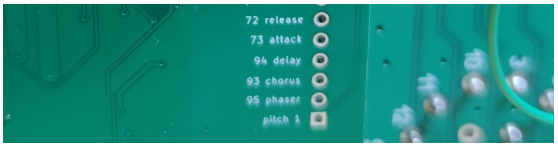
SWEnigiser calibration procedure

note: There is no original calibration procedure available from Orgon Systems, so we had to use common sense, trial and error. None of the original Orgon units we tested had the same settings. If you feel you need a different range for your VCO or anything else, go ahead!



MIDI/CV
Make a fresh power up. Measure voltage at point “72 release”, adjust **Adjust RV12** to 6V. Pitch 1 = 1V, 95 Phaser = 2V etc

VCO
Measure at output
Remove all modulation sources
Set front panel Filter Vol and VCA Vol to 11 o clock.
Set *front panel Coarse Pitch* to CCW position
Set *front panel Fine Pitch* to 50% position
Set *front panel Cutoff* to max, *Resonance* to 0
Insert pitch CV, select lowest C (0V)
Adjust **VR1 Top Scale** to center position.
Adjust **VR6 VCO Centre** for lowest frequency (approx 2-3Hz)

Adjust **RV10 VCO** scale and alternate octaves using a keyboard
Turn clockwise, increase width.
Counter clockwise, decrease octave width.

VR9 Shape Trim - set *front panel Waveform shape* to 50%, adjust for hollow sound or 50% duty cycle. In our experience the closest is VR9 full CCW.
NOTE: Replace, R87 with 220k (470k) to able to achieve symmetry in center position

VR8 Sine Sym(metry) - adjust for purest tone or cleanest looking sine wave

VCA
Set *front panel Cutoff* to max, *Resonance* 0, *VCA offset to max*
VR2 VCA offset - trim to remove DC offset (check output on an oscilloscope)

VR5 Drive trim - set *VCA drive* and *Filter drive* controls to 11 o clock, select triangle VCO, trim for unclipped waveform (Check output on an oscilloscope) or use your ears for least amount of overtones.

Close *front panel VCA offset*
VR3 VCA Centre - trim for silence

VCF
Set *front panel Resonance* to max.
VR4 Resonance, adjust fully clockwise or to taste.

RV11 Filter Scale
Set resonance to self oscillation and *front panel Filter track to max*, Tune filter using *front panel Cutoff*. input filter CV 1V/oct and adjust for pure octaves.

VR7 Phaser Trim.
Set to middle so the signal is clearly audible. We could not really make sense out of the Phaser trim, as turning it only seemed to affect amplitude. If you can figure out anything more, please tell us.

Note! Output DC Offset will vary depending on front panel knob settings, this is inherent in the design and fully normal.