Petrichor ATx3

Three passive attenuators in 4HP, individually configurable by jumpers to use either linear (CV) or pseudo-logarithmic (Audio) tapers. These instructions are for Revision 2.

Bill of Materials

- 1x Front Panel in Attractive Purple
- 1x PCB Panel
- 3x 1K-ohm Resistors
- 3x Male 3-pin Headers
- 3x Jumpers (in random colors)
- 3x B100K 9mm D-shaft Potentiometers
- 3x Washers for Pots
- 3x Nuts for Pots
- 3x Knobs for Pots
- 6x Thonkiconn (or Compatible) Jacks
- 6x Nuts for Jacks



Ideas for Usage

- Tame the range of any LFO used to control the parameters of other modules such as Oscillators or Filters. Pair with DivKid's Intruō øchd, or Doepfer A-145-4 Quad LFO.
- Attenuate the output of Envelope Generators or Envelope Followers before using them to open VCA's or Filters. This makes voices performable by allowing you to fade them in and out.
- Attenuate your audio signal before or after any type of filter or signal processing module.
- In linear mode, set the knob half-way to reduce full amplitude square waves or 10V Korg triggers down to 5V triggers expected by some modules.
- In a pinch, you can also use it as a performable way to turn a trigger or gate off, by reducing it to zero.

Look for other useful modules designed by Jeff Day at...

zebby.org/eurorack

Petrichor ATx3 – DIY Kit – Assembly Instructions (Rev.2)

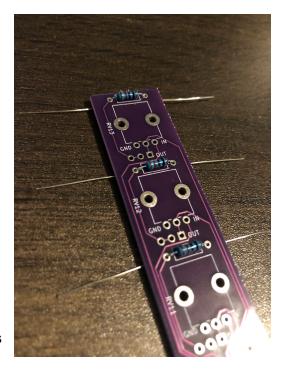
Step 1 - Place Resistors

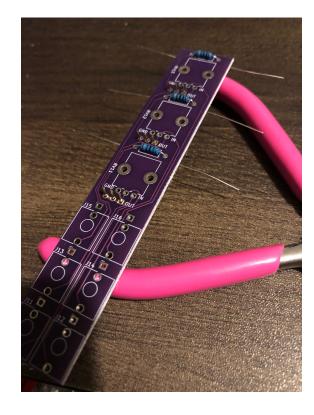
Put the three 1K resistors in place. We'll solder them down later. I recommend putting them in now simply because they become difficult to place in position after Step 5 has been completed.

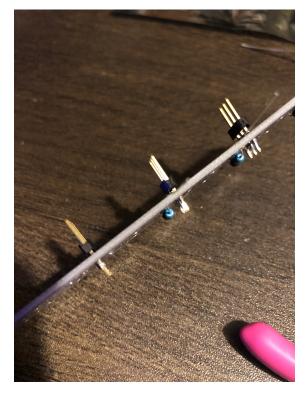
Step 2 - Place & Solder Pin Headers

Put the male pin headers in place, with the plastic on the opposite side of the resistors. I used a pair of pliers to support the board while I soldered these in place.

Try your best to keep the whole board pressed tightly against the headers while you solder them in place, and be careful because when the pin gets hot, the plastic can slip and they can become deformed. I didn't do very well on this one, and you can see there's a gap between the plastic and the board. It will still work fine. This is the hardest part of this build, so I wanted to get it out of the way first.







Step 3 - Place Potentiometers

Place the three potentiometers into the board. You may need to carefully align the three smaller pins, in case they've been bent or are out of alignment, and you may need to squeeze the large structural side-pins slightly closer together as well. These large pins provide a snug fit, and should be able to hold the potentiometers in place without soldering while you complete the next steps.



Step 4 - Place Jacks Carefully place the six jacks in place. They are very fiddly, so keep the board upright to prevent them from falling out.



Step 5 - Press-Fit Assembly

Place the front panel on top. Continue to hold upright as you add the three washers, and the nuts for the three potentiometers and the six jacks. Thumb-tighten all of the washers. This will help hold everything together while you solder the potentiometers and jacks.

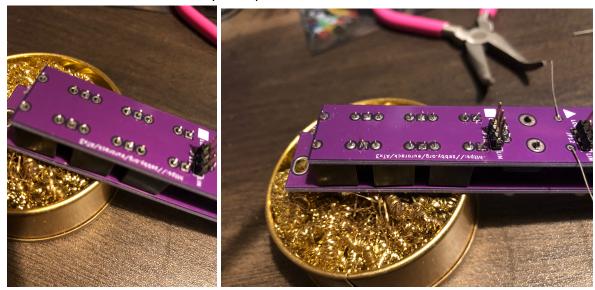






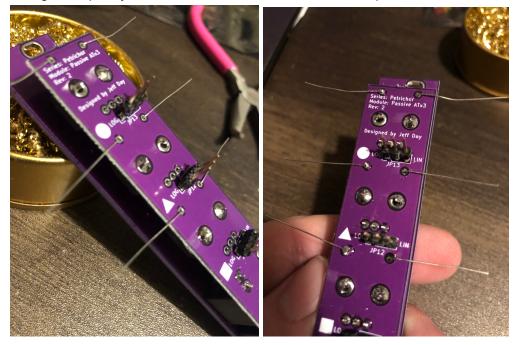
Step 6 - Solder Jacks

Turn the board over, and find something to prop it on so it doesn't roll while you solder the six sockets. There are three solder points per socket.



Step 7 - Structural Soldering

Solder the six large solder points to give structural support to the potentiometers. For best strength, let plenty of solder flow to form a nice cone-shape on each one.



Step 8 - Solder Potentiometers

Solder the three small legs belonging to each of the potentiometers.



Step 9 - Solder Resistors

Solder the legs of the three resistors, then snip off the excess length.

Step 10 - Fit Jumpers

Place the three jumpers in place. Put them in the "Lin" position for attenuation using a linear taper (best for CV), or in the "Log" position for pseudo-Logarithmic taper (best for Audio signals.)

You can mix-and-match as needed.



Step 11 - Fit Knobs

Align and press the knobs onto the potentiometers. then install the new module into your case. This is a passive module, so no power cable is needed!





Eleven easy steps and there she is.

Ooo! That's one nice module.