

# **Reference Information**

Thank you for purchasing the Panasonic Handset Kit. Before operating the handset:



- 1 Please read IMPORTANT SAFETY INSTRUC-TIONS on pages 80-84 before use. Read and understand all instructions.
- 2 Read Precautions on page 75.
- 3 Fully charge the battery. Refer to Battery Charging on page 12.
- 4 Register your handset with the base station (see page 16).
- 5 Fill out the following reference information and tape or staple your purchase receipt here.

Model Number: \_\_\_\_\_

ESN No. (under battery on back of handset):

Purchase Date:

Dealer Name: \_\_\_\_\_

Emergency Number: \_\_\_\_\_

Lock Code: \_\_\_\_\_

Own Phone Number(s):\_\_\_\_\_

Notice for Canadian Customers: This cordless telephone uses radio communications between the handset and the base station, and may not ensure privacy of communication. Other devices, including other cordless telephones, may interfere with this cordless telephone or cause noise during operation.

Units not containing coded access may be accessed by other radio communication systems. Cordless telephones must not cause interference to any licensed radio service.

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# **Kit Composition**



Handset EB-PH55



Battery (M) 700 mAh NiCd EB-BM60



AC Charging Adaptor EB-CA10



Handset Kit Operating Instructions

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# Introduction

#### PHONE OPERATION OVERVIEW

The handset can be used as a cordless phone by using the Handset and Base Station Kit (EB-P55S) or a cellular phone. If your place of business is equipped with a wireless in-building telephone system, your handset can be used as a wireless extension to that system.

If you do not have a wireless in-building telephone system, disregard the sections in this guide that contain specific in-building information

Your handset periodically scans these systems in the following order:

- Cordless
- In-Building
- Cellular

When a system is found, its operation mode is shown on the first line of the display. The current operation mode of the handset is displayed at all times.

You can select which systems you want your handset to scan for.

You can also switch between the systems you have selected. Your handset, however, does not switch systems during a call.

#### Introduction

Calls to your cellular phone number can be forwarded to the base station if Call Delivery service is offered by your cellular service provider (see page 53).

#### SYMBOLS USED IN THIS GUIDE



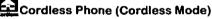
Indicates features in the Cordless mode.

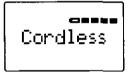


Indicates features in the In-Building mode.



Indicates features in the Cellular mode.





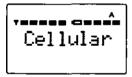
To use your handset as a cordless phone, you must register with the base station (see page 16). After handset registration, and when your handset is in range of the base station, you can use your handset as a cordless phone. If your handset is beyond range of the base station, your handset automatically scans for the other system(s).

When out of range of the base station during conversation, you will hear noise. In this case, move into range of the base station or end the call. Wireless In-Building Phone (In-Bldg Mode)



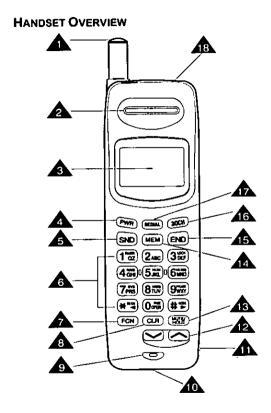
Your handset can operate on a Wireless In-Building system if your building is equipped for this. When you are in range of the In-Building system, your handset displays the mode and your in-building phone number or extension number. You can use your handset as a wireless in-building phone.

# Cellular Phone (Cellular Mode)



Your handset can operate on a Cellular system. When you are beyond the range of the Cordless and Wireless In-Building systems, your handset automatically scans for a Cellular system. After registering with the system, you can use your handset as a cellular phone.

# **Getting Started**







Earpiece.

Display.

Power key: Turns power on and off.

Send key: Makes calls; accesses carrier services (such as call waiting).



Digit keys: Enter digits/characters: select functions.



Function key: Accesses functions.

Clear key: Erases entries; exits functions.



Mouthpiece.



External connector.



Adaptor jack.

Volume and scrolling keys.



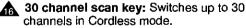
Mute/Hold key: Disables the mouthpiece: puts a call on hold.



Memory key: Stores, recalls, and edits memory locations. Stores function selections.



A End key: Ends calls.



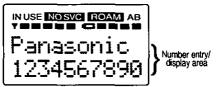


Redial key: Redials the last number dialed.

Private handsfree jack.

#### Getting Started

#### UNDERSTANDING THE DISPLAY



- IN USE Appears while a call is in progress.
- NOSVC Appears when calls cannot be placed or received because the received signal strength is too weak or because you are outside of a service area.
- **ROAM** In Cellular mode, is displayed when you are outside of your home system area; flashes if using a system which is a different type (A or B) from your home system.
  - A Is displayed when using the A system in Cellular or In-Building mode.
  - B Is displayed when using the B system in Cellular or In-Building mode.

#### 7 **21 21 22 23 20**

Indicates received signal strength. In Cordless mode, lights only during communication with the base station. Five bars = highest signal strength. Zero bars = lowest signal strength. No indicator = no signal available.

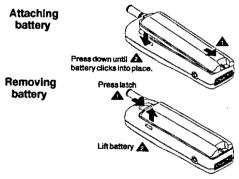


Battery indicator.

Indicates the battery charge level. Four bars = highest battery charge. Zero bars = lowest battery charge.

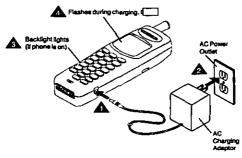
#### BATTERY OVERVIEW

#### **Attaching/Removing Battery**



#### **Battery Charging**

Charge the battery fully, for 11/2 to 3 hours, before initial use.



- If Low Battery is displayed and the handset beeps soon after being charged for the first time, repeat the above charge operation two or three times.
- The battery will charge with the handset power either on or off; however, charging time will be increased with the power on.

#### **Battery Charge Level**

The battery charge level is displayed constantly.

- When the battery charge level is low, Low Battery is displayed and the handset beeps.
- Recharge the battery or replace it with a fully charged battery.

