ESI

3.02 Upgrade Kit Installation Guide

≡E-mu Systems, Inc.

Installation Guide

This kit upgrades a standard ESI with the "3.02" software version. This upgrade adds several new hardware features including:

- 18 New Filters including the Z-plane filter.
- Support for large hard disks (up to 4 GB in size).

WARNING: Because the interior of the ESI contains potentially lethal voltages,

this modification should be performed by authorized service

personnel ONLY!

Tools Needed: Phillips head screwdriver #1

Kit 6213 Contents: (1) These installation instructions

(1) Version 3.02 ESI ROM set

(1) Budget surface-mount IC removal tool

(1) Upgrade Operations Manual

These instructions are not provided as a guarantee against improper installation. When in doubt contact E-mu Customer

Service at: (408) 438-1921.

Important Safety Instructions

Use in countries other than the U.S.A. may require the use of a different line cord or attachment plug, or both. To reduce the risk of fire or electric shock, refer servicing to qualified service personnel. To reduce risk of fire or electric shock, do not expose this product to rain or moisture.

Grounding Instructions

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current, reducing the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet properly installed and grounded in accordance with all local codes and ordinances.

Improper connection of equipment grounding conductor can result in the risk of electric shock. Check with a qualified electrician or ser vice personnel if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with this product. If it will not fit the outlet, have a proper outlet installed by a qualified technician.

User-Maintenance Instructions

- The ESI should be kept clean and dust free. Periodically wipe the unit with a clean, lint free cloth. Do not use solvents or cleaners.
- 2. There are no user lubrication or adjustment requirements.
- 3. Refer all other servicing to qualified service personnel.

Instructions
Pertaining to a
Risk of Fire,
Electric Shock, or
Injury to Persons

When using electric products, basic precautions should always be followed, including the following:

- 1. Read all instructions before using the ESI.
- **2.** To reduce the risk of injury, close supervision is necessary when the ESI is used near children.
- **3.** Do not use the ESI near water or example near a bathtub, washbowl, kitchen sink, in a wet basement, on a wet bar, or near or in a swimming pool.
- **4.** The ESI should be situated so that its location or position does not interfere with its proper ventilation.
- **5.** The ESI should be located away from heat sources such as radiators, heat registers, fireplaces, stoves, or ovens.
- **6.** The ESI should only be connected to a power supply of the type described in the operating instructions and as marked on the product.
- **7.** Care should be taken so that objects do not fall and liquids are not spilled into the enclosure of the ESI through openings.
- 8. This ESI may be equipped with a polarized line plug (one blade wider that the other). This is a safety feature. If you are unable to insert this plug into the outlet, do not defeat the safety purpose of the plug. Contact an electrician to replace your obsolete outlet.
- **9.** The power supply cord of the ESI should be unplugged from the outlet when left unused for a long period of time.
- 10. This product, in combination with an amplifier and headphones and speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, consult an audiologist.
- **11.** The product should be serviced by qualified service personnel if:

SAVE THESE INSTRUCTIONS!

- A. The power supply cord has been damaged;
- B. Objects have fallen, or liquid has been spilled into the product;
- C. The product has been exposed to rain;
- D. The product has been dropped or the enclosure damaged;
- E. The ESI does not operate normally or exhibits a marked change in performance.
- **12.** All servicing should be referred to qualified service personnel.

Radio and Television Interference

The equipment described in this manual generates and uses radio- frequency energy. If it is not installed and used properly - that is, in strict accordance with our instructions - it may cause interference with radio and television reception.

This equipment has been tested and complies with the limits for a Class A computing device in accordance with the specifications in Subpart J of Part 15 of the FCC rules. These rules are designed to pro vide reasonable protection against such interference in a residential installation. However, there is no guarantee that the interference will not occur in a particular installation, especially if a "rabbit ear" TV antenna is used.

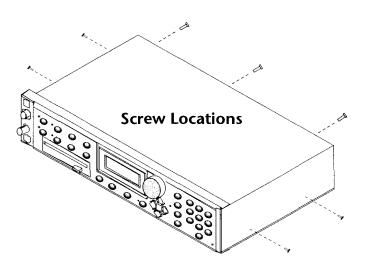
If the ESI does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the ESI to one side or the other of the television or radio.
- Move the ESI farther away from the television or radio.
- Plug the ESI into an outlet on a different circuit than the television or radio.
- Consider installing a rooftop antenna with a coaxial lead-in between the antenna and television set.

