

Panasonic

Digital Super Hybrid System

KX-TD816CE

KX-TD1232CE

**Added and Changed Features for
Installation Manual and Programming Tables
Vol. 3**

Please read this manual first and then the Installation Manual.

In this manual, the last letter “CE” of each model number is omitted.

ROM Version : KX-TD816CE — P341A; KX-TD1232CE — P241B; and later versions

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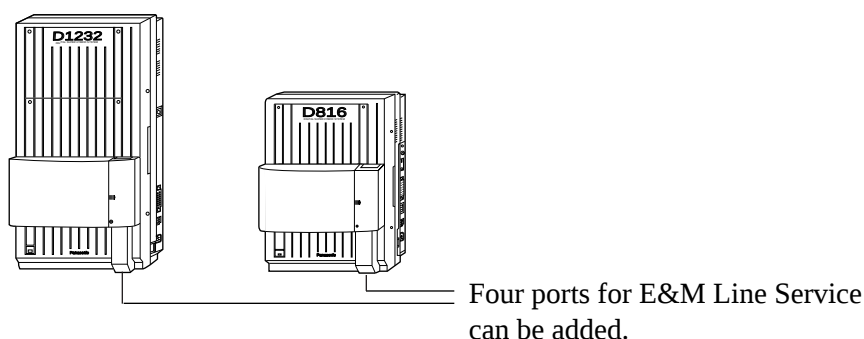
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Additions to KX-TD816/1232

1.4 Options

E&M (TIE) Line Unit (KX-TD184)

This unit can be used for E&M Line Service and has four ports.



Specifications

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

2.4 Installation of Optional Cards and Units

E&M (TIE) Line Unit Connection

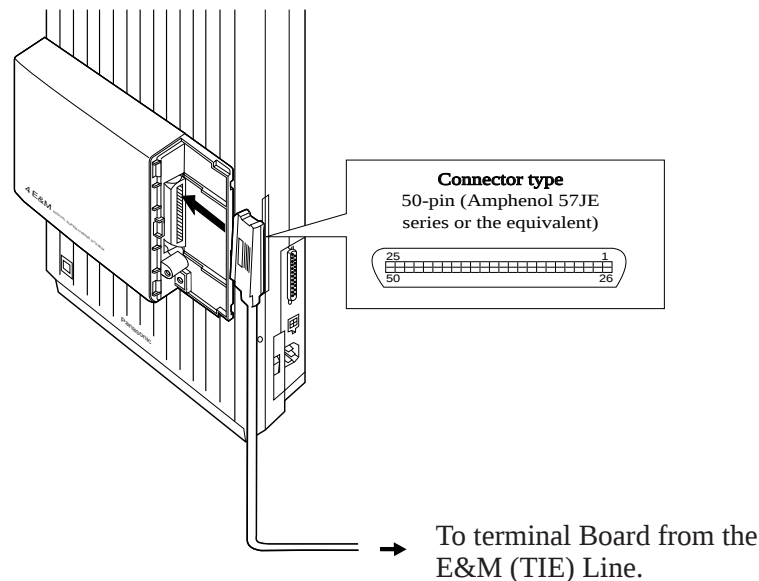
Installing one unit to the system allows four E&M (TIE) lines to be connected to CO lines 05 through 08 for the KX-TD816, or CO lines 09 through 12 or 21 through 24 for the KX-TD1232. This unit can be installed to any of the expansion areas provided on the front of the system.

For unit installation, refer to the procedure “Section 2.4.4 Installing Expansion Unit (KX-TD170/KX-TD180)” in the main Installation Manual. Steps 1 through 5 and 7 through 10 of the installation procedure are the same as other expansion units. Step 6 is different for each unit. Please note the following instructions below instead of step 6 (Installation Manual) for this unit.

- Note**
- System Programming [109] Expansion Unit Type is required for expansion unit location identification.

Step 6

- If the KX-TD184 is installed, use an Amphenol Connector to connect the E&M (TIE) lines.
Insert the connector into the jack.



- Be sure to secure the inside screw, or the unit may not work properly.
- To fix the connector, refer to “Section 2.4.4 Installing Expansion Unit (KX-TD170/KX-TD180), Amphenol 57 Type (screw-attach-type 50-pin connector) Connection for KX-TD170” in the main Installation Manual.
- For jack connection, please see “Cable Pin Numbers to Be Connected” on the next page.
- The KX-TD1232 is illustrated above.

Installing Expansion Unit (KX-TD184)

■ Cable Pins to be Connected (E&M Line)

Connect Pin	Cable Color	Clip No.	Number of Dots	E&M Line	
1	ORN-RED	1	1	NO.1	T } 2-wire or 4-wire - send
26	ORN-BLK	2	1		R } 2-wire or 4-wire - send
2	YEL-RED	3	1		T1 } 4-wire - receive
27	YEL-BLK	4	1		R1 } 4-wire - receive
3	GRY-RED	5	1		E Lead
28	GRY-BLK	6	1		SG Lead
4	WHY-RED	7	1		SB Lead
29	WHY-BLK	8	1		M1 Lead
5	ORN-RED	9	1		SG0
30	ORN-BLK	10	1		M Lead only for Type 5
6	YEL-RED	11	2	NO.2	T } 2-wire or 4-wire - send
31	YEL-BLK	12	2		R } 2-wire or 4-wire - send
7	GRY-RED	13	2		T1 } 4-wire - receive
32	GRY-BLK	14	2		R1 } 4-wire - receive
8	WHY-RED	15	2		E Lead
33	WHY-BLK	16	2		SG Lead
9	ORN-RED	17	2		SB Lead
34	ORN-BLK	18	2		M1 Lead
10	YEL-RED	19	2		SG0
35	YEL-BLK	20	2		M Lead only for Type 5
11	GRY-RED	21	3	NO.3	T } 2-wire or 4-wire - send
36	GRY-BLK	22	3		R } 2-wire or 4-wire - send
12	WHY-RED	23	3		T1 } 4-wire - receive
37	WHY-BLK	24	3		R1 } 4-wire - receive
13	ORN-RED	25	3		E Lead
38	ORN-BLK	26	3		SG Lead
14	YEL-RED	27	3		SB Lead
39	YEL-BLK	28	3		M1 Lead
15	GRY-RED	29	3		SG0
40	GRY-BLK	30	3		M Lead only for Type 5
16	WHY-RED	31	4	NO.4	T } 2-wire or 4-wire - send
41	WHY-BLK	32	4		R } 2-wire or 4-wire - send
17	ORN-RED	33	4		T1 } 4-wire - receive
42	ORN-BLK	34	4		R1 } 4-wire - receive
18	YEL-RED	35	4		E Lead
43	YEL-BLK	36	4		SG Lead
19	GRY-RED	37	4		SB Lead
44	GRY-BLK	38	4		M1 Lead
20	WHY-RED	39	4		SG0
45	WHY-BLK	40	4		M Lead only for Type 5

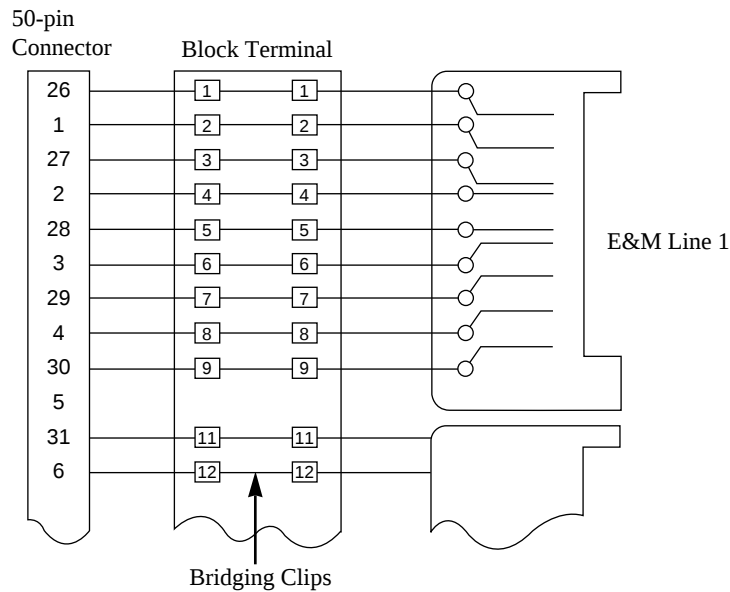
Note:

21-25, 46-50: Cannot be connected

Installing Expansion Unit (KX-TD184)

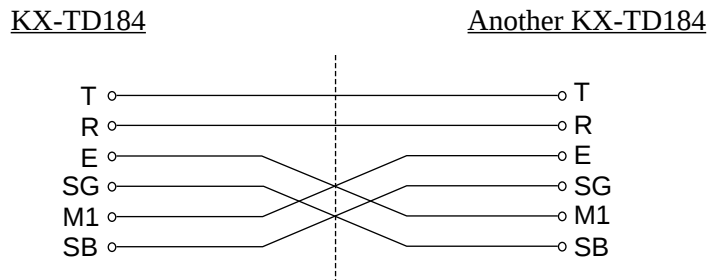
■ Cable Pins to be Connected (E&M Line)

- E&M Line Wiring

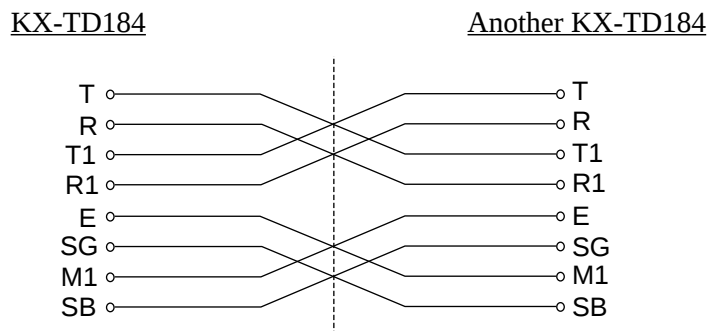


■ Connecting to another KX-TD816/KX-TD1232 system (KX-TD184)

- (1) 2-wire voice path



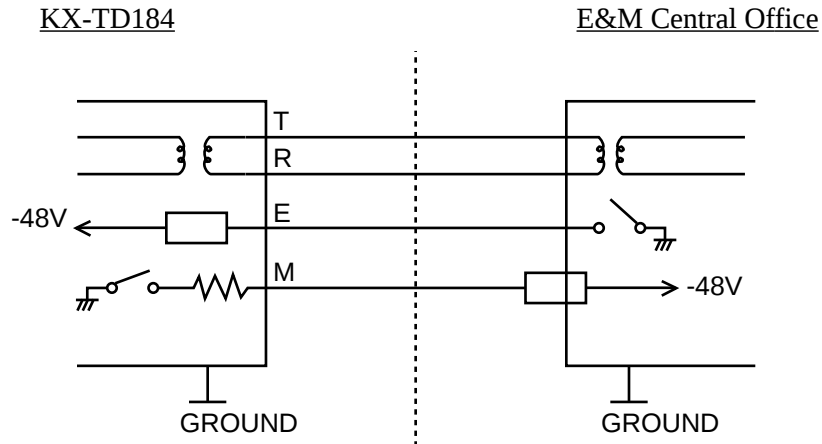
- (2) 4-wire voice path



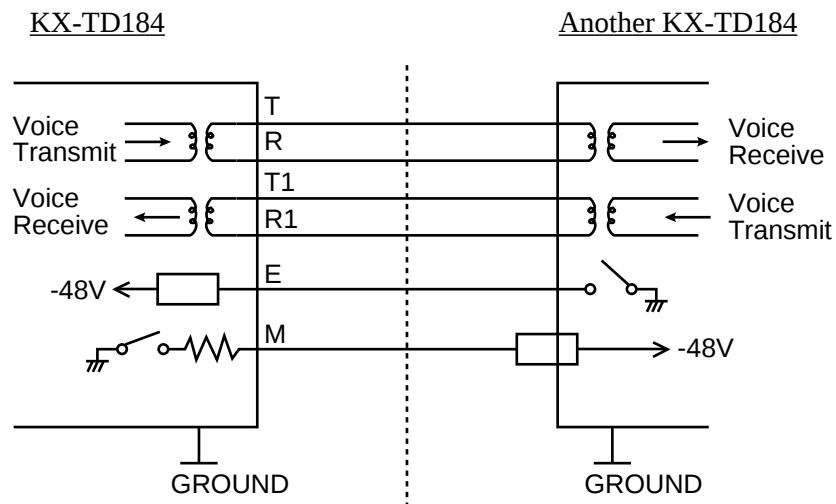
Installing Expansion Unit (KX-TD184)

■ Connecting to the E&M Central Office

(1) 2-wire voice path



(2) 4-wire voice path

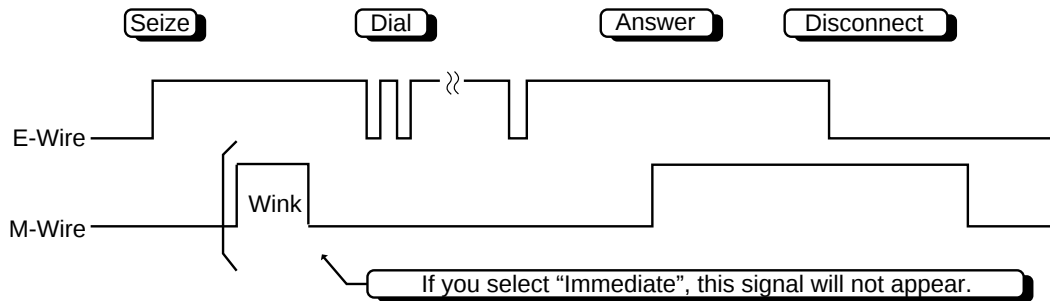


Installing Expansion Unit (KX-TD184)

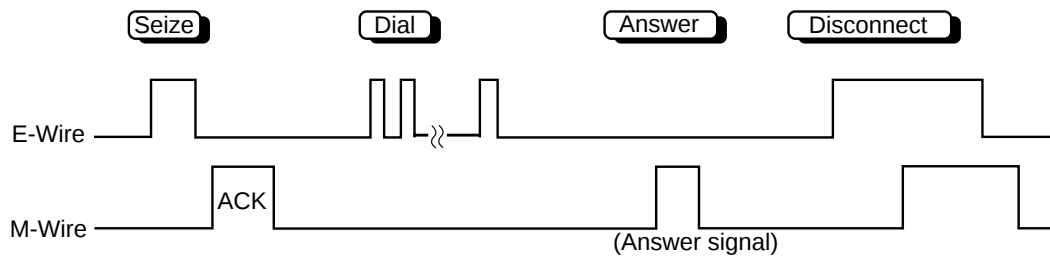
■ E&M Sequences

You can choose one of the following E&M sequences by System Programming [129] “E&M Signal Assignment”.