#### **APPROXIMATE CHARGE TIMES**

 $\mathbf{N}$ 

- Battery (S) 500 mAh NiMH (Nickel-Metal Hydride): 1 ½ - 2 ½ hours
- Battery (M) 700 mAh NíCd (Nickel-Cadmium): 1½ - 2½ hours
- Battery (L) 1250 mAh NiMH (Nickel-Metal Hydride): 3 - 4 hours

Charge batteries in a well-ventilated area between 41°F (5°C) and 95°F (35°C).

Charge the battery for the recommended charging time and/or until stops flashing.

If the handset is turned on, the charge time will be longer.

To obtain greater battery capacity, use the handset until **Low Battery** is displayed and the handset beeps, then charge the battery fully.

Your handset can also be charged by placing it in the base station.

The battery cannot be overcharged.

#### IMPORTANT INFORMATION ABOUT YOUR NEW RECHARGEABLE BATTERY

Charge your new battery until the battery indicator stops flashing. Initial charge time for the EB-BS60 or EB-BM60 battery is  $1\frac{1}{2}$  to 3 hours; for the EB-BL60 battery, it is 3 to 5 hours. If the initial charge time is less than this, remove and reattach the battery and let it charge a second time. After this initial charge, follow the charging instructions in your Operating Instructions booklet.

Note: Under normal conditions, it may take 2 to 3 charge and discharge cycles before the battery reaches its full capacity.

#### BATTERY SPECIFICATIONS

-		Approximate Battery Duration	
Operation Mode	Battery Type	Talk Time	Standby Time
Cordless	Battery (S) 500 mAh NiMH	140 minutes	10 to 12 hours
	Battery (M) 700 mAh NiCd	200 minutes	14 to 17 hours
	Battery (L) 1250 mAh NiMH	350 minutes	25 to 30 hours
In-Building	Battery (S) 500 mAh NiMH	140 minutes	9 hours
	Battery (M) 700 mAh NiCd	200 minutes	12 hours
	Battery (L) 1250 mAh NiMH	350 minutes	23 hours
Cellular	Battery (S) 500 mAn NiMH	60 minutes	9 hours
	Battery (M) 700 mAh NiCd	90 minutes	12 hours
	Battery (L) 1250 mAh NiMH	150 minutes	23 hours

 Standby time may vary depending on battery charging condition and/or radio interference.

#### Getting Started

#### REGISTERING THE HANDSET WITH THE BASE STATION

You must register your new handset with the base station before using it as a cordless phone.

If you move and your cellular phone number changes, you must register it again with the base station before use.

Once the base station has multiple handsets:

- You will hear a dia! tone or enter into conversation following a series of short tones.
- When a call is received, all the handsets ring at the same time, even if the call is a forwarded call.
- When a handset puts a call on hold, all of the handsets display Hold.
- If one of the handsets is being used for a call, intercom, or checking caller IDs, the other handsets will display Cordless Busy # (the handset number). The handset(s) cannot be used or may not switch to Cordless mode until the handset in conversation ends the communication. To use your handset, you can switch to another mode by pressing FRM (#F).
- You can page all the handsets or each individual handset. For details, refer to Intercom with Multiple Handsets on page 47.
- An intercom between handsets is not available.

To register the handset with the base station, follow these steps:

- 1. Handset: Turn on the handset with a fully charged battery and place the handset all the way into the cradle of the base station.
- 2. Base Station: Press the Handset registration button at the left side of the base station, using a fine pen or other pointed instrument.
- 3. Within 30 seconds of pressing the Handset registration button:

Handset: Press FCN 600 12.

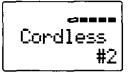
 When Registered appears on the display, registration is complete and a handset number is assigned and displayed.

- If Failed! appears, please retry.
- Shortly after registering the second handset, Cordless #1 appears on the original handset. If Cordless #1 does not appear, press so on the original handset. After Cordless #1 appears, press so.

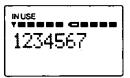
# Basic Operation

#### MAKING A CALL

- 1. Press and hold MR.
  - Wake-up tone sounds and all indicators light.
  - The current scanning operation mode is displayed.
  - After accessing an available system, the mode is displayed (for example, Cordless).



- 2. Fully extend the antenna.
- 3. Enter number (up to 32 digits).
  - Press Conductory to erase a digit, or press and hold to erase the entire entry.
  - To view entries longer than 16 digits, press
     FCN and then hold
- 4. Press SND.



- The IN USE indicator lights steady when the handset is in use.
- The signal strength indicator now appears.
- When the call is successfully sent, the display clears.
- It may take about six seconds till you hear a dial tone.
- You can press so before entering a phone number. After pressing so, you will hear a dial tone.
- 5. Press De to end the call.

or

Place the handset all the way into the cradle of the base station.

- The IN USE indicator turns off.

If the base station or another handset is in use, wait until the call ends or switch to another system by pressing (rem) (#rem).

#### ANSWERING A CALL

Make sure that the handset is turned on and the ring volume is adequate. When a call is received, **Ring** appears on the display:



- - If you do not answer calls, a counter displays the number (up to 99) of unanswered calls.
- 2. Press (END) to end the call.

#### ADJUSTING THE VOLUME

#### RING VOLUME

During ringing, press  $\bigcirc$  or  $\bigcirc$ . Or press KS to temporarily turn the ring volume off.

ог

Press For 45 (12), then 🕥 or 🔿 to adjust. Press Mem to save.

- Pressing (WEB) temporarily turns off the ring volume, but has no effect on subsequent incoming calls.
- If you turn off the ring volume, the wake-up tone is also turned off.

#### EARPIECE VOLUME

During a call, press 😒 or 🔼.

#### KEYTONE VOLUME

When the handset is in standby, press  $\bigodot$  or  $\bigodot$ .

To turn off the keytones, press and hold 🕥 until no bars are displayed.

#### **OPERATION DURING A CALL**

#### Call Hold

- 1. Press (388).
  - The call is on hold and all handsets display Hold.
- 2. Press (WB) or (SND) to return to the held call.

If you put a call on hold for six minutes, a warning tone sounds. The held call is disconnected after ten minutes have elapsed.

#### **Channel Changing**

Changing channels allows you to select a noise-free channel between the handset and the base station. Up to 30 channels are available for use.

If there is noise on the line during a conversation, press (300) to change channels.

#### **Flash Function**

This feature enables you to access another call by pressing (See) during conversation. For details, see 3-Way Calling on page 52 or Call Waiting on page 53.

