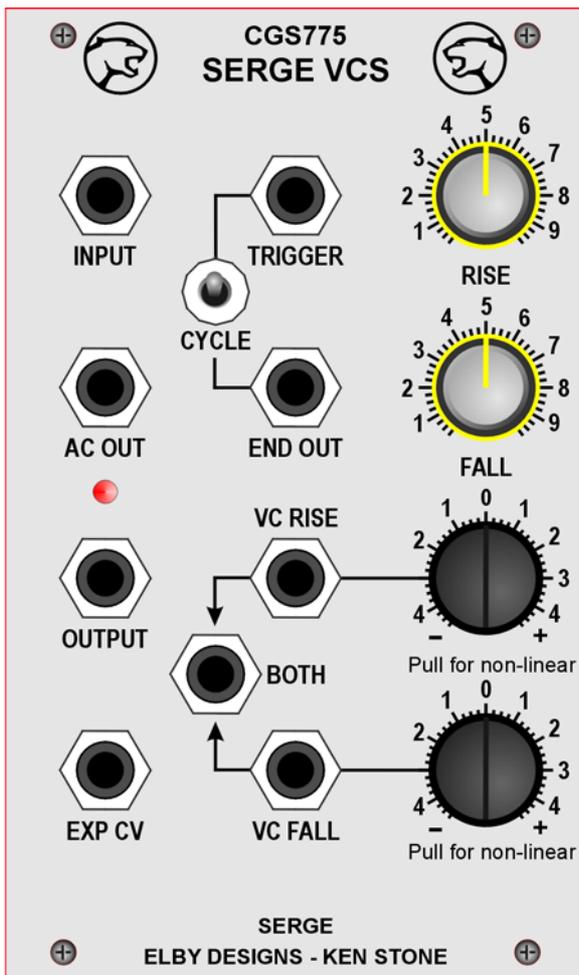


Panther – CGS775 Serge Voltage Controlled Slope



Designed by Seth Nemecek and Ken Stone with co-operation from Serge Tcherepnin, the CGS775 Serge VCS universal slope generator is now available in Eurorack modular format.

The CGS775 Serge VCS module is an extremely versatile control voltage generator and audio source utilising an updated revision of the pcb set from the Bananalogue release.

In the early 1970s, Serge Tcherepnin developed the Positive Slew and Negative Slew modules for the original Serge synthesizer. In time these merged into the classic Dual Universal Slope Generator.

The VCS is a unity gain voltage follower. The rising and falling slopes are independently and jointly voltage controllable over a wide range.

VC Transient Envelope Generator

A pulse at the trigger input will start the envelope, or a gate input will sustain the level and the envelope will fall when the gate

input goes low. Rise and fall are independently and jointly voltage controllable, with variable linear and exponential wave shapes.

VC Portamento

Voltage is slewed according to the rise and fall times.

VC LFO

When the cycle switch is thrown, the trigger input is connected internally to the end trigger output, creating a VC clock with variable waveform and independent rise and fall times.

VC Oscillator

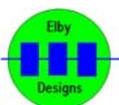
While not as wide ranged, or accurate as a dedicated oscillator module, the VCS is still an excellent audio source. The Exp CV input is scaled *approximately* to the 1v/oct standard. The Output wave can be swept from triangle to saw with linear and non-linear waveforms. End Out also produces a pulse waveform.

VC Non-Linear Audio Processor (Low-Pass Gate)

If an audio rate signal is slewed, the module responds like a VCF, and a rough VCA. The signal is low-pass filtered down to silence, similar to a low-pass gate.

Envelope Follower

Positive and negative peak detection envelope follower.



Elby Designs - Laurie Biddulph

9 Follan Close, Kariong, NSW 2250, Australia

elby_designs@ozemail.com.au <http://www.elby-designs.com>

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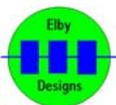
VC Pulse Delay

Trigger input starts the envelope and a trigger will be produced again at the End Out when the envelope completes its cycle.

Sub-Harmonic Generator

If a series of triggers are applied to the VCS faster than the total rise and fall times, the module will divide the incoming signal by a whole number. In the audio range the output will be the sub-harmonic series.

This description was taken from the former Banalogue site



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