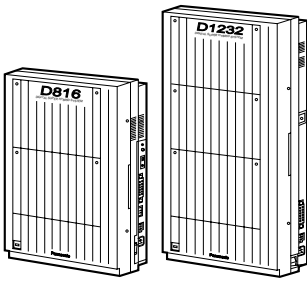# Panasonic

Digital Super Hybrid System

Feature Guide

KX-TD816NE
Model No. **KX-TD1232NE**

Please read this manual before connecting the Digital Super Hybrid System.

Introduction

About this Feature Guide

This Feature 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.

Terms used in this Feature Guide

Connection References

Lists any additional hardware required to use the feature.
Refer to the "Connection" section in the _Installation Manual_ for detailed information.

Programming References

The related and required programming titles are noted for your reference.
System Programming can be done with a PC or a proprietary telephone.
To program with a proprietary telephone, refer to the _Programming Guide_ for detailed information.
Station Programming is individual programming executed by each Proprietary Telephone (PT) user at his or her own PT. They can customize their PTs based on their personal needs.
Refer to the "Connection" section in the _User Manual_ for detailed information.

Feature References

The related feature titles described in this _Feature Guide_ are noted for your reference.

Operation References

The operation required to implement the feature is noted for your reference.
Refer to the "Operation" and "Customising Your Phone & System" Sections in the _User Manual_ for detailed information.

Additional Helpful Information

Along with this Feature Guide, the following manuals are available to help you install, program, and use the KX-TD816/KX-TD1232 System.

Installation Manual

Provides instructions for installing and wiring the hardware.

User Manual

Designed for users of Digital Super Hybrid System, KX-TD816/KX-TD1232.
The focus is Proprietary Telephones (PTs), DSS Consoles, Single Line Telephones (SLTs) and their features.

Programming Guide

Provides step-by-step programming instructions for a proprietary telephone.

Table of Contents

Section 1

General Features

1.1   General Features

Absent Message Capability

Description

Once set this option provides a message, on the display of the calling extension, to show the reason for the called extension's absence. 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 receive the message.

Conditions

- Six default messages, which are changeable, are shown below. The "%" means a parameter to be entered when assigning a message at individual extension.

  a) Will Return Soon

  b) Gone Home

  c) At Ext %%% (extension number)

  d) Back at %% : %% (hour : minute)

  e) Out until %% / %% (month / day or day / month)

  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
- [990] System Additional Information

Features Guide References

None

User Manual References

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

Account Code Entry

Description

An account code is used to identify incoming and outgoing outside for accounting and billing purposes. The account code is appended to the Station Message Detail Recording (SMDR) call record. For incoming outside call, account codes are optional. For outgoing outside call there are three modes available to enter an account code: Verified-All Calls mode; Verified Toll Restriction Override mode; and Option mode. One mode is selected for each extension on a Class of Service basis.

In Verified-All Calls mode, 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 CO Line
- Last Number Redial
- Line Access
- Note Book Function
- One-Touch Dialling
- Pickup Dialling
- Saved Number Redial
- Station Speed Dialling
- System Speed Dialling

In Verified-Toll Restriction Override mode, the user can enter a pre-assigned account code only when the user needs to override toll restriction.

In Option mode, the user can enter any account code when needed.

Conditions

- An account code can be stored into Memory Dialling (System / Station Speed Dialling; Notebook Function; One-Touch Dialling; Pickup Dialling; Call Forwarding - to CO 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.
- If the account code stored in location 001 of the programming table is used, the dialled number is not printed out to SMDR (Private Call).
- Account code entry after CPC detection must be done within 15 seconds. Otherwise, SMDR call record is activated and entry becomes impossible afterwards.
- It is possible to select whether the account code is printed out or not by the SMDR. If it is not printed out, it is shown in dots.

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 Override by Account Code Entry

User Manual References

- 2.2.5 Calling without Restrictions
- 4.1.3 Customising the Buttons
- 4.1.4 Charge Fee Management [Pre-assigned extension only]

Alert Indication

Description

If the following situations occur, the pre-warning indication is displayed on the proprietary telephone of Operator 1 in Day mode.

Memory; When the system finds the wrong system data, the indication "System Data Err 1" is displayed.

Printer; When the paper of the printer for SMDR runs out or the printer is out-of-service, the indication "Check Printer" is displayed. Check the printer.

Connection;[1] When a system inter-connection error occurs and system connection operation is interrupted, the indication "System Link Down" is displayed. Connect the interface between the systems and press the Reset Button on both systems.

Conditions

None

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

Not applicable.

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[1]   Available for the KX-TD1232 only.

Alternate Calling - Ring / Voice

Description

This system offers two methods of Intercom Calling: Ring-Calling or 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 called extension user, if a proprietary telephone, can select tone or voice calling. If the user selects Voice-Calling, the calling party can talk to the user immediately after confirmation tone. The calling extension user is able to change the calling method pre-selected once at a time by the called extension by pressing "✳"; Ring-Calling can be switched to Voice-Calling, and vice versa. This operation is available for both proprietary and single line telephone users during calling.

Conditions

Single line telephone users can only receive Ring-Calling call.

Programming Guide References

System programming is not required.

Features Guide References

- Handsfree Answerback

User Manual References

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

Answering, Direct CO Line

Description

Allows the proprietary telephone user to answer an incoming call by simply pressing the appropriate CO button without lifting the handset or pressing the SP-PHONE/MONITOR button. The user can specify the line to be answered when multiple incoming lines are ringing.

Conditions

None

Programming Guide References

System programming is not required.

Features Guide References

- CO Line Connection Assignment

User Manual References

- 2.3.1 Answering Calls

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.

Automatic Callback - Extension

When the caller answers the callback ringing, other extension's number is automatically dialled.

Automatic Callback - CO Line

When the caller answers the callback ringing, the line is automatically selected to allow the user to make an outside call.

Conditions

* 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 for the same extension or CO line.

Programming Guide References

* [100] Flexible Numbering

Features Guide References

None

User Manual References

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

Automatic Configuration*1

Description

The system sends the VPS data which contains the extension number configuration information and the VPS automatically creates mailboxes with this data (Quick Setup).

Conditions

- The data is transmitted to the VPS on the lowest jack port.
- If two or more lines are connected with the VPS, the port(s) with lower number(s) on the system need to be connected to one(s) with lower number(s) on the VPS.
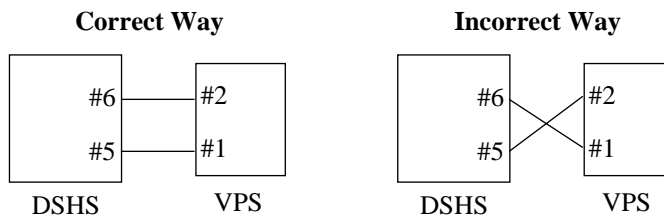
<Example>

Correct Way	Incorrect Way

DSHS	VPS	DSHS	VPS

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

Not applicable.

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*1   Available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration; e.g. KX-TVP100).

Automatic Overflow and Hurry-Up Transfer

Description

When Operator 1 is busy and the outside call reaches the Operator 1 directly, the incoming call can be waited until the waiting queue is over assigned number. When the incoming call is over assigned number, the last call will be transferred to the Operator 2.
(Automatic Overflow)
Operator 1 can refer the waiting queue with the indicator of the Hurry-Up button, and transfer the first waiting call to the pre-assigned extension with the Hurry-Up button. (Hurry-Up Transfer)

Conditions

- Automatic Overflow does not function in the following cases;
  a) The waiting queue is set "0."
  b) Operator 2 is not set.
  c) Operator 1 belongs to Station Hunting Group.
- Hurry-Up Transfer does not function in the following cases;
  a) The waiting queue is set "0."
  b) Hurry-Up Button is not assigned.
  c) Operator 1 belongs to Station Hunting Group.

Programming Guide References

- [005] Flexible CO Button Assignment
- [129] Operator Queue

Features Guide References

- Operator

User Manual References

- 3.2.1 Forwarding a Waiting Call (Automatic Overflow / Hurry-up Transfer)
- 4.1.3 Customising the Buttons

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 CO 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 program ARS so that the user can call the XYZ Company via the least expensive line.

1. Program ARS to work when the feature number for ARS is dialled by the user. Use the program [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 code), 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: Program Address [314] Leading Digit Table 1

Location	Entry
01	1234567
02	
•	
•	
•	
50	

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

   Carrier E — CO Line Group 1

   Carrier F — CO Line Group 2

   Carrier G — CO Line Group 3

   Then check the fee charged by each carrier:
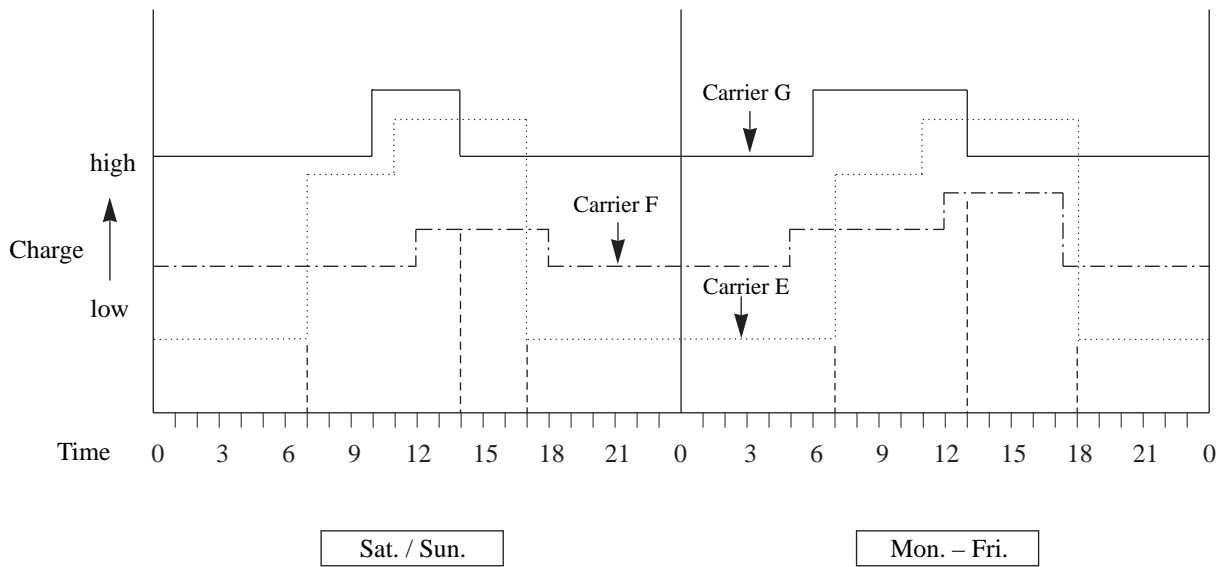
As shown in Table 2, the least costly route varies with the day of the week and the time of day. To select the least expensive line at a certain time, split the day into three zones as follows:

Sat. / Sun.	Mon. - Fri.
(1) 7:00 - 14:00	(1) 7:00 - 13:00
(2) 14:00 - 17:00	(2) 13:00 - 18:00
(3) 17:00 - 7:00	(3) 18:00 - 7:00

To program 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: Program Address [313] ARS Time Table

Sat. / Sun.		Mon. - Fri.		
Time Zones	Entry	Time Zones	Entry	← Enter the starting time of each zone. If a zone is not necessary, select "Disable."
Time-A	7:00	Time-A	7:00	
Time-B	14:00	Time-B	13:00	
Time-C	17:00	Time-C	18:00	
Time-D	Disable	Time-D	Disable	

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

	Time-A	Time-B	Time-C
Least Costly Carrier / CO Line Group (Priority 1)	Carrier F/Group 2	Carrier F/Group 2	Carrier E/Group 1
Next Less Costly Carrier / CO Line Group (Priority 2)	Carrier E/Group 1	Carrier G/Group 3	Carrier F/Group 2
Most Costly Carrier / CO Line Group (Priority 2)	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 CO line group numbers in order of priority. If the specified CO line group requires digit modification, assign the appropriate digit modification table number (1 to 8).
This table is required to have the system automatically add a specific carrier access code to the user-dialed number.

Example: Program [322] Route Plan Table 1

	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: CO Line Group

Modify: Modification Table Number

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

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 Table using programmes [330] "ARS Modify Removed Digit" and [331] "ARS Modify Added Number" as follows:

Example: Program [330] Digit Modification Tables

Modification Table

Modification 1		Modification 2		Modification 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 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 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-dialed 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-dialed 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 dialed,

 0-<u>10333</u>-1-234-567-8910.
            ↓

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

Flow Chart of ARS procedures

```
                              ┌──────────────────────────┐
                              │ A long distance call is made. │
                              └──────────────────────────┘
                                          │
                                          ▼
              ┌──────────────────────┐  Restricted  ┌──────────────────────┐
              │ Toll Restriction Check │ ──────────► │ The call is not made. │
              └──────────────────────┘              └──────────────────────┘
                          │
                     Not Restricted
                          │
                          ▼
        ┌────────────────────────────────────────────┐
        │ Is the ARS Access Code (Default: 0) dialled? │
        └────────────────────────────────────────────┘
           Yes                                No
            │                                  │
            ▼                                  ▼
 ┌──────────────────────────┐    ┌────────────────────────────────────┐
 │ Are the leading digits found in a │    │ The call is routed via the selected line. │
 │ Leading Digit Table?       │    └────────────────────────────────────┘
 └──────────────────────────┘
   Yes                    No
    │                      │
    ▼                      ▼
┌──────────────────────────┐   ┌────────────────────────────────┐
│ Obtains an applicable Route Plan Table │   │ The call is routed via an idle line. │
│ number from the Leading Digit Table. │   └────────────────────────────────┘
└──────────────────────────┘
    │
    ▼
┌────────────────────────────────────────────┐
│ Determines the CO line group of priority 1 in the │
│ Route Plan Table by the current time of day. │
└────────────────────────────────────────────┘
    │
    ▼
┌────────────────────────────────────────────┐
│ Is there any line available in the CO line group of │
│ priority 1?                                 │
└────────────────────────────────────────────┘
   Yes                                          No
```

Obtains an applicable Modification Table number for the CO line group from the Route Plan Table.

Modifies the digits.

Calls.

Is the CO line group of priority 2 assigned in the Route Plan Table?

Is there any line available in the CO line group of priority 2?

Is the CO line group of priority 3 assigned in the Route Plan Table?

Is there any line available in the CO line group of priority 3?

Sends a busy tone.

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 a CO line group. In other words, it is possible to make an outside call by assigning a CO line group directly (ARS Override).
- This feature also applies to Call Forwarding - to CO Line.
- It is possible to select the way to access a CO line to apply ARS, any dialling method or dialling 9 or pressing Loop-CO (L-CO) button, in program [990], "System Additional Information, Area 06 - Bit 5."
- **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 signaling. This function is enabled or disabled in program [990], "System Additional Information, Area 07 - Bit 1" (default: disable).

Programming Guide References

- [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
- [990] System Additional Information

Features Guide References

- Line Access, Automatic

User Manual References

- 2.2.1 Basic Calling

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

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

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

Programming Guide References

- [207] (Reserved for future use.) First Digit Time
- [208] Inter Digit Time

Features Guide References

None

User Manual References

Not applicable.

Background Music (BGM)

Description

Allows the proprietary telephone user to listen to background music from the monitor speaker on the telephone.

Conditions

- The system has an internal or external music source. It may be required to connect a user-supplied music source. Up to two sources can be connected per system.
  It is required to select the internal or external music source by System Programming for the music source 1.
- It is required to select a music source used for BGM by System Programming.
- The BGM is interrupted while off-hooked.

Installation Manual References

- 2.3.9 External Music Source Connection

Programming Guide References

- [803] Music Source Use
- [990] System Additional Information

Features Guide References

- Music on Hold

User Manual References

- 2.7.10 Turning on the Background Music

Background Music (BGM) - External

Description

Background music (BGM) can be broadcasted in your office through external pagers. The BGM can be turned on and off by Operator.

Conditions

- It is required to connect an external pager and an external music source. These are user-supplied item. Up to two pagers and up to two external music sources can be installed per system. Two different music sources can be used for each BGM and Music on Hold.
- Each pager can be programmed to send BGM or not.
- The access priority to external pager is: (1)TAFAS; (2)Paging; (3)BGM. Higher priorities will override BGM.
- It is programmable to select an internal or external music source for BGM.

Installation Manual References

- 2.3.8 External Pager (Paging Equipment) Connection
- 2.3.9 External Music Source Connection

Programming Guide References

- [100] Flexible Numbering
- [803] Music Source Use
- [804] External Pager BGM
- [990] System Additional Information

Features Guide References

- Background Music (BGM)

User Manual References

- 3.2.3 Turning on the External Background Music

Budget Management

Description

Limit the telephone usage to a pre-assigned amount. For example, the limit may be the amount deposited during a hotel at check-in. 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
- [014] Budget Management on ISDN Port
- [990] System Additional Information

Features Guide References

- HOTEL APPLICATION

User Manual References

Not applicable.

Busy Lamp Field

Description

The LED (Light Emitting Diode) indicators of the DSS (Direct Station Selection) buttons, each of which corresponds to a selected extension, tell whether the corresponding extensions are idle, busy or in Do Not Disturb (DND) mode.

Conditions

- This function is available for DSS buttons on Consoles and for flexible CO buttons assigned as DSS buttons on proprietary telephones.
- A DSS button indicator lights red if the corresponding extension is busy or in DND mode.
- The DSS indicator on a proprietary telephone also informs you of incoming calls except for the DIL 1:N and door phone call to the corresponding extensions. You can pick up calls by pressing the corresponding flash DSS button.

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

- Button, Direct Station Selection (DSS)
- Console

User Manual References

- 4.1.3 Customising the Buttons

Busy Station Signalling (BSS)

Description

When attempting to call a busy extension, Busy Station Signalling 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

System programming is not 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

Button, Direct Station Selection (DSS)

Description

The proprietary telephone user can access other extension users with one touch of this button.

Conditions

- A flexible CO button on a proprietary telephone can be assigned as a DSS button using either System or Station Programming.
- DSS buttons are provided on Consoles with default setting. Changing the setting is possible from the paired telephone using Station Programming.
- Once a button is assigned as a DSS button, it provides Busy Lamp Field (BLF) status.
- The mode of a DSS button can be programmed to disconnect the CO line and calls the extension or hold and transfer the call to the extension (One-Touch Transfer by DSS Button).

Programming Guide References

- [005] Flexible CO Button Assignment
- [108] One-Touch Transfer by DSS Button

Features Guide References

- Busy Lamp Field
- Console
- One-Touch Transfer by DSS Button

User Manual References

- 2.2.1 Basic Calling
- 2.4.3 Transferring a Call
- 4.1.3 Customising the Buttons

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 Consoles:

- Flexible CO buttons (provided on PT only)
- Flexible DSS buttons (provided on Console only)
- Programmable Feature (PF) buttons

The below-mentioned table shows all of the features which can be assigned to flexible buttons.

In the table, " ✔" indicates that the feature can be assigned to the button.

Button Features to be assigned	CO (PT)	DSS (DSS)	PF (DSS)
Single CO	✔		
Group CO	✔		
Loop CO	✔		
Alert	✔		
Hurry-Up	✔		
Log-In / Log-Out [1]	✔		
Call Forwarding from Hunting Group [1]	✔	✔	
Call Pickup Deny [1]	✔	✔	
Call Waiting [2]	✔	✔	
Calling Line Identification Restriction (CLIP) [1]	✔	✔	
Connected Line Identification Restriction (COLP) [1]	✔	✔	
Direct Station Selection (DSS)	✔	✔	
Do Not Disturb for Direct Dialling In Call (DND for DDI) [1]	✔	✔	
Doorphone Call Forwarding to CO Line [1]	✔	✔	
Executive Busy Override Deny [1]	✔	✔	
Live Call Screening †	✔	✔	
Live Call Screening Cancel †	✔	✔	

Button Features to be assigned	CO (PT)	DSS (DSS)	PF (DSS)
Message Waiting	✔	✔	
Night [*1]	✔	✔	
Paging Deny [*1]	✔	✔	
Paralleled Telephone Connection [*1]	✔	✔	
Phantom Extension	✔	✔	
Pickup Dialling (Hot Line) [*1]	✔	✔	
Two-Way Record †	✔	✔	
Two-Way Transfer †	✔	✔	
Account Code Entry	✔	✔	✔
Conference	✔	✔	✔
FWD/DND	✔	✔	✔
ISDN Service	✔	✔	✔
One-Touch Dialling	✔	✔	✔
One-Touch Dialling with Auto Hold	✔	✔	✔
Saved Number Redial	✔	✔	✔
Terminate	✔	✔	✔
Voice Mail Transfer	✔	✔	✔

[*1]   : The buttons which alternate the on / off setting of the corresponding feature.

[*2]   : Pressing this button changes the settings as follows:
Receiving Call Waiting tone → OHCA → Whisper OHCA → none of these

†   : Available when the Digital Super Hybrid System is connected to a Proprietary Telephone capable Panasonic Voice Processing System (one that supports proprietary telephone integration; e.g. KX-TVP100).

Conditions

- A CO 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 have multiple appearances of the same Group-CO or Loop-CO buttons on the same telephone. Incoming and outgoing calls on the line are shown on the button in the following priority:

        Single-CO > Group-CO > Loop-CO

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

- Buttons on Proprietary Telephones
- Console

User Manual References

- 4.1.3 Customising the Buttons

Button, Group-CO (G-CO)

Description

To support efficient utilisation of CO lines, a group of CO lines (CO line group) can be assigned to a CO button. This assignment is referred as to Group-CO (G-CO). Any incoming call from any CO line in the CO line group arrives at the G-CO button. To make a CO call, the user can access an idle CO line in the group by simply pressing the dedicated G-CO button.

Conditions

*   No G-CO button is originally provided on a proprietary telephone (PT). It is programmable on a CO button by either System or Station Programming.
*   It is needed to programme the extension for receiving and / or originating calls on CO lines.
*   It is possible to assign the same CO line group to more than one G-CO buttons on the same PT.
*   It is possible to assign the same line to an S-CO button and to a G-CO button.
*   Immediate, delayed, no ringing or no incoming call (disable) can be selected on an extension-CO line basis.
*   The PT user can choose a desired ringer frequency for each G-CO button by System or Station Programming.

Programming Guide References

*   [005] Flexible CO Button Assignment
*   [400] CO Line Connection Assignment
*   [401] CO Line Group Assignment
*   [603-604] DIL 1:N Extension and Delayed Ringing — Day / Night
*   [605-606] Outgoing Permitted CO Line Assignment — Day / Night

Features Guide References

*   Answering, Direct CO Line
*   CO Line Group
*   Line Access, CO Line Group
*   Line Access, Direct
*   Ringing Tone Selection for CO Buttons

User Manual References

*   2.2.1 Basic Calling
*   2.3.1 Answering Calls
*   4.1.3 Customising the Buttons

Button, Loop-CO (L-CO)

Description

All CO lines can be assigned to a flexible CO button on a proprietary telephone (PT). The assigned button serves as a Loop-CO (L-CO) button. An incoming call on any CO line arrives at the L-CO, unless there is an S-CO or G-CO button associated with the line or unless the button is already in use. To make an outside call, the PT user can simply press the dedicated L-CO button.

Conditions

- No L-CO button is originally provided on a PT. A flexible CO button can be assigned as an L-CO button in either System or Station Programming.
- Pressing the L-CO button provides the same operation as entering the automatic line access code.
- Immediate, delayed, no ringing or no incoming call (disable) can be selected on an extension-CO line basis.
- The PT user can choose a desired ringer frequency for each L-CO button by System or Station Programming.

Programming Guide References

- [005] Flexible CO Button Assignment
- [400] CO Line Connection Assignment
- [603-604] DIL 1:N Extension and Delayed Ringing — Day / Night
- [605-606] Outgoing Permitted CO Line Assignment — Day / Night

Features Guide References

- Answering, Direct CO Line
- Line Access, Automatic
- Line Access, Direct
- Ringing Tone Selection for CO Buttons

User Manual References

- 2.2.1 Basic Calling
- 2.3.1 Answering Calls
- 4.1.3 Customising the Buttons

Button, Single CO (S-CO)

Description

A Single-CO (S-CO) button is a CO line access button. This allows the proprietary telephone user to access a specific line by pressing an S-CO button. An incoming call can be directed to an S-CO button.

Conditions

- An S-CO button provides CO Line status.
- It is possible to assign one CO line to both an S-CO and a G-CO button.
- Incoming calls appear on the proprietary telephone, when an extension is assigned as the incoming call destination and an S-CO, G-CO and/or L-CO button is assigned.
- Immediate, delayed, no ringing or no incoming call (disable) can be selected on an extension-CO line basis.
- The digital proprietary telephone user can choose a desired ringing tone type for the S-CO button by System or Station Programming.

