

lexicon

H A Harman International Company

960L

Version 2.5 Software Upgrade

Installation Instructions & Release Notes

SAFETY SYMBOLS

Following are symbols that appear in this documentation:

WARNING Calls attention to a procedure, practice, condition, or the like that, if not correctly performed or adhered to, could result in injury or death.

Note:

Calls attention to information that is essential to highlight.

lexicon

A Harman International Company

Lexicon, Inc.
3 Oak Park
Bedford, MA 01730-1441 USA
Tel 781-280-0300
Fax 781-280-0490
www.lexicon.com

Customer Support

Tel 781-280-0300
Fax 781-280-0495 (Sales)
Fax 781-280-0499 (Service)

Lexicon Part No. 070-14819 | Rev 0 | 07/01

© 2001 Lexicon, Inc. All rights reserved.

This document should not be construed as a commitment on the part of Lexicon, Inc. The information it contains is subject to change without notice. Lexicon, Inc. assumes no responsibility for errors that may appear within this document.

This document contains installation instructions for the 960L Version 2.5 Software. It describes updated and enhanced features of Version 2.5, and discusses items that did not receive full coverage in the 960L Owner's Manual. Refer to the owner's manual, particularly the Version 2.5 addendum, for additional information about the new software.

VERSION 2.5 FEATURES

New Stereo Delay Algorithms

- Simple Delays
- Dual Delays
- Random Delays
- Stereo Frame Delay

New Multi-Channel Delay Algorithms

- Simple Surround Delays
- Random Surround Delays
- Surround Frame Delay
- Octal Frame Delay (8x8 Configuration Only)
- Octal Zone Delay (8x8 Configuration Only)

New Stereo 96kHz Reverb Algorithms

- Chamber
- Plate

New Multi-Channel Reverb Algorithms

- Surround Chamber
- Surround Plate

Stereo Delay Factory Programs

- There are eight banks containing new factory programs that utilize the stereo delay algorithms listed above. These programs range from simple PCM42-type delays to wild delay effects. There is also a bank containing 480L delay programs.

Multi-Channel Factory Programs

- There are five banks containing new factory programs that utilize the multi-channel delay algorithms listed above. These programs range from very simple surround delays to wild surround delay effects.

INSTALLATION INSTRUCTIONS

Note:

Although the installer will preserve user registers, it is recommended to save them to a floppy disk before making the upgrade. (See the section called Organizing Your Registers in Chapter 4 of the owner's manual.) These saved user registers will be compatible with the current version of software in the 960L. If necessary, saved user registers can be loaded from the floppy disk to the Version 2.5 system. However, it is recommended to save a copy of the current user registers in case it is ever desired to revert the system back to its current version. (See Reverting to a Previous Software Version on page 6.)

Performing this upgrade is a simple process. But to avoid problems, please follow the instructions carefully. Pay particular attention to precautions that appear throughout this document.

Please note the following before proceeding to the steps below:

- The installation process requires the 960L serial number, which is located on the back of the mainframe. The serial number consists of four digits, followed by a dash, followed by four more digits. It is recommended to note this number before beginning installation. (The unit will not ask to have the serial number re-entered if this process was completed during a previous installation.)
- Refer to page 1-5 in the 960L Owner's Manual for instructions to open the 960L front panel.
- Use the front panel standby button whenever the instructions call for the 960L to be powered up or down. Do not use the back panel power switch.
- The installation process will take approximately 15 minutes.

WARNING These service instructions are for use by qualified personnel only. Do not perform any servicing other than that contained in these instructions unless qualified to do so. Refer to safety summary prior to performing any service.

1. While the 960L is powered up, insert the Version 2.5 CD. Using the front panel standby button, power down the system, wait a few seconds, then power up the system again. After a few minutes, the following message will appear:

```
Install disc found in drive - [960L V2.50R BUILD 1]

Update / Install 960L:  press '1' to install
                        press '0' to continue with no install
```

2. Press 1 to begin installation. A number of progress messages will appear. When this phase of installation is complete (after about one minute), the following message will appear:

```
Install complete. Please remove CD from drive.
```

3. Remove the CD from the drive. Using the front panel standby button, power down the 960L, wait a few seconds, then power up the system again. The 960L will take a little longer to boot than normal.

If the LARC2 requires an update, the LARC2 will display the following menu:

```
Update needed on Larc2: Press '1' to update
                        Press '0' to ignore
```

4. Press 1 to begin the LARC2 update. This is the longest phase of the process, lasting about 10 minutes. The LARC2 will display a progress indicator. After the LARC 2 update is complete, the following message will appear:

```
Please enter serial number of the 960L from the back panel of
the 960L chassis. Do not use the serial number of the LARC2!
Enter numbers only. Do not enter first letter (shown as x )
Use minus for - : Use left arrow < for backspace : Finish
with ENTER.
```

```
x_
```

Note:

When reinstalling Version 2.5, the unit will not ask to have the serial number re-entered if this process was completed during a previous installation.

