

Home Wireless Networks™

HWN500 Handset User's Guide

(working copy)

PRELIMINARY

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PRELIMINARY

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About your HWN500 Handset



Your HWN500 handset is an advanced wireless display telephone designed to work with the Home Wireless Networks™ integrated communication system. The HWN500 handset can support up to four telephone lines and can also be used for system administration of the network.

Note: The network Controller must already be installed and incoming phone lines connected to it before you can add a handset to the network.

Checking parts

The handset kit should contain the following parts.

- Handset
- Charging Cradle
- AC Adaptor
- Ni-Cd Battery Pack
- Protective rubber feet for charging cradle

If any parts are missing or broken, call your dealer.

Notice about Handset batteries



The RBRC Battery Recycling Seal on the Nickel-Cadmium (Ni-Cd) battery pack indicates that Home Wireless Networks is voluntarily participating in an industry program to collect and recycle these batteries at the end of their useful life, when taken out of service within the United States or Canada. The RBRC program provides a convenient alternative to placing spent Ni-Cd batteries into the trash or municipal waste streams, which is illegal in some areas.

Please call 1-800-8-BATTERY for information on Ni-Cd recycling in your area. Home Wireless Networks' involvement in this program is part of our commitment to protecting and conserving our natural resources.

Safety Instructions

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury.

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Do not use this product near water or when you are wet (for example, near a bath tub, kitchen sink, laundry tub, wash bowl, wet basement, or swimming pool). Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning. Do not plug the product back in until it is thoroughly dry.
4. Avoid using a telephone (other than a cordless one) during an electrical storm. There may be a remote risk of electric shock.
5. Do not use a telephone in the vicinity of a gas leak. If you suspect a gas leak, report it immediately using a telephone located away from the area where the gas is leaking. Also make sure the Controller unit is located away from the area of the suspected leak.
6. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.
7. Do not overload the wall outlets or extension cords as this can result in the risk of fire or electric shock.
8. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by people walking on it.
9. This product must not be installed in an attic or in any other temperature-extreme environment.
10. To reduce the risk of electric shock, do not disassemble the telephone equipment. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly could cause electric shock. If service or repair work is required, take the unit to a qualified technician.
11. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - The power cord is damaged or frayed.
 - Liquid has been spilled into the product.
 - The product has been exposed to rain or water.
 - The product has been dropped or the cabinet has been damaged.
 - The product exhibits a distinct change in performance
 - The product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating

instructions - improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.

Battery cautions

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

1. Use only the proper type and size batteries.
2. Do not dispose of batteries in a fire. The cell may explode. Check with local codes for possible special disposal instructions.
3. Do not open or mutilate the battery. Released electrolyte is corrosive and may cause damage to eyes or skin. It may be toxic if swallowed.
4. Exercise care in handling the battery in order not to short the battery with conducting materials such as rings, bracelets, and keys. The battery or conductor may overheat and cause burns.
5. Charge the battery pack provided with or identified for use with this product only in accordance with the instructions and limitations specified for this product.

Preventing static electricity damage

The components inside your system are extremely sensitive to static electricity, also known as electro-static discharge (ESD). Static electricity can cause irreparable damage to your system. You can help prevent such damage by taking the following precautions:

- Avoid touching expansion slot connectors.
- Avoid static-causing surfaces such as plastic and Styrofoam near your unit.
- Never slide your unit across any surface.

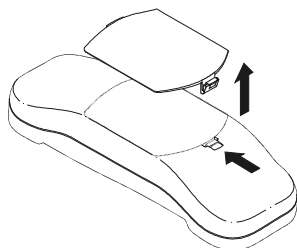
Installing the Handset

1 *Install the battery pack*

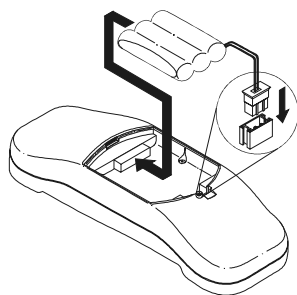
Note: Use only Nickel Cadmium (Ni-Cd) batteries supplied by Home Wireless Networks. To order replacement handset batteries, call 1-888-WHY-WIRE.

