

# E-MU<sup>®</sup>

*Digital Audio Systems  
Desktop Sampling Systems*



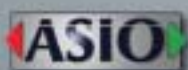
**CREATIVE**  
PROFESSIONAL

## Digital Audio Systems

**E-MU's** new Digital Audio Systems deliver everything you need to produce audio on a PC with professional results – 24-bit/192kHz converters, hardware-accelerated effects and mixing, comprehensive sync options and seamless compatibility with your favorite PC audio/sequencer software. E-MU Systems has teamed up with the Creative Advanced Technology Center, a world leader in ASIC and algorithm development for PC audio, to develop the new line of Creative Professional hardware interfaces that stand toe-to-toe with the most advanced and expensive audio systems in the world. E-MU offers three Digital Audio Systems: the E-MU 1820M, 1820 and 1212M, each matched with I/O and sync options to suit the specific needs of musicians, recording engineers and sound designers.

All three Digital Audio Systems ship with a PCI card that features ADAT, S/PDIF and FireWire® interfaces, as well as connectivity to a family of internal and external I/O and sync options. Whether you are recording full-blown productions or running virtual instruments on a dedicated computer, E-MU's Digital Audio Systems deliver everything needed to create professional-quality music on your PC at a price that will change your expectations of desktop recording forever.

- Features mastering-grade 24-bit, 192kHz converters – the same A/D converters used in Digidesign's flagship ProTools® HD I/O Interface
- E-DSP 32-bit Multi-effects Processor offers you over 20 hardware-accelerated effects (over 500 presets) with no CPU overhead – plug-in architecture allows you to add new effects as needed
- 32 channels of zero latency hardware mixing/monitoring with super-flexible virtual patchbay – no external mixer needed
- Compatibility with most popular audio/sequencer applications with ultra-low latency WDM, DirectSound® and ASIO™ 2.0 Drivers
- Powerful software studio package included



## E-MU 1820<sup>m</sup>



100% PCB Assembly  
24-bit/192kHz  
120dB SNR - measured  
at 100 Hz, 110k Ohm Load

### I/O Configuration:

- Two TFPro™ Mic/Line/Hi-Z preamps (w/48V phantom power)
- Six 1/4" Balanced Inputs
- Eight 1/4" Balanced Outputs
- Turntable Input (w/ground lug and hardware RIAA preamp)
- 24-bit/192kHz ADAT In/Out (switchable to S/PDIF)
- 24-bit/96kHz coaxial S/PDIF In/Out (switchable to AES/EBU)
- 24-bit/96kHz optical S/PDIF Out (switchable to AES/EBU)
- Two sets of MIDI In/Out
- Four stereo 1/8" Speaker Outputs (configurable from stereo to 7.1)
- Stereo Headphone Output
- FireWire® Interface

### Sync Configuration:

- Word Clock In/Out
- SMPTE In/Out
- MTC Out

## E-MU 1820

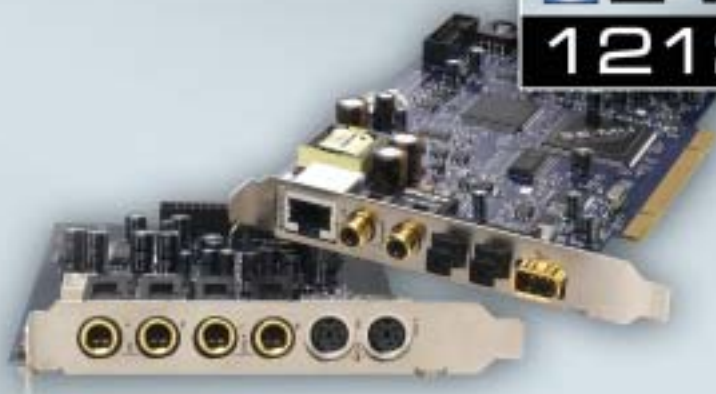


24-bit/192kHz

### I/O Configuration:

- Two TFPro Mic/Line/Hi-Z preamps (w/48V phantom power)
- Six 1/4" Balanced Inputs
- Eight 1/4" Balanced Outputs
- Turntable Input (w/ground lug and hardware RIAA preamp)
- 24-bit/192kHz ADAT In/Out (switchable to S/PDIF)
- 24-bit/96kHz coaxial S/PDIF In/Out (switchable to AES/EBU)
- 24-bit/96kHz optical S/PDIF Out (switchable to AES/EBU)
- Two sets of MIDI In/Out
- Four stereo 1/8" Speaker Outputs (configurable from stereo to 7.1)
- Stereo Headphone Output
- FireWire® Interface