5. Enter the serial number as it appears on the back panel of the 960L mainframe. Do not enter the first letter. Enter the numbers and the dash only. Press ENTER when finished. The following message will appear:

```
Please re-enter serial number for verification . . .
```

```
x_
```

6. Enter the serial number again as it appears on the back panel of the 960L mainframe. Once again, do not enter the first letter of the serial number. Enter the numbers and the dash only. Press ENTER when finished and the system will start.
7. After the system has started, verify that the software has been installed properly. To do this, press the CONTROL button, then the SYSTEM button, and read the version information on the screen. The LARC2 version is 2.4R and the mainframe version is 2.5R Build 1.

Once this process is complete, configure the system and continue working. It is recommended to read the 960L Owner's Manual, particularly the Version 2.5 addendum, for more information about the new software.

REVERTING TO A PREVIOUS SOFTWARE VERSION

To revert to a previous version of 960L software, follow the same procedure outlined on pages 3 to 5 using the release CD for the desired software version. There is one special consideration: When upgrading to Version 2.5, the software recognizes prior versions of user registers and automatically converts them to a compatible format. The 960L software is not able to convert back from later versions.

Therefore, when performing a "back-rev," erase all user registers before inserting the release CD. It is recommended to save them first, noting the software version of the user registers.

1. Using the front panel standby button, power down the 960L, wait a few seconds, then power up the system again. As soon as the LARC2 receives power, go to Menu Mode by pressing and holding the PROGRAM and MACHINE keys at the same time. Hold them until the following message appears:

```
Requesting menu mode from 960L . . .
```

Once this message appears, release the buttons. The 960L will take a little longer to boot than normal. As soon as it is booted, a menu should appear on the LARC2. Ignore any messages that concern locking the CD.

2. Select this item from the menu:

```
7) Erase User Registers & Restore Factory Default Settings
```

Once this process is complete, follow the installation instructions outlined on pages 4 and 5 using the release CD for the desired software version. A few messages will differ slightly. When checking the software version (see Step 7 on page 5), refer to the release notes for the software version being installed to determine software revisions for the LARC2 and the 960L mainframe.

RELEASE NOTES

- When configuring systems with two DSP cards, there are no longer two soft buttons labeled CONFIG 1 and CONFIG 2. In Version 2.5, there is one soft button labeled CONFIG v. When pressed, a menu will appear allowing selection of the desired DSP card for configuration. In systems with one DSP card, there is no change.
- The ability to use double-button presses to access options has been removed in order to support future functionality.
- Reverb algorithms now allow input levels to be set to a maximum level of 0dB. In some previous releases, -6dB was the maximum.

Note:

Setting the input level above -6dB can result in DSP overflows.

- When processing audio, loading a very small Random Hall program while running a large Random Hall program (i.e. loading Oil Drum while running Large Hall) may generate DSP feedback. The level and duration of the feedback depends on the audio source. To prevent feedback from occurring, mute the machine before loading the smaller Random Hall program.
- Occasionally, LARC2 motorized faders may exhibit a "vibrating" characteristic when settling into a new position as programs are loaded. The characteristic may appear to be inconsistent from fader to fader. This is normal due to the varying characteristics of individual fader components. The faders will settle into a stable position after a short adjustment or calibration period.
- Input/output routings need to be set after installing Version 2.5. Once set, the input/output routings are saved with the configuration and will be automatically recalled when that DSP configuration is loaded.
- Input/output routings saved with each configuration may become invalid if the order of the input/output cards is changed or if an input/output card is removed from the unit. If this occurs, simply reset the input/output routings.
- Manual fader adjustment may be prevented when the fader is automatically positioned near the top or bottom of its physical range, even if the parameter is not set to its maximum or minimum value. To overcome this anomaly, move the fader in the opposite direction, then to the desired value.
- The LtRt outputs of the five-output configurations cannot be routed as inputs to the second optional reverb DSP card.
- The two machine outputs in the five-channel cascades are mixed to allow processed material from the first machine to simultaneously pass directly to the system output and feed the second machine. Phasing and comb filtering will occur if dry signal is passed through both machines.

Lexicon

■ A Harman International Company

Lexicon, Inc.
3 Oak Park
Bedford, MA 01730-1441 USA
Tel 781-280-0300
Fax 781-280-0490
www.lexicon.com

Customer Support

Tel 781-280-0300
Fax 781-280-0495 (Sales)
Fax 781-280-0499 (Service)

Lexicon Part No. 070-14819 | Rev 0 | 07/01