Panasonic

Quick Reference Guide

IP Proprietary Telephone

Model No. **KX-NT543/KX-NT546**
KX-NT560

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.

Manuals and supporting information are provided on the Panasonic Web site at:
https://panasonic.net/cns/pcc/support/pbx/

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

Open Source Software Notice
Parts of this product use open source software. For details about the open source software, refer to the following Web site at:
https://panasonic.net/cns/pcc/support/pbx/

Trademarks
● The Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Panasonic Corporation is under license.
● All other trademarks identified herein are the property of their respective owners.

Document Version: 2017-03

For Your Safety

To reduce the risk of injury, loss of life, electric shock, fire, malfunction, and damage to equipment or property, always observe the following safety precautions.

Explanation of symbols

The following symbols are used to classify and describe the level of hazard and injury caused when the denotation is disregarded and improper use is performed.

⚠ **WARNING**	Denotes a potential hazard that could result in serious injury or death.
⚠ **CAUTION**	Denotes a hazard that could result in minor injury or damage to the unit or other equipment.

The following symbols are used to classify and describe the type of instructions to be observed.

🚫	This symbol is used to alert users to a specific operating procedure that must not be performed.
❗	This symbol is used to alert users to a specific operating procedure that must be followed in order to operate the unit safely.

⚠ **WARNING**

General Safety

🚫
- Do not disassemble this unit. Dangerous electrical shock could result. The unit must only be disassembled and repaired by qualified service technicians.
- Never attempt to insert wires, pins, etc. into the vents or other holes of this unit.
- To prevent possible fire or electric shock, do not expose this unit to rain or moisture.
- Do not splash water on the AC adaptor or the power cord, nor get them wet. Doing so can result in fire, electric shock, or injury. If they do get wet, immediately disconnect the AC adaptor and power cord, and contact an authorized service center.
- Do not touch the AC adaptor for extended periods of time. Doing so can lead to low-degree burns.

❗
- 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 center.

- Unplug this unit from the AC outlet and have the unit serviced by qualified service personnel in the following cases:
  A. When the power supply cord or plug is damaged or frayed.
  B. If liquid has been spilled on the unit.
  C. If the unit has been exposed to rain or water.
  D. If the unit does not work normally by following the manual. Adjust only controls covered by the manual. Improper adjustment may require repair by an authorized service center.
  E. If the unit has been dropped, or damaged.
  F. If the unit's performance deteriorates.
- This handset earpiece is magnetized 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 cables 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 authorized service center.

Installation

- Do not make power connections that exceed the ratings for the AC outlet or power equipment. If the power rating of a surge protector, etc. is exceeded, it can cause a fire due to heat buildup.
- Do not bundle up the AC adaptor cord. The cord may become damaged, which can lead to a fire, electric shock, or electric short.

- The unit should only be connected to a power supply of the type as shown on the label on the unit.
- Completely insert the AC adaptor into the AC outlet. Failure to do so may cause electric shock and/or excessive heat resulting in a fire.

Medical (KX-NT560 only)

$\bigcirc$	• Do not use the product in health care facilities if any regulations posted in the area instruct you not to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.
❗	• Consult the manufacturer of any personal medical devices, such as pacemakers or hearing aids, to determine if they are adequately shielded from external RF (radio frequency) energy (the product operates in the frequency range of 2.402 GHz to 2.480 GHz and the power output is 2.5 mW [max.]).

Placement

$\bigcirc$	• 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. • Do not place heavy objects on top of this unit.
❗	• Place this unit on a flat surface. • Allow 10 cm (3 $15/16$ in) clearance around the unit for proper ventilation.

Wall Mounting

❗	• Make sure that the wall that the unit will be attached to is strong enough to support the unit (approx. 1.5 kg). • Only use the optional wall mount kit with the unit. The wall mount kit includes the necessary screws, washers, and wall mounting adaptor. • When driving the screws into the wall, be careful to avoid touching any metal laths, wire laths or metal plates in the wall. • When this unit is no longer in use, make sure to detach it from the wall.

⚠ **CAUTION**

🚫
- 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 0 °C (32 °F) or greater than 40 °C (104 °F).

❗
- Wipe the unit with a soft cloth. Do not clean the unit with abrasive powders or with chemical agents such as benzine or thinner.
- The handset hook poses a choking hazard. Keep the handset hook out of reach of children.
- When left unused for a long period of time, disconnect the unit from the AC outlet. When the unit receives power from a PoE power supply, disconnect the Ethernet cables.
- When the unit is mounted on a wall, make sure the cables are securely fastened to the wall.

