

R E F E R E N C E G U I D E

***Digital Proprietary Telephones and
Digital DSS Console for Digital Super
Hybrid Systems***




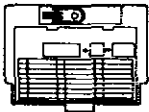
***The KX-T7220E, KX-T7230E, KX-T7235E, KX-
T7240E, and KX-T7250E can perform most of the
functions of the systems. Please read before using.***

MODEL

KX-T7200E Series

Thank you for purchasing this Panasonic Telephone Systems.

System Components

<div style="text-align: right;">Model</div> <div style="text-align: left;">Included Accessories</div>	KX-T7220E Digital Proprietary Telephone with SP-Phone	KX-T7230E Digital Proprietary Telephone with Display	KX-T7235E Digital Proprietary Telephone with Large Display	KX-T7240E Digital DSS Console	KX-T7250E Digital Proprietary Telephone with Monitor
Handset 	One	One	One	—	One
Telephone line cord 	One	One	One	One	One
Handset cord 	One	One	One	—	One
Card holder with memory station card 	One	One	—	—	—

APPROVED for connection to telecommunication systems specified in the instructions for use subject to the conditions set out in them.

NS / 1010 / 235 / R / 604365

Warning

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



73/23/EEC
 89/336/EEC
 92/31/EEC
 93/68/EEC

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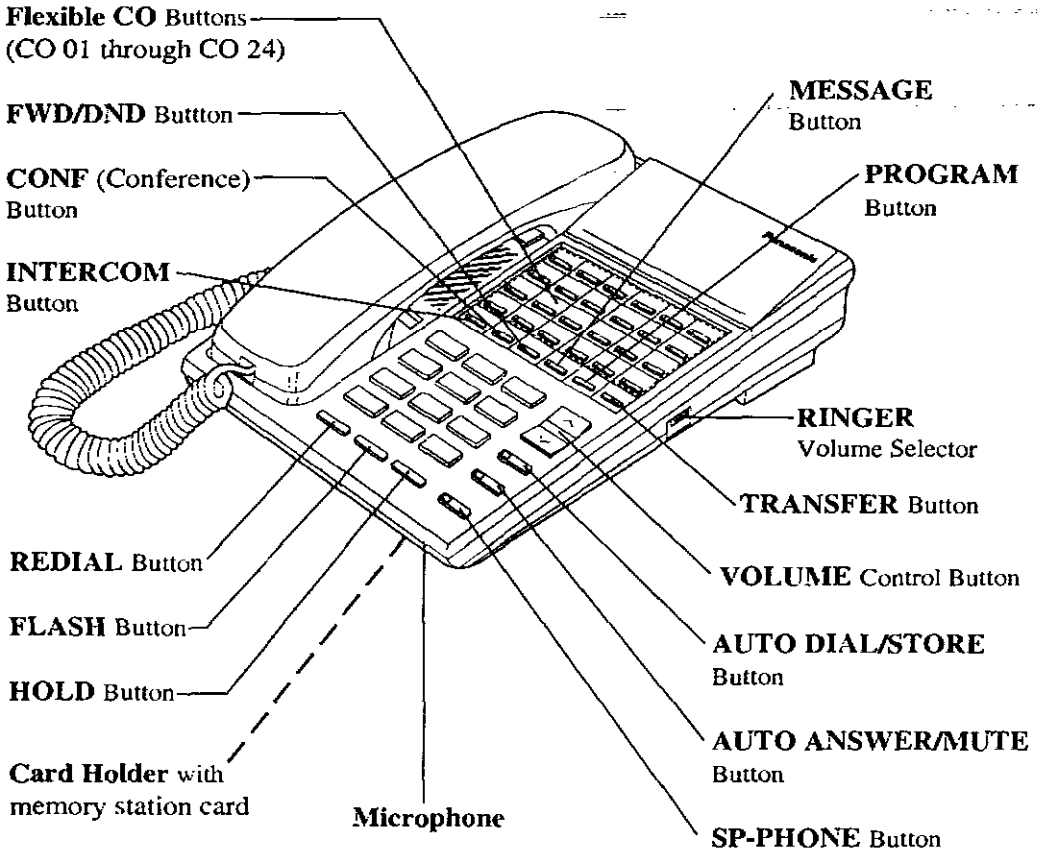
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Configuration

