

## Pyroelectric motion sensor Smart Stairway PIR-SR501-1ELBI



Pyroelectric motion sensor is designed for use with digital receivers TTL, a logical unit when motion is detected. The sensor can be used with the backlight controller Smart Stairway steps or security systems which is used to power the sensor voltage from 5 to 20V DC with TTL logic levels of + 3.3V. The sensor is designed for installation in mortise box rosette diameter of 65 mm.

The main parameters Module HC-SR501	
parameter	Value
Value	3.2MM x 24MM x 18MM
Voltage	DC 4.5V- 20V
Current at OUT	<60uA
Output voltage	High and low level 3.3V TTL
Distance detection	2 - 7m (customizable)
Angle of detection	Up to 120 °. A restraining sleeve is added, reducing the angle to 30°-45 °
Pulse the detection of	5 - 200sek. (Customizable)
Time Lock	2.5sek the next measurement.
Operating temperature	-20 - + 80 ° C
Mode	L - single capture, H - repeatable measurements

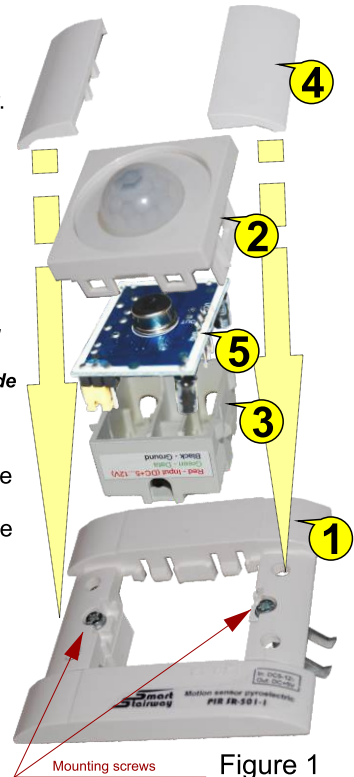
### Installation guide.

1. Prepare the mounting box in the wall.
2. Connect the wires In accordance with the marking on the sensor. (Red - DC power +5 ... + 20V, black - Ground, green - data.)
3. Install in the installation box pyroelectric sensor PIR-SR501-1 ELBI.
4. Tighten with a little effort screws. (See. Figure 1)
5. Install the laths 4. (see. Figure 1)

### Setting up the sensor.

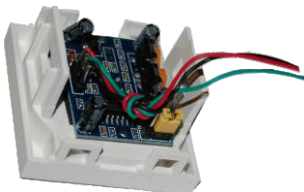
*These settings are optional. The sensor is supplied already configured and does not require configuration. Described settings should be made only if the default settings do not suit you. Through these settings you can degrade system performance. To carry out this work should be interpreted in that case if you have a certain knowledge and skills.*

1. Remove the sensor module housing 2 with a cover 3 of the mounting frame 1 (See. Figure 1) To do this, release the latch on the frame 1 (be careful not to break the latch).
  2. Release latch 3 cover (be careful not to break the latch),. Remove the cover from the housing 2 (see. Figure 1)
  3. To make the sensor settings by adjusting the trimmers according to Fig.2.
  4. Replace the cover 3 back into the housing 2.
  5. Install the body of the sensor with the sensor module and the cover assembly back into the mounting frame 1.
- Make a sensor installed in the mounting hole according to the installation guide.

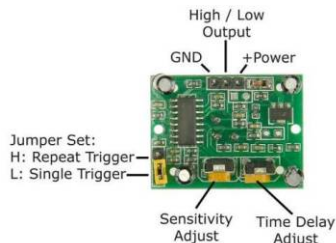


Mounting screws **Figure 1**

- 1 - Mounting Frame
- 2 - The body of the sensor with Fresnel lens.
- 3 - Protective cover pyroelectric sensor.
- 4 - laths.
- 5 - Sensor Module

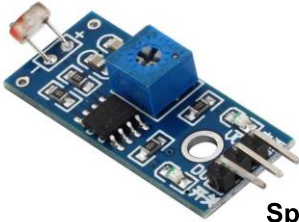


**Figure 3**



**Figure 2**

## Light sensor with digital output with the ability to adjust the sensitivity of triggering.



Light sensor used to detect light in the range of the sensor. The sensor can be connected via digital output to the microcontroller, or directly to the relays without microcontroller. As svitluchuttyevoho resistor element used MLG5516B.

### Specifications:

- Operating voltage: 3.5 V-5 V;
- Digital output: 0 or 1;
- Fixed bolt hole for M3
- Size 53.1 x 11.3 x 13.8 mm
- Current: 15 mA;
- Adjustable sensitivity sensor;

Description of structural elements and instructions for installation and pidkyuchennya.

- 1 - svitlochuttyyeviy element MLG5516B
- 2 - Adjustable rezystor stvitlochutlyvosti.
- 3 - indicator light
- 4 - Power Indicator
- 5 - Signal digital output
- 6 - GND "Earth" ( "-" power supply)
- 7 - Power DC + 3,5 ... 5V

The sensor should be installed in such a way that svitlochuttyyevy only common element falling light, the level of which should be measured. Sensor connection is made to the stabilized direct current voltage source of 3.5 - 5V. Terminal 7 is connected to the positive vihodu controller or power source with the appropriate voltage. Terminal 6 is connected to a general release of "land" or "-". Signal output 5 (D0) pidklyuchaetsya the corresponding output controllers or relays. After the power supply of the sensor light turns on 4. In case of insufficient light sensor turns off the indicator digital output 3. 5 podaetsya logical unit or zero, according to state lighting. The high level signal indicates the presence of light, low - about vidsutnist. Vidpovidno to vikorystanoho control device or controller will relay the signal to perform the action.

