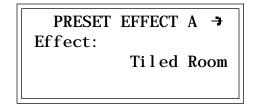
FX A Parameters

HF Damping

High frequency energy tends to fade away first as a sound is dissipated in a room. This parameter allows you adjust the amount of high frequency damping and thus change the characteristics of the room. Rooms with smooth, hard surfaces are more reflective and have less high frequency damping. Rooms filled with sound absorbing materials such as curtains or people have more high frequency damping.

- 1. Press the Preset Definition key. The LED illuminates and the Preset Definition menu appears.
- 2. Select Effects (9). The main Effect screen will appear.
- 3. Select Preset Effect A (0). The following screen appears.



- 4. Select one of the effects using the Data Entry Control or INC/DEC keys.
- 5. Press the Right Cursor key. The Effect Parameters screen appears.

+ PRESET EFFECT A + Decay Time: 48
HF Damping: 64
FxB==>FxA: 0

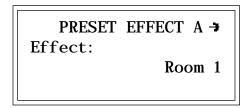
- 6. Move the Cursor down to the second line and adjust the High Frequency Damping as desired.
- 7. Press the Preset Definition key to return to the main menu.

Effect B Into Effect A

The output of effects processor B can be routed into effects processor A. This connects the effects in series instead of their normal parallel configuration. Two effects connected in a series sound very different than the same two effects in parallel. For example, a chorus patched through reverb can turn a bland string section into a lush wall of sound. The $B \rightarrow A$ amount can also be controlled for even more flexibility.

- ➤ To Send the Output of Effect B through Effect A: In this example, 100% of Effect B will be sent into Effect A.
 - 1. Press the Preset Definition key. The LED illuminates and the Master screen appears.
 - 2. Select the Effects submenu (4). The Effects menu will appear.
 - 3. Select Master Effects A (0).

4. Select an Effect using the Data Entry Control or INC/DEC keys. Do not use the "Master Effects" setting as this will cause the Master effects settings to be used.



- 5. Press the Right Cursor key to go to the second screen.
- 6. Cursor down to the third line of the display and set the FxB->FxA amount to 127.

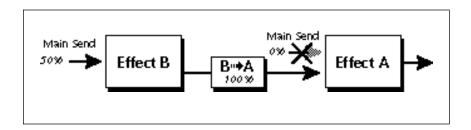
+ PRESET EFFECT A →
Decay Time: 40
HF Damping: 96
FxB==>FxA: 127

- 7. Press the Right Cursor key again to select the Send Amount screen.
- 8. Turn the Send Amounts down to zero since we only want to hear the two effects in series.

+ PRESET EFFECT A
Sends:
Main: 0% Sub2: 0%
Sub1: 0% Sub3: 0%

- 9. Press the ESCAPE key to return to the Effects submenu.
- 10. Press the Right Cursor key to select Master Effect B.
- 11. Select an effect as before, then adjust the Main FX A Send percentage as desired.

✓ Note: Because the amounts are Sends, we want to open the Main Send to Effect B, turn B→A up full and turn the Main Send to Effect A down to zero. This sends ALL of Effect B through Effect A.



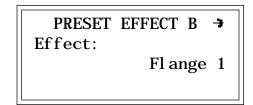
12. Play the keyboard and you should hear the B Effect running through Effect A. This patch is shown in the illustration above.

FX B Parameters

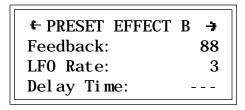
Feedback Amount

The Chorus and Flange effects have a controllable feedback loop after the delay element. Feeding back a small amount of the signal intensifies the effect by creating multiple cancellations or images.

- 1. Press the Preset Definition key. The LED illuminates and the Preset Definition menu appears.
- 2. Select Effects (9). The main Effect screen appears.
- 3. Select Preset Effect B (1). The following screen appears.



- 4. Select one of the effects using the Data Entry Control or INC/DEC keys.
- 5. Press the Right Cursor key. The Effect Parameters screen appears.

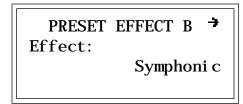


- 6. Move the Cursor down to the second line and adjust the Feedback as desired.
- 7. Press the Preset Definition key to return to the main menu.

LFO Rate

Chorus and Flange effects use a Low Frequency Oscillator (LFO) to animate the effect. An LFO applied to a chorus effect creates the slight changes necessary for a realistic choral effect. Applied to a flanger, the LFO moves the comb filter notches and adds animation to the sound.

- 1. Press the Preset Definition key. The LED illuminates and the Preset Definition menu appears.
- 2. Select Effects (9). The main Effect screen appears.
- 3. Select Preset Effect B (1). The following screen appears.



- 4. Select one of the effects using the data entry control or INC/DEC keys.
- 5. Press the Right Cursor key. The Effect Parameters screen appears.

← PRESET EFFECT B →
Feedback: 48
LFO Rate: 24
Delay Time: ---

- 6. Move the Cursor down to the third line and adjust the LFO Rate as desired.
- 7. Press the Preset Definition key to return to the main menu.

Delay Time

Flanging, chorus and echoes are all based on a delay line where the signal is delayed by some time period and mixed back together with it's un-delayed signal. This parameter varies the length of the delay or "how much time" passes before you hear the delayed signal. On some effects, this parameter is not adjustable, indicated by a dash in the field.

- 1. Press the Preset Definition key. The LED illuminates and the Preset Definition menu appears.
- 2. Select Effects (9). The main Effect screen appears.
- 3. Select Preset Effect B (1). The following screen appears.

PRESET EFFECT B = Effect:
Delay Stereo 2

- 4. Select one of the effects using the Data Entry Control or INC/DEC keys.
- 5. Press the Right Cursor key. The Effect Parameters screen appears.

+ PRESET EFFECT B + Feedback: 32
LF0 Rate: 0
Del ay Time: 400ms

- 6. Move the Cursor down to the third line and adjust the Delay Time as desired.
- 7. Press the Preset Definition key to return to the main menu.

FX Amounts

The Effects Amount controls the percentage of effected (wet) signal to un-effected (dry) signal. This function would be analogous to the effects return on a mixing console. The effects amount for each of the four stereo submix outputs can be individually controlled.

- 1. Press the Preset Definition key. The LED will illuminate and the Preset Definition menu will appear.
- 2. Select Effects (9). The main Effect screen will appear.
- 3. Select Preset Effect A or B as desired (0 or 1).
- 4. Press the Right Cursor key twice to access the Sends screen. The Effect Send screen will appear..

