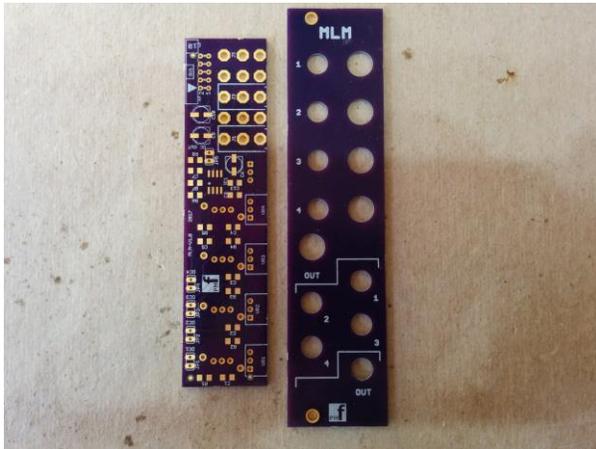


My Little Mixer V1.1 – Assembly Guide

Thank you for purchasing this module! This is an easy build but with some surface mount parts including precision integrated circuits. Some of the pads are quite small and you will need a chisel tip or screwdriver tip soldering iron, fine solder and the skill to solder these tiny joints. If you have not soldered SMD before, we recommend watching some of the many YouTube guides. Our favorite: [EEVBlog](#).



The module is designed and sized for **Euro rack** systems. You will need a 16-10 pin eurorack power ribbon connector with $-12/0/+12$ which is connected to a synth power supply.

Follow the parts lists, these instructions and the PCB silkscreen text to build the module.

There are components installed on BOTH sides of the boards. Please ensure that you place the components on the correct side. When referring to the TOP of a board we mean the side with the **pmF** logo. The BOTTOM has no logo.

You may need to clean up the board edges with wire cutters and/or a file to remove the remains of the tabs from the fabrication process. This is particularly important for the edges containing the jacks. These edges will need to mate flush with the front panel.

You should follow the order of assembly as described below since some components will be soldered underneath other components. The module can be customized during assembly to provide:

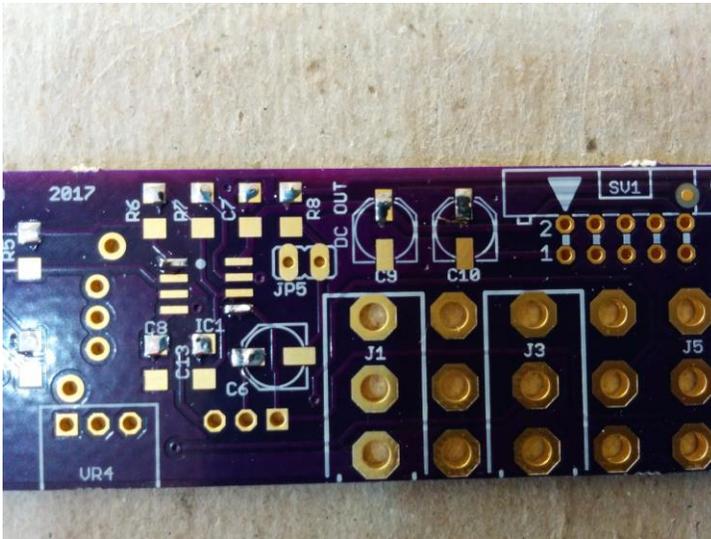
- 1) Full time AC coupling, DC coupling or both
- 2) Switched or non-switched inputs

1. Clean board edges with wire cutters and/or file.



2. Board preparation

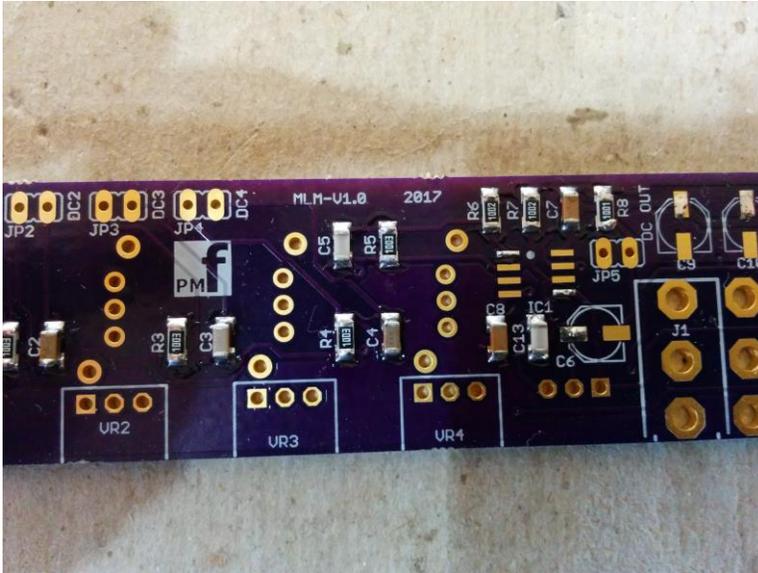
Apply flux to the SMD pads. Tin one pad of each SMD footprint with a SMALL amount of solder. For the ICs, apply a tiny amount of solder to two opposite corner pins.