Procedure

1. Remove the battery cover.



2. Connect the battery jack and insert the battery pack into place.



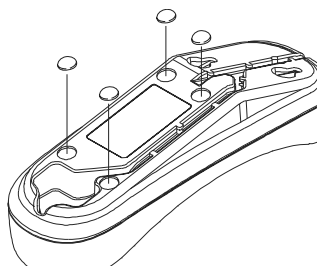
Note: Be sure to place the end of the battery pack against (not on top of) the rubber spacer in the battery well.

3. Replace the battery cover.

2 Charge the handset battery

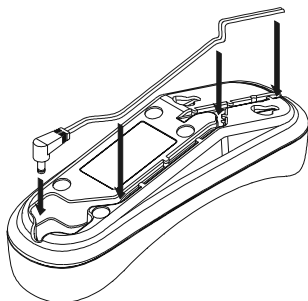
Note: The handset charging cradle can either be wall-mounted, or it can be placed on a horizontal surface such as a desk or counter top.

- To mount the charging cradle on a wall, refer to the wall-mounting instructions at the end of this manual.
- If placing the charging cradle on a horizontal surface, attach the included protective rubber feet to the underside of the charging cradle as shown in the following illustration.



Procedure

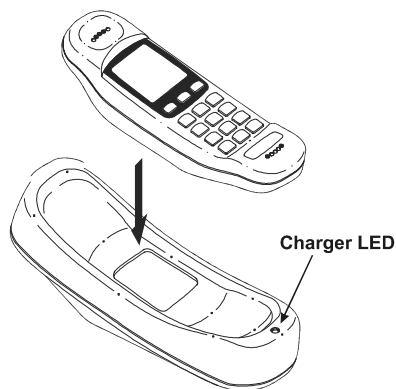
1. Connect the handset AC adaptor to the charging cradle and route the adaptor cord through the channel in the base. When finished routing the cord, plug the adaptor into a standard 110V electrical outlet.



2. Place the handset in the charging cradle and charge the battery for 24 hours.

Notes:

- The battery must be installed in the handset in order to recharge it.
- The handset can be placed either face up or face down in the charging cradle. The LED on the charging cradle illuminates when the handset is properly seated.



- For best results and to prolong battery life, be sure to fully drain the battery before recharging it.

3 *Register the handset with the Controller*

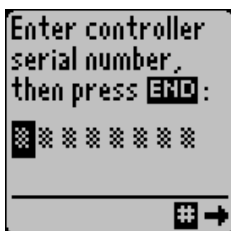
Before you can use the handset, it must be registered with the Controller so the two devices can communicate with each other.

Notes:

- Be sure to fully charge your new handset battery before beginning the handset registration procedure.
- If you change Controllers for any reason, you must re-register the handset with the new Controller.

Procedure

1. During the charging process, the handset will begin displaying the following screen. Wait until the handset has charged for a full 24 hours, then enter the last eight digits of your network Controller serial number. Press **END** when finished.



Note: The Controller serial number is located on the label on the inside front surface of the Controller. See the Network Reference Manual that accompanied the Controller for additional information.

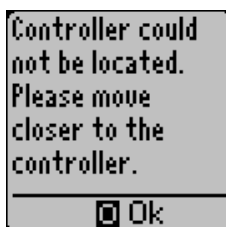
2. You will be asked to confirm that the entered serial number is correct. Press **1** (Yes) to confirm or **2** (No) to re-enter the Controller serial number.
3. After confirming that the serial number is correct, the handset displays the following screen:



Enter your Controller password, then press **0** (OK) to continue.

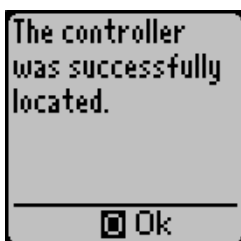
Note: The default Controller password is "4961." You should change this password to one of your own choosing as soon as you finish installing and setting up your network. The password can be changed via the handset Setup menu or via a PC connected to a Data Jack. For additional information, see the Network Reference Manual that accompanied the Controller.