← PRESET EFFECT B

Sends:

Mai n: 10% Sub1: 30% Sub2: 20% Sub3: 40%

- 5. Adjust the Effect Sends as desired.
- 6. Press the Preset Definition key to return to the main menu.

Using SCSI

SCSI (pronounced skuzzy) stands for Small Computer System Interface. SCSI is an industry standard hardware and software specification that allows high-speed data transfers between different pieces of equipment. SCSI devices can include hard disks, tape drives, optical disks and other types of digital equipment.

Why Use SCSI?

- ŠCSI is fast! SCSI is a parallel interface which transmits eight bits of information at a time at high speed over the SCSI cable. MIDI, in comparison, is a serial interface which can only send one bit of information at a time over its line.
- Compatibility: Since SCSI is an industry standard, equipment from many different manufacturers can be linked to work together.
- Expandability: Up to eight SCSI devices can be linked together (the ESI counts as one SCSI device on the chain).

The SCSI Bus

You may have noticed that the rear panel of most external storage devices have two SCSI connectors. This is because SCSI devices are connected together in a chain arrangement. The wires that connect the different pieces of equipment are called the SCSI bus.

ID Numbers

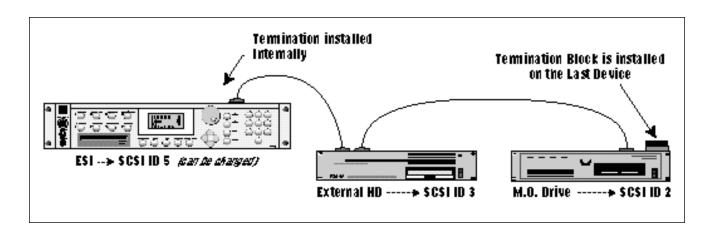
Each device on the SCSI bus has its own ID number so that it can distinguish its data from data meant for another device. If data is being saved to a device with ID-2 for instance, all the other devices on the SCSI bus will ignore that data. If two devices have the same ID number, the system will not work. Each device must have its own unique ID number.

The SCSI ID number of the Macintosh is fixed at ID-7 and cannot be changed. The SCSI ID numbers of most other devices can be changed.

Many SCSI devices have hardware defined ID numbers, which means that they have a switch on the front or the back of the unit which allows the ID number to be easily identified and changed.

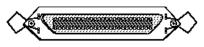
★ Tip: Use the "Mount Drives" utility (Master/Global, Disk Utilities, 1) whenever an external SCSI device does not appear in the list of available devices.

! Caution: Make sure that no two devices have the same ID number since this can corrupt the startup directories of the Macintosh or the ESI.

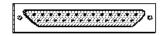


The following is a list of the default SCSI ID numbers:

ID - 7 (fixed)	Macintosh
ID - 6	Unassigned
ID - 5	ESI (this number can be changed)
ID - 4	Unassigned
ID - 3	Unassigned
ID - 2	Internal Iomega 100MB Zip Drive (if installed)
ID - 1	Unassigned
ID - 0	Internal Macintosh HD (if installed)



50-pin Centronics Connector



25-pin DB Connector

★ Tip: Always use 50-pin Centronics-type cables with the ESI These cables have much better electrical characteristics and have fewer problems. Additionally, make sure that all 50 pins of the cables are actually wired. Some SCSI cables have only half of the pins wired.

! Caution: Turn all devices OFF whenever you change the SCSI cable. Serious damage to the ESI may result from connecting and disconnecting SCSI cables with the power on.

In addition, devices left on when the cable is unplugged may not respond properly until powered off and on.

Types of SCSI Cables

There are two basic types of SCSI cables in use: DB25 and 50-pin Centronics. The two types of cable can be identified by their connectors, which are quite different. When buying SCSI extension cables, it is important to choose ones with the right type of connectors, since the two types will not interconnect without a special adapter. The type of SCSI connectors on the Macintosh are DB25 connectors. These are the type commonly found on the back of personal computers. The SCSI connector on the optional SCSI port is the 50-pin Centronics type. Use only high quality shielded cables that have all the pins connected. Many cables only have some of the pins wired.

Terminating SCSI Cables

The total length of the SCSI chain should not exceed 15 feet. A general rule for SCSI cables is: The Shorter the Better!

Terminating resistors or terminators are special resistor packs that are installed on the first and last device in the SCSI chain. Terminators are used to reduce line echoes or standing waves on the SCSI bus. An analogy in an audio system would be impedance matching.

Terminators can either be hidden inside a SCSI device or they can take the form of termination blocks which can simply be plugged into the SCSI port.

Terminators apply power to an array of resistors which ensure a full 5 volt swing between high and low levels on the SCSI line. The host system is required to provide Termination Power. Termination power has its own wire in the SCSI cable and supplies power to the termination block. On external hard disk drives, SCSI terminator power is almost always turned Off and the drives are left un-terminated.

The ESI is shipped with termination power On with the termination resistors left in place. This assumes that the ESI will be placed at one end of the SCSI chain. The ESI has an automatic system which ONLY supplies terminator power when it is NOT being supplied by another device. Therefore, you don't need to worry about terminator power when connecting the ESI.

The more devices you have connected to SCSI and the longer your cables are, the more it becomes important to have the cables properly terminated.

★ Tip: You can check the "Memory Available" screen when downloading samples via SMDI to keep track of how much RAM you have left.

! Caution: When using Alchemy, you must add one to the sample number you want transferred.

! Caution: You cannot transfer to or from sample 000 (the clipboard).

Using ESI and a Computer on the SCSI Bus

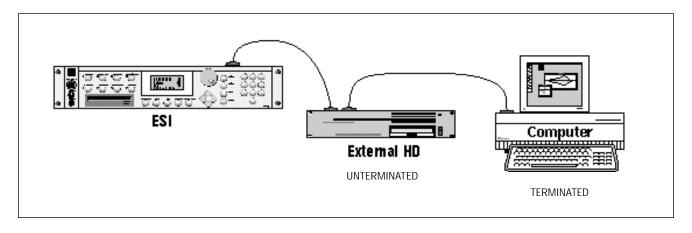
The ESI can now be connected to the SCSI along with another ESI an EIIIX, or a personal computer. Multiple "Master" devices on the SCSI bus is not normally allowed by the standard SCSI protocol. This is only possible because of ESI's advanced SCSI and SMDI (or SCSI Musical Data Interchange) implementation. The ESI's SMDI implementation allows sample data to be exchanged over the SCSI bus in a way similar to the MIDI Sample Dump Standard, except MUCH faster.