3. 1206 Size Resistors and ceramic capacitors

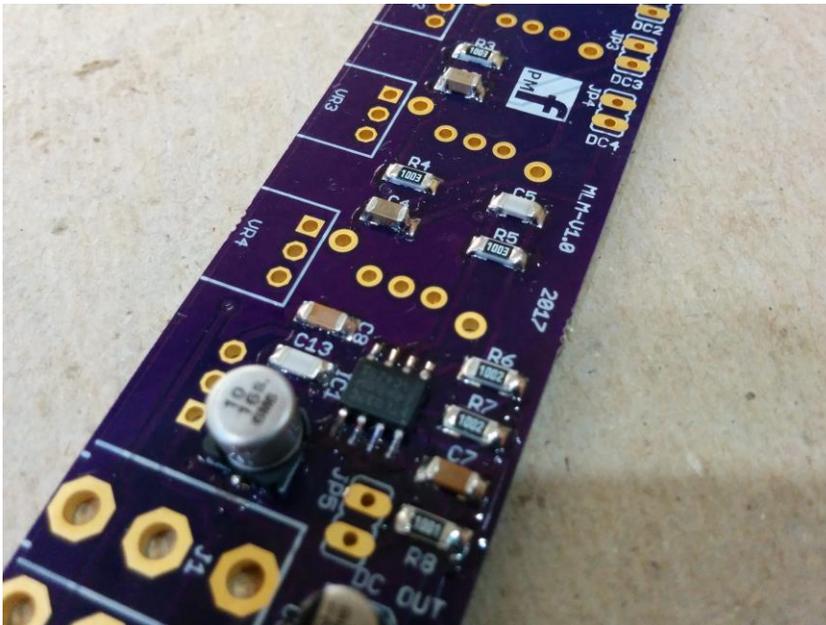
If the mixer will be full time DC coupled, do not purchase or install C1, 2, 3, 4.

Install the 1206 resistors and 1206 capacitors on the TOP of the board by positioning on the footprint and heating the cap and tinned pad until the part is attached. When all 1206 parts have been attached. Solder the opposite pad of each part. Finally, reheat and add solder if necessary to finalize the first pad of each part.



4. ICs

Install the ICs with the correct orientation. Align the dot or other marker with the corresponding mark on the board. If you solder the ICs the wrong way round, they will explode and render the board useless. Position on the footprint and heat the pin and tinned pad in one corner until the part is attached. Position and heat the pin and tinned pad in the opposite corner until the part is attached and aligned with all pins and pads. Solder the remaining pins and pads. Finally reheat and add solder if necessary to finalize the corner pads of each part. Check for and remove any bridges between pins.



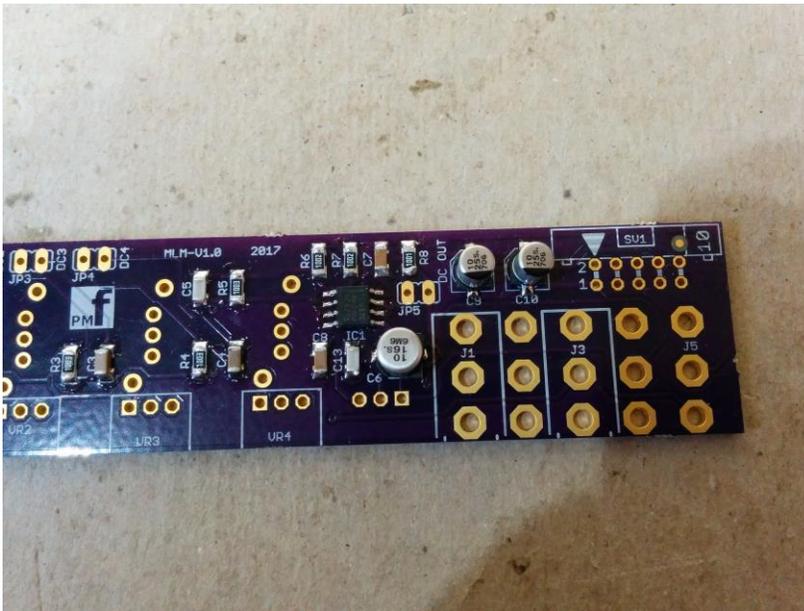
5. Electrolytic capacitors

If the mixer will be full time DC coupled, do not purchase or install C6.

