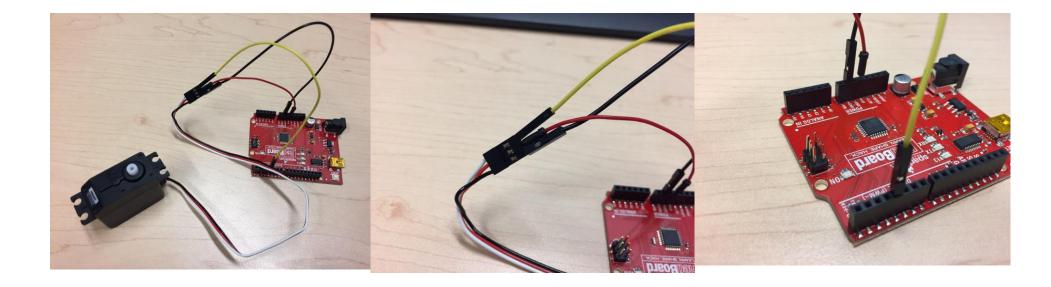
Connecting Physical Computing Sensors

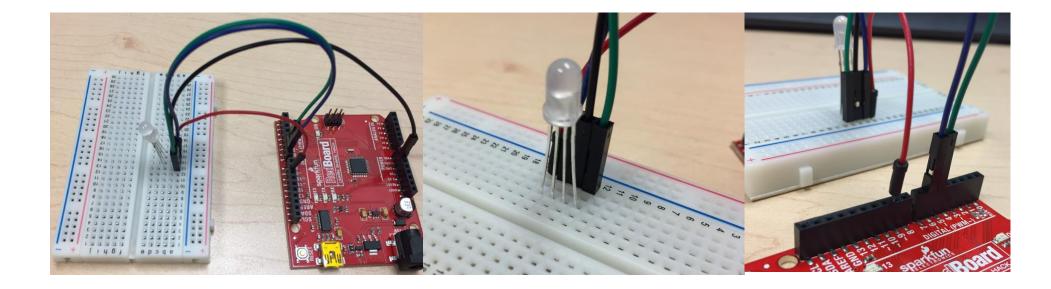
Servo

The servo requires three connections to its RED, WHITE, and BLACK wires. The RED wire should be connected to 5V, the BLACK wire to GND, and the WHITE wire to Digital Input 4, 7, or 8. The images below show these basic connections.



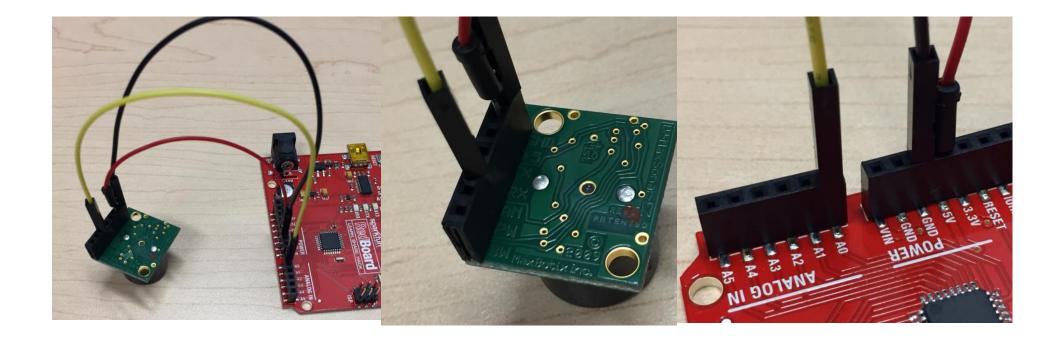
Red Green Blue (RGB) LED

The LED has four connections and must be used with the breadboard. The longest pin of the LED is the GND pin, while the other three are connected to the different colors. The GND pin must be connected to GND on the Arduino and the other pins must be connected to Digital Output 5, 6, or 9. The images below show these basic connections.



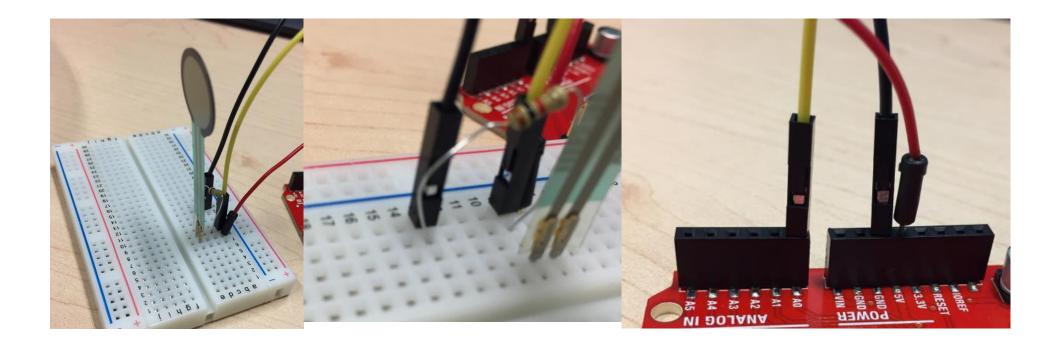
Ultrasonic Range Finder

The Ranger Finder has three connections that must be made. <u>It is very important to ensure proper</u> <u>connections to avoid damaging the sensor</u>. On the back of the rangefinder there are many labeled ports. The ones that need to be connected are +5, GND, and AN. +5 should be connected to 5V on the Arduino, GND to GND on the Arduino, and AN to any of the analog input ports (0-5).



Force Sensitive Resistor

The FSR requires three connections to the Arduino and the breadboard and a simple $1K\Omega$ resistor. Connect one wire from the FSR itself to the 5V input on the Arduino. Where the FSR and the resistor meet, connect that junction to an Analog Input (0-5). Finally, the "bottom" of the resistor should be connected to GND on the Arduino.



Photocell

The Photocell requires three connections to the Arduino and the breadboard and a simple $1K\Omega$ resistor. Connect one wire from the photocell itself to the 5V input on the Arduino. Where the photocell and the resistor meet, connect that junction to an Analog Input (0-5). Finally, the "bottom" of the resistor should be connected to GND on the Arduino.

