R-FX Card Kit
Installation Instructions
for E4 Ultra

6864

The RFX processor card adds a new level of DSP power to your Emulator Four Ultra. The RFX card contains two E-MU R-Chips, which have the power to implement 16 high quality digital effects simultaneously. The RFX card uses a super-wide 32-bit signal path throughout for pristine audio quality. The RFX card also makes it possible to install our new line of low-cost option cards such as the 4-channel analog input card, the ADAT optical card and the 8-channel analog output card.

The modification is fairly easy to install, however if you are unsure of your abilities, please contact E-MU for referral to an authorized service center.

This kit **cannot be installed in older Non-Ultra E4's** due to hardware constraints.

✴ **Important Note:** *The RFX card requires a new Analog Output Expander card and a new ADAT card. If you have older versions of these cards, remove them before installing the RFX card.*

Tools Needed:

Phillips head screwdriver #2

Kit Contents:

(1) These installation instructions
(1) RFX card
(1) Flash Prep. Disk
(1) EOS 4.5 (or higher) Software Disk
(1) RFX operation manual

These instructions are not provided as a guarantee against improper installation. When in doubt, contact: E-MU Customer Service at (831) 438-1921. Contact E-MU UK at +44 (0) 131-653-6556.

WARRANTY MAY BE VOIDED IF DAMAGE IS CAUSED BY IMPROPER INSTALLATION, IMPROPER OR INADEQUATE MAINTENANCE, ACCIDENT, ABUSE, MISUSE, ALTERATION, UNAUTHORIZED REPAIRS, TAMPERING, OR FAILURE TO FOLLOW PROCEDURES OUTLINED IN THESE INSTRUCTIONS.

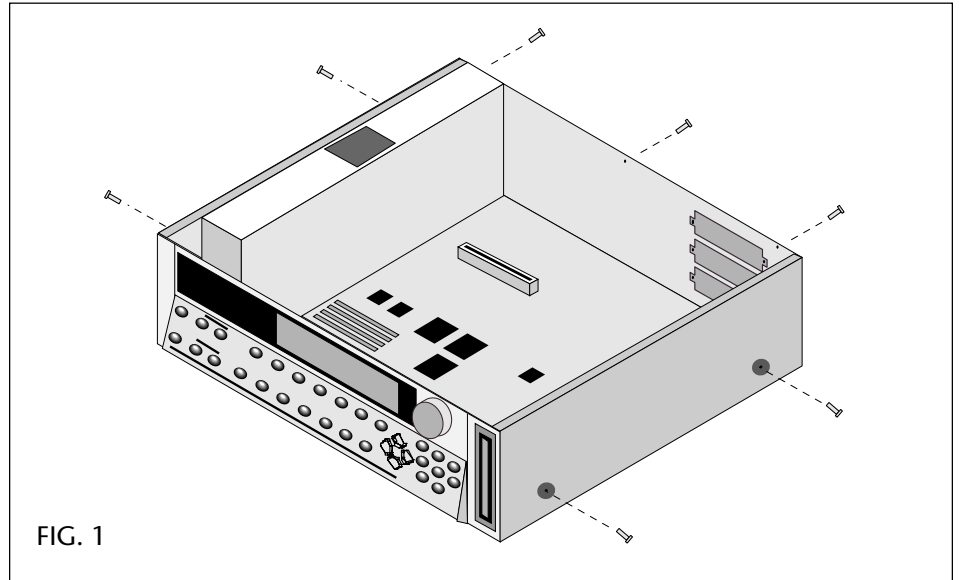—————————————> WARNING <—————————————

UNPLUG THE AC CORD BEFORE DOING ANY WORK!

Groundwork

Before you begin, find a clean, well lit place in which to work. This procedure requires that you periodically "Ground" yourself, by touching a grounded object such as a water pipe or a grounded piece of equipment. Grounding yourself prevents the static charge in your body from damaging the sensitive memory chips. When you are asked to "Ground" yourself, simply reach over and touch the grounded metal. Do not walk across the room or a rug, as this will defeat the purpose of grounding.
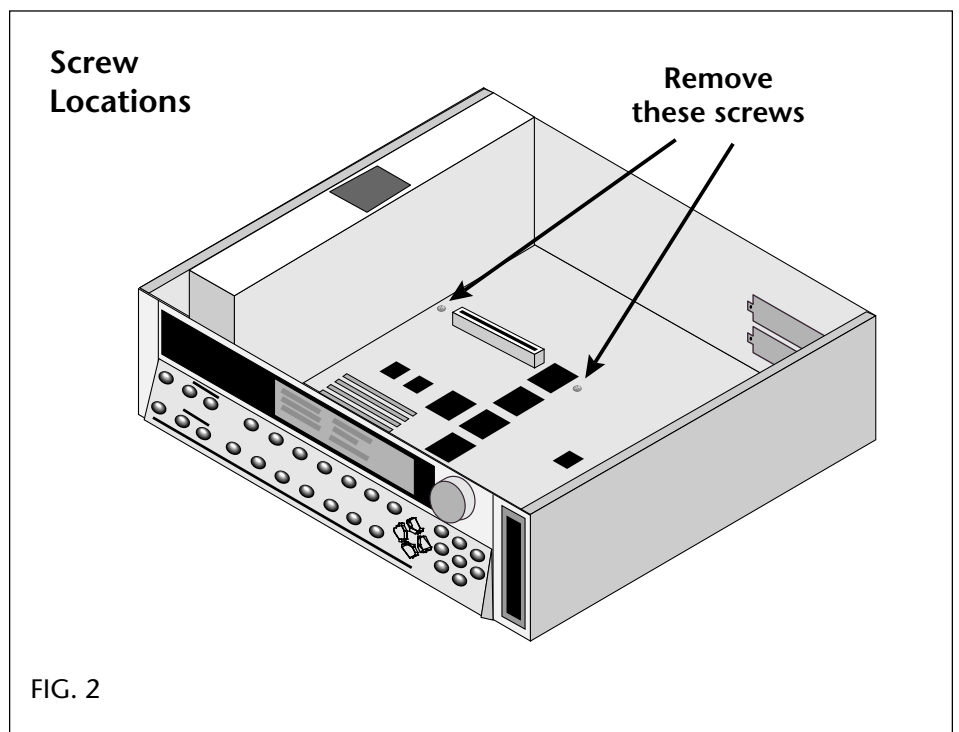
Remove the Top Cover

