Mobile Handset 120 and Desktop Charger/ Gang Charger

User Guide

NEC Business Solutions Ltd.

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Liability Disclaimer

PLEASE NOTE:

It is recommended that standard acceptance procedures be followed prior to operating this equipment in proximity of life-support systems.

To minimize risk of interference, pacemaker users should not carry the Wireless Telephone next to the pacemaker.

Earpiece may retain magnetic objects.

Operation of the Wireless Telephone may produce an audible noise noticeable to hearing aid users. It is recommended that a hearing aid compatible headset be used by hearing aid users.

Changes or modifications to this equipment not approved by NEC Business Solutions Ltd. may cause this equipment to not comply with part 15 of the FCC rules and void the user's authority to operate this equipment.

NEC Business Solutions, Ltd. products contain no user-serviceable parts inside. Refer servicing to qualified service personnel.

NOTE CONCERNING THE WIRELESS TELEPHONES:

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.

RADIO FREQUENCY (RF) INFORMATION:

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

OPERATIONAL WARNINGS:

For Vehicles Equipped with an Air Bag: Do not place a portable radio product in the area over the air bag or in the air bag deployment area. An air bag inflates with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio product may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres: Turn off your radio product, prior to entering any area with a potentially explosive atmosphere, unless it is a radio product type especially qualified for use in such areas (for example, Factory Mutual Approved). Do not remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

The areas with potentially explosive atmospheres referred to above include fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, 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. Areas with potentially explosive atmospheres are often but not always posted.

Batteries: All batteries can cause property damage and/or bodily injury, such as burns if a conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

Cleaning and Drying Considerations: Using a leather carry case may help protect the surfaces and help prevent liquids (e.g., rain) from entering into the interior of the radio product. This product is not waterproof, and exposing the unit to liquids may result in permanent damage to the unit.

If your Wireless Telephone interior gets wet, then do not try to accelerate drying with the use of an oven or a dryer as this will damage the Wireless Telephone and void the warranty. Instead, do the following: 1. Immediately power off the Wireless Telephone. 2. Remove Battery Pack from Wireless Telephone. 3. Shake excess liquid from Wireless Telephone. 4. Place the Wireless Telephone and Battery Pack in an area that is at room temperature and has good airflow. 5. Let the Wireless Telephone and Battery Pack dry for 72 hours before reconnecting the Battery Pack and/or powering on the Wireless Telephone. If the Wireless Telephone does not work after following the steps listed above, contact your dealer for servicing information.

Electro Magnetic Interference/Compatibility:

NOTE

Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio product in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Medical Devices

Pacemakers: The Health Industry Manufacturers Association recommends that a minimum separation of 6 inches (15 cm) be maintained between a handheld wireless radio product and a pacemaker. These recommendations are consistent with the independent research by, and recommendations of, Wireless Technology Research. Persons with pacemakers should:

- ALWAYS keep the radio product more than 6 inches (15 cm) from their pacemaker when the radio product is turned ON.
- Not carry the radio product in a breast pocket.
- Use the ear opposite the pacemaker to minimize the potential for interference.
- Turn the radio product OFF immediately if you have any reason to suspect that interference is taking place.

Hearing Aids: Some digital wireless radio products may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

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

Use While Driving

Check the laws and regulations on the use of radio products in the area where you drive. Always obey them. When using the radio product while driving, please:

- Give full attention to driving and to the road.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call if driving conditions so require.

INTERNATIONAL CERTIFICATIONS:

Australia	
Brazil	NEED NEC BARCODE
Canada	2128-K1374
European Union	

Switzerland	Switzerland
Japan	R005NYCA0014 2.4 DS4
Mexico	NOM NYCE
New Zealand	Z233
Singapore	IDA
United States	IEC 60950
United States	Part 15, part 68

MH110 Wireless Telephones

SPECIFIC ABSORPTION RATE (SAR) INFORMATION:

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 Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

- ANSI C95.1 (1992) American National Standards Institute
- NCRP - Report 86 (1986) National Council on Radiation Protection and Measurements
- ICNIRP (1996) International Commission on Non-Ionizing Radiation Protection;
- DHWC - Safety Code 6 Department of Health and Welfare Canada

Those standards were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg.

NOTE

In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Tests for SAR are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure. The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines.

SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID IYGRNP2400. Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at http://www.wow-com.com.

The only authorized headsets that may be utilized with the SNP2400 are those obtainable from SpectraLink or it's reseller partners.

The measured SAR of the SNP2400 Wireless Telephone is 0.61W/kG @ 2462 MHz (head) 0.0379W/kG @ 2412 MHz (body).

***Phone Operation Normal Position**: Hold the phone as you would any other telephone, with the earpiece to your ear and speak into the microphone. The internal antenna is then positioned properly.*

MH120

SPECIFIC ABSORPTION RATE (SAR) INFORMATION:

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 Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

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The only authorized headsets that may be utilized with the RNP2400 are those obtainable from SpectraLink or it's reseller partners.

