

# PIR Motion Sensing Switch

- PIR motion sensor switch with daylight detection.
- 5 level brightness (100%, 75%, 50%, 25%, 10%).
- 4 level timer (10s, 30s, 60s, 180s).
- Two light off modes are available, the light goes out when people leave or the light maintains low brightness when people leave.
- Match with RF 2.4G single-zone or multi-zone dimming remote control optional.
- Work as RF remote, output RF 2.4G signal, remote control other RF LED controller or RF dimmable LED driver.
- Multiple sensor switch support linkage induction light switch function.
- Suitable for staircase, corridors, bedroom, living room, closet, aisle and other light sensor switch control.

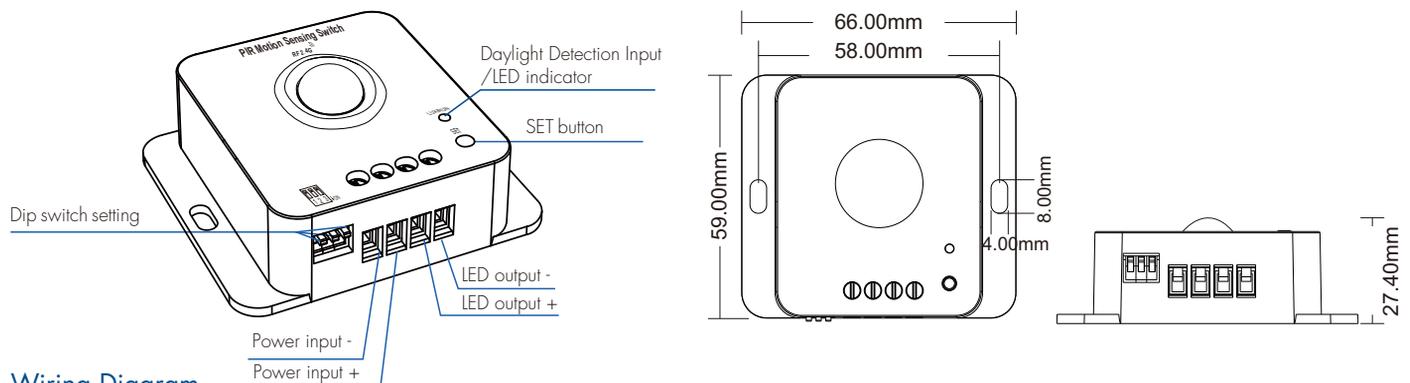


CE RoHS

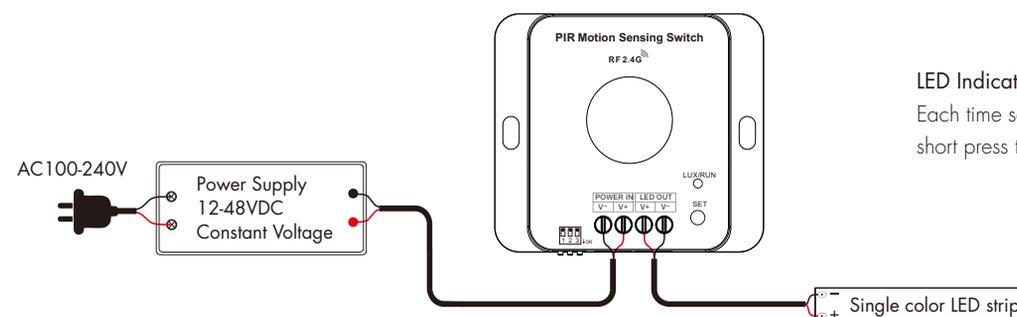
## Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-48VDC	Input signal	PIR sensor, RF 2.4G	EMC standard	EN IEC 55015/ EN IEC 61547 ETSI EN 301 489-1/-3
Input current	6.5A	Sensitivity range	3-5m	Safety standard	EN 61347-1/-2
Output voltage	12-48VDC	Sensitivity angle	80°(±20° Error)	Radio equipment	ETSI EN 300 440
Output current	6A@12-24V 4A@36-48V	Dimming range	10-100%	Certification	CE RoHS
Output power	72W@12V    144W@24V 144W@36V    192W@48V	PWM Frequency	2KHz(default)	Package	
Output type	Constant voltage	Environment		Size	L 70 x W 60 x H 40mm
Warranty	5 years	Operation temperature	Ta: -20°C ~ +55°C	Gross weight	0.059kg
		Case temperature (Max.)	Tc: +85°C		
		IP rating	IP20		

## Mechanical Structures



## Wiring Diagram



### LED Indicator Status:

Each time sensing is effective, the indicator blinks 1 time; short press the SET button, the indicator blinks 1 time.

