

# **Release Notes for NetLink e340/i640 SpectraLink Radio Protocol (SRP)**

## **Build 89.110**

**Release Date: October 1, 2004**

### **Core Changes**

- Fixed a problem with Reg Domain (Regulatory Domain) being reset from 02 Euro to 01 when upgrading from earlier versions or when initially loading software on an out-of-the-box unit or when changing language.

## **Build 89.109**

**Build Date: September 28, 2004 – Not Generally Released**

### **Known Problems**

- When selecting a language in the Stand-by menu, the Reg. Domain under the Admin menu will be reset to 01. The language selection option is only available if there are multiple languages present in the chosen phintl file.

### **Application Changes**

- Fixed problem where the message icon would disappear.
- Added a feature to play Reorder Tone before giving an error beep when the link goes down.

### **Core Changes**

- Added Echo Cancellor.
- i640/e340 microphone gain increased +4dB for TIA-810A SLR
- e340 speaker volume increase of +2dB for hearing aide compatibility
- Locked out Japan regulatory domain from admin menus. No longer support selection of channel 14. Use either FCC (domain 1) or ETSI (domain 2) for operation in Japan
- G.729 decompand scheduling change. Fixes dropped audio on G.729 calls.
- Prevents freeing already-freed sockets
- Fixed DHCP to properly handle renewal responses from multiple sources

## **Build v89.108**

**Release Date: September 8, 2004**

### **Resolved Issues**

- Key tone interactions fixed. Resolves several reported issues where pressing a key, and getting a key tone, during some other action (like switching from Speakerphone to handset on the Docking Station) would result in audio routing to the wrong output device and/or being at the wrong volume.
- Correctly sets the current noise mode when coming out of standby. No longer need to power cycle phone for noise mode setting to take effect.
- Speakerphone LED on Docking Station gets turned off regardless of the state that the END key is pressed in.
- Modified user menu text: No "OK" softkey on display-only menus; Backspace key underflow and last column fixed; Up/Down arrows fixed

- Fixes issue (SRP ACK ID change) with phone not working if it was reset after 32K acknowledged messages had been exchanged. This only happened after a long period of uptime on a very "chatty" PBX integration. Issue required a Gateway reset or phone de- and re-registration to recover.
- PTT/in-ear interaction fixed. The Push-to-Talk application did not allow an incoming PBX call to be signaled (via a mixed-in alert tone).

### **Enhancements**

- Won't associate to IBSS. Improved check that the Beacons and Probe Responses are from an ESS device, not an IBSS device
- Rejects malformed probe responses. The phone now checks a probe response for bad lengths, etc., and discards the packet rather than possibly overflowing an internal buffer and/or memory asserting.

### **Build v89.104**

**Release Date: June 11, 2004**

### **Resolved Issues**

- Allow more than five digits for the extension to be seen on the display
- Fixed "Not entered yet" ESSID
- Fixed PTT resource management
- Fixed audio off on standby menu exit

### **Enhancements**

- Warning and alert tones reduced by 8dB.
- Ringing volume reduced by 10db at loud levels and 20db at soft levels in i640.
- Quite key beep at menu exit.
- Menu "up" returns to parent menu and not top.

### **Build v89.102**

**Not generally released**

### **New Functionality**

- Adds support of NetLink Docking Station
- Support for the ST Micro flash memory chip
- Adds support of vertical scrolling for administration and standby user menus
- Compatible with 170-series of SVP Server software (as well as 160-series of software)
- TFTP timeouts lengthened to 2 seconds
- TFTP doesn't change ports on retries
- Phintl file required (with SRP, adds support for Siemens phintl file to enable German language choice and Siemens font)

### **Resolved Issues**

- FSR bug fixes (problem of losing the network while mobile in standby)
- slnk\_cfg.cfg file over 512 bytes fixed
- Fully compatible with 802.11g radios
- Fixes headset detection
- Battery song with headset fix (volume decreased)