The computer should normally be positioned at one end of the chain and the ESI at the other. The SCSI chain is properly terminated at each end by the computer and the ESI. Devices in the middle of the chain should not have termination resistors installed.

PC Compatibles - The ESI has been tested with IBM PC compatible computers using the Adaptec model 1542C SCSI option card. Sound files can be transferred between a PC computer and the ESI using Sonic Foundry's Sound Forge $^{\text{TM}}$ or other sample editing software.

Macintosh - Sound files can be transferred between a Macintosh computer and the ESI using Passport's Alchemy $^{\rm TM}$ or other digital sample editing software. The ESI is able to access approved Macintosh internal CD-ROM drives with CD-ROMs containing ESI compatible files. Similarly, a Macintosh can access an internal ESI Zip drive with a cartridge that has been formatted for the Macintosh.

- The ESI is strictly a "Slave Device" when using SMDI, meaning that it CANNOT initiate SMDI transfers. This should not normally present a problem however, since a computer based editor will always have a facility for initiating SMDI transfers.
- Caution: A sample transferred into the ESI is automatically placed across the entire keyboard, overwriting the current preset's sample placement. Create a new empty preset before downloading via SMDI to avoid trashing the current preset.
 - Besides the raw sample data, additional information about the sample is included in a SMDI file.
 - ➤ Sample name and number (samples 1-999)
 - ➤ Multichannel/Stereo/Mono status
 - ➤ Sample length plus one set of loop begin/end points
 - ➤ Sample rate, pitch and bit resolution
 - ➤ Sample key placement (an E-mu extension to SMDI)

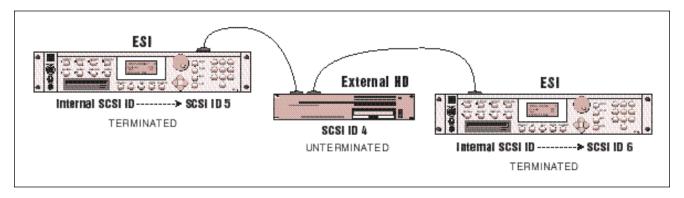


Using Multiple Samplers on the SCSI Bus

ESI version 2.0 software adds arbitration to the SCSI protocol so that multiple "Master" devices can share the bus without a system crash. Two ESI's (an EIIIX, an e-64, or an E-IV) can share the same sound library, without having to duplicate the storage media.

When connecting your system for use with multiple ESI's, be sure to observe the following rules:

- NEVER try to write to two devices at the same time or write to one device while loading from another. Designate one unit as the Master which is the ONLY unit allowed to write. Turn Undo Off on all units except the Master. Simultaneous reads are OK.
- Keep SCSI cable lengths as short as possible (Under 12 feet total).
- Make sure that each SCSI device has its own unique ID number. (Remember that the ESI and EIIIX each use up an ID number in addition to their internal hard disks.)
- Make sure the system is correctly terminated The ESI's should normally be on the ends of the SCSI chain.



! Caution: Use the Install File System option #8 (see Master, Format) when formatting Iomega Zip drive cartridges. The normal format procedure will not work and corrupts the disk.

SCSI Problems

In diagnosing SCSI problems the first rule is: Don't panic, Experiment! If you have several SCSI devices hooked up, try disconnecting one of the devices and maybe change the order of the units on the line. The following checklist may help you find the solution to your unique SCSI setup.

- 1. Make sure the drive is mounted. Mount the drives using the Mount Drive utility (Master/Global, Disk Utilities, 1).
- 2. Check the SCSI ID numbers. No two numbers can be the same.
- 3. Read the documentation again. Learn all you can about your peripheral devices. The answer may be right in front of you.
- 4. Play with the order in which devices are powered up. Normally the "Big Bang" method works best (turn everything on at once), but another order may work better in your unique system.
- 5. Always suspect the cable when something doesn't work on the SCSI bus. Remember: The shorter the cables are, the better.
- 6. Simplify the situation. Disconnect one or more drives until you get the system to work.
- 7. Are the ends of the SCSI bus terminated?
- 8. If all else fails, call us at 408-438-1921. Telephone support hours are 9:00 to 5:00 PST, Monday through Friday.

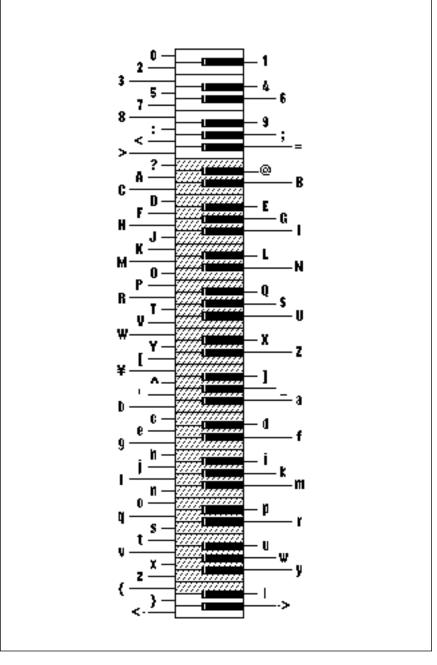
Disk Drive Compatibility Chart

This chart lists the hard disk drives, CD-ROM Drives and Magneto-Optical drives that are compatible for use with the ESI (as of 5-1-95). A current list of compatible disk drives is available on E-mu's web site: (http://www.emu.com). If a drive you wish to use is not listed, adhere to the rule, "Try before you buy!". Be sure to check the revision number on the drive in question to make sure it will work with the ESI. A listed drive with a lower revision number than the one shown may not work.

If a drive you wish to use is not listed on this chart, be sure to adhere to the rule, "Try Before You Buy". The chart only represents those drives which have been tested by E-mu Systems, Inc. Many others will also work.