The measured SAR of the RNP2400 Wireless Telephone is 0.166W/kG @ 2462 MHz (head) 0.0162W/kG @ 2412 MHz (body).

***Phone Operation Normal Position**: Hold the phone as you would any other telephone, with the earpiece to your ear and speak into the microphone. The internal antenna is then positioned properly.*

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1

Introduction

Welcome to the *MH120 and Desktop Charger/Gang Charger User Guide*. This guide provides the information you need to use the MH120 Wireless Telephone and chargers.

Chapter Topics

- *Using this Guide*
- *Document Conventions*

Using this Guide

This guide is designed to make MH120 Wireless Telephones and the MH120 Desktop and Gang chargers easy to understand and simple to use. There are examples of the screens displayed with step-by-step instructions for the procedures you need to perform.

How this Guide is Organized

Chapter 1 Introduction

This chapter outlines how to use the manual, including the organization, chapter layout, and conventions used in the *MH120 and Desktop Charger/Gang Charger User Guide*.

Chapter 2 MH120 Wireless Telephone

This chapter introduces you to the MH120 Wireless Telephone and describes steps for making, answering, and managing your calls.

Chapter 3 Using the MH120 Desktop and Gang Chargers

This chapter describes how to use and clean the MH120 Desktop Charger and the MH120 Gang Charger.

Chapter 4 Care of the Wireless Telephone and Chargers

This chapter discusses the care of the MH120 Wireless Telephone, the MH120 Desktop Charger, and the MH120 Gang Charger.

Document Conventions

This guide uses the conventions listed in Table 1-1.

Table 1-1 *Document Conventions*

When you see:	It means:	Example
Boldfaced	Field names	Enter the ID in the **Name** field.
	Button names	Click **Save**.
	Drop-down list names	Select the names from the **Agents** drop-down list.
	Commands, keywords, or other user input	Enter **login admin** at the command prompt.
Capitalized	Menu names	From the File menu, choose **Save**.
	Window names	From the Directory window, select **Edit** > **Modify**.
	Dialog box names	Click **OK** to save and close the Account Properties dialog box.
Menu > Submenu (boldfaced font)	Menu paths	Select **Edit** > **Modify**.
CTRL+S CTRL+Shift+S (boldfaced font)	Shortcut keys	Press **CTRL+S** to save your changes.
F1	Function keys	Press **F1** to access the online help.
Click	Click the left mouse button	Click **OK** to save your changes.
Right-click	Click the right mouse button	Right-click and select **Delete** from the shortcut menu.
	Warning	Used to warn against possible human injury or risk of death from an action or event.
	Caution	Used when equipment or data could be damaged by an action or event.
	Important	Emphasizes a **MUST** read statement.

When you see:	It means:	Example
	Note	Used to point out special details that you must know or actions that you must take relevant to your current actions.
	Tip	Describes time-saving ideas and other useful information for completing procedures.
	Reference	Indicates a reference to another related document.

Step-by-step instructions are numbered. If more than one option is available to complete a task in a procedure, the options may appear as follows:

Step 1 Do one of the following to add a field to the Employee directory.

—Select the desired field from the **Employee** field and click **Add**.

—Double-click the desired field from the **Employee** field.

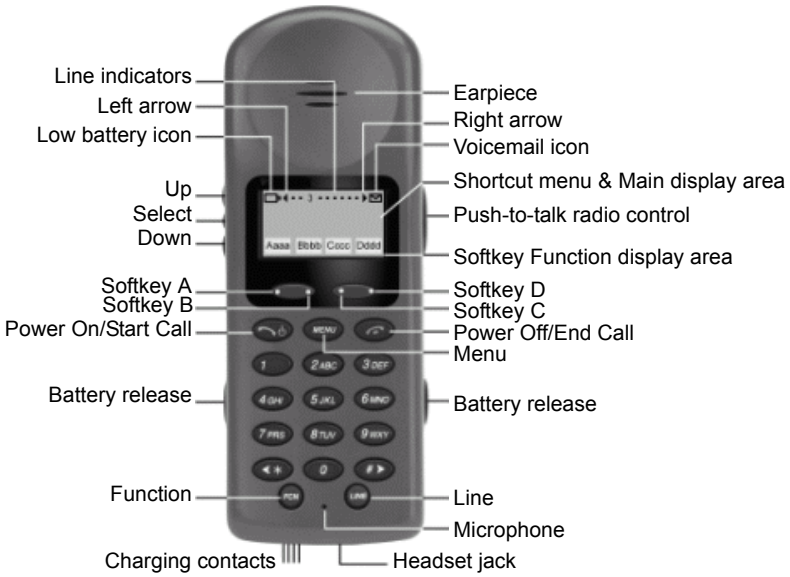
Step 2 To select all of the available fields, click **Add all.**

2

MH120 Wireless Telephone

This chapter introduces you to the MH120 Wireless Telephone and describes steps for making, answering, and managing your calls. Figure 2-1 displays the MH120 Wireless Telephone's features.