If you accidentally press (so) during a normal call, the call is disconnected.

#### LAST NUMBER REDIAL

To redial the last number called, press .

#### Basic Operation

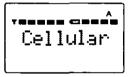


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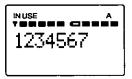
#### **CELLULAR MODE**

#### MAKING A CALL

- 1. Press and hold MR.
  - Wake-up tone sounds and all indicators light.
  - The current scanning operation mode is displayed.
  - After accessing an available system, the mode is displayed (for example, Cellular).
  - If locked, the current lock mode is displayed.



- Fully extend the antenna and verify that signal strength is sufficient. Typically, two bars or less is considered a weak signal.
- 3. Enter number (up to 32 digits).
  - Press CLP to erase a digit, or press and hold CLP to erase the entire entry.
  - To view entries longer than 16 digits, press FCN and then hold FCN.
- 4. Press SND.



- The IN USE indicator lights steady when the handset is in use.
- When the call is successfully sent, the display clears.
- 5. Press 💿 to end the call.

If the Automatic Retry feature is programmed by your dealer: When the call cannot be completed by the cellular system, the handset automatically retries the call up to 15 times. To stop automatic retry at any time, press (m).

#### **ANSWERING A CALL**

Make sure that the handset is turned on and the ring volume is adequate. When a call is received, **Ring** appears on the display:



- Press any key to answer (except <sup>™</sup>, <sup>™</sup>, <sup>™</sup>),
   <sup>™</sup>, <sup>™</sup>, or <sup>™</sup>).
- If you do not answer calls, a counter displays the number (up to 99) of unanswered calls.
- 2. Press (NO) to end the call.

#### **ADJUSTING THE VOLUME**

#### RING VOLUME

During ringing, press  $\bigcirc$  or  $\bigcirc$ . Or press KE to temporarily turn the ring volume off.

#### or

Press FCN 43 12, then 🕑 or 🔿 to adjust. Press MEM to save.

- Pressing (WE) temporarily turns off the ring volume, but has no effect on subsequent incoming calls.
- If you turn off the ring volume, the wake-up tone is also turned off.

#### EARPIECE VOLUME

During a call, press  $\bigcirc$  or  $\bigcirc$ .

#### KEYTONE VOLUME

When the handset is in standby, press  $\bigcirc$  or  $\bigcirc$ .

To turn off the keytones, press and hold  $\bigcirc$  until no bar is displayed.

#### **OPERATION DURING A CALL**

#### **Microphone Mute**

- 1. Press 🐨.
  - The microphone is muted.

#### 2. Press (WB) again to un-mute the microphone.

#### **Flash Function**

This feature enables you to access another call by pressing so during conversation. For details, see Call Waiting on page 53.

If you accidentally press (so) during a normal call, the call is disconnected.

#### LAST NUMBER REDIAL

To redial the last number called, press .

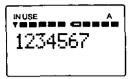
#### IN-BUILDING MODE

#### MAKING A CALL

- 1. Press and hold Mr.
  - Wake-up tone sounds and all indicators light.
  - The current scanning operation mode is displayed.
  - After accessing an available system, the mode is displayed (for example, In-Building).



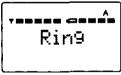
- Fully extend the antenna and verify that signal strength is sufficient. Typically, two bars or less is considered a weak signal.
- 3. Enter number (up to 32 digits).
  - Press CLP to erase a digit, or press and hold to erase the entire entry.
  - To view entries longer than 16 digits, press (FCN) and then hold (FCN).
- 4. Press SND.



- The IN USE indicator lights steady when the handset is in use.
- When the call is successfully sent, the display clears.
- You can press so before entering a phone number. After pressing so, you will hear a dial tone.
- 5. Press 🔊 to end the call.

#### **ANSWERING A CALL**

Make sure that the handset is turned on and the ring volume is adequate. When a call is received, **Ring** appears on the display:



- Press any key to answer (except ™), IND, IND, or ○).
  - If you do not answer calls, a counter displays the number (up to 99) of unanswered calls.
- 2. Press 🗪 to end the call.

#### ADJUSTING THE VOLUME

#### **RING VOLUME**

During ringing, press  $\bigcirc$  or  $\bigcirc$ . Or press RE to temporarily turn the ring volume off.

or

Press For 45 1 , then r or to adjust. Press Here to save.

- Pressing (WE) temporarily turns off the ring volume, but has no effect on subsequent incoming calls.
- If you turn off the ring volume, the wake-up tone is also turned off.

#### EARPIECE VOLUME

During a call, press 🕥 or 🔗.

#### KEYTONE VOLUME

When the handset is not in use, press  $\bigcirc$  or  $\bigcirc$ .

To turn off the keytones, press and hold 🕥 until no bar is displayed.

#### **OPERATION DURING A CALL**

#### **Microphone Mute**

- 1. Press (1888).
  - The microphone is muted.
- 2. Press (XX) again to un-mute the microphone.

#### **Flash Function**

This feature enables you to access another call by pressing so during conversation. For details, see Call Waiting on page 53.

If you accidentally press (so) during a normal call, the call is disconnected.

### LAST NUMBER REDIAL

To redial the last number called, press .

# **Operation Modes**

Your phone operates in three modes: Cordless, In-Building (if your building is equipped with a wireless inbuilding telephone system), and Cellular.

**Cordless:** When the base station is connected, you can make and receive calls in Cordless mode as long as the handset is within range of the base station. If your handset is beyond the range of the base station, your handset automatically scans for the other system(s).

**In-Building:** When you are in range of the In-Building system, you can use your handset as a wireless inbuilding phone.

**Cellular:** When you are beyond the range of the Cordless and wireless In-Building system, your handset scans for a Cellular system. If found, you can use your handset in Cellular mode.

# 

You can select which systems you want your handset

to scan. Scanning priority (first, Cordless; second, In-Building; third, Cellular system) cannot be changed. When a higher priority system is found, the handset switches to the system automatically and its operation mode is displayed on the first line of the display. The current operation mode of the handset is displayed at all times. It takes a while to switch systems and display the operation mode.

