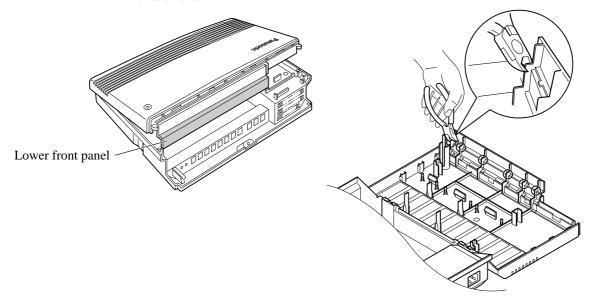
This card can be installed directly to the system or to the KX-TA30877.

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• Only a single line telephone (SLT) can be connected to extension jacks 17 through 24.

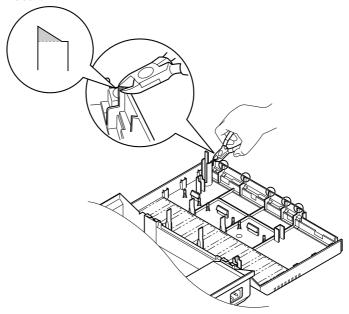
Installing the KX-TA30877 to the KX-TA308

- 1. Loosen the screws and open the top and bottom front covers.
- **2.** Remove the lower front panel with pliers as shown below. Cut the 6 areas marked with a circle.

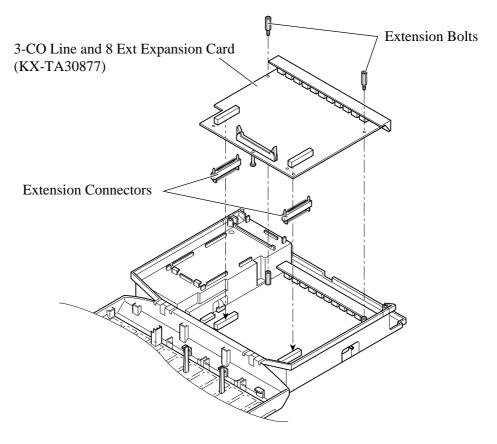


2.18 Installing a 3-CO Line & 8 Ext Expansion Card (KX-TA30877) and 8 SLT Extn. Expansion Card (KX-TA30874)

3. After cutting the areas, be sure to cut off any excess plastic in order to make the surface smooth.



4. Install the KX-TA30877 and secure the 2 extension bolts.

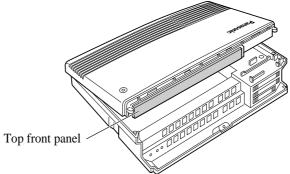


2.18 Installing a 3-CO Line & 8 Ext Expansion Card (KX-TA30877) and 8 SLT Extn. Expansion Card (KX-TA30874)

- **5.** Insert the modular plugs of the telephone line cords (2-conductor wiring) into the modular jacks (CO 4 through 6) on the card. (2.7, Outside (CO) Line Connection)
- 6. Connect the line cords to the terminal board or the modular jacks from the Central Office.
- 7. Insert the modular plugs of the telephone line cords (2 or 4-conductor wiring) into the modular jacks (JACK 09 through 16). (2.8, Extension Connection)
- **8.** Wrap the strap around all of the cords. (2.20, Securing the Cords)
- **9.** Close the covers and secure the screws.

Installing the KX-TA30874

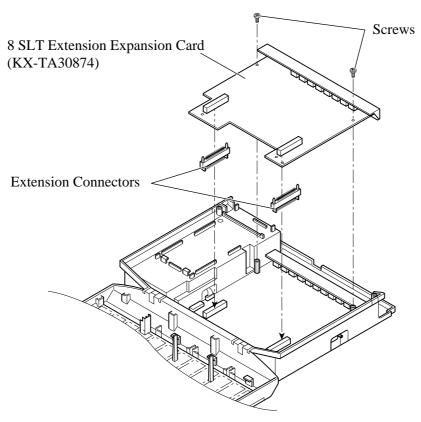
- 1. Loosen the screws and open the front and bottom front covers.
- **2.** If your system is a KX-TA308, remove the lower front panel in the same way as installing a KX-TA30877. If you install the KX-TA30874 to a KX-TA616 or a KX-TA30877, which is connected to a KX-TA308, remove the top front panel with pliers.



3. After cutting the areas, be sure to cut off any excess plastic in order to make the surface smooth. Please refer to installing the KX-TA30877.

2.18 Installing a 3-CO Line & 8 Ext Expansion Card (KX-TA30877) and 8 SLT Extn. Expansion Card (KX-TA30874)

4. Install the KX-TA30874 and secure the 2 screws.

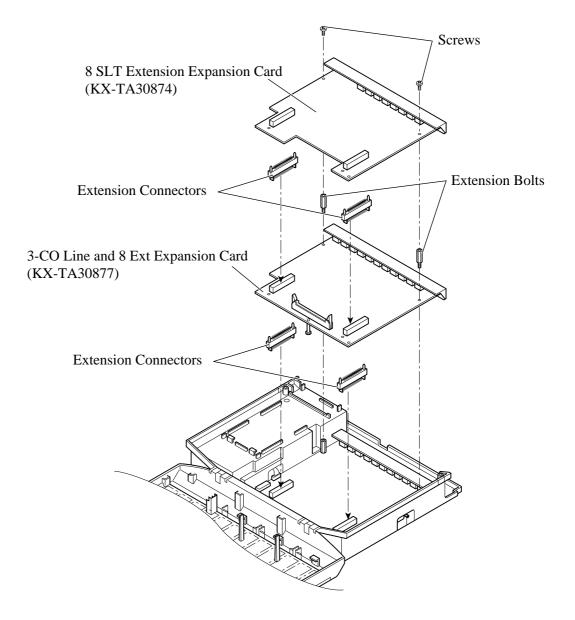


- **5.** Insert the modular plugs of the telephone line cords (2-conductor wiring) into the modular jacks (JACK 17 through 24). (2.8, Extension Connection)
- **6.** Wrap the strap around all of the cords. (\$\sigma\$ 2.20, Securing the Cords)
- 7. Close the covers and secure the screws.

* The illustration on this page is a KX-TA308.

Installing the KX-TA30877 and KX-T30874 — for KX-TA308 only

1. Install the KX-TA30877 first and then the KX-TA30874.



2.19 Auxiliary Connection for Power Failure Transfer

Power failure transfer connects a specific single line telephone (SLT) to selected outside (CO) lines in the event of system power failure, as follows.

Outside (CO) line 1 – extension (T, R) jack 01

Outside (CO) line 4 – extension (T, R) jack 09

Connection of outside (CO) lines 1 and 4, and the respective extensions require no auxiliary connection.



- In the event of a power failure, system memory is protected by a factory-provided lithium battery. There is no memory loss except the Camp-on, Saved Number Redial, Last Number Redial, Call Park and Message Waiting memories.
- The system automatically changes the current connection to this connection when the power supply stops.
- Proprietary telephones cannot be used during a power failure. Therefore, we recommend connecting SLTs in parallel with proprietary telephones connected to extension jacks 01 and 09, or connecting a KX-T7033 (power failure telephone).
- If DC power is available from backup batteries when AC power fails, the system will not change the current connection to the above connection. (** 2.17, Backup Batteries Connection)



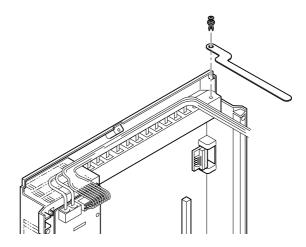
• Feature References

Section 3, Features

Power Failure Transfer, Paralleled Telephone Connection

2.20 Securing the Cords

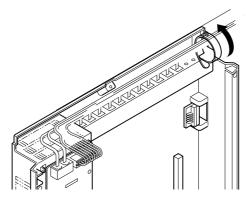
- **1.** Insert the rivet into the hole in the strap.
- 2. Insert the rivet and strap into the hole on the system.



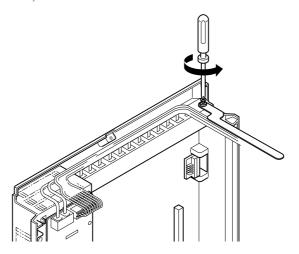
* The illustration on this page is a KX-TA308.

2.20 Securing the Cords

3. Wrap the strap around all of the cords.

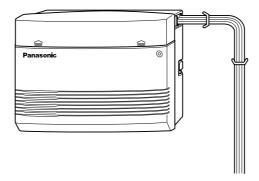


4. To remove the rivet, use a screw driver as shown below.



2.21 Closing the Front Cover

- 1. Replace the covers and tighten the screws.
- **2.** Tie together all of the connected cords and attach them to the wall so that the cords cannot be pulled out of the system.



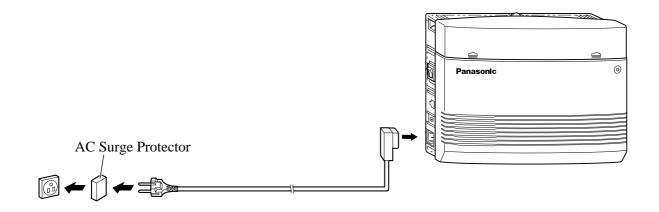
* The illustrations on this page are a KX-TA308.

2.22 Starting the System for the First Time

- **1.** Set the Power Switch to the "OFF" position.
- 2. Plug the AC power cord into the system and an AC outlet.
- **3.** Turn the Power Switch on. (The power indicator will light.)
- **4.** Perform the following operation with a proprietary telephone connected to JACK 01.
 - a) Press the PROGRAM button, or set the MEMORY switch to "PROGRAM" on the back of the telephone.
 - b) Press \times #.
 - c) Enter 1234.
 - d) Enter 999.
 - e) Press the NEXT (SP-PHONE) button.
 - f) Press the SELECT (AUTO ANS/MUTE or AUTO ANSWER/MUTE) button until "All Para" is displayed.
 - g) Press the STORE (AUTO/STORE or AUTO DIAL/STORE) button.
 - h) Press the END (HOLD) button.
 - i) Press the PROGRAM button, or set the MEMORY switch to "SET" on the back of the telephone.

The system will be initialized with the default values. If the system does not work properly, please see 2.24, "System Data Clear".

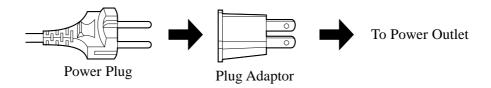
- **CAUTION** The system will continue to be powered even if the Power Switch is turned "OFF".
 - The power supply cord is used as the main disconnect device. Ensure that the outlet is located/installed near the equipment and is easily accessible.



2.22 Starting the System for the First Time

Plug Adaptor

The plug adaptor (included) is to be used if the power plug will not fit your socket. Assemble as shown below, using the plug which fits your socket. In this case, be sure to connect the frame of the main unit to ground because the ground line in the power cable cannot be used.



2.23 System Restart

After starting the system, if the system does not operate properly, restart the system.

Before restarting the system, try the system feature again to confirm whether there definitely is a problem or not.

System Restart causes the following.

- Camp-on is cleared.
- Calls on Hold are terminated.
- Calls on Exclusive Hold are terminated.
- Calls in progress are terminated.
- Call Park is cleared.
- Message Waiting is cleared.
- Last Number Redial is cleared.
- Saved Number Redial is cleared.

Other data is not cleared by System Restart.

1. Turn the Power Switch "OFF" and then "ON".

• If the system still does not operate properly, please see 2.24, "System Data Clear".

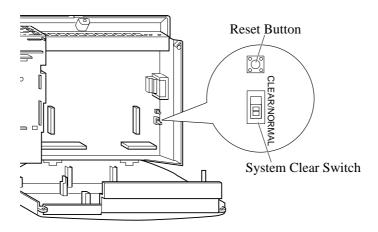
2.24 System Data Clear

When the system does not operate properly after restarting, you can clear the programming data stored in the system. The system will restart with the default settings.

First, try system program [999] "System Data Clear" by following step 4 in 2.22, "Starting the System for the First Time". If the system still does not operate properly, please follow the procedures below.

- 1. Slide the System Clear Switch to the "CLEAR" position.
- **2.** Press the Reset Button.
- **3.** Return the System Clear Switch to the "NORMAL" position before the power indicator stops flashing.

(The power indicator will flash for about 10 seconds.)



CAUTION • Before touching the System Clear Switch and Reset Button, put on a grounding strap.



• After pressing the Reset Button, return the System Clear Switch to the "NORMAL" position in step 3 before the power indicator stops flashing. Otherwise, the system will not clear.



• Feature Reference Section 3, Features

System Data Default Set

* The illustration on this page is a KX-TA308.

Section 3 Features

3



Absent Message Capability

Allows an extension user to set a message which will be displayed at the calling extension to show the reason for the called extension's absence. One of 6 messages can be programmed as desired, which are available for any telephone (single line telephone or proprietary telephone). Setting or canceling a message can be done by individual extension users but only callers using a proprietary telephone with a LCD can see the message.



- The 6 messages are shown below. "%" means a parameter to be entered when assigning a message at an extension.
 - (1) Will Return Soon
 - (2) Gone Home
 - (3) At Ext %%% (extension number)
 - (4) Back at %%: %% AM (or PM) (hour: minute)
 - (5) Out Until %%/%% (month / day)
 - (6) In a Meeting
- An extension user can only select one message at a time. The selected message is displayed every time the user goes off-hook.



• Operating Instructions Reference

1.6 Before Leaving Your Desk, "Showing Your Message on the Calling Party's Display (Absent Message Capability)"

Account Code Entry

An account code is used to identify incoming and outgoing outside calls for accounting and billing purposes. The account code is appended to the SMDR call record. For incoming outside calls, an account code is optional. For outgoing outside calls, there are 4 account input modes programmable in program [605], Option, Forced, Verify–All and Verify–Toll.

Option: A 4 digit code may be entered during a conversation or within 30 seconds

after a conversation when a record is needed.

Forced: A 4 digit code must be entered within 5 seconds after an outside (CO) line is

seized. The code can be any number.

Verify-All: Enables to make an outside call if the code entered within 5 seconds after an

extension user seize an outside (CO) line is the same as one of the account

codes programmed in [310].

Verify–Toll: Enables to make an outside call depending on the code entered within 5 seconds after an outside (CO) line is seized. If it is the same as one of the account codes programmed in [310], your COS is applied. If it is the same as the extension password, the extension COS is applied. If the entered code is both an account code and the extension password, the extension

password has priority.

3 Features A



• Required System Programming

[310] Account Codes

[605] Account Code Entry Mode

[805] SMDR Account Code Selection

• Related Feature References

SMDR, Toll Restriction Override by Extension Password

• Operating Instructions Reference

1.7 Useful Features, "Calling with Account Codes (Account Code Entry)"

Alternate Calling - Ring/Voice (Voice to Ring only)

This system offers a proprietary telephone user 2 types of intercom calling, Voice Call mode and Tone (ring) Call mode. "Voice Call" informs the called party of an incoming call with the calling party's voice, while "Tone Call" uses a ring tone. A proprietary telephone user can select "Voice Call" or "Tone Call" in the Proprietary Telephone Settings. If the user selects "Voice Call", the calling party can talk to the user immediately after the confirmation tone. The calling party can switch the pre-set mode at the called extension, from "Voice Call" to "Tone Call", by pressing "*" after dialing the extension number.



• A rotary telephone user cannot change the pre-set mode at the called extension.



• Operating Instructions References

- 1.2 Proprietary Telephone Settings, "Customizing Your Telephone Functions", Intercom Alert Assignment
- 1.7 Useful Features, "Alternate Calling Ring/Voice (Voice to Ring only)"

Automatic Callback Busy (Camp-On)

When the selected outside (CO) line or dialed extension is busy, the system will automatically notify an extension user with a callback ringing when the line becomes available. When the user answers the callback ringing:

For an extension: The called extension starts ringing without dialing.

For an outside (CO) line: The line is seized.



• Operating Instructions Reference

1.3 Making Calls, "Making Your Telephone Ring Back Automatically When a Line Becomes Free (Automatic Callback Busy – Camp-On)"

3

Automatic Outside (CO) Line Access Number

An Automatic Line Access number (0 or 9) can be programmed. When an extension user dials an Automatic Line Access number before a telephone number, an available outside (CO) line from the assigned lines in program [419] is seized automatically. If "0" is selected in program [121], the operator call will be "9" automatically. If "9" is selected in program [121], the operator call will be "0" automatically.



• Related Feature References

Operator Call, Outside Calling

• Required System Programming

- [121] Automatic Outside (CO) Line Access Number Selection
- [419] Automatic Designated Outside (CO) Line Access

Busy Station Signaling (BSS)

When an extension user calls a busy extension, the busy extension will hear a Call Waiting tone to know that a call is waiting.



• This feature is only available if the called extension has set the Call Waiting feature. If the Call Waiting feature is activated, the caller will hear a ringback tone. If not, the caller will hear a reorder tone.

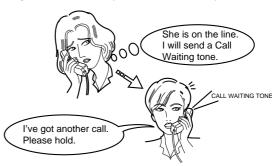


• Related Feature Reference

Call Waiting

• Operating Instructions Reference

1.3 Making Calls, "Sending a Call Waiting Tone to a Busy Extension (Busy Station Signaling)"



3 Features C

Call Forwarding

Allows an extension user to transfer incoming calls automatically to another extension or to an external destination. The following types are available.

All incoming calls are forwarded to another extension.

Busy or No Answer: All incoming calls are forwarded to another extension when

the extension user does not answer within the programmed

To an Outside(CO) Line: Allows an extension user enabled in program [607] to forward

all incoming calls to an external party.

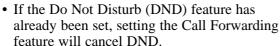
time in [202] or when the extension is busy.

Follow Me: Allows an extension user to set the Call Forwarding – All

Calls feature from another extension.



 Extensions which have already been assigned as a forwarded destination cannot set the Call Forwarding feature.





• If a call between 2 outside parties is established by the Call Forwarding – to Outside (CO) Line feature, the duration of the call is determined by the system timer assigned in program [205]. An alarm tone is generated to both outside parties 15 seconds before the timeout. The call will be disconnected at the timeout.



• Required System Programming

[202] Call Forwarding Start Time

[205] Outside-to-Outside (CO-to-CO) Line Duration Time Limit

[607] Call Forwarding to an Outside (CO) Line

• Related Feature Reference

Limited Call Duration

• Operating Instructions References

1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", FWD/DND (Forward/Do Not Disturb) Button

1.6 Before Leaving Your Desk, "Forwarding a Call (Call Forwarding)"

Calling Party Control (CPC) Signal Detection

The Calling Party Control (CPC) signal is a disconnect signal sent from the Central Office for an outside call. The CPC signal detection is activated by programs [420] and [421]. Program [420] is for incoming outside calls, and [421] is for outgoing outside calls.



• Required System Programming

[420] Calling Party Control (CPC) Signal [421] CPC Detection for Outgoing Calls

Call Park

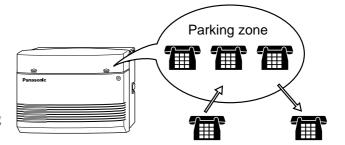
Allows an extension user to place a held call into a system parking area. Any extension user can retrieve the parked call to perform other operations. Up to 10 calls can be parked at the same time.



- If a parked call is not retrieved within the assigned time in program [200], a ring tone or an alarm tone will be heard.
- If a parked call is not retrieved within 30 minutes, it will be automatically disconnected.
- This feature is useful when an extension user wants to hold more than one intercom call with a proprietary telephone, or more than one intercom call or outside call with a single line telephone.
- During a 5-party conference, this feature cannot be performed.



- Required System Programming [200] Hold Recall Time
- Related Feature Reference Conference (5-party)
- Operating Instructions Reference
 1.5 During Conversation, "Placing
 a Call in System Parking Area
 (Call Park)"



3 Features C

Call Pickup

<Directed Call Pickup>

Allows an extension user to answer a call ringing at any other extension.

<Group Call Pickup>

Allows an extension user to answer a call ringing at another extension, if the call is ringing within the user's extension group assigned in program [600].

<Call Pickup Deny>

Allows an extension user to prevent other extensions from picking up a call ringing at the user's extension with the Call Pickup feature.

<Call Retrieving from a TAM (Telephone Answering Machine)>

Allows an extension user to answer an incoming call received by a TAM extension assigned in program [611].



- The user can pick up an incoming outside, intercom or doorphone call with the Directed Call Pickup or Group Call Pickup feature.
- A confirmation tone is sent to the user when the call is picked up with the Directed Call Pickup or Group Call Pickup feature. The tone can be disabled in program [117].
- If a ringing extension sets the Call Pickup Deny feature, an extension user will hear a reorder tone when the user tries to pick up the call.



• Required System Programming

[117] Call Pickup Tone

[600] Extension Group Assignment

[611] TAM (Telephone Answering Machine) Extension

• Operating Instructions Reference

1.4 Receiving Calls, "Picking up a Call Ringing at Another Extension (Call Pickup)"



Call Splitting

Allows an extension user to talk to 2 different parties. If a call is received while the user is already on the line, the user can place the current call on hold and have a conversation with the other party.



• This feature is not possible for a doorphone call, page or 5-party conference.



Related Feature References

Conference (5-party), Doorphone Call, Paging

• Operating Instructions Reference

1.5 During Conversation, "Call Splitting"

 \mathbf{C}

Call Transfer - to Extension

Allows an extension user to transfer a received call, an intercom or an outside call, to another extension. Two types are available.

Screened Call Transfer: Announces the call to another extension before completing

the transfer.

Unscreened Call Transfer: Immediately releases the call to another extension without an

Features

announcement.



- If the destination extension does not answer the call within the assigned time in program [201], the call will return to the transferring party.
- An outside call can be transferred to an extension by simply pressing a DSS button. It requires program [005].
- If Music on Hold is enabled, music is sent to the original external caller while being transferred. Sending a cyclic tone or music on hold can be programmed by program [111].
- During a 5-party conference, the user cannot transfer a call.



• Required System Programming

[005] One-Touch Transfer Using a DSS Button

[111] Hold Music Selection

[201] Transfer Recall Time

• Related Feature References

Conference (5-party), Hold, Music on Hold

- Operating Instructions Reference
 - 1.5 During Conversation, "Transferring a Call to an Extension (Call Transfer to Extension)"

Call Transfer - to Outside (CO) Line

Allows an extension user enabled in program [606] to transfer a received call, an intercom call or an outside call, to an external party.



- If a call between 2 external parties is established using this feature, an alarm tone will be sent to both parties 15 seconds before the assigned time limit in program [205]. Also, a ring tone or an alarm tone will be sent to the extension who transferred the call 50 seconds before the timeout. The call will be disconnected at the timeout unless the extension joins the conversation again.
- A single line telephone user cannot transfer a received call to an external party.
- If Music on Hold is enabled, music will be sent to the original external caller while being transferred. Sending a cyclic tone or music on hold can be programmed by program [111].



• To join the conversation again after transferring the call, press the corresponding CO button. A conference call will be established. This feature is not available for a single line telephone.



Required System Programming

- [111] Hold Music Selection
- [205] Outside-to-Outside (CO-to-CO) Line Duration Time Limit
- [606] Call Transfer to an Outside (CO) Line
- Related Feature Reference

Hold, Music on Hold

• Operating Instructions Reference

1.5 During Conversation, "Transferring a Call to an Outside (CO) Line (Call Transfer – to Outside (CO) Line)"

Call Waiting

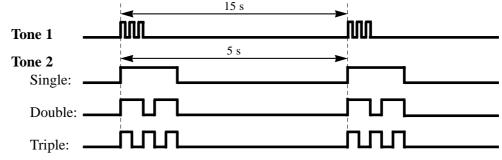
During a conversation, a Call Waiting tone informs an extension user that there is a call waiting. The user can answer the second call by disconnecting the first call or placing it on hold. When Call Waiting is enabled, a Call Waiting tone is sent to the user under the following conditions.

- 1) When an outside call (except a doorphone call) is received, or
- 2) When another extension executes the Busy Station Signaling (BSS) feature.





• For proprietary telephone users, a Call Waiting tone (Tone 1 or Tone 2) can be selected in the Proprietary Telephone Settings. Tone 2 depends on System Programming. Program [423] is for outside calls and program [115] is for intercom calls.





Required System Programming

- [115] Extension Ringing Pattern Selection
- [423] Outside (CO) Line Ringing Pattern Selection
- Related Feature Reference

Hold

• Operating Instructions References

- 1.2 Proprietary Telephone Settings,
 - "Customizing Your Telephone Functions", Call Waiting Tone Selection
- 1.5 During Conversation, "Call Waiting"

Conference (3-party)

<Conference>

During a 2-party conversation, an extension user can add a third party to make a 3-party conference. The maximum number of members of a conference can be programmed in program [116].

<Conference, Unattended>

When a proprietary telephone user is in a 3-party conference with 2 external parties, the user can leave the conference to allow the other 2 parties to continue the conversation. This is called an Unattended Conference. The user may return to the conference, if desired.



- The possible combinations, through System Programming, are 3 extensions, 1 extension and 2 external parties, or 2 extensions and 1 external party.
- When a 2-party call is changed to a 3-party call or vice versa, a confirmation tone is sent to all 3 parties. The tone can be disabled by program [105].
- A 3-party call can also be established by the Executive Busy Override feature.
- The duration of an Unattended Conference can be limited in program [205]. The call is disconnected when the assigned time limit expires unless the extension which leaves the conference returns to it.
- An Unattended Conference can be established when the extension is allowed to transfer a call to an outside (CO) line by program [606].



Required System Programming

[105] Conference Tone

[116] Conference Pattern Selection

[205] Outside-to-Outside (CO-to-CO) Line Duration Time Limit

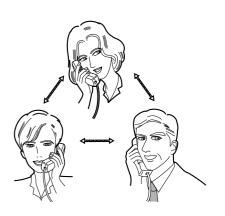
[606] Call Transfer to an Outside (CO) Line

• Related Feature References

Limited Call Duration, Executive Busy Override

• Operating Instructions References

- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", CONF (Conference) Button
- 1.7 Useful Features, "Conference (3-party)"
- 1.7 Useful Features, "Conference, Unattended"



3 Features C-D

Conference (5-party)

Allows an extension user to establish a 5-party conference when "5 party C-2 E-5" is selected in program [116].



- Up to 2 external parties can participate in a conference call.
- All 5 parties can be extensions.
- Only one 5-party conference can be established at one time.
- When a 5-party conference is established, a confirmation tone is sent to all parties. The tone can be disabled by program [105].
- The Unattended Conference, Executive Busy Override features, and the Call Park feature by another extension are not available during a 5-party conference.



• Required System Programming

[105] Conference Tone

[116] Conference Pattern Selection

• Related Feature References

Conference (3-party), Call Park, Executive Busy Override

• Operating Instructions References

- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", CONF (Conference) Button
- 1.7 Useful Features, "Conference (5-party)"

Data Line Security

Prevents an extension user from being interrupted by the Call Waiting and Executive Busy Override features. This feature also prevents a ring tone or an alarm tone from being sent when a call is kept waiting longer than a pre-determined time. Data communication devices, such as computers and facsimiles, connected to an extension jack can operate without interruptions.



• Related Feature References

Call Waiting, Executive Busy Override

• Operating Instructions Reference

1.7 Useful Features, "Data Line Security"



D 3 Features

Date and Time Setting

A manager or operator can adjust the current time.



• Required System Programming

[000] Date and Time Setting

• Operating Instructions Reference

1.8 Operator / Manager Service Features, "Date and Time Setting"

Direct In Line (DIL)

Enables an incoming outside call to go directly to a specified extension. This outside (CO) line can be used by multiple extension users to make a call, but can only be used by one extension to receive a call. DIL can have a different destination in the day, night and/or lunch modes.



• If the destination extension is in an extension group which has enabled the Station Hunting feature (Terminate or Circular) in program [100] "Hunting Group Set", Station Hunting works when the extension is busy.

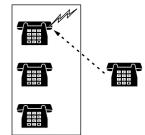


• Required System Programming

[414]–[416] Outside (CO) Line Mode — Day/Night/Lunch

• Related Feature References

Station Hunting, Time (Day/Night/Lunch) Service





Direct Inward System Access (DISA)

Allows an outside caller to access specific system features as if the caller is an extension in the system. The caller can have direct access to features such as:

- Placing an incoming call to an extension, extension group or operator. The caller also has the option of dialing the route for an extension using a 1 digit number (DISA builtin auto attendant number) via DISA calls.
- Calling an external party.

Either None Security, Trunk Security (outside (CO) line security) or All Security in program [511] must be selected to have direct access to these features.

None Security: Any caller can make outside or intercom calls.

Trunk Security: A pre-assigned DISA security code must be entered to make outside calls.

All Security: A pre-assigned DISA security code must be entered to make both outside and intercom calls.

This prevents the caller from making unauthorized calls. However, when making an outside call by Call Forwarding – to Outside (CO) Line, the call is allowed (exception).

The DISA feature operates without an optional card installed. If an outgoing message (OGM) which greets a caller and gives information, or fax detection is required, an optional OGM/FAX Detection Card must be installed. The system can detect a FAX (CNG) tone according to program [514]. An OGM can be programmed in program [502] (** "Outgoing Message (OGM)" in this section). When a caller reaches a DISA line, a message will greet the caller. Two different DISA messages can be recorded by the operator or manager. For example, one message can be used in day mode and the other in night mode, or they can be used for different outside (CO) lines. If an optional OGM/FAX Detection Card is not installed, the caller will hear a short beep instead of the OGM (Internal DISA).



- "DISA" must be assigned to outside (CO) line(s) as the outside (CO) line mode in programs [414] through [416].
- A DISA call is answered after a ringback tone is returned to the caller after the DISA Delayed Answer Time assigned in program [504] expires. The caller can dial during the message or after the tone.
- This system can store up to 10 programmable DISA built-in auto attendant numbers in program [501]. Each number is 1 digit.
- The DISA built-in auto attendant number may be the same as the first digit of other numbers (extension number, etc.). To avoid confusion, the system waits for the second digit for a preprogrammed amount of time in program [517] (default: 2 seconds). If the timer expires, the system will assume that the first digit is a DISA built-in auto attendant number.
- Only one OGM/FAX Detection Card can be installed .
- The DISA line can be used to make outside calls, if a security code assigned in program [512] (if required) has been dialed.
- This system can store up to 4 programmable DISA security codes. Each code should be different
- When a wrong DISA security code is entered, 3 beeps will be heard. The call will be disconnected after 3 failed attempts. If you enter a security code a second and third time, dialing *\times\$ is not necessary.

D 3 Features

- The duration of outside-to-outside (CO-to-CO) line calls can be limited in program [205]. When the specified time expires, both lines are disconnected. A warning tone is sent to both parties 15 seconds before the time-limit.
- To detect the end of an outside-to-outside (CO-to-CO) line call, CPC Signal Detection can be assigned. Programs [420] and [421] are required.



• Connection Reference

2.15 OGM/FAX Detection Card Installation

• Required System Programming

To enable the DISA feature

[414]–[416] Outside (CO) Line Mode — Day/Night/Lunch

[420] Calling Party Control (CPC) Signal

[421] CPC Detection for Outgoing Calls

[500] DISA Incoming Dialing Mode Selection

[501] DISA Built-in Auto Attendant

[502] OGM Mode Selection

[503] FAX Connection

[506] DISA Busy Mode

[510] DISA No Dial Mode

[511] DISA Security Type

[512] DISA Security Codes

[513] Cyclic Tone Detection

[514] FAX Tone Detection

[516] DISA Incoming Assignment

[518] DISA Tone Selection after the Security Code

To set DISA timer values

[205] Outside-to-Outside (CO-to-CO) Line Duration Time Limit

[504] DISA Delayed Answering Time

[505] DISA Waiting Time after OGM

[517] DISA AA Wait Time

[519] DISA OGM Mute Time

To enable the Intercept Routing feature

[408]–[410] Flexible Ringing Assignment — Day/Night/Lunch

[507] DISA Intercept Mode

[508] DISA Ringing Time Before Intercept

[509] DISA Ringing Time After Intercept

[515] Intercept Time for Internal DISA

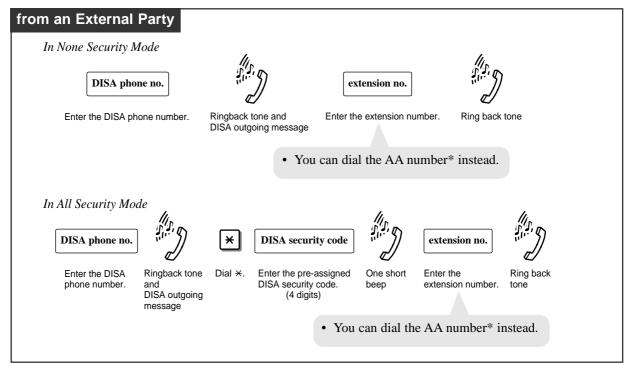
• Related Feature References

Intercept Routing, Outgoing Message (OGM), Polarity Reverse Detection, Station Hunting

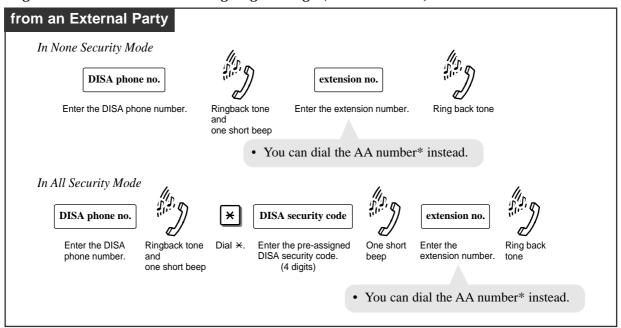
3 Features D

DISA Operation

Calling an extension by following the outgoing message



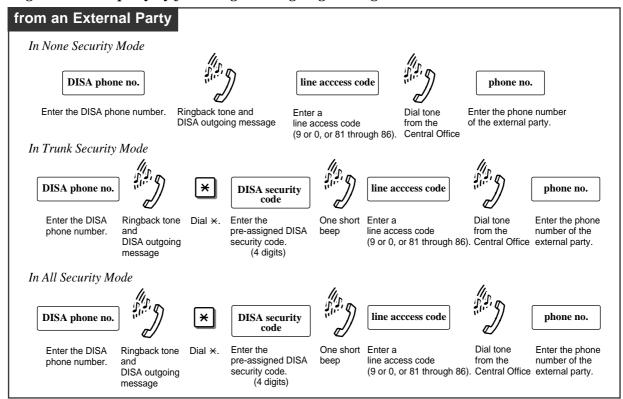
Calling an extension without an outgoing message (Internal DISA)



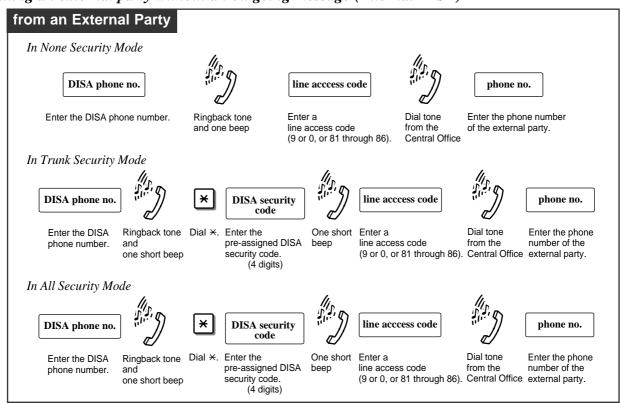
AA number*: A DISA built-in auto attendant number assigned in program [501] "DISA Built-in Auto Attendant".

D 3 Features

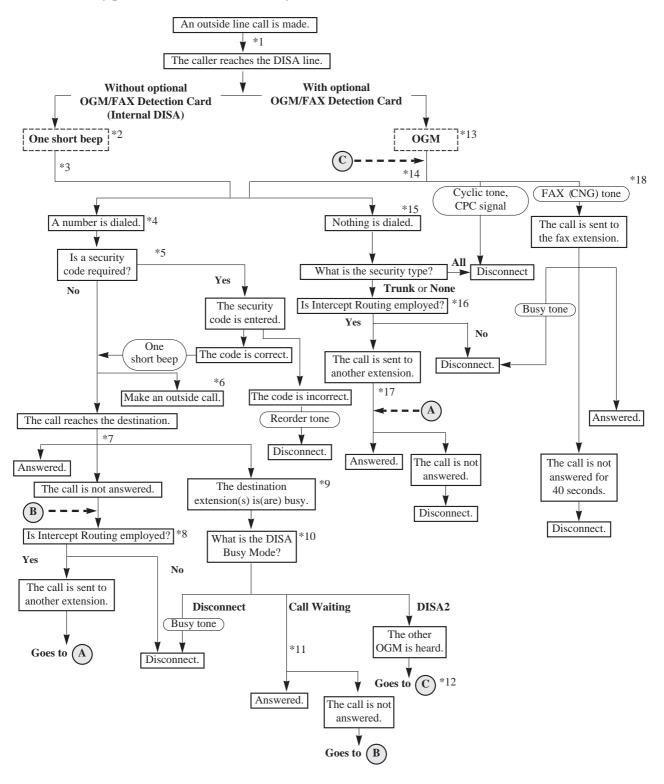
Calling an external party by following the outgoing message



Calling an external party without an outgoing message (Internal DISA)



Flow chart of possible cases and results for DISA calls



Note: The explanation for *1 through *18 is on the next page.

D 3 Features

- *1: The DISA Delayed timer starts. This is the time between a call reaching the system and being received. The time is assigned in program [504].
- *2: When the assigned time period in program [519] expires, the system sends a short beep to the caller.
- *3: The Intercept Timer for Internal DISA starts. This is the time the system waits for the number sent by the caller. If nothing is entered by the caller during this time, the system will regard it as "Nothing is dialed." The time is assigned in program [515].
- *4: The system can accept the following numbers:
 - 100 through 199 as an extension number.
 - 81 through 86 as an outside (CO) line group line access number.
 - 9 as an automatic line access number when "Without AA" is assigned in program [500]. Even if "With AA" is assigned, 9 is regarded as the automatic line access number if nothing is assigned to "9" in program [501]. In case "9" is assigned as the operator call number in program [121] "Automatic Outside (CO) Line Access Number Selection", 9 is regarded as the operator call number instead of an automatic line access number.
 - 0 as the operator call number when the operator is assigned in program [008] "Operator Assignment" and "Without AA" is assigned in program [500]. Even if "With AA" is assigned, 0 is regarded as the operator call number if nothing is assigned to "0" in program [501]. If "0" is assigned as an automatic line access number in program [121], 0 is regarded as an automatic line access number instead of the operator call number.
 - 0 through 9 as a built-in auto attendant number when "With AA" is assigned in program [500]. The DISA AA Wait timer starts after receiving the first 1-digit number. If the timer expires, the system will assume that the first digit is an AA number. The time is assigned in program [517].
- *5: A security code is necessary when program [511] is assigned as follows.
 - All Security the system waits for a security code dialed after "*." When the security code matches the one programmed in [512], the system accepts the numbers after the code.
 - **Trunk Security** the caller can access an outside (CO) line if the security code matches the one programmed in [512]. The caller can access other destinations without the security code.

If the entered number is the same as one of the security codes, a short beep will be heard. The short beep can be disabled by program [518]. If the number is wrong, 3 beeps will be heard. The call will be disconnected after 3 failed attempts.

- *6: The caller must enter the desired telephone number after hearing a dial tone from the Central Office.
- *7: The DISA Ring Timer Before Intercept starts. The destination telephone(s) will ring for the time programmed in [508].
- *8: The system treats the call according to program [507] as follows.
 - **Disconnect** the call is disconnected.
 - **Intercept** the call is sent to the extensions programmed in [408]-[410] "Flexible Ringing Assignment Day/Night/Lunch".

If the call is still not answered within the time programmed in [509], it will be disconnected.

*9: If the destination extension belongs to a hunting group and all extensions in the group are busy, the system will check the DISA Busy Mode. If the destination is a DISA ring group, the DISA Busy Mode will not work for the call. The system regards the call as unanswered.

- *10: The DISA Busy Mode is selected in program [506]. There are 3 modes as follows.
 - **Disconnect** the caller hears a busy tone and a call is disconnected.
 - Call Waiting the destination extension hears a call waiting tone if they have enabled Call Waiting.
 - **DISA2** if "MODE2" is assigned in program [502] and a message is recorded in OGM2, the caller will hear the message and the system waits for the new destination.
- *11: The DISA Ring Timer Before Intercept starts. The destination telephone(s) will ring for the time programmed in [508].
- *12: In this case, the system disregards the security type and does not accept a line access code. If nothing is recorded in OGM2 or OGM2 is used for another caller, the caller will hear a busy tone and the call is disconnected.
- *13: The OGM is sent to the caller according to programs [414]–[416] and [502] when the assigned time in program [519] expires. If an OGM is not recorded, the DISA Wait Timer After OGM programmed in [505] starts immediately. When the system detects a FAX (CNG) tone while the OGM is being sent, the call is sent to the FAX extension assigned in program [503]. When the system detects a cyclic tone or CPC signal while the OGM is being sent, the call is disconnected.
- *14: The DISA Wait Timer After OGM starts. The system waits for a number from the caller during the time assigned in program [505]. When the system detects a FAX (CNG) tone during the programmed time, the call is sent to the FAX extension. When the system detects a cyclic tone or CPC signal during the programmed time, the call is disconnected.
- *15: After the DISA Wait Timer After OGM or the Intercept Timer for Internal DISA expires, the system regards that nothing was dialed.
- *16: The system treats the call according to program [510] as follows.
 - **Disconnect** the call is disconnected.

system receives it.

- **Intercept** the call is sent to the extensions programmed in [408]-[410]. If all extensions are assigned to "Disable", the call will be disconnected.
- *17: The DISA Ring Timer After Intercept starts. The destination telephone(s) will ring for the time programmed in [509]. If the call is not answered during the programmed time, the call will be disconnected.
- *18: The FAX extension assigned in program [503] receives the call. When the extension is busy, the system sends a busy tone to the sending FAX. If the call is not answered after 40 seconds, the call will be disconnected.

 Program [514] determines how many times the FAX (CNG) tone is sent until the

Display Contrast Adjustment (KX-T7330/KX-T7030/KX-T7130/KX-T7033 only)

Allows a display proprietary telephone user to adjust the display contrast with the CONTRAST selector.



• Operating Instructions Reference

1.2 Proprietary Telephone Settings, "Display Contrast Adjustment"

Distinctive Dial Tones

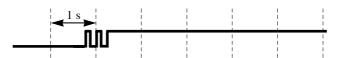
An extension user will hear 3 types of dial tone patterns which give information about the features activated on the telephone.

Dial Tone 1: This is a normal dial tone. None of the features listed in Dial Tone 2 are activated.



Dial Tone 2: Sent when any of the following features are set.

- Absent Message Capability
- Call Forwarding
- Data Line Security
- Electronic Station Lockout
- Pickup Dialing (for single line telephones only) • Timed Reminder
- Background Music (BGM) (for proprietary telephones only)
- Call Pickup Deny
- Do Not Disturb (DND)
- Message Waiting (for proprietary telephones only)
- Remote Station Lock Control



Dial Tone 3: Sent when making an Account Code Entry and answering a Timed Reminder call. Also sent when going off-hook with a single line telephone which has a message in a Voice Processing System.





Operating Instructions Reference

1.7 Useful Features, "Distinctive Dial Tones"

Do Not Disturb (DND)

<Do Not Disturb (DND)>

Allows an extension user to prevent other parties from disturbing them. The extension will not receive intercom or outside calls.

<Do Not Disturb (DND) Override>

Allows an extension user enabled in program [609] to call an extension which has set the Do Not Disturb (DND) feature.



- If your proprietary telephone (PT) is not supplied with the FWD/DND button, it can be assigned to a flexible CO button in the Proprietary Telephone Settings.
- DND does not work for the following calls: Hold recall or Timed Reminder.
- A PT user in the DND mode can answer a call by pressing the corresponding flashing button.
- If the Call Forwarding feature has already been set, setting the DND feature will cancel Call Forwarding.



- Required System Programming [609] Do Not Disturb Override
- Related Feature References

Call Forwarding, Timed Reminder

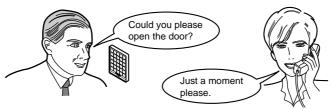
- Operating Instructions References
 - 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone",

FWD/DND (Forward/Do Not Disturb) Button

- 1.7 Useful Features, "Rejecting Incoming Calls (Do Not Disturb DND)"
- 1.7 Useful Features, "Calling an Extension which Denies Receiving Calls (Do Not Disturb Override)"

Door Opener

Up to 4 Door Openers can be connected to the system. The door can be unlocked by a pre-assigned extension users in programs [703]-[705].





- An optional Doorphone/Door Opener Card must be installed to the system and a user-supplied door opener to the door to be opened. Four openers can be installed.
- The door opener will open the door even if a doorphone is not installed.
- The door opener timer can be modified in program [709].



D 3 Features



• Connection Reference

2.16 Doorphone and Door Opener Connection

• Required System Programming

[703]–[705] Door Opener Assignment — Day/Night/Lunch [709] Door Opener Time

• Related Feature Reference

Doorphone Call

• Operating Instructions Reference

1.7 Useful Features, "Door Opener"

Doorphone Call

Up to 4 Doorphones (KX-T30865) can be installed. If a visitor presses the doorphone button, a pre-assigned extension user in programs [700]-[702] can answer the call and talk to the visitor. Any extension user can call a doorphone. The doorphones are also used for the Room Monitor feature.



- An optional Doorphone/Door Opener Card must be installed to the system and a doorphone. Four doorphones can be installed.
- Doorphone 1 and 2 cannot be used simultaneously. When one is in use, an extension user cannot have a conversation with the other. Doorphone 3 and 4 are the same.
- An access tone can be programmed in [707] to be sent to a monitored doorphone before room monitoring starts.
- The ring tone from the doorphone call is programmable in [706].



• Connection Reference

2.16 Doorphone and Door Opener Connection

• Required System Programming

[700]–[702] Doorphone Ringing Assignment — Day/Night/Lunch

[706] Doorphone Ringing/Tone Pattern Selection

[707] Doorphone Access Tone Selection

[708] Doorphone Ringing Time

• Related Feature References

Door Opener, Room Monitor

• Operating Instructions References

1.7 Useful Features, "Room Monitor"

1.7 Useful Features, "Doorphone Call"

Features 3

DSS Console

The Direct Station Selection (DSS) Console provides direct access to extensions, a busy lamp display, as well as 16 PF (Programmable Feature) buttons.

The DSS Console must be programmed to work with a proprietary telephone (PT). The jack number of the DSS Console and its associated PT are assigned in programs [003] and [004]. Up to 2 consoles can be installed per system.

If a feature like One-Touch Dialing is assigned to a DSS button or PF button, accessing the feature can be done easily by pressing the corresponding button. This is very useful for an operator or manager. Refer to the Operating Instructions for more details.



- Programming the DSS and PF buttons can be done only from the paired telephone.
- Indicating the Forward (FWD) or Do Not Disturb (DND) status of corresponding extensions using a DSS button indication is programmable in [112].



- Connection Reference
 - 2.8 Extension Connection
- Required System Programming
 - [003] DSS Console Port Assignment
 - [004] Paired Telephone Assignment for DSS Console
 - [112] DSS Console Indication Mode
- Operating Instructions Reference
 - 1.9 DSS Console Features

Emergency Call

Allows an extension user to access a pre-assigned emergency number which can be dialed regardless of any restrictions.



- Up to 5 emergency numbers can be stored.
- An emergency call is allowed even in the following cases;
 - in Account Code Modes (Verify–All, Verify–Toll and Forced modes),
 - in any toll restriction COS number, and
 - in Electronic Station Lockout.



Required System Programming

[309] Emergency Dial Number Set

• Related Feature References

Account Code Entry, Toll Restriction, Station Lock

• Operating Instructions Reference

1.3 Making Calls, "Making Emergency Calls (Emergency Call)"

Executive Busy Override

< Executive Busy Override - Extension>

Allows an extension user enabled in program [608] to interrupt an existing intercom call. A 3-party conference will be established.

< Executive Busy Override - Outside (CO) Line>

Allows a proprietary telephone user enabled in program [608] to interrupt an existing outside call or add a third party. A 3-party conference will be established.

< Executive Busy Override Deny>

Allows an extension user to prevent other extension users from interrupting their conversation.



- The Executive Busy Override feature will not work if the extension engaged the conversation has set Executive Busy Override Deny or Data Line Security.
- When a 3-party call is changed to a 2-party call or vice versa, a confirmation tone will be sent to all parties. This tone can be disabled by program [105].



• Required System Programming

[105] Conference Tone [608] Executive Busy Override

• Related Feature Reference

Conference (3-party)

• Operating Instructions References

- 1.3 Making Calls, "Interrupting an Existing Call (Executive Busy Override)"
- 1.3 Making Calls, "Denying 'Interrupting an Existing Call' (Executive Busy Override Deny)"

Extension Button Confirmation (KX-T7330/KX-T7030/KX-T7130/KX-T7033 only)

Allows a display proprietary telephone user to confirm the values stored in the buttons, such as the REDIAL button or flexible CO button, by pressing the corresponding button while on-hook.



• Operating Instructions Reference

1.7 Useful Features "Extension Button Confirmation (KX-T7330/KX-T7030/KX-T7130/KX-T7033 only)"

3 Features

Extension Group

The system supports 8 extension groups. In an extension group, the following features can be activated.

- Group Call Pickup: Any member of an extension group can pick up a call directed to another member in the same group.
- Paging Group: Any member of an extension group can make a voice announcement to another group member.

A hunting group, DISA ring group or UCD group is a specific extension group. The following operation as well as the features above can be activated for a hunting group, DISA ring group or UCD group.

Hunting Group

An extension group enabled in program [100] "Hunting Group Set" will perform the Station Hunting feature. See "Station Hunting" in this section.

DISA Ring Group

All extensions in a DISA ring group assigned as an auto attendant destination in program [501] "DISA Built-in Auto Attendant" will ring simultaneously. Selecting "DISA1" or "DISA2" in programs [414]–[416] "Outside (CO) Line Mode — Day/Night/Lunch" is required.

UCD Group

One extension group assigned as the UCD group in program [520] "UCD Group" can be the destination of incoming outside calls via the UCD feature. Selecting "UCD" in programs [414]–[416] "Outside (CO) Line Mode — Day/Night/Lunch" is required.



• Required System Program Address

[600] Extension Group Assignment

• Related Feature References

Call Pickup, Direct Inward System Access (DISA), Paging, Station Hunting, Uniform Call Distribution (UCD)

Extension Password / System Password

The extension password assigned by the manager (extension jack 01) to each extension can be used for the Toll Restriction Override by Extension Password and Walking COS features. The system password is used for entering System Programming and also before assigning the extension password.



• Required System Programming

[002] System Password

• Related Feature References

Toll Restriction Override by Extension Password, Walking COS

• Operating Instructions Reference

1.8 Operator / Manager Service Features, "Extension Password Set (Manager only)"

External Feature Access

Allows an extension user to access special features (e.g. Call Waiting) offered by the Central Office or host PBX. This is done by placing the current call on hold and sending a flash signal using either the FLASH button or the feature number. This feature is effective only during an outside call.



- When "MODE2" is selected in program [110] and the FLASH button is pressed for longer than the time programmed in [418], this feature will not work.
- The flash time must be assigned in program [418] as required by the host PBX or outside (CO) line.



- Required System Programming
 - [110] Flash Key Mode [418] Flash Time
- Related Feature References

Flash, Host PBX Access

- Operating Instructions Reference
 - 1.7 Useful Features, "External feature Access"

Flash

The FLASH button is used to allow a proprietary telephone user to disconnect the current call and originate another call without hanging up. This is activated when "MODE2" is selected in program [110] and the FLASH button is pressed for longer than the time programmed in [418]. When "MODE1" is selected in program [110], the FLASH button can be used to access features of the Central Office or host PBX (External Feature Access). It is performed by putting the current party on hold and sending a flash signal while having an outside call.



• Assigning the External Feature Access feature to any flexible button is useful when "MODE 2" was selected in program [110]. This can be done from any extension by assigning the FLASH button to a One-Touch Dialing button (Operating Instructions, 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", One-Touch Access for System Features). When the assigned button is pressed, a flash signal is sent during the programmed time in [418].



