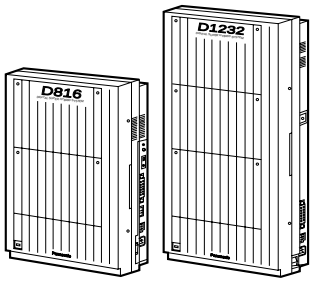
Panasonic



Digital Super Hybrid System

Features Guide

Model KX-TD816JT KX-TD1232JT

Please read this manual before using the Digital Super Hybrid System.
This manual is for software version P351F, P352F or later for KX-TD816 and P251E, P252E or later for KX-TD1232.

Introduction

About this Features Guide

This Features Guide is designed to serve as an overall features reference for the Panasonic Digital Super Hybrid System, KX-TD816 / KX-TD1232.
It explains what the KX-TD816 / KX-TD1232 system can do, and how to obtain the most out of its many features and capabilities.

This manual contains the following sections:

Section 1, General Features

Provides details about the general features.

Section 2, ISDN Features

Provides details about the features required to use ISDN line services.

Section 3, E&M Features

Provides details about the features required to use E&M (TIE) line services.

Section 4, DECT Features

Provides details about the features required to use the wireless system with a DECT portable station.

Section 5, Tone / Ring Tone

Provides the list of tones and ring tones.

Section 6, Index

Provides the feature titles, important words and phrases to help you access the required information easily.

Terms used in this Features Guide

Installation Manual References

The required installation instruction titles described in the *Installation Manual* are noted for your reference.

Programming Guide References

The related and required programming titles described in the *Programming Guide* are noted for your reference.
Programming Guide reference is also shown in the sentences as follows.
Example: <[109] Expansion Unit Type>
Explanation: Refer to system programme [109] in the Programming Guide.
This helps you know the related and require programming easily for the contents of the sentences.

User Manual References

The operation required to implement the feature described in the *User Manual* are noted for your reference.

About the other manuals

Along with this User Manual, the following manuals are available to help you install, programme and use the KX-TD816 / KX-TD1232 system:

Installation Manual

Provides instructions for installing the hardware and programming the system.

Programming Guide

Provides system programming instructions.

User Manual

Provides operating instructions for the end users using proprietary telephones, single line telephones, consoles or DECT portable stations.

Feature Highlights

Automatic Route Selection (ARS)

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

Budget Management

Limits the telephone usage to a pre-assigned amount.

Charge Fee Reference

Allows the user to see charges and to print out the charges.

Hotel Application

Allows to handle the front and operator services such as check-in/check-out and wake-up call setting.

Remote Station Lock Control

Allows an operator to lock an extension so that outgoing calls cannot be made.

Trunk (Outside Line) Answer From Any Station (TAFAS)

Ringing occurs over the external paging system; the call can be answered from any station.

Uniform Call Distribution (UCD)

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

Voice Mail Integration

The system supports Voice Processing Systems with in-band DTMF signalling as well as DPT integration. The Panasonic Voice Processing System provides automated attendant, voice mail, interview and custom services.

ISDN Line Service

The system can manage a call received from the ISDN line by point-to-point or point-to-multi-point configuration. To use this service, an optional unit is required.

E&M (TIE) Line Service

An E&M (TIE) line is a privately leased communication line between two or more PBXs, which provides cost effective communications between company at different locations. To use this service, an optional unit is required.

Wireless System

The system supports the connection of a DECT portable station which can be used as an wireless extension. To support the portable station, optional units are required.

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Section 1

General Features

1.1 System Expansion

EXtra Device Port (XDP)

Description

Extra Device Port (XDP) expands the number of telephones available in the system by allowing an extension jack to contain two telephones. A digital proprietary telephone (DPT) and a single line terephone (SLT) or console and a SLT can be connected to the same jack but have different extension numbers so that they can act as completely different extensions.

Conditions

- XDP requires previous programming of the individual jack. Enable XDP mode for the desired jack. Immediately after changing the assignment, the changed setting may not work for a maximum of eight seconds. <[600] EXtra Device Port>
- If an analogue proprietary telephone (APT) and a SLT are connected to an XDP-enabled jack, neither telephone will work.
- If XDP is disabled for the jack, DPT and a SLT may be used as Parallelled Telephones. APT and a SLT also can be used as Parallelled Telephones.

Installation Manual References

- 2.3.4 EXtra Device Port (XDP) Connection

Programming Guide References

- [600] EXtra Device Port

Features Guide References

- Parallelled Telephone

User Manual References

None

System Connection[*1]

Description

System Connection allows two main units (KX-TD1232) to work together as one system. This expands the capacity of the system, number of extensions, outside lines and so on, by factor two. One main unit is called the master system and the other is called the slave system.

Conditions

- The following resources can be used by either system:
  a) External pagers
  b) Music sources used for Music on Hold
  c) Music sources used for Background Music (BGM)
  d) Station Message Detail Recording (SMDR); Serial Interface (RS-232C) ports
  e) Call Parking areas
- System Inter Connection Card (KX-TD192), optional expansion cards to connect both systems, must be installed for this feature.
- Once this feature is employed, the data adjustment in both systems are performed at the programmed time (default is 1:00) every day. The time can be changed. <[115] Adjust Time>

Installation Manual References

- 1.5.3 System Capacity
- 2.4.7 System Connection

Programming Guide References

- [115] Adjust Time

Features Guide References

None

User Manual References

None

[*1] Available for the KX-TD1232 only.

1.2 System Administration

System Programming and Diagnosis with Personal Computer

Description

This system can be programmed and administered using a personal computer (PC). The Serial Interface/Remote Programming & Diagnosis Manual and its floppy disk are required to perform this feature. There are two programming methods:

Method	Description	
On-Site Programming	Using the Serial Interface (RS-232C) port	By connecting a PC to the system using the Serial Interface (RS-232C) port, system programming and maintenance can be performed locally. The main unit has an Serial Interface (RS-232C) port which can be used for either system administration or Station Message Detail Recording (SMDR).
	Using a modem	By connecting a PC to the system using a modem, system programming and maintenance can be performed locally. Install the optional Remote Card or Unit. Connect the PC to an extension jack. Assign the floating number of the modem. <[813] Floating Number Assignment> Dial this number from the PC.
Remote Programming	You can perform system programming and maintenance from a remote site using a PC. Install the Remote Card or Unit and assign the floating number of the modem. <[813] Floating Number Assignment> Starting system administration from a remote location can be done in the following ways. • Call an extension (probably the operator) from a remote location and request a transfer to the modem. • Dial the floating number of the modem using the Direct Inward System Access (DISA) feature. • Assign the modem as the destination of the Direct In Lines (DIL) 1:1 feature.	

Conditions

- A proprietary telephone can also be used to perform System Programming.
- Access to System Programming is allowed only one at a time.
- To access system administration, a valid password must be entered. The password is factory-programmed and can be changed. <[107] System Password>

- System administration can be performed on-line except for the procedures of the diagnosis. If the system goes off-line, the system functions as if it was in power failure. (Refer to Power Failure Transfer feature.)

Installation Manual References

- 2.4.6 DISA Card / Unit and Remote Card / Unit Installation

Programming Guide References

- [107] System Password
- [813] Floating Number Assignment
- [814] Modem Standard
- [817] KX-TD197 Baud Rate Set

Features Guide References

- System Programming with Proprietary Telephone
- Station Message Detail Recording (SMDR)

User Manual References

None

System Programming with Proprietary Telephone

Description

The system can be programmed using a display proprietary telephone (PT).
The available extensions to perform System Programming are:

a) An extension that is connected to jack 01.

b) An extension that is assigned as a manager. <[006] Operator / Manager Extension Assignment>

For more information and programming instructions, refer to the Programming Guide.

Conditions

- During System Programming the system operates normally.
- During System Programming the programming extension is considered to be busy.
- The display on the PT permits interactive programming.
- Access to System Programming is allowed only one at a time.
- To access system administration, a valid password must be entered. The password is factory-programmed and can be changed. <[107] System Password>
- Programmes [0XX] (Manager Programming) can be changed by any user (**User Programming**).

Programming Guide References

- [006] Operator / Manager Extension Assignment
- [107] System Password

Features Guide References

- System Programming and Diagnosis with Personal Computer

User Manual References

None

1.3 System Features

Account Code Entry

Description

An Account Code is used to identify incoming and outgoing 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 optional. For outgoing outside calls, there are three modes available to enter an account code as follows. One mode is selected for each extension on a Class of Service basis. <[508] Account Code Entry Mode>

Mode Type	Description
Verified-All Calls	The user must always enter a pre-assigned account code when making any of the following calls unless it has previously been stored in memory. • Call Forwarding – to Outside Line • Last Number Redial • One-Touch Dialling • Outside Line Access • Pickup Dialling • Saved Number Redial • Station Speed Dialling • System Speed Dialling
Verified-Toll Restriction Override	The user can enter a pre-assigned account code only when the user needs to override toll restriction.
Option	The user can enter any account code if needed.

Conditions

- An account code can be stored into Memory Dialling (System / Station Speed Dialling; One-Touch Dialling; Pickup Dialling; Call Forwarding – to Outside Line).
- The Account button may be used in place of the feature number. A flexible button on the proprietary telephone set can be programmed as the Account button. <[005] Flexible CO Button Assignment>
- Account code entry after receiving a disconnection signal from an outside line must be done within 15 seconds. Otherwise, SMDR call record is activated and entry becomes impossible afterwards.
- If disconnection signal is selected <[990] System Additional Information, Area 01-Bit3> and Flash function is enabled <[990] System Additional Information, Area 02-Bit5>, the Verified-All Calls extension is allowed to make an outside call using the same line with Flash function.

- In any mode, emergency dial numbers stored <[009] Emergency Dial Number Set> can be dialled out without an account code entry.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [105] Account Codes
- [508] Account Code Entry Mode
- [990] System Additional Information

Features Guide References

- Toll Restriction

User Manual References

- 2.2.5 Calling without Restrictions
- 4.1.3 Customising the Buttons

Budget Management

Description

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

Conditions

None

Programming Guide References

- [010] Budget Management

Features Guide References

- Hotel Application

User Manual References

None

Calling Party Control (CPC) Signal Detection

Description

The Calling Party Control (CPC) Signal is an on-hook indication (disconnect signal) sent from the outside line when the telephone is hung up at the other end. To maintain efficient utilisation of outside lines, the system monitors their state and when CPC Signal is detected from a line, the system disconnects the line and alerts the extension with a reorder tone.

Conditions

- CPC Signal Detection is enabled or disabled on incoming and outgoing outside calls. <[405] CPC Signal Detection Incoming Set, [415] CPC Signal Detection Outgoing Set>
- Generally CPC Signal Detection works on incoming outside calls, and does not work on outgoing outside calls (except once they are placed on Call Hold, Exclusive Call Hold or Consultation Hold). In this case, if the extension user remains off-hook after the completion of an outgoing outside call, the system does not release all the switches used to establish the connection. The connected outside line will continue to be in use. To prevent this, it is programmable to make CPC Signal Detection work on outgoing outside calls. (Note: Some Central Offices (CO) may send CPC-like signals during the dialling sequence and an attempt to make a call may be terminated. If your CO does not send such signals, it is recommended to make CPC Signal Detection work on outgoing outside calls.)
- If your Central Office does not send CPC-like signals, it is effective to limit the dialled numbers during an analogue outside call on a Class of Service basis to prevent unauthorised calls. <[991] COS Additional Information, Bits 4, 3, 2 and 1>
- If a CPC Signal is detected during a Conference call, the line is disconnected and the remaining two parties resume the call.
- If a CPC Signal is detected during a call between a caller using the Direct Inward System Access (DISA) feature and an extension or an outside party, the line is disconnected.

Programming Guide References

- [405] CPC Signal Detection Incoming Set
- [415] CPC Signal Detection Outgoing Set
- [991] COS Additional Information

Features Guide References

None

User Manual References

None

Charge Fee Reference

Description

Allows the pre-assigned display telephone user to see, clear charges and print out the data by Station Message Detail Recording (SMDR). Charges are displayed per extension, outside line, account code or the total of each can be referred to.

Conditions

- The allowed extension is determined by System Programming. <[122] Charge Verification Assignment>
- The verification ID is required to perform this feature. <[123] Charge Verification ID Code Set>
- It is possible to select the first display, Meter or Charge. <[120] Charge Display Selection> This can be switched manually at each extension.
- Exchange rate between Meter and Charges is assigned by Station Programming.
- The displayed currency denomination can be programmed. <[121] Assignment of Denomination>
- If the amount exceeds the maximum displayable meter (99999999), then only the highest possible meter will be displayed.

Programming Guide References

- [120] Charge Display Selection
- [121] Assignment of Denomination
- [122] Charge Verification Assignment
- [123] Charge Verification ID Code Set

Features Guide References

None

User Manual References

- 4.1.4 Charge Fee Management [Pre-assigned extension only]

Class of Service (COS)

Description

COS is used to define the features which are allowed for a group of extensions. Each extension is assigned a COS number. Eight Classes of Service are available.

Conditions

- The programmable items are shown below:

Programmable items	Programme Address
Outgoing call restriction level (Day mode / Night mode) – 1 through 8	[500–501]
Restriction of outside call duration	[502]
Transfers a call to an outside party	[503]
Forwards a call to an outside party	[504]
Executive Busy Override	[505]
Executive Busy Override Deny	[506]
Overrides Do Not Disturb of the called extension	[507]
Account Code Entry operation – verified - all calls / verified - toll restriction override / option	[508]
Off-Hook Call Announcement (OHCA) / Whisper OHCA	[509]

- A Class of Service can be assigned to a DISA (Direct Inward System Access) user code. It determines the toll restriction level of the DISA caller.

Programming Guide References

- [601] Class of Service
- [811] DISA / TIE User Codes

Features Guide References

None

User Manual References

None

Console

Description

The console provides direct access to extensions and features and busy lamp display.
The console must be programmed to work with a proprietary telephone (PT). System Programming assigns the jack numbers of the console and its associated PT. <[007] Console Port and Paired Telephone Assignment>
Up to four consoles can be installed per system. A PT can be paired with up to four consoles.
The paired telephone user can carry out the following operations using the console:

- Direct access to an extension (Direct Station Selection)
- Quick access to an outside party (One-Touch Dialling)
- Easy transfer of an outside call to an extension
  (The programmable One-Touch Transfer feature provides simplified operation.)
- Quick access to a system feature

The above functions are activated simply by pressing buttons on the console which were pre-programmed as function buttons.
Consoles are provided with the following buttons listed below:

KX-T Consoles:

Buttons	7340	7240	7540	7541
DSS	✔(32)	✔(32)	✔(66)	✔(48)
PF (Programmable Feature)	✔(16)	✔(16)		
ANSWER				✔
RELEASE				✔

✔: The button is provided on the designated telephones.
(x): Shows the number of buttons only if multiple buttons are provided.

The functions of the listed buttons are described below:
DSS (Direct Station Selection) buttons: Used to access extensions. Every button is programmed to correspond to an extension. Pressing a button allows the user to call the corresponding extension. Every button is provided with an indicator (**BLF: Busy Lamp Field**), which shows the current state of the corresponding extension as shown in the Table below:

Busy Lamp Field Table

Light	State of extension
Off	Idle
On	Busy

To meet the user's various needs, DSS buttons can be changed to the other function buttons.

PF (Programmable Feature) buttons printed as F1 through F16:
These buttons are provided with no default setting. The paired telephone user can programme the buttons for the other function buttons.
ANSWER button:
Used to answer an incoming call to the paired telephone.
RELEASE button:
Used to disconnect the line during or after a conversation or to complete a Call Transfer.

Conditions

- Programming the DSS and PF buttons can be done only from the paired telephone using Station Programming or Programming with Personal Computer. System Programming with a Proprietary Telephone is not available.
- If the extension number assigned to a DSS button is changed to another number, the DSS button automatically follows the new number. (Re-programming is not necessary.)
- During System Connection[*1], consoles must be paired with telephones in the same system.
- If a port connected to a console is programmed for XDP jack, a single line telephone can be connected to the port in parallel. <[600] EXtra Device Port>

Installation Manual References

- 2.3.2 Extension Connection

Programming Guide References

- [007] Console Port and Paired Telephone Assignment
- [600] EXtra Device Port

Features Guide References

- Button, Flexible
- EXtra Device Port (XDP)

User Manual References

- 2.2.1 Basic Calling
- 3.2.4 Using the ANSWER / RELEASE Button [KX-T7541 only]

[*1] Available for the KX-TD1232 only.

Extension Group

Description

The system supports eight extension groups. Any member of an extension group a can pick up a call directed to another group member (Group Call Pickup) or can make a voice announcement to another group member (Paging – Group). In addition, the Station Hunting function can be enabled for each extension group.

Conditions

- Every extension should belong to an extension group but cannot belong to more than one group.
- If System Connection[*1] is employed an extension group can include extensions on both systems.
- A floating number can be assigned to each extension group.

Programming Guide References

- [106] Station Hunting Type
- [602] Extension Group Assignment
- [813] Floating Number Assignment

Features Guide References

- Call Pickup
- Paging
- Station Hunting

User Manual References

None

[*1] Available for the KX-TD1232 only.

Flexible Numbering

Description

The numbers used for the access codes of system features and the numbers used for extension numbers are not fixed. They can be set as required, provided there are no conflicts. Feature numbers can be from one to three digits, utilising numbers "0 through 9" as well as "✳" and "#". Extension numbers can be two to four digits in length. Any number can be set as the leading first or second digit. If one digit is assigned as the leading digit, some extensions have 2-digit numbers and some have 3-digit numbers. If two digits are assigned as the leading digits, some have 3-digit numbers and some have 4-digit numbers. For the available flexible numbers, please refer to the programme [100] Flexible Numbering.

Conditions

- Flexible feature numbers can only be dialled during dial tone.
- The following are examples of feature number conflicts: Examples: 1 and 11, 0 and 00, 2 and 21, 10 and 101, 32 and 321, etc.
- Some flexible feature numbers require additional digits to make the feature active. For example, to set Call Waiting, the feature number for "Call Waiting" must be followed by "1"and to cancel it, the same feature number should be followed by "0".

Programming Guide References

- [003] Extension Number Set
- [100] Flexible Numbering

Features Guide References

None

User Manual References

None

Floating Station

Description

You can assign virtual extension numbers for resources to make them appear as extensions.
<[813] Floating Number Assignment>
These numbers are defined as floating numbers (FN). The following resources can have floating numbers:

Resource Type	Description
External paging instruments	Used for Trunk (Outside Line) Answer From Any Station (TAFAS) feature. One FN for KX-TD816 and four FNs for KX-TD1232 can be assigned as: **a)** Direct In Lines (DIL) 1:1 destination **b)** DISA destination **c)** Intercept Routing destination
Extension groups	Used for Station Hunting feature (Ring Group and UCD only). Eight FNs can be assigned as: **a)** DIL 1:1 destination **b)** Intercept Routing destination **c)** Extension
Direct Inward System Access (DISA) messages	Used for DISA feature. Two FNs can be assigned as: **a)** DIL 1:1 destination **b)** Intercept Routing destination
Modem	Used for system administration. One FN can be assigned as: **a)** DIL 1:1 destination **b)** DISA destination (as an extension number to call the modem)
Digital Test Access (DTA)	Used for testing. One FN can be assigned as an extension.

Conditions

Floating numbers cannot be used for setting a feature such as Call Forwarding, etc.

Installation Manual References

- 2.4.6 DISA Card / Unit and Remote Card / Unit Installation

Programming Guide References

- [100] Flexible Numbering
- [813] Floating Number Assignment

Features Guide References

None

User Manual References

None

Host PBX Access

Description

The system may be installed behind an existing host PBX. This is performed by connecting a line from the host to an outside line in the Digital Super Hybrid System.

Conditions

- To enable Host PBX Access, put the host PBX line in an outside line group. The user accesses the host PBX by selecting that outside line.
- A Host PBX Access Code is required to access outside lines of the host PBX. <[411] Host PBX Access Codes>
- A pause, if programmed <[412] Pause Time>, can be inserted between the user-dialled Host PBX Access Code and the following digits (Pause Insertion, Automatic). Programme the pause time required by the Host PBX for that outside line group.
- Access to the host PBX during a conversation is also possible (External Feature Access).

Programming Guide References

- [411] Host PBX Access Codes
- [412] Pause Time

Features Guide References

- External Feature Access
- Pause Insertion, Automatic

User Manual References

- 2.8.1 If a Host PBX is Connected

Hotel Application

Description

Allows the operator to handle the front/operator services such as check-in / check-out, remote timed reminder (wake-up call). To activate these services, Hotel Application must first be enabled. <[124] Hotel Application>
The operation is applicable to only the operator extension with KX-T7235 / KX-T7536.

Check-In / Check-Out	Controls the check-in / check-out service. **Check-in mode:** Activates the primary Class of Service (COS) and automatically clears the charge counter. **Check-out mode:** Activates the secondary COS and prints out the total telephone charge and the other charges (such as mini-bar charges). There are two types of check-out mode, ready or not ready (cleaned up or not). <Check-out operation procedure> **1.** The operator changes the room status from check-in to check-out (not ready) mode. **2.** Ready for the room (clean up, etc.). **3.** The operator or the maid in the room changes the check-out (not ready) to check-in (ready) mode.
Remote Timed Reminder (Wake-Up Call)	Remotely sets, cancels and confirms the wake-up call for an extension. The Alert button on Operator 1's extension turns red if the guest does not respond to the alarm ringing. The Alert button can also be used to confirm the not responded room number or to call back the room.
Other useful services	• To inform the guest that a message has been left, the MESSAGE button light turns on or the single line telephone in a guest room rings. If a Voice Processing System (VPS) is connected, the guest can hear messages stored in a mailbox. (Message Waiting) • A guest can access the extension simply by pressing one digit number (e.g. room service). (Quick Dialling) • The operator can prohibit intercom call from a guest room to prevent prank calls. (Remote Station Lock Control)

Conditions

[Check-In / Check-Out]

- The telephone charge can be added to the surcharge according to the pre-assigned margin rate. <[011] Charge Margin Rate>
- It is possible to limit telephone usage to a pre-assigned amount. <[010] Budget Management>

- When Hotel Application is enabled, all extension is set to the primary COS. After completing a confirmation of check-in and check-out, the extension is set to the secondary COS.
- If the paired console is used, the operator can refer to the room status on the console while the display of paired KX-T7235 / KX-T7536 is in HOTEL menu. The lightening patterns of DSS button and room status are shown below:

Lighting Pattern	Room Status
Red on	Check-in
Red flash	Check-out (not ready)
Off	Check-out (ready)

- **Checking out when the printer is connected:**
  Station Message Detail Recording (SMDR) records detailed check-out information. To print out the information, the printer must be connected and its Flow Control must be assigned to "XON/XOFF". Before printing out, the information, except the telephone charge, can be confirmed on the telephone display, and if required, the expenses can be changed. A display and printout example is shown below.

  <Display example>

```
Check out Room: 201

Minibar       25.00
Others        12.50

END    PREV    PRINT
```

  <Print out example>

```
Check in  : 01.Jan.99 17:30
Check out : 02.Jan.99 00:15
Room      : 201

01/01/99  19:00  201  01  4812134          00:00'52   46.23 L.
01/01/99  19:30  201  01  4775678          00:00'30   23.00 L.
01/01/99  20:21  201  01  4905100          00:00'44   30.77 L.

Telephone                    100.00
Minibar                       25.00
Others                        12.50
-----------------------------------------------------
Total                  L.    137.50
```

  a) It is possible to give a header to the printed bill such as the hotel's name or greeting or to assign the starting location of output data with a personal computer.

  b) A new page is started for each print-out.

  c) The system can store check-out information for 1000 calls. If over 900 calls are stored, the information of the room which made the most calls is automatically printed out. To

distinguish this from formal check-out sheet, "**" is printed after the room number.
<Example> [Room:201 **]
On this room's formal check-out sheet, "Call amount" will show the number of calls which have been printed out beforehand.
<Example> [01/01/99 12:05 201 Call amount:25]

- **Checking out when the printer is not connected:**
  Even if the printer is not connected, check-out information can be confirmed on the telephone display, and if required, minibar and other expenses can be changed. A display example is shown below.

```
Check out Room: 201
Telephone    100.00
Minibar       25.00
Others        12.50

END    PREV    PRINT
```

[Remote Timed Reminder (Wake-Up Call)]

- When either an operator or the extension sets a new time, the pre-set time is cleared.
- The Alert button can be assigned to a flexible CO button on Operator 1's extension only. <[005] Flexible CO Button Assignment>
- **SMDR for Timed Reminder:**
  Station Message Detail Recording (SMDR) records the detailed Timed Reminder information and prints it out automatically when the Timed Reminder starts and it is not answered. You can also disable the printout. <[990] System Additional Information, Area 5-Bit 10> The print out example is shown below.

Date	Time	Ext	CO	Dial Number	Duration	Acc code	CD
01/01/99	10:00	103		Reminder / Start			
01/01/99	10:01	103		Reminder / No Answer			

Programming Guide References

- [005] Flexible CO Button Assignment
- [010] Budget Management
- [011] Charge Margin Rate
- [100] Flexible Numbering
- [124] Hotel Application
- [217] Timed Reminder Alarm Repeat Times
- [218] Timed Reminder Alarm Interval Time
- [423] Pay Tone Assignment
- [601] Class of Service
- [990] System Additional Information

Features Guide References

- Budget Management
- Charge Fee Reference

User Manual References

- 3.2.5 Hotel Use Features [KX-T7536, KX-T7235 only]
- 4.1.3 Customising the Buttons

Manager Extension

Description

One extension in the system can be assigned as the system manager. This extension can perform System Programming. <[006] Operator / Manager Extension Assignment>

Conditions

- Besides the manager extension, the extension that is connected to jack 1 is able to perform System Programming.
- If eXtra Device Port mode is activated at the manager extension, the proprietary telephone user is regarded as the manager.

Programming Guide References

- [006] Operator / Manager Extension Assignment

Features Guide References

None

User Manual References

None

Night Service

Description

The system supports both night and day modes of operation. The system operation for originating and receiving calls can be different for day and night modes. The system operation for restricting toll calls can be arranged separately to prevent unauthorised toll calls at night.

Switching the Day / Night Mode

Day / Night mode can be switched either automatically or manually.

Switching Type	Description
Automatic	Your system will switch the day / night mode at the programmed time each day. The starting time of the day / night mode can be set for each day. <[102] Day / Night Service Starting Time>
Manual	The operator can switch the day / night mode by dialling the feature number or pressing the Night button.

Conditions

- The following programming items may be assigned differently for the day and night modes.
  [407-408] DIL 1:1 Extension – Day / Night
  [409-410] Intercept Extension – Day / Night
  [500-501] Toll Restriction Level – Day / Night
  [603-604] DIL 1:N Extension and Delayed Ringing – Day / Night
  [605-606] Outgoing Permitted Outside Line Assignment – Day / Night
- If the Night button is assigned to a flexible button <[005] Flexible CO Button Assignment>, it shows the current status as follows.

Lighting Pattern	Day / Night Status
Off	Day mode
Red on	Night mode

- Any extension user except the operators can check the current status on the display by pressing the Night button.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [101] Day / Night Service Switching Mode
- [102] Day / Night Service Starting Time

Features Guide References

None

User Manual References

- 2.7.9 Checking the Day / Night Service Status
- 3.2.1 Day / Night Service
- 4.1.3 Customising the Buttons

Operator

Description

The system supports up to two operators. Any extension can be designated as an operator. The extension assigned as an operator has the ability to perform the following operations:

- Clearing the Call Log Lock
- Clearing the Live Call Screening Password
- Handling the Hotel Application
- Recording and playing outgoing messages
- Switching Day/Night mode manually
- Setting / clearing the Remote Station Lock
- Setting the Background Music – External on and off

The other extension user can call an operator extension by dialling the feature number (default: 9), if at least one operator is assigned (**Operator Call**).

Conditions

- If eXtra Device Port mode is activated at the operator's extension, the proprietary telephone user is regarded as the operator.
- The operator can be assigned as the destination of Transfer Recall. <[990] System Additional Information, Area 02-Bit 1>
- The Operator Call is connected to Operator 1 first and then Operator 2 if Operator 1 is busy.

Programming Guide References

- [006] Operator / Manager Extension Assignment
- [100] Flexible Numbering
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.2.1 Basic Calling
- WARNING: CANNOT RESOLVE (ucmp03) REFERENCE.

Outgoing Message (OGM)

Description

Allows the extension assigned as an operator to record outgoing voice messages. There are three types of outgoing messages that can be recorded.
After recording these messages, the operator can also play them back for confirmation.

Message Type	Description
Direct Inward System Access (DISA)	Played when a caller accesses the DISA feature. There can be two different DISA messages.
Uniform Call Distribution (UCD)	If assigned in the UCD Table, this message is played when all extensions in an UCD group are busy or not available. There can be four different UCD messages.
Timed Reminder	Used in Timed Reminder. When answering the Timed Reminder alarm (often used as a wake-up call), the user will hear this message. There can be only one Timed Reminder message.

Conditions

- Outgoing messages are numbered as follows:

OGM Number	Assignable Message
OGM 1	DISA message 1 or UCD message 1
OGM 2	DISA message 2 or UCD message 2
OGM 3	Timed Reminder message or UCD message 3
OGM 4	UCD message 4

- A DISA Unit for the KX-TD816 or a DISA Card for the KX-TD1232 is required to programme the OGM. One unit or card can be installed per system. System Connection[*1] permits two DISA Cards. If there are two DISA Cards, the same message is recorded for both simultaneously.
- It is possible to select a maximum recording time of 0/16/32/64 seconds for each message. The total length must be under sixty four seconds. <[215] Outgoing Message Time>

Installation Manual References

- 2.4.6 DISA Card / Unit and Remote Card / Unit Installation

[*1] Available for the KX-TD1232 only.

Programming Guide References

- [100] Flexible Numbering
- [215] Outgoing Message Time

Features Guide References

- Direct Inward System Access (DISA)
- Timed Reminder
- Uniform Call Distribution (UCD)

User Manual References

- 3.2.3 Recording Outgoing Messages

Outside Line Group

Description

Outside lines can be grouped into up to eight outside line groups. This allows extensions to call outside parties without designating a specific outside line, since an outside line is automatically selected from the designated outside line group. All outside lines belonging to an outside line group follow the assignment determined for that outside line group. A list of assignments for each outside line group is shown as follows:

- The destination of Intercept Routing
- Disconnect Time
- Flash Time
- Host PBX Access Code
- Pause Time (used in Speed Dialling and Flash)

Conditions

- Each outside line can only belong to one outside line group.
- Outside lines in an outside line group are selected uniformly if all lines belong to the same system.
- If System Connection[*1] is established, an outside line group can include outside lines in both systems. In this case, an outside line is first selected from the user's system. If all lines in the user's system are in use, a line in the other system is selected.

Programming Guide References

- [100] Flexible Numbering
- [401] Outside Line Group Assignment
- [409-410] Intercept Extension – Day / Night
- [411] Host PBX Access Codes
- [412] Pause Time
- [413] Flash Time
- [414] Disconnect Time

Features Guide References

None

User Manual References

None

[*1] Available for the KX-TD1232 only.

Parallelled Telephone

Description

Any analogue or digital proprietary telephone (APT / DPT) can be connected in parallel with a single line telephone/device (SLT).
When a parallel connection is made, an extension user can make and answer a call using either telephone.

