

Installation Instructions

480L

Sampling Memory Expansion

lexicon

Safety Precautions

The Lexicon 480L is a rugged device with extensive electronic protection. However, reasonable precautions applicable to any piece of audio equipment should be observed.

- ❖ Always use the correct AC line voltage.
- ❖ Do not install the 480L in an unventilated rack, or directly above heat-producing equipment. Maximum ambient operating temperature is 35°C (95°F).
- ❖ Never attach audio power amplifier outputs or other power sources directly to any of the 480L's connectors.
- ❖ To prevent fire or shock hazard, do not expose the 480L to rain or moisture.

Static Electricity Precautions

Many of the 480L's internal components are extremely sensitive to static electricity. The following practices minimize possible damage to ICs that can result from electrostatic discharge.

1. Don't handle ICs and cards more than necessary.
2. Discharge personal static by touching the 480L mainframe before handling ICs or cards.
3. Handle each IC by its body.
4. Do not slide ICs or cards over a surface.
5. Avoid having plastic, vinyl or styrofoam in the work area.
6. Handle ICs only at a static-free workstation.
7. Use only grounded-tip soldering irons.
8. Use antistatic containers for handling and transport.

Notice

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About the Sampling Memory Expander

The Sampling Memory Expander is the first option we've developed to extend the 480L's capabilities. It occupies the fourth card slot in the 480L mainframe. Storage capacity is one megaword of 18-bit PCM sample data. This provides 10.9 seconds of true phase-locked stereo or 21.8 seconds of mono at the 48 kHz sampling rate. At 44.1 kHz, the sampling time is extended to 11.8 seconds of stereo or 23.7 seconds of mono.

The Sampling Memory Expander's extra data capacity means more than just longer samples—the SME sampling programs use only one Machine. This lets you take advantage of the other machine to enhance sampled sounds with the full repertoire of 480L effects and reverberation processing.

The Sampling Memory Expander fills a critical gap in modern audio production techniques. "Flying In" overdubs should save time and provide an additional level of creative choice. Until now, however, existing methods (two-track tape or delay lines with extended memory) were so cumbersome that they often failed to deliver the hoped-for increase in efficiency. They also imposed compromises in audio quality and track alignment.

The Sampling Memory Expander offers a faster way to copy or move several seconds of audio from point A to points B and C. Precise timing and track alignment are ensured by an audio trigger response time of under 300 microseconds.

The 480L's exceptional audio performance gives it the ability to record digitally with accuracy that surpasses conventional digital recorders. If your digital two-track is Sony 1610-compatible, you can sample an audio segment and reproduce it at any location without leaving the digital domain, using the Sampling Memory Expander with the 480L's digital I/O interface.

With the Sampling Memory Expander, you can access the new programs in Bank 6 of Version 2.00 of the 480L's operating software. These programs include new sampling parameters described in the updated Chapter 5 for the 480L *Owner's Manual*—included with the optional Version 2.00 upgrade package.

Specifications

- 1 megaword of dynamic RAM storage
- 18-bit sample word
- 3.84 MIPS execution rate
- Sampling Time*:
 - 21.8 secs Mono @ 48 kHz sampling rate
 - 23.7 secs Mono @ 44.1 kHz sampling rate
 - 10.9 secs Stereo @ 48 kHz sampling rate
 - 11.8 secs Stereo @ 44.1 kHz sampling rate

* Actual sampling times available may vary due to software implementation.

Installation

To install the Sampling Memory Expander:

1. Power down the 480L.
 2. Remove cartridge (if present).
 3. Open the front panel and remove the card retainer.
 4. Remove the Sampling Memory Expansion card from its antistatic bag.
 5. Install the card in the fourth (bottom) slot of the 480L. Align it carefully with the rails on each side of the unit and carefully slide it in. When you are certain that the card is correctly aligned, gently apply seating force to mate its connectors with the backplane. If you encounter any resistance, stop immediately, remove the card, realign it, and try again.
- Damage caused by improperly forcing a card into the 480L can be severe, and is not covered by your warranty!**
6. Reinstall the card retainer, close the front panel, and power up the 480L.
 7. The unit should operate normally. If you encounter difficulties, contact Lexicon Customer Service at (617) 891-6790.

Note: The Sampling Memory Expander is designed for use with 480L Software Version 2.00 or higher.

