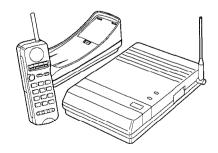
# **Panasonic**

# A EFERENCE C UIDE

Please read the IMPORTANT SAFETY INSTRUCTIONS on pages 20 through the back cover before use. Read and understand all instructions.

**MODEL No.** 

KX-T7880



# THANK YOU FOR PURCHASING THE KX-T7880.

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# Accessories

Handset	0	ne	Base U	nit	One	Ch	arging Unit	One
AC Adaptor	Telephone Line Cord	E	Battery*	Handset Cover	Cradle C	over	Handset Clip	Wall Mounting Plate
		6		•				
Two	One		Two	One	One	;	One	One

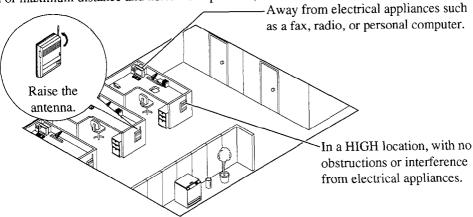
## Note:

- The KX-T7880 can be used as a single line telephone (SLT) for home use. This is called "SLT mode" in this manual. The KX-T7880 can be connected to the Panasonic KX-T/KX-TD series. This is called "EMSS mode" in this manual.
- $\bullet$  To order accessories, call toll free 1--800--332--5368.
- Battery\*: Please use only Panasonic KX-A43 battery.

# FOR BEST PERFORMANCE

# □ Noise

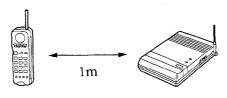
Calls are transmitted between the base unit and the handset using wireless radio waves. For maximum distance and noise free operation, the recommended base unit location is:



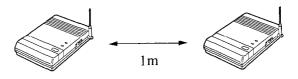
- Wireless telephones, except for the 900MHz telephone, can be used together.
- If you are out of range, an alarm tone sounds continuously during a conversation.

# **□** Operating Distance

The handset should always be at least 1 m from the base unit.



When using more than two base units, place the base units at least 1 m away from each other, or else proper radio transmission cannot be obtained.



# FOR BEST PERFORMANCE

# □ Battery Charge

To power the handset, install the battery in the handset (see page 7) and place the handset on the charging unit for about 15 hours to charge before initial use.



- The handset can also be placed with the dialing buttons facing upward.
- The CHARGE indicator lights.
- The battery cannot be overcharged.



#### Note:

- Clean the charge contacts with a soft cloth once a month, or the battery may not charge properly.
- Once the handset battery is fully charged, you do not have to place the handset on the charging unit until the TALK/BATT. LOW indicator flashes.

Recharge the handset battery, when the TALK/BATT. LOW indicator flashes or beep tones sound every 15 seconds during a conversation.



TALK/BATT. LOW Indicator

# ☐ Standard Battery Life

If your Panasonic battery KX-A43 is fully charged:

While the phone is in use (TALK)......Up to about three hours

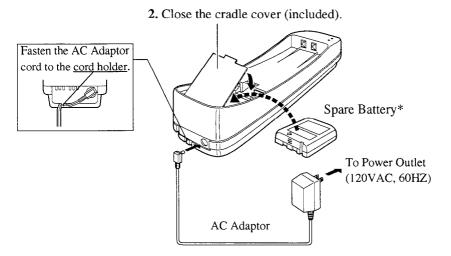
While the phone is not in use (Stand-by)......Up to about 40 hours

Battery life may vary depending on usage conditions and ambient temperature.

# **PREPARATION**

# ☐ Charging Unit

Connect as shown.



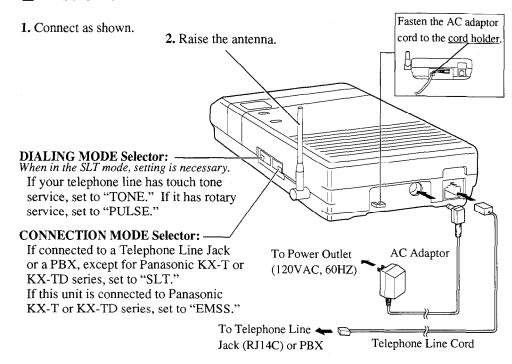
THE WALL OUTLET POWER SOCKET SHOULD BE LOCATED NEAR THIS EQUIPMENT AND BE EASILY ACCESSIBLE.

