

## A-111-4 Quad VCO

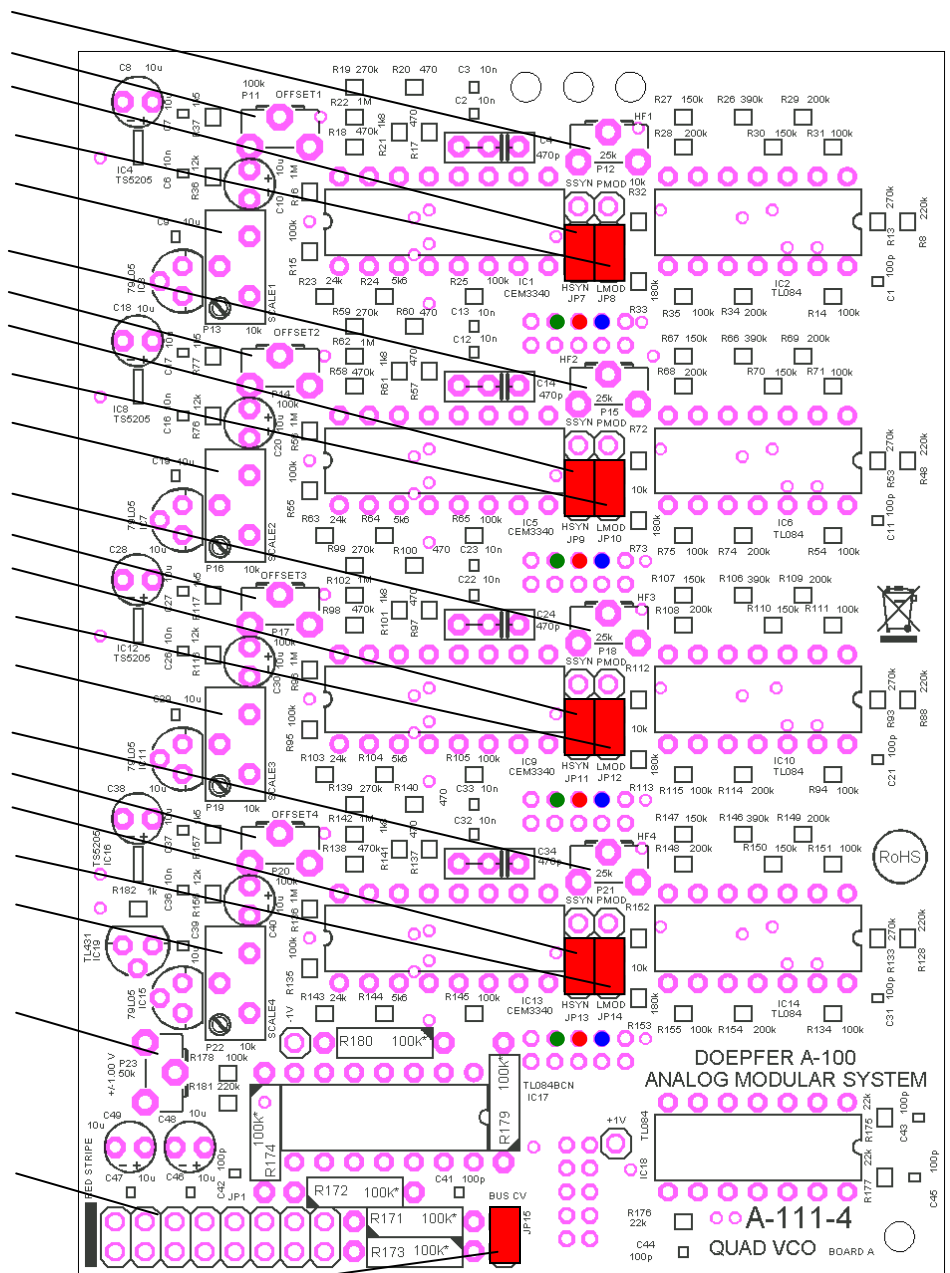
Position und Funktion der Trimpotentiometer, Steckbrücken und Stiftleisten  
 Position and function of the trimming potentiometers, jumpers and pin headers

### Board A

- P12: HF Trim VCO1
- P11: Frequency Offset VCO1
- JP7: Soft/Hard Sync VCO1
- JP8: PWM/LFM VCO1
- P13: Frequency Scale VCO1
- P15: HF Trim VCO2
- P14: Frequency Offset VCO2
- JP9: Soft/Hard Sync VCO2
- JP10: PWM/LFM VCO2
- P16: Frequency Scale VCO2
- P18: HF Trim VCO3
- P17: Frequency Offset VCO3
- JP11: Soft/Hard Sync VCO3
- JP12: PWM/LFM VCO3
- P19: Frequency Scale VCO3
- P21: HF Trim VCO4
- P20: Frequency Offset VCO4
- JP13: Soft/Hard Sync VCO4
- JP14: PWM/LFM VCO4
- P22: Frequency Scale VCO4
- P23:  $\pm 1$  V (Octave Switches)

JP1: Bus Board  
(red stripe left)

