

Brains: Screw Shield

Intro:

The purpose of this section is to put the screw shield together.

If you don't know how to solder, you can read about it here:

<https://www.instructables.com/id/How-to-solder/>

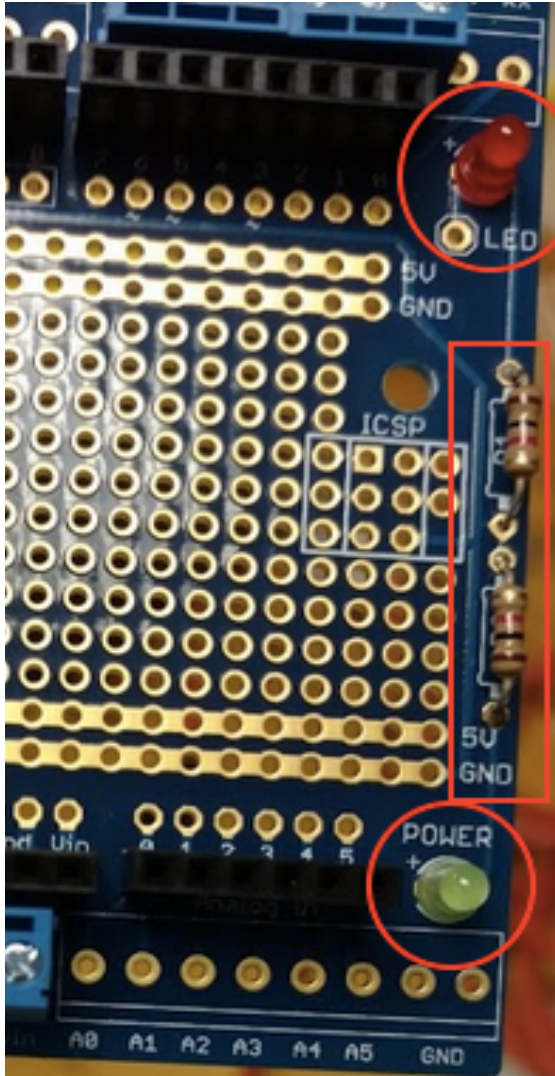
If you need to desolder, I found that using a desolder pump was my favorite method.

You can read about it here: <https://www.instructables.com/id/The-Ultimate-Guide-to-Desoldering/#step3>

Bill of Materials:

Name	Number
Proto-Screwshield (Wingshield) R3 Kit for Arduino	1

Step 1:

