

Passive Multiple

Kit Builder's Guide for PCB v1.0

4mscompany.com



PASSIVE MULT

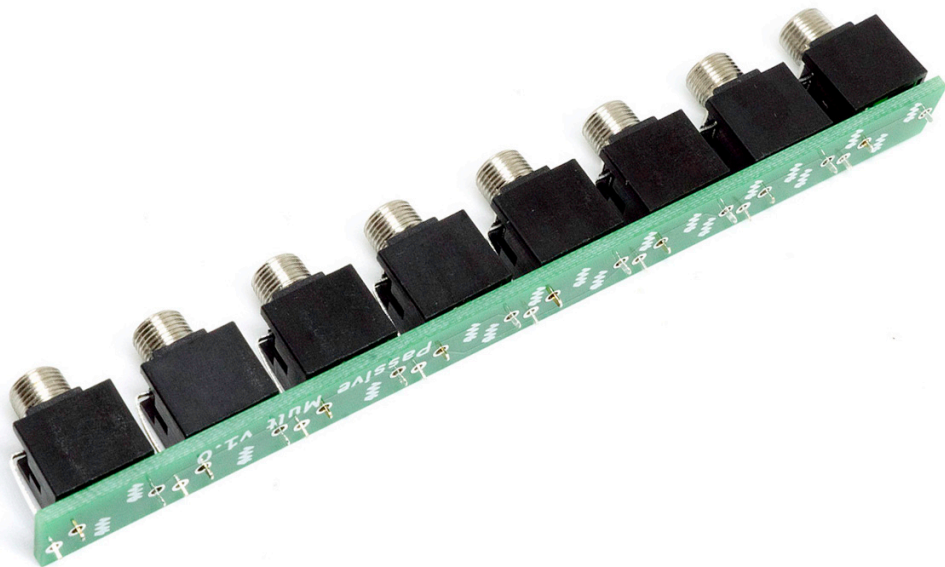
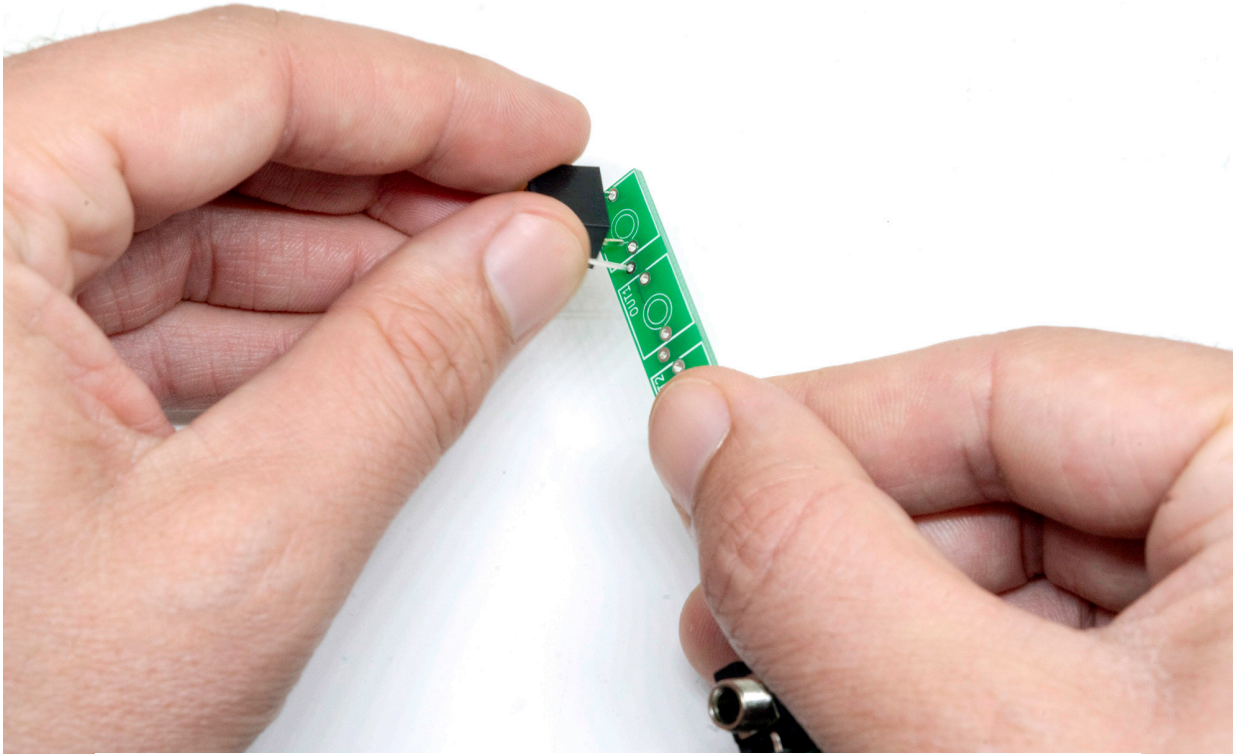
This guide is for building the Passive Mult (PM), a two channel multiple. The PM allows you to split a single signal into multiple copies. The PM can work in a single one-to-six multiple or as a dual one-to-three multiple. Since the device is passive, it can also be used to combine signals (three-to-one, or six-to-one). This is a beginner level kit, with only basic tools and soldering experience necessary.