# Note:

- Spare Battery\*: When the handset battery needs charging, replace it with the fully charged spare battery. This will eliminate waiting for the handset battery to fully recharge.
- · USE ONLY Panasonic AC ADAPTOR KX-A11. The adaptor must remain connected at all times.
- The AC adaptor may feel warm during use. This is normal.
- The unit will not function during a power failure.

# **PREPARATION**

# □ Base Unit

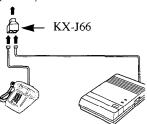


THE WALL OUTLET POWER SOCKET SHOULD BE LOCATED NEAR THIS EQUIPMENT AND BE EASILY ACCESSIBLE.

#### Note:

- USE ONLY Panasonic AC ADAPTOR KX-A11. The adaptor must remain connected at all times.
- The AC adaptor may feel warm during use. This is normal.
- The unit will not function during a power failure.
   We recommend you connect a reserve standard telephone on the same line as protection. The Panasonic T-adaptor, KX-J66 is required.

To Telephone Line Jack (RJ14C) or PBX

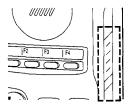


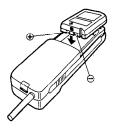
# **PREPARATION**

# ☐ Handset

- . Install the battery (included) in the direction of the arrow on the battery.
- **2.** Close the handset cover (included).
- **3.** Set the POWER/RINGER switch to "ON."

Place the handset on the charging unit for about 15 hours to charge the battery.





# > To install a handset clip

You can hang the handset on your pocket by attaching the handset clip.

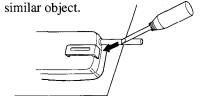
- 1. Slide the cover in the direction of the arrow to remove it.
- 2. Insert the clip (included) in the direction of the arrow.



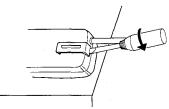


# To remove the handset clip

1. Lay the handset on a flat surface and carefully insert a flat-head screwdriver or similar object.



2. Screw the driver slowly in the direction of the arrow to slide the clip.



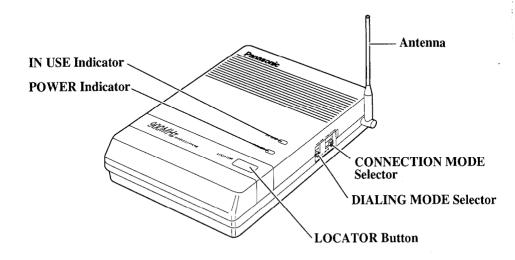
# **▶ Memory Stickers**

You may use the included memory stickers as a memorandum for speed dialing, one-touch dialing or phone number. Write down the desired ones, then attach them to the handset or in a convenient place.

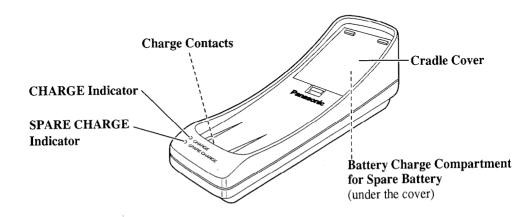
	Memory sticker to the convenient place.
1	6
2	7
3	8
4	9
5	0
PHONE NO.	

# **LOCATION OF CONTROLS**

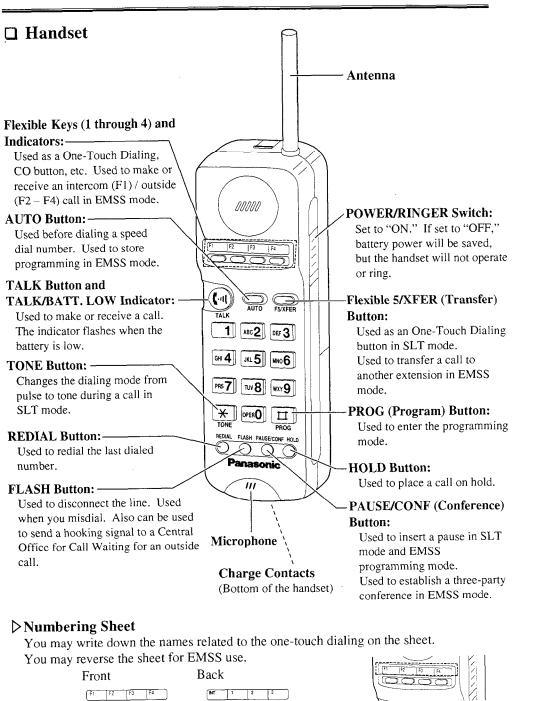
# **□** Base Unit



# □ Charging Unit



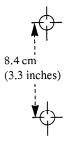
# LOCATION OF CONTROLS



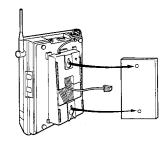
# WALL MOUNTING

The base unit can be mounted on a wall.