Programming Guide References

- [005] Flexible CO Button Assignment
- [400] CO Line Connection Assignment
- [603-604] DIL 1:N Extension and Delayed Ringing — Day / Night
- [605-606] Outgoing Permitted CO Line Assignment — Day / Night

Features Guide References

- Answering, Direct CO Line
- Line Access, Direct
- Line Access, Individual
- Ringing Tone Selection for CO Buttons

User Manual References

- 2.2.1 Basic Calling
- 2.3.1 Answering Calls
- 4.1.3 Customising the Buttons

Buttons on Proprietary Telephones

Description

Proprietary telephones are provided with the feature / line access buttons listed below:

KX-T Proprietary Telephones:

Buttons	7230	7235	7250	7531	7533	7536	7550
AUTO ANSWER / MUTE †	✔	✔		✔	✔	✔	
AUTO DIAL / STORE†	✔	✔	✔!	✔	✔	✔	✔
CO † *	✔(24)	✔(12)	✔(6)	✔(12)	✔(12)	✔(12)	✔(12)
CONF †	✔	✔		✔	✔	✔	✔
RECALL	✔	✔	✔	✔	✔	✔	✔
Function		✔(10)				✔(10)	
FWD / DND †	✔	✔		✔	✔	✔	✔
HOLD	✔	✔	✔	✔	✔	✔	✔
INTERCOM †	✔	✔	✔	✔	✔	✔	✔
Jog Dial				✔	✔	✔	✔
MESSAGE †	✔	✔		✔	✔	✔	✔
MODE				✔			
MONITOR			✔				✔
PAUSE	✔	✔		✔	✔	✔	✔
PROGRAM	✔	✔	✔	✔	✔	✔	✔
REDIAL	✔	✔	✔	✔	✔	✔	✔
SELECT				✔			
SHIFT †	✔	✔				✔	✔
Soft	✔(3)	✔(3)			✔(3)	✔(3)	
SP-PHONE †	✔	✔		✔	✔	✔	✔
TRANSFER	✔	✔	✔	✔	✔	✔	

KX-T Proprietary Telephones:

Buttons	7230	7235	7250	7531	7533	7536	7550
VOICE CALL/MUTE							✔
VOLUME	✔	✔	✔				

✔　: The button is provided on the designated telephones.

†　: The button is provided with Light Emitting Diode (LED).

*　: The button 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.

!　: The button is provided without an LED.

The functions of the listed buttons are described below:
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 program changes.
CO (Central Office line): Can make or receive an outgoing call or can be re-assigned to a different CO or to various feature buttons.
CONF (Conference): Used to establish a three-party conference.
RECALL: Sends a flash signal to the Central Office or a host PBX to access their features.
Function: Used to perform the displayed function / operation.
FWD / DND (Call Forwarding / Do Not Disturb): Used to programme Call Forwarding and 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 of the Memory Dialling 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 handsfree operation.
PAUSE: Inserts a pause in a speed dial number. With an analog proprietary telephone, it is used as the PROGRAM button.
PROGRAM: Used to enter and exit Programming mode.
REDIAL: Used for Last Number or Automatic 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 handsfree 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, but it cannot be used for handsfree

conversations. It also turns the microphone off during a conversation.
VOLUME: Used to adjust the ringer and speaker volume and the display contrast.

Conditions

- Certain buttons are equipped with light indicators (LED's) to show line or feature status.
- CO buttons can be classified as 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

CALL FORWARDING FEATURES - SUMMARY

Description

Call forwarding enables you to have your calls forwarded to a specified destination. You may specify the circumstances under which your calls are forwarded. An ISDN extension port can also be assigned as the destination. The following Call Forwarding features are available:

Call Forwarding - All Calls
Call Forwarding - Busy
Call Forwarding - Busy / No Answer
Call Forwarding - Follow Me
Call Forwarding - No Answer
Call Forwarding - to CO Line
Call Forwarding - from Hunting Group

Assignable forwarding destinations are: (1) extension, (2) ISDN extension, (3) Hunting Group. There can be up to four stages of Call Forwarding. In this case, the fifth stage will be disregarded. If disregarded, the call will be treated according to the condition of the fourth destination.
It is only possible to call an original extension or Hunting Group from the destination extension or Hunting Group immediately before it (Boss Secretary function).

<Example>
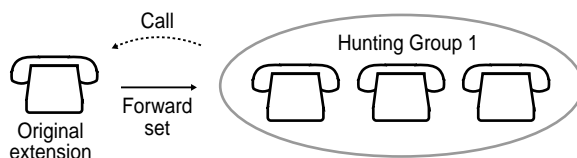
Conditions

- Although calls are forwarded, Message Waiting is not. The MESSAGE button indicator is lit on the extension which was originally called.

- Setting this function cancels any other Call Forwarding functions.

- DIL 1:N calls can only be forwarded one stage.

- If the final destination of the Call Forwarding is Voice Processing System, the mailbox number of the extension which was originally called is automatically sent (Follow On ID), even if it is forwarded more than one stage.

- The call will not return to the calling extension by the Call Forwarding function.

<Example>
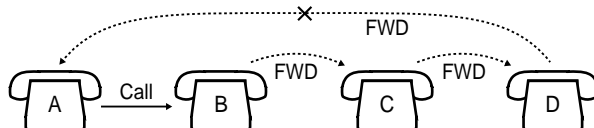
Call Forwarding - All Calls

Description

This feature is used when you want all your calls to be automatically re-directed to another extension.

Conditions

- Types of calls which are forwarded by this feature are:

    Outside calls - DDI; DIL 1:1; DIL 1:N; MSN; Intercept Routing;
    DND transfer; Call Forwarding; Station Hunting

    Intercom calls - Extension; Transfer; Call Forwarding; Station Hunting

Programming Guide References

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

Features Guide References

None

User Manual References

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

Call Forwarding - Busy

Description

A call directed to your extension is forwarded to another extension when your telephone is busy.

Conditions

- Types of calls which are forwarded by this feature are:

    Outside calls - DDI; DIL 1:1; DIL 1:N; MSN; Intercept Routing;
    DND transfer; Call Forwarding; Station Hunting

    Intercom calls - Extension; Transfer; Call Forwarding; Station Hunting

Programming Guide References

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

Features Guide References

None

User Manual References

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

Call Forwarding - Busy / No Answer

Description

Your calls are forwarded to another extension when your extension is busy or you do not answer the call in a pre-determined time.

Conditions

- Types of calls which are forwarded by this function are:

    Outside calls - DDI; DIL 1:1; DIL 1:N; MSN; Intercept Routing; DND transfer; Call Forwarding; Station Hunting

    Intercom calls - Extension; Transfer; Call Forwarding; Station Hunting
- This function operates the same way as Call Forwarding - Busy and Call Forwarding - No Answer.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [202] Call Forwarding – No Answer Time

Features Guide References

- Call Forwarding - Busy
- Call Forwarding - Busy / No Answer

User Manual References

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

Call Forwarding - Follow Me

Description

When you forget to set Call Forwarding - All Calls before you leave your desk or when you move from pre-set place to another, this allows you to set the same function from the destination extension.

Conditions

- Same as the conditions of Call Forwarding - All Calls.
- It is programmable to enable or disable this feature on Class of Service basis.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [991] COS Additional Information

Features Guide References

- Call Forwarding - All Calls

User Manual References

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

Call Forwarding - from Hunting Group

Description

Pre-assigned extension users can forward calls arriving at any Hunting Group or calls arriving just at your own Hunting Group. The destination can be another Hunting Group or a specific extension.

Conditions

- Types of calls which are forwarded by this function are:

    Outside calls - DDI; DIL 1:1; DIL 1:N; MSN; Intercept Routing; DND transfer; Call Forwarding; Station Hunting

    Intercom calls - Extension; Transfer; Call Forwarding; Station Hunting

- Class of Service programming determines the extensions that are able to perform this function.
- This feature does not work if the Station Hunting type of the forwarding Hunting Group is Voice Mail (VM) or Automated Attendant (AA).

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [520] Call Forwarding from Hunting Group
- [990] System Additional Information

Features Guide References

- Station Hunting

User Manual References

- 2.5.2 Forwarding Calls from a Receiving Group (Call Forwarding - from Hunting Group)
- 4.1.3 Customising the Buttons

Call Forwarding - No Answer

Description

Calls to your extension are forwarded to another extension when you do not answer the call in a pre-determined time.

Conditions

- Types of calls which are forwarded by this function are:

    Outside calls - DDI; DIL 1:1; DIL 1:N; MSN; Intercept Routing;
    DND transfer; Call Forwarding; Station Hunting

    Intercom calls - Extension; Transfer; Call Forwarding; Station Hunting

- This function operates if an incoming call is not answered in a specific period of time. Therefore, this function also applies if your extension is busy and cannot answer the incomoing call within the time.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [202] Call Forwarding – No Answer Time

Features Guide References

None

User Manual References

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

Call Forwarding - to CO Line

Description

Calls directed to your extension will be sent to an external destination. The outside telephone number must be pre-programmed.

Conditions

- Types of calls which are forwarded by this function are:

    Outside calls - DIL 1:1; DDI (ISDN Service only)
    Intercom calls - Extension; Transfer

- The forwarding extension's Toll Restriction and Account Code Entry requirements still apply.

- Class of Service programming determines the extensions that are able to perform this function.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [504] Call Forwarding to CO Line

Features Guide References

None

User Manual References

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

Call Hold - CO Line

Description

Allows the proprietary telephone user to put an outside call on hold. The held call can be retrieved from the user who held it or from any other extension.

Conditions

- Music is sent to the party on hold, if available (Music on Hold).
- If a call on hold is not retrieved in a specific period of time, Hold Recall results.
- If an outside party is placed on hold and not retrieved in 15 minutes, it is automatically disconnected

Programming Guide References

- [100] Flexible Numbering
- [200] Hold Recall Time

Features Guide References

- Hold Recall
- Music on Hold

User Manual References

- 2.4.1 Holding a Call

Call Hold - Intercom

Description

This is used to place an intercom call on hold for the proprietary telephone user. The held call can be retrieved from the user who held it or from any other extension.

Conditions

- Only one intercom call can be placed on hold in a telephone at a time. Outside calls and one intercom call can be placed on hold at the same time.
- If a call on hold is not retrieved in a specific period of time, Hold Recall results.
- Music is sent to the party on hold, if available (Music on Hold).

Programming Guide References

- [100] Flexible Numbering
- [200] Hold Recall Time

Features Guide References

- Call Park
- Hold Recall
- Music on Hold

User Manual References

- 2.4.1 Holding a Call

Call Hold Retrieve - CO Line

Description

Allows the extension user to retrieve a call that has been placed on hold by another extension, except for the exclusive hold.

Conditions

Confirmation tone is sent to the user when the hold is retrieved by the feature number. Eliminating the tone is programmable.

Programming Guide References

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

Features Guide References

- Call Hold - CO Line

User Manual References

- 2.4.1 Holding a Call

Call Hold Retrieve - Intercom

Description

Allows the extension user to retrieve a call that has been placed on hold by another extension, except for the exclusive hold.

Conditions

Confirmation tone is sent to the user when the hold is retrieved by the feature number. Eliminating the tone is programmable.

Programming Guide References

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

Features Guide References

- Call Hold - Intercom

User Manual References

- 2.4.1 Holding a Call

Call Hold, Exclusive - CO Line

Description

Allows the extension user to prevent any other extension users from retrieving a held outside call. Only the user who held it can retrieve the call.

Conditions

- If a call on hold is not retrieved in a specific period of time, Hold Recall results. After Hold Recall results, the held call can be retrieved from any other extension.
- If an outside party is placed on hold and not retrieved in 15 minutes, it is automatically disconnected.
- Music is sent to the party on hold, if available (Music on Hold).
- With a single line telephone, either one outside or intercom call can be held.

Programming Guide References

- [200] Hold Recall Time

Features Guide References

- Hold Recall
- Music on Hold

User Manual References

- 2.4.1 Holding a Call

Call Hold, Exclusive - Intercom

Description

Allows the extension user to prevent any other extension users from retrieving a held intercom call. Only the user who held it can retrieve the call.

Conditions

- Only one intercom call can be placed on Call Hold or Exclusive Call Hold at a time.
- If a call on hold is not retrieved in a specific period of time, Hold Recall results. After Hold Recall results, the held call can be retrieved from any other extension.
- Music is sent to the party on hold, if available (Music on Hold).

Programming Guide References

- [200] Hold Recall Time

Features Guide References

- Hold Recall
- Music on Hold

User Manual References

- 2.4.1 Holding a Call

Call Log, Incoming

Description

Provides the external calling party's information on the display proprietary telephone 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 Caller ID or Calling Line Identification Presentation service is obtained from the Central Office.

The displayed information are follows;

a) The party's phone number and name

b) The date and time of the call was made

c) The calling attempt time of the same person

d) The receiving CO line number and name

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.
- This feature is only available for KX-T7533, KX-T7536, KX-T7230 and KX-T7235.
- 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).

Programming Guide References

- [001] System Speed Dialing Number Set
- [002] System Speed Dialling Name Set
- [100] Flexible Numbering

Features Guide References

None

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]
- 3.1.2 Changing the Settings

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 from any other extension user.

Conditions

* The system contains 10 parking areas, each of which has its own call park number. Up to 10 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 within Transfer Recall Timer period, Transfer Recall starts to the operator or the extension that parked the call.
* If Call Park Recall is not retrieved in 15 minutes, it is automatically disconnected.
* Confirmation tone is sent to the user when the parked call is retrieved. Eliminating the tone is programmable.

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 Pickup Deny

Description

Allows the user to prohibit other extensions from picking up calls ringing at his / her extension by using the call pickup features.

Conditions

Distinctive Dial Tone is sent to the user on the extension with this feature when the user goes off-hook.

Programming Guide References

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

Features Guide References

- Call Pickup, CO Line
- Call Pickup, Directed
- Call Pickup, Group

User Manual References

- 2.7.8 Denying Other People the Possibility of Picking up Your Calls (Call Pickup Deny)
- 4.1.3 Customising the Buttons

Call Pickup, CO Line

Description

Allows any extension user to answer an incoming outside call that is ringing at another's telephone.

Conditions

- Call Pickup starts with the lowest CO number.
- Confirmation tone is sent to the user when the call is picked up. Eliminating the tone is programmable.

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)

Call Pickup, Directed

Description

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

Conditions

- Doorphone call can be picked up from extensions that are not programmed to answer a doorphone call.
- Confirmation tone is sent to the user when the call is picked up. Eliminating the tone is programmable.
- You may pick up a call by pressing a flashing DSS button assigned on a proprietary telephone.

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)

Call Pickup, Group

Description

Allows the extension user to answer a call that is ringing at another telephone, if the call is ringing within the user's extension group.

Conditions

- The user can pick up an incoming outside, intercom, or doorphone call.
- Confirmation tone is sent to the user when the call is picked up. Eliminating the tone is programmable.

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)

Call Splitting

Description

Allows the extension user to alternate between two other parties. Placing the current call on hold by pressing another CO / INTERCOM button allows the user to have a conversation with the other party.

Conditions

Call Splitting is impossible during Doorphone Call or Paging.

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 2.4.2 Talking to Two Parties Alternately (Call Splitting)

CALL TRANSFER FEATURES - SUMMARY

Description

Call Transfer features allow the user to transfer a call to another party. This operation can be screened or unscreened. Screened call transfer is used when you want to announce the call to the other party before completing the transfer. Unscreened call transfer immediately releases the caller to the called party. An intercom or an outside call can be transferred to an extension or to an outside party by:

Call Transfer, Screened - to CO Line
Call Transfer, Screened - to Extension
Call Transfer, Unscreened - to Extension

Call Transfer, Screened - to CO Line

Description

Allows the proprietary telephone user to voice-announce to the external party and transfer the call.

Conditions

- Class of Service programming determines the extensions that are able to perform it.

Programming Guide References

- [503] Call Transfer to CO Line
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.3 Transferring a Call

Call Transfer, Screened - to Extension

Description

Allows the extension user to voice-announce to the extension and transfer the call.

Conditions

None

Programming Guide References

- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.3 Transferring a Call

Call Transfer, Unscreened - to Extension

Description

Allows the user to transfer an intercom or outside to directly transfer to an extension party. After dialling the destination extension, the user replaces the handset while hearing ringback tone.

Conditions

- If the destination party does not answer within the transfer recall time, the call will return to the user or operator.
- This function is possible when the destination is sending ringback or busy tone. If the destination is busy, Camp-On Transfer occurs.
- The ringing signal pattern follows the regular ringing pattern depending on the party being transferred: outside or intercom call ringing.
- It is possible for any extension user to transfer a call to the modem[*1] for remote maintenance.
- If music on hold is enabled, music is sent to the party while being transferred. It is system-programmable whether to send ringback tone or music on hold to the caller.
- If the destination party does not answer within the transfer recall time, the call will return to the user or operator.

Programming Guide References

- [201] Transfer Recall Time
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.3 Transferring a Call

[*1]   Available for the KX-TD816/KX-TD1232 only.

Call Waiting

Description

While in 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 enabled or disabled by dialling the appropriate feature number.

Conditions

- The call waiting tone is generated when an outside call comes in or when an extension caller executes Busy Station Signalling.
- Setting Data Line Security cancels Call Waiting which has been turned on.
- For proprietary telephone users, two types of call waiting tone are provided to prevent them from missing the tone as shown below: A proprietary telephone user can select the desired type by Station Programming.

  Tone 1
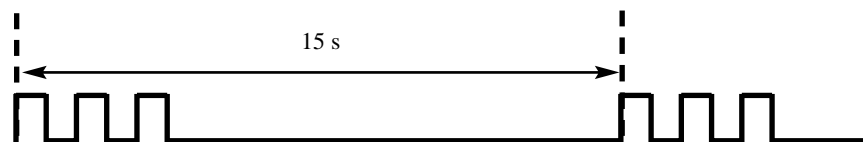
  Tone 2
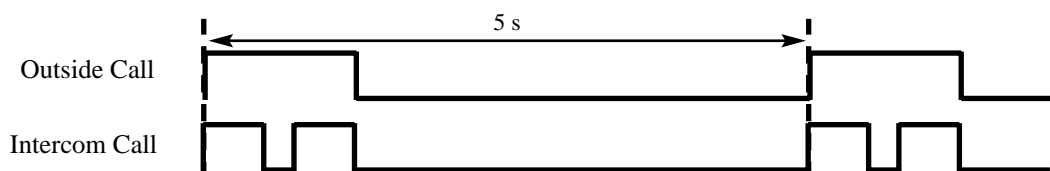
Programming Guide References

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

Features Guide References

- Busy Station Signalling (BSS)

User Manual References

- 2.7.3 Receiving a Call Waiting (Call Waiting / Off-Hook Call Announcement [OHCA] / Whisper OHCA)
- 2.4.4 Answering a Call Waiting
- 4.1.2 Initial Settings
- 4.1.3 Customising the Buttons

Caller ID

Description

Provides the calling party's phone number and/or name of the called party's display proprietary telephone before the called party answers the outside call. If the number and/or name are stored in the list of the System Speed Dialling, the number and/or name are provided. When neither number nor name is stored in the list, the number sent from ISDN is displayed. This feature is one of the ISDN services.

Conditions

- Up to 500 entries of number and name can be stored in the list of the System Speed Dialling by System Programming.
- If the calling party restricts the presentation of calling line identification, neither the phone number nor the name is displayed (Calling Line Identification Restriction).
- The name is not displayed, when the corresponding stored number includes the Flash and Pause, — (hyphen) or Secret button, following to the line access code and — (hyphen).
- Caller ID will override CO line name display on the extension except the operator extension. The display can be alternated between Caller ID and CO line name.

Programming Guide References

- [001] System Speed Dialing Number Set
- [002] System Speed Dialling Name Set

Features Guide References

- Calling / Connected Line Identification Restriction (CLIR / COLR)

User Manual References

Not applicable.

Caller ID to RS-232C Port

Description

Station Message Detail Recording (SMDR) also automatically records detailed call information in the following cases:

a) When an incoming call occurs.

b) When an incoming call is answered by the extension.

c) When an incoming call disappears because nobody answered it.

If CO lines receive a call, when Caller ID is available, SMDR records the name (14 characters max.).

"Ruf" in the SMDR printout format indicates the ring duration of the incoming call in Minutes / Seconds.

Printed call record example:

	Datum	Zeit	Nst	Kst	Al	Rufnummer	Ruf	Dauer	Gebühren	Code	Z
	24.03.94	10:03	201	12345	01	12345678901234567		00:05'12	00007. 00DM	12345	
	24.03.94	10:07	203	00001	20	<K>		00:00'56	00000. 00DM		
1.	24.03.94	10:08			03	<K> MARY WARD					R
2.	24.03.94	10:09	134		03	<K> 0924312111	0'20				A
3.	24.03.94	10:11			03	<K> 1022220	0'45				N

Explanation

1. An incoming call from CO line 3 appears when Caller ID is available.
"R" is the Condition Code for "Receive".

2. An incoming call from CO line 3 is answered by the extension 134 when Caller ID is not available. It took 20 seconds to answer the call.
"A" is the Condition Code for "Answer".

3. An incoming call from CO line 3 disappeared because nobody answered the call within 45 seconds when Caller ID was not available.
"N" is the Condition Code for "No Answer".

Conditions

• Connect a printer provided with an EIA (RS-232C) interface to the EIA (RS-232C) connector located on the main unit.

• It is possible to select whether the SMDR prints out the information of incoming calls (RC) and answered incoming calls (AN).

Installation Manual References

- 2.3.10 Printer Connection

Programming Guide References

- [000] Date and Time Set
- [800] SMDR Incoming / Outgoing Call Log Printout
- [801] SMDR Format
- [802] System Data Printout
- [806-807] Serial Interface (RS-232C) Parameters — Port 1 / Port 2
- [990] System Additional Information

Features Guide References

- Station Message Detail Recording (SMDR)

User Manual References

Not applicable.

Calling / Connected Line Identification Presentation (CLIP / COLP)

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.
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.
These features are one of ISDN's services.

To use the CLIP or COLP service, number assignments are required as follows:
* CLIP/COLP number for each outside line
* CLIP/COLP number for each extension

Conditions

* The CLIP service for outgoing outside calls can be restricted by System Programming (CLIR: Calling Line Identification Restriction).
* The COLP service for incoming outside calls can be restricted by System Programming (COLR: Connected Line Identification Restriction).
* The number actually sent to the calling or called party may be different from the system programmed number. It depends on the contract with your ISDN supplier.
* It is possible to send the desired CLIP number for one time even if the CLIP number is not assigned.

Programming Guide References

* [100] Flexible Numbering
* [419] Subscriber Number Assignment
* [516] Calling Line Identification Restriction
* [517] Connected Line Identification Restriction
* [623] CLIP / COLP Number Assignment for Extension
* [624] CLIP / COLP Number Assignment for ISDN Extension
* [632] CLIP / COLP Number Assignment for TD286 Extension

Features Guide References

* Caller ID to RS-232C Port

User Manual References

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

Calling / Connected Line Identification Restriction (CLIR / COLR)

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.
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.
These features are one of ISDN's services.

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, case by case).
- 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

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [419] Subscriber Number Assignment
- [516] Calling Line Identification Restriction
- [517] Connected Line Identification Restriction

Features Guide References

- Caller ID to RS-232C Port

User Manual References

- 2.7.6 Preventing Your Number Being Displayed on the Called Party's Telephone (Calling Line Identification Restriction [CLIR])
- 2.7.7 Preventing Your Number Being Displayed on the Calling Party's Telephone (Connected Line Identification Restriction [COLR])
- 4.1.3 Customising the Buttons

Charge Fee Reference

Description

Allows the pre-assigned display telephone user to see, clear charges and print out the data by SMDR. Charges are displayed per extension, CO line, account code, department code, or the total of each can be referred to.

Conditions

- The allowed extensions are determined by System Programming.
- The verification ID is required to perform this feature.
- It is programmable to select the first display, Frequency or Charge by System Programming. This can be switched manually at each extension.
- Exchange rate between Frequency counter and Charges is assigned by System Programming.
- The displayed currency denomination can be programmed by [125] Assignment of Denomination.
- If the amount exceeds the maximum displayable charge, then only the highest possible charge will be displayed (e.g. 99999.99FR)

Programming Guide References

- [015] Charge Rate Fractional Point Assignment
- [016] Charge Rate Assignment
- [117] Charge Display Selection
- [118] Charge Verification Assignment
- [119] Charge Verification ID Code Set
- [125] Assignment of Denomination

Features Guide References

None

User Manual References

- 4.1.4 Charge Fee Management [Pre-assigned extension only]
- 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 primary and a secondary COS numbers. Eight Classes of Service are available.