JP15: Bus CV



Board A

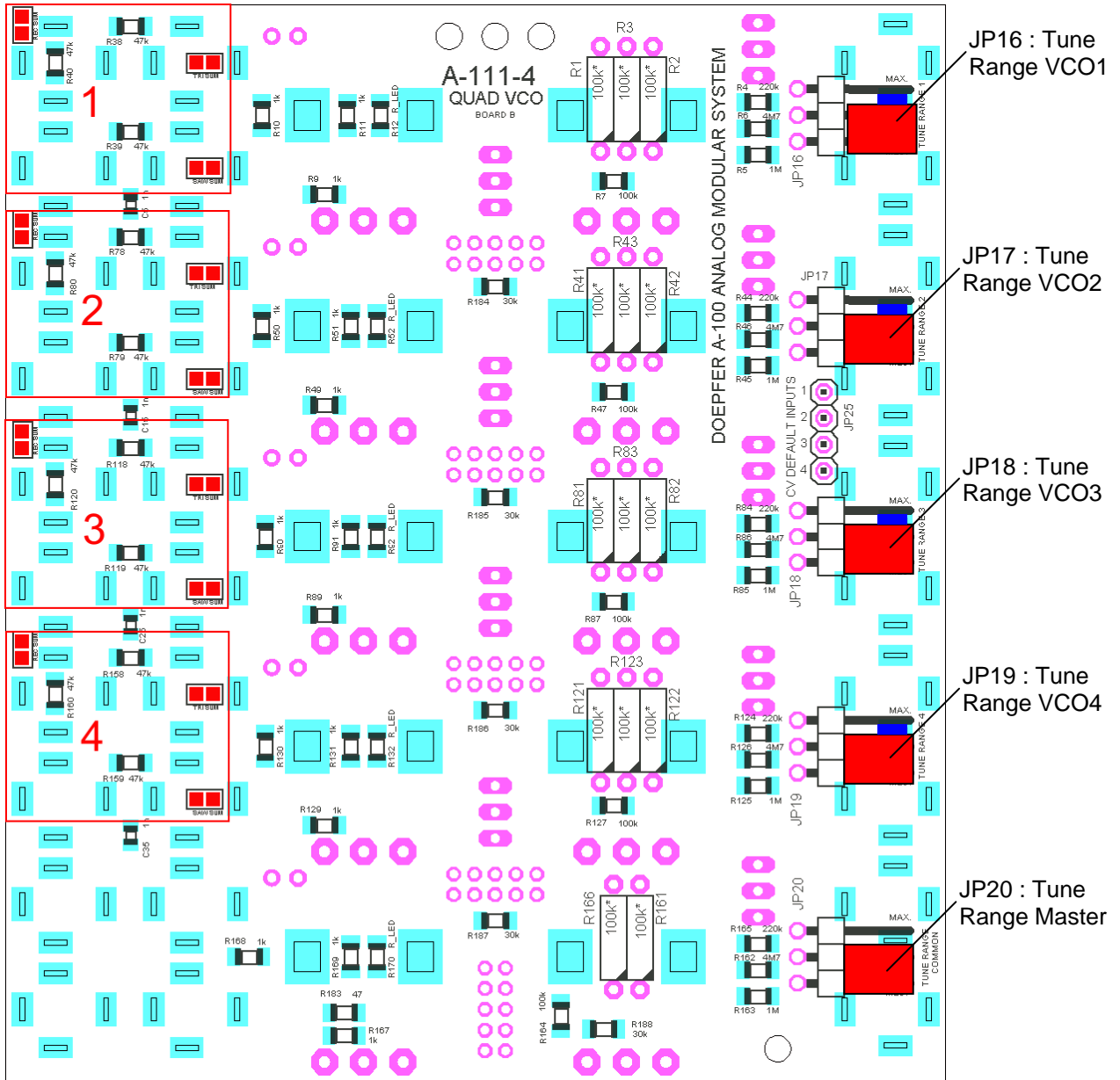
- = sawtooth output
- = rectangle output
- ▲ = triangle output

Function of the trimming potentiometers:

- Frequency Scale: used to adjust the frequency scale (1V/Octave scale) of the VCO in question
- Frequency Offset: used to adjust the frequency offset (absolute tuning) of the VCO in question
- HF Trim: used if the frequency scale is a bit incorrect for higher frequencies (above about 5kHz)
- P23 /  $\pm 1$  V (Octave Switches) is used to adjust the +1.00 and -1.00 voltage used for the octave switches

If re-adjustment is necessary this adjustment order is recommended:  
 Frequency Scale – HF trim – Frequency Offset – P23

## Board B



Board B

### Tune range jumper settings:

- upper position: maximum range (about four octaves)
- lower position: middle range (about one octave)
- no jumper: minimum range (about two semitones)

■ = default CV input (switching contact of the CV socket in question)  
 e.g. for internal normalling to the CV outputs of interface module A-190-5

■ = solder bridge option for sum outputs: installation of the solder bridge connects the output in question (rectangle / triangle / sawtooth of VCO 1/2/3/4) permanently to the corresponding sum output. The switching contact of the output socket in question is no longer used.