Conditions

[General]

- The proprietary telephone (PT) can be used to perform normal operations whether or not the SLT is enabled.
- When receiving a call;
  The SLT is set to ring; both the PT and the SLT will ring except when the PT is in Hands-free Answerback mode or Voice Alerting mode.
  The SLT is not set to ring; the PT rings but the SLT does not ring.
  However, the SLT can answer the phone.
- When the SLT is in operation, the display and LED (Light Emitting Diode) indicator on the paired PT will work in the same way as if the PT is in operation.
- The Call Waiting tone can be heard only by a PT.

[DPT + SLT]

- If one telephone goes off-hook while the other telephone is on a call, the call is switched to the former.
- If eXtra Device Port (XDP) feature is available, each telephone can act as completely different extensions.

[APT + SLT]

- If one telephone goes off-hook while the other telephone is on a call, a three-party call is established. If one user goes on-hook, the other user continues the call.
- The extension user cannot originate a call from the SLT if the APT is:
  – playing Background Music (BGM)
  – in programming mode
  – receiving a paging announcement over the built-in speaker.

Installation Manual References

- 2.3.3 Parallelled Telephone Connection

Programming Guide References

- [100] Flexible Numbering

Features Guide References

- EXtra Device Port (XDP)

User Manual References

- 2.7.10 Setting the Parallel Connected Telephone Ringer (Parallelled Telephone)

Phantom Extension

Description

Allows the system to route calls to a phantom extension. A call to a phantom extension is sent to extensions that have the corresponding Phantom Extension button. You can call the phantom extension by pressing the Phantom Extension button or by dialling the phantom extension number. If several extensions have the same phantom extension number, they will ring simultaneously.

Conditions

- Types of calls whose destination can be the phantom extension are:

Call type	
Outside calls	Direct In Lines (DIL) 1:1; Direct Inward System Access (DISA); Intercept Routing – No Answer (IRNA); Uniform Call Distribution (UCD)-Overflow
Intercom calls	Extension; Transfer

- A phantom number must be assigned <[130] Phantom Extension Number Set> before assigning the Phantom Extension button by Station Programming.
- There is a maximum of 128 phantom numbers. Each number has two to four digits, consisting of numbers **0 through 9.**
- The phantom number cannot be used for feature settings such as Call Forwarding.
- The lighting patterns and statuses of the Phantom Extension button are shown below.

Lighting pattern	**Phantom Extension Status**
Off	Idle
Red on	Calling a phantom extension
Flashing green rapidly	Incoming call

- A DSS (Direct Station Selection) button can be assigned as the Phantom Extension button so that the operator can use the button for transferring a call.
- Whether or not the extension will ring when a call is received at a phantom extension is programmable by Station Programming.

Programming Guide References

- [130] Phantom Extension Number Set

Features Guide References

None

User Manual References

- 2.2.2 Easy Dialling
- 4.1.3 Customising the Buttons

Station Message Detail Recording (SMDR)

Description

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

- Record all outgoing outside calls or outgoing toll calls
- Record all incoming outside calls.

An example of a regular call record printout: When selected for the regular display <[815] SMDR Output Mode>.

Date	Time	Ext	CO	Dial Number	Duration	Acc code	CD
24/06/99	10:03	101	01	12345678901234567890123 45	00:05'12	1234567890	
24/06/99	10:07	103	20	<INCOMING>	00:00'56		
24/06/99	10:08	104	10	<INCOMING>	00:00'20	431211	
24/06/99	10:08	105	10	<INCOMING>	00:10'01	431211	TR
24/06/99	10:09	280	14	10222PI-202-346-7890	00:09'18	001	FW
24/06/99	10:10	103	20	<INCOMING>	00:01'24		
24/06/99	10:11	280	12	<INCOMING>	00:00'24		
24/06/99	10:11	280	22	0924312111	00:03'02		D1
24/06/99	10:20	120	13	<INCOMING>	00:21'46		RM
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

An example of a printed charge call record: When the output mode is selected for charge <[815] SMDR Output Mode> and the charge display is selected <[120] Charge Display Selection>.

Date	Time	Ext	CO	Dial Number	Duration	Cost	Acc code	CD
24/06/99	10:03	101	01	12345678901234567890	00:05'12	382.81L.	1234567890	
24/06/99	10:07	103	20	<I>	00:00'56	0.00L.		
24/06/99	10:08	104	10	<I>	00:00'20	0.00L.	431211	
24/06/99	10:08	105	10	<I>	00:10'01	0.00L.	431211	TR
24/06/99	10:09	280	14	10222P1-202-346-7890	00:09'18	560.00L.	001	FW
24/06/99	10:10	103	20	<I>	00:01'24	0.00L.		
24/06/99	10:11	280	12	<I>	00:00'24	0.00L.		
24/06/99	10:11	280	22	0924312111	00:03'02	128.00L.		D1
24/06/99	10:20	120	13	<I>	00:21'46	0.00L.		RM
(1)	(2)	(3)	(4)	(5)	(6)	(9)	(7)	(8)

An example of a printed meter call record: When the output mode is selected for charge <[815] SMDR Output Mode> and the meter display is selected <[120] Charge Display Selection>.

Date	Time	Ext	CO	Dial Number	Duration	Cost	Acc code	CD
24/06/99	10:03	101	01	12345678901234567890	00:05'12	15	1234567890	
24/06/99	10:07	103	20	<I>	00:00'56	0		
24/06/99	10:08	104	10	<I>	00:00'20	0	431211	
24/06/99	10:08	105	10	<I>	00:10'01	0	431211	TR
24/06/99	10:09	280	14	10222P1-202-346-7890	00:09'18	520	001	FW
24/06/99	10:10	103	20	<I>	00:01'24	0		
24/06/99	10:11	280	12	<I>	00:00'24	0		
24/06/99	10:11	280	22	0924312111	00:03'02	0		D1
24/06/99	10:20	120	13	<I>	00:21'46	1040		RM
(1)	(2)	(3)	(4)	(5)	(6)	(10)	(7)	(8)

Explanation:

Number in the example	Item	Description
(1)	**Date**	Shows the date of the call as Month / Day / Year.

Explanation:

Number in the example	Item	Description
(2)	**Time**	Shows the end time of a call as Hour / Minute.
(3)	**Ext (Extension)**	Shows the extension number, floating number, etc., which was engaged in the call.
(4)	**CO (Outside line)**	Shows the outside line number used for the call.
(5)	**Dial Number**	**Outgoing call:** shows the other party's telephone number (regular call record: maximum 30 digits, charge or meter call record: maximum of 20 digits). Valid digits are 0 through 9, ⁎, #, P (if the PAUSE button is pressed), or the mark "=" (if a host PBX access code is entered). **Received call:** shows <INCOMING> and <I>.
(6)	**Duration**	Shows the duration of the call in Hours / Minutes / Seconds.
(7)	**Acc Code (Account Code)**	Shows the account code appended to the call.
(8)	**CD (Condition Code)**	Shows call handling type with the following codes: **TR**: Transfer **FW**: Call Forwarding to Outside Line **D0**: Non Security Outside Line Access using Direct Inward System Access (DISA) **D1 through D32**: DISA User Codes 1 through 32 **RM**: Remote access to a modem
(9)	**Cost**	Shows the charge.
(10)	**Cost**	Shows the meter.

Conditions

- Connect a printer to the Serial Interface (RS-232C) connector of the main unit. After connecting a printer, do not press the RETURN key, if provided on the printer, for 10 seconds.
- When programmed for outgoing toll calls only, printing occurs only for calls which start with the numbers stored in any Denied Code Table from levels 2 to 6. If Automatic Route Selection (ARS) is employed, the modified number is checked against these tables.
- This system can store information of up to 100 calls. If more calls are originated or received, previous records are deleted starting with the oldest one.
- It is possible to select whether the SMDR prints out the account code <[990] System Additional Information, Area 06-Bit 2>. If it is printed out, it is shown in dots.
- **SMDR for Hotel Application:**
  SMDR also records and prints out details for the Hotel Application function: check-out information and Timed Reminder information.
- SMDR data is not deleted when you reset the system.

- If the system clock is not set <[000] Date and Time Set> or if the calendar IC is out of order, the date and time will not be printed out.
- If the FLASH signal is manually sent during a conversation, the call record is printed and a new record is started.

Installation Manual References

- 2.3.8 Printer and PC Connection

Programming Guide References

- [000] Date and Time Set
- [120] Charge Display Selection
- [212] Call Duration Count Start Time
- [800] SMDR Incoming / Outgoing Call Log Printout
- [801] SMDR Format
- [802] System Data Printout
- [806-807] Serial Interface (RS-232C) Parameters
- [815] SMDR Output Mode
- [990] System Additional Information

Features Guide References

- Hotel Application

User Manual References

None

Voice Mail Integration for Digital Proprietary Telephones

Description

A Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration; e.g. KX-TVP200) can be connected to a Digital Super Hybrid System in a tightly integrated fashion.
The system sends the Voice Processing System (VPS) data which contains the extension number configuration information and the VPS automatically creates mailboxes with this data (**Automatic Configuration – Quick Setup**).
With a digital proprietary telephone capable Panasonic Voice Processing System, the following features are available:

Features	Descriptions
Live Call Screening (LCS)	Allows the user to monitor their voice mailbox while an incoming caller is leaving a message and, if desired, intercept the call by pressing the LCS button. When the caller is connected to the voice mailbox, one of following ways can be selected for monitoring by Station Programming (Live Call Screening Mode Set). **Hands-free mode:** The user can monitor the call automatically through the built-in speaker. **Private mode:** The user will hear an alert tone. To monitor the call, the user goes off-hook with the handset or speakerphone.
Two-Way Recording into Voice Mail	Allows the user to record a conversation into one's mailbox or another mailbox, while talking on the phone. Use the Two-Way Record button to record into your own mailbox. Use the Two-Way Transfer button to record into someone else's mailbox. **Note** When you record Two-Way telephone conversations, you should inform the other party that the conversation is being recorded.

Conditions

[General]

- A maximum of one VPS can be connected to each system.
- A maximum of six jacks of the system can be connected to a digital proprietary telephone capable VPS. Because a digital proprietary telephone connection supports up to two simultaneous voice calls, only one jack of the system needs to be connected for every two VPS ports.
- Connect the jacks and ports in order. In other words, the lowest number jack of the system used for VPS connection must be connected to the lowest number VPS port.

- The VPS data is transmitted to the VPS via the lowest jack port.

[Live Call Screening (LCS)]

- A single line telephone, which is connected to a LCS activated proprietary telephone in parallel, can be also used to monitor a message recording. Even if you are out with a cordless telephone, an alert tone through the handset lets you know that a message is being recorded. To intercept the call, flash the hookswitch.
- When the extension user is having a conversation, a call waiting tone is sent. The user can put the existing call on hold before accessing LCS.
- A flexible CO and DSS (Direct Station Selection) button can be assigned as a LCS or LCS cancel button. <[005] Flexible CO Button Assignment>
- To prevent unauthorised monitoring, a three-digit password must be set by the LCS user. If the user forgets their password, it can be cleared by the operator (**Live Call Screeing Password Control**).
- Each extension can be programmed to either close the mailbox or keep recording the conversation after the call is intercepted. <[616] Live Call Screening Recording Mode Assignment>

[Two-Way Recording into Voice Mail]

- A flexible CO and DSS (Direct Station Selection) button can be assigned as the Two-Way Record or the Two-Way Transfer button. <[005] Flexible CO Button Assignment>
- When all of the voice mail ports are busy:
  – Pressing the Two-Way Record button sends an alarm tone.
  – Pressing the Two-Way Transfer button followed by an extension number sends an alarm tone.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [117] Voice Mail Number Assignment
- [118] Voice Mail Extension Number Set
- [119] Voice Mail Extension Group Assignment
- [616] Live Call Screening Recording Mode Assignment

Features Guide References

- Voice Mail Integration for Inband

User Manual References

- 2.8.2 If a Voice Processing System is Connected
- 3.1.1 Changing the Settings
- 4.1.2 Initial Settings
- 4.1.3 Customising the Buttons

Voice Mail Integration for Inband

Description

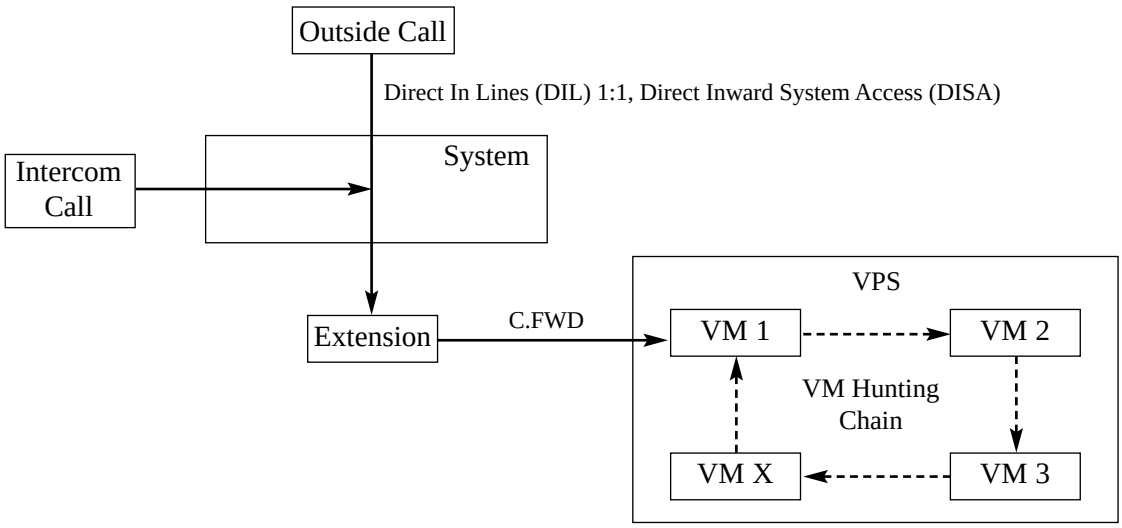
This system can accommodate Voice Processing System (VPS) equipment, which offers the user Voice Mail (VM) and Automated Attendant (AA) Services. If an extension user has set the Call Forwarding destination to the VPS, the calling party will be forwarded to the VPS and can leave a voice message in the mailbox of the extension. When a call is transferred to the VPS by Call Forwarding or Intercept Routing – No Answer (IRNA) features, the mailbox number is sent to the VPS automatically with DTMF (Dual Tone Multi-Frequency) signalling (Follow On ID). Up to twelve extension jacks can be connected to VPS as extensions in the system.

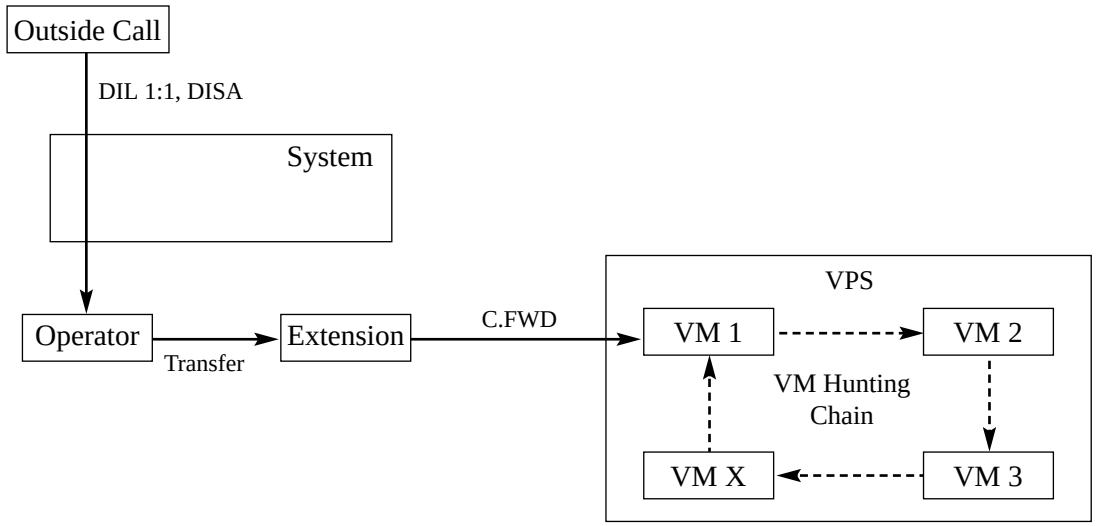
System Explanation

1. Voice Mail (VM) Service

a) Call Forwarding to VM

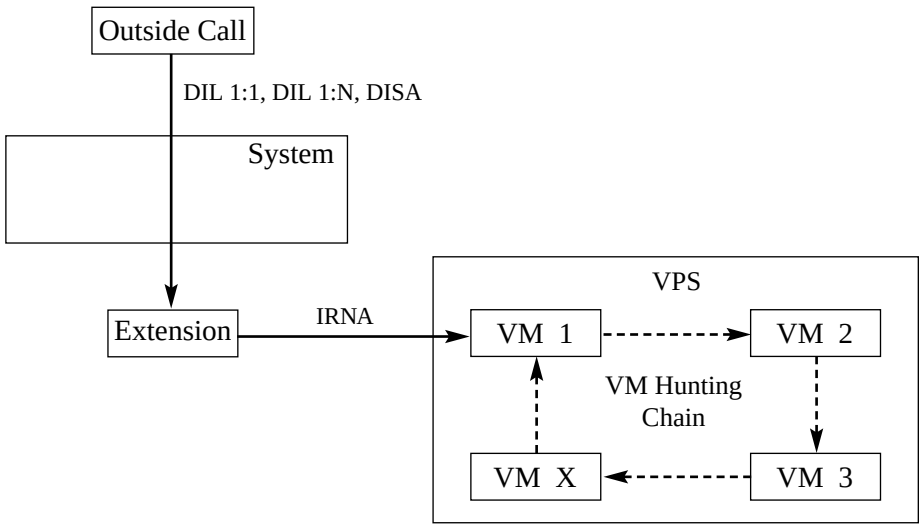
If an extension user sets Call Forwarding (C. FWD) whose destination is the VPS, an incoming call is forwarded to the VPS under the proper conditions. The system sends to the VPS a mailbox number of the corresponding extension at that time. Therefore the calling party can leave his / her message in the mailbox of the desired extension without knowing the mailbox number.





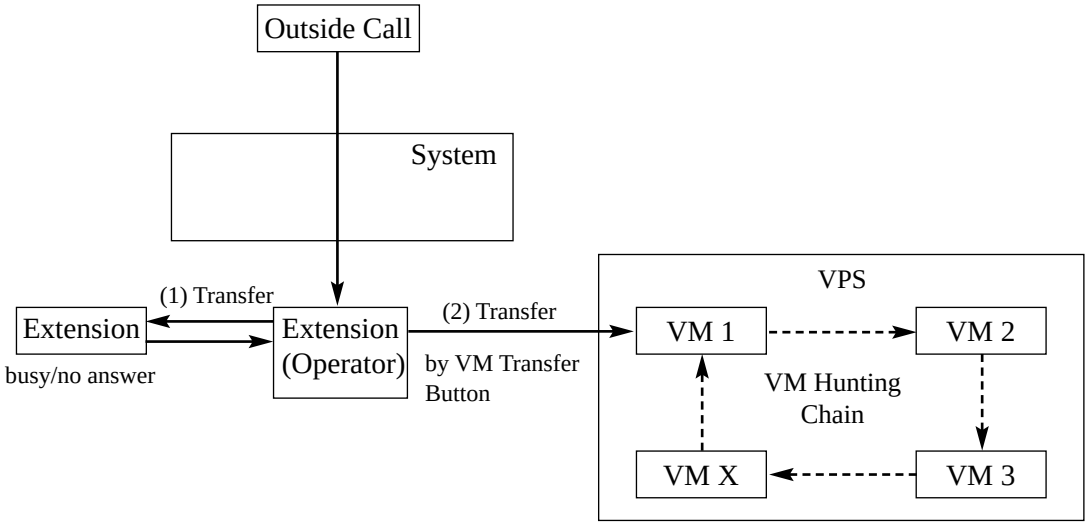
b) Intercept Routing to VM

If an outside line is set as Intercept Routing – No Answer (IRNA) whose destination is the VPS, an outside call is forwarded to the VPS under the proper conditions. The system sends to the VPS a mailbox number of the corresponding extension at that time. Therefore the calling party can leave his / her message in the mailbox of the desired extension without knowing the mailbox number.



c) Transferring to VM

The extension user can transfer an outside call to the VPS so that calling party can leave his / her message in the mailbox of the desired extension. The extension user should use the Voice Mail (VM) Transfer button, when transferring a call to the VPS. Pressing this button and entering the extension number allows the extension user to transfer the call to the mailbox of the corresponding extension.

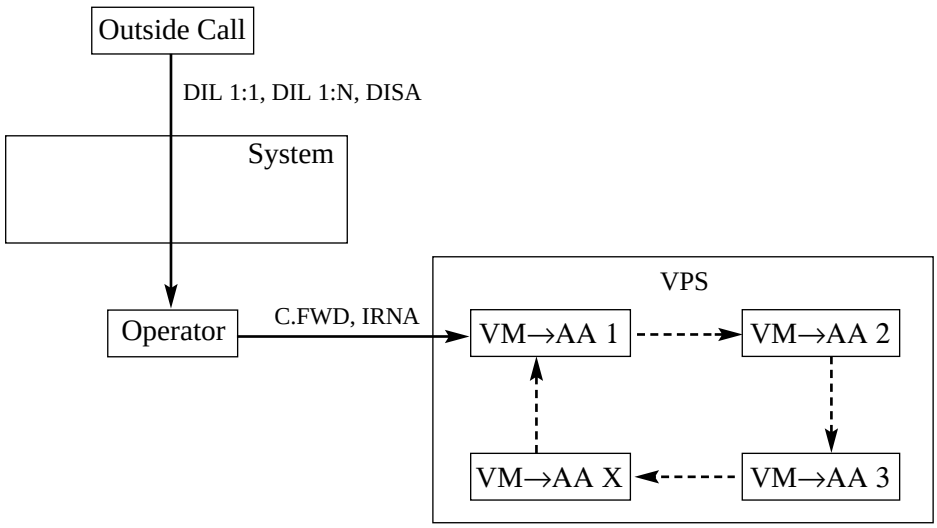


d) Changing from VM to Automated Attendant (AA)

The Automated Attendant Service is automatically activated in the following cases:

1) The incoming call is not answered by the operator and IRNA is activated.

2) The operator is assigned as a destination of DIL 1:1 and the operator sets the Call Forwarding to VPS.



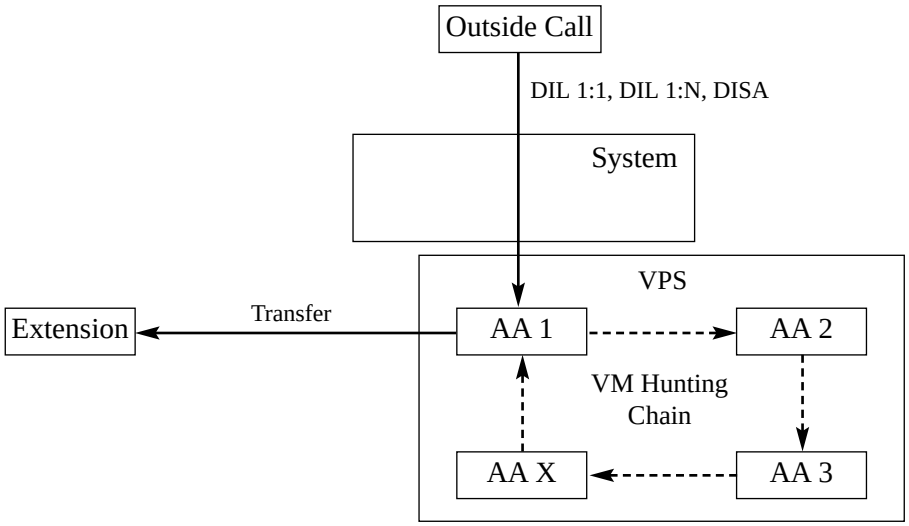
e) Listening to a Recorded Message

If the VPS receives a message, the VPS can turn on the MESSAGE button indicator of the corresponding telephone as notification to the user of the telephone. (Panasonic KX-TVP series can do this.) The VPS notifies the extension user that there is a message waiting in his / her mailbox. When the MESSAGE button indicator is lit, pressing the button allows the extension user to play back the stored message.

2. Automated Attendant (AA) Service

a) AA to Extension

AA receives and answers an outside call and offers services such as transferring to a specified extension or the corresponding mailbox by the DTMF signalling, which is sent from the calling party.



Conditions

- A VPS can be assigned as the destination of the following features.
  - Call Forwarding – All Calls
  - Call Forwarding – Busy
  - Call Forwarding – Busy / No Answer
  - Call Forwarding – No Answer
  - Intercept Routing – No Answer

  In these functions, the caller to the extension need not know the mailbox number of the called extension because the code is automatically transmitted to the VPS (Follow On ID function). If a DIL 1:N call is transferred to the VPS by IRNA, your system transmits the mailbox number of the lowest jack number of the receiving extensions.
- A mailbox number is a respective extension number by default. The mailbox number can be changed, only if programme [990] System Additional Information, Area 02-Bit 8 is set to "free".
- Pressing the Voice Mail Transfer button and dialling the extension number allows the extension user to transfer to the corresponding mailbox. In this case, Follow On ID function is available.
- The Voice Mail extension should be set to Data Line Security to achieve proper recording.
- The Voice Mail extension can execute the Busy Station Signalling (BSS) function to the ringing extension.
- It is recommended that you do not connect more than two VM ports to each Extension Card or Unit.

Installation Manual References

- 2.3.2 Extension Connection
- 2.4.3 8-Station Line Unit Connection

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [106] Station Hunting Type
- [113] VM Status DTMF Set
- [114] VM Command DTMF Set
- [407-408] DIL 1:1 Extension – Day / Night
- [409-410] Intercept Extension – Day / Night
- [603-604] DIL 1:N Extension and Delayed Ringing – Day / Night
- [609] Voice Mail Access Codes
- [990] System Additional Information

Features Guide References

- Call Forwarding
- Intercept Routing
- Station Hunting

User Manual References

- 2.8.2 If a Voice Processing System is Connected
- 4.1.3 Customising the Buttons

1.4 Fault Recovery/Diagnostic

Power Failure Restart

Description

When turning the electricity back on, the system restarts the stored data automatically. Before restarting, the system records the error log if necessary.

Conditions

- In the case of KX-TD1232, if System Connection is established, the Slave System makes a copy of the restored data in the Master system.
- In the event of a power failure, system memory is protected by a factory-provided lithium battery. There is no memory loss except the memories of Camp-On and Call Park.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

None

Power Failure Transfer

Description

If a power failure should happen, or a system is in an off-line condition, specific extension telephone instruments are automatically connected to specific outside lines. This provides outside line conversations between the following extensions and outside lines:
KX-TD816:
Outside line 01 is connected to extension jack number 01
Outside line 02 is connected to extension jack number 02
Outside line 05 is connected to extension jack number 09 (not available for an ISDN line)
Outside line 06 is connected to extension jack number 10 (not available for an ISDN line)
KX-TD1232:
Outside line 01 is connected to extension jack number 01
Outside line 02 is connected to extension jack number 02
Outside line 03 is connected to extension jack number 09
Outside line 04 is connected to extension jack number 10
Outside line 09 is connected to extension jack number 17 (not available for an ISDN line)
Outside line 10 is connected to extension jack number 18 (not available for an ISDN line)
Single line telephones can work in case of a power failure. Connect these telephone instruments to the above extension jacks.

Conditions

- All other conversations except for the above combinations are disconnected during a power failure.
- Only the outside line conversations can operate. All other features do not work.

Installation Manual References

- 2.3.1 Outside Line Connection
- 2.3.2 Extension Connection
- 2.4.2 4-CO Line Unit Connection
- 2.4.3 8-Station Line Unit Connection
- 2.5.1 Auxiliary Connection for Power Failure Transfer

Programming Guide References

No programming required.

Features Guide References

- Power Failure Restart

User Manual References

None

1.5 Attended Features

Direct In Lines (DIL)

Description

Enables an incoming outside call to go directly to one or more answering points.

Type	Description
DIL 1:1	An incoming outside call is sent to a single destination. Assignable destinations are: (1) extension; (2) modem; (3) external pager; (4) DISA (Direct Inward System Access) message; (5) extension group; or (6) phantom extension. <[407-408] DIL 1:1 Extension – Day / Night>
DIL 1:N	An incoming outside call is sent to multiple destinations. Assignable destinations are extensions only. <[603-604] DIL 1:N Extension and Delayed Ringing – Day / Night>

Conditions

[General]

- If an outside line is programmed for both DIL 1:1 and DIL 1:N, it is regarded as a DIL 1:1 line.
- Both DIL 1:1 and 1:N can have different destinations for day and night modes (Night Service).

[DIL 1:1]

- DIL 1:1 to the modem allows the caller to perform remote administration. DIL 1:1 to an external pager causes the pager to sound when receiving incoming calls (TAFAS: Trunk (Outside Line) Answer From Any Station feature). DIL 1:1 to DISA message allows an external caller to access the system directly (DISA feature).

[DIL 1:N]

- A telephone set is originally set to ring instantly. It can be changed to delayed ringing, no ringing or no incoming calls (disable) on an outside line number basis (**Delayed Ringing**). If delayed, no ringing or no incoming calls (disable) is assigned to an extension, the extension can answer an incoming call during no ring or the delay time by pressing the flashing button.

Programming Guide References

- [407-408] DIL 1:1 Extension – Day / Night
- [603-604] DIL 1:N Extension and Delayed Ringing – Day / Night

Features Guide References

None

User Manual References

None

Direct Inward System Access (DISA)

Description

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 intercom call to an extension, operator, modem (for remote system administration) or external pager (for TAFAS: Trunk (Outside Line) Answer From Any Station). A dialling route using a one digit number (DISA built-in automated attendant number) is available.
- Calling an external party.