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 with seven (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 toward the back and lift up and 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 may be covered by a metal box. Do not remove this metal cover!

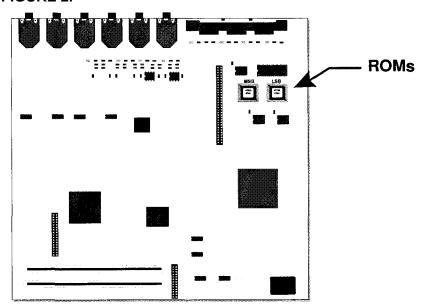
FIGURE 1.



Remove the Old ROMS

The operating system ROMs are located on the right hand side, toward the rear, on the main board as shown in the following illustration (FIG. 2).

FIGURE 2.

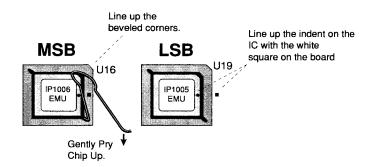


The exact ROM location on your board may be different depending on the unit you have. The ROMs are all in the same vicinity on the main board

Removing the old ROMs is a little tricky because the IC sockets are fragile and can be damaged easily. Notice that there is a slot in each of the diagonal corners of the ROM sockets. These slots allow the removal tool to get underneath the ROM in order to pull it out.

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FIGURE 3.



Remove a ROM by inserting the budget removal tool supplied with this kit into one of the corner slots and gently prying it up. Don't force it! If it moves just a little, that's good. Move the hook to the other side and repeat the procedure. Go from corner to corner, until the ROM pops out. Remove both ROMs.

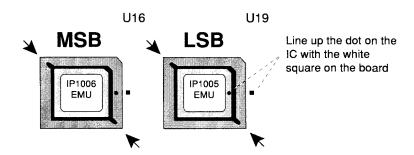
Install the New ROMS

Caution: Make sure the unit is unplugged. If the power supply in this ESI is not encased in a power supply enclosure, be careful not to touch the power supply which can cause electric shock Ground yourself by touching a grounded object, and then remove the version 3.02 ROMs from their antistatic bag. Note that the ROMs are marked IP1006 (M) and IP1005 (L). IP1006 is installed in location MSB (U16 as shown in FIG. 3) and IP1005 is installed in location LSB (U19 as shown in FIG. 3).

Refer to FIG. 4 for proper orientation of the ROM in the IC socket. The corners of the ROMs are keyed with a small flat spot on one corner to show the correct orientation. Place the ROM over the proper socket in the proper orientation and simply press it straight down into the socket. Easy.

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FIGURE 4.



Power-Up Test

Test the ESI to make sure that the installation was successful. Replace the top cover (you don't have to replace the screws, just set it on the unit). Connect AC power and turn on the power switch. The unit should power up normally.

Congratulations! If the unit doesn't power up normally, refer to the next section for some suggestions on what to do.

Unit Doesn't Boot?

If the unit does not power up successfully, turn off and unplug the unit, remove the top cover again.

- Verify that the ROMs are installed in their proper locations.
- Try removing the ROMs, and then check all the pins for straightness. Reseat the ROMs in their proper locations.
- Try replacing the old ROMS.
- Still No Boot? Call E-mu Customer Service at (408) 438-1921.

Telephone support hours are 8:00-5:00 PST, Monday through Friday. Or contact E-mu UK at +44 (0) 13 1-653-6556.

WORLD HEADQUARTERS E-MU SYSTEMS, INC.

PO. BOX 660015 SCOTTS VALLEY, CA USA 95067-00 15 TELEPHONE: 408-438-1921

EUROPE, AFRICA, MIDDLE EAST E-MU SYSTEMS, LTD.

SUITE 6, ADAM FERGUSON HOUSE ESKMILLS INDUSTRIAL PARK MUSSELBURGH, EAST LOTHIAN SCOTLAND, EH21 7PQ TELEPHONE: +44 (0) 131-653-6556

