

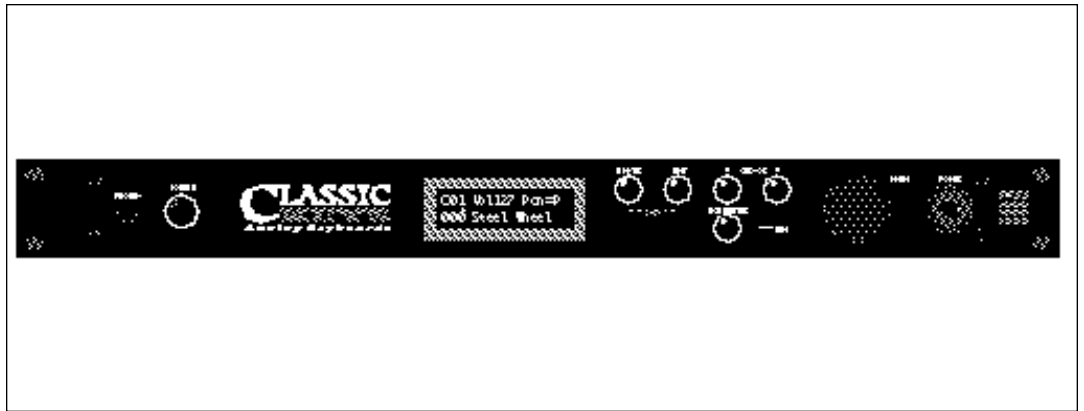


Classic Keys

INTRODUCTION

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Introduction



CLASSIC KEYS

Classic Keys is a musical instrument whose sounds are based on actual digital recordings of “real” instruments. In this way, Classic Keys is very similar to a sampling instrument. With Classic Keys, we have done the sampling for you and loaded it with a collection of the cleanest 16 bit sounds ever sampled.

Classic Keys contains a massive 8 Mega-bytes of the greatest keyboard sounds in the world. These superb samples have been selected from the Emulator III sound library and stored in ROMs for instant access. We have included everything you need to play and compose in a wide range of contemporary styles. You simply plug in and play.

But this is only the beginning. Classic Keys gives you the ability to literally take these sounds apart and reassemble them into an almost limitless number of

entirely new sounds, combining parts of one sound with another or with any of a selection of digital waveforms also stored on ROM. For example, the attack of a flute can be faded out as a vibe tone is faded in, giving you a completely new sound! The monophonic and true stereo 16 bit samples are arranged into 512 preset locations, 256 of which are user-programmable.

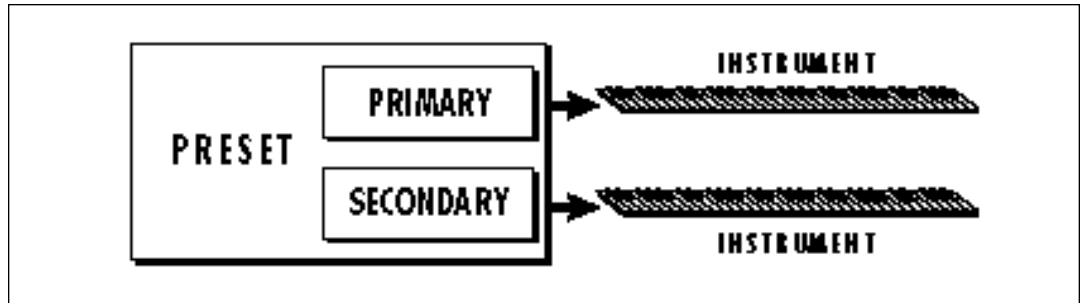
Classic Keys features 32 voice polyphony, allowing you to take full advantage of its layering capabilities (up to 8 sounds on each key) and its ability to respond multi-timbrally to all 16 MIDI channels makes it ideally suited for multitrack sequencing and composing using a MIDI sequencer.

Other features include two studio-quality effects processors with 27 different effects, a user definable alternate tuning, and of course, an extensive MIDI implementation.