Note

- If the unit does not operate properly, disconnect the AC adaptor cord and Ethernet cables 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 authorized Panasonic factory service center. If the known working IP-PT does not operate properly, check the PBX and the Ethernet cable.
- 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 PBX.

- If an error message is shown on your display, consult your dealer or the network administrator.
- Use only the correct Panasonic handset.

Important Safety Instructions

When using this unit, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- Do not use the unit near water, for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use the telephone to report a gas leak in the vicinity of the leak.

SAVE THESE INSTRUCTIONS

FCC and Other Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

● Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

FCC Declaration of Conformity
Trade Name: Panasonic
Model Number: KX-NT543/KX-NT546/KX-NT560
Responsible Party:
Panasonic Corporation of North America
Two Riverfront Plaza
Newark, New Jersey 07102-5490 U.S.A.
Telephone No.: 1-800-211-PANA (7262)

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of the cabinet of this equipment is a label that contains, among other information, a product identifier in the format
US:ACJ.......
If requested, this number must be provided to the telephone company.

If trouble is experienced with this equipment, for repair or warranty information, please contact:
Panasonic Service and Technology Company-BTS Center
415 Horizon Drive Bldg. 300 Ste. 350-B
Suwanee, GA 30024-3186

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

WHEN PROGRAMMING EMERGENCY NUMBERS AND (OR)
MAKING TEST CALLS TO EMERGENCY NUMBERS:
a. Remain on the line and briefly explain to the dispatcher the reason for
   the call.
b. Perform such activities in the off-peak hours, such as early morning
   or late evenings.

This equipment is hearing aid compatible.

When you hold the phone to your ear, noise might be heard in your
Hearing Aid. Some Hearing Aids are not adequately shielded from
external RF (radio frequency) energy. If noise occurs, use the
speakerphone option (if applicable) when using this phone. Consult with
your audiologist or Hearing Aid manufacturer about the availability of
Hearing Aids which provide adequate shielding to RF energy commonly
emitted by digital devices.

For users in Canada only
● This Class B digital apparatus complies with Canadian ICES-003.
● This product meets the applicable Industry Canada technical
  specifications.

For KX-NT560 only
**This unit features a built-in Bluetooth® module that can be used to
wirelessly connect a Bluetooth headset to the unit.**

Radio Frequency Exposure Requirements
This product complies with FCC/IC radiation exposure limits set forth for
an uncontrolled environment. To comply with FCC/IC RF exposure
requirements, it must be installed and operated in accordance with
provided instructions. The unit requires minimum 20 cm (8 in) spacing
must be provided between antennas and all person's body (excluding
extremities of hands, wrists and feet) during wireless modes of
operation. This transmitter must not be co-located or operated in
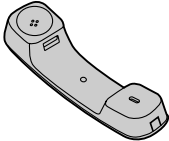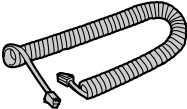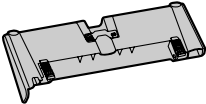conjunction with any other antenna or transmitter.

Compliance with TIA-1083 standard

Telephone handsets identified with this logo have reduced noise and interference when used with T-Coil equipped hearing aids and cochlear implants.

Accessory Information

Included Accessories*1

Handset (1)	Handset Cord (1)	Stand (1)
[Part No.]	[Part No.]	[Part No.]
Black model: PNLXQ1001Z	Black model: PNJA1066Z	Black model: PNYLUT133BM
White model: PNLXQ1002Z	White model: PNJA1067Z	White model: PNYLUT133M

*1 For extra orders for the accessories, call toll-free:
1-800-332-5368. (For users in the United States only)

Note

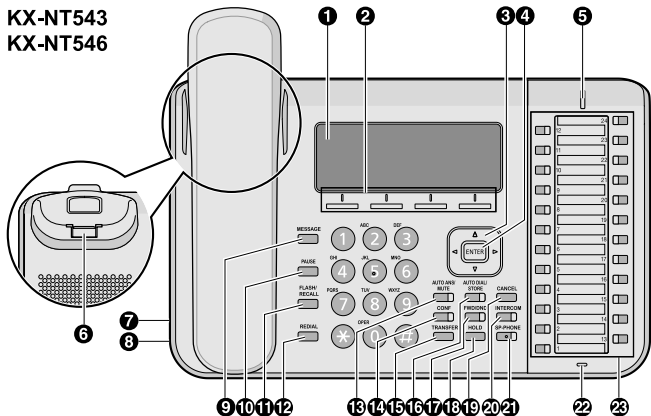● The illustrations may differ from the appearance of the actual product.

