



SpectraLink 8002 Wireless Telephone and Accessories

User Guide

Session Initiation Protocol (SIP)

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About this Guide

Thank you for choosing the SpectraLink 8002 Wireless Telephones with Session Initiation Protocol (SIP). This unit provides business telephony features and functions such as multiple call appearances, call hold, transfer, and conference over an IP network.

In this User Guide, you will find everything you need to quickly use your new handset. Be sure to verify with your system administrator that your network is prepared for configuring your SpectraLink 8002 Wireless Telephones. As well, be sure to read the *Parts List* and *Safety* sections in this guide before you set up and use the SpectraLink 8002 Wireless Telephone. This information can also be found at http://www.polycom.com/usa/en/support/voice/wi-fi/spectralink_8002_wireless.html.

Polycom Model Numbers

This document covers the following registered model numbers:

SNP2400 (wireless telephone)

BPE100 (Battery Pack)

DCE100 (Desktop Charger)

TDE200 (Dual Charger)

Related Documents

SpectraLink 8002 Quick Reference Guide (1725-36026-001)

SpectraLink 8002, e340, h340, i640 Regulatory Information
(1725-36086-001)

Available at

http://www.polycom.com/usa/en/support/voice/wi-fi/spectralink_8002_wireless.html

Customer Support

Please contact your facility's Network Administrator for support.

You may also access the Polycom Knowledge Base at:

<http://www.polycom.com/usa/en/support/voice/voice.html>

Icons and Conventions

This manual uses the following icons and conventions.



Caution! Follow these instructions carefully to avoid danger.



Note these instructions carefully.

Label

This typeface indicates a key, label, or button on SpectraLink hardware.

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Getting Started

SpectraLink 8002 Wireless Telephone Overview

SpectraLink 8002 Wireless Telephones are mobile handsets for workplace IP telephone systems. The handsets operate over an 802.11b wireless Ethernet LAN providing users a wireless voice over IP (VoIP) extension. By seamlessly integrating into a SIP environment, handset users are provided with high-quality mobile voice communications throughout the workplace. The handset gives users the freedom to roam throughout the workplace while providing the features and functionality of a SIP desk phone.

The handsets reside on the wireless LAN with other wireless devices using direct sequence spread spectrum (DSSS) radio technology. The handset radio transmits and receives packets at up to 11 Mb/s.

In the SIP environment, the handsets support up to three proxy servers, sometimes referred to as PBX's. Each handset may have five line appearances and two calls per line. Each handset may have multiple sets of credentials to identify itself by current user.

The SpectraLink 8002 Wireless Telephone is a lightweight, durable handset specifically designed for mobile workplace use within a facility using SIP and an 802.11 wireless LAN. The handsets are to be used on-premises; they are not cellular or satellite phones.



Install and charge the Battery Pack before using the SpectraLink 8002 Wireless Telephone. See *Battery Packs* and *Chargers* sections below.

Parts List

The following components are included in your SpectraLink 8002 Wireless Telephone package:

- SpectraLink 8002 Wireless Telephone
- Battery Pack model BPE101
- Desktop Charger model DCE101 [or]
Dual Charger model DCE201
- Power supply for Charger

Battery Packs

The handset will need to have its Battery Pack recharged periodically. The Nickel Metal Hydride (NiMH) rechargeable handset Battery Pack gives you four hours of talk time or 80 hours of stand-by time. Stand-by time is when the handset is turned on, but not in an active call.

Indications of low battery

The handset will notify you when the charge on the Battery Pack is low by displaying the battery icon. If you are in a call you will hear a soft beep through the earpiece every thirty seconds. User has 15–30 minutes of battery life left. The alerts will increase to every six seconds when there is about one minute of battery life left.

Not in call: The message Low Battery and a loud beep indicate a critically low Battery Pack charge. These occur when the user is not in a call. The handset will not work until the Battery Pack is charged.



Take care not to short the battery contacts on the Battery Pack with metal objects such as coins, keys or paper clips. Shorting the contacts can cause permanent damage.

Battery Pack removal and replacement

To remove, press down on the latch on the Battery Pack on the back of the handset. The Battery Pack releases outward.

To replace, slide the lip of the Battery Pack into the bottom of the cavity. Push the top of the Battery Pack until it snaps into place. You should not have to force it against the handset.



The Battery Pack for the SpectraLink 8002 Wireless Telephones has a rounded shape and is black, catalog number BPE101. Use only this model Battery Pack in the SpectraLink 8002 Wireless Telephone.



Only use Polycom Battery Packs with SpectraLink 8002 Wireless Telephones.

Do not dip the Battery Pack in water or throw into 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.