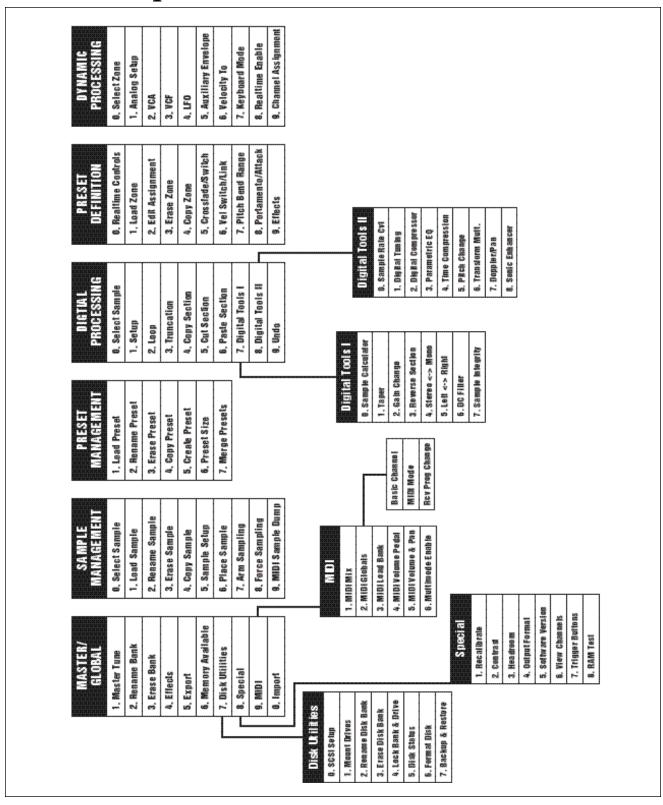
Keyboard Character Map

★ Tip: The shaded area represents a standard five octave keyboard range.

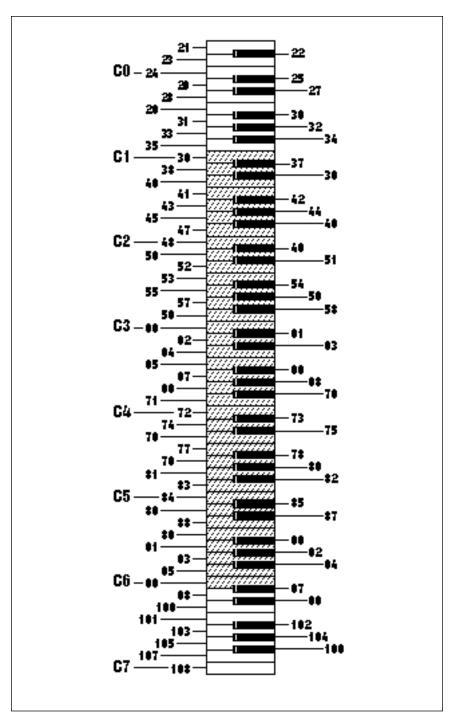


AVAILABLE CHARACTERS. Banks, drives, samples and presets can be named or renamed using these characters. Select the characters using the ten key pad, data entry knob, and keyboard. You can also use the up cursor to insert spaces and the down cursor to delete spaces. There are also additional characters (not shown above) which are only available through use of the data entry knob or increment/decrement buttons.

ESI Menu Map



MIDI Key Numbers



MIDI KEY NUMBERS. The shaded area represents a standard five octave keyboard range.

MIDI Implementation Chart

Function	1	Transmille d	Recognized	Remarks
Basic Channel	Delavii Changed	He He	1 1-10	Mem orized
Mede	Delauli Messages	Но	Не	
Hole Humber	True Yelce	He He	21-108 (A-1 lbru C7) 21-108 (A-1 lbru C7)	
Yelecily	Hele OH Hele OFF	He He	Yes y=1-127 He	
Aller Touch	Keys Channels	He He	He Tes	
Mich Benie	:r	He	Yes	
Control Cha	R 90	Не	Yes	0-31 04-70
Bank Geleci		Не	ĭes	See Naie Belaw
Program Change Ti	rue Humber	He He	Yes 0-127 Yes 0-127	
All Count O	11	He	Yes	
All Holes of	I	He	Yes	
Reset All G	niroller#	He	Yes	
6ysiem Exc	lusiye	Не	He	
MIDI Gampi	e Dump	Tes	Yes	Also xmit/reor SMD1
Gyslem Common	:Gong Pes :Gong Gel :Twne	Ho Ho Ho	Ho Ho Ho	
6ysiem : Real Time :	:Clock :Comm ands	He He	He He	
Messages:	Lecal On/Oli Rollye Gense Resel	Ho Ho Ho	Ho Ho Ho	

Notes: Pan Gehard leit 127-bard right

Bank Select: Ba oo oo 20 kb ca pp. (a= MiDi channel, bb = bank#, pp = program in bank

Specifications

✓ Note: Use only 72-pin, low profile SIMMs in the ESI (4 MB, 16 MB or 64 MB). If different size SIMMs are used, the larger SIMM MUST be installed towards the rear of the unit (socket B). The smaller SIMM will be divided in half (you get only half the memory of the smaller SIMM).

Because there are lethal voltages present inside the ESI enclosure, additional sample memory should be installed only by your E-mu dealer or a qualified technician.

Number of Voices 6	64 mono, 32 stereo
Memory 4	4 MB standard, 128 MB maximum
Outputs 4	4 individual 1/4" unbalanced, polyphonic 6 additional with Turbo Option
Output Level	-10 dbm nominal, max 6 volts p-p
Output Impedance 1	1K
Data Encoding I	Input: 16 bit Output: 18 bit
Digital I/O (Turbo Opt.) . S	S/PDIF format, RCA connectors
SCSI 5	50 pin connector, advanced links
Sample Rates 4	44.1 kHz, 22.05 kHz
Frequency Response 2	20 Hz to 20 kHz at 44.1 kHz sample rate
THD + N I	Less than 0.05%
THD	Less than 0.03%
Signal/Quiescent Noise I	Better than 100 dB
Stereo Phase I	Phase Coherent ±1° at 1 kHz
Weight 1	10 lbs (4.5 kg)
	W - 17.125" (43.5cm), H - 3.5" (8.9cm), L - 9.75" (23.7cm)
	100-240 VAC, 50/60 Hz, auto-switching supply, less than 30 watts consumption

Error Codes

This section explains some of the error codes you might possibly encounter while working with the ESI. This listing covers only the error codes whose meaning might be confusing or unclear. Most of the error codes explanations in the ESI are readily apparent.

Drive Not Formatted!

Trying to access a hard drive that has not been formatted for the ESI.

FD Data Lost Error! Bad disk or floppy drive.

FD Data CRC Error! Bad disk or floppy drive.

FD Data Save Error! Bad disk or floppy drive.

Floppy Disk Error! Bad disk or floppy drive.

Floppy Seek Error! Bad disk or floppy drive.

Insert Unlocked FD! Floppy disk is locked.