### **Enhancements**

- Includes fixes to battery charging. Charges active phone.
- Adds improvements for enhanced battery life, but does not extend the current specifications

- Adjusts echo suppressor for enhanced audio

**Build v89.102**  
**Release Date: May 6, 2004**

**New Functionality**

- Adds support of NetLink Docking Station (currently in beta testing)
- Support for the ST Micro flash memory chip
- Adds support of vertical scrolling for administration and standby user menus
- Compatible with 170-series of SVP Server software (as well as 160-series of software)
- TFTP timeouts lengthened to 2 seconds
- TFTP doesn't change ports on retries
- Phintl file required (with SRP, adds support for Siemens phintl file to enable German language choice and Siemens font)

**Resolved Issues**

- FSR bug fixes (problem of losing the network while mobile in standby)
- slnk\_cfg.cfg file over 512 bytes fixed
- Fully compatible with 802.11g radios
- Fixes headset detection
- Battery song with headset fix (volume decreased)

**Enhancements**

- Quieter alert tones
- Includes fixes to battery charging. Charges active phone.
- Adds improvements for enhanced battery life, but does not extend the current specifications
- Adjusts echo suppressor for enhanced audio

**Build v89.099 (GDL v92.056)**  
**Release Date: February 26, 2004**

This is the first major release of code for the NetLink e340/i640 Wireless Telephones since version 89.080. There have been several resolutions and enhancements incorporated into this code.

**New Functionality**

Support for Fast Secure Roaming (FSR) is now incorporated into the code. FSR is a security function that works with Cisco APs running CCKM mode to allow low latency devices to roam within the network more quickly. This functionality is currently in beta at customer sites.

**Resolved Issues**

- Now correctly utilizes subnet mask and default gateway information in the over-the-air downloader (subnet download fixes).
- The over-the-air downloader now correctly responds to ARP requests (Linux TFTP server issue).
- Fixed "DCA Timeout" errors that can occur with over-the-air downloader v92.054 or v92.055.
- Fixed problems with ringer following the volume adjust.
- Fixed problems with ring cadence processing.
- Fixed issues that caused lockup behaviors.
- Fixed issue where MSG icon would cause phone to stop charging with some PBX integrations.
- Several fixes for memory and VMAC\_ISR asserts.

- Added fix to help reduce amount of multicast flooding that occurs in certain network configurations.
- Fixed SVP timing issues that were causing collisions and retries on the air.
- Multiple fixes to resolve code related manufacturing failures.

### **Enhancements**

- Reduced beeper volume by 20dB on alert tones.
- Maximum audio level is now the equivalent of about 1 volume setting louder (~5db louder) and added new audio sidetone curve for NetLink i640 Wireless Telephone only.
- Adjustments to low battery thresholds to optimize call and standby time.
- Allows 32-character ESSID entry and usage.
- 802.11 ACK timing has been adjusted for compatibility with Airespace APs.
- Changed packet-processing behavior to improve audio performance.
- Added enhancements to help reduce amount of multicast flooding that occurs in certain network configurations.

### **“DCA Timeout” Workaround**

Over-the-air downloader versions 92.054 and 92.055 have a bug that can result in repeated “DCA Timeout” failures when attempting to update code. This bug can render the phone inoperative. A fix for this problem has been included in v92.056 of the over-the-air downloader (included with this release), but until the code in the phone is updated it cannot take advantage of the fix.

In order to get the code in the phone updated, thus obtaining the fix you can use the following procedure:

1. Get the phone as close to an AP as possible, or convenient, while powered off.
2. Power the phone on.
3. When the “Erasing memory” message appears on the phone display, power the AP off.
4. Once the phone displays either “No Net Found” or “Updating Code...” it is now safe to power the AP back on, the phone should now correctly download and update code.  
(Note: during this final step do not power the phone off or you will need to start over at step #1).