HC-SR505 Mini PIR Motion Sensor

Introduction

HC-SR505 Mini PIR Motion Sensor is based on infrared technology and it can automatic control by itself with high sensitivity and high reliability. Because of the minimum size and low-power operation mode, it widely used in various of automatic electronic equipment, especially battery-powered automatic products.



Features

- Automatic Control
- Minimum size
- Repeatable Trigger
- Wide range of operating voltage
- Low-power
- Output high signal

Specification

- Operating voltage range: DC4.5-20V
- Quiescent Current: <60uA
- Trigger: reusable trigger (default)
- Delay Time: The default 8S + -30%
- Board Dimensions: 10 * 23mm
- Induction angle: <100 degrees cone angle
- Sensing distance: 3 meters
- Working temperature: -20 to +80 degrees
- Sensor Lens Dimensions: Diameter: 10mm

Usage

Hardware

Connect the PIR Motion Sensor to your Arduino/Crowduino power supply pin and digital pins. You can connect the "s" terminal to any of your Arduino Pins like the "D6" as below :



Programming

1 - Copy the following program to Arduino IDE and upload to your Arduino/Crowduino :

```
void setup()
             {
  Serial.begin(9600);
  pinMode(6,INPUT);
  digitalWrite(6,LOW);
}
void loop()
            {
    if(digitalRead(6) == HIGH) {
      Serial.println("Somebody is here.");
    }
    else {
      Serial.println("Nobody.");
    }
    delay(1000);
}
```

2 - Open the Serial monitor, and set the baud rate to 9600, you will see that When somebody is in front of the sensor, the Serial Monitor will output "Somebody is here". Or, the Serial Monitor outputs "Nobody."

00 COM33	
	Send
Nobody.	
Nobody.	
Nobody.	
Nobody.	
Nobody.	E
Nobody.	
Nobody.	
Somebody is here.	
	+
Autoscroll Newline	