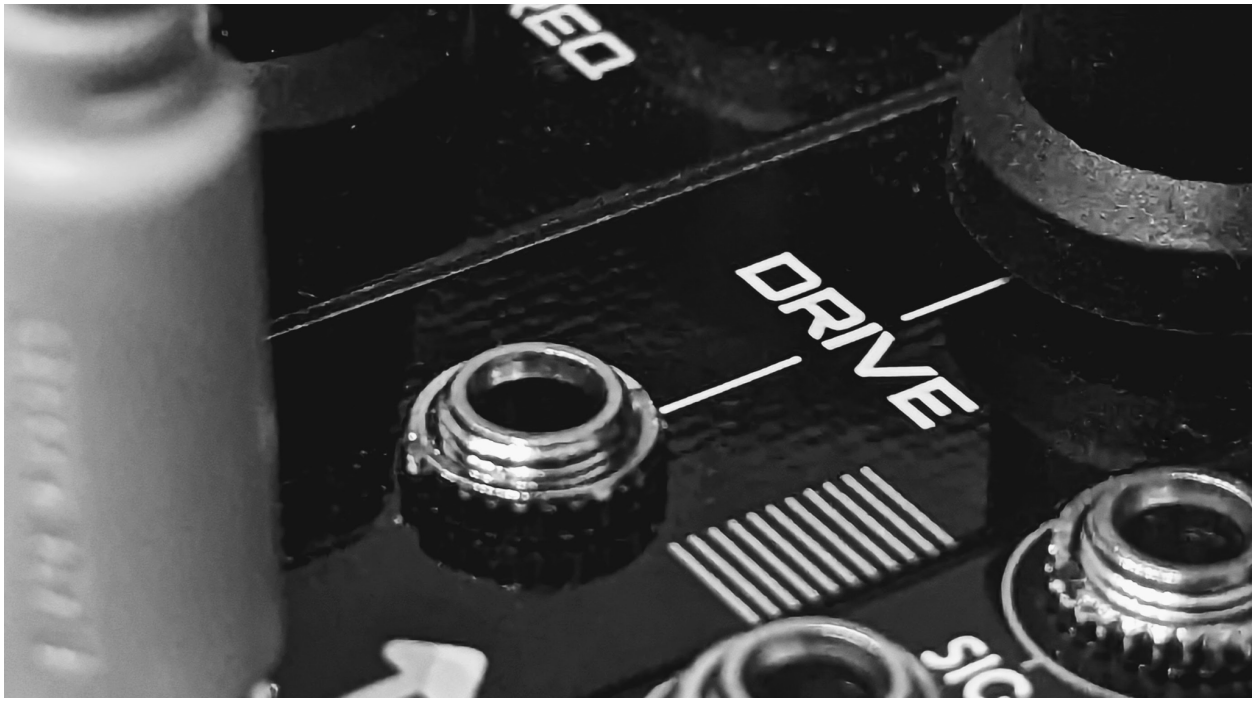
NIJEL v1.1

by neutral labs



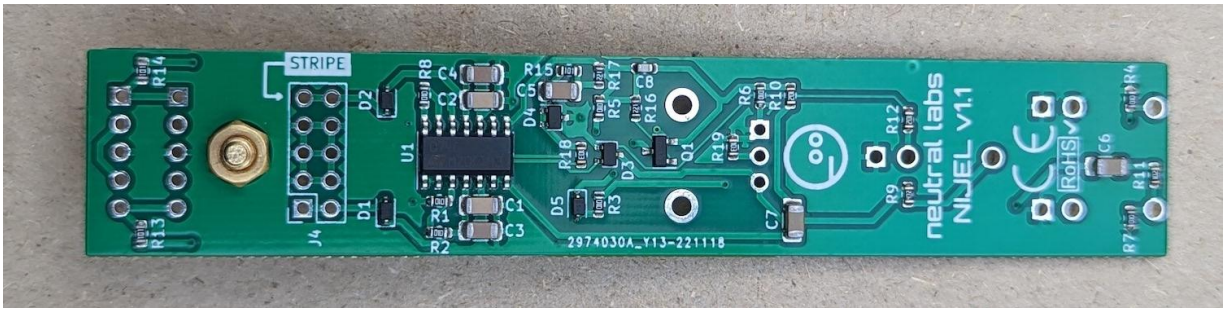
Build Guide

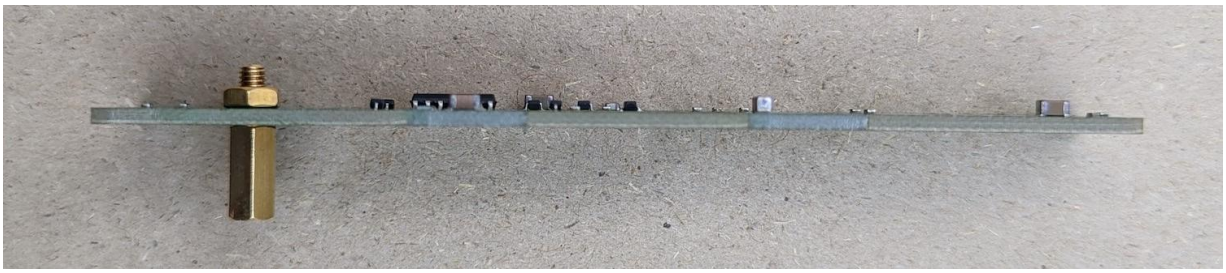
NIJEL is an extremely easy kit to build: It comes with most of the components presoldered. You will only have to solder a pot, a spacer, some sockets and headers, so there is very little room for error.

Component List

