OWNER'S MANUAL

Congratulations on purchasing **NODE™** by *Molten Voltage*

NODE is a programmable 4-Loop MIDI Audio Switcher that stores and recalls the bypass status of four (4) isolated effect loops.

Key Features

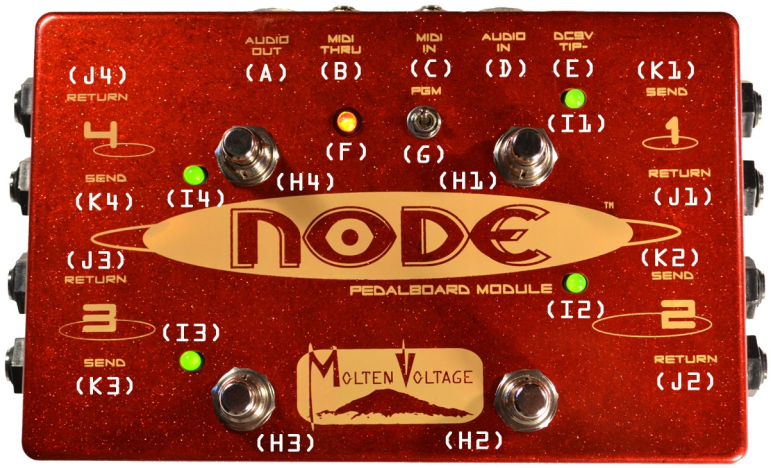
- 4-Loop Relay Bypass, Programmable, MIDI-controlled switching module for robust, scalable PedalBoard designs
- Proprietary *ReMute*™ circuit virtually eliminates switching noise without sacrificing audio quality
- Stores and recalls bypass status of 4 isolated audio loops
- Robust, 128 program storage
- Simple, intuitive user interface
- MIDI-Compatible
- MIDI Thru repeater for boosting the MIDI signal and re-transmitting it downstream
- Scalable - combine NODEs like building blocks to make elaborate designs with an unlimited number of switches
- Tough, road-ready construction
- Simple to program - toggle a switch!
- Molten Voltage enhanced MIDI technology allows remote, synchronized self-programming
- True-bypass loops allow use of vintage pedals while leaving them all-original

- Easy to see pedal status at a glance with the bright LED display
- Power-on light show
- Compact design assists discrete modular pedalboard construction
- Compatible with all major MIDI controllers, including Voodoo Lab Ground Control and Rocktron MIDI Raider

CONNECTING

Plug in a *separate or isolated* 9 volt, 2.1mm, 100mA minimum, ***tip negative*** DC Power supply into the DC9V jack (E). Never power **NODE** using a "daisy chained" power supply that is also connected to audio effects.

Note: In order to achieve optimal electrical isolation of the audio and digital signals, **NODE MUST HAVE A SEPARATE OR ISOLATED POWER SUPPLY, DISTINCT FROM ALL AUDIO DEVICES**



A) AUDIO OUT

1/4" output for the audio signal. Connected directly to AUDIO IN if all loops are bypassed.

B) MIDI THRU

5-pin DIN connection for repeating MIDI output. Repeats all MIDI data received that the MIDI IN jack. Connects to MIDI IN on another device.

C) MIDI IN

5-pin DIN connection for receiving MIDI data. Connect to MIDI OUT or MIDI THRU of another device.

D) AUDIO IN

1/4" input for the audio signal. Connected directly to AUDIO OUT if all loops are bypassed.

E) DC9V TIP-

Separate or Isolated 9-volt DC, tip-negative 2.1mm center power connection. Power supply must deliver 200mA minimum.

F) STATUS LED

Flashes to indicate a program has been successfully written to memory.

G) PGM Switch

Toggle the switch down, then up again to write the current settings to the currently selected program. If the switch is in the down position, you will need to go up, down, then up again.

Note: Programs can also be stored upon a remote command from the Molten Voltage MASTER CONTROL or TEMPODE devices.

H1-4) Loop Bypass Footswitches

Pressing a momentary switch toggles the corresponding loop output bypass state.

I1-4) Loop Bypass LED Indicators

When red, the corresponding loop is bypassed. When green, the loop is engaged.