### Wire Preparation:

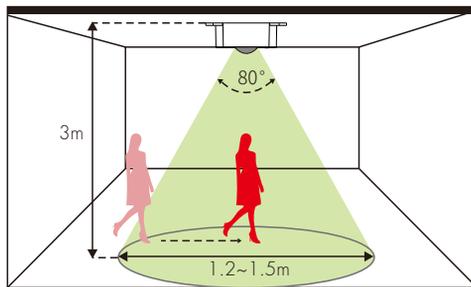
1. The wiring can be solid or stranded with a cross-sectional area of 0.5 to 1.5 mm<sup>2</sup>. Conventional 1mm<sup>2</sup> can withstand 10A output current.
2. When wiring is installed, the terminals must be tightened. If they are not tightened, the contact point resistance will be too high and the terminals will easily burn due to heat when used at full load for a long time.



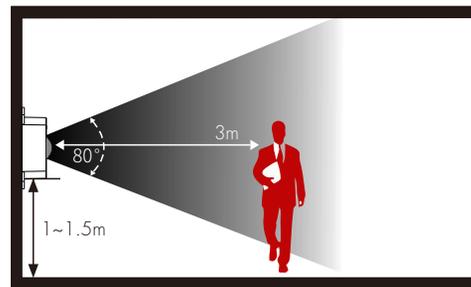
**Note:** The output power of a constant voltage power supply should be at least 1.2 times that of the output load (light strip), otherwise the full power output of the load can easily cause automatic flickering or shaking of the light.

## Installation Example

Put the controller on the wall or ceiling and fix it with screws.



Ceiling mounting pattern



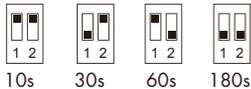
Wall mounting pattern

### Installation attention:

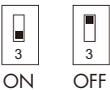
1. Recommended for wall mounting.
2. If the sensor is exposed to direct sunlight, interference signal will be introduced.
3. The sensor should be installed in a dry environment and keep away from windows, air conditioner and fans.
4. Make sure that the sensor stays away from heat source, such as countertops, kitchen appliances which generate hot steam, walls and windows in direct sunlight, air conditioner, heating, refrigerators, stoves and so on.
5. We recommend the wall-mounted installation height is 1-1.5 meters and the ceiling mounting height is no more than 3 meters.
6. There should not be shelter (screen, furniture, large bonsai) within the range of detection.

## DIP Switch Function

1. DIP switch 1-2 set 4 levels of delayed light off time: 10s, 30s, 60s, 180s.



2. DIP switch 3 set daylight detection on or off.



Turn on daylight detection: the light will be turned on only when the ambient light is less than the daylight sensing threshold.

Turn off daylight detection: turns on the light immediately when it senses human movement, making no distinction between day or night states.

The daylight sensing threshold is fixed at 30 lux by default.

## SET Button Function

**Short press the SET button:** Sequentially switch 5 levels of light brightness (100%, 75%, 50%, 25%, 10%).

**Long press the SET button (10s):** The indicator light blinks 3 times, restore the factory settings, the induction light off mode is light off when people leave, the light brightness is 100%, all remote control match is deleted, and the linkage induction function is canceled.

**Long press the SET button (15s):** Indicator light blinks 4 times, the induction light off mode is set to light maintains low brightness when people leave.

### Note:

Light off when people leave mode: light off at the end of the delay time.

Light maintains low brightness when people leave mode: after the end of the delay time, the light does not go out, keep 10% brightness.