- Required System Program Address
 - [110] Flash Key Mode [418] Flash Time
- Operating Instructions Reference

1.7 Useful Features, "External Feature Access"

3 Features F

Flexible Buttons

A proprietary telephone (PT) user can change the flexible buttons on the telephone and DSS console to certain function buttons. For example, if the telephone has more CO buttons than available outside (CO) lines, the unused CO buttons may be changed to One-Touch Dialing buttons, etc.

The 4 types of flexible buttons are as follows:

- Flexible CO Buttons (located on a PT only)
- Flexible DSS Buttons (located on a DSS Console only)
- Programmable Feature (PF) Buttons (located on a PT and DSS Console)
- Flexible MESSAGE Buttons (located on a PT except for the KX-T7055)

Check the required operation first. If the telephone is not provided with the button, assigning the button can be performed in the Proprietary Telephone Settings.

Function	Programmable Button					
runcuon	СО	DSS	PF	MESSAGE		
DSS (Direct Station Selection)	~	~		~		
One-Touch Dialing	~	~	V	~		
CONF (Conference)	~					
FWD/DND (Forward/Do Not Disturb)	~					
SAVE	~					
Log-In/Log-Out	~					
Single-CO (S-CO)	~					
Other CO (O-CO)	~					
Group-CO (G-CO)	~					
MESSAGE (Message Waiting)				~		
Day		~				
Night		~				
Lunch		~				
Station Lock		~				

[&]quot;\" indicates that the feature is available.



Operating Instructions Reference

1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone"

Handset/Headset Selection (KX-T7330/KX-T7030/KX-T7130/KX-T7033 only)

The system supports the use of headsets with proprietary telephones. Switch the selection mode before using the headset (optional).



• Operating Instructions Reference

1.2 Proprietary Telephone Settings, "When Using the Headset"

Handsfree Answerback

Allows a proprietary telephone with a speakerphone to answer an intercom call without lifting the handset. This feature performed by pressing the AUTO ANSWER/MUTE or AUTO ANS/MUTE button.



• This feature does not work for incoming outside calls or doorphone calls.



• Operating Instructions Reference

1.4 Receiving Calls, "Handsfree Answerback"

Handsfree Operation

Allows a proprietary telephone user to dial and talk to the other party without lifting the handset. Pressing one of the following buttons activates the handsfree mode when the SP-PHONE/MONITOR button indicator is off:

SP-PHONE button, MONITOR button, INTERCOM button, or CO button.



• The KX-T7350, the KX-T7050 and the KX-T7055 can perform handsfree dialing operations, etc., but cannot have a handsfree conversation.



• Operating Instructions Reference

1.3 Making Calls, "Handsfree Operation"



Hold

<Call Hold>

Allows an extension user to place an intercom and/or outside call. The held call can be retrieved by the user who held it, or by any other extension (Call Hold Retrieve). With a single line telephone (SLT), either one outside or intercom call can be held at one time. If an SLT user want to hold both calls, use the Call Park feature. An SLT user can select how to operate the Call Hold feature by program [104].

<Exclusive Hold>

Allows an proprietary telephone user to prevent other extension users from retrieving their held call. Only the user who held the call can retrieve it. This feature is not available for an SLT.



- Only one intercom call can be placed on hold. For a proprietary telephone, outside calls and one intercom call can be placed on hold at the same time.
- If a held call is not retrieved within the assigned time in program [200], the extension user who held it will hear a ring tone or an alarm tone. If the user is on-hook and their SP-PHONE/MONITOR button indicator is off, the phone will ring (Hold Recall). If the user is off-hook or in the handsfree mode, an alarm tone will be sent to the built-in speaker of a proprietary telephone or the handset receiver of a single line telephone at 15-second interval (Hold Alarm).

If "Disable" is selected in program [200], nothing will be heard.

- If a held outside call is not answered within thirty minutes, it will be automatically disconnected.
- For outside calls, music is sent to the external party on hold, if available (Music on Hold).
- During a 5-party conference, the Hold feature cannot be activated.



• Required System Programming

[104] Hold Mode Selection [200] Hold Recall Time

• Related Feature References

Call Park, Music on Hold, Hookswitch Flash

Operating Instructions References

- 1.5 During a Conversation, "Placing a Call on Hold (Call Hold)"
- 1.5 During a Conversation, "Placing a Call on Hold Exclusively (Exclusive Hold)"
- 1.5 During a Conversation, "Retrieving a Call on Hold (Call Hold Retrieve)"

Hookswitch Flash

Flashing the hookswitch is used to allow a single line telephone user to hold a call for transferring or holding, if the flash time is within the assigned time in program [207]. The procedure to transfer a call or hold is determined in program [104] "Hold Mode Selection". Flashing the hookswitch can be also used to disconnect a call, if the flash time is more than the assigned time in program [207].



• If "MODE 1" was selected in program [207], the system will recognize flashing the hookswitch as hooking, while a busy tone or reorder tone is sent or during a conversation. The system will recognize as 1 being dialed in the pulse mode, while a dial tone is sent. The system can refuse receiving a pulse signal by selecting "Disable" in program [614]. Therefore, even if the hookswitch is flashed during a dial tone, the system will regard it as hooking.



• Required System Programming

[207] Hookswitch Flash Timing Range Selection

[614] Internal Pulse Detection

Host PBX Access

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



- A Host PBX Access code assigned in program [403] is required to access an outside (CO) line of the host PBX.
- Access to the host PBX during a conversation is also possible (External Feature Access).

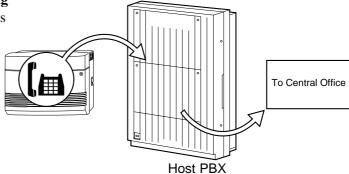


• Required System Programming [403] Host PBX Access Codes

[417] Pause Time

• Related Feature Reference

External Feature Access



3 Features

Intercept Routing

Provides automatic redirection of incoming outside calls via the DISA or UCD feature. The Intercept Routing feature works in the following 2 cases.

- 1) When nothing is dialed after a dial tone or OGM is sent to the caller. (The DISA feature only)
- 2) When the call is not answered within a programmed time. This is called Intercept Routing No Answer (IRNA).



• Required System Programming

[408]–[410] Flexible Ringing Assignment — Day/Night/Lunch

[507] DISA Intercept Mode

[508] DISA Ringing Time Before Intercept

[509] DISA Ringing Time After Intercept

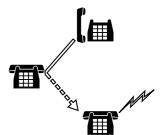
[510] DISA No Dial Mode

[523] UCD Busy Mode

[524] UCD Intercept Mode

[525] UCD Ringing Time Before Intercept

[526] UCD Ringing Time After Intercept



• Related Feature References

Direct Inward System Access (DISA), Uniform Call Distribution (UCD)

Intercom Calling

Allows an extension user to make a call to another extension.



- An extension number and a name can be assigned in programs [009] and [604]. If assigned, they will be shown on the display proprietary telephone during an intercom call.
- The DSS buttons permit a proprietary telephone user one-touch access to an extension. The DSS button can be assigned to a flexible CO button in the Proprietary Telephone Settings.

The DSS buttons on the DSS console can also be used.



• Required System Programming

[009] Extension Number Assignment

[604] Extension Name Setting

• Operating Instructions References

- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", DSS (Direct Station Selection) Button
- 1.3 Making Calls, "Intercom Calling"
- 1.9 DSS Console Features, "Initial Settings", Extension Number Assignment

L-M 3 Features

Language Selection

The selected language in program [615] is shown on the LCD display of a proprietary telephone during operation and Proprietary Telephone Settings, but not used during System Programming. The selected language in program [806] is used for an SMDR printout.



• Required System Programming

[615] LCD Language Assignment [806] SMDR Language Assignment

Limited Call Duration

The system disconnects 2 types of outside outgoing calls when a specific timer expires. One is a call with an external party. The other is an outside–to–outside (CO-to-CO) call using the Call Forwarding – to Outside (CO) Line, Call Transfer – to Outside (CO) Line, Unattended Conference feature, or the DISA feature. Limiting the time of the call can be assigned through System Programming.



• An alarm tone will be sent to both parties 15 seconds before the assigned time limit.



• Required System Programming

[205] Outside-to-Outside (CO-to-CO) Line Duration Time Limit

[212] Outside (CO) Line Duration Time Limit

[613] Outside (CO) Line Duration Time Limit Selection

• Related Feature References

Call Forwarding – to Outside (CO) Line, Call Transfer – to Outside (CO) Line, Conference (3-party), Direct Inward System Access (DISA)

3 **Features**

Line Access Buttons

A proprietary telephone (PT) user must assign one of the following 3 types of CO buttons to flexible CO buttons in the Proprietary Telephone Settings. This allows making or receiving outside calls. The default setting for the flexible CO buttons (CO 1 – CO 6) are Single-CO (S-CO) buttons. CO 1 corresponds to outside (CO) line 1, CO 2 corresponds to outside (CO) line 2, etc.

<Group-CO (G-CO) Button>

Receiving or making outside calls is on an outside (CO) line group basis. The outside (CO) line group is assigned in program [404]. Any incoming call from any outside (CO) line in the outside (CO) line group arrives at the G-CO button. To make an outside call, the user can access an idle outside (CO) line in the group by simply pressing the assigned G-CO button.

<Single-CO (S-CO) Button>

Receiving or making outside calls is done using a specific outside (CO) line. An incoming call from the specific outside (CO) line arrives at the S-CO button. To make an outside call, the user can access the specific outside (CO) line by simply pressing the assigned S-CO button.

<Other-CO (O-CO) Button>

Outside (CO) lines, which are not assigned to an S-CO or G-CO button, can be assigned to a flexible CO button as the O-CO button. An incoming call on an outside (CO) lines arrives at the O-CO. To make an outside call, the user simply presses the assigned O-CO button.



- The same outside (CO) line group can be assigned to more than one G-CO button on the same PT.
- The same line can be assigned to an S-CO button and G-CO button. The S-CO button has priority.
- Immediate, delayed, no ringing or no incoming calls (disable) can be selected by programs [405] through [413] on an extension-outside (CO) line basis.
- A ringing pattern can be selected for each outside (CO) line by program [423].



• Required System Programming

[400] Outside (CO) Line Connection Assignment

[404] Outside (CO) Line Group Assignment

[405]–[407] Flexible Outward Dialing Assignment — Day/Night/Lunch

[408]–[410] Flexible Ringing Assignment — Day/Night/Lunch

[411]–[413] Delayed Ringing Assignment — Day/Night/Lunch

[423] Outside (CO) Line Ringing Pattern Selection

• Related Feature References

Ringing Pattern Selection, Outside Calling, Receiving Calls

• Operating Instructions Reference

1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", Line Access Buttons

Log-In/Log-Out

Allows an extension user to join (Log-In) or leave (Log-Out) a hunting, DISA ring or UCD group temporarily. Extensions in the log-out mode will not receive calls by Station Hunting, DISA or UCD but will receive other calls, not like the Do Not Disturb (DND) feature. The Log-In/Log-Out button can be assigned to a flexible button in the Proprietary Telephone Settings. The lighting patterns of the Log-In/Log-Out button on a proprietary telephone and status are as follows.

Off: Log-In mode Red: Log-Out mode

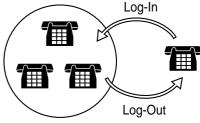


• There should be at least one extension that is in the Log-In mode in a group.



• Related Feature References

Direct Inward System Access (DISA), Extension Group, Station Hunting, Uniform Call Distribution (UCD)



UCD Group Hunting Group DISA Ring Group

• Operating Instructions References

- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", Log-In/Log-Out Button
- 1.7 Useful Features, "Joining or Leaving a Call Distribution Group (Log-In/Log-Out)"

Message Waiting

Allows an extension user to notify the called extension of a message waiting when the called extension is busy or does not answer the call. Only a proprietary telephone user with a MESSAGE button can know there is a message waiting if the LED on the MESSAGE button lights red. Pressing the lit MESSAGE button can call back the called party. The messages which are stored in the mailbox of the Voice Processing System can also be heard by following the Voice Mail prompts after pressing the lit MESSAGE button (Voice Mail Integration).



- This feature is not available for a proprietary telephone which does not have a MESSAGE button, such as the KX-T7055.
- Canceling the message can be performed from the extension sending it or from the extension receiving it.
- Each extension can have a maximum of 8 simultaneous messages.
- Messages are always left at the original extension. They cannot be sent to a Call Forwarding or Station Hunting destination.



• Operating Instructions References

- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", Restoring the MESSAGE button
- 1.7 Useful Features, "Leaving a Message Notification (Message Waiting)"
- 1.7 Useful Features, "Voice Mail Integration"

M-O

Microphone Mute

Allows a proprietary telephone user to turn off the microphone for privacy.



• The user's voice will only be muted during a handsfree conversation. The user can hear the other party's voice during Microphone Mute.



• Operating Instructions Reference

1.5 During a Conversation, "Turning off the Microphone (Microphone Mute)"

Music on Hold / Background Music (BGM)

While an external party is on hold, music is automatically generated.



- Operations such as Call Hold and Call Transfer activate Music on Hold.
- A user-supplied external music source, such as a radio, must be connected to the system when "External" is selected in program [111]. One external music source can be connected to the system. The music source is used for Music on Hold and/or BGM.
- When "Tone" is selected in program [111], the cyclic tone is used only for Music on Hold and the external music source is used for BGM.



• Connection Reference

2.10 External Music Connection

• Required System Programming

[111] Hold Music Selection

• Related Feature References

Hold, Call Transfer – to Extension, Call Transfer – to Outside (CO) line, Uniform Call Distribution (UCD)

• Operating Instructions Reference

1.7 Useful Features, "Turning on the Background Music (BGM)"

One-Touch Dialing

Allows a proprietary telephone user one-touch access to a desired party or system feature. This is done by storing an extension number, telephone number or a feature number (up to 16 digits) in a One-Touch Dialing button. One-Touch Dialing buttons can be assigned to flexible buttons in the Proprietary Telephone Settings.



- An account code can be stored into a One-Touch Dialing button.
- A number consisting of 17 digits or more can be stored by dividing it and storing it in 2 One-Touch Dialing buttons.



• Operating Instructions References

- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone" One-Touch Dialing button
- 1.3 Making Calls, "Dialing by Simply Pressing a Button (One-Touch Dialing)"
- 1.9 DSS Console Features, "Initial Settings"
- 1.9 DSS Console Features, "One-Touch Dialing"
- 1.9 DSS Console Features, "One-Touch Access for System Features"

Operator / Manager Extension

The system supports one operator. Any extension can be designated as an operator in program [008]. Extension jack 01 is the system manager extension. The extension assigned as an operator or manager has the ability to perform the following operations.

- Setting the Date and Time
- Canceling the Electronic Station Lockout
- Setting/Canceling the Remote Station Lock
- Setting/Canceling/Confirming the Timed Reminder (Wake-up Call) Remotely
- Recording and Playing the Outgoing Message
- Changing the Day/Night/Lunch Mode

The manager extension can also perform System Programming and the following operation.

Setting the Extension Password



Required System Programming

[008] Operator Assignment

• Operating Instructions Reference

1.8 Operator / Manager Service Features

Operator Call

Allows an extension user to call an operator within the system by dialing the feature number assigned in program [121]. One extension can be assigned as the operator in program [008].



- If an operator is not assigned, this feature is not available and a reorder tone will be heard
- Every extension user can reach the operator just by dialing the operator call number (0 or 9) assigned in program [121] "Automatic Outside (CO) Line Access Number Selection".



Required System Programming

[008] Operator Assignment

[121] Automatic Outside (CO) Line Access Number Selection

• Related Feature Reference

Automatic Outside (CO) Line Access Number

• Operating Instructions Reference

1.3 Making Calls, "Calling an Operator (Operator Call)"

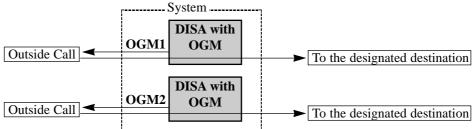
3 Features O

Outgoing Message (OGM)

Allows the extension assigned as an operator or manager to record up to 2 outgoing voice messages (maximum 30 seconds each). This message is played when a caller accesses the DISA or UCD feature. An optional OGM/FAX Detection Card is required to program the OGM.

The following are some examples of OGM and flow chart.

Case 1: Receives 2 calls at a time – OGM for DISA. (Do not want customers to be kept waiting.)



OGM1: "This is A company. For the sales division, press 1. For the service division, press 2. To call the operator, press 0."

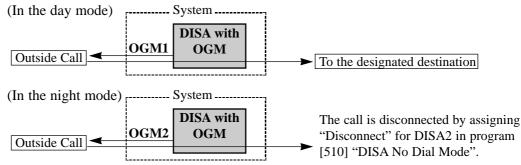
division, press 2. To call the operator, press 0."

OGM2: Same as OGM 1

Required Settings: [502] "MODE1"

[414]-[416] "DISA1"

Case 2: Uses the OGM in the day, night and lunch modes – OGM for DISA.



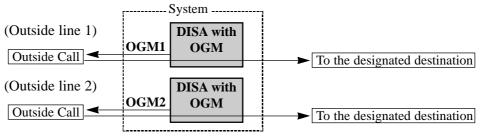
OGM1: "This is A company. For the sales division, press 1. For the service division, press 2. To call the operator, press 0."

OGM2: "We are sorry but our office is closed for the day."

Required Settings: [502] "MODE2"

[414]-[416] "DISA1" for OGM1, "DISA2" for OGM2

Case 3: Uses a different OGM for outside (CO) lines – OGM for DISA.



O 3 Features

OGM1: "This is A company. For the sales division, press 1. For the service

division, press 2. To call the operator, press 0."

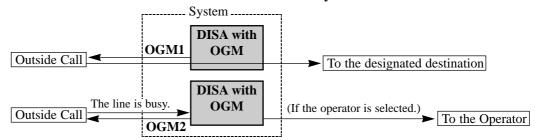
OGM2: "This is B company. To contact Mr. A, press 101. To contact Mr. B, press

102."

Required Settings: [502] "MODE2"

[414]-[416] "DISA1" for the A company outside (CO) line(s). "DISA2" for the B company outside (CO) line(s).

Case 4: Uses a different OGM when the line is busy – OGM for DISA.



OGM1: "This is A company. For the sales division, press 1. For the service

division, press 2. To call the operator, press 0."

OGM2: "We are sorry. The line is currently busy. If you want to call the operator,

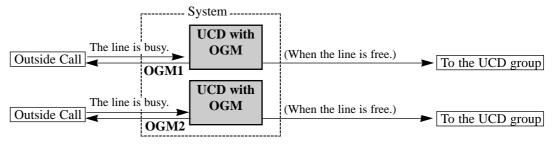
press 0."

Required Settings: [502] "MODE2"

[414]-[416] "DISA1"

[506] "DISA2"

Case 5: Distributes calls to the UCD group – OGM for UCD.

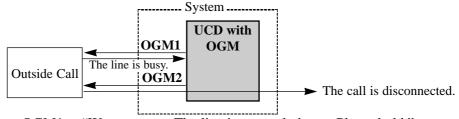


OGM1: "We are sorry. The line is currently busy. Please hold."

OGM2: Same as OGM1

Required Settings: [502] "MODE3" [414]-[416] "UCD"

Case 6: Disconnects a call after the OGM - OGM for UCD.



OGM1: "We are sorry. The line is currently busy. Please hold."

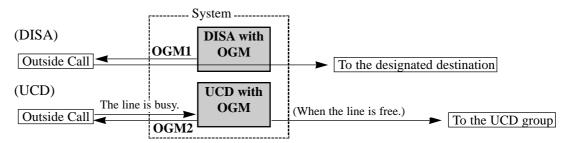
OGM2: "We are sorry. The line is currently busy. Please call back later."

Required Settings: [502] "MODE4"

[414]-[416] "UCD"

3 Features O

Case 7: Uses the DISA or UCD feature for outside (CO) lines – OGM for DISA and UCD.



OGM1: "This is A company. For the sales division, press 1. For the service division, press 2. To call the operator, press 0." (DISA message)

OGM2: "We are sorry. The line is currently busy Please hold." (UCD message)

Required Settings: [502] "MODE5"

[414]-[416] "DISA1" for outside (CO) line(s) which use the DISA feature

"UCD" for outside (CO) line(s) which use the UCD feature



• An optional OGM/FAX Detection Card is required to program the OGM.



• Connection Reference

2.15 OGM/FAX Detection Card Installation

Required System Programming

[414]–[416] Outside (CO) Line Mode — Day/Night/Lunch [502] OGM Selection

[506] DISA Busy Mode

• Related Feature References

Direct Inward System Access (DISA), Uniform Call Distribution (UCD)

• Operating Instructions Reference

1.8 Operator / Manager Service Features, "Outgoing Message (OGM)"

Outside Calling

Allows an extension user to make a call to an external party by using one of the following line access methods.

< Automatic Line Access>

Allows an extension user to select an available outside (CO) line automatically from the assigned lines in program [419] by pressing the Automatic Line Access number (0 or 9). For a proprietary telephone, a Line Access Button assignment (S-CO, G-CO, O-CO) in the Proprietary Telephone Settings is required. If Idle Line Preference is set on the telephone in the Proprietary Telephone Settings, the user can access an idle line only by going off-hook.

<Individual Line Access>

Allows a proprietary telephone user to select the desired outside (CO) line by pressing the CO button assigned as the S-CO button. A Line Access Button assignment (S-CO) is required before use.

<Outside (CO) Line Group Access>

Allows an extension user to select an idle line within a designated outside (CO) line group. An outside (CO) line group is assigned in program [404]. To specify an outside (CO) line group, dial the feature number "8" and the desired outside (CO) line group number (1 through 6). A proprietary telephone user can also specify an outside (CO) line group by pressing a G-CO button. A Line Access Button assignment (G-CO) is required before use. If Idle Line Preference is set on the telephone in the Proprietary Telephone Settings, the user can access an idle line only by going off-hook.



- Each extension requires System Programming to access outside (CO) lines.
- After an outside (CO) line is seized, the system waits for the assigned time in program [206] before dialing.



• Required System Programming

[206] Dialing Start Time

[400] Outside (CO) Line Connection Assignment

[404] Outside (CO) Line Group Assignment

[405]–[407] Flexible Outward Dialing Assignment — Day/Night/Lunch

[419] Automatic Designated Outside (CO) Line Access

• Related Feature References

Automatic Outside (CO) Line Access Number Preferred Line Assignment — Outgoing, Line Access Buttons

• Operating Instructions References

- 1.2 Proprietary Telephone Settings, "Customizing Your Telephone Functions", Preferred Line Assignment Outgoing
- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", Line Access Buttons
- 1.3 Making Calls, "Outside Calling"

3 Features O-P

Outside (CO) Line Ringing Selection

When an outside call is received at an extension, the user can select whether their extension will ring or not.



• Select "Enable" in programs [408]–[410].



• Required System Programming

[408]–[410] "Flexible Ringing Assignment — Day/Night/Lunch

• Operating Instructions Reference

1.2 Proprietary Telephone Settings, "Customizing Your Telephone Functions", Outside (CO) Line Ringing Selection

Paging

Allows an extension user to make a voice announcement to several people at the same time. The message is announced over the built-in speakers of proprietary telephones and/or the external pager. The paged person can answer the page (Answering a Page) from any extension within the system. The following types are available.

All Extensions: Makes a voice announcement to all extensions over the built-in

speakers of proprietary telephones.

Group: Makes a voice announcement to the designated extension group over

the built-in speakers of proprietary telephones. An extension group is

assigned in program [600] "Extension Group Assignment".

External: Makes a voice announcement over the external pager.

All Extensions &: Makes a voice announcement to all extensions over the built-in **External** speakers of proprietary telephones and the external pager.



- An extension user can also transfer a call after paging (Paging and Transfer) or denying to be paged (Paging Deny).
- An external pager (user-supplied) must be connected beforehand. One external pager can be connected to the system.
- A confirmation tone is sent to the extensions before the voice announcement or answering.
- A confirmation tone is sent to the external pager before the voice announcement. The tone to the external pager can be disabled in program [106].
- An extension which has set the Do Not Disturb (DND) or Paging Deny feature, or is in use cannot be paged.



- Connection Reference
 - 2.9 External Pager (Paging Equipment) Connection
- Required System Programming

[106] External Paging Access Tone

• Related Feature References

Extension Group, Do Not Disturb (DND)

• Operating Instructions Reference

1.5 During a Conversation, "Paging"

P 3 Features

Paralleled Telephone Connection

Any analog proprietary telephone can be connected in parallel with a single line device, such as a single line telephone, facsimile and data terminal.



• System Programming is required.



- Connection Reference
 - 2.11 Paralleled Telephone Connection
- Required System Programming

[610] Paralleled Telephone Connection

• Related Feature Reference

Power Failure Transfer

- Operating Instructions Reference
 - 1.7 Useful Features, "Parallel Connection of a Proprietary Telephone and Single Line Telephone (Paralleled Telephone Connection)"

Personal Speed Dialing

Allows an extension user to store up to 10 speed dialing numbers (0 through 9) with a maximum of 16 digits per number. An extension number, telephone number or feature number can be stored. For example, storing extension numbers for each room in a house can be useful. (1 = Living Room, 2 = Kitchen, etc.) To make a call, dial # and the number.



• Proprietary telephone users cannot use this feature if One-Touch Dialing buttons are assigned to PF buttons. If the user assign a personal speed dialing number, the number stored in the One-Touch Dialing button will be overwritten and vice versa. PF Buttons F1 through F10 correspond to the speed dialing numbers as follows.

$$F1 - 0$$
 $F6 - 5$
 $F2 - 1$ $F7 - 6$
 $F3 - 2$ $F8 - 7$
 $F4 - 3$ $F9 - 8$
 $F5 - 4$ $F10 - 9$

• A rotary telephone user cannot use this feature.



• Operating Instructions References

1.3 Making Call, "Dialing with Personal Speed Dialing (Personal Speed Dialing)"

3 Features P

Pickup Dialing

Allows a single line telephone user to make an outgoing call by going off-hook, if the user has stored the telephone number (up to 32 digits) beforehand. This feature is also known as Hot Line.



- A rotary telephone cannot program this feature.
- The user can set and cancel this feature.
- If the feature is activated and the user goes off-hook, a dial tone will be generated for the delay time assigned in program [203] and then dialing will start. During the delay time, the user can dial another party overriding the Pickup Dialing function.



• Required System Programming

[203] Pickup Dial Delay Time

• Operating Instructions Reference

1.3 Making Call, "Dialing by Simply Going Off-Hook (Pickup Dialing)"

Polarity Reverse Detection

The circuit in the system can detect an outside (CO) line polarity reverse signal from the Central Office when trying to make an outside call. This detects the start (a called party goes off-hook) and end (the called party goes on-hook) of an outgoing outside call. The conversation time can be verified on the SMDR printout using this feature.

When an outside call is received, the circuit can also detect the polarity reverse signal before ringing.



• Required System Programming

[424] Reverse (Polarity) Circuit Assignment

• Related Feature Reference

Station Message Detail Recording (SMDR)

P 3 Features

Power Failure Transfer

During a power failure, specific extension telephones are automatically connected to specific outside (CO) lines. This provides outside (CO) line conversations between the following extensions and outside (CO) lines.

Outside (CO) line 1 : extension jack 01 Outside (CO) line 4 : extension jack 09

A single line telephone (SLT) can work in case of a power failure. Connect an SLT to the above extension jack. For more information, refer to the Operating Instructions.



- All other conversations, except the above combinations, are disconnected during a power failure.
- Only an outside (CO) line can have a conversation. All other features do not work.
- We recommend connecting a single line telephone (SLT) in parallel at extension jacks 01 and 09, so that an SLT can be used during a power failure.



- Connection Reference
 - 2.19 Auxiliary Connection for Power Failure Transfer
- Related Feature Reference

Paralleled Telephone Connection

- Operating Instructions Reference
 - 1.7 Useful Features, "Power Failure Transfer"

Preferred Line Assignment — Incoming

A proprietary telephone user can select the method to answer incoming outside calls from the following 3 line preferences. System Programming and Proprietary Telephone Settings are required.

No Line Preference: When an incoming call is received, the extension user must go

off-hook and then press the flashing CO button.

Prime Line Preference: When incoming calls are received at the same time, the user

can receive the call on the preferred outside (CO) line by only

going off-hook.

Ringing Line Preference: When an incoming call is received, the user can receive the

call ringing at their telephone by going off-hook.



- A single line telephone can only set "Ringing Line Preference".
- Line access button(s) (Single-CO, Other-CO or Group-CO) should be assigned to CO button(s) beforehand.



• Required System Programming

[408]–[410] Flexible Ringing Assignment — Day/Night/Lunch [411]–[413] Delayed Ringing Assignment — Day/Night/Lunch

• Related Feature Reference

Line Access Buttons

- Operating Instructions References
 - 1.2 Proprietary Telephone Settings, "Customizing Your Telephone Functions", Preferred Line Assignment Incoming
 - 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", Single-CO (S-CO) Button, Other-CO (O-CO) Button, Group-CO (G-CO) Button

3 Features P

Preferred Line Assignment — Outgoing

A proprietary telephone user can select a desired outgoing line preference to make outside calls from the following 3 line preferences. System Programming and Proprietary Telephone Settings are required.

Idle Line Preference: When the user goes off-hook, they are connected to an idle line.

An idle line is automatically selected from the pre-assigned

lines in program [419].

Prime Line Preference: When the user goes off-hook, they are connected to the pre-

assigned line. Assign one prime line beforehand.

No Line Preference: No line is selected when the user goes off-hook. They must

select a line to make a call.



• Line access button(s) (Single-CO, Other-CO or Group-CO) should be assigned to the CO button(s) beforehand.



• Required System Programming

[400] Outside (CO) Line Connection Assignment

[405]–[407] Flexible Outward Dialing Assignment — Day/Night/Lunch

[419] Automatic Designated Outside (CO) Line Access

• Related Feature Reference

Line Access Buttons

Operating Instructions References

- 1.2 Proprietary Telephone Settings, "Customizing Your Telephone Functions", Preferred Line Assignment Outgoing
- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", Single-CO (S-CO) Button, Other-CO (O-CO) Button, Group-CO (G-CO) Button

Proprietary Telephone Setting Data Default Set

Allows a proprietary telephone user to reset the following Proprietary Telephone Settings to the default settings.

- Preferred Line Assignment Outgoing
- Preferred Line Assignment Incoming
- Outside (CO) Line Ringing Selection
- Intercom Alert Assignment
- Call Waiting Tone Selection



• Operating Instructions Reference

1.2 Proprietary Telephone Settings, "Customizing Your Telephone Functions", Proprietary Telephone Setting Data Default Set

P-R 3 Features

Pulse to Tone Conversion

Allows an extension user to change the dialing mode from Pulse to Tone after entering a telephone number to access services, such as computer telephone services or Voice Mail, which require tones.



- This feature only works for outside (CO) lines which have set "Pulse Mode" or "Call Blocking Mode" in program [401].
- Changing from Tone to Pulse is not possible.



- Required System Programming
 - [401] Dial Mode
- Operating Instructions Reference

1.7 Useful Features, "Pulse to Tone Conversion"

Receiving Calls

Allows an extension user to receive an intercom or outside call by going off-hook. A proprietary telephone user can also receive a call by pressing the rapid flashing CO or INTERCOM button, and talk (handsfree mode) if the telephone has the SP-PHONE button.



• A proprietary telephone user can select the Line Preference for incoming outside calls. See "Preferred Line Assignment — Incoming" in this section.



Required System Programming

[408]–[410] "Flexible Ringing Assignment — Day/Night/Lunch" [411]–[413] "Delayed Ringing Assignment — Day/Night/Lunch"

Related Feature Reference

Preferred Line Assignment — Incoming

• Operating Instructions Reference

1.4 Receiving Calls, "Receiving Calls"

Redial

<Automatic Redial>

Allows a proprietary telephone user to redial the last number dialed, and saved number by the Saved Number Redial feature automatically. This is done by pressing the SP-PHONE or MONITOR button and the corresponding button. Redial will be repeated automatically the assigned number of times in program [113] until the called party answers. The interval time between Automatic Redial is programmed in [114]. If another operation is performed during Automatic Redial, this function will be canceled. This feature is not available for the KX-T7055.

<Last Number Redial>

Every extension automatically saves the last telephone number dialed so that the extension user can make a call to the same party later using a simple operation.

3 Features R

<Saved Number Redial>

Allows a proprietary telephone user to save the current external telephone number in the SAVE button during a conversation, so that the extension user can redial the same party later using a simple operation. The saved number can be redialed until another number is stored. A flexible button can be assigned as the SAVE button in the Proprietary Telephone Settings.



• Required System Programming

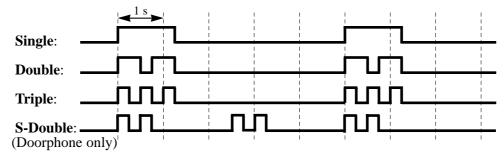
- [113] Automatic Redial Repeat
- [114] Automatic Redial Interval Time

• Operating Instructions References

- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", SAVE button
- 1.3 Making Calls, "Redialing Automatically (Automatic Redial)"
- 1.3 Making Calls, "Redialing the Last Number Dialed (Last Number Redial)"
- 1.3 Making Calls, "Redialing the Saved Number (Saved Number Redial)"

Ringing Pattern Selection

A ringing pattern can be selected depending on the type of call such as an outside call, intercom call and doorphone call. Ringing pattern is as follows,





 We recommend considering a combination of ringing patterns for outside calls, intercom calls and doorphone calls. For example, private calls and business calls can be distinguished.



• Required System Programming

- [115] Extension Ringing Pattern Selection
- [423] Outside (CO) Line Ringing Pattern Selection
- [706] Doorphone Ringing/Tone Pattern Selection

• Related Feature Reference

Outside (CO) Line Ringing Selection

Room Monitor

Allows a proprietary telephone user to monitor a room or the front door through another proprietary telephone or doorphone without them knowing. The access tone will not be sent to the monitored proprietary telephone and doorphone when monitoring starts.



- The extensions that can be monitored must be programmed in [612] before operation when using a proprietary telephone.
- If a doorphone is used as a room monitor, the access tone will be heard when monitoring starts as the default setting. The tone can be disabled in program [707].
- This feature is not available for KX-T7050, KX-T7055 and KX-T7350.
- A single line telephone with a MUTE button can be used for monitoring.



• Required System Programming

[612] Room Monitor Assignment[707] Doorphone Access Tone Selection

• Related Feature Reference

Doorphone Call

• Operating Instructions Reference

1.7 Useful Features, "Room Monitor"

Secret Dialing

Allows a proprietary telephone user to conceal all or part(s) of a System Speed Dialing number assigned in program [001] or One-Touch Dialing number assigned to a flexible button in the Proprietary Telephone Settings which normally appear on the display.



- When storing a number, press the INTERCOM button at the beginning and the end of the numbers to be concealed.
- One or more parts of a telephone number can be concealed.
- Printing out the concealed number on a SMDR can be assigned in program [803].



Required System Programming

[001] System Speed Dialing Entry

[803] Secret Speed Dialing/One-Touch Dialing Printing

• Related Feature References

One-Touch Dialing, System Speed Dialing

- Operating Instructions References
 - 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", One-Touch Dialing Button
 - 1.3 Making Calls, "Secret Dialing"

3 Features S

Self-Extension Number Confirmation (KX-T7330/KX-T7030/KX-T7130/KX-T7033 only)

Allows a display proprietary telephone user to confirm their jack and extension number using a simple operation.



• Operating Instructions Reference

1.7 Useful Features, "Self-Extension Number Confirmation (KX-T7330/KX-T7030/KX-T7130/KX-T7033 only)"

Station Feature Clear

Allows an extension user to reset the following station features to the default settings.

- Absent Message Capability
- Automatic Callback Busy (Camp-On)
- Background Music (BGM)
- · Call Forwarding
- Call Pickup Deny
- Call Waiting
- Data Line Security
- Do Not Disturb (DND)
- Executive Busy Override Deny
- Log-In/Log-Out
- Message Waiting (All messages will be erased.)
- Pickup Dialing (The stored telephone number will be erased.)
- Paging Deny
- Room Monitor
- Timed Reminder
- Voice Mail Integration



• Operating Instructions Reference

1.7 Useful Features, "Canceling the Feature Settings (Station Feature Clear)"

S 3 Features

Station Hunting

If a called extension is busy, Station Hunting redirects the incoming call to an idle extension in an extension group in numerical order. Idle extensions are automatically hunted according to programming. The following 2 hunting types are available.

Circular hunting: The extensions are hunted one time in numerical order. If all

extensions are busy, a busy tone will be heard.

Termination hunting: The extensions are hunted until the extension which has the

highest jack number in the group is reached. If all higher order numbers are busy, the search will end and a busy tone will be

heard.

1

- One hunting type can be selected for each extension group.
- To leave the hunting group temporarily, use the Log-Out feature. To rejoin, use the Log-In feature.
- If the called extension has set Do Not Disturb (DND), Call Forwarding or Log-Out, Station Hunting will skip the extension. However, Station Hunting will not skip the extension which receives the call first, even if it has set Do Not Disturb (DND) or Call Forwarding.



Required System Programming

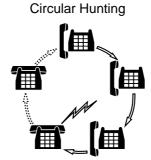
[100] Hunting Group Set

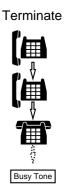
[101] Hunting Type

[600] Extension Group Assignment

• Related Feature References

Call Forwarding Do Not Disturb (DND) Extension Group Log-In/Log-Out





3 Features S

Station Lock

<Electronic Station Lockout>

Allows an extension user to lock their station so that other users cannot make outside calls until it is unlocked. Any 4-digit code can be used to lock and unlock an extension.

<Electronic Station Lockout - CANCEL ALL>

The operator and manager can cancel Electronic Station Lockout of all extensions at one time.

<Remote Station Lock Control>

The operator and manager are given the privilege of controlling Electronic Station Lockout at any station by using the DSS console. The operator and manager can see the status of each extension, locked or unlocked, by the pre-assigned DSS button LED on the DSS console. For example, this feature is useful for a small hotel or motel when guests are checked out.



- The Remote Station Lock Control overrides the Electronic Station Lockout. If the operator or manager sets Remote Station Lock on an extension that has already been locked by the extension user, the user cannot unlock it.
- A toll restriction class can be assigned to an extension which has set the Electronic Station Lockout and Remote Station Lock Control features in program [312] "Toll Restriction Station Lock Boundary Class". Certain types of outgoing outside calls are allowed depending on the assigned toll restriction class.



• Operating Instructions References

- 1.6 Before Leaving Your Desk, "Locking Your Telephone (Electronic Station Lockout)"
- 1.8 Operator / Manager Service Features, "Electronic Station Lockout CANCEL ALL"
- 1.8 Operator / Manager Service Features, "Remote Station Lock"
- 1.9 DSS Console Features "Initial Setting", Station Lock Button Assignment (Operator/Manager only)

S Features

Station Message Detail Recording (SMDR)

Station Message Detail Recording (SMDR) automatically prints out detailed call information of outside calls. A printer connected to the Serial Interface (RS-232C) port can be used to print incoming and outgoing outside calls, as well as print a hard copy of System Programming. To print out the record of System Programming items that have been assigned, use program [804] "System Data Dump". To print the call records, use program [802] "Incoming/ Outgoing Call Selection for Printing", which prints out the following records.

- A record of all outgoing outside calls or outgoing toll calls
- A record of all incoming outside calls

An example of a printed call record:

Date	Time	Ext	CO	Dial Number	Duration	Code
12/31/98	12:52PM	103	05	12345678901234567890123456789012	00:00'16	
12/31/98	12:53PM	103	02	< incoming >	00:01'43	
12/31/98	*12:54PM	101	02	< incoming >	00:07'48	
12/31/98	1:04PM	103	06	0921438	00:00'06	
12/31/98	1:04PM	102	05	< DISA incoming >	00:00'09	4536 0
12/31/98	1:05PM	103	01	< DISA incoming >	00:00'08	0
12/31/98	1:06PM	103	01	092123456789	00:00'08	
12/31/98	1:06PM	C-05	02	0921234567	00:00'17	2
12/31/98	1:07PM	103	01	0921234567	00:11'00	13
12/31/98	2:15PM	103	01	0921234567	00:11'00	. 101
12/31/98	2:26PM	103	01	F/0927654321	00:03'00	
12/31/98	2:27PM	116	05	9=0924567123	00:13'55	
12/31/98	3:25PM		02	< UCD Waiting >	00:11'48	
•	•	•	•	•	•	•
•	•	•	•	•	•	•
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Example of the SMDR printout format:

Explanation

- (1) Date: shows the date of the call as Month/Day/Year.
- (2) Time: shows the time the call was started as Hour: Minute/AM or PM. "*" indicates a transferred call.
- (3) Ext: shows the extension number, etc. that engaged in the call. "C-xx" indicates an outside-to-outside (CO-to-CO) call via the DISA feature. The outside (CO) line which receives a DISA call is shown as xx.
- (4) CO: shows the outside (CO) line number used for the call.
- (5) Dial Number

Outgoing call: Shows the called party's telephone number (maximum 32 digits).

Valid digits are 0 through 9, #, \times and P (if the PAUSE button is

pressed).

Received call: Shows <incoming>. An incoming call via the DISA feature is

shown as <DISA incoming>, via the DIL feature is shown as

<DIL incoming>.

3 Features S

UCD waiting call: Shows <UCD waiting> for an incoming call via the UCD feature. When the "UCD waiting call" is answered, it becomes a "Received call" and a new record is started.

- (6) Duration : shows the duration of the call or the UCD call waiting time in Hours/Minutes/Seconds.
- (7) Code: shows the account code appended to the call, account code index number (e.g.: 13), the extension number which uses the Toll Restriction Override by Extension Password feature (e.g.: 101) or DISA security code status (e.g.: 0). Code "0" indicates a DISA incoming call without a DISA security code. Codes "1 to 4" indicate a DISA incoming call with DISA security code 01 to 04 respectively. For example, code 1 corresponds to DISA security code 01, etc.



- This system can store information of up to 64 calls.
- This data is not deleted even when the system is reset.
- If FLASH is manually sent out during a conversation to make another call without hanging up, etc., a call record will be printed and a new record started. "F/" will be printed at the beginning of the dial number on the new record.
- When a host PBX code is entered, "=" will be printed between the code and dialed number.
- The language used for an SMDR printout can be selected in program [806].



• Connection Reference

2.13 Printer and PC Connection

• Required System Programming

[000] Date and Time Setting

[204] Call Duration Count Start Time

[800] SMDR RS-232C Communication Parameter

[801] SMDR Parameter

[802] Incoming/Outgoing Call Selection for Printing

[803] Secret Speed Dialing/One-Touch Dialing Printing

[804] System Data Dump

[805] SMDR Account Code Selection

[806] SMDR Language Assignment

• Related Feature Reference

Language Selection

System Data Default Set

This system can re-initialize the system-programmed data. If all the programmed data is cleared, the system will reset using the default settings by program [999].



• The default setting for each programming item is listed in Section 5.1, Default Values.



Required System Programming

[999] System Data Clear

• Installation Reference

2.24 System Data Clear

System Speed Dialing

The system supports 100 System Speed Dial numbers (up to 32 digits) assigned in program [001] that are available to all extension users. A System Speed Dial number is dialed out using a simple operation.



- Toll Restriction for System Speed Dialing can be assigned by program [301].
- A rotary telephone user cannot use this feature.



• Required System Programming

[001] System Speed Dialing Entry [301] Toll Restriction – System Speed Dialing Boundary Class

• Related Feature

Toll Restriction for System Speed Dialing

• Operating Instructions Reference

1.3 Making Calls, "Dialing with System Speed Dialing (System Speed Dialing)"

Timed Reminder

<Timed Reminder>

Allows an extension user to generate an alarm tone at a preset time as a wake-up alarm or a reminder. The user can set this to be activated once or everyday.

<Timed Reminder, Remote (Wake-Up Call)>

The operator or manager can remotely set, cancel and confirm the Timed Reminder of the desired extension. For example, this is useful for a small hotel or motel to set an extension in a guest room as a wake-up call, or set an extension in a child's room by a mother.





• Operating Instructions References

- 1.7 Useful Features, "Alarm Setting (Timed Reminder)"
- 1.8 Operator / Manager Service Features, "Timed Reminder, Remote (Wake-Up Call)"

3 Features T

Time (Day/Night/Lunch) Service

The system supports the day, night and lunch operation modes. The system operation for making and receiving calls can be different for the day, night and lunch modes. The system operation for toll restriction can be arranged to prevent unauthorized toll calls for each mode. Time service can be set automatically or manually by program [006].

Changing the Day/Night/Lunch Mode

The day, night and lunch modes can be changed either automatically at an assigned time in program [007] or manually by the operator or manager at any desired time.



- The lunch mode interrupts the day or night mode. After the lunch mode is finished, the day or night mode starts again.
- If the lunch mode is set using feature number "783#" in the automatic mode, the mode can only be canceled by using feature number "780#". This can be useful during holidays. The day and night modes are automatically changed at the programmed time in [007] even if feature number "780#" is not entered. These operations can only be done by an operator or manager.
- The operator and manager can see the status of the mode (day, night or lunch) by the preassigned DSS buttons' LED on the DSS console. Time service can be changed easily by pressing the pre-assigned DSS buttons.
- The following programming items will be affected by the time service.

[405]-[407] Flexible Outward Dialing Assignment

[408]-[410] Flexible Ringing Assignment

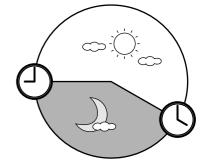
[411]-[413] Delayed Ringing Assignment

[414]-[416] Outside (CO) Line Mode

[601]-[603] TRS – Class of Service Assignment

[700]-[702] Doorphone Ringing Assignment

[703]-[705] Door Opener Assignment





• Required System Programming

[006] Time (Day/Night/Lunch) Service – Changing Mode

[007] Time (Day/Night/Lunch) Service – Start Time

• Operating Instructions References

- 1.8 Operator / Manager Service Features, "Time (Day/Night/Lunch) Service Setting"
- 1.9 DSS Console Features, "Initial Settings", Day, Night and Lunch Buttons Assignment

T 3 Features

Toll Restriction

Toll Restriction is a system programmable feature that can prohibit certain extension users from making unauthorized toll calls.

Every extension is programmed to belong to one of 5 classes of service (COS). Each COS is programmed to have a toll restriction class for day mode, night mode and lunch mode. There are 5 toll restriction COS numbers available. Toll restriction COS number 1 is the highest class and the COS number 5 is the lowest. That is, COS number 1 allows all toll calls. COS numbers 2 through 5 are used to restrict calls by combining pre-programmed deny and exception codes shown in the table on the next page.

Denied Codes

An outgoing outside call made by an extension with a toll restriction COS number between 2 and 5 is first checked against the assigned denied codes in program [302]-[305].

If the first digits of the dialed number (not including the line access code) are not found in the class, the call can be made. Each class can store up to 20 denied codes, each consisting of 10 digits.

Exception Codes

These codes are used to override a programmed denied code. A call denied by the denied codes is checked against the selected exception codes assigned in program [306]. If a match is found, the call can be made.

Up to 20 exception codes, each consisting of 10 digits, can be stored. The available number of codes depends on the COS number.



- Emergency numbers, such as the police or fire station, should be stored in program [309] "Emergency Dial Number Set" so that they are excepted from toll restriction.
- If a stored Host PBX access code in program [403] "Host PBX Access Codes" or a stored carrier code in program [300] "Carrier Code Assignment" is found in the dialed number, the subsequent telephone numbers will be checked for toll restriction.
- The interdigit timer assigned in program [208] "Interdigit Time" applies until the toll restriction check is completed. When the timer expires, an outside outgoing call will be disconnected while dialing, if "Enable" was selected in program [211] "No Dial Disconnection".
- The toll restriction class for a station locked extension can be assigned in program [312] "Toll Restriction Station Lock Boundary Class" so that even a station locked extension can make a local call, etc.
- It is programmable whether the "*" or "#" the user dials is to be checked or not on the Toll Restriction code in program [125] "Toll Restriction Check for ** and #". This is useful to prevent unauthorized calls which could be possible through certain Central Office exchange systems.



• Required System Programming

[301] Toll Restriction – System Speed Dialing Boundary Class

[302]-[305] Toll Restriction – Classes 2 through 5 Denied Codes

[306] Toll Restriction – Exception Codes

[601]-[603] TRS – Class of Service Assignment – Day/Night/Lunch

• Related Feature References

Emergency Call

Toll Restriction for System Speed Dialing

Toll Restriction Override by Extension Password

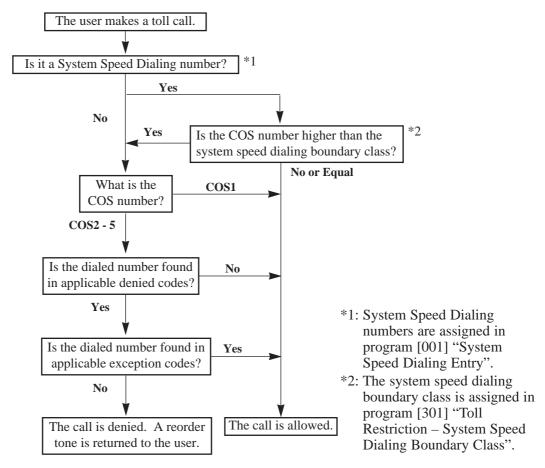
Toll Restriction - Station Lock Boundary Class

3 Features T

Combination of denied codes and exception codes

COS No.	Denied Calls	Excepted Calls
1	No restriction.	No restriction.
2	20 denied codes programmed in [302].	20 exception codes (code numbers 01-20)
		programmed in [306].
3	20 denied codes programmed in [302] plus	15 exception codes (code numbers 01-15)
	20 denied codes programmed in [303].	programmed in [306].
4	20 denied codes programmed in [302] plus	10 exception codes (code numbers 01-10)
	20 denied codes programmed in [303] plus	programmed in [306].
	20 denied codes programmed in [304].	
5	20 denied codes programmed in [302] plus	5 exception codes (code numbers 01-05)
	20 denied codes programmed in [303] plus	programmed in [306].
	20 denied codes programmed in [304] plus	
	20 denied codes programmed in [305].	

Flow chart of Toll Restriction



T 3 Features

Toll Restriction for System Speed Dialing

Calls originated by System Speed Dialing are restricted depending on the combination of the System Speed Dialing Boundary Class assigned in program [301] and the class of service (COS) assigned to each extension as follows.

System Speed Dialing Boundary COS Class No.	1	2	3	4	5
1	A	A	Α	A	A
2	C	A	A	A	A
3	С	С	A	A	A
4	C	С	С	A	A
5	С	С	С	С	A

A: allowed **C:** checked

- <Example>
- —If the boundary is set to COS number 2,
 The system will allow system speed dialing for COS numbers 1 and 2, but check COS numbers 3, 4 and 5 according to toll restriction.



• Required System Programming

[301] Toll Restriction – System Speed Dialing Boundary Class

• Related Feature Reference Toll Restriction 3 Features T

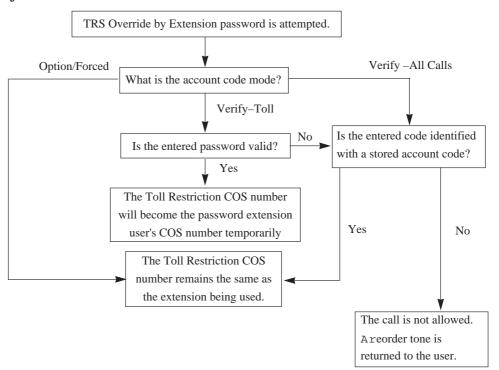
Toll Restriction Override by Extension Password

Allows an extension user to override toll restriction temporarily to make a toll call from another toll-restricted extension. The user can carry out this feature by entering their extension password, instead of an account code, before dialing the telephone number. The user can make a toll call with their COS number.



- The account code "Verify–Toll" mode at another extension permits users to override another extension's toll restrictions.
- If the user does not enter the extension password or enters an invalid password, a regular toll restriction check is done.
- When a user makes a call using this feature, the user's extension number will be displayed on the SMDR.
- Users can also override toll restriction of another extension by using the Walking COS feature.
- To override toll restriction in the "Option", "Forced" or "Verify–All" mode, use the Waling COS feature.