(1) Continuous E&M

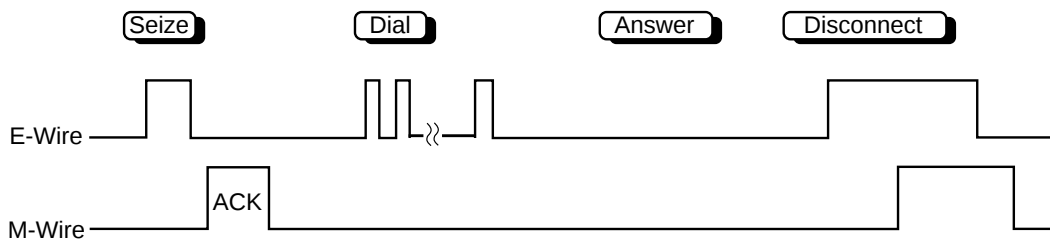


(2) Pulsed E&M with Answer signal



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

(3) Pulsed E&M without Answer signal



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

Automatic Configuration[†]

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.

Programming References

No programming required.

Feature References

None

Operation References

Not applicable.

E&M (TIE) Line Service

Description

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

System Explanation

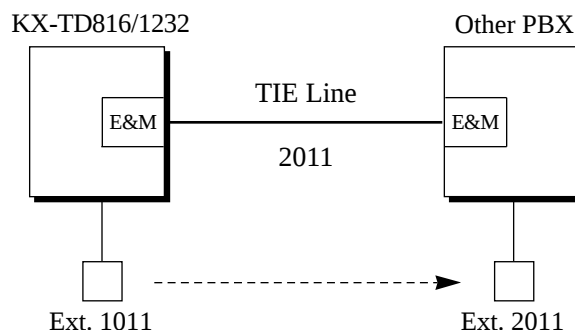
1. Making a TIE Call

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

1.1 Extension Number method

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

<Example>



Explanation

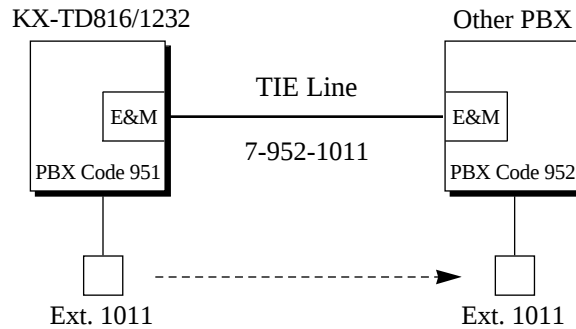
To use this method, it is necessary to change the first one or two digits of extension numbers of either PBX to avoid having the same extension number.

1. Extension 1011 dials extension number “2011”.
2. Extension 1011 is connected to extension “2011” of the other PBX.

1.2 PBX Code method

Dial the [TIE Line Access Code] [PBX Code] [Extension Number] to make a TIE call.

<Example>



Explanation

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

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

2. TIE Line and CO Line Connection

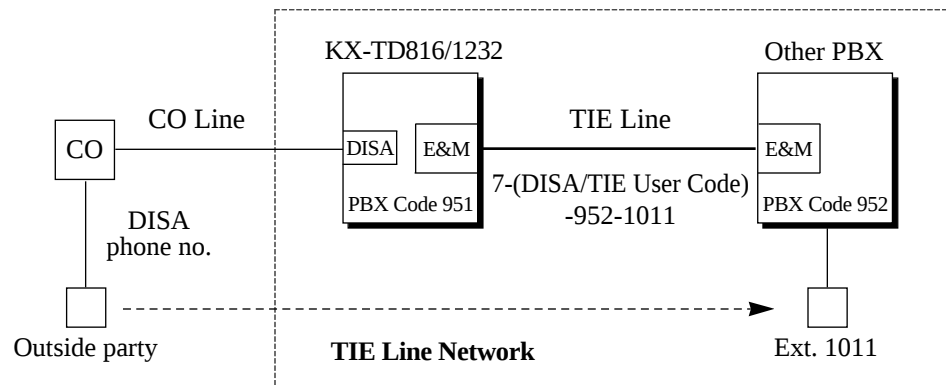
To connect the TIE line with the CO line, the following patterns are available.

2.1 CO-to-TIE Transfer

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

■ TIE call using DISA

<Example>



Explanation

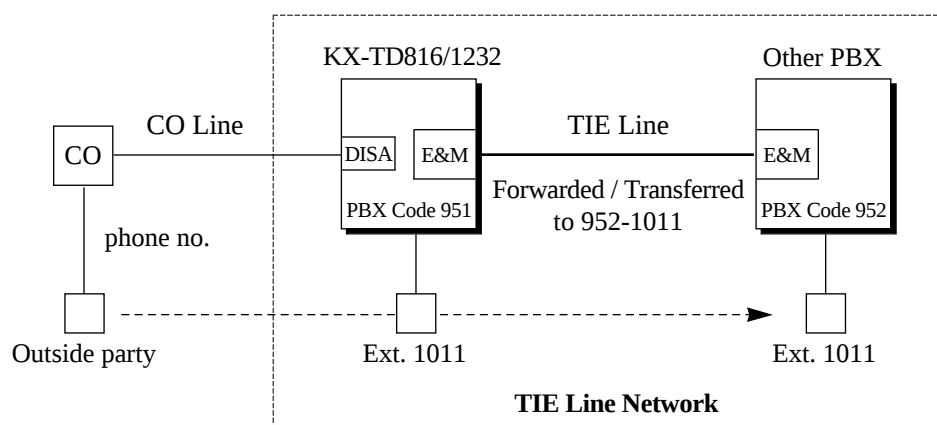
The outside caller dials as follows:

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

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

■ Call Forwarding / Call Transfer to the TIE line

<Example>



Explanation

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

Note: Setting the destination of Call Forwarding to the TIE line is the same as Call Forwarding to a CO Line.

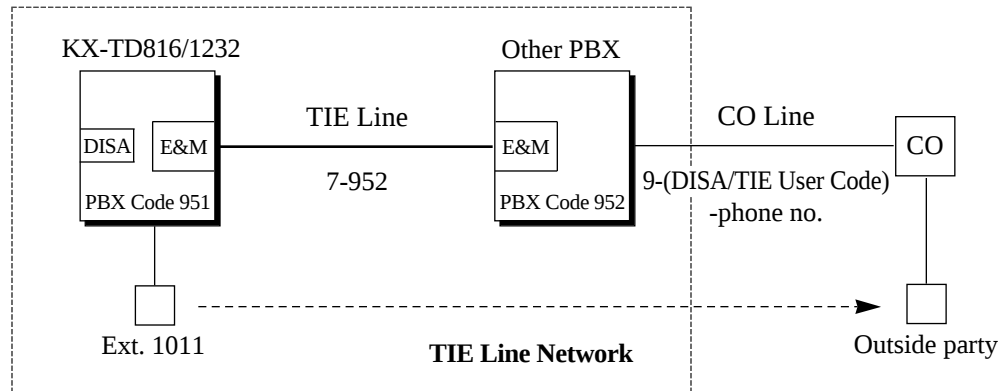
Transferring a call to the TIE line is the same as a Call Transfer to a CO Line.

2.2 TIE-to-CO Transfer

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

■ Outside call through the other PBX

<Example>



Explanation

Extension 1011 dials as follows:

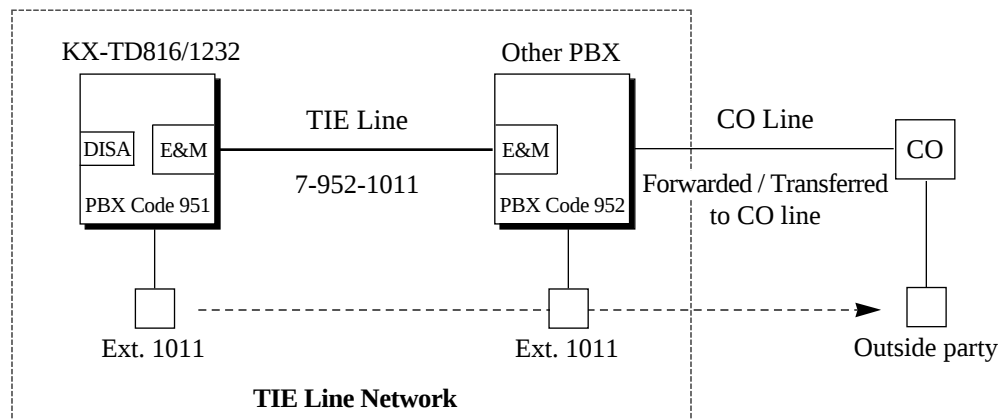
1. TIE line access code “7”, PBX code “952” and CO line access code “9”, and a special dial tone is heard.
2. The DISA/TIE user code (if required) and desired phone number.

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

Note: The DISA/TIE user code (assigned in program [811]) is required when the CO line security mode is selected in program [439].

■ Call Forwarding / Call Transfer to CO line

<Example>



Explanation

Extension 1011 dials as follows:

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

3. TIE Line Routing Table

The TIE Line Routing Table is referenced by the system to identify the CO line route, when an extension user makes a TIE call.

It is necessary to make unified routing tables with each PBX in your TIE line network.

A routing pattern appropriate for each call is decided by the first three digits (except the TIE line access code) of the dialed number.

There are two system programs for the tables:

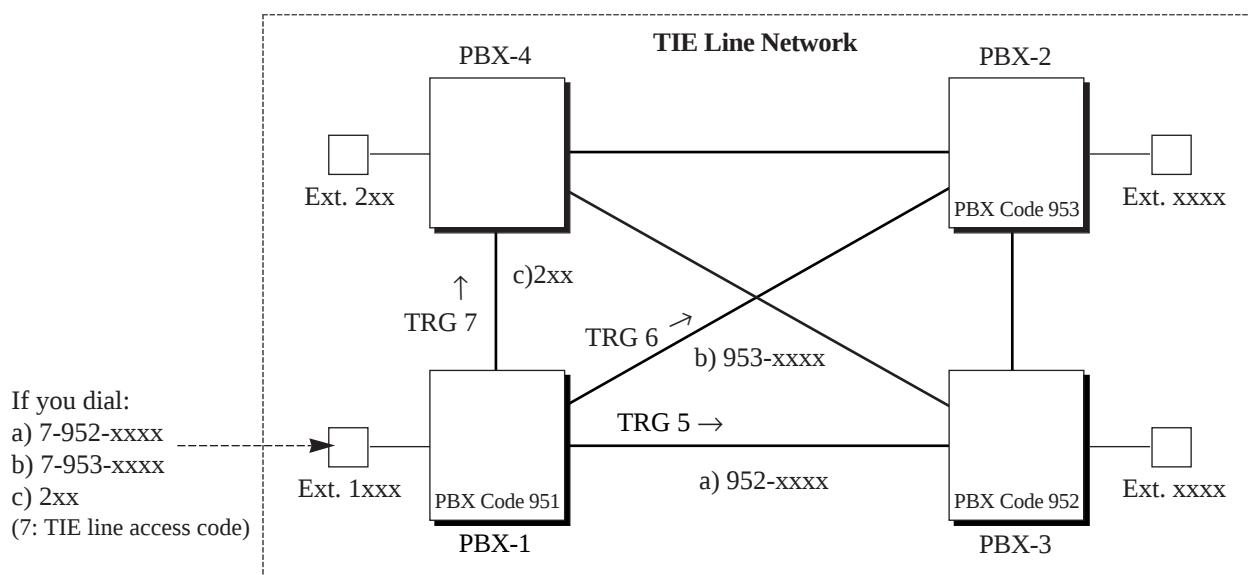
[340] TIE Line Routing Table: used to assign the access number (PBX code or extension number) and CO line group hunt sequence.

[341] TIE Modify Removed / Added Digit: used to assign removed and added digits of the dialed digits of the TIE call.

Programming Example

<Example>

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



TIE Line Routing Table of PBX-1

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

Explanation

Location 01: The hunt sequence by dialing [7+PBX Code 952]:

The 1st route — CO line group (TRG) 5

The 2nd route — CO line group (TRG) 6

Location 02: The hunt sequence by dialing [7+PBX Code 953]:

The 1st route — CO line group (TRG) 6

The 2nd route — CO line group (TRG) 5

Location 03: The hunt sequence by dialing [Ext.no. 2xx]:

The 1st route — CO line group (TRG) 7

If the received number does not match the PBX Code, the system checks the number in the routing table. If it is found, the system automatically sends the number to the corresponding PBX.

For example, if PBX-1 receives the number “952-xxxx” from PBX-4, PBX-1 automatically sends the number through CO line group 5.