The brightness adjustment range automatically changes to 25%-100% when light maintains low brightness when people leave.

## Match Remote Control(Optional)

The PIR motion sensor switch can be matched with RF remote to realize both induction control and remote control at the same time.

End user can choose the suitable match/delete ways. Two options are offered for selection:

### Use sensor switch's SET button

Match:

Long press SET button for 5s, the LED indicator blinks twice.

Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote.

Delete:

Long press SET button for 10s to delete remote match, and restore the factory settings, the LED indicator blinks 3 times.

### Use Power Restart

Match:

Sensor switch power off, then power on, repeat again.

Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 3 times on the remote. The light blinks 3 times means match is successful.

Delete:

Sensor switch power off, then power on, repeat again.

Immediately short press on/off key (single zone remote) or zone key (multiple zone remote) 5 times on the remote. The light blinks 5 times means all matched remotes were deleted.

## One Sensor Switch Work as RF Remote

The PIR motion sensor switch can be matched with one or multiple RF LED controller or RF dimmable LED driver, including single color, dual color, RGB, RGBW, RGB+CCT light type, turn on or turn off the other light by motion detection.

### Use the controller's Match key

Match:

Short press match key of the controller, immediately short press the SET button of sensor switch, The LED indicator fast flash a few times means match is successful.

Delete:

Press and hold match key for 5s to delete all match, The LED indicator fast flash a few times means all matched remotes were deleted.

### Use Power Restart

Match:

Switch off the power of the controller, then switch on power, repeat again. Immediately short press the SET button of sensor switch 3 times quickly. The light blinks 3 times means match is successful.

Delete:

Switch off the power of the controller, then switch on power, repeat again. Immediately short press the SET button of sensor switch 5 times quickly. The light blinks 5 times means all matched remotes were deleted.

## Multiple Sensor Switch Linkage Induction

Multiple sensor switch in the same area (mutual distance <30 meters) can be synchronized with RF 2.4G signals to turn on and off the lights. Two linkage induction modes are offered, please select the appropriate linkage induction mode according to the actual application.

### Linkage induction mode 1:

When human movement is sensed, all lights are turned on at the same time with the same brightness. At the end of the delay time, all lights turn off at the same time (or remain at 10% low brightness).

### Linkage induction mode 2:

When human movement is sensed, all the lights are turned on at the same time, the light is brightest in the sensing area, and the other non-sensing areas lights brightness is automatically dimming down (20% brightness), that is, the brightest areas of the lights automatically follow the movement of the human body, the human body out of the sensing area of the lights delayed by 5s to darken. At the end of the sensing delay, all lights turn off at the same time (or keep at 10% low brightness).

### Linkage induction mode setting

After multiple sensor switch are powered off and on simultaneously for 5 consecutive times quickly, they enter linkage induction setup state, and the LED indicator flashes rapidly.

Within 10s, short press the SET button of any one of the sensor switch 3 times quickly, the output LED of all sensor switch flash 2 times, the linkage induction mode 1 is set successfully.

Within 10s, short press the SET button of any one of the sensor switch 5 times quickly, the output LED of all sensor switch flash 4 times, the linkage induction mode 2 is set successfully.

### Note:

1. When set to linkage induction mode, the matched RF remote of all sensor switch are cleared, that is, RF remote control is no longer supported.
2. When set to linkage induction mode, the induction light off mode of all sensor switch will be automatically set to the same as the sensor switch with the SET button pressed. Please select one of the two induction light off mode before set the linkage induction mode.
3. Under the linkage induction mode state, when press the SET button of any one of the sensor switch to set the brightness, the brightness of all sensor switch will change at the same time, and ignore the human body sensing signal within 5s.
4. Under the linkage induction mode 2 state, if you short press the SET button to set the brightness to 10%, the brightness of the lights in other non-sensing area will also change to 10% brightness, that is, it will work as linkage induction mode 1.
5. If a sensor switch needs to be exited from the linkage induction mode, long press the SET button for 10 seconds to restore the factory settings.

## Application Scenario

PIR motion sensing switch is suitable for staircase, corridors, bedroom, living room, closet, aisle and other light sensor switch control.