Installing the Charger

Your SpectraLink 8002 Wireless Telephone is packaged with one of two Charger models. The Desktop Charger will charge a single handset with an installed Battery Pack. The Dual Charger will charge the handset and a spare Battery Pack.

Place the Charger on a flat, horizontal surface. Plug the power supply into the Charger and into an appropriate wall outlet. The user must end any call in progress by pressing the **End Call** key on the handset before placing it into the Charger. Handsets may be charged while on hook or while turned off.

While the handset is charging while on hook, it will display its extension number and **Charging...** as well as an animated battery icon in the display's upper right corner. The handset is fully operational and will ring if called. When the handset is charging while turned off, only **Charging...** and the animated battery icon will display and no calls will be received. Note that during the handset charging cycle, the **Charging...** dots will be racing. When the handset is fully charged, **Charge Complete** will display.

Desktop Charger

The Desktop Charger will charge a single handset with an installed Battery Pack. Place the handset in the Desktop Charger facing forward. When the handset is placed correctly, the red indicator light will come on. The indicator light will not come on when the slot is empty, when the handset is improperly seated, or when the Desktop Charger has no power applied. The indicator light will remain on until the handset is removed.

Dual Charger

The Dual Charger is designed to charge the Battery Pack in the handset and also charge an additional Battery Pack in the rear charging bay. The handset has charging priority when both slots are occupied. Place the handset in the front slot, facing forward. The Battery Pack alone snaps into the rear charging bay. The LED indicates the status of the Battery Pack in the rear bay.

When the handset is fully charged or is removed, the Battery Pack will begin charging. Note that the time it takes for the Battery Pack to charge will be lengthened if its charging cycle is interrupted by the placement of a handset in the front slot.

Features of your SpectraLink 8002 Wireless Telephone



1. **Earpiece** – Delivers audio to the ear.
2. **Display** – Offers a top row of icons showing the status of the handset, two 16-character lines of text and a bottom row for available softkey labels.
3. **Softkeys** – Four softkeys in two rocker-style softkey buttons. A softkey label appears in the display area just above the corresponding softkey when the function assigned to that softkey is available.
4. **On hook** – Also referred to as Power Off and End Call.

5. **Microphone** – Sensitive microphone transmits voice accurately and without distortion.
6. **Battery contacts** – Located along the bottom edge, the battery contacts enable the handset to be charged in the Desktop Charger and in the front slot of the Dual Charger. They should be kept clean and free of debris.
7. **Keypad** – 12 keys provide the 10 digits 0-9, the alphabetic characters, and special characters available in context-sensitive applications.
8. **Off hook** – Also referred to as Power On and Start Call.
9. **Up/Down and Select**
 - Up/Down – Use these buttons to scroll through menu options. Use to adjust speaker volume while in a call.
 - Select – Use the middle button to select menu options.
10. **Headset jack** – Allows you to place and receive calls through an optionally connected headset.
11. **Left/Right scroll** – Used when entering text or in custom applications.
12. **FCN** – Press to access system functions.
13. **LINE** – Press to access additional line appearances.
14. **MENU** – Press to open a menu of special options.

The Handset Display

Overview

When active, the handset screen has six rows that display information in this format:

Row #	Information provided
1	Icons
2	Line number
3	Instructions
4	Call one info
5	Call two info or dial aids
6	Softkeys

Row 1 displays signal, battery, voicemail and line number icons. Row 2 displays the line number of the line for which information is being displayed. Row 3 displays instructions where needed. Two calls are permitted on each line. Row 4 displays information for call one and row 5 displays information for call two. Row 5 is also used to provide dialing aid for call one. Row 6 displays available softkeys.

Alphanumeric

The SpectraLink 8002 Wireless Telephones support a two to four line display of up to 19 alphanumeric characters. Display information provided by the proxy server when the handset is off-hook, such as calling party identification, will be processed and put on the handset display.

Line indicators

The line indicators on the handset will convert to a solid or flashing number to indicate the line is in use or ringing. The number or text associated with the line is displayed on the handset by pressing the **LINE** key.

Signal strength

The signal-strength icon indicates the strength of the signal from the AP and can assist the user in determining if the handset is moving out of range. It is always present on the display in the upper left corner.

Battery charge

The battery icon indicates the amount of charge remaining in the Battery Pack. There are three levels and when only one level remains, the Battery Pack needs to be charged. It is always present on the display in the upper right corner.

Voicemail

The voicemail icon is activated whenever any of the specified mail contacts (see SIP configuration files) sends notification to the handset that new messages are available. By activating the **LINE** menu, and observing which lines are flagged with a plus (+) sign, the user can determine which proxy has outstanding mail.

The system administrator defines access to voicemail.