Basic Organization

Classic Keys is organized as shown in the diagram below.



The Preset is a complete set of all program parameters for a complete Classic Keys sound.

The preset memory is organized into two banks of 128 user RAM presets (banks 0-1) and two banks of unalterable ROM presets (banks 2-3).

Bank	Contents
0	- User RAM Presets
1	- User RAM Presets
2	- ROM Presets
3	- ROM Presets

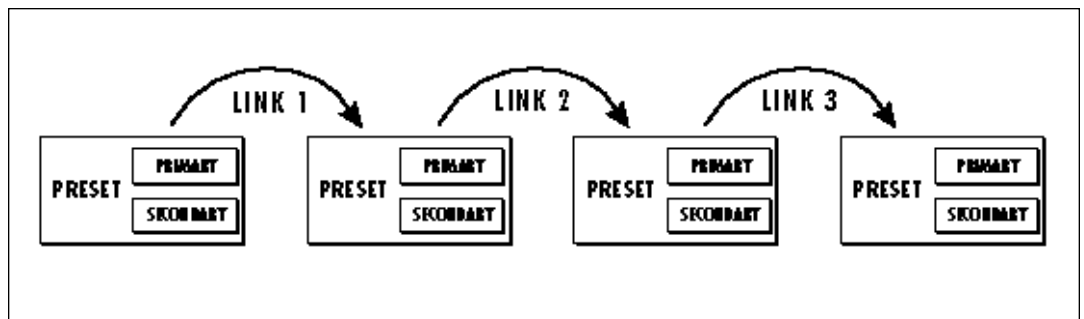
