



<KX-NT346>

Panasonic

Quick Reference Guide

IP Proprietary Telephone

Model No. **KX-NT343/KX-NT346/KX-NT366**

Thank you for purchasing an IP Proprietary Telephone (IP-PT). Please read this manual carefully before using this product and save this manual for future use. For more details, please refer to the manuals of the PBX.

Note: In this manual, the suffix of each model number is omitted unless necessary.

This unit supports the following optional devices and features:

	KX-NT343	KX-NT346	KX-NT366 ^{*1}
Display	3-Line	6-Line	6-Line
Flexible Outside (CO) Line Buttons	24	24	48 (12×4)
Self Labelling			✓
KX-NT303 Add-on 12 key module	✓	✓	
KX-NT305 Add-on 60 key module ^{*2}	✓	✓	
KX-NT307(PSLP1528) Bluetooth Module	✓	✓	✓
KX-A239UK Optional AC Adaptor	✓	✓	✓
CODEC	G.729A, G.711, G.722 ^{*3}		

✓: Available

^{*1} KX-NT366 is only available for KX-TDE100/KX-TDE200/KX-TDE600/
KX-NCP500/KX-NCP1000.

^{*2} KX-NT305 is only available for KX-TDE100/KX-TDE200/KX-TDE600/
KX-NCP500/KX-NCP1000.

^{*3} G.722 is only available for KX-TDE100/KX-TDE200/KX-TDE600/KX-NCP500/
KX-NCP1000.

- For information on connecting the KX-NT307, refer to the KX-NT307 Bluetooth[®] Module Installation Instructions.

This model supports the following PBX versions:

KX-TDA15/KX-TDA30: PSMR Software File Version 4.0000 or later

KX-TDA100/KX-TDA200: PMPR Software File Version 5.0000 or later

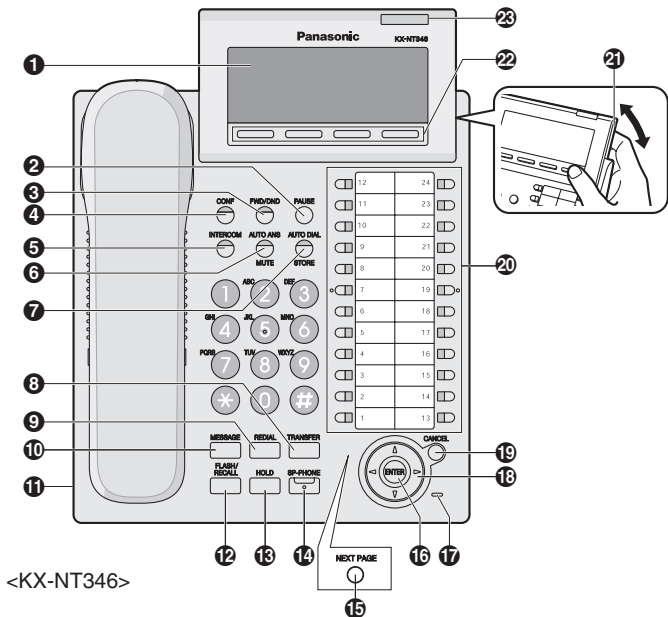
KX-TDA600: PLMPR Software File Version 5.0000 or later

KX-TDE100/KX-TDE200: PMMPR Software File Version 1.0000 or later

KX-TDE600: PGMPR Software File Version 2.0000 or later

KX-NCP500/KX-NCP1000: PBMPR Software File Version 1.0000 or later

Location of Controls













<KX-NT346>

- 1 LCD (Liquid Crystal Display)**
- 2 PAUSE:** Used to insert a pause when storing a telephone number. This button is also used for programming this unit.
- 3 FWD/DND (Call Forwarding/Do Not Disturb):** Used to set Call Forwarding or Do Not Disturb on your extension.
- 4 CONF (Conference):** Used to establish a multiple party conversation.
- 5 INTERCOM:** Used to make or receive intercom calls.
- 6 AUTO ANS (Auto Answer)/MUTE:** Used to receive an incoming call in hands-free mode or mute the microphone/handset during a conversation.