#### **Operation Modes**

Scanning operation mode options vary depending on the systems with which you are registered. When cellular lock is enabled, the handset does not scan for Cellular systems.

When you select this Scanning Operation	Your handset scans for and lets you make and receive calls in these modes			
Mode	Cordless	In-Building	Cellular	
Automatic	X	х	X	
CL only	X			
In-BI only		Х		
Cell only			X	
CL & In-Bl	X	Х		
CL & Cell	X		X	
In-Bi & Cell		Х	X	

 When In-Building mode is disabled, your handset does not display In-BI selections.

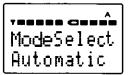
#### Selecting Scanning Mode

To select the scanning operation mode:

1. When the handset is in standby, press

(FCN) (7#8) (2ABC).

- The current setting is displayed.



- 2. Press 😒 or 🔿 to review options.
- When the desired setting is displayed, press (MEM).



This setting is retained after the handset is turned off. Check the current setting when you turn on the handset.

To change to Cordless mode quickly, place the handset in the base station (provided the handset can scan for Cordless system). **Operation Modes** 

# 

If you are in range of two or three systems you are registered with, you can temporarily change from one system to another.

To change modes:

When the handset is in standby, press FCN (#\*\*).



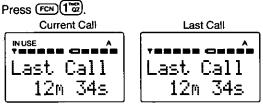
- The handset scans for the next higher priority system. If another system is found, the handset switches to that system and its operation mode is displayed.
- The handset automatically switches to the next higher priority system, if found. To switch to the system you want to use, refer to Operation Mode Selections on page 33.
- If another system is not found, the handset switches back to the previous one.

This feature does not work during a call or if you have selected a scanning operation mode that looks for only one system (such as Cordless only). Refer to Operation Modes on page 33.

# **Additional Features**



Individual Call Timer



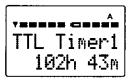
- The length of the current call or of the last call is displayed in minutes and seconds.
- When viewing the current call length, the timer is continuously updated as you continue the conversation.

This timer does not count during intercom.

# Total Timer 1 (non-resettable)

Press FCN 120.

 The total accumulated call time for both cellular phone numbers is displayed in hours and minutes.



## Total Timer 2

- 1. Press FCN 12 .
  - The accumulated call time for the active cellula phone number is displayed in hours and minutes



2. To reset the timer, press 03 MEM.





Your handset has many lock options to prevent unauthorized use in Cellular mode. Regardless of the lock setting, 911 can always be called.

911 is the preset emergency number. If desired, your cellular dealer can program an additional emergency number.

#### Programming a Lock Code

- 1. Press FCN 388 488.
- 2. Enter the current lock code.

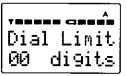


- The preset lock code is 0000.
- 3. Enter a new lock code (two to four digits).
- ,4. Press MEM.

## **Dialed Digit Restriction**

You can limit the length of phone numbers that can be dialed from your handset. For example, to allow only local calls, restrict digit length to seven digits.

- 1. Press FCN 3 2 ABC.
- 2. Enter your current lock code.



- The current dialed digit restriction is displayed.
- 3. Enter digit restriction (from 00 to 31).
  - Entering 00 means no restriction is set.
- 4. Press MEM.

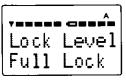
## Additional Lock Options

The following lock options are available:

- Unlock: Unrestricted use.
- Dial Lock: Calls can be made only to numbers stored in the handset's memory (and the emergency number). Calls can be received. The last dialed numbers are deleted from memory.
- Send Lock: Calls can be made only to the emergency number. Calls can be received.
- Full Lock: Calls can be made only to the emergency number. Calls cannot be received.

To switch to a different lock option:

- 1. Press FCN 38 12.
- 2. Enter your current lock code.



- The current lock level is displayed.
- 3. Press 🕑 or 🔿 to review options.
- 4. When the desired option is displayed, press

# 🗒 Cellular Lock

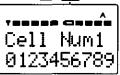
The phone system manager can disable cellular use for handsets used with a wireless In-Building system. This feature requires a manager lock code.

- 1. Press FCN 300 300.
- 2. Enter the manager lock code.
  - The current lock setting is displayed.
- 3. Press 😒 or 🔿 to review options.
- When the desired option is displayed, press
   (MEM).

#### Additional Features

# PHONE NUMBER SELECTION

Your handset can have up to two cellular phone numbers (programmed by your cellular carrier). You can select either phone number for use in Cellular mode only. If cellular lock is enabled, only the first phone number is displayed. The phone numbers can be reviewed in any mode.



- The current active phone number is displayed.
- Press O or o to display the other phone number (if your handset has two numbers).
- 3. When the desired number is displayed, press

# III IIII CELLULAR CARRIER SELECTION

When you sign up for In-Building and/or Cellular services, service is provided by either an A (nonwireline) or B (wireline) cellular service carrier. Your cellular service provider is referred to as your "home system." An A or B indicator is displayed to indicate the carrier that is providing your cellular service. The setting is stored for the currently active phone number.

The **ROAM** indicator lights or flashes when your handset is accessing a system outside of your home system area (roam).

To change the setting:

1. When the handset is in standby, press

FCH (7#3)1\*2.

- The current setting is displayed.
- 2. Press 🕑 or 🐼 to review options.

When the desired setting is displayed, press MEM.

The available options are:

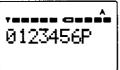
- Normal: Tries to complete calls using your home system. If your handset cannot access your home system (that is, you are out of range), your handset tries to complete calls using an available system (roam).
- A Sys only: Uses only the A system. (If you select this and your home system is B, you will not be able to make or receive calls using your home system.)
- B Sys only: Uses only the B system. (If you select this and your home system is A, you will not be able to make or receive calls using your home system.)
- Home Sys: Selects only your home system; the handset will not roam. (If you select this, you cannot make/receive calls outside of your home system.)

# 

Some services (such as long distance and voice mail) require you to enter a pause between groups of digits. For example, if you want to access your personal voice mail when you are out of the office, you may have to dial your office number, enter your extension number, then enter your personal password or other code. You need to enter a pause between these groups of numbers.

A pause cannot be entered as the first digit and pauses cannot be entered consecutively. For convenience, store your entry (including pauses) in memory (refer to Memory Locations on page 59).