Conditions

- The operator can switch the extension's COS between a primary and a secondary.
- A list of the programmable items is given below:
  - **a)** The ability to forward a call to an outside party
  - **b)** The ability to transfer a call to an outside party
  - **c)** The ability to override Do Not Disturb of the called station
  - **d)** Account Code Entry operation - verified - all calls / verified - toll restriction override / option
  - **e)** The ability to set Executive Busy Override
  - **f)** The ability to deny Executive Busy Override
  - **g)** Outgoing call restriction level (Day mode / Night mode)
  - **h)** The ability to set Call Forwarding - Follow Me
  - **i)** System speed dialling call restriction level (Day mode / Night mode)
  - **j)** The ability to switch the Day/Night service
  - **k)** The ability to unlock the door opener
  - **l)** The ability to turn on the external relay
  - **m)**The ability to set Do Not Disturb for Direct Dialling In Call
  - **n)** The ability to set Connected Line Identification Restriction
  - **o)** The ability to set Calling Line Identification Restriction
  - **p)** The ability to perform Off-Hook Call Announcement (OHCA)
  - **q)** The ability to set Call Forwarding - from Hunting Group
  - **r)** The ability to set Doorphone Call Forwarding to CO Line

Programming Guide References

- [100] Flexible Numbering
- [500-501] Toll Restriction Level — Day / Night
- [503] Call Transfer to CO Line
- [504] Call Forwarding to CO Line
- [505] Executive Busy Override
- [506] Executive Busy Override Deny
- [507] Do Not Disturb Override
- [508] Account Code Entry Mode
- [509-510] Toll Restriction Level for System Speed Dialling – Day/Night
- [511] Door Opener Access
- [512] External Relay Access
- [513] Night Service Access
- [514] Do Not Disturb for Direct Dialling In Call
- [516] Calling Line Identification Restriction
- [517] Connected Line Identification Restriction
- [519] Off-Hook Call Announcement (OHCA)
- [520] Call Forwarding from Hunting Group
- [521] Doorphone Call Forwarding to CO Line
- [601] Class of Service
- [613] ISDN Class of Service
- [991] COS Additional Information

Features Guide References

None

User Manual References

- 3.1.1 Assigning Level of Service

CO Incoming 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 by system programming.

- The caller's telephone number and name — available for an ISDN line provided with the CLIP (Calling Line Identification Presentation) feature.
- The CO line number and CO line name — this information is useful in the following case: When several divisions or companies are connected to one system and they have their own CO lines, a user can check the called party by the LCD before answering the call if each division's or company's name is assigned to a CO line.
- DDI number and Name of the called party — available for incoming DDI calls only. The initial display on the LCD of the called extension is as follows:

Called to Type	Extension including Operator	Phantom Extension	Hunting Group
DIL 1:N	Selected Caller / CO line / DDI	No incoming call is received.	No incoming call is received.
DIL 1:1	Selected Caller / CO line / DDI	Selected Caller / CO line / DDI	DDI number of hunting group and group name
DDI	Selected Caller / CO line / DDI	Selected Caller / CO line / DDI	DDI number of hunting group and group name

Conditions

- It is required to name CO lines and extensions by system programming.
- With the CLIP feature, the ISDN line informs the system of the caller's telephone number. To display the name, the system compares the informed number with the System Speed Dialling Numbers stored in program [001] and if a match is found, determines the caller's name by using the System Speed Dialling Names stored in program [002].
- The display PT (KX-TD7531, KX-T7533, KX-T7536, KX-T7230 or KX-T7235) user can record the call information received by the CLIP feature (Call Log, Incoming feature).
- If the assigned information cannot be displayed, it will be shown according to the following priority:
    Caller $\rightarrow$ CO Line $\rightarrow$ DDI

Installation Manual References

- 2.4.4 ISDN S0 Line Connection (Optional Unit)
- 2.4.7 ISDN S0 Line Connection

Programming Guide References

- [001] System Speed Dialing 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
- [421] CO Line Name Assignment
- [622] Incoming Call Display

Features Guide References

- Call Log, Incoming

User Manual References

Not applicable.

CO Line Connection Assignment

Description

This allows you to specify the CO lines connected to your system to prevent an extension user from originating an outside call by selecting a line which is not connected. An idle 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, reorder tone sounds to indicate that the line is out of use.
- This is effective for all outgoing calls.

Programming Guide References

- [400] CO Line Connection Assignment

Features Guide References

None

User Manual References

Not applicable.

CO Line Connection Assignment - Outgoing

Description

Allows you to assign the CO 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 CO line, reorder tone is sent to indicate that the user cannot use the CO line.
- Day and Night Service are individually programmed. (Night Service)

Programming Guide References

- [605-606] Outgoing Permitted CO Line Assignment — Day / Night
- [615-616] Outgoing Permitted CO Line Assignment – Day / Night for ISDN Extension

Features Guide References

None

User Manual References

Not applicable.

CO Line Group

Description

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

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

Conditions

* Each CO line can only belong to one CO line group.
* CO lines in a CO line group are selected uniformly if all lines belong to the same system.
* If System Connection[*1] is employed, a CO line group can include CO lines in both systems. In this case, a CO 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] CO Line Group Assignment
* [409-410] Intercept Extension — Day / Night
* [411] Host PBX Access Codes

Features Guide References

None

User Manual References

Not applicable.

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

Completion of Calls to Busy Subscriber (CCBS)

Description

Allows the extension users to set the telephone to receive callback ringing when a busy called party on an ISDN line becomes free. A special dial tone informs the caller that the called party is busy. When the caller answers the callback ringing, other party's number is automatically dialled.
This feature is one of ISDN's services and its availability depends on the service of your telephone company.
This feature is in accordance with the ETS 300 359.
(ETS: European Telecommunication Standard)

Conditions

- This feature is enabled or disabled by System Programming.
- An extension can set only one CCBS at a time.
- A proprietary telephone (PT), single line telephone (SLT) and portable station (PS) can set the CCBS to a busy party.
- The CCBS that has been set by an outside party works only if the called busy extension is a PT or SLT and the call arrives via DIL 1:1, DDI 1:1 and MSN 1:1.
- If the callback ringing is not answered in four rings (within 10 seconds) the callback is cancelled.
- The callback rings even if the extension has set the Call Forwarding or DO Not Disturb (DND)
- The caller can use the telephone before the callback rings. The setting is cancelled only in the following conditions.
  – By the cancelling operation.
  – If there is no callback ringing within 60 minutes.
  – If the system power is off. / If you reset the system.
- This feature does not work if the extension has set Data Line Security.
- The time the system waits before sending a CCBS signal while hearing a special dial tone is programmable.
- To activate this feature, use the following software version of the ISDN Card or Unit.

ISDN Card / Unit Type	Software Version
KX-TD280 / KX-TD281 / KX-TD282	P071V / P072V or after
KX-TD286	P831H / P832H or after
KX-TD290	P851F / P852F or after

Programming Guide References

- [100] Flexible Numbering
- [153] Completion of Calls to Busy Subscriber (CCBS)
- [990] System Additional Information

Features Guide References

- Dial Tone, Distinctive

User Manual References

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

Conference

Description

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

Conditions

- Possible conference combinations are: 1-inside and 2-outsides; 2-inside and 1-outside; and 3-inside.
- Up to six conference calls are allowed simultaneously.
- A three-party call is also established by Executive Busy Override.
- When a two-party call is changed to a three-party call and vice versa, a confirmation tone is sent to all three parties. Eliminating the tone is programmable.

Programming Guide References

- [005] Flexible CO Button Assignment
- [990] System Additional Information

Features Guide References

- Executive Busy Override - CO Line
- Executive Busy Override - Extension

User Manual References

- 2.4.5 Three-party Conversation
- 4.1.3 Customising the Buttons

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:

1. Indicates that the new setting differs from the previous setting.

2. Set or cancel the Electronic Station Lockout.
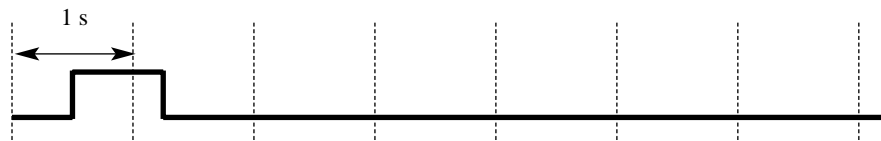
Confirmation tone 2:

1. Indicates that the new setting is identical to the previous setting.

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

3. Sent when accessing external paging equipment. (e.g. Paging - All; Paging - External) Confirmation tone from external pager can be enabled or disabled.

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
- TAFAS Answer

This tone can be eliminated by System Programming so that the user can start talking instantly.

Confirmation tone 4:

Sent when moving from a two-party call to a three-party call, and vice versa. (These are caused by Executive Busy Override or Conference.) It is possible to eliminate this tone by System Programming.
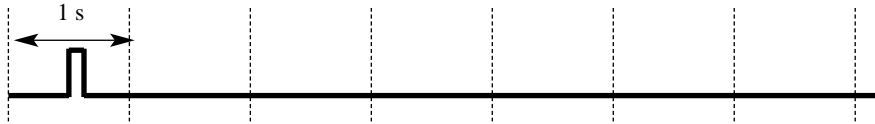
Conditions

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

Not applicable.

Console

Description

The Direct Station Selection (DSS) or Attendant Console provides direct access to extensions and features and busy lamp display as well as providing 16 PF (programming Feature) button. 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.

Up to four consoles for the KX-TD816 and up to eight consoles for the KX-TD1232 can be installed. System Connection[*1] provides for 16 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	7240	7540	7541
DSS	✔(32)	✔(64)	✔(48)
PF (Programmable Feature)	✔(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 (Busy Lamp Field), which shows the current state of the corresponding extension as shown in the Table below:

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

Busy Lamp Field Table

Light	State of extension
Off	Idle
On	Busy / DND

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.
- **To use the KX-T7240 DSS Console with this system:**
  Be careful that the button numberings are opposite of the KX-T7540 and KX-T7541. The default settings of the DSS buttons are the same as that of KX-T7541.

Installation Manual References

- 2.3.3 Optional Extension Connection of Clip Terminal

Programming Guide References

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

Features Guide References

- Button, Flexible
- EXtra Device Port (XDP)
- One-Touch Transfer by DSS Button

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

User Manual References

- 2.2.1 Basic Calling
- 2.4.3 Transferring a Call
- 3.2.5 Using the ANSWER / RELEASE Button [KX-T7541 only]
- 4.1.3 Customising the Buttons

Data Line Security

Description

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

Conditions

* Assigning Data Line Security always offers conversation privacy.
* If one extension in a conversation has set Data Line Security, it applies to the both extensions.
* The Intercept Routing No Answer (IRNA) feature is not available for incoming calls to the extensions to which the Data Line Security feature is assigned.

Programming Guide References

* [612] Data Line Security

Features Guide References

None

User Manual References

Not applicable.

Department Codes

Description

A department code is used to identify outgoing outside calls on extension basis for accounting and billing purpose. The department code is automatically appended to the Station Message Detail Recording (SMDR) call record without entering the code.

Conditions

- The department code is assigned up to 5 digits on an extension basis.
- It is possible to print out the data from SMDR on the department code basis.

Programming Guide References

- [610] Department Codes
- [614] Department Codes of ISDN Port

Features Guide References

None

User Manual References

Not applicable.

Dial Tone, Distinctive

Description

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

Dial tone 1: Normal dial tone. None of the features listed below are enabled.
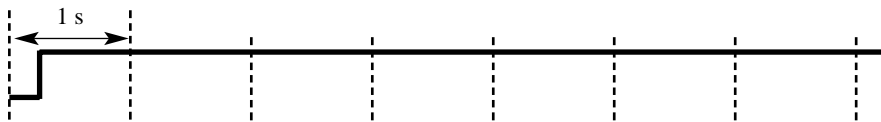
Dial tone 2: Sounds when any one of the features below are set.
Absent Message Capability
Background Music (BGM) (for proprietary telephones only)
Call Forwarding
Call Pickup Deny
Call Waiting
Do Not Disturb (DND)
Electronic Station Lockout
Executive Busy Override Deny
Pickup Dialling
Timed Reminder

Dial tone 3: Sounds when performing Account Code Entry or Completing Calls to Busy Subscriber (CCBS).

Dial tone 4: Sounds when messages are waiting for the proprietary telephone extension.
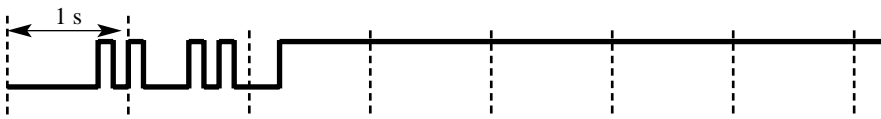
Conditions

None

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

Not applicable.

Direct Dialling In (DDI)

Description

Provides automatic direction of an incoming ISDN line call to a specific extension. Assignable destinations are: Assignable destinations are: (1) Operator, (2) extension, (3) Hunting Group, (4) TAFAS, (5) modem, (6) Phantom extension, (7) Voice Mail extension, (8) ISDN extension and (9) external ringer. 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] ISDN DDI Translation Table	[151] ISDN DDI Ringing Assignment — Day	[152] ISDN 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 in programme [420]/[429] "ISDN Ringing Service Assignment — Day / Night"
- An incoming DDI call is converted as programmed in [111] "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. Selecting an operator or extension depends on programme [990] "System Additional Information, Area 01 - Bits 5 and 6".
- It is possible to deny answering the DDI call on a Class of Serve basis.

Programming Guide References

- [111] ISDN DDI / MSN Removed Digit / Added Number Assignment
- [150] ISDN DDI Translation Table
- [151-152] ISDN DDI Ringing Assignment — Day / Night
- [420/429] ISDN Ring Service Assignment — Day / Night
- [990] System Additional Information

Features Guide References

- Do Not Disturb for Direct Dialling In Call
- Integrated Services Digital Network (ISDN)

User Manual References

Not applicable.

Direct In Lines (DIL)

Description

Enables an incoming outside call to go directly to one or more answering points.
DIL 1:1 puts an incoming outside call to a single destination. Assignable destinations are: (1) extension; (2) modem; (3) external pager; (4) external ringer. This CO line can be used by multiple extension users to make calls but can be used by only one extension to receive calls.
DIL 1:N puts an incoming outside call to multiple destinations. Assignable destinations are extensions only. This CO line can be used by multiple extension users to make and receive calls.
Both DIL 1:1 and 1:N can have different destinations for day and night modes (Night Service).

Conditions

* If a CO line is programmed for both DIL 1:1 and DIL 1:N, it is regarded as a DIL 1:1 line.
* DIL 1:1 to the modem allows the caller to perform remote administration. DIL 1:1 to an external pager or ringer sounds the pager or ringer when receiving incoming calls (TAFAS feature).

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

Not applicable.

Display Contrast Adjustment

Description

Allows the display proprietary telephone user to adjust the display contrast.

Conditions

The adjusting method depends on the type of proprietary telephone (PT) you have.
- With a KX-T7500 series PT, the MODE or Soft buttons and the Jog Dial are used to select from three available levels.
- With a KX-T7200 series PT, the Soft buttons and the Volume button are used to select from three available levels.

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

Not applicable.

Display, Call Information

Description

The display proprietary telephone shows the user the following call information:

Extension number and name

These are shown when calling or when called by an extension user and during an established intercom call.
A display example: 123: Smith

Dialled telephone number

This is shown when dialling the telephone number.
A display example: **91234567890**

CO Line number

This is shown when receiving an outside call.
A display example: **CO 03**

Number or name of the caller

These are shown before answering if the Caller ID feature is available.
A display examples
: **1234567890**
: **Panasonic**

CO Line Name

This is shown when CO Line is received a call.
A display example: **CO 03: Panasonic**

Charge Meter

This is shown during an established outside call.
A display example: **CO 02: 00005**

Charge Fee

This is shown during an established outside call.
A display example: **CO 01: 00001.15FR**

Duration Time

This is shown during an established incoming outside call.
A display example: **CO 01 0: 02' 05**

Conditions

- Extension numbers and names are programmable. If no extension name is stored, only the extension number is displayed.
- It is programmable to select the first display, Charge Meter or Charge Fee by System Programming. To alternate another display, press the CO button.
- The displayed currency denomination can be programmed by [125] Assignment of Denomination.

Programming Guide References

- [003] Extension Number Set
- [004] Extension Name Set
- [117] Charge Display Selection
- [125] Assignment of Denomination
- [421] CO Line Name Assignment

Features Guide References

- Caller ID
- Caller ID to RS-232C Port
- Charge Fee Reference

User Manual References

Not applicable.

Display, Self-Extension Number

Description

Allows the display proprietary telephone user to display their own jack number and extension number in Station Programming mode.

Conditions

Display example
If the jack number is 02 and the extension number is 202:

```
Jack02<=>EXT202
```

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 5.4.1 Programming Information

Display, Time and Date

Description

Offers the display proprietary telephone user a display of either the present time and the date or the date and the day of the week. It is displayed while on-hook.

Conditions

- There are two types of display:
  Display example 1: Day, Month, Time

1 Jan   13:00

  Display example 2: Day, Month, Year, Day of the Week

1 Jan   1999   Fri

- The present date and time are set by System Programming.

Programming Guide References

- [000] Date and Time Set

Features Guide References

None

User Manual References

Not applicable.

Do Not Disturb (DND)

Description

Allows an extension user to appear busy to an incoming extension call or allows to transfer an incoming outside call to the assigned extension. This can be set or cancelled by the extension user.

Conditions

- If your proprietary telephone (PT) is not supplied with the FWD/DND button, it can be assigned on a flexible button.
- DND does not work for the following calls: doorphone calls; recalls for hold / Timed Reminder alarm.
- APT 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).
- The following extension cannot set DND: operator, the Call Forwarding (C.FWD) destination or the DND destination.
- When the extension has set the C.FWD, DND or DND for Direct Dialling In Call, the extension cannot be a DND destination.
- Setting this feature cancels C.FWD or DND for Direct Dialling In Call.
- If the destination extension has DND activated, then the DSS button corresponding to it will light up red. This indicates to the proprietary telephone or console user that the destination extension is unavailable.

Programming Guide References

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

Features Guide References

- Do Not Disturb for Direct Dialling In Call
- Do Not Disturb (DND) Override

User Manual References

- 2.7.2 Refusing Incoming Calls (Do Not Disturb [DND])
- 4.1.3 Customising the Buttons

Do Not Disturb (DND) Override

Description

Permits the pre-assigned extension user to call another user who sets the Do Not Disturb feature. In this case the caller can override the DND programmed on the called extension's telephone and causes the telephone to ring.

Conditions

Class of Service (COS) programming determines the extension users who can perform DND Override.

Programming Guide References

- [507] Do Not Disturb Override

Features Guide References

- Do Not Disturb (DND)

User Manual References

- 2.2.5 Calling without Restrictions

Do Not Disturb for Direct Dialling In Call

Description

Allows the pre-assigned extension user to reject to answer the direct dialling in call on Class of Service basis. The rejected call will be transferred to an operator. The operator cannot reject the direct dialing in call. This feature is one of the ISDN services.

Conditions

* Setting this feature cancels Call Forwarding or DND.
* If the destination extension has DND activated, then the DSS button corresponding to it will light up red. This indicates to the proprietary telephone or DSS console user that the destination extension is unavailable.

Programming Guide References

* [005] Flexible CO Button Assignment
* [100] Flexible Numbering
* [514] Do Not Disturb for Direct Dialling In Call

Features Guide References

* Direct Dialling In (DDI)

User Manual References

* 2.7.2 Refusing Incoming Calls (Do Not Disturb [DND])
* 4.1.3 Customising the Buttons

Door Opener

Description

Allows the extension users to unlock the door for a visitor from their telephones. The door can be unlocked by the extension users on pre-assigned Class of Service. However, while engaged on a doorphone call, any extension user can open the door from the telephone to let the visitor in.

Conditions

* It is needed to install a user-supplied door opener on each door to be opened. Two door openers can be installed on each system. System Connection[*1] provides for four door openers.
* When a visitor presses the Call button on the doorphone, the system may automatically open the door, if the doorphone has a built-in door opener. It is required to set by the System Programming.

Installation Manual References

* 2.3.6 Doorphone and Door Opener Connection

Programming Guide References

* [100] Flexible Numbering
* [122] Automatic Door Open Assignment
* [511] Door Opener Access

Features Guide References

* Doorphone Call

User Manual References

* 2.8.1 If a Doorphone / Door Opener is Connected

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

Doorphone Call

Description

Your system supports a doorphone. If a visitor presses the doorphone button, pre-assigned extensions are rung. The extension who answers the call can talk to the visitor. It is possible for any extension user to originate a call to a doorphone.

Conditions

- It is needed to install a user-supplied Doorphone.
- One doorphone can be installed on each system. System Connection[*1] provides for two doorphones.
- It is necessary to programme the extensions that can receive calls from each doorphone during day and night mode.
- If no extension user answers an incoming doorphone call within 30 seconds, the call stops ringing and is cancelled.
- While engaged on a doorphone call, any extension user can open the door from the telephone to let the visitor in (Door Opener). This requires a user-supplied door opener.
- If the doorphone call is placed on hold, the Music on Hold is not available.

Installation Manual References

- 2.3.6 Doorphone and Door Opener Connection

Programming Guide References

- [100] Flexible Numbering
- [607-608] Doorphone Ringing Assignment — Day / Night

Features Guide References

- Door Opener

User Manual References

- 2.8.1 If a Doorphone / Door Opener is Connected

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

Doorphone Call Forwarding to CO Line

Description

Allows the system to forward doorphone calls to ISDN lines. The extension user can change the forwarding destination, to an extension or outside party, for each doorphone. If an outside party is selected, calls to the doorphone are forwarded to the destination assigned in programme [021]-[022] "Doorphone Call Forwarding - Day / Night." If an extension is selected, calls to the doorphone are forwarded to the destination assigned in programme [607]-[608] "Doorphone Ringing Assignment - Day / Night."

Conditions

- Class of Service programming determines the extension users who can forward the doorphone calls to ISDN lines.
- If the transferred call is not answered within the programmed intercept time, the line will be disconnected.
- If the doorphone button is pressed again before the call is answered, the intercept timer starts again.
- If a call between a party at a doorphone and an outside party is established with this feature, the duration of the call period may be restricted depending on the setting of the system timer.
- When a doorphone call is transferred to an outside party, either the extension at Jack 01-1 or Operator 1 can be selected for the charge account.

Programming Guide References

- [005] Flexible CO Button Assignment
- [021-022] Doorphone Call Forwarding — Day / Night
- [100] Flexible Numbering
- [218] Doorphone-to-CO Line Call Duration Time
- [521] Doorphone Call Forwarding to CO Line
- [607-608] Doorphone Ringing Assignment — Day / Night
- [990] System Additional Information

Features Guide References

- Doorphone Call

User Manual References

- 2.8.1 If a Doorphone / Door Opener is Connected
- 4.1.3 Customising the Buttons

Electronic Station Lockout

Description

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

Conditions

* Making intercom calls and receiving intercom or outside calls are permitted on the locked station.
* The new setting overrides the old one. If Operator sets Remote Station Lock on a station that has already been locked by the station user, the user cannot unlock it.
* It is programmable to admit the press of the Terminate button during an outside call on the locked station.

Programming Guide References

* [100] Flexible Numbering

Features Guide References

* Remote Station Lock Control

User Manual References

* 2.5.4 Preventing Other People from Using Your Telephone (Electronic Station Lockout)

Emergency Call

Description

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

Conditions

- Emergency numbers are allowed to call even in the following cases;
    - in Account Code - Verified mode
    - in any toll restriction levels
    - after the pre-assigned charge limit is reached
    - in Electronic Station Lockout
- A maximum of 10 emergency numbers are assignable.
  Any number can be stored as an emergency number.
- It is possible to store the CO line access code and the emergency number into Quick Dialling. In this case, you need not press a CO button or dial a line access code.

Programming Guide References

- [311] Emergency Dial Number Set

Features Guide References

- Quick Dialling

User Manual References

- 2.2.1 Basic Calling

End-to-End DTMF Signalling (Tone Through)

Description

DTMF signalling is required for access to special network services offered by some telephone companies. This system allows the proprietary telephone user to send DTMF signals to the line during an established call.

Conditions

None

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

Not applicable.