Download

Indicates that the handset is checking for or downloading code. This icon only appears while the handset is running the over-the-air downloader. It appears to the right of the signal-strength icon in the same location as the voicemail icon.

Ringling and tones

The ringing type (normal or vibrate) is selected by the handset user. The audible and vibrating ringer on the handset will follow the protocol command provided by the PBX via the proxy server if the user selects **PBX** cadence described in the *User-defined Preferences* section.

Audio features

Speakerphone features are not available on the 8002 handset.

Handset Modes

Standby mode (on-hook)

In standby mode, the handset is waiting for an incoming call or for the user to place an outgoing call. The extension number is shown on the display and there is no dial tone. In this mode, the handset is conserving battery power and wireless LAN bandwidth.

When an incoming call occurs, the handset will ring, and the handset enters the active mode until the call is answered by pressing the **Start Call** key or the **Answ** softkey. The handset will ring according to user preference as specified in the standby menus. The ringing can be silenced by pressing the **End Call** key. If you do not wish to accept the call, press the **Rej** softkey. The SIP server (if present) will redirect the call as configured by the system administrator, often to voicemail. (Treated like the handset is busy.)

Active mode (off-hook)

The handset is in the active mode when an incoming call is answered or when it is in communication with the SIP server without being in an active call.






When an incoming call occurs during an active call, the handset will play the second call ringing sound until the call is answered, the caller hangs up, or the call transfers to voicemail. If **End Call** is pressed, the first call is terminated and the handset reverts to a full ring.

The active modes utilize the most bandwidth and battery power. To conserve these resources, return the handset to the standby mode when a call is completed by pressing the **End Call** key.

Messaging mode

If text messaging functions have been programmed, as in a nurse call system, the handset is able to receive text messages. While these messages are being accessed, the handset is in messaging mode. Incoming calls will ring with the second call ringing sound.

Handset Icons

Indicator	Function
	The signal-strength icon indicates the strength of the signal and can assist the user in determining if the handset is moving out-of-range.
	The voicemail icon is activated when a new voicemail message is received if the feature is supported by the proxy server.
	The battery icon indicates the amount of charge remaining in the Battery Pack. When only one level remains, the Battery Pack needs to be charged.
	Up and down arrows are displayed when the menu has additional options above or below. Left or right arrows are displayed during editing when the cursor may be moved left or right.
Locked	Locked indicates that the keypad is locked to prevent accidental activation. Use the Unlk softkey plus the # key to unlock it.
[No Service message]	If warning tones are not disabled, an alarm will sound and a descriptive message displays when the handset cannot receive or place calls. You may be outside of the covered area. Walk back into the covered area. The in-service tone indicates service is reestablished.
	The download icon indicates that the handset is downloading code. This icon only appears while the handset is running the over-the-air downloader. It appears to the right of the signal strength icon in the same location as the voicemail icon.

Softkeys

Softkey functions change as the state of the handset changes. Softkeys are displayed only when they are available to be activated. Softkeys make usual PBX functions available on the handset. For example, a call may be placed on hold, the handset may be muted, and a second line may be activated for an outgoing call or a second call on the same line may be answered. Calls may also be transferred to another number, either as a consulted transfer or without consult. Other handset features (DND, Transfer) may be accessed by pressing the **FCN** key.

Number dialing may be specified as alpha or numeric code by pressing **Start Call** plus the **MENU** key. Select **Alpha Dialing** if letters and symbols are to be entered in the dialing string.

Softkey	Name	Displayed during...	Press to...
Answ	Answer	Incoming call on the selected line.	Answer the call (equivalent to START key).
Bksp	Backspace character	Entering a dial number.	Delete the character prior to the cursor position.
Back	Back one screen	Displaying a menu.	Exit the menu.
Dial	Dial Call	A dial number is being entered on the selected line.	Initiate a phone call to the entered dial number.
End	End Call	An active call on the selected line.	Terminate the call without going back to standby mode.
Favr	Favorites	Prior to entering the first character of a dial number.	Activate the Favorites menu.
Fwd	Forward Definition	Prior to entering the first character of a dial number.	Delete a previously defined forward destination. Or initiate definition of a new forward destination.
Hold	Hold	In an active call.	Place the call on hold. The line status shows x when the call is on hold or * when audio is flowing.
Msg	Message	Initial dial screen when new line is selected and a dial tone is active prior to entering first character of the number to be dialed ¹ .	Initiate a call to the specified message center contact address for retrieval or administration of voicemail.

¹ Appears only if the PROXYn_MAIL_NOTIFY is configured. A message center contact address must be defined for the proxy used by the selected line.

