HIGAIN-ETSI
EXCHANGE OFFICE MANAGEMENT UNIT
SOFTWARE RELEASE NOTES – VERSION 3.20

Model	List Number	Part Number
EMU-830	1	150-1440-01
EMU-830	2	150-1440-02
EMU-830	3	150-1440-03
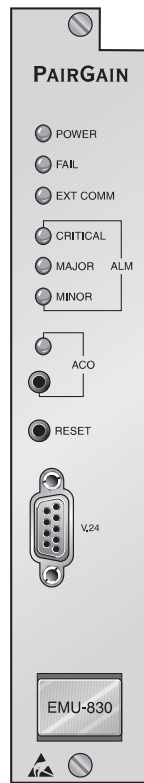
PAIRGAIN TECHNOLOGIES, INC.

ENGINEERING SERVICES SOFTWARE RELEASE NOTES

SECTION 190-800-117-01

Revision History of this document.
Revision 01—July 10, 1998
A) Initial release of EMU software Version 3.20

ꟷPAIRGAIN

TABLE OF CONTENTS

A. SOFTWARE RELEASE OVERVIEW

1. Description

1.1   This document describes the new features, bug fixes, known remaining bugs, and compatibility issues associated with release of the following software:

General Description:	Exchange Office Management Unit Software
Version:	3.20
Checksum:	`0x8648`
Release Date:	06/12/98
File Name:	`muv320.img`

1.2   The previous release of software was:

Version:	3.10
Checksum:	`0xD034`
Release Date:	4/21/98
File Name:	`muv310.img`

2. Product Application

2.1   This software is used with the products listed in the following table.

Exchange Office Management Units Using Version 3.20 Software

Model Number	List	Part Number	Description
EMU-830	1	150-1440-01	Exchange Office Management Unit with TAO and SNMP
EMU-830	2	150-1440-02	Exchange Office Management Unit with TAO and SNMP
EMU-830	3	150-1440-03	Exchange Office Management Unit with TAO, SNMP, and external shelf clock backup circuit

3. New Features

3.1   **Robust Download Protocol.** Version 3.20 supports a proprietary new software download protocol that allows firmware to be downloaded to any unit (EMU or HDSL) in a multishelf TAO network. This protocol is supported by a special PairGain application program that can run on a PC. The connection is made through the front panel RS-232 Console port of one of the EMUs in the network. The previous methods of downloading code to EMUs and HDSL units are still supported through the TAO menus and SNMP FTP/BOOTP techniques.

3.2   **Backup Timing.** EMU List 3 hardware includes a backup timing circuit for the 2 MHz external shelf clock. This circuit will continue to provide a 2 MHz clock to the HDSL cards in the event the 2 MHz external shelf clock is lost. Version 3.20 software reports the status of this circuit and allows the user to set the severity of the alarm generated when the clock is lost.

3.3   **Enhanced Configuration Change Trap.** This trap is now sent when changes are made in alarm severity settings, circuit IDs, or loopback modes.

4. Bug Fixes

4.1   All bugs that have been corrected since the previous software release, Version 3.10, are listed below along with the corrective action that was taken to fix the problem for the current release, Version 3.20.

DR Number:	482
Description:	If the EMU received an incomplete file during a line unit upload it would fail and require a hard reset. A timeout has been added for line unit uploads. Should the timeout occur, the EMU resets automatically.

DR Number:	765
Description:	The EMU would fail when sending out SNMP Traps with no cable attached to the Ethernet port or when no Trap Receiver was configured. This problem has been corrected and the EMU no longer fails under these conditions.

5. Known Existing Bugs

On rare occasions, the number of ES/UAS counts in the 15 minute HDSL performance history will differ by 3 to 10 seconds through the SNMP and TAO interfaces.

B. BACKWARD COMPATIBILITY AND UPGRADES

6. Compatibility with Previous Versions of HDSL Unit Firmware

6.1   EMU software Version 3.20 requires that the HDSL units use software Versions 3.10 and later to ensure proper operation of the Robust Download Protocol.

7. Upgrade Methods

7.1   **From Version 1.1.** EMU-830 Management units running software Version 1.1 must be upgraded by replacing the two PROM chips on the board. These chips may be ordered from PairGain as part of the EMU-830 Management Unit Software Upgrade Kit (part number 150-1491-01). This kit includes the following:

- EMU-830 Firmware Upgrade PROMs, Version 3.20

- EMU-830 Technical Practice, 700-030-100-04

- SNMP MIB Diskette, Version 3.20

- HDSL Unit Firmware Diskette, Version 3.20

7.2   **From Version 2.0.** EMU-830 Management Units running software Version 2.0 may be upgraded by either replacing the PROM chips identified above, or by performing a firmware download using a maintenance terminal or PC running a terminal emulation program. The Version 3.20 image file (`muv32000.img`) may be downloaded from PairGain's FTP site at ftp.pairgain.com.etsi or from our Web site at http://www.pairgain.com. The EMU-830 Technical Practice, Section 700-030-100-xx, describes how to perform the firmware download.

8. Compatibility with Previous Versions of SNMP MIBs

8.1   EMU software Version 3.20 requires the current release of SNMP MIB files to support the EMU-830 List 3 backup timing feature. The current release of MIB files is backward compatible with EMU Version 3.10 software. The MIB file upgrade is not required if the EMU-830 List 3 backup timing feature is not used.

The MIB files for EMU software Version 3.20 are identified in the following list. The `MIB` files should be compiled in the order listed.

- `RFC1155.mib`   - Standard MIB   Resident on SNMP software package
- `pgmibhd.mib`   - PairGain Common MIB   Release 1.1   Revision 05/21/97
- `pgetsi.mib`   - PairGain ETSI Interface MIB   Release 1.4   Revision 05/14/98
- `pghdsl.mib`   - PairGain HDSL MIB   Release 1.2   Revision 06/24/97
- `pgagtmib.mib`   - PairGain SNMP Agent MIB   Release 1.1   Revision 05/21/97
- `pgetsitr.mib`   - PairGain ETSI SNMP Trap MIB   Release 1.2   Revision 01/08/98

The Release version number and Revision date can be seen by viewing the MIB files with a standard text editor.

C. SAFETY AND EMC COMPLIANCE

9. Safety and EMC Compliance

9.1   The use of EMU software Version 3.20 will not change the safety or EMC characteristics of the EMU-830 board.

Corporate Office
14402 Franklin Avenue
Tustin, CA 92780

Tel: (714) 832-9922
Fax: (714) 832-9924

For Technical Assistance:
(800) 638-0031

ISO 9001

DNV

DNV Certification, Inc.
Certificated Firm

ĮPAIRGAIN