4. TIE Call Dialing Method

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

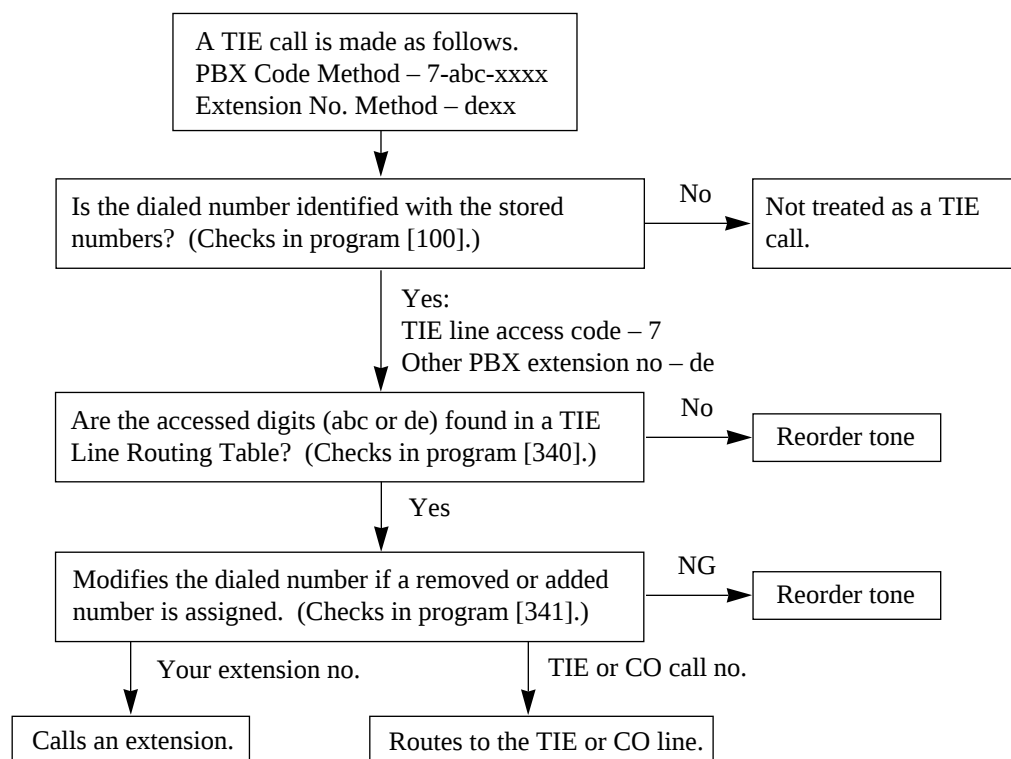
Your telephone	Dialing Method	Dial Modification
APT / DPT	Extension no.	Enable
	CO button + (PBX code) + Extension no.	Disable
	TIE line access code + (PBX code) + Extension no.	Enable
	CO button + PBX code (+ TIE user code) + Phone no.	Disable
	TIE line access code + PBX code (+ TIE user code) + Phone no.	Enable
	Select CO line group + (PBX code) + Extension no.	Disable
	Select CO line group + PBX code (+ TIE user code) + Phone no.	Disable

Your telephone	Dialing Method	Dial Modification
SLT	Extension no.	Enable
	TIE line access code + (PBX code) + Extension no.	Enable
	TIE line access code + PBX code (+ TIE user code) + Phone no.	Enable
	Select CO line group + (PBX code) + Extension no.	Disable
	Select CO line group + PBX code (+ TIE user code) + Phone no.	Disable

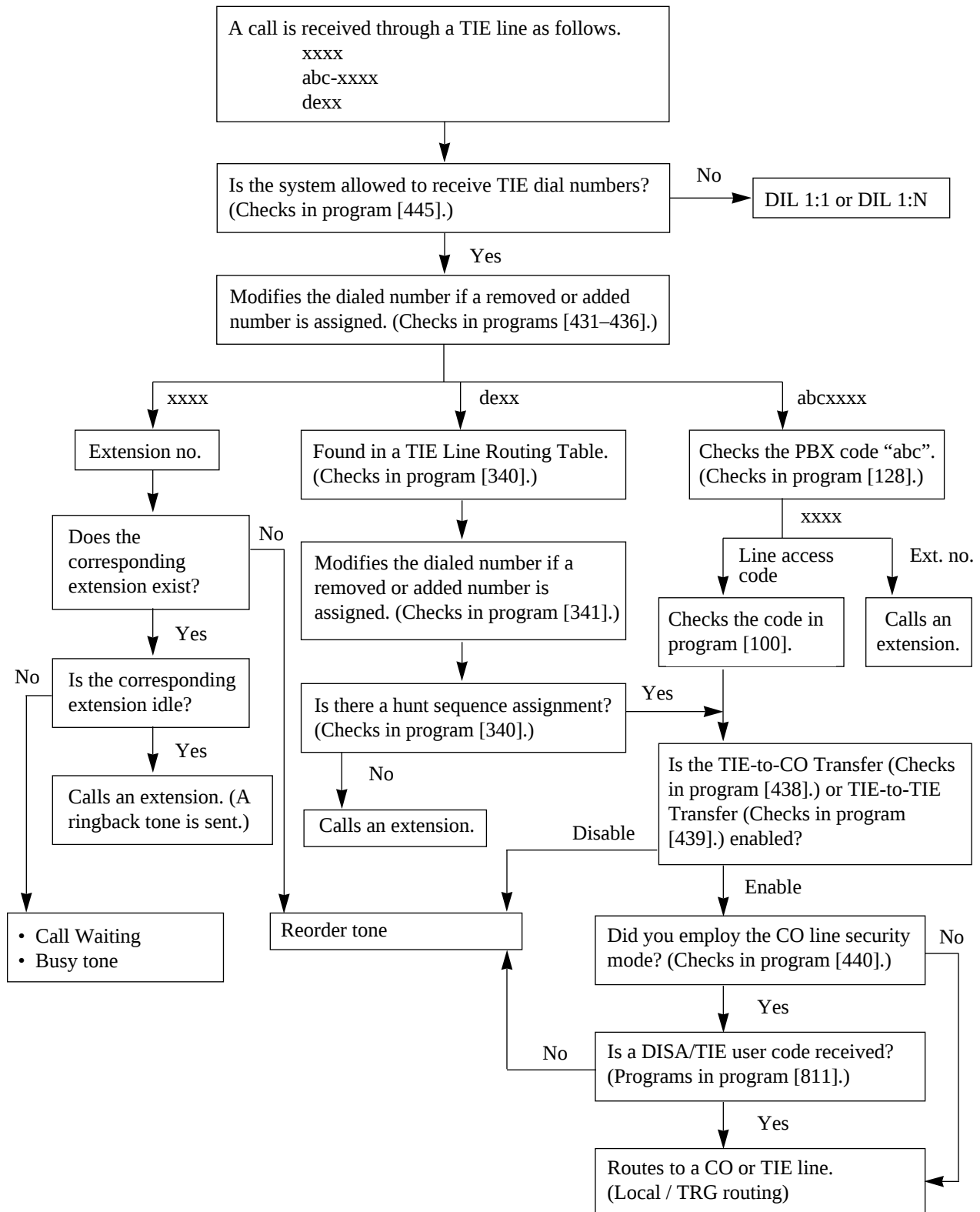
In addition to the methods above, the system can use the TIE line for sending CO line access code “9” through other PBX. When you dial the CO line access code and the CO line is busy, the system automatically sends CO line access code “9” to a TIE line so that you can access the CO line through other PBX. This is enabled by program [990] “System Additional Information, Field (41)”.

5. TIE Line Routing Flow Chart

Making a TIE Call from an Extension



Receiving a Call through a TIE Line



Conditions

- It is possible to program the E&M signal, voice path type and voice level (transmit / receive) of the E&M Line Unit by system programming. For details about the E&M signal, voice path type and voice level, refer to “Installation” in this manual.
- The FLASH button does not function as the disconnection key.
- The ability to perform Call Forwarding/Call Transfer to TIE line is determined on a Class of Service basis. See programs [503] and [504].

Programming References

Section 4, System Programming

- [100] Flexible Numbering
- [109] Expansion Unit Type
- [128] PBX Code
- [129] E&M Signal Assignment
- [220] TIE First / Inter Digit Time
- [340] TIE Line Routing Table
- [341] TIE Modify Removed / Added Digit
- [431] TIE Table Number Assignment
- [432] TIE Incoming Assignment
- [433] TIE Outgoing Assignment
- [434] TIE Subscriber Number Removed Digit
- [435] TIE Added Number
- [436] TIE Wink Time Out Assignment
- [437] CO-to-TIE Transfer
- [438] TIE-to-CO Transfer
- [439] TIE-to-TIE Transfer
- [440] TIE Security Type
- [441] Line Hunt Sequence
- [442] Voice Path Type
- [443] Voice Level (Transmit)
- [444] Voice Level (Receive)
- [445] TIE Receive Dial
- [503] Call Transfer to CO Line
- [504] Call Forwarding to CO Line
- [811] DISA / TIE User Codes
- [990] System Additional Information, Field (41)

Live Call Screening (LCS)[†]

Description

Allows a digital proprietary telephone user to monitor his/her voice mailbox while an incoming caller is leaving a message and, if desired, intercept the call. The voice mailbox can be monitored in one of two ways — Hands-free or Private.

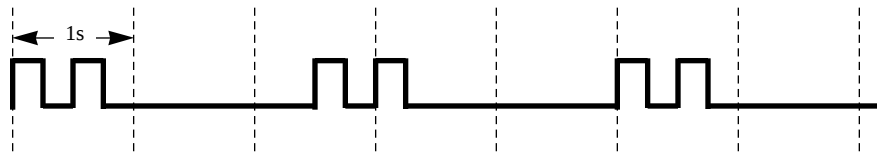
Hands-free Mode

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

Private Mode

When callers are connected to a voice mailbox, a proprietary telephone user will hear an alert tone . 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 emits an alert tone to let you know that a message is being recorded. To intercept the call, flash the hookswitch.

Conditions

- If 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 unauthorized monitoring, a three-digit password must be set by the LCS user. If the user forgets his password, it can be cleared by the operator or manager.
- Each extension can be programmed to either close the mailbox or continue recording the conversation after the call is intercepted.

Programming References

Section 4, System Programming — in this manual

[005] Flexible CO Button Assignment

[616] Live Call Screening Recording Mode Assignment

Station Programming.....Added and Changed Features for User Manual Vol. 4

Flexible Button Assignment – Live Call Screening Button

Live Call Screening Cancel Button

Live Call Screening Mode Set

Feature References

None

Operation References **DPTœ Features**

—Added and Changed Live Call Screening (LCS)

Features for **Operator Service Features**

User Manual Vol. 4 Live Call Screening Password Control

Log-In / Log-Out

Description

Assigns an extension to join (log-in) or leave (log-out) a hunting or UCD 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.
- The lighting patterns of Log-In/Log-Out button and the status are shown below.

lighting pattern	CO Line Status	
	UCD	Station Hunting
Red on	Log-Out	Log-Out
Red flash	Log-In (waiting calls)	
off	Log-In (no calls)	Log-In (no calls)

Programming References

Section 4, System Programming — in this manual

[100] Flexible Numbering, UCD log-in / log-out

Station Programming.....Added and Changed Features for User Manual Vol. 4
Flexible Button Assignment – Log-In / Log-Out Button

Feature References

Section 3, Features

Station Hunting

Uniform Call Distribution (UCD) — in this manual

Operation References

—Added and Changed Log-In / Log-Out
Features for
User Manual Vol. 4

Phantom Extension

Description

Allows the system to route the calls to a phantom extension. A call to a phantom extension arrives at 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; IRNA; UCD-Overflow
Intercom calls – Extension; Transfer
- You can call the phantom extension by pressing the Phantom button or by dialing the phantom extension number. If several extensions have the same phantom extension number, 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 status of the Phantom button are shown below.

