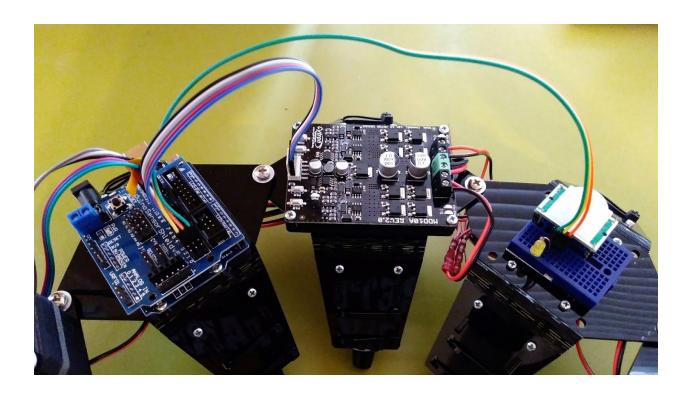
## **Adding a PIR Motion Sensor**

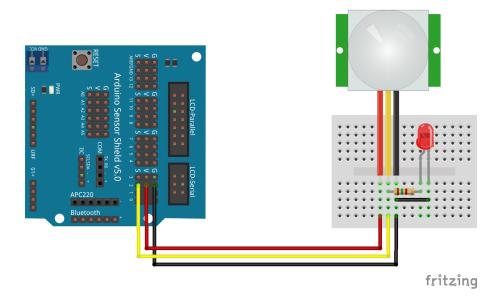


## Parts Required:

- 1 Assembled Make-A-Pede
- 1 PIR Motion Sensor
- 1 LED
- 1 1.5k Resistor
- 3 M-F Jumper Wires

## Wiring

Connect the sensor to your Make-A-Pede using the circuit shown below. The jumper on the back of the sensor should be in the "H" position. The LED is used to show the status of the sensor and is optional.

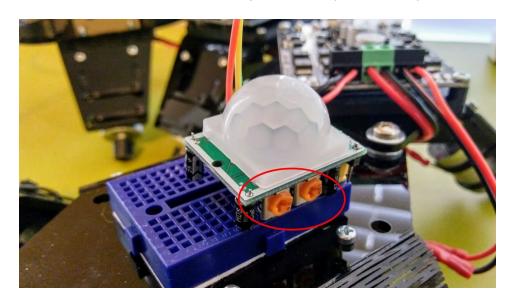


You should verify which pins on the sensor need to be connected to power and ground by carefully removing the plastic lens and looking at the labels underneath.



## **Testing**

Plug your Arduino into your computer. The LED connected to the PIR sensor should come on when it detects motion and turn off several seconds after motion is no longer detected. You can use the 2 knobs on the side of the sensor to adjust sensitivity if necessary.



Open the PIRDemo.ino program by opening the Arduino IDE and going to File  $\rightarrow$  Examples  $\rightarrow$  Make-A-Pede  $\rightarrow$  PIRDemo. Load the program onto your Arduino. Turn on the Make-A-Pede and trigger one of the antenna sensors to start the program. Your Make-A-Pede will start driving around when it detects motion. If it stops detecting motion, it will stop driving and wait for motion to be detected again.