Note: If the Controller cannot be located, the handset displays the following screen:



Move closer to the Controller and press **0** to restart the handset registration process.

4. Once the handset has located the Controller and a correct password has been entered, the handset displays the following screen:



Press **0** to continue.

5. The handset displays the following screen.



Enter a name that identifies the handset with a particular location or individual.

Note: Handset names can be up to 10 characters in length and are entered using the handset keypad.

Example:

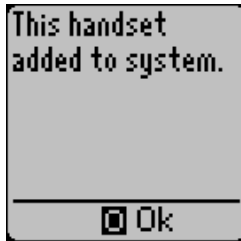
To enter the name "Tim" -

- Press 8 one time to add "T";
- Press 4 three times to add "i";
- Press 6 one time to add "m";
- Press # to advance to the next space;
- Press 0 as many times as necessary to delete the remaining unwanted text.
- Press **END** when finished.

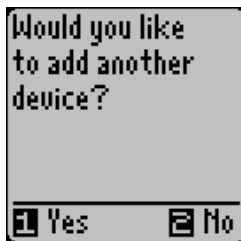
6. When asked if the entered data is correct, press **1** for Yes or **2** for No.

Note: Handset names can be changed at a later date via the Setup menu. For details, see the Network Reference Manual that accompanied the Controller.

7. When the handset displays the following screen, press **0** (OK) to continue:.

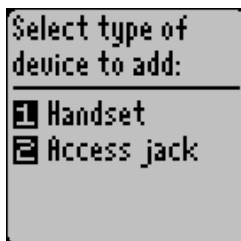


8. When the handset displays the following screen, press **1** (YES) if you want to add another handset or an access jack to the system, then proceed to Step 9.



If you do not want to add another handset or an access jack at this time, press **2** (NO) and proceed to Step 10.

9. If you pressed **1** (YES) in the preceding step, the following screen is displayed.



Press **1** to add another handset, or **2** to add an access jack.

Note: If you press 1, you will be asked to enter the serial number and name of the additional device.

Handset serial numbers are located on the underside of the battery cover. Access jack serial numbers are located on the plug side of the jack.

When you have finished adding devices to the network, proceed to the next step.

- 10.** If you have not yet specified dialing rules for your network via either another handset or a PC connected to a Data Jack, you will be prompted to define these rules now. See the following section for information on this procedure.
- 11.** When the following screen is displayed, press **0** to begin using the handset.



Establishing dialing rules

If you have not already specified dialing rules via a PC connected to a Data Jack, you will be asked to specify them during installation of the first handset.

Note: Dialing Rules tell the system how to dial local and long-distance calls (for example, when to dial “1” before an area code).

Once established, dialing rules can be changed via the handset Setup menu. For details, see the Network Reference Manual that accompanied the Controller.

Procedure

1. When the following screen is displayed, press **1** (YES) if you must dial 10 digits to reach local numbers, then proceed to Step 2.

Press **2** (NO) if you do not need to dial 10 digits to reach local numbers, then proceed to Step 3.



Note: 10-digit dialing is most common in rapidly growing major metropolitan areas that have more than one area code in a dialing area.

Example

Metro Atlanta, Georgia, is a good example of a 10-digit dialing area. Callers from within any of three Atlanta area codes can place local (non-toll) calls to any other number within those three area codes by dialing xxx-xxx-xxxx.

2. If you pressed **1** (YES) in the preceding step, the following screen is displayed.



Follow the instructions on the display to enter all local area codes that do **not** require "1" before dialing.

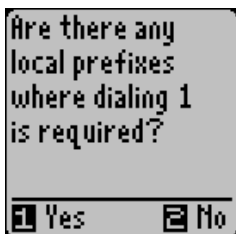
When finished, proceed to Step 6.

3. If you pressed **2** (NO) in Step 1, the following screen is displayed.



Follow the instructions on the display to enter your local area code.

4. After confirming your local area code, the following screen is displayed.

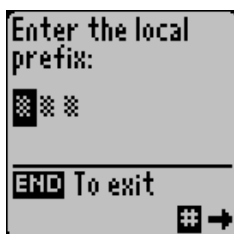


If you must dial "1" to reach any local prefixes, press **1** (YES) and proceed to Step 5.