Softkey	Name	Displayed during...	Press to...
Mute	Toggle muting	In an active call.	Toggle audio transmission to the far end. The line status shows * when not muted or x when muted.
OK	OK	Power up registration if username is not configured in admin menu.	Send the username and password to the SIP server for authorization to register the handset.
Redl	Redial	Prior to entering the first character of a dial number.	Redial the last number that was dialed.
Rej	Reject	Incoming call on the selected line.	Reject the incoming call. The SIP server will then redirect the call elsewhere.
Resm	Resume	In an active call and you have placed the call on hold or in standby mode if any call is on hold.	Resume a call that was previously placed on hold or that went on hold when another line was activated.
Save	Save	Entering a dial number as a forward destination.	Save the dial number as the forwarding destination for the selected line.

Menus

Menus are lists of options that appear when its activation key is pressed. There are five menus: Line, Favorites, Function (FCN), MENU display, and Standby.

Line menu

The Line menu allows you to activate a call on a selected line or to view the status of lines.

View the five line appearances by pressing the **LINE** key. The line number and extension number of the first four lines are displayed. Press the **LINE** key again to view the fifth line. Active lines are in bold face. Defined but unregistered lines are faded. Lines that have been forwarded are prefixed with the greater-than character (>) followed by the forwarding destination.

Pressing the **LINE** key from the active mode displays a menu of line appearances as programmed in the SIP TFTP configuration file. The **LINE** key can be pressed while the handset is in the standby mode to activate the handset and to activate a new call on the selected line.

The currently selected line is indicated by an asterisk (*). Lines for which the corresponding proxy server has outstanding new mail are flagged with plus (+) characters. Lines that should be registered to a proxy but have failed registration for any reason are displayed in faded text and are not selectable from the menu.

Exit the **LINE** display by pressing a line number key to start a new call on the selected line and put any other call on hold, or by pressing the **End Call** key to exit without starting a new call. Press the **More** softkey to page through additional items on the Line menu.

Pressing the **LINE** key from the active mode displays a list of line appearances as programmed in the SIP TFTP configuration file. The line appearances are mapped to corresponding line icons. The **LINE** key can be pressed while the handset is in the standby mode to activate the handset.

The currently selected line is indicated by an asterisk (*). Lines for which the corresponding proxy server has outstanding new mail are flagged with plus (+) characters. Exit the **LINE** display by pressing a line number key or by pressing the **End Call** key. The **LINE** display may be used during a call to examine the status of other lines while you

are participating in a voice call on another line. If the **Rsm** (resume) softkey is pressed to activate a call on a newly selected line, any previous active call is placed on hold status.

Favorites menu

The Favorites menu provides access to a predefined list of dial numbers. The list is programmed by the system administrator and may include generic or specific entries. For specific entries, the user must provide a list of numbers to the system administrator for programming. Numbers on the Favorites list cannot be programmed in or through the handset by the end user.

The Favorites list can include either complete dial numbers for named parties or partial numbers that need additional data entry. Here is a partial entry example: If a PBX feature access code for call forwarding is defined in the Favorites list but you need to add the forwarding destination information before sending the call to the PBX to activate the feature.

To access the Favorites list, while in a dialing state press the **Favr** softkey to display a menu of pre-defined numbers or names that can be dialed (as programmed in the SIP TFTP configuration file.) When an item is selected from the list, the dial number is displayed. You may edit or add digits to the displayed number if necessary before pressing **START** to place the call. When using the Favorites menu to perform a blind transfer to someone on the list, select an entry from the Favorites menu and then press **FCN** and select **Transfer**.

FCN menu

Pressing the **FCN** key from the active mode displays a list of telephony options available to the user. Included here are transfer and do-not-disturb functions.

The FCN menu is accessible while in the active mode and provides these features:

Transfer

Do Not Disturb

Set/Clear Forward

<OAI>

<OAI>

<OAI>

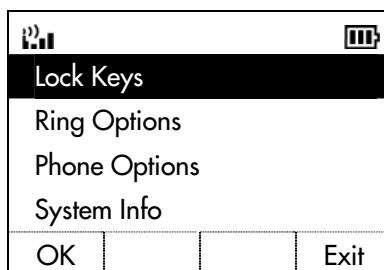
Items on this menu are accessible through navigation and selection keys or through short-cut keys as displayed with the menu items. OAI functions are automatically added as items at the end of this menu when defined on an OAI server.

MENU display

Pressing the **MENU** key from the active mode displays options available for the operating mode of the handset. The currently available options set the data entry mode during dialing (and during entry of a forwarding number) to either numeric only or alphanumeric mode.

Standby menu

While in the standby mode, press and hold **FCN** briefly to open the user options menu. See Chapter 2 for full information about this menu.



Using the Navigation Keys

A combination of navigation buttons and softkeys allows you to navigate easily in the menus.