Optional Accessories

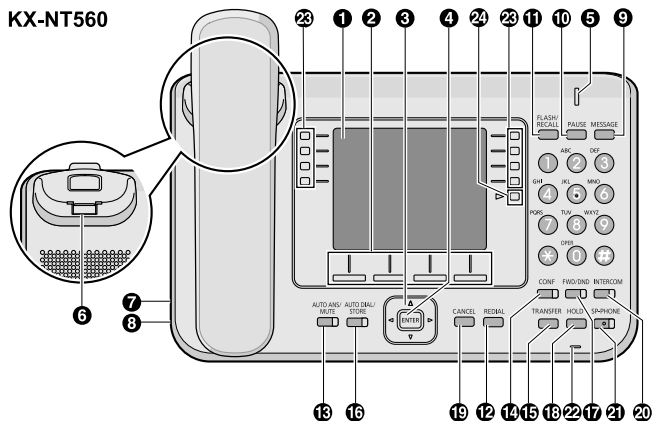| AC adaptor*1	● For users in the United States: KX-A239 (PQLV206) ● For users in Canada: KX-A239X (PQLV206)
Wall Mount Kit	KX-A433

*1 To order an optional AC adaptor, please order using the "KX-A239" or "KX-A239X" model number (not "PQLV206").

Location of Controls

KX-NT543
KX-NT546

KX-NT560

❶ **LCD (Liquid Crystal Display):**
KX-NT543: 3 lines, KX-NT546: 6 lines, KX-NT560: 4.4-inch

❷ **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.

❸ **Navigator Key:** Used to adjust the volume and the display contrast or select desired items.

❹ **ENTER:** Used to assign the selected item.

❺ **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.

❻ **Handset Hook:** Keeps the handset stable when the unit is mounted on a wall.

❼ **EHS (Electronics Hook Switch) Jack**

❽ **Headset Jack**

❾ **MESSAGE:** Used to leave a message waiting indication or call back the party who left the message waiting indication.

❿ **PAUSE:** Used to insert a pause when storing a telephone number. This button is also used for programming this unit.

⓫ **FLASH/RECALL:** Used to disconnect the current call and make another call without hanging up.

⓬ **REDIAL:** Used to redial the last dialed number.

⓭ **AUTO ANS/MUTE:** Used to receive an incoming call in hands-free mode or mute the microphone/handset during a conversation.

⓮ **CONF:** Used to establish a multiple party conversation.

⓯ **TRANSFER:** Used to transfer a call to another party.

⓰ **AUTO DIAL/STORE:** Used for System/Personal Speed Dialing or storing program changes.

⓱ **FWD/DND:** Used to switch Call Forwarding or Do Not Disturb on your extension.

⑱ **HOLD:** Used to place a call on hold.

⑲ **CANCEL:** Used to cancel the selected item.

⑳ **INTERCOM:** Used to make or receive intercom calls.

㉑ **SP-PHONE (Speakerphone):** Used for performing hands-free operations.

㉒ **Microphone:** Used for hands free conversations.

㉓ **Flexible CO Buttons:** Used to seize an outside line or perform a feature that has been assigned to the key.

㉔ **NEXT PAGE Key:** Used to switch the page for the Self Labeling feature. (KX-NT560 only)

Before Operating the Telephone

Speaker volume

While in a hands-free conversation
Press [▲] or [▼] to adjust the volume.

Handset/Headset volume*1

While using the handset or headset
Press [▲] or [▼] to adjust the volume.

Ringer volume

While on-hook or receiving a call
Press [▲] or [▼] to adjust the volume.

LCD Contrast

While on-hook
1. Press the **PROG** soft button (S1).
2. Enter ⓪①.
3. Press [ENTER].
4. Press [▲] or [▼] to adjust the LCD contrast.
5. Press [ENTER].
6. Press [CANCEL].

Ring Tone

1. Press the **PROG** soft button (S1).
2. Press a flexible CO button or [INTERCOM] 2 times.
3. Enter 2 digits (01-30) using the dial keys (0-9), or press [▲] or [▼] to select the ring tone.
4. Press [ENTER].
5. Press [CANCEL].

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

LCD Backlight

While on-hook
1. Press the **PROG** soft button (S1).
2. Enter ⓪④.
3. Press [ENTER].
4. Press a dial key to select the LCD backlight mode.
   ⓪: Automatic
   ①: Always ON
   ②: Always OFF
5. Press [ENTER].
6. Press [CANCEL].