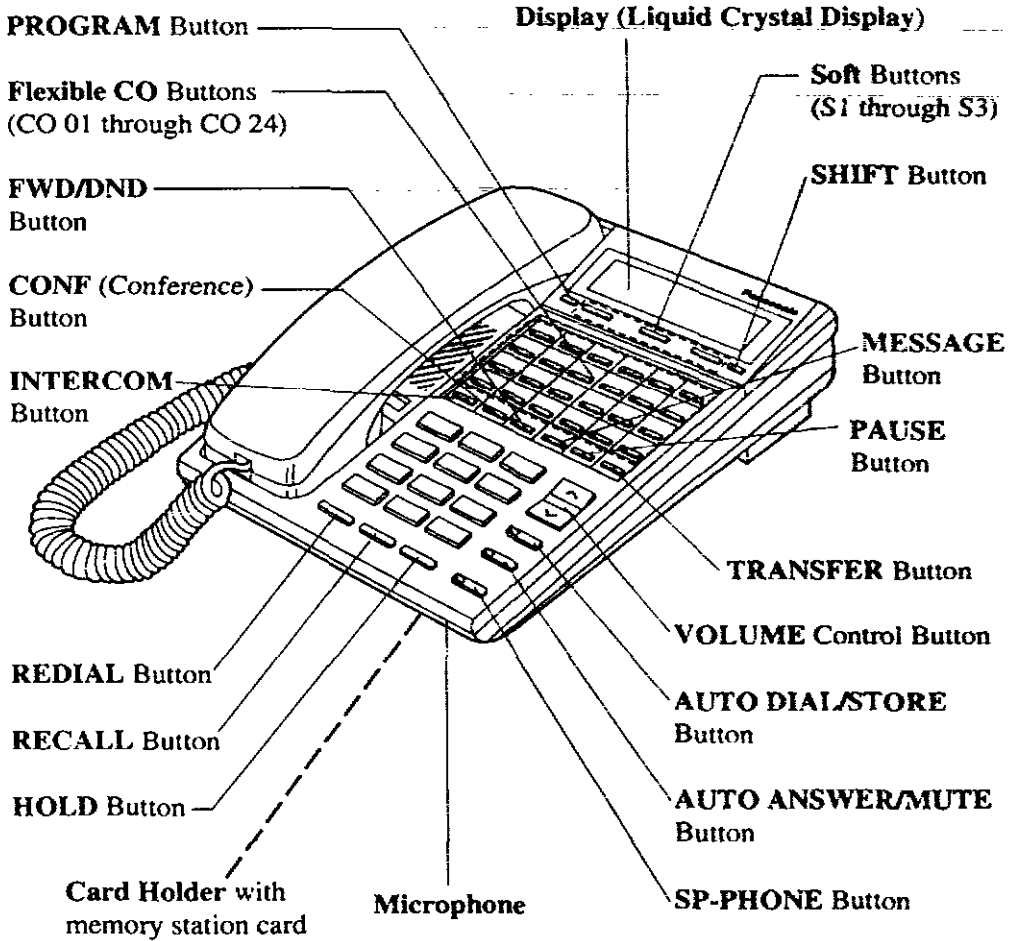
■ Location of Controls

- KX-T7220E -



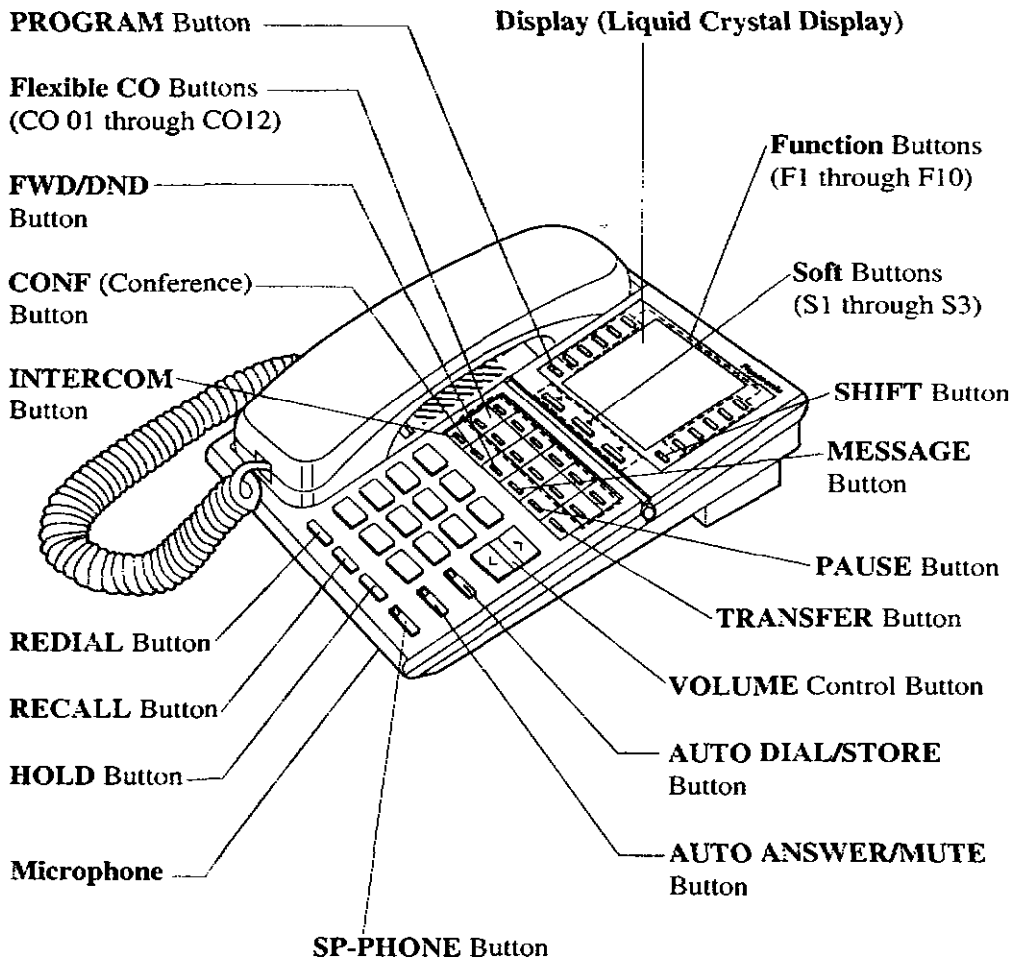
Configuration

- KX-T7230E -



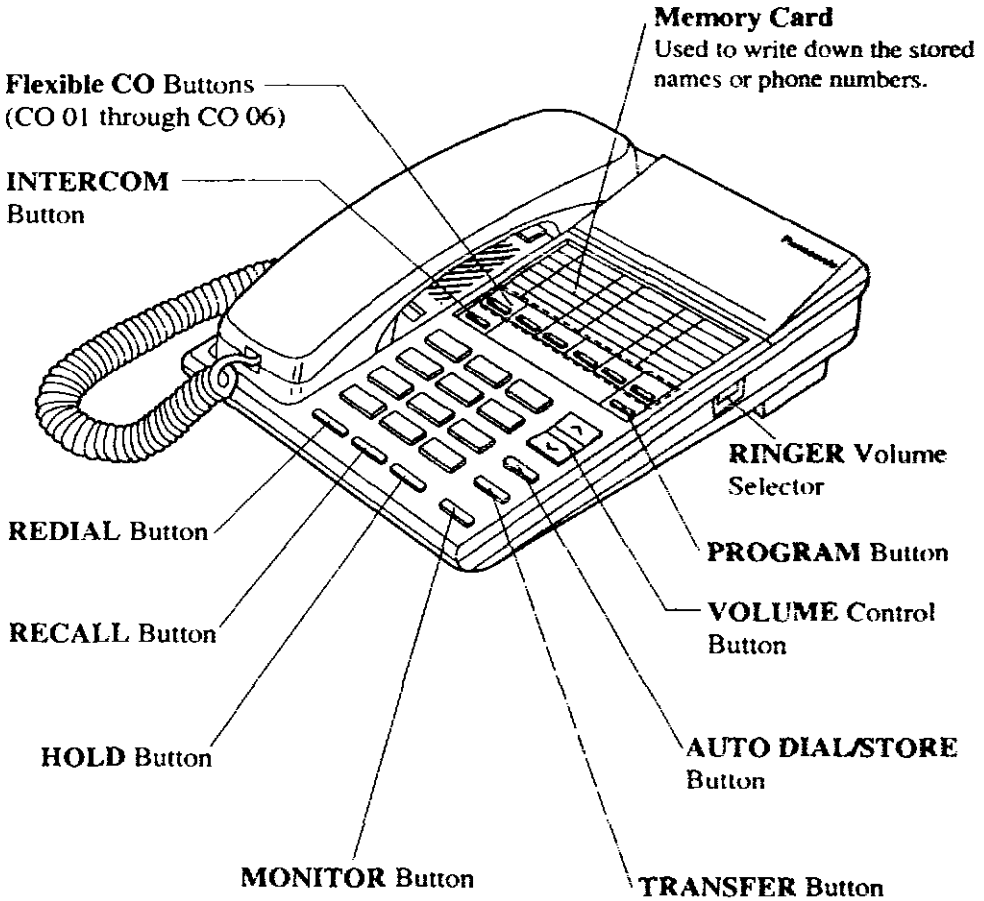
Configuration

- KX-T7235E -



Configuration

- KX-T7250E -



Configuration

■ Feature Button Descriptions

AUTO ANSWER/MUTE Button

Used for extension auto answer, it turns the microphone off during a conversation.

AUTO DIAL/STORE Button

Used for System Speed Dialling and for storing program changes.

CONF (Conference) Button

Used to establish a three-party conference.

Flexible CO Button

Used to seize the CO line or access one of several features.

Function (F1 through F10) Button

Used to perform the programmed function or operation.

FWD/DND (Call Forwarding/Do Not Disturb) Button

Used to program the Call Forwarding feature or set the Do Not Disturb (DND) feature.

HOLD Button

Used to place a call on hold.

INTERCOM Button

Used to make or receive extension calls.

MESSAGE Button

Used to call back the message sender.

MONITOR Button

Used for handsfree dialling operation.

PAUSE Button

Inserts a pause in speed dial numbers or in other numbers.

PROGRAM Button

Used to enter into Station Programming mode and to exit from Station Programming mode.

RECALL Button

Sends a Register Recall signal to the central office or to a host PBX to access the system features. If a PBX is not being used, this button can be used to disconnect the current call and start another call without requiring that you hang up.

REDIAL Button

Used for Last Number or Automatic Redialling.

SHIFT Button

Used to alternate the cue of Soft button functions..

Soft (S1 through S3) Button

Used to perform the function or operation that appears on the bottom line of the display.

SP-PHONE (Speakerphone) Button

Used for handsfree speakerphone operation.

TRANSFER Button

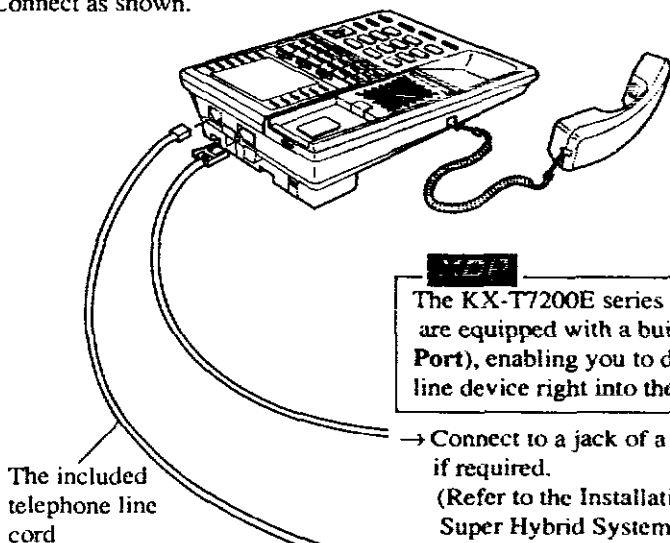
Transfers a call to another extension or to an external destination.

