

An IR sensor is a sensor that measures the distance from an object by emitting an infrared light and measuring the time it takes for the light to reflect back to the sensor. The sensor has an adjustable threshold that can be used to detect objects within a certain range. The sensor can be used to detect objects in front of it, or to detect the presence of an object in a certain area.

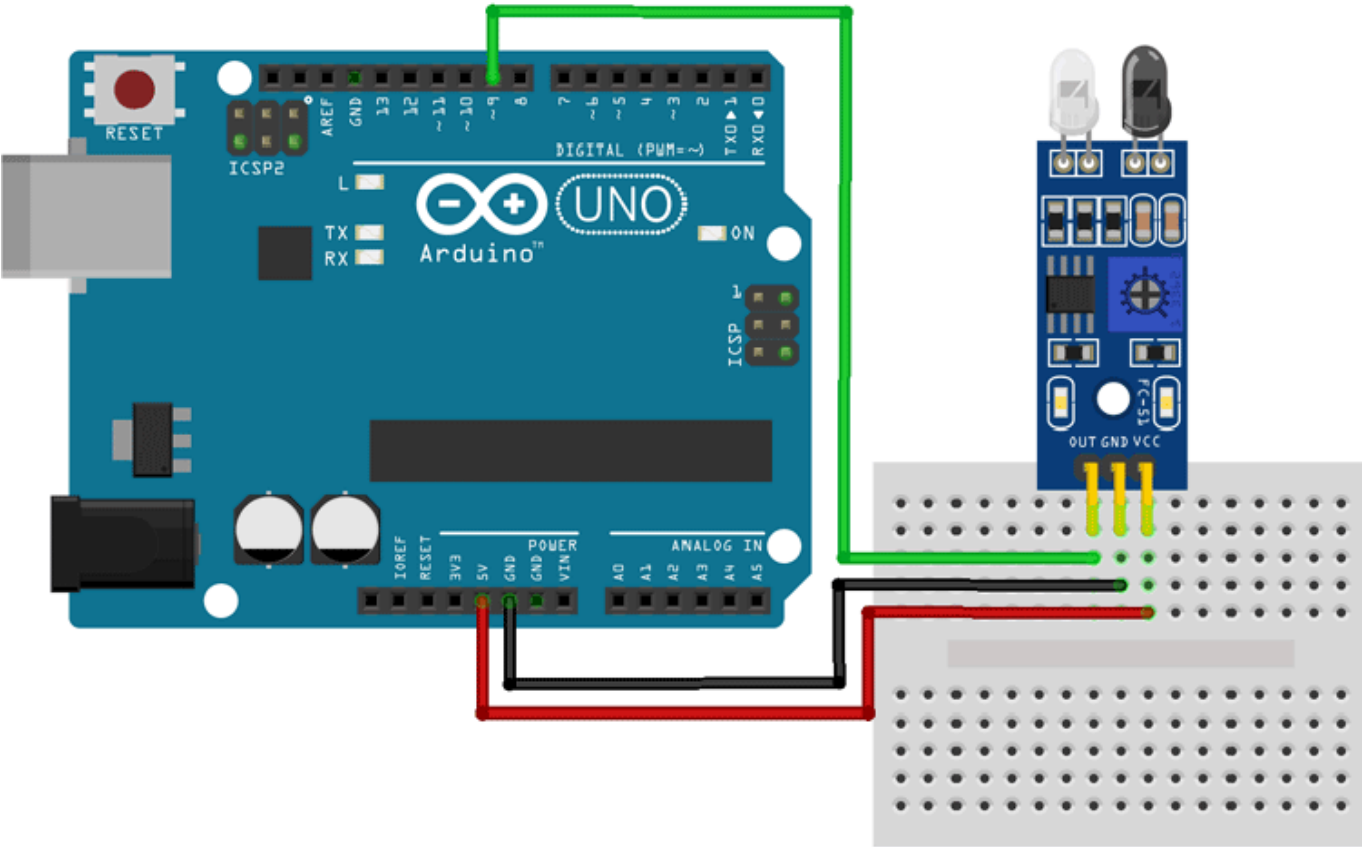
Hardware

- IR Sensor
- Arduino
- Jumper Wires

Circuit

Connect the IR sensor to the Arduino as shown in the diagram. Here is a table of the connections for your reference:

IR Sensor	Arduino
VCC	5V
GND	GND
OUT	Digital Pin 9



You're free to use any digital pin for the OUT pin, from 2 to 12. Just make sure to update the pin number in the code, as shown below in the `void setup()` function.

```
void setup() {  
  initializeIRSensor(2); // Initialize the IR sensor on digital pin 2  
}
```