Location of Controls

- 7 AUTO DIAL/STORE:** Used for System/Personal Speed Dialling or storing programme changes.
- 8 TRANSFER:** Used to transfer a call to another party.
- 9 REDIAL:** Used to redial the last dialled number.
- 10 MESSAGE:** Used to leave a message waiting indication or call back the party who left the message waiting indication.
- 11 Headset Jack**
- 12 FLASH/RECALL:** Used to disconnect the current call and make another call without hanging up.
- 13 HOLD:** Used to place a call on hold.
- 14 SP-PHONE (Speakerphone):** Used for performing hands-free operations.
- 15 NEXT PAGE Key:** Used to switch the page for the Self Labelling feature. (KX-NT366 only)
- 16 ENTER:** Used to assign the selected item.
- 17 Microphone:** Used for hands free conversations.
- 18 Navigator Key:** Used to adjust the volume and the display contrast or select desired items.
- 19 CANCEL:** Used to cancel the selected item.
- 20 Flexible CO Buttons:** Used to seize an outside line or perform a feature that has been assigned to the key.
- 21 LCD Panel:** Can be adjusted to the desired angle.
- 22 Soft Buttons (S1-S4):** S1-S4 (located from left to right) are used to select the item displayed on the bottom line of the display.
- 23 Message/Ringer Lamp:** When you receive an intercom call, the lamp flashes green, and on an outside call, the lamp flashes red. When someone has left you a message, the lamp stays on red.


Settings

Speaker volume	<i>While in a hands-free conversation</i>	 <p>Press Up to increase or Down to decrease the volume.</p>
Handset/Headset volume*	<i>While using the handset or headset</i>	
Ringer volume	<i>While on-hook or receiving a call</i>	
LCD Contrast (for the main display)	<i>While on-hook</i> PAUSE  ► (0) (1) ►  ►  ►  ► PAUSE 	
Ring Tone	PAUSE  ► $\left(\begin{array}{c} \text{CO} \\ \text{OR} \\ \text{INTERCOM} \end{array} \right)$ ► $\left(\begin{array}{cc} (0) & (1) \\ & \\ (3) & (0) \end{array} \right)$ ► $\left(\begin{array}{c} \text{OR} \\ \text{AUTO DIAL} \\ \text{STORE} \end{array} \right)$ ► PAUSE  <p>Press 2 times.</p>	
LCD Backlight	<i>While on-hook</i> PAUSE  ► (0) (4) ► $\left(\begin{array}{c} \text{OR} \\ \text{AUTO DIAL} \\ \text{STORE} \end{array} \right)$ ► $\left(\begin{array}{l} (0) \text{ Automatic} \\ (1) \text{ Always ON} \\ (2) \text{ Always OFF} \end{array} \right)$ ► $\left(\begin{array}{c} \text{OR} \\ \text{AUTO DIAL} \\ \text{STORE} \end{array} \right)$ ► PAUSE 	























* If you hear your own voice through the handset or headset, decrease the volume.

Icon Meanings

 = Flexible CO button  = Off-hook  = On-hook

 = Feature number  = Talk  = Confirmation Tone

Making Calls

Calling	
To an extension  ► <input data-bbox="166 425 329 460" type="text" value="extension no."/> ► 	To an outside party  ►  ► <input data-bbox="619 425 816 460" type="text" value="outside phone no."/> ► 
Redial	
 ► REDIAL <input data-bbox="184 544 222 579" type="text" value=""/> ► 	
Quick Dialling	
 ► <input data-bbox="166 649 329 684" type="text" value="quick dial no."/> ► 	
One-touch Dialling	
To store (KX-NT343/KX-NT346) For storing on a KX-NT366, refer to page 12. PAUSE  ►  ► ② ► <input data-bbox="350 789 660 838" type="text" value="desired no.* (max. 32 digits)"/> ► AUTO DIAL  ► STORE 	
* Enter outside line access number before outside phone number.	
To dial  ►  assigned as a One-touch Dialling button ► 	
Personal Speed Dialling	
To store  ► * ③ ① ► <input data-bbox="311 1069 505 1118" type="text" value="personal speed dial no. (2 digits)"/> ► <input data-bbox="529 1069 723 1118" type="text" value="desired no.* (max. 32 digits)"/> ► #  ► 	
* Enter outside line access number before outside phone number.	
To dial  ► AUTO DIAL  ► STORE ► * ► <input data-bbox="384 1244 743 1279" type="text" value="personal speed dial no. (2 digits)"/> ► 	

