

*Field Engineering Bulletin*  
071 8283 02 | July 20, 2004  
Reference ECO: 635K

## ***Broadlinx 2.1.1 to 2.2.0 Upgrade***

### **Applicability**

This release applies only to Trinx routers equipped with a Broadlinx board (NR-33000) operating with software version 2.1.1.

**Note** Users with prior versions must first upgrade to 2.1.1 before 2.2.0 can be installed. Please refer to Field Engineering Bulletin 071 8283 01, "Broadlinx 2.1.1 Upgrade."

The software required for this upgrade is provided on a Broadlinx flash memory module.

### **Purpose**

The primary purpose of this release is to provide compatibility with:

- Apex digital audio router
- SNMP
- Encore control system version 1.6.5

This functionality is accomplished with software only (no FPGA updates are needed).

Other new features and error corrections are provided by this release, as described in the Release Notes section below.

As with any software package, some limitations remain. Many of these are known and are detailed in this document and other documents referenced. Please note that the description of known limitations is not an agreement to correct them.

## Materials required

<u>Qty</u>	<u>Description</u>	<u>Part number</u>
1 or 2	64 MB Compact Flash Memory, Broadlinx (1 per NR-33000)	163 8279 06
1	Field Engineering Bulletin	071 8283 02

## Equipment required

- Trinix router equipped with Broadlinx (NR-33000) board(s).
- Ethernet connection to Trinix/Broadlinx.

## Release notes

### Release 2.2.0

#### Enhancements

1. Support is now provided for crosspoint bus connection and control of the Apex digital audio router.
2. Support is now provided for Simple Network Management Protocol (SNMP)
3. Support is now provided for Encore control system version 1.6.5.1.

#### Logged problems corrected

1.  CR 47337 - inappropriate switchover from active NR-33000 board to backup board has been corrected.
2. CR 46092 - discovery of NR-33000 on LAN using NetConfig application is more reliable.

## Release 2.1.1

### Logged problems corrected (all Trinix routers)

1. For all types of Output Cards, corrected the problem where the last Take's action (within a group of Takes) was delayed an additional VIT period. This caused the output enable transition to occur one VIT after the switch in the DM-33512 Matrix Boards (for the last Take).

### Logged problems corrected (DV-33512 routers)

1. In the DM-33512 Matrix board, fixed intermittent problem of detecting the presence of input cards within the frame. This was sporadically causing Takes to not be confirmed.
2. The RP-33500 would report a low 3.3 V supply when no cards were present (for example, frame number 2 in an input-expanded system).

### Logged problems corrected (All Trinix routers with Encore control)

1. On rare occasions, when the NR-33000 card was activated, the NR's XPT bus controller would not become active. This has been corrected.

### Logged problems corrected (HO-33120 boards only)

1. The monitor switch on the RP-33500 set the monitor output to 1536 when in the 1024 position, and 1024 when in the 1536 position.

## Release 2.1

### Enhancements (all Trinix routers)

1. Encore release 1.6.1 is supported, including NR-33000 redundancy.
2. The left hand Device pane in the NetConfig application now reports the target name of the router instead of the matrix size.
3. The Firmware Update status display has been improved.
4. The router can now be restarted after updates without cycling power or re-seating cards.
5. The new Trinix HO-33120 HD/SD Output Board with multi-rate reclocker is now supported.

### Enhancements (DV-33512 routers)

1. The router no longer requires repowering when changing the frame number.
2. The system now reports the CPLD code versions running on the DM-33512 cards.

**Logged problems corrected (all Trinix routers)**

1. Fixed SMS 7000 board add messages for “SR types” and “Input types” – Extra messages were getting displayed when an SR-TYPE board was discovered.
2. The system update process would occasionally halt when 99% complete. This has been corrected.
3. The upgrade process has been modified so that the system makes up to two attempts to update a board.
4. The Ethernet Monitor task has been removed from externally switched router configurations. (Broadlinx with Jupiter).
5. SMS 7000 commanded NR-33000 switchover (active NR-33000 to inactive NR-33000) is disabled during a firmware upgrade.
6. The web firmware management page and device information page both show the revision levels in decimal.
7. SMS/Encore - The In Use LED now reports the correct status when the activate button is pressed.
8. Settings for the Reclock/Bypass switches on the HO-33110 are now consistent with those for the HO-33120.