- Up/Down** buttons: display previous/next menu item.
- Select** button: selects the menu item or option.
- OK** softkey: selects 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)

Alphanumeric Dialing

The carat (^) indicates the insertion point for the next character. Up to 80 characters may be entered with automatic scrolling. While in alphanumeric mode, alphabetic characters can be entered by repeatedly pressing the 1 through 9 keys. Punctuation characters are available by repeatedly pressing the asterisk (*), zero (0) or pound (#) keys. Row 5 displays the available characters as the key is pressed. Pausing will enter the highlighted character in the dial string. A space character is available on the pound key or by pressing the >> softkey when the insertion point is at the end of the dial string. The << and >> softkeys may be used to position the insertion point for editing the entry. Press the **Dele** softkey to delete the character prior to the insertion point. Insert a character by pressing its key.

By default, the username assigned to the line one appearance is displayed on the standby screen.

Customizing your SpectraLink 8002 Wireless Telephone

When the handset is in standby mode (on but not in use), press and briefly hold **FCN** to display the standby menu which allows you to set user options.

Check with your system administrator for specific features supported by your handset.

The Standby Menu

Standby Menu Items	2 nd Level	3 rd Level	4 th Level
Lock Keys			
Ring Options	Telephone Ring	Ring Cadence	Off *PBX Continuous Short Pulse Long Pulse
		Ring Tone	*Tone 1 Tone 2 Tone 3 Tone 4 Tone 5
		Vibrate Cadence	*Off PBX Continuous Short Pulse Long Pulse
		Ring Delay**	*No Delay 5 Second Delay 10 Second Delay

Standby Menu Items	2 nd Level	3 rd Level	4 th Level
	Auxiliary Ring 1	[same as Telephone Ring]	
	Auxiliary Ring 2		
Phone Options	Noise Mode	*Normal High Severe	
	Key Tones	*Enable Tones Disable Tones	
	Warning Tones	*Enable warnings Disable warnings	
	Display Contrast	Contrast %	
	Keypad Autolock	*Disable 5 seconds 10 seconds 20 seconds	
System Info	Phone IP Addr		
	Server IP Addr		
	Firmware Version		

* *Default setting.*

***Option appears when Ring Cadence and Vibrate Cadence are both set to a value other than “Off”.*
(Additional options may be present. Contact your service representative for information.)

Lock Keys

When enabled, the Keypad Lock option will lock the keypad immediately. If the keypad is locked, it may be unlocked by the end user pressing the **Unlk** softkey and then the **#** key.

Ring Options

The Ring Option allows the user to set the ring for three separate functions. Telephone ring is used for usual telephony functions. The Auxiliary Rings may be used to set different ringing patterns for OAI applications.²

² OAI applications are custom features that vary by facility. Please contact your system administrator for more information about custom features available in your facility.

Telephone Ring

Telephone Ring allows the user to set a distinctive ring style, volume and sequence. Select from an audible ring or a vibrate-only ring or a vibrate ring along with or followed by an audible ring.

Ring Cadence The Ring Cadence is the rhythm of the ring. It may be set to a pre-programmed ring cadence, or it may be set to obtain its cadence from the proxy server. The PBX option is designed to utilize any distinctive rings sent by the proxy server while allowing the user to set unique rings for auxiliary applications.

Off: Silent

PBX: Proxy server determines ring cadence (e.g. the proxy server may send rings that differentiate between internal and external calls)

Continuous: Rings continually until answered

Short Pulse: Rings in short bursts

Long Pulse: Rings in long bursts

Ring Tone Select from five available tones (scroll to Tone 5 option). The Play softkey allows the user to preview the tone before selecting. If Ring Cadence is turned off, the Ring Tone option will not appear on the menu.

Vibrate Cadence Vibrate Cadence options are the same as for Ring Cadence (see above).

Ring Delay Ring Delay determines how long the vibrate cadence will play before the audible ring starts. If Ring Cadence and Vibrate Cadence are turned off, the Ring Delay option will not appear on the menu.

Auxiliary Ring 1 and Ring 2

Auxiliary rings are designed to be utilized by OAI applications, enabling the user to set a distinctive ring for these applications.

Phone Options

Noise Mode

Provides options that describe the noise level in your environment. Changing this mode to **High** or **Severe** adjusts the handset's microphone and in-ear speaker volume to account for background noise. Select **Normal** for most office environments; **High** for moderate background noise; or **Severe** for extremely noisy conditions. If you use **High** or **Severe** modes in a quiet environment, the person on the other end of the line may find it difficult to hear your voice.

Key Tones

Key Tones may be turned on or off and determine whether tones play when keys are pressed. Key Tones are enabled by default.