Lighting pattern	Phantom Extension Status
Off	Idle
Red on	Calling a phantom extension
Green rapid flash	Incoming call

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

Programming References

Section 4, System Programming — in this manual
[130] Phantom Extension Number Assignment
Station Programming.....Added and Changed Features for User Manual Vol. 4
Flexible Button Assignment – Phantom Button

Feature References

None

Operation References DPT Features

—Added and Changed Phantom Extension
Features for
User Manual Vol. 4

Two-Way Recording into the Voice Mail†

Description

Allows a 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 References

Section 4, System Programming — in this manual

[005] Flexible CO Button Assignment

Station Programming.....Added and Changed Features for User Manual Vol. 4
Flexible Button Assignment — Two-Way Record Button, Two-Way Transfer Button

Feature References

None

Operation References

DPT Features
—Added and Changed Two-Way Recording into the Voice Mail
Features for
User Manual Vol. 4

Uniform Call Distribution (UCD)

Description

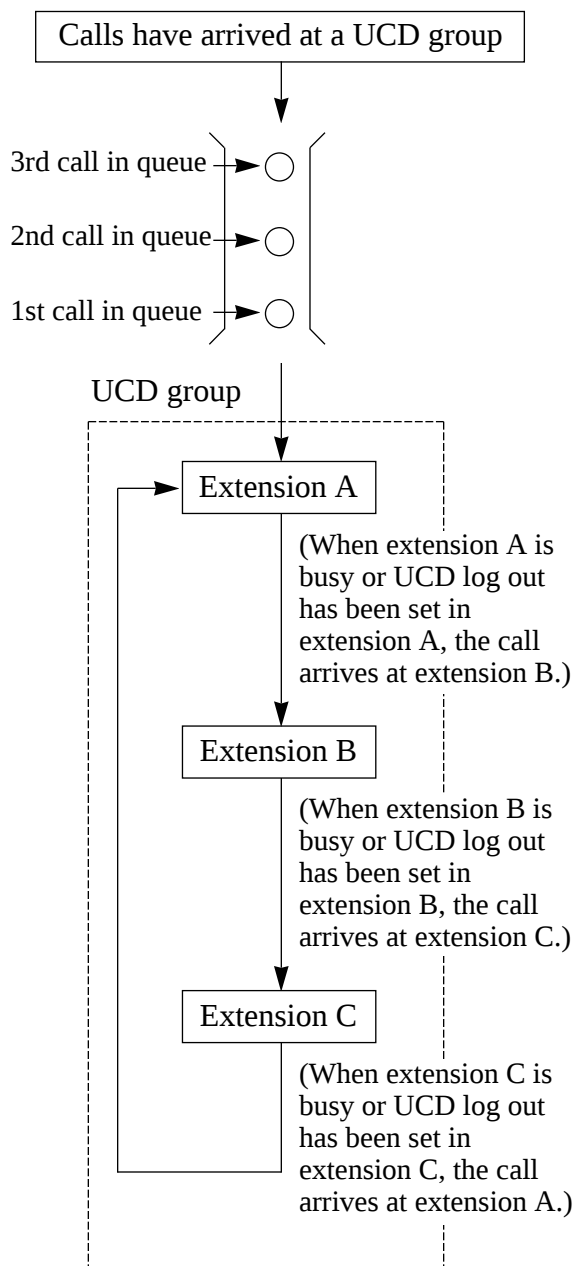
Allows incoming calls (CO line, extension) to be distributed uniformly to a specific group of extensions called UCD group. Calls to a UCD group hunt for an idle station in a circular way, starting at the extension following the last one called. This UCD feature is particularly helpful when a certain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

3 Features

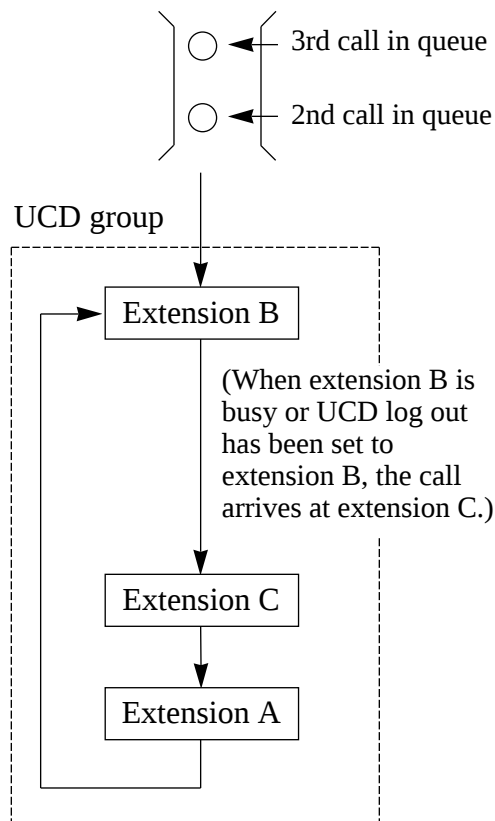
U

An outline sketch of UCD is shown below.

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



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



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

- (4) When all extensions in a UCD group are busy or not available, the incoming outside call will be handled by the UCD Time Table.

An example is shown below.

UCD Time Table Assignment

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

UCD : UCD Group Number (1 – 8)

FN : Floating Number of the UCD Group

OFN : Overflow Extension Number

TT : Time Table Number (1 – 4)

Sequence Assignment

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

S1 : Send 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 → : Directly transfers to an overflow extension.
- RT → n/a → n/a → n/a → : Waits for an idle extension. The caller hears a ringback tone. (IRNA works.)
- → 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 → : Waits for an idle extension. The caller hears a ringback tone. (IRNA does not work.)
- 1T → TR → n/a → n/a → : Waits for an idle extension for 16 seconds and then transfers to an overflow extension.

* n/a: not available for assignment.

Note:

- The UCD Time Table is not available for incoming extensions or transferred calls.
- If the overflow extension or Time Table number is not assigned, the system does not answer the call and waits for any extension to be idle. In this case, IRNA will be employed.
- If the system sends the OGM after queuing, the OGM answering time is subject to the time assigned in program [213] “DISA Delayed Answer Time.”
- Dialing is disregarded during an OGM.
- In sequence assignment, “Sx” can be assigned in 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.
- An OGM is only available for KX-TD1232.
- If a timer is the first item in a Time Table sequence, it will delay answering according to the Timer’s time setting. The caller will hear a ringback tone.
- Music on Hold after an OGM can be changed to a ringback tone by program [990] “System Additional Information, Field (1).”

Conditions

- UCD can be used in the following cases:
 - a) The floating number of UCD is assigned as the DIL 1:1 destination.
 - b) The floating number of UCD is assigned as the Intercept Routing destination.
 - c) The floating number of UCD is dialed from an extension.
 - d) The floating number of UCD is dialed from DISA.
 - e) The floating number of UCD is assigned as the UCD Overflow destination.
 - f) The floating number of UCD is assigned as the Direct Dialing In destination.
- This feature requires assignment of a UCD group in System Programming. An extension cannot belong to two or more UCD groups.
- The floating number can be assigned on a UCD group basis. The UCD group is based on the extension group.
- It is possible to set the log-in or log-out status on an extension basis. A UCD call can arrive at an extension in log-in status within the UCD group, but cannot arrive at 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 their extensions. When the extension re-joins the group, the extension sets the log-in status.
- There should be at least one extension that is in log-in status.

Programming References

Section 4, System Programming — in this manual

[106] Station Hunting Type

[126] UCD Overflow

[127] UCD Time Table

[611] ISDN DDI Number / Floating Number Transformation

[813] Floating Number Assignment

Feature Reference

Section 3, Features

Extension Group

Station Hunting

Log-In / Log-Out — in this manual

Operation References

DPT Features, SLT Features

—Added and Changed Features for
User Manual Vol. 4

Uniform Call Distribution (UCD)

Voice Mail Integration for Digital Proprietary Telephones[†]

Description

A Digital Proprietary Telephone capable Panasonic Voice Processing System can be connected to a 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 four DSHS jacks can be connected to a digital proprietary telephone capable VPS. Because a digital proprietary telephone connection supports up to two simultaneous voice calls, only one DSHS jack needs to be connected to two 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 via the lowest jack port.

Programming References

Section 4, System Programming — in this manual

[117] Voice Mail Number Assignment

[118] Voice Mail Extension Number Assignment

[119] Voice Mail Extension Group Assignment

[616] Live Call Screening Recording Mode Assignment

Feature References

Section 3, Features

Voice Mail Integration

Operation References

Not applicable.

Voice Mail Number Assignment[†]

Description	Assigns the jack number corresponding to the voice mail port for data transmission to the Voice Processing System. The voice mail port is expandable to four ports (8 ports during System Connection for KX-TD1232).
Selection	KX-TD816 • Jack number: 02 through 16 KX-TD1232 • M (Master) / S (Slave) • Jack number: 02 through 32 / Master; 33 through 64 / Slave
Default	Master and Slave — Blank
Programming	KX-TD816 1. Enter 117 . Display: VMS Port Asn 2. Press NEXT . Display example: M:# # # # 3. Enter a jack number . To delete the current entry, press CLEAR . To change the current entry, press CLEAR and enter the new jack number. 4. Press ▶ to enter another jack number. 5. Repeat steps 3 through 4 to enter another jack number. 6. Press STORE . 7. Press END . KX-TD1232 1. Enter 117 . Display: VMS Port Asn 2. Press NEXT to program the Master System. To program “Slave,” press NEXT again. Display example: M:# # # #

[†]: 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-TVP200).

Voice Mail Number Assignment[†]

3. Enter a **jack number**.
 To delete the current entry, press **CLEAR**.
 To change the current entry, press **CLEAR** and enter the new jack number.
4. Press **▶** to enter another jack number.
5. Repeat steps 3 through 4 to enter another jack number.
6. Press **STORE**.
7. Press **NEXT** to program the Slave System.
 Display example: S:# # # #
8. Repeat steps 3 through 4 to enter another jack numbers.
9. Press **END**.

Conditions

- Neither Jack number 01 nor the manager extension can be assigned as a voice mail port jack. The voice mail port jack cannot be assigned to a manager extension.
- The jack numbers correspond to the voice mail port in numerical order.
 Example: Stored jack numbers: Jacks 02, 03, 05, 08
 Jack 02=Voice mail numbers 01, 02; Jack 03= Voice mail numbers 03, 04; Jack 05=Voice mail numbers 05, 06; Jack 08=Voice mail numbers 07, 08

Feature References

None

Voice Mail Extension Number Assignment[†]

Description	Assigns the extension number for the voice mail number. These numbers can be used the same way extension numbers are used for station access.
Selection	• Voice mail number (VM): KX-TD816 – 01 through 08 KX-TD1232 – 01 through 16 • Extension Number: 2 through 4 digits
Default	KX-TD816 – VM-01=165, VM-02=166, VM-03=167, VM-04=168, VM-05=169, VM-06=170, VM-07=177, VM-08=178 KX-TD1232 – VM-01=165, VM-02=166, VM-03=167, VM-04=168, VM-05=169, VM-06=170, VM-07=177, VM-08=178, VM-09=171, VM-10=172, VM-11=173, VM-12=174, VM-13=175, VM-14=176, VM-15=179, VM-16=180
Programming	1. Enter 118. Display: VM EXT NO. Set 2. Press NEXT. Display: VM NO?→ 3. Enter a voice mail number. To enter voice mail number 01, you can also press NEXT. Display: VM-01:#02-1:165 4. Enter an extension number. To change the current entry, press CLEAR and enter the new number. 5. Press STORE. 6. To program another voice mail number, press NEXT or PREV, or SELECT and the desired voice mail number. 7. Repeat steps 4 through 6. 8. Press END.

[†]: 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-TVP200).

Voice Mail Extension Number Assignment[†]

Conditions

- You cannot leave an entry empty.
- The first one or two digits of the voice mail extension numbers are subject to program [100] “Flexible Numbering, (01) through (16) 1st through 16th hundred extension blocks.”
- Double entries and incompatible entries for extension numbers are invalid. Valid entry examples are: 10 and 11, 10 and 110; Invalid entry examples are: 10 and 106, 210 and 21. In order not to make an invalid entry, check the other extension numbers in programs [003] “Extension Number Set,” [012] “ISDN Extension Number Set, [130] “Phantom Extension Number Assignment” and [813] “Floating Number Assignment.”
- The display shows “VM-XX:#YY-1:ZZZ” in step 3.
 - “XX” means the voice mail number.
 - “YY” means the jack number of the voice mail port programmed in [117].
 - “-1” of YY-1 means the first part of jack number in digital line.
 - YY-2 means the second number of the jack number in digital line.

Feature References

Section 3, Features — in this manual
Voice Mail Integration for Digital Proprietary Telephones

Voice Mail Extension Group Assignment[†]

Description	Assigns each voice mail number to a voice mail extension group number.
Selection	• Voice mail number (VM): KX-TD816 – 01 through 08, * KX-TD1232 – 01 through 16, * (* =all voice mail number) • Voice mail extension group number (EXG) = 1 through 8
Default	All voice mail numbers = EXG 1
Programming	1. Enter 119. Display: VM EXT Group Asn 2. Press NEXT. Display: VM NO?→ 3. Enter a voice mail number. To enter voice mail number 01, you can also press NEXT. Display example: VM-01:#02-1:EXG1 4. Enter the voice mail extension group number. To delete the current entry, press CLEAR. To change the current entry, enter the new number. 5. Press STORE. 6. To program another voice mail number, press NEXT or PREV, or SELECT and the desired voice mail number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	• The display shows “VM-XX:#YY-1:EXG Z” in step 3. “XX” means a voice mail number. “YY” means the jack number of the voice mail port programmed in [117]. “-1” of YY-1 means the first part of jack number in digital line. “YY-2” means the second part of the jack number in digital line. • To assign all voice mail numbers to the same selection, press the * key in step 3. In this case, the display shows the contents programmed for TIE table number 1.
Feature References	Section 3, Features — in this manual Voice Mail Integration for Digital Proprietary Telephones

[†]: 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-TVP200).

UCD Overflow

Description	Assigns the destination where the call is transferred to when all extensions in the UCD group are busy. The Time Table number of the overflow extension must also be assigned.
Selection	• UCD group number: 1 through 8 • Overflow extension number: 2 through 4 digits • Time table number: 1 through 4
Default	All UCD groups — Not stored
Programming	1. Enter 126. Display: UCD Overflow 2. Press NEXT. Display: UCD NO?→ 3. Enter an UCD group number. To enter UCD group number 1, you can also press NEXT. Display example: UCD1: ,TT: 4. Enter an overflow extension number. Display example: UCD1:102,TT: 5. Press ➡ . 4. Enter a time table number. Display example: UCD1:102,TT:1 4. Press STORE. 5. Press END.
Conditions	If the overflow extension or Time Table number is not assigned, the system does not answer the call and waits for any extension to be idle. In this case, IRNA will be employed.
Feature Reference	Section 3, Features — in this manual Uniform Call Distribution (UCD)

UCD Time Table

Description	Assigns the queuing sequence in the UCD time table. The queuing sequences are as follows: *S1 : Sends DISA outgoing message 1 *S2 : Sends DISA outgoing message 2 *S3 : Sends DISA outgoing message 3 *S4 : Sends DISA outgoing message 4 TR : Transfers to the overflow extension RT : Returns to the top of the sequence Blank : Disconnects 1T : Timer — 16 seconds 2T : Timer — 32 seconds 3T : Timer — 48 seconds 4T : Timer — 64 seconds
Selection	• Time table number: 1 through 4 • S1 / S2 / S3 / S4 / TR / RT / 1T / 2T / 3T / 4T / Blank
Default	All time tables — Not stored
Programming	1. Enter 127. Display: UCD Time Table 2. Press NEXT. Display: Table NO?→ 3. Enter a time table number. To enter time table number 1, you can also press NEXT. Display example: 1: → → → → 4. Keep pressing SELECT until the desired selection is displayed. Display example: 1:S4→ → → → 5. Press ➡ . 6. Repeat steps 4 and 5. 4. Press STORE. 5. Press END.
Conditions	• “Sx” can be assigned in a space other than in the first only when another “Sx” is assigned in the first space. • An assignment after “TR,” “RT” or “Blank” is not available.
Feature Reference	Section 3, Features — in this manual Uniform Call Distribution (UCD)

PBX Code

Description	Assigns the PBX Code as your location number if the “PBX Code method” is employed for TIE Line Network calling.
Selection	PBX Code: 1 to 3 digits
Default	Not Stored
Programming	1. Enter 128. Display: PBX Code 2. Press NEXT. Display: Code: 3. Enter a PBX Code. To change the current entry, press CLEAR and enter the new code. 4. Press STORE. 5. Press END.
Conditions	• Valid numbers for the PBX Code are 0 through 9. • The PBX Code method is: PBX Code + Extension number.