Figure 2-1 *MH120 Wireless Telephone*



(not to scale)

Chapter Topics

- *Turning the Wireless Telephone On or Off*
- *Making a Call*
- *Answering A Call*
- *Activating System Features*
- *Using the Softkeys*
- *Using Push to Talk (PTT)*
- *Using Wireless Telephone Headsets*
- *Setting User Preferences*
- *Configuring the User Option Menu*
- *Working with Battery Packs*
- *Removing and Replacing Battery Packs*

Turning the Wireless Telephone On or Off

Use the following steps to turn on the MH120 Wireless Telephone.

Step 1 Press and hold the **Power On/Start Call** key for about one second. Two chirps will sound.

Step 2 Release the **Power On/Start Call** key. The in-service tone sounds and the extension number displays.
The Wireless Telephone is now in standby mode and ready to make and receive calls.

Use the following step to turn off your MH120 Wireless Telephone.

Step While in standby mode, press and hold the **Power Off/End Call** key. One chirp sounds and the Wireless Telephone turns off.

NOTE

The Wireless Telephone can not be turned off during a call. End the call first and then turn the Wireless Telephone off.

Making a Call

Use the following steps to make a call.

Step 1 Go **Off Hook** by pressing the **Power On/Start Call** key.

Step 2 Select a **Line** before dialing a number if you are required by your telephone system to select one.

Step 3 Press the **LINE** key and the number key of the line you wish to use. You may hear a dial tone.

Step 4 Dial the number. Calls should be dialed with the Wireless Telephone exactly as with your desk phone.

NOTE

You may dial extension numbers, internal numbers, or make external calls, depending on the setup of your PBX. You may hear a dial tone, then press the number keys to dial the number.

Answering A Call

When an incoming call is received the Wireless Telephone rings or vibrates to alert you of an incoming call. Additionally, a line number on the display may flash, and the display may show information about the call, such as caller's name and extension.

To answer a call, press the **Power On / Start Call** key, hold the earpiece to your ear, and speak with a normal tone of voice.

Using Call Waiting

If you are on a call and hear subdued ringing, a call is coming in on a second line. The line number on the display may be flashing. To answer this call:

Step 1 Press the **Hold** key to put your first call on hold.

Step 2 Press the **LINE** key and the line **number** of the second call at the same time.

Table 2-1 describes available features when answering calls.

Table 2-1 *Call Answering Features*

Features	Actions
Headset Answer	When a headset is plugged into the Wireless Telephone, any key other than the Power On/Start Call, Power Off/End Call, softkeys or side buttons may be pressed to answer a call.
Hanging Up	At the end of each call, press the Power Off/End Call key. Be sure to do this at the end of each call.
Changing Volume	You may increase or decrease the volume of the speaker by pressing the corresponding Up and Down buttons located on the left side of the Wireless Telephone.
Silencing while Ringing	If the ringing of the Wireless Telephone is not desired, you may silence the ring by pressing the Power Off/End Call button. This action does not interrupt the call and the caller may leave a voicemail message.
Backlight	The backlight comes on when any key is pressed or when there is an incoming call and stays on for 10 seconds. It turns off after 10 seconds if another key is not pressed within that period.

Activating System Features

The features that have been programmed in your system may be viewed and activated through the Shortcut menu and Softkey Functions.

Table 2-2 describes the features that have already been programmed in your system.

Table 2-2 *Programmed features*

Features	Descriptions
Shortcut menu	System features that are accessible by the MH120 Wireless Telephone may be viewed by going off hook (pressing the Power On/Start Call key) and then pressing the MENU key. A feature menu displays in the main display area. This is the shortcut menu. The shortcut menu lists the feature shortcut, if any, and the feature description. As you scroll through the features by pressing the Up and Down buttons, the feature abbreviation is highlighted in the softkey function display area. To activate a feature, you may press its softkey, its shortcut key, or the Select button while the option is highlighted.
Select button	To use the Select key, press Up or Down to highlight an option, then press Select to activate the feature.
Shortcut keys	Programmed features may have the number 1-9, *, 0, or # in the left column of the shortcut menu. This is the shortcut key that activates that feature. To activate the feature using its shortcut key, press the shortcut key while in the shortcut menu. The feature activates whether or not that feature is currently displayed or highlighted. ***Note:*** *No shortcut indicates that the feature does not have a shortcut and this is generally the case with primary level softkey functions.*

An example of shortcut keys usage follows.

Example: *If the Transfer feature is programmed to shortcut key 2, the Shortcut Menu displays:*

2 Transfer

When the Transfer option is highlighted in the menu, **Xfr** will be highlighted in the softkey function display area. Do one of the following to activate the **Transfer** feature:

- Press **2**.
- Press the corresponding softkey.
- Scroll to the option and press **Select**.
  - Press **MENU + 2** to activate the Transfer feature if you are not already scrolling through the shortcut menu.