USER RAM PRESETS
CAN BE MOVED, ERASED
OR ALTERED AS DESIRED

ROM PRESETS
CANNOT BE MOVED OR
ALTERED UNLESS THEY ARE
FIRST COPIED TO A USER
LOCATION

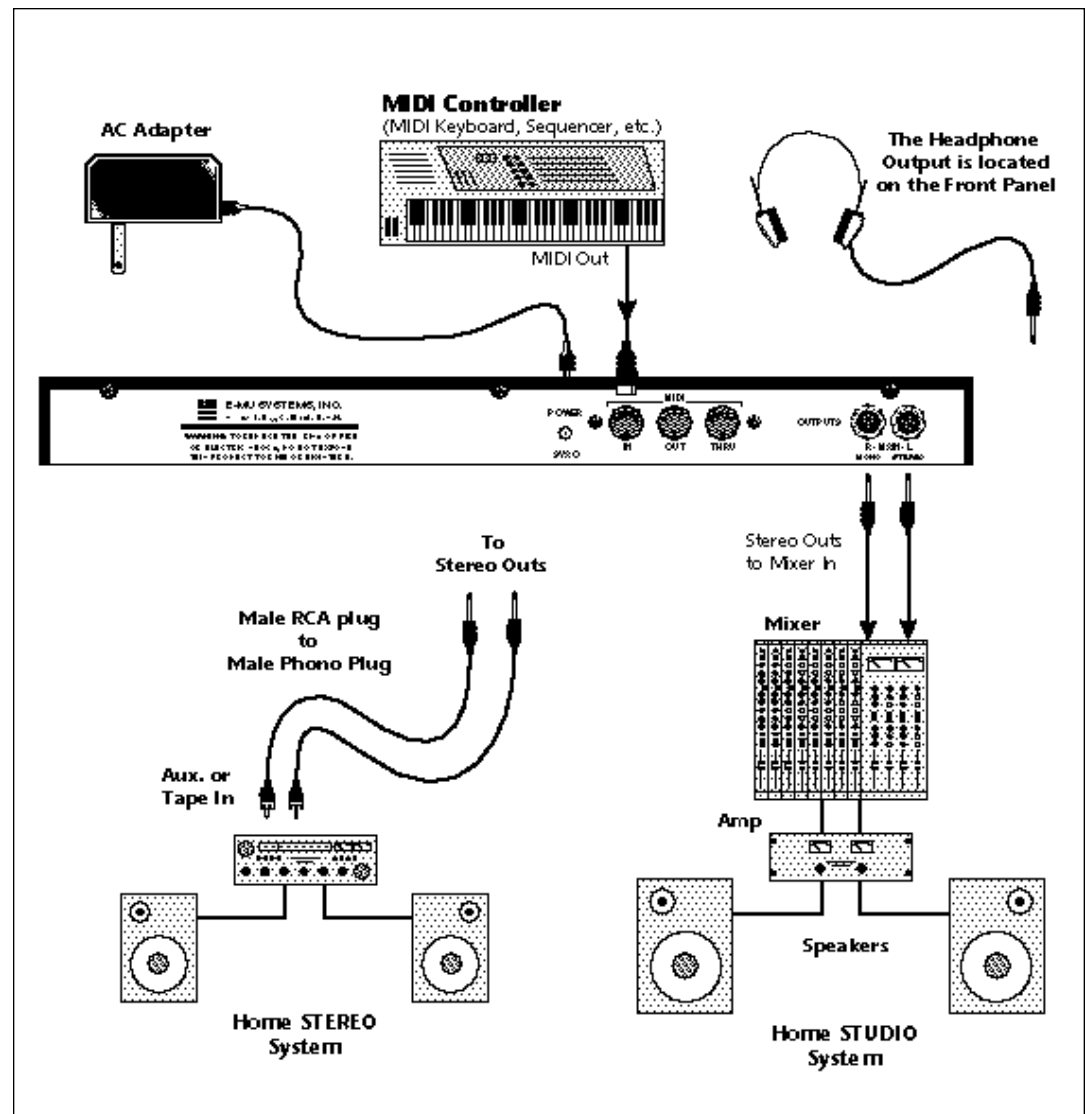
The primary and secondary layers are essentially two instruments with complete modulation controls. The two layers can be layered or placed adjacent to each other, and can be switched or crossfaded together in various ways.

