SpectraLink 8002, e340/h340/i640 Wireless Telephone Configuration Cradle

Administration Guide

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POLYCOM®

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About this Guide

This document explains how to set up the SpectraLink Configuration Cradle, create configuration plans for the SpectraLink 8002, e340/h340/i640 Wireless Telephones and how to download configuration plans to the handset. It also covers maintaining the software and troubleshooting error messages.

Referenced Documents

SpectraLink e340/h340/i640 Wireless Telephone: Configuration and Administration Guide (SRP) (72-1065-09)

SpectraLink e340/h340/i640 Wireless Telephone: Configuration and Administration Guide with Cisco CallManager/CallManager Express (72-1082-02)
SpectraLink e340/h340/i640 Wireless Telephone: Configuration and Administration Guide with Mitel Networks 3300 and SX-200 ICP (72-1084-02)

Above documents are available at http://www.polycom.com/usa/en/support/voice/wi-fi/wi-fi.html.

Customer Support

Polycom wants you to have a successful installation. If you have questions please contact Polycom Customer Support Hotline at (800) 775-5330. The hotline is open Monday through Friday, 6 a.m. to 6 p.m. Mountain Time.

For Technical Support: technicalsupport@polycom.com

For Knowledge Base:
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.

Contents

1

SpectraLink Configuration Cradle Overview

The SpectraLink Configuration Cradle is a two-slot cradle designed to automate the process of configuring the 8002, e340, h340 and i640 models of SpectraLink 8000 Wireless Telephone. The front slot of the cradle is for the SpectraLink 8002, e340/h340 Wireless Telephone; the rear slot is for the SpectraLink i640 Wireless Telephone. Only one handset may be configured at a time.

The Configuration Cradle can also aid in debugging system problems. See Chapter 8 *Assert Errors*.

The Configuration Cradle is connected to a PC via a serial cable. The Configuration Cradle program runs on the PC and enables the system administrator to establish and store configuration options for System, Group and User levels. The Configuration Cradle program can be downloaded from the Polycom website http://www.polycom.com/usa/en/support/voice/wi-fi/dual_charging_stand.html

Configuration plans may be set up in the program and downloaded into a Wireless Telephone or a configured Wireless Telephone may be placed in the cradle and its configuration may be uploaded and edited or saved.

SpectraLink Configuration Cradle with SpectraLink e340 Wireless Telephone

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Installing the SpectraLink Configuration Cradle

Set up the Configuration Cradle by first obtaining the appropriate SpectraLink power supply for your country or region. Place the Configuration Cradle on a flat, horizontal surface and plug the power supply into the Configuration Cradle and into an appropriate wall outlet. Plug a straight-through serial cable into the Configuration Cradle and into an available serial port on the PC.

Set up a folder for Wireless Telephone configuration on the PC and download the programming software from the Polycom website http://www.polycom.com/usa/en/support/voice/wi-fi/dual_charging_stand.html into this folder. Extract the individual files from the zip and run the **PhoneConfig.exe** file.

Note that there is no installer or uninstaller since the program does not modify your system or registry. It runs from its current location and stores its settings locally.

Serial port settings are handled automatically by the Configuration Cradle software. If necessary, the COM port the Cradle is using can be set in the **Settings** menu.

USB Serial Adapters: Some adapters are incompatible with the Configuration Cradle. Of the adapters tested by Polycom engineering, two have been found to work:

- Sakar International IConcepts Item #60448
- Keyspan USA-19HS

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Planning the Configuration Files

Each configurable option may be categorized as one of three types: System (**Sys**), Group (**Grp**) or User (**Usr**). System level options should be those that are stable across the entire system. DHCP vs. Static IP addressing would be an example of a System option. Options that are designated as Group type should be those that change by category of user. PTT Allow/Disallow and PTT Channel are examples. A unique extension number is assigned to each handset by the system administrator and would be a User type. The remaining User types should be reserved for options that are normally set by the end user. For Standby menu options such as Ring Type and Noise Mode, default values may be entered with the expectation that the user may change them.

