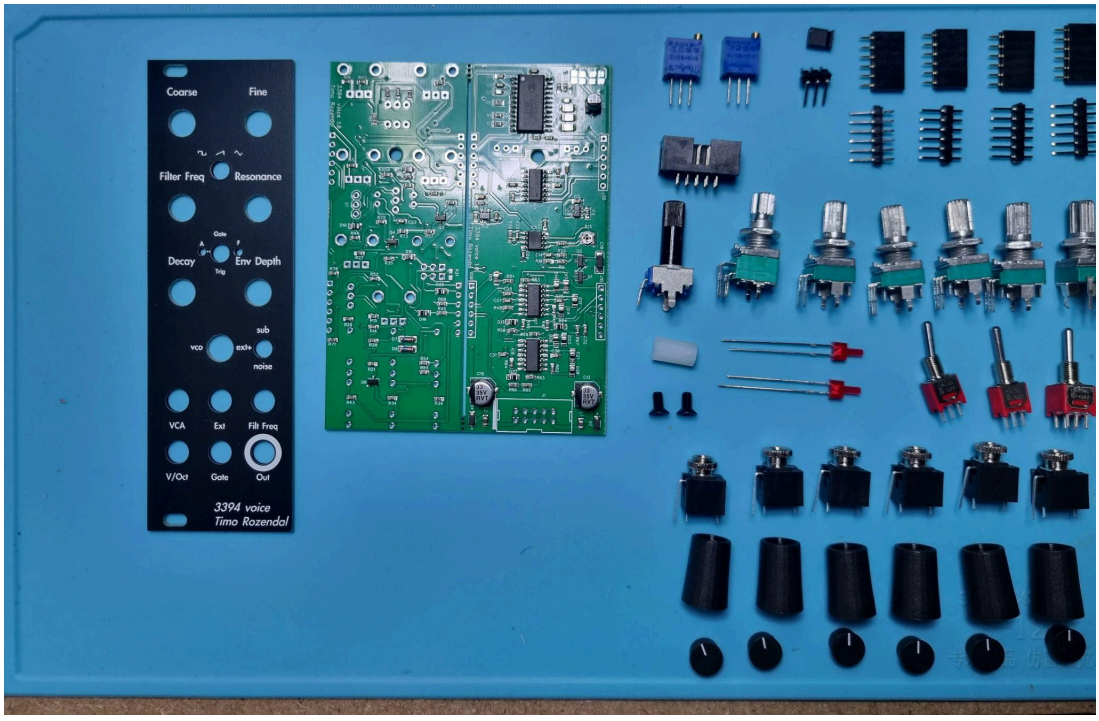
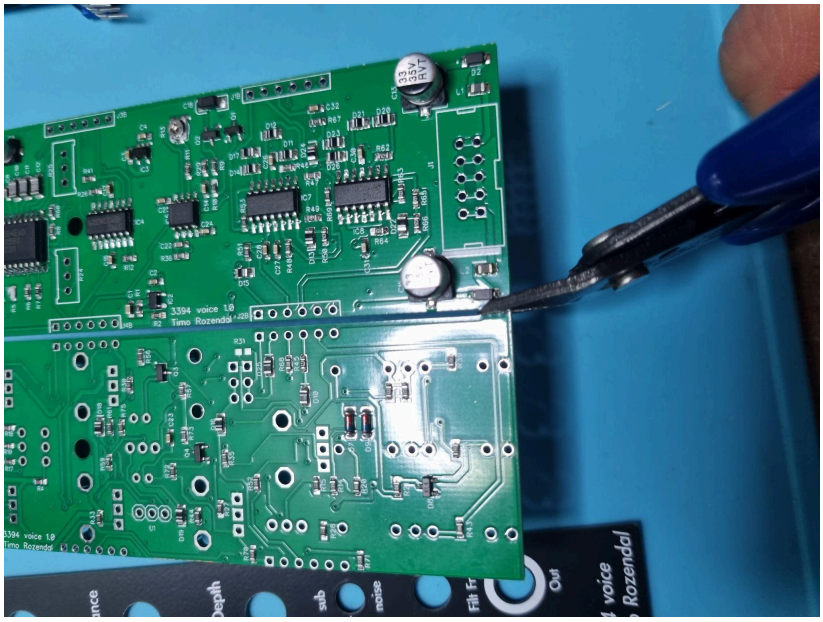
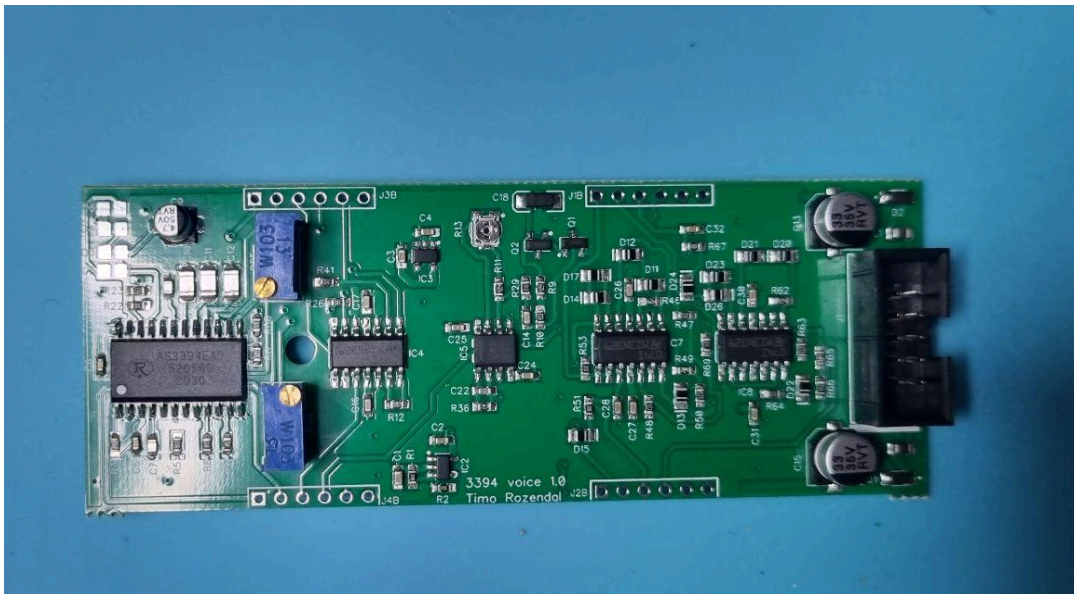
This shows a step by step guide (the SMD parts comes already pre-soldered)