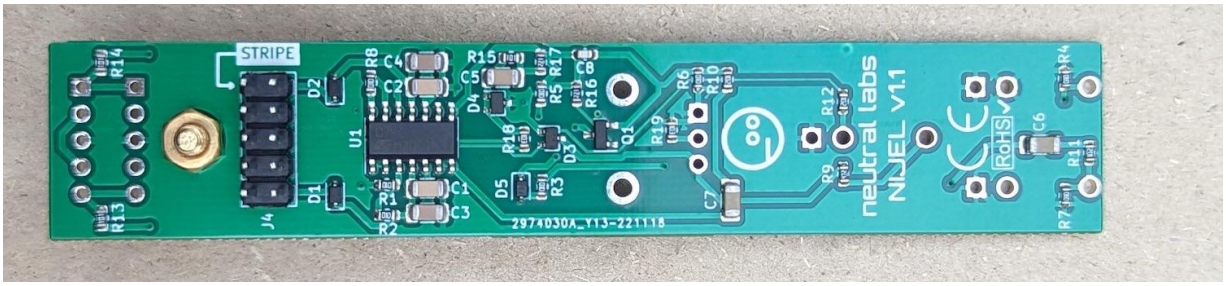
Part ID	Count	Type
J1-J3	3	Thonkiconn mono 3.5 mm switching socket + nut
J4	1	10-pin power header
J5-J6	2	5-pin header (panel port)
RV1	1	10 kΩ linear potentiometer + nut
-	1	brass spacer + nut
-	2	panel screw
-	1	knob for RV1
-	-	Various sample components to be used with the panel ports of the completed module: **These do not go on the PCB!**