NOTE

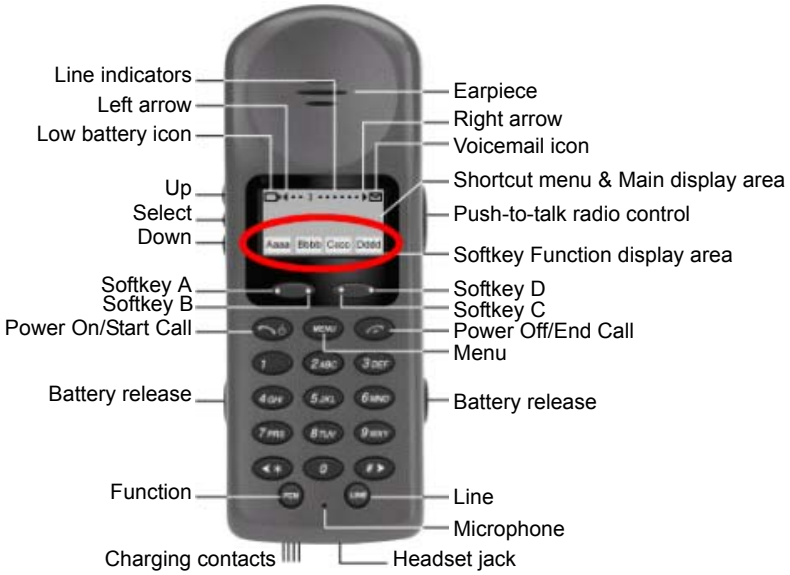
*In certain system environments, the softkeys and the **MENU** key are unavailable. In such environments, press the **FCN** key while off hook to scroll through system features. Press the **shortcut** key to activate the feature.*

Using the Softkeys

The softkeys on your MH120 Wireless Telephone enable you to quickly activate system features. There are four softkeys and up to 16 features programmed for softkey access.

The display area directly above each softkey is programmed with a feature abbreviation to guide your access to the feature. The softkeys are referred to from left to right as A,B,C,D. In Figure 2-2 the corresponding display area is labeled Aaaa, Bbbb, Cccc, and Dddd.

Figure 2-2 *MH120 Wireless Telephone—display area highlighted*



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The softkeys operate with a toggle function. Press the **left** or **right** side of the key to activate the corresponding softkey feature.

The first four primary softkey features are displayed in the softkey function display area by default. Use the following steps to view all of the features that can be activated through the softkeys.

Step 1 Briefly press the **Power On/Start Call** key to go off hook.

Step 2 Press the **FCN** key. The second set of feature abbreviations displays in the softkey display area.

—Each time the **FCN** key is pressed, a different set of features displays until all 16 possible features have been displayed.

—The softkey features display in the same sequence as they appear on the shortcut menu.

Step 3 Press the corresponding softkey to activate any feature while its abbreviation is displayed.

Activating Features With Shortcut keys

While scrolling through the softkey functions, a shortcut key may be pressed to activate its corresponding feature, whether or not that feature is currently displayed in the softkey function display area.

Because system features vary, your system administrator will explain them in reference to your telephone system.

Example: *Using the previous example for the Transfer function described on* page 2-4*: If the Transfer function is assigned to softkey A in the second level row, then* ***Xfr*** *will display in the* ***Aaaa*** *softkey display area when the* ***FCN*** *key is pressed.*

If a call is in progress, do one of the following to activate the **Transfer** feature:

- Press **FCN** + (softkey **A**) to transfer the call.
- Press **FCN + 2** to use the shortcut key.
- Press **MENU + 2**.

REFERENCE

Refer to the example of using the shortcut keys on *page 2-4* *for more information about using M****ENU + 2****.*

Using Push to Talk (PTT)

The push-to-talk feature allows MH120 Wireless Telephones to operate in a push-to-talk (PTT) group broadcast mode in addition to the standard telephone operation. This feature is similar to Push-to-talk radios, or walkie talkies.

The MH120 Wireless Telephone supports 8 multicast channels with the current channel saved in memory on the phone. A PTT call is initiated by pressing the **Talk** button located on the right side of the handset. All MH120 Wireless PTT dialogue is interrupted when you answer a PBX call. When the PBX call is ended, PTT dialogue resumes if it is an active call.

The different push-to-talk features and terminology are discussed in the following sections.

Selecting a Channel

See “Setting User Preferences” on page 2-10.

The Call Period

The two-way radio operates on the concept of a push-to-talk session or call period. The push-to-talk call period begins with the first transmission and ends when there has been no two-way radio traffic on the channel for 10 seconds.