Warning Tones

The handset plays various Warning Tones such as system up or down, out of range, etc. These tones may be turned on or off and are enabled by default.

Display Contrast

The display may need to be adjusted for different lighting situations. Contrast may be set by pressing the **Up** and **Down** side buttons until the desired contrast is displayed and then pressing the **OK** softkey.

Keypad Autolock

The handset may be set to lock the keypad automatically when in standby mode. The automatic locking function of the keypad may be disabled (the default) or adjusted for a 5, 10 or 20-second delay before locking.

System Info

Phone IP Addr

Displays the IP address currently assigned to the handset.

Server IP Addr

Displays the IP address of the SpectraLink OAI Server (if installed).

Firmware Version

Displays the software version running the handset. The MAC address is the hardware identification number and is set at the factory. Three code numbers correspond to the three files that each version uses.

Downloader: pd11gl3.bin

Functional: pd11wsd3.bin

Phintl: pi110001.bin

Using the Basic Features of Your SpectraLink 8002 Wireless Telephone

Your SpectraLink 8002 Wireless Telephone is designed to be used like a cell phone on a public switched telephone network (PSTN). You can place calls, transfer a call to someone else, or conduct a conference call.³

At any time, at most one active call may be in progress on your phone. The active call is the one that has audio associated with it. There may be multiple other calls:

- On hold
- In an “Incoming call” or “Ringing” state

This chapter provides basic operating instructions for the SpectraLink 8002 Wireless Telephone. This chapter contains instructions on:

- Turn the handset on and off
- Lock and unlock the keypad
- Place and answer a call
- Place a call on hold
- Mute/unmute a call
- Silence the ring
- Set and clear Call Forwarding
- Set and clear Do Not Disturb
- Redial last number dialed
- Adjust headset volume
- End the call

³ The SpectraLink 8002 Wireless Telephone requires the infrastructure of your facility to operate. Contact your system administrator if you have questions about your facility's boundaries.

Turn the handset on

Press and hold the **END** key until two chirps sound.

Turn the handset off

Press and hold the **END** key. One chirp will sound. If you are in a call, hang up first, then turn off the handset.

Unlock the keypad

Press the **Unlk** softkey, then **#**.

Lock the keypad

While in standby mode press **FCN**, then **Select**.

Place a call

1. Press the **START** key and wait for a dial tone.
2. Dial the numbers and press the **START** key. Listen for the ring to indicate the alerting of the called party.

Note: Line 1 is the default line

Example:

1			
Line 1 [your dial number]			
*To: [dialed number]			
Hold	Rej		Mute

Answer a call

When the handset rings, the line's icon will flash and row 2 will display the line number and your dial number. Row 4 will display **Fr** (From) and the caller ID of the incoming call.

1. Press the **Start Call** key or the **Answ** softkey to answer the call.
or
2. Press **Rej** to reject the call and allow the SIP server to redirect the call elsewhere, usually to voicemail.

Example:

1	Line 1 [your dial number]		
	Fr: [caller ID]		
Answ	Rej		

When the call is answered an asterisk (*) displays at the start of row 4 which indicates that this line is in an active call with established audio connection. The softkeys for **Hold** and **Mute** appear.

Example:

1	Line 1 [your dial number]		
	*Fr: [caller ID]		
Hold		Mute	End

Place a call on hold

Press the **Hold** softkey.

When a call is placed on hold, an equal character (=) replaces the asterisk (*) and the **Rsmc** softkey displays.

Example:

1	Line 1 [your dial number]		
=Fr:	[caller ID]		
Rsmc		Mute	End

Mute/Unmute a call

Press the **Mute** softkey. When the handset is muted, an x character replaces the asterisk (*). Press the **Mute** softkey again to restore audio pickup.

Silence the ring

Press the **END** key to silence the loud ring and convert to in-ear ringing.

Loud ringing will resume when the next incoming call is received while the handset is in standby mode.

Forward all calls

Calls may be forwarded on a per-line basis. The **LINE** display will indicate if a line is forwarded by a > character followed by the destination address. If any line is forwarded, the standby screen will display forwarding status. If the do-not-disturb feature is enabled, the forwarding status will be pre-empted by the **Do Not Disturb** display.

1. Press **LINE** + [the line number].
2. Press the **Fwd** softkey and enter the forwarding destination.
3. Press the **Save** softkey to save the forwarding destination.

If a given contact number has multiple appearances on the handset, forward the lowest line appearance to forward all calls to that number on any line appearance.

Clear forwarding on a line

1. Press **LINE** + [the line number],
2. Press the **Fwd** softkey and enter the forwarding destination.
3. Press the **Fwd** softkey again.