Step-by-step instructions

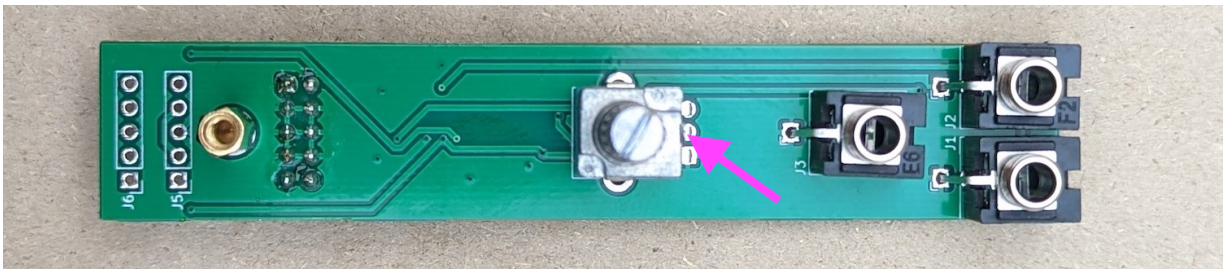




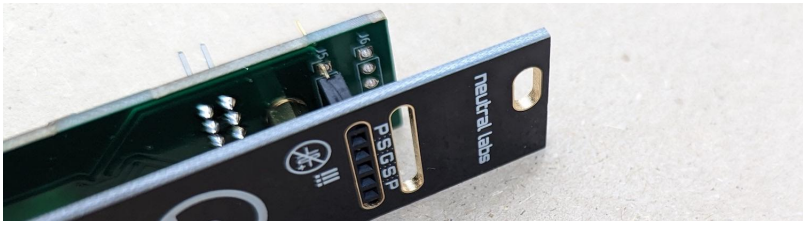
First, put the brass spacer through the PCB hole as shown and tighten the brass nut.

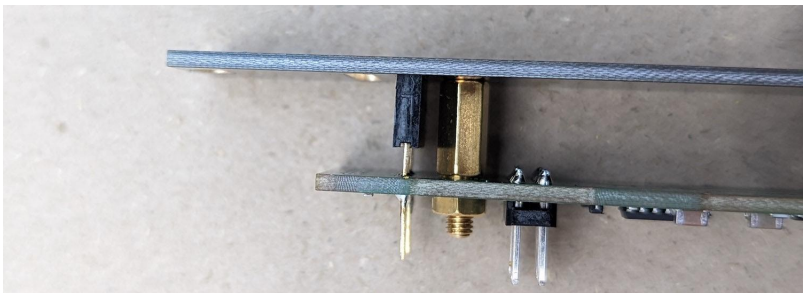


Put the 10-pin header (J4) in its place and solder. Make sure it points straight up. It’s easier if you solder 1 pin first, correct the angle if necessary, then solder the other pins.

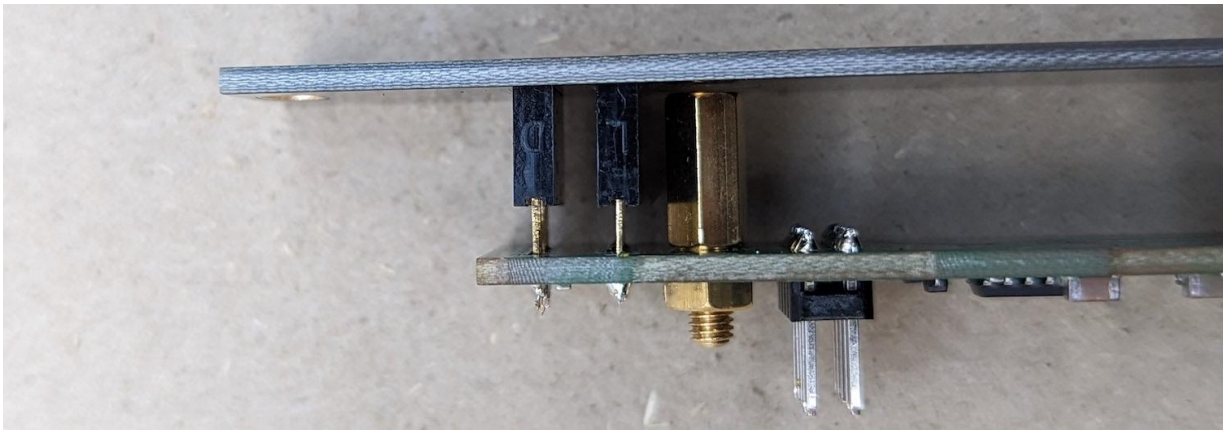


Snip off the little anti-rotation tab near the bottom of RV1 with a wirecutter. Put RV1 as well as J1, J2 and J3 in their places as shown. Put on the front panel, attach and lightly tighten the nuts to RV1 and the sockets. Solder all on the backside.