**Logged problems corrected (DV-33512 routers)**

1. Invalid FPGA Overtemp alarms on the DM-33512 Matrix boards have been fixed.
2. Spurious +2.5 volt power supply alarms have been fixed.
3. The web page graphics for the DV-33512 have been corrected to show the “B” and “C” power supplies in the correct position.
4. Resolved an issue where upon power-up, some DM-33512 Matrix boards would not recognize frame properly causing the card to not function correctly.
5. Corrected a problem wherein input card presence detection would fail intermittently causing “no confirm” messages during Takes.

### **Known Issues**

1. The Trinix web pages contain two representations of the Trinix frame, a tree view on the left and a graphical view on the right. The design of the web pages is such that a browser Refresh (via the menu Refresh, toolbar icon, or F5 key) returns the user to the Trinix home page. To facilitate refresh of only certain views a “Refresh” button has been added to many of the web pages. In some cases this results in the two views being out of sync. The most recently refreshed view should always be correct. The views can be re-synchronized with a browser Refresh (menu, toolbar, or F5). The user will then need to navigate back to the desired web page.

## **Related Documents**

Trinix Installation Manual, part no. 071 8276 xx.

# Firmware Update

## Compact Flash Installation

**Note** Any NR-33000 board, active or inactive, can be unseated safely with power on. Switcher status will not change, but switching cannot take place without an active Broadlinx board.

1. Install the provided compact flash memory module(s) in the NR-33000 memory slot(s):
  - a. Pull out the Broadlinx board (the inactive board if there are two NRs) far enough so the ejector levers allow access to the compact flash module. See [Figure 1](#) and [Figure 2](#).

Figure 1. Primary Broadlinx location (DV-33512 installation shown).

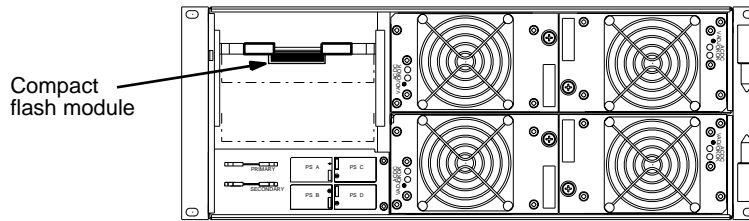
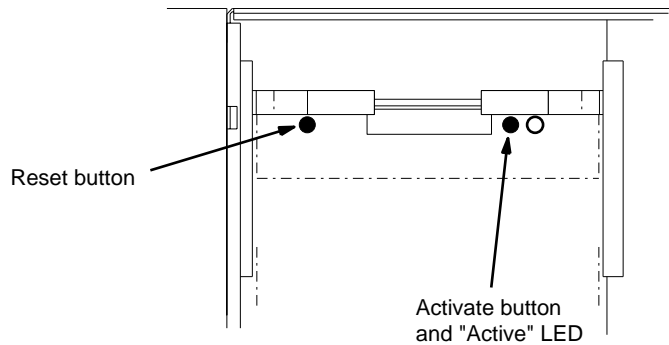


Figure 2. NR-33000 reset/activation controls.



