Vos ~Modulator Operating Guide

Support: CuriousInventor.com/forums

There are three separate sections that can be combined with patch cables or used separately with other equipment:

- Voltage Controlled Amplifier
- Attack / Release Envelope Generator
- LFO Square Wave and Triangle Wave Generator

Voltage Controlled Amplifier:

VCA In: Audio In

VCA Out: Audio Out

CV1: Main Control Voltage input

CV2: Auxiliary Control Voltage input, summed with CV1 (Offset, Sens do not affect CV2). Note: hot signal required, a guitar signal needs to be amplified before going into CV2. Plugging in a high frequency signal (like a guitar) creates an effect similar to ring modulation.

Inst On: Bypass Control voltage and pass audio through at full volume

VCA Sens: Control Voltage sensitivity – this effectively amplifies the control voltage input.

VCA Offset: Control Voltage offset – this adds an offset to the control voltage input. Adding more offset allows you to increase the overall volume without affecting the amount of variation. For example, if a small amplitude sine wave is going into VC1, increasing CV Sens would increase the variation, making the loud parts louder and soft parts softer. But increasing VCA Offset would keep the variation the same while increasing the overall level. This can be used to add a tremolo effect.

Attack / Release Envelope Generator:

This section shapes incoming control voltage signals by adding a ramp to the rise and fall of the signal. If a square wave is sent to Env In, setting **Attack** and **Release** to 0 (all the way counter-clockwise), a square wave will also come out of Env Out. As **Attack** is increased, the transition from 0V to the high voltage level will take longer. If **Attack** is at 0 and **Release** is increased, it will give incoming notes a tail that fades out.

LFO Square and Triangle Wave Generator:

LFO Rate: This knob controls the rate for both the square wave and triangle wave, which are generated simultaneously.

Wiggle (Offset): This adds an offset to the triangle wave output.
Wobble (Gain): This multiplies the triangle wave by a gain.

If **Wiggle** is turned all the way to the left, **Wobble** all the way to the right, the sound will be off for most of the cycle, and on for a very short period. Try connecting the Triangle Output to CV1, setting **Wiggle** to the left, **Wobble** slightly to the right, **VCA Offset** mostly to the left. Only a small portion of each cycle will be heard, and more as **Wiggle** is increased.