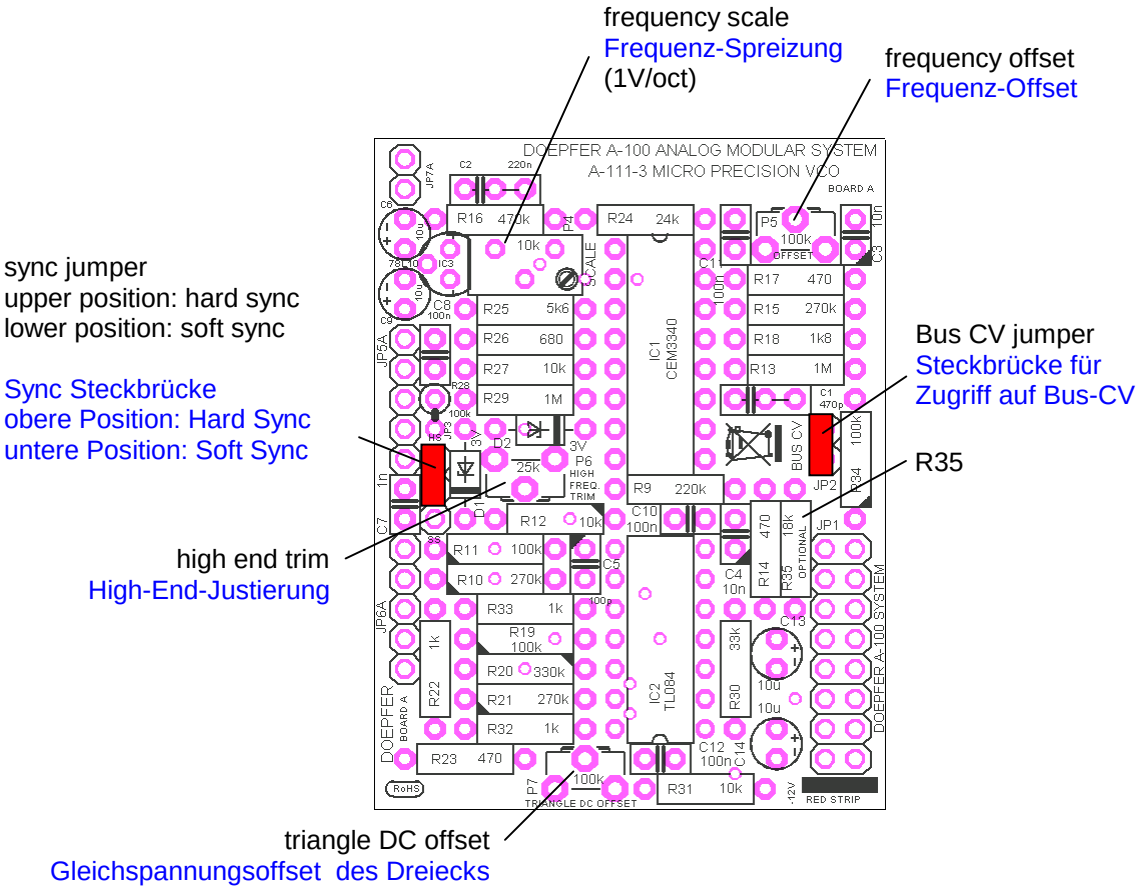
A-111-3 Micro Precision VCO

Position and function of the trimming potentiometers and jumpers
Position und Funktion der Timmpotentiometer und Steckbrücken

Board A (main board)

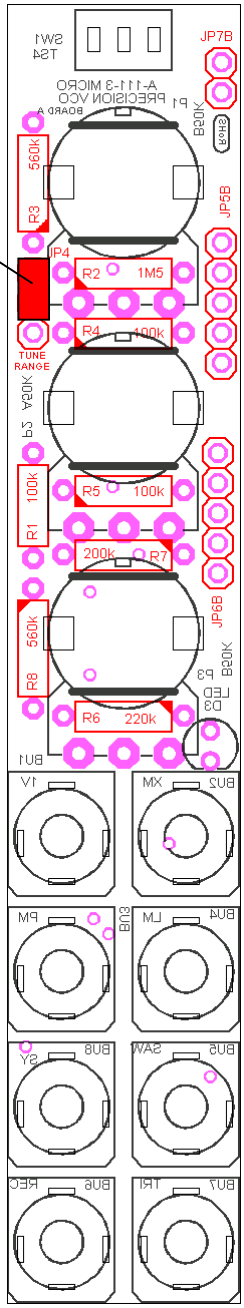


Meaning of resistor R35: R35 defines the DC offset of the sawtooth output. Without R35 the voltage range of the sawtooth output is about 0...+10V, with R35 (18k) the range is about -5V ... +5V.

Bedeutung des Widerstandes R35: R35 legt den Gleichspannungsoffset des Sägezahnausgangs fest. Ohne R35 liegt der Spannungsbereich des Sägezahns bei ca. 0 ... +10V. Ist R35 bestückt, so liegt der Bereich bei ca. -5V ... +5V.

Board B (control/connection board)

JP4 tune range
upper position: medium (~ 2 octaves)
lower position: maximal (~ 10 octaves)
removed : minimal (~ 0.5 octaves)



A-111-3 Micro Precision VCO

Adjustment procedure

(for experts only)

1V/Octave adjustment

- Mode switch to VCO mode, octave switch to position "0", Tune and XM to center position, no external modulations, no CV via bus
- JP4 (tune range) to upper position (~ 2 octaves range)
- Connect the 1V socket to a CV source that is able to generate exact 1.00V differences (i.e. 0.00V / +1.00V / +2.00V / +3.00V / +4.00V and so on)
- Connect one of the outputs (e.g. sawtooth) to a frequency meter
- Adjust P4 (frequency scale) so that a difference of 1.00V of the applied CV corresponds exactly to one octave intervals (i.e. frequency doubling), the absolute frequencies are not important at this time
- Correct the values - if required - for higher frequencies (beyond about 5kHz) by means of P6 (high end trim)
- the Tune knob may be used to change the absolute frequency if required

Frequency offset adjustment

- Tune and XM to center position, no external modulations, no CV via bus
- Adjust P5 (frequency offset) range switch adjust) so that the frequency meter reads 64Hz
- Note: that's only a recommendation: also another frequency offset may be used (depends also upon the setting of the jumper JP4 (tune range) and the desired frequency range

Triangle DC offset adjustment

- Connect the triangle output to an oscilloscope
- Adjust P7 (triangle DC offset) so that the triangle wave is symmetrical with respect to 0V/GND.
- Note: that's only a recommendation: also another DC offset may be used (e.g. that the negative peak of the triangle is about GND/0V).

If you are not able to do the adjustment please return the unit to the dealer where you purchased it for readjustment.