MIDI Features and Controls

Library of MIDI commands and how to program your Eternity.

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How to Connect

Midi communication to the Eternity conforms to the specification for TRS to Midi adapters issued by the Midi Association. So what does this mean for me? In order to communicate via Midi you will need either a 5 pin to 1/4" TRS adapter cable that is wired to the TRS specification, or if you wish to make your own patch cables, a link to the wiring diagram and the midi specification can be found here. You can also use a midi box/ hub that converts 5 pin Midi to multiple TRS outputs, like the Traffic Control from JET or similar boxes from Strymon or Morningstar. You could also use a compatible Midi controller with TRS midi output's like the Futurist by Matthews Effects or various controllers by Morningstar.

Changing the MIDI Channel

From the factory the Eternity is set to receive Midi messages on Midi channel 1, however this can be changed upon powering up the pedal. After applying power to the Eternity, hold down the Bypass switch while the pedal is in startup mode (Mix & Repeats knobs are scrolling thru the color spectrum). Once the LEDs turn a solid color, release the Bypass switch to enter the Global settings. Rotate the Cntrl1 knob and the Bypass LED will begin to blink between 1 and 16 times (depending on which channel is set by the knob). Rotate the Cntrl1 knob counter-clockwise to decrease the MIDI channel or clockwise to increase the MIDI channel. Once you've reached the desired channel (i.e. channel 6 means the LED will flash 6 times), hold the Bypass switch to exit the global settings and to save the Midi channel to permanent memory.

Saving Presets via MIDI

You have two options for creating presets. The first option is to use a "smart" midi controller (like the JET MCX) that can send multiple simultaneous midi messages. Just send individual CC messages to turn the Bypass switch on, select the algorithm, and set the values for each knob/toggle switch.

The second option is to use our revolutionary CC Snapshot feature. While in Live Mode, select your desired algorithm and then set all of the knobs & switches to their desired positions. From there just send midi CC #28 with any Value from 7 thru 100. The pedal will then take a snapshot of its algorithm and knob/switch positions, after that the knobs will flash green letting you know the preset has been saved into permanent memory. To recall this preset, just send a PC message with the same number used for the Value when sending CC #28.

Example: send CC #28 Value 10 to save a preset in the 10th slot. Send PC #10 to recall the new preset.

The Eternity can save 100 onboard presets (the first 6 are saved using the pedal and 7 - 100 are saved with CC Snapshot).

Program Change Messages

Receiving PC messages will recall the onboard presets stored within the Eternity.

- PC #0 - Will bypass the pedal (Available from Serial #132 and up)
- PC #1 - Recalls the first preset (Light Blue)
- PC #2 - Recalls the second preset (Green)
- PC #3 - Recalls the third preset (Yellow)
- PC #4 - Recalls the fourth preset (Red)
- PC #5 - Recalls the fifth preset (Pink)
- PC #6 - Recalls the sixth preset (White)
- PC #7 - 127 Recalls the preset created by CC Snapshot (Dark Blue)

Control Change Messages

Receiving CC messages will control the individual controls, knobs, and switches of the Eternity.

- CC #18 Any value between 0 & 42 sets the subdivision toggle switch to ¼ notes
  - Any value between 43 & 85 sets the subdivision toggle switch to dotted ⅛ notes
  - Any value between 86 & 127 sets the subdivision toggle switch to ⅛ notes
- CC #19 with any value of 0 thru 127 controls the Mix knob. 0 is the equivalent of having the knob turned completely counter-clockwise (mix turned off) and 127 is like having the knob turned completely clockwise (mix at full volume). Sending a value of 64 is the equivalent of having the knob straight up at noon.
- CC #20 with any value of 0 thru 127 controls the Repeats knob
- CC #21 with any value of 0 thru 127 controls the Filter knob
- CC #22 with any value of 0 thru 127 controls the Cntrl1 knob
- CC #23
  - Any value between 0 & 63 turns the Bypass switch off
  - Any value between 64 & 127 turns the Bypass switch on
- CC #24
  - Any value between 0 & 63 turns the Preset switch off
  - Any value between 64 & 127 turns the Preset switch on
- CC #25 any value between 0 & 127 increments the Preset number
- CC #26 any value between 0 & 127 decrements the Preset number
- CC #27
  - Any value between 0 & 21 activates the Tape delay algorithm
  - Any value between 22 & 44 activates the Digital delay algorithm
  - Any value between 45 & 66 activates the Analog delay algorithm
  - Any value between 67 & 88 activates the Dual delay algorithm
  - Any value between 89 & 110 activates the ESD delay algorithm
  - Any value between 111 & 127 activates the JET Signature delay algorithm
- CC #28 any value between 7 & 127 activates CC Snapshot mode
  - This takes a snapshot of your current settings and stores it in permanent memory at the appropriate preset location. An example would be to send CC #28 Value 7, this stores a preset in the 7th slot and can be recalled anytime by sending PC #7
- CC #29
  - Any value between 0 & 63 turns off Kill Dry mode
  - Any value between 64 & 127 turns on Kill Dry mode