Flow chart of TRS Override





• Required System Programming

[605] Account Code Entry Mode

• Related Feature References

Account Code Entry, Extension Password/System Password, Station Message Detail Recording (SMDR), Toll Restriction, Walking COS

Toll Restriction — Station Lock Boundary Class

Allows assigning a toll restriction class for extensions where the Electronic Station Lockout or Remote Station Lock feature has been set.

An extension user usually cannot make an outside call at a locked extension, however if a toll restriction class is assigned in program [312], the user can make an outside call at the locked extension.



• The higher toll restriction class number will take precedence. For example, if toll restriction COS number 3 is assigned to an extension and the station lock boundary class is 4, the extension user is allowed to make a call with toll restriction COS number 4.



• Required System Program Address

[312] Toll Restriction - Station Lock Boundary Class

• Related Feature References

Station Lock, Toll Restriction

Uniform Call Distribution (UCD)

Distributes incoming calls to one specific extension group called a UCD group assigned in program [520]. Calls to the UCD group hunt for an idle extension in numerical order. The UCD feature is particularly helpful when a certain extension receives a high volume of calls compared with other extensions.



- An optional OGM/FAX Detection Card is required to perform the UCD feature.
- The Log-In or Log-Out status can be set on an extension basis. There should be at least one extension that is in Log -In status in the UCD group.
- An extension which sets the Call Forwarding–All, –Busy or No Answer, or the Do Not Disturb (DND) feature is skipped during circular calling.
- When all extensions in the UCD group are busy, a busy message is heard and then Music on Hold is activated. If any extension in the UCD group is not available within the programmed time period, then (1) an OGM will be heard and the call is disconnected, or (2) the call will be sent to pre-programmed extension(s) in [408]-[410]. System Programming is required for this operation. Refer to the "Flow chart of possible cases and results for UCD calls".



Connection Reference

2.15 OGM/FAX Detection Card Installation

• Required System Programming

[111] Hold Music Selection

[408]-[410] Flexible Ringing Assignment – Day/Night/Lunch

[414]–[416] Outside (CO) Line Mode — Day/Night/Lunch

[502] OGM Mode Selection

[513] Cyclic Tone Detection

[520] UCD Group



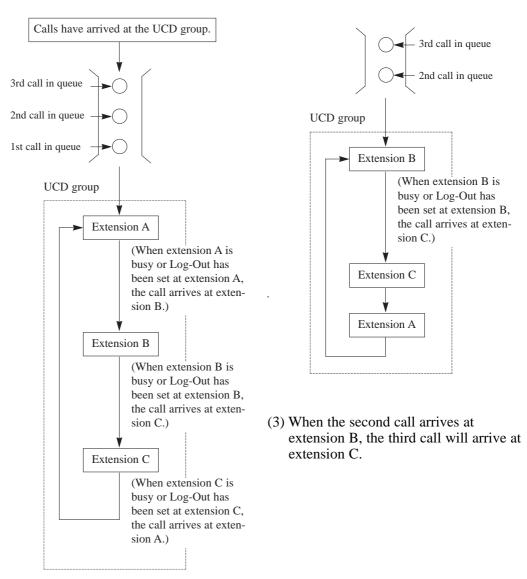
- [521] UCD Busy Waiting Time
- [522] UCD OGM Message Interval Time
- [523] UCD Busy Mode
- [524] UCD Intercept Mode
- [525] UCD Ringing Time before Intercept
- [526] UCD Ringing Time after Intercept
- [600] Extension Group Assignment

• Related Feature References

Call Forwarding, Do Not Disturb (DND), Extension Group, Log-In/Log-Out

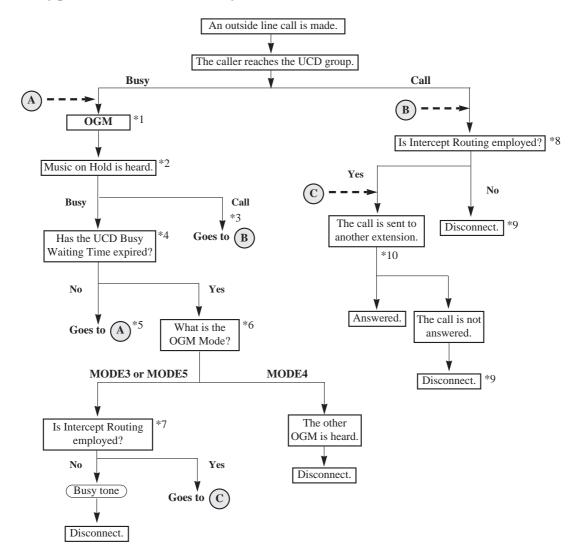
Outline of a UCD

- (1) When a number of calls have arrived at the UCD group, the first call arrives at extension A first.
- (2) When the first call arrives at extension A, the second call arrives at extension B.



U 3 Features

Flow chart of possible cases and results for UCD calls



3 Features

- *1: An OGM is sent to the caller.
 - When the system detects a cyclic tone or CPC signal while the OGM is being sent, the call is disconnected.
- *2: Music on hold is selected in program [111] as follows.
 - External Uses an external music source, such as radio.
 - **Internal** Uses the internal music source equipped with the system.
 - **Tone** Uses the cyclic tone equipped with the system.
- *3: When an extension in the UCD group is available.
- *4: The system holds the call until the assigned time in program [521] expires.
- *5: OGM repeats the assigned time intervals in program [522] within the assigned time in program [521].
- *6: The other OGM (OGM2) is selected in program [502].
- *7: The system treats the call according to program [523] as follows when the assigned time in [521] expires.
 - **Disconnect** the call is disconnected.
 - **Intercept** the call is sent to the extensions programmed in [408]-[410].
- *8: The system treats the call according to program [524] as follows when the assigned time in [525] expires.
 - **Disconnect** the call is disconnected.
 - **Intercept** the call is sent to the extensions programmed in [408]-[410].
- *9: If the caller did not hear an OGM, the call will not be disconnected until the caller goes on-hook.
- *10: The UCD Ring Timer After Intercept starts. The destination telephone(s) will ring for the time programmed in program [526]. If the call is not answered during the programmed time, the call will be disconnected.

Voice Mail Integration

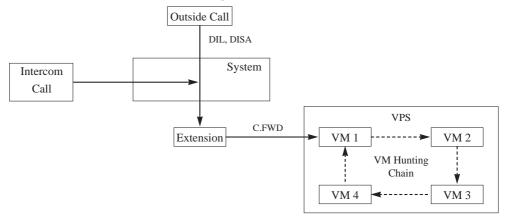
This system supports a Voice Processing System (VPS) equipment by sending DTMF tones described in program [103]. The DTMF tones sent to a VPS indicate the state of a call (busy, answered, ringing, disconnected, etc.). The DTMF tones also inform a VPS of the destination of a call transferred to the VPS by the Call Forwarding or DISA Intercept Routing – No Answer feature. Up to 4 VPSs can be connected to the extension jacks as extensions in the system.

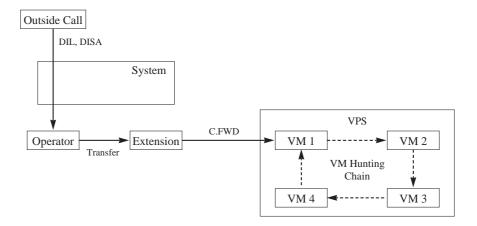
System Explanation

1. Voice Mail Service

1.1 Call Forwarding to VM

If an extension user sets Call Forwarding (C. FWD) whose destination is the VPS, an incoming call is forwarded to the VPS. The system sends the VPS the extension mailbox number at that time. Therefore, the calling party can leave their message in the mailbox of the desired extension without having to know the mailbox number.

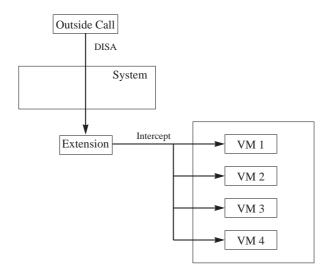






1.2 DISA Intercept to VM

If an outside (CO) line is set as the Intercept whose destination is the VPS, an outside call is forwarded to the VPS. The system sends the VPS the extension mailbox number at that time. Therefore, the calling party can leave their message in the mailbox of the desired extension without having to know the mailbox number. If a DISA call is transferred to the VPS by Intercept Routing from a DISA ring group, your system will transmit the mailbox number of the lowest jack number of the DISA ring group. Delayed Ringing must be assigned to VPS extensions in programs [411]-[413].



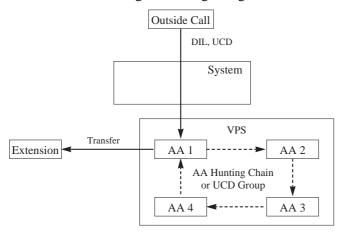
1.3 Listening to a Recorded Message

If the VPS receives a message, the VPS can turn on the MESSAGE button indicator on the corresponding proprietary telephone to notify to the user. (Panasonic KX-TVP series can do this.) The VPS notifies the extension user that there is a message waiting in their mailbox. When the MESSAGE button indicator is lit, pressing the button allows the extension user to play back the stored message. A single line telephone user hears dial tone 3 (** "Distinctive Dial Tone" in this section) when going off-hook if there are messages in their mailbox. They can call the voice mail extension to listen to their messages. In this case, they must listen to all of the messages. Once they access voice mail, dial tone 3 will be eliminated and not be heard next time they go off-hook. Therefore, they will not know even if there are messages left.

2. Automated Attendant (AA) Service

2.1 AA to Extension

AA receives and answers outside calls and offers services such as transferring to an extension or mailbox using DTMF signaling, which is sent from the calling party.



1

• A VPS can be assigned as the destination for the following features.

Call Forwarding - All Calls

Call Forwarding - Busy/No Answer

DISA Intercept Routing - No Answer

In these functions, the caller does not need to know the mailbox number of the called extension because the code is automatically transmitted to the VPS.

- The mailbox number is the same as its extension number.
- The Voice Mail extension should set Data Line Security to achieve proper recording.
- If your VPS is a Panasonic KX-TVP series and KX-TA308 or KX-TA616 cannot be selected in the PBX type setup menu, select "KX-T1232". Follow the steps for a KX-T1232.



• Connection Reference

2.8 Extension Connection

• Required System Programming

[009] Extension Number Assignment

[102] Voice Mail Port

[103] DTMF Integration

[408]-[410] Flexible Ringing Assignment — Day/Night/Lunch

[411]-[413] Delayed Ringing Assignment — Day/Night/Lunch

[414]–[416] Outside (CO) Line Mode — Day/Night/Lunch

[507] DISA Intercept Mode

• Related Feature References

Call Forwarding, Data Line Security, Direct Inward System Access (DISA), Distinctive Dial Tone, Intercept Routing, Station Hunting

• Operating Instructions Reference

1.7 Useful Features, "Voice Mail Integration"



Volume Control

Allows a proprietary telephone user to adjust the following volumes, as necessary, by adjusting the corresponding levers or pressing the corresponding buttons.

- Handset receiver volume
- Headset volume
- Ringer volume
- Speaker volume



• Operating Instructions Reference

1.2 Proprietary Telephone Settings, "Volume Control — Handset Receiver/Headset / Ringer/Speaker"

Walking COS

Allows an extension user who is not at their own telephone to override the toll restriction COS number of another extension by dialing their extension password. For the duration of the call, the COS of the extension is changed to the COS of their own extension.



- If the extension overriding toll restriction is assigned to "Forced" or "Verify–All", the user must enter the account code before the line access code.
- When a user makes a call using this feature, the user's extension number will be displayed on the SMDR, not the extension where the user made the call.



• Operating Instructions References

- 1.7 Useful Features, "Calling Using Your Privileges at Another Extension (Walking COS)"
- 1.8 Operator / Manager Service Features, "Extension Password Set (Manager only)"

Section 4 System Programming

4.1 Before System Programming

-NOTE:-

System data clear should be performed before System Programming.

(\$\sigma\$ 2.22, Starting the System for the First Time)

Default Setting

This system has factory default settings (\$\sigma\$ 5.1, Default Values). If any of the programming needs to be changed, you can change the setting by System Programming. **Default** shows you the factory default setting. Any required changes can be written in the Programming Tables listed in section 7, Programming Tables.

Required Telephone Set

One of the following display proprietary telephones is required for System Programming.

• KX-T7330, KX-T7030, KX-T7130 or KX-T7033

Connect the telephone to the following.

• Jack number 01

Before entering the programming mode

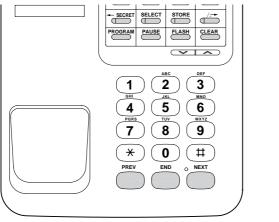
Before entering the programming mode, confirm that:

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

Placing the Overlay on a Telephone

A programming overlay is packed with the telephone at the factory. This overlay should be used at all times during programming. The functions of the telephone keys change during programming as shown below.

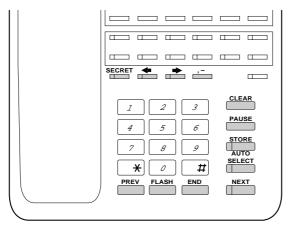
Location of Controls with the Overlay



KX-T7330

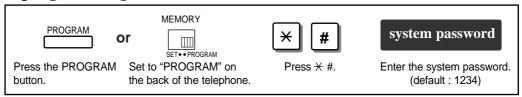
KX-T7030/KX-T7033

4.1 Before System Programming



KX-T7130

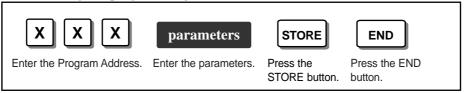
To enter the programming mode



- The system password can be changed by program [002] "System Password".
- During the programming mode, your extension is treated as a busy extension.
- If you enter the wrong system password, you will hear an alarm tone (3 beeps). Try again.

Programming sequence

After entering the programming mode



After pressing the STORE button, you will hear one of the following tones.

Confirmation tone (1 beep): This informs you that storing is completed. You can

continue programming by entering the same or another

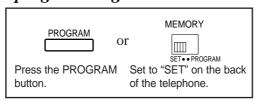
program address

(2 beeps): This informs you that the same parameter has already been

stored.

Alarm tone (3 beeps): This informs you that the entry is invalid.

To exit the programming mode

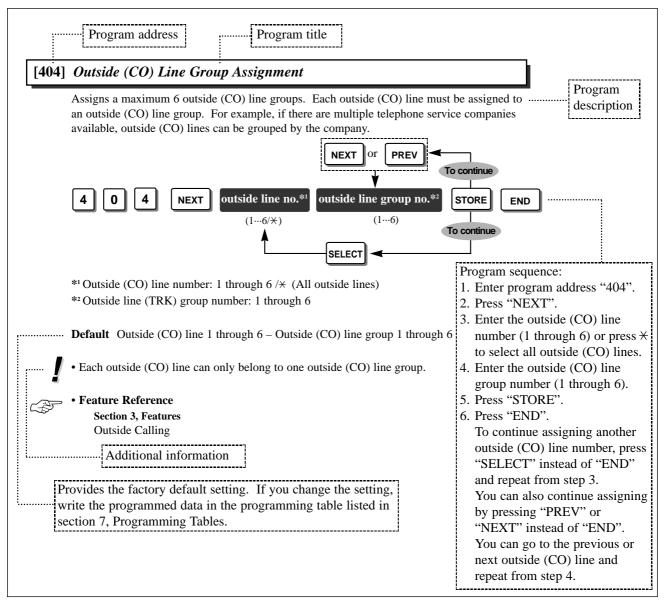


4.1 Before System Programming

Programming example

The following programming instructions assume that you have already entered the programming mode.

Example: Program [404] "Outside (CO) Line Group Assignment"

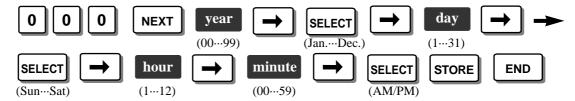


Additional Information

- When you press \times , for example in step 3 in program [404], if all outside (CO) lines have been assigned as outside (CO) line group 1, "CO \times : TRK GRP 1" will be displayed. If each outside (CO) line has been assigned to a different outside (CO) line group, "CO \times : Mixed" will be displayed.
- You can press the SELECT button repeatedly to select the desired parameter, if available.
- You can use the → or ← button to move to the next/previous step, if available.

[000] Date and Time Setting

Sets the current date and time.



Default '98 Jan. 1 Thu 12:00 AM

- To return to the previous programming step, press —.
- To correct a wrong entry for the year, day, hour or minute, press the CLEAR button and enter the new one in each step.
- After changing an entry, you can press the STORE button. You do not have to perform the rest of the steps.
- The clock starts immediately after the STORE button is pressed.
- The system supports years from 1998 to 2097.



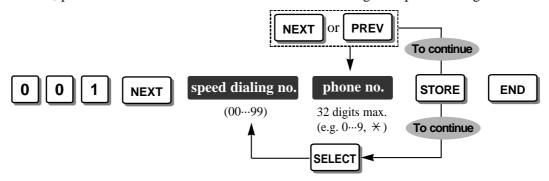
• Feature References

Section 3, Features

Date and Time Setting, Station Message Detail Recording (SMDR)

[001] System Speed Dialing Entry

Assigns a maximum of 100 System Speed Dialing numbers. To delete a stored phone number, press the CLEAR and STORE buttons after entering the Speed Dialing number.



Default Not stored.

Į

- To correct a wrong entry, press the CLEAR button and enter the new one.
- A line access number (9 or 0, 81 through 86) should be included before the phone number.

- Up to 32 digits, consisting of "0 through 9", "**,", "#", "PAUSE", "—", "FLASH" and "ICM (Secret)" can be stored.
- If you are storing an account code assigned in [310] "Account Codes", enter ** and the account code after a line access number.
- If you want to conceal all or part of a System Speed Dialing number on the display, enter "[" and "]" (press the ICM button) before and after the part you want to conceal. Do not press the ICM button before and after a line access number (9 or 0, 81 through 86) or an account code. "[" and "]" are counted as one digit.
- Press ← or → to scroll the display



• Feature References

Section 3, Features

Secret Dialing, System Speed Dialing

[002] System Password

Assigns the password required for entering the System Programming mode. Also it is used to set an extension password.



Default 1234



• To correct a wrong entry, press the CLEAR button and enter the new one.



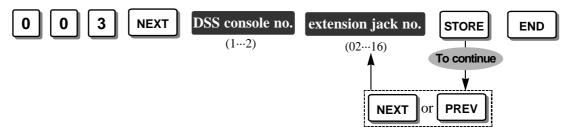
• Feature Reference

Section 3, Features

Extension Password / System Password

[003] DSS Console Port Assignment

Assigns a maximum of 2 jack numbers to connect the DSS console(s).



Default All DSS consoles – Disable (Not stored)

1

- Two DSS consoles cannot be assigned to the same jack number.
- Extension jack 01 is the manager extension. So please do not assign extension jack 01 as the DSS console jack.
- To not assign an extension jack number, press the CLEAR button in the extension jack number step.
- The extension jack number which has already been assigned as a paired telephone in program [004] "Paired Telephone Assignment for DSS Console" is not available in this program.

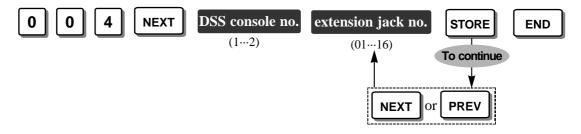


• Feature Reference

Section 3, Features DSS Console

[004] Paired Telephone Assignment for DSS Console

Assigns a jack number for an extension paired with the DSS console.



Default Extension jack number paired with DSS console 1 – Disable (Not stored) Extension jack number paired with DSS console 2 – Disable (Not stored)

!

- A single line telephone (SLT) cannot be paired with the DSS console.
- To not assign an extension jack number, press the CLEAR button in the extension jack number step.
- The extension jack number which has already been assigned as a DSS console in program [003] "DSS Console Port Assignment" is not available in this program.



• Feature Reference

Section 3, Features
DSS Console

[005] One-Touch Transfer Using a DSS Button

Selects how an outside call is transferred to any extension using the DSS button.

With Transfer: Press the DSS button to transfer an outside call.

Without Transfer: Press the TRANSFER button then the DSS button to transfer an outside call.



Default With Transfer



• This program is effective for 2 kinds of DSS buttons. One is on the DSS console, and the other is flexible CO button on your proprietary telephone assigned as a DSS button.



- Operating Instructions References
 - 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", DSS (Direct Station Selection) Button
 - 1.9 DSS Console Features, "Initial Settings", One-Touch Dialing Assignment

[006] Time (Day/Night/Lunch) Service Changing Mode

Selects changing the day, night and lunch service manually or automatically. For manual changing, refer to the Operating Instructions. For automatic changing, set the next program [007] "Time (Day/Night/Lunch) Service Starting Time".



Default Manual



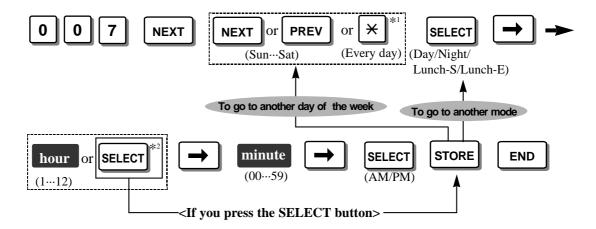
• Feature Reference

Section 3, Features

Time (Day/Night/Lunch) Service

[007] Time (Day/Night/Lunch) Service Start Time

Sets the starting time on a week day basis, when "Automatic" is selected in program [006] "Time (Day/Night/Lunch) Service Changing Mode".



- *1 To assign every day of the week to one selection, press the \times button.
- *2 If the SELECT button is pressed, the display will show the previous entry. If the previous setting was "None", press the SELECT button to enter the starting time. If you do not need to change the time service, keep pressing the SELECT button until "None" is displayed. For example, if Monday's day mode is set to "None", the day mode will not be turned on Monday.

Default Everyday – Day – 9:00 AM / Night – 5:00 PM / Lunch-S (starting) – None / Lunch-E (ending) – None



• Feature Reference

Section 3, Features

Time (Day/Night/Lunch) Service

[008] Operator Assignment

Assigns an extension jack number for the operator.



Default Jack-01



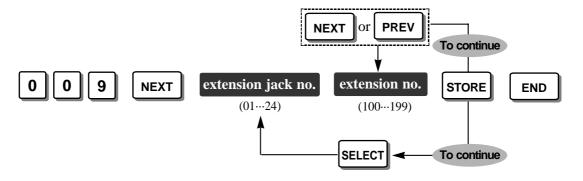
• Feature References

Section 3, Features

Operator / Manager Extension, Operator Call

[009] Extension Number Assignment

Assigns an extension number (100 through 199) to each extension.



Default Extension jacks 01 through 24 – 101 through 124



• A double entry is invalid. If the programmed extension number is the same as a previously stored one, 2 beeps will be heard when the STORE button is pressed. When extension number 103 has already been assigned to jack number 03, to assign extension number 103 to the jack number 05, change the extension number of jack number 03 to another one (100 through 199). Then assign extension number 103 to jack number 05.



• Feature Reference

Section 3, Features Intercom Calling

[010] LCD Time Display Selection

Selects how the current time will be displayed on a proprietary telephone while idle. Either 12 hour or 24 hour (military time) can be selected.



Display example:

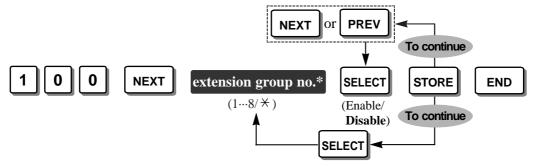
When "12 HOUR" is selected: Jan 1 11:20PM When "24 HOUR" is selected: 1 Jan 23:20

Default 12 HOUR

• Programs [000] "Date and Time Setting" and [007] "Time (Day/Night/ Lunch) Service Start Time", and the Timer Reminder feature are assigned using 12-hour time regardless of this program. The SMDR printout is also printed using 12-hour time.

[100] Hunting Group Set

Enables or disables automatically locating an idle extension in the same extension group as the dialed extension, when the called extension is busy. If "Enable" is selected, assign the next program [101] "Hunting Type". The extension group is assigned in program [600] "Extension Group Assignment".



* Extension group number: 1 through 8 / × (all extension groups)

Default All extension groups – Disable

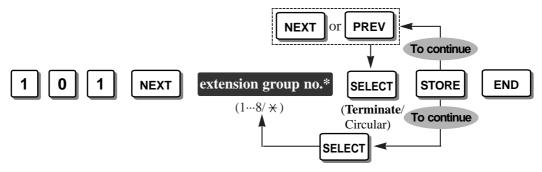


• Feature Reference

Section 3, Features Station Hunting

[101] Hunting Type

Assigns the hunting type, **Terminate** or **Circular**, to each extension group when a hunting group is enabled in program [100] "Hunting Group Set".



* Extension group number: 1 through 8 / * (all extension groups)

Default All extension groups – Terminate

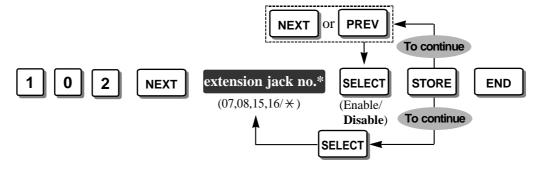


• Feature Reference

Section 3, Features Station Hunting

[102] Voice Mail Port

Assigns the extension jack number(s) connected to a Voice Processing System (VPS). Only extension jacks 07, 08, 15 and 16 are available.



* Extension jack number: 07, 08, 15 and/or 16 / *(All 4 extension jacks)

Default All extension jacks – Disable



• Feature Reference

Section 3, Features

Voice Mail Integration

[103] DTMF Integration

Enables or disables the system to send codes (DTMF signals) to the extension(s) assigned as the Voice Mail Port in program [102] "Voice Mail Port". These DTMF signals indicate the state of the call (busy, answered, ringing, disconnected, etc.) in addition to the normal call tones. They also enable the Voice Processing System (VPS) to immediately recognize the current state of the call and speed up the call handling.



Default Disable



- The table on next page describes the codes (DTMF signals), call state and conditions for the DTMF integration operation.
- This feature greatly improves the performance of the Panasonic KX-TVP series: Voice Processing Systems which have been programmed for Inband Signaling. For more information about Inband Signaling, refer to your Voice Processing System manual.



Feature Reference

Section 3, Features

Voice Mail Integration

DTMF signals

Code	Call State	Conditions
1	Ringback Tone	When an extension a VPS has dialed is ringing.
2	Busy Tone	When an extension a VPS has dialed is busy.
3	Reorder Tone	When a VPS dials an invalid extension number or when a VPS is accidentally connected to another Voice Mail Port.
4	DND	When an extension a VPS has dialed sets the DND (Do Not Disturb) feature.
5	Answer	When an extension which a VPS has dialed answers the call.
6	Forwarded to Voice Processing System (Ringing)	When a called extension is forwarded to a VPS, the call can be forwarded to another available VPS. In this way, the first VPS, typically an Auto-Attendant, can release the call to another VPS and receive another incoming call.
7	Forwarded to Voice Mail (Busy)	When a called extension is forwarded to a VPS and no VPSs are available to receive the call.
8	Forwarded to Extension	When a called extension is forwarded to another, non-VPS extension.
9	Confirmation Tone	When a VPS has successfully turned a message waiting lamp on or a message waiting lamp off.
#9	Disconnect	When the calling party disconnects.

[104] Hold Mode Selection

You can select how to hold a line and transfer a call to another extension with a single line telephone (SLT), **Hold-1**, **Hold-2** or **Hold-3**. If the following occurs frequently with an SLT, select "Hold-2" or "Hold-3".

- Nobody answers when a call is received.
- A busy tone is heard even though nobody is using the outside (CO) line.

If a call is not terminated after going on-hook, the above cases occur. To avoid these problems, select "Hold-2" or "Hold-3". Every call will be terminated unless 20 is dialed after flashing the hookswitch in the Hold-2 and Hold-3 modes.

- Hold-1: To hold a line or transfer a call, flash the hookswitch.
- **Hold-2**: To hold a line, flash the hookswitch and dial 20. To transfer a call, flash the hookswitch.
- Hold-3: To hold a line or transfer a call, flash the hookswitch and dial 20.



Default Hold-1



• Feature Reference

Section 3, Features

Hold

[105] Conference Tone

Enables or disables the confirmation tone before starting or ending a conference call established by the Conference feature or Executive Busy Override feature.



Default Enable



• Feature References

Section 3, Features

Conference (3-party), Conference (5-party), Executive Busy Override

[106] External Paging Access Tone

Enables or disables the confirmation tone before paging is sent over the external pager.



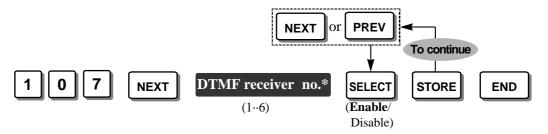
Default Enable



• Feature Reference Section 3, Features Paging

[107] DTMF Receiver Check

Enables or disables the 6 DTMF receivers to check whether the DTMF receivers are activated normally or not. Refer to the Section 6 Troubleshooting, "While Operating" for further information on checking the DTMF receivers.



* DTMF receiver number: 1 and 2 (for checking extension jacks 01 through 08)/

3 and 4 (for checking extension jacks 09 through 16)/

5 and 6 (for checking extension jacks 17 through 24)

Default All DTMF receivers – Enable

[108] Flash Mode for a Station Locked Extension

Enables or disables a station locked extension to send a flash signal during a conversation with an external party.



Default Disable

[109] CO Indicator Assignment

Enables or disables an extension which was assigned not to ring in programs [408]-[410] "Flexible Ringing Assignment" to answer an incoming outside call. The CO button indicator will flash when an outside call is received. If enabled, an extension user can answer the call by pressing the flashing CO button. If disabled, the user cannot answer the call even if they press the CO button.



Default Enable

1

• The extension must be a proprietary telephone with a CO button and indicator.

[110] Flash Key Mode

Assigns the sending the flash signal mode, **MODE 1** or **MODE 2**, when the FLASH button on a proprietary telephone is pressed.

MODE 1: The flash signal is sent during the programmed time in [418] "Flash Time".

MODE 2: The flash signal is sent while the FLASH button is pressed if the time the FLASH button was pressed is more than the programmed time in [418]. This will be useful to disconnect the current call and make another call without hanging up. If the time the FLASH button was pressed is less than the programmed time in [418], the flash signal will be sent during the programmed time.



Default MODE 1



• Feature Reference Section 3, Features Flash

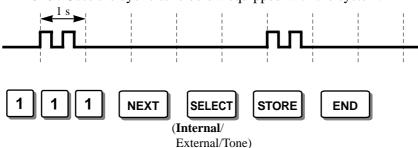
[111] Hold Music Selection

Selects the music source, Internal, External or Tone, which an external party will hear when an outside call is on hold.

External: Uses an external music source, such as a radio.

Internal: Uses the internal music source equipped with the system.

Tone: Uses the cyclic tone below equipped with the system.



Default Internal



• The music source can also be used for BGM.



• Feature Reference

Section 3, Features

Music on Hold / Background Music (BGM)

[112] DSS Console Indication Mode

Enables or disables the Busy Lamp Field (BLF) on the DSS button to indicate the status, Forward (FWD) or Do Not Disturb (DND), of corresponding extensions.



* Enable: FWD – Flashing slowly, DND – Flashing moderately Disable: FWD – Off, DND – Off

Default Enable



• Feature Reference

Section 3, Features
DSS Console

[113] Automatic Redial Repeat

Selects the number of times Automatic Redial is repeated.

1 1 3 NEXT SELECT STORE END

(0/3/10/
15 times)

Default 10 times

• Feature Reference
Section 3, Features
Redial

[114] Automatic Redial Interval Time

Selects the interval time between Automatic Redial attempts.

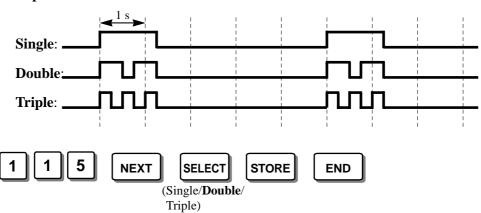
1 1 4 NEXT SELECT STORE END

Default 60 seconds

• Feature Reference Section 3, Features Redial

[115] Extension Ringing Pattern Selection

Selects the extension ringing pattern when an intercom call received, either **Single**, **Double** or **Triple**.



Default Double

!

- The length of the ring cycle for a single line telephone (SLT) is determined in program [124] "SLT Ring Mode Selection".
- The extension ringback pattern is determined at the same time.



• Feature Reference

Section 3, Features

Ringing Pattern Selection

[116] Conference Pattern Selection

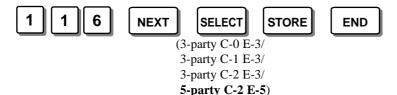
Selects the maximum number of external parties which can attend a conference. The maximum number of conference parties is 5.

3-party C-0 E-3: No external parties can attend a 3-party conference.

3-party C-1 E-3: One external party can attend a 3-party conference.

3-party C-2 E-3: A maximum of 2 external parties can attend a 3-party conference.

5-party C-2 E-5: A maximum of 2 external parties can attend a 5-party conference.



Default 5-party C-2 E-5



Feature References

Section 3, Features

Conference (3-Party), Conference (5-Party)

4.2 System Programming

[117]-[119]

[117] Call Pickup Tone

Enables or disables the confirmation tone when the Call Pickup feature is activated.

1 1 7 NEXT SELECT STORE END

(Enable/
Disable)

Default Enable



• Feature Reference Section 3, Features Call Pickup

[118] Pulse Restriction

Enables or disables sending pulse dialing to the Central Office during a conversation with an external party when "Pulse Mode" or "Call Block Mode" is selected in program [401] "Dial Mode".

1 1 8 NEXT SELECT STORE END

(Enable/
Disable)

Default Enable

[119] Redialing after Pulse to Tone Conversion

Enables or disables sending tone dialing to the Central Office when an extension user redial after changing the pulse mode into tone mode by pressing \times and #.

1 1 9 NEXT SELECT STORE END

(Enable/
Disable)

Default Disable

• Feature Reference

Section 3, Features

Pulse to Tone Conversion

[120] Bell Frequency

Selects the bell frequency sent to a single line telephone (SLT).

1 2 0 NEXT SELECT STORE END

Default 25 Hz

[121] Automatic Outside (CO) Line Access Number Selection

Selects the Automatic Outside (CO) Line Access number (0 or 9).

1 2 1 NEXT SELECT STORE END

Default 9



• If you select "0", the operator call will automatically be "9". If you select "9", the operator call will automatically be "0"



• Feature References

Section 3, Features

Automatic Outside (CO) Line Access Number, Operator Call

[122] Automatic Rotation for Outside (CO) Line Access

Enables or disables the rotation of outside (CO) lines seized for "Automatic Outside (CO) Line Access".

1 2 2 NEXT SELECT STORE END

(Enable Disable)

Default Disable (Does not rotate.)



• Feature Reference

Section 3, Features

Automatic Outside (CO) Line Access Number

4.2 System Programming

[123]-[125]

[123] Break Ratio

Selects the pulse break rate, **MODE1** or **MODE 2**, when a Pulse is sent to the Central Office during a conversation.

MODE 1: 66 % **MODE 2**: 60 %

1 2 3 NEXT SELECT STORE END

MODE2)

Default MODE 1

[124] SLT Ringing Mode Selection

Selects the length of the ring cycle for a single line telephone (SLT).

MODE 1: 5 second cycle MODE 2: 3 second cycle

1 2 4 NEXT SELECT STORE END

(MODE1/

MODE2)

Default MODE 1

[125] Toll Restriction Check for \times and

Assigns whether the entered "*" and "#" are checked by toll restriction or not. This assignment is required for certain Central Offices to prevent toll fraud. Some Central Offices ignore the user-dialed "*" and "#". If your Central Office ignores these symbols, select "Disable".

• 1 2 5 NEXT SELECT STORE END

(Enable)

Disable)

Default Enable



END

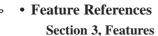
[200] Hold Recall Time

Assigns the length of the hold recall timer. Hold recall (a ring tone or an alarm tone) is heard when the timer expires. If hold recall is not required, select "Disable".

2 0 0 NEXT SELECT STORE

(30 sec/ 1/1.5/2/3/4/5/6 min/ Disable)

Default 30 seconds



Call Park, Hold

[201] Transfer Recall Time

Assigns the length of the transfer recall timer. If a transferred call is not answered within the programmed time, the call will be returned to the original caller.

2 0 1 NEXT SELECT STORE END

 $1/2 \min$

Default 30 seconds

• Feature Reference

Section 3, Features

Call Transfer - to Extension

[202] Call Forwarding Start Time

Assigns time for the Call Forwarding – No Answer feature. If a call is not answered within the programmed time, the call will be forwarded to the destination.

2 0 2 NEXT SELECT STORE END

(5/10/15/20
sec delay)

Default 15 seconds delay

• Feature Reference Section 3, Features Call Forwarding

[203] Pickup Dial Delay Time

Assigns the length of time for the Pickup Dialing feature. If the telephone user lifts the handset, the programmed party is called automatically when the timer expires. This time gives the user an opportunity to enter numbers before automatic dialing occurs.

2 0 3 NEXT SELECT STORE END

Default 3 seconds



• Feature Reference Section 3, Features Pickup Dialing

[204] Call Duration Count Start Time

Assigns the start time of a conversation either immediately after an outside (CO) line is seized or after dialing. This corresponds to the length of the conversation displayed on the LCD and printed on the printer (SMDR).

2 0 4 NEXT SELECT STORE END

(5/**10**/15/20/25/30/ 35/40/45/50 sec after dial/Instantly)

Default 10 seconds after dial

• If reverse signal detection is enabled in program [424] "Reverse (Polarity) Circuit Assignment", the system will automatically start the timer immediately after an external party answers a call.



• Feature References

Section 3, Features

Polarity Reverse Detection, Station Message Detail Recording (SMDR)

[205] Outside-to-Outside (CO-to-CO) Line Duration Time Limit

Sets the maximum time allowed for a conversation between two external parties using the Call Forwarding – to Outside (CO) Line, Call Transfer – to Outside (CO) Line, Unattended Conference feature, or the DISA feature. When the timer expires, the outside-to-outside line call is disconnected.

2 0 5 NEXT time STORE END

Default 10 minutes



• Feature Reference

Section 3, Features
Limited Call Duration

[206] Dialing Start Time

Assigns the minimum length of the pause time the system waits before dialing after seizing an outside (CO) line.

2 0 6 NEXT SELECT STORE END

(0/250/500/750/
1000/1250/1500 ms)

Default 0 millisecond



• Feature Reference Section 3, Features Outside Calling

[207] Hookswitch Flash Timing Range Selection

Sets the hookswitch flash time range sent from an extension to the system.

MODE 1: 50 to 180 milliseconds.

MODE 2: 80 to 180 milliseconds.

MODE 3: 80 to 650 milliseconds.

MODE 4: 80 to 1000 milliseconds.

MODE 5: 200 to 1000 milliseconds.

2 0 7 NEXT SELECT STORE END

(MODE1/MODE2/ MODE3/**MODE4/** MODE5)

Default MODE 4



• Feature Reference

Section 3, Features Hookswitch Flash

[208] Interdigit Time

Assigns the maximum time allowed between digits for an outgoing outside call.

2 0 8 NEXT SELECT STORE END (5/10/15 sec)

Default 10 seconds



- The interdigit timer applies until the toll restriction check is completed. When the timer expires, an outgoing outside call will be disconnected while dialing, if "Enable" was selected in program [211] "No Dial Disconnection".
- For a single line telephone, an outgoing outside call will be released from a DTMF receiver when the interdigit timer expires.



• Feature Reference

Section 3, Features

Toll Restriction

[210] DTMF Time

Assigns the minimum duration of a DTMF signal sent to an outside (CO) line which is set to the DTMF mode in program [401] "Dial Mode".

MODE 1: 80 milliseconds MODE 2: 160 milliseconds

2 1 0 NEXT SELECT STORE END

(MODE1/

MODE2)

Default MODE 1

[211] No Dial Disconnection

Enables or disables disconnecting an outside (CO) line if an extension user does not dial anything within 10 seconds after an outside (CO) line is seized.

2 1 1 NEXT SELECT STORE END

(Enable/
Disable)

Default Disable (Does not disconnect)

• The interdigit timer assigned in program [208] "Interdigit Time" applies until the toll restriction check is completed. When the timer expires, an outgoing outside call will be disconnected while dialing, if "Enable" was selected in this program.



• Feature Reference

Section 3, Features

Toll Restriction

[212] Outside (CO) Line Duration Time Limit

Sets the maximum time allowed for a conversation with an external party. This program is effective for the extension(s) which assigned "Enable" in program [613] "Outside (CO) Line Duration Limit Selection".

2 1 2 NEXT time STORE END

Default 10 minutes

- A beep sounds at 5-second intervals 15 seconds before the programmed time expires.
- This program is effective only for an outgoing outside call.
- When making a call after an outside (CO) line is seized and transferred to the enabled extension in program [613] by another extension, the timer starts after the call has been transferred.



• Feature Reference

Section 3, FeaturesLimited Call Duration

[213] Bell Off Detection

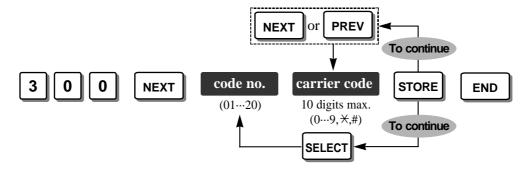
Sets the maximum time between detecting one bell signal and the next from the Central Office. In case the next bell signal is not detected within the programmed time, the system recognizes the bell signal has stopped.

2 1 3 NEXT SELECT STORE END

Default 6 seconds

[300] Carrier Code Assignment

Assigns up to 20 carrier codes. This allows the system to recognize the special user-dialed carrier code. The system disregards the assigned code and toll restriction is applied to the numbers after the code.



Default All codes – Not stored.

- I
- "x" (press the PAUSE button) substitutes any number (= wild card).
- To correct a wrong entry, press the CLEAR button and enter the new one.

[301] Toll Restriction – System Speed Dialing Boundary Class

Assigns the toll restriction class for System Speed Dialing numbers. System Speed Dialing numbers can be assigned in program [001] "System Speed Dialing Entry".



* Boundary Class: 1 through 5

Default Boundary Class -1



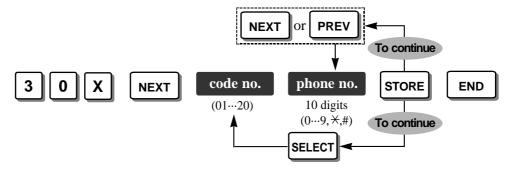
• Feature Reference

Section 3, Features

Toll Restriction for System Speed Dialing

[302]-[305] Toll Restriction - Classes 2 through 5 Denied Codes

Assigns up to 20 toll call numbers which are restricted to make an outside (CO) calls on a class of service (COS) basis for each program.



X – Program address selection number: 2 ([302] for Class 2) / 3 ([303] for Class 3)/ 4 ([304] for Class 4) / 5 ([305] for Class 5)

Default All codes – Not stored.



- "x" (press the PAUSE button) substitutes any number (= wild card).
- Each phone number should consist of 10 digits.
- To correct a wrong entry, press the CLEAR button and enter the new one.



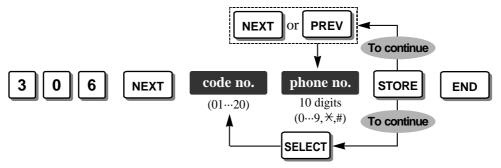
• Feature Reference

Section 3, Features

Toll Restriction

[306] Toll Restriction - Exception Codes

Assigns up to 20 exception numbers which are allowed to make an outside (CO) calls on a class of service (COS) basis even when denied codes are programmed in [302]-[305] "Toll Restriction – Classes 2 through 5 Denied Codes".



Default All codes – Not stored.

- "x" (press the PAUSE button) substitutes any number (= wild card).
- Each phone number should consist of 10 digits.
- To correct a wrong entry, press the CLEAR button and enter the new one.

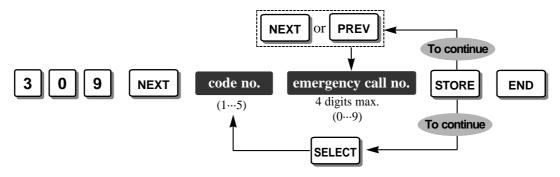


• Feature Reference

Section 3, Features
Toll Restriction

[309] Emergency Dial Number Set

Assigns up to 5 emergency call numbers, for example, a police station or fire station. These numbers are free from restrictions, for example, toll restriction, Account Code – Forced/Verify mode or Electronic Station Lock.



Default All codes – Not stored.



• To correct a wrong entry, press the CLEAR button and enter the new one.



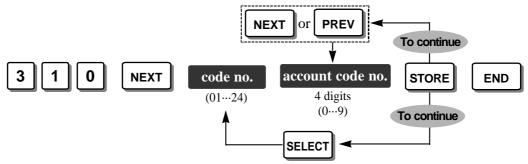
• Feature References

Section 3, Features

Emergency Call, Toll Restriction

[310] Account Codes

Assigns up to 24 account codes which are compared with the code entered when "Verify" is selected in program [605] "Account Code Entry Mode". When one of the account codes is the same as the entered code, an outside call can be made.



Default All codes – Not stored.

• To correct a wrong entry, press the CLEAR button and enter the new one.



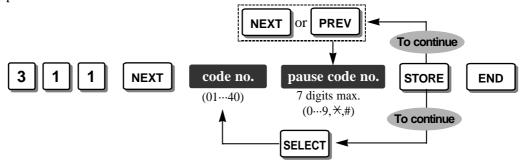
• Feature References

Section 3, Features

Account Code Entry, Toll Restriction Override by Extension Password

[311] Automatic Pause Insertion Codes

Assigns up to 40 automatic pause insertion codes which are checked with the outside outgoing call number. When one of the codes is the same as the call number, the pause time assigned in program [417] "Pause Time" is automatically inserted after the code. If a second dial tone is sent from your Central Office, it is convenient to assign the area code as the pause code number.



Default All codes – Not stored.

• To correct a wrong entry, press the CLEAR button and enter the new one.

[312] Toll Restriction - Station Lock Boundary Class

Assigns the Toll Restriction class for an extension which has set the Electronic Station Lockout or Remote Station Lock Control.

3 1 2 NEXT SELECT STORE END

(Disable/
COS-2···5)*

* Boundary COS: 2 through 5 / Disable (Disables all outside outgoing calls.)

Default Disable



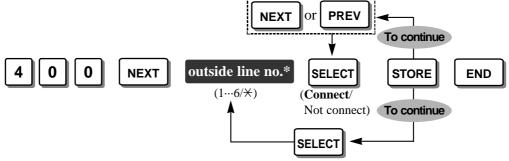
• Feature Reference

Section 3, Features

Toll Restriction Station Lock Boundary Class

[400] Outside (CO) Line Connection Assignment

Assigns which outside (CO) line(s) is connected to the system or not.



* Outside (CO) line number: 1 through 6 / * (All outside lines)

Default All outside (CO) lines – Connect



• Feature Reference Section 3, Features Outside Calling

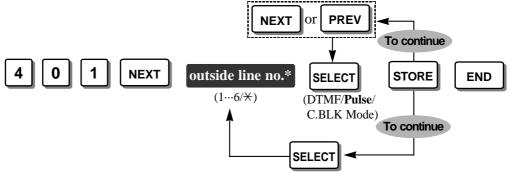
[401] *Dial Mode*

Selects the dialing mode, **DTMF**, **Pulse** or **C. BLK** (Call Blocking), for each outside (CO) line.

DTMF: The dialing signals from an extension, either Tone or Pulse, are converted to Tone and transmitted to the Central Office. If the system is connected directly to the Central Office or installed behind a host PBX, which receives both Tone and Pulse, select this mode.

Pulse: The dialing signals from an extension, either Tone or Pulse, are converted to Pulse and transmitted to the Central Office.

C. BLK: If your Central Office can receive both DTMF and Pulse signals but the user are contracted for Pulse, select this mode. When dialing with a touch tone telephone, only Pulse signals are sent to the Central Office.



* Outside (CO) line number: 1 through $6 / \times$ (All outside lines)

Default All outside (CO) lines – Pulse Mode



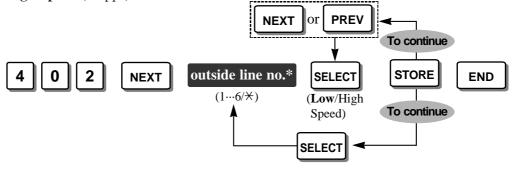
• Feature Reference

Section 3, Features

Pulse to Tone Conversion

[402] Pulse Speed Selection

Selects a pulse rate for each outside (CO) line which sets "Pulse Mode" or "Call block Mode" in program [401] "Dial Mode". There are 2 pulse rates, **Low Speed** (10 pps) and **High Speed** (20 pps).

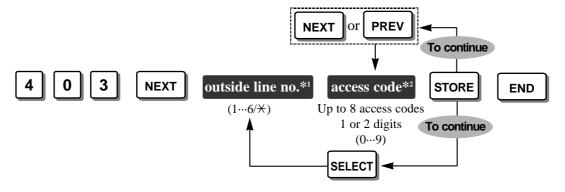


* Outside (CO) line number: 1 through 6 / × (All outside lines)

Default All outside (CO) lines – Low Speed

[403] Host PBX Access Codes

If the system is installed behind a host PBX, each outside (CO) line may require an access code to make an outside call. Up to 8 access codes can be stored for each outside line. When the programmed codes are dialed, the pause time assigned in program [417] "Pause Time" is automatically inserted, and toll restriction is applied after the code.



- *1 Outside (CO) line number: 1 through 6 / * (All outside lines)
- *2 Insert a "," for each code using the button on the overlay. Example:
 - Access codes 81, 82 on outside (CO) line number 1 4 0 3 NEXT 1 8 1 , 8 2 STORE END

Default All outside (CO) lines – Not stored



• To correct a wrong entry, press the CLEAR button and enter the new one.

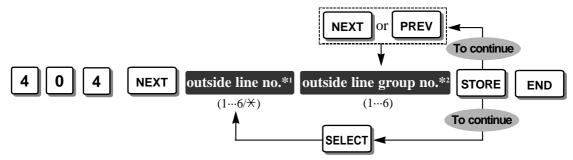


• Feature Reference Section 3, Features

Host PBX Access

[404] Outside (CO) Line Group Assignment

Assigns a maximum 6 outside (CO) line groups. Each outside (CO) line must be assigned to an outside (CO) line group. For example, if there are multiple telephone service companies available, outside (CO) lines can be grouped by the company.



- *1 Outside (CO) line number: 1 through 6 /* (All outside lines)
- *2 Outside line (TRK) group number: 1 through 6

Default Outside (CO) line 1 through 6 – Outside (CO) line group 1 through 6



• Each outside (CO) line can only belong to one outside (CO) line group.



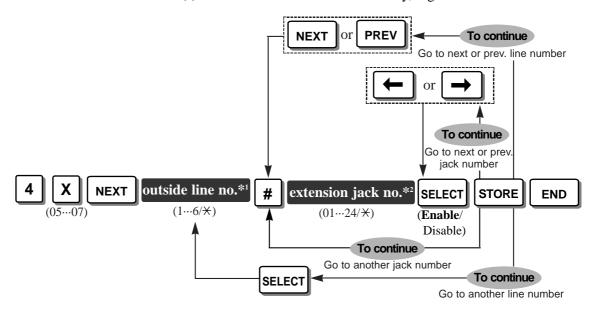
• Feature Reference

Section 3, Features
Outside Calling

4.2

[405]-[407] Flexible Outward Dialing Assignment —Day/Night/Lunch

Determines which extension(s) can make an outside call in the day, night and/or lunch modes.



- **X** Program address selection number: 05 ([405] for day) / 06 ([406] for night) / 07 ([407] for lunch)
- *1 Outside (CO) line number: 1 through 6 /* (All outside lines)
- *2 Extension jack number: 01 through 24 / × (All extension jacks)

Default All outside (CO) lines – all extension jacks – Enable



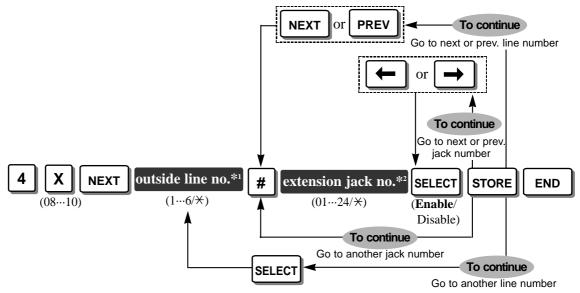
• Feature Reference

Section 3, Features

Outside Calling

[408]-[410] Flexible Ringing Assignment —Day/Night/Lunch

Determines which extension(s) will ring for incoming outside calls in the day, night and/or lunch modes.