- 1. Enter a phone number.
- 2. Press FCN 95 15 to enter a pause.



- A "P" is displayed to indicate the pause.
- 3. Continue entering numbers and pauses as needed.
- 4. Press Sol to make the call.
  - The first group of numbers is dialed. The remaining digits are paused indefinitely.
- 5. When prompted, continue pressing so to transmit additional groups of numbers.

# SHORT PAUSE DIALING/FLASH DIALING

Some PBXs require you to enter either a short pause or a hook flash after entering the outside line access code and before entering the phone number. A short pause produces a 3.6 second pause; a hook flash produces a 1 or 2 second pause.

If your base station is connected to a PBX and you want to make an outside call, check whether the PBX system in your office requires a short pause or a hook flash. For convenience, store your entry with the outside line access code and short pause (or flash) in memory (refer to Memory Locations on page 59).

- 1. Enter an outside line access code.
- 2. Press FCN 955, then 2 lor short pause or

(3) for flash, depending on your PBX system.

- A "-" or "F" is displayed.



3. Enter a phone number, then press (SND).

#### REGISTERING HANDSET/CANCELING REGISTRATION

#### **Registering Handset**

For instructions, refer to Registering the Handset with the Base Station on page 16.

#### **Changing Handset Number**

You cannot assign the same number to more than one handset. To change the handset numbers, you must cancel each handset registration and register with the base station again.

### **Canceling Handset Registration**

Once you cancel handset registration, you cannot use the handset as a cordless phone for your base station. If you need to re-register the handset, refer to Registering the Handset with the Base Station on page 16.

- 1. Handset: Turn on the handset with a fully charged battery and place the handset all the way into the cradle of the base station.
- Base Station: Press the Handset registration button at the left side of the base station, using a fine pen or other pointed instrument.
- 3. In 30 seconds after pressing the Handset registration button:

# Handset: Press FCN 650 #= .

- When the handset displays Deleted!, canceling registration is complete and the handset scans for another system.
- If Failed! appears, please retry.

# INTERCOM WITH MULTIPLE HANDSETS

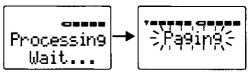
If you have purchased the Handset and Base Station Kit, an intercom is available between one handset and the base station (when another handset is in standby) and the base station user can page all the handsets or each individual handset. Each handset displays its handset number on the second line of the display. For handset number assignment, refer to Registering the Handset with the Base Station on page 16. An intercom between handsets is not available.

If you are making a call (cordless) with one handset and someone else powers on a second handset to make a call, the second person will not receive a "busy" indication from the base station, nor will they be able to place the call until the first handset is hung up.

# Paging

PAGING THE BASE STATION FROM THE HANDSET

1. Handset: Press FCN 0.



- The base station beeps, then the intercom starts automatically.
- It may take about six seconds to communicate with the base station.
- To stop paging, press END.

- 2. Handset: Speak into the handset.
- 3. Base Station: Answer into the microphone.
- Handset: Press 
   to end the intercom.
   or

Base Station: Press et a end the intercom.

PAGING A SPECIFIED HANDSET FROM THE BASE STATION (INDIVIDUAL PAGING)

1. Base Station: Press 🕮 , then handset number

(1-3-).



- The handset beeps for a minute.

- To stop paging, press again.
- Handset: Press any key to answer (except MR), BOD, WEB, V, or ().
- 3. Base Station: Speak into the microphone.
- Base Station: Press to end the intercom. or

Handset: Press 🗪 to end the intercom.

Additional Features

If you get an audible notification during intercom, it means an outside call is being received. To answer it, press (so) or (Price). The intercom ends.

PAGING ALL HANDSETS FROM THE BASE STATION (ALL PAGING)

- 1. Base Station: Press 🛲 💷.
  - The base station user can talk with the handset user who answers the page first.
- Handset: Press any key to answer (except Mm),
   (₩), (₩), (∨), or (△).
- 3. Base Station: Speak into the microphone.
- 4. Base Station: Press 🕮 to end the intercom. or

Handset: Press (BND) to end the intercom.

- **Transferring Calls**
- **TRANSFERRING A CALL TO THE BASE STATION**
- 1. Handset: Press FCN 0.75 0.75
  - The call is on hold.
  - Intercom starts.



## 2. Handset: Speak into the handset.

Base Station: Answer into the microphone.

- To cancel the intercom, press no or . The call is still on hold. To retrieve the call, refer to Call Hold on page 22.
- 3. Base Station: Press Press.
  - The transfer is complete.

To return to the call without transfer, press () or ().

# ANSWERING A CALL TRANSFERRED FROM THE BASE STATION

1. Base Station: Press Em then handset number

(1-3 m) or all handsets (0 m).

- The handset beeps for a minute.
- To stop paging, press (P-ROE).
- Handset: Press any key to answer (except MR),
   (NUE), (NUE), (NUE), or (N).
  - The call is on hold.
  - Intercom starts.

- 3. Base Station: Speak into the microphone.
  - To cancel the intercom, press no or .
     The call is still on hold. To retrieve the call, refer to Call Hold on page 22.

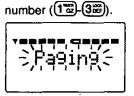
Handset: Press (See) or (WWF) to answer the call.

- The transfer is complete.

To return to the call without transfer, press (

#### TRANSFERRING A CALL FROM ONE HANDSET TO ANOTHER

1. Handset 1: Press (FCN) (). then handset



- The call is on hold and both handsets beep for one minute.
- To stop paging, press (BD).

## 2. Handset 2: While Call Transfer is displayed,



press any key to answer (except 🔊, 🔊,

- The transfer is complete.

# An intercom between handsets is not available.

### 3-Way Calling

 $\mathbf{N}$ 

The 3-way calling feature allows conversation between the base station, a handset, and an outside call.

If the base station is being used for an outside call:

- 1. Press (SND) to join the conversation.
  - To put the outside call on hold to start an intercom, press (WB) during conversation.
- 2. To end 3-way calling, press 🗪.

If the handset ends the 3-way conversation, the base station is still connected to the outside call.

#### CALL DELIVERY

ı

Call Delivery service is only available if offered by your cellular service provider and programmed by your dealer. Contact your cellular service provider for details and your dealer for programming.