Tools Needed:

- Soldering iron, solder
- 5/16" socket driver (optional: pliers will work if you're careful)

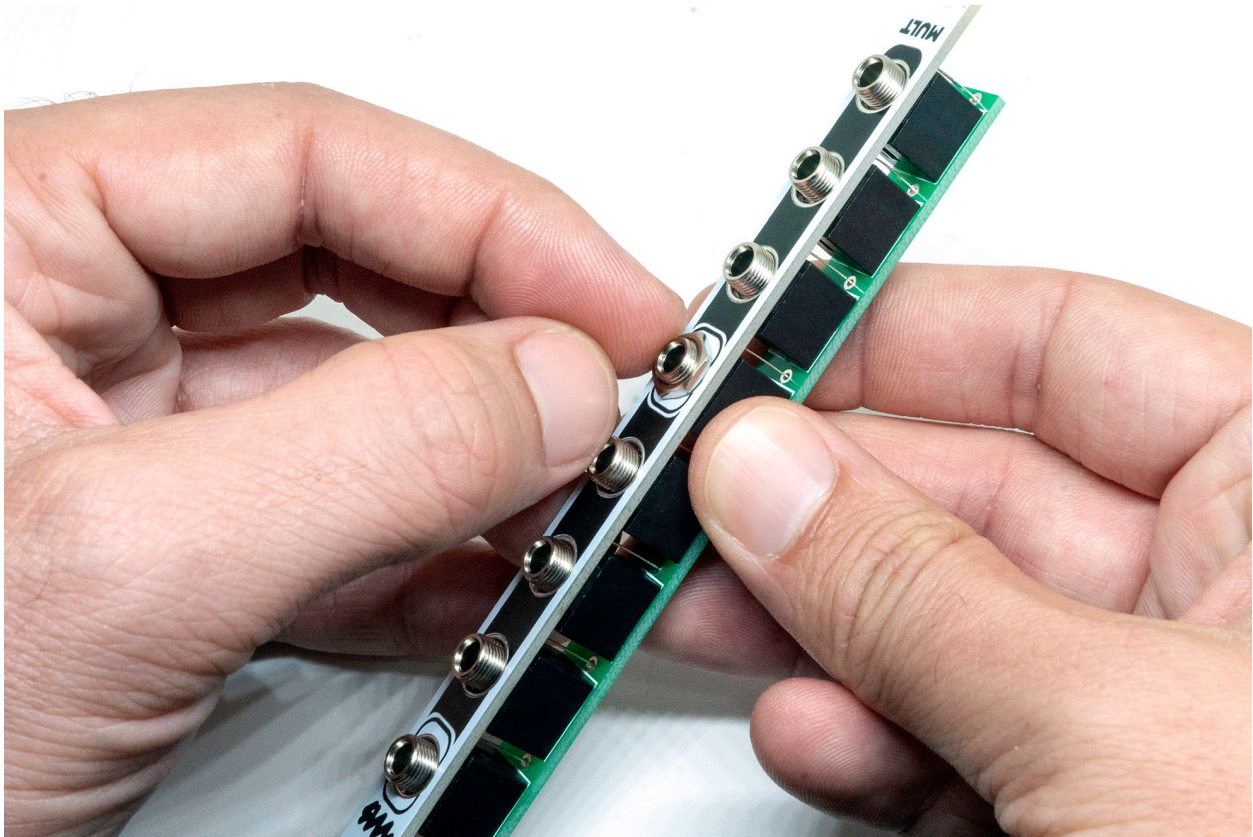
Step 1: Insert Jacks/Prep Mounting

Install the eight jacks to the green PCB. The jacks should be inserted on the side with the white rectangles and circles. Tip: Feed the longer bent pin in first, then push the other two pins in snugly. Push each jack down so it's flush against the PCB. See photos below.



