

# Overview

Basic overview and features of the JET Lion Distortion

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# Description

Introducing the Lion, a 100% all analog signal path, programmable distortion pedal with onboard presets and full midi control. The Lion is an op amp based distortion with hard clipping diodes placed after the feedback loop of the op amp. While it is its own unique circuit, it can be closely compared to similar type circuits like the Boss DS-1, Pro Co Rat, and JHS Angry Charlie, etc. The Lion features an internal 18V charge pump converting a standard 9V power supply to 18V for maximum headroom and responsive touch dynamics.

- 100% All Analog Signal Path
- Full MIDI Control Over Every Knob, Switch, Feature, etc.
- Internal 18V Charge Pump for Maximum Headroom & Responsive Touch Dynamics
- 3 Selectable Distortion Circuits
- 3 Selectable Presets (knobs not active in preset mode)
- 100 On-Board Presets w/ the Use of a MIDI Controller
- Any Circuit Can Be Saved to Any Preset Location
- Live Mode (knobs always active)
- Preset Mode (knobs inactive)
- Quick access between Live Mode & Presets
- Multi-Colored LED's Showing the Status of Each Preset & Algorithm
- Double Tap the Preset Switch for an Instant Lead Boost
- Soft Click Bypass Switches
- Power via 9v (Negative Tip) DC Power Supply (power supply not included)
  - **\*Requires 200ma or larger power supply (anything less will result in performance issues)**
- Dimensions L x W x H - 4.7 in x 3.7 in. x 1.66 in. (119 mm x 94 mm x 42 mm)

# The Distortion Circuits

The Lion has three different circuits which offer different levels of compression and clarity. By default the Lion loads up with symmetrical silicone diodes which offers the most amount of compression. Typically used for heavy, thick chording, or nice saturated lead lines. Then we offer asymmetrical clipping with silicone diodes, this offers a slightly less compressed sound for a more open feel which usually works great for rhythm chords or more open sounding lead lines. The last option is a pair of red LED's, these offer the least amount of compression and the most headroom giving your guitar a very open feel. Red LED's will give you a more vintage Marshall sound and/or that "classic distortion sound".

Each circuit offers varying amounts of headroom, so typically when switching between these circuits your output volume will jump around quite a bit. At JET Pedals, we've added our volume leveling technology (VLT) to each circuit so you don't experience any jumps in volume when switching between circuits. This allows you to really feel the difference between the various circuit types, rather than simply hearing a perceived difference with volume jumps.

# The Tone Stack

The tone stack of the Lion offers complete flexibility for maximum tone shaping. With both a low cut and high cut knob, you can either create complex fat rhythm tones, searing bright lead tones, or even cut both low and high frequencies to create a pseudo mid hump for cutting through the mix.

\*\*\* The low cut on the Lion is unlike traditional low cut knobs where they remove lows from the signal path post distortion. The Lion has the low cut positioned in the feedback loop of the opamp, which acts like the "sag" on tube amplifiers. With the low cut knob turned counter clockwise you will notice a more "spongy" feel to the distortion which can more compressed. With the low cut knob turned clockwise you will notice more "tightness" to the feel of the the distortion which can be less compressed.

# Lead Boost

The Lion has a hidden Lead Boost feature, this can be useful for adding just a touch of output volume or adding a significant amount of output volume for lead lines or solos (will not affect your gain/breakup).

Double tap the Preset switch to auto engage the Lead Boost, once engaged the Preset LED will begin to flash indicating the Lead Boost is engaged. To exit the Lead Boost, simply press the Preset Switch.

The volume of the Lead Boost is user definable and can be changed/stored in permanent memory via the configuration menu at startup, see "Using the Pedal" for more info.