Executive Busy Override - CO Line

Description

Allows a proprietary telephone user to barge into an existing outside call either between two outside parties on the ISDN line through the system or between an outside and an inside parties, so as 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.
- The pre-assigned extension users can barge in any CO line even if access to the line is not allowed by System Programming.
- This feature does not work if the extension has set Executive Busy Override Deny or Data Line Security.
- When a two-party call is changed to a three-party call and vice versa, a confirmation tone is sent to all three parties. This tone can be eliminated by System Programming.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [505] Executive Busy Override
- [506] Executive Busy Override Deny
- [990] System Additional Information

Features Guide References

- Conference

User Manual References

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

Executive Busy Override - Extension

Description

Allows the pre-assigned extension user to barge into an existing extension call, either between two inside parties or between an outside and an inside parties, so as 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.
- This feature does not work if the extension has set Executive Busy Override Deny or Data Line Security.
- When a two-party call is changed to a three-party call and vice versa, a confirmation tone is sent to all three parties. This tone can be eliminated by System Programming.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [505] Executive Busy Override
- [506] Executive Busy Override Deny
- [990] System Additional Information

Features Guide References

- Conference

User Manual References

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

Extension Connection Assignment

Description

Assign whether the extension user can perform all accesses or not.

Conditions

- The extension of the jack number 01 should be set to "connect."
- If the destination of DIL 1:1 or DDI is set to "disconnect," the call is transferred to an operator.

Programming Guide References

- [611] Extension Connection Assignment

Features Guide References

None

User Manual References

Not applicable.

Extension Group

Description

The system supports sixteen extension groups. Any member of an extension group can pick up a call directed to another member of the same group (Group Call Pickup). In addition, there is the Paging - Group feature.

Conditions

* Every extension should belong to an extension group and can belong to more than one group simultaneously.
* If System Connection[*1] is employed, an extension group can include extensions on both systems.

Programming Guide References

* [602] Extension Group Assignment

Features Guide References

* Call Pickup, Group
* Paging - Group

User Manual References

Not applicable.

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

External Relay

Description

A pre-assigned extension can switch on the relay connected to the system.

Conditions

- Class of Service Programming determines the extension users who can access the relay.
- One external relay can be connected per system.
- It is possible to assign the connecting time by System Programming.

Installation Manual References

- 2.3.7 External Relay, External Ringer and External Sensor Connection

Programming Guide References

- [100] Flexible Numbering
- [213] External Relay Connecting Time
- [512] External Relay Access

Features Guide References

None

User Manual References

- 2.8.3 If an External Relay is Connected

External Ringer

Description

If a call is placed on a specified extension or a CO line, an external bell connected to the system will ring together. Any extension can answer the call by entering a feature number. The external ringer can be assigned as a destination of the following feature:

1. CO Line - DIL, Direct Dialling In

2. Extension - All incoming call

3. TAFAS

Conditions

* It is assignable to enable / disable the external ringer per extension / CO line.
* One ringer can be connected per system.
* The ringer can be assigned a floating number.

Installation Manual References

* 2.3.7 External Relay, External Ringer and External Sensor Connection

Programming Guide References

* [100] Flexible Numbering
* [418] External Ringer Assignment
* [813] Floating Number Assignment

Features Guide References

None

User Manual References

* 2.8.4 If an External Ringer is Connected

External Sensor

Description

If a device connected to the external sensor becomes active, it is informed to Operator 1 with the ring tone.

```
Display Sample: External Sensor 1
```

Ring Tone

|←   5 s   →|
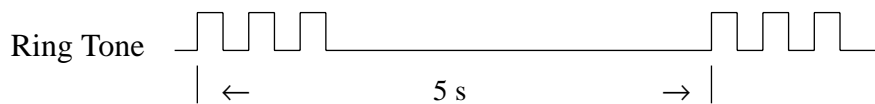
While having a conversation,

|←   1 s   →|
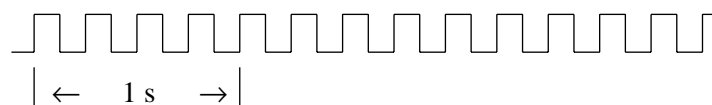
Conditions

• One external sensor can be connected per system.
• If a call is not answered within 60 seconds, it will automatically stop ringing.

Installation Manual References

• 2.3.7 External Relay, External Ringer and External Sensor Connection

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

• 3.2.8 If an External Sensor is Connected

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 proprietary telephone (PT) and a single line telephone (SLT) or console and 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 by System Programming. Immediately after changing the assignment, changed setting may not work for a maximum of eight seconds.

Installation Manual References

- 2.3.5 EXtra Device Port (XDP) Connection for a Digital Proprietary Telephone and a Single Line Telephone

Programming Guide References

- [600] EXtra Device Port

Features Guide References

- Parallelled Telephone

User Manual References

Not applicable.

Flexible Numbering

Description

The numbers used for the access codes of system features and the number used for extension numbers are not fixed. They can be set as required provided there are not any 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.

Flexible Feature Numbers

Number	Feature	Default
01	1st hundred extension block	2
02	2nd hundred extension block	3
03 - 16	3rd through 16th hundred extension block	None
17	Operator call	9
18	Automatic line access	0
19	CO line group line access	8
20	System speed dialling	✶
21	Station speed dialling	6✶
22	Station speed dialling programming	60
23	Doorphone call	68
24	Paging - external	64
25	Paging - external answer / TAFAS answer	44
26	Paging - group	63
27	Paging - group answer	43
28	Call pickup, CO line	4✶
29	Call pickup, group	40
30	Call pickup, directed	41
31	Call hold	50
32	Hold retrieve - intercom	51
33	Hold retrieve - CO line	53
34	Last number redial	#
35	Call park / call park retrieve	52

Flexible Feature Numbers

Number	Feature	Default
36	Account code entry	49
37	Door opener	55
38	Reserved	—
39	Station program clear	790
40	Message waiting	70
41	External relay on	67
42	Call forwarding / do not disturb	710
43	Call pickup deny	720
44	External ringing	730
45	Call waiting / OHCA / Whisper OHCA	731
46	Executive busy override deny	733
47	Pickup dialling programme	74
48	Absent message	750
49	Timed reminder	76
50	Electronic station lockout	77
51	Night service mode	78
52	Parallel telephone mode	69
53	Background music - external	65
54	Paging - deny	721
55	Primary COS select	791
56	Secondary COS select	793
57	log-in / log-out	45
58	Operator 1 call	61
59	Operator 2 call	62
60	Automatic callback busy cancel	46
61 - 68	Reserved	—
69	External ringer answer	47
70	Timed reminder, remote	7$\ast$
71	Call log, incoming	54
72	Do not disturb for DDI	56
73	CLIR	57

Flexible Feature Numbers

Number	Feature	Default
74	COLR	58
75	Call log lock control, incoming	59
76	Live call screening password	799
77	System working report printout/clear	794
78	SXDP	48
79	Outgoing message	712
80	CLIP / COLP	711
81	Reserved	—
82	Call forwarding from hunting group	714
83	Doorphone call forwarding to CO line	715
84	Doorphone call forwarding mode switch	716
85	CCBS cancel	713

Default feature numbers are shown above.
In addition to the flexible feature numbers above, fixed feature numbers are provided.

Fixed Feature Numbers

Feature	Default
While busy tone is heard	
Automatic Callback Busy /	
Completion of Calls to Busy Subscriber (CCBS)	6
Busy Station Signalling (BSS) /	
Off-Hook Call Announcement (OHCA) /	
Whisper OHCA	2
Executive Busy Override	3
Message Waiting	4
While Do Not Disturb tone is heard	
Do Not Disturb Override	2
While calling or talking	
Account Code Delimiter	# / 99
Alternate Calling - Ring / Voice	✳
Conference	3
Door Open	5

Fixed Feature Numbers

Feature	Default
When the set is on-hook	
Day / night mode display	#
Time display / date display switching	✳

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
- [813] Floating Number Assignment

## Features Guide References

None

User Manual References

Not applicable.

Floating Station

Description

You can assign virtual extension numbers for resources to make them appear to be extensions. These numbers are defined as floating numbers (FN). The following resources can have floating numbers:

a) External paging instruments: used for TAFAS feature.
Two FNs are available for KX-TD816.
Four FNs are available for KX-TD1232.
These FNs can be assigned as:

   1) DIL 1:1 destination

   2) Intercept Routing destination

b) External ringer: used for call reception.
One FN is available for KX-TD816.
Two FNs are available for KX-TD1232.
These FNs can be assigned as:

   1) DIL 1:1 destination

   2) Intercept Routing destination

c) Modem[*1]: used for system administration. One FN is available.
This can be assigned as DIL 1:1 destination and also can be used as an extension number to call the modem.

d) UCD group: used for Station Hunting feature. 32 FNs are available. These FNs can be assigned as :

   1) DIL 1:1 destination

   2) Extension

   3) Intercept Routing destination

   4) DDI / MSN destination

   5) Hunting Group - overflow

e) Digital Test Access: used for testing
One DTA is available.
The FN can be used as an extension.

Conditions

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

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

Installation Manual References

- 2.3.7 External Relay, External Ringer and External Sensor Connection
- 2.3.8 External Pager (Paging Equipment) Connection
- 2.4.8 Remote Card Installation
- 2.4.9 9600bps Speed Remote Unit / Message Unit Installation
- 2.4.10 9600bps Speed Remote Card / Message Card Installation

Programming Guide References

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

Features Guide References

None

User Manual References

Not applicable.

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 be off-hook before pressing the button, which is required for One-Touch Dialling. Handsfree operation is automatically provided by pressing a One-Touch Dialling button, a DSS button, a REDIAL button, a SAVE button, etc..

Conditions

- It is necessary to programme automatic handsfree dial mode.
- This feature is also available with DSS buttons on a Console.
- This feature is also available with the display operation for KX-T7531, KX-T7533, KX-T7536 or KX-T7235 (Special Display Features).

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 4.1.2 Initial Settings

Handset / Headset Selection

Description

The system supports the use of a user-supplied headset on a proprietary telephone (PT).

Conditions

To set headset mode on a PT, use Station Programming.

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 4.1.2 Initial Settings

Handset Microphone Mute

Description

Allows the KX-T7500 series proprietary telephone user to turn off the handset microphone, for privacy.

Conditions

- This is effective for the handset microphone only. Only your voice will be muted during a handset conversation.
- The user can hear the other party's voice during Handset Microphone Mute.

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 2.4.7 Mute

Handsfree Answerback

Description

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

Conditions

- Handsfree answerback mode is set or cancelled by pressing the AUTO ANSWER button.
- This feature does not work for calls from outside parties or doorphone calls.
- Handsfree Answerback set on a telephone overrides the Ring / Voice Intercom Alerting mode preset on the telephone; Handsfree conversation mode is established as soon as confirmation tone is sent.
- Handsfree answerback mode is overridden and a ring tone is heard when an outside call is transferred to the extension where the mode is set.

Programming Guide References

System programming is not required.

Features Guide References

- Alternate Calling - Ring / Voice

User Manual References

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

Handsfree 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 handsfree 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
- A single press of a One-Touch Button, DSS button, REDIAL button or a SAVE button also provides handsfree mode if Full One-Touch Dialling is enabled.
- The KX-T7550 and KX-T7250 can be used for handsfree dialling operation, etc., but cannot be used for handsfree conversation.

Programming Guide References

System programming is not required.

Features Guide References

- Full One-Touch Dialling

User Manual References

- 2.2.1 Basic Calling
- 2.3.1 Answering Calls

Hold Recall

Description

Prevents a call on hold from being kept waiting longer than a pre-determined time. If the timer expires, ringing or an alarm tone is generated as a reminder to the user who held the call. If the user is on-hook and its speaker-phone is off, the phone is rung. If the user is off-hook or in speakerphone 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.

Conditions

- It is required to enable the Call Waiting Tone beforehand.
- Hold Recall can be disabled by System Programming.
- The display PT flashes the indication of the held party for five seconds at 15-second intervals synchronised with the tone.
- Alarm tone is sent as follows:
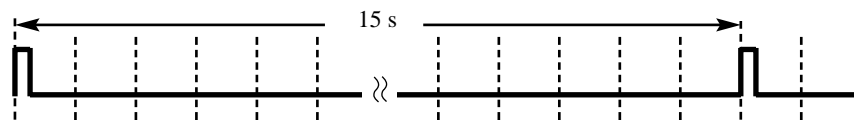
Programming Guide References

- [200] Hold Recall Time

Features Guide References

- Call Hold - CO Line
- Call Hold - Intercom
- Call Hold, Exclusive - CO Line
- Call Hold, Exclusive - Intercom
- Call Waiting

User Manual References

Not applicable.

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 a CO line in the Digital Super Hybrid System.

Conditions

- To enable Host PBX Access, put the host PBX line in a CO line group. The user accesses the host PBX by selecting that CO line.
- A Host PBX Access Code is required to access CO lines of the host PBX.
- A pause, if programmed, can be inserted between the user-dialled Host PBX Access Code and the following digits (Automatic Pause Insertion). Program the pause time required by the Host PBX for that CO line group.

Programming Guide References

- [411] Host PBX Access Codes

Features Guide References

None

User Manual References

Not applicable.

HOTEL APPLICATION

Description

Allows the operator to handle the front/operator services such as check-in / check-out, timed reminder (wake-up call) and room management. This operation is applicable to only the operator extension with the KX-T7536 or KX-T7235.

HOTEL APPLICATION (Check-In / Check-Out)

Description

Allows the operator to operate the check-in / check-out service. This feature can control the usage of an outside call by switching the Class of Service between primary and secondary, and count and print out the telephone charge and the other charges such as minibar.

Conditions

* It is required to enable the hotel application by System Programming.
* When the check-in is assigned, the Class of Service is set to the primary one and the charge counter will be cleared. When the check-out is assigned, the Class of Service is set to secondary one and the total telephone charge and the other charge will be displayed and printed out.
* The telephone charge can be added the surcharge according to the pre-assigned margin rate. The pre-assigned tax rate can be also added.
* If the operator uses the paired Console, the operator can refer the check-in status on Console.
* It is possible to give a header to the printed bill such as hotel's name or greeting or to assign the starting location of output data with a personal computer.
* It is possible to limit the telephone usage on a pre-assigned amount by System Programming.

Programming Guide References

* [010] Budget Management
* [011] Charge Margin and Tax Rate
* [123] Hotel Application
* [990] System Additional Information

Features Guide References

* Budget Management
* Charge Fee Reference

User Manual References

* 3.2.6 Hotel Use Features

HOTEL APPLICATION (Room Management)

Description

Allows the extension user to print out the information of a guest room (e.g. cleaning status of the room and the total of the minibar charge) with a telephone in each room. The absent messages No.6-No.9 can be printed out.

Conditions

- When this feature is available, the absent messages No.6-No.9 are not sent to extensions.

Programming Guide References

- [008] Absent Messages
- [990] System Additional Information

Features Guide References

- Absent Message Capability

User Manual References

- 3.2.6 Hotel Use Features

HOTEL APPLICATION (Timed Reminder, Remote -Wake-Up Call)

Description

Allows the operator to set, cancel and confirm the wake-up call remotely for the extension.

Conditions

* When either an operator or the extension sets a new time, the pre-set time is cleared.
* When a wake-up call is not answered, the operator's Alert indicator (KX-T7536 and KX-T7235) will flash.

Programming Guide References

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

Features Guide References

* Timed Reminder

User Manual References

* 3.2.6 Hotel Use Features
* 4.1.3 Customising the Buttons

Hunting Group

Description

The system supports thirty-two hunting groups. The station hunting feature is assigned on the hunting group basis.
Hunting works when an incoming call arrives at an floating number for a hunting group.
However, for VM/AA hunting, an incoming call to any extension number which belongs to a hunting group is hunted as well.
The following assignments are determined for the hunting group.

- Floating Extension Number
- The Hunting Group Name
- Numbers of Waiting Queues
- Overflow Status
- The Destination of Intercept Routing — Day/Night
- Hunting Type

Conditions

- Each extension can belong to more than one group simultaneously.

Programming Guide References

- [106] Station Hunting Type
- [131] Hunting Group Assignment
- [132] Hunting Group Name Assignment
- [133] Hunting Overflow
- [134-135] Hunting Intercept — Day / Night
- [813] Floating Number Assignment

Features Guide References

- No Reply Group
- Ring Group
- Station Hunting
- Uniform Call Distribution (UCD)

User Manual References

Not applicable.

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 Card/Unit, KX-TD280, KX-TD281, KX-TD282, KX-TD286, or KX-TD290 is required. The KX-TD290 can only use "point-to point" configuration.

Point-to-point

A call received through one ISDN port is sent directly to a specific extension using a Direct Dialling In (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 programs for ISDN

```
                    ┌─────────────────────────────────────┐
                    │ Select the ISDN ring service, DDI,  │
                    │ MSN, or Disable in programmes        │
                    │ [420]-[490] "ISDN Ring Service       │
                    │ Assignment – Day / Night."           │
                    └─────────────────────────────────────┘
      Disable                    │ DDI                        MSN
```

The extensions which are assigned in programme [407]-[408] "DIL 1:1 Extension – Day / Night" receive calls.	A received number is converted as programme [111] "ISDN DDI / MSN Removed Digit /Added Number Assignment."	

Disable | DDI | MSN

The extensions which are assigned in programme [603]-[604] "DIL 1:N Extension and Delayed Ringing – Day / Night" receive calls.	The system searches for the converted number in programme [150] "ISDN DDI Translation	The system searches for the converted number in programme [437] "Multiple Subscriber Number Set."

DDI | MSN

A call is received at a specific extension, assigned in programmes [151]-[152] "ISDN DDI Ringing Assignment – Day / Night," directly using the DDI service. (Refer to the DDI feature.)	A call is received at the pre-assigned extension, assigned in programmes [438]-[439] "Extension Ringing Assignment – Day / Night for ISDN," directly using the MSN ringing service. (Refer to the MSN Ringing Service feature.)

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

Program	[422]/[440] ISDN Port Type	[423]/[441] ISDN Layer 1 Active Mode	[424]/[442] ISDN Configuration	[425]/[443] ISDN Date Link Mode	[426]/[444] 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

Conditions

- **After ISDN assignments, you should reset the system so that the assignments are effective.**
- If "Disable" is assigned in programmes [420]/[429] "ISDN Ring Service Assignment — Day / Night" and an extension is not assigned in programmes [407]-[408] "DIL 1:1 Extension — Day / Night," the call will be received by DIL 1:N.

Installation Manual References

- 2.4.2 ISDN S0 Line Connection (Optional Card)
- 2.4.4 ISDN S0 Line Connection (Optional Unit)
- 2.6.1 System Restart

Programming Guide References

- [109] Expansion Card / Unit Type
- [111] ISDN DDI / MSN Removed Digit / Added Number Assignment
- [150] ISDN DDI Translation Table
- [151-152] ISDN DDI Ringing Assignment — Day / Night
- [407-408] DIL 1:1 Extension — Day / Night
- [420/429] ISDN Ring Service Assignment — Day / Night
- [422] ISDN Port Type
- [423] ISDN Layer 1 Active Mode
- [424] ISDN Configuration
- [425] ISDN Data Link Mode
- [426] ISDN TEI Mode
- [437] Multiple Subscriber Number Set
- [438-439] Extension Ringing Assignment — Day / Night for ISDN MSN
- [440] TD286 ISDN Port Type
- [441] TD286 ISDN Layer 1 Active Mode
- [442] TD286 ISDN Configuration
- [443] TD286 ISDN Data Link Mode
- [444] TD286 ISDN TEI Mode
- [450] PRI Configuration

Features Guide References

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

User Manual References

Not applicable.

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 or Card. A maximum of eight terminal units can be connected to each ISDN S0 bus with point-to-multi-point configuration. However, only up to two units 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, 00 through 99. 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
- Completion of Calls to Busy Subscriber (CCBS)
- Conference
- Do Not Disturb
- Log-In / Log-Out
- Message Waiting
- Paging - Group Answer
- Pickup Dialling
- Timed Reminder

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

Programme	[422]/[440] ISDN Port Type	[423]/[441] ISDN Layer 1 Active Mode	[424]/[442] ISDN Configuration	[425]/[443] ISDN Date Link Mode	[426]/[444] 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

Conditions

- **After ISDN assignments, you should reset the system so that the assignments are effective.**
- Class of Service and department code for ISDN port apply 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 ISDN ports become available.

  If the KX-TD286 is installed together with the KX-TD281 or KX-TD282, it is not possible to assign the same port as an external ISDN S0 line. If it is done, only the port of the KX-TD286 becomes available.

TD816

CO No.	ISDN Port	TD282	TD280	TD286
1, 2	1	*2	—	*1
3, 4	2	*2	—	*1
5, 6	3	—	*2	*2
7, 8	4	—	*2	*2
—	5	—	—	Internal
—	6	—	—	Internal

TD1232

CO No.	ISDN Port	TD281	TD280	TD286
1, 2	1	External	—	*1
3, 4	2	External	—	*1
5, 6	3	*2	—	*1
7, 8	4	*2	—	*1
9, 10	5	—	*2	*2
11, 12	6	—	*2	*2

Installation Manual References

- 2.4.2 ISDN S0 Line Connection (Optional Card)
- 2.4.4 ISDN S0 Line Connection (Optional Unit)
- 2.4.7 ISDN S0 Line Connection
- 2.6.1 System Restart

Programming Guide References

- [012] ISDN Extension Number Set
- [013] ISDN Extension Name Set
- [014] Budget Management on ISDN Port
- [017] TD286 Extension Number Set
- [018] TD286 Extension Name Set
- [019] Budget Management on TD286 Port
- [109] Expansion Card / Unit Type
- [422] ISDN Port Type
- [423] ISDN Layer 1 Active Mode
- [424] ISDN Configuration
- [425] ISDN Data Link Mode
- [426] ISDN TEI Mode
- [427] ISDN Extension Multiple Subscriber Number
- [428] ISDN Extension Progress Tone
- [440] TD286 ISDN Port Type
- [441] TD286 ISDN Layer 1 Active Mode
- [442] TD286 ISDN Configuration
- [443] TD286 ISDN Data Link Mode
- [444] TD286 ISDN TEI Mode
- [445] TD286 ISDN Extension Multiple Subscriber Number
- [446] TD286 ISDN Extension Progress Tone
- [437] Multiple Subscriber Number Set
- [438-439] Extension Ringing Assignment — Day / Night for ISDN MSN
- [613] ISDN Class of Service
- [614] Department Codes of ISDN Port
- [615-616] Outgoing Permitted CO Line Assignment – Day / Night for ISDN Extension
- [627] TD286 Class of Service
- [628] TD286 Department Codes
- [629-630] Outgoing Permitted CO Line Assignment – Day / Night for TD286 Extension

Features Guide References

None

User Manual References

Not applicable.

Intercept Routing

Description

Provides automatic redirection of incoming outside calls. There are two types of Intercept Routing. In the first case, a call cannot be placed to the called party. This is called Rerouting. In the second case the call is not answered within a programmed time period. This is called Intercept Routing - No Answer (IRNA).
Items which can have the Intercept Routing destination are:

1. CO Line Group,

2. Extension, and

3. Hunting Group.

Conditions

- Intercept Routing applies to DIL 1:1, DIL 1:N, 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:

    a) an extension

    b) an external pager

    c) a hunting group

    d) an external ringer

    e) a phantom extension

    f) a voice mail extension

- Intercept Routing is activated as shown below, depending on the combination of incoming type and called destination.

Destination Type	Extension including Operator	External Pager/ External Ringer/ Internal ISDN/ Phantom Extension	Hunting Group
DIL 1:N	Assigned CO line group	No incoming calls are received.	No incoming calls are received.
DIL 1:1	Registered extension	Assigned CO line group	Assigned hunting group
DDI	Registered extension	Assigned CO line group	Assigned hunting group
Intercept	No more Intercept Routing	No more Intercept Routing	Assigned hunting group

- If the Call Forwarding to CO Line feature is set at the IRNA destination, the call will be forwarded to the specific outside party.

Programming Guide References

- [203] Intercept Time
- [409-410] Intercept Extension — Day / Night
- [620-621] Extension Intercept Routing — Day / Night

Features Guide References

None

User Manual References

Not applicable.

Intercom Calling

Description

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

Conditions

- Extension numbers are assigned to all extensions by System Programming. An extension number is programmed to be two, three, or four digits. The ISDN extension number is programmed to be one, two or three digits.
- Names can be given to extension numbers by System Programming. An extension number and a name, if programmed, is shown on the display PT during an intercom call.
- DSS buttons permit one-touch access to an extension and provide Busy Lamp Field.
- 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:

   Ringback tone: indicates that the other extension is being called.
   Confirmation tone: indicates that the user can perform Voice Calling.
   Busy tone: indicates that the other extension is busy.
   Do Not Disturb tone: indicates that the other extension has DND assigned.