To gain access to the interior of the unit, the top panel must first be removed. The top panel is attached to the main chassis by means of (7) screws. There are three screws along the back of the unit and two on each side. When all the screws are removed, slide the metal top backwards and up off the unit, exposing the main circuit board. Set the top cover aside in a safe place and put the screws into a cup so they will not get lost. The power supply is covered by a metal box. Do not remove this metal cover!

FIG. 1

✺ **Caution:** *The "PCI" slot on the E4 Ultra is a proprietary bus used the RFX card. Plugging a computer PCI card into this socket will cause serious damage!*

Remove Two Screws

The RFX Board will be installed into the empty "PCI" slot near the center of the main board. First remove the two phillips screws from the main board on either end of the "PCI" socket as shown in Figure 2 below. Set these screws aside in a safe place as they will be used in the next step.

Screw Locations

Remove these screws

FIG. 2

Install the RFX Board

1. The RFX Board is easy to install. Ground yourself again, by touching a grounded object, then remove the board from its protective bag.

2. Install the RFX board as shown in Figure 3 below. The card can only be installed one way. Replace the two screws you removed in the previous step and screw them down tightly. The RFX card should be held rigidly in place.
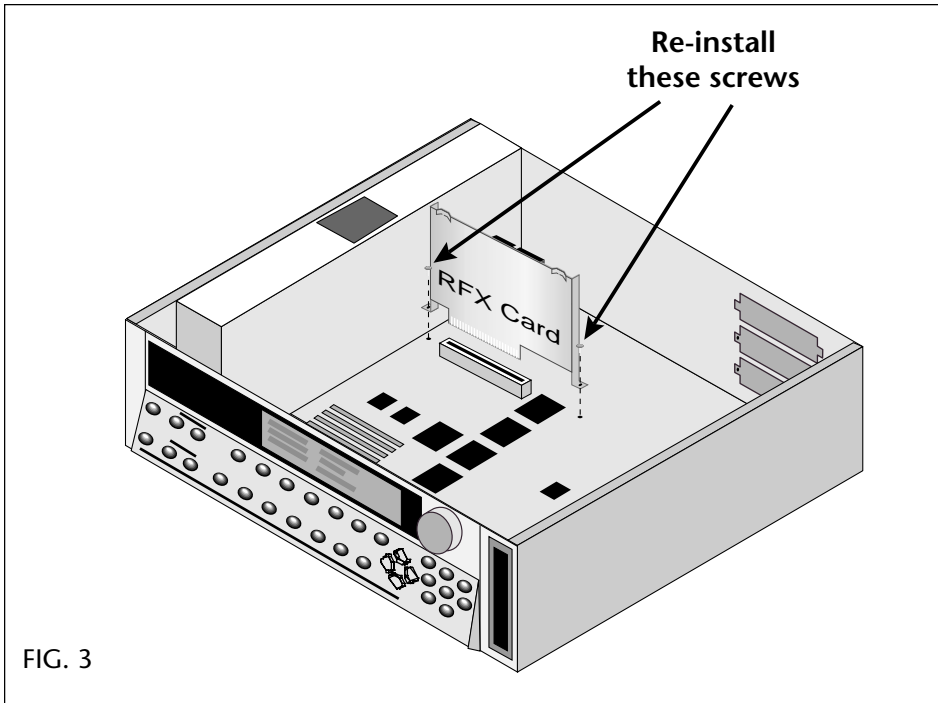
Re-install these screws

RFX Card

FIG. 3

Reassembly

1. Check for any loose cables or loose screws inside.

2. Take the top cover and tilt down the front edge. Carefully insert the front edge of the top panel between the front panel and the top of the metal enclosure. Next lay the top cover down flat on top of the enclosure.

3. Make sure all the screw holes line up and reinstall the seven screws. The screws are all the same.

Update the Software

1. **Insert the Flash Prep disk** with the label side toward the display.

2. **Power on** the Emulator. The display reads, "Ultra Boot Replacer".

3. **Press Enter** to update Flash from floppy.

4. **Turn off power** to the Emulator.

5. **Insert the EOS 4.5 software disk** with the label side toward the display.

6. **Power on** the Emulator. The display reads, "Update FLASH from floppy?".

7. **Press Enter**. The display reads, "Loading OS…".

8. After a minute or so, the display reads "Valid OS loaded in RAM. Burn to Flash?" **Press Enter** to update the Flash memory.

Power On

During the boot-up process, watch for the display, "RFX-32 Installed". This verifies that EOS recognizes the RFX card.

Problems?

If the unit doesn't power up normally or doesn't show the "RFX-32 Installed" display, disconnect power immediately and try the following:

- Are you running EOS version 4.5 (or higher) software? You should be.
- Open the unit, and remove then reseat the RFX card. (Bad connection?)
- Try returning the unit to it's original configuration.

If all else fails, call E-MU Customer Service at (831) 438-1921. Telephone support hours are 8:00-5:00 PST, Monday through Friday.