

MH AMIX

BOM

Designator	Notes	Qty	Value
C1,C2,C3,C4	Capacitor_Ceramic (marked 104)	4	100nF
C5,C6	Electrolytic Compact Capacitor	2	22uF
D1,D2	Diode	2	1N5818
J1,J2,J3,J5	Connector_Audio:Jack_3.5mm_QingPu_WQP-PJ398SM_Vertical + jack nut	4	Jack Socket
J4	Connector_IDC:IDC-Header_2x05_P2.54mm_Vertical	1	Power Connector
R1,R2	Resistor_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P7.62mm_Horizontal 0.25W	2	10R
R3,R4,R5,R6,R7,R8	Resistor_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P7.62mm_Horizontal 0.25W	6	100k
R9	Resistor_THT:R_Axial_DIN0207_L6.3mm_D2.5mm_P7.62mm_Horizontal 0.25W	1	1k
RV1,RV2,RV3	Potentiometer_THT:Potentiometer_Alpha_RD901F-40-00D_Single + nut	3	A50k
U1	Op Amp IC + socket	1	TL072
	Potentiometer Knobs	3	Knobs

Assembly Guide

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

Place and solder resistors R2, R4, R6, R7, R8. Orientation is not an issue with resistors. Note R2 is a different value from the others. Check the BOM for values.

Place and solder C1. Again, orientation is not an issue with this type of component.

Place and solder the 2 diodes D1 and D2. These are 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.

Place and solder R9. Like the diodes this resistor is mounted vertically, but the orientation does not matter.

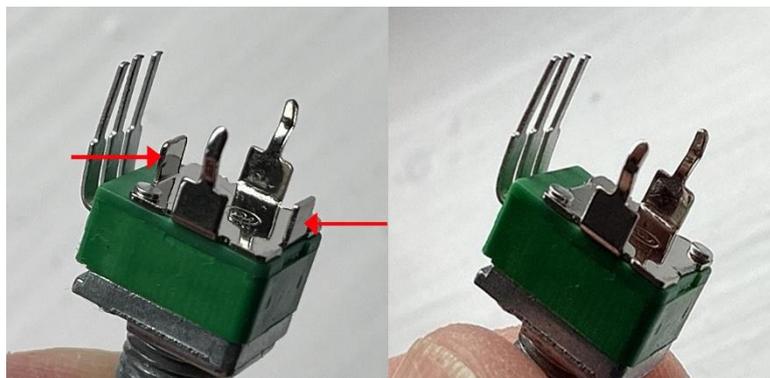
Turning to the other side of the board (the side with the MH logo), place and solder resistors R1, R3 and R5. (note these are different values)

Place and solder C2, C3 and C4.

Place and solder the IC socket. The notch on the IC socket should line up with the notch on the PCB.

Place and solder the 10 pin Power connector on the side of the board with the MH logo. If you are using a shrouded header make sure the notch lines up with the notch marking on the PCB

Remove the stand off lugs from all three potentiometers. 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.



Place the potentiometers and jack sockets on the front of the PCB (Do not solder yet). Note pairs of jack sockets (J1+J3, J2+J5) share a solder pad for the ground leg. Push both legs through the same hole.

Put the front panel over the potentiometers and jack sockets. Secure with the jack 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.

Insert the IC in the IC socket making sure the notch on the IC lines up with the notch on the IC socket and the PCB. If there is no notch on the IC there should be a dot or circle in one corner. In this case place the IC so that the dot/circle is nearest the notch on the IC socket and the PCB.

Push the knobs on to the potentiometer spindles.

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