VOLUME Control Button

Used to adjust the ringer, speaker and handset/headset volume and the display contrast.

Initial Setting

- **Connection** (except the KX-T7240: refer to DSS Console Features at page 30.)
Connect as shown.



XDP

The KX-T7200E series (except the KX-T7240E) are equipped with a built-in XDP (Extra Device Port), enabling you to directly connect any single line device right into the phone.

→ Connect to a jack of a single line telephone, if required.

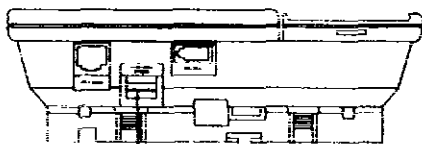
(Refer to the Installation Manual of the Digital Super Hybrid System.)

→ Connect to a Digital Super Hybrid System via a Master Socket.

■ Tilting the Display (for KX-T7235E)

-To lift the display:

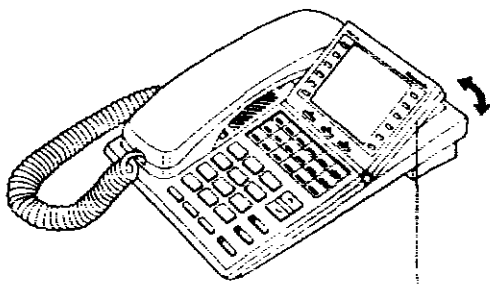
- 1 Push the LCD ADJ button.
- 2 Lift up the display.



LCD ADJ Button

-To set down the display:

- 1 Push the LCD ADJ button.
- 2 Press down the display.



Lift up or take down.

Initial Setting

■ Display Contrast Control (for KX-T7230E/KX-T7235E)

- 1 Press the **CONT (S1)** button.
— *The display shows the contrast level.*
- 2 Press the **∧ (UP)** or **∨ (DOWN)** of the **VOLUME** Control button.

■ Speaker Volume Control (for KX-T7220E/KX-T7230E/KX-T7235E/KX-T7250E)

- 1 Press the **SP-PHONE** or the **MONITOR** button.
- 2 Press the **∧ (UP)** or **∨ (DOWN)** of the **VOLUME** Control button.
— *The display shows the volume level.*

■ Handset/Headset Volume Control

(for KX-T7220E/for KX-T7230E/KX-T7235E/KX-T7250E)

While having a conversation with a handset or a headset;

- 1 Press the **∧ (UP)** or **∨ (DOWN)** of the **VOLUME** Control button.
— *The display shows the volume level.*

■ Ringer Volume Control

– for KX-T7230E/KX-T7235E

During on-hook status;

- 1 Press the **RING (S2)** button.
— *The display shows the volume level.*
- 2 Press the **∧ (UP)** or **∨ (DOWN)** of the **VOLUME** Control button.

While the telephone is ringing;

- 1 Press the **∧ (UP)** or **∨ (DOWN)** of the **VOLUME** Control button.
— *The display shows the volume level.*

– for KX-T7220E/KX-T7250E

- 1 Slide the lever of the **Ringer Volume Selector** as desired (**OFF/LOW/HIGH**).

■ Handset/Headset Selection (for KX-T7220E/KX-T7230E/KX-T7235E/KX-T7250E)

- 1 Press the **PROGRAM** button.
- 2 Dial **999**.
- 3 Dial **1** or **2**.
 - **1** : Handset
 - **2** : Headset (optional)
- 4 Press the **STORE** button.
- 5 Press the **PROGRAM** button.

Station Programming

Before programming, you need to enter into Programming mode.

When the telephone is idle and on-hook;

- Press : **PROGRAM** **9** **9**.

To exit from Programming mode.

- Press : **PROGRAM**.
- or
- Lift the handset.

Flexible Button Assignment

- Press the desired **CO** button.
- Dial **1** - **7**, + desired number (such as phone number or feature number, if required).
 - 1 : DSS button
 - 2 + desired number : **One-Touch Dialling** button
 - 3 : MESSAGE button
 - 4 : FWD/DND button
 - 5 : SAVE button
 - 6 : Account button
 - 7 : Conference (CONF) button
- Press **STORE** button.

Note:

- To erase an incorrect entry while assigning: press the **TRANSFER** button.
- To clear the assignment : press the desired **CO** button + 2 + **STORE** button.

Full One-Touch Dialling Setting

- Dial **3**.
- Dial **1** or **2**.
 - 1 : Off
 - 2 : On
- Press **STORE** button.

Station Speed Dial Number/Name Assignment (for KX-T7235E)

- To store dial number

- Press a **Function** button (F1-F10).
- Enter **phone number**.
- Press **STORE** button.

- To store name

- Press **Function** button (F1-F10).
- Press **NEXT** (S3) button.
- Enter **name**.

- See the following table for information on how to enter each character.

- Press **STORE** button.

Step 1. Press	Step 2. Press	Soft-1 (SHIFT)	Soft-2 (SHIFT)	Soft-3 (SHIFT)
1		Q	Z	!
				?
2		A	B	C
3		D	E	F
4		G	H	I
5		J	K	L
6		M	N	O
7		P	R	S
8		T	U	V
9		W	X	Y
0		.	.	:
		.	.	:
*		.	.	<
		+	=	>
#		\$	&	(
		%	@)

- Press **SHIFT** to alternate between capital and small letters.

<Example>

To enter the letter "K," press each button as follows:

- Press **5**.
- Press **Soft 2** button.

Proprietary Telephone Features

<NOTE>

- Off-hook: Lift the handset or press the SP-PHONE/MONITOR button.
- On-hook: Replace the handset or press the SP-PHONE/MONITOR button.
- Fx: Press Function button "x."
- Sy: Press Soft button "y."
- Pressing the MONITOR button can perform handsfree dialling operation.

Helpful hints for Handsfree operation:

- **If it is difficult to hear the other party's voice;**
Raise the sound level using the Speaker Volume Control.
- **If the other party has difficulty hearing you;**
Lower the sound level.
- **Absorbing echoes;**
Use this unit in a room which has curtains and/or carpeting.
- **To avoid missing part of the conversations;**
If you and the other party speak at the same time, parts of your conversation will be lost.
To avoid this, speak alternately.

If you are using the KX-T7250E, you should assign the following buttons to the flexible buttons beforehand so that you can execute quick operation.

- Account button
- Conference (CONF) button
- FWD/DND button
- MESSAGE button

For assignment, see Station Programming (page 12).

■ Basic Operation

<Making Calls>

- Intercom Calling

Allows you to make a call to another extension.

- Off-hook.
- Dial **extension number**.
- or
- Press **Extension** (F3) button. (for KX-T7235E) See page 26.

- Outward Dialling

Allows you to make a call to an outside party using one of the following line access methods;

- Off-hook.
- Dial **9** or **81** - **88**, or press a **CO** button.
 - **9** : Line Access, Automatic
 - **81-88** : Line Access, CO Line Group
 - **CO** : Line Access, Individual
- Dial **phone number**.

<Receiving Calls>

- Off-hook.
- or
- Press a flashing **CO** or **INTERCOM** button directly.

Proprietary Telephone Features

■ Absent Message Capability

There are nine flexible absent messages available. If you select a message, it will be shown on the display of the calling party's telephone. If you are required, messages 7, 8 and 9 can be assigned through System Programming. For System Programming, refer to the Installation Manual of the Digital Super Hybrid System.

