

Dual VCA v1.2 – User Guide

This is the setup and user guide. The unit is designed for a monophonic Analog synthesizer.



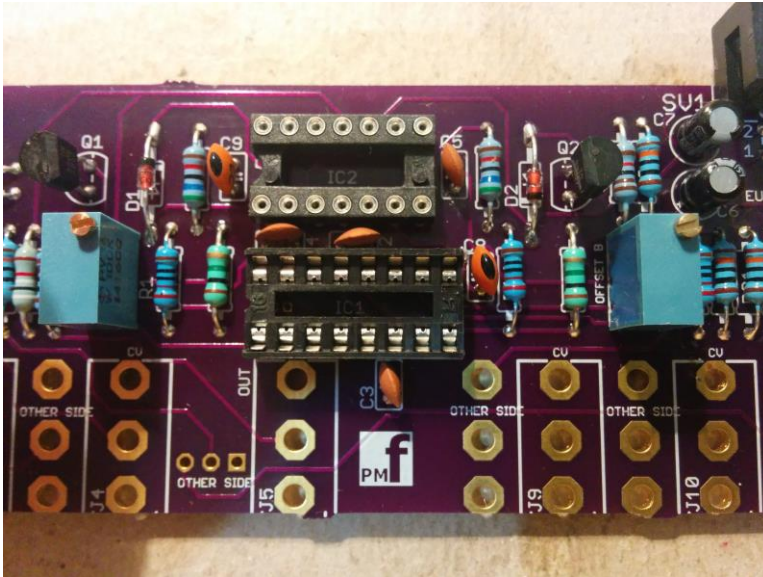
The module is designed and sized for **Euro rack** systems. You will need a 16-10 pin **Euro rack** power ribbon connector with $-12/0/+12$ which is connected to a synth power supply. You will also need a trimmer adjustment tool, a digital volt meter.

Calibration

If you bought PCBs or a kit, you should only need to calibrate the unit once. If you bought a pre-built and tested unit, you can skip this section. Power up the device.

1. Do this calibration procedure for each half of the DUAL VCA
2. Attach -ve probe of multimeter set to the 20V range to the GND pin of the power header or the ground pin of one of the jacks.
3. Disconnect ALL jacks

4. Turn the gain control pot to maximum
5. Plug a +5.00V control voltage into one of the CV jacks. This can come from a keyboard controller or other source. Note this is plugged into a CV socket not a SIGNAL IN socket.
6. Measure the DC voltage at the OUTPUT jack (of the relevant half of the DUAL VCA) with the +ve probe of the meter.
7. Turn R1 (VCA A) or R14 (VCA B) in either direction until the voltage measured is +0.00V



Operation

1. The CV jack will in general be driven by an ADSR curve generated during the time that a GATE signal is applied.
2. The second CV jack can be used by another source to control the gain of the VCA.
3. The Gain pot is used to set the initial Gain when the CV is 0.
4. The AC coupled input can be used to remove the DC part of an audio signal. The DC and AC jacks are exclusive-OR switched together with the DC jack having override priority.
5. You can experiment with the output of your envelope shapers to determine whether they work best with the AC or DC coupled input of this VCA.