E&M Signal Assignment

Description	Assigns the E&M signal. There are three signals available: Continuous: Continuous E&M (Wink/Immediate) Pulsed Ans: Pulsed E&M with Answer Signal (Wink only) Pulsed No Ans: Pulsed E&M without Answer Signal (Wink only)
Selection	Continuous / Pulsed Ans / Pulsed No Ans
Default	Continuous
Programming	1. Enter 129. Display: E&M Signal 2. Press NEXT. Display example:Continuous 3. Keep pressing SELECT until the desired selection is displayed. 4. Press STORE. 5. Press END.
Conditions	• If you select “Pulsed Ans” or “Pulsed No Ans”, you must select “Wink” as the start type.

Phantom Extension Number Assignment

Description	Assigns the phantom numbers. Each number will be assigned to a flexible CO or DSS button and used as a Phantom button.
Selection	• Location number: 001 through 128 • Phantom number: 2 through 4 digits
Default	All locations – Not stored
Programming	1. Enter 130. Display: Phantom NO. 2. Press NEXT. Display: Location NO?→ 3. Enter a location number. To enter location number 001, you can also press NEXT. Display example: 001: Not Stored 4. Enter a phantom number. To delete the current entry, press CLEAR. To change the current entry, press CLEAR and enter the new number. 5. Press STORE. 6. To program another location, press NEXT or PREV, or SELECT and the desired location number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	• There is a maximum of 128 phantom numbers. Each number has two to four digits, consisting of numbers 0 through 9. • The first one or two digits of the phantom extension numbers are subject to program [100] “Flexible Numbering, (01) through (16) 1st through 16th hundred extension blocks.” • Phantom extension numbers and other extension numbers should be unique. Double entry and incompatible entry for these numbers are invalid. Valid entry examples are: 10 and 11, 10 and 110; Invalid entry examples are: 10 and 106, 210 and 21. In order not to make an invalid entry, check the other extension numbers in programs [003] “Extension Number Set,” [012] “ISDN Extension Number Set, [118] “Voice Mail Extension Number Assignment” and [813] “Floating Number Assignment.”
Feature References	Section 3, Features — in this manual Phantom Extension

ISDN DDI Number / Phantom Extension Number Transformation

Description	Used to convert a DDI number to a phantom extension number in order to put an incoming DDI call to a specific extension.
Selection	• Location number: 001 through 128 • DDI Number: 1 through 6 digits/ Blank (no number)
Default	All locations – Blank
Programming	1. Enter 131. Display: Phantom DDI NO. 2. Press NEXT. Display: Location NO?-> 3. Enter a location number. To enter location number 001, you can also press NEXT. Display: 001: 4. Enter a DDI number. To delete the current entry, press CLEAR. 5. Press STORE. 6. To program another jack, press NEXT or PREV, or SELECT and the desired location number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	• There is a maximum of 128 phantom DDI numbers. Each DDI number can be one through six digits, consisting of 0 through 9.
Feature References	Section 3, Features — in this manual Direct Dialing In (DDI)

TIE First / Inter Digit Time

Description	Assigns the maximum time allowed between the start of the dial tone and the first digit dialed (First Digit Time), and between digits (Inter Digit Time) on an TIE call. If an extension user fails to dial any digits during this time, the DTMF receiver is released. This timer applies until the Toll Restriction check is completed.
Selection	Time (seconds): 3 to 30
Default	10 s
Programming	1. Enter 220. Display: TIE Timer 2. Press NEXT. Display example: Time:10 sec 3. Enter the time. To change the current entry, press CLEAR and enter the new time. 4. Press STORE. 5. Press END.
Conditions	• This timer is used for toll restriction checking. • You cannot leave the entry empty.
Feature References	Section 3, Features Toll Restriction

TIE Line Routing Table

Description	The TIE line routing table can be programmed. This table is referenced by the system to identify the CO line route, when an extension user makes a TIE call. A routing pattern appropriate for each call is decided by the first three digits (except the TIE line access code) of the dialed number. This program assigns the TIE line access code and CO line group hunt sequence.
Selection	• Location number: 01 through 32 • TIE line access code: 1 to 3 digits • CO line group hunt sequence number: 1 through 8 (5 entry max.)
Default	All locations – Not stored
Programming	1. Enter 340. Display example: TIE Route 2. Press NEXT. Display: Location NO?→ 3. Enter a location number. To enter location number 01, you can also press NEXT. Display example: 01: , 4. Enter a TIE line access code. To delete the current entry, press CLEAR. To change the current entry, press CLEAR and enter the new number. 5. Press ➡ to program the CO line group hunt sequence number. 6. Enter a CO line group hunt sequence number. To delete the current entry, press CLEAR. To change the current entry, press CLEAR and enter the new number. 7. Press STORE. 8. To program another location, press NEXT or PREV, or SELECT and the desired location number. 9. Repeat steps 4 through 8. 10. Press END.
Conditions	• Each TIE line access code has a maximum of three digits, consisting of 0 through 9 and *. The character “*” can be used as a wild card character. • Program [341] “TIE Removed Digit/ Added Dial” is used to modify the TIE line access code.

TIE Modify Removed Digit / Added Dial

Description	Assigns the removed digits and added numbers of a received TIE call. Digits are removed and added from the beginning of the dialed digits.
Selection	• Location number: 01 through 32 • Number of digits to be deleted: 0 to 4 (0=no deletion) • Number to be added: 4 digits (max.)
Default	All locations – Deleted digit: 0, Added Dial: Blank
Programming	1. Enter 341. Display: TIE Remove/Add 2. Press NEXT. Display: Location NO?→ 3. Enter a location number. To enter location number 01, you can also press NEXT. Display example: 01:0, 4. Enter the number of digits to be deleted. To change the current entry, press CLEAR and enter the new number. 5. Press ➡ to program the number to be added. 6. Enter the number to be added. To change the current entry, press CLEAR and enter the new number. 7. Press STORE. 8. To program another location, press NEXT or PREV, or SELECT and the desired location number. 9. Repeat steps 4 through 8. 10. Press END.
Conditions	Each added number has a maximum of 4 digits, consisting of 0 through 9 .

TIE Table Number Assignment

Description	Assigns a TIE table number to each CO line group.
Selection	• CO line group (TRG) number: 1 through 8, * (* =all CO line groups) • TIE table number: 1 to 4
Default	All CO line groups – Not stored
Programming	1. Enter 431. Display: TIE Table NO. 2. Press NEXT. Display: TRK GRP NO?→ 3. Enter a CO line group number. To enter CO line group number 1, you can also press NEXT. Display example: TRG1:Not Stored 4. Enter a TIE table number. To change the current entry, press CLEAR and the new number. 5. Press STORE. 6. To program another CO line group, press NEXT or PREV, or SELECT and the desired CO line group number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	• This is the first and basic programming for the TIE features. If this assignment is changed, it affects other programming ([432] through [436]). • To assign all CO line groups to the same selection, press the * key in step 3. In this case, the display shows the contents programmed for CO line group number 1.

TIE Incoming Assignment

Description

Assigns a TIE incoming method, immediate or wink, to each TIE table according to your central office service.

Immediate: Incoming TIE calls can be received right after the receiving signal arrives.

Wink: Incoming TIE calls can be received after the wink signal is transmitted to the central office (after the receiving signal arrives).

Selection

- TIE table number: **1 to 4**, * (* =all TIE tables)
- **Immediate / Wink**

Default

All DID / TIE tables – Wink

Programming

1. Enter **432**.
Display: TIE Signal In
2. Press **NEXT**.
Display: Table NO?→
3. Enter a **TIE table number**.
To enter TIE table number 1, you can also press **NEXT**.
Display example: 1:Wink
4. Keep pressing **SELECT** until the desired selection is displayed.
5. Press **STORE**.
6. To program another TIE table, press **NEXT** or **PREV**, or **SELECT** and the desired **TIE table number**.
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

To assign all TIE tables to one selection, press the * key in step 3. In this case, the display shows the contents programmed for TIE table number 1.

TIE Outgoing Assignment

Description

Assigns a TIE outgoing method, immediate or wink, to each TIE table according to your central office service.

Immediate: Outgoing TIE numbers can be transmitted right after seizing the CO line.

Wink: Outgoing TIE numbers can be transmitted after receiving the wink signal from the central office after seizing the CO line.

Selection

- TIE table number: **1 to 4**, * (* =all TIE tables)
- **Immediate / Wink**

Default

All TIE tables – Wink

Programming

1. Enter **433**.
Display: TIE Signal Out
2. Press **NEXT**.
Display: Table NO?→
3. Enter a **TIE table number**.
To enter TIE table number 1, you can also press **NEXT**.
Display example: 1:Wink
4. Keep pressing **SELECT** until the desired selection is displayed.
5. Press **STORE**.
6. To program another TIE table, press **NEXT** or **PREV**, or **SELECT** and the desired **TIE table number**.
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

- The time the system waits for the confirmation wink signal can be programmed in program [436] “TIE Wink Time Out Assignment”. The system disconnects the CO line when the time-out time expires.
- To assign all TIE tables to one selection, press the * key in step 3. In this case, the display shows the contents programmed for TIE table number 1.

TIE Subscriber Number Removed Digit

Description	Assigns the removed digits of the received TIE subscriber numbers to each TIE table. Digits are removed from the beginning of the received digits.
Selection	• TIE table number: 1 to 4 • Number of digits to be deleted: 0 through 6 (0=no deletion)
Default	All TIE tables – 0
Programming	1. Enter 434. Display: TIE Remove Digit 2. Press NEXT. Display: Table NO?→ 3. Enter a TIE table number. To enter TIE table number 1, you can also press NEXT. Display example: 1:1 4. Enter the number of digits to be deleted. To change the current entry, press CLEAR and the new number. 5. Press STORE. 6. To program another TIE table, press NEXT or PREV, or SELECT and the desired TIE table number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	You cannot leave the entry empty.

TIE Added Number

Description	Assigns the added number to the TIE subscriber number which is determined in program [434] “TIE Subscriber Number Removed Digit”. This makes the final number which serves as the extension number. Note that digits are inserted at the beginning of the number.
Selection	• TIE table number: 1 to 4 • Number to be added: 4 digits (max.)
Default	All DID / TIE tables – Not Stored
Programming	1. Enter 435. Display: TIE Add Dial 2. Press NEXT. Display: Table NO?→ 3. Enter a TIE table number. To enter TIE table number 1, you can also press NEXT. Display example: 1:2 4. Enter the number to be added. To change the current entry, press CLEAR and enter the new number. 5. Press STORE. 6. To program another TIE table, press NEXT or PREV, or SELECT and the desired TIE table number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	Each added number has a maximum of 4 digits, consisting of 0 through 9 .

TIE Wink Time Out Assignment

Description	The TIE outgoing method can be set to the wink mode in program [433] “TIE Outgoing Assignment”. This program sets the time the system waits for the confirmation wink signal after a CO line is seized according to your central office service. The system disconnects the CO line when the time-out expires.
Selection	• TIE table number: 1 to 4, * (* =all TIE tables) • Time: 1 through 127 (× 64 milliseconds is the actual time)
Default	All TIE tables – 16
Programming	1. Enter 436. Display: TIE Wink Timeout 2. Press NEXT. Display: Table NO?→ 3. Enter a TIE table number. To enter TIE table number 1, you can also press NEXT. Display example: 1:16 4. Enter the time. To change the current entry, press CLEAR and enter the new number. 5. Press STORE. 6. To program another TIE table, press NEXT or PREV, or SELECT and the desired TIE table number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	• You cannot leave the entry empty. • To assign all TIE tables to one selection, press the * key in step 3. In this case, the display shows the contents programmed for TIE table number 1.

CO-to-TIE Transfer

Description	Enables or disables transferring an incoming outside call to the TIE line on a CO line group basis. This restriction applies to the following: 1) A TIE call using DISA 2) Call Forwarding to a TIE line 3) Call Transfer to a TIE line.
Selection	• CO line group (TRG) number: 1 through 8, * (* =all CO line groups) • Enable / Disable
Default	All CO line groups – Disable
Programming	1. Enter 437. Display : CO-TIE Transfer 2. Press NEXT. Display: TRK GRP NO?→ 3. Enter a CO line group number. To enter CO line group number 1, you can also press NEXT. Display example: TRG1:Disable 4. Keep pressing SELECT until the desired selection is displayed. 5. Press STORE. 6. To program another CO line group, press NEXT or PREV, or SELECT and the desired CO line group number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	To assign all CO line groups to the same selection, press the * key in step 3. In this case, the display shows the contents programmed for CO line group number 1.