- **X** Program address selection number: 08 ([408] for day) / 09 ([409] for night) / 10 ([410] for lunch)
- *¹ Outside (CO) line number: 1 through 6 /★ (All outside lines)
- *2 Extension jack number: 01 through 24 /★ (All extension jacks)

Default All outside (CO) lines – all extension jacks – Enable



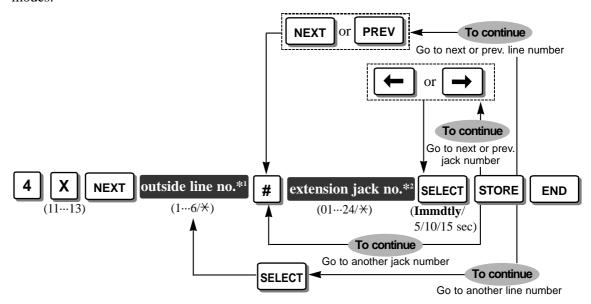
• Feature References

Section 3, Features

Outside (CO) Line Ringing Selection, Uniform Call Distribution (UCD), Receiving Calls

[411]-[413] Delayed Ringing Assignment —Day/Night/Lunch

Assigns the ringing start time for extension(s) which were selected to ring in programs [408]-[410] "Flexible Ringing Assignment —Day/Night/Lunch" in the day, night and/or lunch modes.



- **X** Program address selection number: 11 ([411] for day) / 12 ([412] for night)/ 13 ([413] for lunch)
- *1 Outside (CO) line number: 1 through 6 /* (All outside lines)
- *2 Extension jack number: 01 through 24 / × (All extension jacks)

Default All outside (CO) lines – all extension jacks – Immediately



• Feature Reference

Section 3, Features
Receiving Calls

[414]-[416] Outside (CO) Line Mode —Day/Night/Lunch

Selects the mode of an incoming outside call on each outside (CO) line in the day, night and lunch modes. There are the following 5 modes.

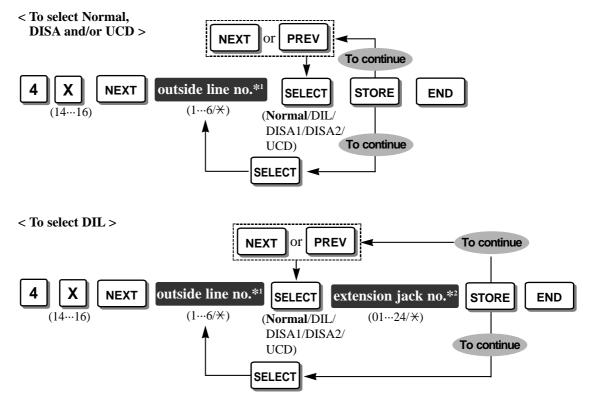
Normal: An incoming outside call will be received at the extension(s) assigned in programs [408]–[410] "Flexible Ringing Assignment — Day/Night/Lunch".

DIL: An incoming outside call will be received at the assigned extension in this program.

DISA1: An incoming outside call will be received at an extension through the DISA feature. A caller will hear a tone or an outgoing message.

DISA2: An incoming outside call will be received at an extension through the DISA feature. A caller will hear 2 different messages.

UCD: An incoming outside call will be received at an extension through the UCD feature.



X – Program address selection number: 14 ([414] for day) / 15 ([415] for night)/ 16 ([416] for lunch)

1 Outside (CO) line number: 1 through 6 / (All outside lines)

*2 Extension jack number: 01 through 24 / × (All extension jacks)

Default All outside (CO) lines – Normal



- You must select "DISA1" when the optional OGM/FAX Detection card is not installed and if you want to use the internal DISA.
- When you select "UCD", assign program [520] "UCD Group" to determine which extension group is assigned to the UCD group.
- When you select "DISA1", "DISA2" and/or "UCD", assign program [502] "OGM Selection" to determine which OGM will be used.



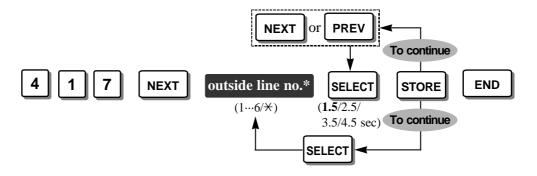
• Feature References

Section 3, Features

Direct In Line (DIL), Direct Inward System Access (DISA), Outgoing Message (OGM), Uniform Call Distribution (UCD)

[417] Pause Time

Assigns the length of the pause time. The programmed pause time is automatically inserted after a line access code, a host PBX access code programmed in [403] "Host PBX Access Codes" or a pause code assigned in [311] "Automatic Pause Insertion Codes" or can be manually inserted by the user using the PAUSE button.



* Outside (CO) line number: 1 through 6 / × (All outside lines)

Default All outside (CO) lines – 1.5 seconds

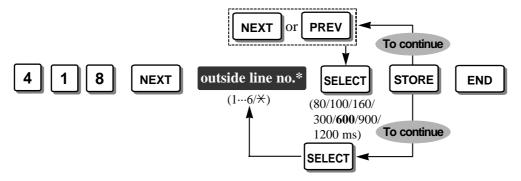


• Feature Reference

Section 3, Features
Host PBX Access

[418] Flash Time

Assigns the length of the flash time. If your system is installed behind a host PBX, External Feature Access is necessary to obtain its services. To enable it, select the required flash signal sending time for an outside (CO) line.



* Outside (CO) line number: 1 through 6 / * (All outside lines)

Default All outside (CO) lines – 600 milliseconds



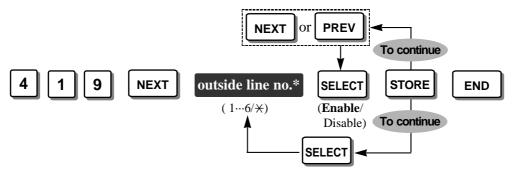
Feature References

Section 3, Features

External Feature Access, Flash

[419] Automatic Designated Outside (CO) Line Access

Selects which outside (CO) line is seized automatically when an extension user dial the Automatic Line Access number (0 or 9) assigned in program [121] "Automatic Outside (CO) Line Access Number Selection".



* Outside (CO) line number: 1 through 6 / * (All outside lines)

Default All outside (CO) lines – Enable



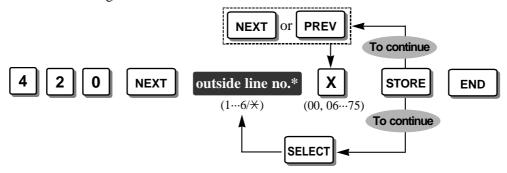
• Feature References

Section 3, Features

Automatic Outside (CO) Line Access Number, Outside Calling

[420] Calling Party Control (CPC) Signal

Assigns the required minimum duration of the Calling Party Control (CPC) signal from the Central Office for incoming outside calls. If programmed, the system disconnects the line when the CPC signal is detected.



- * Outside (CO) line number: 1 through 6 / × (All outside lines)
- \mathbf{X} CPC signal detect time selection number: $\mathbf{No.}$ = selection number Detect time (milliseconds)

No.	Detect time	No.	Detect time	No.	Detect time	No.	Detect time
00	Disable	23	198	42	350	61	502
01 - 05	Cannot use	24	206	43	358	62	510
06	62	25	214	44	366	63	518
07	70	26	222	45	374	64	526
08	78	27	230	46	382	65	534
09	86	28	238	47	390	66	542
10	94	29	246	48	398	67	550
11	102	30	254	49	406	68	558
12	110	31	262	50	414	69	566
13	118	32	270	51	422	70	574
14	126	33	278	52	430	71	582
15	134	34	286	53	438	72	590
16	142	35	294	54	446	73	598
17	150	36	302	55	454	74	606
18	158	37	310	56	462	75	614
19	166	38	318	57	470		
20	174	39	326	58	478		
21	182	40	334	59	486		
22	190	41	342	60	494		

Default All outside (CO) lines – 350 milliseconds (No. 42)



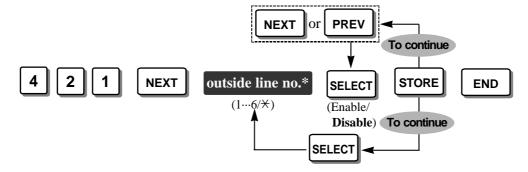
• Feature Reference

Section 3, Features

Calling Party Control (CPC) Signal Detection

[421] CPC Detection for Outgoing Calls

Enables or disables the CPC signal detection during an outgoing outside call. If disabled, the CPC signal detection is only activated during an incoming outside call or after call hold.



* Outside (CO) line number: 1 through 6 / * (All outside lines)

Default All outside (CO) lines – Disable



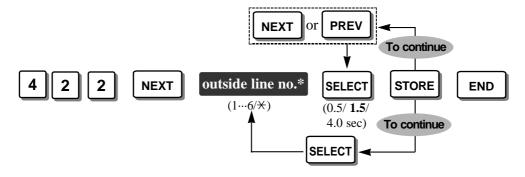
• Feature Reference

Section 3, Features

Calling Party Control (CPC) Signal Detection

[422] Disconnect Time

Determines the amount of time to send the disconnect signal from the system to the Central Office or host PBX. The time you select must be longer than the requirements of your Central Office or host PBX.



* Outside (CO) line number: 1 through $6 / \times$ (All outside lines)

Default All outside (CO) lines – 1.5 seconds



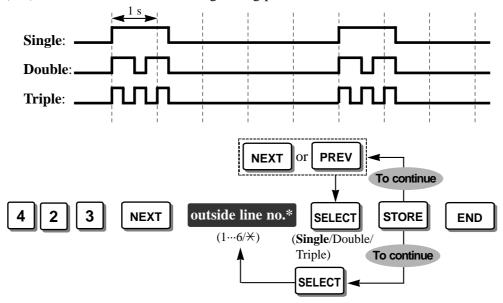
• Feature Reference

Section 3, Features

Flash

[423] Outside (CO) Line Ringing Pattern Selection

Selects the incoming outside call ringing pattern, **Single**, **Double** or **Triple**, for each outside (CO) line. This is useful for distinguishing private calls from business calls.



* Outside (CO) line number: 1 through 6 / × (All outside lines)

Default All outside (CO) lines – Single



• We recommend assigning this program regarding the extension ringing pattern assigned in program [115] "Extension Ringing Pattern Selection" and doorphone ringing pattern assigned in program [706] "Doorphone Ringing Tone Selection"



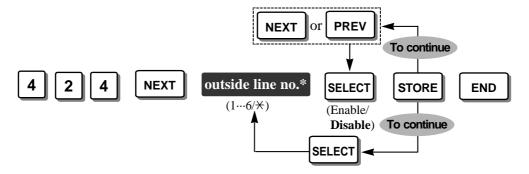
• Feature Reference

Section 3, Features

Ringing Pattern Selection

[424] Reverse (Polarity) Circuit Assignment

Enables or disables detecting the reverse signal for each outside (CO) line's polarity from the Central Office when making a call. If enabled, the outside call duration can be determined.



* Outside (CO) line number: 1 through 6 / × (All outside lines)

Default All outside (CO) lines – Disable



• Feature Reference

Section 3, Features

Polarity Reverse Detection

[500] DISA Incoming Dialing Mode Selection

Selects the destination of an incoming outside call via the DISA feature when you select "DISA 1" or "DISA 2" in programs [414]-[416] "Outside (CO) Line Mode

-Day/Night/Lunch", **Without AA** (auto attendant) or **With AA**. If you select "With AA", assign the next program [501] "DISA Built-in Auto Attendant".

Without AA: Available destinations are: extension numbers assigned in program [009] "Extension Number Assignment", line access numbers (0 or 9, 81 through 86) and the operator number (0 or 9).

With AA: Available destinations are: numbers available in the "Without AA" mode, and numbers (0 through 9) assigned in program [501].



Default Without AA



- For example: in the "With AA" mode, if a number is not dialed within the programmed time in [517] "DISA AA Wait Time" after dialing 1, the call is received at the DISA builtin auto attendant number 1.
- In the "With AA" mode, if 0 and/or 9 are not assigned in program [501], the system recognizes them as a line access number and/or operator number.

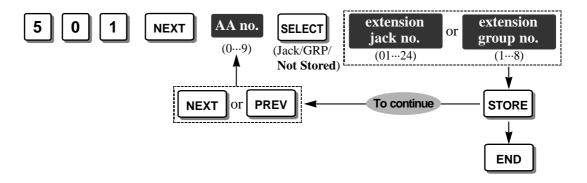


• Feature Reference

Section 3, Features

[501] DISA Built-in Auto Attendant

Assigns a maximum of 10 DISA built-in auto attendant numbers when "With AA" is selected in program [500] "DISA Incoming Dialing Mode Selection". The extension numbers assigned in program [009] "Extension Number Assignment", and the extension group numbers assigned in program [600] "Extension Group Assignment" can be assigned as a 1 digit number and used as DISA built-in auto attendant numbers.



Default All auto attendant numbers – Not stored

!

• If you would like to use a line access number and/or operator number in the "With AA" mode, do not assign auto attendant number(s) which correspond to a line access number and/or operator number (0 and/or 9).



• Feature Reference

Section 3, Features

[502] OGM Mode Selection

Selects how the 2 outgoing messages (OGM1 and OGM2) are used, **MODE1** through **MODE5**.

Mode	OGM1	OGM2	Description
1	DISA1	DISA1	The system can receive 2 incoming calls via the DISA feature at the same time. This is useful when receiving many calls.
2	DISA1	DISA2	An example: DISA1 is used in the day mode and DISA2 is used in the night mode.
3	UCD	UCD	The system can hold up to 2 incoming calls via the UCD feature at the same time until any extension is available.
4	UCD	UCD- END	The system disconnects an incoming call via the UCD feature when the assigned waiting time in [521] "UCD Busy Waiting Time" expires.
5	UCD	DISA1	An example: UCD is used in the day mode and DISA1 is used in the night mode.



Default MODE1



- Programs [414]-[416] "Outside (CO) Line Mode Day/Night/Lunch" are used to assign "DISA1", "DISA2" or "UCD" to each outside (CO) line according to this assignment. UCD-END is used automatically when UCD is assigned in programs [414]-[416], "Disconnect" is selected in program [523] "UCD Busy Mode", and "MODE4" is selected in this program.
- If the optional OGM/FAX Detection card is not installed, this assignment should be "MODE1".



• Feature References

Section 3, Features

Direct Inward System Access (DISA), Outgoing Message (OGM), Uniform Call Distribution (UCD)

[503] FAX Connection *1

Assigns one extension which can receive facsimile data when the system receives a FAX (CNG) tone via the DISA feature.

5 0 3 NEXT extension jack no. STORE END

Default Disable (Not assigned)

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- The assigned extension will automatically have the Data Line Security feature set.
- To not assign an extension jack number, press the CLEAR button in the extension jack number step.



• Feature References

Section 3, Features

Data Line Security, Direct Inward System Access (DISA)

[504] DISA Delayed Answer Time

Sets the time from a call being received and answered with the DISA feature.

5 0 4 NEXT SELECT STORE END

Default 3 seconds

• Feature Reference

Section 3, Features

Direct Inward System Access (DISA)

[505] DISA Waiting Time after OGM *1

Assigns the length of time the system keeps detecting the DTMF signals or FAX (CNG) tone after the DISA outgoing message is completed.

5 0 5 NEXT SELECT STORE END

Default 5 seconds



• Feature Reference

Section 3, Features

[506] DISA Busy Mode

Selects the operation when a called extension or all called extensions in an extension group enabled in program [100] "Hunting Group Set" via the DISA feature is/are busy.

Disconnect, Call Waiting or DISA2 is available.

Disconnect: The call is disconnected after the busy tone.

Call Waiting: A call waiting tone is sent to the called extension or first called extension

in the hunting group.

DISA2: OGM2 is sent to the caller and the system waits for another destination

when the first destination is busy.

5 0 6 NEXT SELECT STORE END

Call Waiting/ DISA2)

Default Disconnect

• Program [502] "OGM Mode Selection" should be "MODE2", if "DISA2" was selected in this program.



• Feature References

Section 3, Features

Direct Inward System Access (DISA), Outgoing Message (OGM)

[507] DISA Intercept Mode

Selects the operation when a called extension or extension group via the DISA feature does not answer a call within the length of time programmed in [508] "DISA Ringing Time before Intercept". **Intercept** or **Disconnect** is available.

Intercept: The call is redirected depending on [408]-[410] "Flexible Ringing

Assignment–Day/Night/Lunch" (Intercept Routing – No Answer feature). This is useful for business use. For example, the call is forwarded to the

operator or a Voice Processing System automatically.

Disconnect: The call is disconnected. This is useful for users who do not want to forward the call, for example, to a home.

5 0 7 NEXT SELECT STORE END

Disconnect)

Default Intercept



• Feature References

Section 3, Features

Direct Inward System Access (DISA), Intercept Routing, Voice Mail Integration

[508] DISA Ringing Time before Intercept

Assigns the length of time for the Intercept Routing – No Answer feature ([507] "DISA Intercept Mode", Intercept). When the time expires the system starts to redirect the call to the programmed extension(s).

5 0 8 NEXT SELECT STORE END (10/20/30/40/60/120 sec)

Default 20 seconds



• Feature References

Section 3, Features

Direct Inward System Access (DISA), Intercept Routing

[509] DISA Ringing Time after Intercept

Assigns the length of time to call the extension(s) where a call is redirected by the Intercept Routing – No Answer feature([507] "DISA Intercept Mode", Intercept) after the time programmed in [508] "DISA Ringing Time before Intercept" expires. If the call is not answered within the programmed time, the call will be disconnected.

5 0 9 NEXT SELECT STORE END
(10/20/30/
40/60/120 sec)

Default 20 seconds



• Feature References

Section 3, Features

Direct Inward System Access (DISA), Intercept Routing

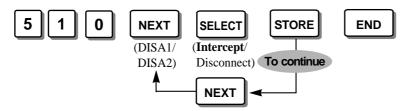
4.2

[510] DISA No Dial Mode

Selects the operation when the system does not receive either DTMF signals or a FAX (CNG) tone after a specified length of time programmed. If the optional card is installed, then use program [505] "DISA Waiting Time after OGM". If the optional card is not installed, then use program [515] "Intercept Time for Internal DISA". **Intercept** or **Disconnect** is available.

Intercept: The call is directed depending on programs [408]-[410] "Flexible Ringing Assignment–Day/Night/Lunch" (Intercept Routing – No Answer feature). The destination telephone(s) will ring for the time programmed in [509] "DISA Ringing Time after Intercept".

Disconnect: The call is disconnected.



Default DISA 1 and DISA 2 – Intercept



• Feature References

Section 3, Features

Direct Inward System Access (DISA), Intercept Routing

[511] DISA Security Type

Selects the security mode for making calls attempted by a DISA caller. **Trunk Security** (outside (CO) line security), **All Security** or **None Security** is available.

Trunk Security: Requires the caller to enter a DISA security code assigned in program

[512] "DISA Security Codes" before making an outside call.

All Security: Requires the caller to enter a DISA security code before making both an

outside and intercom call.

None Security: Allows the caller to make both an outside and intercom call without

entering a DISA security code.

5 1 1 NEXT SELECT STORE END

(Trunk/All/
None Security)

Default Trunk Security

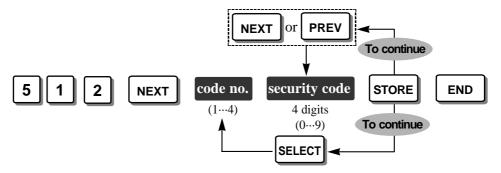


• Feature Reference

Section 3, Features

[512] DISA Security Codes

Assigns a maximum of 4 required DISA security codes if "Trunk Security" or "All Security" is selected in program [511] "DISA Security Type".



Default All DISA security codes – 0000

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The used security codes are printed on the SMDR.



• Feature Reference

Section 3, Features

Direct Inward System Access (DISA)

[513] Cyclic Tone Detection*1

Assigns the number of times a cyclic tone is detected while the DISA outgoing message is sent so that the system can recognize the end of the DISA call.



* Disable (Does not detect)

Default 4 Times



• Feature References

Section 3, Features

Direct Inward System Access (DISA), Uniform Call Distribution (UCD)

[514] FAX Tone Detection*1

Sets the number of times the FAX (CNG) tone must be detected while the DISA outgoing message is sent before the system recognizes the incoming signal as facsimile data.

5 1 4 NEXT SELECT STORE END

(1 Time/2 Times)

Default 1 Time

 The extension which can receive facsimile data must be assigned in program [503] "FAX Connection"

• Feature Reference

Section 3, Features

Direct Inward System Access (DISA)

[515] Intercept Time for Internal DISA

Assigns the length of time the system keeps detecting DTMF signals after a call is received at the internal DISA. If the system does not receive DTMF signals within the programmed time, the call will be intercepted or disconnected according to program [510] "DISA No Dial Mode".

5 1 5 NEXT SELECT STORE END

Default 3 seconds

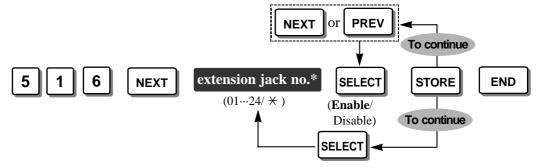
• A cyclic tone and FAX (CNG) tone cannot be detected by the internal DISA.

• Feature Reference

Section 3, Features

[516] DISA Incoming Assignment

Enables or disables each extension to receive an outside call via the DISA feature. If a DISA call is received at a disabled extension, the DISA caller will hear a reorder tone and the call will be disconnected automatically. For example, it may be convenient to disable the president's extension.



* Extension jack number: 01 through 24 /* (All extension jacks)

Default All extension jacks – Enable



• If a call via the DISA feature is received by an extension group, this program will not work for extensions in that extension group.



• Feature Reference

Section 3, Features

Direct Inward System Access (DISA)

[517] DISA AA Wait Time

Selects the time that the system waits for a second digit entry. If the programmed time expires, the system will assume that the first digit is a DISA built-in auto attendant number, if a number is assigned in program [501] "DISA Built-in Auto Attendant. For example, if a number is not dialed within the programmed time after dialing 1, the system will assume that "1" is the auto attendant number.



Default 2 seconds



• Feature Reference

Section 3, Features

[518] DISA Tone Selection after the Security Code

Enables or disables sending a beep after entering the security code. If "Enable" is selected, a beep is sent when the number entered is the same as one of the security codes assigned in program [512] "DISA Security Codes".



Default Enable



• Feature Reference

Section 3, Features

Direct Inward System Access (DISA)

[519] DISA OGM Mute Time

Assigns the length of time from answering a call with the DISA feature and sending the DISA outgoing message or a beep. During the assigned length of time, the system will not receive DTMF signals.

5 1 9 NEXT SELECT STORE END

Default 0 second



• Feature Reference

Section 3, Features

4.2 System Programming

[520]-[522]

[520] UCD Group*1

Assigns one extension group which works as the UCD group.

Default Extension group number 1



• Feature Reference

Section 3, Features

Uniform Call Distribution (UCD)

[521] UCD Busy Waiting Time*1

Assigns the length of time the system holds an incoming outside call via the UCD feature when all extensions in the UCD group are busy. When the programmed time expires, the call will be intercepted or disconnected according to program [523] "UCD Busy Mode".

5 2 1 NEXT waiting time (1...32 minutes) STORE END

Default 10 minutes



• Feature Reference

Section 3, Features

Uniform Call Distribution (UCD)

[522] UCD OGM Message Interval Time*1

Assigns interval time between sending UCD outgoing messages to an incoming outside call via the UCD feature when all extensions in the UCD group are busy. The UCD outgoing message is repeated during the time programmed in [521] "UCD Busy Waiting Time".

5 2 2 NEXT SELECT STORE END

(30 sec/1/
1.5/2 min)

Default 1 minute



• Feature Reference

Section 3, Features

Uniform Call Distribution (UCD)

[523] *UCD Busy Mode**1

Selects the operation when the length of time programmed in [521] "UCD Busy Waiting Time" expires. **Intercept** or **Disconnect** is available.

Intercept: The call will be redirected depending on programs [408]-[410] "Flexible

Ringing Assignment–Day/Night/Lunch" (Intercept Routing feature). The extension which receives a redirected call rings during the length of time

programmed in [526] "UCD Ringing Time after Intercept".

Disconnect: The call will be disconnected immediately.



Default Intercept



• This program is effective only when "MODE 3" or "MODE 5" is selected in program [502] "OGM Mode Selection". If "MODE 4" is selected, the call will be disconnected after the UCD-END outgoing message.



• Feature References

Section 3, Features

Intercept Routing, Uniform Call Distribution (UCD)

[524] UCD Intercept Mode*1

Selects the operation when all extensions in the UCD group do not answer an outside call via the UCD feature within the length of time programmed in [525] "UCD Ringing Time before Intercept". **Intercept** or **Disconnect** is available.

Intercept: The call is redirected depending on programs [408]-[410] "Flexible Ringing Assignment–Day/Night/Lunch" (Intercept Routing – No Answer feature).

Disconnect: The call is disconnected.



Default Intercept



• Feature References

Section 3, Features

Intercept Routing, Uniform Call Distribution (UCD)

[525] UCD Ringing Time before Intercept*1

Assigns the length of time for the Intercept Routing – No Answer feature ([524] "UCD Intercept Mode", Intercept). When the time expires, the system starts to redirect the call to the programmed extension(s).

5 2 5 NEXT SELECT STORE END
(10/20/30/
40/60/120 sec)

Default 20 seconds



• Feature References

Section 3, Features

Intercept Routing, Uniform Call Distribution (UCD)

[526] UCD Ringing Time after Intercept*1

Assigns the length of time to call the extension(s) where a call is redirected by the Intercept Routing – No Answer feature ([524] "DISA Intercept Mode", Intercept) after the time programmed in [525] "UCD Ringing Time before Intercept" expires.

5 2 6 NEXT SELECT STORE END
(10/20/30/
40/60/120 sec)

Default 20 seconds



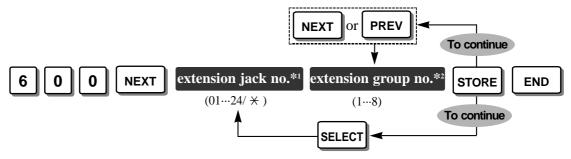
• Feature References

Section 3, Features

Intercept Routing, Uniform Call Distribution (UCD)

[600] Extension Group Assignment

Assigns an extension group for each extension. For example: by department or floor.



- *¹ Extension jack number: 01 through 24 / ★ (All extension jacks)
- *2 Extension group number: 1 through 8

Default All extension jacks – Extension group 1



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



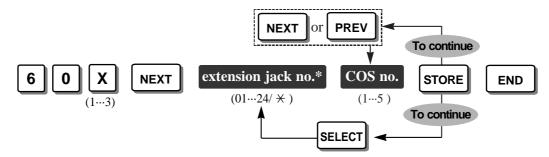
• Feature References

Section 3, Features

Extension Group, Station Hunting

[601]-[603] TRS - Class of Service Assignment —Day/Night/Lunch

Programs a class of service (COS) in the day, night and/or lunch modes for each extension. There are 5 class of services available for each extension.



- **X** Program address selection number: 1 ([601] for day) / 2 ([602] for night)/ 3 ([603] for lunch)
- * Extension jack number: 01 through 24 / * (All extension jacks)

Default All extension jacks – COS-1



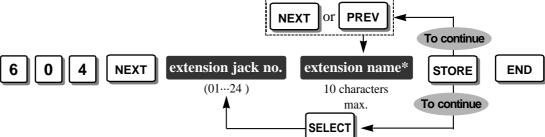
• Feature Reference

Section 3, Features

Toll Restriction

[604] Extension Name Setting

Assigns a name to each extension which will be displayed when making or receiving an intercom call.



* Extension name:

Combination Table

Pressing SELECT (Times)							
Keys	0	1	2	3	4	5	6
1	1	Q	q	Z	z	!	?
2	2	A	a	В	b	С	с
3	3	D	d	Е	e	F	f
4	4	G	g	Н	h	I	i
5	5	J	j	K	k	L	1
6	6	M	m	N	n	О	О
7	7	P	p	R	r	S	s
8	8	Т	t	U	u	V	v
9	9	W	w	X	X	Y	y
0	0		•	,	,	:	;
*	*	,,	+	-	=	<	>
#	#	\$	%	&	@	()

<Example>

- To enter "Mike;
- 1. Press 6 and then press the SELECT button once to enter "M."
- 2. Press 4 and then press the SELECT button 6 times to enter "i."
- 3. Press 5 and then press the SELECT button 4 times to enter "k."
- 4. Press 3 and then press the SELECT button 4 times to enter "e."

Default All extension jacks – Not stored.

- To erase all letters, press the CLEAR button. To erase 1 letter, press 🗲.
- Each name has a maximum of 10 characters.

[605] Account Code Entry Mode

Selects the account code input mode, **Option**, **Forced**, **Verify–All** or **Verify–Toll**, for each extension jack. This feature displays the account code of the called or calling party on the SMDR.

Option: The user can enter any account code, if needed.

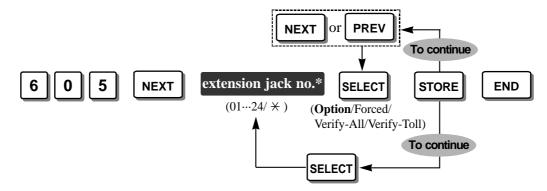
Forced: The user must always enter an account code. The code can be any number.

Verify-All: The user must always enter an assigned account code in program

[310] "Account Codes" to make an outside call.

Verify–Toll: The user must enter an assigned account code in program [310] to make an outside call. If the user enters their extension password, they can override

toll restriction and make a call with their COS number.



* Extension jack number: 01 through 24 / * (All extension jacks)

Default All extension jacks – Option



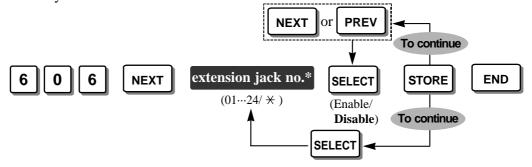
• Feature References

Section 3, Features

Account Code Entry, Toll Restriction Override by Extension Password

[606] Call Transfer to an Outside (CO) Line

Enables or disables transferring an intercom or outside call to any outside (CO) line manually for each extension.



* Extension jack number: 01 through 24 / * (All extension jacks)

Default All extension jacks – Disable



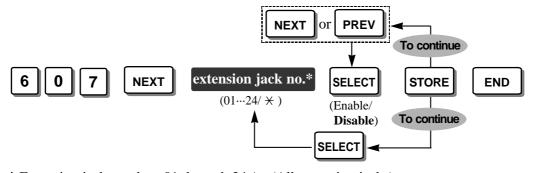
• Feature References

Section 3, Features

Call Transfer – to Outside (CO) Line, Conference (3-party)

[607] Call Forwarding to an Outside (CO) Line

Enables or disables automatically forwarding an incoming intercom or outside call to any outside (CO) line for each extension.



* Extension jack number: 01 through 24 / × (All extension jacks)

Default All extension jacks – Disable



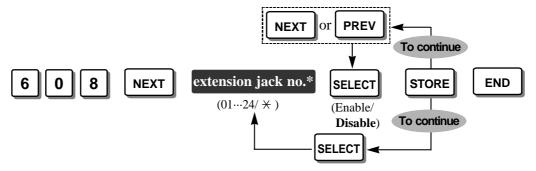
• Feature Reference

Section 3, Features

Call Forwarding

[608] Executive Busy Override

Enables or disables using the Executive Busy Override feature at each extension. If enabled, an extension user can interrupt an established call.



* Extension jack number: 01 through 24 /* (All extension jacks)

Default All extension jacks – Disable



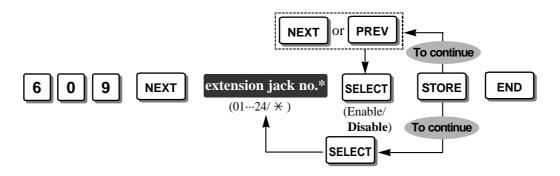
• Feature Reference

Section 3, Features

Executive Busy Override

[609] Do Not Disturb Override

Enables or disables using the Do Not Disturb Override feature at each extension. If enabled, an extension user can ring an extension which has set the Do Not Disturb feature.



* Extension jack number: 01 through 24 / × (All extension jacks)

Default All extension jacks – Disable



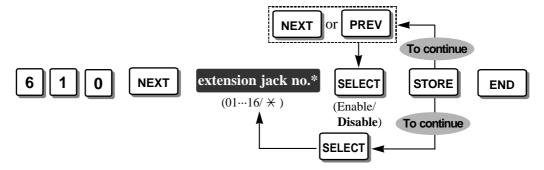
• Feature Reference

Section 3, Features

Do Not Disturb (DND)

[610] Paralleled Telephone Connection

Enables or disables a single line telephone (SLT) to be connected in parallel with a proprietary telephone.



* Extension jack number: 01 through 16 / × (All extension jacks)

Default All extension jacks – Disable



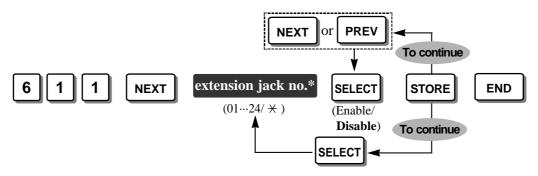
• Feature Reference

Section 3, Features

Paralleled Telephone Connection

[611] TAM (Telephone Answering Machine) Extension

Assigns the jack number of an extension connected to a telephone answering machine (TAM) to activate the Call Retrieving from TAM feature.



* Extension jack number: 01 through 24 / × (All extension jacks)

Default All extension jacks – Disable (not connected)



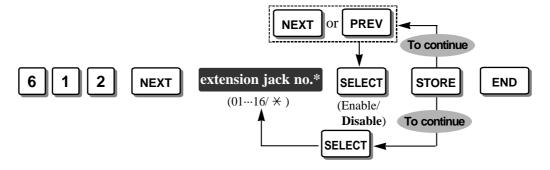
• Feature Reference

Section 3, Features

Call Pickup

[612] Room Monitor Assignment

Enables or disables which extension can be monitored using the Room Monitor feature.



* Extension jack number: 01 through 16 /* (All extension jacks)

Default All extension jacks – Disable (Cannot be monitored.)

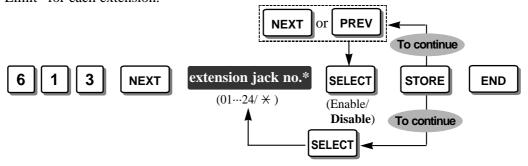


• Feature Reference

Section 3, Features Room Monitor

[613] Outside (CO) Line Duration Time Limit Selection

Enables or disables the time limit programmed in [212] "Outside (CO) Line Duration Time Limit" for each extension.



* Extension jack number: 01 through 24 /* (All extension jacks)

Default All extension jacks – Disable



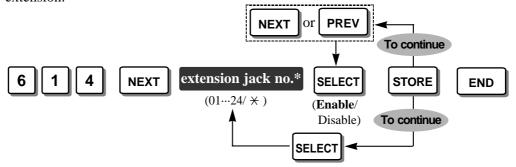
• Feature Reference

Section 3, Features

Limited Call Duration

[614] Internal Pulse Detection

Enables or disables connecting a single line telephone (SLT) to receive pulse signals for each extension.



^{*} Extension jack number: 01 through 24 / * (All extension jacks)

Default All extension jacks – Enable



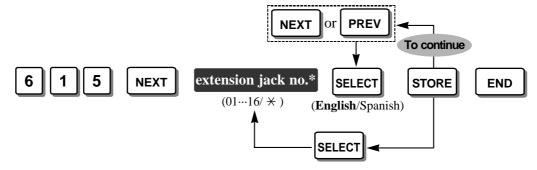
• If you select "MODE 1" in program [207] "Hookswitch Flash Timing Range Selection" and "Enable" in this program, the system will distinguish between a pulse signal and hooking depending on the situation. When you select "Disable" in this program, if "1" is dialed during the pulse mode, the system will regard it as hooking and all other numbers will be disregarded.



• Feature Reference Section 3, Features Hookswitch Flash

[615] LCD Language Assignment

Selects the language, **English** or **Spanish**, shown on the LCD display of a proprietary telephone on an extension basis. The selected language is shown during operation and Proprietary Telephone Settings.



* Extension jack number: 01 through 16 / * (All extension jacks)

Default English



• The language used for the SMDR printout is assigned in program [806] "SMDR Language Assignment".

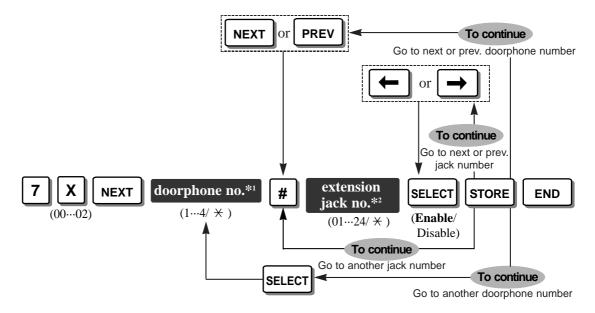


• Feature Reference Section 3, Features

Language Selection

[700]-[702] Doorphone Ringing Assignment—Day/Night/Lunch

Enables or disables receiving a call from up to 4 doorphones in the day, night and/or lunch modes for each extension.



- **X** Program address selection number: 00 ([700] for day) / 01 ([701] for night) / 02 ([702] for lunch)
- *¹ Doorphone number: 1 through 4 / ★ (All doorphones)
- *2 Extension jack number: 01 through 24 / * (All extension jacks)

Default All doorphones – all extension jacks – Enable

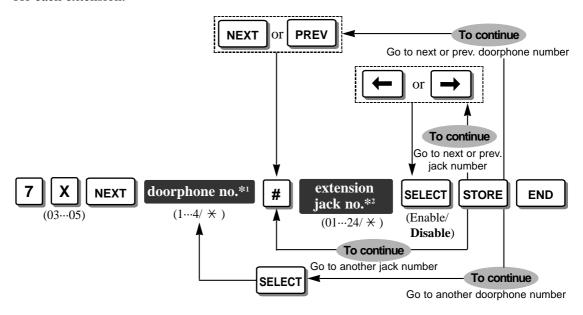


• Feature Reference

Section 3, Features
Doorphone Call

[703]-[705] Door Opener Assignment—Day/Night/Lunch

Enables or disables accessing to up to 4 door openers in the day, night and/or lunch modes for each extension.



- **X** Program address selection number: 03 ([703] for day) / 04 ([704] for night) / 05 ([705] for lunch)
- *1 Doorphone number: 1 through 4 / * (All doorphones)
- *2 Extension jack number: 01 through 24 / × (All extension jacks)

Default All door openers – all extension jacks – Disable

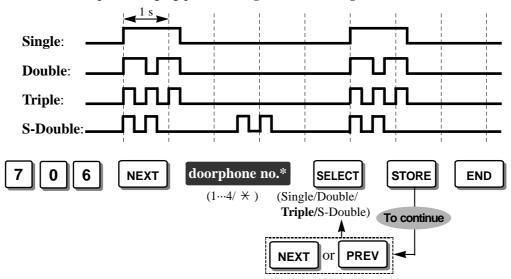


• Feature Reference

Section 3, Features
Door Opener

[706] Doorphone Ringing / Tone Pattern Selection

Selects the doorphone ringing pattern, Single, Double, Triple or S-Double.



^{*} Doorphone number: 1 through 4 / * (All doorphones)

Default All doorphones – Triple



• When a doorphone call is received at a proprietary telephone, a tone is heard instead of ringing.



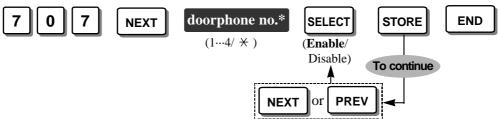
• Feature References

Section 3, Features

Doorphone Call, Ringing Pattern Selection

[707] Doorphone Access Tone Selection

Enables or disables sending a doorphone access tone to a monitored doorphone. If enabled, the access tone is heard from the doorphone when monitoring from a telephone starts.



* Doorphone number: 1 through 4 / ★ (All doorphones)

Default All doorphones – Enable



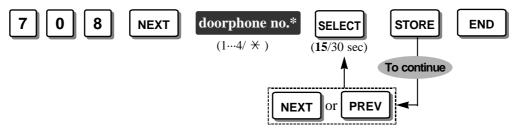
Feature References

Section 3, Features

Doorphone Call, Room Monitor

[708] Doorphone Ringing Time

Sets the ringing time when making an intercom call from a doorphone.



* Doorphone number: 1 through 4 / * (All doorphones)

Default All doorphones – 15 seconds

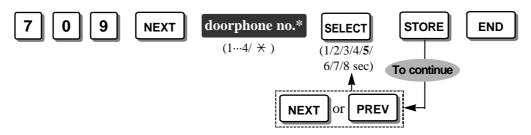


• Feature Reference

Section 3, Features
Doorphone Call

[709] Door Opener Time

Assigns the length of the door opener time. The door is unlocked for the assigned period of time.



* Doorphone number: 1 through 4 / × (All doorphones)

Default All door openers – 5 seconds



• Feature Reference

Section 3, Features
Door Opener

[800] SMDR RS-232C Communication Parameters

Assigns the communication parameters for the Serial Interface (RS-232C).

NL-Code: Selects the code for your printer or personal computer. If your printer or (New line)

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

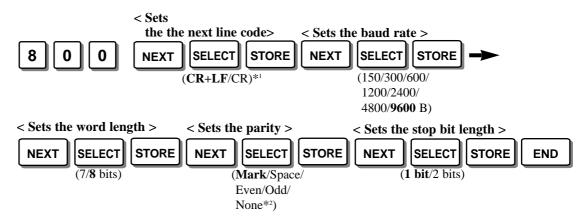
the string of bits composing a character. Make your selection depending

on the requirements of your printer or personal computer.

Stop Bit: The stop bit code indicates the end of a bit string which composes a

character. Select a value depending on the requirements of your printer

or personal computer.



^{*1} CR+LF (Carriage Return + Line Feed) / CR (Carriage Return)

^{*2} Select "None" when the error checking function is not required from the printer.

Default	New line	Baud rate	Word length	Parity	Stop bit length
	CR + LF	9600 baud	8 bits	Mark	1 bit



- To return to the previous mode, press | PREV | instead of | NEXT |.
- The following combinations are invalid.

Parity	Word length	Stop bit length
Mark	8	2
Space	8	1
Space	8	2

If any of the above invalid combinations are selected, an alarm tone is heard.



• Feature Reference

Section 3, Features

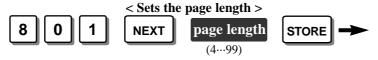
Station Message Detail Recording (SMDR)

[801] SMDR Parameter

Assigns the following 2 printing codes to match the SMDR output with the paper size used in the printer.

Page Length: Determines the number of lines per page.

Skip Perf: Determines the number of lines to be skipped at the end of every page. (Perforation)



< Sets the skip perforation >

skip perforation **NEXT** (0...95)

STORE END

Page length – 66 lines **Default**

Skip perforation – 0 line



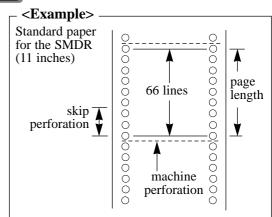
- The page length should be at least 4 lines longer than the skip perforation length.
- To correct a wrong entry, press the CLEAR button and enter the new one.



• Feature Reference

Section 3, Features

Station Message Detail Recording (SMDR)



[802] Incoming/Outgoing Call Selection for Printing

Determines which calls will produce an SMDR printout.



- *1 Outgoing: On (Print all calls) / Off (No printing) / Toll (Print toll calls only)
- *2 Incoming: On (Print all calls) / Off (No printing)

Outgoing calls / Incoming calls - On **Default**



• If "Outgoing; Toll" is selected, only calls which are checked in programs [302]–[305] "Toll Restriction – Classes 2 through 5 Denied Codes" and are allowed, are printed out.



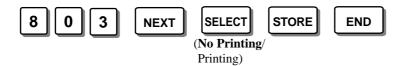
Feature Reference

Section 3. Features

Station Message Detail Recording (SMDR)

[803] Secret Speed Dialing / One-Touch Dialing Printing

Selects to print out secret dialing numbers stored in program [001] "System Speed Dialing Entry" and/or stored in One-Touch Dialing, or not to print them out on SMDR even though secret dialing numbers are not displayed on the LCD.



Default No printing



• Feature References

Section 3, Features

Secret Dialing, Station Message Detail Recording (SMDR)

[804] System Data Dump

Starts and stops printing the assigned data. All or a specific area of current system-programmed data is printed out. The areas are as follows.

All Para: Prints out all data.

System Para: Prints out all data except for the following 4 parameters.

CO Para: Prints out programs [400] through [403] and [405] through [424]. Ext Para: If the extension is a proprietary telephone, programs [102], [516] [600]

through [613] and [615] will be printed out. The assigned data on the PF (Programmable Feature) buttons and CO buttons will also be printed out. If the extension is a single line telephone, programs [102], [516] and [600] through [614] will be printed out. The assigned Personal Speed Dialing

numbers are also printed out.

DSS Para: Prints out the assigned data in the DSS buttons and PF buttons on the DSS

console.

Speed Dial: Prints out the System Speed Dialing numbers (00 through 99) assigned in

program [001].

Stop Output: Stops printing.

< To select All parameters, System parameter,
Speed dial and/or Stop output. >

8 0 4 NEXT SELECT STORE END

(All/System/CO/Ext/
DSS Para/Speed Dial/
Stop Output) To continue

4.2





< To select the Extension parameter. >



< To select the DSS parameter. >



- *1 Outside (CO) line number: 1 through 6 / * (All outside lines)
- *2 Extension jack number: 01 through 24 / * (All extension jacks)
- *3 DSS console number: 1 through $2 / \times$ (Both DSS console numbers)



• This program and [999] "System Data Clear" are not included.



• Feature Reference

Section 3, Features

Station Message Detail Recording (SMDR)

[805] SMDR Account Code Selection

Selects printing out the account code stored in program [310] "Account Codes", or just the index of the account code on SMDR printout.



Default CODE



• Feature References

Section 3, Features

Account Code Entry, Station Message Detail Recording (SMDR)

4.2 System Programming

[806], [998]

[806] SMDR Language Assignment

Selects the language, English or Spanish, used for an SMDR printout.

8 0 6 NEXT SELECT STORE END (English/Spanish)

Default English

• Feature References

Section 3, Features

Language Selection, Station Message Detail Recording (SMDR)

[998] ROM Version

Confirms the system ROM version.

9 9 8 NEXT END

Display example:

Y501A 980430 (BX)
Version Date

[999] System Data Clear

Resets all or a specific area of the current assigned data to the default settings. The areas are as follows.

All Para: Resets all data to the default settings.

System Para: Resets all data to the default settings except for the data of the following 4

parameters.

CO Para: Resets programs [400] through [403] and [405] through [424] to the

default settings on an outside (CO) line basis.

Ext Para: Resets programs [102], [516] and [600] through [615] to the default

settings on an extension basis.

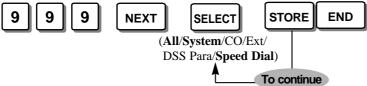
DSS Para: Resets the assigned data on the DSS buttons and PF buttons on the DSS

console.

Speed Dial: Resets the System Speed Dialing numbers (00 through 99) assigned in

program [001].

< To select All, System parameter and/or Speed Dial. >



< To select the CO (outside line) parameter. >



< To select the Extension parameter. >



< To select the DSS parameter. >



- *1 Outside (CO) line number: 1 through 6 / * (All outside lines)
- *2 Extension jack number: 01 through 24 / ★ (All extension jacks)
- *3 DSS console number: 1 through $2 / \times$ (Both DSS console numbers)



• This program and [804] "System Data Dump" are not included.



