Overview

Basic overview and features of the JET Eternity Delay

- Description
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Description

Introducing the Eternity Delay- our most sophisticated design to date.

The Eternity Delay is engineered with six studio-grade algorithms, six onboard presets (127 with MIDI), full MIDI control over every knob, switch, algorithm, preset, and bpm with MIDI clock. Additionally, it features a live mode, preset mode, and kill-dry mode. It also boasts the world's most advanced tap tempo and stereo analog dry thru.

We've included Junior (JET's) favorite algorithm into the Eternity Delay and named it, JET's Signature Rhythm Delay (JRD). The JRD is a slapback & analog dual delay algorithm. This algorithm is not commonly found in other delay pedals, but Junior has used it extensively to create massive sounding rhythm and lead sounds.

The Eternity Delay features an upgrade to the standard tap tempo. The Eternity tap tempo averages the BPM based on the number of taps received. This results in extreme accuracy when MIDI clock isn't available. The tap tempo rate LED automatically syncs itself to the BPM and flashes on the downbeat of each ¼ note, solving the problem of flashing LEDs that appear to be out of tempo.

Features At A Glance:

- 6 Studio grade algorithms:
  - Tape
  - Digital
  - Analog
  - Dual Delay
  - ESD (Echo | Slap | Doubler)
  - JET Signature - Slap/Analog Dual

- 6 Onboard presets:
  - Up to 127 presets via MIDI
  - Rotate the knobs in Preset Mode to see the saved position of each knob
  - Quickly edit and save any preset by adjusting the knobs then holding the Bypass switch for 3 seconds
- Full MIDI control over every knob, switch, algorithm, preset, bpm (via midi clock), etc.
- Stereo Analog Dry Thru
- Live Mode, Preset Mode and Kill Dry Mode
  - Quickly jump between two different delays
  - Any preset can be queued up while in Live Mode without affecting your sound
- The world’s most advanced dedicated tap tempo switch:
  - Tap tempo range is from approx. 60 to 160 BPM

    - Tap tempo will average the BPM’s based on the number of taps received, resulting in extreme accuracy when MIDI clock isn’t available
    - Tap tempo rate LED will automatically sync itself to BPM and flashes on the down beat of each ¼ note. No more annoying flashing LED’s that appear to be out of tempo with the song.
- Selectable subdivision rate switch, select between quarter, dotted eight, and eight note subdivisions.
- Use the Eternity in any rig
    - Mono in / Mono out
    - Mono in / Stereo out
    - Stereo in / Stereo out
    - Stereo in / Mono out (sums to Mono)
    - Kill Dry Mode
- User adjustable Global Settings
    - Don’t want to cycle through all 6 preset locations? Easy, define the number of onboard presets available within the Global Settings.
    - Define which preset and algorithm loads at startup
    - Assign the Eternity to any MIDI channel 1 thru 16
    - Enable/Disable Kill Dry Mode
- Power via 9v (Negative Tip) power supply (pwr supply not included)
- Current Draw: 250mA
- Enclosure Dimensions: 4.82" x 2.62" x 1.425"

Algorithms

The Eternity has 6 studio grade algorithms to choose from. Below details the sounds for each algorithm.

Tape Delay

Designed to emulate tape machine delay’s. With sonic characteristics of warm tube saturated repeats, each repeat gets progressively darker and the speed of the tape reels can fluctuate, causing artifacts such as wow and flutter. A brand new tape machine will have minor artifacts affecting the delay repeats. However as it ages, these characteristics tend to be more distinct and the delay repeats will represent more of these artifacts. Cntrl1 will emulate the tape age, fully counter-clockwise is like a brand new tape machine. As its rotated clockwise, each repeat gets darker and the wow & flutter becomes more noticeable.

Digital Delay

Bright & clean delay repeats. The Cntrl 1 knob adds some character/grit to your repeats for a less pristine delay sound. The character/grit is input sensitive, play harder and this will be more noticeable or play softer for less character/grit.

Analog Delay

Designed to emulate the old bucket brigade analog delay’s. Analog delay’s will have signal degradation on each repeat causing each successive repeat to roll off some high frequency’s. The Cntrl 1 knob, when set fully counter-clockwise, is a simple and straightforward Analog delay. When rotated clockwise, the Cntrl 1 knobs adds modulation to the repeats of the delay. The rate and depth of the modulation is fixed, think of the Cntrl 1 knob as a volume knob for the modulation.

Dual Delay

This delay runs two different delay’s with different subdivisions in full stereo and in ping pong (L & R). Delay 1 is an analog delay which is set by the Subdivision switch and Delay 2 is a fixed dotted eight digital delay. The Mix knob controls the level of delay 1 and the Cntrl 1 knob controls the level of delay 2. The subdivision switch affects Delay 1 and is as follows:

- 1/4 Note Setting
  - Delay 1 will be set to a 1/4 note with Delay 2 set to a dotted 1/8 note
- Dotted 1/8 Note Setting
  - Delay 1 will be set to the Golden Ratio with Delay 2 set to a dotted 1/8 note
- 1/8 Note Setting
  - Delay 1 will be set to an 1/8 note with Delay 2 set to a dotted 1/8 note

Echo | Slap | Doubler (ESD) Delay

This delay is actually three delay’s in one and the subdivision switch selects between the three different delay’s. The Echo delay is called up when the Subdivision switch is set to the 1/4 note position. Based on the tap tempo range (approx. 60 - 160 BPM) the Echo delay will range from 333 milliseconds to 125 milliseconds. When the subdivision switch is set to dotted 1/8, this calls call up the Slap delay. The tap tempo range will go from 125 milliseconds to 47 milliseconds. When the subdivision switch is set to the 1/8 note position, this calls call up the Doubler delay. The tap tempo range will go from 63 milliseconds to 23 milliseconds. The Cntrl 1 knob widens the stereo spread of the ESD delay, at fully counter-clockwise the stereo spread will be off and gets wider as its rotated clockwise.

JET Signature Rhythm (JRD) Delay

This delay is not commonly found on other delay pedals however it is a sound that I (Junior “JET”) have used extensively for creating massive sounding rhythm & lead sounds. This delay is very similar to the Dual Delay however it is important to not have the delay’s ping pong back and forth. Delay 1 is an analog delay and the Subdivision switch, Mix, and Repeats knobs all control delay 1. Delay 2 is a fixed 100 millisecond Slapback delay and Cntrl 1 adjusts the overall volume of delay 2.