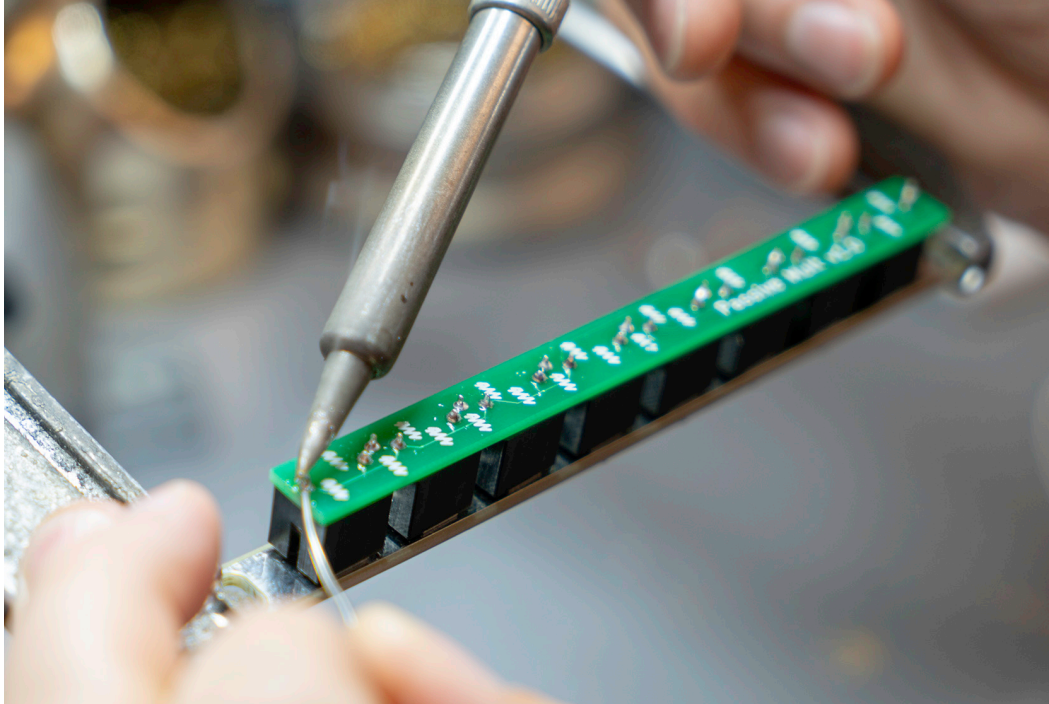
Step 2: Install Panel

- A. Double-check that the jacks are flush to the PCB (see above photo). Take the black and white panel and gently lower it down on the PCB. Wiggle it slightly so that it fits over the jacks.
- B. When the panel is on, hold everything together with one hand while putting a nut on the center jack with your other hand (see photo on left). This is tricky and you may drop the nut a few times: don't worry, this is the hardest part. Tighten the nut as tight as you can with your hands (don't use a tool yet).
- C. Install the rest of the nuts on the jacks. First tighten each one by hand. Then go back and tighten all the nuts another 1/8 turn using a 5/16" socket wrench or pliers (be careful not to scratch the panel!).
- D. Flip it over and make sure there are no gaps between the jack and the PCB. Also make sure the PCB is parallel with the panel. Be careful to hold the PCB and panel at the same time, as the PCB can still slip off the jacks.



Step 3: Soldering

- A. Place the unit on a hard surface or in vise to solder so that the panel is facing the floor and the PCB is facing the ceiling. See photo below.
- B. Do a final check to make sure each jack is flush to the PCB
- C. Solder all the jack leads.



Step 4: Finish

Go back and tighten all the nuts another 1/8 turn using a socket wrench or pliers (carefully, the panel scratches easily).

And there you have it, a completed 4ms Passive Mult! This module requires no power, so all that's left is to install in your Eurorack system with the supplied 3mm screws. Enjoy!