## E-MU 1212<sup>m</sup>



100% PCB Assembly  
24-bit/192kHz  
120dB SNR - measured  
at 100 Hz, 110k Ohm Load

### I/O Configuration:

- Two 1/4" Balanced Inputs
- Two 1/4" Balanced Outputs
- 24-bit/192kHz ADAT In/Out (switchable to S/PDIF)
- 24-bit/96kHz S/PDIF In/Out (switchable to AES/EBU)
- MIDI In/Out
- FireWire® Interface

# Total Analog and Digital Connectivity

## AudioDock M

Front

Two premium TFPro™ Mic Preamps with Neutrik® Connectors, 48V Phantom Power and 40dB of Input Gain control



MIDI, Sample Rate and Sync Source Indicators

MIDI In/Out 1  
Optical S/PDIF Output  
Stereo Headphone Output

Back

Stereo Turntable Input with RIAA Preamp and Ground

Six balanced 1/4" Analog Inputs (24-bit/192kHz)



4 Stereo 1/8" Speaker Outputs (configurable from stereo to 7.1)

EDI Connector to E-MU 1010 PCI Card (no external power required)

Eight balanced 1/4" Analog Outputs (24-bit/192kHz)

MIDI In/Out 2

### E-MU 1010 PCI Card

### Sync Daughter Card

### E-MU 0202 I/O Daughter Card

EDI Connector to E-MU AudioDock M

Coaxial S/PDIF In and Out

ADAT In and Out (192kHz compatible) - switchable to optical S/PDIF

FireWire® Port for Video Capture, connecting peripheral devices and/or additional hard drives



Word Clock Sync In and Out

SMPTE Sync In and Out

MTC Out



Two balanced 1/4" Analog Inputs (24-bit/192kHz)

Two balanced 1/4" Analog Outputs (24-bit/192kHz)

MIDI In/Out



# Integrated Hardware-accelerated Effects, Mixing and Monitoring

## E-MU PatchMix DSP

### Toolbar

Quick access to your most-used functions (e.g. Show/Hide, Session and effects management, etc.)

### Viewer Window (3 Modes)

- Effects Editor lets you view all effects parameters for quick editing
- Input/Output Patchbays give you an instant overview of your I/O configurations at a glance

### Effects Presets

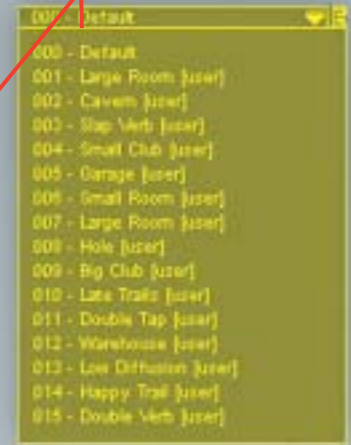
Save your favorite effects parameter settings as presets within the effects plug-in

### Audio Source

A Patchstrip can be fed by any external analog or digital input, as well as internal host sources from your audio application via ASIO™ or DirectSound®

### Insert Chain

The Insert Chain allows you to easily route a channel of audio to any effects plug-in, physical output (ASIO) in any order (i.e. monitor your recording with effects but record dry). You can also send and return audio to/from your outboard gear like a traditional insert



### Main & Auxiliary Buses

Offer you the same flexibility as the Insert Chain above to route your Aux Busses and Main Buss to effects plug-ins, physical outputs and virtual outputs (ASIO)

### Sync

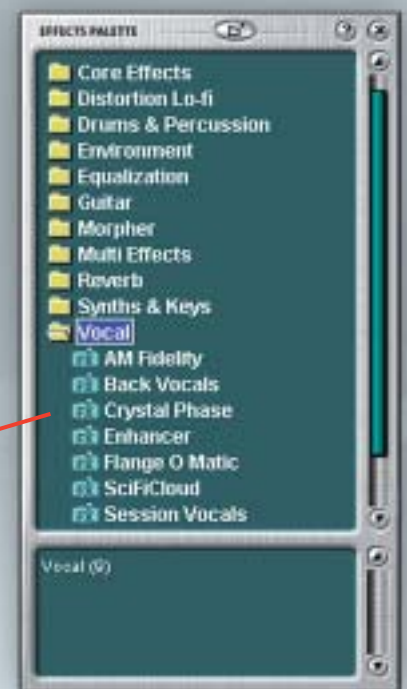
Choose from Internal Clock, External ADAT, or External S/PDIF sync to synchronize your entire digital studio