Loop Start (End) Zero!

Sample header is corrupted and needs to be repaired using the "Fix Samples" function.

★ Tip: If the Error Code has the word "Zero" anywhere in it, use the "Fix Samples" utility to repair it.

Mono Start (End) Zero!

Sample header is corrupted and needs to be repaired using the "Fix Samples" function.

No Samples in Preset!

No samples mapped to any zones.

No Samples Exist! No samples in bank.

No Presets Exist!

No presets in bank.

No Valid Drives!

1) Conflicting SCSI devices. 2) No SCSI termination at each SCSI cable end. 3) SCSI cable too long. 4) Reboot entire system after changing SCSI cables or ID numbers.

Not Enough Memory

Trying to load in a bank that is too large.

Preset Memory Full!

Not enough preset memory for the operation.

Sample Memory Full!

Not enough sample memory for the operation.

Sample Overload!

A/D converter headroom has been exceeded.

SCSI Bank Locked!

Trying to write to a locked bank.

SCSI Hardware Error!

No HD, Cable, No power, Wrong SCSI ID number.

SCSI Media Error!

Media defect on the hard disk.

Wrong Floppy Number!

Wrong disk in loading sequence.

Wrong Floppy Type!

Sound disk <-> Software Disk.

This section explains some of the problems you might possibly encoun-Troubleshooting ter while working with the ESI. Before assuming that your ESI is faulty, check the following list which details the corrective action you can take yourself without having to call a service center. If you have any doubts or questions, get in touch with your nearest E-mu dealer or call the Emu customer service department at (408) 438-1921, between the hours of 8:30 am and 5:30 pm Monday through Friday.

The ESI seems dead

If the ESI seems dead, first disconnect any external SCSI devices and try again.

The unit is completely dead. No lights no sound. Problem:

Cause: The power supply may be damaged.

Solution: Consult your dealer or authorized E-mu service center.

Audio Problems

Problem: The ESI powers up normally, but does not make any

sound.

Cause: Proper audio connections may not have been made.

Solution: Try listening directly to the stereo output using head-

phones to verify that the ESI is at fault. Check that

proper audio connections have been made.

Problem: The ESI powers up normally, but does not make any

sound.

Cause: The front panel volume control may need recalibration.

Solution: Recalibrate the volume control using the Recalibrate

function located under Special in the Master/Global

module.

Problem: The ESI powers up normally, but does not make any

sound.

Cause: Proper MIDI connections may not have been made.

Solution: Try using the trigger buttons to play the ESI. Check

MIDI activity LED. Verify that proper MIDI connections

have been made.

Problem: The digital audio output level is too low when a single

channel is played.

Cause: Because of the nature of sampling instruments, each

> additional channel played adds +3 dB to the headroom requirement. A single channel on the ESI comes out

about -6 dB down.

Make sure the Master Volume control is at maximum. Solution:

> Set the headroom adjustment (Master/Global, Special, 3) to 0 dB. All volume adjustments in the ESI affect the

digital output level.

Problem: Certain sounds do not play polyphonically.

Cause: The zone may be in solo mode, or only assigned to one

output channel.

Solution: Disable solo mode and check output channel assign-

ment.

Problem: Certain sounds cut off prematurely.

Cause: More than 64 mono, or 32 stereo channels are playing.

Or, if specific output channels are assigned, two sounds

may be "ripping each other off".

Solution: Check output channel assignment (Dynamic Processing,

9). Try turning Dynamic Allocation (Master/Global, 4) on. Set release times on VCA to a shorter setting.

Problem: Stereo samples are only heard out of one side.

Cause: Disable side function is turned on.

Solution: Turn disable side function (Dynamic Processing, 1) off

in the zone.

Problem: Audible hum in system when ESI is connected.

Cause: There is a ground loop present in the audio system.

Solution: Find and eliminate the ground loop.

Functional Problems

Problem: Added RAM SIMMs don't fit with the Turbo Option Kit..

Cause: Using high-profile SIMMs.

Solution: Use only low-profile SIMMs when adding additional

memory to your system.

Problem: Front panel buttons double trigger.

Cause: Buttons need cleaning.

Solution: Consult your dealer or authorized E-mu service center.

Problem: Looping only works while in the Digital Processing

module.

Cause: Disable Loop function is turned on.

Solution: Turn disable loop function (Dynamic Processing, 1.

Setup) off in the zone.

Problem: Controllers (wheels, pedal, pressure) do not work at all.

Cause: Controllers are not assigned in the preset.

Solution: Assign the controllers to the desired destinations (Preset

Definition, 0. Realtime Controls).

Problem: Controllers (wheels, pedal, pressure) do not work at all

and are assigned correctly.

Cause: Controllers are disabled in Realtime Control Enable

section.

Solution: Enable realtime controllers for the selected zone

(Dynamic Processing, 8. Realtime Control Enable).

Problem: The footpedal or LFO has little or no effect when

assigned to VCA.

Cause: The initial VCA level is set at 100%. Solution: Lower the initial VCA setting as desired.

MIDI Problems

Since MIDI setups can be quite complex, make sure that you have all the MIDI parameters (on the ESI and external MIDI devices) set correctly before you become daunted. On the ESI, MIDI parameters are located in the Master/Global module, (9. MIDI, 2. MIDI Globals).

Problem: The ESI does not respond to the MIDI parameters as

programmed.

Cause: MIDI Globals are turned off.

Solution: Turn on MIDI Globals (Master/Global, 9, MIDI, 2, MIDI

Globals).

Problem: The ESI does not respond to the modulation wheels or

pressure from an external MIDI controller.

Cause: MIDI controllers are not assigned in the MIDI Globals or

Realtime Control submodules.

Solution: Assign proper controller channel numbers to Left

Wheel, Right Wheel, Pedal, Pressure, MIDI A and B, then assign MIDI A and B to desired destinations (Master/Global, 9. MIDI, 2. MIDI Globals). Check Realtime Control routings (Preset Definition, 0. Realtime

Controls).

Hard Disk Problems

Problem: The ESI does not recognize an external hard disk or

other SCSI device.

Cause: The external hard disk or SCSI device was powered-up

after the ESI.

Solution: Mount the drives using the Mount Drive function

located under Disk Utilities, 1 in the Master/Global

module.

Problem: The ESI display reads "Disk Not Formatted" and an

external SCSI device is connected.

Cause: The hard disk may have crashed, the SCSI cable may be

too long or two devices may have the same SCSI ID

number.