Up to four presets can be Linked in order to have more than one preset on the keyboard at a time. The linked presets may lie on top of each other to create a dense layered sound or be arranged side by side on the keyboard to create a split keyboard.

Each preset consists of one or more Instruments. An instrument is a complete set of samples or a digital waveform which covers the entire keyboard range. An instrument can be assigned to each of the Primary and Secondary layers of the preset.



Basic Setup

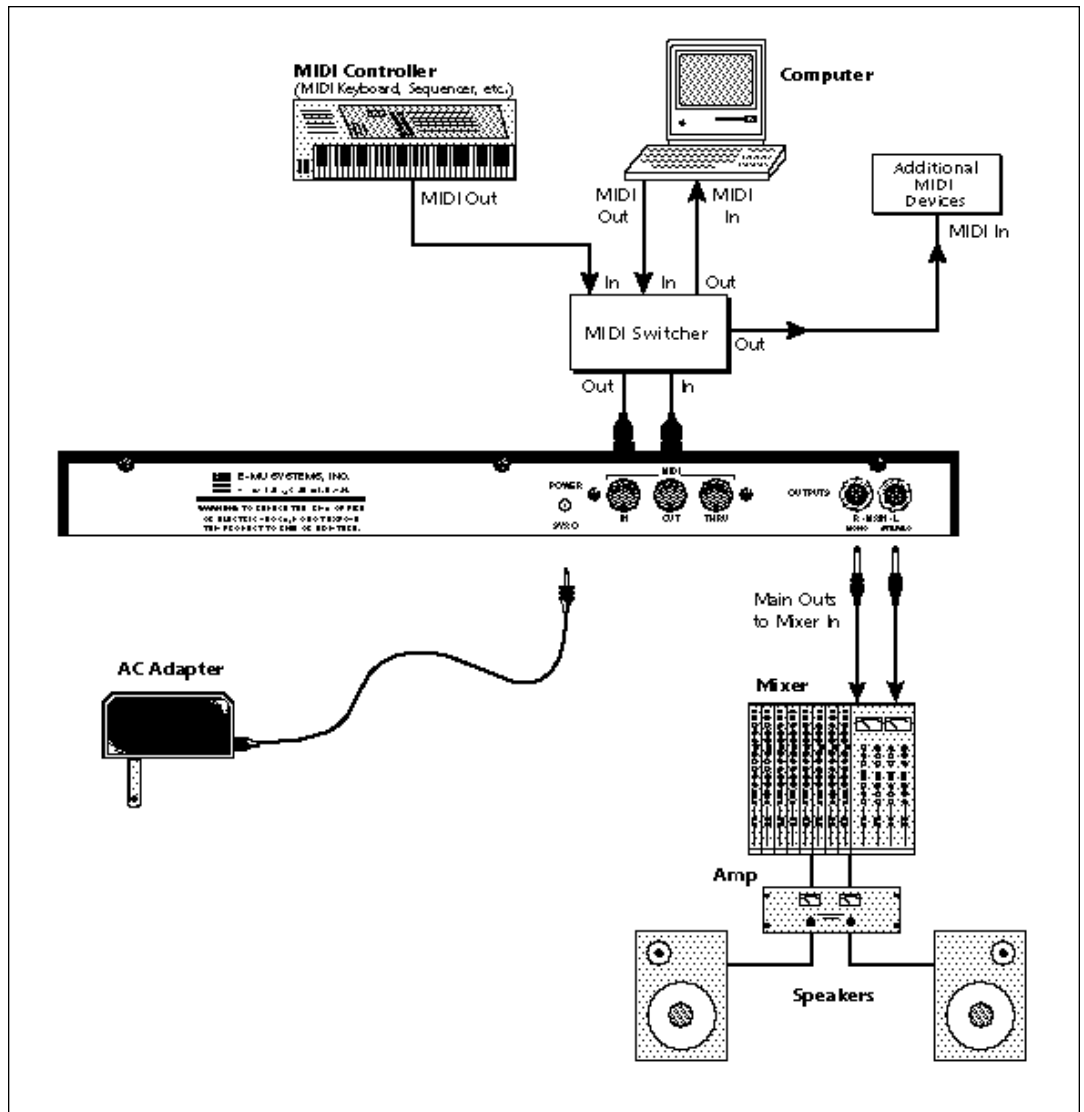


MIDI In - Classic Keys is controlled by MIDI messages received at the MIDI In connector. Connect the MIDI In of the Classic Keys to the MIDI Out connector of a MIDI controller such as a MIDI keyboard, MIDI wind controller, or MIDI guitar controller.

Outputs - Classic Keys is a high quality, stereo audio device. In order to reproduce its wide dynamic range and frequency

response, use a high quality amplification and speaker system such as a recording mixer and amplifier or home stereo system. A stereo setup is highly desirable because of the added realism of stereophonic sound. Headphones can be used if an amplifier and speaker system are not available. The right output jack serves as a mono output when the left jack is not plugged in.

