

# **Techtonics ED2 PIR Motion Sensor Owner's Manual**

Home » Techtonics » Techtonics ED2 PIR Motion Sensor Owner's Manual



### **Contents**

- 1 Techtonics ED2 PIR Motion Sensor
- 2 PIR Motion Sensor Module
- 3 Specifications
- **4 Pin Configuration**
- 5 FAQS
- 6 Documents / Resources
  - **6.1 References**



## **Techtonics ED2 PIR Motion Sensor**



### **PIR Motion Sensor Module**

### **Description**

This document provides information about a PIR (Passive Infrared) motion sensor module, including its components, wiring, and functionality.

 The HC-SR505 Mini PIR Motion Detection Sensor Module is a digital intelligent automatic control product based on passive human body infrared technology. It has high sensitivity and high reliability and is widely used in various automatic induction electrical equipment. It automatically controls the products with ultra-small size, and ultra-low-voltage operation mode.

### Features:

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

# **Specifications**

Operating voltage range: DC 4.5-20V

• Quiescent Current: <60uA

• Trigger: reusable trigger (default)

Delay Time: 130The 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

### **Package Includes**

• 1 x Mini PIR Motion Detection Sensor Module

# **Pin Configuration**

• Pin 1: VCC Positive Power Supply

• Pin 2: OUT Signal Pin

• Pin 3: GND Ground

## **Wiring Diagram**

The PIR sensor can be connected to a microcontroller such as an Arduino. The wiring involves connecting the VCC to a power source, the OUT pin to a digital input pin on the microcontroller, and the GND to ground.

### **Functionality**

The PIR sensor detects motion by measuring changes in infrared radiation. When a heat source, such as a human body, moves within its detection area, the sensor outputs a digital signal.

### **Diagram Description**

The diagram illustrates the detection area of the PIR sensor using a Fresnel lens. It shows how the sensor detects

movement and produces an output signal in response to changes in infrared radiation.

# **Example Setup**

An example setup includes a PIR sensor connected to an Arduino board. The wiring involves connecting the sensor's pins to the appropriate pins on the Arduino and using a breadboard for connections.

#### **FAQS**

· What is the operating voltage of the PIR sensor?

The PIR sensor operates at a voltage range of DC 2.7-12V.

· How does the PIR sensor detect motion?

The sensor detects motion by measuring changes in infrared radiation within its detection area.

• Can the PIR sensor be used with an Arduino?

Yes, the PIR sensor can be easily integrated with an Arduino for motion detection projects.

### **Documents / Resources**



<u>Techtonics ED2 PIR Motion Sensor</u> [pdf] Owner's Manual ED2 PIR Motion Sensor, ED2, PIR Motion Sensor, Motion Sensor, Sensor

### References

User Manual

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.