Solution: Try using a shorter SCSI cable (maximum cable length is

about 12 feet) and check that no two devices have the

same ID number.

Problem: The ESI display reads "SCSI Error!". There is an external

device connected to SCSI.

Cause: Two SCSI devices may have the same ID number or an

external SCSI device does not have power.

Solution: Make sure all external SCSI devices have power. Change

one of the SCSI ID numbers. If this fails, try another

SCSI cable or another SCSI device if possible.

Problem: Data from an external SCSI device is being scrambled or

lost.

Cause: The SCSI cable may be too long, or the device may not

be terminated correctly.

Solution: Try using a shorter SCSI cable (maximum cable length is

about 12 feet) or check that the last device in the SCSI chain has termination resistors installed. See "Using

SCSI" in this manual.

Problem: Iomega Zip cartridges are not being correctly formatted.

Cause: Zip drives have a unique type of formatting.

Solution: Use the Install File System option #8 (see Master,

Format) when formatting Iomega Zip drive cartridges. The normal ESI format procedure will not work and

corrupts the disk's low level formatting.

Warranty

Please read this warranty, as it gives you specific legal rights.

Length of Warranty

Your ESI warranty covers all defects in materials and workmanship for a period of one year (90 days for disk drives) from the date of purchase by the original owner, provided that the Warranty Registration Card is filled out and returned to E-mu Systems within 14 days from the date of purchase. Cases may arise where E-mu's Service Department or one of E-mu's authorized service centers will ask for a copy of your sales receipt to facilitate warranty service. Please keep your purchase receipt in a safe place.

E-mu Systems does not cover:

Damages due to improper or inadequate maintenance, accident, abuse, misuse, alteration, unauthorized repairs, tampering, or failure to follow normal operating procedures as outlined in the owner's manual. Deterioration or damage of the cabinet. • Damages occurring during any shipment of the ESI for any reason. • An ESI that has in any way been modified by anyone other than E-mu Systems, Inc.

Limitation of Implied Warranties

No warranty is expressed or implied. E-mu Systems specifically disclaims the implied warranties of merchantibility and fitness for a particular purpose.

Exclusion of Certain Damages

E-mu Systems' liability for an ESI found defective is limited to repair or replacement of the unit at E-mu's option. In no event shall E-mu Systems Inc. be liable for damages based on inconvenience, whether incidental or consequential, loss of use of the unit, loss of time, interrupted operation or commercial loss, or any other consequential damages.

Some states do not allow limitation of the duration of implied warranties or the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

How To Obtain Warranty Service

All E-mu products are manufactured with the highest standards of quality. If you find that your instrument does require service, it may be done by any authorized E-mu service center. If you are unable to locate a service center in your area, please contact E-mu Systems Service Department at (408) 438-1921. They will either refer you to an authorized service center or ask that you return your ESI to the factory. When returning an ESI to the factory, you will be issued a Return Merchandise Authorization number (RMA). Please label all cartons, shipping documents and correspondence with this number. E-mu suggests you carefully and securely pack your ESI for return to the factory. (Do not send the power cord or operation manual.) Mark the outside of the shipping carton clearly with your RMA number. Send to E-mu Systems, Inc. 1600 Green Hills Road, Scotts Valley, California, 95066. You must pre-pay shipping charges to E-mu Systems. E-mu will pay return shipping fees. You will be responsible for any damage or loss sustained during shipment in any direction

Index

Symbol	erasing 58, 60, 63
110V / 220V Operation 8	exporting 59
2-pole filters 192, 194	loading 23, 29
2nd order filters 194	loading from a hard disk 31
4-pole filters 192, 194	loading MIDI 76, 81
4th order filters 194	locking 60, 63
6-pole filters 192, 194	management 54
	renaming 57, 60, 62
A	saving 23
	bat-phaser filter 195
ADC gain 99 A effect types 226	beep tone 122
adjust loops 84	boost
adjust the sample range 170	headroom 70, 72
aftertouch control 79	output 73
AHDSR envelope 199, 200, 204	boost/cut 193
Aribsic envelope 139, 200, 204 Akai™	boot in multimode 82
import 83	bottom feeder filter 195
load 86	bus, effects 216, 217
SCSI setup 83	busses by zone, submix 222
-	bypass, effects 225
alternate tuning template 197 amplifier, voltage controlled 35, 38	
amplitude threshold 150	С
arm sampling 102	calculator, sample 131
assign group 209	CD-ROM 14
assignable controllers 162	change
assigning samples to the keyboard 33	filter cutoff envelope 37
assignment	filter cutoff frequency 36
channel, groups 209	filter Q
edit key 169	gain 51, 133
attack	receiving MIDI program 23, 78
time, compressor 142	original key 198
VCA 199	pitch 53, 138, 147
VCF 202	channel assignment 211
audition button 24	channel view 70, 74
auto	channel settings in multi mode 224
correlation 118	channels, MIDI 78, 221, 222
normalize 100	chorus effect 228, 233
placement 100	by doubling 197
repeat 150	clear path, doppler 153
truncate 100, 122	clipboard 117
velocity to 205	collect memory 60
auxiliary envelope 40, 204, 207	combine L/R 85
available memory 60	compression 142
J	loop 115
	musical, digital compressor 144
В	ratio, digital compressor 142
B effect types 226	time 138, 146
backup 60, 67	compressor
bandpass filter 194	compression ratio 142
backwards talking game 50	dynamic range 138
bandwidth, EQ 146	mode, peak 142
bank 13	musical compression 144
confirm new 85	confirm new bank 85
definition 13	connect external hard disk 30

