

HiGAIN INTERNATIONAL

EXCHANGE OFFICE MANAGEMENT UNIT (EMU-830)

VERSION 2.x FIRMWARE UPGRADE KIT

INSTALLATION INSTRUCTIONS

190-800-107-01

OVERVIEW

The HiGain International Series Exchange Office Management Unit (EMU-830) is designed to allow the field upgrade of firmware through either flash download or PROM replacement. In the majority of cases, downloading the software through the EMU-830 craft port interface would be the preferred method of upgrading. This document addresses the upgrade performed by PROM replacement. This method is required to revise the EMU-830 bootloader, a piece of code which can not be changed via flash download. The new bootloader allows subsequent downloads to be performed at 19.2 kbps, doubling the 9600 bps rate supported by earlier versions.

Upgrade Kit Description

Your EMU-830 upgrade kit contains the firmware which enables Simple Network Management Protocol (SNMP) management of HiGain International Series shelves. This firmware release, version 2.x, also supports higher rates of access for both the EMU-830 craft port interface and the management interface between the EMU-830 and the High bit-rate Digital Subscriber Line (HDSL) cards within the shelf.



Management units operating with EMU-830 version 2.x firmware can only manage HDSL line cards that are operating with HDSL unit version 2.x firmware, not the older version 1.13 firmware. It is mandatory, therefore, to upgrade all HDSL line cards (both local and remote units) to firmware version 2.x.

The upgrade kit includes the following items:

Qty	Item
2	EMU-830 Firmware Upgrade PROMs, Version 2.x
1	EMU-830 Technical Practice
1	SNMP MIB Diskette
1	HDSL Unit Firmware Diskette, Version 2.x



Please follow the PROM REPLACEMENT INSTRUCTIONS in this document when installing the EMU-830 PROMs. The instructions for uploading the version 2.x firmware to the LTU/NTU-80x Line Units are available as a “read me” file (readme.txt) on the Line Unit firmware diskette.

PROM REPLACEMENT INSTRUCTIONS

Location of Firmware PROMs

The firmware for the EMU-830 unit is contained in two (2) replaceable PROM devices. These devices may be factory upgraded and replaced in the field to support new features or implement bug fixes. The two PROM devices reside on the EMU-830 card at the locations shown in Figure 1.

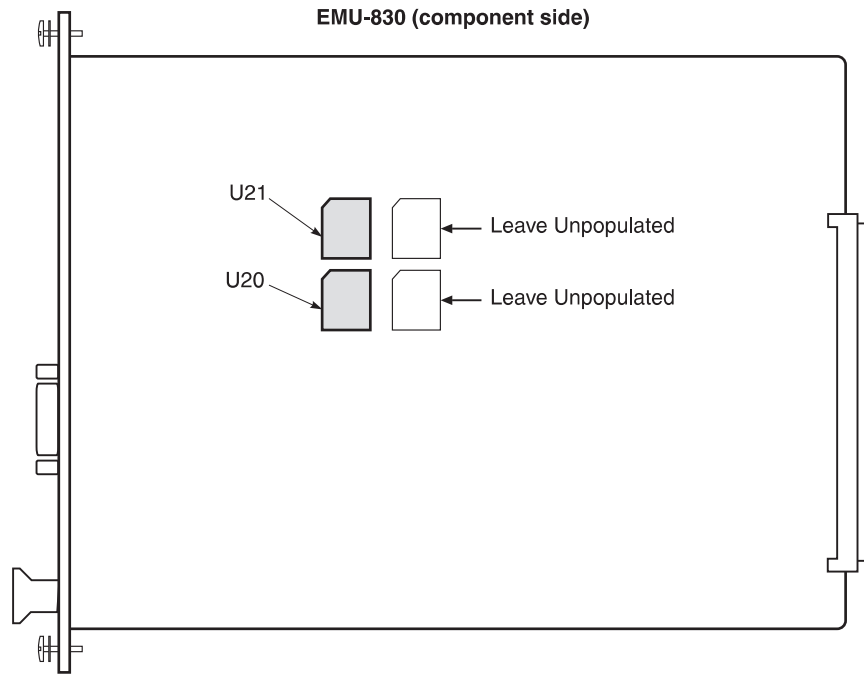


Figure 1. EMU-830 PROM Locations U20, U21

PROM Identification Labels

The labeling that identifies each PROM is shown in Figure 2.

