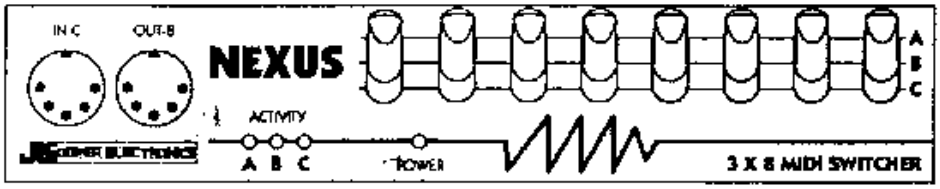
NEXUS

3 X 8 MIDI SWITCHER

Owners Manual

Second Edition February 1992



JLCooper Electronics 12500 Beatrice Street Los Angeles, CA 90066

Greetings
Thank you for purchasing the JLCooper Nexus, the 3 input, 8 output MIDI switcher. Nexus means "link", which perfectly describes this product. Nexus is a simple way to efficiently link together a medium size MIDI stage or studio rig.

Please fill out the enclosed warranty card and mail it in soon.

Activity LEDs
On the front panel of Nexus, there are three Activity LEDs, one for each input. These will flicker whenever MIDI data comes into an input. Some instruments send MIDI data continuously. For example, many sequencers always send MIDI clocks. So do not be surprised if an LED stays on most of the time.

Hookup
When hooking up your system, try to use good quality MIDI cables with a known history.

MIDI outputs always go to MIDI inputs, of course.

Any keyboard, controller, sequencer, computer, tone module, effect, drum machine, --anything with a MIDI output, hooks up to the Nexus three MIDI inputs

Likewise, the eight MIDI outputs of Nexus are hooked up to the MIDI inputs of any device that will receive MIDI.

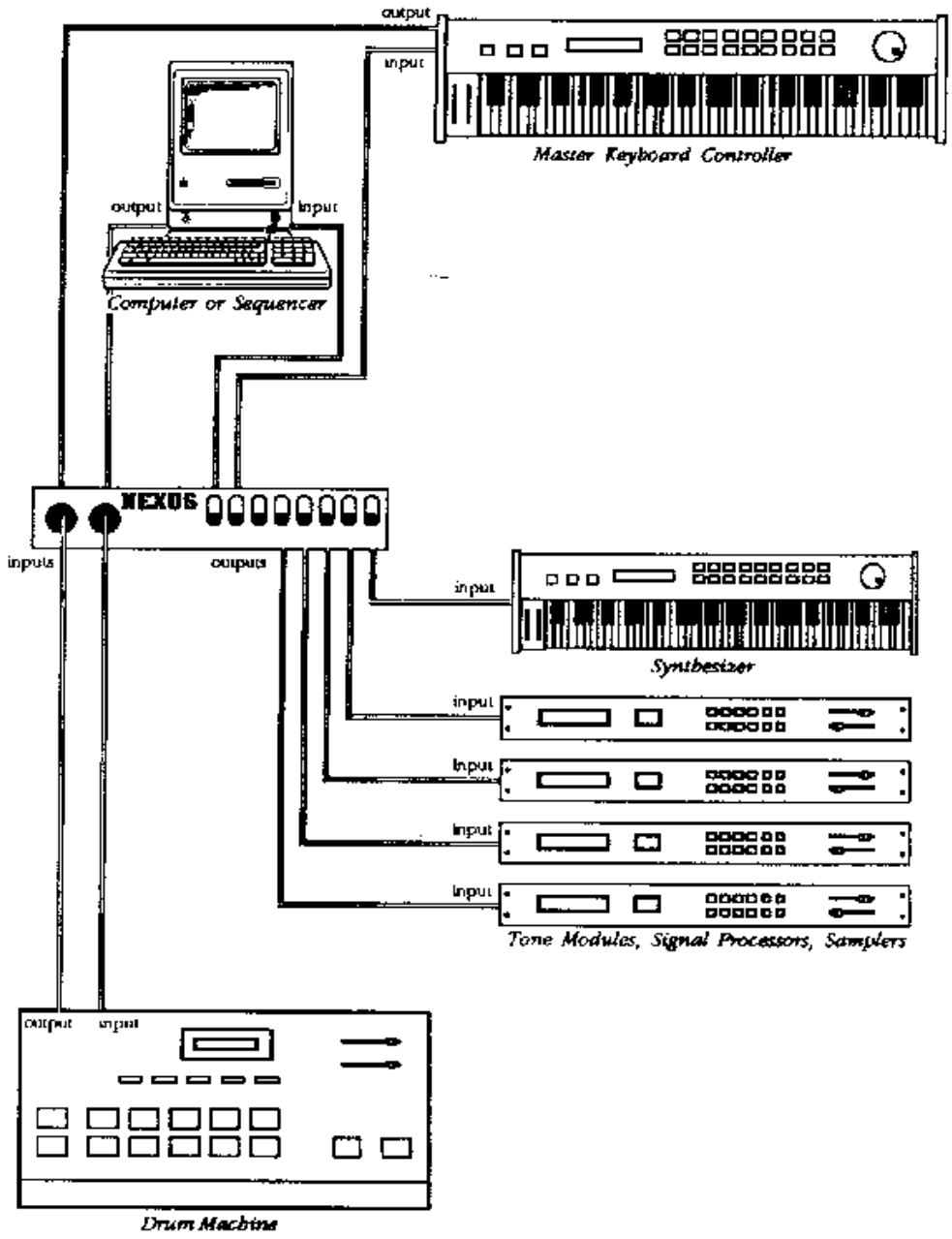
Notice the input and output located on the front of Nexus. There is nothing special about this input and output pair. They are just for convenience, like when a friend brings over a drum machine and you want to tie it into your studio without ripping out a lot of cables.