The PTT mode controls the keypad during a push-to-talk call period. Therefore, it is not possible to use the keypad for any other function, such as accessing the on-hook menus or accessing an OAI application. However, it is possible to place a PBX call **(see below)**.

Initiating Calls

Press the **Talk** button and wait two seconds to activate the channel before talking. The “start transmit” sound will play when you may begin talking.

Transmitting Calls

Use the following steps to transmit calls.

Step 1 Initiate a call. Talk into the microphone while holding the Wireless Telephone two inches from your mouth.

Step 2 Release the **Talk** button when finished talking. The “end transmit” sound plays.

The MH120 Wireless Telephone then enters the waiting state where it monitors the channel for up to 10 seconds.

Step 3 (Optional) To initiate subsequent transmissions on the MH120 Wireless Telephone, press the **Talk** button, using the same channel. The “start transmit” sound plays immediately and the user can start talking. The display screen shows the current active channel. Since all phones on that channel are already in the receive state, there is no two-second delay.

If no transmission occurs during the 10-second countdown period, the MH120 Wireless Telephone plays the “end call” sound and reverts to the idle state.

If you inadvertently press any other button or key on the Wireless Telephone while transmitting a call, the call will be terminated.

Receiving Calls

When a PTT transmission is received the phone plays the “receiving alert” sound and enters the receive state.

In this state the phone receives all conversations on the selected channel. The phone ignores the Talk key while in the receive state. The screen shows the current active channel, the caller ID information of the

current transmitter, and an indication that the phone is receiving a broadcast transmission.

The caller ID is protocol specific. Usually it is the extension number programmed in the phone from the on-hook user menu.

At the end of a transmission, the phone enters the waiting state where it monitors the channel for up to 10 seconds and displays “Waiting” on the screen. If no other transmission occurs within 10 seconds the phone plays the “end call” sound and reverts to idle state.

Changing PTT volume

Press the **Up** and **Down** buttons to raise or lower PTT volume. A separate volume is maintained for PTT calls with the current volume selection retained in memory.

Muting a PTT call

The Mute feature only affects the current call. The phone will play subsequent PTT calls. Mute does not allow the user to use the Wireless Telephone's keypad for anything else, including an OAI application.

Use the following steps to Mute a call:

Step 1 Press the **Mute** soft key. A Mute Two-Way Radio? prompt displays.

Step 2 Press the **Yes** or **No** soft key. The prompt disappears after 3 seconds if the user doesn't confirm either Yes or No.

The Mute soft key turns into an Unmute soft key while in the mute state and can be used to unmute the PTT call (the confirmation prompt is displayed first).

When the next PTT call period starts the audio is automatically unmuted.

Terminating a PTT Call Early

Use the following steps to terminate incoming broadcasts.

Step 1 Press the **Terminate** soft key.

Step 2 Select **Yes** when the confirmation prompt displays. Push-to-talk audio is immediately stopped and the phone exits the PTT session.

No other Wireless Telephone is affected and only the current call is terminated for this handset. When the next PTT call period starts, the Wireless Telephone is again in the receive state. You may rejoin a still-active session by initiating a PTT call.

Disable the PTT feature in the on-hook user menu to stop receiving PTT calls.

Answering an Incoming PBX Call During a PTT Call

A telephone call may be answered while in a PTT call session. To announce an incoming call, the Wireless Telephone will ring with a low-volume ring and display the system message.

Use the following steps to answer a call.

Step 1 Press **Power On/Start Call**. The PTT call session will be pre-empted and no PTT audio will be heard.

Step 2 Press **Power Off/End Call** after the PBX call is over to go back on hook. PTT goes out of pre-empted mode and becomes active again. If an already active PTT call has not ended, the PTT audio starts playing again.

If the user does not answer the telephone call by pressing **Power On/ Start Call**, the PTT display will be shown after the ring has stopped.

Making a PBX Call During a PTT call

To start a telephone call during a PTT call session, press the **Power On/ Start Call** key. This causes the two-way radio to be pre-empted as described under "Answering an Incoming PBX Call During a PTT Call".

Utilizing Status Indicators

Table 2-3 discusses the status indicators in the MH120 Wireless Telephone.

Table 2-3 *MH120 Status Indicators*

Status Indicator Names	Descriptions
No Service Message	An alarm sounds and a descriptive message displays when the Wireless Telephone cannot receive or place calls. You may be outside of the covered area. Walk back into the coverage area. The in-service tone indicates service is re-established. If functionality does not return, note the error message and contact your system administrator.
	The battery icon displays and a soft beep will be heard while the Wireless Telephone is in use whenever the Battery Pack charge is low. User has 15-30 minutes of Battery Pack life left.
Battery low	This message will display and an alarm will sound while the Wireless Telephone is idle whenever the Battery Pack is critically low. The Wireless Telephone cannot be used until the Battery Pack is charged.
	The voicemail icon indicates that you have a new voicemail message.
Melody	A melody is played after the Wireless Telephone is powered on for the first time following a completed charge (Charge Complete).