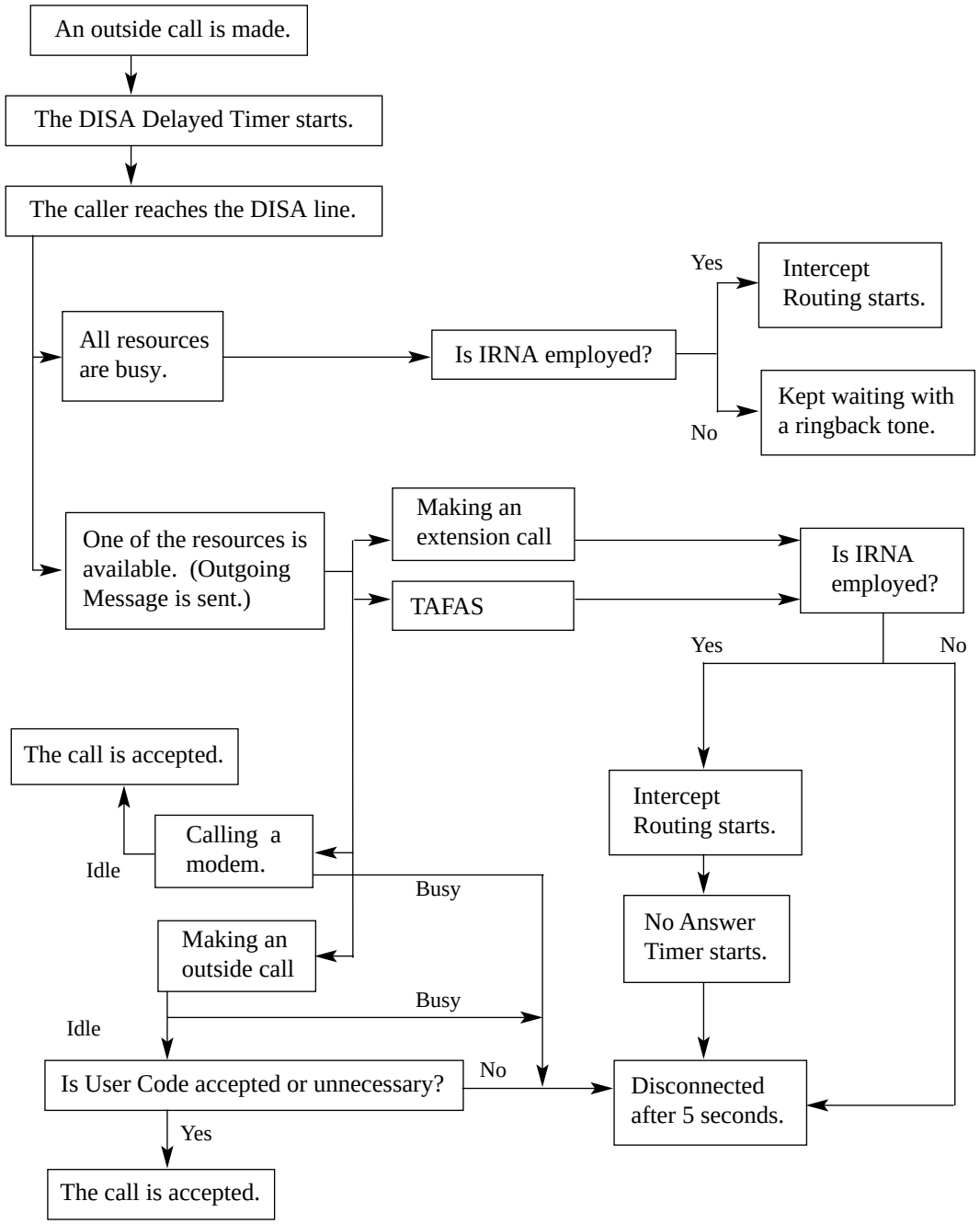
One of the following security mode must be selected to prevent the caller from making unauthorised calls. <[809] DISA Security Type>

Security Mode	Description
Non	Any caller can make outside or intercom calls.
Outside Line	A pre-assigned DISA user code is required to make outside calls.

However, when making an outside call by Call Forwarding – to Outside Line, the call is permitted (exception).
An Outgoing Message can be programmed for the DISA feature. When a caller reaches the DISA line, a pre-recorded message will greet the caller. Two different DISA messages may be recorded by the operator. Thus, one message may be used in day mode and the other in night mode, or they can be used for different outside lines.

Note
When you enable the outside-to-outside call transfer feature of DISA function, if a third party knows the password, there is a risk that someone else illegally may make a phone call using your telephone line, and the cost may be charged to your account.
In order to avoid this to happen, we strongly recommend you to keep the secrecy of the password, and change the password frequently.

Flow chart of possible cases and results for DISA calls



Conditions

- The following items are required for the DISA feature:

  a) An optional DISA Unit or Card must be installed.

  b) The Floating Station number of the DISA message should be assigned as the Direct In Lines (DIL) 1:1 destination. <[813] Floating Number Assignment, [407-408] DIL 1:1

Extension – Day / Night> This assigns the DISA line and the message accessed by external callers.

c) The DISA message(s) should be recorded by the operator.

- Only one DISA Unit (for KX-TD816) or DISA Card (for KX-TD1232) can be installed per system. During System Connection[*1], the DISA Card is effective only for an outside line used in the same system.
- A DISA call is answered after a ringback tone is returned to the caller after the DISA Delayed Answer Time expires. <[213] DISA Delayed Answer Time> The caller can dial during the message.
- The floating number of a DISA message may be selected as the destination of Intercept Routing. <[409-410] Intercept Extension – Day / Night>
- **DISA Built-in Automated Attendant:**
  This system can store up to ten programmable DISA built-in automated attendant numbers. <[818] DISA Built-in Automated Attendant Number> After listening to the DISA message, the caller can dial a single digit. The number may be the same as the first digit of other numbers (extension number, floating number, etc.). To avoid confusion, the system waits for the second digit for a preprogrammed amount of time (default: 1 second). If the timer runs out of time, the system assumes that the first digit is a DISA built-in automated attendant number. <[221] DISA AA Wait Time>
- The DISA line can be used to originate outside calls if a security code (if required) has been dialled.
- This system can store up to 32 programmable DISA user codes. Each code should be unique. It is possible to assign a Class of Service number to each code. The Class of Service of the code defines the Toll Restriction level. <[811] DISA / TIE User Codes>
- The duration of outside-to-outside line calls can be limited. <[206] Outside-to-Outside Line Call Duration Time> When the specified time expires, both lines are disconnected unless the caller re-tries or extends the time, if available. A warning tone is sent to both parties 15 seconds before the time-limit at five-second intervals.
- Extending the call duration can be enabled from one to seven minutes or disabled. <[214] DISA Prolong Time> The caller can do this several times.
- To detect the end of an outside-to-outside line call, Calling Party Control (CPC) Signal Detection and Tone Detection can be assigned. <[405] CPC Signal Detection Incoming Set, [415] CPC Signal Detection Outgoing Set, [810] DISA Tone Detection>
- Dialling "✳" during DISA outside-to-outside line conversation enables or disables the call retry. If disables, "✳" will simply be dialled. <[990] System Additional Information, Area 07-Bit 10>
- When a DISA call arrives at a busy extension which has disabled Call Waiting, a busy tone will be sent to the caller. If required, Intercept Routing – No Answer (IRNA) can be activated. <[990] System Additional Information, Area 07-Bit 7>

Installation Manual References

- 2.4.6 DISA Card / Unit and Remote Card / Unit Installation

[*1] Available for the KX-TD1232 only.

Programming Guide References

- [100] Flexible Numbering
- [203] Intercept Time
- [206] Outside-to-Outside Line Call Duration Time
- [213] DISA Delayed Answer Time
- [214] DISA Prolong Time
- [215] Outgoing Message Time
- [221] DISA AA Wait Time
- [405] CPC Signal Detection Incoming Set
- [407-408] DIL 1:1 Extension – Day / Night
- [409-410] Intercept Extension – Day / Night
- [415] CPC Signal Detection Outgoing Set
- [809] DISA Security Type
- [810] DISA Tone Detection
- [811] DISA / TIE User Codes
- [812] DISA DTMF Repeat
- [813] Floating Number Assignment
- [818] DISA Built-in Automated Attendant Number
- [990] System Additional Information

Features Guide References

- Intercept Routing
- Outgoing Message (OGM)

User Manual References

- 2.2.8 To Access Another Party Directly from Outside (Direct Inward System Access [DISA])

Ring Group

Description

All extensions in a ring group ring simultaneously by dialling the floating number of the extension group. A ring group can be a Station Hunting type.

Conditions

- Types of calls whose destination can be the ring group are:

Call type	
Outside calls	Direct In Lines (DIL) 1:1; Direct Inward System Access (DISA); Intercept Routing – No Answer (IRNA); Uniform Call Distribution (UCD)-Overflow
Intercom calls	Extension; Transfer

- The floating number of the extension group is used for all other hunting types, Circular, Termination, Voice Mail (VM), Automated Attendant (AA) and Uniform Call Distribution (UCD).

Programming Guide References

- [106] Station Hunting Type
- [602] Extension Group Assignment
- [813] Floating Number Assignment

Features Guide References

- Floating Station
- Station Hunting

User Manual References

None

Trunk (Outside Line) Answer From Any Station (TAFAS)

Description

A tone signal is sent through the external pager when an incoming outside call is received. Any extension user can answer the call.

Conditions

- Connect a user-supplied external paging device.
- One external pager can be installed in the KX-TD816. Two external pagers can be installed in the KX-TD1232 per system, and System Connection[*1] permits four pagers (maximum). These pagers are numbered from 1 through 4. To answer an incoming call dial the feature number and 1 to 4. The feature number is the same as that used to answer Paging – External.
- A floating number of a pager is programmable. <[813] Floating Number Assignment>
- TAFAS can be used in the following cases:
  - **a)** The floating number of an external pager is assigned as the Direct In Lines (DIL) 1:1 destination. In this case all incoming calls on the specified line will be signalled.
  - **b)** A DISA (Direct Inward System Access) caller dials the floating number of an external pager.
  - **c)** The floating number of an external pager is assigned as the Intercept Routing destination. In this case incoming calls redirected to the destination will be signalled.
- A confirmation tone is sent to the user before being connected to the caller. Eliminating the tone is programmable. <[990] System Additional Information, Area 02-Bit 6>

Installation Manual References

- 2.3.6 External Pager (Paging Equipment) Connection

Programming Guide References

- [100] Flexible Numbering
- [813] Floating Number Assignment
- [990] System Additional Information

Features Guide References

- Floating Station

[*1] Available for the KX-TD1232 only.

User Manual References

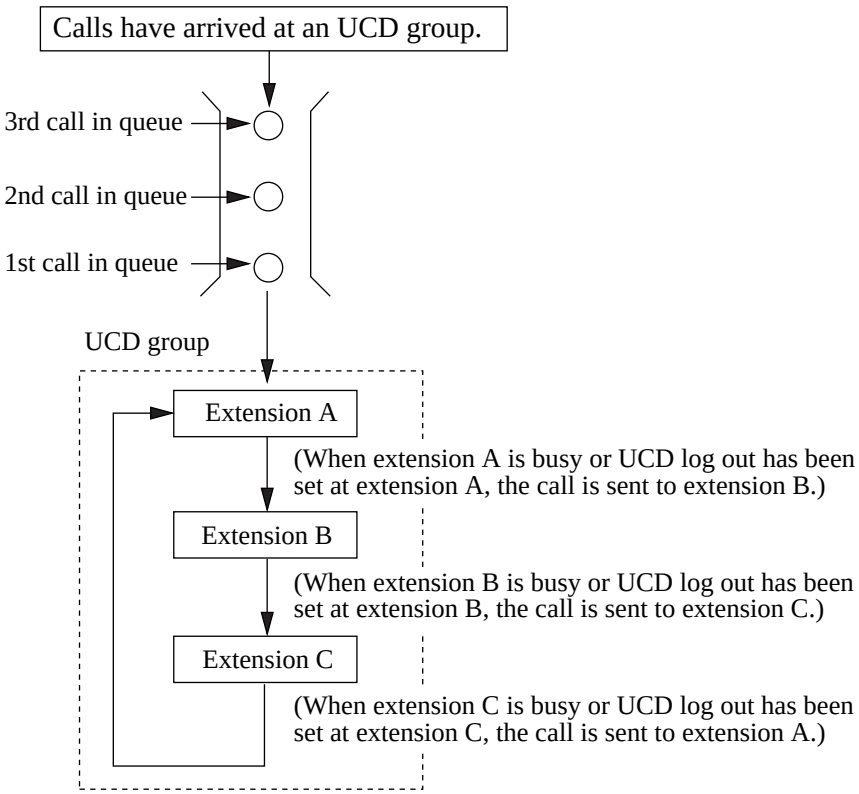
- 2.3.4 Answering a Call via an External Speaker (Trunk Answer From Any Station [TAFAS])

Uniform Call Distribution (UCD)

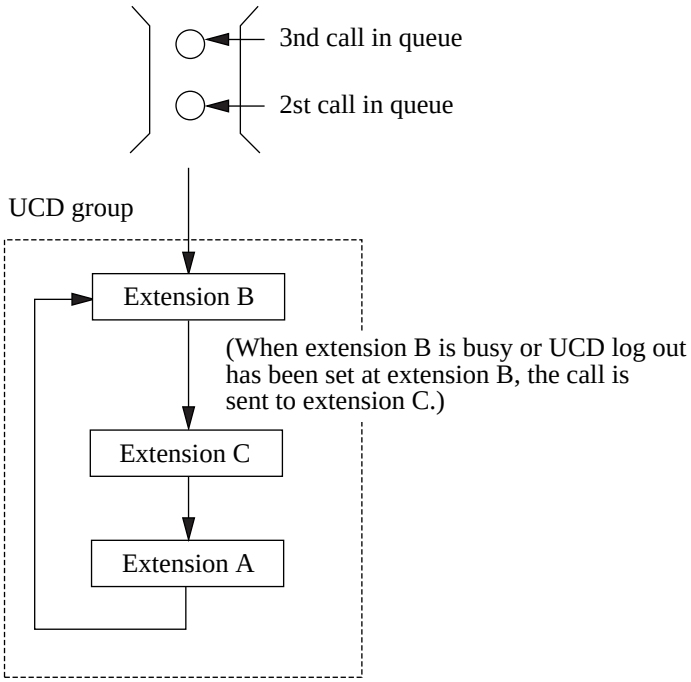
Description

UCD is a Station Hunting feature which is activated by dialling the floating number of the extension group called an UCD group. Incoming calls to an UCD group are distributed unformly by hunting for an idle extension in a circular way. This UCD feature is particularly helpful when a certain extension receives a high volume of calls compared with other extensions.
If all extensions in an UCD group are busy or not available, the incoming outside call will be handled by the UCD Time Table.
An outline sketch of an UCD is shown below.

1. When a number of calls have arrived at an UCD group, the 1st call is sent to extension A first.



2. When the 1st call arrives at extension A, the 2nd call is sent to extension B.



3. When the 2nd call arrives at extension C, the 3rd call will be sent to extension A.

4. When all extensions in an UCD group are busy or not available, the incoming outside call will be handled by the UCD Time Table. An example is shown below.

UCD Time Table Assignment

UCD	FN	OFN	TT
1	191	101	1
2	192	291	2
3	193		
4	194		
5	291		
6	292		
7	293		
8	294		

UCD: UCD Group Number (1-8)
FN: Floating Number of the UCD Group
OFN: Overflow Extension Number
TT: Time Table Number (1-4)

Sequence Assignment

TT	SEQUENCE
1	S1 → 4T → 4T → TR →
2	S1 → 2T → → →
3	S4 → RT → → →
4	TR → RT → → →

S1: Send Outgoing Message (OGM) 1
S2: Send OGM 2
S3: Send OGM 3
S4: Send OGM 4
TR: Transfer to overflow extension
RT: Return to top
Blank: Disconnect the line
1T: Timer – 16 seconds
2T: Timer – 32 seconds
3T: Timer – 48 seconds
4T: Timer – 64 seconds

Sequence Activation Examples

Sequence Examples	Activation
S4 → → → →	Sends OGM 4 and then disconnects the line.
S4 → TR → N/A → N/A → N/A	Sends OGM 4 and then transfers to an overflow extension.
S4 → 1T → → →	Sends OGM 4, Music on Hold for 16 seconds and then disconnects the line.
S1 → S2 → S3 → →	Sends OGM 1, OGM 2, OGM 3 and then disconnects the line.
S4 → 1T → S1 → →	Sends OGM 4, Music on Hold for 16 seconds, OGM 1 and then disconnects the line.
S4 → 1T → 4T → RT → N/A	Sends OGM 4, Music on Hold for 16 + 64 seconds and then OGM 4 again.
S4 → RT → N/A → N/A → N/A	Sends OGM 4 repeatedly.
TR → N/A → N/A → N/A → N/A	Directly transfers to an overflow extension.
RT → N/A → N/A → N/A → N/A	Waits for an idle extension. The caller hears a ringback tone. (Intercept Routing – No Answer (IRNA) works.)
→ N/A → N/A → N/A → N/A	Waits for an idle extension. The caller hears a ringback tone. (IRNA works.)
1T → → → →	Waits for an idle extension. The caller hears a ringback tone. (IRNA does not work.)
1T → RT → N/A → N/A → N/A	Waits for an idle extension. The caller hears a ringback tone. (IRNA does not work.)

Sequence Activation Examples

Sequence Examples	Activation
1T → TR → N/A → N/A → N/A	Waits for an idle extension for 16 seconds and then transfers to an overflow extension.

N/A: not available for assignment.

Note

- The UCD Time Table is not available for incoming extensions or transferred calls.
- If the overflow extension or Time Table number is not assigned, the system will not answer the call and waits for an idle extension. In this case, IRNA will be employed.
- If the system sends the OGM after queuing, the OGM answering time is subject to the time assigned. <[213] DISA Delayed Answer Time>
- Dialling is disregarded during the OGM.
- In sequence assignment, "Sx" can be assigned to a space other than the first only when another "Sx" is assigned in the first space.
- In sequence assignment, an assignment after "TR", "RT" or "Blank" is not available.
- If a timer is the first item in a Time Table sequence, it will delay answering according to the Timer's setting. The caller will hear a ringback tone.
- Music on Hold after an OGM can be changed to a ringback tone. <[990] System Additional Information, Area 01-Bit 1>

Conditions

- UCD can be used in the following cases:
  a) The floating number of UCD is assigned as the Direct In Lines (DIL) 1:1 destination.
  b) The floating number of UCD is assigned as the Intercept Routing destination.
  c) The floating number of UCD is dialled from an extension.
  d) The floating number of UCD is dialled from DISA (Direct Inward System Access).
  e) The floating number of UCD is assigned as the UCD Overflow destination.
- This feature requires assigning an UCD for an extension group. <[106] Station Hunting Type> An extension cannot belong to two or more UCD groups.
- The floating number can be assigned on an UCD group basis. The UCD group is based on the extension group. <[813] Floating Number Assignment>
- It is possible to set the log-in or log-out status on an extension basis. An UCD call can be sent to an extension in log-in status within the UCD group, but cannot be sent to extensions in log-out status. If the extension would like to leave the group temporarily, the extension sets the log-out status by the feature number to prevent UCD calls being sent to his/her extension. When the extension re-joins the group, the extension sets the log-in status.
- There should be at least one extension that is in log-in status.

Programming Guide References

- [106] Station Hunting Type
- [126] UCD Overflow
- [127] UCD Time Table
- [602] Extension Group Assignment
- [813] Floating Number Assignment

Features Guide References

- Extension Group
- Log-In / Log-Out
- Station Hunting

User Manual References

None

1.6 Originating Features

Alternate Calling – Ring / Voice

Description

This system offers two methods of Intercom Calling – Ring-Calling and Voice-Calling. Ring-Calling informs the called party of an incoming call with a ring tone, while the Voice-Calling uses the calling party's voice. The proprietary telephone user can select ring tone or voice calling by Station Programming (Intercom Alert Assignment). If the user selects Voice-Calling, the calling party can talk to the user immediately after the confirmation tone. The calling extension user can change the called extension user's pre-set method (ring tone or voice) by pressing "✳" after dialling the extension number. By doing so, Ring-Calling is switched to Voice-Calling, or vice versa, at the called extension.

Conditions

A single line telephone users receive calls with Ring-Calling only.

Programming Guide References

No programming required.

Features Guide References

- Hands-free Answerback

User Manual References

- 2.2.7 Alternating the Calling Method (Alternate Calling — Ring / Voice)
- 4.1.2 Initial Settings

Automatic Callback Busy (Camp-On)

Description

If the line is busy when a call is made, callback ringing will inform the caller when the line becomes free. The result after the caller answers the callback ringing differs depending on the busy party.

Busy party	Result after the caller answers the callback ringing
Extension	The extension's number is automatically dialled.
Outside party	The line is automatically selected to allow the user to make an outside call.

Conditions

- Off-hook prior to the start of callback ringing cancels this function.
- If the callback ringing is not answered in four rings (within 10 seconds) the callback is cancelled.
- More than one extension user can set this function to one extension or outside line at the same time.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.2.4 When the Dialled Line is Busy or There is No Answer

Automatic Route Selection (ARS)

Description

Automatic Route Selection (ARS) is a system programmable feature that automatically selects the least expensive route available at the time an outgoing outside call is made. Preprogramming eliminates dialling the access code of the least expensive carrier. All the user has to do is dial the feature number for ARS, and the number. The appropriate outside line group is selected and the access code is added before the number is outpulsed.

Programming Example

The following is an example to show how to programme ARS so that the user can call the XYZ Company via the least expensive line.

1. Programme ARS to work when the feature number for ARS is dialled by the user. Use the programme [312] ARS Mode to enable the feature.
2. Store the telephone number of the outside party that will use the ARS feature. For example, if XYZ Company's telephone number is "1-234-567-8910" (not including the line access number), store the leading digits of the number "1234567" (max. 7 digits). To store the numbers, use one of the programmes [314] through [321] ARS Leading Digit Entry for Plans 1 through 8 (Leading Digit Tables 1 through 8). The following assumes that we have selected Leading Digit Table 1 to store the number. Remember that Table number 1 matches Route Plan Table 1.

   Example: Programme Address [314] Leading Digit Table 1

   Table 1

Location	Entry
01	1234567
02	
•	
•	
•	
50	

3. Check all carriers available to call the stored telephone number and their outside line groups. Suppose there are three carriers available to call the XYZ Company and each carrier's line is assigned to an outside line group as follows:

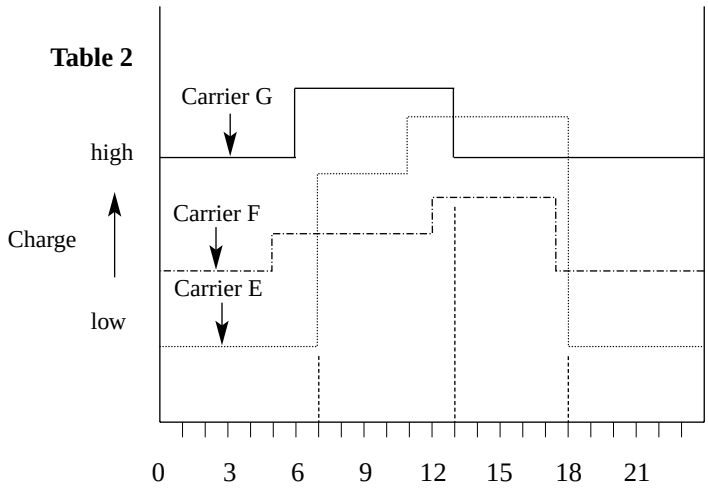
   Carrier E — Outside Line Group 1

   Carrier F — Outside Line Group 2

   Carrier G — Outside Line Group 3

Then check the fee charged by each carrier:

Table 2



As shown in Table 2, the least costly route varies with the time of day. To select the least expensive line at a certain time, split the day into three zones as follows:

(1) 7:00 - 13:00

(2) 13:00 - 18:00

(3) 18:00 - 7:00

To programme the time zones above, use the programme [313] "ARS Time". Four time zones (Time-A, Time-B, Time-C, Time-D) are provided. Enter the starting hour for each zone.

Example: Programme Address [313] ARS Time Table

Table 3

Time Zones	Entry	
Time-A Time-B Time-C Time-D	7:00 13:00 18:00 Disable	← Enter the starting time of each zone. If a zone is not necessary, select “Disable”.

4. Determine the priority of the outside line groups in each time zone. The table below shows the carrier and outside line groups selected for each priority and time zone:

Table 4

	Time-A (7:00-13:00)	Time-B (13:00-18:00)	Time-C (18:00-7:00)
Least Costly Carrier / Outside Line Group (Priority 1)	Carrier F/Group 2	Carrier F/Group 2	Carrier E/Group 1

Table 4

	Time-A (7:00-13:00)	**Time-B (13:00-18:00)**	**Time-C (18:00-7:00)**
Next Less Costly Carrier / Outside Line Group (Priority 2)	Carrier E/Group 1	Carrier G/Group 3	Carrier F/Group 2
Most Costly Carrier / Outside Line Group (Priority 3)	Carrier G/Group 3	Carrier E/Group 1	Carrier G/Group 3

To have the system use the priorities shown above, use one of the programmes [322] through [329] "ARS Routing Plans 1 through 8" (Route Plan Tables 1 through 8).
As we have already selected Leading Digit Table 1, select Route Plan Table 1. Enter the outside line group numbers in order of priority. If the specified outside line group requires digit modification, assign the appropriate digit modification table number (1 through 8).
This table is required to have the system automatically add a specific carrier access code to the user-dialled number.

Example: Programme [322] Route Plan Table 1

Table 5

	Time -A		**Time -B**		**Time -C**		**Time -D**	
	COG	**Modify**	**COG**	**Modify**	**COG**	**Modify**	**COG**	**Modify**
Priority 1	2	2	2	2	1	1		
Priority 2	1	1	3	3	2	2		
Priority 3	3	3	1	1	3	3		

COG: Outside Line Group

Modify: Modification Table Number

5. Create a Digit Modification Table. Carriers E, F and G match the outside line groups and Modification Tables as follows and have the following Access Codes:

Table 6

Carrier	**COG**	**Mod. Table**	**Access Code**
E	1	1	1-0-333
F	2	2	1-0-555
G	3	3	1-0-666

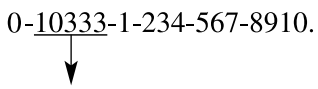
According to Table 6, enter the Access Codes in the respective Modification Tables using programmes [330] ARS Modify Removed Digit and [331] ARS Modify Added Number as follows:

Example: Programme [330] Digit Modification Tables

Table 7

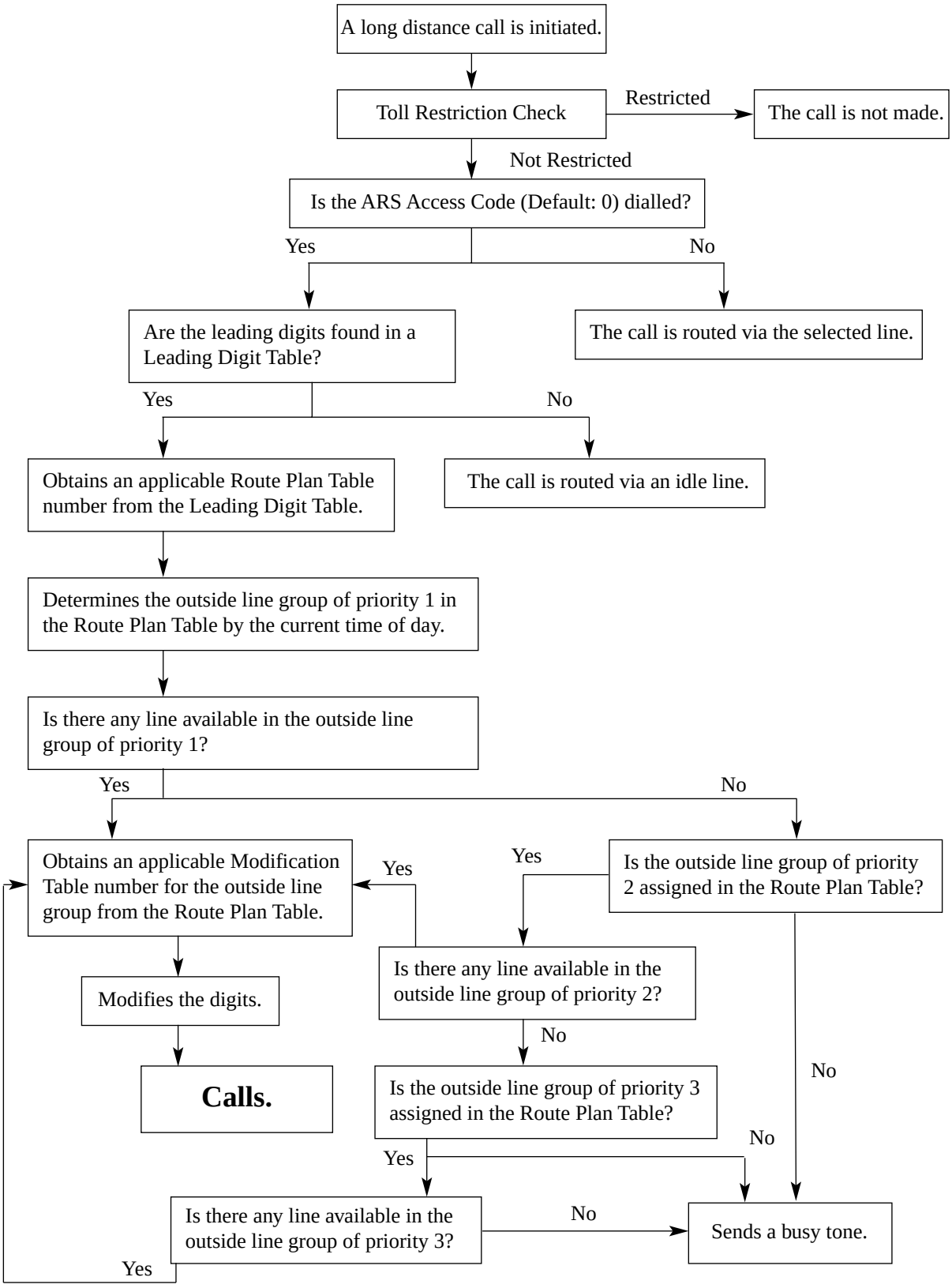
Modification Table 1		**Modification Table 2**		**Modification Table 3**		
Remove	0	Remove	0	Remove	0	← Enter the number of digits to be deleted.
Add	10333	Add	10555	Add	10666	← Enter the digits to be added.

If Modification Table 1 is applied, the user-dialled number "0-1-234-567-8910" is modified to "0-10333-1-234-567-8910" to access the least expensive Carrier E.
Similarly, if Modification Table 2 is applied, it is modified to "0-10555-1-234-567-8910" to access Carrier F.
Use the "Removed Digit" programme when it is necessary to delete some leading digits from the user-dialled number. For example, if the user manually dials a Carrier Access Code but the carrier is not the least expensive, modification is required. For example, to delete "10333" from the beginning of the user-dialled number and add "10555", enter "5" in the "Removed Digit" programme. Enter "10555" in the "Added Number" programme. When "0-10333-1-234-567-8910" is dialled,



The five digits are deleted and "10555" is added. "10555-1-234-567-8910" is sent to the outside line.

Flow Chart of the ARS procedures



Conditions

- A Toll Restriction check is done before ARS is applied.
- ARS works according to the selected dialling plan. Thus, if the user dialled number is not found in the dialling plan (Leading Digit Tables), the dialled number is sent out by a Local Access (Automatic line access) Code.
- ARS is not applied to a call specifying an outside line group. In other words, it is possible to make an outside call by assigning an outside line group directly (ARS Override).
- This feature also applies to Call Forwarding – to Outside Line.

Programming Guide References

- [100] Flexible Numbering
- [312] ARS Mode
- [313] ARS Time
- [314-321] ARS Leading Digit Entry for Plans 1 through 8
- [322-329] ARS Routing Plans 1 through 8
- [330] ARS Modify Removed Digit
- [331] ARS Modify Added Number

Features Guide References

- Outside Line Access

User Manual References

- 2.2.1 Basic Calling

Busy Station Signalling (BSS)

Description

When attempting to call a busy extension (ringing or having a conversation), Busy Station Signalling (BSS) allows you to signal the user on the phone to answer your call. The called extension user hears a Call Waiting tone and is able to answer the call.