Typical Configuration Plans

Because the specific options that are available depend on the software version and License Option, the typical plan options for your facility may be different than those listed here.

Typical System file settings:

System file settings typically do not change across an installation. These are typical **Sys** categories:

- License Option
- Network Config
- IP Addressing
- ESSID
- Security

Typical Group file settings:

If certain groups of people require different access to functions, such as push to talk, these options would be stored as Group files. Several

different Group files can be established and the handsets can be configured by group. Typical **Grp** categories are:

- Push-to-talk options on both Admin and Standby menus

Typical User file settings:

If a setting can be changed by the user in the Standby menu, then it would typically be stored in a User file. These can be the default settings or whatever your system requires. Typical **Usr** categories are:

- Extension
- Static IP address
- Ring Options
- Phone Options

You may have zones in your facility that require different System settings, such as security. These settings can be moved to a Group file or you may set up two System files.

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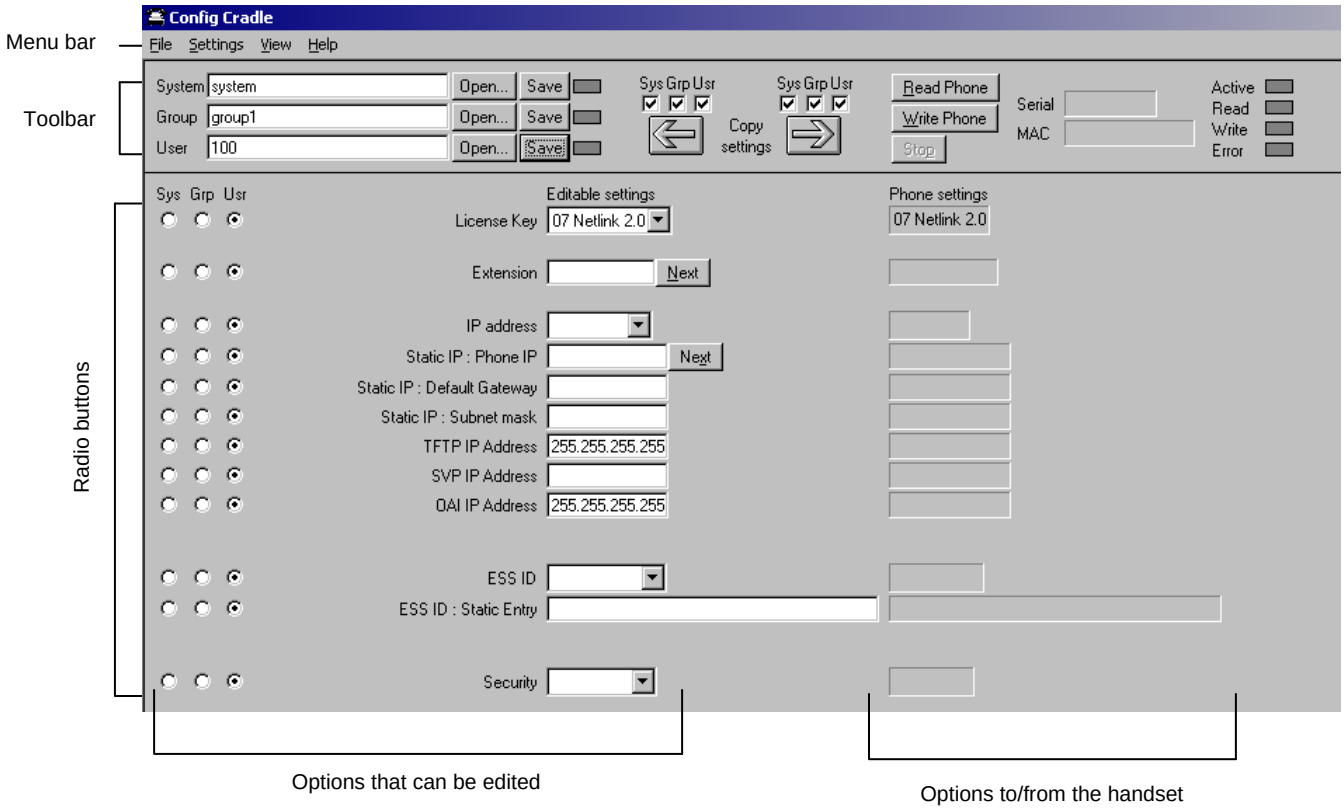
Configuration Cradle Window