Studio Setup

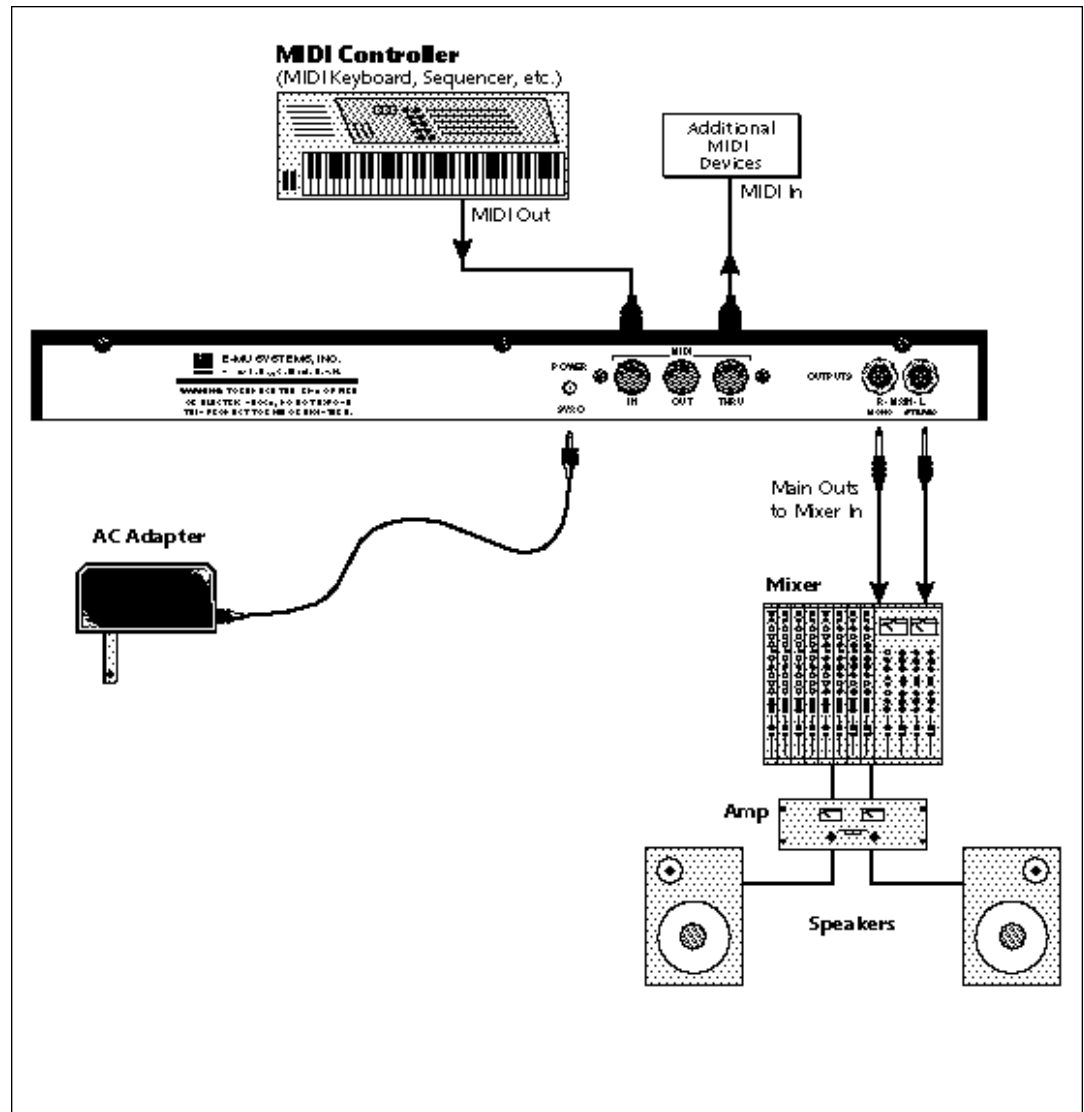


MIDI In - In this setup, Classic Keys is controlled by MIDI messages received at the MIDI In connector which have been routed by a MIDI switcher. The MIDI switcher allows any MIDI controller such as a MIDI keyboard, MIDI wind controller, or a computer to be easily connected.

MIDI Out - The MIDI Out jack is normally used to transmit program data to a computer or other device.

Outputs - Use a high quality amplification and speaker system such as a recording mixer and amplifier or home stereo system. A stereo setup is highly desirable because of the added realism of stereophonic sound. The right output jack serves as a mono output when the left jack is not plugged in.

Performance Setup



MIDI In - Classic Keys is controlled by MIDI messages received at the MIDI In connector. Connect MIDI In of the Classic Keys to MIDI Out of a MIDI controller such as a MIDI keyboard, MIDI wind controller, or MIDI guitar controller.

MIDI Thru - MIDI Thru transmits an exact copy of the messages received at the MIDI In jack and is used to connect additional MIDI devices onto the MIDI chain.