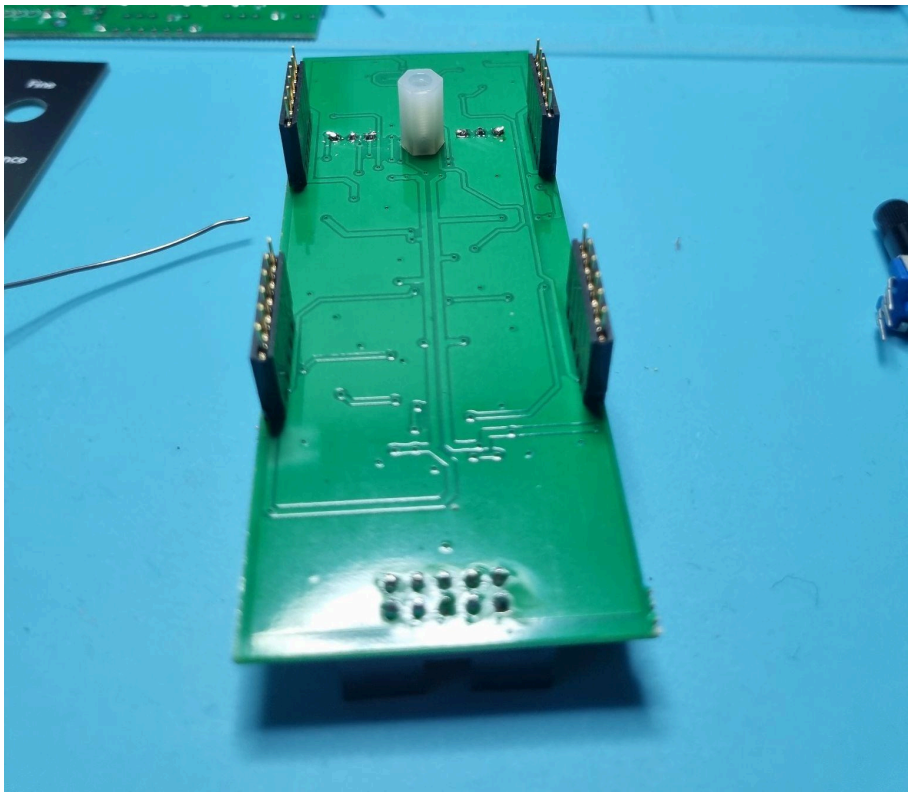
Carefully cut the boards



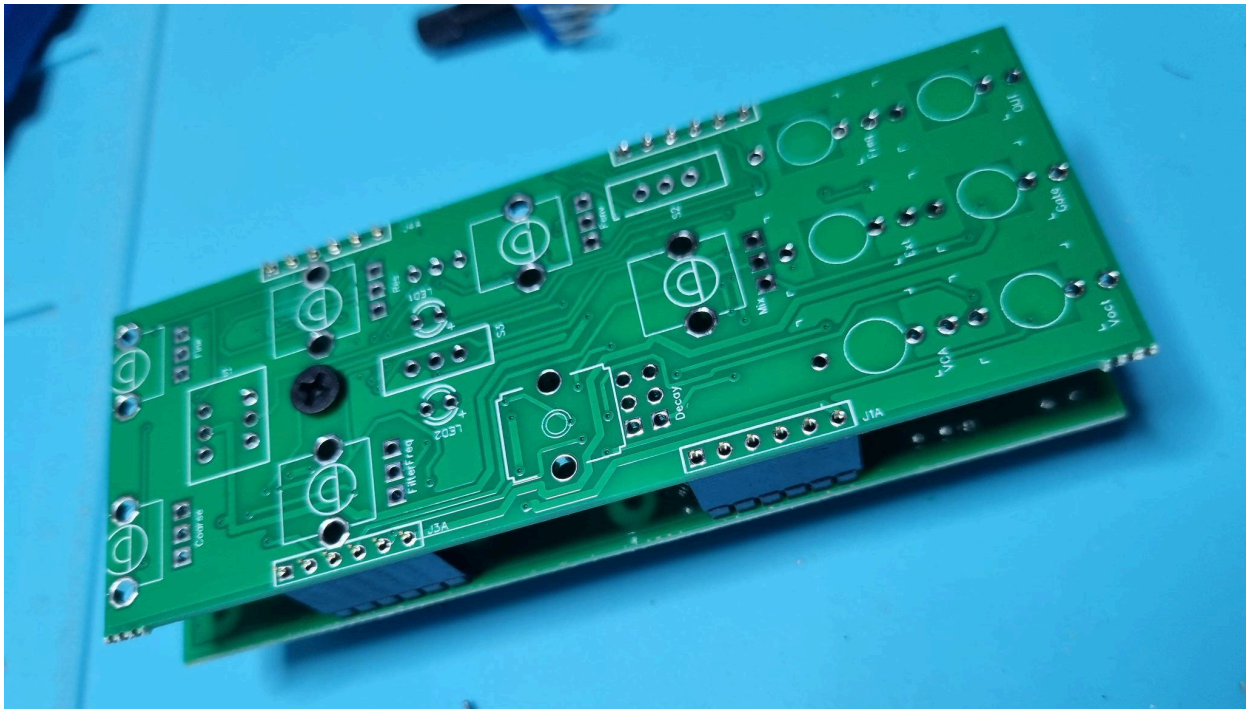
Install the power header and the multiturn trimmers - ensure the power header is oriented correctly with the notch