When first opened, the **PhoneConfig** program displays the toolbar and a list of configurable options. All **Editable settings** fields are blank or are set to default values. **Phone settings** are unavailable until a handset is read or settings are copied to the **Phone settings** fields.

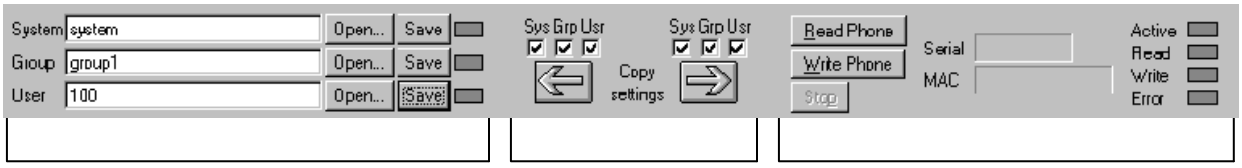
Initial window

A window similar to the one shown below appears when the Config Cradle program is first opened. The default filenames appear in the toolbar and all category radio buttons default to **Usr**.



Configuration Cradle Toolbar

The Config Cradle toolbar allows you to name, open, and save configuration files and download and upload configuration settings to and from the handset in the Cradle.



File management | Copy settings | Upload/download and indicators

File management

The three filename windows, **System**, **Group** and **User** match the three columns of radio buttons along the left side of the window. The **Sys, Grp** and **Usr** radio buttons allow you to designate the option(s) for System, Group or User files. The three windows in the file management section allow you to name, open, or save setting types as separate files.

The filenames shown above are the default names, but any filename can be assigned by entering it into the field and clicking the **Save** button. By default, the files will be saved in a new folder named **ConfigData** under the folder where the program is stored. The new folder will be created automatically the first time a file is saved. To open an existing file, click the **Open** button and browse to the file. Use the **File** menu to customize the file structure, if desired.

The three flags beside the **Save** buttons have four colors to indicate the status of the file displayed in the window:

- Red: file does not exist. The filename in the window has not been saved.
- Yellow: file not loaded. The filename in the window exists in the ConfigData folder but has not been loaded into the **Editable settings**.
- Green: unsaved edits. When changes are made in the **Editable settings** field(s) the green flag indicates these have not been saved.
- Gray: file up to date. The settings have been saved.

Copy settings

The **Copy settings** arrows and checkboxes allow you to copy between the **Phone settings** column and the **Editable settings** column. The **Sys Grp Usr** check boxes allow you to copy just the settings you require.

Upload/download and indicators

When the **Read Phone** and **Write Phone** buttons are clicked, they initiate the transfer of configuration data from or to the handset in the Cradle. The handset indicators change color to indicate the state of the transfer. See below for indicator color significance. The **Stop** button will halt the transfer.

The **Serial** and **MAC** windows display the serial number and MAC address of the handset in the Cradle. This information is not stored.

The four labeled flags on the right indicate the status of the configuration transfer:

Active: green when attempting communication with handset in Cradle. Turns yellow if a timeout occurs (may be due to an improperly seated handset). The software will repeatedly re-attempt communication after a timeout so re-seating the handset should correct the problem.

Read: green when information is currently being read from the handset in the Cradle.

Write: yellow when information is currently being written to the handset in the Cradle.

