

SDS_VCO

Calibration Procedure

Every SDS_VCO is calibrated before being sold, but over time some circuitry can possibly drift or perhaps the settings were a bit too close to "edges" in the digital realm.

If sometimes, during a pure sine wave, or even triangle wave, you can hear some "chatter" (when the MOD jack is assigned to modulate the waveforms only), and there's nothing actually plugged into the MOD input, calibrating can clean it up.

If you believe your VCO is in need of calibration, this addendum covers how to do it.

Note: Before you begin the calibration !

You will need an accurate voltage source (modular with variable but static voltage output, or regulated voltage/signal generator) and a DMM (digital multi-meter) that is known to be accurate.

*** Once you change the factory calibration there's no going back!**

You will also need a soft towel or napkin to sit the SDS_VCO on while powered up, so it can short against other things in your rack (especially the LED's which have exposed leads)

1:

Unplug plugs from all jacks. This is important.

2:

Turn WAVE pot to Wave # 0 (no led's on)

3:

Power down module /rack

4: *Enter Calib. Mode:*

Once powered up, you must wiggle ATtack knob within **12** seconds. Once the LED's flash to signal entry, leave ATtack knob turned up (CW) or module will simply exit and re-start.

5:

Adjust your voltage to 2.500 volts (verify it!) and plug that into the VCO CV (top jack)

6: *VCO CV offset:*

Turn the DeCaY knob fully right (CW) then slowly left until no LED's are on.

*Note: if both RED LED's are on when DeCaY is fully CW, you can leave it fully CW.

7: *MOD CV offset:*

Turn the WAVE knob fully left (CCW) then turn right slowly until green LED#1 comes on.

Now turn it back a bit until LED goes out. If both Red LED's light you've gone too far, try adjusting WAVE knob until it's about half-way between none or red's and the first LED.

..again **If at "zero", turn up a small bit as we don't want unplugged mod roaming into neg side!

Once you are finished, exit and save your new calibration by turning the ATtack knob fully left. Be careful not to touch the DeCaY knob while doing so or your adjustment may be corrupted.

The SDS_VCO will re-start and is ready to use.

If you still have the 2.5V signal plugged into the CV jack, then plug in your audio patch. The resulting "note" you will hear should be E-flat.