facing outwards towards the edge of the PCB.



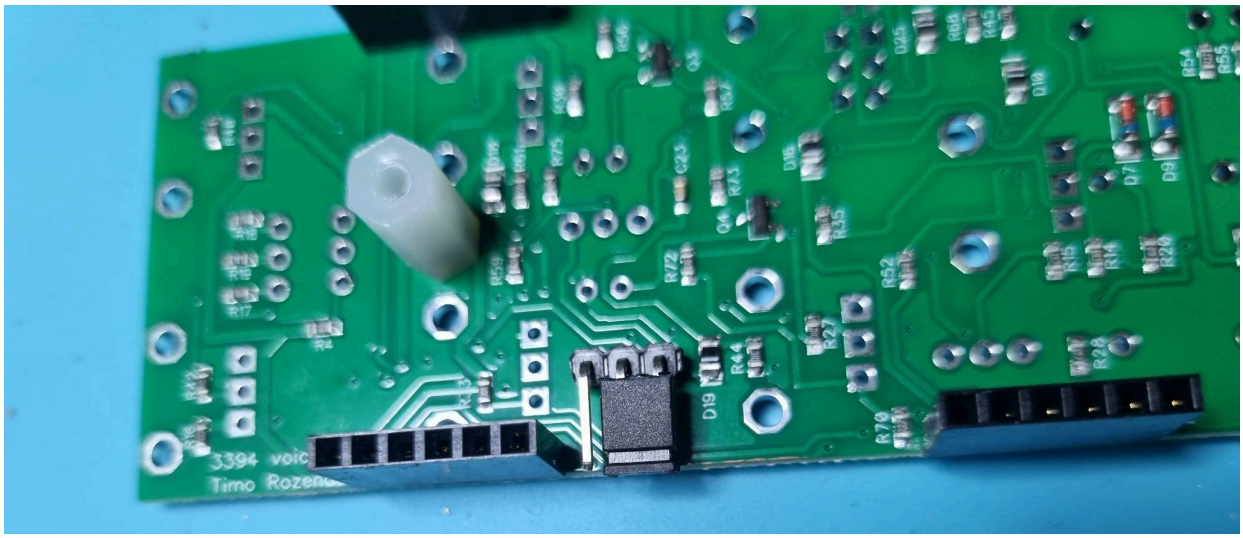
Place the female headers into the male headers and place them on the board (without soldering) Attach the spacer with 1 screw as shown.



