Replace the Host board

1. Return the Host board to the mainframe, making sure the board is accurately positioned in the slotted rails. Push firmly into the back plane.
2. Reconnect the cable.

Verify 480L operation

1. Power unit up and note on the LARC that diagnostics complete. The unit should default to Single Configuration with NO Program loaded into Machine A. Press BANK 1, then PRogram 1 to load Large Hall.

This completes the software installation. If the unit appears to be functioning properly, replace the card retainer and close the front cover. Refer to the revised Owner's Manual for information on V4.0 features and functionality.

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Lexicon Part No. 070-09331

Installing 480L V4.0 Software

480L V4.0

Digital Effects Processor

Features of V4.0 Software:

- **Integration of Program Pack V1.00**
  Digital Compressor/Expander
  Enhanced Parametric EQ
  Panorama

- **Enahnced Programs**
  Ambience
  Very small (1 meter) ambience
  Random Hall
  1-39 Meter room sizes
  Precision RT crossover control
  Output shelf equalizer
  Infinite RT
  Stereo Adjust Programs
  Blumlein shuffler and shelf center frequency adjustment
  Digital phase inversion and channel swap

- **New Programs**
  Twin Delays
  PONS Adjust
  Post Ambience Bank
  Prime Time III
  Precision Oscillator
  Pink Noise
  Binaural Simulator
  Frequency Dynamics
  Distression

- **System Enhancements**
  MIDI Sysex Automation and Dumps
  Power-up Program table

Classic Cart Option

The Classic Cart option can be purchased from Lexicon as a further enhancement to Version 4.0 software. It provides 40 additional programs for the 480L including:

224XL Concert Hall Programs
Classic Rich Plate Programs
224XL 6-Voice Chorus Programs
1/3 Octave Multiband Delays Programs

Lexicon

SAFETY SUMMARY

The following general safety precautions must be observed during all phases of operation, service and repair of this instrument. Failure to comply with these precautions, or with specific warnings elsewhere in these instructions violates safety standards of design manufacture and intended use of the instrument. Lexicon assumes no liability for the customer's failure to comply with these requirements.

GROUND THE INSTRUMENT

To minimize shock hazard the instrument chassis and cabinet must be connected to an electrical ground. The instrument is equipped with a three-conductor AC power cable. The power cable must either be plugged into an approved three-contact electrical outlet or used with a three-contact to two-contact adapter with the grounding wire (green) firmly connected to an electrical ground (safety ground) at the power outlet. The power jack and mating plug of the power cable meet International Electrotechnical Commission (IEC) safety standards.

DO NOT OPERATE IN AN EXPLOSIVE ATMOSPHERE

Do not operate the instrument in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.

KEEP AWAY FROM LIVE CIRCUITS

Operating personnel must not remove instrument covers. Component replacement and internal adjustments must be made by qualified maintenance personnel. Do not replace components with power cable connected. Under certain conditions, dangerous voltages may exist even with the power cable removed. To avoid injuries, always disconnect power and discharge circuits before touching them.

DO NOT SERVICE OR ADJUST ALONE

Do not attempt internal service or adjustment unless another person, capable of rendering first aid and resuscitation, is present.

DO NOT SUBSTITUTE PARTS OR MODIFY INSTRUMENT

Because of the danger of introducing additional hazards, do not install substitute parts or perform any unauthorized modification to the instrument.

DANGEROUS PROCEDURE WARNINGS

Warnings, such as the example below, precede potentially dangerous procedures throughout this manual. Instructions contained in the warnings must be followed.

WARNING

Dangerous voltages, capable of causing death, are present in this instrument. Use extreme caution when handling, testing and adjusting.

SAFETY SYMBOLS

General definitions of safety symbols used on equipment or in manuals.

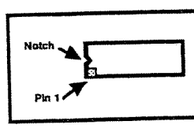
Instruction manual symbol: the product will be marked with this symbol when it is necessary for the user to refer to the instruction manual in order to protect against damage to the instrument.

Indicates dangerous voltage. (Terminals fed from the interior by voltage exceeding 1000 volts must be so marked.)

WARNING — The WARNING sign denotes a hazard. It calls attention to a procedure, practice, condition or the like which, if not correctly performed or adhered to, could result in injury or death to personnel.