• Feature Reference

Section 3, Features

System Data Default Set

Section 5 Appendix

Add	lress Program	Default
[000]	Date and Time Setting	'98 Jan. 1 Thu 12:00 AM
[001]	System Speed Dialing Entry	All speed dialing numbers – Not stored
[002]	System Password	1234
[003]	DSS Console Port Assignment	All DSS Consoles — Disable
[004]	Paired Telephone Assignment for DSS Console	DSS1 – Disable, DSS2 – Disable
[005]	One-Touch Transfer Using a DSS Button	With Transfer
[006]	Time (Day/Night/Lunch) Service Changing Mode	Manual
[007]	Time (Day/Night/Lunch) Service Start Time	Every day of the week — Day – 9:00 AM / Night – 5:00 PM / Lunch-S – None / Lunch-E – None
[008]	Operator Assignment	Jack-01
[009]	Extension Number Assignment	Jack 01 through 24 = Extn. 101 through 124
[010]	LCD Time Display Selection	12 HOUR
[100]	Hunting Group Set	All extension groups — Disable
[101]	Hunting Type	All extension groups – Terminate
[102]	Voice Mail Part	All extension jacks — Disable
[103]	DTMF Integration	Disable
[104]	Hold Mode Selection	Hold-1
[105]	Conference Tone	Enable
[106]	External Paging Access Tone	Enable
[107]	DTMF Receiver Check	All DTMF receivers — Enable
[108]	Flash Mode for a Station Locked Extension	Disable
[109]	CO Indicator Assignment	Enable
[110]	Flash Key Mode	MODE 1
[111]	Hold Music Selection	Internal
[112]	DSS Console Indication Mode	Enable
[113]	Automatic Redial Repeat	10 times
[114]	Automatic Redial Interval Time	60 seconds
[115]	Extension Ringing Pattern Selection	Double
[116]	Conference Pattern Selection	5-party C-2 E-5

Address Program	Default
[117] Call Pickup Tone	Enable
[118] Pulse Restriction	Enable
[119] Redialing after Pulse to Tone Conversion	Disable
[120] Bell Frequency	25 Hz
[121] Automatic Outside (CO) Line Access Number Selection	9
[122] Automatic Rotation for Outside (CO) Line Access	Disable
[123] Break Ratio	MODE 1
[124] SLT Ringing Mode Selection	MODE 1
[125] Toll Restriction Check for × and #	Enable
[200] Hold Recall Time	30 seconds
[201] Transfer Recall Time	30 seconds
[202] Call Forwarding Start Time	15 seconds delay
[203] Pickup Dial Delay Time	3 seconds
[204] Call Duration Count Start Time	10 seconds after dial
[205] Outside-to-Outside (CO-to-CO) Line Duration Time Limit	10 minutes
[206] Dialing Start Time	0 millisecond
[207] Hookswitch Flash Timing Range Selection	MODE 4
[208] Interdigit Time	10 seconds
[210] DTMF Time	MODE 1
[211] No Dial Disconnection	Disable
[212] Outside (CO) Line Duration Time Limit	10 minutes
[213] Bell Off Detection	6 seconds
[300] Carrier Code Assignment	All codes – Not stored
[301] Toll Restriction — System Speed Dialing Boundary Class	Boundary Class-1
[302]–[305] Toll Restriction — Classes 2 through 5 Denied Codes	All codes – Not stored
[306] Toll Restriction — Exception Codes	All codes – Not stored
[309] Emergency Dial Number Set	All codes – Not stored
[310] Account Codes	All codes – Not stored

Address Program	Default	
[311] Automatic Pause Insertion Codes	All codes – Not stored	
[312] Toll Restriction — Station Lock Boundary Class	Disable	
[400] Outside (CO) Line Connection Assignment	All outside (CO) lines – Connect	
[401] Dial Mode	All outside (CO) lines — Pulse Mode	
[402] Pulse Speed Selection	All outside (CO) lines – Low Speed	
[403] Host PBX Access Codes	All outside (CO) lines – Not stored	
[404] Outside (CO) Line Group Assignment	CO1 — TRK GRP-1; CO2 — TRK GRP-2; CO3 — TRK GRP-3; CO4 — TRK GRP-4; CO5 — TRK GRP-5; CO6 — TRK GRP-6;	
[405]–[407] Flexible Outward Dialing Assignment — Day/Night/Lunch	All outside (CO) lines – all extension jacks – Enable — Day/Night/Lunch	
[408]–[410] Flexible Ringing Assignment — Day/Night/Lunch	All outside (CO) lines – all extension jacks – Enable — Day/Night/Lunch	
[411]–[413] Delayed Ringing Assignment — Day/Night/Lunch	All outside (CO) lines – all extension jacks – Immdtly — Day/Night/Lunch	
[414]–[416] Outside (CO) Line Mode — Day/Night/Lunch	All outside (CO) lines — Normal — Day/Night/Lunch	
[417] Pause Time	All outside (CO) lines — 1.5 seconds	
[418] Flash Time	All outside (CO) lines – 600 milliseconds	
[419] Automatic Designated Outside (CO) Line Access	All outside (CO) lines — Enable	
[420] Calling Party Control (CPC) Signal	All outside (CO) lines – 42 (350 milliseconds)	
[421] CPC Detection for Outgoing Calls	All outside (CO) lines – Disable	
[422] Disconnect Time	All outside (CO) lines – 1.5 seconds	
[423] Outside (CO) Line Ringing Pattern Selection	All outside (CO) lines – Single	
[424] Reverse (Polarity) Circuit Assignment	All outside (CO) lines – Disable	
[500] DISA Incoming Dialing Mode Selection	Without AA	
[501] DISA Built-in Auto Attendant	All numbers — Not Stored	
[502] OGM Mode Selection	MODE 1	
[503] FAX Connection	Disable	
[504] DISA Delayed Answer Time	3 seconds	
[505] DISA Waiting Time after OGM	5 seconds	
[506] DISA Busy Mode	Disconnect	

Address Program		Default
[507] DISA Intercept Mod	e	Intercept
[508] DISA Ringing Time before Intercept		20 seconds
[509] DISA Ringing Time	after Intercept	20 seconds
[510] DISA No Dial Mode	2	DISA1 and DISA2 — Intercept
[511] DISA Security Type		Trunk Security
[512] DISA Security Code	S	CODE-01 = 0000 / CODE-02 = 0000 CODE-03 = 0000 / CODE-04 = 0000
[513] Cyclic Tone Detection	on	4 Times
[514] Fax Tone Detection		1 Time
[515] Intercept Time for In	nternal DISA	3 seconds
[516] DISA Incoming Assi	ignment	All extension jacks — Enable
[517] DISA AA Wait Time	;	2 seconds
[518] DISA Tone Selection	n after the Security Code	Enable
[519] DISA OGM Mute Ti	ime	0 second
[520] UCD Group		Group – 1
[521] UCD Busy Waiting	Time	10 minutes
[522] UCD OGM Message	e Interval Time	1 minute
[523] UCD Busy Mode		Intercept
[524] UCD Intercept Mode	e	Intercept
[525] UCD Ringing Time	Before Intercept	20 seconds
[526] UCD Ringing Time	After Intercept	20 seconds
[600] Extension Group Ass	signment	All extension jacks — EXT GRP-1
[601]–[603] TRS – Class — Day/Nigh	s of Service Assignment nt/Lunch	All extension jacks — COS-1
[604] Extension Name Set	ting	All extension jacks – Not stored
[605] Account Code Entry	Mode	All extension jacks – Option
[606] Call Transfer to an C	Outside (CO) Line	All extension jacks – Disable
[607] Call Forwarding to a	an Outside (CO) Line	All extension jacks – Disable
[608] Executive Busy Ove	rride	All extension jacks – Disable
[609] Do Not Disturb Ove	rride	All extension jacks – Disable
[610] Paralleled Telephone	e Connection	All extension jacks – Disable

Address Program	Default	
[611] TAM (Telephone Answering Machine) Extension	All extension jacks – Disable	
[612] Room Monitor Assignment	All extension jacks – Disable	
[613] Outside (CO) Line Duration Time Limit Selection	All extension jacks – Disable	
[614] Internal Pulse Detection	All extension jacks – Enable	
[615] LCD Language Assignment	English	
[700]–[702] Doorphone Ringing Assignment — Day/Night/Lunch	All doorphones — all extension jacks – Enable — Day/Night/Lunch	
[703]–[705] Door Opener Assignment — Day/Night/Lunch	All door openers – all extension jacks – Disable	
[706] Doorphone Ringing/Tone Pattern Selection	All doorphones — Triple	
[707] Doorphone Access Tone Selection	All doorphones — Enable	
[708] Doorphone Ringing Time	All doorphones — 15 seconds	
[709] Door Opener Time	All door openers — 5 seconds	
[800] SMDR RS-232C Communication Parameters	New line code = CR+LF; Baud rate = 9600; Word length = 8; Parity bit = Mark; Stop bit = 1	
[801] SMDR Parameter	Page length – 66; Skip perforation – 0	
[802] Incoming/Outgoing Call Selection for Printing	Outgoing calls – On; Incoming calls – On	
[803] Secret Speed Dialing/One Touch Dialing Printing	No printing	
[805] SMDR Account Code Selection	CODE	
[806] SMDR Language Assignment	English	

5.2 Specifications

		T T T T T T T T T T T T T T T T T T T		
System Capacity	KX-TA308	Outside (CO) Lines: 3 max. (6 max. with 3-CO Line & 8 Ext Expansion Card)		
		Extensions : 8 max. (24 max. with 3-CO Line & 8 Ext Expansion Card and 8 SLT Extension Expansion Card)		
	KX-TA616	Outside (CO) Lines: 6 max.		
		Extensions : 16 max. (24 max. with 8 SLT Extension Expansion Card)		
Control Method		CPU: 16 bit CPU Control ROM: 2 MB, Control RAM: 512 KB		
Switching		Space Division CMOS Crosspoint Switch		
Power Supplies		Primary: 110 – 240 VAC, 50/60 Hz (1.0 – 0.5 A) Secondary: Circuit Volt (+5V, +26V)		
Dialing		Dial Pulse (DP):10 pps, 20pps Tone (DTMF) Dialing, DTMF–DP		
Intercom Paths		4		
Connector		Outside (CO) Lines : 2-pin Modular Connector (RJ11) Extensions/Doorphone: 4-pin Modular Connector Pager/Music Source : EIAJ RC-6701 A plug (two-conductor, ø 3.5 mm in diameter)		
Extension Connection Cable		KX-T7320 / KX-T7330 / KX-T7350 / KX-T7020 / KX-T7030 / KX-T7033 / KX-T7050 / KX-T7055 / KX-T7130 2 pair wire (T, R, H, L) Single Line Telephones		
SMDR (Station M Recording)	lessage Detail	Interface : Serial Interface (RS-232C) (D-SUB, 9-pin) Output Equipment: Printer Detail Recording : Date, Time, Extension Number, Outside (CO) Line Number, Dialed Number, Call Duration, Account Code		
Station Loop Limi	t	KX-T7320 / KX-T7330 / KX-T7350 / KX-T7020 / KX-T7030 / KX-T7033 / KX-T7050 / KX-T7055 / KX-T7130		
Minimum Leakage	e Resistance	15,000 ohms		
Maximum Number of Station Instruments per Line		1 for a KX-T7320 / KX-T7330 / KX-T7350 / KX-T7020 / KX-T7030 / KX-T7033 / KX-T7055 / KX-T7130 or single line telephone 2 for by parallel connection of a proprietary telephone and a single line telephone		
Ring Voltage		80 Vrms at 25 Hz depending on the Ringing Load		
Central Office Loc	op Limit	1,600 ohms max.		
Environmental Re	quirements	$0-40~^{\circ}\text{C}$ / $32-104~^{\circ}\text{F}$, $10-90\%$ relative humidity		
Hookswitch Flash Timing Range 80 -		80 – 1,000 milliseconds		

5.2 Specifications

Lines, Cards, Station Equipment

Item	Max. Quantity
Service Units	1
Outside (CO) lines	6
Extension Jacks	24
Station Terminals	40
3-CO Line and 8 Ext Expansion Card	1 (KX-TA308 only)
8 SLT Extension Expansion Card	1
OGM/FAX Detection Card	1
Doorphone/Door Opener Card	1
Doorphones	4
Door Openers	4
External Pager	1
External Music Source	1
DSS Consoles	2

System Data

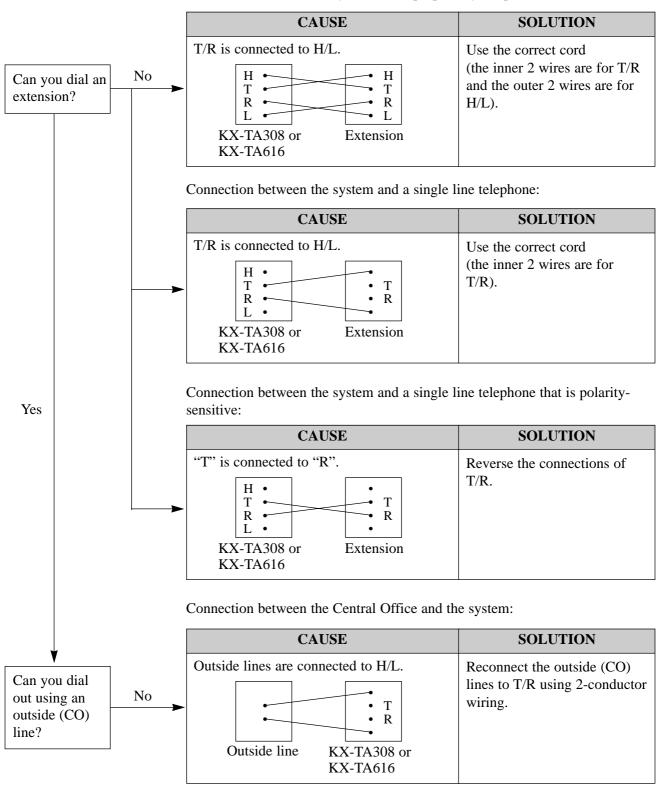
Item	Max. Quantity
Operator	1
System Speed Dialing	100
One Touch Dialing	24 per extension (Proprietary telephone)
Personal Speed Dialing	10 per extension
Call Park areas	10
Absent Messages	6
Toll Restriction Classes	5
Extension Groups	8
Message Waitings	8 per extension

Section 6 TroubleShooting

6.1 While Installing

PROBLEM	PROBABLE CAUSE	POSSIBLE SOLUTION
Extension does not operate.	Something is wrong with the printed circuit board (Extension Card).	Exchange the printed circuit board with another printed circuit board.
	Something is wrong with the connection between the system and extension.	Take the 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.
	A telephone with an A-A1 relay is connected.	Use a 2 wire cord. Set the A-A1 relay switch on the telephone to the "OUT" or "OFF" position.
	Something is wrong with the extension.	Take the extension and plug it into another extension port that is working. If the telephone does not work, replace the phone.
Improper reset operation.		Turn the Power Switch "OFF" and then "ON".
Noise during external paging.	Induced noise on the wire between the system and the amplifier.	Use a shielded cable as the connection wire between the system and amplifier. A short shielded cable is recommended.
Volume distortion from external music source.	Excessive input level from external music source.	Decrease the output level of the external music source by using the volume control on the music source.
Speed Dialing or One- Touch Dialing does not function.	Wrong programming.	Enter an outside line access number (9 or 0, 81 through 86) in programming.
A proprietary telephone connected to extension jacks 01 through 08 or 09 through 16 does not operate, but a single line telephone operates.	An extension (H, L) jack 01 through 08 or 09 through 16 may have been shorted.	Turn the Power Switch "OFF". Fix the shorted part, then turn the Power Switch "ON".

6.2 While Connecting



6.3 While Operating

PROBLEM	PROBABLE CAUSE	POSSIBLE SOLUTION
When using the speakerphone with a proprietary telephone, KX-T7030, KX-T7130, KX-T7330 or KX-T7033, nothing is heard.	The HANDSET/HEADSET selector on the KX-T7030, KX-T7130, KX-T7330 or KX-T7033 is set to the "HEADSET" position.	When the headset is not used, set the HANDSET/HEADSET selector to the "HANDSET" position.
The unit does not ring.	The Ringer Volume Selector is set to "OFF".	Set to "HIGH" or "LOW".
During a power failure, the extension connected to jack number 01 or 09 does not operate.	A proprietary telephone is connected to the jack.	Disconnect the proprietary telephone and connect a single line telephone.
Making an outside call cannot be performed.	The corresponding CO button does not exist on the proprietary telephone.	Program the CO button. See the Flexible Button Assignment. (Operating Instructions, 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone")
A tone type single line telephone (SLT) user cannot make a call.	There may be something wrong with a DTMF receiver.	 Select "Enable" for DTMF receiver 1 and "Disable" for DTMF receiver 2 in program [107]. Make a call using a tone type SLT connected to one of extension jacks 01–08. If you cannot make the call, the problem may have been caused by DTMF receiver 1. If the call can be made, go to step 4. Try DTMF receiver 2. Select "Disable" for DTMF receiver 1 and "Enable" for DTMF receiver 2 in program [107], and make another call. If you cannot make the call, the problem may have been caused by DTMF receiver 2. If the call can be made, go to step 5. Check the other 4 DTMF receivers in the same way. Refer to program [107].

Section 7 Programming Tables

[000] Date and Time Setting											
	Year	Month	Day	Day of the week	Hour	Minute	AM / DM				
	(00 - 99)	(Jan. – Dec.)	(1 - 31)	(Sun – Sat)	(1 - 12)	(00 - 59)	AM / PM				
Default	'98	Jan.	1	Thu	12	00	AM				
Change											

[002] System Password								
Default				Parameter: 4 digits, 0 – 9				
1	2	3	4					

	[003] DSS Console Port Assignment	[004] Paired Telephone Assignment for DSS Console
Selection	DSS console jack no. (02···16) / Disable	Paired telephone jack no. (01···16) / Disable
Default	All: Disable	DSS 1 – Disable / DSS 2 – Disable
DSS 1		
DSS 2		

[005] One-Touch Transfer Using a DSS Button								
	Default	Selection						
With Transfer	✓							
Without Transfer								

[006] Time (Day/Night/Lunch) Service Changing Mode												
	Default Selection											
Manually	1											
Automatically												

[007] Time (Day/Night/Lunch) Service Start Time									
	Default Change								
	Every day	Every day	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Day	9:00 AM								
Night	5:00 PM								
Lunch-S	None								
Lunch-E	None								

[008] Operator Assignment								
	Default	Jack no.						
Operator Jack-01								

[010] LCD Time Display Selection											
	Default Selection										
12 HOUR	✓										
24 HOUR	24 HOUR										

[001] System Speed Dialing Entry								
SPD no.	Telephone number (32 digits max.)	SPD no.	Telephone number (32 digits max.)					
Default		All: Not store						
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						

(Conti	nued)		
SPD no.	Telephone no. (32 digits max.)	SPD no.	Telephone no. (32 digits max.)
80		90	
81		91	
82		92	
83		93	
84		94	
85		95	
86		96	
87		97	
88		98	
89		99	

	[00 Extension Num	[600] Extension Group Assignment						[604] Extension Name Setting			
Extension jack no.	Extension no. (100···199)			Exte De				Group	Extension name (10 character max.)		
Jack no.	Default	Change	1	2	3	4	5	6	7	8	Default: All – Not stored
01	101			!	 	! !	 		! !	! !	
02	102			į		i I	i	į			
03	103				 	 	 	i	 		
04	104				l I	 	 	1	 	 	
05	105				 	 	 		 	! !	
06	106			İ	i !	i i	!	!		!	
07	107			i	l I	i I	i I	i	i		
08	108				l I	 	 			:	
09	109				 	 	 	-		:	
10	110			!	i i	i I	i I	!	!	:	
11	111			<u> </u>	I I	i i	i	1	i i	:	
12	112				l I	l I	i	1	 	:	
13	113				l I	 	 			:	
14	114			!	 	I I	 		! !		
15	115			!	!	i i	!	İ	 	i !	
16	116			1	l I	i i		1		:	
17	117			 	 	 				:	
18	118				 	 	 				
19	119			 	 	I I	i i		 		
20	120			i !	l I	I I	!	!	 	i i	
21	121			1	I I	I I	I	İ	I I	1	
22	122				i i	 					
23	123				 	 	 				
24	124				I I	I I	!	İ	!		
*				<u> </u>	i I	<u> </u>	i i	İ	<u> </u> 		

	[100] Hunting Group Set												
Calcation	Default Extension group no. $(1 \cdots 8, \times : all)$												
Selection	All	1 2 3 4 5 6 7 8 *											
Disable	✓		! !	 	! !	 	 	 	 	 			
Enable			[]	 	[]	 	 	1	[]	 			

	[101] Hunting Type											
Selection Default Extension group no. (1…8, \pm : all)												
Selection	All	1	2	3	4	5	6	7	8	 		
Terminate	✓		 		 		 	 	 	 		
Circular			 		 		 	 		 		

		[102] Voice Mail Port						[107]] DTMI	F Recei	ver Che	eck	
Selection	Default	Extn. j	ack no.	(07, 08,	15, 16,	米 : all)	Default		DTM	F receiv	ver no. (16)	
Selection	All	07	08	15	16	 	All	1	2	3	4	5	6
Disable	1			 		 			 	 			
Enable			!	 	1	I I	✓		 	 	 	1	

	[103] DTMF Integration		[104] Hold Mode Selection			_	05] nce Tone	[106] External Paging Access Tone		
Selection	Enable	Disable	Hold-1	Hold-2	Hold-3	Enable	Disable	Enable	Disable	
Default		✓	✓	 		✓	 	✓	 	
Change		 		 	1		 		 	

	[108] Flash Mode for a Station Locked Extension			Indicator nment		10] ey Mode	[111] Hold Music Selection		
Selection	Enable	Disable	Enable	Disable	MODE 1	MODE 2	Internal	External	Tone
Default		1	✓	 	1	 	1	 	
Change	 			 		 			

		S Console on Mode	[113] Automati	[114] Automatic Redial Interval Time			
Selection	Enable	Disable	0 time	3 times	10 times	15 times	40 sec	60 sec
Default	✓			 	· /	 		✓
Change		 - -		 	 	 		

		Extension F ttern Select			[116] Conference Pattern Selection						
Selection	Single	Double	Triple	3-Party C-0 E-3	3-Party C-1 E-3	3-Party C-2 E-3	5-Party C-2 E-5				
Default		✓	 		 	 	✓				
Change		 			 	 					

	[117] Call Pickup Tone		[118] Pulse Restriction			ialing after e Conversion	[120] Bell Frequency		
Selection	Enable	Disable	Enable	Disable	Enable	Disable	20 Hz	25 Hz	
Default	1		✓	 		1		/	
Change		I I		[[1		1	

		Outside (CO) Line ber Selection	[122] Automatic Rotation for Outside (CO) Line Access				
Selection	0	9	Enable	Disable			
Default		✓		✓			
Change		 		 			

	[123] Break Ratio			Γ Ringing election	[125] Toll Restriction Check for \star and #			
Selection	MODE 1	MODE 2	MODE 1	MODE 2	Enable	Disable		
Default	✓		√		1	1		
Change		 		 		1 1		

	[200] Hold Recall Time											
Selection	30 sec	1 min	1.5 min	2 min	3 min	4 min	5 min	6 min	Disable			
Default	✓	 	 		 	 	 	 	 - -			
Change		 	 		 	 	 	 	 			

	Tr	-	01] Recall Time	Call I	[202] Call Forwarding Start Time				[203] Pickup Dial Delay Time			
Selection	15 sec	30 sec	1 min 2 min	5 sec	10 sec	15 sec	20 sec	1 sec	2 sec	3 sec	4 sec	
Default		1			 	1	 		 	1		
Change		 			1 1	 	 		 			

[204] Call Duration Count Start Time											
Selection	5 sec	10 sec	15 sec	20 sec	25 sec	30 sec	35 sec	40 sec	45 sec	50 sec	Instantly
Default		✓	 	 	 	 	 	 			
Change] 	 	 	 	 	 	 			

	[205] Outside to Outside (CO to CO) Line Duration Time Limit	[206] Dialing Start Time						
Selection	1⋅⋅⋅32 minutes	0 ms	250 ms	500 ms	750 ms	1000 ms	1250 ms	1500 ms
Default	10 minutes	1	 	 	 	 		
Change			 	 	 	 	 	

	[207] Hookswitch Flash Timing Range Selection				[208] Interdigit Time			
Selection	MODE 1	MODE 2	MODE 3	MODE 4	MODE 5	5 sec	10 sec	15 sec
Default		 	 	1	 		✓	1
Change		!	l !	1	1		 	

	-	10] F Time	[211] No Dial Disconnection		[212] Outside (CO) Line Duration Time Limit	[213] Bell Off Detection		
Selection	MODE 1	MODE 2	Enable	Disable	1···32 minutes	3 sec	6 sec	12 sec
Default	1		/		10 minutes		1	I I I
Change				 				I I

	[300] Carrier Code Assignment							
Location no.	Carrier code (10 digits max.)	Location no.	Carrier code (10 digits max.)					
Default: All		Not stored						
01		11						
02		12						
03		13						
04		14						
05		15						
06		16						
07		17						
08		18						
09		19						
10		20						

[301] Toll Restriction — System Speed Dialing Boundary Class								
Selection	Class-1	Class-2	Class-3	Class-4	Class-5			
Default	1	 	1 1 1	 				
Change		 	 	 				

	[302] Toll Restriction – for Class 2 Denied Codes	[303] Toll Restriction – for Class 3 Denied Codes		
CODE no.		Telephone n	o. (10 digits)	
Default		All: No	t stored	
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

	[306] Toll Restriction – Exception Codes								
CODE no.	Telephone no. (10 digits)	CODE no.	Telephone no. (10 digits)						
Default		All: Not stored	i						
01		11							
02		12							
03		13							
04		14							
05		15							
06		16							
07		17							
08		18							
09		19							
10		20							

[309] Emergency Dial Number Set						
CODE no.	Emergency call no. (4 digits max.)					
Default	All: Not stored					
1						
2						
3						
4						
5						

	[310] Account Codes								
CODE no.	Account code no. (4 digits)	CODE no.	Account code no. (4 digits)						
Default		All: Not stored							
01		13							
02		14							
03		15							
04		16							
05		17							
06		18							
07		19							
08		20							
09		21							
10		22							
11		23							
12		24							

	[311] Automatic Pause Insertion Codes								
CODE no.	Pause code no. (7 digits max.)	CODE no.	Pause code no. (7 digits max.)						
Default		All: Not stored							
01		21							
02		22							
03		23							
04		24							
05		25							
06		26							
07		27							
08		28							
09		29							
10		30							
11		31							
12		32							
13		33							
14		34							
15		35							
16		36							
17		37							
18		38							
19		39							
20		40							

[312] Toll Restriction – Station Lock Boundary Class							
	Default	Change					
Disable	✓						
COS-2							
COS-3							
COS-4							
COS-5							

	[400] Outside (CO) Line Connection Assignment		[401] Dial Mode			[402] Pulse Speed Selection	
Outside line no.	Selection		Selection			Selection	
Outside line no.	Connect	No Connect	DTMF	Pulse	Call Blocking	Low Speed	High Speed
Default: All	✓			1	1	✓	 - -
1				 	1		I I
2					1		
3					!		
4					1		
5					1		
6		1		 	 		
×				 	!		I I

		[4	103] Host PB	X Access	Code			[404] Out Line Group	
Outside line no.		(1 or	Acces 2 digits, 8 di		Outside line (1				
Default			All: No	ot stored				Default	Change
1	 		 	 		 	 - -	1	
2	I		! !	! !		 		2	
3	1	1	[]	 		 	 	3	
4		į	į			i !		4	
5			1	 		 		5	
6	1	 	 	 		 	 	6	
×			!	-		 	_ 	_	

			[40	5] Flexi	ible Ou	tward I	Dialing	Assignn	nent —	Day				
Extension	Outside	e line 1	Outside	e line 2	Outsid	e line 3			Outside	e line 5	Outside	e line 6	*(All)
jack no.			1					ction		T	T	1	1	
		Disable	1	Disable	Enable	Disable		Disable		Disable	Enable	Disable	Enable	Disable
Default: All	✓		1		✓		✓	 	1	! 	1	! ! !	✓	
01						 		 		 		 		
02		 				I I		I I		 		I I		
03						i I		i I		i !		i I		i !
04		 				! ! !		! ! !		! 		! 		! ! !
05						 		 		 		 		
06						 		 		 		 		I I
07								i !		 		i !		
08						i I		i I		 		i I		i I
09						I I I		I I I		 		I I I		I I I
10								 		 		 		
11						I I		 		 		 		1 1
12								i		i !				i
13		l I				 		 		 		 		
14		 				I I I		I I I		 		I I I		I I I
15								 		 		 		
16		 				 		 		 		 		
17						i !		i !				i I		i !
18		i I								 		i I		
19		 				I I I		 		 		I I I		
20]]						 		 		 		
21						 		 		 		 		
22														
23						 		 		 		 		
24		 				 		 		 		I I I		
X						 		 		 		 		

			[400	6] Flexi	ble Out	ward D	ialing A	Assignm	ent —	Night				
Extension	Outside	e line 1	Outsid	e line 2	Outsid	e line 3	Outsid	e line 4	Outside	e line 5	Outside	e line 6	* (All)
jack no.								ction						
Jack no.	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	1	 	✓	 	✓	 	1	 	1	 	✓	 	1	
01				 		1				 		 		
02				i I		i !		i I		 		i I		i I
03				 		i		į		 		i !		i
04		 		 						 		! ! !		
05] 		 		 		 		
06		 		 		1 1		[[
07				İ		į				i I		į		
08		l I		 		i i		i i		 		 		
09		 		 		1 1 1		 		 		 		
10				 		1		 		 		 		
11				 		1		!		 		1		_
12				 		i !				 		i !		
13		i I		 		i				 		i		
14				 		1		1		 		 		
15				 						 				
16				 		1		[1		-
17						İ		i				i		
18						i		1		i I		1		
19				 		1 1 1		! ! !		 		 		-
20				 		1				l 		 		
21				l		1] 		!		-
22				i i				i !		i i		i !		
23				 		1		 		 		 		
24				 		 		 		 		 		-
X		 		 		 		! !		 		I I L		

			[407] Flexib	ole Out	ward Di	ialing A	ssignm	ent — I	Lunch				
E tension	Outsid	e line 1				le line 3	_	_			Outsid	e line 6	* ((All)
Extension					•		Sele	ction			•			
jack no.	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	1	 	1	 	1	1	1	 	1	 	1	I I	1	
01				 		1				 		I I		
02		i !		i !		i !		i !		i !		i !		
03		 		 		 		 		 		 		
04		 		 		 		 		 		 		
05		 		 		 		 		 		 		
06		 		 				 		 		 		1
07		i I		 		i I		i I		i I		i i		i I
08		i		i !		i		i		i !		i		i
09				! ! !		<u> </u>				! ! !		<u> </u>		
10		 		 		 		 		 		! ! !		1
11				 						 		 		
12		!		! !		!				! !		! !		!
13		i		i !		İ		i		i !		İ		İ
14				 		<u> </u>				 		! !		<u>.</u>
15				 		<u> </u>				! ! !		 		
16		! !		 		 		! !		 		! !		
17				 						 		! !		!
18				 		1				 		 		1
19		i		i !		<u>i</u>		i		i !		İ		<u>i</u>
20				! !		<u> </u>				! ! !				<u> </u>
21				 						 		 		
22		 		 		 		 		 		! !		
23		 		 		 		 		 		I I		<u> </u>
24		i !		 		<u>i</u>		i !		 		i I		<u>i</u>
*				 		<u> </u>				 		<u> </u>		<u> </u>

				[408]	Flexible	e Ringir	ng Assig	nment	— Day					
Extension	Outside	e line 1	Outside	e line 2	Outside	e line 3	Outside	e line 4	Outside	e line 5	Outside	e line 6	* (All)
jack no.							Sele							
Jack 110.	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	1	 	1		1] 	√		1	 	1	 	✓]
01		 				 				 		 		
02		i !				i !				 		 		
03		i I				i I I				 		 		i I
04		I I I				I I I				 		 		I I I
05		 				 						 		
06		 				 				 		 		I I
07						i !				 		i I		
08						 				 				i I
09		 				 				 		 		I I
10]]]				 		 		
11		 				 				 -		 		I I
12		i				i				İ		i		
13		! ! !				1 				 		l I		I I
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15		 				 				 		 		
16		 				 				 		 		
17		!				i I						! !		
18		! ! !				1 				 		! 		I I
19		I I I				I I I				 		 		I I I
20		 				 						 		
21						 								
22		i !				i !								i !
23						i I				 				
24		 				 				 		 		I I
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				[409] H	lexible	Ringin	g Assig	nment -	— Nigh	t				
Extension	Outsid	e line 1	Outside	e line 2	Outsid	e line 3	Outsid	e line 4	Outside	e line 5	Outside	e line 6	* (All)
jack no.								ction						
jack no.	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	✓	 	✓		✓	 	✓	 	✓	 	✓	 	✓	
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				[410] F	lexible	Ringing	g Assigi	nment –	– Lunc	h				
Extension	Outside	e line 1	Outsid	e line 2	Outsid	e line 3			Outside	e line 5	Outside	e line 6	* (All)
jack no.							Sele	ction						
jack no.	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable	Enable	Disable
Default: All	✓	 	✓	 	✓	 	✓	 	1	 	✓	 	✓	
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							[4	11]	Dela	aye	d Ri	ingi	ng A	Assi	gnm	ent	_	Day	,								
	Outside line 1 Outside line 2 Outside line 3 Outside line 4 Outside line 5 Outside line 6 * (All Selection (I: Immediately, 5: 5 seconds delay, 10: 10 seconds delay, 15: 15 seconds delay) I 5 10 15 I 10 15 I 10 15 I 10 15 I 10 15 I 10 15 I 10 15 I 10 15 I 10 10 10 15 I 10															All)											
Extension			Se	elect																					ay)		
jack no.	I	5				_																		_		10	15
Default: All	1	!	<u> </u>	!	_	! !	<u> </u> 	<u> </u>		<u> </u>	<u> </u>	!		!	!	! !		<u> </u>	<u> </u> 		<u> </u>	<u> </u>	! !		! !		 !
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jack no.			Se	lecti					<u> </u>	, 5:	5 se	cond	ds d	elay	, 10	: 10	sec	ond	s de	lay,	15:	15	seco	nds	dela	ıy)		
jack no.	I	5	10	15	I	5	10	15	I	5	10	15	I	5	10	15	I	5	10	15	I	5	10	15	I	5	10	15
Default: All	✓	 	! ! !	 	1	 	! ! !	 	✓	 	 	 	✓	 			✓	 	 		✓	 	 		✓			
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							[41:	3] D	ela	ved	Rin	ging	g As	sigi	nme	nt –	– L	unc	h									
	Selection (I: Immediately, 5: 5 seconds delay, 10: 10 seconds delay, 15: 15 seconds delay) I 5 10 15 I 5 10 15 I 5 10 15 I 5 10 15 I 5 10 15 I 5 10 15 I 5 10 15 I 5 10 15																											
Extension	Ou	isia																								`	1111)	
jack no.	T	5				-			_ <u>-</u>																		10	15
Default: All	1	1 J 1 1	10 	1.0	1	1	10	1.0	1 ✓	1 J	10	13	1 ✓	<u>.</u>	1	1 <i>.</i> 	1 ✓	1 J 1 1	10 	1.0	<u> </u>	<u> </u>	10	1.0	<u>√</u>	<u>.</u> .	10	1.5
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	[41	4] Ou	ıtside (CO — Da		ne Mo	ode	[41	[5] Ot	ıtside (CO — Nigl		ne Mo	ode	[41	6] Ot	ıtside (CO — Lun		e Mo	ode
Outside		Sele	ction — N	: No	rmal,	DIL	+ Ex	tensic	on jack no.	(01.	24),	D1:	DISA	41, D	2: DISA2,	U: U	CD	
line no.	N	DIL	Extn. no.	D1	D2	U	N	DIL	Extn. no.	D1	D2	U	N	DIL	Extn. no.	D1	D2	U
Default: All	1		 				1		 				1		 			
1			 						 						 			
2			 						1						 			
3			1						1									
4			I I						I I						 			
5									 									
6			 						 						 			
X] 						 									

		[4] Pause	[7] Time				I	[418] Flash Tim	e		
Outside line no.	S	Selection	(second	s)			Selection	on (millise	econds)		
Outside line no.	1.5					100	160	300	600	900	1200
Default: All	✓	 		-		 	 	 	1	 	
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2		!		!		!	! !	i !	! !	! !	!
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	[419] Automatic Designated Outside (CO) Line Access		[420] Calling Party Control (CPC) Signal	[421] CPC Detection for Outgoing Calls		
Outside line no.	Selection		Selection: 00 (Disable),	Sele	ction	
Outside line no.	Enable	Disable	06 (62 msec)…75 (614 msec)	Enable	Disable	
Default: All	✓	 	42 (350 milliseconds)		✓	
1		1 1			1	
2		1				
3						
4					I	
5					l I	
6		 			 	
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	[422] Disconnect Time				Outside (CC g Pattern Se	[424] Reverse (Polarity) Circuit Assignment		
0.4.1.1	Selection (seconds)				Selection		Sele	ction
Outside line no.	0.5	1.5	4.0	Single	Double	Enable	Disable	
Default: All		✓	1	✓	I I	 		1
1		 	 		 	 		I I
2		 	!		1	I !		
3		1	i		1	1		1
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5			1		 	 		1
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[500] DISA Incoming Dialing Mode Selection									
Selection	Without AA	With AA							
Default	✓	 							
Change		 							

	[501] DISA Built-in Auto A	ttendant							
Auto attendant	Selection								
no.	Jack: Extension jack no. (01···24)	GRP: Extension group no. (1···8)							
Default	All: No	ot stored							
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									

		OGM	[502] MODE Sel	[503] FAX Connection		
Selection	MODE 1	MODE 2	MODE 3	MODE 4	MODE 5	Extension jack no. (01···24) / Disable
Default	✓	 	 	 		Disable (Not assigned)
Change		l !	l !	l !		

	D	[5] ISA Delayed	04] l Answer Tii	me	[505] DISA Waiting Time after OGM				
Selection	0 sec	3 sec	6 sec	12 sec	0 sec	5 sec	10 sec	15 sec	
Default		/	 	 		✓	 	 	
Change		 	 	1		 	1	 	

	[506] DISA Busy Mode] DISA ept Mode	[508] DISA Ringing Time before Intercept					
Selection	Disconnect	Call Waiting	DISA 2	Intercept	Disconnect	10 sec	20 sec	30 sec	40 sec	60 sec	120 sec
Default	✓	 		✓			1] 	 	 	
Change		 					 	 	 	 	

	[509] DISA Ringing Time after Intercept						[510] DISA No Dial Mode			
Selection	10 sec 2	20	20 000	40 saa	60 000	120 000	DI	SA 1	DI	SA 2
Selection	10 sec 2	ZU SEC	30 sec	40 860	l oo sec	120 sec	Intercept	Disconnect	Intercept	Disconnect
Default	-	✓			 	 	✓	 	✓	
Change] 		

	[511] DISA Security Type				[513] Cyclic Tone Detection			
Selection	Trunk	All	None	0···9, 4 digit Disable 2 Times 3	3 Times 4 Times			
Default	✓	 	 	All codes = 0000	✓			
Change		 	 	CODE=01 CODE=02 CODE=03 CODE=04				

		[514] FAX Tone Detection [515] Intercept Time for Internal DISA [517] DISA AA Wait Time						Time		
Selection	1 Time	2 Times	3 sec	6 sec	9 sec	1 sec	2 sec	3 sec	4 sec	5 sec
Default	✓		✓	 			1	 	 	
Change		-		 	 		 	 	 	

		[516] DISA Inc	oming Assignment				
Extension	Sele	ction	Extension	Selection			
jack no.	Enable	Disable	jack no.	Enable	Disable		
Default: All	✓	 	13		 		
01		1	14		1		
02			15		1		
03		1	16		I I		
04		 	17		 		
05		 	18		 		
06		1 1	19		 		
07			20		i !		
08		1	21		I I		
09		1	22		 		
10		 	23		 		
11		 	24		 		
12							

		One Selection curity Code		[5] ISA OGM	19] [Mute Tir	ne	[520] UCD Group
Selection	Enable	Disable	0 sec	2 sec	4 sec	6 sec	Extension group no. (1···8)
Default	✓	 	✓	 	 		1
Change		 		 	 	 	

	[521] UCD Busy Waiting Time	UCD O	[52 GM Mess	22] age Interv	al Time		23] sy Mode
Selection	01⋅⋅⋅32 minutes	30 sec	1 min	1.5 min	2 min	Intercept	Disconnect
Default	10 minutes		1	 		1	
Change			 	 	 		

	_	24] cept Mode		UCD R	[52 inging Tim	25] ie before Ii	ntercept	
Selection	Intercept	Disconnect	10 sec	20 sec	30 sec	40 sec	60 sec	120 sec
Default	✓	 		✓	 	 	 	
Change		 			 	 	 	

		[526] UCD Ri	nging Time after	r Intercept		
Selection	10 sec	20 sec	30 sec	40 sec	60 sec	120 sec
Default		✓	 	 	 	
Change		 	1	 	1	

7-23

	[60]	1] TRS Assign		s of Sei — Day				– Class ment –						s of Ser - Luncl	
Extension		COS	S no. (1	…5)			COS	S no. (1	…5)			COS	S no. (1	5)	
jack no.	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Default: All	✓]]]	 	 		1	 	 	 	1	1	 	 	 	
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			05] e Entry Mod	e		Transfer to		Forwarding le (CO) Line
Extension		Sele	ction		Sele	ction	Sele	ction
jack no.	Option	Forced	Verify-All	Verify-Toll	Enable	Disable	Enable	Disable
Default: All	✓	 	 	1		✓		✓
01		 	 	! !		 		
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		xecutive verride	[609] l Disturb (Do not Override	[610] Pa Telephone (
Extension	Sele	ction	Sele	ction	Selec	ction	Sele	ction		
jack no.	Enable	Disable	Enable Disable		Enable	Disable	Enable	Disable		
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Default: All	✓		✓		1	i I	1	i I	✓		✓	i I	1	 	✓	i I	1	 	1	 	1		✓	<u> </u>
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	[[706] Doorpl / Tone Patte	_	~		orphone ne Selection	[708] Do Ringin	orphone g Time
Doorphone		Selec	ction		Sele	ction	Selec	ction
no.	Single	Double	Triple	S-Double	Enable	Disable	15 sec	30 sec
Default: All		 	✓	 - -	1	 	✓	
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	[709] Door Opener Time														
Door opener		Selection													
no.	1 sec	2 sec	3 sec	4 sec	5 sec	6 sec	7 sec	8 sec							
Default: All		 	 	I I	✓	 	 	 							
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×] 	 	1	1	 							

[800] SMDR RS-232C Communication Parameters																		
Selection	New li	-	Baud rate					Word length Parity bit			op it							
	CR+LF	CR	150	300	600	1200	2400	4800	9600	7	8	Mark	Space	Even	Odd	None	1	2
Default	1				 	 	 	 	1		1	✓	 	 	 	 	/	
Change					 	 	 	 	 				 		 	 		

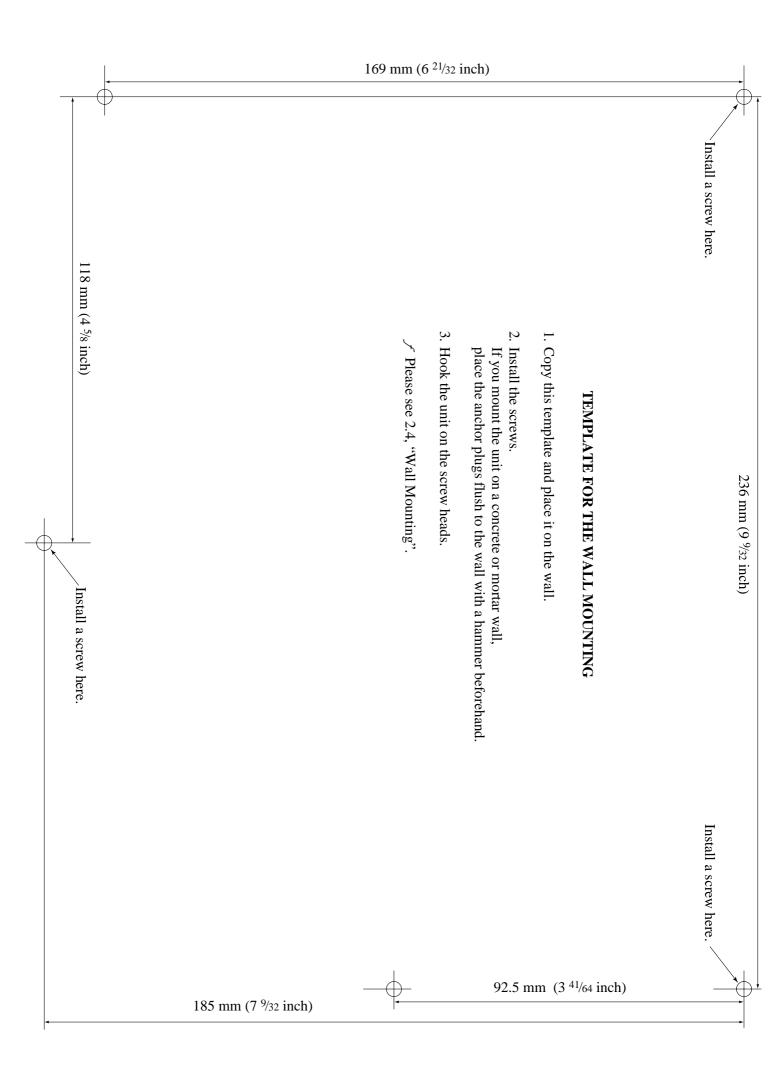
[801] SMDR Parameter				
	Default	Selection		
Page length (4···99)	66			
Skip perforation (0···95)	0			

[802] Incoming/Outgoing Call Selection for Printing					
		Default	Selection		
In a service a selle	On	✓			
Incoming calls	Off				
	On	✓			
Outgoing calls	Off				
	Toll				

		peed Dialing / aling Printing		05] t Code Selection	[806] SMDR Language Assignment		
Selection	No Printing	Printing	CODE	INDEX	English	Spanish	
Default	✓	 	✓	 	✓	 	
Change		 		 		 	

Memo

Memo



Panasonic

Advanced Hybrid System

Operating Instructions

Panasonic ©

KX-TA308
MODEL KX-TA616





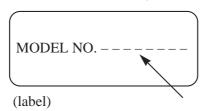
Please read this manual before connecting the Advanced Hybrid System.

Thank you for purchasing a Panasonic Telephone System. $System\ Components$

	Model No.	Description
Service Unit	KX-TA308 / KX-TA616	Advanced Hybrid System
Telephone	KX-T7320 KX-T7330 KX-T7350 KX-T7020 KX-T7030 KX-T7033 KX-T7050 KX-T7055 KX-T7130	Proprietary Telephone (12 COs) Proprietary Telephone with LCD (12 COs) Proprietary Telephone (12 COs) Proprietary Telephone (12 COs) Proprietary Telephone with LCD (12 COs) Proprietary Telephone with LCD (12 CO's) and power failure switch Proprietary Telephone (12 COs) Proprietary Telephone (3 COs) Proprietary Telephone with LCD (12 COs)
Optional Equipment	KX-T7340 KX-T7040 KX-TA30860 KX-TA30874 KX-TA30877 KX-TA30891 KX-T30865 KX-T7090	DSS Console (32 DSSs, 16 Feature buttons) DSS Console (32 DSSs, 16 Feature buttons) Doorphone/Door Opener Card Expansion Card (up to 8 extension lines for a single line telephone) Expansion Card (up to 3 outside (CO) lines and 8 extension lines) OGM and FAX Detection Card Doorphone Headset
	KX-A227	Back-up Battery Cable

NOTICE:

- A Proprietary Telephone is abbreviated as PT.
- A Single Line Telephone is abbreviated as SLT.
- This Operating Instructions does not show complete model number that indicate the country where your models should be used. The model number of your unit is found on the label affixed to the unit.



Important Information

Satisfactory performance cannot be guaranteed for each combination of host and subsidiary equipment.

'Prevention of access by user.' This equipment is intended to be accessible only by authorized personnel. It must be installed in a locked room or similar environment, so that user access is prevented. Failure to prevent such user access will invalidate any approval given to this equipment.

Precautions

- Keep the unit away from heating and electrical noise generating devices such as fluorescent lamps, motors and televisions.
- This unit should be kept free of dust, moisture, high temperature (more than 40°C / 104°F) 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.
- 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. THEN 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.

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

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

For your future reference					
- J					
SERIAL NO (found on the bottom of the unit)	DATE OF PURCHASE				
NAME OF DEALER					
DEALER'S ADDRESS					

Introduction

Structure of the Manual

This manual consists of the following sections.

Section 1. Operations

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

Section 2. Appendix

Provides the Tone/Ring Tone List, LED Indication, Feature Number List and the Telephone Troubleshooting.

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Description of the Symbols Mainly Used in this Manual



The feature or program references.

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Section 1 Operations

What kind of telephone do you use?

In this manual, you will find how 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 a feature number. If you use single line devices which do not have a "*" or "#" key, it is not possible to access features that have "*" or "#" in their feature numbers.

If you use a Panasonic proprietary telephone which has a special function button and/or a display, you will follow the button or display operation for easy access. If you use a Panasonic proprietary telephone which does not have a function button, you may change one of the unused buttons to another button. Refer to Section 1.2, "Proprietary Telephone Settings". A Panasonic proprietary telephone has Light Emitting Diode (LED) button indicators, so you can see the line conditions according to the lighting patterns. Refer to Section 2.2, "LED Indication".

Please use the proper operation for your telephone.

Description of the Symbols Used in this Manual

In this manual, many symbols are used. Some of the symbols need explanation. Those are described below.



Lift the handset, or press the SP-PHONE or MONITOR button (Off-hook).



Flash the hookswitch on a single line telephone.



Replace the handset, or press the SP-PHONE or MONITOR button (On-hook).



Tones which vary depending on the condition.

Refer to "Tone / Ring Tone List" (Section 2.1).



Number keys on the telephone — depends on the condition.

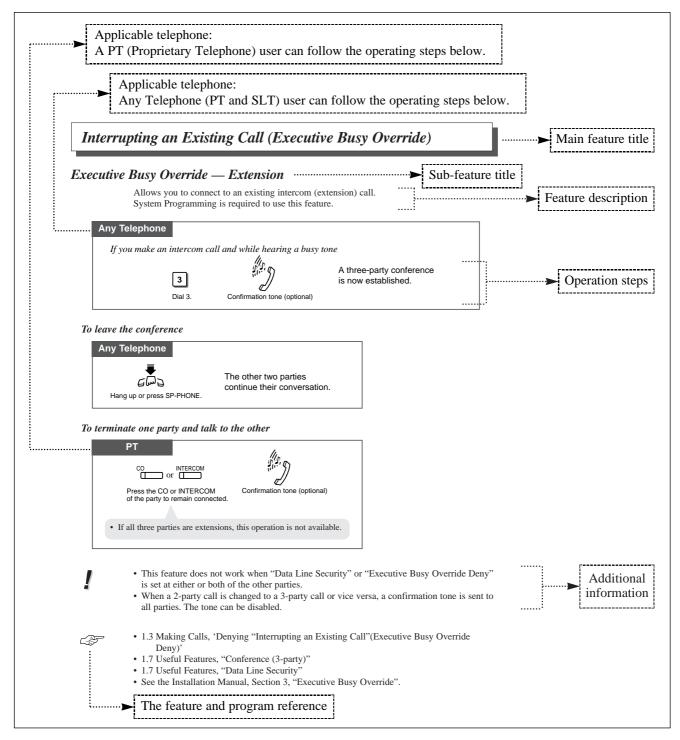


- For proprietary telephone operations, all button illustrations are based on the KX-T7130 model.
- The AUTO ANSWER/MUTE button corresponds to the AUTO ANS/MUTE button on a KX-T7300 series.
- The AUTO DIAL/STORE button corresponds to the AUTO/STORE button on a KX-T7300 series.

1.1 Before Operating

Operating example

Example: "Interrupting an Existing Call (Executive Busy Override)", Executive Busy Override — Extension



- If your telephone is not noted in the operation steps (ex. only "PT" is noted and you are using a single line telephone), this means your telephone cannot execute that feature.
- If your telephone can perform several operations for one feature, you can select the method according to your needs.

If you use a Panasonic proprietary telephone, you can customize your telephone functions. For example, you can change the initial settings according to your needs or the button functions on your telephone. To program, you need to switch your telephone to the programming mode. During the programming mode, your telephone is busy to outside callers. If you want to make a normal call operation, you must finish the programming mode.



- This feature cannot be used with a single line telephone.
- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to "PROGRAM" or press the PROGRAM button on the KX-T7300 series.

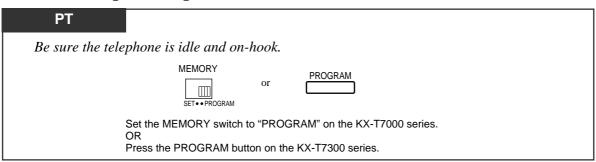
When you enter the Station Programming mode, the display shows the following message as the initial programming mode.

```
PITS-PGM NO? \rightarrow
```

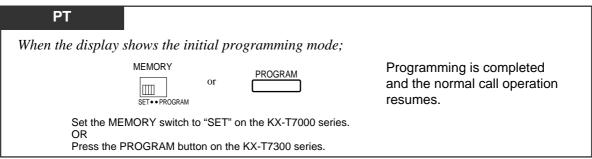
The display also gives you helpful or stored data information related to the programming steps. You can also refer to the "Display Example" in the Appendix (Section 2.4).

- After programming, return the MEMORY switch to the "SET" position or press the PROGRAM button on the KX-T7300 series.
- If you move your desk and change the extension line, reset as desired. The setting will not remain in your telephone but will remain in the previous extension user's memory.
- During the programming mode, your extension is treated as a busy extension.

To enter the Programming Mode



To exit the Programming Mode



When storing data

After pressing the STORE button to store data, you may hear one of the following tones.

- Confirmation tone (1 beep): storage is completed.
- Confirmation tone (2 beeps): the data is the same as the last entry.
- Alarm tone (3 beeps): the entry is not valid.

Customizing Your Telephone Functions

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

Preferred Line Assignment — Outgoing

Idle Line Preference: You can access any enabled idle outside (CO) line to make a call

directly by going off-hook.

Prime Line Preference: You can access a programmed outside (CO) line directly by going

off-hook.

No Line Preference: You cannot access an outside (CO) line by going off-hook. Choose

(**default**) the outside (CO) line.

SELECTION	Programming Input			
☐ Idle Line Preference.	12	AUTO DIAL STORE		
☐ Prime Line Preference.	13	outside (CO) line no. Enter the outside (CO) line number (1 through 6).		
☐ No Line Preference.	11	AUTO DIAL STORE		



- Setting a new line preference feature will cancel the previous setting.
- The user can override the Idle/Prime Line Preference temporarily to select a specific line. To select it, press the desired line access button (INTERCOM or CO button) before going off-hook or pressing the SP-PHONE/MONITOR button.
- If there are only 3 lines in the system, outside (CO) line numbers 4 through 6 cannot be used.

Preferred Line Assignment — Incoming

No Line Preference: When an incoming outside call is received, the extension user

must go off-hook and then press the flashing CO button.

Prime Line Preference: When incoming outside calls from the Central Office are received

at the same time, you can receive the call on the preferred outside

(CO) line first only by going off-hook.

Ringing Line Preference: When an incoming outside call is received, you can receive the

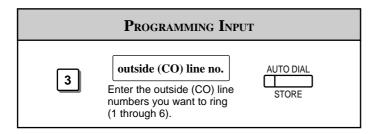
(**default**) call ringing at your telephone by going off-hook.

Selection	Programming Input			
☐ No Line Preference.	2 1 AUTO DIAL STORE			
☐ Prime Line Preference.	outside (CO) line no. Enter the outside (CO) line number (1 through 6). AUTO DIAL STORE			
☐ Ringing Line Preference.	2 2 AUTO DIAL STORE			

- Setting a new line preference feature will cancel the previous setting.
- In "Prime Line Preference" mode, if incoming calls from the Central Office are received at the same time except for the preferred outside (CO) line, you must go off-hook and then press the CO button whose indicator is flashing red quickly.