TIE-to-CO Transfer

Description	Enables or disables transferring TIE calls to a CO line on a CO line group basis. This restriction applies to the following: 1) An outside call through another PBX 2) Call Forwarding to a CO line 3) Call Transfer to a CO line.
Selection	• CO line group (TRG) number: 1 through 8, * (* =all CO line groups) • Enable / Disable
Default	All CO line groups – Disable
Programming	1. Enter 438. Display : TIE-CO Transfer 2. Press NEXT. Display: TRK GRP NO?→ 3. Enter a CO line group number. To enter CO line group number 1, you can also press NEXT. Display example: TRG1:Disable 4. Keep pressing SELECT until the desired selection is displayed. 5. Press STORE. 6. To program another CO line group, press NEXT or PREV, or SELECT and the desired CO line group number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	To assign all CO line groups to the same selection, press the * key in step 3. In this case, the display shows the contents programmed for CO line group number 1.

TIE-to-TIE Transfer

Description	Enables or disables transferring TIE calls to a TIE line on a CO line group basis. This restriction applies to the following: 1) A TIE call through another PBX 2) Call Forwarding to a TIE line 3) Call Transfer to a TIE line.
Selection	• CO line group (TRG) number: 1 through 8, * (* =all CO line groups) • Enable / Disable
Default	All CO line groups – Enable
Programming	1. Enter 439. Display : TIE-TIE Transfer 2. Press NEXT. Display: TRK GRP NO?→ 3. Enter a CO line group number. To enter CO line group number 1, you can also press NEXT. Display example: TRG1:Enable 4. Keep pressing SELECT until the desired selection is displayed. 5. Press STORE. 6. To program another CO line group, press NEXT or PREV, or SELECT and the desired CO line group number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	To assign all CO line groups to the same selection, press the * key in step 3. In this case, the display shows the contents programmed for CO line group number 1.

TIE Security Type

Description	Assigns the security mode for TIE calls. There are two modes, Non Security and Trunk Security (CO line security). Non Security mode allows the caller to access a CO line without dialing a TIE user code. Trunk Security mode requires the caller to enter a TIE User Code assigned in program [811] “DISA / TIE User Codes” before making a TIE call.
Selection	• CO line group (TRG) number: 1 through 8, * (* =all CO line groups) • Non (non security) / Trunk (trunk security)
Default	Non
Programming	1. Enter 440 Display: TIE Security 2. Press NEXT. Display: TRK GRP NO?→ 3. Enter a CO line group number. To enter CO line group number 1, you can also press NEXT. Display example: TRG1:Non 4. Keep pressing SELECT until the desired selection is displayed. 5. Press STORE. 6. Press END.
Conditions	To assign all CO line groups to the same selection, press the * key in step 3. In this case, the display shows the contents programmed for CO line group number 1.

Line Hunting Sequence

Description	Assigns the hunting sequence of idle lines, seizing from the smallest to the largest line number or vice versa in a CO line group, on a CO line group basis.
Selection	• CO line group (TRG) number: 1 through 8, * (* =all CO line groups) • Small → Large / Large → Small
Default	All CO line groups – Small → Large
Programming	1. Enter 441. Display : Line Hunting 2. Press NEXT. Display: TRK GRP NO?→ 3. Enter a CO line group number. To enter CO line group number 1, you can also press NEXT. Display example: TRG1:Large>Small 4. Keep pressing SELECT until the desired selection is displayed. 5. Press STORE. 6. To program another CO line group, press NEXT or PREV, or SELECT and the desired CO line group number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	• The default setting (Small → Large) often may cause a busy situation between two PBXs, as the same line may be seized by both sides simultaneously. In this case, we recommend changing the setting of either PBX to Large → Small. • To assign all CO line groups to the same selection, press the * key in step 3. In this case, the display shows the contents programmed for CO line group number 1.

Voice Path Type

Description	Assigns the voice path type on a CO line basis.
Selection	• CO line number: KX-TD816 – 05 through 08, * (* =all CO lines) KX-TD1232 – 09 through 12 (Master), 21 through 24 (Slave), * (* =all CO lines) • 2 wire / 4 wire
Default	All CO lines – 2 wire
Programming	1. Enter 442. Display: Voice Path Type 2. Press NEXT. Display: CO Line NO?→ 3. Enter a CO line number. To enter CO line number 09, you can also press NEXT. Display example: C009:2 Wire 4. Keep pressing SELECT until the desired selection is displayed. 5. Press STORE. 6. Press END.
Condition	To assign all CO lines to one selection, press the * key in step 3.

Voice Level (Transmit)

Description	Assigns the transmitted voice level on a CO line port basis. This program is valid only when the voice path type is set to “4 wire”.
Selection	• CO line number: KX-TD816 – 05 through 08, * (* =all CO lines) KX-TD1232 – 09 through 12 (Master), 21 through 24 (Slave), * (* =all CO lines) • -6 db / -3 db / 0 db / +3 db
Default	All CO lines – -3db
Programming	1. Enter 443. Display: Voice Level (TX) 2. Press NEXT. Display: CO Line NO?→ 3. Enter a CO line number. To enter CO line number 09, you can also press NEXT. Display example: C009:-3db 4. Keep pressing SELECT until the desired selection is displayed. 5. Press STORE. 6. Press END.
Conditions	To assign all CO lines to one selection, press the * key in step 3.

Voice Level (Receive)

Description	Assigns the received voice level on a CO line basis. This program is valid only when the voice path type is set to “4 wire”.
Selection	• CO line number: KX-TD816 – 05 through 08, * (* =all CO lines) KX-TD1232 – 09 through 12 (Master), 21 through 24 (Slave), * (* =all CO lines) • -6 db / -3 db / 0 db / +3 db
Default	All CO lines – -3db
Programming	1. Enter 444. Display: Voice Level (RX) 2. Press NEXT. Display: CO Line NO?→ 3. Enter a CO line number. To enter CO line number 09, you can also press NEXT. Display example: C009:-3db 4. Keep pressing SELECT until the desired selection is displayed. 5. Press STORE. 6. Press END.
Conditions	To assign all CO lines to one selection, press the * key in step 3.

TIE Receive Dial

Description	Assigns whether the system receives TIE dial numbers on a CO line basis. If “No” is selected, the dialed number is treated as a local number and sent to DIL 1 : 1 or DIL 1 : N.
Selection	• CO line number: KX-TD816 – 05 through 08, * (* =all CO lines) KX-TD1232 – 09 through 12 (Master), 21 through 24 (Slave), * (* =all CO lines) • Yes / No
Default	All CO line ports – Yes
Programming	1. Enter 445. Display: TIE Receive Dial 2. Press NEXT. Display: CO Line NO?→ 3. Enter a CO line number. To enter CO line number 09, you can also press NEXT. Display example: C009:Yes 4. Keep pressing SELECT until the desired selection is displayed. 5. Press STORE. 6. Press END.
Conditions	To assign all CO lines to one selection, press the * key in step 3.

Live Call Screening Recording Mode Assignment[†]

Description	Assigns whether to close the mailbox or to continue recording the conversation after a call is intercepted.
Selection	• Jack number: KX-TD816 – 01 through 16, * KX-TD1232 – 01 through 64, * (* =all jacks) • Stop Record / Keep Record
Default	All jacks = Stop Record (Stop recording)
Programming	1. Enter 616. Display: LCS Rec.Mode 2. Press NEXT. Display: Jack NO?→ 3. Enter a jack number. To enter jack number 01, you can also press NEXT. Display example: #01:Stop Record 4. Keep pressing SELECT until the desired selection is displayed. 5. Press STORE. 6. To program another jack number, press NEXT or PREV, or SELECT and desired jack number. 7. Repeat steps 4 through 6. 8. Press END.
Conditions	• For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. • For an explanation of jack numbering, see “Rotation of jack number” on page 4-7 in the main installation manual. • To assign all jacks to the same selection, press the * key at step 3. In this case, the display shows the contents programmed for jack 01.
Feature References	Section 3, Features — in this manual Live Call Screening (LCS) Voice Mail Integration for Digital Proprietary Telephones

Changes

FEATURE TITLE	SECTION OF THE MANUAL	REVISION
Station Message Detail Recording (SMDR)	(Installation Manual) Section 3	This feature has been changed to the new one. See pages 61 through 64.
[005] Flexible CO Button Assignment	(Installation Manual) Section 4	The Selection section is changed as shown on page 65.
[100] Flexible Numbering	(Installation Manual) Section 4	The new features have been added. See page 66 for details.
[106] Station Hunting Type	(Installation Manual) Section 4	This program has been changed to the new one. See pages 67 and 68.
[109] Expansion Unit Type	(Installation Manual) Section 4	This program has been changed to the new one. See pages 69 and 70.
[611] ISDN DDI Number / Floating Number Transformation	(Installation Manual) Section 4	The Selection section has been changed as follows. - Floating Station: Operator / Pager 1 / Pager 2 / Pager 3 / Pager 4 / DISA 1 / DISA 2 / MODEM / ISDN 01 / ISDN 02 / ISDN 03 / ISDN 04 / ISDN 05 / ISDN 06 / ISDN 07 / ISDN 08 / ISDN 09 / ISDN 10 / ISDN 11 / ISDN 12 / UCD Grp 1 / UCD Grp 2 / UCD Grp 3 / UCD Grp 4 / UCD Grp 5 / UCD Grp 6 / UCD Grp 7 / UCD Grp 8 - DDI Number: 1 through 6 digits
[811] DISA User Codes	(Installation Manual) Section 4	This program has been changed to the new one. See page 71.
[813] Floating Number Assignment	(Installation Manual) Section 4	This program has been changed to the new one. See pages 72 and 73.
[990] System Additional Information	(Installation Manual) Section 4	The default of Field (24) has been changed from “0” to “<u>1</u>: allow”. Fields (39) (40) and (41) are added to Area 6. See pages 74 and 75 for details.

Station Message Detail Recording (SMDR)

Description

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

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

There are three types of the call record, which are the regular call record, the charge call record and the meter call record.

An example of a printed regular call record: When selected for the regular display by Program [815] "SMDR Output Mode."

Date	Time	Ext	CO	Dial Number	Duration	Acc code	CD
06/24/93	10:03AM	101	01	123456789012345678901234567890	00:05'12	1234567890	
06/24/93	10:07AM	103	20	<INCOMING>0123456789	00:00'56		
06/24/93	10:08AM	104	10	<INCOMING>	00:00'20	431211	
06/24/93	10:08AM	105	10	<INCOMING>	00:10'01	431211	TR
06/24/93	10:09AM	280	14	10222P1-202-346-7890	00:09'18	001	FW
06/24/93	10:10AM	103	20	<INCOMING>1234567890	00:01'24		
06/24/93	10:11AM	280	12	<INCOMING>	00:00'24		
06/24/93	10:11AM	280	22	0924312111	00:03'02		D1
06/24/93	10:20AM	120	13	<INCOMING>	00:21'46		RM
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

An example of a printed charge call record: When selected for charge by Program [815] “SMDR Output mode” and selected for charge display by program [120] “Charge Display Selection.”

Date	Time	Ext	CO	Dial Number	Duration	Cost	Acc code	CD
06/24/93	10:03AM	101	01	12345678901234567890	00:05'12	382.81KC	1234567890	
06/24/93	10:07AM	103	20	<I>0123456789	00:00'56	0.00KC		
06/24/93	10:08AM	104	10	<I>	00:00'20	0.00KC	431211	
06/24/93	10:08AM	105	10	<I>	00:10'01	0.00KC	431211	TR
06/24/93	10:09AM	280	14	10222P1-202-346-7890	00:09'18	560.00KC	001	FW
06/24/93	10:10AM	103	20	<I>1234567890	00:01'24	0.00KC		
06/24/93	10:11AM	280	12	<I>	00:00'24	0.00KC		
06/24/93	10:11AM	280	22	0924312111	00:03'02	128.00KC		D1
06/24/93	10:20AM	120	13	<I>	00:21'46	0.00KC		RM
.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.
(1)	(2)	(3)	(4)	(5)	(6)	(9)	(7)	(8)

An example of a printed meter call record: When selected for charge by Program [815] “SMDR Output Mode” and selected for meter display by Program [120] “Charge Display Selection.”

Date	Time	Ext	CO	Dial Number	Duration	Cost	Acc code	CD
06/24/93	10:03AM	101	01	12345678901234567890	00:05'12	15	1234567890	
06/24/93	10:07AM	103	20	<I>0123456789	00:00'56	0		
06/24/93	10:08AM	104	10	<I>	00:00'20	0	431211	
06/24/93	10:08AM	105	10	<I>	00:10'01	0	431211	TR
06/24/93	10:09AM	280	14	10222P1-202-346-7890	00:09'18	520	001	FW
06/24/93	10:10AM	103	20	<I>1234567890	00:01'24	0		
06/24/93	10:11AM	280	12	<I>	00:00'24	0		
06/24/93	10:11AM	280	22	0924312111	00:03'02	0		D1
06/24/93	10:20AM	120	13	<I>	00:21'46	1040		RM
.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.
(1)	(2)	(3)	(4)	(5)	(6)	(10)	(7)	(8)

Example of SMDR printout format:

Explanation

- (1) Date : shows the date of the call as Month / Day / Year.
- (2) Time : shows the start time of a call as Hour:Minute / AM or PM.
- (3) Ext : shows the extension number, floating number, etc. that engaged in a call.
- (4) CO : shows the CO line number used for the call.
- (5) Dial Number

Outgoing call: shows the other party's telephone number (Regular call record : Max. 30 digits, Charge or Meter call record : Max. 20 digits). Valid digits are 0 through 9, * #, P (if PAUSE button is pressed), or the mark "=" (if a host PBX access code is entered).