connection 8	D
SCSI 236	damping, high frequency 227, 231
connector, SCSI 9, 245, 236	data entry control 16, 21
continuous controller 79, 161	data
contrary bandpass filter 194	backing up 67
contrast 70, 71	restoring from backup 69
control	saving to a floppy disk 29
destination 163	saving to a hard disk 30
mod 79	DC filter 131, 136
pedal 79	decay
pitch 79	time, reverb 227, 230
pressure 79	VCA 199
realtime 42	VCF 202
source, selecting 43	decrement button 16
controllers	default setting 16
assignable 162	delay effect 229
continuous 161	delay
enable 208	LFO 202
convert	zone 197
sample rate 138, 139	delay, effects processor
stereo to mono 131, 135	panning 229
convolution See transform multiply	programs 227
copy	stereo 229
path 151	time 234
preset 109	vibrato 229
region 126	destination
zone 173	footswitch 43, 165
correlation, auto- 118	modulation 43
create preset 110	modulation wheel 42
crossfade	selecting 43
looping 116, 124	digital input 99
positional 176, 177	digital
realtime 164, 177	processing 11, 114
pasting 130	tools I 131
velocity 176, 177	tools II 138, 140
cross-switch 165, 176, 179	tuning 138, 140
current preset 15, 22	dimensions 245
current sample 15, 33	disable loop 198
cursor 16, 22	disable side 198
cursor/page buttons 22	disk
curve	backing up 60
gain change 134	drive 13
taper 133	external drives 14
cut and paste 50	floppy 13
cut frequency, boost/ 146, 193	formatting 60, 65
cut region 50, 127	formatting a floppy 29
cutoff frequency 35, 191, 200	formatting read/write optical 66
changing 36	hard 9, 14
	status 60, 64
	utilities 60
	distortion effect 229
	distortion specification 245
	doppler/pan 149
	doubling 228
	U

drive	crossfade looping 124
CD-ROM 14	crossfading 130
external 14	mix in paste 129
floppy disk 13	equalizer, parametric 138, 145
hard disk 14	erase
locking 60, 63	bank 58
magneto-optical 14	disk bank 60, 63
mounting 60, 62	preset 54, 109
select button 24	sample 97
dual effects processors 216	zone 172
dual tap delay 229	error codes 246
dynamic processing 11, 35, 189	escape button 21
dynamic range	ESI turbo option 215
adjusting 72	ESI/E3X lowpass filter 195
compression 142	expansion, dynamic range 142
expansion 142	export functions (bank) 59
dynamic setup 197	external drives 14
	hard disk, connecting 30
E	
edit	F
assignment 169	fade in/out
doppler path 153	gain change 134
effects	sonic enhancer 155
amount, preset 235	taper 132
bus 216	Fc 35, 191
bypass 225	feedback, delay 229
chorus 233	amount 233
control 218	filters 190
control channel 224	background 190
flange 233	changing the cutoff frequency 36
master 219	DC 131, 136
master in multi-mode 220	ESI/E3X lowpass 195
master/global 219, 220	guided tour 35
only mix 217, 221	parametric 193
processors, dual 216	Q 36, 192
programmed in the preset 218	reconstruction 139, 140
sends 216	realtime control of 163
types, A/B 226	swept EQ 193
Emax II	types 194-195
import 83, 89	VCF tracking 200
load 89	voltage controlled (VCF) 200
SCSI setup 89	Z-plane 193
enabling	fix samples 137
multimode 82	flange effects 233
the loop 121	flanger 228
realtime controls 208	lite filter 195
enhancer, sonic 155	flip path, doppler 152
enter 21	floppy disk 13
envelope	saving data to a 29
generator 37-40, 199, 201, 204	footswitch
inverted 37	assignments 80
mode 208	destinations 43, 165
trigger (gate) 207	force sampling 102
equal power	, -

format disk 60, 65 external hard disk 30 floppy disk 29 hard disk 9, 66 read/write optical disks 66 selecting output 73	insert mode, paste 129 insufficient drive memory 117 integrity, sample 137 interface, MIDI 78 interleave, hard disk 66 inverted envelopes 37
fragment, memory 60	K
frequency changing the filter cutoff 36 cutoff 35, 191 interpolation filter 139 LFO 202 sampling 10, 99 full placement, Akai import 85 FX B through FX A 231 FX output 215	key, changing the original 198 keyboard keys, linking to samples 33 mode 207 notes, triggering 70 transposing the 32
	latch mode 74, 75
G gain change 51, 133	layer, primary/secondary 15 LCD, changing viewing angle 71 left <-> right 131, 136
sample input 99	length, changing sample 149
gated reverbs 227	length, sampling 100 LFO 39, 229
generator, envelope 37-40, 199, 201, 204	routing 202-203
global effects 219, 220, 224	limiter 144
global MIDI functions 76, 78	linear crossfade looping 124 crossfading 130
H	mix, pasting 129
hall programs, reverb 227	link presets 183
hard disk 9, 14 backing up 67	load bank 23
connecting an external 30	preset 107
formatting 9, 30, 66	sample 95
interleave 66	zone 166
loading a bank from 31	loading
problems 250	a bank 29
saving data to a 30	a bank from a hard disk 31
headphone output 6	a preset 54
headroom/boost 70, 72, 73	lock bank and drive 60, 63
high frequency damping 227, 231	loop
highpass filter 194 hold, VCA peak duration 199	adjusting 84 compression 115
hold, VCF 202	croswsfade 116, 124 enable 121 in release 121
	setup 122
import	single cycle 131
Akai 83	looping
Emax II 83, 89 functions 83	a sample 48, 114, 123
increment/decrement buttons 16	crossfade 116, 124
increment/decrement presets 165	low freq. oscillator 39, 202, 233 lowpass filters 36, 191, 194

M	morphing filter 193
magneto-optical drive 14	mount drives 60, 62
main effects bus 216	multi tap effect programs 227
main output format 70, 73	multimode 25, 78
master	button 25
effects 219	channel settings 224
effects settings in multimode 220	enable 82
/global module 55	multiply, transform 138
tune 57	musical compression 144
volume 21	
memory 60	N
insufficient system drive 117	noise reduction 144
testing 70, 75	nontranspose function 207, 208
type 245	normalize
menu map chart 242	automatically 100
merge presets 111	gain change 134
MIDI	gain change 134
A/B control 79	
basic channel 78	0
bank select 244	offset path, doppler 152
channel 78, 221, 222	options
connection 8	ESI turbo 215
continuous controller number 79	hard disk interleave 66
global 76, 78	turbo 8
implementation chart 244	original key, changing 198
in 8	oscillator, low frequency 39, 233
key number chart 243	output
load bank 76, 81	boost 73
mix 76, 77	connection 6
mode 78	format, selecting 73
multi mode 25, 82, 216	headphone 6
out 8	impedance 245
poly mode 209	level 245
problems 250	main 70
program change 23, 78	FX 215
sample dump 103	submix 6
thru 8	turbo option 6, 215
volume pedal 81	,
volume pedal global override 76	
volume/pan 76, 82	Р
mix in paste, linear 129	pan
mod control 79	doppler/ 138, 149
mode	MIDI volume/ 76
envelope 208	realtime 163
insert (paste) 129	VCA 198
keyboard 207	panning delay, effect 229
MIDI 78	parametric
mono A-1 210	EQ bandwidth 146
multi 25, 78	equalizer 138, 145
transpose 25	filters 193
trigger 24	swept EQ 194-195
modulation destinations 42, 43	paste
module 15	cut and 50
monitor through while sampling 100	mode, insert 129
mono A-I mode 210	region 51, 128