Programming Guide References

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

Features Guide References

- Button, Direct Station Selection (DSS)

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

LED Indication, CO Line

Description

The LED (Light Emitting Diode) indicators of the buttons associated with CO lines tell the line conditions with a variety of lighting patterns. This allows the user to determine which lines are idle and which lines are in use. The table below shows the lighting patterns and line conditions according to the CO button type.

LED Indicator	CO Line Status
Off	Idle
Green On	You are using the line.
Green slow flash	You have a held call or Hold Recall.
Green moderate flash	You have one of the following: (1) exclusive hold, (2) outside-to-outside line call, or (3) unattended conference.
Green rapid flash	Hold Recall / Incoming call
Red On	Other-use
Red slow flash	Other-hold

Flashing light (winks) patterns
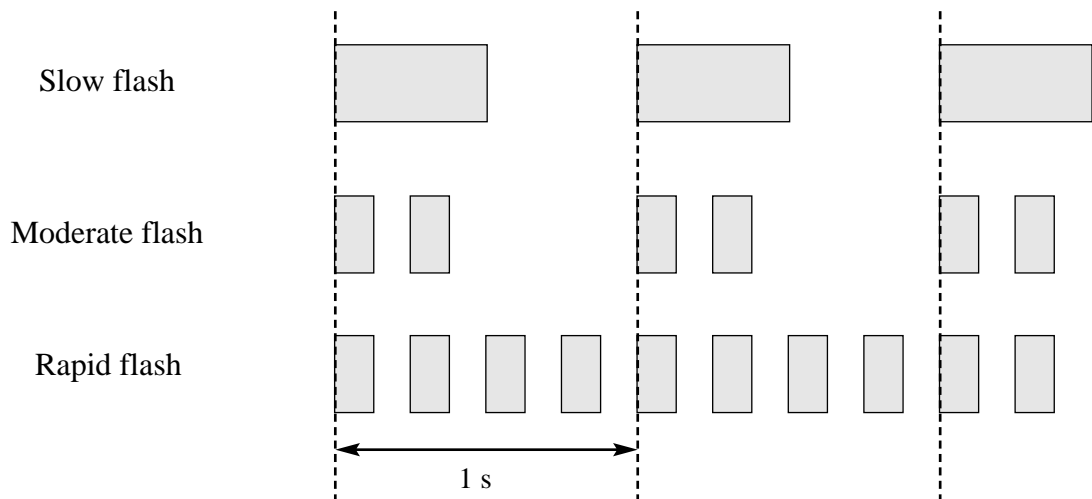
Conditions

Red slow flash indication appears on the S-CO button only.

Programming Guide References

System programming is not required.

Features Guide References

- Button, Group-CO (G-CO)
- Button, Loop-CO (L-CO)
- Button, Single CO (S-CO)

User Manual References

Not applicable.

LED Indication, Intercom

Description

The LED (Light Emitting Diode) indicator of the INTERCOM button indicates the line condition with a variety of lighting patterns. This allows the user to see the current state of the intercom line. The table below shows the lighting patterns and the intercom line conditions.

INTERCOM Button	Intercom Status
Off	Idle
Green On	Intercom call / Conference established
Green slow flash	Intercom call hold
Green moderate flash	Intercom call exclusive hold
Green rapid flash	Incoming intercom / Doorphone call

Conditions

None

Programming Guide References

System programming is not required.

Features Guide References

• Busy Lamp Field

User Manual References

Not applicable.

Line Access, Automatic

Description

Allows the extension user to dial the automatic line access number and access an idle line from the CO line groups assigned for the extension. The proprietary telephone user can use the Loop-CO button in place of the access number.

Conditions

- Each extension is subject to System Programming items for CO lines available to access.
- An idle CO line is selected from the CO line groups assigned to the station. If one CO line group is available, an idle line is selected from that group. If multiple CO line groups are available, the CO line group hunting sequence is determined by System Programming.
- This feature requires a CO button (G-CO, L-CO or S-CO) assignment on a proprietary telephone (PT). Dialling the line access code selects a CO button on a PT according to the priority:

    S-CO > G-CO > L-CO on a hunted CO line group
- If Idle Line Preference - Outgoing is set on the telephone, the user can access an idle line only by going off-hook.
- The system waits for a programmed time before dialling after a CO line is seized.

Programming Guide References

- [100] Flexible Numbering
- [103] Automatic Access CO Line Group Assignment
- [400] CO Line Connection Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day / Night

Features Guide References

- CO Line Connection Assignment - Outgoing

User Manual References

- 2.2.1 Basic Calling

Line Access, CO Line Group

Description

Allows the extension user to dial access a CO line group. An idle line is selected from the CO line group. To specify a CO line group, dial the feature number (the default setting is "8") and a desired CO line group number (1 through 8). A proprietary telephone user can also specify a CO line group by pressing a Group-CO button.

Conditions

- Each extension is subject to System Programming items for CO lines available to access.
- An idle line is selected in sequence from the lines in the specified CO line group.
- Group-CO buttons must be programmed prior to use.
- If Idle Line Preference - Outgoing is set on the telephone, the user can access an idle line only by going off-hook.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [400] CO Line Connection Assignment
- [401] CO Line Group Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day / Night

Features Guide References

- Button, Group-CO (G-CO)
- CO Line Connection Assignment - Outgoing
- CO Line Group

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

Line Access, Direct

Description

Allows the proprietary telephone user to select a CO line by pressing an idle CO button, which automatically establishes handsfree 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.

Conditions

- There are three types of CO buttons which can be programmed on an extension: Single-CO button, Group-CO button, and Loop-CO button.
- Each extension is subject to System Programming items for CO lines available to access.

Programming Guide References

- [005] Flexible CO Button Assignment
- [400] CO Line Connection Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day / Night

Features Guide References

- Button, Group-CO (G-CO)
- Button, Loop-CO (L-CO)
- Button, Single CO (S-CO)
- CO Line Connection Assignment - Outgoing

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

Line Access, Individual

Description

Allows the proprietary telephone user one-button access to a CO line without having to dial a line access code.

Conditions

- Each extension is subject to System Programming items for CO lines available to access.
- This feature requires a Single-CO (S-CO) button assignment on a proprietary telephone.
- The system waits for a programmed time before dialling after a CO line is seized.

Programming Guide References

- [005] Flexible CO Button Assignment
- [400] CO Line Connection Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day / Night

Features Guide References

- Button, Single CO (S-CO)
- CO Line Connection Assignment - Outgoing

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

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:

a) No Line Preference
No line is selected when you go off-hook. You must select a line to answer.

b) Prime Line Preference
You can assign a prime line beforehand and answer a call on that line, when multiple calls are received simultaneously.

c) Ringing Line Preference
When you go off-hook, you answer the call ringing at your telephone.

Conditions

* Setting a new line preference feature cancels the previous setting.
* If Prime Line Preference is selected and 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.
* If Ringing Line Preference is selected, 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."
* A single line telephone is always set to Ringing Line Preference and cannot be changed.

Programming Guide References

* [400] CO Line Connection Assignment
* [603-604] DIL 1:N Extension and Delayed Ringing — Day / Night

Features Guide References

None

User Manual References

* 2.3.1 Answering Calls
* 4.1.2 Initial Settings

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:

a) Idle Line Preference:
When you go off-hook, you are connected to an idle line. An idle line is automatically selected from the pre-assigned lines.

b) No Line Preference:
No line is selected when you go off-hook. You must select a line to make a call.

c) Prime Line Preference:
When you go off-hook, you are connected to the pre-assigned line. Assign a line as your prime line beforehand.

Conditions

* Setting a new line preference feature cancels the previous setting.
* To set Prime Line Preference, one prime line is selected from intercom or CO lines.
* The CO lines used by users must be connected by programming.
* To select Idle Line Preference, CO lines available for the user should be programmed. Also CO lines available for Automatic Line Access should be assigned.
* 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.

Programming Guide References

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

Features Guide References

* CO Line Connection Assignment - Outgoing

User Manual References

* 2.3.1 Answering Calls
* 4.1.2 Initial Settings
* 4.1.3 Customising the Buttons

Live Call Screening (LCS)*1

Description

Allows a proprietary telephone user to monitor their voice mailbox while incoming callers are leaving a message and, if desired, intercept the call. The voice mailbox can be monitored in one of two ways — Hands-free or Private.

Hands-free Mode

The voice mailbox is monitored through the built-in speaker of the proprietary telephone.

Private Mode

The proprietary telephone sounds an alert tone when callers are connected to the voice mailbox. To monitor the call, the user goes off hook on the handset or speakerphone.

Alert Tone
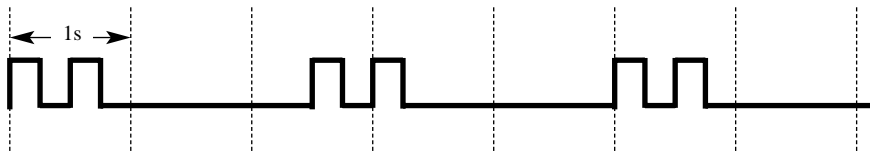
To intercept the call in either Hands-Free or Private mode, press the LCS button.

A single line telephone, which is connected with a proprietary telephone in parallel, can be also used to monitor a recording message. Be sure that the Live Call Screening on the connected proprietary telephone has been activated.
This feature is useful when you are out with a portable handset of a cordless telephone (SLT). The handset sounds an alert tone to let you know that a message is being recorded. To intercept the call, lift the handset and flash the hooking.

Conditions

- When the extension user is having a conversation, a call waiting tone is sent. The user can put an existing call on hold before accessing LCS.
- A flexible CO and DSS button can be assigned as a Live Call Screening button.
- To prevent unauthorised monitoring, a three-digit password must be set by the LCS user. If the user forgets his password, it can be cleared by Operator.
- Each extension can be programmed to either close the mailbox or keep recording the conversation after the call is intercepted.

Programming Guide References

- [005] Flexible CO Button Assignment
- [617] Live Call Screening Recording Mode Assignment

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*1   Available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration; e.g. KX-TVP100).

Features Guide References

None

User Manual References

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

Lockout

Description

If one party in a conversation goes on-hook, they are both disconnected from the speech path automatically. This feature applies to extension and outside calls. Reorder tone is sent to the off-hook party after it is disconnected.

Conditions

None

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

Not applicable.

Log-In / Log-Out

Description

Assigns an extension to join (log-in) or leave (log-out) a hunting group. Extensions in log-out status receive no calls by Station Hunting but can receive other calls, unlike the DND feature.

Conditions

- There should be at least one extension that is in log-in status. Only one log-in extension cannot be set in log-out status.
- The lighting patterns of Log-In/Log-Out button and the status are shown below.

Lighting pattern	CO Line Status
Red on	Log-Out (no reception)
Flashing Red	Log-In (multiple reception)
Off	Log-In

Programming Guide References

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

Features Guide References

- Station Hunting
- Uniform Call Distribution (UCD)

User Manual References

- 2.5.5 Leaving a Call Distribution Group (Log-In / Log-Out)
- 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.

Conditions

- Besides the manager extension, the extension that is connected to the jack 1 is able to perform System Programming.
- If eXtra Device Port mode is enabled at the manager extension, the proprietary telephone user is regarded as the manager.
- Manager extension can print out and clear the system working report.

Programming Guide References

- [006] Operator / Manager Extension Assignment — Day / Night
- [100] Flexible Numbering

Features Guide References

None

User Manual References

Not applicable.

Message Waiting

Description

The system supports the ability to inform the called party of a message waiting. The user, with a MESSAGE button, knows there is a message if the LED of the MESSAGE button is lit red. Even if the button is not provided nor assigned, the called party hears special dial tone, when he / she goes off-hook. Pressing the lit MESSAGE button also means to call back the extension that left the message or listen to the messages which are stored in the mailbox of the Voice Processing System.

Conditions

• For the proprietary telephone which is provided with no MESSAGE button, a flexible CO button can be assigned as the MESSAGE button either by System or Station Programming.

• Canceling the message can be performed from the extension setting it or from the extension receiving it.

• The system supports a maximum of 128 simultaneous messages.

• Messages are always left on the original extension. It is not sent to a Call Forwarding or Station Hunting destination.

• A single line telephone user will hear the ring tone as a notification, if he / she receives a message. It is programmable to set the interval of a ring tone by System Programming.

Programming Guide References

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

Features Guide References

• Dial Tone, Distinctive
• Voice Mail Integration

User Manual References

• 2.2.4 When the Dialled Line is Busy or There is No Answer
• 2.8.2 If a Voice Processing System is Connected
• 4.1.3 Customising the Buttons

Microphone Mute

Description

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

Conditions

- This is effective for the microphone only; your voice will only be muted during a handsfree conversation.
- The user can hear the other party's voice during Microphone Mute.

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 2.4.7 Mute

Mixed Station Capacities

Description

This system supports a wide range of telephone sets, not only Proprietary Telephone (PT) in the Digital Super Hybrid System, but also single line rotary telephones (employing dial pulse signals) and single line push-button dialling telephones (touch tone). The super hybrid method used in this system allows any telephone to be connected to an extension modular jack without an adaptor.

Conditions

- If a telephone is replaced by another one, the stored data (such as feature button storage) is held for the new one.
- It is possible to ignore the pulse dial by System Programming. In this case, a single line rotary telephone does not function.

Installation Manual References

- 2.3.2 Extension Connection for Proprietary Telephones, Single Line Telephones and Consoles
- 2.4.5 Extension Connection (Optional Unit)

Programming Guide References

- [121] Pulse Dial Reception Assignment

Features Guide References

None

User Manual References

Not applicable.

Module Expansion

Description

The KX-TD816 starts with 8 extension jacks.
The KX-TD1232 starts with 16 extension jacks. It can be expanded by installing optional card and units.

- Extension line unit: Adds 8 extension jacks.
- ISDN S0 line card:
  KX-TD816 – Adds 2 ISDN S0 lines.
  KX-TD1232 – Adds 4 ISDN S0 lines.
- ISDN S0 line unit:
  KX-TD816 and KX-TD1232 – Adds 2 ISDN S0 lines or 6 ISDN S0 lines.
  KX-TD1232 only – Adds 1 PRI ISDN line.

The KX-TD816 can have a maximum of one extension unit, one ISDN S0 line cards and ISDN S0 units. The KX-TD1232 can have a maximum of two extension units, one ISDN S0 line cards and one ISDN units.

Conditions

- The number of extension jacks may be different from the number of telephones if the eXtra Device Port feature is enabled. This feature allows one extension jack to have two telephones.
- When an optional card and / or unit is installed, the card and / or unit identification is set by System Programming.

Installation Manual References

- 2.4.2 ISDN S0 Line Connection (Optional Card)
- 2.4.4 ISDN S0 Line Connection (Optional Unit)
- 2.4.5 Extension Connection (Optional Unit)
- 2.4.6 Installing Expansion Unit
- 2.4.7 ISDN S0 Line Connection

Programming Guide References

- [109] Expansion Card / Unit Type

Features Guide References

- EXtra Device Port (XDP)
- Parallelled Telephone

User Manual References

Not applicable.

Multilingual

Description

Assigns the language displayed on proprietary telephones and printed out to SMDR.

Conditions

- You can select from German, English or French when you are in the Station Programming mode or when in normal use.
- You can select from German or English when you are in System Programming mode or when you print out the data to SMDR.

Programming Guide References

- [101] Language Assignment

Features Guide References

None

User Manual References

Not applicable.

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) TAFAS, (5) modem, (6) Phantom extension, (7) Voice Mail extension, (8) ISDN extension and (9) external ringer.

The extensions which are assigned in programmes [438]-[439] "Extension Ringing Assignment - Day / Night for ISDN" receive a call if the dialled number matches the stored MSN.

<Example>

ISDN Port No.	Location No.	[437] Multiple Subscriber Number Set	[438] Extension Ringing Assignment — Day for ISDN	[439] Extension Ringing Assignment — Night for ISDN
01	-1	2011111	101	201
	-2	2012222	102	202
	:			
	-10			

Conditions

*   An incoming MSN number is converted as programmed in [111] "ISDN DDI / MSN Removed Digit / Added Number Assignment".

*   To use the MSN ringing service, "MSN" must be selected in programme [420]/[429] "ISDN Ring Service Assignment — Day / Night."

*   If an MSN number through the ISDN line does not match the number assigned in programme [437] "Multiple Subscriber Number Set", the call will not be received. If no MSN numbers are assigned in programme [437], the call will be sent to an extension according to DIL 1:1 or DIL 1:N.

*   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

*   [111] ISDN DDI / MSN Removed Digit / Added Number Assignment
*   [407-408] DIL 1:1 Extension — Day / Night
*   [420/429] ISDN Ring Service Assignment — Day / Night
*   [437] Multiple Subscriber Number Set
*   [438-439] Extension Ringing Assignment — Day / Night for ISDN MSN

Features Guide References

- Integrated Services Digital Network (ISDN)

User Manual References

Not applicable.

Music on Hold

Description

While a party is on hold, music is automatically sent.

Conditions

- Operations such as Call Hold, or Exclusive Call Hold generates Music on Hold. In case of Call Transfer, it is possible to assign either Music or ringback tone is generated.
- The music source is used for Music on Hold and / or BGM. Select a music source for each usage.
- The system has an internal music source. However it may be necessary to connect a user-supplied external music source such as a radio to the system. Up to two music sources can be connected per system. It is required to select the internal or external music source by System Programming.

Installation Manual References

- 2.3.9 External Music Source Connection

Programming Guide References

- [803] Music Source Use
- [990] System Additional Information

Features Guide References

- Background Music (BGM)

User Manual References

Not applicable.

Night Service

Description

This 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 of the Day / Night Mode

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

Class of Service programming determines the extensions that can perform it.

Automatic Night Service:

If you set automatic switching mode, your system will switch the Day / Night mode at the programmed time each day.

Manual Night Service:

Operator and the pre-assigned extension can switch the Day / Night mode manually.

Conditions

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

  [006] Operator / Manager Extension Assignment - Day / Night
  [021]-[022] Doorphone Call Forwarding — Day / Night
  [134]-[135] Hunting Intercept — Day / Night
  [137]-[138] UCD Time Table Assignment — Day / Night
  [151]-[152] ISDN DDI Ringing Assignment — Day / Night
  [407]-[408] DIL 1:1 Extension — Day / Night
  [409]-[410] Intercept Extension — Day / Night
  [420]/[429] ISDN Ring Service Assignment — Day / Night
  [438]-[439] Extension Ringing Assignment — Day / Night for ISDN MSN
  [500]-[501] Toll Restriction Level — Day / Night
  [509]-[510] Toll Restriction for System Speed Dialling — Day / Night
  [603]-[604] DIL 1:N Extension and Delayed Ringing — Day / Night
  [605]-[606] Outgoing Permitted CO Line Assignment — Day / Night
  [607]-[608] Doorphone Ringing Assignment — Day / Night
  [615]-[616] Outgoing Permitted CO Line Assignment — Day / Night for ISDN Extension
  [620]-[621] Extension Intercept Routing — Day / Night
  [629]-[630] Outgoing Permitted CO line Assignment — Day / Night for TD286 Extension

- After switching the service mode manually in Automatic mode the Automatic mode will be changed to the Manual mode.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [102] Day / Night Service Starting Time
- [513] Night Service Access

Features Guide References

None

User Manual References

- 2.7.11 Checking the Day / Night Service Status
- 3.2.2 Day / Night Service
- 4.1.3 Customising the Buttons

No Reply Group

Description

Extensions or ring groups can belong to the no reply group. If the floating number of this group is dialled, the call is hunted in the group in the order of registration at a pre-programmed "Call Forwarding — No Answer Time." If the called extension or ring group is busy, the call skips to the next extension or the ring group. A no reply group can be a Station Hunting type.

Conditions

- Types of calls whose destination can be the no reply group are:

      Outside calls — DIL1:1; DDI, MSN; IRNA;Hunting Group-Overfrow
      Intercom calls — Extension; Transfer

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

Programming Guide References

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

Features Guide References

- Floating Station
- Station Hunting

User Manual References

Not applicable.

Notebook Function

Description

Allows the proprietary telephone user to store the phone number in the memory during conversation on the phone or on-hook status. The stored number is dialled automatically with simple operation.

Conditions

- The outside line, which was connected when the user stored the number is selected when re-dialling the number. If the line is busy, the busy tone is sent.
- The pause, if programmed, can be inserted between the CO line access number and the following phone number (Automatic Pause Insertion).

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 2.4.6 Saving a Number (Notebook Function)

Off-Hook Call Announcement (OHCA)

Description

OHCA 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-T7536.

Conditions

- Class of Service programming determines which extensions can perform this feature.
- 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
- [519] 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)
- 2.4.4 Answering a Call Waiting

Off-Hook Monitor

Description

Allows the speaker-phone proprietary telephone user to let the other users listen to the conversation through the built-in speaker, when the existing call keep using the handset.

Conditions

- This feature is not available for the KX-T7550 and KX-T7250.

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 2.4.8 Letting Other People Listen to the Conversation (Off-Hook Monitor)

One-Touch Dialling

Description

One-Touch Dialling offers the proprietary telephone (PT) user one-touch access to a desired party or system feature. This is enabled by storing a telephone number or a feature number of up to 16-digits on a One-Touch Dialling button. The number of buttons available depends on the type of PT. One-Touch Dialling buttons can be programmed to flexible buttons: CO, DSS or PF (Programmable Feature).

Conditions

- It is possible to store an account code into a 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 code should not be stored on the second button.
- If the Full One-Touch Dialling is enabled, there is no need to go off-hook, before pressing the One-Touch Button.

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

- Full One-Touch Dialling

User Manual References

- 2.2.2 Easy Dialling
- 4.1.2 Initial Settings
- 4.1.3 Customising the Buttons

One-Touch Transfer by DSS Button

Description

This feature, if programmed, allows the Console and the proprietary telephone user to hold an outside call and quickly transfer it to an extension. While talking to an outside party, pressing a DSS button on the console or the proprietary telephone provides automatic hold and transfer. There is no need to press the TRANSFER button. The extension starts ringing immediately.

Conditions

- One-Touch Transfer cannot be performed when there is another call on transfer hold.
- If One-Touch Transfer mode is disabled, the user transfers an outside call by pressing the TRANSFER button followed by the DSS button.

Programming Guide References

- [108] One-Touch Transfer by DSS Button

Features Guide References

- Button, Direct Station Selection (DSS)

User Manual References

- 2.4.3 Transferring a Call

Operator

Description

The system supports up to two operators during day and night modes separately. Any extension can be appointed as an operator. The extension assigned as Operator has the ability to perform the following operations:

- Clearing the password of the Live Call Screening
- Performing the Hotel Application
- Printing / clearing the System Working Report
- Setting / clearing the Remote Station Lock
- Switching the Class of Service - primary / secondary
- Switching the Day / Night mode manually
- Turning on / off the external background music
- Recording / playing outgoing messages

Only Operator 1 has the ability to perform the following operations:

- Setting the Automatic Overflow
- Setting / cancelling the Incoming Call Log Lock
- Setting the Hurry-Up Transfer
- Receiving the Alert Indication
- Receiving an alarm tone from the external sensor
- Receiving the call which is transferred from DND extension

Conditions

- If eXtra Device Port mode is enabled at the operator's extension, the proprietary telephone user is regarded as the operator.
- The operator can be assigned as a destination of the Transfer Recall by System Programming.
- The Direct Dialling In call which is denied to receive by the extension or is dialled improper number is forwarded to the operator.
- The Alert Indication is only available for the operator 1 in Day mode.

Programming Guide References

- [005] Flexible CO Button Assignment
- [006] Operator / Manager Extension Assignment — Day / Night
- [100] Flexible Numbering
- [129] Operator Queue
- [990] System Additional Information

Features Guide References

None

User Manual References

- 4.1.3 Customising the Buttons

Operator Call

Description

Allows the extension user to call an operator extension by dialling the feature number, if at least one operator is assigned. There can be one or two extensions assigned as Operator 1 and 2. When an operator call (default: 9) is made, the call is connected to Operator 1. If the Operator 1's line is busy, the call is connected to Operator 2.

Conditions

None

Programming Guide References

- [006] Operator / Manager Extension Assignment — Day / Night
- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.2.1 Basic Calling

Outgoing Message (OGM)

Description

Allows the extension assigned as an operator to record outgoing voice messages. There are two types of outgoing messages that can be recorded.

UCD (Uniform Call Distribution) message:

If assigned in the UCD Time 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 message:

This message is 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.

After recording these messages, the operator can also play them back for confirmation.

Conditions

• A Message Unit or Card is required to programme the OGM. One unit or card can be installed per system. System Connection[*1] permits two Message Units or Cards.

• If only one system has the Message Unit or Card during System Connection[*2], the UCD message can be activated only in the system which has the unit or card, but the Timed Reminder message can be activated in both systems. If both systems have their own Message Unit or Card, the same UCD or Timed Reminder message is recorded for both simultaneously.