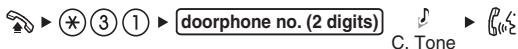
Features List

System Speed Dialling

To dial



Doorphone Call



During a Conversation

Call Hold

To hold



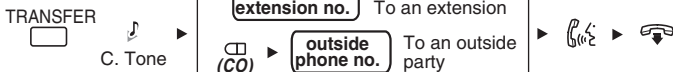
To retrieve a call at the holding extension



To retrieve an outside call from another extension



Call Transfer



Useful Features

Multiple Party Conversation

To add other parties during a conversation (i.e., conference)

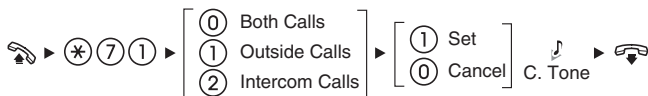


To leave a conference



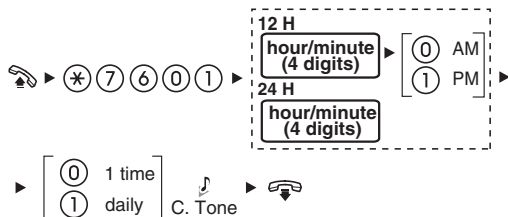
Setting the Telephone According to Your Needs

Do Not Disturb



Timed Reminder

To set



To cancel

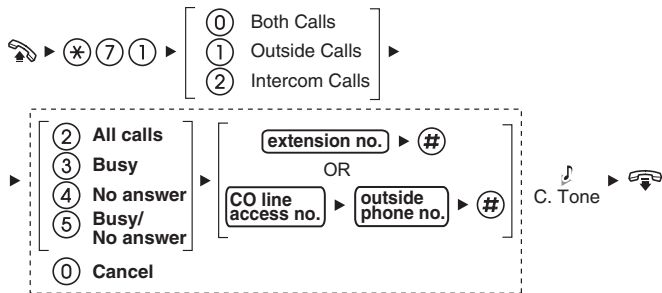


To stop or answer the ring back



Before Leaving Your Desk

Call Forwarding



Features List

Making Use of the Voice Mail Service

Listening to a message

From your own extension

 ► **VPS extension no.** ►

► **Mailbox Password*** **#**

* If you have no password, you can skip the last step.

From someone else's extension

 ► **VPS extension no.** ►

► **#** **6** ► ***** ►

► **mailbox no.** ►

► **Mailbox Password*** **#**

* If you have no password, you can skip the last step.

KX-TVM series

- ① Listen to Message
- ② Deliver Message
- ③ Mailbox Management
- ④ Automated Attendant
- ⑤ Message Notification
- ⑥ Other Features
- * End Call

KX-TVP series

- ① Listen to Message
- ② Deliver Message
- ③ Check Mailbox Distribution
- ④ Automated Attendant
- ⑤ Mailbox Management
- ⑥ Other Features
- * End Call

Leaving a message

 ► **VPS extension no.** ►

From your own extension

Mailbox Password* **#**

From someone else's extension

**6** ► ***** ► **mailbox no.** ► **Mailbox Password*** **#** ►

* If you have no password, you can skip the last step.

► ② ► Enter the desired mailbox number ► ② ① ► Leave a message ► ① ② ►

To send the message immediately

① ② (KX-TVM series)

② (KX-TVP series)

To set the delivery time

① ①

► Follow the guidance

During playback

- ① Repeat Voice Guidance
- * Exit

- Consult your dealer or the network administrator for more details regarding feature numbers.
- It is possible to assign flexible CO buttons as feature buttons.
- Control panel/button names and descriptions can be found in “Location of Controls” on page 2.