<Standard Operation>

Setting

- Off-hook.
- Dial **[750]**.
- Dial a **[message number]** (1-9) + **[parameter]** (such as extension number, if required).
 - 1: "Will Return Soon"
 - 2: "Gone Home"
 - 3: "At Ext (*extension number*)"
+ **[extension number]**.
 - 4: "Back at (*time*)"
+ Enter **[hour]** (00-23) + **[minute]** (00-59).
 - 5: "Out Until (*date*)"
+ Enter **[day]** (01-31) + **[month]** (01-12).
 - 6: "In a Meeting"
- 7-9: user programmable messages
- On-hook.

Cancelling

- Off-hook.
- Dial **[7500]**.
- On-hook.

<Display Operation (for KXT7235E)>

Setting

- Press **[Features]** (F4) button.
- Press **[NEXT]** (S3) button.
- Press **[Absent MSG On]** (F4) button.
- Dial a **[message number]** (1-9) + **[parameter]** (such as extension number, if required).
- On-hook.

Cancelling

- Press **[Features]** (F4) button.
- Press **[NEXT]** (S3) button.
- Press **[Absent MSG Off]** (F5) button.
- On-hook.

■ Account Code Entry

Used to identify outside calls, for accounting and billing purposes. If required, you can be forced to enter an account code before dialling.

<Standard Operation>

- Off-hook.
- Dial **[49]** (or press **Account** button).
- Enter **[account code]** + **[#]**.
- Dial **[9]** or **[81 - 88]**, or press a **[CO]** button.
- Dial **[phone number]**.

<Display Operation (for KX-T7230E/ KX-T7235E)>

When hearing dial tone or during a conversation with an outside party:

- Press **[ACCNT]** (S3) button.
- Enter **[account code]** + **[#]**.

Proprietary Telephone Features

■ Alternate Calling — Ring/Voice

Allows you to select ring or voice calling when making an intercom call. In Ring-Calling mode, you can call the other party with a ring tone. While in Voice-Calling mode, you can talk to the other party immediately after a confirmation tone.

<Standard Operation>

When calling an extension;

To change to Ring or Voice mode

- Dial **[*]** button.

<Display Operation (for KX-T7230E/ KX-T7235E)>

When calling an extension;

To change to Ring mode

- Press **[Tone]** (S2) button.

To change to Voice mode

- Press **[Voice]** (S3) button.

■ Automatic Callback Busy (Camp-On)

When the selected CO line or extension you have dialled is busy, dial the camp-on code and hang up. Your telephone will ring when the called party becomes idle. When you answer the callback ringing, the called extension automatically starts ringing or the CO line is automatically selected to make an outside call again.

<Standard Operation>

While hearing busy tone;

- Dial **[6]**.
- Confirmation tone is audible.
- On-hook.

<Display Operation (for KX-T7230E/ KX-T7235E)>

While hearing busy tone;

- Press **[C, BCK]** (S3) button.
- Confirmation tone is audible.
- On-hook.

■ Background Music (BGM)

Background music, from an external source, is heard through the built-in speaker of the telephone.

<Standard Operation>

Setting / Cancelling

While on-hook;

- Press **[HOLD]** or **[TRANSFER]**.

<Display Operation (for KX-T7230/ KX-T7235)>

Setting / Cancelling

While on-hook;

- Press **[BGM]** (S3) button.

■ Busy Station Signalling (BSS)

You can inform a busy extension, which Call Waiting has been set, that you are waiting. The extension hears three beeps.

<Standard Operation>

If a busy tone is heard;

- Dial **[2]**.
- Wait for an answer.

<Display Operation (for KX-T7230E/ KX-T7235E)>

If a busy tone is heard;

- Press **[BSS]** (S1) button.
- Wait for an answer.

Proprietary Telephone Features

■ Call Forwarding

Automatically transfers incoming calls to another extension or to an external destination. The following types are available:

- All Calls

All incoming calls are forwarded to another extension.

- Busy

All incoming calls are forwarded to another extension, when your extension is busy.

- No Answer

All incoming calls are forwarded to another extension, if you don't answer the call.

- Busy/No Answer

All incoming calls will be forwarded to another extension, if you don't answer or your extension is busy.

- to CO Line

Incoming internal call is forwarded to a CO line.

- Follow Me

Allows you to remotely set "Call Forwarding-All Calls" feature from another extension.

<Standard Operation>

Setting

- Off-hook.
- Press **FWD/DND** (CO) button.
(Or you may dial 710 instead of FWD/DND button.)
- Dial as follows:

- All Calls

2 + **extension number**

- Busy

3 + **extension number**

- No Answer

4 + **extension number**

- Busy/No Answer

5 + **extension number**

- to CO Line

6 + **line access code** (9, 81-88)
+ **phone number** + **#**

- Follow Me

7 + **your extension number**

- On-hook.

Canceling

—At the original extension

- Off-hook.
- Press **FWD/DND** (CO) button.
- Dial **0**.
- On-hook.

—At the destination extension (Follow Me)

- Off-hook.
- Press **FWD/DND** (CO) button.
- Dial **8**.
- Dial **your extension number**.
- On-hook.

<Display Operation (for KX-T7235E)>

- All Calls

- Off-hook.
- Press **FWD/DND** button.
- Press **FWD-All Calls** (F3) button
+ **extension number**.
- On-hook.

- Busy

- Off-hook.
- Press **FWD/DND** button.
- Press **FWD-Busy** (F4) button
+ **extension number**.
- On-hook.

- No Answer

- Off-hook.
- Press **FWD/DND** button.
- Press **FWD-No Answer** (F5) button
+ **extension number**.
- On-hook.

Proprietary Telephone Features

– Busy/No Answer

- Off-hook.
- Press **FWD/DND** button.
- Press **NEXT (S3)** button.
- Press **FWD-BSY/NA (F1)** button + **extension number**.
- On-hook.

– to CO Line

- Off-hook.
- Press **FWD/DND** button.
- Press **NEXT (S3)** button.
- Press **FWD-CO Line (F2)** button + **line access code (9, 81-88)** + **phone number** + **#**.
- On-hook.

– Follow Me

- Off-hook.
- Press **FWD/DND** button.
- Press **NEXT (S3)** button.
- Press **FWD-From (F3)** button + **your extension number**.
- On-hook.

Canceling

– At the original extension

- Off-hook.
- Press **FWD/DND** button.
- Press **FWD/DND Cancel (F1)** button.
- On-hook.

– At the destination extension

(Follow Me)

- Off-hook.
- Press **FWD/DND** button.
- Press **NEXT (S3)** button.
- Press **FWD-From Cancel (F4)** button.
- Dial **your extension number**.
- On-hook.

■ Call Hold

Allows you to hold an extension or an outside call.

- Press **HOLD** button.

Retrieving

(Intercom Call)

– At the holding extension

- Press **INTERCOM** button.

– At another extension

- Off-hook.
- Dial **51** + holding **extension number**.

(Outside Call)

– At the holding extension

- Press the green **CO** button that is slowly flashing.

– At another extension

- Press the red **CO** button that is slowly flashing.

■ Call Park

Allows you to “park a call” so that any extension can retrieve it.

Setting

While having a conversation:

- Press **TRANSFER** button.
- *Confirmation tone is audible.*
- Dial **52** + **parking zone number (0-9)**.
- *Confirmation tone is audible.*
- On-hook.

Retrieving

- Off-hook.
- Dial **52** + **parking zone number (0-9)**.
- *Confirmation tone is audible (optional).*
- Talk.

Proprietary Telephone Features

■ Call Pickup

Allows you to answer a call ringing at another extension.

- CO Line

- Off-hook.
- Dial **[4 *]**.
- *Confirmation tone is audible (optional).*
- Talk

- Directed

- Off-hook.
- Dial **[41] + [extension number]**.
- *Confirmation tone is audible (optional).*
- Talk.