- 1. Drill two holes spaced 8.4 cm (3.3 inches) apart and install two screws.
- 2. Insert the tabs of the wall mounting plate (included) into the openings of the base unit, then push it in the direction of the arrow.
- Mount the base unit on the wall.







# LOCATING THE HANDSET FROM THE BASE UNIT

This feature helps you find the handset if misplaced. You may also locate a person at the handset from the base unit by sounding beep tones for 60 seconds. If the handset is in use, locating is not available.

1. Press **LOCATOR** button on the base unit.

The IN USE indicator flashes and the handset beeps.

To stop the beeping, press LOCATOR button again.

Helpful Hint:

Pressing the TALK button on the handset stops the beeping and the IN USE indicator on the base unit changes from flashing to a steady light.



# ADJUSTING THE RINGER VOLUME

You can adjust the ringer volume. (Default: High)

- 1. Press # key until a confirmation tone sounds. (More than one second.)
- 2. Press # key again. You will hear the current volume level.
- 3. By pressing # key, the volume level alternates between High and Low.

# SELECTING THE ANSWERING MODE

You can select either Automatic or Manual to answer a call. (Default: Automatic)
In Automatic mode, you just pick up the handset from the charging unit to answer a call.

# Setting

- 1. Press # key until a confirmation tone sounds.

  The TALK/BATT, LOW indicator lights red.
- 2. Enter 1 or 2.
  - 1: Automatic
  - 2: Manual

# KEY LOCK

This feature prevents buttons from being pressed while carrying the handset or when in idle use.

# Locking

1. Press | key until a confirmation tone sounds. (More than one second.)

# Unlocking

1. Set the POWER/RINGER switch to "OFF" and return to "ON."

#### Note:

During key lock, if you press the <u>TALK</u> button or <u>Flexible</u> keys, or press the <u>#</u> key for more than one second, an alarm tone will sound.

# PROGRAMMING FOR SPEED OR ONE-TOUCH DIAL-SLT MODE

# To enter station programming mode;

Set the POWER/RINGER switch to "ON," while pressing **PROG** (#) button.

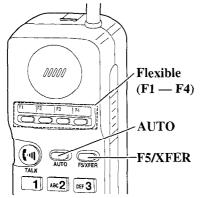
The TALK/BATT. LOW indicator lights red.

You hear a confirmation tone.

# To exit;

Press TALK button or place the handset on the charging unit.

# > Storing telephone numbers



# For Speed Dialing;

- 1. Enter Programming Mode.
- 2. Enter phone number.
- 3. Press **AUTO** button.
- **4.** Enter **speed dialing number** (0-9).
- **5.** To store an another number, repeat steps 2 through 4.
- **6.** Exit from programming mode.

# For One-Touch Dialing;

- 1. Enter Programming Mode.
- **2.** Enter **phone number** .
- 3. Press the desired **Flexible** key or **F5/XFER** button.
- **4.** To store an another number, repeat steps 2 through 3.
- 5. Exit from programming mode.

#### **Conditions:**

- Ten phone numbers for Speed Dialing and five phone numbers for One-Touch Dialing can be stored.
- Each number has a maximum of 20 digits. The valid characters are 0 through  $9, \times, \#$ , and the FLASH and PAUSE/CONF buttons.
- If you do not enter anything for 30 seconds during programming, the programming mode is canceled.

# SAFETY INSTALLATION INSTRUCTIONS

When installing telephone wiring, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- 1. Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- 3. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- 4. Use caution when installing or modifying telephone lines.

#### Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America

One Panasonic Way Secaucus, New Jersey 07094

#### Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.

Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985

# PANASONIC

# Business Telephone System (BTS) Products Limited Warranty

Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will repair this product with new or refurbished parts or systems, free of charge, in the USA or Puerto Rico for one (1) year from the date of original purchase in the event of a defect in materials or workmanship.