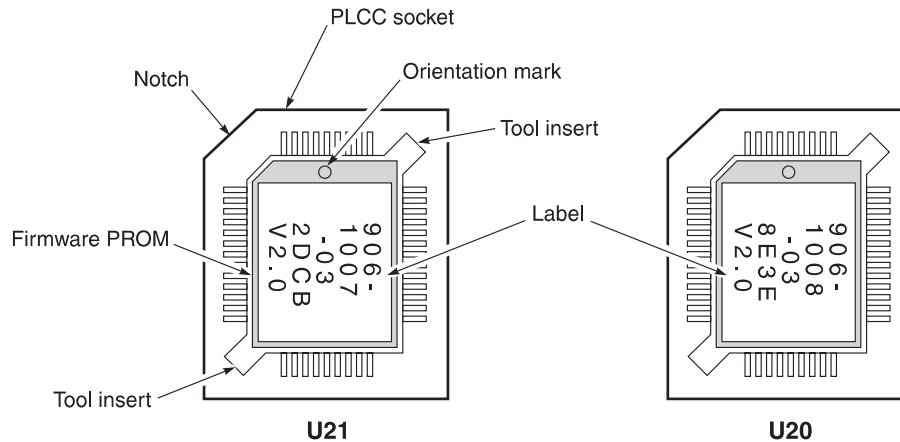


Figure 2. EMU-830 PROM Labeling

PROM Replacement Procedure

- 1 Use a flat-blade screwdriver to loosen the two screws securing the EMU-830 to Slot 17 of the shelf; then remove the EMU-830 from the shelf.
- 2 Locate PROM U21 on the EMU circuit board (see Figure 1).
- 3 Insert a PROM extraction tool into the "Tool Insert" slots on the U21 socket (see Figure 2).
- 4 Gently pry the PROM out of the socket using the PROM extraction tool.
- 5 Locate the U21 replacement PROM shipped with your kit; it is labeled as shown in Figure 2.
- 6 Place the PROM located in step 5 into the U21 socket.



There is a notch on both the PROM and the socket. Make sure these notches are aligned with each other before inserting the PROM.

- 7 Press the PROM into the socket until it seats firmly.
- 8 Locate PROM U20 on the EMU circuit board (see Figure 1).
- 9 Insert a PROM extraction tool into the "Tool Insert" slots on the U20 socket (see Figure 2).
- 10 Gently pry the PROM out of the socket using the PROM extraction tool.
- 11 Locate the U20 replacement PROM shipped with your kit; it is labeled as shown in Figure 2.
- 12 Place the PROM located in step 11 into the U20 socket.



There is a notch on both the PROM and the socket. Make sure these notches are aligned with each other before inserting the PROM.

- 13 Press the PROM into the socket until it seats firmly.
- 14 Align the EMU-830 circuit board with the black guide lines on the top and bottom edges of shelf-slot 17, then push the EMU board into the slot until the EMU front panel is flush with the front of the shelf.
- 15 Secure the EMU-830 to the shelf with the two retaining screws on the EMU front panel.

Technical Support

Contact Numbers

PairGain Technical Assistance is available 24-hours-a-day, 7-days-a-week by contacting PairGain Customer Service Engineering group at:

Telephone: (800) 638-0031 or (714) 832-9922

Fax: (714) 832-9924

Response

During normal business hours (8:00 AM to 5:00 PM, Pacific Time, Monday - Friday, excluding holidays), technical assistance calls are normally answered directly by a Customer Service Engineer. At other times, a request for technical assistance is handled by an on-duty Customer Service Engineer through a callback process. This process normally results in a callback within 30 minutes of initiating the request.

Bulletin Board Services

PairGain maintains a computer bulletin board system for obtaining current information on PairGain products, product troubleshooting tips and aids, accessing helpful utilities, and for posting requests or questions. This system is available 24-hours-a-day by calling (714) 730-3299. Transmission speeds up to 28.8 kbps are supported with a character format of 8-N-1.

Internet Access

PairGain software updates and Simple Network Management Protocol (SNMP) Management Information Bases (MIBs) for the HiGain International Series are available through the PairGain File Transfer Protocol (FTP) Server at <ftp.pairgain.com> located in the ETSI directory. Use "anonymous" as a log-in name and "guest" as a password.

©Copyright 1997 PairGain Technologies, Inc.

PairGain is a registered trademark, and HiGain is a trademark of PairGain Technologies, Inc.