Using Wireless Telephone Headsets

NEC Business Solutions Ltd. offers optional headsets for use in noisy environments or if you need to have your hands free while talking on the Wireless Telephone.

To use the headset, simply plug it into the jack on the bottom of the Wireless Telephone. The headset is specially designed to work properly with the MH120 Wireless Telephone. We do not recommend using other headsets.

Setting User Preferences

User preferences can be set through the vertical menus when the Wireless Telephone is in standby mode (on, but not in use). Use the following steps to set user preferences.

Step 1 Place the Wireless Telephone in standby mode.

REFERENCE

Refer to "Turning the Wireless Telephone On or Off" on page 2-2 for more information regarding turning on the telephone.

Step 2 Press and briefly hold **FCN** to display user options.

NOTE

Check with your system administrator for specific features supported by your Wireless Telephone.

Table 2-4 describes navigation tools that can be used when configuring user preferences.

Table 2-4 *User Preferences Navigation Tools*

Features	Descriptions
Up/Down buttons	Displays previous/next menu item.
Select button	Selects the menu item or option.
OK softkey	Completes selection of the menu item or option.
Save softkey	Saves the entry.
Bksp softkey	Backspaces to allow editing of entry.
Cncl softkey	Cancels edit and returns to previous menu level.
Up softkey	Returns to previous menu level.
Exit softkey	Exits the menu (at the top level).
END CALL key	Exits to standby state (from any level).

Configuring the User Option Menu

Table 2-5 describes commands located on the User Option Menu.

REFERENCE

Table 2-4 describes available navigation tools.

***Table 2-5** User Option Menu Commands*

Commands	Descriptions	Actions
Ring Type	Select Telephone Ring to set the standard ring on the Wireless Telephone. • ***Normal***: the factory default ring. • ***Vib/Norm ring***: vibrates for five seconds and then rings. • ***Vibrate ring***: vibrates for a non-audible call alert.	Press 0 to select desired ring type. The ring type currently set displays with an asterisk.
Noise Mode	Adjusts the Wireless Telephone to account for background noise. • ***Normal***: for most office environments. • ***High***: for moderate background noise. • ***Severe***: for extremely noisy conditions.	Select an option that describes the noise in your environment.
Current IP address	In IP systems, the IP address of the Wireless Telephone is displayed. This number may not be edited.	None.
Extension	Sets the extension number associated with your Wireless Telephone. This number is used to identify the Wireless Telephone and is for display purposes only.	Use keypad to enter extension number.
Push to talk	Channel selection 1-8: selects the channel used for two-way radio transmission and monitoring. • *Enable* turns on PTT mode. • *Disable* turns off PTT mode.	Enter number to select channel. Select ***Enable*** or ***Disable***.

NOTE

Additional options may be present. Contact your system administrator for information.

Working with Battery Packs

The Wireless Telephone's Battery Pack must be recharged periodically. The Nickel Metal Hydride (NiMH) rechargeable Wireless Telephone Battery Pack gives you four hours of talk time or 80 hours of stand-by time.

Stand-by time is when the phone is turned on, but not in an active call.

Low Battery Indicator

When the Wireless Telephone battery is running out of power a low battery icon displays. If the Wireless Telephone is in use, a soft beep sounds through the earpiece every six seconds indicating that the user has 15-30 minutes of battery life remaining.

If the Wireless Telephone is not in use when the battery begins to run out of power, the low battery icon displays. If the battery is not recharged and becomes critically low, a **Low Battery** message displays and a loud beep sounds. These occur when the user is not in a call. The Wireless Telephone will not work until the Battery Pack is recharged.

Be careful not to short-circuit the battery contacts on the Battery Pack. Batteries can be short-circuited if metal objects such as coins, keys or paper clips cause a direct connection of the battery terminals. Shorting the contacts can cause permanent damage.

Removing and Replacing Battery Packs

Use the following steps to remove and replace MH120 Battery Packs.

Step 1 Press both battery release buttons to remove the Battery Pack. The Battery Pack releases outward.

Step 2 Slide the Battery Pack straight into the cavity to replace the Battery Pack. You should not have to force it against the Wireless Telephone.

Changing the Battery Pack During a Call

The Battery Pack can be changed while a call is still in progress. Use the following steps to remove and replace the battery pack while in a call.

NOTE

*If you are using the Telephony Gateway in your telephone system, **do not** press **Power Off/End Call** on the Wireless Telephone before beginning the following steps.*

Step 1 Quickly remove the discharged Battery Pack and replace with a charged Battery Pack.

REFERENCE

Refer to "Removing and Replacing Battery Packs" for detailed instructions.

Step 2 Press **Power On/Start Call** to turn the Wireless Telephone back on.

Step 3 Press **Power On/Start Call** again to resume the call in progress.