Outside (CO) Line Ringing Selection

You can select whether the extension will ring or not when an outside call is received at your extension.





- The "Flexible Ringing Assignment" should be set to "Enable". (See the Installation Manual.)
- When an outside call is received at your extension but does not ring, the CO indicator will flash. If you want to answer the outside call, press the flashing CO button.

Intercom Alert Assignment

The intercom alert (tone/voice) at a receiving extension can be selected by programming.

Voice Call: A Voice alert instead of Tone alert is heard through the speaker on the

receiving extension.

Tone Call (default): A tone alert (ringing) sounds at the receiving extension.

Selection	Programming Input		
☐ Voice Call	4 2	AUTO DIAL L STORE	
☐ Tone Call (Cancels the Voice Call.)	41	AUTO DIAL STORE	

Call Waiting Tone Selection

You can select the call waiting tone, either Tone 1 (default) or Tone 2.

SELECTION	Programming Input		
☐ Tone 1	5 1 AUTO DIAL STORE		
☐ Tone 2	5 2 AUTO DIAL STORE		

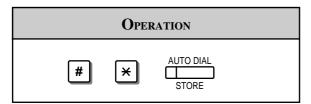


- 1.5 During a Conversation, "Call Waiting"
- 2.1 Tone / Ring Tone List

Proprietary Telephone Setting Data Default Set

Allows you to reset the proprietary telephone settings at an extension to the default settings.

- Preferred Line Assignment Outgoing (default: No Line Preference)
- Preferred Line Assignment Incoming (default: Ringing Line)
- Outside (CO) Line Ringing Selection (default: Ring all outside (CO) lines)
- Intercom Alert Assignment (default: Tone Call)
- Call Waiting Tone Selection (default: Tone 1)





• This feature also cancels the Handsfree Answerback feature and pressing the AUTO ANSWER/MUTE button in the Room Monitor feature.

Customizing the Buttons on Your Telephone

Changing the Flexible Buttons

You can change the flexible buttons on your telephone to certain function buttons. For example, if your telephone has more CO buttons than available outside (CO) lines, you may change the unused CO buttons to One-Touch Dialing buttons, etc.

The 4 types of flexible buttons are as follows:

- Flexible CO Buttons (located on a PT only)
- Flexible DSS Buttons (located on a DSS Console only)
- Programmable Feature (PF) Buttons (located on a PT and DSS Console)
- Flexible MESSAGE Buttons (located on a PT except for the KX-T7055)

Check the required operation first. If your telephone is not provided with the button, you can assign the button using this program.

Function	PROGRAMMABLE BUTTON				
	CO	DSS	PF	MESSAGE	
DSS (Direct Station Selection)	~	~		✓	
One-Touch Dialing	~	~	~	~	
CONF (Conference)	~				
FWD/DND (Forward/Do Not Disturb)	~				
SAVE	~				
Log-In/Log-Out	~				
Single-CO (S-CO)	~				
Other CO (O-CO)	~				
Group-CO (G-CO)	~				
MESSAGE (Message Waiting)				~	
Day		~			
Night		~			
Lunch		~			
Station Lock		~			

[&]quot;

" indicates that the feature is available.



- To confirm the stored function data Press the button you want to confirm.
- As to the buttons on your proprietary telephone, please refer to your proprietary telephone manual.

Line Access Buttons

One of the following 3 types of CO buttons must be used to seize an outside (CO) line when making a call.

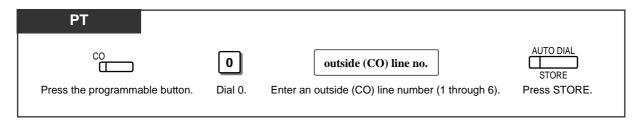
- Group-CO (G-CO) button
- Other-CO (O-CO) button
- Single-CO (S-CO) button



- A flexible CO button can be assigned as a Line Access Button (G-CO, O-CO or S-CO) in Proprietary Telephone Settings. Once a flexible CO button is assigned as a Line Access Button, it provides the line status using lighting patterns and color indication. Please refer to "2.2 LED Indication".
- You can set the G-CO and S-CO buttons on one telephone. Incoming and outgoing calls on the line are shown on the button in the following priority.
 S-CO > G-CO

Single-CO (S-CO) Button

A S-CO button is an outside (CO) line access button. This allows you to access a specific line by pressing a S-CO button. An incoming call can be directed to a S-CO button.

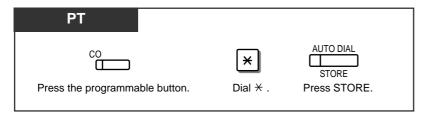




- Only one S-CO button can be assigned to an outside (CO) line.
- The same outside (CO) line can be assigned as a S-CO button and G-CO button.

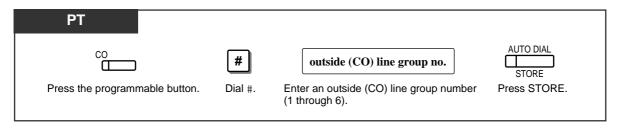
Other CO (O-CO) Button

Outside (CO) lines which are not assigned to S-CO or G-CO buttons can be assigned to a flexible CO button on a proprietary telephone. The assigned button serves as the O-CO button. An incoming call, on assigned outside (CO) lines, arrives at the O-CO button. To make an outside call, you simply press the designated O-CO button.



Group-CO (G-CO) Button

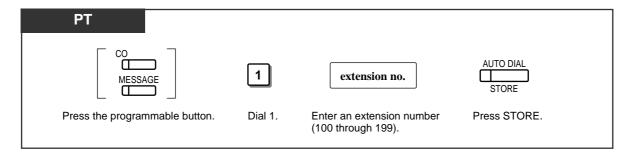
To use outside (CO) lines and a group of outside (CO) lines (outside (CO) line group) efficiently can be assigned to a CO button. This button is referred to as Group-CO (G-CO) button. Any incoming calls from any outside (CO) line in the outside (CO) line group arrive at the G-CO button. To make an outside call, you can access an idle outside (CO) line in the group by simply pressing the assigned G-CO button.



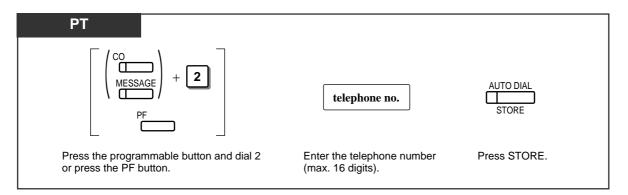


- The same line can be assigned as a S-CO button and G-CO button.
- The extension for making and/or receiving calls in outside (CO) line groups must be programmed.
- When your extension is assigned as the incoming call destination for an outside (CO) line, you cannot receive any incoming outside calls unless a G-CO, O-CO or S-CO button associated with the line is assigned.

DSS (Direct Station Selection) Button



One-Touch Dialing Button



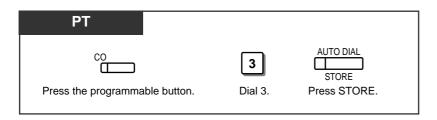


- To store the telephone number of an external party, a line access code (9, 0 or 81 through 86) must be stored as the first digit.
- You can use 0 through 9, *, #, PAUSE and INTERCOM (Secret) as follows.
 PAUSE: inserts a pause.
 INTERCOM: conceals all or part of a stored number.
- The number of Personal Speed Dialing numbers corresponds to the number of PF buttons assigned as One-Touch Dialing. (PF buttons are on a proprietary telephone.) You cannot assign both the One-Touch Dialing and Personal Speed Dialing features to the same number. For example, if you assign One-Touch Dialing to the PF 1 button and then Personal Speed Dialing 0, only the Personal Speed Dialing 0 feature will be assigned.



• 1.7 Useful Features, "Secret Dialing"

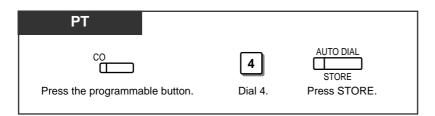
CONF (Conference) Button





- 1.7 Useful Features, "Conference (3-party)"
- 1.7 Useful Features, "Conference, Unattended"
- 1.7 Useful Features, "Conference (5-party)"

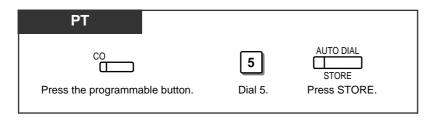
FWD/DND (Forward/Do Not Disturb) Button





- 1.6 Before Leaving Your Desk, "Forwarding a Call (Call Forwarding)"
- 1.7 Useful Features, "Rejecting Incoming Calls (Do Not Disturb DND)"

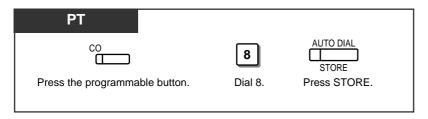
SAVE Button





• 1.3 Making Calls, "Redialing the Saved Number (Saved Number Redial)"

Log-In/Log-Out Button

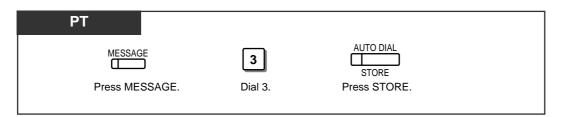




- 1.7 Useful Features, "Joining or Leaving a Call Distribution Group (Log-In/Log-out)"
- See the Installation Manual, Section 3, "Log-In/Log-Out".

Restoring the MESSAGE Button

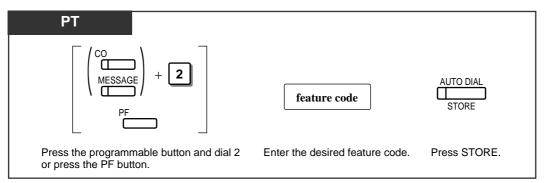
Allows you to restore the message waiting feature to the MESSAGE button.



One-Touch Access for System Features

Features that can be accessed using the dialing buttons can also be programmed into memory.

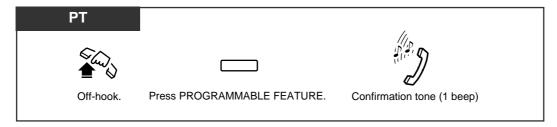
Programming



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• If you want to use a programmable feature button as a button for External Feature Access, you can press the FLASH button instead of the feature code. When you press the assigned button, you can access special features (e.g. Call Waiting) offered by a host PBX or Central Office.

To Access

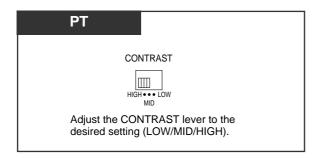


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• Whether the confirmation tone is heard or not depends upon the programmable feature.

Display Contrast Adjustment

The CONTRAST selector is used to adjust the display contrast.





• This feature is available for a KX-T7330/KX-T7033/KX-T7030/KX-T7130 only.

When Using the Headset

The Panasonic Advanced Hybrid System supports the use of a headset on a proprietary telephone (PT). When you use the headset (optional), you should switch the selection mode first.



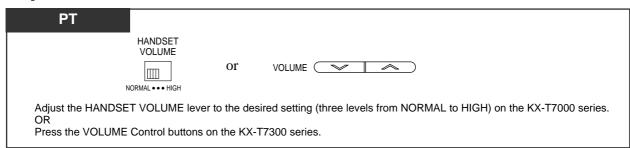


• This feature is available for a KX-T7330/KX-T7033/KX-T7030/KX-T7130 only.

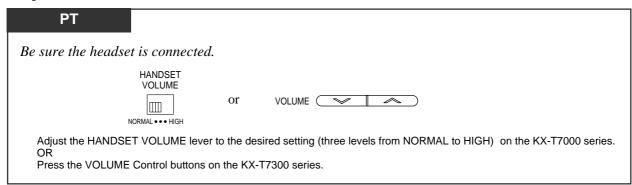
Volume Control — Handset Receiver/Headset/Ringer/Speaker

Allows you to adjust the following volumes as necessary.

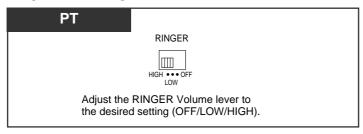
To adjust the handset receiver volume



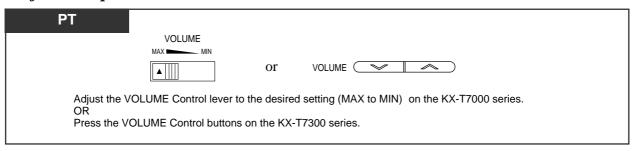
To adjust the headset volume



To adjust the ringer volume



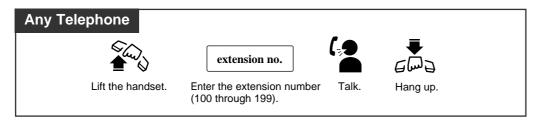
To adjust the speaker volume



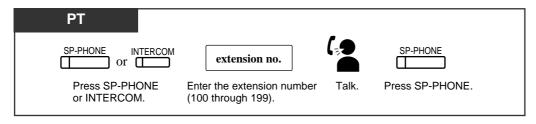
Intercom Calling

Allows you to make a call to another extension.

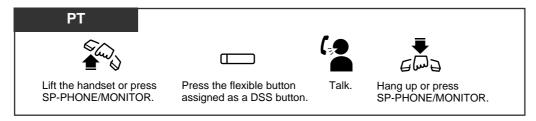
Using the handset



Using the Speakerphone



Using a DSS (Direct Station Selection) button





- After dialing an extension number, you will hear one of the following tones.
 - **Ringback tone:** Indicates the destination extension is being called.

Confirmation tone: Indicates you can perform voice calling (e.g. Paging).

Busy tone: Indicates the destination extension is busy.

Do Not Disturb (DND) tone: Indicates the destination extension has set the "Do Not Disturb (DND)" feature.

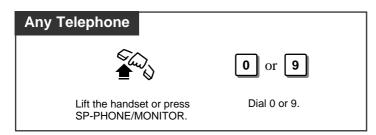
- PT An extension number and a name, if programmed, are shown on a display PT during an intercom call.
- You can assign a DSS button on a flexible button in Proprietary Telephone Settings. The stored number can be displayed by pressing the desired DSS button while on-hook.



- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", DSS (Direct Station Selection) Button
- 2.1 Tone/Ring Tone List
- See the Installation Manual, Section 3, "Intercom Calling".

Calling an Operator (Operator Call)

Allows you to call an operator within the system. One extension can be assigned as an operator.





- If an operator is not assigned, this feature is not available and you will hear a reorder tone.
- If the line access number is assigned to "0" by System Programming, the operator call number will be changed to "9".
- See the Installation Manual, Section 3, "Operator Call".

Outside Calling

Allows you to make a call to an external party using one of the following line access methods.

- 1.) Making Outside Calls Using Automatic Line Access
- 2.) Making Outside Calls Using Individual Line Access
- 3.) Making Outside Calls Using Outside (CO) Line Group Access







• An outside (CO) line which is not assigned to a CO button cannot be dialed.

• Helpful hints for the Handsfree (speakerphone) operation are noted in the "Handsfree Operation" feature.

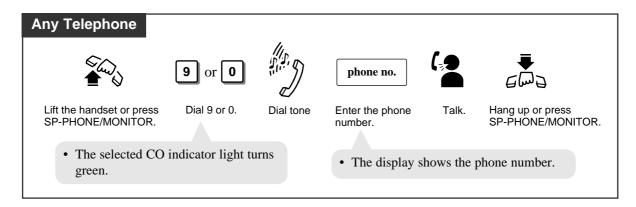


- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", Single-CO (S-CO) Button, Group-CO (G-CO) Button
- 1.6 Before Leaving Your Desk, "Locking Your Telephone (Electronic Station Lockout)"
- 1.7 Useful Features, "Calling with Account Codes (Account Code Entry)"
- 1.7 Useful Features, "Calling Using Your Privileges at Another Extension (Walking COS)"
- 1.8 Operator / Manager Service Features, "Remote Station Lock"
- See the Installation Manual, Section 3, "Outside Calling".
- See the Installation Manual, Section 3, "Toll Restriction Override by Extension Password".
- See the Installation Manual, Section 3, "Toll Restriction Station Lock Boundary Class".
- See the Installation Manual, Section 3, "Toll Restriction".

1.3 Making Calls

Making Outside Calls Using Automatic Line Access

Allows you to select an available outside (CO) line automatically.

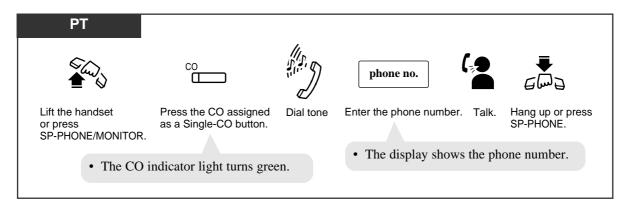


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• If the line access number is assigned to "0" by System Programming, the operator call number will be changed to "9".

Making Outside Calls Using Individual Line Access

Allows you to select the desired outside (CO) line without dialing the line access code.



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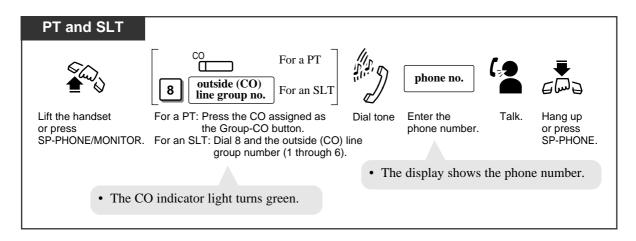
PT

• You may skip off-hook and press the Single-CO (S-CO) button directly.

1.3 Making Calls

Making Outside Calls Using Individual Outside (CO) Line Group Access

Allows you to select an idle line within a designated outside (CO) line group. Through System Programming, outside (CO) lines can be divided into 6 line groups.

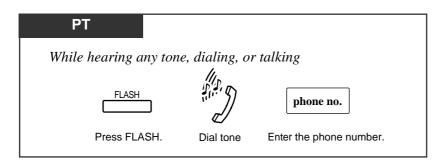




• You may press the Group-CO button directly instead of going off-hook and dialing 8 and the outside (CO) line group number.

Flash

Allows you to disconnect the current call and make another call without hanging up.





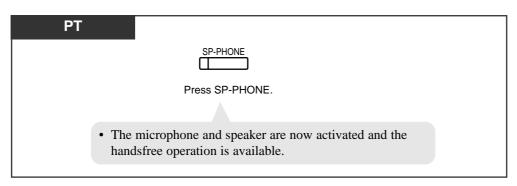
- System Programming may be required to perform this feature properly.
- During an outside call, the FLASH button can be used as a External Feature Access button.



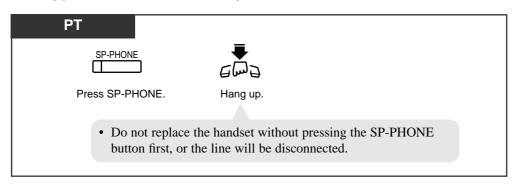
- 1.7 Useful Features, "External Feature Access"
- See the Installation Manual, Section 3, "Flash".

Handsfree Operation

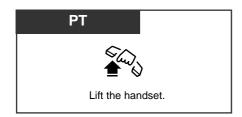
Allows you to dial and to talk to the other party without lifting the handset.



Switching from the handset to handsfree mode



Switching from handsfree to the handset mode





- PT
- Helpful hints for the Handsfree operation:
 - Use this unit in a quiet room for best performance.
 - If you and the other party talk at the same time, parts of your conversation will be lost. To avoid this, talk alternately.
- The handsfree mode is canceled if you do not start dialing within 10 seconds.
 - The KX-T7350/KX-T7050/KX-T7055 have MONITOR buttons instead of a SP-PHONE button. It can be used for handsfree dialing, etc., but it cannot be used for a handsfree conversation.
- PT You can enable the handsfree mode by pressing a CO or INTERCOM button.



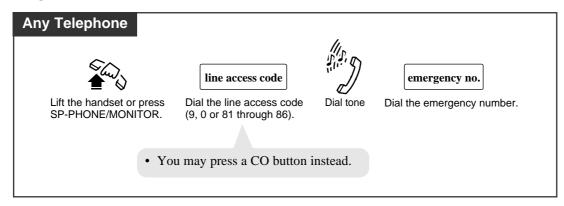
• See the Installation Manual, Section 3, "Handsfree Operation".

1.3 Making Calls

Making Emergency Calls (Emergency Call)

Allows you to dial a pre-assigned emergency number after seizing an outside (CO) line. Up to 5 emergency dial numbers can be stored.

Dialing





- An emergency call is allowed even in the following cases,
 - Account Code Verify (All, Toll) modes
 - Any toll restriction COS number
 - Electronic Station Lockout
- If your telephone is connected to a host PBX, you must dial the host PBX line access code after the line access code.

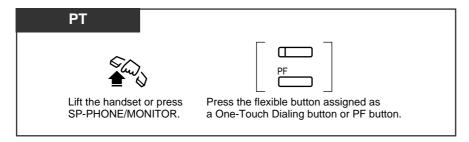


• See the Installation Manual, Section 3, "Emergency Call".

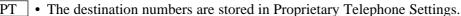
Dialing by Simply Pressing a Button (One-Touch Dialing)

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, telephone number or feature number (up to 16 digits) in a One-Touch Dialing button.

Dialing







You may press a CO button to select a desired outside (CO) line before pressing the One-Touch Dialing button.

• "Speed Dialing", "One-Touch Dialing" and manual dialing can be used together.

• You can store a number consisting of seventeen digits or more by dividing and storing it into 2 One-Touch Dialing buttons.

• A pause is automatically entered after the stored line access code, 9, 0 or 81 through 86,

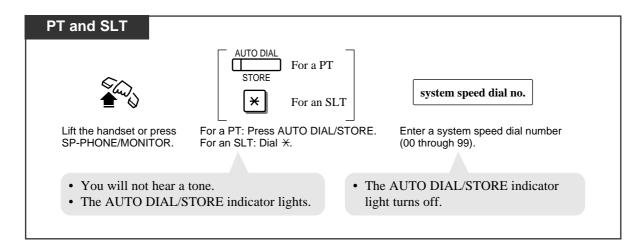
• To confirm the current status of the button, press the button while on-hook.



- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", One-Touch Dialing Button
- See the Installation Manual, Section 3, "One-Touch Dialing".

Dialing with System Speed Dialing (System Speed Dialing)

Allows you to make a call using pre-programmed speed dial numbers. This system supports 100 speed dial numbers which are available to all extension users.





- System Speed Dial numbers must be stored by System Programming.
- "Speed Dialing", "One-Touch Dialing" and manual dialing can be used together.
- You may press a CO button or dial a line access code to select a desired outside (CO) line before pressing the AUTO DIAL/STORE button or dialing *.
- It is possible to cancel toll restriction with this feature (Toll Restriction Override for System Speed Dialing). In this case, System Programming is necessary.
- A System Speed Dial number can be divided when stored. «Example»
 - If the number is divided and stored in System Speed Dial numbers 01 and 02, Press: [AUTO DIAL/STORE] [0] [1] [AUTO DIAL/STORE] [0] [2].
- PT The dialed number appears on the display.
- SLT A rotary telephone cannot use this feature.

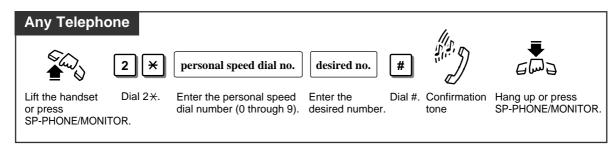


- See the Installation Manual, Section 3, "Toll Restriction for System Speed Dialing".
- See the Installation Manual, Section 3, "System Speed Dialing".

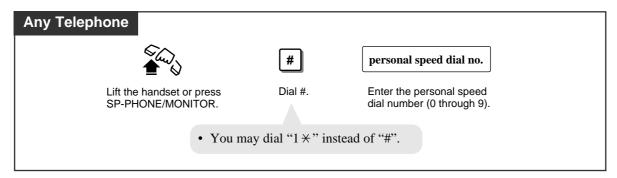
Dialing with Personal Speed Dialing (Personal Speed Dialing)

Allows you to store up to 10 speed dial numbers at your extension. These numbers are available for your extension only.

Storing a phone number

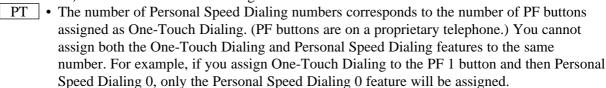


Dialing





- An account code must be stored by pressing "* * " and entering the account code after the line access code.
- You can store an extension number, telephone number, or feature number of up to 16 digits. Valid digits are "0 through 9".
- A pause can be stored by pressing the \times key. However, in the account code verify-all, verify-toll and forced modes, " \times " is not regarded as a pause.
- To store the telephone number of an external party, a line access code (9, 0 or 81 through 86) must be stored as the first digit.



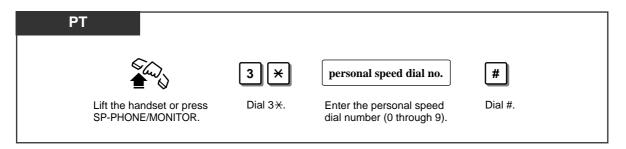
SLT • A rotary telephone cannot use this feature.



- 1.2 Proprietary Telephone Settings, "Customizing the Button on Your Telephone", One-Touch Dialing Button
- See the Installation Manual, Section 3, "Personal Speed Dialing".

1.3 Making Calls

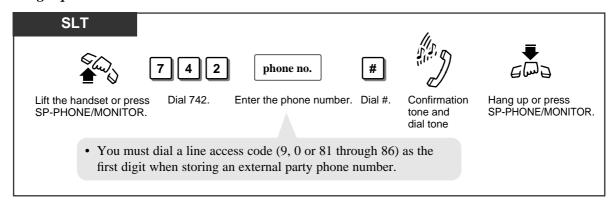
Checking the stored personal speed dialing numbers



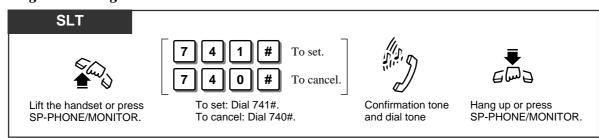
Dialing by Simply Going Off-Hook (Pickup Dialing)

Allows you to make an outgoing call by just going off-hook (single line telephone only).

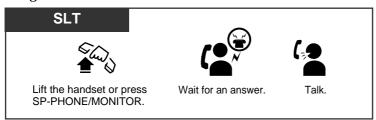
Storing a phone number



Setting / Canceling



Dialing





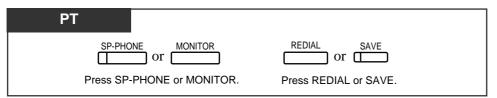
- This feature will not work if you answer an incoming call or retrieve a call on hold.
- Up to 32 digits, consisting of "0 through 9" and "**, can be stored. The "**" button is used as a PAUSE. However, in the account code verify-all, verify-toll and forced modes, "**" is not regarded as a pause.
- An account code must be stored by pressing "** *" and entering the account code after the line access code.
- During the waiting time after going off-hook, you can call another party and override this feature. You can change the waiting time between going off-hook and connecting with a called line by System Programming.
- A rotary telephone cannot use this feature.



• See the Installation Manual, Section 3, "Pickup Dialing".

Redialing Automatically (Automatic Redial)

PT users can redial the last number dialed and saved number automatically by going off-hook with the SP-PHONE/MONITOR button and pressing the corresponding button directly. Redial will be automatically repeated the pre-programmed number of times until the called party answers.





• The number of times can be changed by System Programming.

PT • If another operation is performed during automatic redial, this function will be canceled.

PT • To cancel automatic redial, press the FLASH button.

• This feature is not available for a KX-T7055.

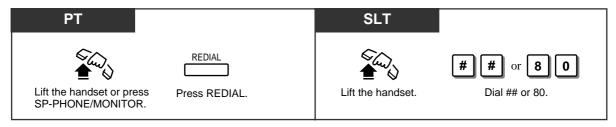
PT • A flexible button can be assigned as the SAVE button.



- 1.3 Making Calls, "Redialing the Last Number Dialed (Last Number Redial)"
- 1.3 Making Calls, "Redialing the Saved Number (Saved Number Redial)"
- See the Installation Manual, Section 3, "Redial".

Redialing the Last Number Dialed (Last Number Redial)

Automatically saves the last outside phone number dialed so that you can make a call to the same party later using a simple operation.





- Up to 32 digits can be stored and redialed. This does not include an outside (CO) line access code.
- If you hear a busy tone when attempting to redial, select another line and press the REDIAL button or feature number.
- PT "*," "#", "PAUSE", and "INTERCOM" (for secret dialing) are counted as 1 digit.
- While calling or during a conversation, pressing the REDIAL button will disconnect the current call and redial the stored number.
- You can check the stored number. Press the REDIAL button while on-hook, and the stored number will be displayed.

1.3 Making Calls

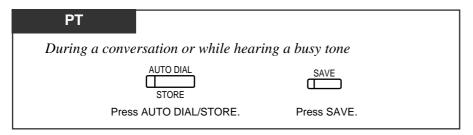


- 1.3 Making Calls, "Redialing Automatically (Automatic Redial)"
- See the Installation Manual, Section 3, "Redial".

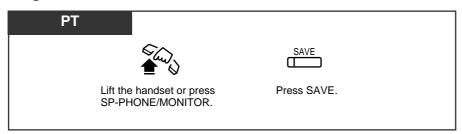
Redialing the Saved Number (Saved Number Redial)

Allows you to save the current external telephone number during a conversation, so that you can redial the same party later using a simple operation. The saved number can be redialed until another number is stored.

Storing



Dialing





- Up to 32 digits can be stored and redialed. This does not include an outside (CO) line access
- PT "*," "#", "PAUSE", and "INTERCOM" (for secret dialing) are counted as 1 digit.
- PT A flexible button can be assigned as the SAVE button.
- You can check the stored number. Press the SAVE button while on-hook, and the stored number will be displayed.
- PT You can change the outside (CO) line when dialing. You may press a CO button to select an outside (CO) line directly after going off-hook before pressing the SAVE button.



- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", SAVE Button
- 1.3 Making Calls, "Redialing Automatically (Automatic Redial)"
- See the Installation Manual, Section 3, "Redial".

Sending a Call Waiting Tone to a Busy Extension (Busy Station Signaling – BSS)

The busy extension that you called will hear the assigned Call Waiting tone and know that you are waiting.

Any Telephone

If you make an intercom call and hear a busy tone

2

Wait for an answer and talk.

Dial 2.



- To answer from the calling extension, see "Call Waiting" in this manual.
- If you hear a reorder tone when you set this feature, this feature cannot be operated with the called party. This feature is only available if the called extension has set the "Call Waiting" feature.



- 1.5 During a Conversation, "Call Waiting"
- See the Installation Manual, Section 3, "Busy Station Signaling (BSS)".

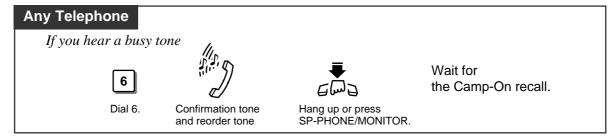
Making Your Telephone Ring Back Automatically When a Line Becomes Free (Automatic Callback Busy – Camp-On)

Allows you to receive callback ringing when the dialed line becomes idle. When you answer the callback ringing;

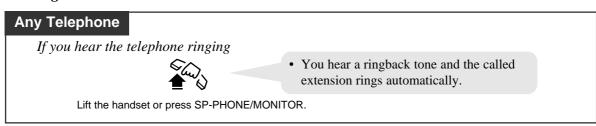
For an extension: The called extension starts ringing without dialing.

For an outside (CO) line: The line is seized.

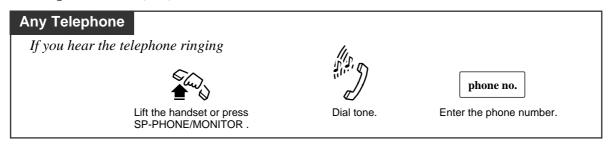
Setting



Answering an intercom recall



Answering an outside (CO) line recall



Canceling





• If you do not answer before four callback ring signals (within 10 seconds), this feature will be canceled.



• See the Installation Manual, Section 3, "Automatic Callback Busy (Camp-On)".

Interrupting an Existing Call (Executive Busy Override)

Executive Busy Override — Extension

Allows you to connect to an existing intercom (extension) call. System Programming is required to use this feature.



If you make an intercom call and while hearing a busy tone

3

Dial 3.

Confirmation tone (optional)

A three-party conference is now established.

To leave the conference

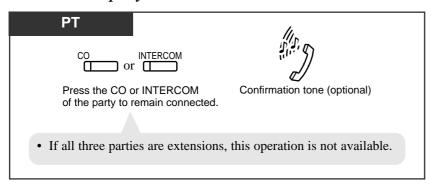
Any Telephone



The other two parties continue their conversation.

Hang up or press SP-PHONE.

To terminate one party and talk to the other





- This feature does not work when "Data Line Security" or "Executive Busy Override Deny" is set at either or both of the other parties.
- When a 2-party call is changed to a 3-party call or vice versa, a confirmation tone is sent to all parties. The tone can be disabled.

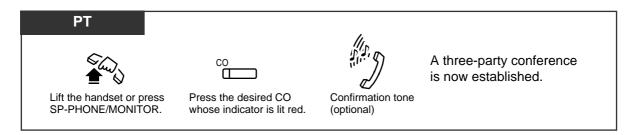


- 1.3 Making Calls, 'Denying "Interrupting an Existing Call" (Executive Busy Override Deny)'
- 1.7 Useful Features, "Conference (3-party)"
- 1.7 Useful Features, "Data Line Security"
- See the Installation Manual, Section 3, "Executive Busy Override".

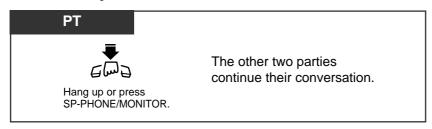
Executive Busy Override — Outside (CO) Line

Allows you to connect to an existing outside call or add a third party to your existing conversation.

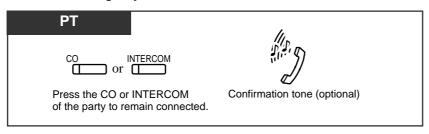
System Programming is required to use this feature.



To leave the conference



To terminate one party and talk to the other





• This feature does not work when "Data Line Security" or "Executive Busy Override Deny" is set at the extension engaged in the existing outside call.



• When a 2-party call is changed to a 3-party call or vice versa, a confirmation tone is sent to all parties. Eliminating the tone is programmable.

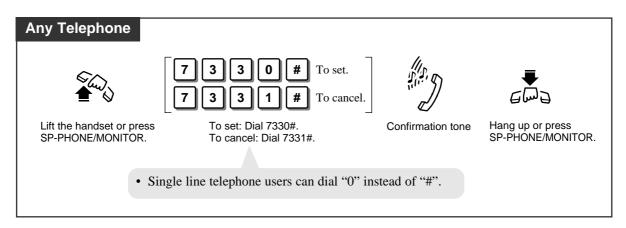


- 1.3 Making Calls, 'Denying "Interrupting an Existing Call" (Executive Busy Override Deny)
- 1.7 Useful Features, "Conference (3-party)
- 1.7 Useful Features, "Data Line Security"
- See the Installation Manual, Section 3, "Executive Busy Override".

Denying "Interrupting an Existing Call" (Executive Busy Override Deny)

Allows you to prevent other extension users from interrupting your conversation.

Setting / Canceling

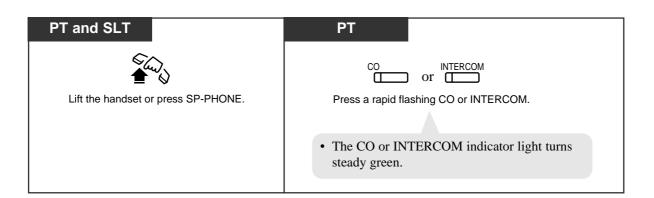




- 1.3 Making Calls. "Interrupting an Existing Call (Executive Busy Override)", Executive Busy Override Extension
- 1.3 Making Calls. "Interrupting an Existing Call (Executive Busy Override)", Executive Busy Override Outside (CO) Line
- See the Installation Manual, Section 3, "Executive Busy Override".

1.4 Receiving Calls

Receiving Calls





- There are 3 types of Line Preference for incoming outside calls (— No Line/Prime Outside (CO) Line/Ringing Line). Each preference can be selected by Proprietary Telephone Settings.
- When receiving an incoming call, you may press the CO or INTERCOM button which is rapidly flashing red and talk (Handsfree mode).
- PT Helpful hints for the handsfree operation are noted in the "Handsfree Operation" feature.



- 1.2 Proprietary Telephone Settings, "Customizing Your Telephone Functions", Preferred Line Assignment Incoming
- 1.3 Making Calls, "Handsfree Operation"
- See the Installation Manual, Section 3, "Receiving Calls".

1.4 Receiving Calls

Handsfree Answerback

Allows you to answer an intercom call without lifting the handset.

Setting



When the SP-PHONE and the AUTO ANSWER/MUTE indicator are off



Press AUTO ANSWER/MUTE.

• The AUTO ANSWER/MUTE indicator turns on.

Canceling

PT

When the AUTO ANSWER/MUTE indicator is on

AUTO ANSWER

Press AUTO ANSWER/MUTE.

• The AUTO ANSWER/MUTE indicator light turns off.





- This feature does not work for incoming outside calls or doorphone calls.
 - When an outside call is transferred to your extension, this feature is overridden and a ring tone is heard.



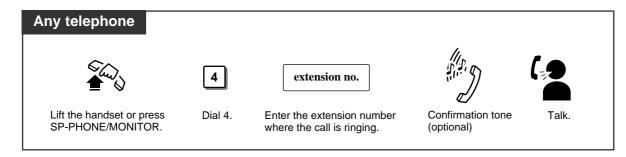
- 1.2 Proprietary Telephone Settings, "Customizing Your Telephone Functions", Intercom Alert Assignment
- 1.7 Useful Features, "Room Monitor"
- See the Installation Manual, Section 3, "Handsfree Answerback".

1.4 Receiving Calls

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

Directed Call Pickup

Allows you to answer an incoming call ringing at any other extension.





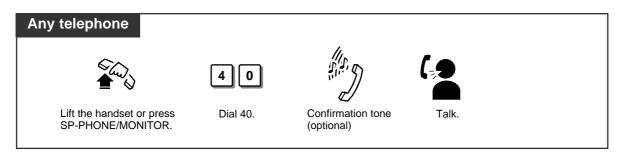
- Doorphone calls can be picked up from extensions that are not programmed to answer doorphone calls.
- You can hear a confirmation tone when the call is picked up. The tone can be disabled.
- If a ringing extension sets the Call Pickup Deny feature, you will hear a reorder tone.



- 1.4 Receiving Calls, "Picking up a Call Ringing at Another Extension (Call Pickup)", Denying/allowing your call to be picked up (Call Pickup Deny)
- See the Installation Manual, Section 3, "Call Pickup".

Group Call Pickup

Allows you to answer a call that is ringing at another telephone within your extension group.





- You can pick up an incoming outside, intercom or doorphone call, but you cannot pickup a Camp-On recall and hold recall.
- You can hear a confirmation tone when the call is picked up. The tone can be disabled.
- If a ringing extension sets the Call Pickup Deny feature, you will hear a reorder tone.

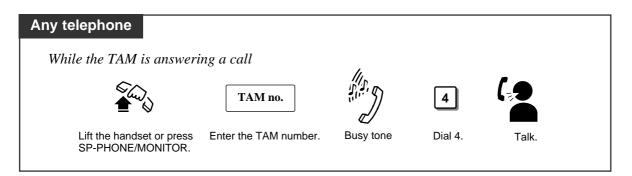


- 1.4 Receiving Calls, "Picking up a Call Ringing at Another Extension (Call Pickup)", Denying/allowing your call to be picked up (Call Pickup Deny)
- See the Installation Manual, Section 3, "Extension Group".
- See the Installation Manual, Section 3, "Call Pickup".

1.4 Receiving Calls

Call Retrieving from a TAM (Telephone Answering Machine)

Allows you to answer an incoming call received by a TAM. System Programming is required to use this feature.





- When you try to pick up a call and hear a reorder tone, the TAM is not answering the call or the dialed extension is not the TAM extension.
- A TAM number is the 3-digit extension number of the TAM.

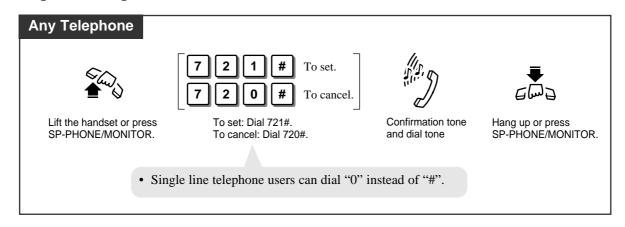


• See the Installation Manual, Section 3, "Call Pickup".

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

Allows you to prevent another extension from picking up your calls with the "Call Pickup" feature.

Setting / Canceling



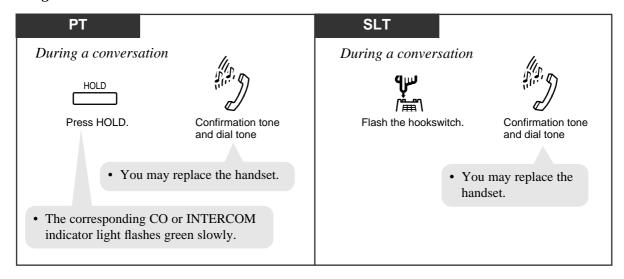


- 1.4 Receiving Calls, "Picking up a Call Ringing at Another Extension (Call Pickup)", Directed Call Pickup
- 1.4 Receiving Calls, "Picking up a Call Ringing at Another Extension (Call Pickup)", Group Call Pickup
- See the Installation Manual, Section 3, "Call Pickup".

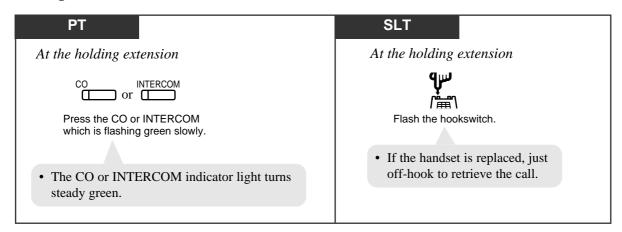
Placing a Call on Hold (Call Hold)

Allows you to place a call on hold.

Placing a call on hold



Retrieving a call on hold





- To retrieve a call on hold at another extension, refer to "Retrieving a Call on Hold (Call Hold Retrieve)".
- If a held call is not retrieved within a pre-determined time (default: 30 sec.), ringing or an alarm tone will be heard (Hold Alarm/Hold Recall). If the hold recall time is set to "Disable", it will not be recalled.
- If a held outside call is not answered within 30 minutes, it will be automatically disconnected.
- When going off-hook:
 - Before recalling: A dial tone will be heard while the call is on hold. You may dial another telephone number.
 - While recalling: Only the first call on hold will be released and enter the conversation mode.
- You cannot hold a doorphone call.

- PT During a 5-party conference, you cannot use this feature.
- With outside calls, you can put multiple calls on hold. However, with intercom calls, you can put only one call on hold.
- If a call is placed on hold for more than the programmed time, ringing or an alarm tone will be heard (Hold Alarm/Hold Recall) and the LCD will flash the following display.

 Example:
 - When holding extension 111, Mr. Brown: "111: Brown" will flash.
 - When holding outside (CO) line, CO 1: "Call on CO 1" will flash.
- If "Hold-2" or "Hold-3" is assigned by System Programming, you must dial "20" after flashing the hookswitch.
- Only an outside or intercom call can be placed on hold at one time. If you want to hold both calls, use the Call Park feature.

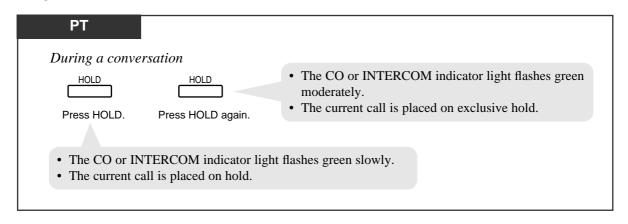


- 1.5 During a Conversation, "Retrieving a Call on Hold (Call Hold Retrieve)"
- 1.5 During a Conversation, "Placing a Call in System Parking Area (Call Park)"
- 1.7 Useful Features, "Conference (5-party)"
- See the Installation Manual, Section 3, "Hold".

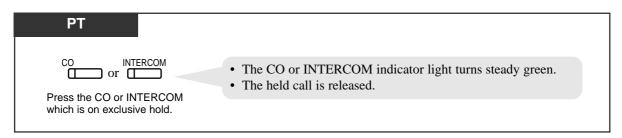
Placing a Call on Hold Exclusively (Exclusive Hold)

Prevents other extension users from retrieving your held call. Only the user who held the call can retrieve it.

Placing a call on exclusive hold



Retrieving a call on exclusive hold



During a Conversation 1.5





• During a 5-party conference, you cannot use this feature.

• If a held call is not retrieved within a pre-determined time (default: 30 sec.), ringing will be heard (Hold Recall).

PT

• If an outside call is placed on hold and not retrieved within 30 minutes, it will be automatically disconnected.



• With outside calls, you can put multiple calls on exclusive hold. However, with intercom calls, you can put only one call on exclusive hold.

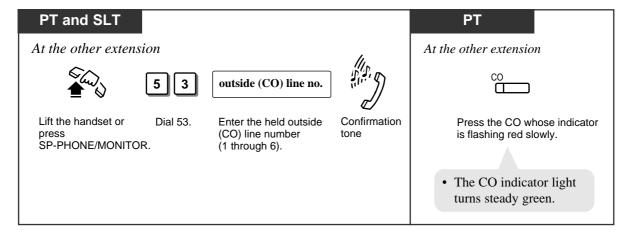


- 1.5 During a Conversation, "Placing a Call on Hold (Call Hold)"
- 1.7 Useful Features, "Conference (5-party)"
- See the Installation Manual, Section 3, "Hold".

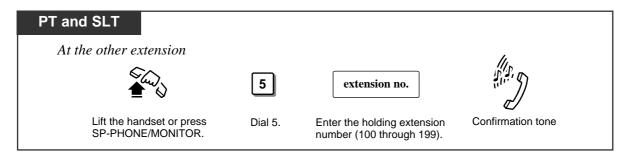
Retrieving a Call on Hold (Call Hold Retrieve)

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

Retrieving an outside call on hold



Retrieving an intercom call on hold





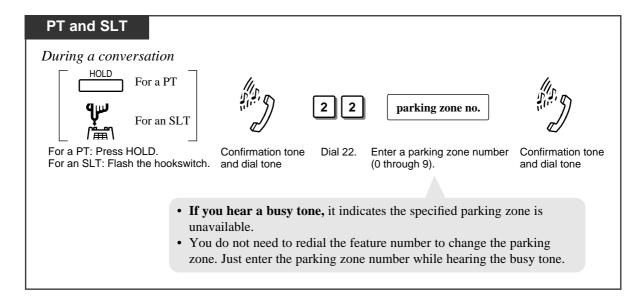
- "Call Park" and "Exclusive Hold" cannot be retrieved by this feature.
- You can hear a confirmation tone when the call is retrieved by entering the feature number.



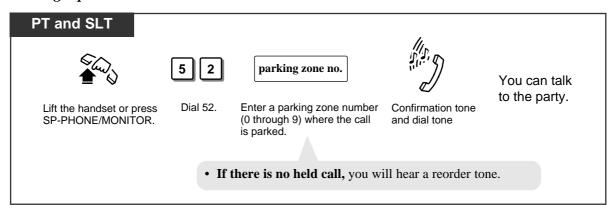
- 1.5 During a Conversation, "Placing a Call on Hold (Call Hold)"
- See the Installation Manual, Section 3, "Hold".

Placing a Call in System Parking Area (Call Park)

Allows you to place a held call into a system parking area. You can release from the parked call to perform other operations. The parked call can be retrieved by any extension user. Up to 10 calls can be parked.



Retrieving a parked call





- If a parked call is not retrieved within a pre-determined time (default: 30 seconds), ringing will be heard (Hold Recall).
- If a parked call is not retrieved within 30 minutes, it will be automatically disconnected.
- This feature is useful when you want to hold more than one intercom call with a PT, or more than one intercom or outside call with an SLT.
- During a 5-party conference, you cannot use this feature.

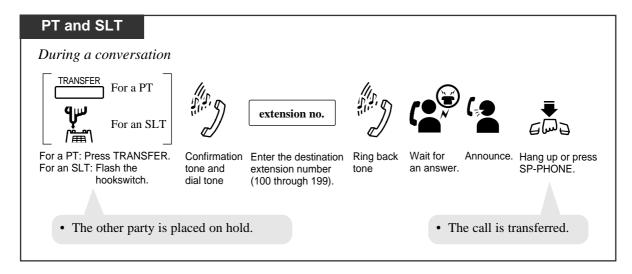


- 1.7 Useful Features, "Conference (5-party)"
- See the Installation Manual, Section 3, "Call Park".

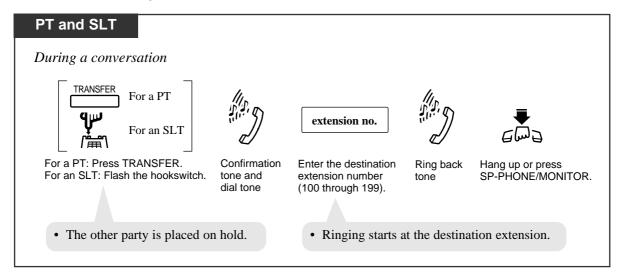
Transferring a Call to an Extension (Call Transfer – to Extension)

Allows you to transfer a received call to another extension. There are 2 ways. **Screened Call Transfer:** The destination confirms the transfer before sending. **Unscreened Call Transfer:** The line is released after transferring the call without confirmation.

Screened Call Transfer



Unscreened Call Transfer

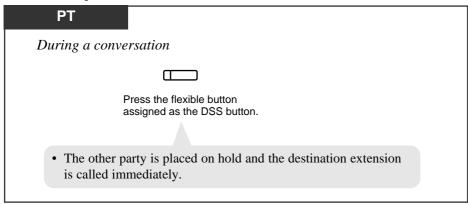


Call Transfer using a DSS button

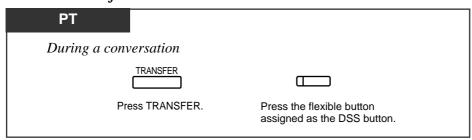
Allows you to perform a Screened or Unscreened Call Transfer by using a DSS button. There are 2 operations, depending on whether or not One-Touch Transfer* is set.

* One-Touch Transfer allows you to hold an outside call and transfer it to an extension by pressing one key. This feature provides automatic hold and transfer, without pressing the TRANSFER button. System Programming is required to use this function.

"With Transfer" mode



"Without Transfer" mode





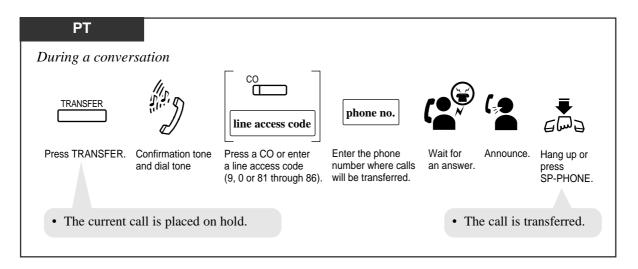
- If the destination extension does not answer the call within a pre-determined time (default: 30 sec.), the call will return to you (Transfer Recall).
- If there is no answer within 30 minutes after "Transfer Recall" starts, the line will be disconnected.
- When the dialed extension is busy, you may access the extension by dialing "2" (Busy Station Signaling) or "3" (Executive Busy Override) and going on-hook.
- If you want to return to the held call, press the TRANSFER button or corresponding CO or INTERCOM button before the destination extension answers.
- PT A flexible CO button can be assigned as a DSS button.
- PT To use "One-Touch Transfer", System Programming is required.
- PT During a 5-party conference, you cannot transfer a call.
- If you want to return to the held call, flash the hookswitch before the destination extension answers.
- If "Hold-3" is assigned in System Programming, you must dial "20" after flashing the hookswitch.

