NetLink Configuration Cradle

NetLink e340/h340/i640 Wireless Telephones

Configuring NetLink Wireless Telephones

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Table of Contents

1. About This Document

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

1.1 Referenced Documents

NetLink e340/h340/i640 Wireless Telephone: Configuration, and Administration for SRP (72-1065-09)

NetLink e340/h340/i640 Wireless Telephone: Configuration and Administration
    for *Cisco CallManager and IP Phone 7960 Emulation* (72-1082-02)
    for *ITU H.323 Protocol* (72-1085-02)
    for *Media Gateway Control Protocol (MGCP)* (72-1088-02)
    for *Mitel Networks 3300 and SX-200 ICP with 5220 IP Phone emulation* (72-1084-02)

Above documents are available at
http://www.spectralink.com/service/manuals.html.

1.2 Customer Support Hotline

SpectraLink wants you to have a successful installation. If you have questions please contact **SpectraLink Customer Support Hotline at (800) 775-5330.**

The Hotline is open Monday through Friday, 5:00 AM to 7:00 PM Mountain Time.

1.3 Icons and conventions

This manual uses the following icons and conventions.

Caution! Follow these instructions carefully to avoid danger.

Note these instructions carefully.

NORM   This typeface indicates a key, label, or button on the NetLink Configuration Cradle or Wireless Telephone.

2. NetLink Configuration Cradle Overview

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

✎ The Configuration Cradle can also aid in debugging system problems. See section 9: *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 SpectraLink website http://www.spectralink.com/service/software.php

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.

3.   Installing the NetLink 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 SpectraLink website http://www.spectralink.com/service/software.php 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 Adaptors: Some adapters are incompatible with the Configuration Cradle. Of the adaptors tested by SpectraLink engineering, two have been found to work:

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

4.   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.

4.1   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
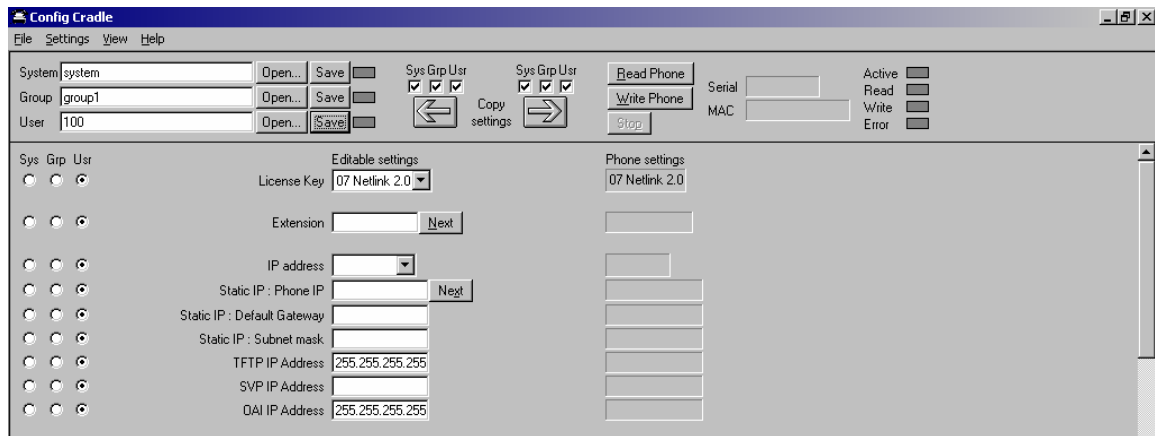- Ring Options
- Phone Options

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.

5.   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.

5.1   Initial window

This is the window that appears when the Config Cradle program is first opened. The default filenames appear and all category buttons on the left default to **Usr**.

5.2   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.

The three filename windows allow you to open and save settings by **System**, **Group** or **User** type 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 created.
- 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.

The **Copy settings** arrows and boxes allow you to copy settings to the handset side of the window where they may then be written to the handset in the Cradle. Or the

configuration in a handset may be copied to the **Editable settings** area and edited or saved. The **Sys Grp Usr** checkboxes allow you to copy just the settings you require.

When clicked, the **Read Phone** and **Write Phone** buttons initiate the transfer of configuration data from or to the handset in the Cradle. 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.

6. Creating Your Configuration Plan

When first setting up a configuration plan you will enter information into the **Editable settings** fields, indicate which of the three categories each option belongs to, and save as **System**, **Group** or **User** files.

Do not create a plan that saves an option in two different categories. Option categories should be established and should not overlap. Example: PTT settings are typically tagged as **Grp** options and saved in **Group** files.

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. Click the **Sys** category button on the left side of the window for each option. Save these settings as a System file by entering the filename in the **System** filename field and clicking **Save**.

Note that when a setting is changed, it 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** category button on the left side of the window for each option. Save each plan under a different name in the **Group** filename field.

Create one basic **User** file for default (or desired) values for each **User** field. Click the **Usr** category button on the left side of the window for each option.

User settings don't necessarily need to be saved for each handset, but they can be saved, if desired. It may be useful, for example, to save a user's ring preferences from a handset being replaced so that the new handset can be configured up the same way. 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.

6.1　Sample configuration window

Shown below 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.**

6.2   Configuration planning worksheet

Plan category_____ Filename_____

Sys	Grp	Usr	Label	Editable Setting

7.   Downloading and Uploading Configuration Plans

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

7.1   Downloading a configuration plan to a handset

1. Place a NetLink Wireless Telephone <u>with the Battery Pack removed</u> into the appropriate slot.

2. Use the toolbar to open the **System**, **Group** and **User** plans for this handset.

3. 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.

5. Click **Write Phone** to begin the download.

6. You may save the settings unique to this handset by ensuring the correct extension number or other filename is entered in the **User** filename field and then clicking **Save**. You may also load files or edit settings for the next handset (steps 2 and 3) during the download.

7. When the **Active** flag turns off, the download has finished and the handset may be removed from the Cradle.

7.2   Uploading a configuration plan from a handset

1. Place a NetLink Wireless Telephone <u>with the Battery Pack removed</u> 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 to use them to create configuration plans as described above or to save them by user or extension.

8. Software Maintenance

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

Download the latest NetLink Configuration Cradle software from: http://www.spectralink.com/service/software.php

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.

9.   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.

10. 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

Note concerning shielded cable:
SpectraLink 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 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.

⚠ SpectraLink 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 Wireless Telephones in this Cradle.