If you do not need to dial "1" to reach any local prefixes, press **2** (NO) and proceed to Step 6.

Note: These are numbers that you must dial 1+xxx+xxxx (no area code) to reach.

5. If you pressed 1 (YES) in the preceding step, the following screen is displayed.



Follow the instructions on the display to enter all local prefixes that you must dial "1" to reach.

6. When the following screen is displayed, press **0** to begin using the handset.



Handset Operation

Basic Calling Features

Answering an incoming call	Press TALK .
Answering a specific line	Select the desired ringing line number. Example: To answer a call on line 3, press 3.
Making a call on the first available line	<ol style="list-style-type: none">1. Press TALK or press the number associated with a particular line.2. When you hear dial tone, dial the desired number.
Making a call on a specific line	<ol style="list-style-type: none">1. Select the desired line number.2. Dial the phone number. Example: To make a call on Line 3, press 3, then dial the phone number.
Ending a call	Press END .
Placing a call on hold	While on an active call, press HOLD .
Retrieving a held call	Press MENU until you reach the screen showing the held call.
Call Waiting	<p>When you hear the Call Waiting tone, press FLASH to answer the waiting call. Your original call will be placed on hold. Press FLASH again to return to your original call. You can then toggle between the two calls using FLASH.</p> <p>Note: You must subscribe to your telephone company's Call Waiting service in order to use this feature.</p>
Calling another extension	Press the desired extension number. Example: To call extension 12, press 12.

<i>Calling all extensions in the network</i>	<ol style="list-style-type: none"> 1. Press MENU until you reach the screen containing the Extensions function. 2. Select Extensions from the list of menu items. 3. Scroll through the list until Ring All is highlighted. 4. Press 0 to dial all extensions in the network.
<i>Redialing the last number called</i>	From a non-menu screen, press * .
<i>Transferring a call</i>	<ol style="list-style-type: none"> 1. Press MENU until you reach the screen containing the Transfer function. 2. Select Transfer from the list of menu options. 3. Select the extension number you want to transfer the call to. 4. Press 0 (Okay) to transfer the call.
<i>Using the Mute function</i>	<ol style="list-style-type: none"> 1. The Mute function turns the handset microphone off. You can still hear the party on the other end, but they can't hear you. 2. While on a call, press MENU until you reach the screen containing the Mute function. 3. Select Mute to toggle the Mute function on and off.
<i>Making the current call private</i>	<p>While on a call, you can prevent other devices on the network (except one connected to the Controller E-jack) from accessing that line.</p> <ol style="list-style-type: none"> 1. Press MENU until you reach the screen containing the Private feature. 2. Select Private to toggle Call Privacy on and off. <p>Note: The above procedure makes only the current call private. To make all calls on a particular line private, see the Network Reference Manual that accompanied the Controller.</p>

Notes:

- You must subscribe to the Caller ID service provided by your phone company in order to use the following Caller ID features.
- Two types of directories are available - a System Directory and a Personal Directory. The System Directory can store up to 50 entries and is available to all handsets and PCs in the network. The Personal Directory can store up to 40 entries per handset (up to a maximum of 400 Personal Directory entries). Entries stored in the Personal Directory are available only to the handset that stored them.

<i>Dialing from the Caller ID log</i>	<ol style="list-style-type: none">1. Press MENU until you reach the screen containing the Caller ID function.2. Select Caller ID from the list of menu options.3. Scroll through the Caller ID records until the desired entry appears.4. Press 5 to dial the number.
<i>Deleting a specific record from the Caller ID Log</i>	<ol style="list-style-type: none">1. Press MENU until you reach the screen containing the Caller ID function.2. Select Caller ID from the list of menu options.3. Scroll through the Caller ID records until the desired entry appears.4. Press 9 to delete the record from the Caller ID log.
<i>Deleting all records from the Caller ID log</i>	<ol style="list-style-type: none">1. Press MENU until you reach the screen containing the Caller ID function.2. Select Caller ID from the list of menu options.3. Press 9 and hold for at least 3 seconds.4. When the confirmation screen appears, press 1 (Yes) to clear all records from the Caller ID log.

