

### Introduction:

Your Octave Theory was hand crafted in Oregon. Thank you for purchasing Subdecay pedals.

Inspired by the Korg MS-20 & 8 bit video game sounds. Eleven modes provide a plethora of options.

**Topology:** The Octave Theory's filter is similar to the MS-20.

Envelopes, control voltages, octaves and cross-fading are generated by an ARM Cortex M4 digital processor.

### Notes:

-This pedal's peak detection circuit self calibrates when the effect is bypassed. When first powered up the effect may act strangely until it is bypassed for about five seconds.

-For best pitch tracking use the neck pickup of your guitar. Avoid using other effects before the Octave Theory.

### Getting started:

The Octave Theory is the world's first octave shift pedal. So what is octave shifting? At its core the Octave Theory seamlessly cross-fades between octaves. Paired with an awesome filter this creates a multitude of possibilities, like 8 bit chiptune sounds, classic guitar synth, super sub bass tones and the world's first shepard tone guitar synthesizer.

The Octave theory is monophonic. It can only detect a single note at a time. The pedal should be placed early in your effects chain. The only effect that might be worthwhile placing prior would be a compressor for added sustain. Place any sort of time based effect (echo, flanger, chorus, etc.) after the Octave Theory.

### Controls:

**Mode:** There are eleven modes broken up into four groups- **LFO**, **Envelope**, **Shepard Tone** & **Manual**. Each mode has either a green or white marker. Green indicates filter priority. White indicates AMP priority. (AMP is synth speak for modulating the output volume, usually via an ADSR envelope.)

**Oct. Mod:** Controls a parameter of the octave modulation.

- **LFO**- Controls the modulation speed.
- **Envelope**- Controls how much the input envelope triggers octave shifting.
- **Shepard Tone**- Shifts octaves manually.
- **Manual**- Shifts octaves manually.

**Filter Freq:** Sets the resting frequency of the filter.

**AMP Decay:** AMP priority modes- Sets the decay time of the output using an internal ADR (Attack/Decay/Release) envelope. The filter also follows the ADR envelope at a fixed depth.

**Filter Depth:** Filter Priority modes- Filter follows an envelope generated by the input level, just like an envelope filter. In filter priority modes the internal ADR AMP envelope is set to infinite decay time.

**Filter Res:** Sets the resonance of the filter. Turning past 3:00 will cause the filter to oscillate.

To get an understanding of how this effect works set it to manual mode. Experiment with the other knobs, especially the OCT. Mod. You'll hear the OCT. Mod shift from lower to higher octaves. This shifting is the core of the effect. All of the other modes automate this shifting internally.

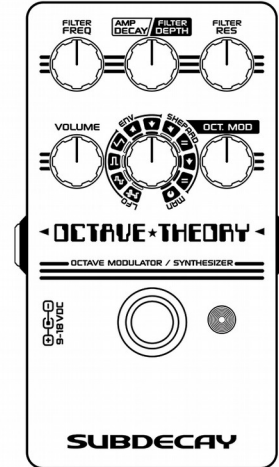


Manual mode

# SUBDECAY

## OCTAVE THEORY

### OCTAVE MODULATOR SYNTHESIZER



## USER GUIDE

VERSION 1.00A

Subdecay Studios, Inc. - Hand made in Oregon.

Having trouble? Visit our website for more info: [subdecay.com](http://subdecay.com)

Email us: [support@subdecay.com](mailto:support@subdecay.com)

Or call us: 503 538 3632

### Specifications:

Input impedance: 500Kohms.

Output Impedance: ~ 5Kohms.

Powered by a 9-18VDC adapter.

Current draw @ 9VDC ~ 35mA.

Can not be powered by a battery.

### Operation and care:

All the regular stuff here. Don't leave it out in the rain or put it in an oven. If you want to clean it use a towel, don't put it in the washing machine. Send it back to us if it stops working.

### Warranty:

Subdecay Studios offers a 3 year limited warranty from the purchase date to the original purchaser. This warranty does not cover polar bear attacks, willful destruction, using your pedal as a hammer, or the neglect of the user. It does not cover the finish, paint or any external superficial damage. Any unauthorized repairs or modifications voids the warranty.

*This document was believed to be accurate at the time it was created. Specifications are subject to change without notice.*