Received call: shows <INCOMING> and <I>. If the call is carried by an ISDN network, also shows the telephone number of the calling party.

- (6) Duration : shows the duration of the call as Hours / Minutes / Seconds.
- (7) Acc Code (Account Code): shows the account code appended to the call.
- (8) CD (Condition Code): shows call handling type with the following codes:

TR: Transfer

FW: Call Forwarding to CO Line

D0*: Non Security CO Line Access using DISA

D1* through D4: DISA User Codes 1 through 4

RM*: Remote access to a modem

To print out the record of System Programming items that have been assigned, use the program [802] "System Data Printout."

- (9) Cost : shows the charge.
- (10) Cost : shows the meter.

Conditions

- Connect a printer provided with an EIA (RS-232C) interface to the EIA (RS-232C) connector located on the main unit.
- When programmed for outgoing toll calls only, printing occurs only for calls which start with the numbers stored in any Denied Code Table from levels 2 to 6. If ARS is employed, not the user-dialed but modified number is checked against these tables.

- This system can store information on up to 100 calls. If more calls are originated or received, previous records are deleted starting from the oldest one.
- This data is not deleted when you reset the system.
- If the system clock is not set by System Programming or if the calendar IC is out of order, the date and time is not printed out.
- If FLASH Signal is manually sent out during a conversation, the call record is printed and a new record is started.

Connection References**Section 2, Installation**

2.3.10 Printer Connection

Programming References**Section 4, System Programming,**

[000] Date and Time Set

[120] Charge Display Selection – in this manual

[212] Call Duration Count Start Time

[800] SMDR Incoming / Outgoing Call Log Printout

[801] SMDR Format

[802] System Data Printout

[806]–[807] EIA (RS-232C) Parameters

[815] SMDR Out put Mode – in this manual

[990] System Additional Information, Field (38)

Feature References

None

Operation References

Not applicable.

Flexible CO Button Assignment

Description

As the new features are added, the assignable flexible buttons are changed as shown below.

Selection

- Jack number: **KX-TD816 – 01 through 16**
KX-TD1232 – 01 through 64
- Button Code (plus parameter, if required):

Button Code	Parameter
0 (Single-CO)	KX-TD816: 01 through 08 (CO line number) KX-TD1232: 01 through 24 (CO line number)
1 (DSS)	2 through 4 digits (Extension number)
2 (One-Touch)	16 digits max. (Telephone number)
3 (Message Waiting)	None
4 (FWD/DND)	None
5 (Save)	None
6 (Account)	None
7 (Conference)	None
80 (Log-In/Log-Out)	None
82 (Voice Mail Transfer)	2 through 4 digits (Extension number)
83 (Two-Way Record) [†]	2 through 4 digits (Extension number)
84 (Two-Way Transfer) [†]	2 through 4 digits (Extension number)
85 (Live Call Screening) [†]	None
86 (Live Call Screening Cancel) [†]	None
87 (Alert)	None
88 (Phantom)	2 through 4 digits (Phantom extension number)
* (Loop-CO)	1 through 8 (CO line group number)
# (Group-CO)	1 through 8 (ring tone type number)
CO (ringer frequency)	

For more information about this programming, refer to the program [005] “Flexible CO Button Assignment” in the main Installation Manual.

[†]: 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-TVP200).

Flexible Numbering

The following new features have been added.

Selection

- Selection number: **67 through 85**
- Feature number: **1 to 3 digits** (for selection number 67),
consisting of **0 through 9**
1 or 2 digits (for selection numbers 68 through 83), consisting of **0 through 9**
1 to 3 digits (for selection number 84 and 85),
consisting of **0 through 9, #, ***

Default

Number	Feature	Default
67	TIE line access code	None
68	Other PBX Extension 01	None
69	Other PBX Extension 02	None
70	Other PBX Extension 03	None
71	Other PBX Extension 04	None
72	Other PBX Extension 05	None
73	Other PBX Extension 06	None
74	Other PBX Extension 07	None
75	Other PBX Extension 08	None
76	Other PBX Extension 09	None
77	Other PBX Extension 10	None
78	Other PBX Extension 11	None
79	Other PBX Extension 12	None
80	Other PBX Extension 13	None
81	Other PBX Extension 14	None
82	Other PBX Extension 15	None
83	Other PBX Extension 16	None
84	LCS password set / cancel [†]	799
85	log-in / log-out	45

For the programming sequence and more information, refer to the program [100] “Flexible Numbering” in the main Installation Manual.

Station Hunting Type

Description

Used to enable or disable hunting and set the Station Hunting type for each extension group. There are six Station Hunting types available: Circular, Termination, Voice Mail (VM), Automated Attendant (AA), and Uniform Call Distribution (UCD). If circular hunting is assigned for a group, all the extensions in the group are hunted until an idle one is found. If termination hunting is assigned, hunting stops at the extension which has the largest jack number in the group. If VM hunting is assigned, all the VM ports of an extension group are hunted until an idle one is found which permits Voice Mail Service. If AA hunting is assigned, all the AA ports of an extension group are hunted until an idle one is found which permits AA Service. If UCD is assigned, group members are hunted in a circular way.

Selection

- Extension group number: **1 through 8**, * (* =all extension groups)
- **Disable** (no hunting) / **Terminate** (termination) / **Circular** / **VM** (voice mail) / **AA** (automated attendant) / **UCD**

Default

All extension groups – Disable

Programming

1. Enter **106**.
Display: Call Hunting
2. Press **NEXT**.
Display: EXT GRP NO?→
3. Enter an **extension group number**.
To enter extension group number 1, you can also press **NEXT**.
Display example: Group1: Disable
4. Keep pressing **SELECT** until the desired selection is displayed.
5. Press **STORE**.
6. To program another extension group, press **NEXT** or **PREV**, or **SELECT** and the desired **extension group number**.
7. Repeat steps 4 through 6.
8. Press **END**.

Station Hunting Type

Conditions

- Program [602] “Extension Group Assignment” is used to assign the extension group members.
- The system supports a maximum of eight jacks (16 jacks during System Connection for KX-TD1232) for connection to a Voice Processing System as VM or AA ports.
- To assign all extension groups to the same selection, press the * key at step 3. In this case, the display shows the contents programmed for extension group 1.

Feature References**Section 3, Features**

Station Hunting

Uniform Call Distribution (UCD) — in this manual

Voice Mail Integration

Expansion Unit Type

Description	Assigns the type of expansion units to be used in the system. This allows the system to identify the unit in each expansion unit location.
Selection	KX-TD816 • Areas 1; 2 = C (4 CO) / S1 (2 S0) / S2 (6 S0) / EM(4 E&M) / E (EXT)/ A (16 SLT) KX-TD1232 • Master / Slave • Areas 1; 2; 3 = C (4 CO) / S1 (2 S0) / S2 (6 S0) / EM(4 E&M) / E1 (EXT1)/ E2 (EXT2)/ A1 (16 SLT1) / A2 (16 SLT2)
Default	KX-TD816: C;E KX-TD1232: Master and Slave – C;E1;E2
Programming	KX-TD816 1. Enter 109. Display: Expansion Card 2. Press NEXT. Display example: Master:C ;E 3. Keep pressing SELECT until the desired selection of Area 1 is displayed. 4. Press ➡ to program Area 2, if required. 5. Keep pressing SELECT until the desired selection of Area 2 is displayed. 6. Press STORE. 7. Press END. KX-TD1232 1. Enter 109. Display: Expansion Card 2. Press NEXT to program the Master System. To program the “Slave”, press NEXT again. Display example: Master:C ;E1;E2

Expansion Unit Type

3. Keep pressing **SELECT** until the desired selection of Area 1 is displayed.
4. Press **➡** to program another Area, if required.
5. Keep pressing **SELECT** until the desired selection of the Area is displayed.
6. Repeat steps 4 and 5 until all of the required entries are completed, if required.
7. Press **STORE**.
If only one system is in operation, go to step 10.
8. Press **NEXT** to program the Slave System.
Display example: Slave :C ;E1;E2
9. Repeat steps 3 through 7, if required.
10. Press **END**.

Conditions

- Each parameter corresponds to an expansion unit as follows:
C=KX-TD180, S1=KX-TD280, S2=KX-TD286, E, E1 and E2=KX-TD170, A, A1 and A2=KX-TD174, EM=KX-TD184
- There are two expansion areas in the KX-TD816, areas 1 and 2 from bottom to top. Either one 8-Station Line Unit or 16-SLT Line Unit and either one 4-CO Line Unit, 4-E&M Line Unit, 2-ISDN S0 Line Unit or 6-ISDN S0 Line Unit can be installed.
- There are three expansion areas in each system for the KX-TD1232, areas 1, 2 and 3 from bottom to top. Either up to two 8-Station Line Units or 16-SLT Line Units and either one 4-CO Line Unit, 4-E&M Line Unit, 2-ISDN S0 Line Unit or 6-ISDN S0 Line Unit can be installed in each system.
- An out-of-service system is unassignable. In this case, skip steps 8 and 9 for the KX-TD1232.
- For the KX-TD1232, if only the Slave System is in operation, the display shows “Slave” in step 2.
- After changing the setting, turn the Power Switch off and on once. Otherwise, the previous setting will remain.

DISA / TIE User Codes

Description	Assigns the DISA and TIE User Codes and a Class of Service (COS) to each code. The code COS determines the toll restriction level of the DISA and TIE caller.
Selection	• DISA / TIE user code number: 01 through 32 • DISA / TIE user code: 4 to 10 digits • COS number: 1 through 8
Default	Code 01=0001 – COS 1 Code 02=0002 – COS 1 Code 03=0003 – COS 1 : Code 32=0032 – COS 1
Programming	1. Enter 811. Display: User Code 2. Press NEXT. Display: User Code NO?→ 3. Enter a DISA / TIE user code number. To enter user code number 01, you can also press NEXT. Display example: 01:0001 C:1 4. Enter a DISA / TIE user code. To change the current entry, enter the new code. 5. Press ➡ to program the COS. 6. Enter a COS number. To change the current entry, enter the new COS number. 7. Press STORE. 8. To program another user code, press NEXT or PREV, or SELECT and the desired DISA / TIE user code number. 9. Repeat steps 4 through 8. 10. Press END.
Conditions	• This setting is required if the Trunk (CO line) Security mode is selected in programs [440] “TIE Security Type” and [809] “DISA Security Type”. • Each user code should be unique and composed of eight numerical digits, 0 through 9. • You cannot leave an entry empty.

Floating Number Assignment

Description	Assigns the floating numbers for External Pagers, DISA* messages, modem* and UCD groups. These numbers can be used the same way extension numbers are used for station access.
Selection	- Floating station: KX-TD816 – Pager1 / DTA / UCD-Grp (group) 1 through 8 KX-TD1232 – Pager1 through 4 / DISA1 / DISA2 / MODEM / DTA / UCD-Grp (group) 1 through 8 - Floating number: 2 through 4 digits
Default	KX-TD816 – Pager 1=196; DTA=199; UCD-Grp 1=191; UCD-Grp 2=192; UCD-Grp 3=193; UCD-Grp 4=194; UCD-Grp 5=291; UCD-Grp 6=292; UCD-Grp 7=293; UCD-Grp 8=294; KX-TD1232 – Pager 1=196; Pager 2=197; Pager 3=296; Pager 4=297; DISA 1=198; DISA 2=298; MODEM=299; DTA=199; UCD-Grp 1=191; UCD-Grp 2=192; UCD-Grp 3=193; UCD-Grp 4=194; UCD-Grp 5=291; UCD-Grp 6=292; UCD-Grp 7=293; UCD-Grp 8=294;
Programming	- Enter 813. Display: FLT EXT NO. - Press NEXT to program Pager 1. Display example: Pager1:EXT196 To program another floating station for KX-TD1232, keep pressing NEXT or PREV until the desired floating station is displayed. - Enter a floating number. To change the current entry, press CLEAR and enter the new floating number. - Press STORE. - To program another floating station, keep pressing NEXT or PREV until the desired floating station is displayed. - Repeat steps 3 through 5.

Floating Number Assignment

7. Press **END**.

Conditions

- A floating number is composed of two to four numerical digits, **0 through 9**.
- The first one or two digits of the floating numbers are subject to program [100] “Flexible Numbering, (01) through (16) 1st through 16th hundred extension blocks.”
- Floating numbers and extension numbers should be unique. Double entry and incompatible entry for these numbers are invalid. Valid entry example: 10 and 11, 10 and 110; Invalid entry example: 10 and 106, 210 and 21.

In order not to make an invalid entry, check the other extension numbers in programs [003] “Extension Number Set,” [012] “ISDN Extension Number Set, [118] “VM Extension Number Assignment” and [130] “Phantom Extension Number Assignment.” The default of each extension number is as follows:

[003] Extension Number Set

KX-TD816 – 101 through 116, 201 through 216

KX-TD1232 – 101 through 164, 201 through 264

[012] ISDN Extension Number Set

Not stored

[118] VM Extension Number Assignment

165 through 180

[130] Phantom Extension Number Assignment

Not stored

- You cannot leave an entry empty.

Feature References

Section 3, Features
Floating Station

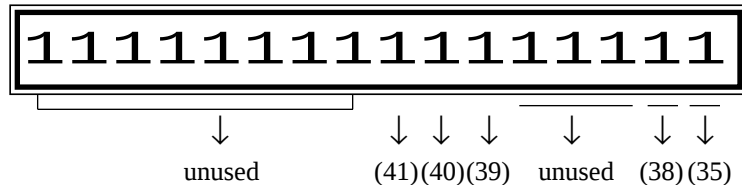
System Additional Information

Description

Field (39), (40) and (41) are added to Area 6.