Accessing Features Using the Display

Using the LCD Display

It is possible to access the following directories, logs, and menus by pressing left or right on the Navigator Key while this unit is idle:

- Extension Number Directory**
- System Speed Dialling Directory**
- Personal Speed Dialling Directory**
- Outgoing Call Log**
- Incoming Call Log**

Entering Characters

You can enter alphabetic characters and digits using the dialling buttons. Pressing a dialling button repeatedly displays different characters, as shown in the following tables. While entering characters, you can move the cursor with the left and right Navigator keys and delete characters with the TRANSFER button. To toggle between Table 1 and Table 2, press the Soft button (S1) at any time while entering characters. For a list of available characters, refer to the next page.

Accessing Features Using the Display

Table 1 (Standard mode)

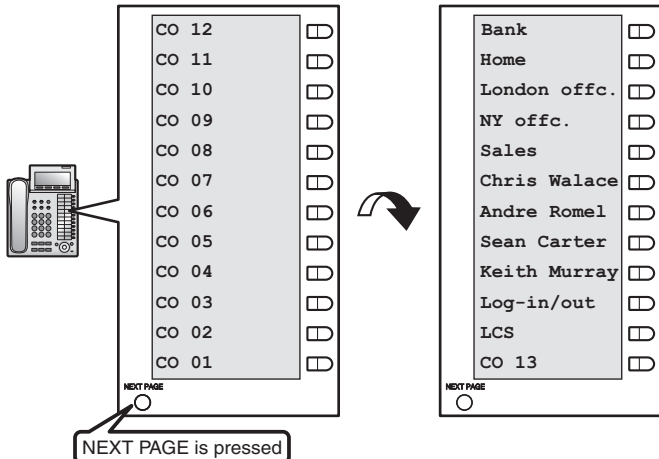
Times Buttons	1	2	3	4	5	6	7	8	9
①	!	?	"	1					
②	A	B	C	a	b	c	2		
③	D	E	F	d	e	f	3		
④	G	H	I	g	h	i	4		
⑤	J	K	L	j	k	l	5		
⑥	M	N	O	m	n	o	6		
⑦	P	Q	R	S	p	q	r	s	7
⑧	T	U	V	t	u	v	8		
⑨	W	X	Y	Z	w	x	y	z	9
⑩	(space)	.	,	'	:	;	0		
* ⑪	/	+	-	=	<	>	*		
# ⑫	\$	%	&	@	()	€	£	#

Table 2 (Option mode)

Times Buttons	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
①	!	?	"	ä	ö	ü	1								
②	A	B	C	a	b	c	À	Á	Â	Ã	Ä	Å	Æ	Ç	2
③	D	E	F	d	e	f	Ð	È	É	Ê	Ë	3			
④	G	H	I	g	h	i	Ì	Í	Î	Ï	4				
⑤	J	K	L	j	k	l	5								
⑥	M	N	O	m	n	o	Ñ	Ò	Ó	Ô	Õ	Ö	Ø	Œ	6
⑦	P	Q	R	S	p	q	r	s	Š	ß	7				
⑧	T	U	V	t	u	v	Û	Ú	Û	Ü	8				
⑨	W	X	Y	Z	w	x	y	z	Ý	Ž	9				
⑩	(space)	.	,	'	:	;	0								
* ⑪	/	+	-	=	<	>	*								
# ⑫	\$	%	&	@	()	€	£	#						

Self Labelling (KX-NT366 only)