<u>Batteries</u> (when applicable) — New rechargeable batteries in exchange for defective rechargeable batteries for ten (10) days from the date of original purchase. Non-rechargeable batteries are not warranted.

Carry-in or mail-in service in the USA or Puerto Rico can be obtained during the warranty period from a Panasonic Services Company (PASC) Factory Servicenter listed in the Servicenter Directory. Please refer to the Servicenter Directory or call, toll free, 1-800-545-2672 to locate a PASC Factory Servicenter. Carry-in or mail-in service in Puerto Rico can be obtained during the warranty period by calling the Panasonic Sales Company telephone number listed in the Servicenter Directory.

This warranty is extended only to the original purchaser. A purchase receipt or other proof of date of original purchase will be required before warranty service is rendered.

This warranty only covers failures due to defects in materials and workmanship which occur during normal use. The warranty does not cover damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor or failures which result from accident, misuse, abuse, neglect, mishandling, faulty installation, misapplication, set-up adjustments, improper operation or maintenance, alteration, modification, power line surge, improper voltage supply, lightning damage, signal reception problems, or serviced by anyone other than a PASC Factory Servicenter or a PASC authorized Servicenter, or damage that is attributable to acts of God.

#### LIMITS AND EXCLUSIONS

There are no express warranties except as listed above.

THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. EXCEPT AS EXPRESSLY PROVIDED ABOVE, THERE IS NO WARRANTY OR GUARANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR WARRANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the Customer Satisfaction Center at the company address indicated above.

# Servicenter Directory

# **Panasonic**

# PRODUCT INFORMATION · OPERATION ASSISTANCE · LITERATURE REQUESTS · DEALER LOCATIONS

Customer Satisfaction Center 2F-3, One Panasonic Way, Secaucus, NJ 07094 (Headquarters) 201-348-9090 (9:00am-8:00pm Monday-Friday, EST)

## ACCESSORY PURCHASES

1-800-332-5368 (Consumer Orders Only)

Panasonic Services Company 20421 84th Avenue South Kent, WA 98032 (6:00 am to 6:00 pm Monday-Friday: 6:00 am to 10:30 am Saturday, PST) (Visa, Master card, Discover card, American Express or Check)

# AUTHORIZED SERVICENTERS . PARTS DISTRIBUTOR LOCATIONS

To locate an independent authorized servicenter or parts distributor in your area, within the USA dial toll free 1-800-545-2672, 24 hours a day, 7 days a week.

# PRODUCT REPAIRS

#### Panasonic Services Company **BTS Centers**

8655 Roswell Road, Suite 200 Atlanta, GA 30350 Phone (770) 518-6469 Fax (770) 552-1521

2221 Cabot Boulevard West Suite B Langhorne, PA, 19047 Phone (215) 741-0679 Fax (215) 741-0521

#### Service in Puerto Rico

Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/ **Factory Servicenter** 

Ave. 65 de Infantería, Km. 9.5 San Gabriel Industrial Park Carolina, Puerto Rico 00985 Phone (787) 750-4300 Fax (787) 768-2910

#### REPAIR INQUIRIES

# Regional Customer Care Department

#### EAST (PCE)

Langhorne, PA 19047 Phone (215) 741-0676 Fax (215) 750-6492

#### EAST (PCE)

Suite 2-390 Suwannee, GA 30174 Phone (770) 338-6860 Fax (770) 338-6548

#### CENTRAL (PCC)

2221 Cabot Boulevard West Suite A 1225 Northbrook Parkway 1707 North Randall Road 6550 Katella Avenue Elgin, IL 60123 Phone (847) 468-5530 Fax (847) 468-5528

#### WEST (PCW)

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#### Covers:

AK, AZ, CA, CO, ID, MT, NV, NM, OR, UT,

As of January '97

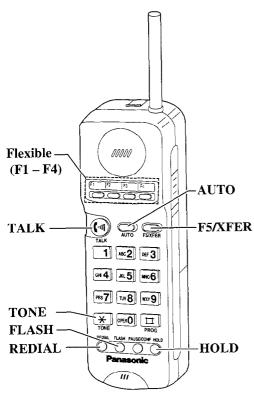
Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America One Panasonic Way, Secaucus, New Jersey 07094

Panasonic Sales Company ("PSC"), Division of Matsushita Electric of Puerto Rico, Inc. Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Printed in Japan

**PSQV1013YA** KK1295NS6017CM

# **OPERATING INSTRUCTIONS—SLT MODE**



# ■ Making Calls

- Pick up the handset and press the **TALK** button.
- Dial phone number .
- —When you misdial, press **FLASH** button.