Area 6

Display example



Explanation for Area 6

Field	Description	Selection	Default	Reference
(39)	Selects the result when a CO call is routed by Call Forwarding to a voice mail port which is in AA service mode. (For both Inband and DPT Integration) disable: AA service mode enable: The mode will change to the VM service mode and a Follow-On ID is sent. When the voice mail port is in VM service mode, this program is not affected.	0 : Disable 1 : Enable	1	Voice Mail Integration
(40)	Selects the result when a CO call is routed to a voice mail port by IRNA. (For both Inband and DPT Integration) When the voice mail port is in VM service mode; enable: VM service mode disable: The mode will change to the AA service mode (Only when Inband) When the voice mail port is in AA service mode; enable: The mode will change to the VM service mode and a Follow-On ID is sent. disable: AA service mode	0 : Enable 1 : Disable	1	Voice Mail Integration
(41)	Enables or disables sending CO line access code “9” to a TIE line. When you dial CO line access code “9” and the CO line is busy, the system can automatically send CO line access code “9” to a TIE line so that you can access the CO line through another PBX.	0 : Enable 1 : Disable	1	None

System Additional Information

The **Selection** section is changed as follows.

Selection

- Area code: **01** (area 1) / **02** (area 2) / **03** (area 3) / **04** (area 4) / **05** (area 5) / **06** (area 6)¹
- Field number : **1 through 22, 26 and 36 (for areas 1 and 2)**
23 through 25 and 27 (for areas 3 and 4),
28 through 34, and 37 (for area 5),
35 and 38 through 41 (for area 6)
- Selection: See “**Selection**” shown in the lists for each area.

Default

See “**Default**” shown in the lists.

Programming Tables for Added and Changed Features

100, 126 – 127

87

[100] Flexible Numbering			
Item	Feature	Default	Parameter
67	TIE line access code	None	
68	Other PBX Extension 01	None	
69	Other PBX Extension 02	None	
70	Other PBX Extension 03	None	
71	Other PBX Extension 04	None	
72	Other PBX Extension 05	None	
73	Other PBX Extension 06	None	
74	Other PBX Extension 07	None	
75	Other PBX Extension 08	None	
76	Other PBX Extension 09	None	
77	Other PBX Extension 10	None	
78	Other PBX Extension 11	None	
79	Other PBX Extension 12	None	
80	Other PBX Extension 13	None	
81	Other PBX Extension 14	None	
82	Other PBX Extension 15	None	
83	Other PBX Extension 16	None	
84	LCS password set / cancel	799	
85	UCD log-in / log-out	45	
(Selection) No.67: 1 – 3 digits (Valid Entries) 0 – 9 No.68 – 83: 1 or 2 digits, (Valid Entries) 0 – 9 No.84 – 85: 1 – 3 digits (Valid Entries) 0 – 9,*,#			

[126] UCD Overflow		
Item : UCD Group No.	Parameter	
	Overflow Extension No. (2 – 4 digits)	Time Table No. (1 – 4)
Default : all	Not Stored	
1		
2		
3		
4		
5		
6		
7		
8		

[127] UCD Time Table				
	Sequence			
Table 1	→	→	→	→
Table 2	→	→	→	→
Table 3	→	→	→	→
Table 4	→	→	→	→
Selection : S1* / S2* / S3* / S4* / TR / RT / 1T / 2T / 3T / 4T / Blank				

127

<Note> *: Available for KX-TD1232 only.

106, 109, 128 – 129, 220

	[106] Station Hunting Type							
	Default	Item : Extension Group						
	all	1	2	3	4	5	6	7 8
Disable	✓							
Terminate								
Circular								
Voice Mail								
Automated Attendant								
UCD								

[128] PBX Code	
Default	Parameter : 1 – 3 digits, 0 – 9
Not stored	

[129] E&M Signal Assignment		
	Default	Selection
Continuous	✓	
Pulsed Ans		
Pulsed No Ans		

[109] Extension Card / Unit Type																										
TD816	Area No.	1						2																		
	Selection	C	S1	S2	EM	E	A	C	S1	S2	EM	E	A													
	Default	✓											✓													
	Parameter																									
TD1232	Master System																									
	Area No.	1						2						3												
	Selection	C	S1	S2	EM	E1	E2	A1	A2	C	S1	S2	EM	E1	E2	A1	A2	C	S1	S2	EM	E1	E2	A1	A2	
	Default	✓											✓										✓			
	Parameter																									
	Slave System																									
	Area No.	1						2						3												
	Selection	C	S1	S2	EM	E1	E2	A1	A2	C	S1	S2	EM	E1	E2	A1	A2	C	S1	S2	EM	E1	E2	A1	A2	
	Default	✓												✓										✓		
	Parameter																									
<Note> TD816 – C:4CO, S1:2S0, S2:6S0, EM:4E&M, E:8EXT, A:16SLT TD1232 – C:4CO, S1:2S0, S2:6S0, EM:4E&M, E1:8EXT-1, E2:8EXT-2, A1:16SLT-1, A2:16SLT-2																										

[220] TIE First / Inter Digit Time	
Default	10 s
Parameter	
Selection	3 – 30

117 – 119

80

[117] Voice Mail Number Assignment					
Item	Default	Parameter : Jack No. 02 – 16 (TD816) / Jack No. 02 – 64 (TD1232)			
Master	Not Stored				
Slave (TD1232 only)	Not Stored				

Item : VM No. (01 – 16)	[118] Voice Mail Extension Number Assignment			[119] Voice Mail Extension Group Assignment							
	Jack No. : -1 -2	Parameter : Ext. No. (2 – 4 digits)		Parameter : Ext. Group No. (1 – 8)							
				Default : all – 1							
		Default	Change	Change							
				1	2	3	4	5	6	7	8
01	-1	165									
02	-2	166									
03	-1	167									
04	-2	168									
05	-1	169									
06	-2	170									
07	-1	177									
08	-2	178									
09	-1	171									
10	-2	172									
11	-1	173									
12	-2	174									
13	-1	175									
14	-2	176									
15	-1	179									
16	-2	180									
All VM No.											

118 and 119

<Note> VM No.: TD816 (01 – 08),
TD1232 (01 – 16)

	[130] Phantom Extension Number Assignment						
	Parameter : 2 – 4 digits, consisting of 0 – 9.						
Default : all	Not Stored						
Item: Location	Parameter	Item: Location	Parameter	Item: Location	Parameter	Item: Location	Parameter
001		033		065		097	
002		034		066		098	
003		035		067		099	
004		036		068		100	
005		037		069		101	
006		038		070		102	
007		039		071		103	
008		040		072		104	
009		041		073		105	
010		042		074		106	
011		043		075		107	
012		044		076		108	
013		045		077		109	
014		046		078		110	
015		047		079		111	
016		048		080		112	
017		049		081		113	
018		050		082		114	
019		051		083		115	
020		052		084		116	
021		053		085		117	
022		054		086		118	
023		055		087		119	
024		056		088		120	
025		057		089		121	
026		058		090		122	
027		059		091		123	
028		060		092		124	
029		061		093		125	
030		062		094		126	
031		063		095		127	
032		064		096		128	

	[131] ISDN DDI Number / Phantom Extension Number Transformation						
	Parameter : 1 – 6 digits, consisting of 0 – 9.						
Default : all	Not Stored						
Item: Location	Parameter	Item: Location	Parameter	Item: Location	Parameter	Item: Location	Parameter
001		033		065		097	
002		034		066		098	
003		035		067		099	
004		036		068		100	
005		037		069		101	
006		038		070		102	
007		039		071		103	
008		040		072		104	
009		041		073		105	
010		042		074		106	
011		043		075		107	
012		044		076		108	
013		045		077		109	
014		046		078		110	
015		047		079		111	
016		048		080		112	
017		049		081		113	
018		050		082		114	
019		051		083		115	
020		052		084		116	
021		053		085		117	
022		054		086		118	
023		055		087		119	
024		056		088		120	
025		057		089		121	
026		058		090		122	
027		059		091		123	
028		060		092		124	
029		061		093		125	
030		062		094		126	
031		063		095		127	
032		064		096		128	

[340] TIE Line Routing Table					
Item : Location No.	Parameter : TIE line access code (3 digits max.), consisting of 0 – 9, *.	Parameter : CO line group hunt sequence no. (1 – 8), 5 entries max.	Item : Location No.	Parameter : TIE line access code (3 digits max.), consisting of 0 – 9, *.	Parameter : CO line group hunt sequence no. (1 – 8), 5 entries max.
Default: all	Not Stored	Not Stored	Default: all	Not Stored	Not Stored
all locations			17		
1			18		
2			19		
3			20		
4			21		
5			22		
6			23		
7			24		
8			25		
9			26		
10			27		
11			28		
12			29		
13			30		
14			31		
15			32		
16					

[341] TIE Modify Removed Digit/ Added Dial					
Item : Location No.	Parameter : No. of digits to be deleted (0 – 4)	Parameter : No. to be added (4 digits max.), consisting of 0 – 9.	Item : Location No.	Parameter : No. of digits to be deleted (0 – 4)	Parameter : No. to be added (4 digits max.), consisting of 0 – 9.
Default: all	0	Not Stored	Default: all	0	Not Stored
all locations			17		
1			18		
2			19		
3			20		
4			21		
5			22		
6			23		
7			24		
8			25		
9			26		
10			27		
11			28		
12			29		
13			30		
14			31		
15			32		
16					

431 – 433, 437 – 441

	[431] TIE Table Number Assignment	[437] CO-to-TIE Transfer		[438] TIE-to-CO Transfer		[439] TIE-to-TIE Transfer	
Item : CO Line Group No.	Parameter: TIE Table No. (1 – 4)	Selection		Selection		Selection	
		Enable	Disable	Enable	Disable	Enable	Disable
Default : all	Not Stored		✓		✓	✓	
all CO line groups							
1							
2							
3							
4							
5							
6							
7							
8							

	[440] TIE Security Type		[441] Line Hunting Sequence	
Item : CO Line Group No.	Selection		Selection	
	Non	Trunk	Small→Large	Large→Small
Default : all	✓		✓	
all CO line groups				
1				
2				
3				
4				
5				
6				
7				
8				

	[432] TIE Incoming Assignment		[433] TIE Outgoing Assignment	
Item : TIE Table No.	Selection		Selection	
	Immediate	Wink	Immediate	Wink
Default : all		✓		✓
all tables				
1				
2				
3				
4				

[illegible]

611, 616

[611] ISDN DDI Number / Floating Number Transformation			
Item: Floating Ext. No.	Default: All-not stored	Item: Floating Ext. No.	Default: All-not stored
	Selection		Selection
	Parameter: 1 through 6 digits, consisting of 0 - 9		Parameter: 1 through 6 digits, consisting of 0 - 9
Operator		UCD Grp 1	
Pager 1		UCD Grp 2	
Pager 2*		UCD Grp 3	
Pager 3*		UCD Grp 4	
Pager 4*		UCD Grp 5	
DISA 1*		UCD Grp 6	
DISA 2*		UCD Grp 7	
MODEM*		UCD Grp 8	
ISDN 1		<Note> *: available for the KX-TD1232 only.	
ISDN 2			
ISDN 3			
ISDN 4			
ISDN 5			
ISDN 6			
ISDN 7*			
ISDN 8*			
ISDN 9*			
ISDN 10*			
ISDN 11*			
ISDN 12*			

616

<Note> Jack No.: TD816 (01 – 16),
 TD1232 (01 – 32 for Master, 33 – 64 for Slave)

[616] Live Call Screening Recording Mode Assignment					
Item : Jack No. (01 – 31)	Selection		Item : Jack No. (32 – 64)	Selection	
	Stop Rec	Keep Rec		Stop Rec	Keep Rec
Default : all	✓		32		
All jacks			33		
01			34		
02			35		
03			36		
04			37		
05			38		
06			39		
07			40		
08			41		
09			42		
10			43		
11			44		
12			45		
13			46		
14			47		
15			48		
16			49		
17			50		
18			51		
19			52		
20			53		
21			54		
22			55		
23			56		
24			57		
25			58		
26			59		
27			60		
28			61		
29			62		
30			63		
31			64		

[990] System Additional Information																
AREA 06 [Fields 35 and 38 through 41]																
Field	Unused								41	40	39	Unused			38	35
Default	—	—	—	—	—	—	—	—	1	1	1	—	—	—	1	1
Selection																
<Selection>																
Field	35	: 0 (0 sec.) / 1 (5 sec.)														
	38	: 0 (not printed out) / 1 (printed out)														
	39	: 0 (Disable) / 1 (Enable)														
	40	: 0 (Enable) / 1 (Disable)														
	41	: 0 (Enable) / 1 (Disable)														

<Note> *: Available for KX-TD1232 only.

[811] DISA / TIE User Codes									
	Default		Parameter			Default		Parameter	
Item	Code	COS	Code (4 to 10 digits)	COS (1 – 8)	Item	Code	COS	Code (4 to 10 digits)	COS (1 – 8)
Code 1	0001	1			Code 17	0017	1		
Code 2	0002	1			Code 18	0018	1		
Code 3	0003	1			Code 19	0019	1		
Code 4	0004	1			Code 20	0020	1		
Code 5	0005	1			Code 21	0021	1		
Code 6	0006	1			Code 22	0022	1		
Code 7	0007	1			Code 23	0023	1		
Code 8	0008	1			Code 24	0024	1		
Code 9	0009	1			Code 25	0025	1		
Code 10	0010	1			Code 26	0026	1		
Code 11	0011	1			Code 27	0027	1		
Code 12	0012	1			Code 28	0028	1		
Code 13	0013	1			Code 29	0029	1		
Code 14	0014	1			Code 30	0030	1		
Code 15	0015	1			Code 31	0031	1		
Code 16	0016	1			Code 32	0032	1		