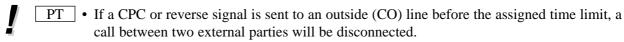


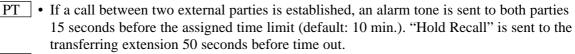
- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", DSS (Direct Station Selection) Button
- See the Installation Manual, Section 3, "Call Transfer to Extension".

Transferring a Call to an Outside (CO) Line (Call Transfer – to Outside (CO) Line)

Allows you to transfer a received call to an external party. System Programming is required to execute this feature.







- If you want to return to the held call, press the TRANSFER button or corresponding CO or INTERCOM button before the destination party answers.
- If you want to join the conversation after transferring the call, press the corresponding CO button. A conference call is established.
- To change the party where the call is transferred before hanging-up, press the CO button whose indicator is flashing slowly to retrieve the call, then repeat the Call Transfer procedure.

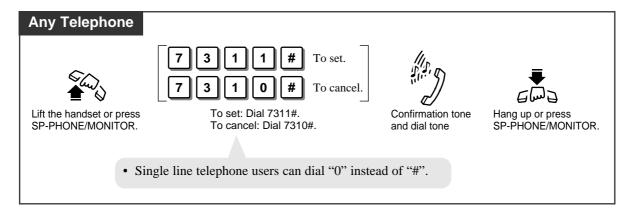


• See the Installation Manual, Section 3, "Call Transfer – to Outside (CO) Line".

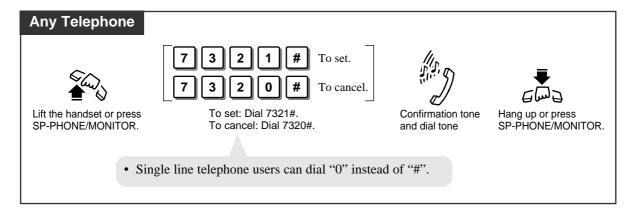
Call Waiting

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

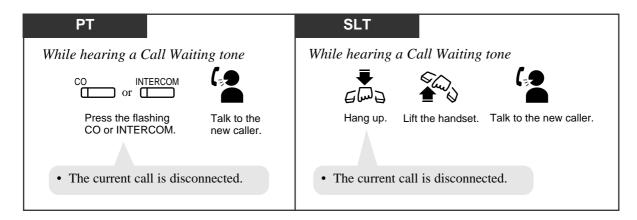
Setting / Canceling for outside calls



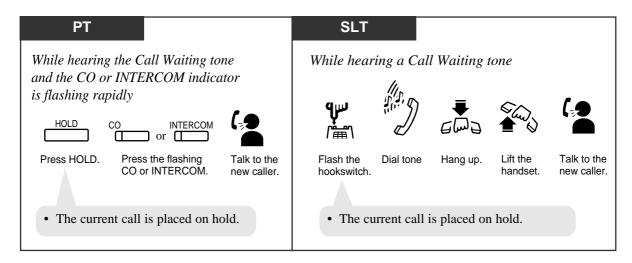
Setting / Canceling for intercom calls



To talk to the new caller by terminating the current call



To talk to the new party by holding the current call



— If both the current call and new call are extension calls, you do not have to press the INTERCOM button.



- The default is "OFF".
- When Call Waiting is enabled, a Call Waiting tone is sent to the user under the following conditions.
 - 1) When an outside call (except a doorphone call) is received, or
 - 2) When another extension executes the "Busy Station Signaling (BSS)" feature.
- Setting "Data Line Security" temporarily cancels this feature.
- You can change the desired Call Waiting tone (Tone 1 or Tone 2).
- If a Call Waiting tone is heard and the CO or INTERCOM indicator does not flash, this tone indicates Call Waiting from the Central Office. In this case, see "External Feature Access".
- If "Hold-2" or "Hold-3" is assigned in System Programming, you must dial "20" after flashing the hookswitch.
- You cannot transfer the new call while holding the current call. If you want to do so, first park the original call using the Call Park feature; then hang up; then take the new call.

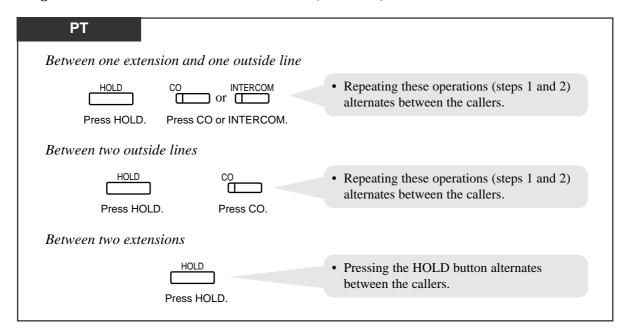


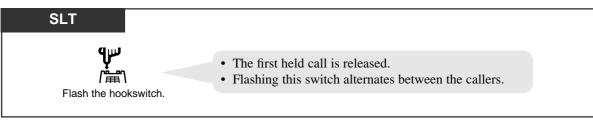
- 1.2 Proprietary Telephone Settings, "Customizing Your Telephone Functions", Call Waiting Tone Selection
- 1.3 Making Calls, "Sending a Call Waiting Tone to a Busy Extension (Busy Station Signaling BSS)"
- 1.5 During a Conversation, "Placing a Call in System Parking Area (Call Park)"
- 1.7 Useful Features, "Data Line Security"
- 1.7 Useful Features, "External Feature Access"
- See the Installation Manual, Section 3, "Call Waiting".

Call Splitting

Allows you to talk to two different parties alternately. If a call is received while you are already on the line, you can place the current call on hold and have a conversation with the other party.

Having a conversation while another call is on (exclusive) hold







- This feature does not work during a doorphone call or paging.
- PT During a 5-party conference, you cannot use this feature.



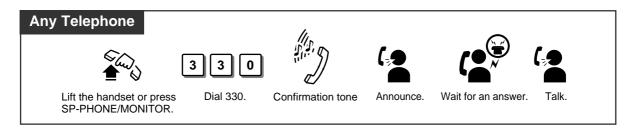
- 1.5 During a Conversation, "Placing a Call on Hold (Call Hold)"
- 1.5 During a Conversation, "Placing a Call on Hold Exclusively (Exclusive Hold)"
- See the Installation Manual, Section 3, "Call Splitting".

Paging

Allows you to make a voice announcement to several people at the same time. Your message is announced over built-in speakers of proprietary telephones and/or the external pager. The paged person can answer your page from any telephone. You can also transfer a call after paging or denying to be paged.

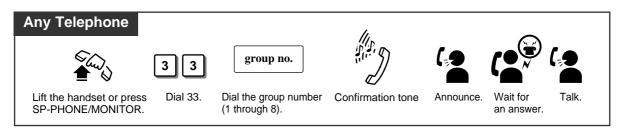
All extensions

Allows you to make a voice announcement to all extensions.



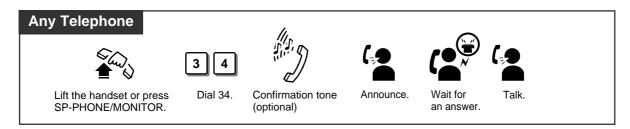
Group

Allows you to select an extension group and make a voice announcement. The announcement can only be heard through the extensions' built-in speakers.



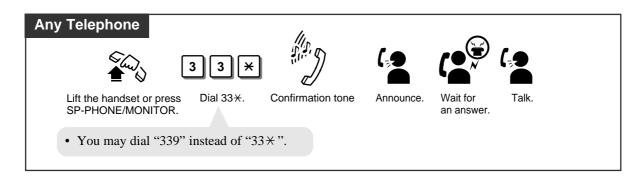
External

Allows you to make a voice announcement over the external pager.



All extensions & External

Allows you to make a voice announcement to all extensions. Your message is announced over the built-in speakers of proprietary telephones (PT) and the external pager.





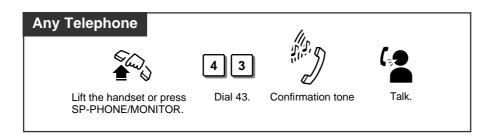
- If the pager is in use, a busy tone will be heard.
- The paged extension users hear a confirmation tone before the voice announcement.
- You can hear a confirmation tone from the external pager (External Pager Confirmation Tone) at the paged side before the voice announcement. The tone can be disabled.
- You can hear a confirmation tone before making the voice announcement.
- More than one person cannot use the paging feature at the same time.
- You cannot page extensions which have set the DND or Paging-Deny feature, or which are in use.



- 1.7 Useful Features, "Rejecting Incoming Calls (Do Not Disturb DND)"
- See the Installation Manual, Section 3, "Paging".

Answering a Page

Allows you to answer an announced page at any extension within the system.





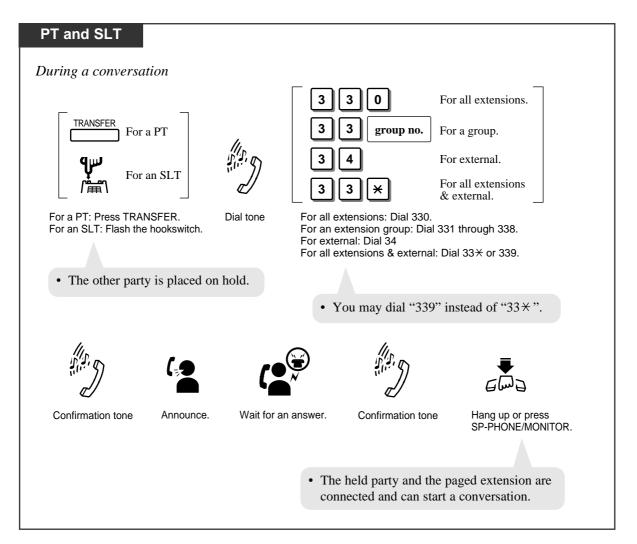


- You can hear a confirmation tone when the page is answered.
- If an outside call has been paged and transferred, you can answer the call by pressing the corresponding CO button whose indicator is flashing slowly.

During a Conversation *1.5*

Transferring after paging (Paging and Transfer)

You can transfer a call using the paging function (All Extensions, Group, External, or All Extensions & External).





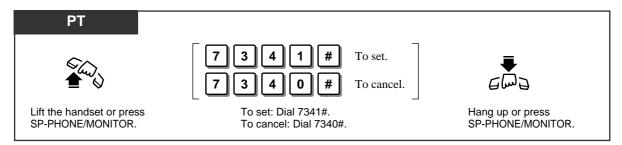
• If the external paging access tone is set to "Disable", a confirmation tone from the external paging equipment will not be heard after accessing external paging. Refer to System Programming, "External Paging Access Tone".

SLT • If "Hold-3" is assigned in System Programming, you must dial "20" after flashing the hookswitch.

Paging Deny

A page sent to a built-in speaker can be denied by any extension in the system.

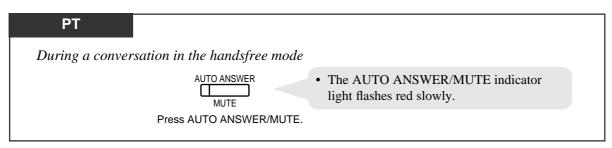
Setting / Canceling



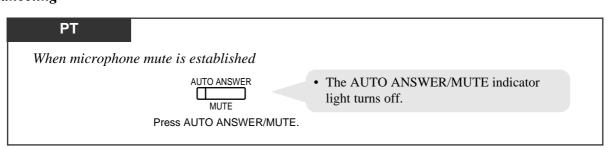
Turning off the Microphone (Microphone Mute)

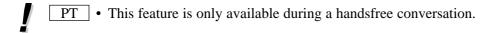
Allows you to turn off the microphone so you can consult privately with others in the room. You will still be able to hear the other party.

Setting



Canceling







• See the Installation Manual, Section 3, "Microphone Mute".

Forwarding a Call (Call Forwarding)

Automatically transfers incoming calls to another extension or to an external destination. The following types are available.

Түре	DESCRIPTION	
All Calls	All incoming calls are forwarded to another extension.	
Busy or No Answer	All incoming calls are forwarded to another extension when you do not answer or when your extension is busy.	
To Outside (CO) Line	All incoming calls are forwarded to an outside (CO) line.	
Follow Me	Allows you to set "Call Forwarding — All Calls" feature from another extension.	

Note: You can also set Voice Mail as the forwarding destination. Refer to "Voice Mail Integration" in this manual.

- To cancel the Call Forwarding features, refer to "Cancel" in this feature.
- Call Forwarding can only be extended to one target telephone. For example, extension A is forwarded to extension B, and if extension B tries to set Call Forwarding to extension C, an alarm tone is heard and the setting is rejected.

If extension B has already set Call Forwarding to extension C, and extension A tries to set Call Forwarding to extension B, the setting will be also rejected.



- If the destination extension has already set "Do Not Disturb", you cannot forward any calls to the extension.
- There should be at least one extension that can receive calls in the same UCD group.
- When a UCD extension which sets "Call Forwarding" function receives a call, the call will not be forwarded and the system will search for an idle extension in the UCD group first. But if the UCD extension is the last one that can receive the call, it will be forwarded to the assigned extension by "Call Forwarding".
- Setting a new "Call Forwarding" function (All Calls, Busy or No Answer, etc.) cancels any other "Call Forwarding" functions or the "Do Not Disturb (DND)" function.
- If your entry is valid, confirmation tone 1 (1 beep) is sent. If your entry is the same as previously programmed data, confirmation tone 2 (2 beeps) is sent. Refer to the "Tone List" in the Appendix (Section 2).
- You can call the original extension from the Call Forwarding destination extension (for example, Boss Secretary).
- Camp-On recall and Hold recall are not forwarded.

PT • A flexible CO button on a proprietary telephone which is not provided with FWD/DND button can be assigned as the FWD/DND button.

• The lighting patterns of the FWD/DND button are as follows.

Off: Both functions are not set.

Red: DND mode

Flashing red slowly: FWD mode

• You can check the assignment by pressing the FWD/DND button while on-hook.

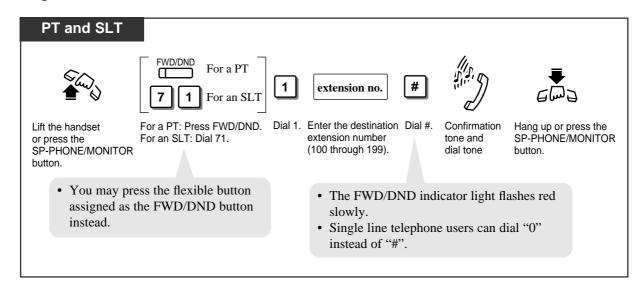


- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", FWD/DND Button
- 1.7 Useful Features, "Rejecting Incoming Calls (Do Not Disturb DND)"
- 1.7 Useful Features, "Voice Mail Integration"
- See the Installation Manual, Section 3, "Call Forwarding".

All Calls

You can re-direct all of your calls to another extension.

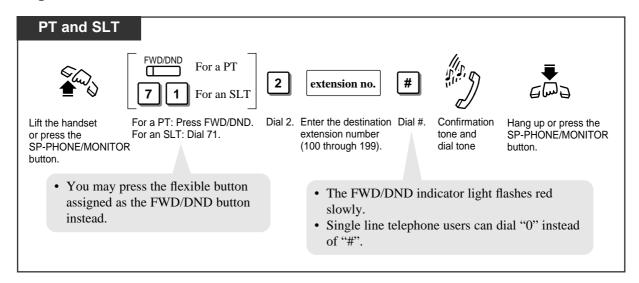
Setting



Busy or No Answer

You can forward your calls to another extension when your extension is busy or if you do not answer the call within a pre-determined time.

Setting





• "Voice Call" and "Handsfree Answerback" do not work when Call Forwarding — Busy or No Answer is set.

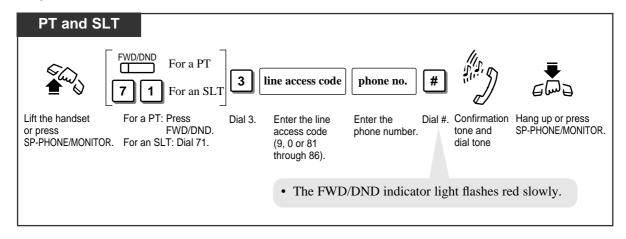


• 1.2 Proprietary Telephone Settings, "Customizing Your Telephone Functions", Intercom Alert Assignment

To Outside (CO) Line

You can forward calls to an external party. System Programming is required to execute this feature.

Setting



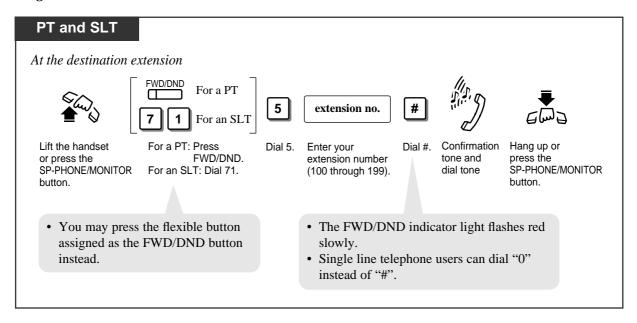


- If an incoming outside call is forwarded to an outside (CO) line, the "Outside-to-Outside (CO-to-CO) Line Call Duration Time" is applied to the call and the line will be disconnected when it expires (default: 10 min.). An alarm tone is sent to both parties 15 seconds before the assigned duration time limit.
- Up to 32 digits (including the line access code) can be programmed.
- If a CPC or reverse signal is sent to an outside (CO) line before the assigned duration time limit, a call between two external parties will be disconnected.
- This feature cannot be used for incoming outside calls from lines assigned as "Normal", by System Programming.
- In the account code verify-all, verify-toll and forced modes, an account code must be stored by pressing "** ** " and entering the account code after the line access code ("**" is not regarded as a pause).

Follow Me

You can set the "Call Forwarding" feature from the destination extension. This is useful if you forget to set "Call Forwarding — All Calls" before you leave your desk.

Setting



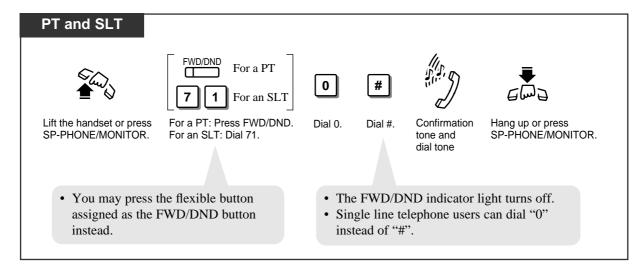


• This feature can be canceled at your extension or the destination extension.

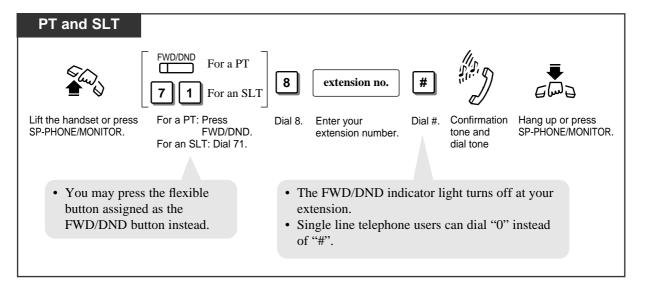
Cancel

There are two canceling methods for "Call Forwarding". The canceling depends on the Call Forwarding type that has been assigned.

Canceling Call Forwarding at your (original) extension



Canceling Call Forwarding at the destination extension — "Follow Me (All Calls)" only

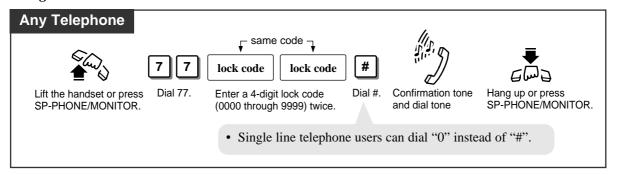


Locking Your Telephone (Electronic Station Lockout)

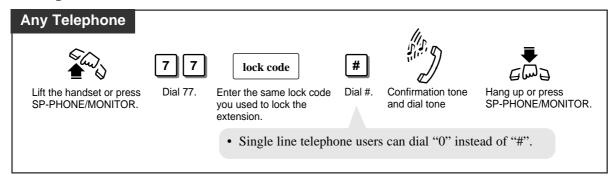
Allows you to lock your extension so that other users cannot make outside calls from your extension.



Locking



Unlocking





- If another user tries to access an outside (CO) line from a locked extension, the user will hear a reorder tone and for PT users "Restricted" is shown on the display. However, calls can be made at a locked extension depending on system programming. System programming determines which COS number applies to calls at the locked extension.
- An extension assigned as an operator or manager can cancel this function for all the other extensions (Electronic Station Lockout — CANCEL ALL).
- "Remote Station Lock Control" overrides this feature. If the operator or manager sets Remote Station Lock on the extension you have already locked, you cannot unlock it.
- The lock code must be 4 digits except for the "#" and "*\times" buttons.
- You can make intercom calls and receive intercom or outside calls at a locked extension.
- You can make outside calls depending on the toll restriction class.

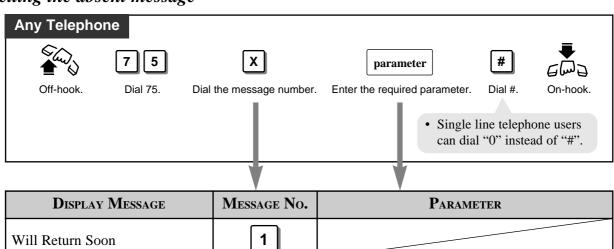


- 1.8 Operator/Manager Service Features, "Electronic Station Lockout CANCEL ALL"
- 1.8 Operator/Manager Service Features, "Remote Station Lock"
- See the Installation Manual, Section 3, "Toll Restriction Station Lock Boundary Class".
- See the Installation Manual, Section 3, "Station Lock".

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

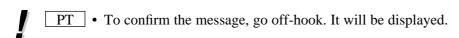
When a caller using a proprietary telephone with a LCD dials another extension, a programmed Absent Message (Message 1 through 6) will be displayed on the calling party's LCD. Absent Messages can be programmed at any telephone (SLT or PT).

Setting the absent message



DISPLAY MESSAGE	Message No.	Parameter
Will Return Soon	1	
Gone Home	2	
At Ext %%% (extension number)	3	extension no. Enter the extension number (100 though 199).
Back at %%:%% AM (or PM) (hour:minute)	4	hour minute 0 or 1 Enter the hour (01 through 12). (00 through 59). For PM: press 1.
Out Until %%/%% (month/day)	5	month day Enter the month Enter the day (01 through 12). (01 through 31).
In a Meeting	6	
Cancel	0	

Note: % indicates where you enter the desired parameter.



• See the Installation Manual, Section 3, "Absent Message Capability".

Conference (3-party)

During a 2-party conversation, you can add a third party to make a 3-party conference. The maximum number of extensions and outside (CO) lines in a conference can be changed by System Programming.

Establishing a conference



During a 2-party conversation



phone no.



CONF



A 3-party conference is now established.

Press CONF.

Enter the phone number of the third party.

Talk to the third party.

Press CONF.

Confirmation tone (optional)

- The CONF indicator light turns steady red.
- The corresponding CO or INTERCOM indicator light turns green.
- You must dial the line access code (9, 0 or 81 through 86) as the first digit when calling an external party.
- The current party is placed on hold.
- The CONF indicator light flashes red slowly.

SLT

During a 2-party conversation



phone no.



懂





A 3-party conference is now established.

Flash the hookswitch.

Enter the phone number of the third party.

Talk to the third party.

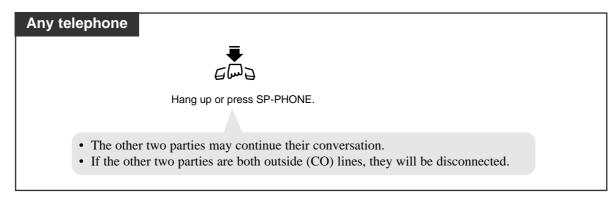
Flash the hookswitch.

sh the Dial 3.

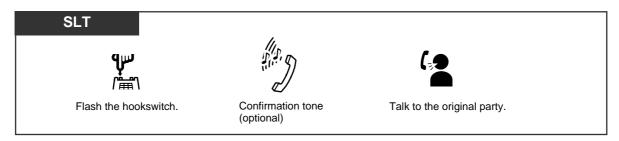
Confirmation tone (optional)

- You must dial the line access code (9, 0 or 81 through 86) as the first digit when calling an external party.
- The other party is placed on hold.

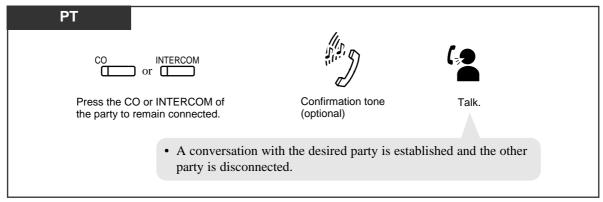
To leave the conference



To talk to the original party while holding the third party



To terminate one party and talk to the other



A conference call can also be established by "Executive Busy Override".
When a 2-party call is changed to a 3-party call or vice versa, a confirmation tone is sent to all parties. The tone can be disabled.
PT • Pressing a CO button which is not in the conference allows you to exit from the conference, leaving the other two parties connected unless they are both outside (CO) lines. If the other parties are both outside (CO) lines, they will be disconnected.
PT • If the third party does not answer, press the CO button or INTERCOM button to return to the second party.
PT • To change a 3-party conference to a 5-party conference, refer to "Conference (5-party)".
SLT • You can return to the original party before the third party answers by flashing the hookswitch.
SLT • If "Hold-2" or "Hold-3" is assigned in System Programming, you must dial "20" after flashing the hookswitch.

Useful Features 1.7

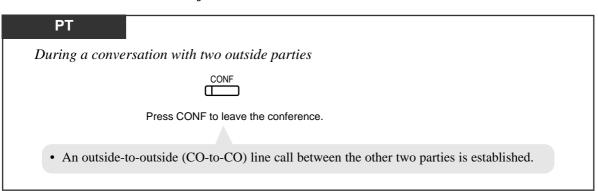


- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", CONF (Conference) Button
- 1.3 Making Calls, "Interrupting an Existing Call (Executive Busy Override)", Executive Busy Override — Extension
- 1.3 Making Calls, "Interrupting an Existing Call (Executive Busy Override)" Executive Busy Override — Outside (CO) Line"
- 1.7 Useful Features, "Conference, Unattended"
- See the Installation Manual, Section 3, "Conference (3-party)".

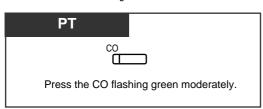
Conference, Unattended

When you are in a conference with two outside parties, you can leave the conference call allowing the other two parties to continue their conversation.

To establish an Unattended Conference



To return to the conference





- - During a 5-party conference, you cannot use this feature.
- When an Unattended Conference is established, an alarm tone is sent to both outside parties 15 seconds before the assigned time limit (default: 10 min.). "Hold Recall" is activated at the extension that leaves the conference 50 seconds before the time out. The call is disconnected when the time out expires unless the extension returns to the conference.



• For example, if you are on-hook and hear "Hold Recall" during the Unattended Conference mode, the display will show "CO 2 & CO 3" for 50 seconds before the time out.

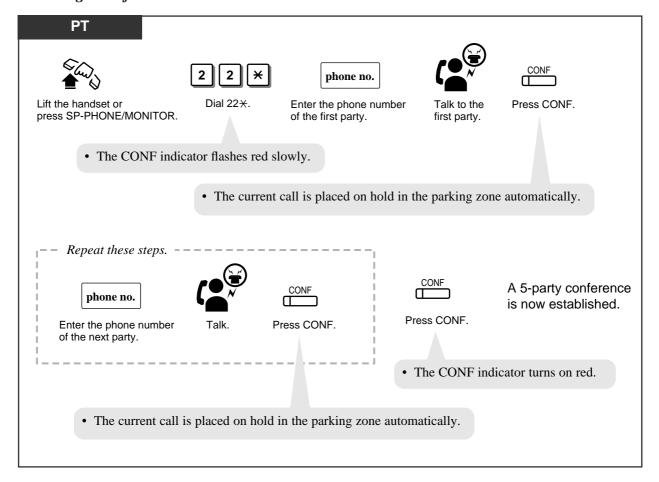


- 1.7 Useful Features, "Conference (3-party)"
- See the Installation Manual, Section 3, "Conference (3-party)".

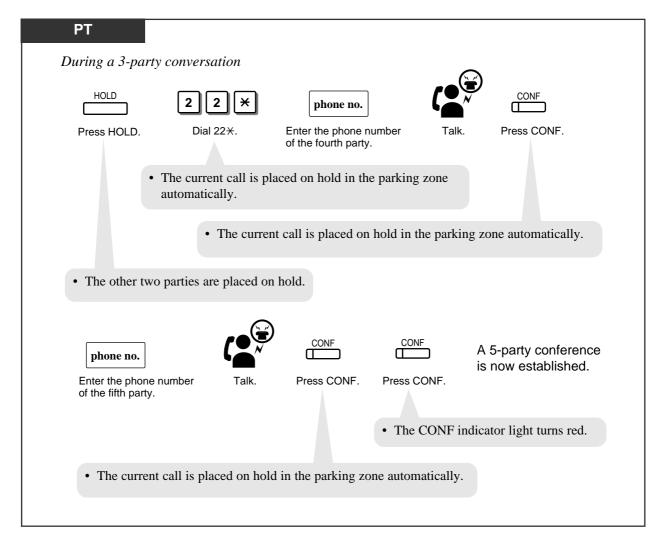
Conference (5-party)

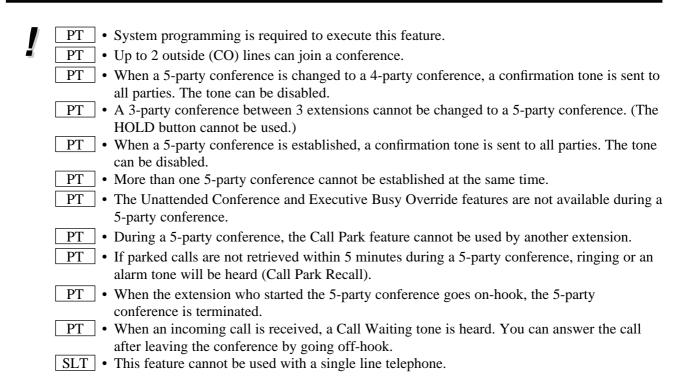
Allows you to establish a 5-party conference. The members of a conference may be up to 5 extensions, or 3 extensions and 2 outside (CO) lines.

Establishing a conference



To change to a 5-party conference during a 3-party conference







- 1.3 Making Calls, "Interrupting an Existing Call (Executive Busy Override)"
- 1.5 During a Conversation, "Call Waiting"
- 1.7 Useful Features, "Conference (3-party)"
- 1.7 Useful Features, "Conference, Unattended"
- See the Installation Manual, Section 3, "Conference (5-party)".

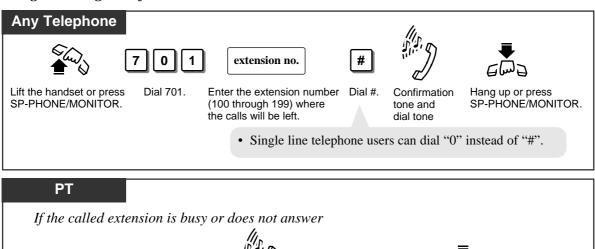
Advanced Operations

Leaving a Message Notification (Message Waiting)

When the called extension is busy or does not answer your call, you can leave a notification so that the called party may call you back.

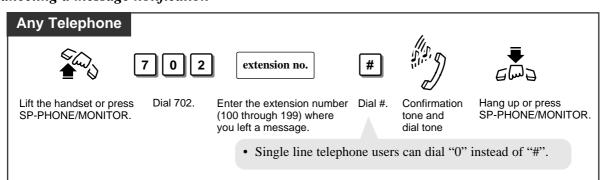
As a message receiver, the MESSAGE button light lets you know that a call has been received. If you receive notification, you can call back the original party by a simple operation. This feature is available only for proprietary telephones with MESSAGE buttons.

Leaving a message notification



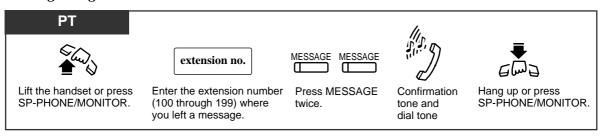
Canceling a message notification

Press MESSAGE.



Confirmation tone and dial tone

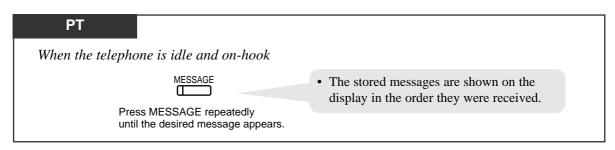
Canceling using the MESSAGE button



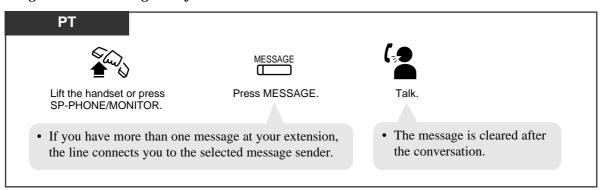
Hang up or press SP-PHONE/MONITOR.

Checking and Selecting a message notification by the message receiver

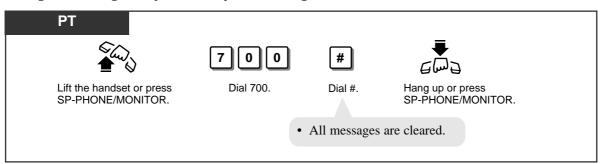
If there is a message, the message waiting lamp (MESSAGE indicator) light will be on.



Calling back the message notification sender



Clearing all message notifications by the message receiver





- Each extension can have a maximum of 8 simultaneous messages. If you try to set the ninth message, you will hear a reorder tone.
- If the MESSAGE indicator does not go out after calling the extension which left the message, another message is waiting.
- If multiple message notifications are left at your extension, call back is executed in the order received.
- If you select a specific message to call back, the other call backs will be executed in the order received, starting with the one selected.

(e.g.)
$$5 \rightarrow 6 \rightarrow 7 \rightarrow 8 \rightarrow 1 \rightarrow 2 \rightarrow 3 \rightarrow 4$$

• If a message has been left at your extension, you cannot cancel the setting using the MESSAGE button. You have to cancel the setting using the feature number 702.



- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", Restoring the MESSAGE Button
- See the Installation Manual, Section 3, "Message Waiting".

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, account codes are not required. For outgoing outside calls, account codes are often required. You can enter account codes in the following 4 modes.

Verify - All mode: You must always enter the pre-assigned account code.

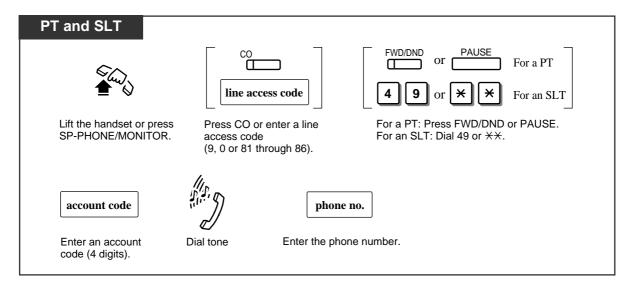
Verify - Toll mode: You must always enter the pre-assigned account code. You can enter your extension password so that you can override toll restriction.

Option mode: An account code can be entered when a record of the account code is required.

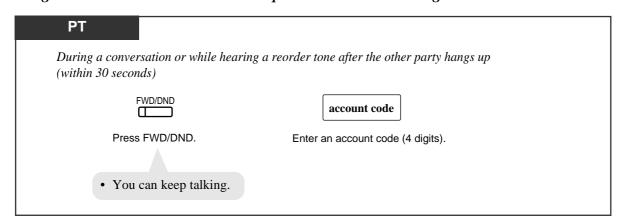
It can be any number.

Forced mode: You must always enter an account code. It can be any number.

Making calls with account codes except in the Option mode



Making calls with account codes in the Option mode and receiving calls



Useful Features *1.7*



- In the Verify-All and Verify-Toll modes, you must always enter a pre-assigned account code.
- You do not need to make an account code entry when receiving incoming calls.
- You can clear and re-enter a number by pressing "* * " or the FWD/DND button while entering an account code.
- An account code can be stored into Memory Dialing ("One-Touch Dialing", "Pickup Dialing", "System/Personal Speed Dialing", "Call Forwarding — to Outside (CO) Line"). The sequence to enter an account code into Memory Dialing is as follows.
 - [Feature Number] [Line Access Code] [* *] [Account Code] [Phone Number]
- If an entered account code does not match the pre-assigned account code in the verify-all mode or the verify-toll mode, when making an outside call, a reorder tone is heard.



PT • An account code has 4 digits (0 through 9). FLASH, PAUSE, etc. cannot be used.



- 1.8 Operator/Manager Service Features, "Extension Password Set (Manager only)"
- See the Installation Manual, Section 3, "Station Message Detail Recording (SMDR)".
- See the Installation Manual, Section 3, "Account Code Entry".
- See the Installation Manual, Section 3, "Toll Restriction Override by Extension Password".

Rejecting Incoming Calls (Do Not Disturb — DND)

Allows you to prevent other parties from disturbing you. Your extension will not receive intercom or outside calls.



Setting / Canceling

PT and SLT For a PT To set. For an SLT To cancel. To set: Dial 4. Confirmation tone Lift the handset For a PT: Press Dial #. Hang up or press FWD/DND. or press To cancel: Dial 0. and dial tone SP-PHONE/MONITOR. SP-PHONE/MONITOR. For an SLT: Dial 71. • Single line telephone users can dial "0" instead of "#".



- A calling extension that has "Do Not Disturb (DND) Override" enabled can override your extension when the "Do Not Disturb (DND)" mode is set.
- DND also works for paging.
- If the Call Forwarding feature has already been set, setting the DND feature will cancel Call Forwarding.
- The Timed Reminder alarm and Hold Recall features override this feature.
- PT A flexible CO button on a proprietary telephone which is not provided with FWD/DND button can be assigned as the FWD/DND button.
- PT • If the "Do Not Disturb (DND)" mode is set, you can still answer a call by pressing the CO
- - PT The lighting patterns of the FWD/DND button are as follows.

Off: Both functions are not set.

Red: DND mode

Flashing red slowly: FWD mode



- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", FWD/DND Button
- 1.6 Before Leaving Your Desk, "Forwarding a Call (Call Forwarding)"
- 1.7 Useful Features, "Calling an Extension which Denies Receiving Calls (Do Not Disturb Override)"
- See the Installation Manual, Section 3, "Do Not Disturb (DND)".

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

Allows you to call an extension even though the "Do Not Disturb — DND" feature is set. System Programming is required to use this feature.

Any Telephone

If you make an intercom call and hear a Do Not Disturb (DND) tone



2



DND tone

Dial 2.

Wait for an answer.



- If you hear a reorder tone after dialing 2, the "Do Not Disturb Override" feature is not set at your extension.
- If you hear a busy tone after dialing 2, the line is busy. You can use the Automatic Callback Busy feature.



- 1.7 Useful Features, "Rejecting Incoming Calls (Do Not disturb DND)"
- See the Installation Manual, Section 3, "Do Not Disturb (DND)".

Secret Dialing

Allows you to conceal all or part(s) of a "System Speed Dialing number" or "One-Touch Dialing number" assigned to a flexible button, both which normally appear on the display.

PT

When storing the phone number

INTERCOM

Press INTERCOM before and after the part you wish to conceal.

<PT Display Example>

9-1-[201]... — "201" is not shown on the display when you dial.

PT • A secret code, "[" or "]" (pressing the INTERCOM button), are counted as 1 digit.

PT • You can conceal one or more parts of a telephone number.

• If the phone number "9-1-[201]-431-21xx" has been stored, the display will show the following when the call is made.

• You can program whether to print out the concealed number(s) on the SMDR or not by System Programming.

PT • Do not press the INTERCOM button before a line access number (9, 0 or 81 through 86).



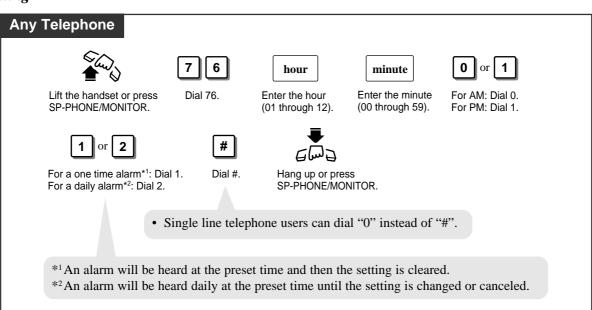
- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", One-Touch Dialing Button
- 1.3 Making Calls, "Dialing by Simply Pressing a Button (One-Touch Dialing)"
- 1.3 Making Calls, "Dialing with a System Speed Dialing Button (System Speed Dialing)"
- See the Installation Manual, Section 3, "Secret Dialing".

Alarm Setting (Timed Reminder)

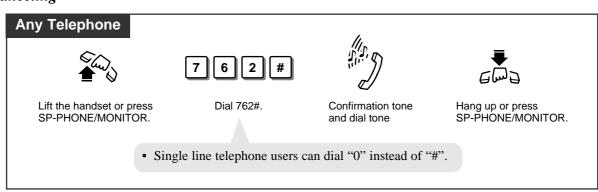
You can receive a ringback at your telephone to remind you of a meeting or appointment. Either one time or daily (everyday until canceled) is available at a pre-set time. At home, you can also use this feature as a wake-up call.



Setting

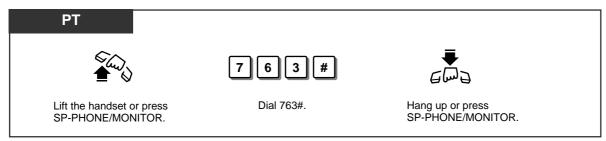


Canceling

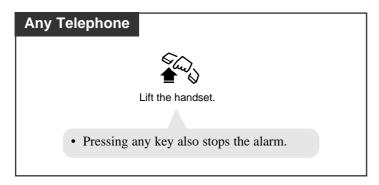


1.7 Useful Features

Checking the set time (with a display PT only)



Stopping the alarm





- Be sure the system clock is set correctly.
- The alarm continues for thirty seconds.
- If you receive an incoming call during the alarm, ringing starts after the alarm stops.
- If the alarm is set to sound during a conversation, the alarm will start after the conversation.
- If you set a new time, the preset time will be cleared.



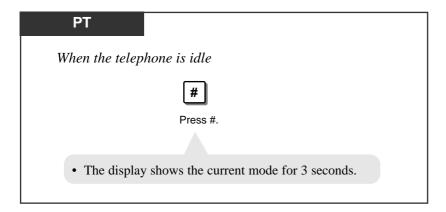
• See the Installation Manual, Section 3, "Timed Reminder".

1.7 Useful Features

Time (Day/Night/Lunch) Service

This system supports the Day, Night and Lunch modes. The system operation for originating and receiving calls can be different in the day, night and lunch modes. "Time Service" can only be set by the operator and manager. For a PT user, even if your extension is not assigned as the operator or manager, you can use your display to check the current mode.

Confirming the current mode (with a display PT only)





• The Day/Night/Lunch mode is automatically switched at a predetermined time (default: 9:00 a.m. for every day, 5:00 p.m. for every night), if the automatic mode is selected.



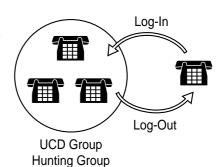
- 1.8 Operator/Manager Service Features, "Time(Day/Night/Lunch) Service Setting"
- See the Installation Manual, Section 3, "Time (Day/Night/Lunch) Service".

Advanced Operations

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

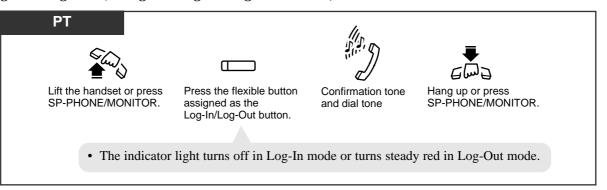
Allows you to assign the Log-In mode or Log-Out mode within a hunting, DISA ring or UCD group. When in the Log-Out mode, you can leave the group temporarily, preventing hunting calls from being sent to your extension. The lighting patterns of the Log-In/Log-Out button on a proprietary telephone and status are as follows.

Off: Log-In mode Red: Log-Out mode

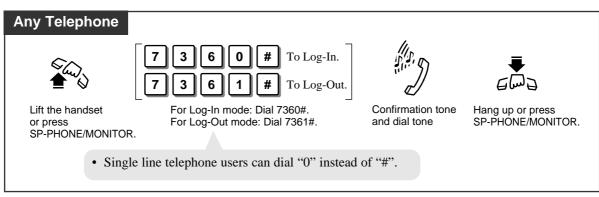


DISA Ring Group

Log-In / Log-Out (Using the Log-In/Log-Out button)

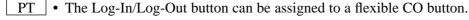


Log-In / Log-Out (Using the feature number)





- The default is "Log-In" mode.
- There should be at least one extension in the group that is in the Log-In mode.
- When in the Log-Out mode, the last extension in a UCD group cannot leave the group.



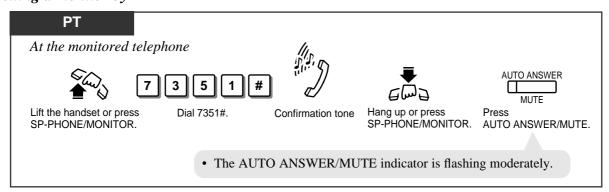


- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", Log-In/Log-Out Button
- See the Installation Manual, Section 3, "Station Hunting".
- See the Installation Manual, Section 3, "Direct Inward System Access (DISA)".
- See the Installation Manual, Section 3, "Uniform Call Distribution (UCD)".
- See the Installation Manual, Section 3, "Log-In/Log-Out".

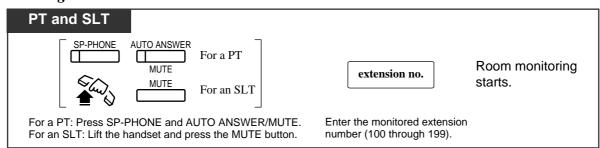
Room Monitor

Allows you to monitor a room through a proprietary telephone with an AUTO ANSWER/MUTE button (AUTO ANS/MUTE button on a KX-T7300 series). The proprietary telephone you want to monitor should be prepared for monitoring beforehand. You can also monitor through a doorphone. You can use a proprietary telephone with an AUTO ANSWER/MUTE button (AUTO ANS/MUTE button on a KX-T7300 series) and single line telephone with a MUTE button for monitoring.

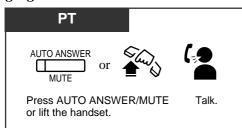
Setting a monitor by PT



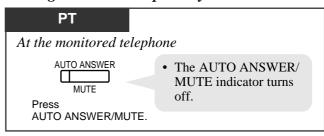
Monitoring



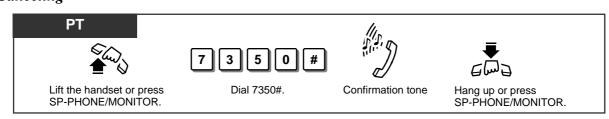
Paging a monitored room



Canceling a monitor temporarily

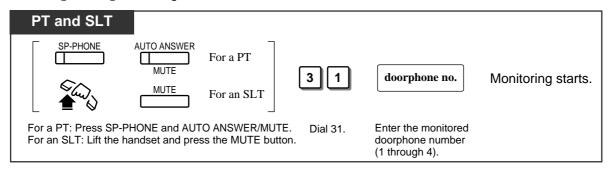


Canceling



1.7 Useful Features

Monitoring through a doorphone





PT • Syst

• The doorphone access tone can be eliminated by System Programming.

• System Programming is required to monitor through a PT.

• The access tone will not be sent to the monitored PT. The paging tone will also not be sent to the monitored PT.

• This feature is not available for the KX-T7350, KX-T7050 and KX-T7055.

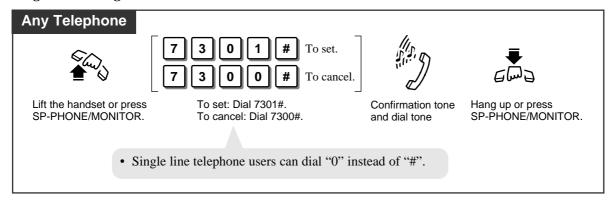


- See the Installation Manual, Section 3, "Room Monitor".
- See the Installation Manual, Section 3, "Doorphone Call".

Data Line Security

Your extension can be protected against interruptions from the "Call Waiting", "Hold Alarm", and "Executive Busy Override" features. Data communication devices, such as computers and facsimiles, can operate uninterrupted.

Setting / Canceling





- 1.3 Making Calls, "Interrupting an Existing Call (Executive Busy Override)", Executive Busy Override Extension
- 1.3 Making Calls, "Interrupting an Existing Call (Executive Busy Override)", Executive Busy Override Outside (CO) Line
- 1.5 During a Conversation "Call Waiting"
- See the Installation Manual, Section 3, "Data Line Security".
- See the Installation Manual, Section 3, "Hold".

Parallel Connection of a Proprietary Telephone and Single Line Telephone (Paralleled Telephone Connection)

Any extension connected to jack numbers 01 through 16 can be connected in parallel with a proprietary telephone and a single line telephone. In the event of a power failure, CO1 and CO4 can be accessed using the single line telephones that are connected in parallel with the proprietary telephones to extension jacks 01 and 09 respectively. If the extension receives a call, ringing will be heard from the proprietary telephone and the single line telephone. You can answer the call by using either the proprietary telephone or the single line telephone. An answering machine, facsimile, MODEM (personal computer), etc., can be connected instead of a single line telephone.

System Programming is required to enable this feature.





PT • A proprietary telephone LCD will show you a single line telephone is in use.

SLT • The following features will not work with a single line telephone connected in parallel with a proprietary telephone.

Call Splitting

External Feature Access

Account code input

Conference

Pickup dialing

- SLT A single line telephone connected in parallel with a proprietary telephone cannot make a call in the following cases.
 - The proprietary telephone is set to the BGM mode.
 - The proprietary telephone is receiving a page through the built-in speaker.
 - The proprietary telephone is set to the PROGRAM mode.

- SLT A single line telephone connected in parallel with a proprietary telephone will not ring in the following cases.
 - The proprietary telephone is set to Handsfree Answerback.
 - The proprietary telephone is set to "Voice Call" in the Intercom Alert Assignment.



• See the Installation Manual, Section 3, "Paralleled Telephone Connection".

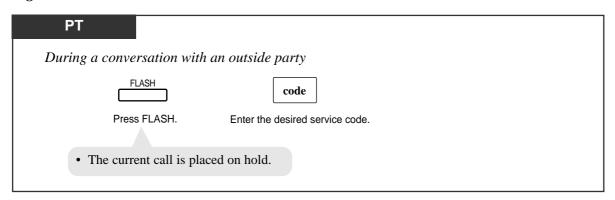
Mixed Station Dialing

Any telephone, either a KX-T7033/KX-T7030/KX-T7020/KX-T7050/KX-T7055/KX-T7330/ KX-T7320/KX-T7350/KX-T7130, single line rotary phone (10 pps, 20 pps) or single line touch tone telephone, may be used as an extension for the system.

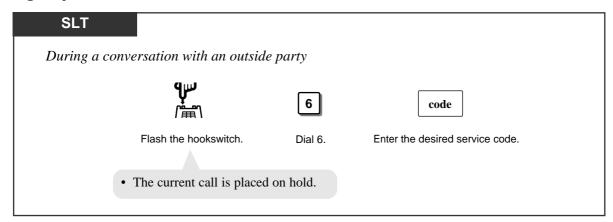
External Feature Access

Allows you to access special features (e.g. Call Waiting) offered by a host PBX or Central Office. This feature is effective only during an outside call. You can access the feature by using either the FLASH button or the feature number.

Using the FLASH button



Using the feature number







- ▲ "Flash Time" must be assigned as required by the host PBX, or outside (CO) line.
- You may access some features of the host PBX using the FLASH button. If the system is connected to a host PBX and the flash operation is required, follow the flash operation procedure which is required by the host PBX.
 - FLASH button also allows you to disconnect the current call and make another call without hanging up by System Programming. You can also assign a flexible button for the flash button.