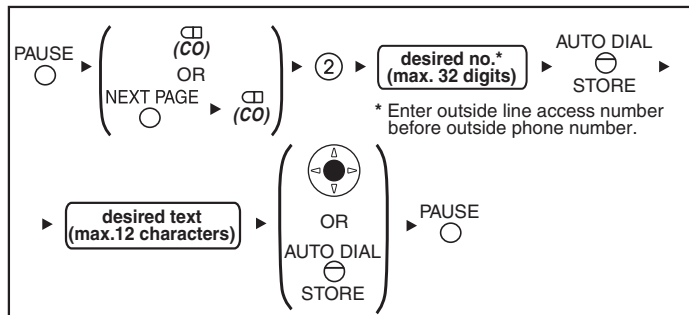
The KX-NT366 IP-PT features 12 flexible buttons, with an LCD screen next to the buttons. Each item can be named on the LCD screen through personal or system programming to reflect the function of its corresponding flexible button. Additionally, the flexible buttons can be organised into 4 “pages”, allowing you to assign a total of 48 items to the 12 flexible buttons. You can toggle between pages by pressing the NEXT PAGE key, as follows:



- This feature is only available for the KX-TDE100/KX-TDE200/
KX-TDE600/KX-NCP500/KX-NCP1000.

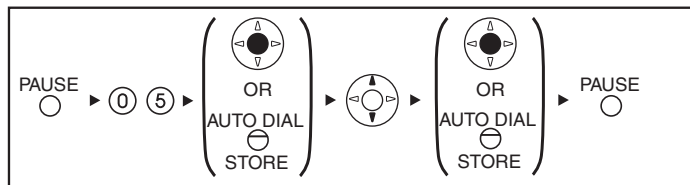
Self Labelling (KX-NT366 only)

Storing a One-touch Dialling button, and setting the displayed text for the Self Labelling LCD Display



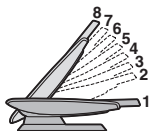
- Similar to the above procedure, when storing other types of buttons (CO buttons, feature buttons, etc.), the displayed text for the Self Labelling LCD Display can be assigned.

Setting the Self Labelling LCD Display contrast levels



Operation Board Angle Adjustment

The angle of the operation board can be set to one of eight angles (level 1 = 0°, level 8 = 45°).



CAUTION:

Hold the operation board until the operation board is secured at the desired angle. Make sure you do not pinch your fingers when raising or lowering the operation board.

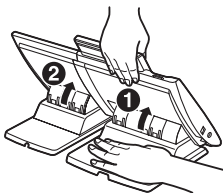
To raise:

Gently lift the operation board one level at a time.

To lower:

Raise the operation board to level 8. Next, with one hand on the base of the unit, lift the operation board again to release the latch, then slowly push the operation board down to level 1. If the operation board cannot be lowered to level 1, repeat this step.

- When a KX-NT305 is attached to this unit, first lift the unit's handset cradle to release the latch (1), then with one hand on the base of the KX-NT305, similarly lift its operation board to release its latch (2).

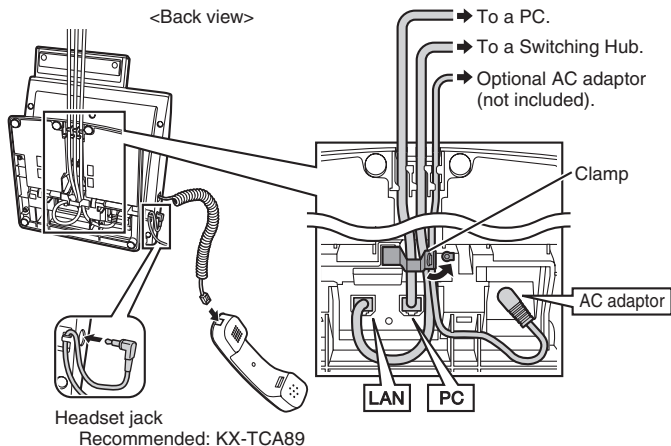


Locking the Handset Hook

Pull down the handset hook until it locks to prevent the handset from falling off the handset cradle when the unit is mounted to a wall or set at a high angle. To temporarily place the handset down during a conversation, hook it over the top edge of the unit as shown.



Connection



PC connection

- Use a straight CAT 5 (or higher) Ethernet cable (not included) that is 6.5 mm in diameter or less.
- For further information on the connection to a PC, refer to the documentation provided for the PBX.

