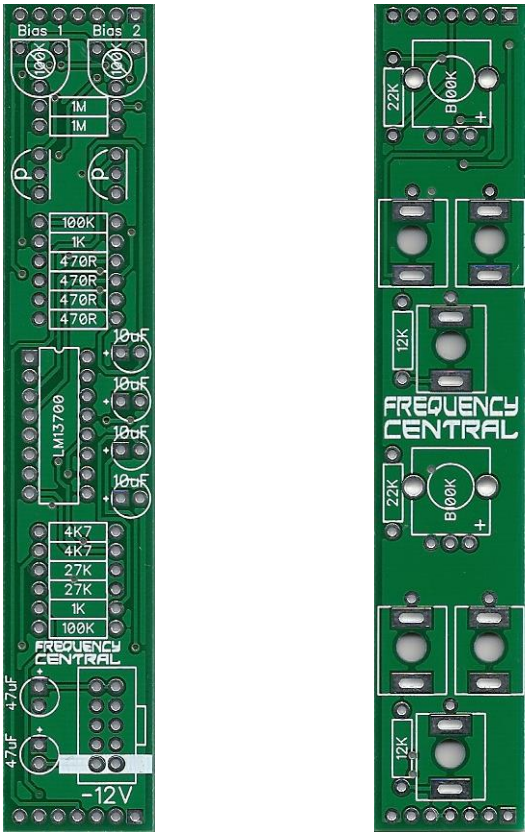
FREQUENCY CENTRAL

Build documentation for:

MORE VCAs

A compact pair of ARP influenced VCAs.



Key to PCB screen print:

p: This signifies PNP BC557 transistors. Note the correct pinout as shown by the half circles.

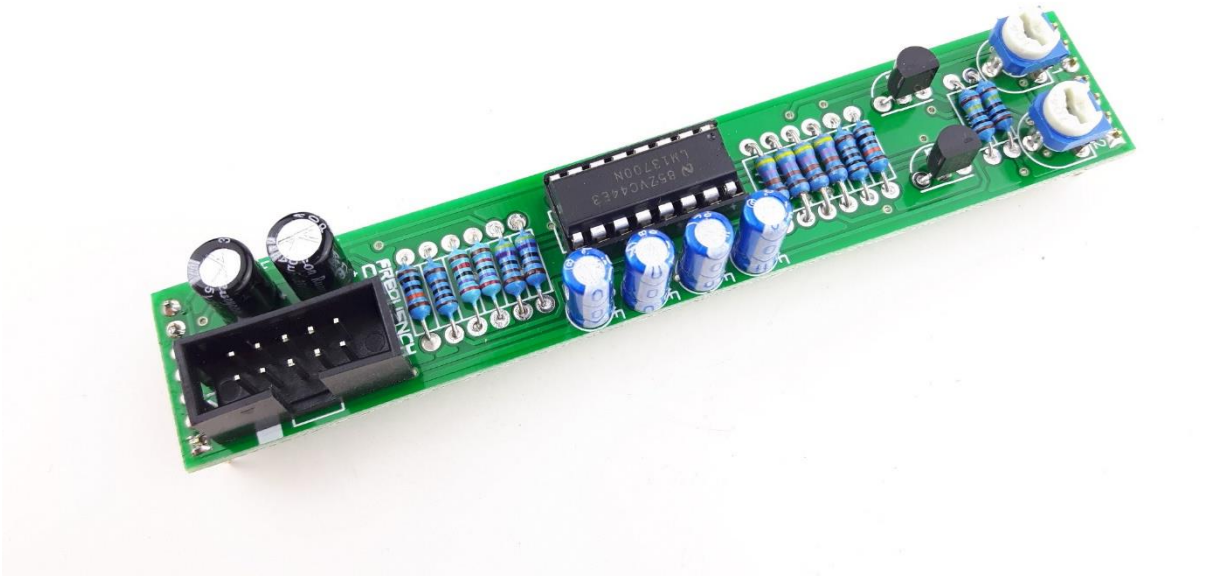
The PCB shows the correct orientation for BC557. Other transistor types can be used (eg 2N3906), but please observe the correct pinout. Please observe the correct polarity of the electrolytic capacitors.

