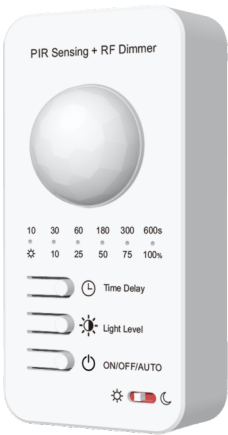


PIR Motion Sensor Dimming Controller

- PIR motion sensor dimming controller with daylight detection.
- 3 button operation, 6 indicator lights.
- 3 work modes.
- 5 level dimmer.
- 6 level timer.
- Two light off modes are available, the light goes out when people leave or the light maintains low brightness when people leave.
- Optional RF 2.4G single-zone or multi-zone dimming remote control.
- Work as RF remote, output RF 2.4G signal, matched with RF LED controller or RF dimmable LED driver optional.
- 3M tape installation, easy and convenient.
- Suitable for kitchen, cabinets, stairs, bedrooms, closets, living rooms, aisles and so on.

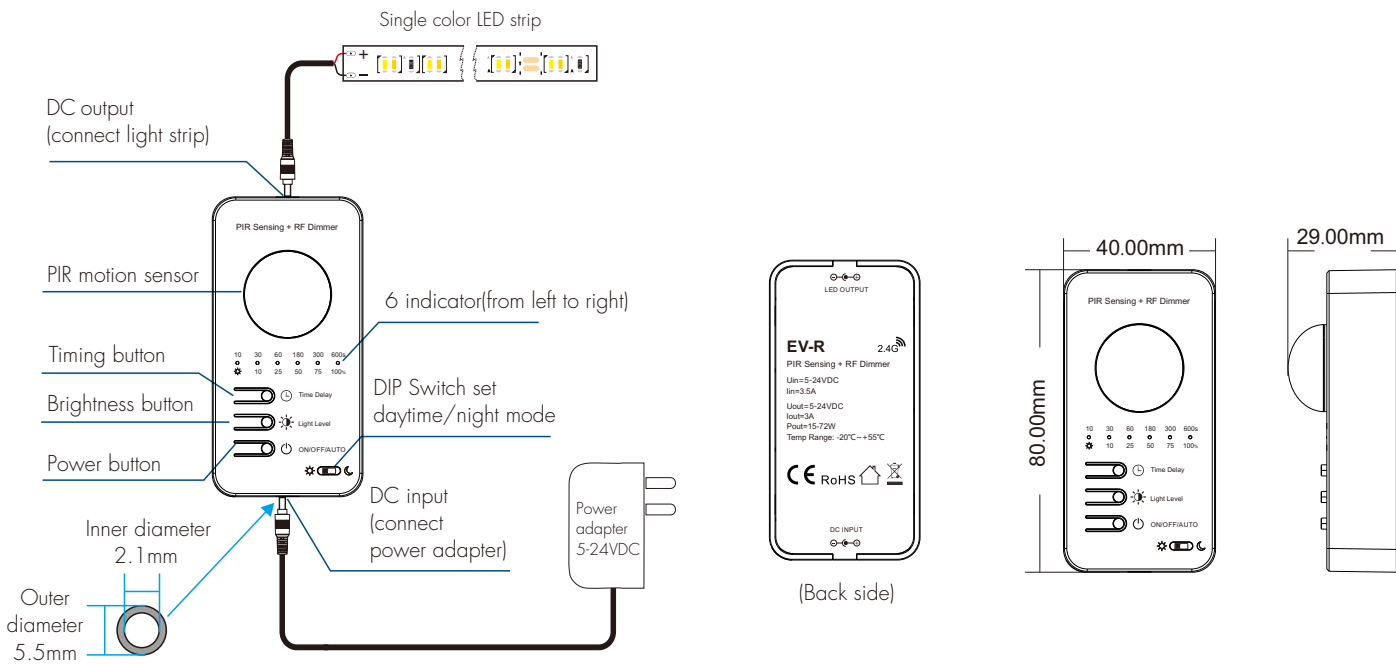


CE RoHS emc RED

Technical Parameters

| Input and Output | | Sensor data | | Safety and EMC | |
|-------------------------|---------------------------|--------------------|-------------------------|-------------------------|---|
| Input voltage | 5-24VDC | Sensitivity angle | 120° | EMC standard (EMC) | ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4 |
| Output voltage | 5-24VDC | Sensing range | 2-7m | | |
| Input current | 3.5A | Dimming data | | Safety standard | EN 61347-1:2015+A1:2021 EN 61347-2-13:2014+A1:2017 |
| Output current | 3A | Input signal | PIR sensor + RF 2.4GHz | | |
| Output power | 15-72W | Control distance | 30m(Barrier-free space) | Radio Equipment(RED) | ETSI EN 300 328 V2.2.2 |
| Warranty and Protection | | Dimming gray scale | 256 levels | Certification | CE,EMC,RED |
| Warranty | 5 years | Dimming range | 10 - 100% | Environment | |
| Protection | Over-heat , Short circuit | Package | | Operation temperature | Ta: -20℃ ~ +55℃ |
| | | Size | l90 x W48 x H40mm | Case temperature (Max.) | Tc: +85℃ |
| | | Gross weight | 0.048kg | IP rating | IP20 |

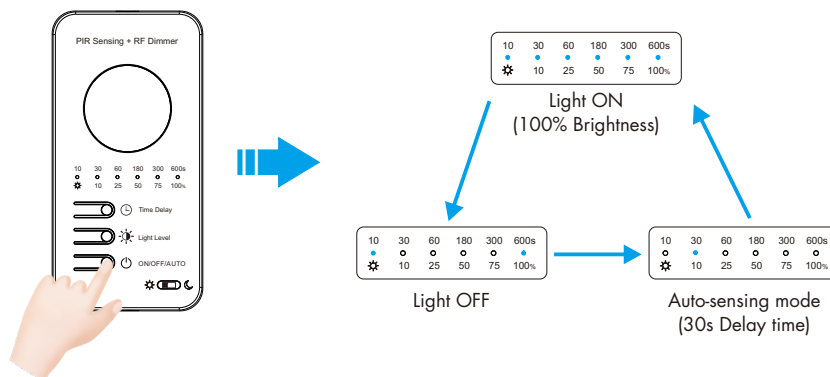
Mechanical Structures and Installations



Button Operation

1. Three working modes

Short press the power button to switch 3 working modes sequentially: light on, light off, auto-sensing mode.



Light ON mode

In light on mode, the LED strip is always on.

In light on mode, adjust the light brightness (10-100%) through the brightness button.

Short press the brightness button to switch 5 levels of brightness:

10% (Indicator 1-2 on), 25% (Indicator 1-3 on), 50% (Indicator 1-4 on), 75% (Indicator 1-5 on), 100% (Indicator 1-6 on).

Long press the brightness button to increase or decrease the brightness continuously, each time you release and long press again, the brightness changes in the opposite direction.

The light on mode is applied in the kitchen and other places where long time lighting is needed, it can be used with RF remote control.

If you short press the time delay button in the light-on mode, it will automatically switch to auto-sensing mode.

Light OFF mode

In light off mode, the LED strip is off, and Indicator 1 and Indicator 6 are on.

Auto-sensing mode

In auto-sensing mode, turn on the light when the PIR sensing probe detects human movement, and the light turn off or maintains low brightness with automatic delay after the person leaves.

In auto-sensing mode, set the sensing delay off time through time delay button (10-600 seconds),

and adjust the light brightness through brightness button (10-100%).

Short press the time delay button to switch 6 levels of delay time: 10% (Indicator 1-2 on), 25% (Indicator 1-3 on), 50% (Indicator 1-4 on), 75% (Indicator 1-5 on), 100% (Indicator 1-6 on).

Short press the brightness button to switch 5 levels of brightness:

10% (Indicator 1-2 blinks once), 25% (Indicator 1-3 blinks once), 50% (Indicator 1-4 blinks once), 75% (Indicator 1-5 blinks once), 100% (Indicator 1-6 blinks once).

Two light off modes are available, light off when people leave or light maintains low brightness (10%) when people leave, factory default light off when people leave.

In auto-sensing mode, long press brightness button and delay button at the same time for 2 seconds to switch two light off modes.

When indicator 1-2 blinks 3 times, set as light maintains low brightness (10%) when people leave. that is after the end of the sensing delay, the light does not go out.

When indicator 1 blinks 3 times, set as light off when people leave.

Auto-sensing mode is used in staircases, corridors, cupboards, bedrooms and other places where light need to be turned on by sensing.

Note: (1) The brightness adjustment range automatically changes to 25%-100% when light maintains low brightness when people leave.