Registering the Bluetooth headset (KX-NT560 only)

1. Set the Bluetooth headset to pairing mode by following the instructions provided with the headset.
2. Press the **PROG** soft button (S1).
3. Enter ⑥⑥.
4. Press [ENTER].
5. Enter the Pass Key and press [ENTER].*1
6. Press [CANCEL].

Confirming the ID of the Bluetooth headset and deregistering the Bluetooth headset (KX-NT560 only)

1. Press the **PROG** soft button (S1).
2. Enter ⑥⑦.
3. Press [ENTER].*2*3
4. Press [ENTER] to deregister the headset.
5. Press [CANCEL].

*1 For more information regarding the Pass Key of your headset, refer to the operating instructions of your headset.
*2 Confirm that the displayed ID is the ID of your headset. For more information regarding the ID of your headset, refer to the operating instructions of your headset.
*3 If you do not wish to perform deregistration, press [CANCEL] 3 times.

Feature Operations

Making Calls

Calling

【To an extension】
1. Go off-hook.
2. Dial an extension number.

【To an outside party】
1. Go off-hook.
2. Press a flexible CO button.
3. Dial the outside party's phone number.

Redial

1. Go off-hook.
2. Press [REDIAL].

Quick Dialing

1. Go off-hook.
2. Dial a quick dialing number.

Doorphone Call

1. Go off-hook.
2. Enter ✳③①.
3. Enter a doorphone number (2 digits).
4. After the confirmation tone, talk.

System Speed Dialing

1. Go off-hook.
2. Press [AUTO DIAL/STORE].
3. Enter a system speed dialing number (3 digits).

Personal Speed Dialing

【To store】
1. Go off-hook.
2. Enter ⊛③⓪.
3. Enter a personal speed dialing number (2 digits).
4. Enter the phone number to store (max. 32 digits)*1.
5. Press ⏀.
6. After the confirmation tone, go on-hook.

【To dial】
1. Go off-hook.
2. Press [AUTO DIAL/STORE].
3. Enter ⊛.
4. Enter a personal speed dialing number (2 digits).

One-touch Dialing

【To store】
1. Press the **PROG** soft button (S1).
2. Press a flexible CO button.
3. Enter ②.
4. Enter the number to store (max. 32 digits).*1
5. Press [ENTER].
6. Enter the text to store (max. 12 digits).*2
7. Press [ENTER].*2
8. Press [CANCEL].

【To dial】
1. Go off-hook.
2. Press the flexible CO button assigned as a One-touch Dialing button.

*1 Enter the outside line access number before an outside phone number.
*2 KX-NT560 only

During a Conversation

Call Hold

【**To hold**】
1. Press [HOLD].
2. After the confirmation tone, go on-hook.

【**To retrieve a call at the holding extension**】
1. Go off-hook.
2. Press a flexible CO button or [INTERCOM].

【**To retrieve an outside call from another extension**】
1. Go off-hook.
2. Press a flexible CO button.

Call Transfer

【**To an extension**】
1. Press [TRANSFER].
2. After the confirmation tone, dial an extension number.
3. Talk.
4. Go on-hook.

【**To an outside party**】
1. Press [TRANSFER].
2. After the confirmation tone, press a flexible CO button.
3. Dial an outside phone number.
4. Talk.
5. Go on-hook.

Setting the Telephone According to Your Needs

Do Not Disturb

1. Go off-hook.
2. Enter ⊛⑦①.
3. Press a dial key to select the setting.
   - ⓪: Both outside and intercom calls
   - ①: Outside calls only
   - ②: Intercom calls only
4. To enable Do Not Disturb, enter ①.
   To cancel Do Not Disturb, enter ⓪.
5. After the confirmation tone, go on-hook.

Timed Reminder

【**To set**】
1. Go off-hook.
2. Enter ⊛⑦⑥⓪①.
3. Enter the hour and minute (4 digits).
4. If 12-hour-time display is set, enter ⓪ (AM) or ① (PM).
5. Enter ⓪ (1 time) or ① (daily).
6. After the confirmation tone, go on-hook.

【**To cancel**】
1. Go off-hook.
2. Enter ⊛⑦⑥⓪⓪.
3. After the confirmation tone, go on-hook.

【**To stop or answer the ring back**】
1. Press [INTERCOM], or go off-hook.