Do Not Disturb (reject all incoming calls)

Press **FCN 2**. The handset will not ring for new incoming calls.

When the do-not-disturb feature is enabled, the standby screen will display **Do Not Disturb**.

Clear Do Not Disturb

Press **FCN 2** again to resume ringing.

Redial the last number you dialed

1. Press **START**.
2. Press **Redl**.
3. Verify that the displayed number is the one you want and the line # is valid.
4. Press **START**.

Adjust the headset volume

While the headset is plugged in, press the up/down volume buttons on the side of the handset during the call.

End the call

Press the **END** key to return to the standby mode.

Turn on the 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 if another key is not pressed within that period.

Using the Advanced Features of Your SpectraLink 8002 Wireless Telephone

This chapter provides operating instructions for the advanced features of the SpectraLink 8002 Wireless Telephone. This chapter contains instructions on:

- Multiple line appearances
- Using the Favorites menu
- Transferring calls (blind and consulted)
- Listening to voicemail
- Activating OAI custom feature applications

Place a second call on the same line

Only outgoing calls are permitted as the second call on a given line. If there is an incoming call to the number assigned to the line, the caller will get a busy tone and be routed to voicemail or to the second appearance of that call number if defined.

1. To access the second call dial tone, press **LINE** + [the line number].
2. Dial the number to place the second call. When a second call is active on the same line appearance, the second call appears below the first on the handset display.
3. Use **LINE** + [the line number] to toggle between calls. The selected call is in bold type the other call is faded.

Example:

The following example shows an active incoming call as call one on line 1 (Fr or From) and an outgoing call on hold as call two on line 1 (To). The bold text on row 4 indicates that call one is the currently selected call and that any softkeys or menu functions will apply to call

one. The asterisk (*) on row 4 indicates that audio is currently flowing for call one.

1			
Line 1 [your dial number]			
*Fr: [caller ID of caller]			
=To: [number you dialed]			
Hold		Mute	End

Place a call on a different line

1. Press **START** and listen for dial tone and then press **LINE**.
or to predial the number just press the **LINE** key
2. Navigate to desired line and press **Select**.
3. Dial the number.
4. Press the **Dial** softkey or **START** to initiate the call.

Place a call from Favorites menu

1. Press **START**.
2. Listen for dial tone.
3. Press **Favr** softkey.
4. Use the side buttons to find and select desired entry.
5. Edit entry if needed.
6. Press **START** to place the call.

Answer a call on a second line

If another call comes in on a different line, the called line icon flashes and a tone sounds in the audio stream. In this example, a call is coming in on line 2 and the line 2 icon is flashing.

Example:

In this example, a call is coming in on line 2 and the line 2 icon is flashing.

1	2	Line 1 [your dial number]	
*Fr: [caller ID]			
Hold		Mute	End

1. To view the caller ID of the incoming call without interrupting the active call, press **LINE** + [the line number]. The display now shows information about the incoming call and you will continue hearing audio on the first call.

Example:

1	2	Line 2 [your dial number]	
Fr: [caller ID]			
Answ	Rej		

2. Press **Answ** or **START** to answer the incoming call and place the active call on hold. Pressing the **Rej** softkey will redirect the incoming call to voicemail or as otherwise programmed.

Transfer a call (blind)

1. While in a call, press **FCN** and then select **Transfer** (or press the shortcut key 1). (The current call will be placed on hold). A new call will be started and you will hear a dial tone.)
2. Press the digits for the number to which you wish to transfer the call or press the **Favr** softkey and select an entry from the Favorites menu.
3. Press **FCN 1** again. The call will be transferred to the number that you have entered and your call will be disconnected.

Transfer a call (consulted)

1. While in a call, press **FCN** and then select **Transfer** (or press the shortcut key 1). (The current call will be placed on hold. A new call will be started and you will hear a dial tone.)

2. Press the digits for the number to which you wish to transfer the call or press the **Favr** softkey and select an entry from the Favorites menu.
3. Press **Dial** to establish a second call.
4. When the party answers, have your conversation and then press **FCN 1** to transfer the held call and disconnect the first call and return to standby mode.

Transfer a call to another call already on Hold

1. While in a call, press **FCN** and then select **Transfer** (or press the shortcut key 1). The current call will be placed on hold and you can converse with the party on the second line.
2. Have your conversation and then press **FCN 1** to transfer the held call and disconnect the first call and return to standby mode.

Listen to voicemail

When any proxy has outstanding messages, the voicemail icon will display. The **LINE** menu will display a plus (+) indication when there is a new voicemail for that line. Indications are cleared when the handset receives notification that all new voicemail messages have been read.