  You hear a new dial tone.

# □ Receiving Calls

• Pick up the handset and press the **TALK** button.

#### OR

 Pick up the handset, if "Automatic" is set as an answering mode.

## □ Call Hold

# **▷** Setting

• Press HOLD button.

# **▷** Retrieving

• Press TALK button.

# □ Call Waiting

To use this feature, you must subscribe to the call waiting service offered by your local telephone company.

# While hearing a call waiting tone;

• Press **FLASH** button.

The first call is on hold and you can answer a new call.

# ☐ Last Number Redial

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

# ☐ One-Touch Dialing

- Off-hook.
- Press **Flexible** key (**F1 F4** or **F5/XFER**).

# □ Speed Dialing

- Off-hook.
- Press AUTO button.
- Dial speed dial number .

# ☐ Tone Dialing

• Press **TONE** (\*) button.

Change the dialing mode to Tone.

# PROGRAMMING FOR ONE-TOUCH DIAL-EMSS MODE

# To enter station programming mode;

Set the POWER/RINGER switch to "ON," while pressing PROG (#) button.

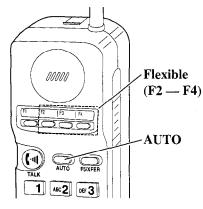
The TALK/BATT. LOW indicator lights red.

You hear a confirmation tone.

# To exit;

Press TALK button or place the handset on the charging unit.

# Changing the Flexible keys to an One-Touch Dial button and storing numbers



#### KX-T336

- 1. Enter Programming Mode.
- 2. Press Flexible (F2 or F3) key.
- 3. Dial 3.
- **4.** Dial **line access code** (default: 9) for an outside call.
- 5. Dial phone number .
- 6. Press AUTO button.
- 7. To store an another number, repeat steps 2 through 6.
- 8. Exit from programming mode.

# KX-T30810/61610/123211, KX-TD816/1232

- 1. Enter Programming Mode.
- **2.** Press **Flexible** (F2, F3, or F4) key.
- **3.** Dial **2** .
- **4.** Dial **line access code** (default: 9) for an outside call.
- 5. Dial phone number.
- **6.** Press **AUTO** button.
- 7. To store an another number, repeat steps 2 through 6.
- 8. Exit from programming mode.

# **OPERATING INSTRUCTIONS-EMSS MODE**

# -Note

## Off-hook means;

Pick up the handset from the charging unit and press **TALK** button. If Automatic mode is selected, just pick up the handset from the charging unit when receiving a call.

# On-hook means;

Replace the handset on the charging unit or press **TALK** button.

Default Settings of Flexible Keys

Flexible	1	2	3	4
KX-T336	†	PDN	PDN	PDN
Other	INT	CO1	CO2	CO3

†: In more detail, refer to the manual of the KX-T336.

# ■ Making Calls

# **▶** Intercom Calling

- Off-hook.
- Press **INT** or **PDN** button.
- Dial **extension number** .

# Dutside Dialing

- Off-hook.
- Dial **9**, or press **CO** button.
  - 9: Select an available outside line automatically. ("9" is default.)
  - CO: Select the desired outside line directly.
- Dial phone number

# ☐ Receiving Calls

• Off-hook.

OR

• Press a flashing **Flexible** key.

# □ Call Hold

- ▶ Setting
  - Press **HOLD** button.

# **▶** Retrieving

- Press a flashing **Flexible** key.
- ☐ Call Transfer to Extension

  During a conversation;
  - Press **F5/XFER** button.
    - Dial **extension number** .

Wait for an answer and announce.

· On-hook.

# □ Conference

# While hearing a conversation;

- Press **PAUSE/CONF** button.
- Dial third party's number .
- Press **PAUSE/CONF** button after the third party answers.

# ☐ Last Number Redial

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

# ☐ One-Touch Dialing

- Off-hook.
- Press an available Flexible key.

# **□** System Speed Dialing

- Off-hook.
- Press **AUTO** button.
- Dial speed dial number .