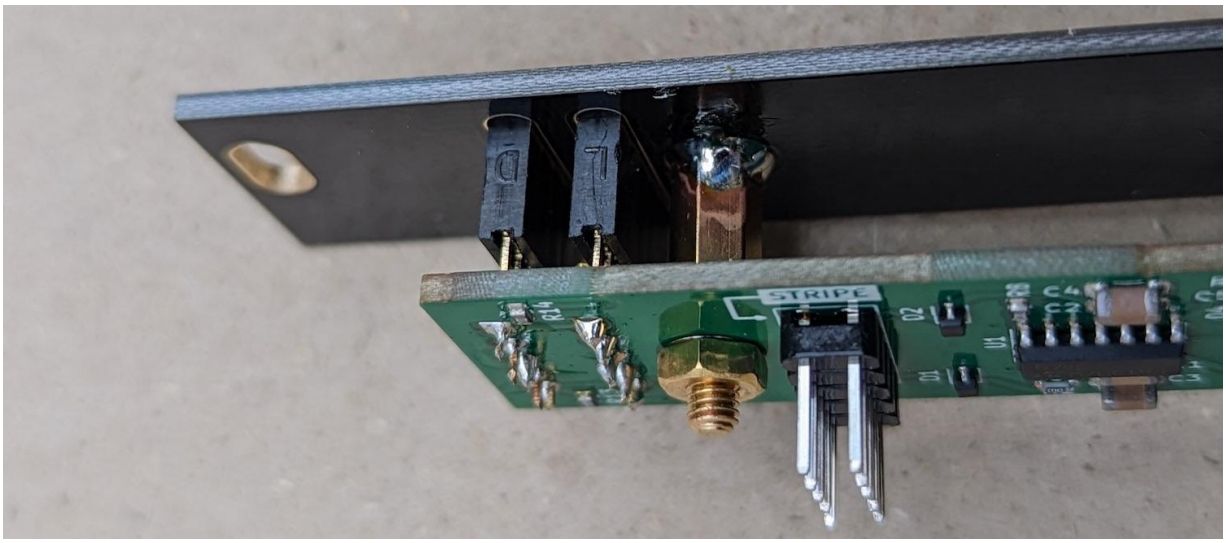




Put J5 through the slot in the front panel and make sure it is flush with the front panel. A piece of sticky tape might help. Solder from the back: 1 pin first, then check the angle, then solder the rest.



Now perform the same with J6. After that, you may snip off the legs of J5 and J6 that stick out on the backside.



Now solder the brass spacer to the large solder pad on the back of the front panel. The key is to heat both the spacer and pad well enough, so the solder will flow easily. If your soldering iron is adjustable, increase the temperature from what you would normally use for PCB work. If it has different tips, use a large one. Heat the spacer and pad for about 6-8 seconds before you add the solder while still keeping your iron in place (use plenty of solder to make a strong connection). Be careful not to damage the plastic of J5. At one point you will notice the solder suddenly changing shape from a convex blob and flowing into place like in the photo: That’s when you’ll know you’re done.

Now plug in and test your module. Refer to the manual if needed.

If something's not right, it may be best to unplug the module from Eurorack power immediately so as not to damage it (or the PSU).

Most problems can easily be fixed by reheating all your own solder joints so the solder can reflow. Also visually inspect joints and see if you can spot accidental solder bridges.

When everything is working correctly, you can now tighten all the nuts. If using a wrench or pliers, be careful not to scratch the front panel surface. As the final step, put the knob on the pot shaft.

If you need help troubleshooting or want to share photos, audio and/or video of your creations (please do), send a message to admin@neutral-labs.com