This feature allows forwarding calls which access your cellular phone number to the base station, if the handset with power on operates in Cordless mode. To use Call Delivery, refer to the *Operating Instructions* for the Handset and Base Station Kit.

#### CALL WAITING

Only available if offered by your service provider.

When a second call is received during a call, you get an audible notification.

- 1. Press (SND) to answer the second call.
  - The first call is on hold.
- 2. Press (SND) to return to the first call.
  - The sol serves as a flash key.

# SENDING DTMF KEYTONES

Some phone services, such as voice mail, require the phone to transmit tones when digit keys are pressed (DTMF tones). Even when keytones are turned off, however, DTMF tones are still transmitted.

If DIALING MODE on the base station has been set to PULSE, press (\*\*\*) before sending DTMF tones.

Press keys during a call

or

Recall a number from memory, then press (FCN) (SND).

You can transmit tones automatically by recalling short pauses from memory then pressing (FCN) (SND). Refer to Short Pause Dialing/Flash Dialing on page 45.





Only available if Caller ID (for Cordless system) is offered by your service provider. Contact your service provider for details.

When a caller ID is received, the information on the caller is displayed after the first ring and you can decide whether to answer the call or not. The caller ID is automatically stored even if you answer the call.

When the base station is connected to a Private Branch Exchange (PBX) system, you may not receive caller IDs. Contact your service provider.

The base station stores up to 30 caller IDs. Depending on your service provider, caller IDs may include name, number, time, and date of call. Contact your service provider for details.

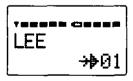
Once 30 caller IDs have been stored, a new caller ID overwrites the oldest entry. If additional calls are received from the same caller, only the date and time are overwritten.

#### **CALLER ID REVIEW**

When unread caller ID(s) are stored, the CALLER ID indicator on the base station flashes.

- 1. Press (FCN) (\*\*\*\*) to receive the caller IDs from the base station.
  - It may take about six seconds to communicate with the base station.
- 2. When the number of new caller IDs appears,

press 🔿 to read.



- 3. Press 😒 or 🔿 to review caller IDs.
  - When you have read all the unread caller IDs, **End of New** is displayed.
- When the desired caller ID is displayed, press
   (#\*) to review the rest of the caller ID and continue pressing (#\*) until the entire caller ID is displayed.
- 5. To make the call to the chosen caller ID, press (SND).

If No Caller's Name/Phone Number is displayed, it may be due to one of the following conditions:

**Private:** Shows that a caller did not want to indicate his/her name and/or phone number.

No Data: Shows that a caller was not in the Caller ID service area.

Long Distance: Shows that a caller made the call as a long distance call.

If a caller's ID is not displayed, the caller may not be a Caller ID service user.

### DELETING/STORING CALLER IDS

- 1. Recall the desired caller ID as described above.
- 2. Press MEM).
- 3. To delete the caller ID, press (), then (), or

To delete all the caller IDs, press 🗺, then

or

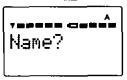
To store the caller's number in location memory, press (MEM), then edit and enter a location number (refer to Storing Entries on page 61).

# **Memory Features**

# MEMORY LOCATIONS

## Entering a Name and Phone Number

- 1. Enter a number (up to 32 digits).
- 2. Press MEM MEM.



- 3. Enter a name (up to 15 characters).
  - If you do not want to enter a name, go to step 4.
  - Enter characters using the Oracity to Oracity keys. Press a key once to enter the first character on the key, press twice to enter the second character, and so on. When another key is pressed or no key is pressed for a while, the cursor moves forward. If the cursor is above a character and a key is pressed, the new character overwrites the old one.

#### Memory Features

Press this key	To enter these characters or perform these actions
1	Q Z (space) 1
2	ABC2
3	DEF3
4	GH14
5	JKL5
6	MNO6
7	PRS7
8	TUV8
9	WXY9
0	/0
#	Moves the cursor forward.
*	Moves the cursor back.
CLR	Deletes characters.

For example, to enter the name LEE:



- 2. Press 35 (E).
- 3. Wait a moment or press (#\*).

4. Press 388 (E).

 To store your entry, refer to Storing Entries below.

## STORING ENTRIES

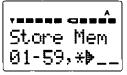
The handset is capable of storing up to 59 phone numbers.

The two storage methods are:

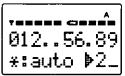
- Memory Location Storage—Saves in a specified location (page 61).
- Automatic Storage—Saves in next available location (page 62).

## Memory Location Storage

1. With your entry displayed, press (MEM).



- Enter the first digit of a two-digit memory location.
  - Example: Press (2xc) (for a two-digit memory location that begins with 2). The display below shows that locations 20, 21, 22, 25, 26, 28, and 29 are available. A "." means the memory location is occupied. (In this example, locations 23, 24, and 27 are occupied).



- If you enter () as the first digit, only locations 01 to 09 are available; location 00 is reserved for the last number dialed memory.
- 3. Enter the second digit of the memory location.
  - If you enter an occupied location, the display flashes. Press (MEM) to overwrite or CLR to return to step 2.

#### Automatic Storage

1. With your entry displayed, press MEM.

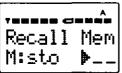


- 2. Press \*\* to store in the next available location.
  - If you enter the first digit of a two-digit location and press (\*\*\*), your entry is saved in the next available location that begins with the entered number.
  - If memory is full, Memory Occupied appears on the display.

#### **REVIEWING/SCROLLING**

### By Memory Location

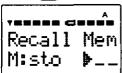
1. Press MEM.



- 2. Enter a two-digit memory location (00 to 59).
  - The display shows the location and name or the last 16 phone number digits.
- To switch name and phone number, press (#").
   or

To scroll through memory, press 😒 or 🐼.

- By Name
- 1. Press MEM



2. Press 😒 or 🐼 to review names.

#### Memory Features

- Names are reviewed alphabetically.
- Press and hold or or to display single letters. Release the key to view the next name that begins with the displayed letter.
- Only locations 01 to 59 are scrolled.

#### **EDITING/DELETING STORED ENTRIES**

You can edit and/or clear any entry in memory.