# **OPERATING INSTRUCTIONS FOR KX-T336**

Numbers entered depend on which numbering plan you are using.

# ☐ Call Forwarding

Specified calls to your telephone are automatically forwarded to another preset extension.

# > Setting

- · Off-hook.
- Press 🗙 🗙 .
- Enter **feature number** .
  - 2: All Calls
  - -- 3: Busy or Off-Hook
  - -4: No Answer
  - 6: Busy/Off-Hook/No Answer
- Dial extension number .
- On-hook.

# Canceling

- · Off-hook.
- Press ##].
- Dial 0 .
- On-hook.

# ☐ Directed Call Pickup

Allows you to answer a call at any other extension.

- Off-hook.
- Dial 48 + extension number.

Confirmation tone

· Talk.

# ☐ Paging

Provides an announcement to all extensions using the built-in telephone speakers and/or external speakers.

- Off-hook.
- Enter feature number .

- 410 : External pagers 1 & 2
- 411: External pager 1
- 412: External pager 2
- 420: All extensions
- 421-428 : Extension group 1-8
- 41 \* or 42 \*: All extensions and external pagers

  Confirmation tone
- Page.

# ☐ Paging Answer

Allows you to answer an announced page.

# Over the built-in speaker;

- Off-hook.
- Dial 44 .

  Confirmation tone
- · Talk.

# Over the external pager;

- Off-hook.
- Dial 43 + external pager number (1-2).

Confirmation tone

· Talk.

# ☐ Paging and Transfer

Allows you to transfer a call with the paging feature.

# During a conversation;

- Press **F5/XFER** button.
- Enter paging feature number . (See "Paging.")

Confirmation tone

• Page.

Wait for an answer.

· On-hook.

# FEATURE NUMBER TABLE

The feature numbers for KX-T30810/61610/123211 and KX-TD816/1232 are listed below. For more information, please refer to the manual of your PBX.

Feature	Feature Number					
reature	KX-T30810/61610	KX-T123211	KX-TD816/1232			
Busy Station Signaling	1	1	1			
Call Forwarding						
— All Calls	71+ EXTN +#	711+ EXTN+ #	7102 + EXTN			
—Busy or No Answer		712+ EXTN+ #	7105 + EXTN			
— Busy	—	<del></del>	7103 + EXTN			
— No Answer	—	<u> </u>	7104 + EXTN			
— Cancel	70 + #	710 + #	7100			
Direct Call Pickup	4 + EXTN	4 + EXTN	41 + EXTN			
Paging						
— All extensions	34	330	330			
— External pager 1	33	321	321			
— External pager 2	<u> </u>	322	322			
— External pager 3	<del></del>		323 (1232 only)			
— External pager 4		<del></del>	324 (1232 only)			
— All external pagers		320	320			
— Extension Groups	35 through 38	33 + group no.	33 + group no.			
All extension and pager		32* or 33*	32* or 33*			
Paging — Answer						
Over built-in speaker	43	43	43			
Over pager	43	42 + pager no.	42 + pager no.			

## Note:

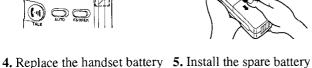
- The numbers entered for the KX-TD816/1232 depend on which numbering plan you are using.
- "EXTN" means extension number.

# REPLACING THE BATTERY

When the handset battery needs charging, replace it with the fully charged spare battery. This will eliminate waiting for the handset battery to fully recharge.

- **1.** Set the POWER/RINGER switch to "OFF" to prevent memory loss.
- **2.** Remove the handset cover.
- **3.** Remove the handset battery.

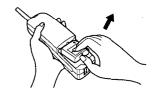




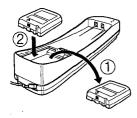
- Replace the handset battery with the spare battery in the charging unit.
- ① Remove the spare battery.
- ② Insert the handset battery in the charging unit in the correct direction.

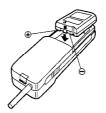


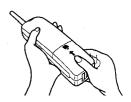
Install the spare battery in the handset in the correct direction.



Close the handset cover and set the POWER/RINGER switch to "ON."







## Note:

- If you do not replace the battery within five minutes, memory may be lost.
- If the TALK/BATT. LOW indicator flashes after a few telephone calls even when the handset battery has been fully charged, it is time to install a new battery. Remember to charge the new battery before use.
- If you change the battery while on the phone, hold the call first.