- Group

<Standard Operation>

- Off-hook.
- Dial **[40]**.
- *Confirmation tone is audible (optional).*
- Talk.

<Display Operation (for KX-T7235E)>

- Off-hook.
- Press **[Features]** (F4) button.
- Press **[Group Pickup]** (F3) button.
- Talk.

■ Call Transfer to Extension

Transfers incoming outside or extension calls to another extension (screened or unscreened).

- Screened

While having a conversation;

- Press **[TRANSFER]** button.
- Dial **[extension number]**.
- Wait for an answer and announce.
- On-hook.

- Unscreened

While having a conversation;

- Press **[TRANSFER]** button.
- Dial **[extension number]**.
- On-hook.

■ Call Waiting

Informs you with three beeps that there is a call waiting.

Setting

- Off-hook.
- Dial **[7311]**.
- *Confirmation tone is audible.*
- On-hook.

Cancelling

- Off-hook.
- Dial **[7310]**.
- *Confirmation tone is audible.*
- On-hook.

To talk to the new caller, terminating the current call

While hearing call waiting tone;

- Press the flashing **[CO]** or **[INTERCOM]** button.

To talk to the new caller, holding the current call

While hearing call waiting tone and the CO or INTERCOM indicator is flashing rapidly;

- Press **[HOLD]** button.
- Press the flashing **[CO]** or **[INTERCOM]** button. (If both the current call and new call are extension calls, you can skip this step.)

Proprietary Telephone Features

■ CO Incoming Call Information Log Lock (for KX-T7230E/ KX-T7235E)

Allows you to lock the display of your unit so that CO incoming call information is not shown on the display, if you don't want others to see the information.

Locking

- Off-hook.
- Dial **[57]** + **[lock code]** (000-999).
- Dial the same **[lock code]** again.
- *Confirmation tone is audible.*
- On-hook.

Unlocking

- Off-hook.
- Dial **[57]**.
- Dial the same **[lock code]** as you used to lock the extension.
- *Confirmation tone is audible.*
- On-hook.

■ CO Incoming Call Information Log Mode (for KX-T7230E/ KX-T7235E)

Allows you to control the CO Incoming Call Information Log Mode on your unit when the information area is full. If you set this mode, new CO incoming call information is retained but old data is discarded. If you cancel this mode, new CO incoming call information is not memorized on your unit.

Setting / Cancelling

- Off-hook.
- Dial **[56]**.
- Dial **[1]** or **[0]**.
- **1** : for setting
- **0** : for cancelling
- *Confirmation tone is audible.*
- On-hook.

■ Conference

Allows you to make a three-party conference.

While having a conversation:

- Press **[CONF]** (CO) button.
- Dial the **[third party's number]**.
- Talk to the third party.
- Press **[CONF]** (CO) button.

■ Do Not Disturb (DND)

Allows you to prevent other parties from disturbing you. Your extension will not receive extension or outside calls.

<Standard Operation>

Setting / Cancelling

- Off-hook.
- Press **[FWD/DND]** (CO) button.
- (Or you may dial **710** instead of FWD/DND button.)
- Dial **[1]** or **[0]**.
- **1** : for setting
- **0** : for cancelling
- *Confirmation tone is audible.*
- On-hook.

<Display Operation (for KX-T7235E)>

Setting

- Off-hook.
- Press **[FWD/DND]** button.
- Press **[Do Not Disturb]** (F2) button.
- *Confirmation tone is audible.*
- On-hook.

Cancelling

- Off-hook.
- Press **[FWD/DND]** button.
- Press **[FWD/DND Cancel]** (F1) button.
- *Confirmation tone is audible.*
- On-hook.

Proprietary Telephone Features

■ Do Not Disturb (DND)

Override

Allows you to call an extension even though Do Not Disturb (DND) is set.

<Standard Operation>

If DND tone is heard;

- Dial **2**.
- Wait for an answer.

<Display Operation (for KX-T7230E/ KX-T7235E)>

If DND tone is heard;

- Press **Over** (S2) button.
- Wait for an answer.

■ External Feature Access

Allows you to access special features (e.g. Call Waiting) offered by a host PBX, Centrex or the central office.

While having a conversation;

- Press **RECALL** button.
- Dial the code for the desired service.

■ Full One-Touch Dialling

This feature automatically activates the handsfree speakerphone and dials a phone number or accesses a system feature at the touch of a button.

Change a CO button to function as a One-Touch or SAVE button beforehand.

See Station Programming (page 12).

- Press a **One-Touch** (CO), **REDIAL** or **SAVE** (CO) button.

■ Message Waiting

Allows you to leave a message for another extension. The message waiting lamp gives a visual indication that a message has been received.

<Standard Operation>

Setting

When the called extension is busy or does not answer;

- Press **MESSAGE** (CO) button.
- Confirmation tone is audible.
- On-hook.

Cancelling

- Off-hook.
- Dial **700** + **extension number**.
- Confirmation tone is audible.
- On-hook.

Selecting a message from the messages waiting

While on-hook;

- Press **MESSAGE** (CO) button repeatedly until the desired message sender appears on the display.

Responding to a message

- Off-hook.
- Press **MESSAGE** (CO) button.

<Display Operation (for KX-T7235E)>

Setting

When the called extension is busy or does not answer;

- Press **Features** (F4) button.
- Press **NEXT** (S3) button.
- Press **Message On** (F2) button.
- Dial **extension number**.
- On-hook.

Cancelling

- Press **Features** (F4) button.
- Press **NEXT** (S3) button.
- Press **Message Off** (F3) button.
- Dial **extension number**.
- On-hook.

Proprietary Telephone Features

■ Paging

Provides an announcement (page), through the built-in speaker of the telephone or by the external speakers.

<Standard Operation>

– All

Page through both built-in speakers and external pagers.

- Off-hook.
- Dial [62] (or [63]) + [*].
- Confirmation tone is audible (optional).
- Announce.

– External

- Page through all the external pagers simultaneously.
- Paging to a specific external pager.

To access all external pagers

- Off-hook.
- Dial [620].
- Confirmation tone is audible (optional).
- Announce.

To access a particular pager

- Off-hook.
- Dial [62] + [external pager number] (1-4).
(External pager number 3-4 are only available for the KX-TD1232.)
- Confirmation tone is audible (optional).
- Announce.

– Group

- Page to all groups (all extensions) simultaneously.
- Page to a particular group of extensions using the built-in speakers.

To access all groups simultaneously

- Off-hook.
- Dial [6300].
- Confirmation tone is audible (optional).
- Announce.

To access a particular group of extensions

- Off-hook.
- Dial [63] + [extension group number] (01-16).
- Confirmation tone is audible (optional).
- Announce.

– Answer

A page sent to the built-in speakers or the external pagers can be answered by any extension in the system.

- Off-hook.
- Dial [42] + [external pager number] (1-4) or [43].

(External pager number 3-4 are only available for the KX-TD1232.)

- 42 + external pager number (1-4):
To answer a page sent to the external pager/TAFAS.
- 43 : To answer a page sent to the built-in speaker.

- Confirmation tone is audible (optional).
- Talk.

<Display Operation (for KX-T7235E)>

– All

- Press [Features] (F4) button.
- Press [External Paging] (F1) button or [Group Paging] (F2) button.
- Dial [*].
- Announce.

– External

To access all external pagers

- Press [Features] (F4) button.
- Press [External Paging] (F1) button.
- Dial [0].
- Announce.

To access a particular pager

- Press [Features] (F4) button.
- Press [External Paging] (F1) button.
- Dial [external pager number] (1-4).

(External pager number 3-4 are only available for the KX-TD1232.)

- Announce.

Answer

- Press [Features] (F4) button.
- Press [Answer Ext-Page] (F4) button.
- Dial [external pager number] (1-4).

(External pager number 3-4 are only available for the KX-TD1232.)