Users of IP telephony interfaces not requiring the WL System Telephony Gateway should Park a call prior to changing the Battery Pack during an active call. The call should then be retrieved after the Battery Pack is replaced to rejoin the conversation. Check with the switch administrator for instruction on how to perform this or a similar process on your particular telephone system.

3

Using the MH120 Desktop and Gang Chargers

This chapter describes how to use and maintain the following battery chargers for the MH120 Wireless Telephone:

- Desktop Charger: a battery charger designed to charge a single Nickel Metal Hydride (NiMH) Battery Packs.
- Gang Charger: a battery charger designed to charge four Nickel Metal Hydride (NiMH) Battery Packs simultaneously.

Chapter Topics

- *Using the MH120 Desktop Charger*
- *MH120 Gang Charger*
- *Cleaning the Chargers*

The MH120 Desktop Charger

The MH120 Desktop Charger is designed to charge the Nickel Metal Hydride (NiMH) Battery Packs. Full charging is accomplished in approximately one and a half hours. Chargers operate in a 50° to 85° F (10° to 30° C) environment. Do not expose them to freezing temperatures or direct sunlight.

Figure 3-1 *NEC Business Solutions Ltd. MH120 Desktop Charger*

The MH120 Desktop Charger is shipped with the appropriate power supply for the site's location. Place the MH120 Desktop Charger on a flat, horizontal surface. Plug the power supply into the MH120 Desktop Charger and into an appropriate wall outlet.

Do not place anything in the MH120 Desktop Charger other than the Wireless Telephone. You might damage the contacts. Bent contacts can keep the Wireless Telephone from charging.

Using the MH120 Desktop Charger

The Wireless Telephone must be off or in standby mode during charging. The user must end any call in progress before placing the handset into the MH120 Desktop Charger. An in progress call can be ended by pressing the **Power Off/End Call** button on the Wireless Telephone.

Table 3-1 describes the LED indicator lights on the MH120 Desktop Charger.

Table 3-1 *MH120 Desktop Charger LED indicator lights*

LED Indicator Lights	Descriptions
Main Indicator Light	The main indicator light displays red when the MH120 Wireless Telephone is placed into the MH120 Desktop Charger slot. Place the MH120 Wireless Telephone into the MH120 Desktop Charger slot facing forward. If the Wireless Telephone is placed correctly, the red indicator light will come on. The indicator light will not come on when the slot is empty, when the MH120 Wireless Telephone is improperly seated, or when the MH120 Desktop Charger has no power applied.
Charging Indicator	• If the Wireless Telephone is in standby mode, it displays the *extension number* and *Charging*. • If the Wireless Telephone is turned off, only *Charging. . .* displays. The dots race during the charging cycle. ***Note:*** *It is normal for the Battery Pack to become warm when charging.*
Charge Complete Indicator	When the Wireless Telephone is fully charged, *Charge Complete* displays. The indicator light stays lit until the Wireless Telephone is removed.

MH120 Gang Charger

The MH120 Gang Charger is designed to charge four Nickel Metal Hydride (NiMH) Battery Packs simultaneously. Full charging is accomplished in approximately one and a half hours. Chargers operate in a 50° to 85° F (10° to 30° C) environment.

IMPORTANT

Do not expose Gang Chargers to freezing temperatures or direct sunlight.

Figure 3-2 *NEC Business Solutions Ltd. Gang Charger*

(shown with two empty charging bays)

The Gang Charger is shipped with the appropriate power supply for the site's location. Use the following steps to connect the Gang Charger.

Step 1 Place the Gang Charger on a flat, horizontal surface.

Step 2 Plug the power supply into the Gang Charger and into an appropriate wall outlet.

CAUTION

Do not place anything in the MH120 Desktop Charger other than the Wireless Telephone. You might damage the contacts. Bent contacts can keep the Battery Pack from charging.

Using the Gang Charger

Use the following steps to remove the MH120 Wireless Telephone battery pack and recharge it in the Gang Charger.

Step 1 Remove the Battery Pack from the MH120 Wireless Telephone by depressing both battery release buttons. The Battery Pack releases.

Step 2 Insert the Battery Pack into one of the four charging bays so that the Battery Pack contacts meet the charging bay contacts.

—The LED above the charging bay will turn on to indicate that charging is in progress.

—Complete charging occurs in one and a half to two hours. The Battery Pack is partially charged in five minutes.

When charging is complete, the LED turns off.

Step 3 Lift the Battery Pack out of the charging bay.

Troubleshooting a Blinking LED

If the LED starts blinking as soon as the Battery Pack is inserted the Battery Pack may be improperly seated.

- Lift it out and reinsert.
- If the LED continues to blink or starts blinking at any time during the charging process, it indicates that there is a problem with the Battery Pack that makes it unusable.
- Do not continue to charge the Battery Pack.
- Dispose of it properly and do not attempt to use it in the Wireless Telephone.
- Do not attempt to open or repair a defective Battery Pack.