- 1. Recall an entry (refer to Reviewing/Scrolling on page 63).
- 2. Press MEW.
- To delete the entire entry from the location, press ().
   or

To edit the name, press MEM.

- 4. Enter a new name (refer to Entering a Name and Phone Number on page 59).
- 5. Once you edit the name, press MEM.
- 6. Enter a new number (up to 32 digits).
- 7. Once you edit the number, press MEM.
- 8. Press MEM MEM to save the edited entry in the displayed location.

or

Enter a new memory location.

#### DIALING

#### One Touch Dialing (Locations 1-9)

Press and hold the desired location (1) to 9) until the IN USE indicator lights. The handset automatically makes the call.

#### Super Speed Dialing (Locations 01-59)

- 1. Enter the memory location
- 2. Press 🔊.
  - If the entered memory location is empty, a call is initiated to the number(s) on the display.

#### Speed Dialing (All Locations)

- 1. Press MEM.
- 2. Enter any memory location (01-59).
- 3. Press SND.

### LAST NUMBER MEMORY

To view the last five phone numbers called:

- 1. Press 🕬 🖓 🖓.
- Press or or to display the desired number.
- 3. Press (SND) to place the call.

#### Memory Features

# 

- 1. During a call, enter a number (up to 32 digits).
  - If the phone number you called remains on the display, clear it before entering a new number.
  - When the call ends, the number is automatically stored in the handset's scratch pad memory.
- To review the number in scratch pad memory, press (MEM) (\*\*\*\*).
- When the scratch pad entry appears, press so to call the number.

# Accessories

#### Executive Value Kit (EB-VE60Z)





Dual Slot Rapid Charger<sup>‡</sup> EB-CR50Z

 Allows you to talk without holding the handset.

<sup>‡</sup> Has two slots to charge or discharge batteries—a handset slot for a battery with handset, and a spare slot for the battery only.

### ACCESSORY ORDERING

The accessory kits and parts listed here are shown on the previous pages. To order, visit your Panasonic dealer or, in the US, call Panasonic at 1-800-414-4408.

- If you are calling to place an order, please have the accessory number and your credit card number ready.
- Accessory information is subject to change without notice.
- Many accessories are available individually.

AC Charging Adaptor	.EB-CA10
Battery (S) 500 mAh NiMH	.EB-BS60
Battery (M) 700 mAh NiCd	.EB-BM60
Battery (L) 1250 mAh NiMH	.EB-BL60
Carry Case	.EB-YK60
Dual Slot Rapid Charger	.EB-CR50Z
Executive Value Kit	.EB-VE60Z
Handset Kit	.EB-PH55S
Private Handsfree Kit	.EB-M70006Z

# **Before Requesting Help**

### **ROUTINE CARE**

Clean your handset with a damp cloth. Do not use petroleum-based chemicals.

### HELPFUL HINTS

Before calling for service, try these helpful hints...

#### If your handset does not turn on...

Fully charge the battery (see page 12).

#### If the NOSVC indicator lights...

- Fully extend the antenna.
- Try "Normal" carrier system selection (see page 42).
- Check the current scanning operation mode (see page 33).

# If calls cannot be made or received in Cellular mode...

Your handset may be locked. To unlock, see page 39.

#### If intercom does not work...

- The handset is too far from the base station. Move the handset to within range of the base station.
- Plug in the AC Adaptor of the base station.

## If a handset cannot page another handset...

- The handset is too far from the base station.
- Check to see if the handset displays its handset number on the second line. If it does not, register the handset with the base station again (see page 16).

### If "Delivery Failed" is displayed...

Turn the handset off and then on again.

# If your handset does not switch to a system you are currently in range of...

- Check the current scanning operation mode (see page 33).
- If it does not switch to Cordless mode, register the handset with the base station (see page 16). Or, if another handset is in use, wait until the call ends.
- If it does not switch to In-Building mode, you
  may be in a building which is not equipped with
  an In-Building system. Contact the equipment
  supplier.

## If Off/On is displayed...

 Turn the handset off and then on again. If the message reappears, contact your dealer.

### If "xxx-Key Corrupted" is displayed...

Contact your dealer.

### If the **ROAM** indicator lights in your home area...

 Try "Home System Only" carrier system selection (see page 42). If the ROAM indicator remains on, contact your dealer or service provider.

# If you hear a fast busy tone when trying to make a call...

- Your call cannot be accepted because the cellular system is busy or the handset is too far from the base station.
- Ensure the received signal strength is sufficient in In-Building or Cellular mode.
- Move to an area with better reception and try your call again.

# If you hear a rapid high/low tone when trying to make a call...

 Your call was rejected by the cellular system because the number you were calling was invalid or the NOSVC indicator was on.

# If you can make but not receive calls while roaming...

 Contact your carrier or the local cellular carrier about roaming information and forwarding your calls.

#### If phone reception is not good...

- Press (m) to change channels if in Cordless mode (see page 23).
- Fully extend the handset antenna.
- Move the handset and base station away from electrical appliances. Or move the handset from uneven terrain or large buildings.

# Additional Help for US Customers

Call Panasonic's Customer Satisfaction Center at 1-800-414-4408.

If your handset is malfunctioning, call Panasonic at 1-800-414-4408 to locate the nearest Panasonic Servicenter or Authorized Independent Servicer.

# **Technical Specifications**

Dimensions with:

Battery (S) 500 mAh: 5.5" (H) x 1.7" (W) x 1.2" (D) 140 x 43 x 31 (mm) Battery (M) 700 mAh: 5.5" (H) x 1.7" (W) x 1.6" (D) 140 x 43 x 41 (mm) Battery (L) 1250 mAh: 5.5" (H) x 1.7" (W) x 1.6" (D) 140 x 43 x 41 (mm)

Weight with:

Battery (S) 500 mAh: 5.5 oz. (156 g) Battery (M) 700 mAh: 6.9 oz. (196 g) Battery (L) 1250 mAh: 7.7 oz. (218 g)

**External Connector Input Voltage:** 

7 VDC

**Battery Voltage:** 

4.8 VDC

# Adaptor Jack Input Voltage:

7 VDC

#### Before Requesting Help

AC Charging Adaptor (EB-CA10 specified): Input: 120 VAC, 60 Hz, 10W

Output: 7 VDC, 600 mAh

Consumes 4.5 watts when connected to 120 V outlet, even when not connected to the handset.