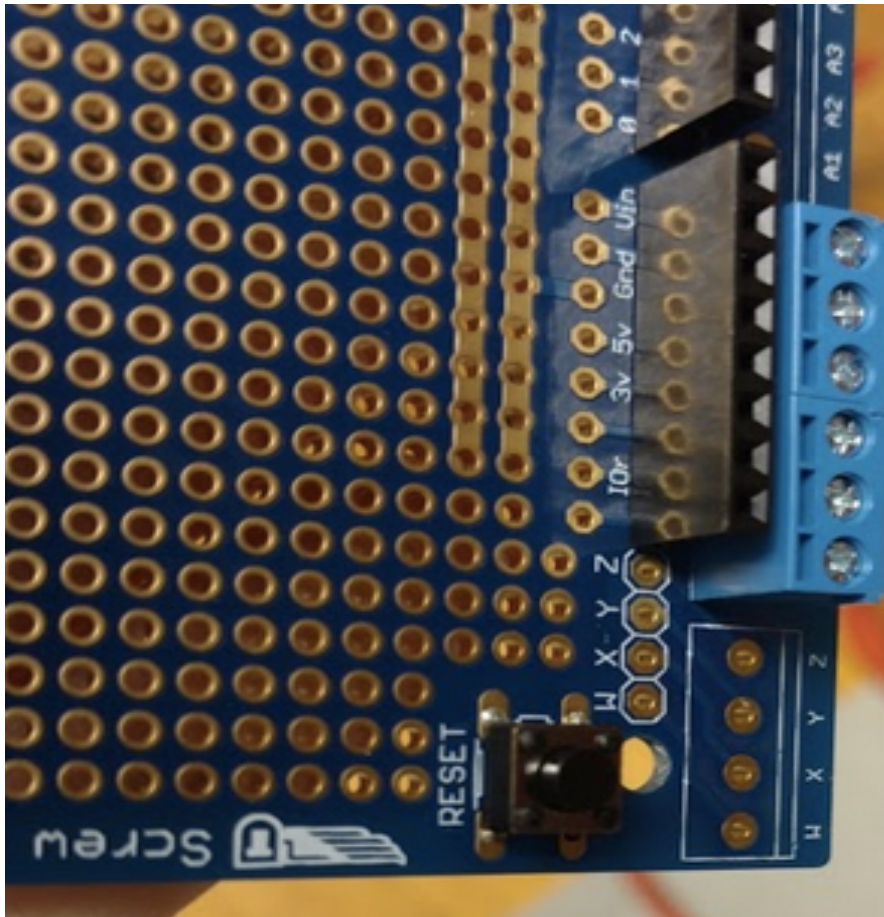


Need:

- 2x LEDs - red, green
- 2x resistors, 1 KOhm, +-5% (J)

Solder the LEDs on, with green for power, ensuring the longer end enters the positive hole. Solder the resistors on.

Step 2:

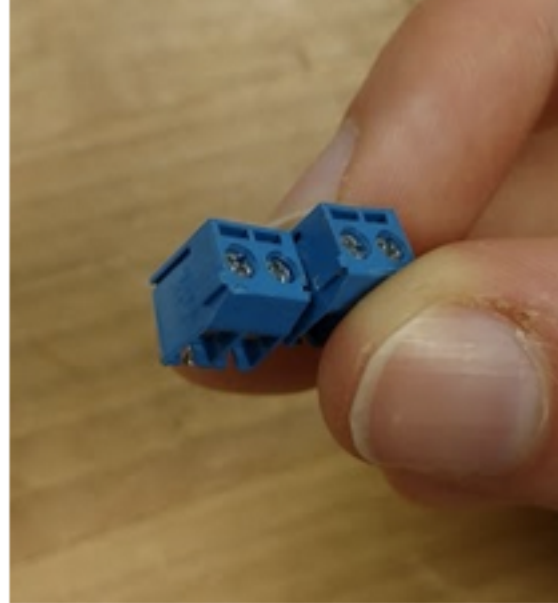
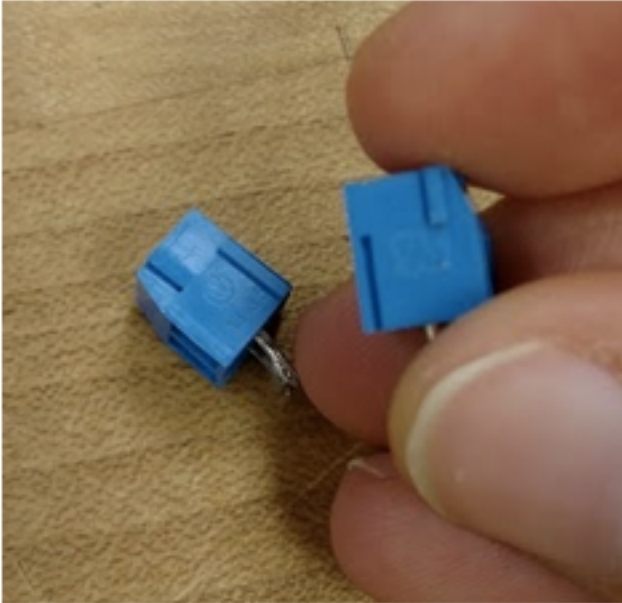


Need:

- 1 reset button.

Solder the reset button on.

Step 3:

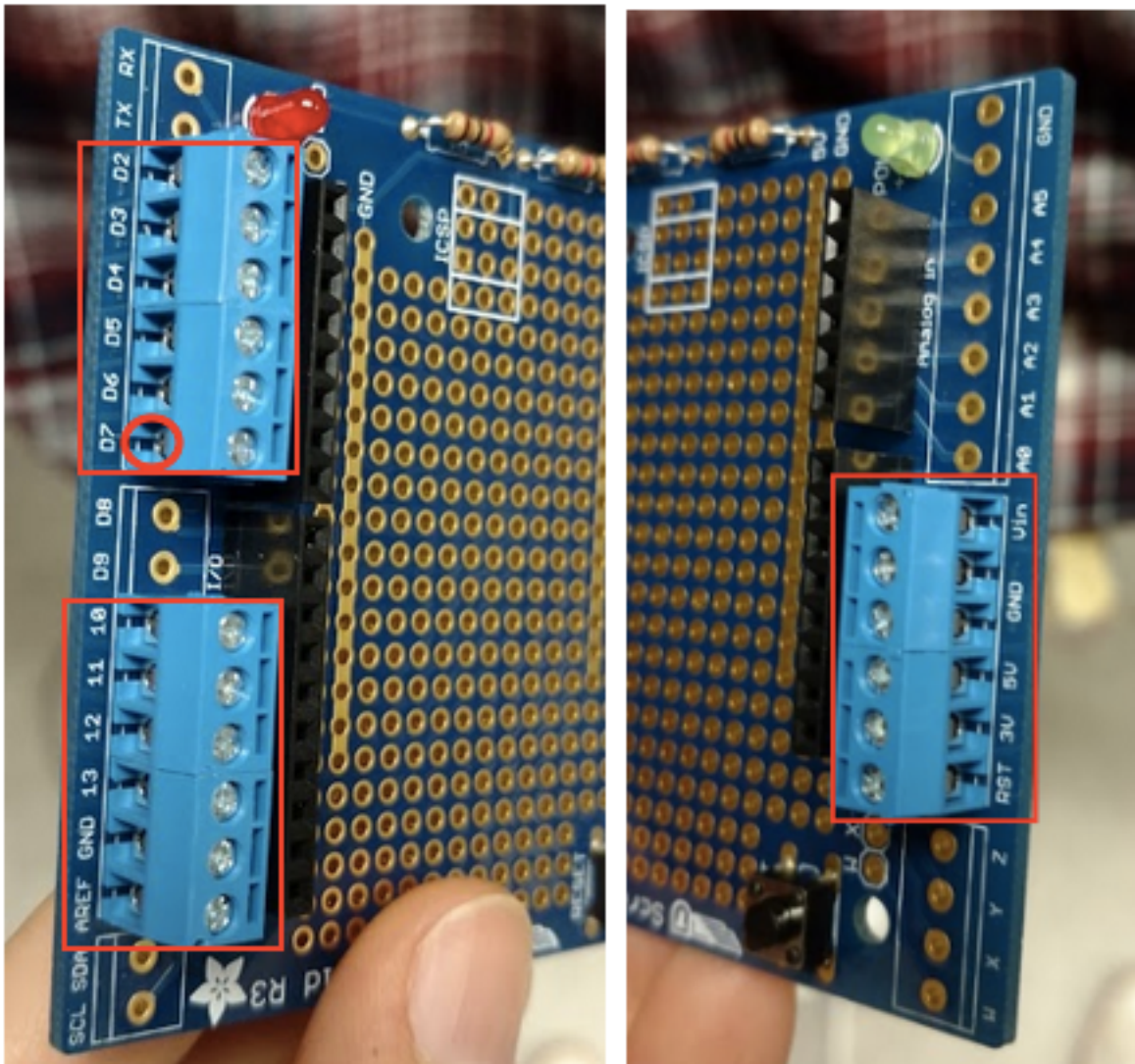


Need:

- 6x Terminal Block, 3-pin, 3.5mm

Slide the 3-terminal blocks together into sets of two, for a total of 3 sets. The pictures show how to connect some 2-terminal blocks.

Step 4:

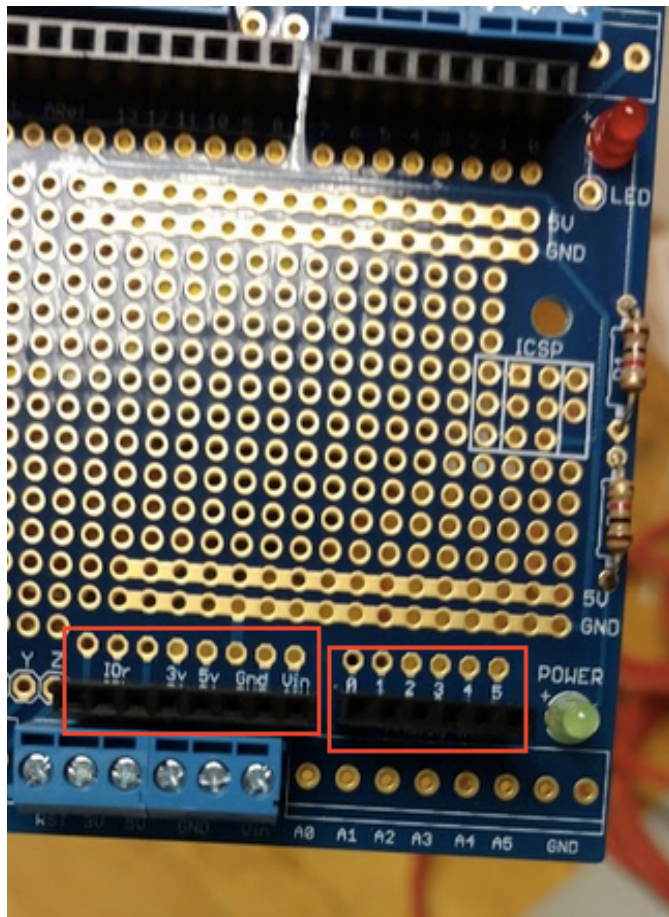


Need:

- 6x Terminal Block, 3-pin, 3.5mm

Ensuring that the side entries to the terminal block (circled in red near D7) are facing outwards, solder the sets to pins 10 to AREF, D7 to D2, and RST to Vin.

Step 5:

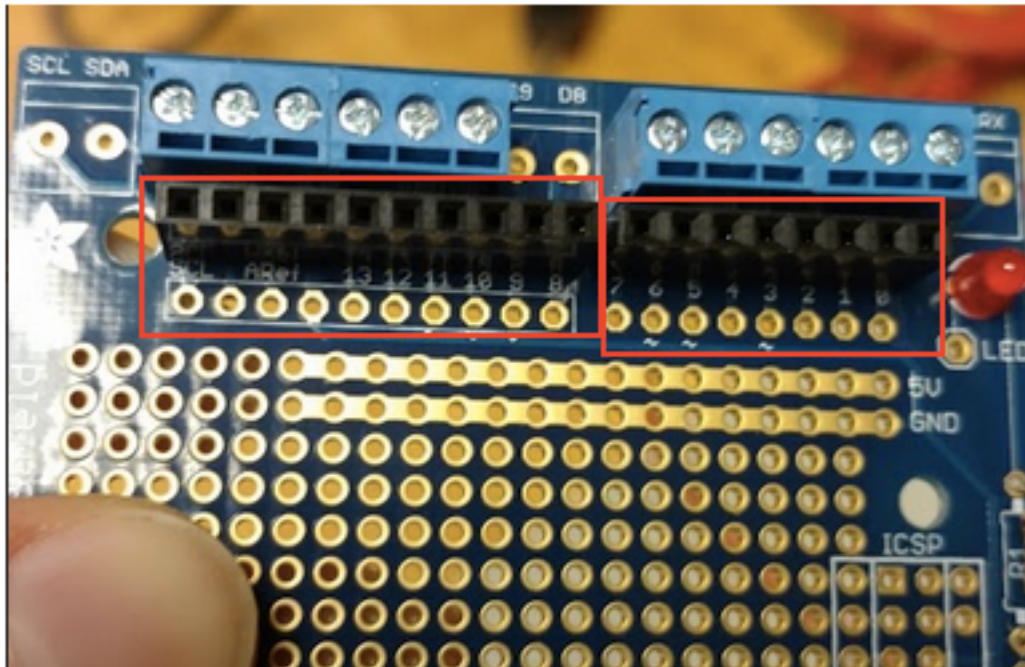


Need:

- 1x 8 Terminal Shield Stacking Header
- 1x 6 Terminal Shield Stacking Header

Solder one 8 terminal piece of shield stacking header starting at Vin. Solder the 6 terminal piece of shield stacking header to Analog In, 0 to 5.

Step 6:



Need:

- 1x 8 Terminal Shield Stacking Header
- 1x 10 Terminal Shield Stacking Header

Solder the 10 terminal piece of shield stacking header from 8 to SCL. Solder one 8 terminal piece of shield stacking header to Digital I/O, 0 to 7.

You're Done!