Conditions

- This feature only works if the called extension has activated Call Waiting. If it is activated, the caller will hear ringback tone.
- If the called party has been set to activate the Off-Hook Call Announcement (OHCA) or Whisper OHCA function, the caller can announce the call through the speaker or the handset.
- If none of three features, Call Waiting, OHCA or Whisper OHCA is set at the called party, the caller will hear a reorder tone.

Programming Guide References

No programming required.

Features Guide References

- Call Waiting
- Off-Hook Call Announcement (OHCA)
- Whisper OHCA

User Manual References

- 2.2.4 When the Dialled Line is Busy or There is No Answer

Electronic Station Lockout

Description

Allows the extension user to lock their telephone so that other users cannot make outgoing outside calls. Any 3-digit numeric code can be used as a password to lock the telephone. The same code is used as a password to unlock it.

Conditions

- Making intercom calls and receiving intercom or outside calls are permitted on the locked extension.
- **Remote Station Lock Control** overrides Electronic Station Lockout. If the operator sets Remote Station Lock on an extension that has already been locked by the extension user, the user cannot unlock it.
- It is programmable to admit the press of the FLASH button during an outside call on the locked extension. <[990] System Additional Information, Area 02-Bit 5>

Programming Guide References

- [100] Flexible Numbering
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.5.3 Preventing Other People from Using Your Telephone (Electronic Station Lockout)
- 3.1.1 Changing the Settings

Emergency Call

Description

Allows the extension user to dial out a pre-assigned emergency number without seizing an outside line.

Conditions

- Emergency numbers are allowed even in the following cases:
  - in Account Code – Verified mode
  - in any toll restriction level
  - after the pre-assigned charge limit is reached
  - in Electronic Station Lockout
- [009] Emergency Dial Number Set – Emergency dial location number (1-8) corresponds to [100] Flexible Numbering – No. 55-62.

  <Example>

  If you want to assign "110" as an emergency call;

  a) Assign "110" in programme [100], feature number "55,"

  `Display example: Emergency call 1:110`

  b) Assign an outside line access number "0" and "110" in programme [009], location number "1,"

  `Display example: 1:0110`

Programming Guide References

- [009] Emergency Dial Number Set
- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.2.1 Basic Calling

Executive Busy Override

Description

Allows the pre-assigned extension user to interrupt an existing call, between two inside parties, two outside parties, or between an outside and an inside party, to establish a three-party conference call. It is possible for extension users to prevent this function from being executed by another extension user (**Executive Busy Override Deny**).

Conditions

- Class of Service programming determines the extension users who can perform Executive Busy Override and Executive Busy Override Deny. <[505] Executive Busy Override, [506] Executive Busy Override Deny>
- This feature does not work if the extension has set Executive Busy Override Deny or Data Line Security.
- Single line telephone users can only interrupt an existing call between two inside parties.
- Proprietary telephone users can interrupt any outside line even if access to the line is not allowed.

Programming Guide References

- [100] Flexible Numbering
- [505] Executive Busy Override
- [506] Executive Busy Override Deny

Features Guide References

- Conference

User Manual References

- 2.2.4 When the Dialled Line is Busy or There is No Answer
- 2.7.6 Denying Other People the Possibility of Joining Your Conversation (Executive Busy Override Deny)

Intercom Calling

Description

Allows the extension user to call another extension user within the system.

Conditions

- Extension numbers are assigned to all extensions. An extension number is programmed to be two, three, or four digits. <[003] Extension Number Set>
- Names can be given to extension numbers. <[004] Extension Name Set> An extension number and a name, if programmed, is shown on the display proprietary telephone during an intercom call.
- DSS (Direct Station Selection) buttons permit one-touch access to an extension and provide Busy Lamp Field (BLF).
- KX-T7531, KX-T7533, KX-T7536 and KX-T7235 users can make an extension call with an extension dialling directory on the display.
- After dialling an extension number, the user will hear one of the following:

Tone Type	Discription
Ringback tone	Indicates the other extension is being called.
Confirmation tone	Indicates the user can perform Voice Calling.
Busy tone	Indicates the other extension is busy.
Do Not Disturb (DND) tone	Indicates the other extension has DND assigned.

Programming Guide References

- [003] Extension Number Set
- [004] Extension Name Set
- [005] Flexible CO Button Assignment
- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.2.1 Basic Calling
- 2.9.4 Using the KX-T7531, KX-T7533, KX-T7536 or KX-T7235

Line Preference – Outgoing (Idle Line / No Line / Prime Line)

Description

A proprietary telephone user can select a desired outgoing line preference to originate calls from the following three line preferences by Station Programming (Preferred Line Assignment – Outgoing).

Type	Description
Idle Line	When you go off-hook, you are connected to an idle line. An idle line is automatically selected from the pre-assigned lines.
No Line	No line is selected when you go off-hook. You must select a line to make a call.
Prime Line	When you go off-hook, you are connected to the pre-assigned line. Assign an outside or intercom line as your prime line beforehand.

Conditions

[General]

- Setting a new line preference feature cancels the previous setting.
- The outside lines used by users must be connected by programming. <[400] Outside Line Connection Assignment>
- 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; or if Full One-Touch Dialling is enabled, press One-Touch Dialling, DSS, REDIAL or SAVE button.

[Idle Line]

- To select Idle Line Preference, outside lines available for the user should be programmed. Also outside lines available for Automatic Line Access should be assigned. <[103] Automatic Access Outside Line Group Assignment>

Programming Guide References

- [005] Flexible CO Button Assignment
- [103] Automatic Access Outside Line Group Assignment
- [400] Outside Line Connection Assignment
- [605-606] Outgoing Permitted Outside Line Assignment – Day / Night

Features Guide References

- Outside Line Connection Assignment – Outgoing

User Manual References

- 2.2.1 Basic Calling
- 4.1.2 Initial Settings

Off-Hook Call Announcement (OHCA)

Description

Allows you to inform a busy extension that another call is waiting by talking through the built-in speaker of the called party's proprietary telephone. If the existing call is using the handset, the second conversation is made with the speakerphone so that the called party can talk to two parties independently. OHCA is performed the same way as Busy Station Signalling (BSS). It depends on the telephone type used by the called party whether Call Waiting, OHCA or Whisper OHCA is activated by the operation. If the called telephone is one of the following, OHCA becomes active: KX-T7235, KX-T7536.

Conditions

- Class of Service programming determines which extensions can perform this. <[509] Off-Hook Call Announcement (OHCA)>
- If none of three features, Call Waiting, OHCA or Whisper OHCA is set at the called party, the caller will hear a reorder tone.

Programming Guide References

- [100] Flexible Numbering
- [509] Off-Hook Call Announcement (OHCA)

Features Guide References

- Busy Station Signalling (BSS)
- Call Waiting
- Whisper OHCA

User Manual References

- 2.7.3 Receiving a Call Waiting (Call Waiting / Off-Hook Call Announcement [OHCA] / Whisper OHCA)

Outside Line Access

Description

There are several methods to access an outside line. The following types are available.

Type	Description	Accessing method
Automatic	Selects an idle outside line automatically from the outside line groups assigned for the extension.	Dial the automatic line access number. Or press a Loop-CO (L-CO) button.
Direct	Selects an idle outside line by pressing the idle CO button directly.	Press an idle CO button.
Individual	Selects the desired outside line without dialling the line access number.	Press a Single-CO (S-CO) button.
Outside Line Group	Selects an idle outside line from the desired outside line group assigned for the extension.	Dial the outside line group access number and an outside line group number. Or press a Group-CO (G-CO) button.

Conditions

[General]

- Each extension is subject to System Programming items for outside lines available to access.
- No G-CO or L-CO button is originally provided on a proprietary telephone (PT). A flexible CO button can be assigned as an G-CO, L-CO or S-CO button as follows. <[005] Flexible CO Button Assignment>

Button Type	Assignable parameters
Group-CO (G-CO)	An outside line group is assigned.
Loop-CO (L-CO)	All outside lines are assigned.
Single-CO (S-CO)	A specific outside line is assigned.

It is possible to assign in the following ways.

– The same line to a S-CO button and to a G-CO button

– The same outside line group to more than one G-CO button

– More than one L-CO button

Dialling the line access number selects a CO button on a PT according to the priority:

Single-CO > Group-CO > Loop-CO (on a hunted outside line group)

- The digital PT user can choose a desired ringer frequency for each G-CO, L-CO or S-CO button. <[005] Flexible CO Button Assignment>
- The system waits for a programmed time before dialling after an outside line is seized. <[211] Dial Start Time>
- If Idle Line Preference – Outgoing is set on the telephone, the user can access an idle line only by going off-hook.

[Automatic]

- This feature functions with Automatic Route Selection (ARS), if ARS is activated. If so, the least expensive route is automatically selected.
- An idle outside line is selected from the outside line groups assigned to the extension. If one outside line group is available, an idle line is selected from that group. If multiple outside line groups are available, the outside line group hunting sequence is determined. <[103] Automatic Access Outside Line Group Assignment>
- The lowest available outside line number can always be automatically accessed (default: disable). <[990] System Additional Information, Area 07-Bit 4>

  <Example>

  – When the extension user in the master system makes an outside call, the outside line has the last used outside line number plus 1 is accessed.

  – When the extension user in the slave system makes an outside call, the outside line has the last used outside line number plus 2 is accessed.

  – Once an outside line has the biggest number is busy, another line has the smallest number among idle lines is accessed again.

[Direct]

- By pressing an idle CO button, it automatically establishes the hands-free operation mode and allows the user to perform On-Hook Dialling. The user need not press the SP-PHONE button, MONITOR button nor lift the handset.

[Individual]

- If Automatic Route Selection (ARS) is set, it is overridden by an outgoing call made by pressing the S-CO button.

[Outside Line Group]

- It is programmable to access the outside line based on each extension. <[605-606] Outgoing Permitted Outside Line Assignment – Day / Night>
- An idle line is selected in sequence from the lines in the specified outside line group.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [103] Automatic Access Outside Line Group Assignment
- [211] Dial Start Time
- [400] Outside Line Connection Assignment
- [401] Outside Line Group Assignment
- [605-606] Outgoing Permitted Outside Line Assignment – Day / Night
- [990] System Additional Information

Features Guide References

- Outside Line Connection Assignment – Outgoing
- Outside Line Group
- Ringing Tone Selection for CO Buttons

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

Outside Line Connection Assignment

Description

This allows you to specify the outside lines connected to your system which prevents an extension user from originating an outside call by selecting a line which is not connected. A free line is selected from the connected ones when an extension user makes an Automatic Line Access.

Conditions

- If the user tries to make a call with a disconnected line, a reorder tone sounds to indicate that the line is out of use.
- This is effective for all outgoing calls including Direct Inward System Access (DISA).

Programming Guide References

- [400] Outside Line Connection Assignment

Features Guide References

None

User Manual References

None

Outside Line Connection Assignment – Outgoing

Description

Allows you to assign the outside line an extension user can use for outgoing calls. This feature is useful to prevent unauthorised toll calls.

Conditions

- When an extension user tries to make an outside call on a disallowed outside line, a reorder tone is sent to indicate that the user cannot use the outside line.
- Day and Night Service are individually programmed. (Night Service)

Programming Guide References

- [605-606] Outgoing Permitted Outside Line Assignment – Day / Night

Features Guide References

None

User Manual References

None

Toll Restriction

Description

Toll Restriction is a system programmable feature that, in conjunction with the assigned Class of Service, can prohibit certain extension users from placing unauthorised toll calls.

Every extension is programmed to belong to one of eight Classes of Service. Each Class of Service is programmed to have a toll restriction level for day mode and night mode.

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

Denied Code Tables

An outgoing outside call made by an extension with a toll restriction level between 2 and 6 is first checked against the selected Denied Code Tables. If the leading digits of the dialled number (not including the line access number) are not found in the table, the call is made. There are five system programmes for Denied Code Tables: **[301-305] TRS Denied Code Entry for Levels 2 through 6:** Each programme is used to make up a Denied Code Table for Levels 2 through 6 respectively.
Complete every table by storing numbers that are to be prohibited. These numbers are defined as denied codes. Each table can store up to 20 denied codes, each consisting of a maximum of seven digits.

Excepted Code Tables

These tables are used to override a programmed denied code. A call denied by the selected Denied Code Tables is checked against the selected Excepted Code Tables, and if a match is found, the call is made.
There are five system programmes for these tables:
[306-310] TRS Excepted Code Entry for Levels 2 through 6: Each programme is used to make up an Excepted Code Table for Levels 2 through 6.
Complete every table by storing numbers that are exceptions to the denied codes. These numbers are defined as excepted codes. Each table can store up to five excepted codes, each consisting of a maximum of seven digits.

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

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

	Denied Code Tables	Excepted Code Tables
Level 6	Tables for Levels 2 to 6	Tables for Level 6
Level 7	None	None
Level 8	None	None

[Explanation]

Level 1: allows all calls.
Level 2: denies codes stored in the Denied Code Table for Level 2 except the codes stored in Excepted Code Tables for Levels 2 through 6.
Level 3: denies codes stored in the Denied Code Tables for Levels 2 and 3 except the codes stored in Excepted Code Tables for Levels 3 through 6.
Level 4: denies codes stored in the Denied Code Tables for Levels 2 through 4 except the codes stored in Excepted Code Tables for Levels 4 through 6.
Level 5: denies codes stored in the Denied Code Tables for Levels 2 through 5 except the codes stored in Excepted Code Tables for Levels 5 and 6.
Level 6: denies codes stored in the Denied Code Tables for Levels 2 through 6 except the codes stored in Excepted Code Table for Level 6.
Level 7: allows intercom calls only.
Level 8: allows operator calls only.

Example of Toll Restriction programming

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

1. Determining the application

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

Entry Example

Level	Denied Code	Excepted Code
2	011	None
3	011 976 1xxx976	None
4	011 976 1xxx976 0	None

Entry Example

Level	Denied Code	Excepted Code
5	011 976 1xxx976 0 411 1xxx555	None
6	011 976 1xxx976 0 411 1xxx555 1 x0 x1	911 1911 800 1800

Note: "x" substitutes a digit.

2. Programming

a) [500-501] Toll Restriction Assignment
Assign a toll restriction level to each Class of Service (COS).

Example

COS	Level (Day)	Level (Night)
1	1	6
2	2	6
:	:	:
8	8	8

b) [301-305] Denied Code Table Entry
Depending on the application, enter the denied codes in the associated tables. You can use numeric characters and the wild card character "*".

Level-2 Denied Code Table

Location	Code
01 : : 20	001

Level-3 Denied Code Table

Location	Code
01	976
02	1✳✳✳976
:	
20	

Level-4 Denied Code Table

Location	Code
01	0
:	
:	
20	

Level-5 Denied Code Table

Location	Code
01	411
02	1✳✳✳555
:	
20	

Level-6 Denied Code Table

Location	Code
01	1
02	✳0
03	✳1
:	
20	

c) [306-310] Excepted Code Table Entry
Depending on the application, enter the excepted codes in the associated tables. You can use numeric characters and the wild card character "✳".

Level-6 Excepted Code Table

Location	Code
1	911
2	1911
3	800
4	1800
5	

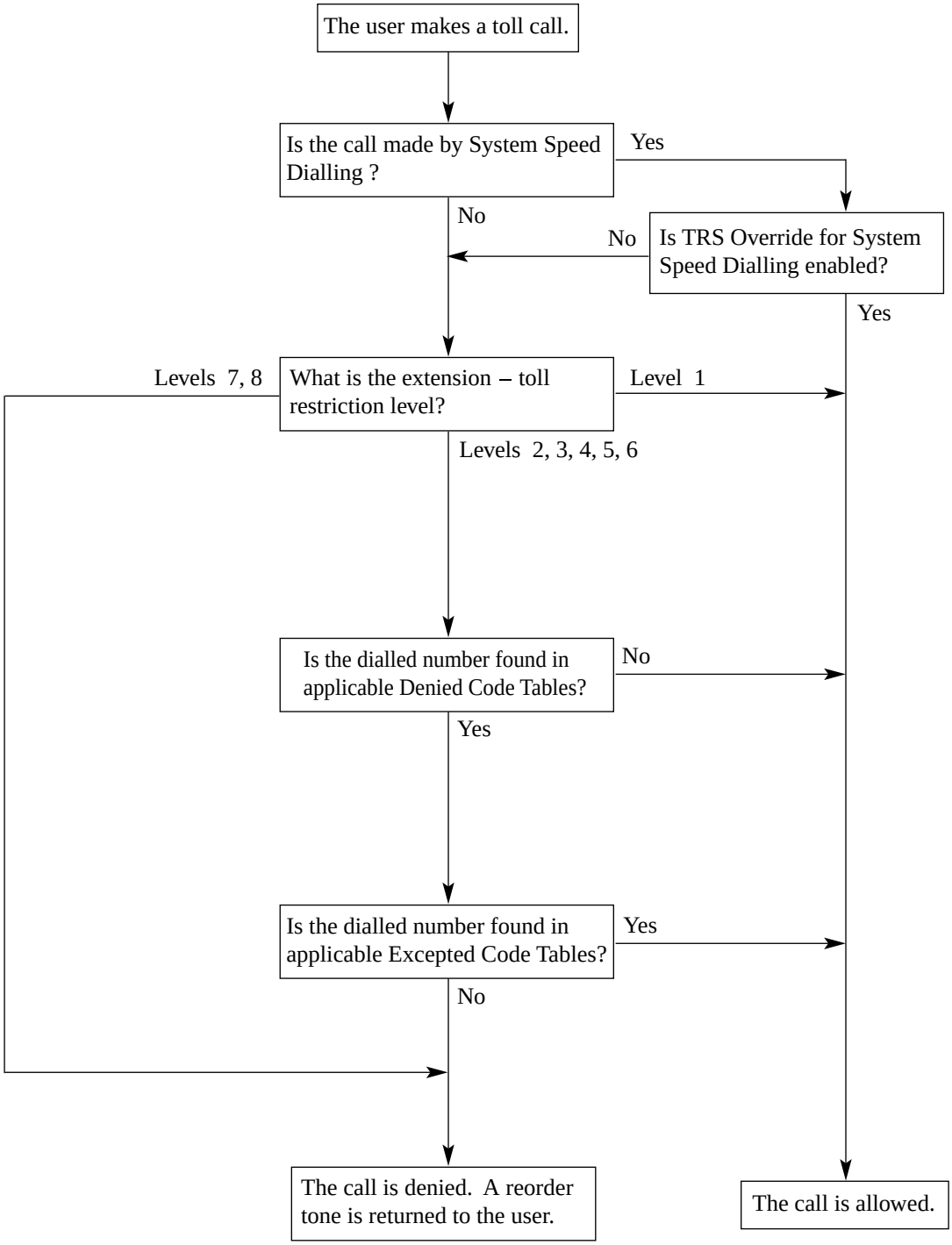
[Explanation]

If your Toll Restriction Level is 6;

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

b) You can make a call whose toll call number is "800". Though the number whose second digit "0" is one of the Denied Codes for Level 6, the number "800" is one of the Excepted Codes for Level 6. The Excepted Codes override the Denied Codes.

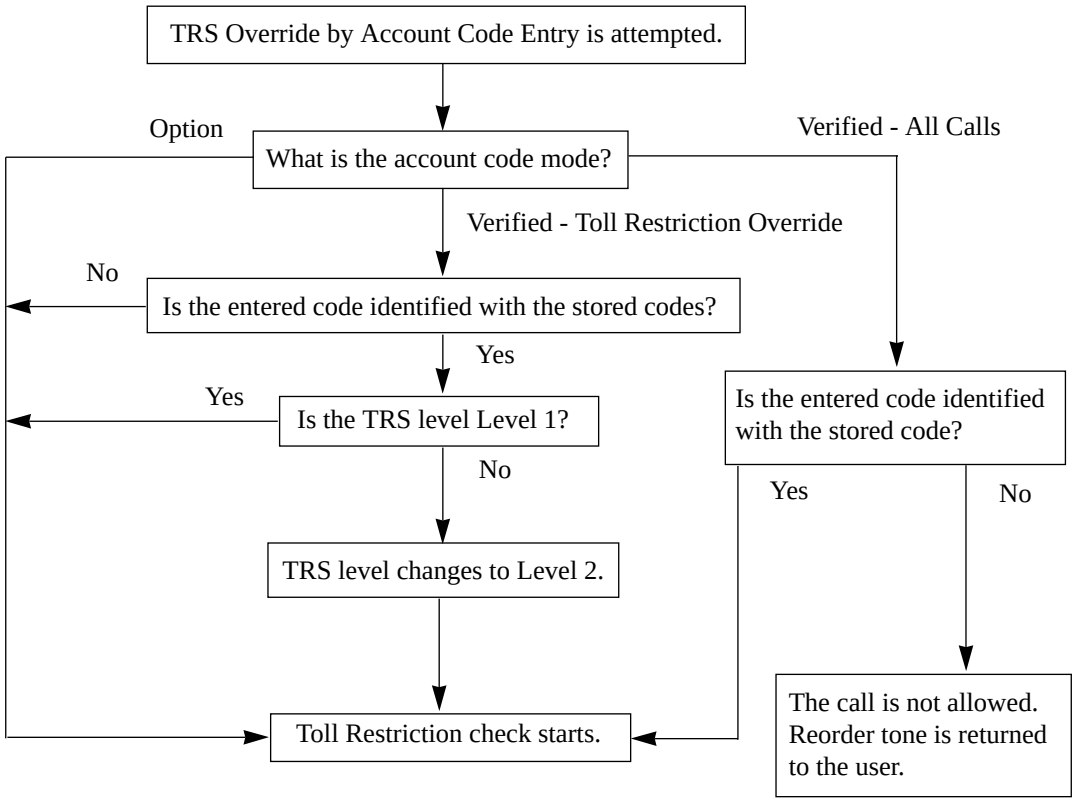
Flow Chart of Toll Restriction (TRS)



Conditions

- Toll restriction checks are applied to the following:
  a) Automatic Route Selection (ARS)
  b) Account Code Entry
  c) Dial Access, Automatic
  d) Outside Line Access, Outside Line Group
  e) Outside Line Access, Individual
  f) Special Carrier Code Entry
  g) System Speed Dialling
- Emergency numbers as the Police or Fire Department should be stored so that they are excepted from toll restriction. <[009] Emergency Dial Number Set>
- It is programmable whether the "✳" or "#" the user dials is to be checked or not on the Toll Restriction code. This is useful to prevent unauthorised calls which could be possible through certain Central Office exchange systems. <[990] System Additional Information, Area 02-Bit 4>
- It is programmable to allow the press of the RECALL button, during an outside call on the extensions in Levels 7 and 8. <[990] System Additional Information, Area 02-Bit 5>
- **Toll Restriction for Host PBX Access:**
  If a stored Host PBX access code is found in the dialled number, a toll restriction check starts for the subsequent telephone number.
- **Toll Restriction Override for System Speed Dialling:**
  Toll restriction for System Speed Dialling can be cancelled for the whole system. <[300] TRS Override for System Speed Dialling>
- **Toll Restriction Override by Account Code Entry:**
  By entering the appropriate account code before dialling the telephone number, the toll restriction can be cancelled temporarily.
  A Class of Service which is assigned Account Code Entry – Verified Toll Restriction Override mode permits the class members to override their toll restrictions. <[508] Account Code Entry Mode>
  The toll restriction level of the user is set to level 2 by this feature. This can be used by extension users assigned a toll restriction level from 3 through 8. Levels 1 and 2 are not changed.

Flow Chart of Toll Restriction (TRS) Override by Account Code Entry



Programming Guide References

- [207] First Digit Time
- [208] Inter Digit Time
- [300] TRS Override for System Speed Dialling
- [301-305] TRS Denied Code Entry for Levels 2 through 6
- [306-310] TRS Excepted Code Entry for Levels 2 through 6
- [500-501] Toll Restriction Level – Day / Night
- [601] Class of Service
- [990] System Additional Information

Features Guide References

- Account Code Entry

User Manual References

None

Whisper OHCA

Description

Allows the extension user to notify the busy party through the handset, which will only be heard by the party. Only KX-T7500 series telephone users can send or receive the Whisper OHCA.

Conditions

- Class of Service programming determines which extensions are able to perform this feature. <[509] Off-Hook Call Announcement (OHCA)>
- You can select receiving Call Waiting tone, Off-Hook Call Announcement (OHCA), Whisper OHCA or none of these at your extension. However, the setting may change depending on each telephone setting or the telephone type as listed below.

Calling party's OHCA COS mode	**Called Party's Call Waiting Mode**			
	OFF	**ON**		
	cancel	**Call Waiting**	**OHCA**	**Whisper OHCA**
Disable	Call Waiting disabled	Call Waiting tone	Call Waiting tone	Call Waiting tone
Enable (default)	Call Waiting disabled	Call Waiting tone	OHCA, Call Waiting tone	Whisper OHCA, OHCA, Call Waiting tone

<Example> If the user selects the Whisper OHCA mode;
– If using the KX-T7536 handset: Whisper OHCA
– If using the KX-T7536 SP-PHONE: Call Waiting
– Other: Call Waiting

- The Voice Mail extension can only execute BSS irregardless of the setting.
- If the Whisper OHCA sender does not use a KX-T7500 series telephone, it will work as OHCA. If the receiver does not use a KX-T7500 series telephone, the announcement may be heard by the other party.
- It is possible to enable the Whisper OHCA by any telephone. <[990] System Additional Information, Area 06-Bit 14> However, it may not work properly. (e.g. The announcement may be heard by the other party.)

Programming Guide References

- [100] Flexible Numbering
- [509] Off-Hook Call Announcement (OHCA)
- [990] System Additional Information

Features Guide References

- Busy Station Signalling (BSS)
- Call Waiting
- Off-Hook Call Announcement (OHCA)

User Manual References

- 2.7.3 Receiving a Call Waiting (Call Waiting / Off-Hook Call Announcement [OHCA] / Whisper OHCA)

1.7 Dialling Features

Automatic Station Release

Description

After going off-hook, if an extension user fails to dial any digits within a specified time period, the user will be disconnected from the line after reorder tone is sent. To get a line again, the user must go back on-hook and then off-hook.

Conditions

This function works in the following cases:
When making a call

a) The first digit has not been dialled within 10 seconds.

b) After a digit is dialled, the next one is not dialled within five seconds (Intercom call only).

Programming Guide References

- [207] First Digit Time
- [208] Inter Digit Time

Features Guide References

None

User Manual References

None

Full One-Touch Dialling

Description

Allows the proprietary telephone user to make a call or have access to a system service with one button. There is no need to turn the SP-PHONE / MONITOR button on before pressing the button, which is required for One-Touch Dialling. The hands-free operation is automatically provided by pressing an One-Touch Dialling button, DSS (Direct Station Selection) button, REDIAL button or SAVE button.

Conditions

- It is necessary to programme automatic hands-free dial mode by Station Programming (Full One-Touch Dialling Assignment).
- This feature is also available with DSS buttons on a console.
- This feature is also available with the Function button or Jog Dial operation for KX-T7531, KX-T7533, KX-T7536 or KX-T7235.

Features Guide References

- One-Touch Dialling
- Redial

User Manual References

- 4.1.2 Initial Settings

One-Touch Dialling

Description

Allows the proprietary telephone user one-touch access to a desired party or system feature. This is activated by storing an extension number, telephone number or a feature number (up to 16-digits) in an One-Touch Dialling button.

Conditions

- One-Touch Dialling buttons can be programmed to flexible buttons: CO, DSS (Direct Station Selection) or PF (Programmable Feature).
- It is possible to store an account code into an One-Touch Dialling button.
- Speed Dialling, One-Touch Dialling, manual dialling, Last Number Redial and Saved Number Redial can be used together.
- It is possible to store a number consisting of 17 digits or more by dividing it and storing it in two One-Touch Dialling buttons. In this case, a line access number should be stored in the first button.
- When storing a number, it is possible to conceal all or part of the number by pressing the INTERCOM button at the beginning and the end of the number to be concealed (**Secret Dialling**). The concealed part will not appear on the display but will be printed out by Station Message Detail Recording (SMDR).
- If Full One-Touch Dialling is enabled, there is no need to go off-hook, before pressing the One-Touch Dialling button.

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

- Full One-Touch Dialling

User Manual References

- 2.2.2 Easy Dialling
- 4.1.3 Customising the Buttons

Pause Insertion, Automatic

Description

This function is used to insert a pre-assigned pause between the outside line access number or the host PBX and dialled digits.

Conditions

- This feature requires previous programming of an outside line access number and host PBX as well as assignment of the pause duration. <[411] Host PBX Access Codes, [412] Pause Time>
- This feature works for Speed Dialling, One-Touch Dialling, Last Number Redial, Saved Number Redial, Pickup Dialling, Call Forwarding – to Outside Line as well as for ordinary calls.
- Pressing the PAUSE button in dialling number inserts a pause for a pre-assigned time.

Programming Guide References

- [100] Flexible Numbering
- [411] Host PBX Access Codes
- [412] Pause Time

Features Guide References

- Host PBX Access
- Toll Restriction

User Manual References

None

Pickup Dialling

Description

Allows an extension user to make an outgoing call by going off-hook, if the user has previously stored the telephone number. This feature is also known as Hot Line.

Conditions

- A rotary dial telephone without the "#" button cannot programme this feature. For programming the phone number, temporarily replace a rotary dial telephone with a pulse telephone with the "#" button.
- The user uses a feature number to activate or deactivate pickup dialling.
- If the feature is activated and the user goes off-hook, a dial tone is generated for the waiting time <[204] Pickup Dial Waiting Time> and then dialling starts. During the waiting time the user can dial another party, overriding the Pickup Dialling function.
- If the user answers an incoming call or retrieves a call on hold, the Pickup Dialling feature does not work.
- If the proprietary telephone is provided with a PF 12 button, the stored number in the PF12 button is common with the one for Pickup Dialling.

Programming Guide References

- [100] Flexible Numbering
- [204] Pickup Dial Waiting Time

Features Guide References

None

User Manual References

- 2.2.2 Easy Dialling

Quick Dialling

Description

Quick Dialling offers the extension user easy access to a desired party. This is enabled by storing an extension number or a telephone number up to 16-digits as a quick dialling number <[015] Quick Dialling Number Set> and assigning it up to 4-digits as a flexible quick dialling number <[104] Flexible Quick Dialling Number Set>.

Conditions

- When a flexible quick dialling number is dialled, the quick dialling number is changed to the stored number and dialled.
- There is a maximum of 80 location numbers.

Programming Guide References

- [015] Quick Dialling Number Set
- [104] Flexible Quick Dialling Number Set

Features Guide References

None

User Manual References

- 2.2.2 Easy Dialling

Redial

Description

The following types are available.

Type	Description
Automatic	Allows the proprietary telephone user to redial automatically to the busy outside party. If the Last Number Redial, Saved Number Redial or Call Log operation is performed handsfree, the telephone set will hang up and try again after a specific period of time.
Last Number	Saves the last telephone number dialled to an outside line and allows the extension user to dial the same number again.
Saved Number	Allows the proprietary telephone user to save a telephone number while in conversation on an outside line and redial the number afterwards. The saved number can be redialled until another number is stored.

Conditions

[General]

- If Full One-Touch Dialling is enabled, there is no need to go off-hook, before pressing the REDIAL or SAVE button.

[Automatic]

- The number of times for Redial Repeat and the interval time are programmable. <[209] Automatic Redial Repeat Times, [210] Automatic Redial Interval Time>
- If any dialling operation is done during Automatic Redial, this function is cancelled.
- This feature is only available for telephones which have an SP-PHONE button.