### Aux Sends

The two Aux Sends let you patch your audio to Busses for effects processing or submixing before hitting your audio recorder (perfect for headphone cuemixes)

### Effects Palette (over 500 Effects Presets)

Puts all your E-DSP effects plug-ins at your fingertips, letting you effortlessly drag-and-drop effects onto Patchstrip Inserts and Aux/Main Busses, as well as create and organize new effects presets and configurations – you can even chain multiple effects plug-ins and save them together to create specialized effects (e.g. vocal channel, guitar recording channel)



# Desktop Sampling Systems

**Emulator® X** is the culmination of over 30 years of sampler development; combining the pristine sound quality, powerful synthesis and filters of E-MU's hardware samplers with the disk streaming, file management, and interface advantages of software. Emulator X is a true professional sampler from the ground up, providing you with breakthrough tools for automated sampling and preset creation unlike anything that has come before. With its integrated waveform editor, unparalleled synthesis engine and patented Z-plane morphing filters, Emulator X delivers hands-on control over your sounds, right down to the sample level, with a perfect balance of usability and raw sonic potential. Only Emulator X offers the best of both worlds – true professional sampling, synthesis and sound quality, with all the advantages of software.

## Automated sample acquisition and preset creation

Emulator X makes sampling as easy as loading a preset by offering intelligent, automated sampling and preset creation from both external audio and batch files, allowing you to turn a .WAV file into a fully functioning preset in seconds with a single click of your mouse.

## Integrated waveform editor

Emulator X provides you with a host of professional DSP tools that you've come to expect from E-MU (e.g. Gain Change, Time Compression/ Expansion, Pitch Change, Reverse, Sample Calculation with automatic digital tuning, etc.), giving you total control over your samples.

## Comprehensive sound format support

Emulator X supports EOS, EIII, GigaSampler®, Akai, HALion®, EXS24, SoundFont® 2.1, .WAV and many more – ships with over 2GB of sounds.

## Automated preset cataloging across network drives

Emulator X automatically catalogs and tracks all of your presets across your entire network—no wasted time looking for sounds.

## Advanced synthesis architecture

No software sampler can match the depth of the Emulator X synthesis engine, with 36 patchcords per voice, over 50 patented Z-Plane morphing filters, multi-wave LFO's, conditional voice modulation, clock modulation and a host of other synthesis features and parameters. You can save your favorite synth setups as templates for quick editing.

## E-DSP Multi-effects Processor

Emulator X offers you an arsenal of hardware-accelerated plug-in effects (over 500 presets) with no CPU overhead.

## PatchMix DSP

The included PatchMix DSP software delivers 32 channels of zero latency hardware mixing and monitoring with flexible virtual patchbay—no external mixer needed.

Dynamic Processing Window - advanced synthesis with 36 patchcords per voice, multi-wave LFOs and over 50 Z-Plane filter types

Multi-setup Window - 32 channel multitimbral with 16 assignable control knobs

Name	Original Key	Start	End
Last Call Loop 1	C2	0	21504
Last Call Loop 2	F1	22800	23369
Last Call Loop 3	C2	49058	52996
Last Call Loop 4	G1	50015	0
Last Call Loop 5	A1	67532	64012
Last Call Loop 6	A2	76191	76692
Last Call Loop 7	F1	103333	106336
Last Call Loop 8	B3	129404	130266
Last Call Loop 9	C2	131363	131844

Acquire/Chop Window - automated sampling and preset creation



# EmulatorX STUDIO

*I/O Configuration:*

- Two TFPro™ Mic/Line/Hi-Z preamps (w/48V phantom power)
- Six 1/4" Balanced Inputs
- Eight 1/4" Balanced Outputs
- Turntable Input (w/ground lug and hardware RIAA preamp)
- 24-bit/192kHz ADAT In/Out (switchable to S/PDIF)
- 24-bit/96kHz coaxial S/PDIF In/Out (switchable to AES/EBU)
- 24-bit/96kHz optical S/PDIF Out (switchable to AES/EBU)
- Two sets of MIDI In/Out
- Four stereo 1/8" Speaker Outputs (configurable from stereo to 7.1)
- Stereo Headphone Output
- FireWire® Interface

*Sync Configuration:*

- Word Clock In/Out
- SMPTE In/Out
- MTC Out



# EmulatorX

*I/O Configuration:*

- Two 1/4" Balanced Inputs
- Two 1/4" Balanced Outputs
- 24-bit/192kHz ADAT In/Out (switchable to S/PDIF)
- 24-bit/96kHz S/PDIF In/Out (switchable to AES/EBU)
- MIDI In/Out
- FireWire® Interface