MH FXI/O

BOM

Designator	Notes	Qty	Value
C5,C6	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	Connector_Audio:Jack_3.5mm Mono	4	3.5mm Mono Jack socket
J5, J6	Connector_Audio:Jack_3.5mm Stereo	2	3.5mm Stereo Jack socket
J7	Connector_IDC:IDC-Header_2x05_P2.54mm_Vertical	1	Power connector
R1,R2	Resistor_0.25W_Vertical_THT	2	10R
R13, R14	Resistor_0.25W_Vertical_THT	2	47k*
RV1,RV2,RV3	Potentiometer_THT	3	A50k Dual gang
	Potentiometer knobs	3	
	MH Eurorack FXI/O Front panel & PCB (SMD presoldered)	1	

*This value can be changed if required. These two resistors set the maximum level which can be provided by the send control. Reduce the value of these resistors to allow a higher signal from the send jack.

If you substitute a different value of potentiometer in position RV1, these resistor values need to be changed proportionately.

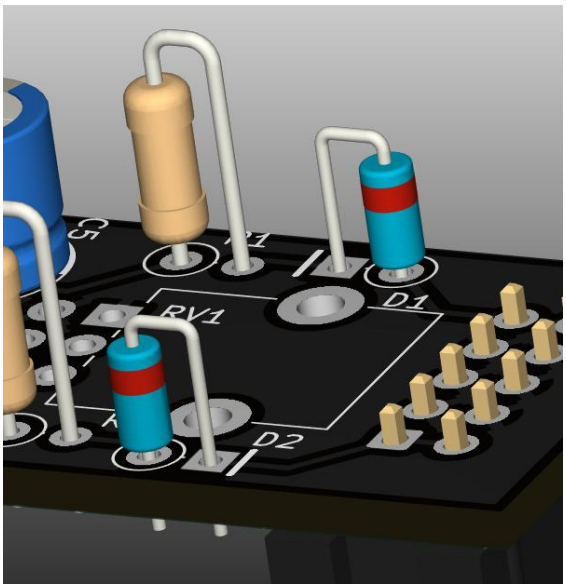
Assembly Guide

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

Place and solder all the resistors. Note: R1 and R2 are different values to R13 and 14. The resistors and mounted vertically. Place the resistor (either way round) in the circled solder pad and bend the other leg over to go in the other solder pad.

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.



Place and solder the two electrolytic capacitors, C5 and C6. 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.

Turning to the other side of the board (the side with the MH logo), 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.

Place the potentiometers, and jack sockets on the front of the PCB (Do not solder yet). Note that some jack sockets share a solder pad for the ground leg. Push both ground legs through the same hole. Make sure the stereo jacks go in positions J5 and J6

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. Take special care when soldering RV2, the outer connections are very close to some of the SMD components.

Push the knobs on to the potentiometer spindles.

Done! Connect the power cable, power up and enjoy your new module.