[Last Number]

- The memorised telephone number is replaced by a new one if at least one digit sent to an outside line is dialled. Dialling an outside line access number alone does not change the memorised number.

[Saved Number]

- If the SAVE button is not provided on your PT, it is possible to assign a flexible button to be the SAVE button. <[005] Flexible CO Button Assignment>

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [209] Automatic Redial Repeat Times
- [210] Automatic Redial Interval Time

Features Guide References

- Call Log, Outgoing

User Manual References

- 2.2.3 Redial
- 4.1.2 Initial Settings
- 4.1.3 Customising the Buttons

Station Speed Dialling

Description

Allows each extension user to place calls with abbreviated dialling for frequently dialled numbers which are stored in that user's telephone.

Conditions

- Up to 10 numbers can be stored in each telephone.
- Station Speed Dialling can be followed by manual dialling to supplement the dialled digits.
- You may make a call with One-Touch Dialling button, instead of Station Speed Dialling.
- The single line telephone may be replaced with a proprietary telephone (PT) temporarily to store one-touch dialling into memory. The Function Buttons F1 through F10 correspond to speed dial numbers as follows:

  F1 – 0; F2 – 1; F3 – 2; F4 – 3; F5 – 4; F6 – 5; F7 – 6; F8 – 7; F9 – 8; F10 – 9
- When storing a number, KX-T7531, KX-T7533, KX-T7536 and KX-T7235 users can conceal all or part of the number by pressing the INTERCOM button at the beginning and the end of the number to be concealed (**Secret Dialling**). The concealed part will not appear on the display but will be printed out by Station Message Detail Recording (SMDR).

Installation Manual References

- [100] Flexible Numbering

Features Guide References

- One-Touch Dialling

User Manual References

- 2.2.2 Easy Dialling

System Speed Dialling

Description

Allows all extension user to place calls with abbreviated dialling for frequently dialled numbers which are stored in the system.

Conditions

[General]

- Up to 500 numbers can be stored in the system.
- It is possible to override the toll restriction by dialling using the System Speed Dialling (**Toll Restriction Override for System Speed Dialling**). <[300] TRS Override for System Speed Dialling>

[Proprietary telephone users only]

- Speed Dialling, One-Touch Dialling, manual dialling, Last Number Redial and Saved Number Redial can be used in combinations.
- When storing a number, it is possible to conceal all or part of the number by pressing the INTERCOM button at the beginning and the end of the number to be concealed (**Secret Dialling**). The concealed part will not appear on the display but will be printed out by Station Message Detail Recording (SMDR).

[Single line telephone users only]

- If a stored feature number includes "*" or "#", rotary single line telephones cannot use it.

Programming Guide References

- [001] System Speed Dialling Number Set
- [002] System Speed Dialling Name Set
- [100] Flexible Numbering
- [300] TRS Override for System Speed Dialling

Features Guide References

- Toll Restriction

User Manual References

- 2.2.2 Easy Dialling

1.8 Ringing Features

Call Waiting

Description

During a conversation, a call waiting tone informs the user of another incoming call that is waiting. He or she can answer the second call by disconnecting or placing the current call on hold. Call waiting tone can be activated or deactivated by dialling the appropriate feature number.

Conditions

- The call waiting tone is generated when an outside call (except a DISA (Direct Inward System Access) call) is received, or when an extension caller executes Busy Station Signalling (BSS).
- Setting Data Line Security temporarily cancels Call Waiting which has been turned on by an extension user.
- For proprietary telephone users, two types of call waiting tone can be selected to prevent them from missing the tone by Station Programming (Call Waiting Tone Type Selection).

Programming Guide References

- [100] Flexible Numbering

Features Guide References

- Busy Station Signalling (BSS)
- Off-Hook Call Announcement (OHCA)
- Whisper OHCA

User Manual References

- 2.7.3 Receiving a Call Waiting (Call Waiting / Off-Hook Call Announcement [OHCA] / Whisper OHCA)
- 4.1.2 Initial Settings

Do Not Disturb (DND)

Description

Allows an extension user to appear busy to incoming outside or extension calls.

Conditions

- If your proprietary telephone (PT) is not supplied with the FWD/DND button, it can be assigned on a flexible button.<[005] Flexible CO Button Assignment>
- DND does not work for the following calls: recalls for hold / Timed Reminder alarm or calls directed by Intercept Routing.
- A PT user in DND mode can answer a call by pressing the button showing the arrival of the call.
- An extension in DND mode can be called by other extension users who are allowed to override DND in their Class of Service (**Do Not Disturb Override**). <[507] Do Not Disturb Override>
- Setting DND cancels any Call Forwording feature currenty set.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [507] Do Not Disturb Override

Features Guide References

None

User Manual References

- 2.2.5 Calling without Restrictions
- 2.7.2 Refusing Incoming Calls (Do Not Disturb [DND])
- 4.1.3 Customising the Buttons

Log-In / Log-Out

Description

Assigns an extension to join (log-in) or leave (log-out) a hunting or Uniform Call Distribution (UCD) group. Extensions in log-out status will not receive calls via Station Hunting but will receive other calls, unlike the Do Not Disturb (DND) feature.

Conditions

- There should be at least one extension that is in log-in status.
- If the Log-In / Log-Out button is assigned to a flexible CO button <[005] Flexible CO Button Assignment>, it shows the current status as follows.

Lighting pattern	Outside Line Status	
	UCD	Station Hunting
Red on	Log-Out	Log-Out
Flashing red	Log-In (waiting calls)	—
Off	Log-In (no calls)	Log-In (no calls)

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering

Features Guide References

- Station Hunting
- Uniform Call Distribution (UCD)

User Manual References

- 2.5.4 Leaving a Call Distribution Group (Log-In / Log-Out)
- 4.1.3 Customising the Buttons

Station Hunting

Description

If a called extension is busy, Station Hunting redirects the incoming call to a free member of the extension group. Idle extensions are automatically searched according to the programmed type. Six hunting types are available as follows:

Hunting Type	Description
Circular	The extensions are searched until an idle one is found, regardless of the jack number.
Termination	The extensions are searched until reaching the extension which has the highest jack number in the group.
Voice Mail (VM)	All the VM ports are searched until an idle one is found to permit VM Service.
Automated Attendant (AA)	All the AA ports are searched until an idle one is found to permit AA Service.
Ring Group	All the extensions in the ring group ring simultaneously.
Uniform Call Distribution (UCD)	Successive calls go to a different extension each time a call is received. Extensions are hunted in a circular way.

Conditions

- One of the hunting types is selected for each extension group.
- Depending on the hunting type, extension groups are accessed in the following ways.
  - **a)** Circular, Termination, VM and AA hunting: When the called extension belongs to an extension group of these hunting types.
  - **b)** Ring Group and UCD hunting: When the floating number of an extension group of these hunting types is called.
- To leave the hunting group temporarily, use the Log-Out function.
  To re-join, use the Log-In function.
- If all the searched extensions are busy, a busy tone is sent to the caller.
- If the called extension has set Do Not Disturb or Call Forwarding, Station Hunting skips the extension.
- If UCD is set, the Hunting is performed as a setting of UCD.

Programming Guide References

- [106] Station Hunting Type
- [602] Extension Group Assignment
- [813] Floating Number Assignment

Features Guide References

- Extension Group
- Log-In / Log-Out
- Ring Group
- Uniform Call Distribution (UCD)
- Voice Mail Integration for Inband

User Manual References

None

Timed Reminder

Description

Each telephone can be set to generate an alarm tone at a preset time as a wake up tone or reminder. This feature can be programmed to be active once only or daily. If the user goes off-hook during the alarm, the special dial tone is heard. If a voice message is used, a pre-recorded voice message is heard.

Conditions

- Be sure that the system clock works.
- Setting a new time clears the preset time.
- The alarm continues for 30 seconds. To stop it, lift the handset or, with a proprietary telephone, press any button.
- The number of times for Alarm Repeat and the interval time are programmable. <[217] Timed Reminder Alarm Repeat Times, [218] Timed Reminder Alarm Interval Time>
- The voice message feature requires the optional DISA Unit or Card and the message is recorded by the operator.
- There is no limit for the number of the extensions who can set the Timed Reminder at the same time.
- Timed Reminder can also be set remotely by the operator (**Hotel Application – Remote Timed Reminder (Wake-Up Call)**).

Installation Manual References

- 2.4.6 DISA Card / Unit and Remote Card / Unit Installation

Programming Guide References

- [100] Flexible Numbering
- [215] Outgoing Message Time
- [217] Timed Reminder Alarm Repeat Times
- [218] Timed Reminder Alarm Interval Time

Features Guide References

- Hotel Application
- Outgoing Message (OGM)

User Manual References

- 2.7.1 Setting the Alarm (Timed Reminder)

1.9 Answering Features

Call Pickup

Description

Allows an extension user to answer a call ringing at any other extension.
The following types are available:

Feature Type	Picking up call type
Directed	A specific extension's call.
Group	A call within your extension group.
Outside	An outside call.

Preventing other extensions from picking up calls ringing at his / her extension is also possible (**Call Pickup Deny**).

Conditions

[General]

- A confirmation tone is sent to the user when the call is picked up.
  Eliminating the tone is programmable. <[990] System Additional Information, Area 02-Bit 6>

[Group]

- The priority of Group Call Pickup is as follows:
  Outside call > Transferred call > Extension call
- The call is picked up from the lowest jack number.

[Outside]

- The outside call is picked up from the lowest outside line number.

[Deny]

- Distinctive dial tone is sent to the user on the extension when the user goes off-hook.

Programming Guide References

- [100] Flexible Numbering
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.3.3 Answering a Call Ringing at Another Telephone (Call Pickup)
- 2.7.5 Denying Other People the Possibility of Picking up Your Calls (Call Pickup Deny)

Hands-free Answerback

Description

Allows the speakerphone telephone user to talk to a caller without lifting the handset, if the user has set hands-free answerback mode. If the user receives an intercom call in this mode, hands-free conversation is established immediately after the user hears a beep tone and the caller hears a confirmation tone.

Conditions

- Hands-free answerback mode is set or cancelled by pressing the AUTO ANSWER button.
- This feature does not work for calls from outside parties.
- Hands-free Answerback set on a telephone overrides the Ring / Voice Intercom Alerting mode preset on the telephone; Hands-free conversation mode is established as soon as a confirmation tone is sent.

Programming Guide References

No programming required.

Features Guide References

- Alternate Calling – Ring / Voice

User Manual References

- 2.3.2 Answering Hands-free (Hands-free Answerback)

Line Preference – Incoming (No Line / Prime Line / Ringing Line)

Description

A proprietary telephone user can select the method used to answer incoming calls from the following three line preferences by Station Programming (Preferred Line Assignment – Incoming).

Type	Discription
No Line	You must select a line to answer an incoming call after you go off-hook.
Prime Line	You can assign a prime line beforehand and answer a call on that line, when multiple calls are received simultaneously.
Ringing Line	When you go off-hook, you can answer the call ringing at your telephone.

Conditions

[General]

- Setting a new line preference feature cancels the previous setting.
- A single line telephone is always set to Ringing Line Preference and cannot be changed.

[Prime Line]

- If an incoming call arrives from a line other than the prime line, it cannot be answered just by going off-hook. The Prime Line should be assigned to the Single-CO button.

[Ringing Line]

- Going off-hook does not answer a line programmed for "no ring" even though there is an incoming call. Going off-hook during the delay time does not answer a line programmed for "delayed ringing".

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.3.1 Answering Calls
- 4.1.2 Initial Settings

1.10 Holding Features

Call Hold

Description

Allows the extension user to put a call on hold. The held call can be retrieved by the user who held it or by any other extension.
Preventing other extension users from retrieving a held call is also possible (**Exclusive Call Hold**). In this case, only the user who held the call can retrieve it.

Conditions

- A proprietary telephone user can hold an intercom call and multiple outside calls at the same time, while a single line telephone user can hold either an intercom call or an outside call. To hold multiple intercom calls at one time, use the Call Park feature.
- Music is sent to the party on hold, if available (Music on Hold).
  (**Music on Hold**: Automatically generates a music while a party is on hold. It is required to select the internal or external music source to be used <[990] System Additional Information, Area 06-Bits 11 and 10>, and also required to assign the music source to be used <[803] Music Source Use>. It is also possible to disable the Music on Hold.)
- If a call on hold is not retrieved in a specific period of time, Hold Recall is emitted. After Hold Recall is emitted, the held call can be retrieved from any extension even if it is held in exclusive hold.
  (**Hold Recall**: Occurs as a reminder after a pre-determined time. It is also possible to disable the Hold Recall. <[200] Hold Recall Time> If the user is in off-hook mode when the timer expires, an alarm tone is sent from the built-in speaker of a proprietary telephone (PT) or from the handset receiver of a single line telephone at 15-second intervals. The display PT flashes the indication of the held party for five seconds at 15-second intervals synchronised with the tone.)
- If an outside party is placed on hold and not retrieved within 30 minutes, it is automatically disconnected.
- Confirmation tone is sent to the user when the hold is retrieved by the feature number. Eliminating the tone is programmable. <[990] System Additional Information, Area 02-Bit 6>

Programming Guide References

- [100] Flexible Numbering
- [200] Hold Recall Time
- [803] Music Source Use
- [990] System Additional Information

Features Guide References

- Call Park

User Manual References

- 2.4.1 Holding a Call

Call Park

Description

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

Conditions

- The system contains ten parking areas, each of which has its own call park number. Up to ten calls can be parked at the same time in the system. Under the System Connection[*1] all users may access the same call parking area. The number of holding slots remains at 10.
- If a parked call is not retrieved in a specific period of time, Transfer Recall occurs. <[201] Transfer Recall Time>
- If a parked call is not retrieved in 30 minutes, it is automatically disconnected.
- A confirmation tone is sent to the user when the parked call is retrieved. Eliminating the tone is programmable. <[990] System Additional Information, Area 02-Bit 6>

Programming Guide References

- [100] Flexible Numbering
- [201] Transfer Recall Time
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.1 Holding a Call

[*1] Available for the KX-TD1232 only.

Call Splitting

Description

Allows the extension user to alternate between two other parties. Placing the current call on hold allows the user to have a conversation with the other party.

Conditions

Call Splitting is impossible during Doorphone Call or Paging.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.4.2 Talking to Two Parties Alternately (Call Splitting)

1.11 Transferring Features

Call Forwarding

Description

Allows you to have your calls forwarded to a specified destination. You may specify the circumstances under which your calls are forwarded. The following Call Forwarding features are available:

Type	Circumstance	Destination
All Calls	Any time.	A specified extension
Busy	When your extension is busy.	
No Answer	When you do not answer.	
Busy / No Answer	When your extension is busy or you do not answer.	
Follow Me	When you forget to set forwarding "All Calls" before you leave your desk, you can set the same function from the destination extension.	
To Outside Line	Any time.	A specified outside party

Conditions

[General]

- Types of calls which are forwarded by these features are:

Call type	
Outside calls	Direct In Lines (DIL) 1:1; Direct Inward System Access (DISA); Intercept Routing; Transfer
Intercom calls	Extension; Transfer

- According to intercom or outside incoming calls, it is possible to set the different destination each.
- There can only be one stage of Call Forwarding, if a call is forwarded to an extension which is also in Call Forwarding. In this case, Station Hunting can be activated for the forwarded call.
- Although calls are forwarded, Message Waiting is not. The MESSAGE button indicator is lit on the originally called extension.

- If an extension in Call Forwarding is also in a Hunt group, a call directed to the extension is forwarded. Station Hunting still applies for calls directed to other extensions in the Hunt group.
- Setting the Call Forwarding function cancels other Call Forwarding or Do Not Disturb (DND), if any.
- A Floating Station cannot be programmed as the forwarded destination.
- It is possible to select the forwarding destination when an outside call is transferred from an extension or the Voice Processing System (VPS) to an extension where the Call Forwarding has been set, destination of intercom calls or destination of incoming outside calls. <[990] System Additional Information, Area 07-Bit 8>

[No Answer and Busy/No Answer]

- The number of rings before the call is forwarded is programmable. <[202] Call Forwarding – No Answer Time>

[Follow Me]

- It is programmable to enable or disable the Call Forwarding – Follow Me feature on a Class of Service basis. <[991] COS Additional Information , Bit 5>

[To Outside Line]

- It is programmable to enable or disable the Call Forwarding – To Outside Line feature on a Class of Service basis. <[504] Call Forwarding to Outside Line>
- The forwarding extension's Toll Restriction, Automatic Route Selection (ARS) and Account Code Entry requirements still apply.
- If an extension is limited according to its Class of Service <[502] Extension-to-Outside Line Call Duration Limit>, the extension is unable to forward an outside call to an outside line.
- If a call between an extension and an outside party is established by this feature, the duration of the call period can be restricted depending on the setting of the system timer. <[205] Extension-to-Outside Line Call Duration Time> The call is disconnected at the time-out.
- A call between two outside parties is established only when using an ISDN line.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [202] Call Forwarding – No Answer Time
- [205] Extension-to-Outside Line Call Duration Time
- [502] Extension-to-Outside Line Call Duration Limit
- [504] Call Forwarding to Outside Line
- [990] System Additional Information
- [991] COS Additional Information

Features Guide References

None

User Manual References

- 2.5.1 Forwarding Your Calls (Call Forwarding)
- 4.1.3 Customising the Buttons

Call Transfer

Description

Allows the extension user to transfer a call to another party.
The following types are available.

Feature Type		Transferring method
Screened	**to Extension**	Transfers a call to the extension or the external party after a voice announcement.
	to Outside Line	
Unscreened	**to Extension**	Transfers a call to an extension party without a voice announcement. While listening for the ringback tone after dialling the destination extension, you can replace the handset.

Conditions

[General]

- The destination extension must have a CO button which is common to the outside line in use by the transferring party.
- Transferring a call to an external party cannot be performed from a single line telephone.
- If Music on Hold is enabled, music is sent to the caller while being transferred. It is system-programmable whether to send ringback tone or music on hold to the caller. <[990] System Additional Information, Area 01-Bit 1>
  (**Music on Hold**: Automatically generates a music while a party is on hold. It is required to select the internal or external music source to be used <[990] System Additional Information, Area 06-Bits 11 and 10>, and also required to assign the music source to be used <[803] Music Source Use>.)
- The console and the proprietary telephone user can hold an outside call and quickly transfer it to an extension by pressing a DSS button directly (**One-Touch Transfer by DSS Button**). <[108] One-Touch Transfer by DSS Button> However, it cannot be performed when there is another call on Consultation Hold.
  If One-Touch Transfer mode is disabled, the user transfers an outside call by pressing the TRANSFER button followed by the DSS button.
  (**Consultation Hold**: Established by pressing TRANSFER or CONF button. With a single line telephone, it is established by pressing the hookswitch lightly. It allows the extension user to place a call on hold temporarily to transfer it, make a Conference call, or perform Call Splitting. <[990] System Additional Information, Area 01-Bits 2 and 9>)

[Screened – to Outside Line]

- Class of Service programming determines the extensions that are able to perform this. <[503] Call Transfer to Outside Line>
- A call between two outside parties is established only when using an ISDN line.

[Unscreened – to Extension]

- If the destination party does not answer within the transfer recall time <[201] Transfer Recall Time>, the call will return to the user or Operator 1. You can select either one. <[990] System Additional Information, Area 02-Bit 1>
- This function is possible when the destination is sending ringback or busy tone. Camp-On Transfer occurs if the destination is busy.
- The ringing signal pattern follows the regular ringing pattern depending on the party being transferred: outside or extension call ringing.
- An outside call can be transferred directly to a Uniform Call Distribution (UCD) group so that an idle extension is automatically hunted by UCD. If all extensions in a UCD group are busy, the incoming outside call will be handled by the UCD Time Table.
- It is possible for any extension user to transfer a call to the modem for remote maintenance.

Programming Guide References

- [108] One-Touch Transfer by DSS Button
- [201] Transfer Recall Time
- [205] Extension-to-Outside Line Call Duration Time
- [502] Extension-to-Outside Line Call Duration Limit
- [503] Call Transfer to Outside Line
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.3 Transferring a Call

Intercept Routing

Description

Provides automatic redirection of incoming outside calls. There are two types of Intercept Routing as follows.

Type	Description
Rerouting	If a call cannot be sent to the called party, it is redirected to the programmed destination.
Intercept Routing – No Answer (IRNA)	If a call is not answered within a programmed number of rings, it is redirected to the programmed destination. <[203] Intercept Time, [409-410] Intercept Extension – Day / Night>

Conditions

- Intercept Routing applies to Direct In Lines (DIL) 1:1, DIL 1:N, Direct Inward System Access (DISA), Trunk (Outside Line) Answer From Any Station (TAFAS), Call Forwarding, and Station Hunting.
- The final destination of intercepted calls must be programmed for day and night modes. There are six possible destinations:

  (1) extension

  (2) external pager

  (3) DISA outgoing message

  (4) extension group

  (5) phantom extension

  (6) voice mail extension
- If the destination is in Do Not Disturb mode, Do Not Disturb does not function and the call is sent.

Programming Guide References

- [203] Intercept Time
- [409-410] Intercept Extension – Day / Night

Features Guide References

None

User Manual References

None

1.12 Conversation Features

Conference

Description

During a two-party conversation, the extension user can add a third party to their conversation, thereby establishing a conference. The system supports three-party conference calls, including outside or inside parties.

Conditions

[General]

- Possible combinations are:1-inside and 2-outside; 2-inside and 1-outside; and 3-inside.
- Up to six conference calls are allowed simultaneously.
- The third party must have a CO button which is common to the outside line used by the original parties.
- A three-party call is also established by Executive Busy Override or Privacy Release.

Programming Guide References

- [005] Flexible CO Button Assignment
- [502] Extension-to-Outside Line Call Duration Limit

Features Guide References

None

User Manual References

- 2.4.5 Three-party Conversation
- 4.1.3 Customising the Buttons

Data Line Security

Description

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

Conditions

- Assigning Data Line Security always offers conversation privacy unless Privacy Release is executed.
- If one extension in a conversation has set Data Line Security, it applies to both extensions.

Programming Guide References

- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.7.8 Protecting Your Line against Indication Tones (Data Line Security)

External Feature Access

Description

Allows the extension user to have access to the features of a host PBX or Central Office, such as Call Waiting, etc. This is performed by putting the current party on hold and sending a flash signal.

Conditions

- This feature is effective only during a call via an analogue outside line.
- The flash time must be assigned as required by the host PBX or outside line.
- With a proprietary telephone, the RECALL button, EFA button (Soft button) or the feature number is used to perform this function. With a single line telephone, the feature number cannot be used when the user already has a Consultation Hold.
  (**Consultation Hold**:Allows the extension user to place a call on hold temporarily to transfer it, make a conference call or perform Call Splitting. <[990] System Additional Information, Area 01-Bit 2 and 9>)
- This feature does not work by pressing the RECALL button on proprietary telephones if the button is assigned as the FLASH feature (disconnection signal). <[990] System Additional Information, Area 01-Bit 3>
- During outside calls, a FLASH stored in System Speed Dialling, Station Speed Dialling or One-Touch Dialling functions as External Feature Access, not as Flash.

Programming Guide References

- [100] Flexible Numbering
- [413] Flash Time
- [990] System Additional Information

Features Guide References

- Flash
- Host PBX Access

User Manual References

- 2.8.1 If a Host PBX is Connected

Flash

Description

The RECALL button is used to allow a proprietary telephone user to disconnect the current call and originate another call without hanging up first.

Conditions

- If External Feature Access is enabled on the RECALL button, this function does not work for an outside call. <[990] System Additional Information, Area 01-Bit 3>
- The amount of time between successive accesses to the same outside line is programmable. <[414] Disconnect Time>
- Pressing the RECALL button re-starts the conversation duration, outputs a Station Message Detail Recording (SMDR) call record, inserts the automatic pause, and checks toll restriction level again.
- It is required to enable this function at the locked extension and toll-restricted extension. <[990] System Additional Information, Area 02-Bit 5>

Programming Guide References

- [414] Disconnect Time
- [990] System Additional Information

Features Guide References

- External Feature Access

User Manual References

None

Hands-free Operation

Description

Allows the proprietary telephone user to dial and to talk to the other party without lifting the handset. Pressing an appropriate button provides hands-free mode.

Conditions

- This function can be utilised by pressing a button listed below when the SP-PHONE / MONITOR button indicator is off:
  SP-PHONE button; MONITOR button; INTERCOM button; CO button
- Telephones which do not have an SP-PHONE button can only be used for hands-free dialling operations etc. They cannot be used for hands-free conversations.
- A single press of an One-Touch Button, DSS (Direct Station Selection) button, REDIAL button or a SAVE button also provides the hands-free mode if Full One-Touch Dialling is activated.

Programming Guide References

No programming required.

Features Guide References

- Full One-Touch Dialling

User Manual References

- 2.2.1 Basic Calling
- 2.3.1 Answering Calls

Off-Hook Monitor

Description

Allows the KX-T7531, KX-T7533, and KX-T7536 digital proprietary telephone users to let the other users listen to the conversation through the built-in speaker, while continuing the same call using the handset.

Conditions

This is effective with a handset conversation.

Programming Guide References

- [148] Off-Hook Monitor

Features Guide References

None

User Manual References

- 2.4.7 Letting Other People Listen to the Conversation (Off-Hook Monitor) [KX-T7531, KX-T7533, KX-T7536 only]

Privacy Release

Description

By default all conversations which take place on outside lines, extension lines and doorphone lines are protected by privacy (**Automatic Privacy**).
Privacy Release allows the proprietary telephone user to suspend Automatic Privacy for an existing call in order to establish a three-party call. During a conversation with an outside party on a CO button, the user can allow another extension party to join the conversation by pressing the CO button.

Conditions

When a two-party call is changed to a three-party call or vice versa, a confirmation tone is sent to all three parties. Eliminating the tone is programmable. <[990] System Additional Information, Area 02-Bit 3>

Programming Guide References

- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.5 Three-party Conversation

1.13 Paging Features

Paging

Description

Allows an extension user to make a voice announcement to many people at the same time. Your message is announced over the built-in speakers of proprietary telephones and / or external speakers (external pagers).
The paged person can answer your page from a nearby telephone.
Making and answering a page is possible from either a proprietary or single line telephone. You can do paging with a call on hold in order to transfer the call (**Paging and Transfer**).
Paging features are classified as follows:

Type	Paging method
All	Paged from all speakers of the proprietary telephones and from all external pagers.
External	Paged from all or specific external pagers.
Group	Paged from the speakers of the proprietary telephones in all or specific extension groups.

Conditions

[General]

- A confirmation tone is sent to extensions, when the page is made or answered. Eliminating the tone is programmable. <[990] System Additional Information, Area 02-Bit 6>
- A confirmation tone is sent from external pagers, before the voice announcement. Eliminating the tone is programmable. <[805] External Pager Confirmation Tone>

[All]

- If System Connection[*1] is established, paging is performed to all proprietary telephones and all external paging devices in both systems.
- A ringing or busy extension cannot receive a page.

[External]

- An external pager must be connected beforehand. One pager for KX-TD816, and up to two pagers per system for KX-TD1232 can be connected. If System Connection[*2] is established, up to four pagers are available.

[*1] Available for the KX-TD1232 only.
[*2] Available for the KX-TD1232 only.

- External pagers can be used for Trunk (Outside Line) Answer From Any Station (TAFAS), Paging – External, or Background Music (BGM) – External in this order. For example, if Paging – External is overridden by TAFAS, reorder tone is returned to the performer of the Paging – External. If BGM is overridden by a higher priority, it is interrupted and starts again when the higher priority is finished.

[Group]

- To select all groups page all extensions.

Installation Manual References

- 2.3.6 External Pager (Paging Equipment) Connection

Programming Guide References

- [100] Flexible Numbering
- [805] External Pager Confirmation Tone
- [990] System Additional Information

Features Guide References

None

User Manual References

None

1.14 Proprietary Telephone Features

Background Music (BGM)

Description

Allows the proprietary telephone user to listen to background music (BGM) from the monitor speaker on the telephone.
BGM can also be broadcast in your office through the external pagers (**Background Music (BGM) – External**), which can be turned on and off by the operator.

Conditions

[General]

- It may be required to connect a user-supplied external music source, such as a radio. One external music source can be connected to KX-TD816, and up to two sources can be connected to KX-TD1232 per system.
- It is required to select the internal or external music source 1 to be used for BGM and/or Music on Hold. <[990] System Additional Information, Area 06-Bits 11 and 10>
- The music coming out from the monitor speaker on the telephone is interrupted when you go off-hook.

[External]

- It is required to connect a user-supplied external pager. One pager can be installed to KX-TD816, and up to two pagers can be installed to KX-TD1232 per system.
- Each pager can be programmed to send BGM or not. <[804] External Pager BGM>
- The priority of access to external pager is as follows:
  Trunk (Outside Line) Answer From Any Station (TAFAS) > Paging > BGM

Installation Manual References

- 2.3.6 External Pager (Paging Equipment) Connection
- 2.3.7 External Music Source Connection

Programming Guide References

- [100] Flexible Numbering
- [804] External Pager BGM
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.7.7 Turning on the Background Music
- 3.2.2 Turning on the External Background Music

Mute

Description

During a conversation, a proprietary telephone user can disable the microphone or the handset to consult privately with others in the room while listening to the other party on the phone through the built-in speaker or the handset. There are two types of mute as follows.

Type	Condition
Handset Mute	During a conversation using the handset. This function is only available for the KX-T7500 series telephone users.
Microphone Mute	During a conversation using the microphone.

Conditions

- The user can hear the other party's voice during Mute. Only your voice will be muted.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.4.6 Mute

Station Programme Clear

Description

Allows the extension user to cancel the functions set on the user's own telephone. The following functions will be cancelled by this feature:

Absent Message Capability — The message set on the telephone
Background Music that has been turned on
Call Forwarding
Call Log, Incoming — Over-stored mode
Call Pickup Deny
Call Waiting enabled
Data Line Security
Do Not Disturb (DND)
Executive Busy Override Deny
Log-Out status
Message Waiting — All the messages that have been left by other extension users
Off-Hook Call Announcement (OHCA) enabled
Parallelled Telephone enabled
Pickup Dialling
Timed Reminder
Whisper OHCA enabled

Conditions

None

Programming Guide References

- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.7.11 Clearing the Feature Settings at Your Extension (Station Programme Clear)

Station Programming

Description

Allows the proprietary telephone (PT) user to customise the extension to their needs. The following programming items are available:

Telephone Type	Programming Items
Any PT	Call Waiting Tone Type Assignment Flexible Button Assignment Full One-Touch Dialling Assignment Intercom Alert Assignment Live Call Screening Mode Set Preferred Line Assignment – Incoming / Outgoing Station Programming Data Default Set
Digital PT	Phantom Extension Ringing On / Off Set Ringing Tone Selection for CO Buttons
Display PT	Charge Fee Reference Self-Extension Number Confirmation
Digital display PT (KX-T7531, KX-T7533, KX-T7536, KX-T7235)	Station Speed Dialling Number / Name Assignment
Operator's PT	Call Log Lock Control, Incoming Live Call Screening Password Control Remote Station Lock Control

Detailed information and programming instructions are described in the User Manual, Station Programming.

Conditions

- During Station Programming, the PT is considered to be in busy status.
- The user can return all of the following items programmed on the telephone to the default settings (**Station Programming Data Defaut Set**).