Attach the other board with the second screw and solder the 4 headers (on both sides!)



Unscrew the backboard (leave the screw in the top board) and place the angled header with the jumper as illustrated:

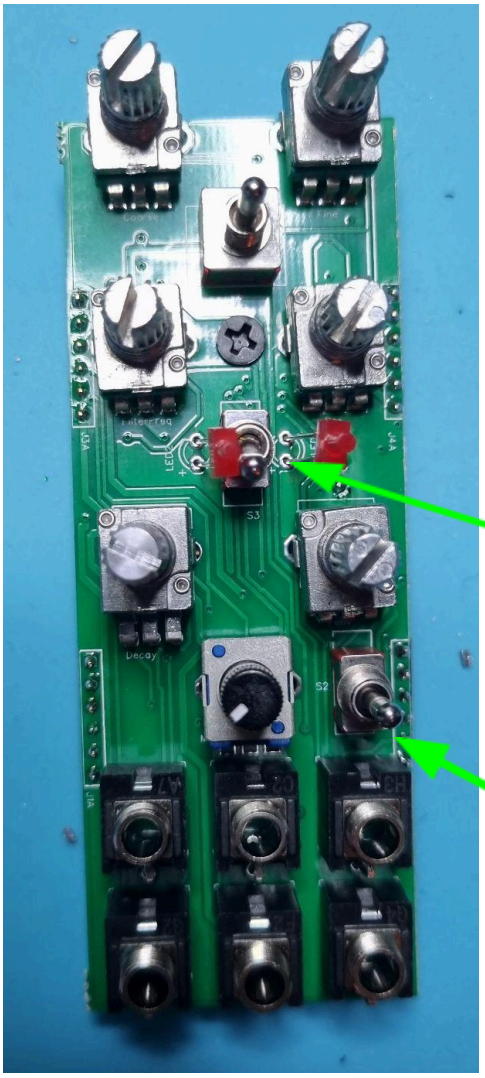


Place all the parts on the top pcb as shown (**don’t solder them yet!**)

Note: the smaller toggle switches are both different:

S3 is the two position switch (ON-ON), while S2 is three position (ON-OFF-ON)

Mind the orientation of the leds (longest leg should go in the hole denoted with +)



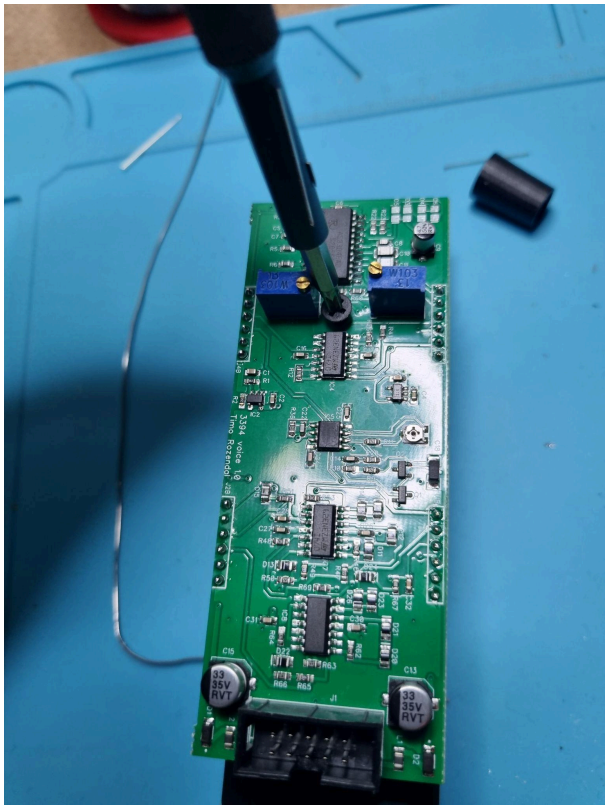
2 Position switch (S3)

3 Position Switch (S2)

Then place the panel and fasten the jacks and pots.

Solder everything, do the leds last (make sure they are flush with the panel) and cut the leads of the leds

Screw the two sides back together



Place the knobs and pointer caps

s

Done!

Then is time for calibration:
R25 sets the V/oct scaling of the VCO
R24 sets the V/oct scaling of the VCF

The idea is to increase the interval of volts (e.g. by playing notes through a midi to cv interface) while listening to /measuring the frequency and fine adjusting the trimmers so that the scaling becomes closest to 1 Volt per octave for the longest possible range. For the VCO you can expect 5 to 6 octaves of good tracking, for the VCF it is much less (only a few octaves, but can still be useful).

R13 sets the noise level (this is more a matter of taste).