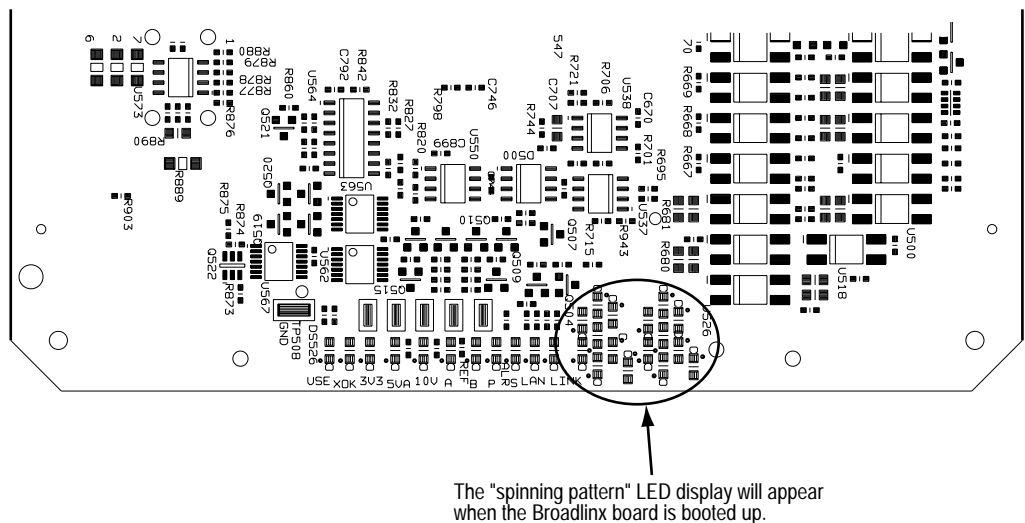
- b. Remove the old flash module by pressing on the adjacent small square ejector button.
    - c. Insert the new flash module and seat it firmly.

- d. Re-seat the Broadlinx board. The board will boot up automatically with the new software.

When the board is first inserted, keep the ejector levers spread apart and slide the board in until the levers make contact. The levers are then folded toward each other to seat the board.

The boot process will take about 45 seconds, after which you will see a “spinning” pattern of the LEDs on the front edge of the board. See [Figure 3](#).

Figure 3. Broadlinx board LEDs.



- e. If there are two NR boards, make the inactive NR-33000 active:
  - Jupiter-** and **Encore-**controlled systems - press the “Activate” button (see [Figure 2](#)). The “Active” LED indication will switch to this board. Note that a Secondary (amber) alarm will be asserted when the Secondary NR is active.
  - SMS 7000-**controlled system - press the “Reset” button on the **active** NR-33000 (see [Figure 2](#)). The “Active” LED indication will switch to the opposite board.
- f. If there are two NR boards, return to [Step a](#) above and install the new compact flash memory module on the remaining NR-33000.

## Verification of Firmware Revision Status

The Broadlinx Firmware Management table displays the types of possible PC boards, the version of sub-level software that is presently associated with each type that is installed, the versions of top-level software packages present in the Broadlinx board, and the compatibility Status of these software elements. An example of this table is shown in [Figure 4](#).

Figure 4.

### Firmware Management

Module	Fpga Active	Fpga Pending	uControl Active	uControl Pending	Status
HI-33110			5	5	●
SI-33110			5	5	●
HO-33110	11	13	7	7	●
SO-33110	11	13	7	7	●
DM-33100		5		7	●
HR-33000	8 ...	11	7	7	●
SR-33000		9		7	●
RP-33500			4	4	●
SR-33500	5	5	5	5	●
DM-33501	4 ...	8	5	5	●
DM-33502	4 ...	8	5	5	●
HI-33120					●
HO-33120		3		1	●
VxWorks			20040302	20040302	●
Web Interface			20040302	20040302	●

2.2.0	Activate	Upload	Cancel
-------	----------	--------	--------

Following the upgrade, all Status “lights” should be green. If not, contact Thomson Technical Support.

**Note** If you are unfamiliar with procedures for displaying the Firmware Management menu, refer to Section 4 of the Trinix manual. If Adobe Acrobat Reader is installed on the PC, the Trinix manual can be displayed on line by clicking the “Help” command in the Broadlinx title bar. (The Help command may be beyond the right margin of the Broadlinx window; if so, go to the left edge of the window and slide it to the left until the Help command appears.)