ESI-4000 DIGITAL SAMPLER



The ESI-4000 64-voice digital sampler is E-MU's latest professional, low-cost entry in to the sampler market. E-MU is famous for it's sampling technology, and the ESI-4000 has it all: professional features, superb sound quality, thousands of sounds standard, and exceptional expansion capabilities. Utilizing the popular interface found on the original ESI-32, the ESI-4000 is consistent with E-MU's philosophy of making high end technology easy to use. Almost every feature is only one or two button pushes away, so you get all of the results and power without any of the wait and frustration. The ESI-4000 upholds the ESI tradition with it's unbeatable combination of great features and affordable price, making it the best sampler value in its class—Emulator technology at a breakthrough price.

Exceptional features

The ESI-4000 offers an exceptional feature set complete with 64-voice polyphony; up to 128 MB of sample RAM; 64 digital 6-pole filters (19 different types); and a host of powerful DSP capabilities including time compression and expansion, parametric EQ, and digital tuning. Creating your own samples is fast and efficient with the ESI-4000's built-in sampling and editing tools. Some of these tools include manual and automatic truncation, cross-fade looping, cut, copy, paste, normalization, and automatic correlation for easy looping. Add ten programmable trigger buttons for firing off grooves, without having to use a keyboard, and you have an indispensable tool for all of your music making and sound generating projects. To top off this comprehensive feature set, ESI-4000's intuitive user interface is simple to learn and a pleasure to use.

Extreme Expandability

Available in three varieties, Standard, Turbo, and Turbo Zip, there's an ESI-4000 for any need. The ESI-4000 Turbo offers two additional stereo subouts, an effects stereo submix, two 24-bit stereo effects processors, and S/PDIF digital I/O. The Turbo effects section offers more than 30 effects and four stereo submixes per processor and high quality reverb, delay, chorus, flange, and even distortion algorithms. The extra outputs and digital I/O give you greater mixing and sampling flexibility. You can upgrade the ESI-4000's sampling memory from the standard 16 MB all the way up to 128 MB with industry standard 72-pin SIMMs. At a sample rate of 44.1 kHz, that's over 25 minutes of mono sampling time! The ESI-4000 Turbo Zip comes from the factory with all of the Turbo features and replaces the standard 3.5 inch floppy drive with a convenient Iomega Zip drive, providing 100 MB of sample storage on a convenient removable Zip disk. You can upgrade your standard ESI-4000 to an ESI-4000 Turbo using the ESI Turbo Option Kit.

▼ Powerful DSP

The ESI-4000 has all the tools you need to meet any sample editing requirement. These tools include:

- Stereo phase-locked time compression/expansion makes your samples longer or shorter without changing the pitch.
- Pitch change changes the pitch of your samples without changing the time
- **Sample rate conversion** gives you extra sampling time by changing the sample rate after the sound has been sampled.
- **Doppler/pan** effect gives you complete control of the stereo field.
- Exciter adds life and crispness to your samples.
- Parametric EQ allows you to adjust the overall tonal character of your samples.
- Transform multiply allows you to merge two sounds together, then
 accentuates frequencies common to both and discards uncommon
 frequencies you've got to hear it to believe it!
- Cut, copy, paste are the basic editing functions for slicing and dicing your samples.
- Auto truncate saves time when sampling by automatically taking off the start, end, or both as soon as the sample is taken.
- Crossfade looping virtually eliminates any clicks or pops in your looped samples.
- **Audio scrub** helps you find that perfect loop point.
- **Auto normalize** changes the gain of your samples to give you the best signal-to-noise ratio.
- **Compressor** reduces the dynamic range of your sample and gives a punchier, tighter sound to your kicks and basses.



ESI-4000

Key Features

- 64 voice polyphony for thick sequencing and layering.
- SCSI interface standard, allowing you access to thousands of sounds via CD-ROM.
- 16 MB of RAM, upgradeable to 128 MB with 72 pin SIMMs.
- 64 digital 6-pole filters with 19 different filter types, allows you to modify the sound of your samples and make them come alive.
- Over 1000 presets included on 2 CD-ROMs accessed via SCSI.
- 4 audio outputs (expandable to 8, plus a stereo-effects output and S/PDIF digital I/O with Turbo Option Board model 6215, standard on models 6226 and 6227) for great mixing flexibility.
- User-friendly interface means you spend less time looking at the manual and more time creating great music.
- Optional dual stereo effects processors (standard on the Turbo units), breathes life and depth into your samples.
- Compatible with Akai S-1100/1000 and E-MU E-IIIx, ESI-32, and EMAX II libraries via SCSI, giving you access to thousands of sounds.
- 10 programmable front panel buttons for triggering samples quickly and easily without a MIDI controller.
- Powerful DSP and editing functions for customizing your sounds, including stereo phase locked time compression and expansion, parametric eq, digital tuning, manual and auto truncate, cross-fade looping, cut, copy, paste, normalization, and automatic correlation (for finding loop points).