You'll want to hook up both a MIDI input and output for sequencers and synthesizers.

Certain devices, such as drum machines, tone modules, and MIDI-controlled audio signal processors, might only need to receive MIDI data. For those kinds of instruments, use only Nexus MIDI outputs. That is why Nexus has more outputs than inputs.

However, even some tone modules and samplers require two-way communication. For example, you may intend to use a sampler with a MIDI System Exclusive Librarian software package. In that case, you will want to hook up both the input and the output.

A typical hook up is shown here.


output
input
Master Keyboard Controller
output
input
Computer or Sequencer
NEXUS
inputs
outputs
input
Synthesizer
input
input
input
input
Tone Modules, Signal Processors, Samplers
output
input
Drum Machine

Operation
The principle of routing MIDI inputs and outputs is as follows:

Each of the 8 MIDI outputs has its own selector switch, numbered 1 through 8. Each switch has three positions, designated A, B, and C. A, B, and C represent the MIDI inputs. The position of a switch determines which of the three MIDI inputs is controlling that output.

Say for example that MIDI data comes out of a sequencer and goes into Nexus MIDI input A. Lets assume that we want the sequencer to send MIDI to five synthesizers. Say that Nexus outputs 4 through 8 are hooked up to those synthesizers. So, to route the MIDI output of the sequencer into the synthesizers, flip switches 4 through 8 UP to the A position.

Just remember that switch positions indicate sources of MIDI, that is, the instruments sending data. The switch numbers indicate the destinations of MIDI, that is, the instruments receiving data.

It may be helpful to run a thin strip of masking tape below the switches to help you keep track of things. Label each switch with the name of the instrument hooked up to that output number. For example, if Nexus MIDI output 4 goes to the input of a Yamaha DX-7, write "DX-7" below the switch.

When using Nexus, consider carefully how you set the switches. Notice that with the added flexibility of having a Nexus MIDI switcher, you have also increased the possibility of creating a MIDI loop. In a typical situation, you might want to send the output of a keyboard controller to the input of a sequencer. The output of the sequencer might be sent to some tone modules. Just don't accidentally switch the sequencer so that it sends MIDI back to itself.

IMPORTANT: Try not to route an instrument back to itself. Unless you are intentionally creating some special effect, you will likely only create confusion.

Trouble Shooting and Servicing
If a particular instrument is not receiving MIDI, check first the activity LEDs to make sure that MIDI is coming into Nexus. Then check the switch settings. Finally, make sure that the receiving instrument is set to the correct MIDI channel.

If you experience any operational difficulties, let us reassure you that <u>every</u> unit is 100% factory tested. It worked when it left the factory, otherwise it wouldn't have been shipped.

There are no "user-serviceable" parts inside Nexus. For warranty service in the U.S. in the event of a malfunction, call the factory to obtain a Return Authorization before sending the unit back. Please, read the instructions and debug your system before calling the factory.