Switching Hub connection

- Use a straight CAT 5 (or higher) Ethernet cable (not included) that is 6.5 mm in diameter or less.

AC adaptor

- Use a Panasonic AC adaptor KX-A239UK (PQLV206E).
- The AC adaptor is used as the main disconnect device. Ensure that the AC outlet is located near the unit and is easily accessible.

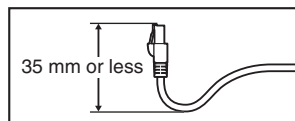
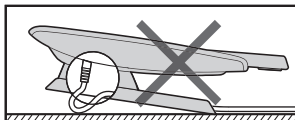
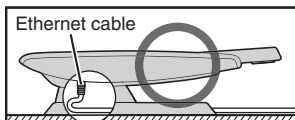
CAUTION:

When selecting Ethernet cables

Use flexible, high-quality, snagless (without strain relief) cables. Do not use cables with coating that may tear or crack when bent.

To prevent damage to the cables, use cables* that do not protrude from the bottom of the base when the operation board is set to level 1. (For information on adjusting the angle of the operation board, refer to page 13.)

* Use cables as shown.



When connecting cables

Ensure that the Ethernet cables and the AC adaptor cord are inserted in the grooves, and are clamped to prevent damage to the connectors. Leave some slack in the AC adaptor cord and the Ethernet cable connected to the hub.

When connecting headset jack

Ensure that the headset cord is wound around the hook to prevent damage to the connector.

Installing the KX-NT303/KX-NT305

The KX-NT303/KX-NT305 allow 12/60 additional flexible CO buttons to be added to this unit. These buttons are used to seize an outside line, make a call using One-touch Dialling, or perform a feature that has been assigned to the key.



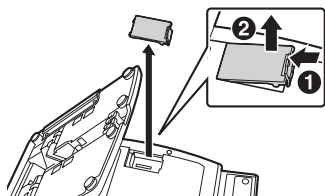
<with a KX-NT346>

CAUTION:

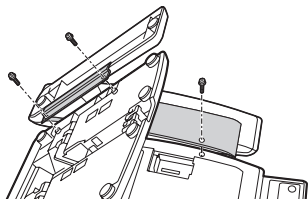
Before you install or uninstall the Add-on Key Module, turn off the unit by disconnecting the AC adaptor (if connected) and the Ethernet cable connected to the switching hub.

KX-NT303 (For KX-NT343/KX-NT346)

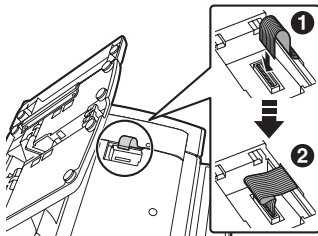
1. Open the cover.



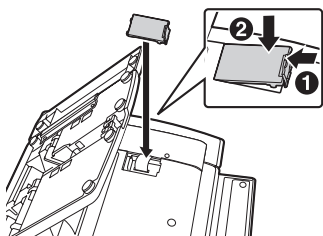
2. Attach the KX-NT303 to your unit with the screws (included).



3. Plug the flat cable into the connector (1), then bend the cable slightly as shown (2).



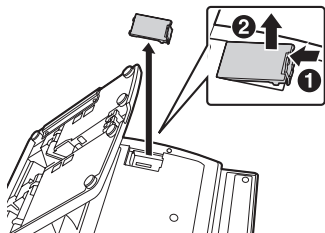
4. Close the cover.



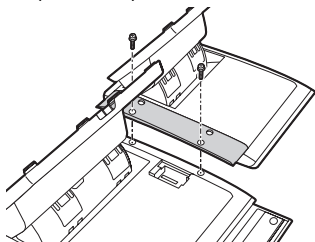
Installing the KX-NT303/KX-NT305

KX-NT305 (For KX-NT343/KX-NT346)

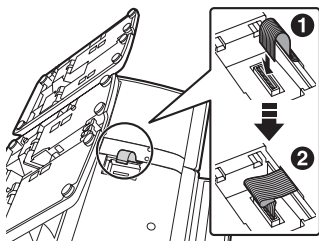
1. Open the cover.