#### Attention:



The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

# **TROUBLESHOOTING**

# The unit does not work.

- Set the POWER/RINGER switch to "ON."
- The unit was not connected properly. (See pages 5 and 6.)
- The handset battery is weak. Charge the battery fully, or replace with the fully charged spare battery.

# Sound flutters or fades.

- You are too far from the base unit. Move closer to the base unit.
- Raise the base unit antenna.

#### Noise occurs.

• Place the base unit away from office equipment such as computers.

# I am encountering interference from another unit.

 Set the handset and the base unit away from other electrical appliances.

# The handset does not ring.

• Set the POWER/RINGER switch to "ON."

# The TALK/BATT. LOW indicator flashes. Beep tones sound every 15 seconds during a conversation.

• Charge the battery fully, or replace the handset battery with the spare battery in the charging unit.

# I charged the battery for 15 hours, but the TALK/BATT. LOW indicator starts to flash after a few telephone calls.

- Clean the battery charge contacts and charge once more.
- It is time to change the battery. Replace with a new one.

# I cannot use the unit during a power failure.

• The unit will not function during a power failure. We recommend you connect a reserve standard telephone on the same line. For parallel connection, see page 6.

# While using the handset, an alarm tone sounds continuously.

- · Approach the base unit.
- Make sure that the AC adaptor is connected to the base unit.

# I cannot store a phone number into memory.

• Do not pause for over 30 seconds while storing.

While operating the unit, the AC adaptor feels warm. While charging the battery, the unit feels warm. The SPARE CHARGE indicator does not go out even after charging for 15-hours.

• These are normal conditions.

# The unit does not ring when receiving an intercom call in EMSS mode.

• "Voice-Calling mode" is set. (Refer to the manual of your PBX; Alternate Calling — Ring/Voice.) "Voice-Calling mode" is not available on this unit. Set to the "Ring-Calling" mode.

- If there is any trouble, disconnect the unit and connect a known working phone. If the known working phone operates properly, have your unit repaired by one of the authorized Panasonic Factory Servicenter. If the known working telephone does not operate properly, consult with your telephone company or have the PBX repaired, if connected.
- 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 any abrasive powder, to clean the cabinet.
   Wipe it with a soft cloth.
- The unit should be situated so that the location or position does not interfere with its proper ventilation. Allow 10 cm (4 inches) clearance around the unit.

Take special care to follow the safety suggestions listed below.

# Safety

- Power Source: The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.
- 2) Nonuse Periods: When the unit is not in use, turn the power off. When left unused for a long period of time, the base unit and the charging unit should be unplugged from the AC outlet.

# Installation

# Environment

- 1) Water and Moisture: Do not use this unit near water for example, near a bathtub, washbowl, sink, etc. Damp basements should also be avoided.
- 2) Heat: The unit should be situated away from heat sources such as radiators, kitchen ranges, etc. It also should not be placed in rooms where the temperature is lower than 5°C (41°F) or higher than 40°C (104°F).

#### Placement

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

# For best performance

- If noise prevents the conversation from being understood at the handset, approach the base unit to lessen the noise.
- 2) The handset should be fully recharged in the charging unit when the TALK/BATT. LOW indicator flashes.
- 3) The antenna of the handset should not be touched during use because of its high sensitivity.
- 4) The possible calling distance may be shortened when the unit is used in the following places: Near obstacles such as hills, tunnels, undergrounds, near metal objects such as wire fences, etc.

- When using this unit, basic safety precautions should always be followed to reduce the risk of fire, electric shock, or personal injury.
  - 1. Read and understand all instructions.
  - 2. Follow all warnings and instructions marked on the unit.
  - 3. Unplug this unit from wall outlets before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
  - 4. Do not use this unit near water, for example, near a bathtub, washbowl, kitchen sink, or the like. Never spill any liquid on the unit.
  - Install this unit securely on a stable surface. Serious damage and/or injury may result if the unit falls.
  - 6. Do not cover slots and openings on the unit. They are provided for ventilation and protection against overheating. Never place the unit near radiators, or a place where proper ventilation is not available.
  - 7. Use only the power source as marked on the unit. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
  - 8. Do not place objects on the power cord. Install the unit where no one can step or trip on the cord.
  - 9. Do not overload wall outlets and extension cords. This can result in the risk of fire or electric shock.
  - Never push any objects into the unit through the slots. This may result in risk of fire or electric shock.