Error: red when an error has occurred. An error message will appear on the status bar at the bottom of the main window.

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Creating Your Configuration Plan

Although not necessary for using the Config Cradle program, a configuration plan can maximize its efficiency and save countless hours of handset option management.

Organize the plan

Determine which options should be categorized as each type – System, Group or User.

Do not create a plan that saves an option in two different categories. Option categories should be established and should not overlap. Example: **Speakerphone** and **Push-to-talk** settings (SpectraLink i640 handset only) are typically tagged as **Grp** options and saved as **Group** files.

Create the options and save the settings

Once you have established which options will be categorized as System, Group or User, enter the configuration information into the **Editable settings** fields.

Start with the System options and enter all system-level field values, such as IP addresses, security, and reg domain. Click the **Sys** radio button on the left side of the window for each option. Save these settings as a System file by entering a descriptive filename in the **System** filename field and clicking **Save**. See the example below.

Note that when a setting is changed, the option label is highlighted in yellow until it is saved.

In the same way, create each Group plan by entering the values in the fields designated as Group types. Click the **Grp** radio button on the left side of the window for each option. Save each plan under a different name in the **Group** filename field. You may have several groups – possibly divided by sets of PTT users.

It is recommended that you establish one generic **User** file that has the default (or desired) values for each **User** field. Click the **Usr** radio

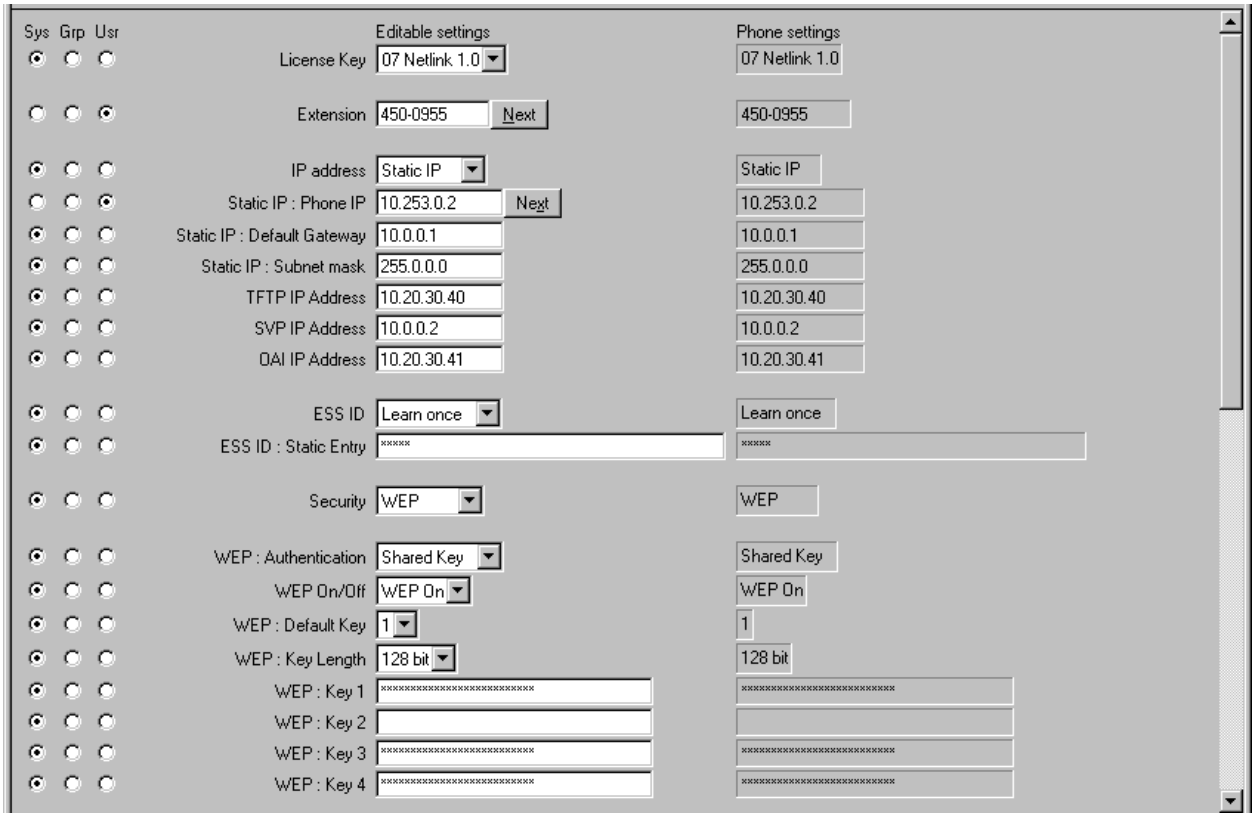
button on the left side of the window for each option and save the generic user file.