1. Dial the number assigned to message retrieval and follow system instructions to retrieve messages.
2. Alternately, if a **PROXYn_MAIL_ACCESS** value has been configured for the corresponding proxy, the voicemail system can also be accessed by pressing the **Msg** softkey, which will appear after selecting a line and before beginning to dial.

Activate a registered OAI application on an OAI server

1. Press **START**.
2. Press **FCN**.
3. Navigate to desired OAI function using **Up** and **Down** buttons.
4. Select the OAI function using the **Select** button or shortcut key.

Charger Options

Overview

The SpectraLink 8002 Desktop Charger is a one-slot charger designed to charge the SpectraLink 8002 Wireless Telephone with the BPE101 Battery Pack. The SpectraLink 8002 Dual Charger has two charging slots. The front slot charges the handset with an installed Battery Pack, the rear slot charges a spare Battery Pack.

Set up the Charger by first obtaining the appropriate Polycom power supply for the country or region. Place the Charger on a flat, horizontal surface and plug the power supply into the Charger and into an appropriate wall outlet.

The user must end any call in progress by pressing the **End Call** button on the handset before placing the handset into the Desktop Charger or the front slot of the Dual Charger. The handset may be off or in standby mode during charging.

Full charging is accomplished in approximately one and a half hours.

Desktop Charger

Indicator light

Place the SpectraLink 8002 Wireless Telephone into the Desktop Charger slot facing forward. If the handset is placed correctly, the red indicator light will come on. The indicator light will not come on when the slot is empty, when the SpectraLink 8002 Wireless Telephone is improperly seated, or when the Desktop Charger has no power applied.



Charging indicator

While the handset is charging in standby mode, it will display its extension number and **Charging....** The battery icon will show charging progress. The handset is fully operational and will ring if called. When the handset is charging while turned off, only **Charging...** will display and no calls will be received. The dots will be racing during the charging cycle. It is normal for the Battery Pack to become warm when charging.

Charge Complete

When the handset is fully charged, **Charge Complete** will display. The indicator light will remain on until the handset is removed.

Dual Charger

Place the handset face forward into the Dual Charger front slot. Place a spare Battery Pack in the rear slot, charging contacts down. The front slot takes charging precedence; the Battery Pack in the rear slot will begin charging when the handset in the front slot is fully charged or when the front slot is empty.



When the handset or Battery Pack is seated correctly, the corresponding indicator light will come on. A bright indicator means the Battery Pack is charging, a dim indicator means the Battery Pack is waiting to charge. The indicator light will not come on when the handset is incorrectly seated, the slot is empty or when the Dual Charger has no power applied. If the indicator light is off or flashing, it means the handset or Battery Pack is incorrectly seated. Remove the handset or Battery Pack 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 handset. Do not attempt to open or repair a defective Battery Pack. Contact your service representative for assistance.

The indicator light will turn off when charging is complete. Full charging is accomplished in approximately two hours for either slot.

Indicator light

Place the SpectraLink 8002 Wireless Telephone into the Desktop Charger slot facing forward. If the handset is placed correctly, the red indicator light will come on. The indicator light will not come on when the slot is empty, when the SpectraLink 8002 Wireless Telephone is improperly seated, or when the Desktop Charger has no power applied.

Charging indicator

While the handset is charging in standby mode, it will display its extension number and **Charging....** The battery icon will show charging progress. The handset is fully operational and will ring if called. When the handset is charging while turned off, only **Charging...** will display and no calls will be received. The dots will be racing during the charging cycle. It is normal for the Battery Pack to become warm when charging.

Charge Complete

When the handset is fully charged, **Charge Complete** will display. The indicator light will remain on until the handset is removed.

Important Notes about Chargers and Battery Packs

- Chargers operate in a 50° to 85° F (10° to 30° C) environment. Do not expose them to freezing temperatures or direct sunlight.
- Do not place anything in the charger other than the handset. You might damage the contacts. Bent contacts can keep the handset from charging.
- It is normal for the Battery Pack to become warm when charging.
- Only use SpectraLink Battery Packs with SpectraLink chargers.
- Never use non-SpectraLink 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 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.

Safety Information



WARNING: SpectraLink products contain no user-serviceable parts inside. Refer servicing to qualified service personnel.

WARNING: Changes or modifications to this equipment not approved by SpectraLink Corporation may cause this equipment to not comply with part 15 of the FCC rules and void the user's authority to operate this equipment.

FCC Statement

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.

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. 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 the Handset

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 the 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.

Electromagnetic Interference/Compatibility



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.

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.⁴ 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/ea> after searching on FCC ID IYGSNP2400. 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 its reseller partners.

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

Handset operation normal position

Hold the handset as you would any other telephone, with the earpiece to your ear and speak into the microphone. The internal antenna is then positioned properly.

⁴ 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.

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