- 11. To reduce the risk of electric shock, do not disassemble this unit. Take it to an authorized servicenter when service is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the appliance is subsequently used.
- 12. Unplug this unit from the wall outlet and refer servicing to an authorized servicenter when the following conditions occur:
  - A. When the power supply cord or plug is damaged or frayed.
  - B. If liquid has been spilled into the unit.
  - C. If the unit has been exposed to rain or water.
  - D. If the unit does not work normally by following the operating instructions. Adjust only controls covered by the operating instructions. Improper adjustment of internal controls may require extensive work by an authorized servicenter.
  - E. If the unit has been dropped or physically damaged.
  - F. If the unit exhibits a distinct change in performance.
- 13. During thunderstorms, avoid using telephones except cordless types. There may be a remote risk of electric shock from lightning.
- 14. Do not use this unit to report a gas leak, when in the vicinity of the gas leak.

# SAVE THESE INSTRUCTIONS

#### CAUTION:

To reduce the risk of fire or injury to persons, read, understand and follow these instructions.

- 1. Use only the battery(ies) specified by the manufacturer.
- Do not dispose of the battery(ies) in a fire. They may explode. Check with local waste management codes for special disposal instructions.
- Do not open or mutilate the battery(ies).
   Released electrolyte is corrosive and may cause burns or injury to the eyes or skin. The electrolyte may be toxic if swallowed.
- 4. Exercise care in handling batteries in order not to short the battery with conducting materials such as rings, bracelets, and keys. The battery or conductor may overheat and cause burns.
- Charge the battery(ies) that are provided or identified for use with this product only in accordance with the instructions and limitations specified in this manual.

#### WARNING:

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

## **FCC Information**

If required by the telephone company, inform them as follows.

- —FCC Registration No.: (found on the bottom of the unit)
- -Ringer Equivalence: 0.2B
- —The particular telephone lines to which the equipment is connected.

# Ringer Equivalence Number (REN):

The REN is useful in determining the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the REN's of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

In the event terminal equipment causes harm to the telephone network, the telephone company should notify the customer, if possible, that service may be stopped. However, where prior notice is impractical, the company may temporarily cease service providing that they:

- a) Promptly notify the customer.
- b) Give the customer an opportunity to correct the problem with their equipment.

 c) Inform the customer of the right to bring a complaint to the Federal Communication Commission pursuant to procedures set out in FCC Rules and Regulations Subpart E of Part 68.

The Telephone Company may make changes in its communications facilities, equipment, operations, or procedures, where such action is reasonably required in the operation of its business and is not inconsistent with the rules and regulations in FCC Part 68.

If such changes can be reasonably expected to render any customer terminal equipment incompatible with telephone company communications facilities, or require modification or alteration of such terminal equipment, or otherwise materially affect its use or performance, the customer shall be given adequate notice in writing, to allow the customer an opportunity to maintain uninterrupted service.

#### **CAUTION:**

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

#### NOTE:

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.

Privacy of communications may not be ensured when using this phone.

This unit must not be connected to a coin operated line. If you are on a party line, \* check with your local telephone company.

When programming emergency numbers and/or making test calls to emergency numbers:

- Remain on the line and briefly explain to the dispatcher the reason for the call before hanging up.
- Perform such activities in the off-peak hours, such as early morning hours or late evenings.

# **Hearing Aid Compatibility**

This telephone provides magnetic coupling for hearing aids.

# When you ship the product

Carefully pack and send it prepaid, adequately insured and preferably in the original carton. Attach a postage-paid letter, detailing the symptom, to the outside of the carton. DO NOT send the product to the Executive or Regional Sales offices. They are NOT equipped to make repairs.

#### **Product Service**

Panasonic Servicenters for this product are listed in the servicenter directory. Consult your authorized Panasonic dealer for detailed instructions.

ERIAL NO	DATE OF PURCHASE
(found on the bottom of the	e unit)
NAME OF DEALER	
DEALER'S ADDRESS	

Matsushita Consumer Electronics Company, Division of Matsushita Electric Corporation of America One Panasonic Way, Secaucus, New Jersey 07094

Panasonic Sales Company ("PSC"), Division of Matsushita Electric of Puerto Rico, Inc. Ave. 65 de Infantería, Km.9.5, San Gabriel Industrial Park Carolina, Puerto Rico 00985