Proprietary Telephone Features

- Group

To access all groups simultaneously

- Press **Features** (F4) button.
- Press **Group Paging** (F2) button.
- Dial **00**.
- Announce.

To access a particular group of extensions

- Press **Features** (F4) button.
- Press **Group Paging** (F2) button.
- Dial **extension group number** (01-16).
- Announce.

Answer

- Press **Features** (F4) button.
- Press **Answer GRP-Page** (F5) button.

■ Paging and Transfer

Allows you to transfer a call to the paged person.

- Press **TRANSFER** button.
- *You hear dial tone and the other party is placed on hold.*
- Dial **paging feature number** (62 or 63)
- Dial **additional number**. - See "Paging" operation.
- Announce.
- *When the paged party answers, you will hear confirmation tone (optional).*
- On-hook.

■ Paralleled Telephone Connection

Allows you to connect this unit in parallel with a single line telephone (SLT). This unit can be connected with a SLT by inserting another telephone line cord to a jack. (For connection, see page 10.) When a parallel connection is made, either telephone can be used.

<Standard Operation>

Setting / Cancelling

- Off-hook.
- Dial **69**.
- Dial **1** or **0**.
- - 1 : for setting
- - 0 : for cancelling
- *Confirmation tone is audible.*

<Display Operation (for KX-T7235E)>

Setting / Cancelling

- Press **Features** (F4) button.
- Press **NEXT** (S3) button.
- Press **Parallel On/Off** (F1) button.
- Dial **1** or **0**.
- 1 : for setting
- 0 : for cancelling
- *Confirmation tone is audible.*

■ Pulse to Tone Conversion

Allows you to change from Pulse to Tone dialling mode.

- Dial **phone number** (Pulse mode).
- Dial *** + #**.
- Dial **phone number** (Tone mode).

Proprietary Telephone Features

■ Redial

– Automatic (for KX-T7230E/KX-T7235E)

Without lifting the handset, redialling can be activated automatically and repeated until the called party answers. The number and time between retries is programmable.

- Off-hook with **SP-PHONE** button.
- Press **REDIAL** button.

– Last Number

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

- Off-hook.
- Press **REDIAL** button.

– Saved Number

The desired outside call number can be stored and then redialled.

Assign a CO button as the SAVE button. See Station Programming (page 12).

Storing

While having a conversation or when hearing busy tone;

- Press **AUTO DIAL/STORE** button.
- Press **SAVE** (CO) button.
- On-hook.

Dialling

- Off-hook.
- Press **SAVE** (CO) button.

■ Station Feature Clear

Allows you to reset all station features you programmed, to the default settings.

- Off-hook.
- Dial **790**.
- *Confirmation tone is audible.*
- On-hook.

■ Station Speed Dialling

Each extension can store up to 10 speed dial numbers which are only available to that extension user.

Storing phone numbers

- Off-hook.
- Dial **60**.
- Dial the **Station Speed Dial number** (0-9).
- Dial the **desired number** * + **#**.
(* The line access code is required for an outside call.)
- *Confirmation tone is audible.*
- On-hook.

Dialling

- Off-hook.
- Dial **6 ✕** + **Station Speed Dial number** (0-9).

Note:

With the KX-T7235E, you can execute this feature with the display operation. See Special Display Features (page 26).

■ System Speed Dialling

The system supports 500 speed dial numbers which are available to all extension users.

- Off-hook.
- Press **AUTO DIAL/STORE** button.
- Dial the **System Speed Dial number** (000-499).

Note:

With the KX-T7235E, you can execute this feature with the display operation. See Special Display Features (page 27).

Proprietary Telephone Features

■ Timed Reminder

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

Setting

- Off-hook.
- Dial **761**.
- Enter **hour** (01-12).
- Enter **minute** (00-59).
- Dial **0** or **1**.
 - 0 : for AM
 - 1 : for PM
- Dial **0** or **1**.
 - 0 : for a one time alarm setting
 - 1 : for a daily alarm setting
- On-hook.

Cancelling

- Off-hook.
- Dial **760**.
 - *Confirmation tone is audible.*
- On-hook.

■ Trunk (CO Line) Answer from Any Station (TAFAS)

Ringing through the external paging system indicates an incoming outside call. TAFAS allows this call to be answered from any extension.

Same operation as Paging - External Answer (See page 21).

■ Voice Mail Integration

When you are busy or absent, your calls can be forwarded to a mail box of the Voice Processing System.

Setting Call Forwarding to Voice Processing System

- Off-hook.
- Press **FWD/DND** (CO) button.
(Or you may dial **710** instead of FWD/DND button.)
- Dial **2** - **5**.
 - 2 : FWD-All Calls
 - 3 : FWD-Busy
 - 4 : FWD-No Answer
 - 5 : FWD-Busy/No Answer
- Dial **extension number** of the Voice Processing System.
 - *Confirmation tone is audible.*
- On-hook.

Playing back a recorded message

- Off-hook.
- Press **MESSAGE** (CO) button.

Special Display Features

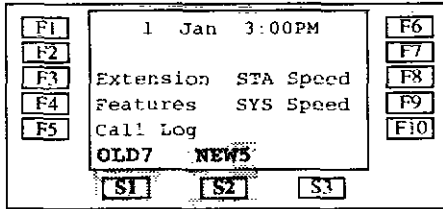
CO Incoming Call Information Log (for KX-T7230E/KX-T7235E)

Allows you to confirm the CO incoming call information on the display. You can also call back the caller by selecting one of the memorized numbers.

- for KX-T7235E

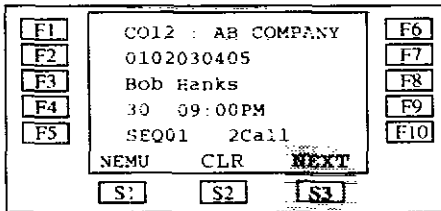
1. Press **OLD (S1)** or **NEW (S2)** button to see the CO incoming call information.

- **OLD** : Information that you have already confirmed by pressing **NEW (S2)** button.
- **NEW** : Information that you have not confirmed yet.



2. Confirm the information by pressing **NEXT (S3)** button (or **SHIFT + PREV (S3)** button).

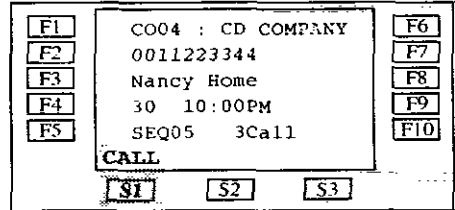
< Example >



3. Off-hook.

4. Press **CALL (S1)** button to call Nancy Home.

< Example >



- for KX-T7230E

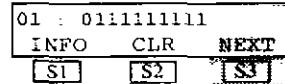
1. Press **OLD (S1)** or **NEW (S2)** button to see the CO incoming call information.

< Example >



2. Confirm the information by pressing **NEXT (S3)** button (or **SHIFT + PREV (S3)** button).

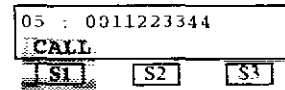
< Example >



3. Off-hook.

4. Press **CALL (S1)** button to call specific party.

< Example >



Special Display Features

■ CO Outgoing Call Log (for KX-T7235E)

Allows you to redial one of your last five outside calls.

1. Press Call Log (F5) button.
 2. Press the desired Fx button.
- <Example> To select 111, press F2 button.

F1	1234567890	F6
F2	111	F7
F3	0987654	F8
F4	000111222333	F9
F5	100200300400500	F10
MENU		
S1	S2	S3

■ Station Speed Dialling (for KX-T7235E)

Allows you to make a one-touch call by selecting a name.

1. Press STA Speed (F8) button.
 2. Press the desired Fx button.
- <Example> To select Panasonic, press F7 button.

F1	Bob	KME-soft	F6
F2	Jim Kopp	XXXXXXXXXX	F7
F3	Ronald	Police	F8
F4	Zangril	Louisa	F9
F5	Nancy	Home	F10
MENU		NEXT	
S1	S2	S3	

Press NEXT (S3) button to see the next screen of programmed telephone numbers.