If desired, user settings can be saved for each user, as each handset is configured. If you determine that each handset configuration should be saved, it is easiest to do this during the configuration process. See *Downloading a configuration plan to a handset,* below.

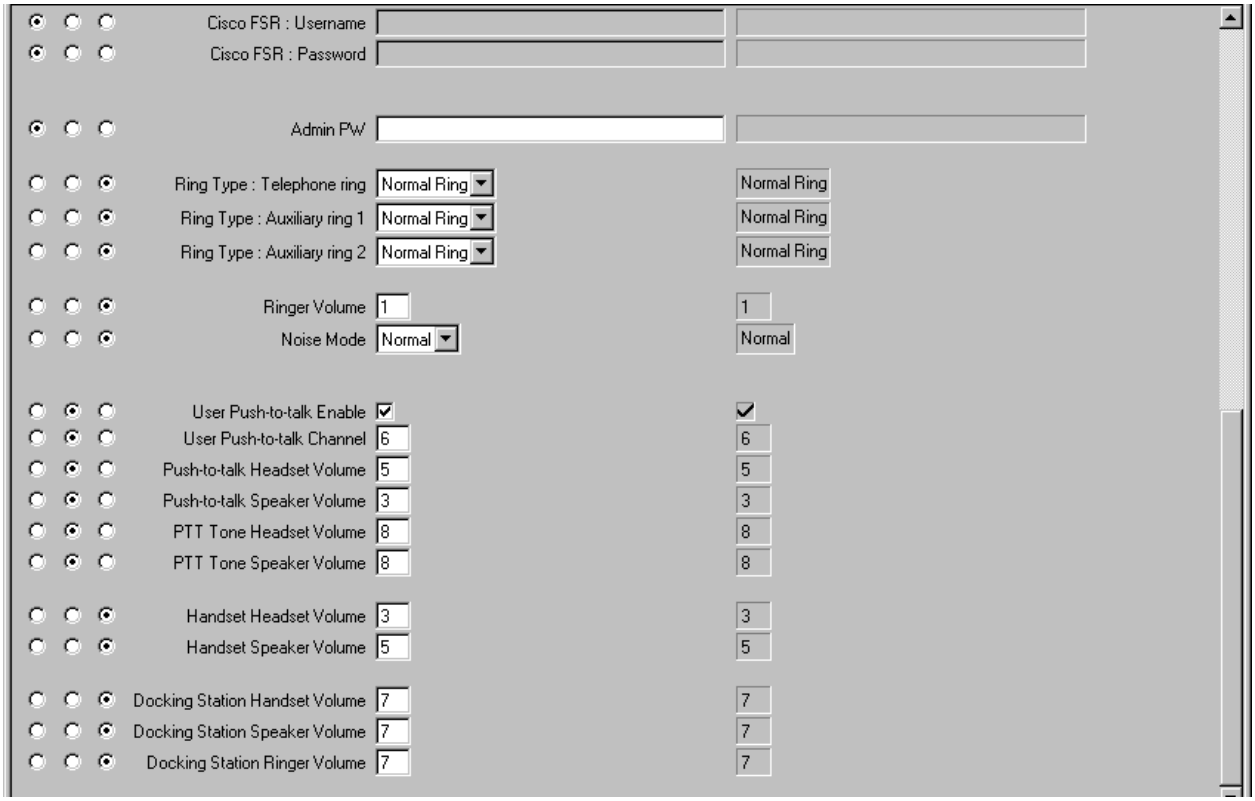
Alternately, you can upload options from a correctly-configured handset; copy them to the **Editable settings** column, categorize them and save them. See *Uploading a configuration plan from a handset* below.