• A maximum of four messages can be recorded per Message Unit or Card, and two messages can be played at the same time.

• To use the Timed Reminder message, the recorded OGM number must be selected by system programming.

Installation Manual References

• 2.4.9 9600bps Speed Remote Unit / Message Unit Installation
• 2.4.10 9600bps Speed Remote Card / Message Card Installation

Programming Guide References

• [216] Outgoing Message Time
• [818] Timed Reminder Message Assignment

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

[*2]   Available for the KX-TD816 only.

Features Guide References

- Timed Reminder
- Uniform Call Distribution (UCD)

User Manual References

- 3.2.4 Recording Outgoing Messages

PAGING FEATURES - SUMMARY

Description

Paging allows you to make a voice announcement to multiple persons 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). It is also possible to deny the page.

Paging features are classified as follows:

Paging - All
Paging - External
Paging - Group

Paging - All

Description

Allows you to make a voice announcement from the speakers of the proprietary telephones and from the external paging devices (external pagers). If one of the paged persons answers your paging, you can talk to the person through the connected line.

Conditions

- If System Connection[1] is established, paging is performed to all proprietary telephones and all external paging devices in both systems.
- The confirmation tone is sent to extensions, when the paging is made or answered. Eliminating the tone is programmable.
- The confirmation tone is sent from external pagers, before the voice announcement. Eliminating the tone is programmable.
- The ringing or busy extension cannot receive a page.

Installation Manual References

- 2.3.8 External Pager (Paging Equipment) Connection

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [805] External Pager Confirmation Tone
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.6 Making / Answering an Announcement
- 2.7.4 Denying the Paged Announcement (Paging — DENY)
- 4.1.3 Customising the Buttons

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[1]   Available for the KX-TD1232 only.

Paging - External

Description

Allows you to make a voice announcement using external paging devices (external pagers). Up to two pagers can be contained per system. It is possible to select one or two pagers to perform your paging. Any telephone user can answer your Paging - External.

Conditions

- Previous connection of an external pager is required.
- External pagers can be used for 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 another higher priority, it is interrupted and starts again when the higher priority is finished.
- The confirmation tone is sent to the extensions and external pager, when the paging is made or answered. Eliminating the tone is programmable.
- The confirmation tone is sent from external pagers before the voice announcement. Eliminating the tone is programmable.

Installation Manual References

- 2.3.8 External Pager (Paging Equipment) Connection

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [805] External Pager Confirmation Tone
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.6 Making / Answering an Announcement
- 2.7.4 Denying the Paged Announcement (Paging — DENY)
- 4.1.3 Customising the Buttons

Paging - Group

Description

Allows you to select an extension group and make a voice announcement. All the proprietary telephones in the group will receive the page. If a member of the paged group answers your paging, you can talk to the person through the connected line.

Conditions

- To select all groups pages all extensions.
- Confirmation tone is sent when the page is made or answered. Eliminating the tone is programmable.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [990] System Additional Information

Features Guide References

- Extension Group

User Manual References

- 2.6 Making / Answering an Announcement
- 2.7.4 Denying the Paged Announcement (Paging — DENY)
- 4.1.3 Customising the Buttons

Parallelled Telephone

Description

The proprietary telephone device can be connected in parallel with a single line telephone (SLT).
When a parallel connection is made, an extension user can make and answer a call using either telephone.

Conditions

- The proprietary telephone (PT) can be used to perform normal operations whether or not the SLT is enabled.
- In the SLT + proprietary telephone (PT) combination, if one telephone goes off-hook while the other telephone is on a call, the call is switched to the former.
- When receiving a call;
  The SLT is enabled; Both the PT and the SLT ring except when the PT is in Handsfree Answerback mode or Voice Alerting mode.
  The SLT is disabled; 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 indicator on the paired PT will show in the same way as if the PT is in operation.
- If eXtra Device Port feature is available, each telephone can act as completely different extension.
- Call Waiting tone can be heard only PT.

Installation Manual References

- 2.3.4 Parallelled Telephone Connection for a Proprietary Telephone and a Single Line Telephone

Programming Guide References

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

Features Guide References

- EXtra Device Port (XDP)

User Manual References

- 2.7.12 Setting the Parallel Connected Telephone Ringer (Parallelled Telephone)
- 4.1.3 Customising the Buttons

Phantom Extension

Description

Allows the system to route the calls to a phantom extension. A call to a phantom extension is sent to an extension who has the corresponding Phantom button. A Phantom button can be assigned by Station Programming.

Conditions

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

   Outside calls —DIL 1:1; DDI; MSN; IRNA; Hunting Group-Overflow
   Intercom calls —Extension; Transfer

- You can call the phantom extension by pressing the Phantom button or by dialling the phantom extension number. If several extensions have the same phantom extension button, they will ring simultaneously.
- A phantom number must be assigned by System Programming before assigning the Phantom 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 button are shown below.

Lighting pattern	Phantom Extension Status
Off	Idle
Red on	Calling a phantom extension
Flashing green rapidly[1]	Incoming call

[1] This lighting pattern is available only if the phantom button is assigned to the CO button.

- A DSS button can be assigned as the Phantom button so that the operator can use the button for transferring a call.

Programming Guide References

- [005] Flexible CO Button Assignment
- [130] Phantom Extension Number Assignment

Features Guide References

None

User Manual References

- 2.2.2 Easy Dialling
- 4.1.3 Customising the Buttons

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, replace a rotary dial telephone to the telephone with the "#" button temporarily.
- The user uses a feature number to enable or disable pickup dialling.
- If the feature is enabled and the user goes off-hook, dial tone is generated for the 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.

Programming Guide References

- [005] Flexible CO Button Assignment
- [100] Flexible Numbering
- [204] Pickup Dial Waiting Time

Features Guide References

None

User Manual References

- 2.2.2 Easy Dialling
- 4.1.3 Customising the Buttons

Power Failure Restart

Description

Returning on electricity, the system restarts the stored data automatically. Before restarting, the system records the error logs if necessary.

Conditions

- If System Connection[1] is established, the Slave system makes a copy of the restored data of the Master system.
- In the event of a power failure, system memory is protected by the factory-provided lithium battery. There is no memory loss except the memories of Camp-On and Call Park. However if the system finds the wrong system data, the indication "System Data Err" is displayed on the display proprietary telephone of Operator 1.

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

Not applicable.

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[1] Available for the KX-TD1232 only.

Predial

Description

Allows the display proprietary telephone user to check and correct the dialled number in on-hook state before going off-hook. When going off-hook, making a call is initiated.

Conditions

- This feature is available during stand-by state only.
- A line access number is always required to make an outgoing outside call.
- Making a call is performed at the time the handset is lifted up or the CO or SP-PHONE button is pressed.

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 2.2.1 Basic Calling

Privacy, Automatic

Description

By default all conversations established on CO lines, extension lines, and doorphone lines have privacy enabled.

Conditions

Automatic privacy may be temporarily released for a three-party conference, which is established by Executive Busy Override.

Programming Guide References

System programming is not required.

Features Guide References

- Executive Busy Override - CO Line
- Executive Busy Override - Extension

User Manual References

Not applicable.

Private Call

Description

Allows the user to exclude private calls from the SMDR printout. When making a private call, if the user enters the pre-set account code, the dialled number is not included in the SMDR printout.

Conditions

- It is required to program the account code for private calls in program [105] "Account Code." The location 001 of the entries is used as the account code for this feature.
- To prevent private calls, clear the entry above.

Programming Guide References

- [105] Account Codes

Features Guide References

- Account Code Entry
- Station Message Detail Recording (SMDR)

User Manual References

- 2.2.5 Calling without Restrictions
- 4.1.4 Charge Fee Management [Pre-assigned extension only]

Quick Dialling

Description

Quick Dialling offers the extension user one-touch access to a desired party. This is enabled by storing an extension number or a telephone number up to 24 digits as a quick dial number.

Conditions

- Up to eighty quick dial numbers can be stored.
- For example, Quick Dialling is convenient for the following.
  - **a)** Room service call in a hotel.
  - **b)** Storing the CO line access code and the emergency number executes the Emergency Call without pressing a CO button or dialling a line access code. In this case, you can override the dial restriction.
- You must assign a feature number first in programme [104] "Quick Dial Assignment," and then a quick dial number in programme [009] "Quick Dial Number Set" in order for Quick Dial to be effective.
  Example: If you want to dial "5" to call extension 201;
  - **a)** Change or clear the feature numbers which have "5" in the first digit in programme [100].
  - **b)** Assign "5" in the location number 01 in programme [104].
  - **c)** Assign "201" in a quick dial location number 01 (same location number as the location number 01 in programme [104]) in programme [009].

  Now you can dial the quick dial number 5 to call extension 201.
- Quick Dialling is available even if the toll restriction level is 6 which denies the intercom callings.

Programming Guide References

- [009] Quick Dial Number Set
- [104] Quick Dial Assignment

Features Guide References

None

User Manual References

- 2.2.2 Easy Dialling

Redial, Automatic

Description

This is a special feature for the proprietary telephones, that provides automatic redialling of the last dialled, saved number or call log, if the called party is busy. If the Last Number Redial, Saved Number Redial, Call Log operation or Notebook function is performed handsfree, the telephone set will hang up and try again after a pre-determined period of time.

Conditions

- Redial Repeat Time and Interval Time can be changed by System Programming.
- Pressing Terminate button allows the system to cancel this feature.
- If any dialling operation is done during Automatic Redial, this function is finished.

Programming Guide References

- [209] Automatic Redial Repeat Times
- [210] Automatic Redial Interval Time

Features Guide References

- Call Log, Incoming
- Notebook Function
- Redial, Saved Number
- Redial, Last Number
- Special Display Features (Call Log, Outgoing)

User Manual References

- 2.2.3 Redial

Redial, Last Number

Description

Every telephone in the system automatically saves the last telephone number dialled to a CO line and allows the extension user to dial the same number again.

Conditions

- With a proprietary telephone, REDIAL button is used to carry out Last Number Redial. With a single line telephone, the feature number is used.
- The memorised telephone number is replaced by a new one if at least one digit to be sent to a CO line is dialled. Dialling a CO line access code alone does not change the memorized number.
- Proprietary telephones allows multiple redialling automatically (Automatic Redial).

Programming Guide References

- [100] Flexible Numbering

Features Guide References

- Redial, Automatic

User Manual References

- 2.2.3 Redial

Redial, Saved Number

Description

Allows the proprietary telephone user to save a telephone number and redial the number afterwards. The user can store it while in conversation on a CO line. The saved number can be redialled many times until another one is stored.

Conditions

- Proprietary telephones (PT) allow automatic multiple redialling (Automatic Redial).
- If the SAVE button is not provided on your PT, it is possible to assign a flexible button to be the SAVE button.

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

- Redial, Automatic

User Manual References

- 2.2.3 Redial
- 4.1.3 Customising the Buttons

Remote Station Lock Control

Description

Operator is given the privilege of controlling Electronic Station Lockout on any station.

Conditions

The new setting is superior to the old one. If Station Lockout has already been set by the extension user and Remote Station Lock is set by Operator, canceling the lock is only possible by Operator.

Programming Guide References

System programming is not required.

Features Guide References

- Electronic Station Lockout

User Manual References

- 3.1.2 Changing the Settings

Ring Group

Description

By dialling the floating number of a hunting group, all extensions in the ring group ring simultaneously.
A ring group can be a Station Hunting type.

Conditions

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

    Outside calls — DIL 1:1; DDI; MSN; IRNA; Hunting Group-Overflow
    Intercom calls — Extension; Transfer

- The floating number of the hunting group is used for all other hunting types, Circular, Voice Mail (VM), Automated Attendant (AA), Uniform Call Distribution (UCD) and No Reply.

Programming Guide References

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

Features Guide References

- Floating Station
- Station Hunting

User Manual References

Not applicable.

Ringing Tone Selection for CO Buttons

Description

Allows the proprietary telephone user to select the desired ringer frequency for each CO button. This provides discrimination of 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 Tone Selection for the INTERCOM Button

Description

Allows the digital proprietary telephone user to select the desired ringer frequency for the intercom button. This distinguishes incoming intercom calls.

Conditions

There are eight ringer frequencies available. One of them can be assigned to an intercom button.

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 4.1.3 Customising the Buttons

Ringing, Delayed

Description

If Direct In Lines (DIL) 1:N is established, a telephone set is originally set to ring instantly. This setting can be changed to delayed ringing, no ringing or no incoming call (disable) on a CO line basis.

Conditions

- This feature does not apply to DIL 1:1 calls.
- If delayed, no ringing or no incoming call (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

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

Features Guide References

- Direct In Lines (DIL)

User Manual References

Not applicable.

Ringing, Discriminating

Description

Allows the extension user to identify the incoming call by the ringing pattern. (See Section 5.1 "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) Transfer 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

- 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 calls can be identified by ringing signals sent out from external pagers or ringer. The ringing pattern is the same as the outside calls.

- The digital PT user can select a desired tone frequency for each CO and the INTERCOM button.

Programming Guide References

System programming is not required.

Features Guide References

- Ringing Tone Selection for CO Buttons
- Ringing Tone Selection for the INTERCOM Button

User Manual References

Not applicable.

Secret Dialling

Description

Allows an extension user to conceal all or part of a registered telephone number that normally appears on the display during System Speed Dialling or One-Touch Dialling. Numbers can be assigned to Programmable Feature buttons on PT and Console. When a display telephone user makes a call to the telephone number that is set to Secret Dialling, all or part of the number does not appear on the display. Additionally, KX-T7531, KX-T7533, KX-T7536 and KX-T7235 are capable of Secret Dialling for "Station Speed Dialling" numbers.

Conditions

- When storing a number, press the INTERCOM button at the beginning and the end of the number to be concealed.
- You can conceal one or more parts of a telephone number.
- The concealed part will be printed out by SMDR.

Programming Guide References

- [001] System Speed Dialing Number Set
- [990] System Additional Information

Features Guide References

- One-Touch Dialling
- Special Display Features (System Speed Dialling)
- Special Display Features (Station Speed Dialling)

User Manual References

- 2.9.4 Using the KX-T7531, KX-T7533, KX-T7536 or KX-T7235
- 4.1.3 Customising the Buttons

Special Display Features

Description

The KX-T7531, KX-T7533, KX-T7536 and KX-T7235 feature a display that allows the user to originate calls or to access system facilities with ease. The display prompts the user with information related to the desired feature. Examples of this special function are shown below:

Special Display Features (Call Log, Outgoing)

Special Display Features (Extension Dialling)

Hotel Application (operator only) ($\rightarrow$ See the "HOTEL APPLICATION.")

Special Display Features (Station Speed Dialling)

Special Display Features (System Feature Access Menu)

Special Display Features (System Speed Dialling)

Special Display Features (Call Log, Outgoing)

Description

Provides a KX-T7536 and KX-T7235 display of the last 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

System programming is not required.

Features Guide References

None

User Manual References

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

Special Display Features (Extension Dialling)

Description

Provides a display of extension names and numbers. The user can call an extension by pressing the associated function button.

Conditions

System Programming of extension numbers and names is required.

Programming Guide References

- [003] Extension Number Set
- [004] Extension Name Set
- [012] ISDN Extension Number Set
- [013] ISDN Extension Name Set
- [100] Flexible Numbering

Features Guide References

None

User Manual References

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

Special Display Features (Station Speed Dialling)

Description

A list of the names and telephone numbers stored for One-Touch Dialling is displayed allowing the user to make a one-touch call by name without having to know the number.

Conditions

- It is necessary to program One-Touch Dialling Numbers and Names into the 10 function buttons F1 through F10.
- It is programmable to select the first display, number or name.

Programming Guide References

- [990] System Additional Information

Features Guide References

- One-Touch Dialling

User Manual References

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

Special Display Features (System Feature Access Menu)

Description

This feature provides a 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)
  Do Not Disturb (set / cancel)
  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
  Call Park
  Class of Service (primary / secondary)
  Night Service (pre-assigned extension also)

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

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

Special Display Features (System Speed Dialling)

Description

A list of the names stored for System Speed Dialling is displayed. This allows the user to dial by name without having to know the telephone number. All the user needs to do is pressing the button associated with the desired name.

Conditions

- The numbers and names for System Speed Dialling must be programmed.
- If a name is not stored for a number, it is not displayed and cannot be called with this feature.

Programming Guide References

- [001] System Speed Dialing Number Set
- [002] System Speed Dialling Name Set

Features Guide References

- Special Display Features (System Speed Dialling)

User Manual References

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

Station Feature 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
    Automatic Callback Busy (Camp-On)
    Background Music that has been turned on
    Call Forwarding
    Call Log, Incoming - Over-stored mode
    Call Pickup Deny
    Call Waiting enabled
    Calling Line Identification Restriction (CLIR)
    Connected Line Identification Restriction (COLR)
    Do Not Disturb (DND)
    Executive Busy Override Deny
    External Ringer
    Log-Out Status
    Message Waiting - All the messages that have been left by other extension users
    Paging Deny
    Parallelled Telephone enabled
    Pickup Dialling
    Timed Reminder

Conditions

None

Programming Guide References

- [100] Flexible Numbering

Features Guide References

None

User Manual References

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

Station Hunting

Description

If a call reaches a floating number of a hunting group, Station Hunting redirects the incoming call to an idle member of the hunting group. There are a maximum of 32 hunting groups. Idle extensions are automatically hunted according to the programmed type. There are six hunting types available - Circular, UCD (Uniform Call Distribution), Voice Mail (VM), Automated Attendant (AA), Ring and No Reply.

Circular hunting:

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

UCD:

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

AA hunting:

All of the AA ports are hunted until an idle one is found to permit AA Service.

VM hunting:

All of the VM ports are hunted until an idle one is found to permit VM Service.

Ring:

All of the extensions in the group ring simultaneously.

No Reply hunting:

The extensions are hunted in the order of registration at a programmed "Call Forwarding — No Answer" time. If the called extension is busy, the call hunts the following extensions.

One hunting type is selected for each hunting group. The hunting order corresponds to the order of registration in programme [131]. For VM/AA Hunting, an incoming call to any extension number which belongs to a hunting group is hunted as well.

Hunting Type Incoming Call Arrives at	Circular	VM/ AA	UCD	Ring	No Reply
Floating Extension	✔	✔	✔	✔	✔
Extension which belongs to a hunting group		✔			

✔: A call is hunted.

Conditions

• Even if the called extension has set Do Not Disturb, or Call Forwarding, they are disregarded and the call reaches the extension.

Programming Guide References

- [106] Station Hunting Type
- [131] Hunting Group Assignment
- [132] Hunting Group Name Assignment
- [133] Hunting Overflow
- [134-135] Hunting Intercept — Day / Night

Features Guide References

- Hunting Group
- Log-In / Log-Out
- Uniform Call Distribution (UCD)
- No Reply Group
- Ring Group

User Manual References

Not applicable.

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 and charge fee as well as print a hard copy of the System Programming. To print the record of System Programming items that have been assigned, use the programme [802] System Data Printout. To print the charge fee, use the Station Programming. To print the call records, use the programme [800] SMDR Incoming / Outgoing Call Log Printout, which allows you to print out the following records:

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

An example of printed call records:

Date	Time	Ext	Dpt	CO	Dial Number	Ring	Duration	Cost:$	Acc Code	CD
24.03.94	10:03	201	12345	01	12345678901234567	0'56	00:05'12	00007. 00$	12345	
24.03.94	10:07	203	00001	20	<K>111222333	0'56	00:00'56	00000. 00$		
24.03.94	10:08	204	10	10	<K>111444555	0'04	00:00'20	00000. 00$	43121	
24.03.94	10:08	205		10	<K>MARY WARD		00:10'01	00000. 00$	43212	V
24.03.94	10:09	228		14	10222P1-202-346-7		00:09'18	00011. 28$	001	W
24.03.94	10:20	2103		13	<K>1022330		00:21'46	00000. 00$		F
24.03.94	13:01	201	12345	02	<Private>		00:10'54	00012. 48$	11111	
24.03.94	14:52	209	12345	02			00:03'02	00017	11111	
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
(1)	(2)	(3)	(4)	(5)	(6)	(11)	(7)	(8)	(9)	(10)

Example of SMDR printout format:

Explanation

1. Date : shows the date of the call as Day / Month / Year.
2. Time : shows the end time of a call as Hour:Minute.
3. Ext : shows the extension number, floating number, etc. that engaged in a call.
4. Dpt : shows the department code appended to the call.
5. Co : shows the CO line number used for the call.
6. Dial Number

   Outgoing call: shows the other party's telephone number (maximum 22 digits). Valid digits are 0 through 9, $\ast$, #, P (if PAUSE button is pressed), – (if a hyphen is entered) or the mark "=" (if a Host PBX access code is entered).

   Received call: shows <K> which indicates 'Incoming,' and if the Caller ID is available, the calling party's name or number (maximum 14 digits) is shown.
7. Duration : shows the duration of the call as Hours / Minutes / Seconds.

8. Cost : shows the amount of charge fee; Unit or DM.

9. Acc Code : shows the account code appended to the call.
   If the Private Call is made, "11111" is shown as a code.

10. CD : shows the condition code.

   T : Transfer
   F : Call Forwarding to CO line
   M : Remote Maintenance (MODEM)[*1]
   R : Receive an incoming call
   A : Answer an incoming call
   N : No answer an incoming call
   D : Doorphone Call Forwarding to CO line

11. Ring: shows the ring duration of the incoming call as Minutes / Seconds.

Conditions

- When programmed for outgoing toll calls only, printing occurs only for calls which start with the numbers stored in any Denied Code Table from levels 2 to 6.
- This system can store information on up to 100 calls. If more calls are initiated or received, stored records are deleted starting from the oldest one.
- It is possible to select the SMDR format, page length, skip perforation and page width. If 80 characters for page width is selected, the last five digits of account codes are not printed out.
- This data is not deleted when you reset the system.
- "**8.** Cost" is printed out in the format selected in programme [117] "Charge Display Selection."
- It is programmable to enable or disable the printout of secret dial numbers.
- If the account code stored in location 001 of the programming table is dialled, the dialled number is not printed out to SMDR (Private Call). Refer to the seven and eight lines on an example of printed call records.
- When the paper of the printer runs out or the printer is out-of-service, the indication "Check Printer" is displayed on the telephone of Operator 1.

Installation Manual References

- 2.3.10 Printer Connection

Programming Guide References

- [000] Date and Time Set
- [800] SMDR Incoming / Outgoing Call Log Printout
- [801] SMDR Format
- [802] System Data Printout
- [806-807] Serial Interface (RS-232C) Parameters — Port 1 / Port 2
- [990] System Additional Information

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

Features Guide References

- Charge Fee Reference

User Manual References

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

Station Programming

Description

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

For any PT,
- Call Waiting Tone Type Assignment
- Flexible Button Assignment
- Full One-Touch Dialling Assignment
- Handset / Headset Selection
- Intercom Alerting Assignment
- Key Click Tone On / Off Assignment
- Preferred Line Assignment - Incoming / Outgoing
- Ringing Tone Selection for CO Buttons
- Station Programming Data Default Set

For display PT,
- Charge Fee Reference
- Self-Extension Number Confirmation

For large digital display PT (KX-T7531, KX-T7533, KX-T7536 and KX-T7235 only),
- Station Speed Dialling Number / Name Assignment

For Operator extension PT only,
- Remote Station Lock Control
- Live Call Screening Password Control

For Operator 1 extension PT only,
- Call Log Lock Control, Incoming

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.

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

- 3.1.2 Changing the Settings

Station Programming Data Default Set

Description

Allows the proprietary telephone user to return all the following items programmed on the telephone to default setting.

Programming Items	Default
Call Waiting Tone Type Assignment	Tone 1
Full One-Touch Dialling Assignment	On
Handset / Headset Selection	Handset
Intercom Alerting Assignment	Tone Call
Key Click Tone Assignment	On
Preferred Line Assignment - Incoming	Ringing Line
Preferred Line Assignment - Outgoing	Intercom Line

Station Programming is used to set or cancel these items at individual telephones.

Conditions

None

Programming Guide References

System programming is not required.

Features Guide References

• Station Programming

User Manual References

• 4.1.2 Initial Settings

Station Speed Dialling

Description

Allows an extension user to store frequently dialled numbers in order to place a call with abbreviated dialling. It is performed by dialling the feature number and a speed dial number from 0 through 9. Up to 10 numbers can be stored for each telephone.