Programming Items	Default
Call Waiting Tone Type Assignment	Tone 1
Full One-Touch Dialling Assignment	On
Intercom Alert Assignment	Tone Call
Live Call Screening Mode Set	Hands-free
Preferred Line Assignment – Incoming	Ringing Line
Preferred Line Assignment – Outgoing	Intercom Line

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 3.1.1 Changing the Settings
- 4.1.1 Customising Your Phone (Station Programming)

1.15 Audible Tone Features

Confirmation Tone

Description

At the end of many different functions the system confirms the success of the operation by sending a confirmation tone to the extension user through the speaker of the telephone.

Confirmation tone 1:

a) Indicates that the new setting differs from the previous setting.

b) Set or cancel the Electronic Station Lockout.

Confirmation tone 2:

a) Indicates that the new setting is identical to the previous setting.

b) In addition, sent when various features are successfully performed or accessed. (e.g. Call Hold; Automatic Callback Busy)

c) Sent when accessing external paging equipment. (e.g. Paging – All; Paging – External) Confirmation tone from external pagers can be enabled or disabled.
<[805] External Pager Confirmation Tone>

Confirmation tone 3:

Sent when a conversation is established just after dialling.
For example, when accessing the following features by the feature numbers:

- Call Park Retrieve
- Call Pickup
- Hold Retrieve
- Paging / Paging Answer
- Trunk (Outside Line) Answer From Any Station (TAFAS)

This tone can be eliminated so that the user can start talking instantly. <[990] System Additional Information, Area 02-Bit 6>

Conditions

Confirmation Tone 1 and 2 are provided to reconfirm the assigned feature.

Programming Guide References

- [805] External Pager Confirmation Tone
- [990] System Additional Information

Features Guide References

None

User Manual References

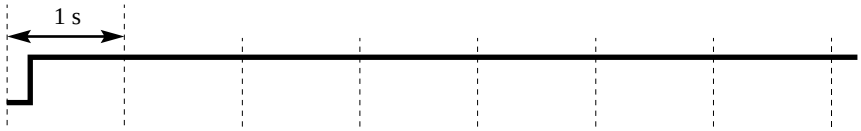
None

Dial Tone, Distinctive

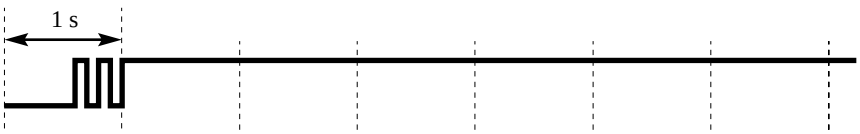
Description

Four types of dial tone patterns are available to give information about features activated on the telephone set.

Dial tone 1: Normal dial tone. None of the features listed below are activated.

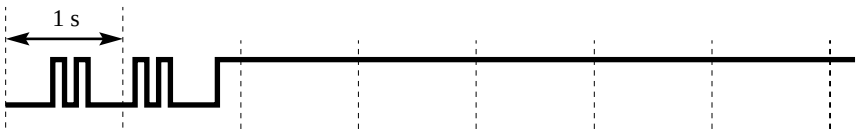


Dial tone 2: Emitted when any one of the features below are set.
Absent Message Capability
Background Music (BGM) (for proprietary telephones only)
Call Forwarding
Call Pickup Deny
Call Waiting
Data Line Security
Do Not Disturb (DND)
Electronic Station Lockout
Executive Busy Override Deny
Pickup Dialling
Timed Reminder



Dial tone 3: Emitted when performing Account Code Entry. Also sounds when answering Timed Reminder call.

Dial tone 4: Emitted when messages are waiting for the extension.



Conditions

- Dial tone 2 can be disabled. In this case, dial tone 1 will be emitted even if programmable extension features have been set. <[990] System Additional Information, Area 06-Bit 13>

Programming Guide References

- [990] System Additional Information

Features Guide References

None

User Manual References

None

Dial Type Selection

Description

Allows you to select the desired dialling mode for each outside line regardless of originating call extension (rotary or tone). <[402] Dial Mode Selection>
There are three dialling modes available:

Feature Type	Transferring method
DTMF (Dual Tone Multi-Frequency) Mode	The dialling signal from an extension, either tone or rotary, is converted to tone dialling. DTMF signals are transmitted to the outside line.
Pulse Dial (Rotary) Mode	The dialling signal from an extension, either tone or rotary, is converted to rotary dialling. Rotary pulses are transmitted to the outside line.
Call Blocking Mode	Set this mode on outside lines that can receive both tone and rotary, but under contract with the Central Office for rotary only. When dialling to a line using a touch-tone telephone, only rotary is sent to the Central Office.

Conditions

- **Pulse to Tone Conversion**:
  It is possible for the extension user to temporarily convert the pre-assigned rotary dialling mode to DTMF mode so that the user can access special services such as computer-accessed long distance calling or voice mail services. This feature works only on outside lines set to Pulse Dialling mode or Call Blocking mode. DTMF mode cannot be changed to rotary.
- In case an outside line can receive both DTMF and pulse signals and is contracted for DTMF with a Central Office, DTMF mode should be selected for the line. If it is contracted for rotary mode, Call Blocking mode should be selected for the line.
- If a line is assigned Pulse Dial mode, select an appropriate pulse speed <[403] Pulse Speed Selection>, pulse break ratio <[990] System Additional Information, Area 02-Bit 7>, and inter-digit pause for the line <[990] System Additional Information, Area 02-Bits12 and 11>, if necessary. If a line is assigned DTMF, select an appropriate DTMF duration for the line <[404] DTMF Time>, if necessary.
- After a held call is retrieved, the dial mode goes back to the one originally programmed on the outside line.
- Either DTMF or rotary dialling can be assigned for the DISA (Direct Inward System Access) outgoing line. With DISA, Pulse to Tone Conversion is not possible.

Programming Guide References

- [402] Dial Mode Selection
- [403] Pulse Speed Selection
- [404] DTMF Time
- [990] System Additional Information

Features Guide References

None

User Manual References

None

Ringing Tone Selection for CO Buttons

Description

Allows the digital proprietary telephone user to select the desired ringer frequency for each CO button. This distinguishes different incoming outside calls.

Conditions

There are eight ringer frequencies available. One of them can be assigned to a CO button that is assigned as each of the following buttons: Single-CO, Group-CO, or Loop-CO button. It is not possible to assign a ringer frequency to any other button.

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

None

User Manual References

- 4.1.3 Customising the Buttons

Ringing, Discriminating

Description

Allows the extension user to identify the incoming call by the ringing pattern. (See Section 5 "Tone / Ring Tone".)

Conditions

- When there are multiple incoming calls and the extension goes from off-hook to on-hook, the calls are rung according to the following priority:
  a) Consultation Hold Recall
  b) An incoming call from a line in which the Prime Line Preference – Incoming function has been set (with a proprietary telephone only)
  c) Call Waiting
  d) Incoming calls; Hold Recall; Transfer Recall
- If multiple incoming calls arrive at an on-hook extension simultaneously, priority as to which calls should be rung is generally on a "first-come, first-served" basis. In the case of proprietary telephones (PT), however, when the Prime Line Preference – Incoming function has been set, this line takes precedence.
- Incoming TAFAS (Trunk (Outside Line) Answer From Any Station) calls can be identified by ringing signals sent out from the external pager. The ringing pattern is the same as the outside calls.
- The digital PT user can select a desired tone frequency for each CO button.

Programming Guide References

No programming required.

Features Guide References

- Ringing Tone Selection for CO Buttons

User Manual References

None

1.16 Button Features

Button, Flexible

Description

The use of Flexible Buttons is determined by either System or Station Programming. The following three types of Flexible Buttons are provided on proprietary telephones (PT) and console:

- Flexible CO buttons (provided on PT only)
- Flexible Direct Station Selection (DSS) buttons (provided on console only)
- Programmable Feature (PF) buttons

The table below shows all of the features which can be assigned to Flexible Buttons.

Button **Features to be assigned**	**CO** **(PT)**	**DSS** **(DSS)**	**PF** **(PT/DSS)**
Alert	✔		
Single-CO (S-CO)	✔		
Group-CO (G-CO)	✔		
Log-In / Log-Out	✔		
Loop-CO (L-CO)	✔		
Direct Station Selection (DSS)	✔	✔	
Live Call Screening (LCS) *	✔	✔	
Live Call Screening (LCS) Cancel *	✔	✔	
Message Waiting	✔	✔	
Night	✔	✔	
Phantom Extension	✔	✔	
Two-Way Record *	✔	✔	
Two-Way Transfer *	✔	✔	
Account Code Entry (Account)	✔	✔	✔
Conference	✔	✔	✔
FWD / DND	✔	✔	✔

Button / Features to be assigned	CO (PT)	DSS (DSS)	PF (PT/DSS)
One-Touch Dialling	✔	✔	✔
Saved Number Redial (SAVE)	✔	✔	✔
Voice Mail Transfer	✔	✔	✔

* Available when this system is connected to a Panasonic Voice Processing System which supports digital proprietary telephone integration (e.g. KX-TVP200).

" ✔" indicates that the feature is available.

Conditions

- An outside line can only appear on one Single-CO button of any given telephone. A station can only appear on one DSS button of any given telephone or console.
- It is possible to set the Group-CO or Loop-CO buttons on one telephone. Incoming and outgoing calls on the line are shown on the button in the following priority.
  Single-CO > Group-CO > Loop-CO
- Pressing a flexible button while on-hook displays the feature name or the information assigned to the button for five seconds.

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

- Console
- Buttons on Proprietary Telephones and Consoles

User Manual References

- 4.1.3 Customising the Buttons

Buttons on Proprietary Telephones and Consoles

Description

Proprietary telephones and consoles are provided with the feature / line access buttons listed below. The functions of the listed buttons are also described.

Buttons on KX-T Proprietary Telephones:

Buttons	7020	7030	7050	7130	7230	7235	7250	7451	7531	7533	7536	7550
AUTO ANSWER / MUTE †	✔	✔		✔	✔	✔			✔	✔	✔	
AUTO DIAL / STORE †	✔	✔	✔	✔	✔	✔	✔ !	✔ !	✔	✔	✔	✔
CO †*	✔(12)	✔(12)	✔(12)	✔(12)	✔(24)	✔(12)	✔(6)	✔(4)	✔(12)	✔(12)	✔(12)	✔(12)
CONF †	✔	✔	✔ !	✔	✔	✔			✔	✔	✔	✔
Function						✔(10)					✔(10)	
FWD / DND †	✔	✔	✔	✔	✔	✔			✔	✔	✔	✔
HOLD	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
INTERCOM †	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Jog Dial									✔	✔	✔	✔
MESSAGE	✔	✔	✔ †	✔	✔	✔			✔	✔	✔	✔
MODE									✔			
MONITOR			✔				✔	✔				✔
PAUSE	✔	✔		✔	✔	✔			✔	✔	✔	✔
PF (Programmable Feature)	✔(4)	✔(4)	✔(4)	✔(12)								
PROGRAM					✔	✔	✔	✔	✔	✔	✔	✔
RECALL	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
REDIAL	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
SAVE				✔								
SELECT									✔			
SHIFT †					✔	✔				✔	✔	
Soft					✔(3)	✔(3)				✔(3)	✔(3)	
SP-PHONE †	✔	✔		✔	✔	✔			✔	✔	✔	
TRANSFER	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
VOICE CALL / MUTE												✔
VOLUME					✔	✔	✔	✔				

✔ : The button is provided on the designated telephones.
† : The button is provided with an LED (Light Emitting Diode).
* : The buttons which can be changed to function as a feature button are called flexible buttons.
! : The button is provided without an LED.
(x) : Shows the number of buttons only if multiple buttons are provided.

Buttons on KX-T Consoles:

Buttons	7040	7240	7540	7541
DSS †*	✔(32)	✔(32)	✔(66)	✔(48)
PF (Programmable Feature)	✔(12)	✔(12)		
ANSWER				✔
RELEASE				✔

✔ : The button is provided on the designated telephones.
† : The button is provided with an LED (Light Emitting Diode).
* : The buttons which can be changed to function as a feature button are called flexible buttons.
(x) : Shows the number of buttons only if multiple buttons are provided.

Buttons Usage:

Buttons	Usage
AUTO ANSWER / MUTE	This dual function button is used for extension auto-answer and microphone mute during a conversation.
AUTO DIAL / STORE	Used for System Speed Dialling and storing programme changes.
ANSWER	Used to answer an incoming call to the paired telephone.
CO (Central Office line)	Can make or receive an outside call or can be re-assigned to a different CO or to various feature buttons.
CONF (Conference)	Used to establish a three-party conference.
DSS (Direct Station Selection)	Used to access extensions. Every button is programmed to correspond to an extension. DSS buttons can also be changed to the other function buttons.
Function	Used to perform the displayed function / operation.
FWD / DND (Call Forwarding / Do Not Disturb)	Used to programme Call Forwarding, set Do Not Disturb.
HOLD	Used to place a call on hold.
INTERCOM	Used to make or receive intercom calls.
Jog Dial	Used to adjust the ringer, speaker, handset and headset volume and the display contrast. It can also be used to select data from the Call Directory and the System Feature Access Menu on the display.
MESSAGE	Used to send a message or display current message.
MODE	Used to shift the display in order to access various features.
MONITOR	Used for a handsfree operation.
PAUSE	Inserts a pause in a speed dial number. With an analogue proprietary telephone, it is used as the PROGRAM button.

Buttons Usage:

Buttons	Usage
PF (Programmable Feature)	These buttons are provided with no default setting. They can be programmed for the other function buttons.
PROGRAM	Used to enter / exit the Programming mode. With the KX-T7220 and KX-T7250, it can also be used as the PAUSE button.
RECALL	Allows you to disconnect the current call and originate another call without hanging up (Flash). Sends a flash signal to the Central Office or host PBX to access their features (External Feature Access).
REDIAL	Used for Last Number or Automatic Redial.
RELEASE	Used to disconnect the line during or after a conversation or to complete a Call Transfer.
SAVE	Used to store a dialled telephone number for Saved Number Redial.
SELECT	Used to select the displayed function or to call for the displayed phone number.
SHIFT	Used to access the second level of Soft button function.
Soft	Pressing a Soft button performs the function / operation appearing on the bottom line of the display.
SP-PHONE (Speakerphone)	Used for a hands-free operation. Pressing the button causes the telephone to switch between handset and handsfree operation.
TRANSFER	Transfers a call to another extension or external destination.
VOICE CALL / MUTE	Used for extension auto-answer (hands-free conversation is not available), and handset microphone mute during a conversation.
VOLUME	Used to adjust the ringer, speaker, handset and headset volume and the display contrast.

Conditions

- Certain buttons are equipped with LED to show line or feature status.
- CO buttons can be classified according to the following three types:
  Single-CO (S-CO) button / Group-CO (G-CO) button / Loop-CO (L-CO) button

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

None

User Manual References

- 4.1.3 Customising the Buttons

LED Indication

Description

The LED (Light Emitting Diode) indicators of the INTERCOM button and the buttons associated with outside lines show the line conditions with a variety of lighting patterns. This allows the user to see the current state of the line. The table below shows the lighting pattern for different line conditions.

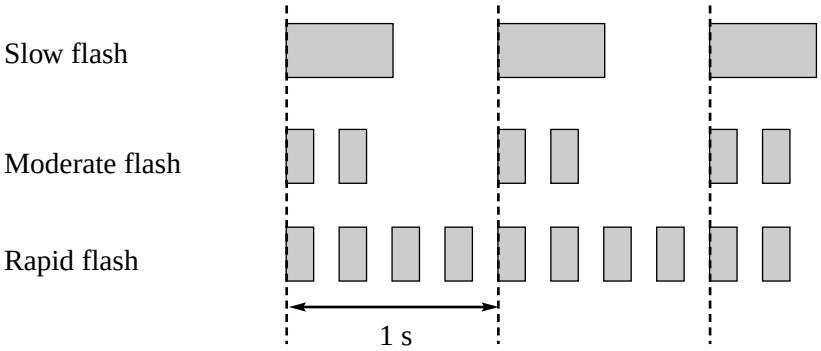
LED indication and the outside line status

LED Indicator	Outside Line Status
Off	Idle
Green On	I-use
Green slow flashing	I-hold
Green moderate flashing	I-Exclusive Hold / Outside-to-outside line call
Green rapid flashing	Hold Recall / Privacy Release possible / Incoming call (DIL 1:1 etc.)
Red On	Other-use/Log-Out
Red slow flashing	Other-hold
Red rapid flashing	Incoming call (DIL 1:N etc.)

LED indication and the intercom line status

INTERCOM Button	Intercom Line Status
Off	Idle
Green On	Intercom call / Conference established
Green slow flashing	Intercom call Hold
Green moderate flashing	Intercom call exclusive hold / Consultation hold
Green rapid flashing	Incoming intercom

Flashing light patterns



Conditions

- Red slow flashing indication appears on the Single-CO (S-CO) button only.
- The indication of Privacy Release appears on the S-CO button only.

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

- Outside Line Access

User Manual References

- 4.1.3 Customising the Buttons

1.17 Display Features

Absent Message Capability

Description

Once set, this feature provides a message on the display of the calling extension to show the reason for the absence of the person on the extension called. Nine messages can be programmed as desired which are available for every extension user. There are six pre-programmed default messages. Setting or cancelling a message can be done by individual extension users but only callers with a display telephone can view the message.

Conditions

- Six default messages, which are changeable, are shown below. The "%" means a parameter to be entered when assigning a message at an individual extension.
  a) Will Return Soon
  b) Gone Home
  c) At Ext %%% (extension number)
  d) Back at %% : %% (hour : minute)
  e) Out Until %% / %% (month / day)
  f) In a Meeting
- An extension user can select only one message at a time. The selected message is displayed every time the user goes off-hook.

Programming Guide References

- [008] Absent Messages
- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.5.2 Showing an Absent Message on the Caller's Telephone Display (Absent Message Capability)

Call Directory

Description

Allows the KX-T7531, KX-T7533, KX-T7536 and KX-T7235 users to make a call using the following call directories which can easily be accessed by using the display.

Directory Type	Description
Extension Dialling Directory	Provides a display of extension names and numbers. System Programming of extension numbers and names is required. <[003] Extension Number Set, [004] Extension Name Set>
Station Speed Dialling Directory	Provides a display of names and numbers stored in Station Speed Dialling.
System Speed Dialling Directory	Provides a display of names stored in System Speed Dialling. System Programming of numbers and names is required. <[001] System Speed Dialling Number Set, [002] System Speed Dialling Name Set>

Conditions

- It is programmable to select the initial display of the Station Speed Dialling for names and numbers. <[990] System Additional Information, Area 02-Bit 9>
- If a name is not stored for a System Speed Dialling number, it is not displayed and cannot be called with this feature.

Programming Guide References

- [001] System Speed Dialling Number Set
- [002] System Speed Dialling Name Set
- [003] Extension Number Set
- [004] Extension Name Set
- [100] Flexible Numbering
- [990] System Additional Information

Features Guide References

- One-Touch Dialling
- Station Speed Dialling
- System Speed Dialling

User Manual References

- 2.9.4 Using the KX-T7531, KX-T7533, KX-T7536 or KX-T7235

Call Log, Outgoing

Description

Provides a KX-T7536 and KX-T7235 display of the last five dialled telephone numbers and allows the user to perform redialling the number by pressing the associated button.

Conditions

The oldest telephone number will be eliminated when over the limited numbers are dialled out.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.9.4 Using the KX-T7531, KX-T7533, KX-T7536 or KX-T7235

Display Message

Description

The display proprietary telephone shows the user the following information:

Displaying Item	Display Example
While in idle status	
(Pressing "✳" alternates the following two displays.)	
Shows the month, day, time	`1 Jan  10:00`
Shows the month, day, year, day of the week	`1 Jan 1999 FRI`
(Pressing a feature / number assigned button)	
Shows the feature name or the information assigned to the button for five seconds.	`Account`
While making or receiving calls	
Shows the extension number and name of the calling or called extension.	`123: Smith`
Shows the dialled telephone number.	`01234567890`
Shows the outside line number and name when receiving an outside call.	`CO 03:AB COMPANY`
Shows the charge meter during an established call.	`CO01:  5`
Shows the charge fee during an established call.	`CO01:  1.15L.`
Shows the call duration during an established outside call. It remains for five seconds after the call is finished.	`CO 02 0:02'28`
While in Station Programming mode	
Shows the self-jack number and extension number.	`Jack02<=>EXT102`

Conditions

- Extension numbers and names, and outside line names are programmable. <[003] Extension Number Set, [004] Extension Name Set, [417] Outside Line Name Assignment> If no name is stored, only the number is displayed.
- The outgoing outside call duration starts when the programmable timer expires. <[212] Call Duration Count Start Time>
- It is possible to select the first display, meter or charge. <[120] Charge Display Selection> To alternate the display, press the FWD/DND button.
- It is possible to adjust the display contrast.

Programming Guide References

- [000] Date and Time Set
- [003] Extension Number Set
- [004] Extension Name Set
- [120] Charge Display Selection
- [212] Call Duration Count Start Time
- [417] Outside Line Name Assignment
- [423] Pay Tone Assignment

Features Guide References

None

User Manual References

- 4.2.1 Programming Information

Message Waiting

Description

The system supports the ability to inform the called party of a message waiting. The called party, with a MESSAGE button, knows there is a message if the MESSAGE button LED (Light Emitting Diode) lights red. If the button is not provided or assigned, the called party hears a special dial tone, when he / she goes off-hook. Pressing the lit MESSAGE button or dialling the Message Waiting feature number can call back the caller or listen to messages which are stored in a mailbox in the Voice Processing System.

Conditions

- For a proprietary telephone which does not have a MESSAGE button, a flexible CO button can be assigned as the MESSAGE button. <[005] Flexible CO Button Assignment>
- For single line telephone users without a message waiting lamp, the message waiting ring tone can be sent to notify the user. The message waiting ring interval time is programmable (default: 0=no ring). <[216] Message Waiting Ring Interval Time>
- Cancelling a message can be performed from the sending extension or from the receiving extension.
- The system supports a maximum of 128 simultaneous messages.
- Messages are always left on the original extension. They can not be sent to a Call Forwarding or Station Hunting destination.
- It is possible to assign whether the system or the Voice Processing System turns off the Message Waiting lamp when the user hears a message recorded in a mailbox. <[990] System Additional Information, Area 01-Bit 15>

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [216] Message Waiting Ring Interval Time
- [990] System Additional Information

Features Guide References

- Dial Tone, Distinctive
- Voice Mail Integration for Inband

User Manual References

- 2.2.4 When the Dialled Line is Busy or There is No Answer
- 4.1.3 Customising the Buttons

System Feature Access Menu

Description

Provides a KX-T7531, KX-T7533, KX-T7536 and KX-T7235 display of the system features available at any time and allows the user to have access to the desired features.

Conditions

- The features available to access are:
  Absent Message Capability
  Call Park
  Call Pickup, Group
  Call Forwarding (set / cancel)*1
  Do Not Disturb (set / cancel)*2
  Live Call Screening (password set)
  Log-In / Log-Out
  Message Waiting
  Paging (access / answer)
  Parallelled Telephone
- In addition to the features above, the operator can have the display of the following features:
  Background Music (BGM) – External
  Night Service

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.9.4 Using the KX-T7531, KX-T7533, KX-T7536 or KX-T7235

*1 Available for the KX-T7536 and KX-T7235 only.
*2 Available for the KX-T7536 and KX-T7235 only.

Section 2

ISDN Features

2.1 System Expansion

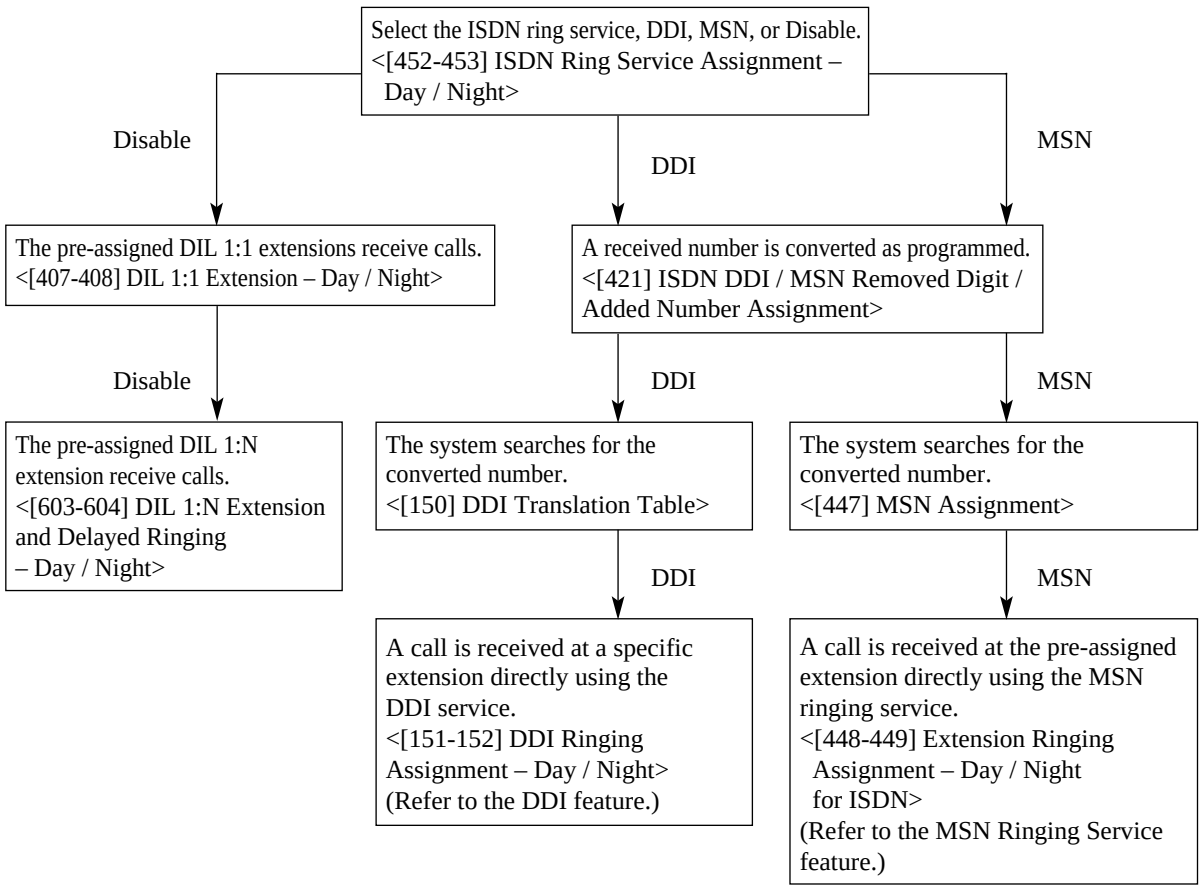
Integrated Services Digital Network (ISDN)

Description

The system can manage a call received from the ISDN line by point-to-point or point-to-multi-point configuration.
An optional ISDN Line Unit, KX-TD280, KX-TD286, or KX-TD290 is required. The KX-TD290 can only use "point-to-point" configuration.

Configuration Type	Description
Point-to-point	A call received through one ISDN port is sent directly to a specific extension using a Direct Dialling Inward (DDI) service.
Point-to-multi-point	One ISDN port can support a maximum of ten Multiple Subscriber Numbers (MSN). A call received through an ISDN port is sent directly to the pre-assigned extension if the dialled number matches the stored MSN.

Flow chart of required programmes for ISDN



Conditions

- **After ISDN assignments, you should reset the system so that the assignments are effective.**
- **Automatic Time Adjustment:**
  The time can automatically be adjusted when the first call after 3:00 is received. <[990] System Additional Information, Area 07-Bit 13>
- **ISDN Service Access:**
  The ISDN Service button can be assigned to a flexible button. It is used to access an ISDN network service.
- The system is in accordance with European Telecommunication Standard (ETS) specifications below:
  ETS 300 092 Calling Line Identification Presentation (CLIP) supplementary service.
  ETS 300 093 Calling Line Identification Restriction (CLIR) supplementary service.
  ETS 300 097 Connected Line Identification Presentation (COLP) supplementary service.
  ETS 300 098 Connected Line Identification Restriction (COLR) supplementary service.
  ETS 300 122 Generic keypad protocol for the support of supplementary service (ISDN Service Access).
  ETS 300 182 Advice of Charge (AOC) supplementary service Digital Subscriber Signalling System No.one (DSS1) protocol.
- Each port can be assigned as follows:
  *1 and *2: can be either an external or internal ISDN S0 line.
  *1: when assigned as internal, the corresponding analogue outside line (CO) ports or ISDN ports become available.

TD816

CO No.	ISDN Port	TD280	TD286
1, 2	1	—	*1
3, 4	2	—	*1
5, 6	3	*2	*2
7, 8	4	*2	*2
—	5	—	Internal
—	6	—	Internal

TD1232

CO No.	ISDN Port	TD280	TD286
1, 2	1	—	*1
3, 4	2	—	*1
5, 6	3	—	*1
7, 8	4	—	*1
9, 10	5	*2	*2
11, 12	6	*2	*2

- The recommended parameter combinations are listed below. The underlined selections are recommended.

Programme	[424] ISDN Port Type	[425] ISDN Layer 1 Active Mode	[426] ISDN Configuration	[427] ISDN Date Link Mode	[428] ISDN TEI Mode
Parameter	CO (DDI)	Call/ <u>Permanent</u>	Point	Call/ <u>Permanent</u>	Fix
	CO (MSN)	Call/ <u>Permanent</u>	Multipoint	<u>Call</u>/ Permanent	Automatic
	Extension	<u>Call</u>/ Permanent	Multipoint	Call	Automatic

Installation Manual References

- 2.8 System Restart
- 3 ISDN Installation

Programming Guide References

- [005] Flexible CO Button Assignment
- [109] Expansion Unit Type
- [112] ISDN Network Type Assignment
- [150] DDI Translation Table
- [151-152] DDI Ringing Assignment – Day / Night
- [407-408] DIL 1:1 Extension – Day / Night
- [421] ISDN DDI / MSN Removed Digit / Added Number Assignment
- [423] Pay Tone Assignment
- [424] ISDN Port Type
- [425] ISDN Layer 1 Active Mode
- [426] ISDN Configuration
- [427] ISDN Data Link Mode
- [428] ISDN TEI Mode
- [429] ISDN Extension Multiple Subscriber Number
- [447] MSN Assignment
- [448-449] Extension Ringing Assignment – Day / Night for ISDN
- [450] PRI Configuration
- [451] PRI Reference CO
- [452-453] ISDN Ring Service Assignment – Day / Night
- [603-604] DIL 1:N Extension and Delayed Ringing – Day / Night
- [990] System Additional Information

Features Guide References

- Direct Dialling Inward (DDI)
- Multiple Subscriber Numbers (MSN) Ringing Service

User Manual References

- 2.2.6 Accessing the ISDN Network Service (ISDN Network Service Access)

Integrated Services Digital Network (ISDN) Extension

Description

The system supports terminal equipment with separate power supplies. For example, an ISDN telephone, G4 Facsimile and personal computers which are connected to an optional ISDN S0 Line Unit. A maximum of eight terminal equipment can be connected to each ISDN S0 bus with point-to-multi-point configuration. However, only up to two equipment can be used simultaneously. Terminal equipment can be addressed individually with Multiple Subscriber Numbers (MSN). The MSN consists of the ISDN extension number and an additional digit, 0 through 9. If MSN is not assigned, all equipment on the same S0 bus are called simultaneously.

