

Introduction:

Your Vitruvian was hand crafted in Oregon. Thank you for purchasing a Subdecay pedal.

Inspired by additive synthesis, sci-fi soundtracks and the Commodore 64's MOS Technology SID chip the Vitruvian Mod is a ring modulator with a synthesizer soul.

The Vitruvian Mod's focus on ease of use and pitch tracking lets you easily create sounds and timbres difficult to achieve by any other means.

A ring modulator multiplies two signals. The output of this multiplication is the sum and difference of the two signals. That's not easy to explain, but you know the effect when you hear it. In this case the Vitruvian Mod modulates the input signal with an internally generated carrier.

Without tuning the ring modulation carrier the results are typically dissonant and unmusical. When tuned conventionally it can make for interesting sounds, albeit usually only for a few notes if you stay in the same key.

While classic static carrier tones are available, pitch tracking allows the internal carrier to follow the input signal. This can result in several octaves down, octaves up, fifths and other harmonic timbres. See the back of this user guide for tuning the Vitruvian Mod's controls.

Specifications:

Input impedance: 250K

Output impedance: Less than 50K

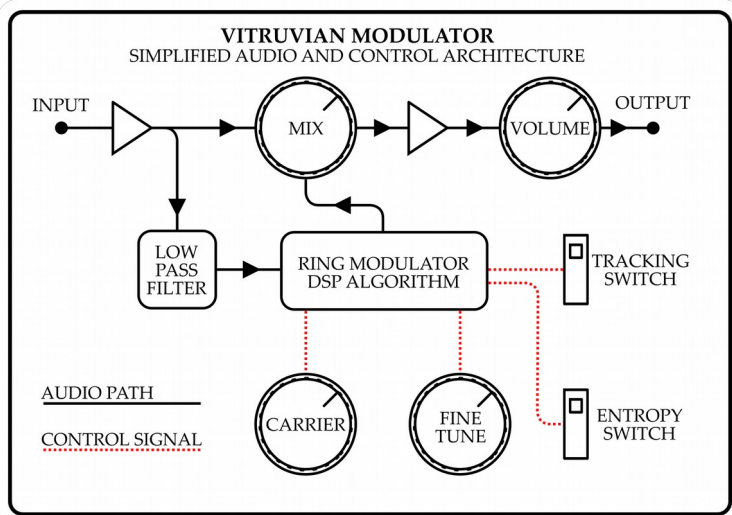
Operation and care:

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.

Simplified circuit architecture: The clean signal remains 100% analog. Ring modulation and pitch tracking are produced by a digital signal processor.



SUBDECAY VITRUVIAN MOD



RING MODULATOR USER GUIDE

VERSION 2.00A

--CONTROLS--

- MIX-** Controls the amount of ring modulation. Turn to the left for fully clean or to the right for fully modulated. Less extreme settings are useful for holding sounds together musically.
- VOLUME-** A simple but often overlooked control on many ring modulators. You won't have to worry about a volume drop or the effect being too upfront in the mix. Simply adjust to taste.
- TRACKING SWITCH-** For classic fixed carrier (non-tracking) mode set to null (0) in the center position. Select HI or LO for tracking modes. This control alters the functionality of the CARRIER and FINE tune knobs.
- CARRIER-** Selects carrier pitch or ratio. Functionality is dependent upon tracking switch and entropy switch settings. See the carrier matrix table at the bottom of the page.
- FINE TUNE-** Allows for fine tuning off the carrier. Functionality is dependent on ENTROPY and TRACKING's switch settings. In Tracking modes with the ENTROPY set to order the FINE tune knob is disabled.
- Entropy Switch-** Changes the range or function of the carrier and fine tune knob. Choose ORDER for ease of use. Choose CHAOS for a wider range of carrier tones. When set to ORDER in HI or LO tracking mode the FINE TUNE option is turned off.

OUTPUT

INPUT

LED INDICATOR

EVIL ROBOT

BYPASS SWITCH

DC input- Powered by a dedicated Class II regulated 9 – 18 volt power supply with a negative center 2.1mm barrel plug. Current draw under normal operation is less than 100mA. If using a "daisy chain" power supply all other units on the power supply MUST be negative ground. Do not power this pedal at a higher voltage!

CARRIER MATRIX

ENTROPY TRACKING	ORDER LO			ORDER HI			ORDER NULL		
	SEMITONES	HARMONIC BASIS	FINE TUNE	SEMITONES	HARMONIC BASIS	FINE TUNE	PITCH	FINE TUNE SEMITONES	
	CARRIER	1	-31	fifth	N/A	0	unison	N/A	E
	2	-24	octave	N/A	+7	fifth	N/A	A	+/-3
	3	-19	fifth	N/A	+9	maj6th*	N/A	D	+/-3
	4	-12	octave	N/A	+12	octave	N/A	G	+/-3
	5	-8	maj3rd*	N/A	+16	maj3rd*	N/A	B	+/-3
	6	-7	fifth	N/A	+19	fifth	N/A	E	+/-3
	7	-5	fourth	N/A	+24	octave	N/A	A	+/-3

ENTROPY TRACKING	CHAOS LO			CHAOS HI			CHAOS NULL		
	SEMITONES	HARMONIC BASIS	FINE TUNE	SEMITONES	HARMONIC BASIS	FINE TUNE	CENTER PITCH	FINE TUNE	
	CARRIER	1	-31	fifth	+/-3	0	unison	+/-3	27.5Hz
	2	-24	octave	+/-3	+7	fifth	+/-3	55Hz	octave
	3	-22	fifth	+/-3	+9	maj6th*	+/-3	110Hz	octave
	4	-12	octave	+/-3	+12	octave	+/-3	220Hz	octave
	5	-8	maj3rd*	+/-3	+16	maj3rd*	+/-3	440Hz	octave
	6	-7	fifth	+/-3	+19	fifth	+/-3	880Hz	octave
	7	-5	fourth	+/-3	+24	octave	+/-3	1760Hz	octave

*Based on Just intonation This Document was believed to be accurate at the time it was created. Specifications are subject to change without notice.