J1-4) RETURN Jacks

Receives the audio signal from the connected effect unit. Connects to the OUTPUT on the effect.

Note: In order to mute a loop, insert a 1/4" connector into the RETURN jack only. When that module is engaged, the audio signal will be muted.

K1-4) SEND Jacks

Sends the audio signal to the connected effect unit. Connects to the INPUT on the effect.

Program Storage

NODE stores 128 programs. Programs are stored by toggling the Write Switch or upon a command from the Molten Voltage MASTER CONTROL or TEMPODE, the MIDI Clock Injector.

Program Recall

Programs are recalled using the Molten Voltage MASTER CONTROL, or any device that sends standard MIDI Program Change messages on Channel 1 or 15.

On power up, NODE always loads program 1.

Program Default

The program default for each of the 128 programs is all four loops bypassed.

MIDI Compatibility

Changing Programs

NODE responds to standard MIDI Program Change messages on channels 1 or 15 only. **The default is MIDI Channel 15.** MIDI Program Change messages sent on any other channel will be ignored.

Note: NODE responds to discrete Program Change messages, as well as those sent using the "running status" data format.

Changing MIDI Channel

NODE's default MIDI Channel is 15. To switch between MIDI Channels 1 and 15, have the PGM switch in the "up" position when powering on (the LED will be off). Switch the PGM switch down within 2 seconds. The STATUS LED will blink in a pattern, indicating the current MIDI Channel.

1 flash = MIDI Channel 1
2 flashes = MIDI Channel 15 (*default*)

Note: the other 4 LEDs will start normally, ignore them

Press the Loop 1 button to toggle between the 2 options. Switch the PGM switch back up to store the channel. The LED comes back on solid red after the new channel has been written.

Note: Changing MIDI Channels does not overwrite any stored programs.

MIDI Thru

The MIDI Thru Jack (B) repeats all MIDI data received that the MIDI IN jack, regardless of whether NODE recognizes the data.

Remote-Programming

NODE will automatically self-program and store its settings upon a command from Molten Voltage's MASTER CONTROL or TEMPODE, the MIDI Clock Injector.

MIDI IMPLEMENTATION CHART

Function	Recognized	Comment
Note On	X	
Note Off	X	
Aftertouch	X	
Control Change	X	
Program Change	O	On MIDI Channels 1 or 15 only.
Channel Pressure	X	
Pitch Bend	X	
System Common	X	
System Exclusive	O	Molten Voltage self-program command.
System Realtime	X	

O = YES, X = NO

TROUBLESHOOTING

Problem	Solution
NODE will not turn on.	Plug in 9 volt DC, 2,1mm Tip Negative Power Supply.
Noise in audio chain	Use a *separate* or *isolated* Power Supply for NODE.
NODE is not receiving MIDI Program Change messages	Set your master MIDI device to send MIDI Program Change messages on the same MIDI Channel (1 or 15) as NODE. *See above regarding changing NODE's MIDI Channel.* Check Power Supply connection. Replace MIDI cable with one under 15 feet.

General Guidelines

- Keep MIDI cables as short as possible. Long cables cause errors. If you need more length, consider using a MIDI repeater.
- If you are daisy chaining MIDI devices, the total MIDI cable length must be considered if any MIDI devices do not amplify the data signal.

Related Products

- MASTER CONTROL (MV-58 and MV-58B)
- TEMPODE, the MIDI Clock Injector
- MIDI Splitty - MIDI Pedalboard Repeater
- SIMI - Modular MIDI Display

Many more available soon!

Support

questions@MoltenVoltage.com

Warranty

Molten Voltage is proud of its products and warrants this unit for a period of two (2) years from the date of purchase to be free from defects in materials and workmanship under normal use and service, as long as the unit is used with an approved power supply, and consistent with these instructions.

Contact *Service@MoltenVoltage.com* regarding repairs. Any user repair attempts void the warranty. PROOF OF PURCHASE IS REQUIRED FOR WARRANTY REPAIRS.

Molten Voltage MIDI PedalBoard Devices

Sturdy
Scalable
Simple™

streamline your sound™

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