<p><i>Saving a Caller ID record to the Directory</i></p>	<ol style="list-style-type: none"> 1. Press MENU until you reach the screen containing the Caller ID function. 2. Select Caller ID from the list of menu options. 3. Scroll through the Caller ID records until the desired entry appears. 4. Press 6 to save the Caller ID information to the Directory. 5. Press 1 to save to the System Directory or 2 to save to the Personal Directory.
<p><i>Dialing from the Directory</i></p>	<ol style="list-style-type: none"> 1. Press MENU until you reach the screen containing the Directory function. 2. Select Directory from the list of menu options. 3. Press 1 to reach the System Directory or 2 to reach the Personal Directory. 4. Select the desired Directory category (2 - ABC, 3 - DEF, etc.). 5. Locate the desired Directory entry. 6. Press 5 to dial the number.

<p><i>Manually adding an entry to the Directory</i></p>	<ol style="list-style-type: none"> 1. Press MENU until you reach the screen containing the Directory function. 2. Select Directory from the list of menu options. 3. Press 1 for the System Directory or 2 for the Personal Directory. 4. Press 0 to add an entry. 5. Use the keypad to enter the desired name. Example: To enter the name "Tim" - <ul style="list-style-type: none"> • Press 8 one time to add "T" • Press # to advance to the next space • Press 4 three times to add "I" • Press # to advance to the next space • Press 6 one time to add "M" • Press END when finished. 6. Press END.
<p><i>Deleting an entry from the Directory</i></p>	<ol style="list-style-type: none"> 1. Press MENU until you reach the screen containing the Directory function. 2. Select Directory from the list of menu options. 3. Press 1 for the System Directory or 2 for the Personal Directory. 4. Select the desired Directory category. 5. Locate the desired Directory entry. 6. Press 9 to delete the record from the Directory.

Conference Calling Features

The HWN500 allows up to 11 parties to participate in a conference call at the same time (assuming all 4 lines and the Controller E-Jack are used).

<i>Initiating a Conference Call</i>	<ol style="list-style-type: none">1. Place all parties on hold.2. Press MENU until you reach the screen containing the Conference function.3. Select Conference from the list of menu options.
<i>Adding another member to a Conference Call</i>	<ol style="list-style-type: none">1. Place all parties on hold.2. Press MENU until you reach the screen containing the conference function.3. Press 1 to add a member.4. Press # to scroll through the available parties.5. When the desired party is highlighted, press 0 (OK) to add the party to the conference.
<i>Dropping out of a Conference Call</i>	<p>Press END.</p> <p>Note: The last internal extension to drop out of a Conference Call will terminate the conference.</p>
<i>Dropping another member from a Conference Call</i>	<ol style="list-style-type: none">1. During a Conference Call, press MENU until you reach the screen containing the Conference function.2. Select Conference from the list of menu options.3. Press 2 to drop a member.4. Press # to scroll through the available members.5. When the desired member is highlighted, press 0 (OK) to drop the member from the conference.

<i>Adjusting the handset volume</i>	<ol style="list-style-type: none">1. Press MENU until you reach the screen containing the Volume function.2. Select Volume from the list of menu options to adjust the handset volume up and down.
<i>Adjusting the Ringer Volume</i>	<ol style="list-style-type: none">1. Press MENU until you reach the screen containing the Ringer volume.2. Select Ringer from the list of menu options to adjust the handset volume up and down.
<i>Scrolling through the menus</i>	When in menu mode, press END to return to the previous screen.
<i>Locating a misplaced handset</i>	<p>Option 1</p> <p>Call the missing extension from another handset. This option causes the called handset to ring. Example: To locate extension 12, press "12."</p> <p>Option 2</p> <p>If you don't know the extension number of the missing handset, you can use another handset to cause all handsets in the network to ring.</p> <ol style="list-style-type: none">1. Press MENU until you reach the screen containing the Extensions menu item.2. Press 7 (Extensions).3. Scroll through the displayed items until "Ring all" is highlighted.4. Press 0 (Ring all).

