Imagine.

The image shows a microphone and three 5.25-inch floppy disks with handwritten labels:
- ① GRAND PIANO ② TRUMPET
- ① MALE VOICE ② FEMALE VOICE
- ① DOG BARK ② BREAKING GLASS

Imagine being able to play any sound

Labels on device: LOWER GET · UPPER GET · SAVE · SWAP · MIX LEVEL · DYNAMIC ALLOCATION · LOWER ENABLE · UPPER ENABLE · Sound Storage · Output · Kybd · Vibrato · Mod

Introducing the Emulator polyphonic

The E-mu Systems Emulator, quite literally, puts the world at your fingertips. With the Emulator, the entire spectrum of sound is yours to control. You can play the sound of any musical instrument - not just a synthesized simulation, but the actual sound. You can play the sounds of voices, of nature, of machines, of animals, of anything. All from a compact, portable instrument that is incredibly simple to use and priced within the budget of most serious musicians.

A digital instrument designed for the artist.

The Emulator is a computer-controlled instrument that can record any sound into its digital memory and then allow you to play that sound at any pitch over the range of its keyboard - with up to eight note polyphonic capability.

Simply connect a microphone to record any live, sound, or plug into the line level input to capture a sound from a record or tape (or from another synthesizer). In either case you just set the level, press the sample button, and in seconds the sound is digitized, stored in memory, and available to be played polyphonically on the keyboard. No longer will you

have to spend hours on tedious trial-and-error programming only to find that your synthesizer is simply incapable of producing the sound you need. If you can hear it, you can play it on the Emulator.

With the Emulator, a new world of possibilities is opened up to the artist dealing with music and sound. For the composer, anything that makes sound becomes a potential instrument, playable by any keyboardist, from parts written in standard music notation. For the performer there is on-stage control of sounds and effects previously available only in the studio. For the sound effects designer there is the ability to create complex tracks for film and broadcast in a fraction of the time required by traditional tape splicing techniques.

Realtime control over any sound.

Despite its simplicity and ease of use, the Emulator provides sophisticated live performance control. Its split keyboard allows two independent sounds to be played simultaneously (or you can record the same sound on both sections of the keyboard for a full four octave range).

you can hear polyphonically.

digital keyboard instrument.

With our new multi-sample software, eight individual samples can be recorded at half octave intervals across the keyboard, resulting in more natural reproduction resonant sounds plus the ability to have eight separate sounds available on the keyboard at one time.

The performance controls allow the addition of vibrato to any sound, with modulation depth controlled by a standard mod wheel or foot pedal. A second wheel allows pitch bending of musical notes and chords, and the creation of novel effects with nonmusical sounds.

Additional controls allow you to sustain any sound indefinitely - regardless of its original length - by defining a loop within the sound, which is repeated as long as a key is held down. A footswitch selectable doubling mode makes it possible to play on one half of the keyboard and have what you play automatically doubled by the sound on the other half.

Create a permanent sound library.

With the Emulator's built-in floppy disk drive you can store sounds on convenient mini-diskettes for later recall. Sounds can be reloaded from a diskette in a matter of seconds and, in a performance situation, you can even load a new sound into one half of the keyboard while continuing to play on the other.

Polyphonic digital sequencer.

The Emulator includes as standard a powerful polyphonic sequencer. The Emulator sequencer will remember what you play on the keyboard and play it back over a wide range of tempos. Complex musical compositions and sound effects tracks may be built up in a manner analogous overdubbing on a multi-track tape recorder. Completed sequences are stored on diskettes along with sounds.

Hear it.

Nothing that we can tell you about the Emulator can completely communicate its range of capabilities. If you have ever imagined having control over a world of sound, request an Emulator demonstration at your local E-mu Systems dealer.

Then you won't have to imagine.

Controls

Sound storage
Get lower - loads a sound from disk into memory for control by the lower section of the keyboard.
Get upper - as above, but for the upper section of the keyboard.
Save - stores both sounds currently in memory on a floppy diskette.
Swap - exchanges control of the sounds currently in memory. between keyboard sections (i.e. upper to lower and lower to upper.

Output
Mix volume - controls the level of the mix output without affecting the independent upper and lower outputs.

Keyboard
Dynamic allocation - toggles keyboard channel allocation between fixed and dynamic modes.

Vibrato
Lower enable - applies vibrato to the sound currently con trolled by the lower section of the keyboard.
Upper enable - as above, but for the upper section of the keyboard.
Rate - sets the vibrato speed.

Sustain
Lower set - allows the user to set or change the sustain loop of the sound currently controlled by the lower section of the keyboard.
Upper set - as above, but for the upper section.
Truncate/Filter - selects the function of the sustain section sliders.
Start point - sets the point within the sound at which the sustain loop begins, sets the truncation point, and sets the sequencer playback speed.
Loop length - sets the length of the sustain loop and the filter cutoff point.

Fine tune
Tune lower - adjusts the tuning of the sound currently controlled by the lower section of the keyboard.
Tune upper - as above, but for the upper section.

Input
Attenuator - adjusts the level of the signal to be sampled.
Level set - sets the gain of the internal preamp.
Overload LED - lights to indicate input signal overload.
Sample - sets automatic sample threshold level and initiates the sampling process.

Sequencer
Get sequence - loads a sequence from disk into sequencer memory
Sequence #1 - selects sequence bin #1.
Sequence #2 - selects sequence bin #2.
Store - initiates sequence recording and overdubbing.
Recall - initiates sequence playback.
Stop - terminates sequence playback.
A - selects special function prefix A.
B - selects special function prefix B.

Wheels
Pitch bend - allows realtime pitch change of upper and lower sounds.
Mod - adjusts modulation depth for sounds with vibrato enabled.

Foot controls
Vibrato depth pedal - duplicates the function of the Mod wheel.
Release footswitch - causes the entire recorded sample to be played, regardless of when a key is released.
Doubling mode footswitch - enables automatic keyboard doubling.

Specifications

Computer
Configuration - four and eight voice versions.
Sample length - two seconds per sound.
Input signal bandwidth - 20Hz – 10kHz ± 3dB.
Playback frequency range - 10Hz-20kHz.
Data encoding - mu-255 companding law.
Signal to quantization error - 72dB
Pitch bend range - 2 semitones.
Fine tune range - 1 semitone.
Power requirements - 115v/230v; 60Hz/50Hz; 200W max.

Keyboard
Range - four octave / 49 key, C to C.
Split - between B1 and C2.

Sound storage
Medium – 5 ¼" floppy diskettes, soft sectored, factory formatted.
Storage capacity - two sounds per diskette.

Inputs (2)
Input 1 - 600 ohm (Cannon connector).
Input 2 - 10k ohm (¼" phone connector).

Outputs (6)
Lower section - line level 600 ohm (Cannon and ¼" phone connector).
Upper section - as above.
Mix - as above, with front panel attenuator.

Standard accessories
Vibrato depth pedal
Release mode footswitch
Doubling mode footswitch
10 diskettes

Software options
User's multi-sample - allows recording of eight individual samples at half octave intervals across the keyboard.
Personal computer interface - allows an external computer to control the Emulator.

Hardware options
Analog interface - provides for control of the Emulator by external control voltages and gates.
RS-232 serial interface - required with the analog interface and the personal computer interface.
Road case - foam lined fitted travel case.

Dimensions
Length - 37.5"
Depth - 15"
Height - 8"
Weight - 75 lbs.

Specifications subject to change without notice,

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