The following bearer capabilities can be supported:

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

The functions of terminal equipment are similar to single line telephone functions except for the following features:

- Automatic Callback Busy
- Call Forwarding
- Call Hold
- Call Park
- Call Pickup
- Call Transfer
- Call Waiting
- Conference
- Do Not Disturb
- Log-In / Log-Out
- Message Waiting
- Paging – Group Answer
- Pickup Dialling
- Timed Reminder

Conditions

- **After ISDN assignments, you should reset the system so that the assignments are effective.**
- Class of Service for ISDN extension port applies to all terminal equipment on the same S0 bus.
- Each port can be assigned as follows:
  *1 and *2: can be either an external or internal ISDN S0 line.
  *1: when assigned as internal, the corresponding analogue outside line (CO) ports or ISDN ports become available.

TD816

CO No.	ISDN Port	TD280	TD286
1, 2	1	—	*1
3, 4	2	—	*1
5, 6	3	*2	*2
7, 8	4	*2	*2
—	5	—	Internal
—	6	—	Internal

TD1232

CO No.	ISDN Port	TD280	TD286
1, 2	1	—	*1
3, 4	2	—	*1
5, 6	3	—	*1
7, 8	4	—	*1
9, 10	5	*2	*2
11, 12	6	*2	*2

- The recommended parameter combinations are listed below. The underlined selections are recommended.

Programme	[424] ISDN Port Type	[425] ISDN Layer 1 Active Mode	[426] ISDN Configuration	[427] ISDN Date Link Mode	[428] ISDN TEI Mode
Parameter	CO (DDI)	Call/ <u>Permanent</u>	Point	Call/ <u>Permanent</u>	Fix
	CO (MSN)	Call/ <u>Permanent</u>	Multipoint	<u>Call</u>/ Permanent	Automatic
	Extension	<u>Call</u>/ Permanent	Multipoint	Call	Automatic

Installation Manual References

- 2.8 System Restart
- 3.2.3 Internal ISDN S0 Line Connection

Programming Guide References

- [012] ISDN Extension Number Set
- [013] ISDN Extension Name Set
- [014] Budget Management on ISDN Port
- [109] Expansion Unit Type
- [424] ISDN Port Type
- [425] ISDN Layer 1 Active Mode
- [426] ISDN Configuration
- [427] ISDN Data Link Mode
- [428] ISDN TEI Mode
- [429] ISDN Extension Multiple Subscriber Number
- [430] ISDN Extension Progress Tone
- [613] ISDN Class of Service
- [614-615] Outgoing Permitted Outside Line Assignment – Day / Night for ISDN Extension

Features Guide References

None

User Manual References

- 4.1.3 Customising the Buttons

2.2 ISDN Information for Other Sections

ISDN Information for Other Sections

Description

The list below describes the information which are required with an ISDN system. For programmes, refer to the Programming Guide.

ISDN Information for Section 1, General Features

Section	Title	ISDN Information
1.2 System Administration	System Programming and Diagnosis with Personal Computer	**[Remote Programming]** • It is also possible to assign the modem as the destination of Direct Dialling In (DDI) or Multiple Subscriber Numbers (MSN) calls.
1.3 System Features	Budget Management	• Programme [014] Budget Management on ISDN Port is required to assign the charge limit of a call on an ISDN extension port basis.
	Charge Fee Reference	• Advice of Charge (AOC): To receive AOC from ISDN lines, programme [423] Pay Tone Assignment is required. The system is in accordance with European Telecommunication Standard (ETS) specifications below: ETS 300 182 Advice of Charge (AOC) supplementary Service Digital Subscriber Signalling System No.One (DSS1) protocol.
	Class of Service (COS)	• Programme [613] ISDN Class of Service is required for assigning each ISDN extension port a Class of Service (COS).
	Floating Station	• Floating number for external paging instruments, extension groups, DISA messages and modem can be assigned as the destination of Direct Dialling In (DDI) or Multiple Subscriber Numbers (MSN) calls.

ISDN Information for Section 1, General Features

Section	Title	ISDN Information
1.3 System Features	Night Service	• The following programming items may be assigned differently for the day and night modes. [151-152] DDI Ringing Assignment – Day / Night [448-449] Extension Ringing Assignment – Day / Night for ISDN [452-453] ISDN Ring Service Assignment – Day / Night [614-615] Outgoing Permitted Outside Line Assignment – Day / Night for ISDN Extension
	Phantom Extension	• The destination of a Direct Dialling In (DDI) or Multiple Subscriber Number (MSN) call can be the phantom extension.
	Station Message Detail Recording (SMDR)	• **(5) Dial Number** (in the explanation of the printout format) **Received Call:** Shows <INCOMING> and <I>. If a call is carried by an ISDN network, also shows the telephone number of the calling party. Example: <I>1234567890
1.5 Attended Features	Ring Group	• The destination of a Direct Dialling In (DDI) or Multiple Subscriber Numbers (MSN) call can be the ring group.
	Uniform Call Distribution (UCD)	• UCD can be used when the floating number of UCD is assigned as the Direct Dialling In (DDI) destination.
1.6 Originating Features	Automatic Route Selection (ARS)	• **ARS with DTMF:** When making a call to an ISDN line using the memory dialling, and the number has a pause in it, the number after the pause will be sent to the line as DTMF signals. This function is useful when accessing a special network service which can be accessed only by the DTMF signalling. <[990] System Additional Information, Area 06-Bit 9>
	Outside Line Connection Assignment – Outgoing	• Programme [614-615] Outgoing Permitted Outside Line Assignment – Day / Night for ISDN Extension is used to determine the outside line which can be accessed by an ISDN extension.

ISDN Information for Section 1, General Features

Section	Title	ISDN Information
1.11 Transferring Features	Call Forwarding	**[General]** • Call Forwarding applies to a Direct Dialling In (DDI) or Multiple Subscriber Number (MSN) call. **[To Outside Line]** • A call between two outside parties is established only when using an ISDN line. A call received through an analogue outside line must be forwarded through an ISDN line. A call received through an ISDN line can be forwarded through an analogue outside line as well as an ISDN line. • The duration of a call between two outside parties is determined by the system timer. <[206] Outside-to-Outside Line Call Duration Time> An alarm tone is generated to both outside parties 15 seconds before the time-out. The call is disconnected at the time-out.
	Call Transfer	**[Screened – to Outside Line]** • A call between two outside parties is established only when using an ISDN line. A call received through an analogue outside line must be transferred through an ISDN line. A call received through an ISDN line can be transferred through an analogue outside line as well as an ISDN line. • The duration of a call between two outside parties is determined by the system timer. <[206] Outside-to-Outside Line Call Duration Time> Hold Recall is generated to the extension who transferred the call 50 seconds before the time-out. The Hold Alarm tone is generated to both outside parties 15 seconds before the time-out. The call is disconnected at the time-out unless the extension restores the conference.
	Intercept Routing	• Intercept Routing applies to an incoming call via an ISDN line.

ISDN Information for Section 1, General Features

Section	Title	ISDN Information
1.12 conversation features	Conference	• **Conference, Unattended:** The proprietary telephone user can leave the conference to allow the two outside parties to continue the conversation. In this case, at least one party must be on an ISDN line. The user may return to the conference, if desired. • An Unattended Conference can be established when the extension is allowed to transfer a call to an outside line. <[503] Call Transfer to Outside Line> • The duration is restricted by a system timer <[206] Outside-to-Outside Line Call Duration Time, [502] Extension-to-Outside Line Call Duration Limit>. Hold Recall is generated to the extension user who left the conference 50 seconds before the time-out. The Hold Alarm tone is generated to both outside parties 15 seconds before the time-out. The call is disconnected at the time-out unless the extension returns to the call.
1.15 Audible Tone Features	Ringing, Discriminating	• When there are multiple incoming calls and the extension goes from off-hook to on-hook, the Unattended Conference Recall is generated following the priority below: **a)** Consultation Hold Recall **b)** An incoming call from a line in which the Prime Line Preference – Incoming function has been set (with a proprietary telephone only) **c)** Call Waiting **d)** Incoming calls; Hold Recall; Transfer Recall; Unattended Conference Recall
1.16 Button Features	Button, Flexible	• The ISDN Service button can be assigned to a flexible CO button, DSS button or PF button. Availability of this button depends on the ISDN service of your telephone company. The system is in accordance with European Telecommunication Standard (ETS) specifications below: ETS 300 122 Generic keypad protocol for the support of supplementary services (ISDN Service Access).
	LED Indication	• When Unattended Conference is established, the button associated with the outside line flashes green moderately.

Conditions

None

2.3 Originating Features

Calling Line Identification Presentation (CLIP)

Description

Calling Line Identification Presentation (CLIP) enables showing the calling party's number on the display of the called party's telephone when a call is received.

To use the CLIP service, number assignments are required as follows:

- CLIP number for each outside line <[418] ISDN Line Number Assignment>
- CLIP number for each extension <[617] CLIP / COLP Number Assignment for Extension, [618] CLIP / COLP Number Assignment for ISDN Extension>

Conditions

- The CLIP service for outgoing outside calls can be restricted (CLIR: Calling Line Identification Restriction). <[419] ISDN Outgoing CLIR Service Assignment>
- The number actually sent to the called party may be different from the system programmed number. It depends on the contract with your ISDN supplier.

Programming Guide References

- [100] Flexible Numbering
- [418] ISDN Line Number Assignment
- [419] ISDN Outgoing CLIR Service Assignment
- [617] CLIP / COLP Number Assignment for Extension
- [618] CLIP / COLP Number Assignment for ISDN Extension

Features Guide References

- Calling Line Identification Restriction (CLIR)

User Manual References

- 2.7.4 Displaying Your Number on the Called Party and Calling Party's Telephone (Calling / Connected Line Identification Presentation [CLIP / COLP])

Calling Line Identification Restriction (CLIR)

Description

Calling Line Identification Restriction (CLIR) restricts showing the calling party's number on the display of the called party's telephone when a call is received.

Conditions

- If the displaying is enabled, the called party can check the calling party's number before the called party answers it (CLIP: Calling Line Identification Presentation).

Programming Guide References

- [418] ISDN Line Number Assignment
- [419] ISDN Outgoing CLIR Service Assignment

Features Guide References

- Calling Line Identification Presentation (CLIP)

User Manual References

None

2.4 Answering Features

Connected Line Identification Presentation (COLP)

Description

Connected Line Identification Presentation (COLP) enables showing the called party's number on the display of the calling party's telephone when the called party answers a call.

To use the COLP service, number assignments are required as follows:

- COLP number for each outside line
- COLP number for each extension

Conditions

- The COLP service for incoming outside calls can be restricted (COLR: Connected Line Identification Restriction). <[990] System Additional Information, Area 05-Bit 11>
- The number actually sent to the calling party may be different from the system programmed number. It depends on the contract with your ISDN supplier.

Programming Guide References

- [100] Flexible Numbering
- [418] ISDN Line Number Assignment
- [617] CLIP / COLP Number Assignment for Extension
- [618] CLIP / COLP Number Assignment for ISDN Extension
- [990] System Additional Information

Features Guide References

- Connected Line Identification Restriction (COLR)

User Manual References

- 2.7.4 Displaying Your Number on the Called Party and Calling Party's Telephone (Calling / Connected Line Identification Presentation [CLIP / COLP])

Connected Line Identification Restriction (COLR)

Description

Connected Line Identification Restriction (COLR) restricts showing the called party's number on the display of the calling party's telephone when the called party answers a call.

Conditions

- If the displaying is enabled, the calling party can check the the called party's number when the called party answers it (COLP: Connected Line Identification Presentation).

Programming Guide References

- [418] ISDN Line Number Assignment

Features Guide References

- Connected Line Identification Presentation (COLP)

User Manual References

None

2.5 Attended Features

Direct Dialling Inward (DDI)

Description

Provides automatic direction of an incoming ISDN line call to a specific extension. Assignable destinations are: (1) Operator, (2) extension, (3) Hunting Group, (4) Trunk (Outside Line) Answer From Any Station (TAFAS), (5) Direct Inward System Access (DISA), (6) modem, (7) Phantom extension, (8) Voice Mail extension, and (9) ISDN extension. This requires a number received from the ISDN network. The number is converted to a specific extension number by using a pre-programmed conversion table.

Location No.	[150] DDI Translation Table	[151] DDI Ringing Assignment – Day	[152] DDI Ringing Assignment – Night
000	2011111	101	201
001	2012222	102	202
:	:	:	:
399	2019999	109	109

Conditions

- To use the DDI service, "DDI" must be selected for the ISDN Ringing Service. <[452-453] ISDN Ring Service Assignment – Day / Night>
- An incoming DDI call is converted as programmed. <[421] ISDN DDI / MSN Removed Digit / Added Number Assignment>
- If an incoming DDI call cannot be sent to a specific extension, it will be sent to an operator or extension according to DIL 1:N. <[990] System Additional Information, Area 05-Bits 7 and 8>
- When a DDI call arrives at a busy extension which has disabled Call Waiting, a busy tone will be sent to the caller. If required, Intercept Routing – No Answer (IRNA) can be activated. <[990] System Additional Information, Area 07-Bit 7>

Programming Guide References

- [150] DDI Translation Table
- [151-152] DDI Ringing Assignment – Day / Night
- [421] ISDN DDI / MSN Removed Digit / Added Number Assignment
- [452-453] ISDN Ring Service Assignment – Day / Night
- [990] System Additional Information

Features Guide References

- Integrated Services Digital Network (ISDN)

User Manual References

None

Multiple Subscriber Numbers (MSN) Ringing Service

Description

Provides automatic direction of an incoming ISDN line call to a pre-assigned extension. One ISDN port can support a maximum of ten Multiple Subscriber Numbers (MSN). Assignable destinations are: (1) Operator, (2) extension, (3) Hunting Group, (4) Trunk (Outside Line) Answer From Any Station (TAFAS), (5) Direct Inward System Access (DISA), (6) modem, (7) Phantom extension, (8) Voice Mail extension, and (9) ISDN extension.
The extensions which are assigned in programmes [448-449] "Extension Ringing Assignment – Day / Night for ISDN" receive a call if the dialled number matches the stored MSN.
<**Example**>

ISDN Port No.	Location No.	[447] MSN Assignment	[448] Extension Ringing Assignment – Day for ISDN	[449] Extension Ringing Assignment – Night for ISDN
01	-1	2011111	101	201
	-2	2012222	102	202
	:			
	-10			

Conditions

- To use the MSN ringing service, "MSN" must be selected for the ISDN Ring Service. <[452-453] ISDN Ring Service Assignment – Day / Night>
- An incoming MSN number is converted as programmed. <[421] ISDN DDI / MSN Removed Digit / Added Number Assignment>
- If an MSN number through the ISDN line does not match the assigned number <[447] MSN Assignment>, the call will not be received. It will be sent to an operator or extension according to DIL 1:N. <[990] System Additional Information, Area 05-Bits 7 and 8>
- When a MSN call arrives at a busy extension which has disabled Call Waiting, a busy tone will be sent to the caller. If required, Intercept Routing – No Answer (IRNA) can be activated. <[990] System Additional Information, Area 07-Bit 7>
- When using point-to-multi-point configuration with a Basic Rate Interface (BRI), we recommend not connecting another ISDN equipment in parallel with your system. As only two channels can be used at one time with the BRI, other ISDN equipment may monopolise the channels.

Programming Guide References

- [407-408] DIL 1:1 Extension – Day / Night
- [421] ISDN DDI / MSN Removed Digit / Added Number Assignment
- [447] MSN Assignment
- [448-449] Extension Ringing Assignment – Day / Night for ISDN
- [452-453] ISDN Ring Service Assignment – Day / Night
- [990] System Additional Information

Features Guide References

- Integrated Services Digital Network (ISDN)

User Manual References

None

2.6 Display Features

Call Log, Incoming

Description

Records the external calling party's information on digital display proprietary telephones which have Soft buttons (e.g. KX-T7536) when the extension user does not answer the call. The phone number and name can be displayed when the number and the name are stored in list of System Speed Dialling. The stored number or modified number, if needed can be used to call back the party. This feature is available, if the Calling Line Identification Presentation (CLIP) service is obtained from the ISDN line.
The following information is displayed:

a) The receiving outside line number and name

b) The party's phone number and name

c) The day and time of the call was made

d) The sequence number and the calling attempt time of the same person

Conditions

- Up to 15 calls can be stored on an extension basis. It is programmable to assign whether the 16th call will be unacceptable or the oldest call is replaced by the newest call that is received after 15 calls are stored.
- If the LED indicator of the SHIFT button is red, the user finds that there were some unanswered call.
- It is possible to prevent the other user from referring the call log on the extension. The operator also can set or cancel the prevention remotely (**Call Log Lock Control, Incoming**).
- It is also possible to record the call information during a conversation by pressing the LOG button (Soft button).
- The call log is registered at the time DPT finishes ringing. If a call is directed to multiple DPTs, the call log is registered at the DPT that has the smallest jack number of the ringing DPTs.
- If the DPT is in Call Forwarding – No Answer or IRNA is activated, the call log is registered at the original DPT but not at the destination DPT unless the destination party answers the call and record it manually.

Programming Guide References

- [001] System Speed Dialling Number Set
- [002] System Speed Dialling Name Set
- [100] Flexible Numbering
- [417] Outside Line Name Assignment
- [418] ISDN Line Number Assignment
- [419] ISDN Outgoing CLIR Service Assignment

Features Guide References

- Calling Line Identification Presentation (CLIP)
- Incoming Outside Call Information Display

User Manual References

- 2.9.1 Calling Using the Call Log (Incoming Call Log) [KX-T7533, KX-T7536, KX-T7230, KX-T7235 only]
- 2.9.2 Recording a Call Log [KX-T7533, KX-T7536, KX-T7230, KX-T7235 only]
- 2.9.3 Denying Other People the Possibility of Seeing Your Call Log (Incoming Call Log Lock) [KX-T7533, KX-T7536, KX-T7230, KX-T7235 only]
- 3.1.1 Changing the Settings

Incoming Outside Call Information Display

Description

Provides the display proprietary telephone user with pre-assigned information if an incoming outside call is received.
You can select one of the following. <[612] Incoming Call Display>

Display Type	Description
The caller's telephone number and name	Available for an ISDN line provided with the Calling Line Identification Presentation (CLIP) feature.
The outside line number and outside line name	This information is useful in the case when several divisions or companies are connected to one system and they have their own outside lines, a user can check the called party with the display before answering the call if each division's or company's name is assigned to an outside line.
DDI / MSN number and name of the called party	Available for incoming Direct Dialling In (DDI) or Multiple Subscriber Number (MSN) calls.

Conditions

- It is required to name outside lines. <[417] Outside Line Name Assignment>
- With the CLIP feature, the ISDN line informs the system of the caller's telephone number or called party's number. To display the name, the system compares the informed number with the System Speed Dialling Numbers stored in programme [001] and if a match is found, decides the caller's name or called party's name by using the System Speed Dialling Names stored in programme [002].
- Digital display proprietary telephones which have Soft buttons (e.g. KX-T7536) can record the information of the call received by CLIP feature (Call Log, Incoming feature).
- It is possible to select whether the call information display changes to the duration time after answering a call (default: change). <[990] System Additional Information, Area 07-Bit 11>

Programming Guide References

- [001] System Speed Dialling Number Set
- [002] System Speed Dialling Name Set
- [417] Outside Line Name Assignment
- [418] ISDN Line Number Assignment
- [419] ISDN Outgoing CLIR Service Assignment
- [423] Pay Tone Assignment
- [612] Incoming Call Display
- [990] System Additional Information

Features Guide References

- Call Log, Incoming

User Manual References

None

Section 3

E&M Features

3.1 System Expansion

E&M (TIE) Line Service

Description

An E&M (TIE) line is a privately leased communication line between two or more PBXs, which provides cost effective communications between company members at different locations. The TIE lines can be used to call through your system to reach another switching system (PBX or Central Office). By utilising TIE lines, your system can support not only communications with the public network but with other company locations in the private network where your system is included.

System Explanation

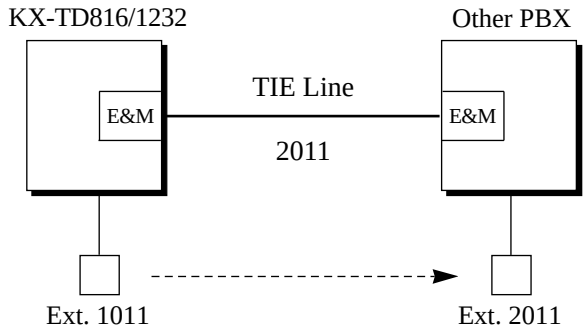
1. Making a TIE Call

One of the following two methods can be used to make a TIE call.

a) Extension Number method

dial the [Extension Number] only to make a TIE call.

<Example>



Explanation

To use this method, it is necessary to change the first one or two digits of extension numbers of either PBX to avoid having the same extension number.

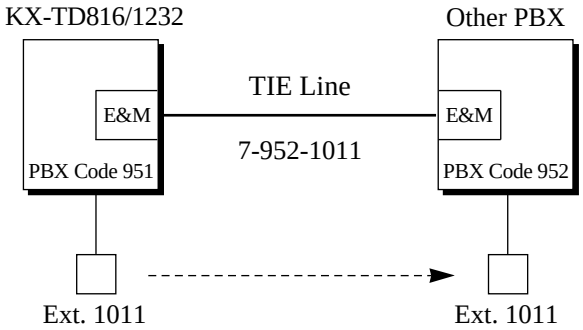
1. Extension 1011 dials extension number "2011".

2. Extension 1011 is connected to extension "2011" of the other PBX.

b) PBX Code method

dial the [TIE line access number] [PBX Code] [Extension Number] to make a TIE call.

<Example>



Explanation

To use this method, it is necessary to have each PBX code in order to identify the location of an extension.

1. Extension 1011 dials TIE line access number "7", PBX code "952" and extension number "1011".
2. Extension 1011 is connected to extension 1011 of the other PBX which has PBX code "952".

2. TIE Line and Outside Line Connection

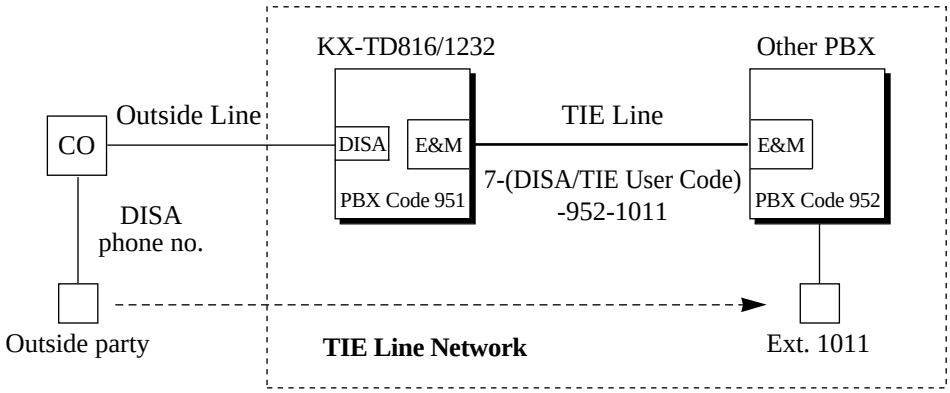
To connect the TIE line with the outside line, the following patterns are available.

a) Outside-to-TIE Transfer

The system transfers incoming outside calls to the other PBX through the TIE line. The following patterns are available.

TIE call using DISA

<Example>



Explanation

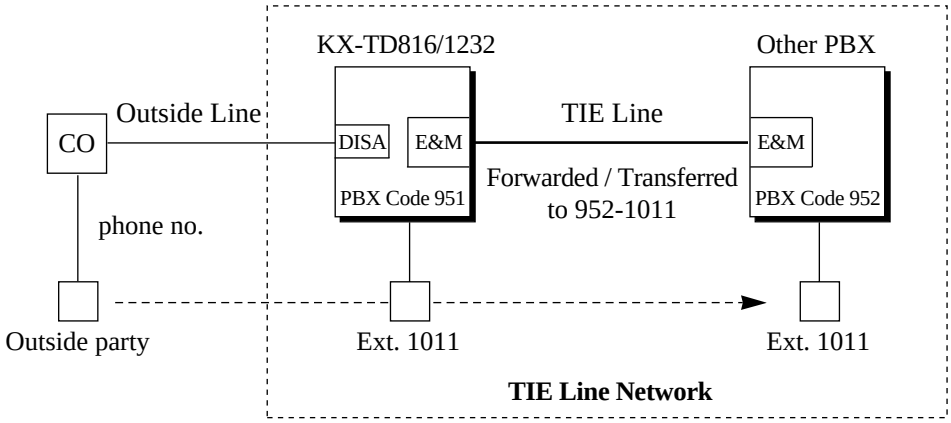
The outside caller dials as follows:

1. The DISA phone number, and the DISA-OGM is sent.
2. TIE line access number "7", and a dial tone is heard.
3. The DISA/TIE user code (if required), PBX code "952" and extension number "1011".

The outside caller is connected to extension 1011 of the other PBX which has PBX code "952".

Call Forwarding / Call Transfer to the TIE line

<Example>



Explanation

The outside caller dials the phone number, and the call is forwarded or transferred to extension 1011 of the other PBX which has PBX code "952".

Notes

Setting the destination of Call Forwarding to the TIE line is the same as Call Forwarding to an Outside Line.

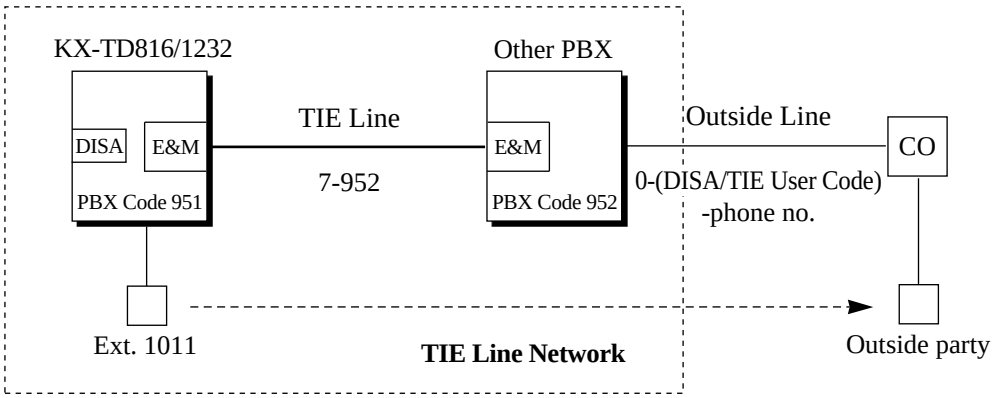
Transferring a call to the TIE line is the same as a Call Transfer to an Outside Line. The DISA/TIE user code <[811] DISA / TIE User Codes>) is required when the outside line security mode is selected <[440] TIE Security Type>.

b) TIE-to-Outside Transfer

The system transfers TIE calls to the outside line of the other PBX through the TIE line. The following patterns are available.

Outside call through the other PBX

<Example>



Explanation

Extension 1011 dials as follows:

1. TIE line access number "7", PBX code "952" and outside line access number "0", and a special dial tone is heard.
2. The DISA/TIE user code (if required) and desired phone number.

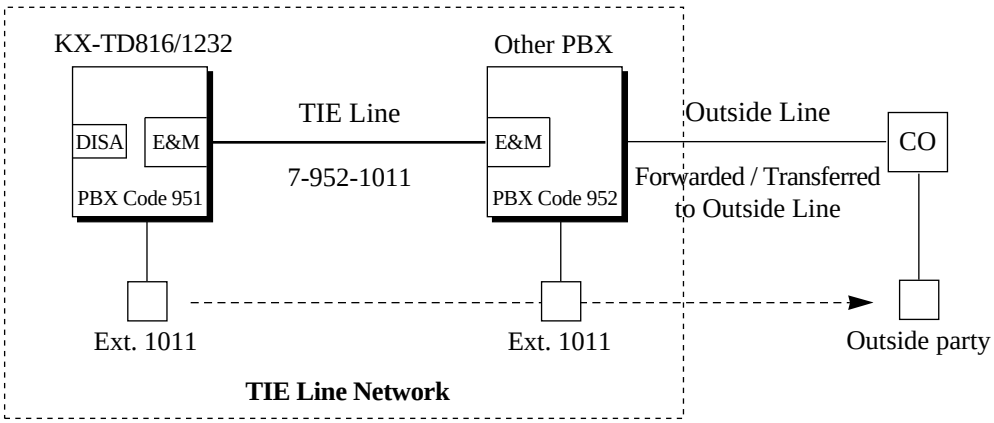
Extension 1011 is connected to the desired outside party through the other PBX which has PBX code "952".

Notes

The DISA/TIE user code <[811] DISA / TIE User Codes>) is required when the outside line security mode is selected <[440] TIE Security Type>.

Call Forwarding / Call Transfer to Outside Line

<Example>



Explanation

Extension 1011 dials as follows:

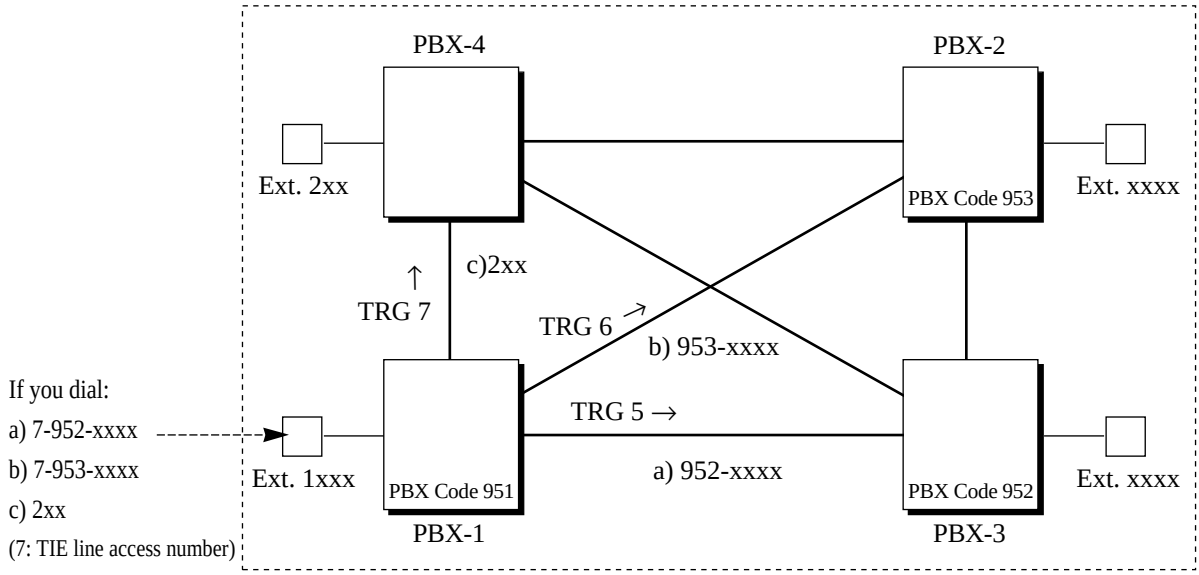
1. TIE line access number "7", PBX code "952" and extension number "1011".
2. The call is forwarded or transferred by extension 1011 of the other PBX which has PBX code "952" to the designated outside line.