Useful Features

Multiple Party Conversation

【**To add other parties during a conversation**】
1. Press [CONF].
2. After the confirmation tone, dial the phone number of the party to add.
3. Talk to the new party.
4. Press [CONF].
5. After the confirmation tone, talk with multiple parties.

【**To leave a conference**】
1. Press [CONF].
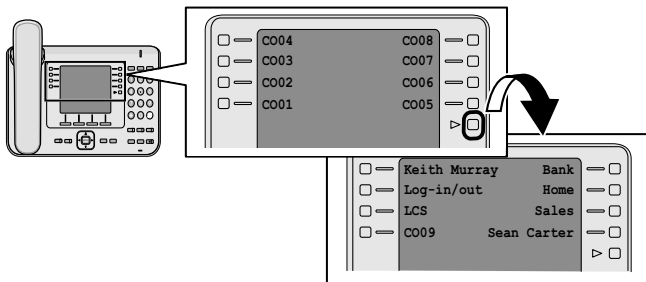2. After the confirmation tone, go on-hook.

Before Leaving Your Desk

Call Forwarding

1. Go off-hook.
2. Enter ✱⑦①.
3. Press a dial key to select the types of calls to apply this feature to.
   ⓪: Both outside and intercom calls
   ①: Outside calls only
   ②: Intercom calls only
4. Press a dial key to select the status.
   ②: All calls
   ③: Busy
   ④: No answer
   ⑤: Busy/No answer
   ⓪: Cancel*1
5. Enter an extension number, and then enter ⌗, or enter a CO line access number, an outside phone number, and then enter ⌗.
6. After the confirmation tone, go on-hook.

*1 If you enter ⓪ in Step 4, you can skip steps 5 and 6.

Self Labeling (KX-NT560 only)

The KX-NT560 IP-PT features 8 flexible buttons around an LCD screen. 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 organized into 4 "pages", allowing you to assign a total of 32 items to the 8 flexible buttons. You can toggle between pages by pressing the NEXT PAGE key, as follows:

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

1. Press the **PROG** soft button (S1).
2. Press a flexible CO button, or press the NEXT PAGE key, and then press a flexible CO button.
3. Enter ②.
4. Enter the number to store (max. 32 digits).*1
5. Press [ENTER].
6. Enter the text to store (max. 12 digits).
7. Press [ENTER].
8. Press [CANCEL].

---

*1 Enter the outside line access number before an outside phone number.
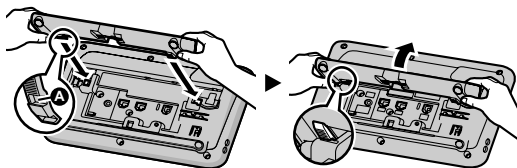
Installation and Setup

Note

● Panasonic assumes no responsibility for injuries or property damage resulting from failures arising out of improper installation or operation inconsistent with this documentation.
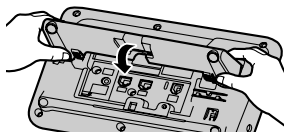
Attaching the Stand

Note

● If you place the display face down when you attach the stand, be sure to place a soft cloth under the display. Failure to do so may result in damage to the display.

1 Insert the catches (**Ⓐ**) of the stand into hooks located in the unit.

2 Gently push the stand in the direction indicated until it locks into place. The stand will be mounted in the high position.
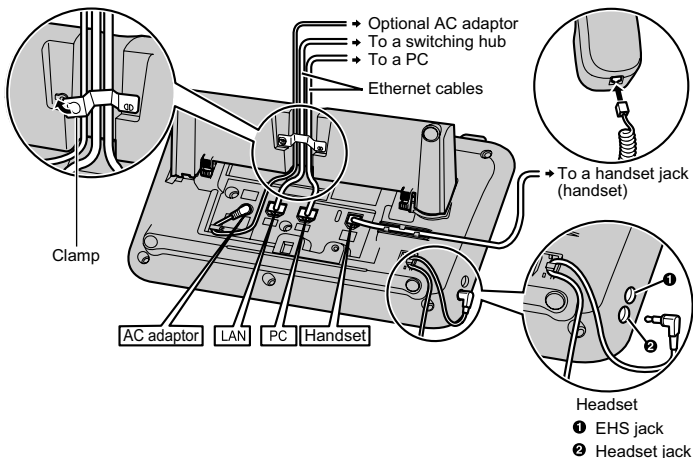

Removing the Stand

1 Hold the stand with both hands.

2 Gently rotate the stand in the direction indicated until it is released.

Connections

→ Optional AC adaptor
→ To a switching hub
→ To a PC

Ethernet cables

→ To a handset jack
(handset)

Clamp

AC adaptor | LAN | PC | Handset

Headset
❶ EHS jack
❷ Headset jack

CAUTION

Optional AC Adaptor
● Use a Panasonic AC adaptor (Page 11).
● The AC adaptor is used as the main disconnect device. Ensure that the AC outlet is installed near the unit and is easily accessible.

