MPX 500 Version 1.1 Software Upgrade

Installation Instructions & Release Notes
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Note:
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1. Before installing the software upgrade, dump the System Parameters or the User Bank into an external MIDI device. (These are two separate dumps.)
2. Install the Version 1.1 software upgrade.
3. Send the previously saved System Parameter or User Bank dump back to the MPX 500.

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.
## Installation Instructions & Release Notes

### 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, Inc. assumes no liability for 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 3-conductor AC power cable. The power cable must be either plugged into an approved 3-contact electrical outlet or used with a 3-contact to 2-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 gasses 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
Following are symbols that appear throughout this user guide:

Appears on the component to indicate the presence of uninsulated, dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.

Appears on the component to indicate important operating and maintenance instructions in the accompanying literature.

CALLS ATTENTION TO A PROCEDURE, PRACTICE, CONDITION, OR THE LIKE THAT, IF NOT CORRECTLY PERFORMED OR ADHERED TO, COULD RESULT IN INJURY OR DEATH.

CALLS ATTENTION TO A PROCEDURE, PRACTICE, CONDITION, OR THE LIKE THAT, IF NOT CORRECTLY PERFORMED OR ADHERED TO, COULD RESULT IN DAMAGE TO OR DESTRUCTION OF PART OR ALL OF THE PRODUCT.

Note:
Calls attention to information that is essential to highlight.

ELECTROSTATIC DISCHARGE (ESD) PRECAUTIONS
The following practices minimize possible damage to EPROMs 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 EPROMs.
• Handle each EPROM by its body.
• Do not slide EPROMs or boards over any surface.
• Insert EPROMs with the proper orientation, and watch for bent pins on EPROMs.
• 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.
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CONTENTS
This update kit includes:
• 1  MPX 500 EPROM
• 1  EPROM Extractor Tool
• Installation and Release Notes (this document)
• 1  Anti-static wrist strap

This kit does not include two Phillips head screwdrivers (sizes 0 and 1) and a wrench or nut driver, which are also needed.

WARNING
Turn off and disconnect all power to the unit prior to installing the software upgrade.

INSTALLATION INSTRUCTIONS
Performing this upgrade is an easy process. But to avoid problems, please follow these instructions carefully. Pay particular attention to the precautions listed in the safety summary, and those that appear throughout these instructions. Any damage caused during installation is not covered under warranty.
**STEP 1 - OPEN THE UNIT**

1. Using a size 1 Phillips head screwdriver, remove the screws (Lexicon Part No. 640-02812) on the top and bottom of the unit (three on top, three on bottom).

2. Carefully remove the side panels by pulling them out (as shown in the illustration below). Begin pulling at the end closest to the front panel.

3. Remove the screw (Lexicon Part No. 640-02812) and nut (Lexicon Part No. 643-01732) closest to the AC receptacle. This is the only screw with a nut attached.

4. Remove the nine larger screws (Lexicon Part No. 641-11466) on the rear panel.
Installation Instructions & Release Notes

INSTRUCTIONS (continued)

STEP 1 - OPEN THE UNIT (continued)

5. Using a size 0 Phillips head screwdriver, remove the four smaller screws (Lexicon Part No. 641-12759) near the MIDI IN & OUT/THRU ports.

6. Using a wrench or nut driver, remove the five plastic nuts (Lexicon Part No. 643-11682) attached to the 1/4" connectors.

7. Remove the U-shaped chassis cover by gently pulling it straight back, away from the front panel.

8. Put the anti-static wrist strap on before proceeding to the next step.
**STEP 2 - INSTALL THE EPROM**

1. Refer to the illustration below to locate the EPROM on the MPX 500 main board (location U9).

2. Check the EPROM provided with the upgrade kit. Because the manufacturing process leaves the pins angled out slightly from the body of the EPROM, the pins must be straightened before insertion. Use the following procedure to straighten the pins:

   A. Place the EPROM on its side on a static-free, flat surface.

   B. Hold the body of the EPROM and, exerting gentle pressure downward, roll it slightly to force the pins into a position parallel to the work surface (see diagram below).

3. Using the EPROM extractor tool (see diagram below) remove the EPROM at location U9 and insert the new EPROM in its place. Be careful to align the EPROM correctly to avoid bending any pins. When the EPROM is inserted, carefully inspect each pin to ensure that it has not been bent.
Installation Instructions & Release Notes

INSTRUCTIONS (continued)

STEP 2 - INSTALL THE EPROM (continued)

CAUTION

EPROMs that are inserted incorrectly will likely be destroyed, and may also cause damage to the board.

Note:
To reassemble the unit, follow instructions 1-7 under the heading “Step 1 - Open the Unit” (pages 7-8) in reverse order.

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RELEASE NOTES

This following describe the enhancements contained in the MPX 500 Version 1.1 Software Upgrade:

• The Tap button responds to consecutive rather than alternate presses.
The program knob is less sensitive.

Program Tempo now works for programs stored in the User Bank.

Tempo-dependent programs stored in the User Bank are now retrieved properly, even if the sample rate has changed.

**ERRATA NOTES**

- On page 19, the MPX 500 User Guide incorrectly states that Memory Protect Mode prevents changes to the User Bank or the System Parameters. When enabled, Memory Protect Mode does prevent changes to the User Bank. But it does not prevent changes to the System Parameters, nor does it prevent restoration of the MPX 500 factory-default settings. This means that Factory Init will erase any stored programs in the User Bank.

- Paragraph four of the original Release Notes for the MPX 500 contained a list of presets from which the Tempo patch was removed after the original User Guide was prepared. That list had a few omissions. Following is a correct version: 3, 5, 6, 7, 63, 64, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 210, 215, 236, 237, 238.

- A Tempo patch was added to preset #12.

- Random clicking in Ambience programs has been fixed.