CAUTION — The CAUTION sign denotes a hazard. It calls attention to an operating procedure, practice, condition or the like which, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the product.

NOTE: The NOTE sign denotes important information. It calls attention to procedure, practice, condition or the like which is essential to highlight.



CAUTION

ICs inserted backwards will be destroyed. Incorrect insertion of ICs is also likely to cause damage to the board.

CAUTION

Electrostatic Discharge (ESD) Precautions

The following practices minimize possible damage to ICs resulting from electrostatic discharge or improper insertion.

- Keep parts in original containers until ready for use.
- Avoid having plastic, vinyl or styrofoam in the work area.
- Wear an anti-static wrist-strap.
- Discharge personal static before handling devices.
- Remove and insert boards with care.
- When removing boards, handle only by non-conductive surfaces and never touch open-edge connectors except at a static-free workstation.*
- Minimize handling of ICs.
- Handle each IC by its body.
- Do not slide ICs or boards over any surface.
- Insert ICs with the proper orientation, and watch for bent pins on ICs.
- Use anti-static containers for handling and transport.

*To make a plastic-laminated workbench anti-static, wash with a solution of Lux liquid detergent, and allow to dry without rinsing.

Installing V4.0 software

Installing new software in the 480L is a straightforward process but, to avoid damage to yourself, or to your unit, please follow the instructions carefully, paying particular attention to the precautions noted.

The 480L V4.0 Update kit includes:

Qty	Part #	Description
1	350-09323	1meg ROM 1 (U40)
1	350-09324	1meg ROM 2 (U41)
1	350-09325	1meg ROM 3 (U42)
1	350-09326	512k ROM 4 (U43)
1	350-09327	GAL (U23)
1	350-09328	GAL (U24)
1	IC Extractor Tool	
1	070-09360	480L V4.0 Owner's Manual
1	070-09361	480L V4.0 Quick Reference Guide
1	070-09331	480L V4.0 Software Installation Instructions

NOTE: Installing V4.0 software will purge 480L user memory. Make hard copies of your register data, or back up to a non - volatile memory cart, *before* installing V4.0 Software!

WARNING

Disconnect the 480L from the AC outlet. *before* installing V4.0 software.

Remove the Host board.

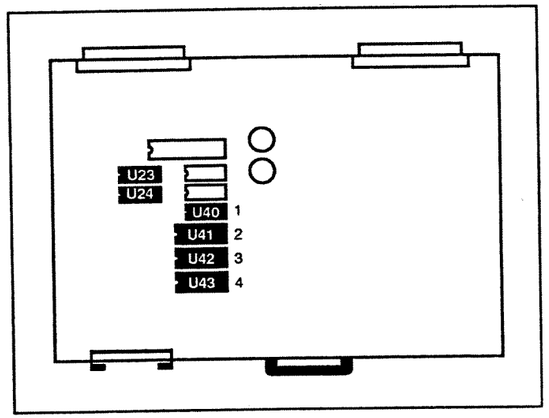
1. Remove any cartdriges from the card slot.
2. Open the hinged 480L front cover. Remove the card retainer by pulling firmly on its two black plastic tabs.
3. Locate the Host Board (the board to which the cartridge cable is connected). Spread the 2 plastic "wings" of the cable connector, and disconnect the ribbon cable from the connector.
4. Grasp the small handle of the Host Board firmly, and pull the Host board out of the mainframe. Place the board on smooth, level, non-static surface.

CAUTION

Exercise ESD Precautions before proceeding

Change ICs

Once the Host board is removed, refer to the diagram to locate the ICs which are to be replaced. Remember to observe antistatic precautions before touching any ICs.



1. Locate the ICs to be replaced, and note their orientation.
2. Using the IC Extractor Tool, remove each ROM (labeled 1-4). Replace each with a new ROM of the same number. Note that ROMs 2,3, and 4 (512k) are replaced with 1 meg ROMs.
3. Locate U23 and U24. Remove these ICs, and replace them with V4.0 GALs, **making sure to install the new chips with the same orientation.**
4. Check all insertions to be sure no pins are bent. Also check the notch orientation so as to be sure ROMs are not inserted backwards.

CAUTION

ICs inserted backwards will be destroyed. Incorrect insertion of ICs is also likely to cause damage to the board.