When connecting a headset
● Ensure that the headset cord has slack and is not pulled tight during use to prevent damage to the connectors.
● Cords used to connect devices to the EHS jack or headset jack must be less than 3 m (9.8 ft) in length.

Note
● The following headsets can be used with this unit. (Not all operations with the headsets can be guaranteed.)
  – Wired headsets
    Panasonic KX-TCA400 or KX-TCA430

– EHS headsets
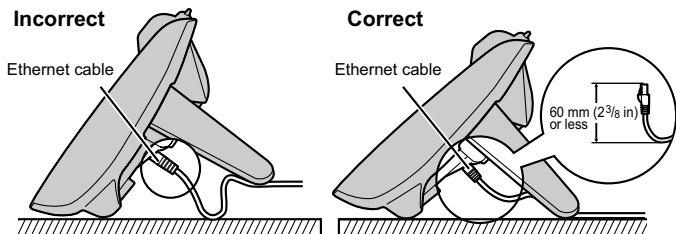– Bluetooth headsets (KX-NT560 only)
For up-to-date information about headsets that have been tested with this unit, please contact your dealer.

When selecting Ethernet cables (not included)
● Use flexible cables without jack covers. Do not use cables with a hard 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.
Connect the cables as shown in the following illustration.

Incorrect

Ethernet cable

Correct

Ethernet cable

60 mm ($2^3/8$ in) or less

● Use a straight CAT 5e (or higher) Ethernet cable (not included) that is 6.5 mm ($1/4$ in) in diameter or less.

When connecting to a switching hub
● If PoE is available, an AC adaptor is not needed.
● KX-NT543/KX-NT546 complies with the PoE Class 2 standard. KX-NT560 complies with the PoE Class 3 standard.
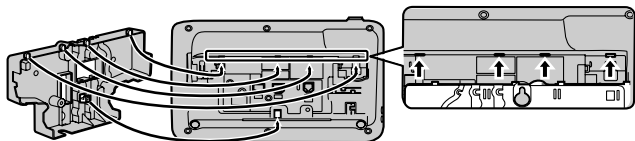
When connecting a PC
● The PC port does not support PoE for connected devices.

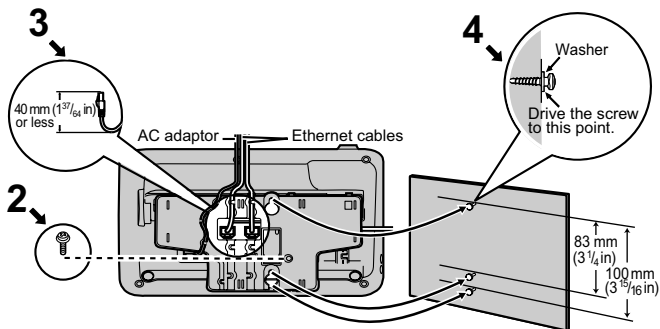**When connecting cables and the AC adaptor**
● Ensure that the Ethernet cables and the AC adaptor cord are clamped to prevent damage to the connectors.

Wall Mounting

1 Insert the 5 tabs of the wall mounting adaptor into the designated openings in the base, and then slide the wall mounting adaptor in the direction of the arrow until it clicks.

2 Fasten the wall mounting adaptor to the base with 1 screw. (Recommended torque: 0.4 N·m [4.08 kgf·cm/3.54 lbf·in] to 0.6 N·m [6.12 kgf·cm/5.31 lbf·in])

3 Connect the cables to the unit, and run the cables through the wall mounting adaptor, as shown in the illustration below.

4 Drive the 2 screws into the wall either 83 mm (3 1/4 in) or 100 mm (3 15/16 in) apart, and mount the unit on the wall.

WALL MOUNTING TEMPLATE
1. Drive the screws into the wall as indicated.
2. Hook the unit onto the screw heads.

Note
Make sure to set the print size to correspond
with the size of this page. If the dimensions of
the paper output still deviate slightly from the
measurements indicated here, use the
measurements indicated here.

100 mm (3 $^{15}/_{16}$ in)

83 mm (3 $^{1}/_{4}$ in)

One screw at either point