



# multidrive



user manual

## Introduction

In the studio, we've found that running multiple amps in parallel really allowed us to get creative and complex tones that weren't possible with only one amp. The Multidrive was created with this amp-stacking concept in mind. We think you'll find the blend is greater than the sum of the parts, in a way that would make Aristotle proud!

The Multidrive represents a sonic Swiss Army knife. Our goal with this pedal was to allow you the control to create your own unique tone from a blend of three original sounding circuits.

To help you get the most out of this product, we've put up some brief instructional videos on our website:

[www.empresseffects.com](http://www.empresseffects.com)

Thanks for purchasing the Empress Multidrive!

Enjoy,

Jason Fee  
Lead Designer

## The Basics of the Multidrive

The Empress Multidrive gives you fuzz, overdrive and distortion circuits that can be run simultaneously, in parallel; their individual outputs get blended together to create the final output. The gain control on each section controls how distorted the section sounds, and the volume control on each section controls how much of the effect appears at the output.

**Fuzz:** A classic sounding circuit with loads of gain and sustain. Blending this in will add great note definition to lead parts. On its own it will give you that classic, bursting at the seams kind of sound.


**Overdrive:** A completely original circuit, this overdrive is designed to give you a warm and smooth break-up that cleans up well with changes in volume and attack, much like a tube preamp.

**Distortion:** This circuit uses a combination of BJTs, FETs, LEDs, standard diodes, and opamps. It's a little bit of gain from a lot of different places. In the mild setting, it's focused and is an excellent complement to the overdrive. In the crunch setting, you get a thick, well defined sound with really tight low end. In the lead setting, it compresses and gets over the top.

## Fuzz, Overdrive and Distortion Controls

Each section has a dedicated volume, gain and filter control. This allows for an extremely wide range of sonic possibilities.

**filter:** engages a high pass filter (hp) or a low pass filter (lp) for this section. This switch allows you to use only the high frequencies of one section with only the low frequencies from another section. For example: you could combine the tight lows of the distortion section with the classic, high frequency, sustain of the fuzz section. The cutoff frequency is 500 Hz for both the high-pass and low-pass filter settings.

**Power:** + —  - 9V DC negative tip 2.1mm jack.  
110mA or greater

**gain:** controls the amount of break-up in each section.

**volume:** controls the amount of signal from each section that gets added to the output. Think of this as the volume fader on a mixer.

**select:** used to toggle between 2 preset combinations of fuzz, overdrive and distortion. Choose which channels are active in each preset using the dip switch located inside the multidriven. LEDs indicate which channels are active at any given time.

**distortion type:** choose  
available in the distortio



**bypass:** When the LED is lit, the signal is applied to the output. When the LED is off, the signal is being bypassed (true bypass).

## at a Glance

... between 3 flavors  
... on section.



... shining, the multidrive effect  
... when off, the multidrive is  
... (pass).

### Master Section Controls

The fuzz, overdrive and distortion sections are summed together in the master section. The master controls apply to the combined signal and can be used to tailor the final sound that leaves the pedal.

**mid freq:** this switch allows you to select the center frequency of the mid band of the master EQ.

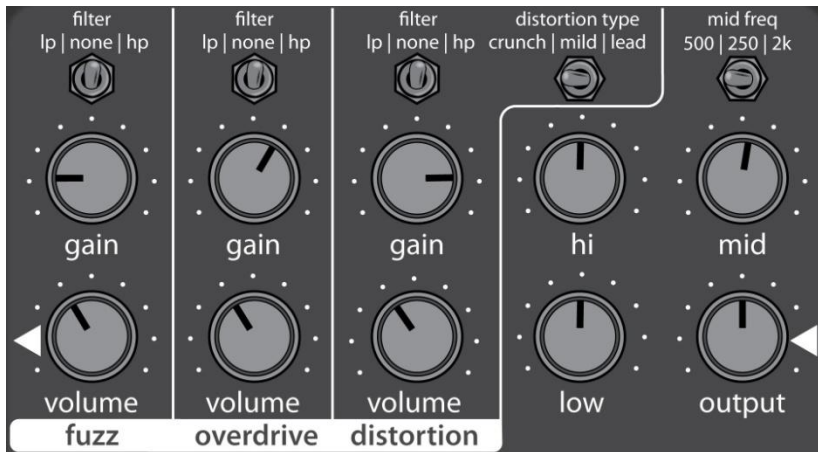
**hi:** controls the amount of high frequency content in the output signal. It is a gentle high shelf filter starting around 3 kHz. The 12 o'clock setting is 0 dB, no boost or cut, and the extreme boost and cut is about 10 dB.

**mid:** allows you to add or subtract the frequency selected with the mid freq switch. The 12 o'clock setting is 0 dB, no boost or cut, and the extreme boost and cut is about 10 dB.

**low:** controls the amount of low frequency content in the output signal. It is a low shelf filter starting around 150 Hz. The 12 o'clock setting is 0 dB, no boost or cut, and the extreme boost and cut is about 10 dB.

**output:** controls the output gain. The point where unity gain is achieved varies and depends on the individual section volumes.

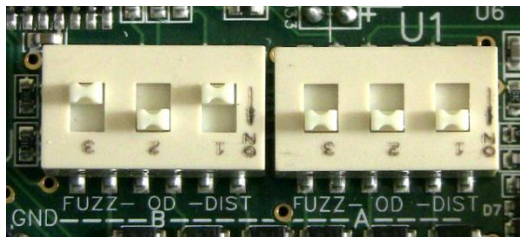
## Quick Start



Set the knobs and switches to match the picture above. If the blue bypass LED is not already lit, press the **bypass** switch to engage the Multidrive. If the red, yellow and green LEDs are not lit, press the **select** switch to change states and engage all 3 channels. Now use up the individual fuzz, overdrive and distortion volumes to blend them to taste.

## Configuring the Select Switch


The Multidrive allows you to toggle between two unique combinations of the individual fuzz, overdrive and distortion sections using the **select** switch. In each state you can combine one, two, or all three sections together to create your own unique drive sound.



To configure the settings, remove the back panel to access the internal DIP switch. Here you can select which drive sections will be turned on when toggling between state A and state B.

For example, with the DIP switch set as shown in the picture above, the **fuzz**, **overdrive** and **distortion** sections are on when the **select** switch is set to state A. In state B, only the **overdrive** section is on.

## Specifications

Input Impedance:	1M $\Omega$
Output Impedance:	510 $\Omega$
Frequency Response (-3dB):	35Hz – 17kHz
Input Voltage:	9VDC-18VDC +  -
Required Current:	120mA
Power Input Connector:	2.1mm Barrel Connector
Height (enclosure only):	1.5"
Height (including controls):	2"
Length:	3.5"
Width:	4.5"
Weight:	1lbs

*\*Noise and Distortion measurements are completely dependent on the settings. Suffice it to say, the pedal is very quiet for the amount of gain added.*

**[www.empresseffects.com](http://www.empresseffects.com)**