C9 and C10 improve the smoothing of the power supply to the board but may not be necessary.

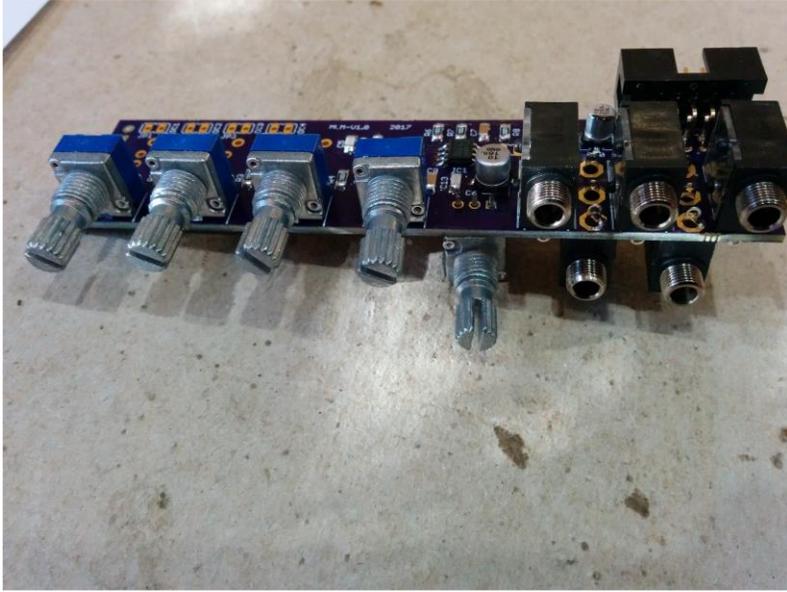
Install these on the TOP. Make sure you orient these capacitors correctly. The lead marked with a + needs to be placed on the pad that has the "+" marking near it. Leads marked with "-" go on the pad WITHOUT the "+". C6 is NON-POLARIZED and does not have a +/- marked.

Position on the footprint and heat the pin and tinned pad until the part is attached. When all have been attached. Solder the opposite pad of each part. Finally reheat and add solder if necessary to finalize the first pad of each part.



6. Power socket

Install the 10 pin power socket on the TOP of the board. The socket should face OUT from the board. Solder.



7. 2 pin jumpers

If the mixer will be full time DC coupled, put a wire link in each of the 5 jumper positions and solder.

If the mixer will be full time AC coupled, do not install anything in the 5 jumper positions.

If the mixer will be swapped between AC and DC coupled, use a proper two pin jumper and removable shunt in each position.

8. Potentiometers

If the pots have positioning lugs on the front, cut these off with a sharp pair of flush cutting pliers. The front of the pot (where the shaft protrudes) needs to be flat.

Install 4 pots (100K) on the top and one (10k = VR5) on the bottom.

Carefully align the pots so they are flush with the edge of the board and perfectly upright and tight to the board surface. Solder one pin. Please ensure they are on the CORRECT SIDE OF THE BOARD. See Photo.



9. 3.5mm Jack Sockets

Install the jacks on the TOP and the BOTTOM and fully solder each one as you install it. Do not bridge the contacts to nearby components or burn the jack bodies or other components. These are tightly packed and the iron must be threaded in carefully.

Now attach the panel to the jacks and pots and solder all the pot pins.

10. Switches

If you are using a non-switched panel. Do not purchase or install switches. Install and solder a wire jumper in the front two pins of each switch footprint. See photo to identify the correct pins.

If you are using switches: Tack one pin of each switch, and when all are tacked, align with the front panel, then solder all the remaining pins and the locating lugs. The switches are on the BOTTOM. Do not bridge the contacts to nearby components.



Final Assembly

1. Put the caps on the switches (if using) by pushing until they click.
2. Place the front panel over the PCB so that the pots, switches and 3.5mm jacks align with the holes in the panel.
3. Put nuts on the pots and jacks and FULLY TIGHTEN all of them. Do not overtighten!

4. Install the knobs.