(2) When turning on auto-sensing mode, it is recommended to turn on daylight detection at the same time.

2. Daylight detection

DIP switch set daytime or night mode.

☼ ☐ ☾ Daytime mode with daylight sensing turned off

☼ ☐ ☾ Night mode with daylight sensing turned on

In daytime mode, daylight sensing is turned off and infrared motion sensing is used 24 hours a day.

In night mode, the daylight sensing function is enabled,

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

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

3. Setting the PIR sensitivity

Long press the time delay button and power button at the same time for more than 2 seconds to set the PIR sensing sensitivity:

Long press for 2 seconds, set to high sensitivity (sensing distance 4-7 meters), all indicator blinks 1 time;

Long press for 5 seconds, set to medium sensitivity (sensing distance 3-6 meters), all indicator blinks 2 times;

Long press for 10 seconds, set to low sensitivity (sensing distance 2-5 meters), all indicator blinks 3 times.

4. Setting the light off fade time

The light on fade time is fixed 1 second, the light off fade time can be set 1, 2, 3 seconds.

In the light off mode, long press the time delay button for 2 seconds to switch the three light off fade time in sequence:

1 second light off fade time, indicator 1 blinks once;

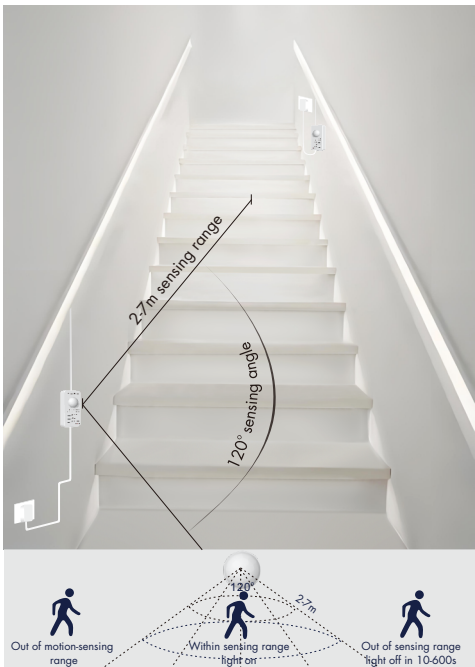
2 second light off fade time, indicator 1-2 blinks once;

3 second light off fade time, indicator 1-3 blinks once.

5. Restore factory settings

Long press the power button and brightness button at the same time for 10 seconds to restore the factory settings, all the indicator lights flash 2 times.
Factory default parameters: auto-sensing mode, PIR sensing high sensitivity, 100% brightness, sensing delay off time 30 seconds, light off fade time 1 second.

Stair Light Applications



(Auto sensing mode installation diagram, for reference only)

The stair light application requires a set of sensor dimming controller on each side of the stairs, both up and down.
This will allow you to illuminate the stairs as you go up or down.
WARNING: Two sensor dimming controller must not be connected together to control the same LED strip.

Match Remote Control (Optional)

The PIR motion sensor dimming controller EV-R can be equipped with an optional RF remote to realize both sensor control and remote control at the same time. When set to auto-sensing mode by the power button, the light can also be switched on/off or the brightness can be adjusted by the remote control, and the sensor dimming controller maintains the auto-sensing mode unchanged.

Match:
Long press the Power button and Brightness button at the same time for more than 2s, all LED indicator flash once means it enters the remote control match state.
Immediately press on/off key (single zone remote) or zone key (multiple zone remote) on the remote.
all LED indicator flash 3 times means match is successful.

Delete:
Long press the Power button and Brightness button for 5s to delete all match, all LED indicator flash 5 times, means all matched remotes were deleted.

Work as RF Remote

The PIR motion sensor dimming controller EV-R 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. End user can choose the suitable match/delete ways. Two options are offered for selection:

Use the controller’s Match key

Match:
Short press the match key of the controller, immediately press the power button of EV-R.

Delete:
Press and hold the match key of the controller for 5s to delete all match, The light blinks 5 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 power button of EV-R 3 times. 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 power button of EV-R 5 times. The light blinks 5 times means all matched remotes were deleted.

Notice for installation of PIR sensor

- 1. If the sensor is exposed to direct sunlight, interference signal will be introduced.
- 2. The sensor should be installed in a dry environment and keep away from windows, air conditioner and fans.
- 3. 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.
- 4. There should not be shelter(screen, furniture, large bonsai) within the range of detection.