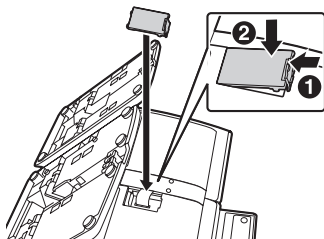
2. Attach the KX-NT305 to your unit with the screws* (included).





3. Plug the flat cable into the connector (1), then bend the cable slightly as shown (2).



4. Close the cover.



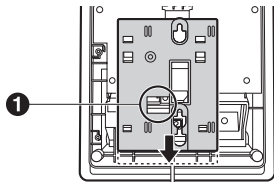
* Two types of screws (2 screws of each type) are included with the KX-NT305, as shown below.

For attaching to the unit	For wall mounting
	

Wall Mounting

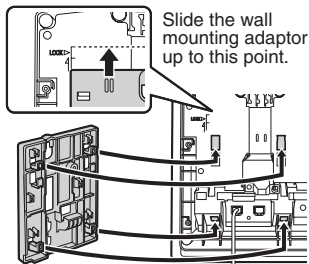
1. Remove the wall mounting adaptor from the unit as shown, set the operation board to level 1, then connect and secure the cables.

- The cables can also be run from the top of the unit (page 14, 15).



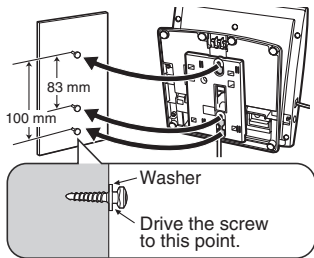
2. Attach the wall mounting adaptor as shown.

- Make sure the cables are not pinched by the wall mounting adaptor. When running the cables from the top of the unit, look through the opening in the wall mounting adaptor (1) to confirm that the cables are not being pinched.



3. Drive the 2 screws (included) into the wall either 83 mm or 100 mm apart, and mount the unit on the wall.

- You can find a wall mounting template on page 23.
- Make sure that the wall that the unit will be attached to is strong enough to support the unit (approx. 1.5 kg; approx. 2.5 kg when the KX-NT305 is attached).
- Make sure the cables are securely fastened to the wall.
- When this product is no longer in use, make sure to detach it from the wall.



- If using a KX-NT305, attach the KX-NT305 (page 17) to the unit first, and perform step 3 only.
- For information on locking the handset hook, refer to page 13.

When using KX-NT300 series IP-PTs, keep the following conditions in mind.

- If the unit does not operate properly, disconnect the unit from the Ethernet cable and then connect again.
- If you are having problems making calls, disconnect the Ethernet cable and connect a known working IP-PT. If the known working IP-PT operates properly, have the defective IP-PT repaired by an authorised Panasonic factory service centre. If the known working IP-PT does not operate properly, check the PBX and the Ethernet cable.
- Wipe the unit with a soft cloth. Do not clean the unit with abrasive powders or with chemical agents such as benzene or thinner.
- Use only the correct Panasonic handset.
- Do not disassemble this unit. Dangerous electrical shock could result. The unit must only be disassembled and repaired by qualified service technicians.
- If damage to the unit exposes any internal parts, immediately disconnect the cable or cord. If the power is supplied from the network to the IP-PT [Power-over-Ethernet], disconnect the Ethernet cable. Otherwise, disconnect the AC adaptor cord. Then return this unit to a service centre.
- Never attempt to insert wires, pins, etc. into the vents or other holes of this unit.
- This unit is designed to aid the visually handicapped to locate dial keys and buttons.
- This unit is designed to be installed under controlled conditions of ambient temperature and a relative humidity.
- Avoid installing the unit in damp or humid environments, such as bathrooms or swimming pools.
- 999 and 112 can be dialled on the product after accessing the CO line for the purpose of making outgoing calls to the BT emergency (999) and (112) services (United Kingdom only).

Take special care to follow the safety suggestions listed below.