Contact your service representative for assistance.

Cleaning the Chargers

Clean the Chargers by wiping the surface with a clean, water-dampened cloth or paper towel. A mild detergent solution may be used. Be sure to wipe away any detergent residue with a plain water dampened cloth.

- DO NOT IMMERSE THE MH120 Desktop Charger IN WATER OR OTHER LIQUID.
- DO NOT POUR LIQUIDS INTO THE SLOT.

The Battery Pack contacts on the Wireless Telephone may be cleaned with isopropyl (rubbing) alcohol applied with a Q-tip, cloth, or paper towel. Do not push or pull the exposed Battery Pack contacts.

- Never use non-NEC Business Solutions Ltd. charging units as they could damage the Battery Pack.
- Only use the original plug-in power adapter for the Chargers.
- Do not dip the Battery Pack in water or throw into the fire.
- Do not throw away the Battery Pack with your domestic waste. Take used Battery Packs to an appropriate collection point for recycling or send them back to your supplier or servicing agent.

Replacement Battery Packs are available from your supplier or servicing agent.

4

Care of the Wireless Telephone and Chargers

This chapter explains how to maintain the MH120 Wireless Telephone, Desktop Charger, and Gang Charger. Steps for routine care that apply to all three products are provided.

Chapter Topics

- *Precautions*
- *Cleaning tips*
- *Usage Tips*

Precautions

Do not drop

Avoid dropping the Wireless Telephone or knocking it against hard surfaces. Carrying the Wireless Telephone in a holster or carrying case will help to protect it.

Do not disassemble

There are no serviceable parts in the Wireless Telephone or MH120 Desktop Charger. You should not open the Wireless Telephone case nor disassemble the MH120 Desktop Charger. Doing so will void your warranty.

Cleaning tips

Use the following cleaning tips to maintain your Wireless Telephone and Desktop Charger.

- Turn off the Wireless Telephone and unplug the MH120 Desktop Charger before you clean them. Please observe the following guidelines:
  - Never immerse either in water.
  - Clean the exterior surfaces, including the charging contacts, with a cloth that has been slightly moistened with water.
  - Do not exert undue pressure on the MH120 Desktop Charger electrical contacts while wiping.

- Wiping the handset surface with a water-dampened cloth or paper towel will remove most films or residues.
  - If the soiling is too stubborn for plain water, a mild detergent solution may be used.
  - Wipe away any detergent residue with a clean water-dampened cloth.
- The Wireless Telephone may be cleaned with any general-purpose household glass and surface-type cleaner.
  - Isopropyl alcohol may be used occasionally, applied by a cloth or paper towel.
  - When using alcohol, do not rub the keypad characters vigorously. Doing so will significantly degrade legibility.

DO NOT SPRAY THE HANDSET DIRECTLY!

- Pre-treated cloths such as used for eyeglasses or cameras may be used to clean the phone. Pre-moistened towelettes may also be used to clean the phone, however, avoid those containing lanolin or aloe as it will leave a slippery residue.
- The surface of the handset may be cleaned occasionally with disinfectants used for general cleaning in a medical environment.
  - Isopropyl alcohol may be used occasionally, applied by a damp cloth or paper towel. When using alcohol, do not rub the keypad characters vigorously. Doing so will significantly degrade legibility.
  - Do not use furniture polishes, waxes or plasticizer-based cleaner (Armor All®, etc.)
  - Do not use lanolin, aloe, glycerin or other skin care type products.
  - Do not apply any solvent such as acetone, mineral spirits etc.
  - Do not directly spray or immerse the handset.
- If the headset connector becomes dirty, a scratchy or intermittent signal may be experienced. To clean the connector, dip the non-padded end of either a wooden or paper handled cotton swab in isopropyl alcohol. Gently insert in the connector and twist, repeating several times. If available, blow compressed air into the connector to clear debris.

Usage Tips

Please observe the following usage guidelines:

- Before you use the Wireless Telephone, the Battery Pack must be charged.
- You can only use the Wireless Telephone with your facility's telephone system. It is not a public cellular phone.
- Keep the Wireless Telephone away from your ear when it is ringing.

- The microphone is between the **FCN** and **LINE** keys. This is a sensitive microphone that works well when the Wireless Telephone is correctly positioned on your ear. There is no need to speak directly into the microphone, but do not cover it with your hand or cheek when talking.
- The LCD panel displays information about the status of your Wireless Telephone and prompts you about features.
- If the Battery Pack is low, you will hear a soft beep and see the battery icon in the display.
- Improper disposal of Battery Packs can damage the environment. Dispose of batteries properly.
- You can control the Wireless Telephone volume level and the type of ring.
- To protect the Wireless Telephone, use a carrying case.

For additional information or support on this NEC Business Solutions product, contact your NEC Business Solutions representative.

NEC Business Solutions Ltd.

Mobile Handset 120 and Desktop Charger/Gang Charger User Guide

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