

Build documentation for:

ROLAND 100M 131 VCA

Layouts and documentation by

FREQUENCY CENTRAL

What's changed:

- CA3080 used instead of BA662A
- 2 x back to back 22uF caps used instead of 10uF BP caps
- Switchable AC/DC coupled

Colour coding:

Red traces: +12v

Brown traces: Ground

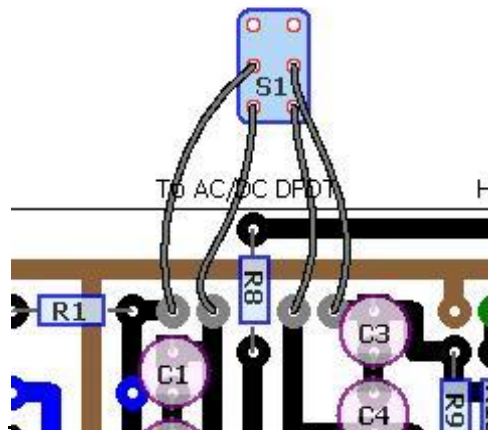
Green traces: -12v

Grey pads: Inputs/Outputs/switches

Blue pads: Expansion (see text)

AC/DC Coupling switch:

AC coupled is suitable for audio processing, whereas DC is for CV processing. Use a DPDT as shown, which shorts out the input and output capacitors for DC coupling. If you just want to build a standard AC coupled VCA, don't install the switch.



Lin/Exp switch:

Switchable linear/exponential response. Use a SPDT switch.

Calibration:

VR1 sets the bias adjust to somewhere around the midpoint until little or no DC 'thunk' is heard when a CV is applied.

VR2 and **VR3** set the linear and exponential offset respectively. Set them by ear so that they both have equal volume with respect to each other.

Blue Pads:

Blue pads by P1: option to add extra audio input and mixing resistor.

Blue pads by P4: option to add extra CV input and mixing resistor.

Blue pad by Q1: option to add LED input overload circuit as per the original Roland.

PCBs available from myself!

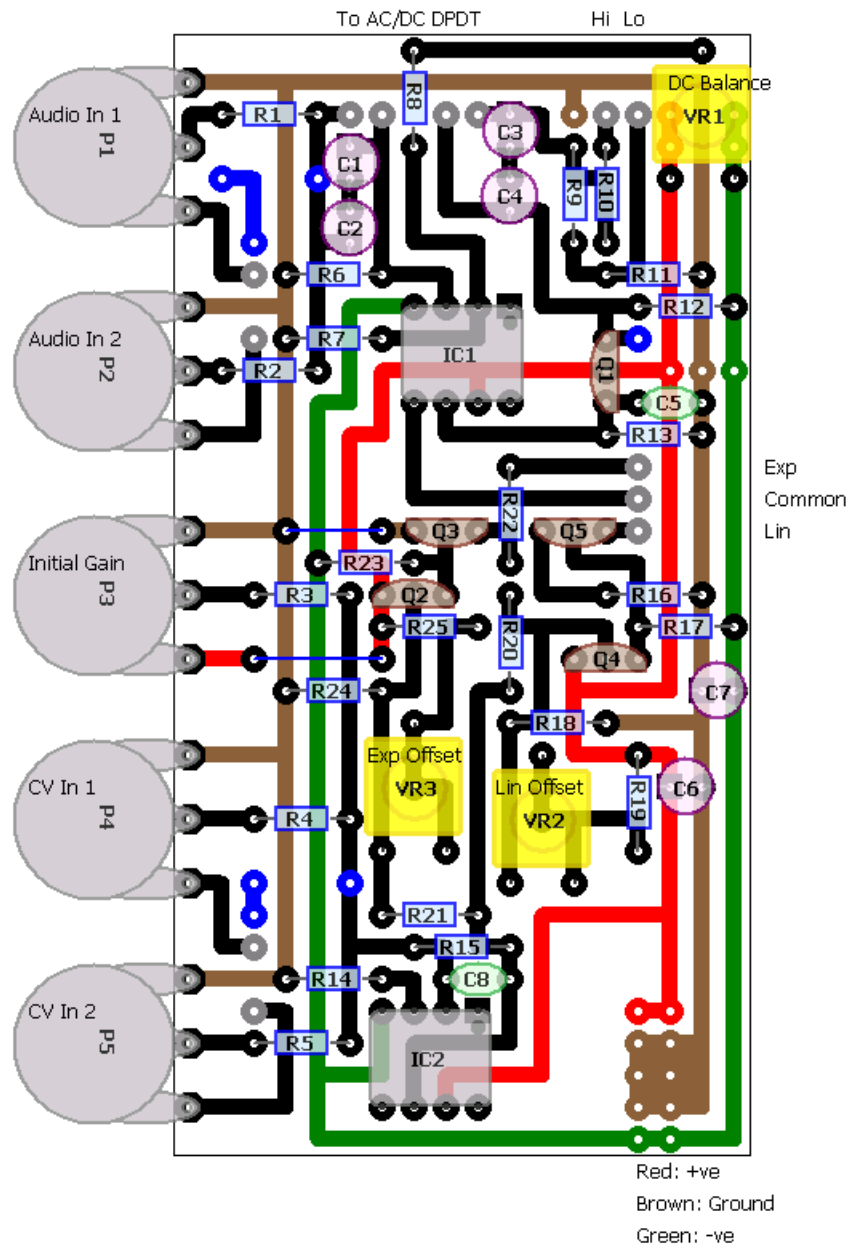
£12 GBP (including shipping) Paypal GIFT to:

rickholt22@hotmail.com



Roland 130 VCA

Layout by frequencycentral



Bill of materials

R1: 180K	C1: 22uF	IC1: CA3080	P1: 100K log
R2: 180K	C2: 22uF	IC2: LF351	P2: 100K log
R3: 150K	C3: 22uF	Q1: BF245B	P3: 100K lin
R4: 100K	C4: 22uF	Q2: BC550C	P4: 100K lin
R5: 100K	C5: 47pF	Q3: BC560C	P5: 100K lin
R6: 560R	C6: 100uF	Q4: BC550C	
R7: 560R	C7: 100uF	Q5: BC560C	All pots Alpha 16mm
R8: 1M	C8: 0.01uF		
R9: 33K			VR1: 100K
R10: 1K			VR2: 100K
R11: 3.3K			VR3: 22K
R12: 10K			
R13: 33K			2 x Jumpers!!
R14: 15K			
R15: 68K			
R16: 6.8K			
R17: 10K			
R18: 15K			
R19: 150K			
R20: 8.2K			
R21: 22K			
R22: 15K			
R23: 180K			
R24: 1K			
R25: 47K			

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