Bill of Materials

470R x 4 1K x 2 4K7 x 2 12K x 2 22K x 2 27K x 2 100K x 2 1M x 2 All resistors ¼ watt metal film.	10uF x 4 47uF x 2	LM13700 x 1 BC557 x 2 16 pin IC socket More VCAs PCBs More VCAs panel	Alpha 9mm B100K x 2 100K trimmer x 2 Box header x 1 Male header x 1 Female header x 1 3.5mm socket x 6 Davies 1900H knob x 2

Main PCB assembly

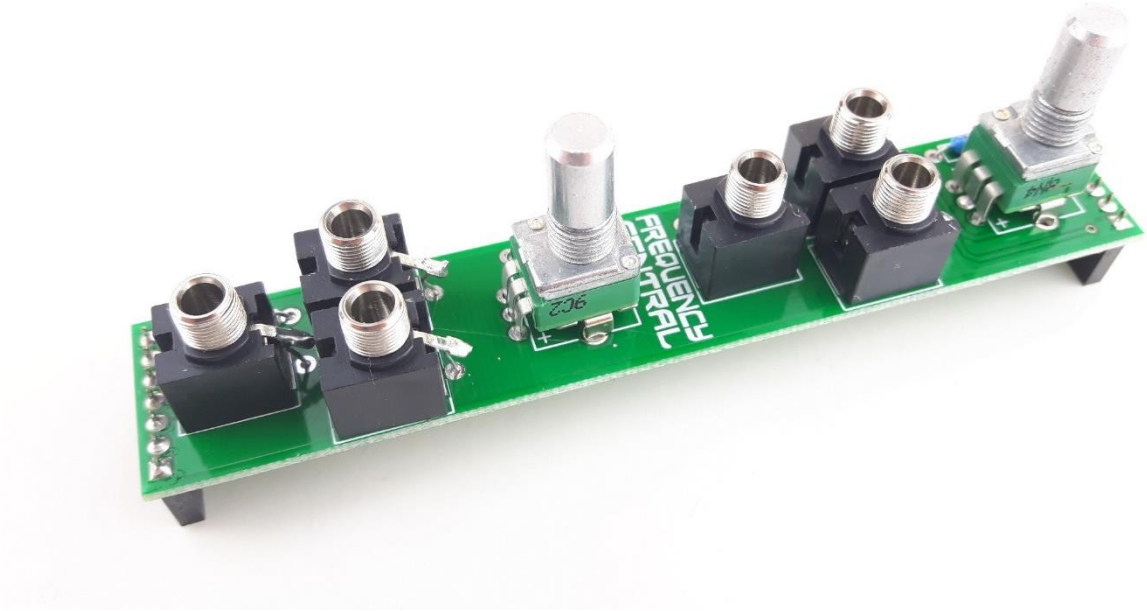
1. Solder all resistors
2. Solder the IC socket
3. Solder both transistors – watch the polarity!
4. Solder the box power header. Make sure the notch lines up with the screenprint legend. If in doubt, have a look at a power cable, and make sure when inserted into the header the red stripe lines up with the -12V screenprint.
5. Solder all electrolytic capacitors
6. Solder both trimmers
7. Cut male headers to size and solder them into place. Make sure that they stick out of the bottom of the PCB.



Pots 'n' sockets PCB

1. Solder both pots, making sure to seat them correctly. Don't forget to also solder the mounting tabs.
2. Place all sockets on the PCB, making sure the ground tabs line up with the PCB's ground pads, then place the panel over them. This will assure that the sockets are correctly positioned. Flip the whole lot over and solder the sockets into place.
3. Use cut off resistor legs to connect the sockets' ground tabs line up with the PCB's ground pads.
4. Cut female headers to size and solder them into place. Make sure that they stick out of the bottom of the PCB.

Note: Not all sockets and switches are equal in height. Providing you use the ones in the links provided, everything will line up perfectly.



Calibration

- **Bias:** Adjust Bias trimmer to sweet spot, ie a nice clean undistorted VCA output with no DC thunk when a snappy ADSR is applied to a CV input. I do this without any audio at the inputs. The chances are that that the sweet spot is around the mid position.

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