Note: If you subscribe to optional line calling services available from your phone company, the HWN500 allows you to take advantage of them as described below.

Optional line calling features includes services such as Call Waiting, Caller ID, Distinctive Ringing, Call Forwarding, etc.

Caller ID	All HWN handsets in the network will display available Caller ID information, unless inbound ringing for the line handling the call has been disabled for a particular handset.
Call Forwarding	All calls to your phone number will be forwarded as specified.
Call Waiting	<p>If you are on a call and another call comes in on that line, you will hear a Call Waiting tone on your handset .</p> <p>To answer the waiting call, press FLASH. Your original call will be placed on hold. Press FLASH again to return to your original call. You can then toggle between the two calls using FLASH.</p> <p>If you have Caller ID w/Call Waiting, the Call Waiting party's Caller ID information will appear on the handset display.</p> <p>Note: If you have disabled inbound ringing on your handset for a particular line and a Call Waiting signal is sent on that line, you will not hear the Call Waiting tone on your handset.</p>
Distinctive Ringing	All handset in the network will ring with the phone company distinctive ringing pattern, UNLESS you have selected a different distinctive pattern for a particular extension via the Setup menu.

<i>Voice Mail</i>	<p>If the Voice Mail feature is activated on your system and a voice mail “message waiting signal” is sent by the telephone company, all HWN handsets in the network will display a “Message Waiting Line x” message when on the Idle screen.</p> <p>Note: For information on activating the Voice Mail feature on your HWN500, see the Network Reference Manual that accompanied the Controller.</p>
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Regulatory Information

Information for general telephones

1. This equipment complies with Part 68 of the FCC rules. On the bottom of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.
2. The applicable registration jack (connector) USOC-RJ11C is used for this equipment.
3. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant. The FCC compliant telephone cord and modular plug is provided with this equipment.
4. The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.
5. If your equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advanced notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.
6. The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.
7. If trouble is experienced with this equipment, for repair or warranty information, please contact the Home Wireless Networks Customer Service Center at 1-888-WHY-WIRE. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.
8. All repairs will be performed in an authorized Home Wireless Networks service station. This equipment cannot be used for party lines or coin lines.
9. This equipment is hearing aid compatible.

For telephone equipped with automatic dialers

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

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

Caution

You are cautioned that any changes or modifications not expressly approved in the product documentation could void your authority to operate this equipment.

Interference Information

Some telephone equipment generates, uses, and can radiate radio frequency energy, and if not installed and used properly, may cause interference to radio or TV reception.

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 to 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.

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

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

Warranty Information

Warranty Statement

Warranty Instructions

Return Instructions

Wall Mounting Instructions

Charger Wall Mounting Instructions

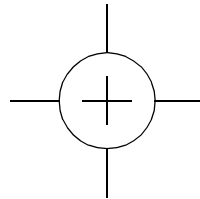
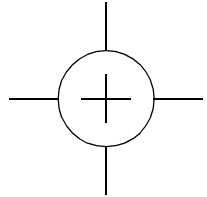
Use the template at the end of this manual to help position the charging cradle on the wall.

Procedure

- 1.** Locate a wall stud in the area where you want to mount the handset charging cradle.
- 2.** Hold the template against the wall with the crossmarks centered on the stud and mark through the center of each crossmark with a pencil or other sharp-pointed object.
- 3.** Insert the mounting screws through the wallboard and into the stud at the marked locations. Leave enough of the screw protruding to hold the charging cradle.
- 4.** Connect the handset AC adaptor to the charging cradle and route the adaptor cord through the channel in the base.
- 5.** Position the charging cradle against the wall so the mounting screws align with the holes on the underside of the unit.
- 6.** Slide the charging cradle down until it seats firmly on the mounting screws. See the following illustration.

Charging Cradle

Wall Mounting Template



Use this template when mounting the Handset Charging Cradle on a wall.

To mark the positions of the mounting screws, hold the template against the wall with the crossmarks centered on a wall stud. Push a pencil or pen point through the center of each crossmark to mark the wall.



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