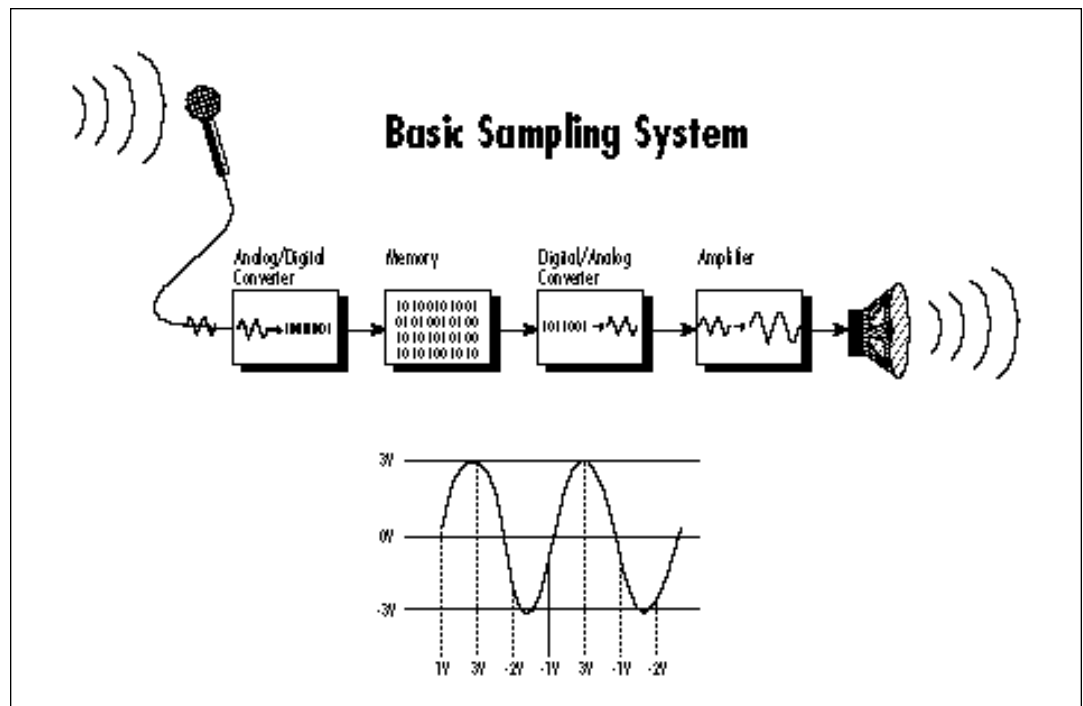
Outputs - Use a high quality amplification and speaker system such as a keyboard amplifier and speakers. A stereo setup is highly desirable because of the added realism of stereophonic sound. The headphone jack is located on the front panel. The right output jack serves as a mono output when the left jack is not plugged in.

POWER UP!

Before applying power, make sure that you have received the correct AC adapter for your part of the world (110V or 220V). Always connect the AC adapter to the Classic Keys before plugging it into the wall. The power switch is located on the right side of the front panel. Classic Keys and its MIDI controller may be turned on in any order. When power is applied, the liquid crystal display will light, indicating that the Classic Keys is operating.

After the sounds and waveforms have been truncated, looped and processed, they are “masked” into the Classic Keys ROM (Read Only Memory) chips.

Conceptually, the sampling process is very simple, as shown in the Basic Sampling System diagram. As a sound wave strikes the diaphragm of a microphone, a corresponding voltage is generated. To sample the sound, the voltage level is repeatedly measured at a very high rate

**ABOUT CLASSIC KEYS**

Classic Keys, unlike many synthesizers, utilizes digital recordings of “real” instruments for the basis of its sound. This is similar to a tape recorder except that in Classic Keys, the sounds are permanently recorded on digital memory chips.

To perform this modern miracle, sounds and instrument waveforms are first sampled into the Emulator III, our top of the line, 16 bit stereo digital sampler.

and the voltage measurements are stored in memory. To play the sound back, the numbers are read back from memory, converted back into voltages, then amplified and fed to a speaker which converts the voltage back into sound waves. Of course, playing back 32 channels at different pitches tends to complicate matters, but this is basically how it works. In Classic Keys, we have left out the analog to digital converter stage since the sounds are already sampled for you.