MH CMIX+

BOM

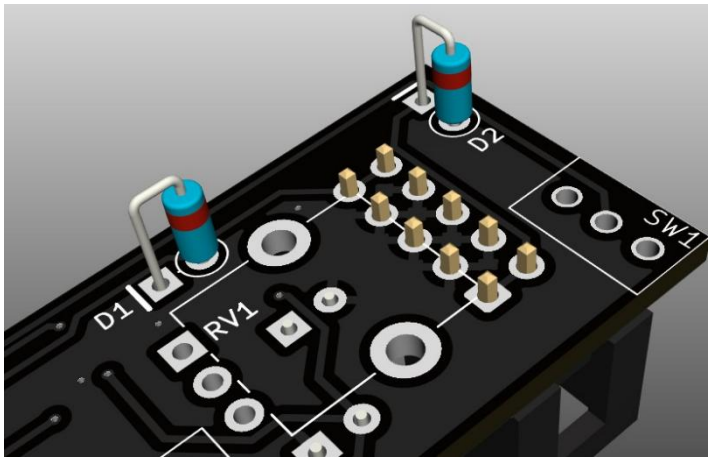
Designator	Notes	Qty	Value
C9, C10	Capacitor_THT:CP_Radial_D6.3mm_P2.50mm	2	22uF
D1,D2	Diode_THT:D_DO-35_SOD27_P2.54mm_Vertical_KathodeUp	2	1N5818
J1,J2,J3,J4,J5,J6	Connector_Audio:Jack_3.5mm_QingPu_WQP-PJ398SM_Vertical_CircularHoles	6	3.5mm Jack socket
J7	Connector_IDC:IDC-Header_2x05_P2.54mm_Vertical	1	Power connector
RV1,RV2,RV3	Potentiometer_THT:Potentiometer_Alpha_RD901F-40-00D_Single_Vertical_CircularHoles	3	B100k
	Potentiometer knobs	3	
SW1,SW2,SW3	Sub miniature toggle switch SPDT ON-OFF-ON	3	SPDT
	MH Eurorack CMIX+ Front panel & PCB (SMD presoldered)	1	

Assembly Guide

Starting on the front of the PCB (side without the MH logo):

Place and solder the 2 diodes D1 and D2. These are also mounted vertically. Take care with orientation – the body of the diode should be soldered into the circled solder pad with the stripe on the diode uppermost (away from the PCB). The other leg needs to be bent over to go in the adjacent square solder pad.

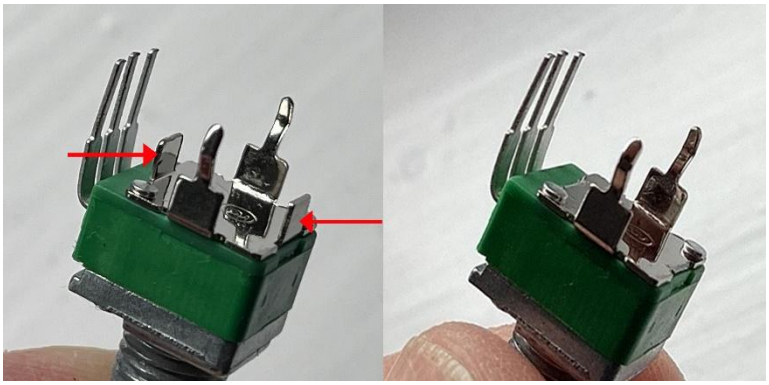
See illustration.



Turning to the other side of the board (the side with the MH logo), place and solder the two electrolytic capacitors, C9 and C10. Take care with orientation the long leg of the capacitor must go in the hole marked '+' with the shorter leg going into the white semi-circle. The capacitor will also have a '-' marking on the short leg side.

Place and solder the 10-pin power connector. If you are using a shrouded power connector, make sure the notch lines up with the notch marking on the PCB.

Remove the standoff lugs from one potentiometer. This is easily done by gripping the lug with a small pair of pliers and wiggling it back and forth a few times, The lug will easily come away from the potentiometer.



Put one nut on each on each of the three switches (this acts as a spacer)

Place the potentiometers, switches and jack sockets on the front of the PCB (Do not solder yet). The potentiometer with the lugs removed must go in the RV1 position. Note that some jack sockets share a solder pad for the ground leg. Push both legs through the same hole.

Put the front panel over the front panel components. Secure with the jack nuts, remaining switch nuts and pot nuts.

Check that the jacks are still aligned to the PCB and have not been rotated by tightening the nuts. If any of them are out of place loosen the nut adjust and retighten.

Solder everything making sure there is no gap between the front panel components and the PCB. The potentiometer PCB mounting legs of RV1 are very close to the 10-pin header and the electrolytic capacitors. If you are not comfortable with soldering in this tight space, it's OK to leave these unsoldered.

Push the knobs on to the potentiometer spindles.

Done! Connect the power cable, power up and adjust RV4 for DC voltage normalised to each input when no jack is inserted.

Enjoy your new module!