3. TIE Line Routing Table

The TIE Line Routing Table is referenced by the system to identify the outside line route, when an extension user makes a TIE call.
It is necessary to make unified routing tables with each PBX in your TIE line network. A routing pattern appropriate for each call is decided by the first three digits (except the TIE line access number) of the dialled number.
There are two system programmes for the tables:
[340] TIE Line Routing Table: used to assign the access number (PBX code or extension number) and outside line group hunt sequence.
[341] TIE Modify Removed Digit / Added Digit: used to assign removed and added digits of the dialled digits of the TIE call.

Programming Example

<Example>
Your system is PBX-1 and there are four PBXs in your TIE line network. To identify the outside line route as illustrated below, you should make the following routing table.



TIE Line Routing Table of PBX-1

Location No.	PBX Code / Ext. No.	Removed Digit	Added Digit	Outside Line Group Hunt Sequence				
				01	02	03	04	05
01	952	0		5	6			
02	953	0		6	5			
03	2xx	0		7				

Explanation

Location 01: The hunt sequence by dialling [7+PBX Code 952]:
The 1st route — outside line group (TRG) 5
The 2nd route — outside line group (TRG) 6
Location 02: The hunt sequence by dialling [7+PBX Code 953]:
The 1st route — outside line group (TRG) 6
The 2nd route — outside line group (TRG) 5
Location 03: The hunt sequence by dialling [Ext.no. 2xx]:
The 1st route — outside line group (TRG) 7

If the received number does not match the PBX Code, the system checks the number in the routing table. If it is found, the system automatically sends the number to the corresponding PBX.
For example, if PBX-1 receives the number "952-xxxx" from PBX-4, PBX-1 automatically sends the number through outside line group 5.

4. TIE Call Dialling Method

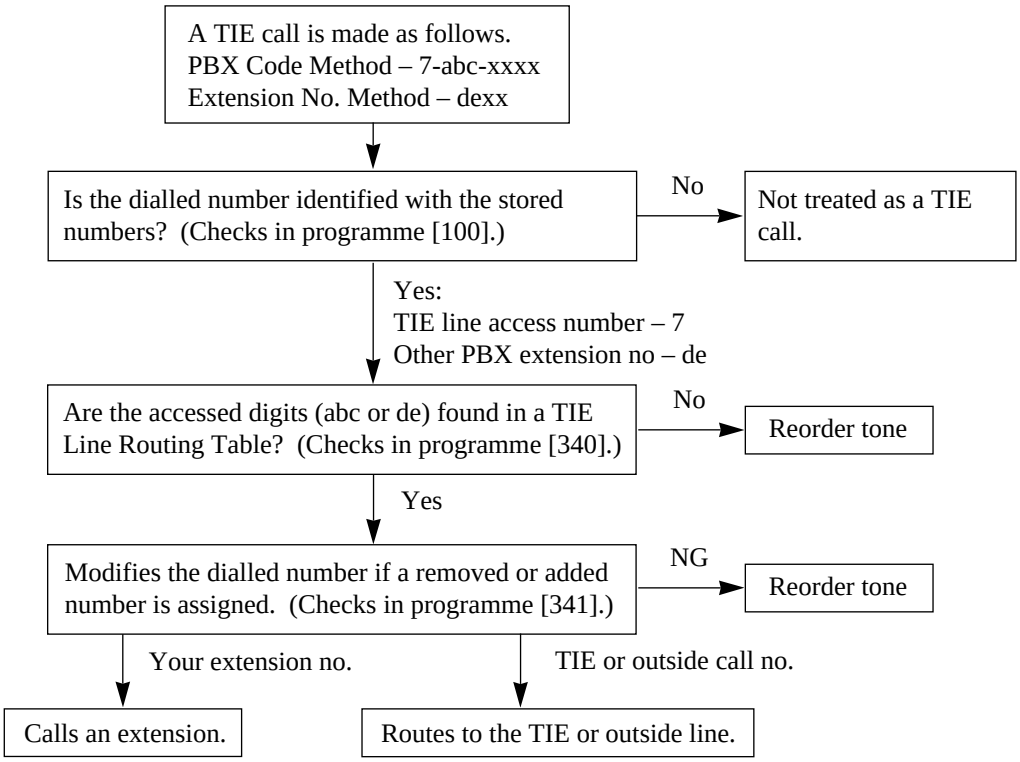
The following patterns are TIE call dialling methods. The dial number modification depends on the dialling method.

Your telephone	Dialling Method	dial Modification
APT / DPT	Extension no.	Enable
	CO button + (PBX code) + Extension no.	Disable
	TIE line access number + (PBX code) + Extension no.	Enable
	CO button + PBX code (+ TIE user code) + Phone no.	Disable
	TIE line access number + PBX code (+ TIE user code) + Phone no.	Enable
	Select outside line group + (PBX code) + Extension no.	Disable
	Select outside line group + PBX code (+ TIE user code) + Phone no.	Disable
SLT	Extension no.	Enable
	TIE line access number + (PBX code) + Extension no.	Enable
	TIE line access number + PBX code (+ TIE user code) + Phone no.	Enable
	Select outside line group + (PBX code) + Extension no.	Disable
	Select outside line group + PBX code (+ TIE user code) + Phone no.	Disable

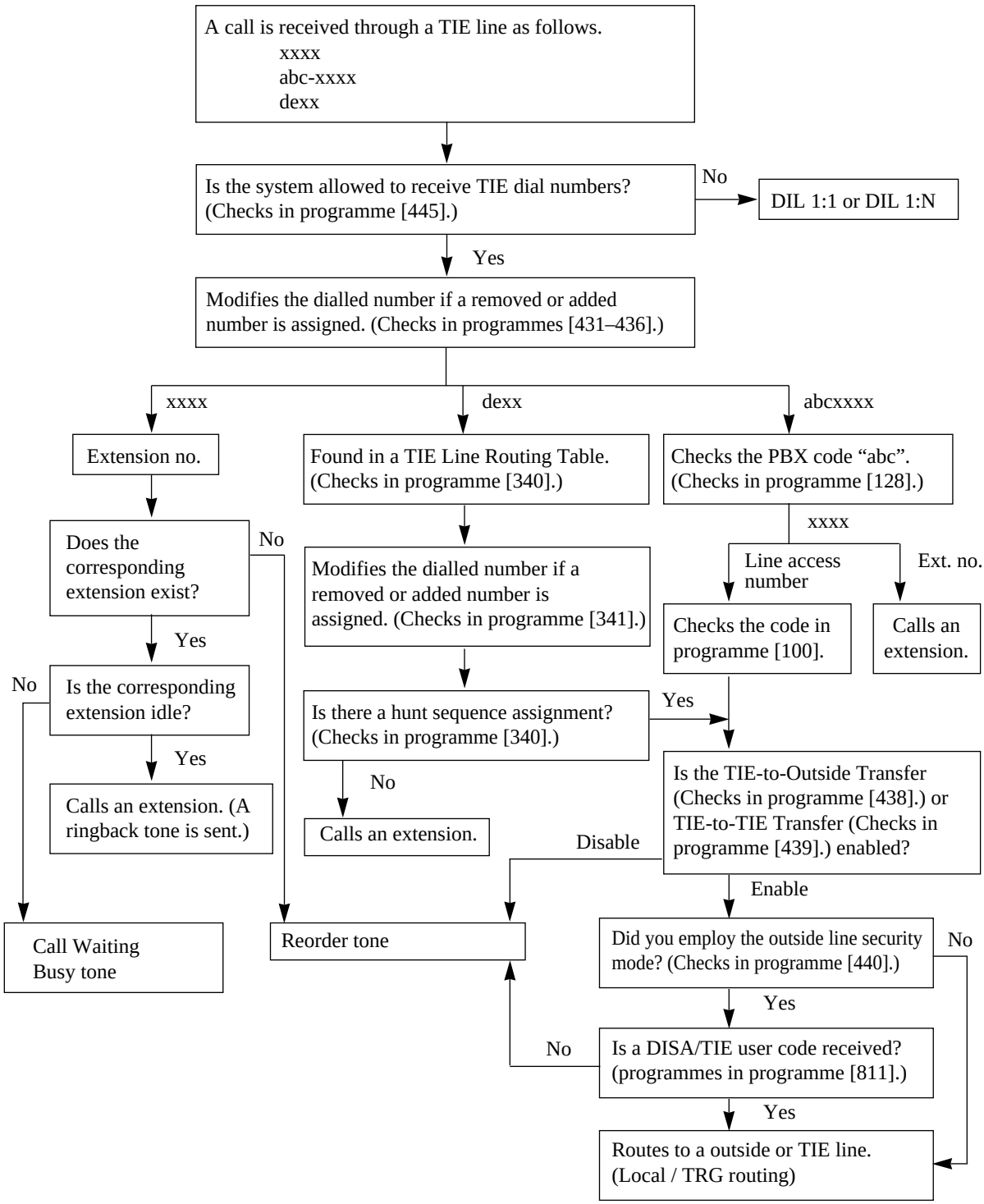
In addition to the methods above, the system can use the TIE line for sending outside line access number "0" through other PBX.
When you dial the outside line access number and the outside line is busy, the system automatically sends outside line access number "0" to a TIE line so that you can access the outside line through other PBX. <[990] System Additional Information, Area 06-Bit 8>

5. TIE Line Routing Flow Chart

Making a TIE Call from an Extension



Receiving a Call through a TIE Line



Conditions

- It is possible to programme the E&M signal, voice path type and voice level (transmit / receive) of the E&M Line Unit. <[442] Voice Path Type, [443] Voice Level (Transmit), [444] Voice Level (Receive)> For details about the E&M signal, voice path type and voice level, refer to Installation Manual.
- The FLASH button does not function as the disconnection key.
- The ability to perform Call Forwarding/Call Transfer to TIE line is determined on a Class of Service basis. <[503] Call Transfer to Outside Line, [504] Call Forwarding to Outside Line>
- When a TIE call arrives at a busy extension which has disabled Call Waiting, a busy tone will be sent to the caller. If required, Intercept Routing – No Answer (IRNA) can be activated. <[990] System Additional Information, Area 07-Bit 7>

Programming Guide References

- [100] Flexible Numbering
- [109] Expansion Unit Type
- [128] PBX Code
- [129] E&M Signal Assignment
- [220] TIE First / Inter Digit Time
- [340] TIE Line Routing Table
- [341] TIE Modify Removed Digit / Added Dial
- [431] TIE Table Number Assignment
- [432] TIE Incoming Assignment
- [433] TIE Outgoing Assignment
- [434] TIE Subscriber Number Removed Digit
- [435] TIE Added Number
- [436] TIE Wink Time Out Assignment
- [437] Outside-to-TIE Transfer
- [438] TIE-to-Outside Transfer
- [439] TIE-to-TIE Transfer
- [440] TIE Security Type
- [441] Line Hunting Sequence
- [442] Voice Path Type
- [443] Voice Level (Transmit)
- [444] Voice Level (Receive)
- [445] TIE Receive Dial
- [503] Call Transfer to Outside Line
- [504] Call Forwarding to Outside Line
- [811] DISA / TIE User Codes
- [990] System Additional Information

Features Guide References

None

User Manual References

None

Section 4

DECT Portable Station Features

4.1 System Expansion

Digital Wireless Connection

Description

The system supports the connection of a DECT portable station (PS), KX-TD7500. It can be used in the system with other telephones.

Conditions

- The KX-TD816 system supports up to 16 PSs and the KX-TD1232 system supports up to 64 PSs.
- To support the PSs, a Cell Station Interface Unit (KX-TD144 / KX-TD146) and a Cell Station (KX-TD142) are required.
- Up to four calls can be made at the same time in the range.
- If you do not want your PS to ring, you can select the VIBRATION feature, which is convenient while in a meeting, etc.
- **The following procedures are required to utilise a PS:**

  a) Assign the radio system ID. <[680] Cell Station Number Assignment for Master CS>

  b) Reset the system.

  c) Register a PS. <[650] PS Registration>

Installation Manual References

- 2.8 System Restart
- 5 DECT Installation

Programming Guide References

- [020] PS Flexible CO Button Assignment
- [109] Expansion Unit Type
- [650] PS Registration
- [651] PS Termination
- [653] PS Extension Name Set
- [654] SXDP Assignment
- [655] PS Budget Management
- [656] PS Charge Verification Assignment
- [657] PS Class of Service
- [658] PS Extension Group Assignment
- [659-660] PS DIL 1:N Extension – Day / Night
- [661-662] PS Outgoing Permitted Outside Line Assignment – Day / Night
- [665] PS Voice Mail Access Codes
- [671] PS Extension Number Set
- [672] PS Password Set
- [673] CLIP / COLP Number Assignment for PS
- [676] PS Incoming Call Display
- [680] Cell Station Number Assignment for Master CS
- [681] PS Radio System ID Reference
- [682] Radio Information Data Clear

Features Guide References

None

User Manual References

- 5 DECT Portable Station

Super EXtra Device Port (SXDP)

Description

Allows a DECT portable station (PS) to be used in parallel with a proprietary wired (PT) or single line telephone (SLT). When in the SXDP mode, your PS can make or receive calls as usual, but can also make calls or receive calls reaching the paired telephone.

Conditions

- This feature can only be set from a PS. The wired telephone can enable or disable this feature (default: enable). <[654] SXDP Assignment>
- When the parallelled wired telephone receives a call, both the wired telephone and PS will ring.
- The following types of incoming calls can't be received even if they are received by the parallelled wired telephone.

Incoming call type	
Incoming calls by group	Direct In Lines (DIL) 1:N; Ring Group; Phantom extension; Doorphone call
Incoming calls by feature	Recall; Timed Reminder; Off-Hook Call Announcement (OHCA)*; Whisper OHCA*

  If the SXDP is set, the features marked with "*" are not available for both a portable station and its paired telephone.
- If a PS receives a call by its own extension number, it works as usual.
- Even if one paired telephone is busy, you can still make calls with the other telephone.
- While a PS is not available such as when a Cell Station (CS) is busy, only the other wired telephone can receive the calls.

Programming Guide References

- [100] Flexible Numbering
- [654] SXDP Assignment

Features Guide References

None

User Manual References

- 5.3.7 Using Your PS in Parallel with the Wired Telephone (Super EXtra Device Ports [SXDP])

4.2 DECT Portable Station Information for Other Sections

DECT Portable Station Information for Other Sections

Description

Most of the features described in other Sections are supported by a system with a DECT portable station (PS). However the following features are not supported.

PS Not Supported Features
Automatic Redial
Background Music (BGM)
EXtra Device Port (XDP)
Handsfree Operation – PS is not provided with a built-in speaker
Live Call Screening (LCS)
Log-In/Log-Out
Mute
Off-Hook Monitor
Operator – As a PS cannot be assigned as an operator, it cannot perform the operator service features.
Parallelled Telephone
Phantom Extension
Station Hunting
Uniform Call Distribution (UCD)

The list below describes the information which are required with a PS. For programmes, refer to the Programming Guide. For PS and PBX Programming, refer to the User Manual.

DECT Portable Station Information for Section 1, General Features

Section	Title	DECT PS Information
1.3 System Features	Budget Management	• Programme [655] PS Budget Management is required to assign the charge limit of a call on a PS basis.
	Charge Fee Reference	• The charge fee reference allowed for a PS is determined by programme [656] PS Charge Verification Assignment.
	Class of Service (COS)	• Programme [657] PS Class of Service is required for assigning each PS a Class of Service (COS).
	Console	• The console cannot work with a PS.
	Extension Group	• The PS extension group can be used with the Group Call Pickup. • The PS extension group can be assigned in programme [658] PS Extension Group Assignment.
	Night Service	• PS users cannot confirm the current mode on the display. • The following programming items may be assigned differently for the day and night modes. [659-660] PS DIL 1:N Extension – Day / Night [661-662] PS Outgoing Permitted Outside Line Assignment – Day / Night
	Voice Mail Integration for Digital Proprietary Telephones	• Live Call Screening (LCS) is not available with a PS.
	Voice Mail Integration for Inband	• A mailbox number can be assigned for each PS in programme [665] PS Voice Mail Access Codes.
1.5 Attended Features	Direct In Lines (DIL)	• A PS can be assigned as the DIL 1:N destination. In this case, programme [659-660] PS DIL 1:N Extension – Day / Night is required. • Intercept Routing applies to DIL 1:1. When the line is busy, the PS is out of range or the PS power switch is OFF.
1.6 Originating Features	Outside Line Connection Assignment – Outgoing	• [661-662] PS Outgoing Permitted Outside Line Assignment – Day / Night is used to determine the outside line which can be accessed by a PS.
1.8 Ringing Features	Do Not Disturb (DND)	• `"DND"` is displayed as notification while on-hook. • The FWD/DND button can be activated by selecting it on the display. For details, refer to the "Selecting the Feature Button on the Display" in the User Manual. • The FWD/DND button can be assigned on a flexible button. However, the LED of the flexible button does not work.

DECT Portable Station Information for Section 1, General Features

Section	Title	DECT PS Information
1.9 Answering Features	Hands-free Answerback	• This feature allows PS users to answer calls, all or intercom, without lifting up the PS or pressing any key only when the user-supplied headset is connected to the PS. If the PS user receives a call in this mode, a handsfree conversation is established immediately after the user hears beep tone and the caller hears a confirmation tone. PS Programming, "Handsfree Answer Mode Set", is required to select the answering mode.
1.11 Transferring Features	Call Forwarding	• "FWD" is displayed as notification while on-hook. • The FWD/DND button can be activated by selecting it on the display. For details, refer to the "Selecting the Feature Button on the Display" in the User Manual. • The FWD/DND button can be assigned on a flexible button. However, the LED of the flexible button does not work.
1.12 Conversation Features	Conference	• The Conference button can be activated by selecting it on the display. For details, refer to the "Selecting the Feature Button on the Display" in the User Manual. • The Conference button can be assigned on a flexible button. However, the LED of the flexible button does not work.
1.13 Paging Features	Paging	**[All / Group]** • PS users can page and answer a page, which is being announced over a nearby wired proprietary telephone or external pager. However you cannot be directly paged at the PS.
1.14 Proprietary Telephone Features	Handset / Headset Selection	• To use a headset with your PS, just connect the user-supplied headset to the PS. Moreover, it is possible to answer calls without lifting up the PS or pressing any key. In this case, PS Programming, "Handsfree Answer Mode Set", is required to select the answering mode.
1.16 Button Features	Button, Flexible	• Programme [020] PS Flexible CO Button Assignment is used to determine the use of the PS flexible buttons.
	LED Indication	• The LED indicators of the Flexible CO buttons do not work while on-hook.
1.17 Display Features	Message Waiting	• "✉" is displayed as notification. • The Message button can be activated by selecting it on the display. For details, refer to the "Selecting the Feature Button on the Display" in the User Manual. • The Message button can be assigned on a flexible button. However, the LED of the flexible button does not work

DECT Portable Station Information for Section 2, ISDN Features

Section	Title	DECT PS Information
2.3 Originating Features	Calling Line Identification Presentation (CLIP)	• Programme [673] CLIP / COLP Number Assignment for PS is required to assign the CLIP numbers for each PS.
2.4 Answering Features	Connected Line Identification Presentation (COLP)	• Programme [673] CLIP / COLP Number Assignment for PS is required to assign the CLIP numbers for each PS.
2.5 Attended Features	Direct Dialling Inward (DDI)	• Programme [151-152] DDI Ringing Assignment – Day / Night is used to select the destination for a DDI call.
	Multiple Subscriber Numbers (MSN) Ringing Service	• Programme [448-449] Extension Ringing Assignment – Day / Night for ISDN is used to assign a PS as MSN destination for MSN calls.
2.6 Display Features	Incoming Outside Call Information Display	• Programme [676] PS Incoming Call Display is used to select the display type when an incoming call is received.

Conditions

None

4.3 DECT Portable Station Features

PS Call Directory

Description

PS users can store names and/or phone numbers in the directory. A stored number is dialled out by selecting a name or phone number in the directory.
There are four types of directory features, including one PS directory and three PBX directories, as follows.

Directory Type	Description
PS Dialling Directory	PS users can make an outside call by selecting privately-assigned names and phone numbers (100 max.).
PBX System Speed Dialling Directory	PS users can make a call via the system by selecting system-assigned names and phone numbers (500 max.).
PBX Extension Dialling Directory	PS users can make a call via the system by selecting system-assigned extension names.
PBX Station Speed Dialling Directory	PS users can make a call via the system by selecting privately-assigned names and phone numbers (10 max.).

Conditions

- It is possible to lock the PS Dialling Directory contents.
- It is not possible to edit items in the PBX System Speed Dialling or PBX Extension Dialling Directories.

Programming Guide References

- [001] System Speed Dialling Number Set
- [002] System Speed Dialling Name Set
- [003] Extension Number Set
- [004] Extension Name Set
- [012] ISDN Extension Number Set
- [013] ISDN Extension Name Set
- [671] PS Extension Number Set

Features Guide References

None

User Manual References

- 5.3.6 Using the Call Directories
- 5.4.2 PS Programming

PS Programming

Description

PS users can change the default settings of PS Programming according to their needs.
It may be required to enter a PS Programming password or a DECT System Lock password when entering the PS Programming mode.
Depending on the password, the number of possible items changes for PS security reasons.
There are three password level as follows.

Level 0: A password is not required.

Level 1: A PS Programming password is required.

Level 2: A DECT System Lock password is required.

After selecting the PS Programming display, "ENTER PASSWORD" may be displayed. If not displayed, no password is required.
The combination of the passwords are as follows.

If DECT System Lock password is	Disable	Disable	Enable	Enable
If PS Programming password is	Disable	Enable	Disable	Enable
System Lock password	Not required.	Not required.	Level 0 - 2 are possible.	Level 0 - 2 are possible.
PS Programming password	Not required.	Level 0 - 2 are possible.	Not required.	Level 0 - 1 are possible.
No password or If incorrect password	Level 0 - 2 are possible.	Level 0 is possible.	Level 0 - 1 are possible.	Level 0 is possible.

The programming items and their password levels are as follows.

Password level	Programming Item
0	Keypad Backlight Mode Set
0	Key Tone Set
0	Ringer Pattern Selection
0	Vibration and Ring Type Selection
0	Display Language Selection
1	Directory Lock Control
0	Quick Answering Mode Set
0	Automatic Answering Mode Set
0	Automatic Answer Delay Selection
2	DECT System Selection*1 *3
0	Standby Display Selection*2

Password level	Programming Item
0	Date / Time Display Selection*2
1	Memory Clear
2	PS Registration Cancellation*3
0	Guidance Menu Set
1	PS Programming Password Set
2	DECT System Lock Password Set

*1 : Only displayed when more than two DECT Systems are connected.

*2 : Only displayed when registered to a Panasonic Digital Super Hybrid System and " " is displayed.

*3 : Only displayed when registered to a Panasonic Digital Super Hybrid System.

Conditions

- The PS Programming password is programmed in PS Programming, and the DECT System Lock password is programmed in the initial PS registration or in PS Programming.
- It is also possible to enter into the proprietary wired telephone programming mode and programme several items for your PS (**PBX Programming**).

Programming Guide References

- [650] PS Registration

Features Guide References

None

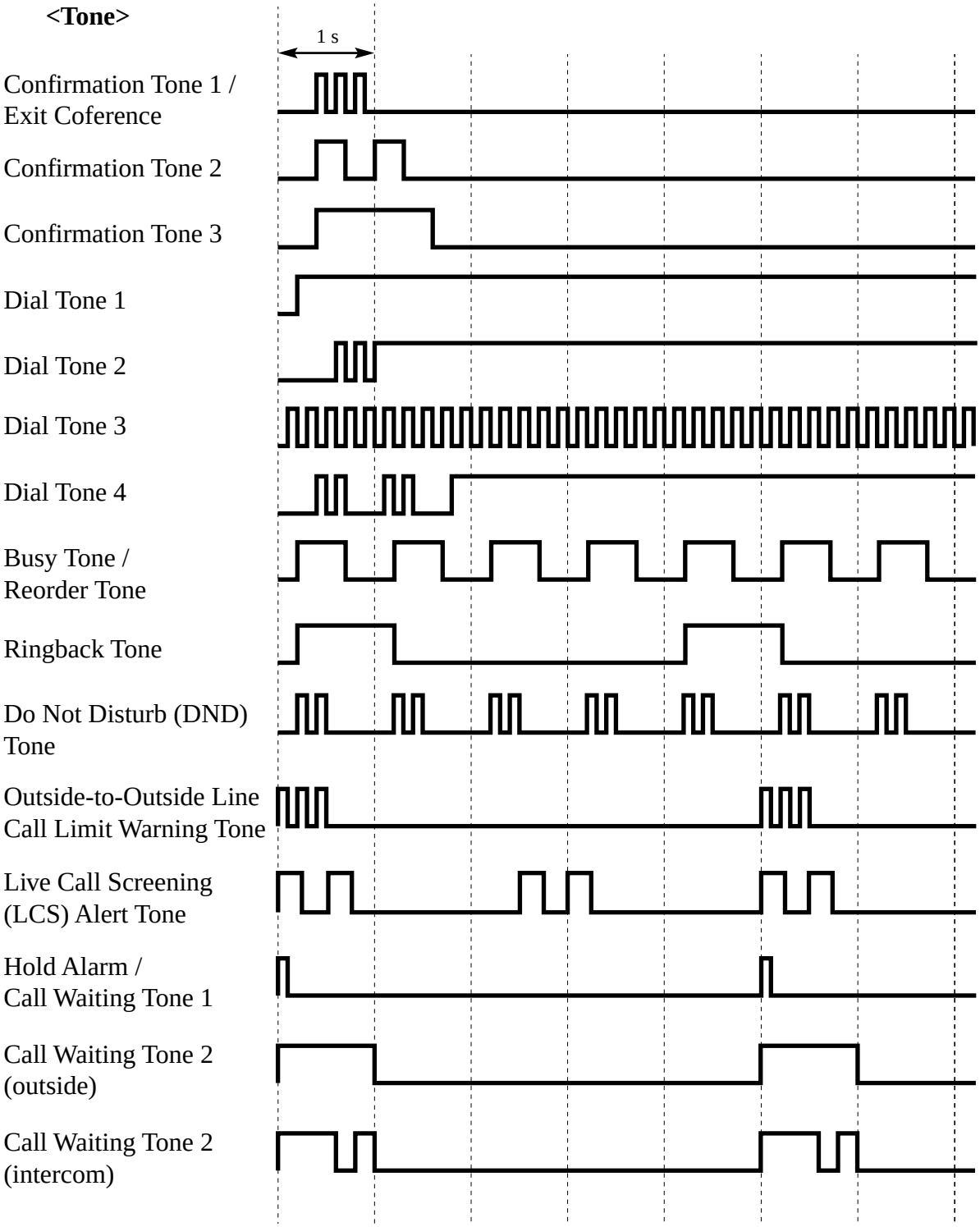
User Manual References

- 5.4 Customising Your PS

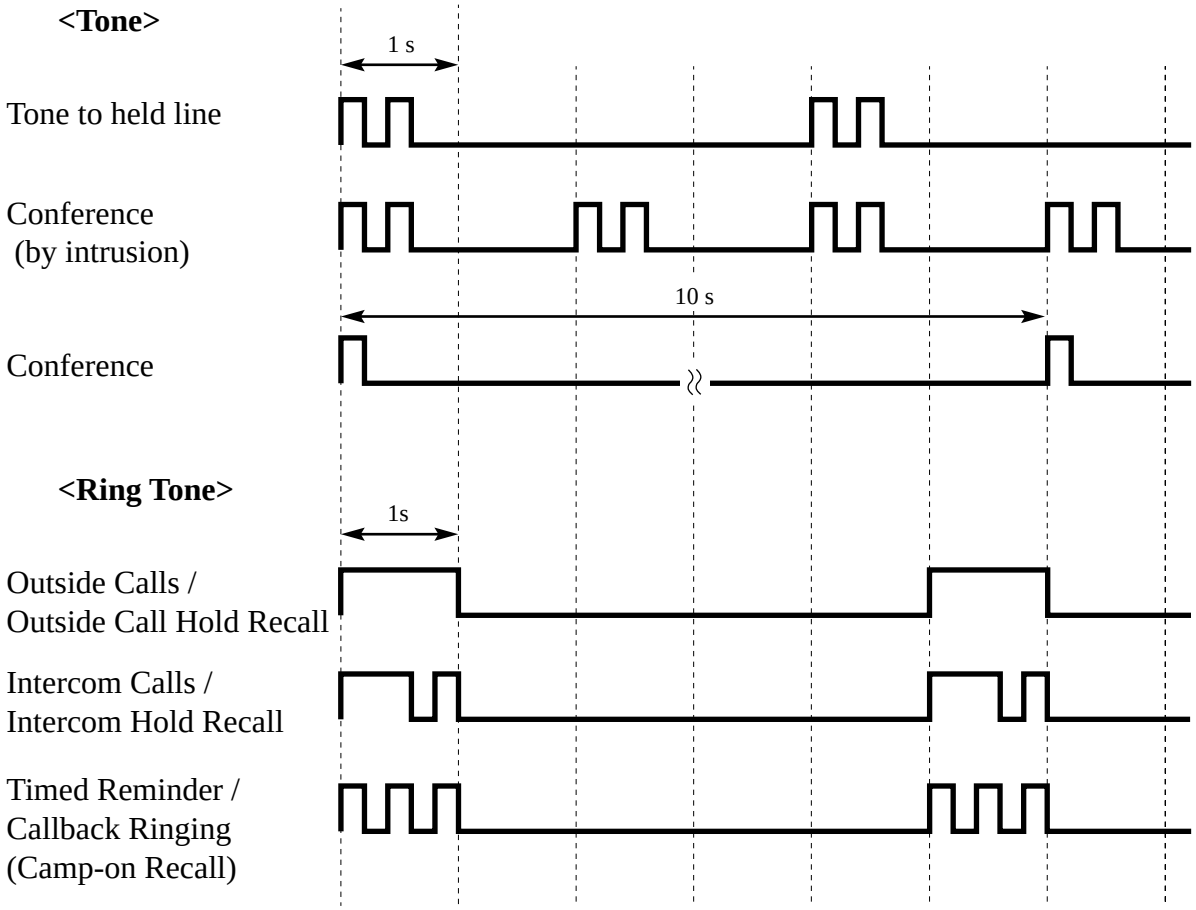
Section 5

Tone / Ring Tone

<Tone>


1 s
Confirmation Tone 1 / Exit Coference
Confirmation Tone 2
Confirmation Tone 3
Dial Tone 1
Dial Tone 2
Dial Tone 3
Dial Tone 4
Busy Tone / Reorder Tone
Ringback Tone
Do Not Disturb (DND) Tone
Outside-to-Outside Line Call Limit Warning Tone
Live Call Screening (LCS) Alert Tone
Hold Alarm / Call Waiting Tone 1
Call Waiting Tone 2 (outside)
Call Waiting Tone 2 (intercom)

<Tone>



<Ring Tone>

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This PBX fulfills the requirements of following European regulations:

CE

73/23/EEC	Low Voltage Directive
89/336/EEC	Electromagnetic compatibility (Basic EMC Publication)
92/31/EEC	Electromagnetic compatibility (Supplement)
93/68/EEC	CE mark

For above mentioned standards the unit is signed with the CE-mark.

Warning:
This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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