Models: 6225 ESI-4000

6226 ESI-4000 Turbo 6227 ESI-4000 Turbo Zip

6215 Turbo Option Kit

Controls: Data Entry

Options:

Data Wheel Encoder

Increment/Yes and Decrement/No

Enter and Escape 10-key pad

Cursor Control: Up, down, left, right

Disk Functions: Drive select

Load bank
Save bank
Audition key

Trigger functions: Trigger mode

10-key pad

Specifications

▼ Display

20x4 backlit LCD

▼ Sound RAM

 $16~\mathrm{MB}$ standard, expandable to $128~\mathrm{MB}$ using standard $72~\mathrm{pin}$ SIMMs

▼ Data Storage

1.44 MB floppy

 $50\ pin\ SCSI$ interface for use with SCSI hard disks,

CD-ROM, and MO drive

100 MB Iomega Zip drive (replaces floppy on Turbo Zip model)

▼ Input and Output Resolution:

128x oversampling sigma/delta A / D conversion Discrete 18 bit D / A converters

▼ Input Sampling Rates

 $22.05~\mathrm{Khz}$ and $44.1~\mathrm{Khz}$ (analog), $32~\mathrm{Khz},\,44.1~\mathrm{Khz},$ and $48~\mathrm{Khz}$ (via S/PDIF option)

▼ Output Sampling Rate:

44.1 Khz

▼ Signal to Noise:

> 90 dB (output)

▼ Frequency Response:

20 Hz - 20 Khz

▼ THD and Noise:

<.05%

▼ THD: <.03%

<.03%

▼ Output Level:

10 ubu

▼ Output Impedance:

1000 ohms

▼ Stereo Phase

Phase coherent +- 1 degree at 1 Khz

▼ Audio Channels

64 mono channels, 32 stereo channels

▼ Digital Filters:

64 digital 6 pole filters with 19 types

▼ Innute

MIDI in, stereo unbalanced 1/4" analog inputs, S/PDIF digital input (optional)

▼ Output:

Four unbalanced polyphonic 1/4" analog outputs, MIDI out and thru, two more stereo outs plus stereo effects output and S/PDIF out (optional)

▼ Dimensions

 Height:
 3.4 inches/9 cm

 Width:
 17 inches/43 cm

 Depth:
 10.4 inches/26.5 cm

 Weight:
 10 lbs 3 oz/ 4.6 kg

▼ Power Requirements

100-240 VAC, 50/60 Hz, less than 50 watts



ESI Turbo Option Kit

▼ Sound Support For ESI-4000

The ESI-4000 is fully compatible with E-MU's extensive CD-ROM library for EIII, EIIIX, EMAX II and ESI-32. The library includes all the classic Emulator musical instrument sounds and sound effects along with General MIDI and the latest developments in the world of dance music.

The new Formula 4000 library is designed exclusively for the ESI-4000 and ESI-32 users with the turbo system upgrade. These five CD-ROMs use the multi-filter and real-time control potential unique to the ESI-4000 and include the latest radical sweeping synth textures, hard resonant basses, loops and worms. Check out these essential discs:

- Hip-Hop Nation Phatt Sounds, Worms & Loops.
- Analog Odyssey: Vintage Synthesizers and Keyboards.
- Techno Trance : Dance Electronica & Loops

- Earth Tones : World Instruments
- Protezoa : Mondo Multi-timbral banks including Proteus 1,2,3 & Vintage.

The ESI-4000 is also compatible with the Akai S1000/S1100 sound library which can be loaded from SCSI hard-drive, removable media or CD-ROM.

E-mu's in-house sound-design group (E-mu Sound Central) are also developing a selection of CD-Audio (eg. Phatt Beats, Orbit Beats) and floppy-disk libraries for users without CD-ROM drives. Hot new sounds are in constant development from both ESC and third-party development partners including Invision Interactive, Northstar Productions, Time & Space, Q-Up Arts, Sonic Arts and Best Service.

Contact your local E-MU dealer, call E-MU direct at 1-888-ESC-1-ESC (US only) or surf over to our online shop at www.emusoundcentral.com to check out the latest in soundware for your E-MU sampler.













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