F1	9-123-4567	9-987-5543	F6
F2	91111111	99999999	F7
F3	93333333	9-999	F8
F4	97777777	Not Stored	F9
F5	100	9-1000001	F10
MENU		NEXT	
S1	S2	S3	

■ Extension Dialling (for KX-T7235E)

Allows you to call another extension by selecting the name.

1. Press Extension (F3) button.
 2. Press the desired Fx button.
- <Example> To select B, press F1 button.

F1	AB	KL	F6
F2	C	MN	F7
F3	DE	OPQR	F8
F4	FG	S	F9
F5	HIJ	T-Z	F10
MENU			
S1	S2	S3	

3. Press the desired Fx button.
- <Example> To select Billy Jane, press F5 button.

F1	Agness	Bob	F6
F2	Alice	Carol	F7
F3	Ann Margly	Casey	F8
F4	Ben Johns	Ched Ely	F9
F5	<u>Billy Jane</u>	Chris	F10
MENU		PREV	NEXT
S1	S2	S3	

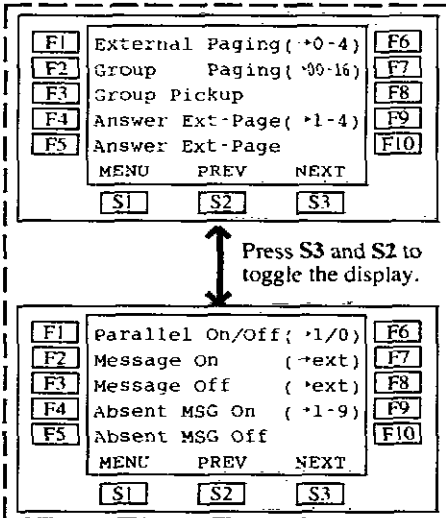
Special Display Features

■ System Feature Access Menu (for KX-T7235E)

Allows you to access following services by pressing Function buttons.

- Absent Message Capability
- Call Pickup, Group
- Message Waiting
- Paging
- Paralleled Telephone Connection

1. Press **Features (F4)** button.
2. Press the **desired Fx** button.



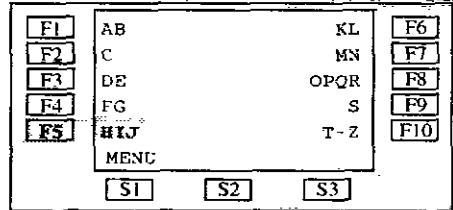
3. Dial the **additional numbers** (if required). See "Proprietary Telephone Features" for each feature.

■ System Speed Dialling (for KX-T7235E)

Allows you to make an outside call by selecting a name stored with system speed dial numbers.

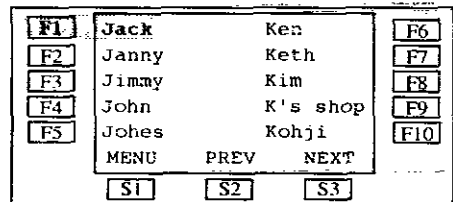
1. Press **SYS Speed (F9)** button.
2. Press the **desired Fx** button.

<Example> To select J, press **F5** button.



3. Press the **desired Fx** button.

<Example> To select Jack, press **F1** button.



Feature Number List

This Manual uses the initial factory settings (default value) for feature descriptions. If you change the feature number, use the new one you programmed instead. Additional Required Digits are needed as follows.

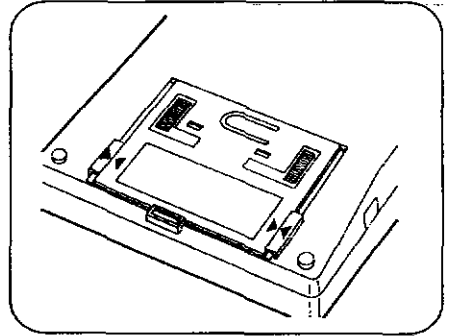
Feature	Dial		Additional Required Digits
	Default	Your #	
Absent Message Capability set/cancel	750		1-9/0
Account Code Entry	49		Account code + # (99)
Call Forwarding set/cancel	710		2-6/0
Call Forwarding-Follow Me set/cancel	710		7/8
Call Park/Call Park retrieve	52		0-9
Call Pickup, CO Line	4 *		
Call Pickup, Directed	41		EXTN.
Call Pickup, Group	40		
Call Pickup Deny set/cancel	720		1/0
Call Waiting set/cancel	731		1/0
CO Incoming Call Information Log Lock lock	57		lock code (000-999) twice
CO Incoming Call Information Log Lock unlock	57		lock code (000-999)
CO Incoming Call Information Log Mode set/cancel	56		1/0
Do Not Disturb (DND) set/cancel	710		1/0
Doorphone Call calling/door open (for KX-TD816)	61/55		1-2
Doorphone Call calling/door open (for KX-TD1232)			1-4
Line Access, Automatic/LCR	9		
Line Access, CO Line Group	8		1-8
Message Waiting set/cancel/call back	70		1/0/2
Operator Call	0		0 or 1
Paging - All	62 or 63		*
Paging - External all/particular (for KX-TD816)	62		0/1-2
Paging - External all/particular (for KX-TD1232)	62		0/1-4
Paging - External Answer/TAFAS Answer (for KX-TD816)	42		1-2
Paging - External Answer/TAFAS Answer (for KX-TD1232)	42		1-4
Paging - Group all/particular	63		00/01-16
Paging - Group Answer	43		
Paralleled Telephone Connection set/cancel	69		1/0
Station Feature Clear	790		
Station Speed Dialling	6 *		0-9
Timed Reminder set	76		1 + *hhmm + 0/1 + 0/1
Timed Reminder cancel/confirm	76		0/2

*hhmm hh : hour (01-12)
mm : minute (00-59)

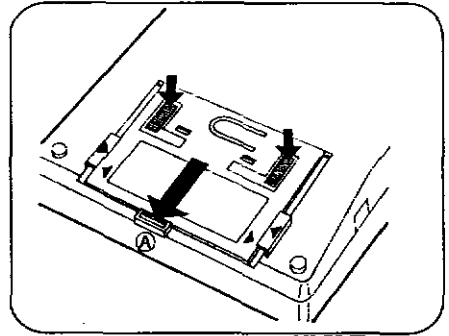
Installing the Card Holder

The KX-T7220E and KX-T7230E is equipped with a card holder with a memory station card. Follow the instructions below to install the card holder to the unit. The KX-T7250E has capacity for optional card holder with a memory station card.

- 1 Match the marks (▶) on the card holder and on the slide rails on the unit.

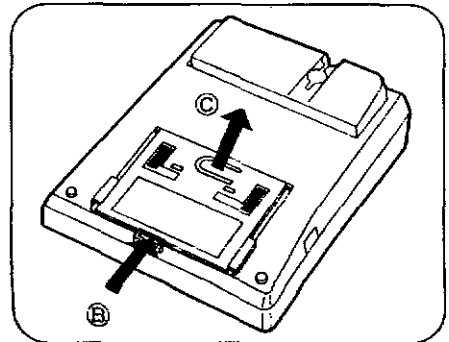


- 2 Push two shaded portions slightly and insert the edges of the holder under the slide rails and then slide down in direction of arrow "A."



Removing the card holder:

Push the card holder in the direction of arrow "B" while keeping the tip of the holder pulling in the direction of arrow "C."



DSS Console Features

With a Directed Station Selection (DSS) console, the KX-T7240E, you can call an extension, transfer calls and access system features with the touch of a button. The DSS Console must be connected to the Panasonic Digital Super Hybrid System and paired with a proprietary telephone.

