Assembly Instructions for eeZeeAmp

Assembly is easy. And, you can learn how to solder at the same time. Review <u>Sparkfun's Soldering Tutorial</u> if you need to. Here's a helpful info-graphic from the tutorial:

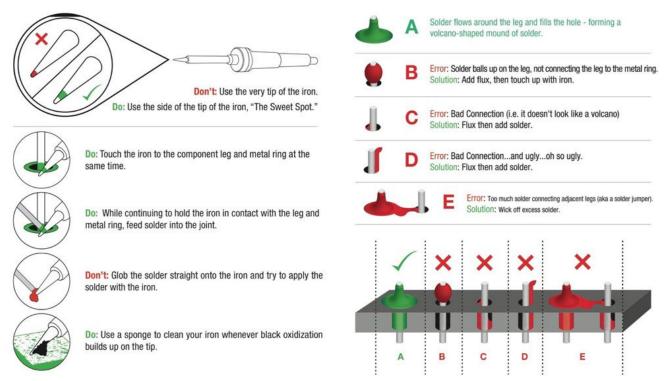


Illustration 1: https://learn.sparkfun.com/tutorials/how-to-solder---through-hole-soldering

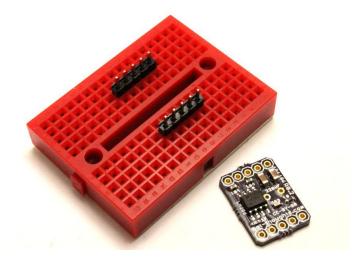
You'll need

- Soldering iron, 40W
- Sponge to clean the iron (I recommend a brass sponge)
- Workbench with plenty of light
- Ventilation since breathing flux fumes is irritating
- Soldering surface (e.g., marble tile sample)
- Rosin core solder 0.022" or 0.032" diameter
- Kester #2331-ZX flux pen (optional)

Pin Headers

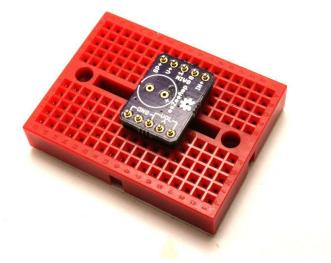
Apply flux to the outer pin header pads on the board.

Insert the two 5-pin headers into a breadboard 0.7" apart (6 rows between).



Install the eeZeeAmp board on the pin headers.

Solder one pin on each side, then continue soldering the remaining pins.



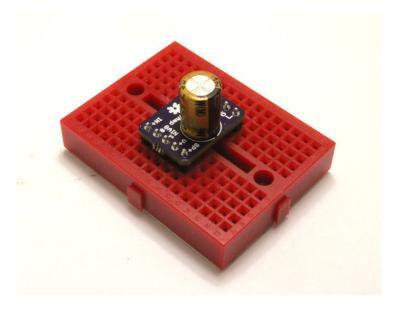
220uF Capacitor

Note that the footprint for the 220uF capacitor is on the top of the board and the positive terminal is labeled with a "+" symbol. The black stripe on the capacitor indicates the negative terminal (see right)

Insert the 220uF output capacitor into the board with the black stripe (negative terminal) closest to the board edge.

While holding the capacitor and board together, solder the positive terminal.

Then, solder the negative terminal. Because it is connected to a large ground plane, it may take longer to heat up the pad and melt the solder.



Cleanup

You'll want to remove the rosin and flux

I usually just use isopropyl alcohol and an old toothbrush

You can also buy chemicals specifically for removing flux and rosin

