# RIT_M
## CALIBRATION INSTRUCTIONS V1.00

The RIT_M (as of V.1.00) has 3 areas of calibration:

| | |
|---|---|
| 1-Automatic CV input reg offset | Sets quiescent (unplugged) CV in level |
| 2-Set up the zero volt offset [DMM]: | Sets the zero volt point |
| 3-Set the gain factor correction [DMM]: | Minor Gain variation compensation |
| 4-Automatic ADC quantizer flattening | Removes ADC curve for CV input |

Even though the RIT_M has been factory calibrated, you may want a slightly higher zero offset to match a VCO you plan to use always with the RIT_M that has less than ideal response to 1V/Octave parameter.

Before calibrating, it's important to let the RIT_M warm up as it would be in normal operation and place in the rack.
Remove all plugs (except CV out to meter is OK). If the module is slave of a master RIT_M, make sure the master is inactive (in standby).

**To enter calibration mode:**

(1) Hold the button for 10 seconds until Loop Pad goes white
(2) Release button and both pads will turn violet
(3) Press button again and hold for 1 second or so. 3 LED's will flash
(4) Plug a volt meter into CV out jack and adjust CV knob for 0.00 V
(5) Press button and Green LED will stay on, while Red & Yellow flash
(6) Adjust CV knob for exactly 2.50 V, allow to settle
(7) Carefully unplug your voltmeter and patch from <u>CV out to CV in</u>
(8) Press button and LED's will toggle for a few seconds until start-up splash.

Done!

**Potential Problems:**

If, after the button is held for 10 seconds, the button is not pressed again (to enter calibration mode) within 15 seconds it will time-out, exiting the calibration mode.

Upon entering the calibration mode, the CV input zero level is auto-calibrated. Ensure there is nothing patched into CV in to start with or will fail.

The CV out to CV in connection must be in place before pressing button, step (8)

Sometimes, depending on the offset amount, the RIT_M may not perform properly after a calibration (i.e. offset is way out) which is uncommon. This requires a power cycle.

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