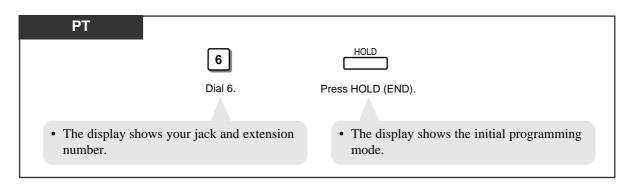
- 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", One-Touch Access for System Features"
- 1.3 Making Calls, "Flash"
- See the Installation Manual, Section 3, "External Feature Access".

1.7 Useful Features

Self-Extension Number Confirmation (KX-T7330/KX-T7030/KX-T7130/KX-T7033 only)

Allows you to display your jack and extension number.

To program, set the MEMORY switch on the proprietary telephone to "PROGRAM" or press the PROGRAM button on the KX-T7300 series.





- Be sure the handset is on the cradle and the SP-PHONE button is off.
- After programming, return the MEMORY switch to the "SET" position or press the PROGRAM button on the KX-T7300 series.
- You can confirm your Self-Extension Number by pressing "XX" while on-hook.

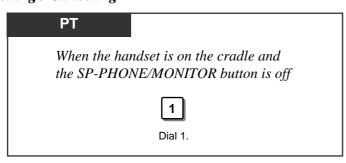


• See the Installation Manual, Section 3, "Self-Extension Number Confirmation (KX-T7330/KX-T7030/KX-T7130/KX-T7033 only)".

Turning on the Background Music (BGM)

You can listen to background music through the built-in speaker of the telephone. An external music source, such as a radio, must be connected. The music stops whenever a call comes in or when you go off-hook.

Setting / Canceling





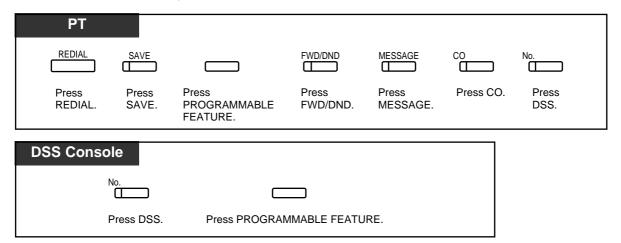
• See the Installation Manual, Section 3, "Music on Hold/Background Music (BGM)".

Extension Button Confirmation (KX-T7330/KX-T7030/KX-T7130/KX-T7033 only)

You can confirm the values stored in the button using the LCD.

Checking

Press the button you want to confirm.





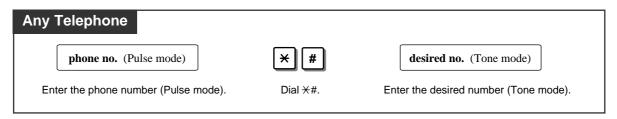
- Be sure the handset is on the cradle and the SP-PHONE button is off.
- When the display exceeds 17 characters, the "&" mark will be displayed on the right side of the LCD.



• See the Installation Manual, Section 3, "Extension Button Confirmation (KX-T7330/KX-T7030/KX-T7130/KX-T7033 only)".

Pulse to Tone Conversion

Allows you to change the dialing mode from Pulse to Tone to access services, such as computer telephone services and Voice Mail which require tones.





• You cannot change from Tone to Pulse dialing mode.



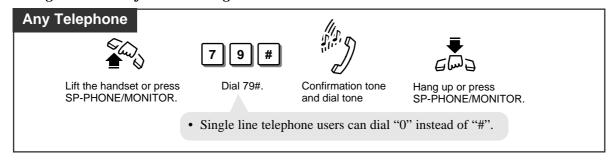
• See the Installation Manual, Section 3, "Pulse to Tone Conversion".

Canceling the Feature Settings (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) Call Pickup Deny
- f) Call Waiting
- g) Data Line Security
- h) Do Not Disturb (DND)
- i) Executive Busy Override Deny
- j) Log-In/Log-Out
- k) Message Waiting (All messages will be erased.)
- 1) Pickup Dialing (The stored telephone number will be erased.)
- m) Paging-Deny
- n) Room Monitor
- o) Timed Reminder
- p) Voice Mail Integration

Clearing the current feature settings

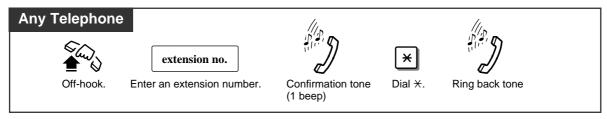




• See the Installation Manual, Section 3, "Station Feature Clear".

Alternate Calling — Ring/Voice (Voice to Ring only)

"Voice Call" (through the built-in speaker) which is set at the called party's extension can be switched to "Tone Call" (ringing). This feature must be set beforehand at the called party's extension. Refer to Proprietary Telephone Settings (Section 1.2). A rotary phone cannot be used.



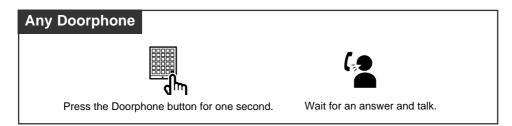


• See the Installation Manual, Section 3, "Alternate Calling — Ring/Voice (Voice to Ring only)".

Doorphone Call

Allows you to have a conversation with a visitor at your doorphone. Up to 4 doorphones can be connected to the system.

Calling an extension from a doorphone



Answering a doorphone call

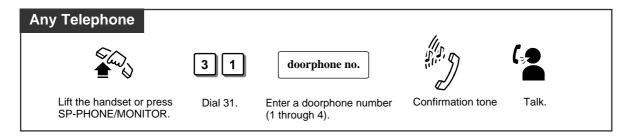
Any Telephone

When you hear the doorphone ring tone at the extension:



Lift the handset or press SP-PHONE/MONITOR.

Calling a doorphone





- An optional doorphone/door opener card and doorphones are necessary for this feature.
- If you do not answer an incoming doorphone call within 15 or 30 seconds, the call will be canceled.
- You must program the extensions which can receive calls from each doorphone for the day, night and lunch modes.
- Any extension user can call a doorphone.
- The Call Waiting feature is not available with doorphone calls.
- Doorphone 1 and Doorphone 2 cannot receive calls simultaneously. When one is in use, an extension user cannot have a conversation with the other. This is the same for Doorphone 3 and Doorphone 4.
- Doorphones can also be used for the Room Monitor feature.



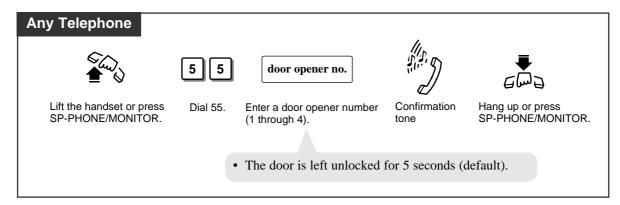
- 1.7 Useful Features, "Room Monitor"
- See the Installation Manual, Section 3, "Doorphone Call".

1.7 Useful Features

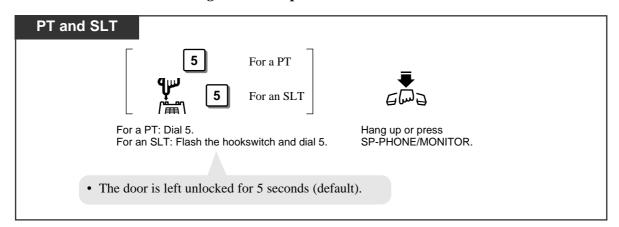
Door Opener

Allows you to unlock the door from your telephone. Up to 4 door openers can be connected to the system.

To unlock the door from an assigned extension



To unlock the door while talking to the doorphone





- An optional doorphone/door opener card is necessary for this feature.
- If you dial 5 again while the door is open, the door will stay open for another 5 seconds (default).
- You can program the extensions which can open the doors for the day, night and lunch modes.
- You can modify the door opener timer in System Programming.
- The door opener will open the door, even if a doorphone is not installed.



• See the Installation Manual, Section 3, "Door Opener".

Voice Mail Integration

Allows you to use a Voice Processing System to forward your calls to a mailbox in the system. A caller can leave a message in your mailbox. If you use a proprietary telephone which has a MESSAGE button, the button light will turn on to let you know you have messages. If you use a single line telephone, dial tone 3 will let you know you have messages when you go off-hook.

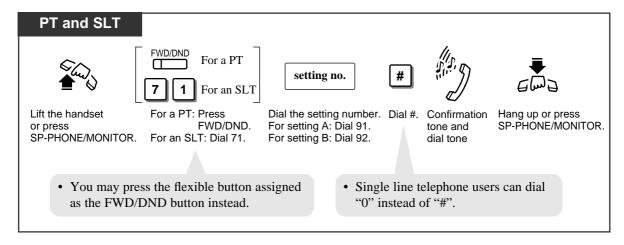
If this feature is enabled, the system automatically sends the Follow-on ID to the Voice Mail Port before connecting the caller. You must choose one of the following two settings for the Follow-on ID format.

Setting A: only sends the extension number to the Voice Mail Port.

Setting B: sends "#6" followed by the extension number. "#6" is used by a Panasonic KX-Voice Processing System to force the VPS port into voice mail service.

The setting depends on the format required by your voice processing system.

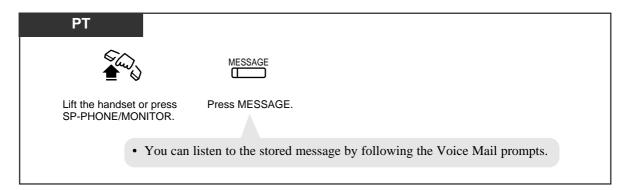
Setting



Listening to a stored message

You can listen to the messages stored in your mailbox easily. There are two operations to play back messages.

Using the Message Waiting (MESSAGE) button



By manual dialing

Any Telephone



Lift the handset or press SP-PHONE/MONITOR.

Voice Mail extension no.

Enter the Voice Mail extension number.

· When you use an SLT, you will hear dial tone 3 if there are messages.

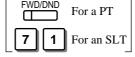
· You can listen to the stored message by following the Voice Mail prompts.

Canceling

PT and SLT













Lift the handset or press SP-PHONE/MONITOR.

For a PT: Press FWD/DND. For an SLT: Dial 71.

Dial 90#.

Confirmation tone and dial tone

Hang up or press SP-PHONE/MONITOR.

- Single line telephone users can dial "0" instead of "#".
- You may press the flexible button assigned as the FWD/DND button instead.



 To forward your calls to your mailbox by the Call Forwarding feature, you have to set "Call Forwarding — All Calls" or "Call Forwarding — Busy or No Answer". The setting is as follows.

[Off-hook] [FWD/DND or 71] [91# or 92#] (after hearing a confirmation tone and dial tone) [FWD/DND or 71] [1 (All Calls) or 2 (Busy or No Answer)] [Voice mail extension number] [#] [On-hook]

Canceling the setting uses the same procedure as Voice Mail Integration.



PT • A flexible button can be assigned as the FWD/DND button.

SLT • You will hear dial tone 3 if there are messages in your mailbox when you go off-hook. When you access voice mail, you have to listen to all of the new messages. If you do not listen to all of the messages, dial tone 3 will be eliminated and you will not know there are messages in your mailbox the next time you go off-hook.



• 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", FWD/DND Button,

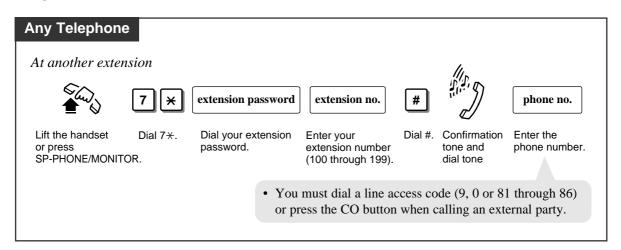
Restoring the Message Button

- 1.6 Before Leaving Your Desk "Forwarding a Call (Call Forwarding)", All Calls, Busy or No Answer
- See the Installation Manual, Section 3, "Intercept Routing".
- See the Installation Manual, Section 3, "Voice Mail Integration".

Calling Using Your Privileges at Another Extension (Walking COS)

Allows you to use your calling privileges (TRS — Class of Service) at another extension. You may override restrictions which may be set at the extension.

Making a call





- TRS Class of Service (COS) is used to define the feature. Each extension is assigned a TRS COS number.
- If your extension is assigned to the Account Code Forced or Verify All mode, you must enter the account code before the line access code.



SLT • A rotary telephone cannot use this feature.



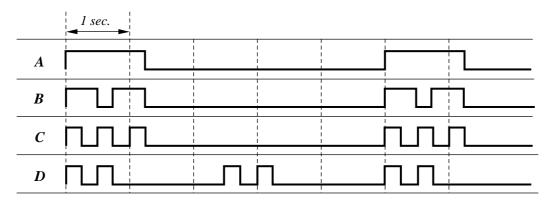
- 1.8 Operator/Manager Service Features, "Extension Password Set (Manager only)"
- See the Installation Manual, Section 3, "Toll Restriction Override by Extension Password".
- See the Installation Manual, Section 3, "Walking COS".

Ringing Pattern Selection

A different ringing pattern is used to distinguish intercom calls from incoming outside calls.

• You can select the ringing pattern as follows in System Programming.

Outside (CO) line: 3 patterns (A, B or C)
Extension: 3 patterns (A, B or C)
Doorphone: 4 patterns (A, B, C or D)





- 2.1 Tone / Ring Tone List
- See the Installation Manual, Section 3, "Ringing Pattern Selection".

Distinctive Dial Tone

A distinctive dial tone will be heard from the handset if the extension user has previously activated a certain feature.

Dial Tone 1: Ordinary dial tone

Dial Tone 2: When any of the following features are activated.

- Absent Message Capability
- Back Ground Music (BGM) (only a proprietary telephone)
- Call Forwarding
- Call Pickup Deny
- Data Line Security
- Do Not Disturb (DND)
- Electronic Station Lockout
- Message Waiting (only a proprietary telephone)
- Pickup Dialing (only a single line telephone)
- Timed Reminder

Dial Tone 3: When performing Account Code Entry and answering a Timed Reminder call.

Also sounds when going off-hook with an SLT which has a message in a Voice Processing System.



- 2.1 Tone / Ring Tone List
- See the Installation Manual, Section 3, "Distinctive Dial Tone".

1.7 Useful Features

Power Failure Transfer

During a power failure, each outside (CO) line will be connected to an assigned extension.

Outside (CO) line 1: extension jack 01 Outside (CO) line 4: extension jack 09



- During a power failure, all features cannot be used except for incoming and outgoing outside calls from extension jacks 01 and 09.
- If extension jacks 01 and 09 are connected to proprietary telephones, disconnect the units and connect single line telephones.
- Automobile type batteries, which are customer supplied, are available as a system back up power supply to operate all the features during a power failure.
- The batteries can be connected directly to the unit. For more information, refer to the Installation Manual.



• See the Installation Manual, Section 3, "Power Failure Transfer".

Lockout

If one party in a conversation goes on-hook, both parties will be disconnected from the speech path automatically. A reorder tone is sent to the off-hook party before it is disconnected. No operation is necessary.

1.8 Operator / Manager Service Features

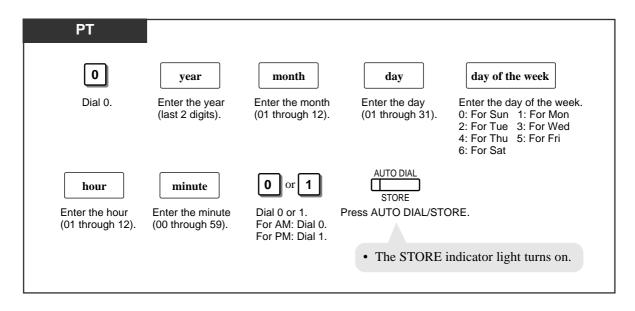
The system supports one operator and one manager. Any extension can be appointed as the operator and extension jack 01 is appointed as the manager. System Programming is required to assign the operator. They can perform the following features.

- 1) Date and Time Setting
- 2) Electronic Station Lockout CANCEL ALL
- 3) Timed Reminder, Remote (Wake-Up Call)
- 4) Outgoing Message (OGM)
- 5) Remote Station Lock
- 6) Time (Day/Night/Lunch) Service Setting
- 7) Extension Password Set (Manager only)

Date and Time Setting

When the current time setting is wrong, you can adjust it by the following procedure.

Setting





- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to "PROGRAM" or press the PROGRAM button on the KX-T7300 series.
- After programming, return the MEMORY switch to the "SET" position or press the PROGRAM button on the KX-T7300 series.

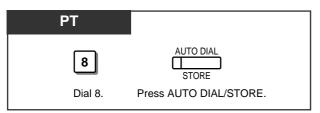


• See the Installation Manual, Section 3, "Date and Time Setting".

Electronic Station Lockout — CANCEL ALL

You can cancel Electronic Station Lockout at all extensions.

Setting





- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to "PROGRAM" or press the PROGRAM button on the KX-T7300 series.
- After programming, return the MEMORY switch to the "SET" position or press the PROGRAM button on the KX-T7300 series.

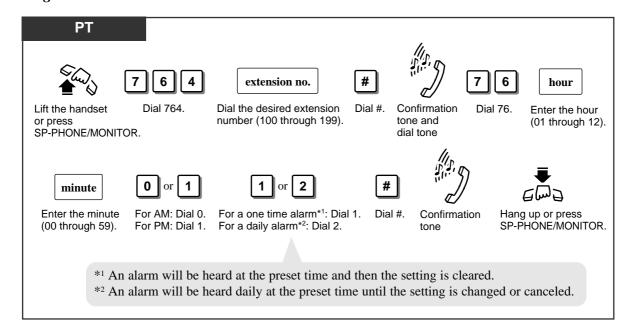


• See the Installation Manual, Section 3, "Station Lock".

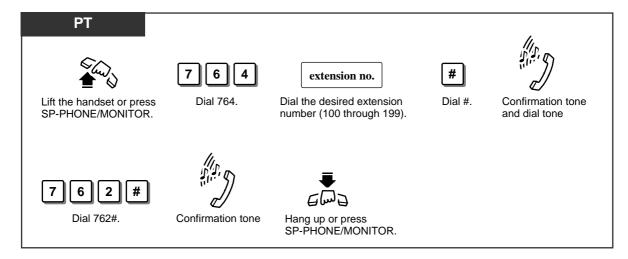
Timed Reminder, Remote (Wake-Up Call)

The operator or manager can remotely set or cancel the Timed Reminder of a desired extension.

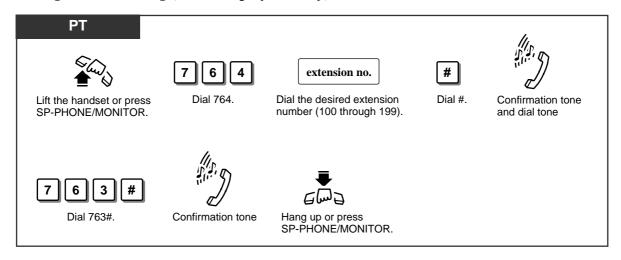
Setting



Canceling



Checking the time setting (with a display PT only)





- 1.7 Useful Features, "Alarm Setting (Timed Reminder)
- See the Installation Manual, Section 3, "Timed Reminder".

Outgoing Message (OGM)

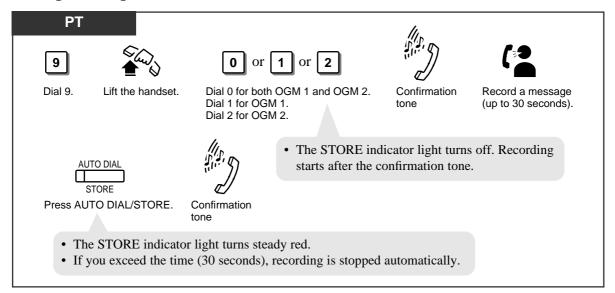
The operator or manager can record or play back the outgoing message.

This is played when a caller accesses the DISA or UCD feature.

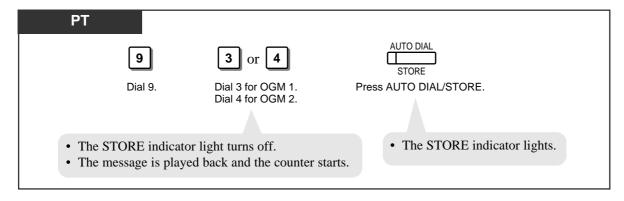
Two Outgoing Messages (OGM 1 and OGM 2) are available for DISA 1, DISA 2, UCD and UCD-END.

To program, set the MEMORY switch on the proprietary telephone to "PROGRAM" or press the PROGRAM button on the KX-T7300 series.

Recording a message



Playing back a message





- Be sure the handset is on the cradle and the SP-PHONE button is off.
- After programming, return the MEMORY switch to the "SET" position or press the PROGRAM button on the KX-T7300 series.

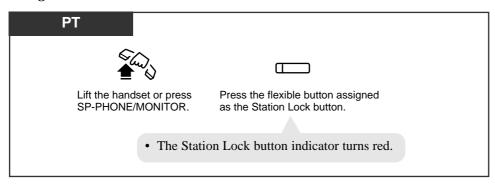


- See the Installation Manual, Section 3, "Direct Inward System Access (DISA)".
- See the Installation Manual, Section 3, "Uniform Call Distribution (UCD)".
- See the Installation Manual, Section 3, "Outgoing Message (OGM)".

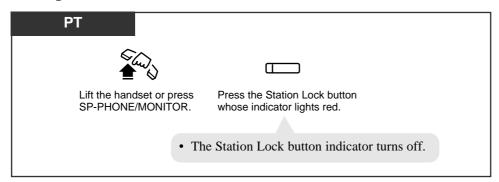
Remote Station Lock

The operator or manager can remotely lock or unlock a desired extension. You can lock outside calls.

Locking



Unlocking





- This feature overrides the "Electronic Station Lockout" feature. If "Electronic Station Lockout" has already been set by the extension user and this feature is set afterwards, the extension user cannot cancel the lock. Only the operator or manager can cancel the lock.
- Extension passwords must be assigned to the operator and manager extensions beforehand.
- An extension user can make a call at the locked extension depending on system
 programming. System programming determines which COS number applies to a call at the
 locked extension.

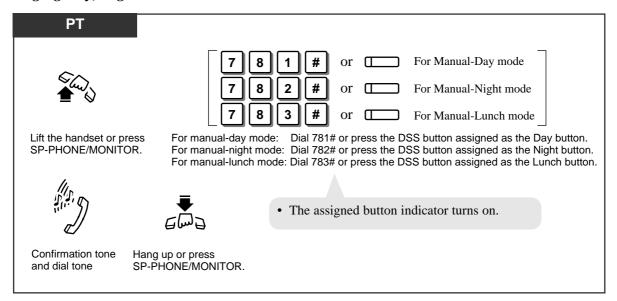


- 1.6 Before Leaving Your Desk, "Locking Your Telephone (Electronic Station Lockout)"
- See the Installation Manual, Section 3, "Station Lock".

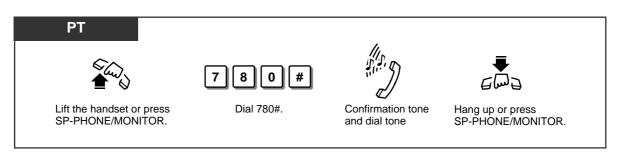
Time (Day/Night/Lunch) Service Setting

This system supports the day, night and lunch modes. The system operation for originating and receiving calls can be different in the day, night and lunch modes. Toll restriction can be programmed to prevent unauthorized toll calls for each mode.

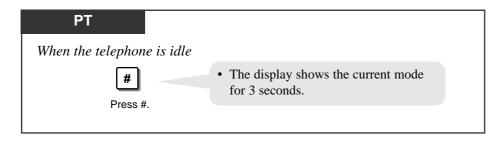
Changing Day, Night or Lunch mode in manual or automatic mode



Canceling the manual Day, Night or Lunch mode and returning to the automatic mode



Confirming the current mode (with a display PT only)



1.8 Operator / Manager Service Features

- 1
- The day/night/lunch mode can be changed either automatically at a predetermined time (default: 9:00 a.m. for every day, 5:00 p.m. for every night) or manually at any time by System Programming.
- Even if the automatic mode has been selected by System Programming, the operator or manager can change the day, night and lunch modes manually.
- The following programs have separate day, night and lunch programming.
 - 1) Delayed Ringing Assignment
 - 2) Door Opener Assignment
 - 3) Doorphone Ringing Assignment
 - 4) Flexible Outward Dialing Assignment
 - 5) Flexible Ringing Assignment
 - 6) Outside (CO) Line Mode
 - 7) TRS Class of Service (COS) Assignment
- If the lunch mode is set using feature number 783# in the automatic mode, the mode will not be changed until the lunch mode is canceled using feature number 780#. The day and night modes are automatically changed at the programmed time even if feature number 780# is not entered.
- Feature number 780# is not accepted in the manual mode.
- One of the day, night or lunch button indicators on the DSS console lights red to display the current mode.
- If the day, night or lunch mode is changed manually in the automatic changing mode and the manager starts System Programming, the manual setting will be canceled after System Programming is completed. It will return to the automatic day, night or lunch mode.

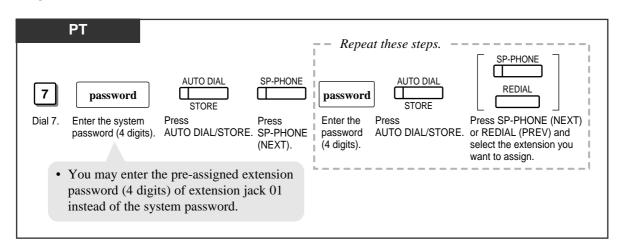


- 1.7 Useful Features, "Doorphone Call"
- 1.7 Useful Features, "Door Opener"
- See the Installation Manual, Section 3, "Direct In Line (DIL)".
- See the Installation Manual, Section 3, "Toll Restriction".
- See the Installation Manual, Section 3, "Time (Day/Night/Lunch) Service".

Extension Password Set (Manager only)

The manager can assign a password to each extension. The assigned password can be used for the Toll Restriction Override by Extension Password and Walking COS features.

Setting



- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to "PROGRAM" or press the PROGRAM button on the KX-T7300 series.
- After programming, return the MEMORY switch to the "SET" position or press the PROGRAM button on the KX-T7300 series.
- The extension number is displayed in the order of the jack number when you press the NEXT or PREV button.
- In the Account Code Verify—Toll mode, you should not assign similar numbers as the emergency call codes. For example, if "911" is assigned as an emergency code, and you assign "9111" as an extension password, the system regards the entered number, "9111", as the emergency code.
- To erase an incorrect entry, press the CLEAR (TRANSFER) button and enter a new number.



- 1.7 Useful Features, "Calling Using Your Privileges at Another Extension (Walking COS)"
- See the Installation Manual, Section 3, "Extension Password/System Password".
- See the Installation Manual, Section 3, "Toll Restriction Override by Extension Password".
- See the Installation Manual, Section 3, "Walking COS".

1.9 DSS Console Features

With a Direct Station Selection (DSS) Console, model KX-T7340 and KX-T7040, you can make or transfer calls and access system features with the touch of a button. The DSS Console must be connected to a Panasonic Advanced Hybrid System and paired with a PT. System Programming is required to designate the extension jacks of the DSS Console. With a paired telephone, you can carry out the following operations using the DSS Console.

- Direct access to an extension (Direct Station Dialing)
- Quick access to an external party (One-Touch Dialing)
- Quick access to a system feature (One-Touch Access for System Features)
- Easy transfer to an extension (Call Transfer)
- Quick access to the day mode (Time (Day/Night/Lunch) Service) (Operator/Manager only)
- Quick access to the night mode (Time (Day/Night/Lunch) Service) (Operator/Manager only)
- Quick access to the lunch mode (Time (Day/Night/Lunch) Service) (Operator/Manager only)
- Quick setting of the Remote Station Lock Control (Remote Station Lock Control) (Operator/Manager only)



- The KX-T7340/KX-T7040 and Proprietary Telephone (PT) should be placed side by side on your desk.
- A single line telephone cannot be utilized with the KX-T7340/KX-T7040.
- For System Programming, please refer to the Installation Manual.

Initial Settings

PF buttons are provided with no default settings, while each DSS button has a default setting as follows.

DSS 01–24: extension numbers 101–124

DSS 25-32: no default settings

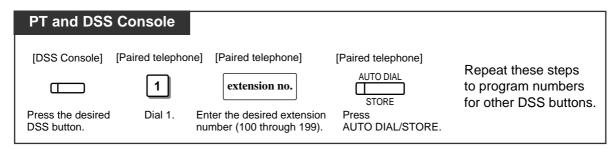
To meet your various needs, DSS buttons can be changed to other function buttons. Every DSS or PF button can be assigned to another extension number, telephone number or feature number by Initial Settings.



- Be sure the handset is on the cradle and the SP-PHONE button is off.
- To program, set the MEMORY switch on the proprietary telephone to "PROGRAM" or press the PROGRAM button on the KX-T7300 series.
- After programming, return the MEMORY switch to the "SET" position or press the PROGRAM button on the KX-T7300 series.
- As to the buttons on your DSS Console, please refer to your DSS Console manual.

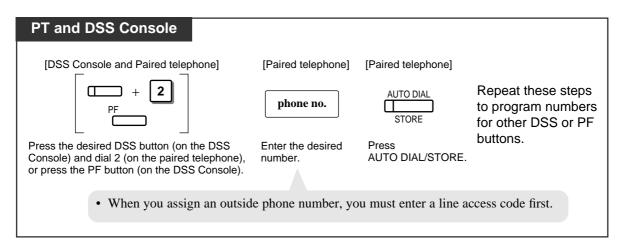
Extension Number Assignment

You can assign a desired number to a DSS button.



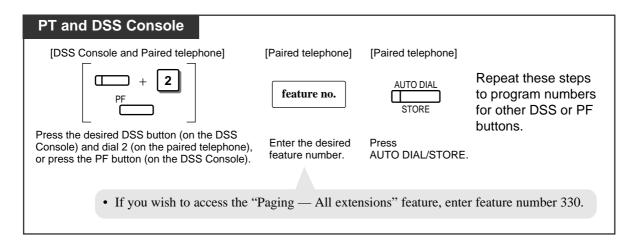
One-Touch Dialing Assignment

You can assign a DSS or PF button as a One-Touch Dialing button. The number can be an extension number or a telephone number. Up to 16 digits can be stored in each memory location.



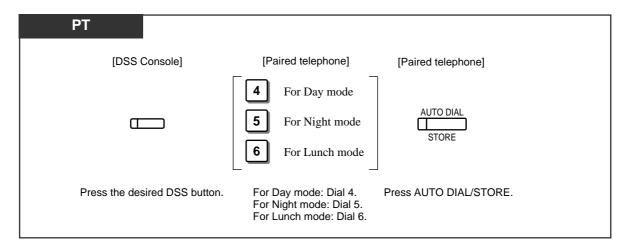
One-Touch Access Assignment for System Features

You can assign a desired feature to a DSS or PF button.



Day, Night and Lunch Buttons Assignment (Operator/Manager only)

You can assign a DSS button as the Day, Night or Lunch button. Simply pressing the assigned button sets the day, night or lunch mode.

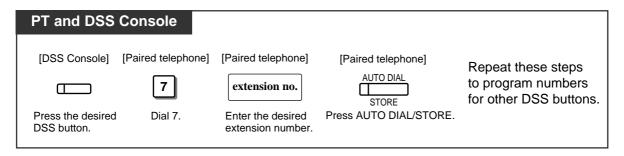




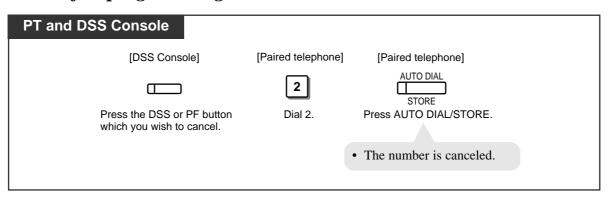
• See the Installation Manual, Section 3, "Time (Day/Night/Lunch) Service".

Station Lock Button Assignment (Operator/Manager only)

You can assign the Station Lock button to a DSS button for the remote station lock control feature.



To cancel after programming



- DSS buttons can be changed to any of the following function buttons by Initial Settings.
 - a) Another DSS Button (Every DSS button can be assigned to another extension number.)
 - b) One-Touch Dialing Button
 - c) Day Button (Operator/Manager only)
 - d) Night Button (Operator/Manager only)
 - e) Lunch Button (Operator/Manager only)
 - f) Station Lock Button (Operator/Manager only)
- PF buttons can be changed to One-Touch Dialing buttons by Initial Settings.
- When the STORE button is pressed after programming, you will hear beep tones as follows.
 - 1 beep: The entry is different from the one that was stored previously.
 - 2 beeps: The entry is the same as the previously stored one.
- You can check the stored data by pressing the desired button while on-hook. The data will be displayed.



 1.2 Proprietary Telephone Settings, "Customizing the Buttons on Your Telephone", DSS Button,

One-Touch Dialing Button

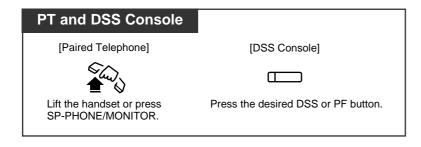
Direct Station Dialing

An extension can be called and accessed, by simply pressing a DSS button. The BLF shows if the extension is engaged.

PT and DSS Console [Paired Telephone] [DSS Console] Lift the handset or press SP-PHONE/MONITOR. Press the desired DSS button.

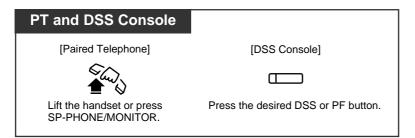
One-Touch Dialing

The stored number is dialed automatically by pressing a programmed DSS or PF button.



One-Touch Access for System Features

You can access system features by pressing a programmed DSS or PF button.



Call Transfer

A call can be transferred to an extension using a DSS button.

Without Transfer

PT and DSS Console	
During a conversation	
[Paired Telephone]	[DSS Console]
TRANSFER	
Press TRANSFER.	Press the desired DSS button.

With Transfer

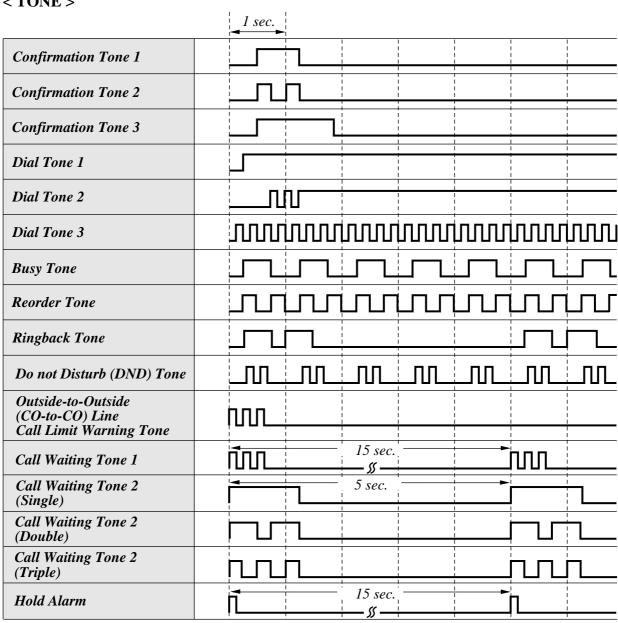
An outside call can be transferred to an extension using a one-touch operation. The One-Touch Transfer function must be set by System Programming.

PT and DSS Console	
During a conversation	
[DSS Console]	
Press the desired DSS button.	
The other party is placed on hold and the destination extension is called.	

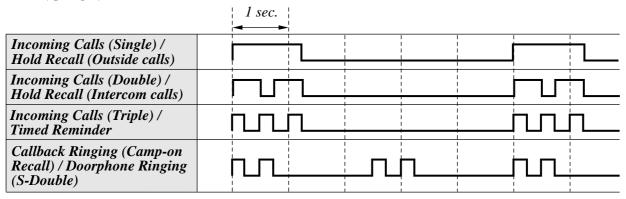
Section 2 Appendix

2.1 Tone / Ring Tone List

< TONE >

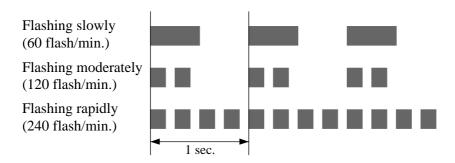


< RING TONE >



The Light Emitting Diode (LED) button indicate the line conditions by using lighting patterns.

Flashing light patterns



LED Indication on the INTERCOM Button

The table below shows the lighting patterns for intercom line conditions.

INTERCOM button	Intercom Line Condition
Off	Idle
Green On	You are using the line.
Flashing Green Slowly	You are holding a line.
Flashing Green Moderately	Intercom call exclusive hold
Flashing Green Rapidly	Incoming intercom/doorphone call

LED Indication on the CO Button

The table below shows the lighting patterns for outside (CO) line conditions.

CO Button	Outside (CO) Line Condition
Off	Idle
Green On	I-use
Flashing Green Slowly	I-hold / Hold Recall
Flashing Green Moderately	I-exclusive hold / Outside-to-outside (CO-to-CO) line call /
	Conference, Unattended
Flashing Red Rapidly	Incoming call
Red On	Other-use
Flashing Red Slowly	Other hold*

— Item with a * is only available on Another CO.

BLF on DSS Button

The Busy Lamp Field (BLF) indicator button is red when the corresponding extension is busy. This is available for flexible CO buttons assigned as DSS buttons on proprietary telephones and DSS buttons on DSS console.

2.3 Feature Number List

Feature Numbers and Additional Required Digits

Feature	Number	Additional Required Digits
Absent Message Capability set / cancel	75	1-6 / 0 + #
Account Code Entry for an SLT	49 or * *	Account code
Call Forwarding set / cancel	71	1-3 + desired number / 0 + #
Call Forwarding — Follow Me set / cancel	71	5 + EXTN. (extension no.) / 8 + #
Call Hold (Hold Mode 2 or 3) for an SLT	20	
Call Hold, Retrieve outside call / intercom call	53 / 5	CO (outside line no.) / EXTN.
Call Park / Call Park Retrieve	22 / 52	0–9
Call Pickup, Directed	4	EXTN.
Call Pickup, Group	40	
Call Pickup Deny set / cancel	72	1 / 0 + #
Call Retrieving from TAM	4	
Call Waiting set / cancel for extensions	732	1 / 0 + #
Call Waiting set / cancel for outside (CO) lines	731	1 / 0 + #
Conference (5-party)	22×	phone no. + CONF
Data Line Security set / cancel	730	1 / 0 + #
Do Not Disturb (DND) set / cancel	71	4 / 0 + #
Doorphone Call calling / door open	31 / 55	1–4
Electronic Station Lockout set	77	0000–9999 twice + #
Electronic Station Lockout cancel	77	0000-9999 + #
Executive Busy Override Deny set / cancel	733	0 / 1 + #
Extension Number	100-199	
External Feature Access	6	
Log-In / Log-Out	736	0 / 1 + #
Message Waiting set / cancel	70	(1 + EXTN.) / (2 + EXTN.) + #
Message Waiting cancel all messages	70	0 + #
Operator Call	0	
Outgoing Message (OGM) recording / playback	9	0-2/3-4
Outward Dialing — Line Access, Automatic — Line Access, Outside (CO) Line Group	9 8	1–6

Feature	Number	Additional Required Digits
Paging — All	33	* or 9
Paging — External	34	
Paging — Group all / particular	33	0 / 1-8
Paging — Answer	43	
Paging Deny set / cancel	734	1 / 0 + #
Personal Speed Dialing	1 × or #	0–9
Personal Speed Dialing store	2*	(0–9) + phone no. + #
Personal Speed Dialing confirm	3×	0–9 + #
Pickup Dialing (Hot Line) assign / set / cancel for an SLT	74	2 + phone no. / 1 / 0 + #
Redial, Last Number for an SLT	## or 80	
Room Monitor set / cancel	735	1 / 0 + #
Station Feature Clear	79	#
System Speed Dialing for an SLT	×	00–99
Timed Reminder set	76	hhmm* + (0 / 1) + (1 / 2) + #
Timed Reminder cancel / confirm	76	2 / 3 + #
Timed Reminder, Remote cancel	764	EXTN. + # + 762#
Timed Reminder, Remote check	764	EXTN. + # + 763#
Timed Reminder, Remote set	764	EXTN. + # + 76 + hhmm* + (0 / 1) + (1 / 2) + #
Time Service set / cancel	78	1-3 / 0 + #
Voice Mail Integration set / cancel	719	1-2 / 0 + #
Walking COS	7×	Extension password + EXTN. + #

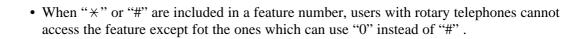
^{*} hhmm

hh: hour (01 - 12) / mm: minute (00 - 59)

2.3 Feature Number List

Feature Numbers

Feature	Number
While a busy tone is heard	
Automatic Callback Busy (Camp-On)	6
Busy Station Signaling (BSS)	2
Executive Busy Override	3
While a Do Not Disturb tone is heard	
Do Not Disturb (DND) Override	2
During a call or while talking	
Alternate Calling — Ring/Voice	*
Conference	3
Door open	5
Pulse to Tone Conversion	* #
When the telephone is on-hook	
Background Music (BGM) on/off	1
Time (Day/Night/Lunch) mode display	#
EXTN. and extension name/	*
Date (day/month) and time display/	
date (month/day/year/day of the week)	
display changing	



Due to the Bilingual Selection Feature, you can select the display in English or Spanish. The left part is the English display and the right part is the Spanish display.

English Display	Spanish Display	DESCRIPTION
Set Time & Date	Fijar Hora/Fecha	Factory setting. The system clock is not working properly.
Jan 1 12:00AM 1 Jan 20:00	Ene 1 12:00AM 1 Ene 20:00	The current date and time using a 12-hour clock. The current date and time using a 24-hour clock. — Pressing "*" while on-hook alternates between this display and the following two displays.
Jan 1,1998 Thu	Ene 1,1998 JUE	The current date and day of the week.
123: 123:Tony Viola	123: 123:Tony Viola	Making or receiving an intercom call. Also, displayed while on-hook. A name is not assigned. Making or receiving an intercom call or called by "Camp-On" (intercom recall). Also, displayed while on-hook. A name is assigned. Confirming key programming on a DSS or MESSAGE button.
101: Busy	101: Ocupada	The destination extension is busy.
101: DND	101:No Molestr	The destination extension has set "Do Not Disturb (DND)".
950-1001PP12345&	950-1001PP12345&	Confirming the key programming on the REDIAL, SAVE, or One-Touch Dialing button.
→123:Tony Viola	→123:Tony Viola	Making or receiving an intercom call after a call is forwarded. A name is assigned.
→101: Busy	→101: Ocupada	The destination extension is busy after a call is forwarded.
→101: DND	→101:No Molestr	The destination extension has set "Do Not Disturb (DND)" after a call is forwarded.
Alarm 10:15AM	Alarma 10:15AM	The "Timed Reminder" setting is completed or a "Timed Reminder" call was received (1-time mode). Confirming the "Timed Reminder" programming.
Alarm 10:15AM*	Alarma 10:15AM*	The "Timed Reminder" setting is completed or a "Timed Reminder" call was received (everyday mode). Confirming the "Timed Reminder" programming.
Alarm Cancel	Alarma Desact	Canceled "Timed Reminder".
Alarm Not Stored	Alarma No Fijada	Confirming "Timed Reminder" programming when it is not stored.
At Ext 101	En la Ext 101	Absent Message 3.

English Display	Spanish Display	Number
Back at 11:00AM	Regreso 11:00AM	Absent Message 4.
BGM off	Musica Desact	Stopped BGM.
BGM on	Musica Ambiental	Started BGM.
Busy	Ocupado	The called doorphone or external pager is in use.
Busy Ovrde Allow	Intrmision Permt	Canceled "Executive Busy Override Deny".
Busy Ovrde Deny	Intrmision NEG.	Completed setting "Executive Busy Override Deny".
C.Pickup Allow	Permite Recoger	Canceled "Call Pickup Deny".
C.Pickup Deny	Recoger Negado	Completed setting "Call Pickup Deny".
Call on CO 1	Sonando LN 1	Called by an outside (CO) line.
Call Prked at 1	Estacionada 1	Completed setting "Call Park".
Callback All COs	Llamar Todas LN	Completed setting "Camp-On" when there is no idle outside (CO) line.
Callback CO 1	Llamar a LN 1	Completed setting "Camp-On".
Callback CO G1	Llamar a LN G1	Completed setting "Camp-On".
Callback Ext 101	Llamar a Ext 101	Completed setting "Camp-On".
CO 1	LN 1	An idle outside (CO) line is seized.
CO 1 0:01'15	LN 1 0:01'15	The duration time of incoming outside call.
CO 1 & CO 2	LN 1 Y LN 2	A Conference with two outside (CO) lines. Called by hold recall. — "Conference, Unattended".
CO 3 Free	LN 3 Libre	Called by "Camp-On" (Outside (CO) line recall).
Conference	Conferencia	Confirming key programming on the Conference button.
CO in Use	LN en Uso	The selected outside (CO) line is busy.
CO Not Assigned	LN No Asignada	The desired outside (CO) line is restricted (not assigned).
CW(CO) Off	LE(LN) Desact	Canceled "Call Waiting" for outside calls.
CW(CO) On	LE(LN) Activa	Completed setting "Call Waiting" for outside calls.
CW(Ext) Off	LE(Ext) Desact	Canceled "Call Waiting" for intercom calls.
CW(Ext) On	LE(Ext) Activa	Completed setting "Call Waiting" for intercom calls.
Data Mode Off	Modo Data Off	Canceled "Data Line Security".
Data Mode On	Modo Data Act	Completed setting "Data Line Security".
Day Mode	Modo Dia	Day mode status. — "Time (Day/Night/Lunch) Service"
Do Not Disturb	No molester	Confirming the key programming on the FWD/DND button. Completed setting "Do Not Disturb (DND)".

English Display	Spanish Display	Number
D - Opener 1-On	Abrepuerta 1-Act	Completed opening the door.
Door Phone 1	Interfono 1	Making or receiving a doorphone call.
Ext101 & CO 1	Ext101 Y LN 1	Conference with an extension and outside (CO) line.
Ext101 & Ext102	Ext101 Y Ext102	Conference with two extensions.
Enter ACCNT Code	Entrar Codigo	Pressing the FWD/DND or PAUSE button. — "Account Code Entry"
Ext Data Clear	Borrar Data Ext	Executed "Station Feature Clear".
External Page	Voceo Externo	Accessed to "Paging — External".
FWD(ALL) All COs	DSV(Todas) a LN	Completed setting "Call Forwarding — to Outside (CO) Line". Confirming the key programming on the FWD/DND button.
FWD (All) CO G1	DSV(Todas) GLN 1	Completed setting "Call Forwarding — to Outside (CO) Line" (- to outside (CO) line group). Confirming the key programming on the FWD/DND button.
FWD(ALL) Ext101	DSV(Todas)Ext101	Completed setting "Call Forwarding — All Calls". Confirming the key programming on the FWD/DND button.
FWD(B/NA) Ext101	DSV(O/NC) Ext101	Completed setting "Call Forwarding — Busy or No Answer". Confirming the key programming on the FWD/DND button.
FWD(From) Ext101	DSV(desde)Ext101	Completed setting "Call Forwarding — Follow Me".
FWD/DND Cancel	Cancela DSV/No M	Canceled "Call Forwarding" or "Do Not Disturb (DND)".
FWD V.M. Off	DSV V.M. Off	Canceled "Call Forwarding to Voice Mail".
FWD V.M. On	DSV V.M. Act	"Call Forwarding to Voice Mail — setting A" is set.
FWD V.M.(#6) On	DSV V.M.(#6) On	"Call Forwarding to Voice Mail — setting B" is set.
Gone Home	Se Fue a Casa	Absent Message 2.
Group Log In	Entrada de Grupo	"Log-In" is set.
Group Log Out	Salida de Grupo	"Log-Out" is set.
In a Meeting	Estoy en Reunion	Absent Message 6.
Locked: 1234	Bloqueada: 1234	Completed setting "Electronic Station Lockout".
Lunch Mode	Modo Almuerzo	Lunch mode status. — "Time (Day/Night/Lunch) Service"
Message Cancel	Mensaje Desact	Canceled Absent Message.

English Display	Spanish Display	Number
MW at Ext 101	ME en Ext 101	Completed setting "Message Waiting".
MW Not Accepted	ME No Aceptado	The "Message Waiting" setting was not accepted.
MW Cancelled	ME Cancelado	Canceled "Message Waiting".
Night Mode	Modo Nocturno	Night mode status. — "Time (Day/Night/Lunch) Service"
No Held Call	No Retenidas	There is not a held call when retrieving a call on hold or parked call.
No Incoming Call	No Entrante	There is not an incoming call when trying to pick up a call.
No Page	No Hay Voceo	When trying to answer a page, there is no call or someone has already answered the page.
Not Valid	No Valido	Illegal operation.
Out Until 12/12	Fuera has 12/12	Absent Message 5.
Paging All	Voceo a Todos	Accessing "Paging — All".
Paging All Ext	Voceo Todas Ext	Accessed "Paging — Group" (- to all extensions).
Paging Allow	Voceo Permitido	Canceled "Paging — Deny".
Paging Deny	Voceo Negado	"Paging — Deny" is set.
Paging Group 1	Voceo Grupo 1	Accessed "Paging — Group" (- to a particular extension group).
Park at 1 N/A	Estacio. 1 N/A	The "Call Park" setting was not available.
PITS-PGM NO? →	Programa NO? →	Entered the Station Programming mode.
PSD Set 1	Persona 1	"Personal Speed Dialing" is set.
PSD 1 Not Stored	No Grabado	Confirming the Personal Speed Dialing number.
RCL: Ext 101	RCL: Ext 101	Called by transfer recall, without a name. — "Call Transfer"
Restricted	Restringido	The outgoing call is restricted.
Room Monitor Off	Cancelar Monitor	Canceled "Room Monitor".
Room Monitor On	Activar Monitor	"Room Monitor" is set.
Set COS Ext101	Clase Ext101	The Walking COS feature is set.
Transfer to CO	Transferir a LN	The destination extension has set "Call Forwarding — to Outside (CO) Line".
Unlocked	Desbloqueada	Canceled "Electronic Station Lockout".
- OIIIOCIICA		

2.5 Troubleshooting

If a power failure occurs...

Your system enables a conversation between a specific outside (CO) line and extension (Power Failure Transfer) and supports system data backup.

Power Failure Transfer

A specific extension can be automatically connected to a specific outside (CO) line. This provides outside (CO) line calls between the following extension and outside (CO) line.

Outside (CO) line 1 is connected to extension jack 01. Outside (CO) line 4 is connected to extension jack 09.

- All other conversations will be disconnected during a power failure.
- Proprietary telephones (PT) cannot be used during a power failure. A single line telephone will work in the event of a power failure. Connect the single line telephone to the above jack.
- When power is restored after a power failure, your system automatically restarts, maintaining as much of the previous system data as possible.

Problem	Probable Cause	Possible Solution
Nothing is heard in the handsfree mode.	The "Headset" mode is selected.	When the headset is not used, set the mode to "Handset". Refer to "When Using the Headset" in Proprietary Telephone Settings.
The unit does not ring.	 An outside (CO) line number is not programmed. The Ringer Volume is set to "OFF". 	 To program outside (CO) line numbers, refer to the Installation Manual. Increase the Ringer Volume. Refer to "Volume Control" in Proprietary Telephone Settings.
The display flashes the following message. Set Time & Date	The system internal clock is not working properly.	Consult with an authorized Panasonic Factory Service Center.

A	Absent Message Capability 1-58	Call Transfer	1-102
1	Account Code Entry	Call Transfer – to Extension	
	Adjustment → Control	Call Transfer – to Outside (CO) Line	
	Alarm Setting (Timed Reminder) 1-72	Call Waiting	
	Alternate Calling — Ring/Voice	Call Waiting Tone Selection	
	Answering → Receiving Calls	Camp-On (Automatic Callback Busy)	
	Automatic Callback Busy — Camp-On 1-30	Canceling	
	Automatic Redial	Alarm Setting (Timed Reminder)	1-72
	Automatic Redial1-27	Automatic Callback Busy — Camp-On	
		BGM	
В	Paulianaum d Music (PCM)	Call Forwarding	
D	Background Music (BGM)	Call Pickup Deny	
	Busy Lamp Field (BLF)	Call Waiting	
	Busy Station Signaling (BSS) 1-29	Data Line Security	
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