Conditions

• 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 (SLT) may be replaced to a proprietary telephone (PT) temporarily to store one-touch dialling into memory. The Function Buttons F1 through F10 are corresponded to speed dial numbers as follows:

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

Programming Guide References

• [100] Flexible Numbering

Features Guide References

• One-Touch Dialling

User Manual References

• 2.2.2 Easy Dialling

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, CO lines and so on. Two connected systems are called the master and the slave systems.
A maximum capacity of the system is as follows:

Item	Maximum Quantity (Single System)	Maximum Quantity (System Connection)
ISDN S0 Line	6	12
Extension Jack	32	64
Console	8	16
Doorphone	1	2
Door Opener	2	4
External Pager	2	4
External Relay	1	2
External Ringer	1	2
External Sensor	1	2
Music Source	2	4

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); EIA (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 by programming.

Installation Manual References

- 2.4.11 System Connection

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*1   Available for the KX-TD1232 only.

Programming Guide References

- [115] Adjust Time

Features Guide References

None

User Manual References

Not applicable.

System Data Default Set

Description

This system permits re-initialisation of system-programmed data. If all the programmed data is cleared, the system will restart with the default setting.

Conditions

The default setting for each programming item is listed in Section 5.2, Default Values.

Installation Manual References

- 2.7.1 System Data Clear

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

Not applicable.

System Programming and Diagnosis with Personal Computer

Description

This system can be programmed and administered using a personal computer. EIA / Remote Programming & Diagnosis Manual and its floppy is required to perform this feature. There are two programming methods:

On-Site Programming

By connecting a personal computer (PC) to your system, system programming and maintenance[1] can be performed locally. There are two ways available to perform the above:
(Method 1.) Using the Serial Interface (RS-232C) port Connect the PC to the Serial Interface (RS-232C) port provided. The main unit has a Serial Interface (RS-232C) port which can be used for either system administration or SMDR.
(Method 2.) Using a modem[2]
Install the optional Remote Card or Unit. Connect the PC to an extension jack. Assign the floating number of the modem in System Programming. Dial this number from the PC.

Remote Programming [3]

You can perform system programming and maintenance from a remote site using a PC. Install the Remote Card / Unit and assign the floating number of the modem in System Programming. 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.
* Assign the modem as the destination of the DIL 1:1 feature.

Conditions

* A proprietary telephone can be used to perform System Programming.
* Only one access is allowed to System Programming at any one time.
* To access system administration, a valid password must be entered. The password is factory-programmed and can be changed.
* System administration can be performed on-line except for the procedures of diagnosis.

Installation Manual References

* 2.4.8 Remote Card Installation
* 2.4.9 9600bps Speed Remote Unit / Message Unit Installation
* 2.4.10 9600bps Speed Remote Card / Message Card Installation

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

Programming Guide References

- [107] System Password
- [813] Floating Number Assignment
- [814] Modem Standard

Features Guide References

None

User Manual References

Not applicable.

System Programming with Proprietary Telephone

Description

This system can be programmed with a personal computer or a proprietary telephone (PT). Proprietary telephones available for System Programming are: KX-T7531; KX-T7533; KX-T7536; KX-T7230 and KX-T7235.
Two extensions are allowed to perform System Programming. The extensions available are:

    a) An extension that is connected to jack 01.

    b) An extension that is assigned as a manager.

For more information and programming instructions, refer to Section 4, "System Programming."

Conditions

- During System Programming the system operates normally.
- During System Programming the extension is considered to be busy.
- The display on the PT permits interactive programming.
- Only one access is allowed to System Programming at any one time.
- To access system administration, a valid password must be entered. The password is factory-programmed and can be changed.
- A personal computer can be used to perform System Programming.

Programming Guide References

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

Features Guide References

None

User Manual References

Not applicable.

System Speed Dialling

Description

This feature supports 500 abbreviated dial numbers available to all users. A system speed dial number is dialled out by pressing the AUTO button and a 3-digit code (000 through 499). It is possible to store two hundred 24-digit telephone numbers per system (maximum).

Conditions

[For proprietary telephone users only]

- Speed Dialling, One-Touch Dialling, manual dialling, Last Number Redial and Saved Number Redial can be used in combination.

[For single line telephone users only]

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

Programming Guide References

- [001] System Speed Dialing Number Set
- [002] System Speed Dialling Name Set
- [100] Flexible Numbering
- [509-510] Toll Restriction Level for System Speed Dialling – Day/Night

Features Guide References

- Toll Restriction Override for System Speed Dialling

User Manual References

- 2.2.2 Easy Dialling

System Working Report

Description

The Digital Super Hybrid System automatically records the system's working state. A printer connected to the EIA (RS-232C) port can be used to print the recorded data.

Recorded contents are as follows:

a) Date of record
  - The date and time when cleared.
  - The date and time when printed out.

b) Incoming calls
  - The number of incoming calls
  - The number of answered incoming calls
  - The ratio of the answered calls to the incoming calls

$$\frac{\text{Number of answered calls}}{\text{Number of incoming calls}} \times 100(\%)$$

  - The average time from receipt of call to answer of the incoming and answered calls.
  - The average duration time of talk of the answered calls.

c) Outgoing calls
  - The number of access requested
  - The number of access succeeded
  - The ratio of access succeeded

$$\frac{\text{Number of access succeeded}}{\text{Number of access requested}} \times 100(\%)$$

  - The average duration of the dialled calls

These records can be deleted by the manager and the operator, and new data will be recorded thereafter.

Conditions

Connect a printer provided with and EIA (RS-232C) connector located on the main unit. After connecting a printer, do not press the RETURN key, if provided on the printer, in 10 seconds.

Installation Manual References

  - 2.3.10 Printer Connection

Programming Guide References

  - [100] Flexible Numbering
  - [806-807] Serial Interface (RS-232C) Parameters — Port 1 / Port 2

Features Guide References

- Station Message Detail Recording (SMDR)

User Manual References

- 3.2.7 Printing the System Working Report

Terminate

Description

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

Conditions

- Pressing the Terminate button disconnects the conversation, outputs an SMDR record, and get an internal dial tone.
- The proprietary telephone is provided with no Terminate button originally. However a flexible CO button can be assigned as the Terminate button either by System or Station Programming.

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

None

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

Time-Out, Variable

Description

Provides timers to control various features or functions.
The following timers are programmable:

System Timer Items	Range
Automatic Redial Interval Time	60 - 1200s
Automatic Redial Repeated Times	1 - 12 times
Call Forwarding - No Answer Time-Out	1 - 12 rings
Doorphone-to-CO Line Call Duration Time	0 - 300 s
External Relay Time	0 - 99 s
Hold Recall Time	0 - 240 s
Intercept Routing Time-Out	3 - 48 rings
Message Waiting Ring Interval Time	0 - 64 min
Pickup Dialling Waiting Time	1 - 8 s
SMDR Duration Count Starting Time	0 - 60 s
Timed Reminder Alarm Ring Time	30 - 240 s
Toll Restriction First Digit Time-Out	5 - 120 s
Toll Restriction Inter-digit Time-Out	5 - 30 s
Transfer Recall Time	3 - 48 rings

Extension Timer Items	
Delayed Ringing Count	Disable / Immediate / 1 / 3 / 6 rings / No ring

Voice Mail Integration Timer Items	
DTMF Signal Duration	80 / 160 ms
DTMF Signal Waiting Time after VPS Answer	0.5 / 1.0 / 1.5 / 2.0 s
DTMF Signal Waiting Time after VPS calls Extension	0.5 / 1.0 / 1.5 / 2.0 s

Conditions

None

Programming Guide References

- [200] Hold Recall Time
- [201] Transfer Recall Time
- [202] Call Forwarding – No Answer Time
- [203] Intercept Time
- [204] Pickup Dial Waiting Time
- [207] (Reserved for future use.) First Digit Time
- [208] Inter Digit Time
- [209] Automatic Redial Repeat Times
- [210] Automatic Redial Interval Time
- [213] External Relay Connecting Time
- [214] Message Waiting Ring Interval Time
- [216] Outgoing Message Time
- [217] Timed Reminder Alarm Ring Time
- [218] Doorphone-to-CO Line Call Duration Time
- [603-604] DIL 1:N Extension and Delayed Ringing — Day / Night
- [990] System Additional Information

Features Guide References

None

User Manual References

Not applicable.

Timed Reminder

Description

Each telephone can be set to generate an alarm ringing at a preset time as a wake up or reminder. This feature can be programmed to be active only once or every day. With the optional unit or card, a voice message can be recorded for this feature.

Conditions

- Be sure that the system clock works.
- Setting a new time clears the preset time when either the operator or the extension set the time.
- The alarm continues for a programmed period of time (default: 30 seconds). To stop it, lift the handset or, with a proprietary telephone, press any button.
- To use a voice message, the optional Message Unit or Card is required.
- A voice message can be recorded by the operator (OGM: Outgoing Message) and then the OGM number must be selected by the programme [818] "Timed Reminder Message Assignment." When the user goes off-hook during the alarm, a pre-recorded voice message is sent.
- If the displayed language is assigned to German in the [101] Language Assignment Programme, Time Announce is sent when the user goes off-hook or sets the time, but if another language is assigned, the dial tone 3 or confirmation tone is sent.

Installation Manual References

- 2.4.9 9600bps Speed Remote Unit / Message Unit Installation
- 2.4.10 9600bps Speed Remote Card / Message Card Installation

Programming Guide References

- [100] Flexible Numbering
- [101] Language Assignment
- [217] Timed Reminder Alarm Ring Time
- [818] Timed Reminder Message Assignment

Features Guide References

- HOTEL APPLICATION (Timed Reminder, Remote -Wake-Up Call)
- Outgoing Message (OGM)

User Manual References

- 2.7.1 Setting the Alarm (Timed Reminder)

Toll Restriction

Description

Toll Restriction is 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 seven digits of the dialled number (not including the line access code) are not found in the table, the call is made. There are five system 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 of which consisting of seven digits.

Excepted Code Tables

These tables are used to override a programmed denied code. A call denied by the selected Denied Code Tables is checked against the selected Excepted Code Tables, 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 programming 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 20 excepted codes, each of which consisting of seven digits.
Applicable Denied and Excepted Code Tables depend on the assigned toll restriction level of an extension as follows:

Level	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	Denied Code Tables	Excepted Code Tables
Level 5	Tables for Levels 2 to 5	Tables for Levels 5 through 6
Level 6	Tables for Levels 2 to 6	Tables for Level 6
Level 7	None	None
Level 8	None	None

[Explanation]

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

Example of Toll Restriction programming

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

1. Determining the application

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

[Entry Example]

Level	Denied Code	Excepted Code
2	011	None
3	011 976 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 130

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	130
:	
20	

[Explanation]

If your Toll Restriction Level is 6;

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

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

Flow Chart of
Toll Restriction

```
                    ┌─────────────────────────────┐
                    │ The user makes a toll call.  │
                    └─────────────────────────────┘
                                   │
                                   ▼
                    ┌─────────────────────────────┐   Yes
                    │ Is the call made by System   │──────────┐
                    │ Speed Dialling ?             │          │
                    └─────────────────────────────┘          ▼
                            │                        ┌─────────────────────────┐
                            No                       │ Check the level for     │
                            │                        │ System Speed Dialling.  │
                            ▼                        └─────────────────────────┘
```

Levels 7, 8   What is the extension – toll   Level 1
                             restriction level?

                             Levels 2, 3, 4, 5, 6

```
                    ┌─────────────────────────────┐   No
                    │ Is the dialled number found  │──────────────────┐
                    │ in applicable Denied Code    │                  │
                    │ Tables?                      │                  │
                    └─────────────────────────────┘                  │
                            │                                         │
                            Yes                                       │
                            │                                         │
                            ▼                                         │
                    ┌─────────────────────────────┐   Yes            │
                    │ Is the dialled number found  │──────────────── │
                    │ in applicable Excepted Code  │                  │
                    │ Tables?                      │                  │
                    └─────────────────────────────┘                  │
                            │                                         │
                            No                                        │
                            │                                         │
                            ▼                                         ▼
                    ┌─────────────────────────────┐        ┌──────────────────────┐
                    │ The call is denied. Reorder  │        │ The call is allowed. │
                    │ Tone is returned to the user.│        └──────────────────────┘
                    └─────────────────────────────┘
```

Conditions

- Toll restriction checks are applied to the following:
  - **a)** Account Code Entry
  - **b)** Dial Access, Automatic

c) Line Access, CO Line Group

d) Line Access, Individual

- If a stored Host PBX access code is found in the dialled number, a toll restriction check starts for succeeding telephone number.

- Toll restriction for System Speed Dialling can be assigned in the Class of Service setting.

- 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 Offices' exchange system.

- It is programmable to admit the press of the RECALL button, during an outside call on the extensions in Levels 7 and 8.

Programming Guide References

- [207] (Reserved for future use.) First Digit Time
- [208] Inter Digit Time
- [301-305] TRS Denied Code Entry for Levels 2 through 6
- [306-310] TRS Excepted Code Entry for Levels 2 through 6
- [311] Emergency Dial Number Set
- [500-501] Toll Restriction Level — Day / Night
- [509-510] Toll Restriction Level for System Speed Dialling – Day/Night

Features Guide References

- Toll Restriction Override by Account Code Entry
- Toll Restriction Override for System Speed Dialling

User Manual References

Not applicable.

Toll Restriction Override by Account Code Entry

Description

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

Conditions

- The toll restriction level of the user is changed to level 2 by this feature. Thus this can be used by extension users assigned a toll restriction level from 3 through 8. The levels 1 and 2 are not changed.
- A Class of Service which is assigned Account Code Entry - Verified Toll Restriction Override permits the class members to override their toll restrictions.
- Up to 40 account codes can be programmed for Verified Account code operation. These are used for Toll Restriction Override.
- If the user does not enter any account code or enters an invalid account code, an ordinary toll restriction check is done.

Flow Chart of TRS Override by Account Code Entry

Programming Guide References

- [100] Flexible Numbering
- [508] Account Code Entry Mode

Features Guide References

- Account Code Entry
- Toll Restriction

User Manual References

Not applicable.

Toll Restriction Override for System Speed Dialling

Description

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

Conditions

Same as the conditions of Toll Restriction feature except that the data for System Speed Dialling are used as the toll restriction levels.

Programming Guide References

- [001] System Speed Dialing Number Set
- [100] Flexible Numbering
- [509-510] Toll Restriction Level for System Speed Dialling – Day/Night

Features Guide References

- Station Speed Dialling
- Toll Restriction

User Manual References

Not applicable.

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

Description

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

Conditions

- Connect a user-supplied external device (pager or ringer).
- Two pagers can be installed per system. One external ringer can be installed per system.
- Floating numbers of devices are programmable.
- TAFAS can be used in the following cases:

   a) The floating number of an external device is assigned as the DIL 1:1 destination. In this case all the incoming calls on the specified line will be signaled.

   b) The floating number of an external device is assigned as the Intercept Routing destination. In this case incoming calls redirected to the destination will be signaled.

   c) The floating number of an external device is assigned as the Direct Dialling In destination.

- Confirmation tone is sent to the user before being connected to the caller. Eliminating the tone is programmable.

Installation Manual References

- 2.3.7 External Relay, External Ringer and External Sensor Connection
- 2.3.8 External Pager (Paging Equipment) Connection

Programming Guide References

- [100] Flexible Numbering
- [418] External Ringer Assignment
- [805] External Pager Confirmation Tone
- [813] Floating Number Assignment
- [990] System Additional Information

Features Guide References

- External Ringer
- Paging - External

User Manual References

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

Two-Way Recording into Voice Mail[*1]

Description

Allows the proprietary telephone user to record the conversation into one's mailbox or another mailbox, while talking on the phone.

Note

When you record Two-Way telephone conversations, you should inform the other party that the conversation is being recorded.

Conditions

- A flexible CO and DSS button can be assigned as a Two-Way Record button or a Two-Way Transfer button.
- When all the voice mail ports are busy, pressing the Two-Way Record button sends an alarm tone.
- When all the voice mail ports are busy, pressing the Two-Way Transfer button followed by an extension number sends an alarm tone.

Programming Guide References

- [005] Flexible CO Button Assignment

Features Guide References

None

User Manual References

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

[*1]   Available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration; e.g. KX-TVP100).
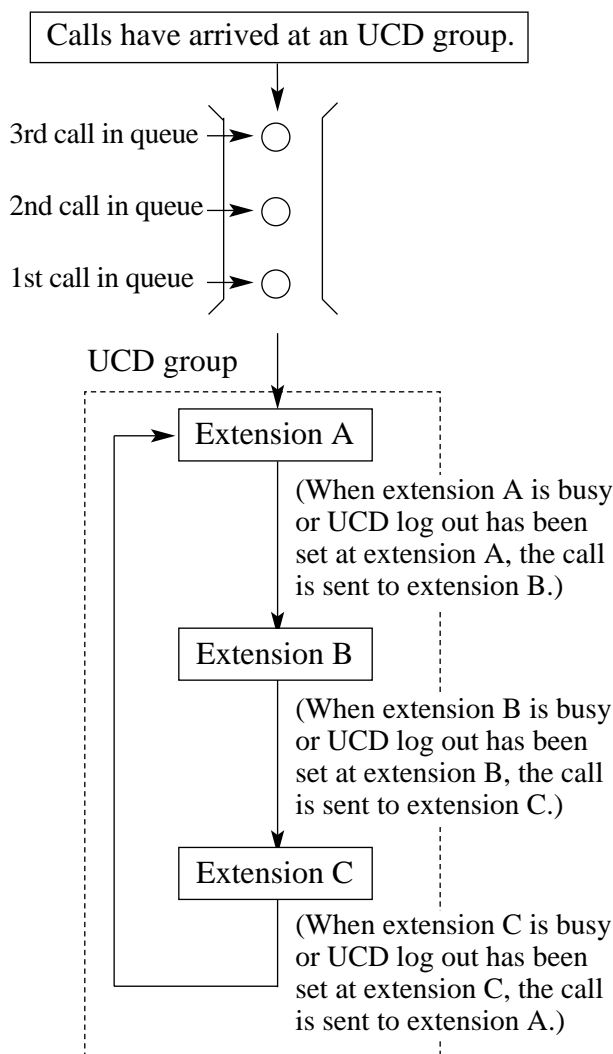
Uniform Call Distribution (UCD)

Description

Allows incoming calls to be distributed uniformly to a specific group of extensions called an UCD group. Calls to an UCD group hunt for an idle station in a circular way. This UCD feature is particularly helpful when a certain extension receives a high volume of calls compared with other extensions.
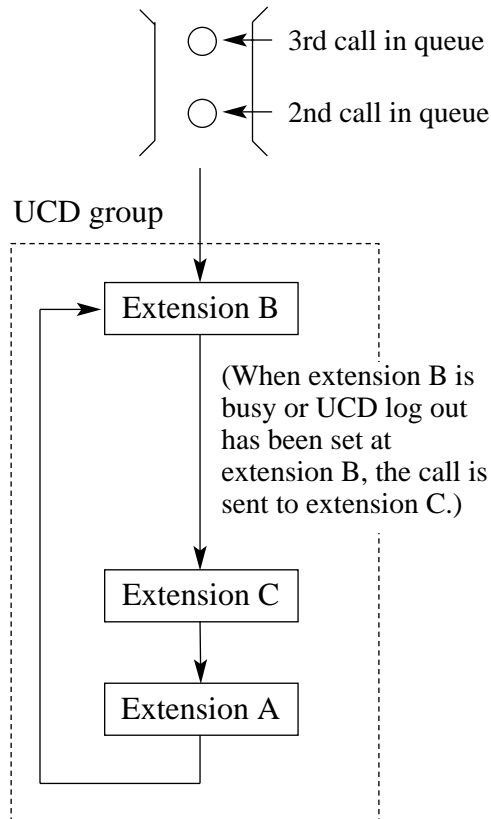
If all extensions in an UCD group are busy or not available, the incoming outside call will be handled by the UCD Time Table.

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.

```
┌─────────────────────────────────────┐
│   Calls have arrived at an UCD group. │
└─────────────────────────────────────┘
                    │
                    ▼
3rd call in queue ─►○  ⎫
2nd call in queue ─►○  ⎬
1st call in queue ─►○  ⎭

        UCD group       │
    ┌- - - - - - - - - -│- - - - - - ┐
    │                   ▼
    │   ┌──────────────────┐
┌──►│   │   Extension A    │
│   │   └──────────────────┘
│   │           (When extension A is busy
│   │            or UCD log out has been
│   │            set at extension A, the call
│   │            is sent to extension B.)
│   │           │
│   │           ▼
│   │   ┌──────────────────┐
│   │   │   Extension B    │
│   │   └──────────────────┘
│   │           (When extension B is busy
│   │            or UCD log out has been
│   │            set at extension B, the call
│   │            is sent to extension C.)
│   │           │
│   │           ▼
│   │   ┌──────────────────┐
│   │   │   Extension C    │
│   │   └──────────────────┘
│   │           (When extension C is busy
│   │            or UCD log out has been
│   │            set at extension C, the call
│   │            is sent to extension A.)
└───┘
    └- - - - - - - - - - - - - - - - - ┘
```

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

○ ← 3rd call in queue

○ ← 2nd call in queue

UCD group

Extension B

(When extension B is busy or UCD log out has been set at extension B, the call is sent to extension C.)

Extension C

Extension A

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: UCD Group Number(1-32)
FN: Floating Number of the UCD Group
TT: Time Table Number (1-4)

UCD	FN	TT
1	291	1
2	291	2
:	:	:
32		

Sequence Assignment

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

Sequence Assignment

TT	SEQUENCE
4	TR→ → → →

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

❒ 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.)

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

Note

N/A: not available for assignment.

Note

- The UCD Time Table is not available for incoming extensions or transferred calls.
- The overflow extension is the IRNA destination of the hunting group or the CO line group assigned by programme [134]-[135] "Hunting Intercept — Day / Night" or [409]-[410] "Intercept Extension — Day / Night." If both of them are assigned, the IRNA destination of the hunting group will be effective.
- If the overflow extension is not assigned, the system will not answer the call and waits for an idle extension.
- If the Time Table number is not assigned, the system will not answer the call. In this case, IRNA will be employed.
- 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 by programme [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 assigned as the Direct Dialling In (DDI) destination.
    e) The floating number of UCD is assigned as the UCD Overflow destination.
- This feature requires assigning an UCD group in System Programming. An extension can belong to two or more UCD groups.
- The floating number can be assigned on a hunting group basis. The UCD group is based on the hunting group.
- 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.
- If all extensions are in log-out status, the system will not answer the call. In this case, IRNA will be employed.

Programming Guide References

- [106] Station Hunting Type
- [134-135] Hunting Intercept — Day / Night
- [137-138] UCD Time Table Assignment — Day / Night
- [139] UCD Time Table
- [409-410] Intercept Extension — Day / Night
- [813] Floating Number Assignment

Features Guide References

- Log-In / Log-Out
- Station Hunting

User Manual References

Not applicable.

User Programming (Manager Programming)

Description

User Programming (Manager Programming) can be programmed by the end user. Programs whose address are [000] through [014] can be changed by the user.

Conditions

None

Programming Guide References

- [120] User Password

Features Guide References

None

User Manual References

Not applicable.