Note:

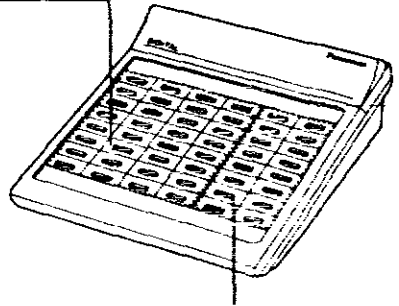
- System Programming is required to designate the jack numbers of the paired DSS Console and proprietary telephone.
- The DSS Console and the Digital Proprietary Telephone should be placed side by side on your desk.
- For System Programming, please refer to the Installation Manual of the Digital Super Hybrid System.

■ Location of Controls

32 DSS Buttons with Busy Lamp Field (BLF):

To access an extension, simply press a DSS button. These buttons also can be assigned for a one-touch dialling. The BLF indicates the current status of the corresponding extension.

Off : Idle
Red : Busy

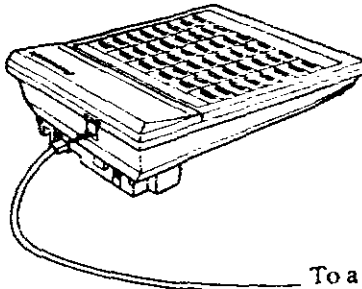


16 Programmable Feature (PF) Buttons:

These buttons, once programmed, let you access various functions with one-touch operation.

■ Connection

The KX-T7240E Direct Station Selection (DSS) Console requires a Panasonic Digital Proprietary Telephone for proper operation.



To a Digital Super Hybrid System via a secondary socket

DSS Console Features

■ DSS (Direct Station Selection) Buttons

Use your paired telephone for the operation except for the DSS button. The initial factory settings for the DSS buttons are as follows:

DSS 01-32 : extension numbers 201-232

<DSS Button Assignment>

- Press **PROGRAM** button + **99**.
- Press a **DSS** button.
- Dial as follows:
 - **Extension Number**
1 + **extension number**
 - **One-Touch Dialling**
2 + **line access code** (9 or 81-88) + **phone number**
- Press **STORE** button.
- Press **PROGRAM** button.

<Dialling>

- Lift handset or press **SP-PHONE** or **MONITOR** button.
- Press the **DSS** button.

<Transfer>

A call can be transferred to an extension by using the DSS button.

- Press **TRANSFER** button.
- Press **DSS** button.

<One-Touch Transfer>

An outside call can be transferred to an extension with one-touch operation. (System Programming is required. Refer to the Installation Manual of the Digital Super Hybrid System.)

- Press the **DSS** button.

■ PF (Programmable Feature) Buttons

Use your paired telephone for the operation except for the PF button.

<PF Button Assignment>

- Press **PROGRAM** button + **99**.
- Press a **PF** button.
- Dial **2**.
- Dial as follows:
 - **One-Touch Dialling**
the **line access code** (9, 81-88) + the **phone number**
 - **One-Touch Access for System Features**
the required **feature number**
- Press **STORE** button.
- Press **PROGRAM** button.

<Dialling>

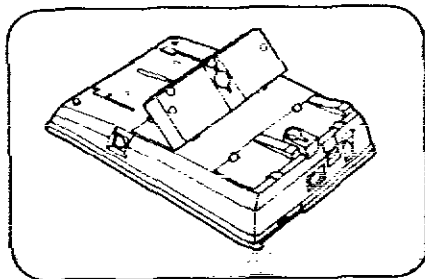
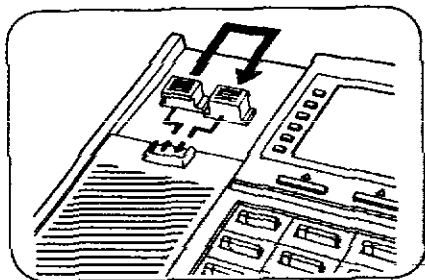
- Lift handset or press **SP-PHONE** or **MONITOR** button.
- Press **PF** button.

Note:

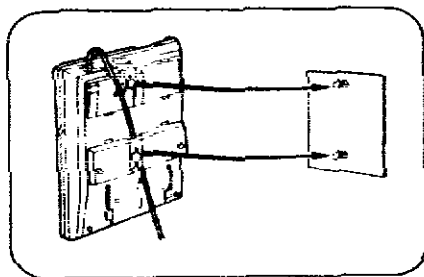
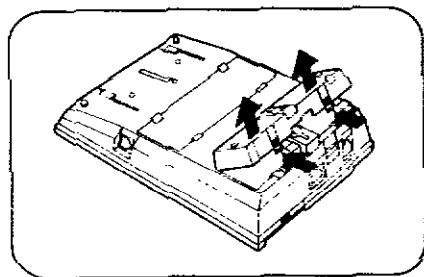
- To erase an incorrect entry while assigning: press the **TRANSFER** button.
- To clear the assignment : press **DSS** or **PF** button + **2** + **STORE** button.

Wall Mounting

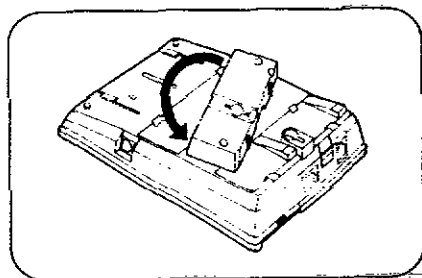
- 1** Remove the handset hook by pulling it toward the top of the unit. Turn it around and re-insert. (Except for the KX-T7240E.)
- 4** Place the stand on the center line.



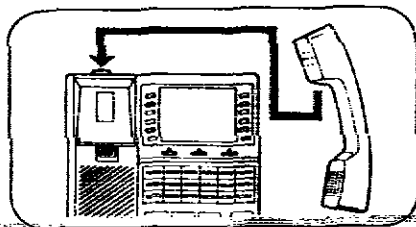
- 2** Remove the attaching stand.
- 5** Mount the unit on the wall.



- 3** Turn it around 180 degrees.



To temporarily place the handset down during a conversation, hook it over the top edge of the phone as shown. (Except for the KX-T7240E.)



Cautions

- The apparatus is designed to be installed and operated under controlled conditions of ambient temperature and a relative humidity not greater than 60%.
- Avoid installing the apparatus in damp or humid environments, such as bathrooms or swimming pools.
- 999 or 112 can be dialled on the apparatus after accessing the CO line for the purpose of making outgoing calls to the BT emergency service.
- During dialling, this apparatus may tinkle the bells of other telephones using the same line. This is not a fault and we advise you not to call Fault Repair Service.
- If the apparatus does not operate properly, disconnect the unit from the extension line cord and then connect again.
- **Power failure transfer**
Even if the KX-T7220E/KX-T7230E/KX-T7235E/KX-T7250E are connected to telephone line, they will not operate during a power failure.

Others:

- If there is any trouble, unplug the extension line and connect a known working phone. If the known working phone operates properly, have the defective phone repaired by one of the specified Panasonic Factory Service Centers. If the known working phone does not operate properly, check the Digital Super Hybrid System and the Internal extension wiring.
- Keep the unit away from heating appliances and electrical noise generating devices such as fluorescent lamps and motors.
- The unit should be kept free of dust, moisture and vibration, and should not be exposed to direct sunlight.
- Do not use benzine, thinner, or the like, or any abrasive powder to clean the cabinet. Wipe it with a soft cloth.
- Do not use any handset other than a Panasonic handset for model KX-T7220E/KX-T7230E/KX-T7235E/KX-T7250E use.
- KX-T7220E/KX-T7230E/KX-T7235E/KX-T7250E are capable of being used in conjunction with hearing aids fitted with inductive coil pick-ups. The handset should be held as for normal conversation. For operation the hearing aid should be set to it's "T" position or as directed in the operating instructions for the hearing aid.
- KX-T7220E/KX-T7230E/KX-T7235E/KX-T7250E are designed to aid the visually handicapped to locate dial keys and buttons.



WARNING:

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