Sample Configuration Window

Shown on the next page is a typical Static IP configuration using the WEP security method. All push to talk (PTT) settings are saved as a group. The settings in the **Editable settings** field were first uploaded from a configured handset and then copied from **Phone settings.**



Sys	Grp	Usr		Editable settings		Phone settings
●	○	○	License Key	07 Netlink 1.0		07 Netlink 1.0
○	○	●	Extension	450-0955	Next	450-0955
●	○	○	IP address	Static IP		Static IP
○	○	●	Static IP : Phone IP	10.253.0.2	Next	10.253.0.2
●	○	○	Static IP : Default Gateway	10.0.0.1		10.0.0.1
●	○	○	Static IP : Subnet mask	255.0.0.0		255.0.0.0
●	○	○	TFTP IP Address	10.20.30.40		10.20.30.40
●	○	○	SVP IP Address	10.0.0.2		10.0.0.2
●	○	○	OAI IP Address	10.20.30.41		10.20.30.41
●	○	○	ESS ID	Learn once		Learn once
●	○	○	ESS ID : Static Entry	*****		*****
●	○	○	Security	WEP		WEP
●	○	○	WEP : Authentication	Shared Key		Shared Key
●	○	○	WEP On/Off	WEP On		WEP On
●	○	○	WEP : Default Key	1		1
●	○	○	WEP : Key Length	128 bit		128 bit
●	○	○	WEP : Key 1	**********		**********
●	○	○	WEP : Key 2			
●	○	○	WEP : Key 3	**********		**********
●	○	○	WEP : Key 4	**********		**********



●	○	○	Cisco FSR : Username		
●	○	○	Cisco FSR : Password		
●	○	○	Admin PW		
○	○	●	Ring Type : Telephone ring	Normal Ring	Normal Ring
○	○	●	Ring Type : Auxiliary ring 1	Normal Ring	Normal Ring
○	○	●	Ring Type : Auxiliary ring 2	Normal Ring	Normal Ring
○	○	●	Ringer Volume	1	1
○	○	●	Noise Mode	Normal	Normal
○	●	○	User Push-to-talk Enable	☑	☑
○	●	○	User Push-to-talk Channel	6	6
○	●	○	Push-to-talk Headset Volume	5	5
○	●	○	Push-to-talk Speaker Volume	3	3
○	●	○	PTT Tone Headset Volume	8	8
○	●	○	PTT Tone Speaker Volume	8	8
○	○	●	Handset Headset Volume	3	3
○	○	●	Handset Speaker Volume	5	5
○	○	●	Docking Station Handset Volume	7	7
○	○	●	Docking Station Speaker Volume	7	7
○	○	●	Docking Station Ringer Volume	7	7

Configuration Planning Worksheet

Plan category_____ Filename_____

Sys	Grp	Usr	Label	Editable Setting

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Downloading and Uploading Configuration Plans

Once your configuration plans are established, the settings are easily downloaded into the handsets.

