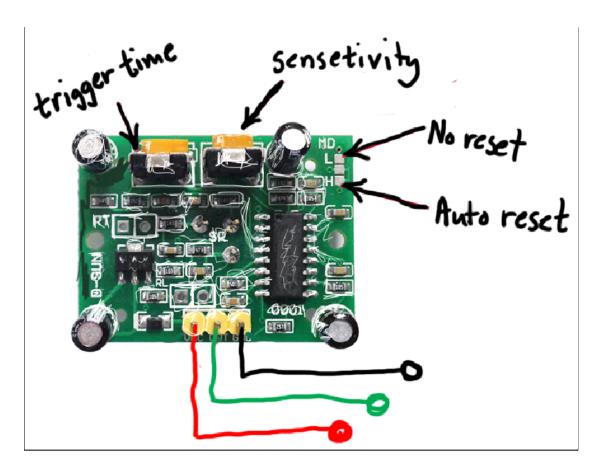


## PIR(passive infra red)

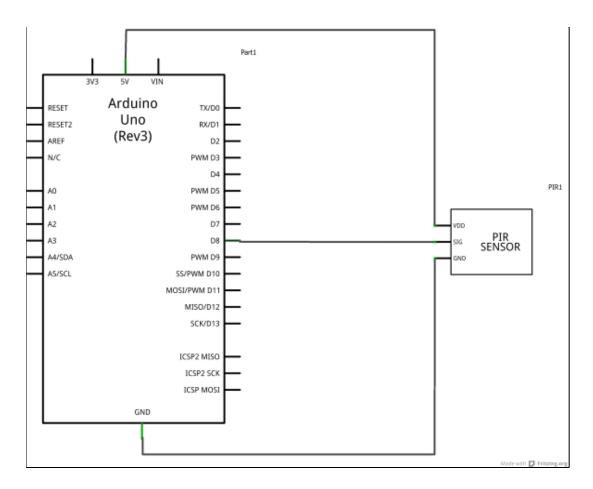


lest's take a look on this sensor deeply

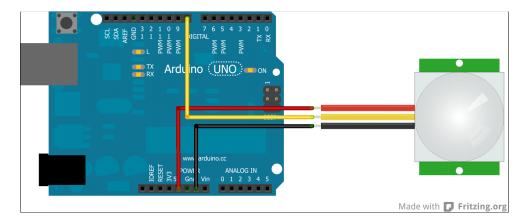


this sensor before adding the white part it's range is from 3m to 7 m but after adding this part it's range increased and it measures now with 110 degrees.

Schematic:



## onArduino:



## code:



## PIRMotionSensor

```
const int PIRSensorPin = 2; // the number of the Sensor pin
const int ledPin = 13;  // the number of the LED pin
// variables will change:
int sensorState = 0;
                    // variable for reading the Sensor status
void setup() {
// initialize the LED pin as an output:
 pinMode(ledPin, OUTPUT);
 // initialize the Sensor pin as an input:
 pinMode(PIRSensorPin, INPUT);
}
void loop(){
 // read the state of the Sensor value:
 sensorState = digitalRead(PIRSensorPin);
 // check if the moving people sensed.
 // if it is, the sensorState is HIGH:
 if (sensorState == HIGH) {
   // turn LED on:
  digitalWrite(ledPin, HIGH);
 }
 else {
  // turn LED off:
   digitalWrite(ledPin, LOW);
 }
```