Voice Mail Integration

Description

This system can accommodate Voice Processing System (VPS) equipment, which offers the user a Voice Mail and an Automated Attendant Services. If an extension user has set Call Forwarding destination to the VPS, a 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 the Call Forwarding or Intercept Routing - No Answer features, the mailbox number is sent to the VPS automatically with DTMF signalling (Follow On ID). Up to eight extension jacks can be connected to VPS as extensions in the system.
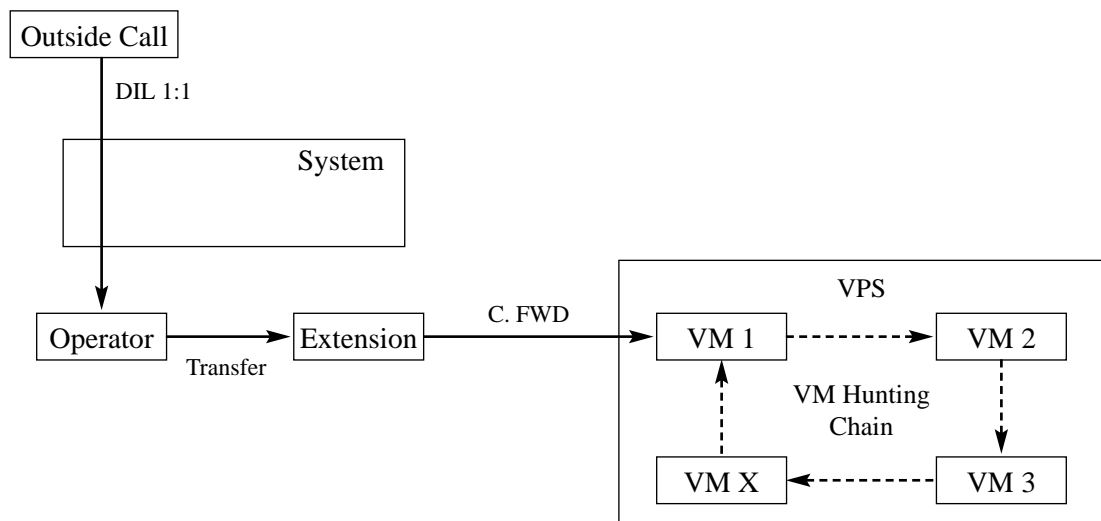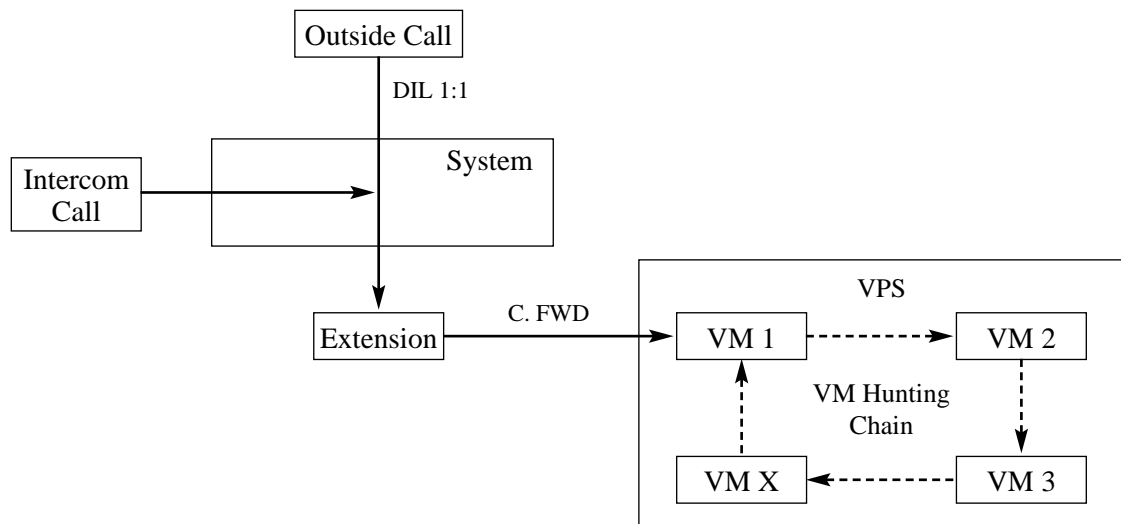
System Explanation

1. Voice Mail Service
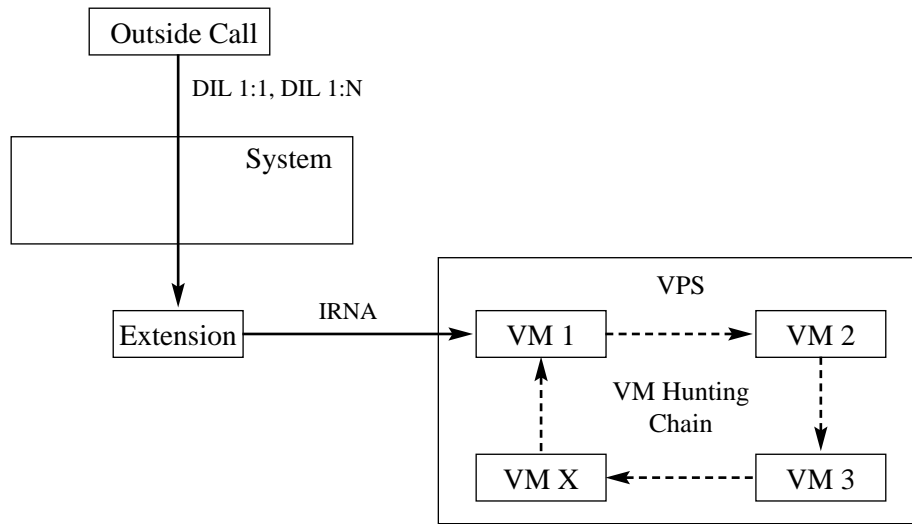
1.1 Call Forwarding to VM

If an extension user sets Call Forwarding (C. FWD) whose destination is the VPS, an incoming call is forwarded to the VPS 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.

```
                    ┌──────────────┐
                    │ Outside Call │
                    └──────────────┘
                          │ DIL 1:1
  ┌──────────┐   ┌────────────────────────────┐
  │ Intercom │──▶│              System         │
  │   Call   │   │                             │
  └──────────┘   └────────────────────────────┘
                          │
                    ┌───────────┐   C. FWD        ┌──────────────────────────────────────┐
                    │ Extension │───────────────▶ │                              VPS      │
                    └───────────┘                 │   ┌───────┐          ┌───────┐        │
                                                  │   │ VM 1  │──────────▶│ VM 2  │        │
                                                  │   └───────┘          └───────┘        │
                                                  │       ▲    VM Hunting                 │
                                                  │       │      Chain                    │
                                                  │   ┌───────┐          ┌───────┐        │
                                                  │   │ VM X  │◀─────────│ VM 3  │        │
                                                  │   └───────┘          └───────┘        │
                                                  └──────────────────────────────────────┘
```

```
  ┌──────────────┐
  │ Outside Call │
  └──────────────┘
        │ DIL 1:1
  ┌────────────────────────────┐
  │              System        │
  │                            │
  └────────────────────────────┘
        │
  ┌──────────┐           ┌───────────┐   C. FWD        ┌──────────────────────────────────────┐
  │ Operator │─────────▶ │ Extension │───────────────▶ │                              VPS      │
  └──────────┘ Transfer  └───────────┘                 │   ┌───────┐          ┌───────┐        │
                                                       │   │ VM 1  │──────────▶│ VM 2  │        │
                                                       │   └───────┘          └───────┘        │
                                                       │       ▲    VM Hunting                 │
                                                       │       │      Chain                    │
                                                       │   ┌───────┐          ┌───────┐        │
                                                       │   │ VM X  │◀─────────│ VM 3  │        │
                                                       │   └───────┘          └───────┘        │
                                                       └──────────────────────────────────────┘
```

1.2 Intercept Routing to VM
If a CO 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.

```
            ┌─────────────┐
            │ Outside Call │
            └─────────────┘
                   │
             DIL 1:1, DIL 1:N
      ┌──────────────────────┐
      │              System   │
      │                       │
      └──────────────────────┘
                   │
                   ▼
      ┌───────────┐   IRNA
      │ Extension │─────────────▶
      └───────────┘
```


1.3 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.
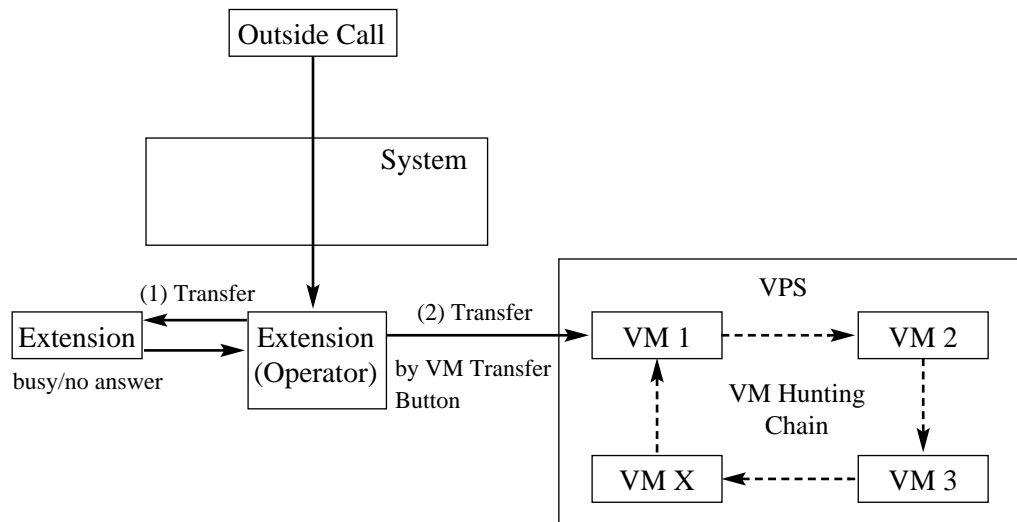
1.4 Changing from VM to Automated Attendant (AA)

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.
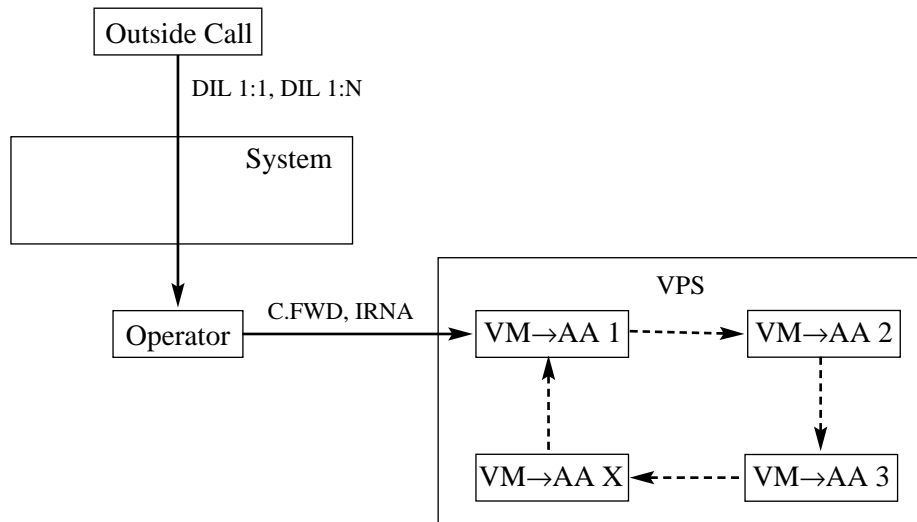
1.5 Listening to a Recorded Message

If the VPS receives a message, the VPS can turn on the MESSAGE button indicator of the corresponding telephone as a 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

2.1 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.
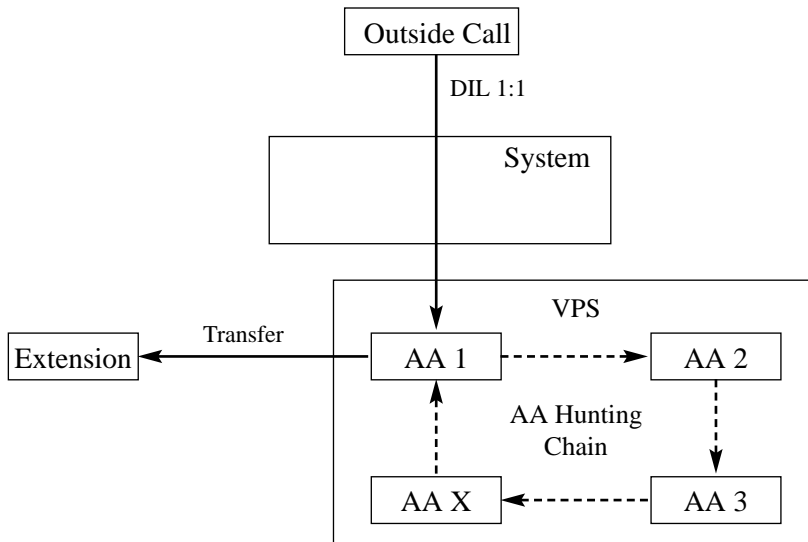
Conditions

- 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.
- It is recommended that you do not connect more than VM ports to each card or unit.

Installation Manual References

- 2.3.2 Extension Connection for Proprietary Telephones, Single Line Telephones and Consoles
- 2.4.5 Extension Connection (Optional Unit)

Programming Guide References

- [005] Flexible CO Button Assignment
- [106] Station Hunting Type
- [100] Flexible Numbering
- [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 - All Calls
- Call Forwarding - Busy
- Call Forwarding - Busy / No Answer
- Call Forwarding - No Answer
- Intercept Routing
- Station Hunting

User Manual References

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

Voice Mail Integration for Proprietary Telephones[*1]

Description

The Proprietary Telephone capable Panasonic Voice Processing System (VPS) can be connected to the Digital Super Hybrid System (DSHS) in a tightly integrated fashion. The system sends the VPS data which contains the extension number configuration information and the VPS automatically creates mailboxes with this data (Automatic Configuration — Quick Setup).

Conditions

- A maximum of one VPS can be connected to each DSHS cabinet.
- A maximum of six DSHS jacks can be connected to a proprietary telephone capable VPS. Because a proprietary telephone connection supports up to two simultaneous voice calls, only one DSHS jack needs to be connected for each 2 VPS ports.
- Connect the jacks and ports in ascending order. In other words, the lowest number DSHS jack used for VPS connection must be connected to the lowest number VPS port.
- The VPS data is transmitted to the VPS on the lowest jack port.
- Only extensions which are assigned as "Connect" in the program [611] can have mailboxes.
- The voice mail service codes and names can be stored in station speed dialling.

Programming Guide References

- [126] Voice Mail Number Assignment
- [127] Voice Mail Extension Number Assignment
- [128] Voice Mail Extension Group Assignment
- [611] Extension Connection Assignment
- [617] Live Call Screening Recording Mode Assignment

Features Guide References

- Voice Mail Integration

User Manual References

Not applicable.

[*1] Available for the KX-TD816/KX-TD1232 when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration; e.g. KX-TVP100).

Volume Control - Speaker / Ringer

Description

Allows the proprietary telephone user to turn up or down the following volumes as desired:

Ringer volume
Speaker volume

Conditions

The control method depends on the telephone type:

- With a KX-T7500 series proprietary telephone, rotate the Jog Dial in the desired direction to select the desired volume level.
  With a KX-T7200 series proprietary telephone, press the volume control button (VOLUME ∧ / ∨ UP / DOWN) to select a desired volume level.
  However, the ringer volume of KX-T7550 and KX-T7250 is selected with Ringer Volume Selector (OFF / LOW / HIGH).

Programming Guide References

System programming is not required.

Features Guide References

None

User Manual References

Not applicable.

Whisper OHCA

Description

When attempting to call a busy extension, Whisper OHCA 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.
- 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		
	0: Cancel	1: Call Waiting	2: OHCA	3: 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 3 (Whisper OHCA mode);
–If using the KX-T7500 series telephone handset...........Whisper OHCA
–If using the KX-T7500 series telephone SP-PHONE......Call Waiting tone
–Other...OHCA, Call Waiting tone

- 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 also be heard by the other party.
- It is possible to enable the Whisper OHCA by any telephone by system programming. However, it may not work properly. (E.g. the announcement may be heard by the other party.)

Programming Guide References

- [100] Flexible Numbering
- [519] 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)
- 2.4.4 Answering a Call Waiting

Section 2

DECT Portable Station Features

2.1 General Features

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 utilize a PS:**
  a) Assign the radio system ID in program [680] Cell Station Number Assignment for Master CS.
  b) Reset the system.
  c) Register a PS in program [650] PS Registration.

Programming Guide References

- [020] PS Flexible Button Assignment
- [109] Expansion Card / 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 CO Line Assignment – Day / Night
- [663-664] PS Doorphone Ringing Assignment – Day / Night
- [665] PS Voice Mail Access Codes
- [666] PS Department Codes
- [667] PS Extension Connection Assignment
- [668] PS Data Line Security
- [671] PS Extension Number Set
- [672] PS Password Set
- [673] PS CLIP / COLP Number Assignment
- [674-675] PS Extension Intercept Routing — Day / Night
- [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

PS Call Directory

Description

PS users can store names and/or phone numbers in the directory. A stored number is dialed 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.
PS Dialing Directory:
PS users can make an outside call by selecting privately-assigned names and phone numbers (100 max.).
PBX System Speed Dialing Directory:
PS users can make a call via the system by selecting system-assigned names and phone numbers (500 max.).
PBX Extension Dialing Directory:
PS users can make a call via the system by selecting system-assigned extension names.
PBX Station Speed Dialing 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 Dialing Directory contents.

Programming Guide References

• [001] System Speed Dialing Number Set
• [002] System Speed Dialling Name Set
• [003] Extension Number Set
• [004] Extension Name 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.
There are two passwords, a PS Programming password and System Lock password, to enter
into the programming mode. The PS Programming password is programmed in PS
Programming, and the System Lock password is programmed in the initial PS registration or
in PS Programming. The displayed PS programming menu differs depending on the password
level as follows.
Level 0: A password is not required.
Level 1: A PS Programming password is required.
Level 2: A System Lock password is required.
The combination of the passwords are as follows.

System Lock	Disable	Disable	Enable	Enable
PS Programming	Disable	Enable	Disable	Enable
System Lock Password	—	—	Level 0 – 2	Level 0 – 2
PS Programming Password	—	Level 0 – 2	—	Level 0 – 1
No Password or Incorrect Password	Level 0 – 2	Level 0	Level 0 – 1	Level 0

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 Answer Mode Set
0	Automatic Answer Delay Selection
2	DECT System Selection
0	Standby Display Selection*
0	Date / Time Display Selection*

Password level	Programming Item
1	Memory Clear
2	PS Registration Cancellation
0	Guidance Menu Set
1	PS Programming Password Set
2	DECT System Lock Password Set

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

Conditions

- If only one DECT system is connected, the "DECT System Selection" display will not appear.
- If your PS is not registered, the "DECT System Selection" and "Canceling the PS Registration" displays will not appear.

Programming Guide References

- [650] PS Registration

Features Guide References

None

User Manual References

- 5.4.2 PS Programming

Super EXtra Device Port (SXDP)

Description

The Super EXtra Device Port (SXDP) 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 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 in program [654] SXDP Assignment (default: enable).
* When the paralleled wired telephone receives a call, both the wired telephone and PS will ring. If either of the paralleled telephones is busy, it is not possible to make a call from the other telephone.
* Types of incoming calls which are received while in SXDP mode are:
  Outside calls – DIL 1:1; Intercept Routing; DDI; MSN; IRNA
  Intercom calls – Extension; Transfer
  Other type of calls will not be sent to the PS.
* When you receive a call reaching the paired telephone by the PS or when making a call from a PS, the display message of the wired telephone is shown on the calling or called party's display (e.g., extension number and name).
* Paralleled telephones can call each other or transfer a call by dialling their own extension number.
* If a PS receives a call by its own extension number, it works as usual.
* The following list shows the conditions when using a certain feature while in SXDP mode.

Feature	Condition
Call Log, Outgoing	• The memory of Call Log is used together. The call logged by the wired telephone can be used by the PS and vice versa.
Budget Management	• The call charge of the PS is included with the wired telephone. If the pre-assigned limit is reached, both telephones cannot make further calls without authorization.
Call Forwarding	• Calls to the wired telephone due to the setting of the wired telephone. • The *Call Forwarding - All* feature for the wired telephone can be set from a PS so that all incoming calls to the wired telephone will be forwarded to the desired destination.
Class of Service (COS)	• The COS level of the wired telephone becomes available.
Do Not Disturb (DND)	• Calls to the wired telephone due to the setting of the wired telephone.
Electronic Station Lockout	• The PS can make a call even if the wired telephone is locked.

Feature	Condition
Executive Busy Override	• Even during a conversation using a PS, the setting of the wired telephone becomes available.
Pickup Dialling	• The memory of the Pickup Dialling exists individually.
Redial, Saved Number	• The memory of the Saved Number Redial of the wired telephone cannot be used by the PS.
Station Speed Dialling (PS Directory)	• The memory of the Station Speed Dialling (PS Directory) exists individually.

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])

2.2   DECT Portable Station Information for Other Sections

DECT Portable Station Information for Other Sections

Description

Most of the features described in the "General Features" section are supported by a system with a DECT portable station (PS). However the following features are not supported.

Background Music (BGM)
Executive Busy Override - CO Line
EXtra Device Port (XDP)
Handsfree Operation
— PS is not provided with a built-in speaker.
Live Call Screening (LCS)
Microphone Mute
Off-Hook Monitor
Operator
— As a PS cannot be assigned as an operator, it cannot perform the operator service features.
Paging - Deny
Parallelled Telephone
Phantom Extension
Redial, Automatic

The list below describes the available feature conditions which are required with a PS.

Note
- In the list, for programs [020] and [650] through [682], refer to the DECT Programming section in Programming Guide. For PS and PBX Programming, refer to the User Manual. For other programs, refer to the "General Programming" section in Programming Guide.

Title	PS Condition
Budget Management	• Program [655] PS Budget Management, is required to assign the charge limit of a call on a PS basis.
Button, Flexible	• Program [020] PS Flexible Button Assignment, is used to determine the use of the PS flexible buttons.

Title	PS Condition
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 5.3.9 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.
Calling / Connected Line Identification Presentation (CLIP / COLP)	• Program [673] PS CLIP / COLP Number Assignment, is required to assign the CLIP / COLP numbers for each PS.
Charge Fee Reference	• The charge fee reference allowed for a PS is determined by program [656] PS Charge Verification Assignment.
Class of Service (COS)	• Program [657] PS Class of Service, is required for assigning each PS a Class of Service (COS).
CO Incoming Call Info & Display Display, Call Information	• The display type for a PS when an incoming call is received can be selected by program [676] PS Incoming Call Display. However, if an incoming call is received using DIL 1:N, the display will only show a CO line number.
CO Line Connection Assignment - Outgoing	• Program [661-662] PS Outgoing Permitted CO Line Assignment – Day / Night, is used to determine the CO line which can be accessed by a PS.
Conference	• The Conference button can be activated by selecting it on the display. For details, refer to the 5.3.9 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.
Data Line Security	• Data Line Security for a PS can be set or canceled by program [668] PS Data Line Security.
Department Codes	• Program [666] PS Department Codes, is used to assign the department code on a PS basis.
Direct In Lines (DIL)	• A PS can be assigned as the DIL 1:N destination. In this case, program [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.
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 5.3.9 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.

Title	PS Condition
Door Opener Doorphone Call	• Program [663-664] PS Doorphone Ringing Assignment – Day / Night, is required for assigning each PS to receive a doorphone call or to open the door.
DSS Console (KX-T7240 / KX-T7040 / KX-T7540 / KX-T7545)	• The DSS Console cannot work with a PS.
Extension Connection Assignment	• Program [667] PS Extension Connection Assignment, is used to assign whether the PS user can perform all accesses or not.
Extension Group	• The PS extension group can be used with the Group Call Pickup. • The PS extension group can be assigned in program [658] PS Extension Group Assignment.
Flexible Numbering	• In addition to current flexible numbering, the feature number for the Super EXtra Device Port (SXDP) can be assigned. For details, refer to the program [100] Flexible Numbering in Programming Guide.
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, "Setting the Automatic Answer Mode", is required to select the answering mode.
Handsfree 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, "Setting the Automatic Answer Mode", is required to select the answering mode.
Hunting Group Station Hunting	• Program [131] Hunting Group Assignment, is required to assign each PS to a hunting group. • PSs are hunted in the No Reply or Ring hunting mode. If another hunting mode is selected in program [106] Station Hunting Type, PSs are skipped. • In Ring hunting mode, a maximum of four PSs ring simultaneously. If the connected CS is busy, the PSs are skipped.

Title	PS Condition
Intercept Routing	• Program [674-675] PS Extension Intercept Routing — Day / Night, is required for assigning the Intercept Routing destination for each PS. • The possible destinations of intercepted calls are as follows. **a)** a wired extension **b)** an external pager A PS cannot be a destination.
LED Indication, CO Line	• The LED indicators of the Flexible CO buttons do not work while on-hook.
Message Waiting	• " ✉ " is displayed as notification. • The Message button can be activated by selecting it on the display. For details, refer to the 5.3.9 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.
Module Expansion	• In addition to the current expansion unit, a Cell Station Interface Unit (KX-TD144 / KX-TD146) can be connected to the system. One KX-TD144 supports up to two Cell Stations (KX-TD142). And one KX-TD146 supports up to six Cell Stations. One KX-TD144 / KX-TD146 can be connected to the KX-TD816, and up to two KX-TD144s / KX-TD146s can be connected to the KX-TD1232.
Night Service	• PS users cannot confirm the current mode on the display.
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.
Pulse to Tone Conversion	• The Tone button can be activated by selecting it on the display. For details, refer to the 5.3.9 Selecting the Feature Button on the Display in the User Manual.
User Programming (Manager Programming)	• Program [020] PS Flexible Button Assignment, can also be programmed by any display proprietary telephone user in the System.
Voice Mail Integration	• A mailbox number can be assigned for each PS in program [665] PS Voice Mail Access Codes.

Conditions

None

This PBX fulfills the requirements of following European regulations:

	73/23/EEC	"Low Voltage Directive"
	89/336/EEC	"Electromagnetic compatibility" (Basic EMC Publication)
CE	92/31/EEC	"Electromagnetic compatibility" (Supplement)
	93/68/EEC	"CE mark"
	91/263/EEC	"Terminal Directive"

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

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