



MULT B (v1.0/v1.1) DIY BUILD GUIDE

This build guide assumes the user has basic knowledge of through hole components, soldering skills and various tools required to Do-It-Yourself. The Bill of Materials covers the whole module. Some parts are for PCB 1/3 and some are for PCB 2/3.

STEP BY STEP (part 1)

1. Locate PCB 1/3 as shown to the right.
2. Populate all resistors and ferrite beads. Solder and clip leads.
3. Populate all diodes, taking care to align the black band on the diode with the stripe shown on the PCB. Solder and clip leads.
4. Populate all of the ceramic capacitors. Solder and clip leads.
5. Populate all of the ICs, taking care that the notch at the top of the IC lines up with the notch shown on the PCB. Solder leads.
6. Populate the IDC power connector, taking care to line up the notch on the part with the notch shown on the PCB. Solder in place.
7. Populate the electrolytic capacitors, taking care to line up the black stripe on the caps with the outlined via on the PCB. Solder and clip leads.
8. Place each the of the jacks into the board and install the faceplate. Finger tighten each nut in place to ensure the jacks are straight. Solder them once you are satisfied.
9. Remove the PCB from the faceplate. Move on to the next page for part 2 of the guide.

BILL OF MATERIALS

Resistors

- ☐ R1 - R4, R20, R21, R27, R28 100K
- ☐ R5 - R19, R22 - R26 499R

Ferrite Beads

- ☐ FB1, FB2 68R

Diodes

- ☐ D1, D2 1N4001

Ceramic Capacitors

- ☐ C3, C4, C5, C6 100nF (104)

Integrated Circuits

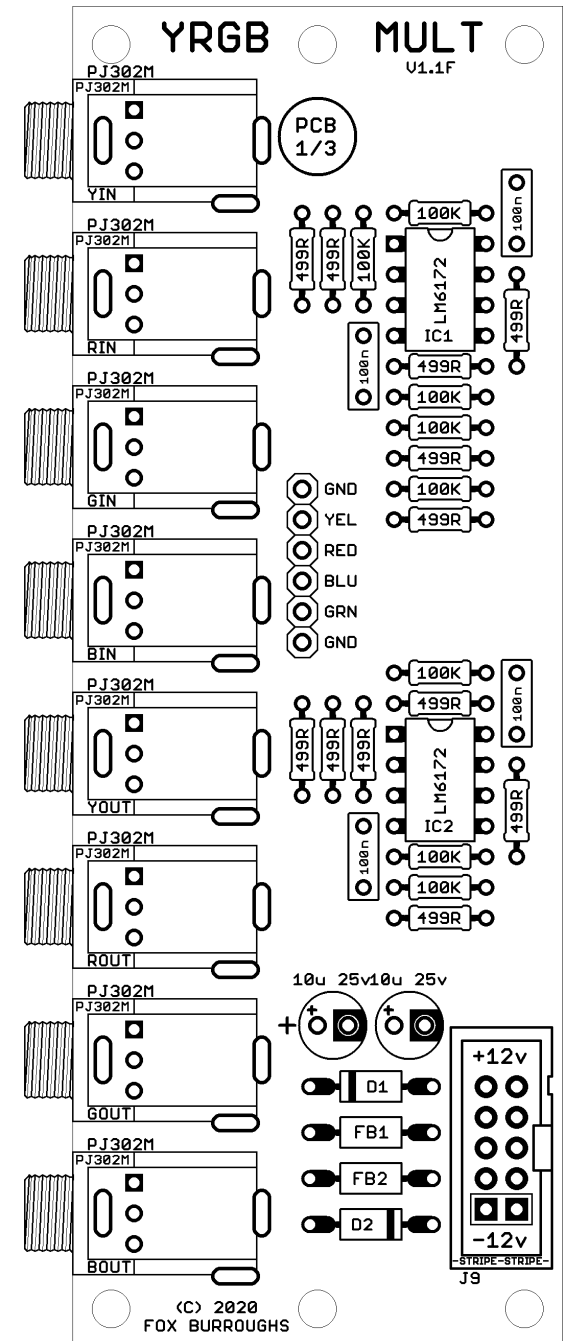
- ☐ IC1, IC2 LM6172

Electrolytic Capacitors

- ☐ C1, C2 10uF/25v

Other Parts

- ☐ 16x PJ302M Jacks
- ☐ 16x 3.5mm nuts
- ☐ 1x 2x5 Polarized IDC Power Header
- ☐ 1x 10-16 Ribbon Cable
- ☐ 1x MULTB PCB 1/3
- ☐ 1x MULTB PCB 2/3
- ☐ 1x MULTA Faceplate
- ☐ 1x 6-pin female stackable header
- ☐ 1x 6-pin male pin header





STEP BY STEP (part 2)

10. Find the second PCB labeled PCB 2/3.
11. There should be eight 499R resistors left over from part 1. Populate all of them, solder and clip leads.
12. Place each the of the jacks into the board and install the faceplate. Finger tighten each nut in place to ensure the jacks are straight. Solder them once you are satisfied.
13. Install both PCBs into the faceplate together. Connect both 6-pin male header and 6-pin stackable headers together. Place the header between boards.
14. Carefully check the solder of each component for bridges and any solder joints that may have been missed. Clean excess flux with alcohol. You may now test it your work.