Downloading a configuration plan to a handset

1. Place a SpectraLink Wireless Telephone with the Battery Pack removed into the appropriate slot.
2. Use the **Open** button located in the file management section on the toolbar to open the **System**, **Group** and **User** cfg files for this handset.
3. In the **Editable settings** fields, enter information unique to the handset – **Extension** and **IP address** (if using static IP). Note that these two fields have a **Next** button that is useful for setting these fields when configuring a quantity of handsets.
4. Copy the settings to the **Phone settings** fields using the **Copy settings** right arrow.
5. Click **Write Phone** to begin the download.
   You may want to save the configuration, load new files or edit settings for the next handset (steps 1 and 2) during the download.
6. (Conditional) If you wish to save the settings unique to this handset, enter the identifying information into the filename fields, such as user name or extension number and then click **Save**.
7. When the **Active** flag turns off, the download has finished and the handset may be removed from the Cradle.

Uploading a configuration plan from a handset

1. Place a SpectraLink Wireless Telephone with the Battery Pack removed into the appropriate slot.
2. Click the **Read Phone** button to begin the upload.
3. When the **Active** flag turns off, the handset's settings will appear in the **Phone settings** fields.

4. You may copy these settings over to the **Editable settings** fields using the **Copy settings** left arrow. The settings may be used to create configuration plans as described above, and may be saved by user or extension.

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Software Maintenance

The SpectraLink Configuration Cradle uses proprietary software programs written and maintained by Polycom. The software version can be displayed via the **Help** menu.

Download the latest SpectraLink Configuration Cradle software from: http://www.polycom.com/usa/en/support/voice/wi-fi/dual_charging_stand.html

The software is delivered in a zip. Install the update by extracting the individual files from the zip and overwriting the existing PhoneConfig.exe and other files.

Please follow customary backup procedures to preserve file integrity.

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Assert Errors

The Wireless Telephone displays the **Assert Error** message when it detects a system error from which it cannot recover. The assert error data is stored in flash memory until the handset is power cycled. This valuable information may be retrieved by the Configuration Cradle as an [.**asrt**] file and sent to Customer Service for further debugging.

To record an assert error:

1. Write down the error message on the display.
2. Remove the Battery Pack and place handset in the Configuration Cradle while the Config program is running.
3. Open the **File** menu, select **Get Assert Information** …
4. Browse to where you want to save the .**asrt** file.
5. Click **Get Assert Data**. The handset will upload the .**asrt** file to the specified location.
6. Call Customer Service and arrange to email the file and error message from the display.

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Regulatory Information

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to 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. This equipment is intended for use in a Business environment.

This Class A digital apparatus complies with Canadian ICES-003.

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Agency Approvals

The following agency safety approvals apply to the Configuration Cradle:

- EN 60950-1:2001 + A11
- UL 60950-1:2003
- CAN/CSA-C22.2 No. 60950-1-03
- AS/NZS 60950-1:2003

The following agency EMC approvals apply to the Configuration Cradle:

- FCC Part 15, Subpart B:1999
- Industry Canada Standard ICES-003
- EN 55022:1994 + A1:2000/A2:2003
- EN55024:1998 + A1:2001/A2:2003

Certification/Registration Numbers

North America	cTUVus Symbol 	CU 72050463 01	
Europe	CE Mark 	US-TUVR-2236	CB Certification
		AE 72051209 0001	Certificate of Conformity

Safety Notices

Note concerning shielded cable

Polycom recommends the use of a shielded cable for the external signal connection in order to maintain FCC Part 15 emissions requirements.

Changes or modifications to this equipment not approved by Polycom may cause this equipment to not comply with Part 15 of the FCC rules and void the user's authority to operate this equipment

Polycom products contain no user-serviceable parts inside. Refer servicing to qualified service personnel

Notes

- The Configuration Cradle operates in a 50 to 85 degrees F (10 to 30 degrees C) environment. Do not expose to freezing temperatures or sunlight.
- Use only the original SpectraLink plug-in power adapter.
- Place only one phone in the Cradle at a time.
- Do not place a phone in the Cradle with a battery installed.
- Do not immerse the Cradle in water or other liquid.
- Do not pour liquids into the telephone slots.
- Only use SpectraLink 8002, e340, h340, or i640 Wireless Telephones in this Cradle.