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# Precautions

### SAFETY INFORMATION FOR WIRELESS HANDHELD PHONES

### EXPOSURE TO RADIO FREQUENCY SIGNALS

Your wireless handheld portable telephone is a low power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals.

In August, 1996, the Federal Communications Commission (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

ANSI C95.1 (1992)<sup>\*</sup> NCRP Report 86 (1986)<sup>\*</sup> ICNIRP (1996)<sup>\*</sup>

These standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

<sup>\*</sup> American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection.

### Precautions

The design of your phone complies with the FCC guidelines (and those standards).

# ANTENNA CARE

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

# PHONE OPERATION

NORMAL POSITION: Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

TIPS ON EFFICIENT OPERATION: For your phone to operate most efficiently:

- Extend your antenna fully.
- Do not touch the antenna unnecessarily when the phone is in use. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

# DRIVING

Check the laws and regulations on the use of wireless telephones in the areas where you drive. Always obey them.

- Give full attention to driving—driving safely is your first responsibility.
- Do not use a handheld telephone while driving a

vehicle. If using a handheld telephone, park the - vehicle before conversing.

#### **ELECTRONIC DEVICES**

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.

### **Pacemakers**

The Health Industry Manufacturers Association recommends that a minimum separation of six inches (6") [15 cm] be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

- Should ALWAYS keep the phone more than six inches from their pacemaker when the phone is turned ON;
- · Should not carry the phone in a breast pocket;
- Should use the ear opposite the pacemaker to minimize the potential for interference.
- If you have any reason to suspect that interference is taking place, turn your phone OFF immediately.

# Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider.

# **Other Medical Devices**

If you use any other personal medical device, consult the manufacturer of your device to determine if they are adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

Turn your phone OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

# Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

### Posted Facilities

Turn your phone OFF in any facility where posted notices so require.I

# AIRCRAFT

FCC regulations prohibit using your phone while in the air.

Switch OFF your phone before boarding an aircraft.

### BLASTING AREAS

To avoid interfering with blasting operations, turn your phone OFF when in a "blasting area" or in areas posted: "Turn off two-way radio." Obey all signs and instructions.

#### **POTENTIALLY EXPLOSIVE ATMOSPHERES**

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include fueling areas such as gasoline stations; below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles, such as grain, dust or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

### For Vehicles Equipped with an Air Bag

An air bag inflates with great force. DO NOT place objects, including both installed or portable wireless equipment, in the area over the air bag or in the air bag

#### Precautions

deployment area. If in-vehicle wireless equipment is improperty installed and the air bag inflates, serious injury could result.

### **IMPORTANT SAFETY INSTRUCTIONS**

### USE ONLY THE SPECIFIED HANDSET AND BASE STATION

When using this unit, basic safety precautions should atways 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 this unit.
- Unplug this unit from AC outlets before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- Do not use this unit near water, for example, near a bath tub, wash bowl, kitchen sink, or the like.
- Place 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 in a place where proper ventilation is not provided.

- Use only the power source 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.
- Do not place objects on the power cord. Install the unit where no one can step or trip on the cord.
- Do not overload wall outlets and extension cords. This can result in the risk of fire or electric shock.
- Never push any objects through slots in this unit. This may result in the risk of fire or electric shock. Never spill any liquid on the unit.
- 11. To reduce the risk of electric shock, do not disassemble this unit. Take the unit 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 unit is subsequently used.

- 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 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.
- During thunderstorms, avoid using telephones except cordless types. There may be remote risk of an electric shock from lightning.
- Do not use this unit to report a gas leak when in the vicinity of the leak.

# SAVE THESE INSTRUCTIONS

## CAUTION

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

- 1. Use only the battery(ies) specified.
- 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.
- Exercise care in handling batteries in order not to short the battery to conductive materials such as rings, bracelets, and keys. The battery and/or conductor may overheat and cause burns.
- Charge the battery(ies) provided with or identified for use with this product only in accordance with the instructions and limitations specified in this manual.
- 6. Use only Panasonic charging accessories.

# Attention US Customers:

 The product you have purchased is powered by a nickel cadmium battery which is recyclable. At the end of its useful life, under various state and local laws, it is illegal to dispose of this



battery into your municipal waste stream. Please call 1-800-8-BATTERY for information on how to recycle this battery.

**WARNING:** To prevent fire or shock hazard, do not expose this product to rain or any type of moisture.

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.
- 2. Perform such activities in the off-peak hours, such as early morning hours or late evenings.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

# 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.

# **OTHER INFORMATION**

## Environment

Do not use the handset in extreme temperature or humidity.

Specified operating temperature range is:

Handset .....-22° F (-30° C) to 140° F (60° C)

# Handling

- Do not carry the unit by holding the antenna.
- When you leave the unit unused for a long time, unplug the AC Charging Adaptor from the outlet.

## Panasonic Responsibility for Accessories

Do not use any accessories other than those designed for use with your series phone. Use of attachments not recommended or sold by Panasonic may result in fire, electrical shock or injury. Panasonic cannot be held responsible for damages caused by using non-Panasonic accessories.

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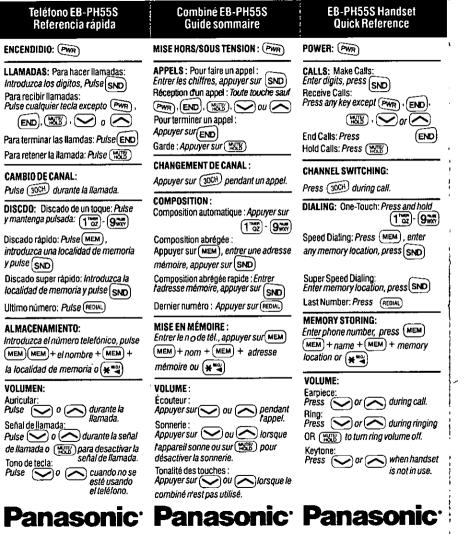
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#### PANASONIC TELECOMMUNICATION SYSTEMS COMPANY

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