Safety

- 1) The unit should only be connected to a power supply of the type described in the Quick Reference Guide or as shown on the label on the unit.
- 2) When left unused for a long period of time, the optional AC adaptor should be unplugged from the AC outlet, if you are using Power-over-Ethernet, disconnect the Ethernet cable.

Important Information

Installation

Environment

- 1) Do not use this unit near water, for example, near a bathtub, washbowl or sink. Damp basements should also be avoided.
- 2) Keep the unit away from heating appliances and devices that generate electrical noise, such as fluorescent lamps, motors and televisions. These noise sources can interfere with the performance of the unit. It also should not be placed in rooms where the temperature is less than 5 °C or greater than 40 °C.

Placement

- 1) Do not place heavy objects on top of this unit.
- 2) Care should be taken so that objects do not fall onto, and liquids are not spilled into, the unit. Do not subject this unit to excessive smoke, dust, moisture, mechanical vibration, shock or direct sunlight.
- 3) Place the unit on a flat surface.

WARNING:

TO PREVENT POSSIBLE FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

THIS HANDSET EARPIECE IS MAGNETISED AND MAY RETAIN SMALL FERROUS OBJECTS.

THE USE OF EXCESSIVE SOUND VOLUME THROUGH EARPHONES, HEADPHONES, OR HEADSETS MAY CAUSE HEARING LOSS.

DISCONNECT THIS UNIT FROM POWER OUTLET/THE ETHERNET CABLE IF IT EMITS SMOKE, AN ABNORMAL SMELL OR MAKES UNUSUAL NOISE. THESE CONDITIONS CAN CAUSE FIRE OR ELECTRIC SHOCK. CONFIRM THAT SMOKE HAS STOPPED AND CONTACT AN AUTHORISED SERVICE CENTRE.

IMPORTANT NOTICE:

- Under power failure conditions, the IP-PT may not operate. Please ensure that a separate telephone, not dependent on local power, is available for use in remote sites in case of emergency.
- For information regarding network setup of the IP-PT such as IP addresses, please refer to the Installation Manual for the Panasonic PBX.
- If an error message is shown on your display, consult your dealer or the network administrator.
- The firmware of the KX-NT343, KX-NT346, and KX-NT366 are protected by copyright laws and international treaty provisions, and all other applicable laws. It cannot be reverse engineered, decompiled or disassembled.

This unit is 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 its "T" position or as directed in the operating instructions for the hearing aid.



Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.



Important Information

CE 0682

This product is intended to be connected to a Panasonic PBX only. Panasonic Communications Company (U.K.) Ltd. declares that this equipment is in compliance with the essential requirements and other relevant provisions of Radio & Telecommunications Terminal Equipment (R&TTE) Directive 1999/5/EC.

Declarations of Conformity for the relevant Panasonic products described in this manual are available for download by visiting:

<http://www.doc.panasonic.de>

Contact to Authorised Representative:

Panasonic Testing Centre

Panasonic Marketing Europe GmbH

Winsbergring 15, 22525 Hamburg, Germany

Trademark:

The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Panasonic Corporation is under licence.

One screw here

157 mm

One screw here

WALL MOUNTING TEMPLATE

1. Drive the screws into the wall as indicated.

Note:

If the KX-NT305 is attached to the unit, leave 157 mm of space between the 2 screws for the unit and the 2 screws for the KX-NT305, as indicated above. This space is abbreviated in this template and must be measured.

2. Hook the unit onto the screw heads.

for base unit

100 mm
83 mm

for KX-NT305 Add-on 60 Key Module

100 mm
83 mm

One screw at either point

One screw at either point

Panasonic Business Systems U.K.

Panasonic House, Willoughby Road, Bracknell,
Berkshire RG12 8FP

Copyright:

This material is copyrighted by Panasonic Communications Co., Ltd., and may be reproduced for internal use only. All other reproduction, in whole or in part, is prohibited without the written consent of Panasonic Communications Co., Ltd.

© Panasonic Communications Co., Ltd. 2007

PSQX4394YA-GQ KU0707ME1019 (UK)