path, doppler	Q
clear 153	Q 35, 36, 192, 200
copy 151	VCF note on 164
duration 150	quick zone 190
edit 153	•
flip 152	_
manager 151	R
offset 152	RAM capacity 245
reverse 152	RAM test 70, 75
peak	range
compressor mode 142	pitch bend 184
hold, envelope 199	velocity 178, 182
pedal	rate
control 79, 161	LFO
MIDI volume 76, 81	preset LFO 202
phaser filters 195	effect LFO 233
pitch	portamento 184
bend range 184	sample 99
bending 42	sample rate convert 139
change 53, 138, 147	ratio
control 79	dynamic compression 142
place sample 101	time compression 146
placement, auto 100	realtime
placement, sample 49	control 42, 161
rule 100	crossfade 177
	switch 178
plate reverb programs 227	recalibrate 70, 71
poly all mode, channel assignment 209	reconstruction filter 139
port, MIDI 8 portamento 184	redo 117
	reduction, noise 144
positional crossfade 176, 177	region
power requirement 245 power, RMS 142	copy 126
	cut 127
practice sampling session 48	cutting a 50
presampling time 99	paste 128
preserve order, Akai import 85	pasting a 51
preset 12	release
copy 109	time, compressor 142
create 110	VCA 199
current 15, 22	VCF 202
definition 12	remaining memory 60
erase 54, 109	rename
increment/decrement 165	bank 57
link 183	disk bank 60, 62
load 107	preset 108
merge 111	sample 96
rename 108	resonance 192 See also: Q
selecting 22, 31	restore disk 69
size 111	reverberation 227
templates, creating 101	
pressure (aftertouch) 79	reverse doppler path 152
primary and secondary layers 15	reverse section 135
processors, dual effects 216	right channel, sample setup 99
program See also: Preset	RMS, compressor mode 142
change, MIDI 23, 78	room reverb programs 227
effects 227	routings, submix bus 217

S	SCSI
S/PDIF 8, 215	Akai TM sampler connection 83
sample	avoid host on ID 61
adjusting keyboard range 170	background 236
assigning to keyboard keys 33	connecting a drive 9, 236
calculator 131	Emax II connection 89
current 15, 33	ESI SCSI ID 61
data word size 103	ID number 9, 236
definition 11	problems 239
dump, MIDI 103	setup 61
erase 97	using 236
input 8	secondary layer 15
integrity 103, 131, 137	section, reverse 135
length 100	select zone 196
time compression 146	selecting
loading 95	control source & destination 43
looping a 48, 114-116, 123	drive 24
monitor 100	presets 22, 31
placement 49	samples 95, 121
rule 100	zero crossing points 22
rate 99	zones 12, 196
rate convert 138	send amounts, effects 216
renaming 96	settings, default 16
reverse 131	setup, sample 99
select 121	setup, SCSI 61
selecting 95	shape, LFO 202
setup 99	shift, doppler pitch 149
source 99	sine, LFO waveform 202
start 206	single cycle loops 131
truncating 47	size
fix 137	bank 60
truncating 125	preset 111
sampling 10, 45	slapback, effect 228
arm 102	SMDI 238
basics 10 force 102	software version 70, 74 solo mode 207, 208
level 99	_
	sonic enhancer 155
monitor through while 100 practice session 48	source, sample 99 sources, control 43
presample times 99	special functions 70
rate 99	specifying the zone 34
terminate 102	square, LFO waveform 202
threshold 99	status, disk 60, 64
time (recording) 100	stereo
saving	to mono conversion 131, 135
as E3 bank 59	delay 229
as v1.04 floppy 59	effects processors 215
as v2.10 bank 59	jacks 215
bank 23	outputs 6, 7, 215-217
data to a floppy disk 29	sampling 99, 126
data to a hard disk 30	sub effects bus 216
sawtooth, LFO waveform 202	submix 211
scrub wheel 120	bus routings 217
	busses by zone 222
	outputs 6

submodule 15	U
sustain, envelope 199	undo 117, 156
sustain, footswitch 165	utilities, disk 60
swap left and right 131, 136	,
swept EQ 193-195	
switch	V
crossfade/ 179	VCA 38, 198
realtime 178	envelope 199
velocity 176, 177	level 198
,	pan 198
_	realtime control of attack 164
T	VCF 35, 200
taper 51, 132	cutoff 200, 206
templates, creating	envelope 35, 37, 201
alternate tuning 197	note on Q 264
preset 101	Q 206
ten key pad 21	variation, LFO 203
terminate sampling 102	velocity 205
termination, SCSI 237	cross-switch function 183
testing memory 70	crossfade 176, 177
threshold 99, 142	range 178, 182
doppler 150	crossfade 180
compressor 144	switch 176, 177
sampling 99	switch/ preset link 180
zero crossing 122	to 205
time compression 146	understanding 41
tracking, filter 200	version, software 70, 74
transform multiplication 148	vibrato delay effect 229
transpose 25, 57	view channels 70, 74
keyboard 32	viewing angle, LCD 71
zone 171	vocal Ah-Ay-Ee filter 195
transposition 11	vocal Oo-Ah filter 195
range 100	voltage
triangle, LFO waveform 202	AC settings 8, 245
trigger	controlled amplifier 35, 38, 198
buttons 70	controlled filter 200
envelope 207	volume
keyboard notes 70	master 21
mode 24	MIDI pedal 81
trimming samples 125	pan MIDI 82
truncate sample 125	pedal, MIDI 76
truncate, auto 100	recalibrate 71
truncating a sample 47	
tune	W
master 57	warranty 252
sonic enhancer 155	waveform, LFO 202
tuning	weight 245
alternate template 197	wet/dry mix effects sends 216
digital 138, 140	webary mix enects serios 210
dynamic setup 197	
ESI to other instruments 32	
turbo option 8	

```
Z
Z-plane filter 193
zero crossing 22, 118
zero X threshold 118, 122
Zip drives, formatting 66
zone 12, 34, 189
copying 173
definition 12
erasing 172
level 198
loading a 166
quick 190
selecting 12, 196
specifying 34
submix busses by 222
transposing 171
```

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