

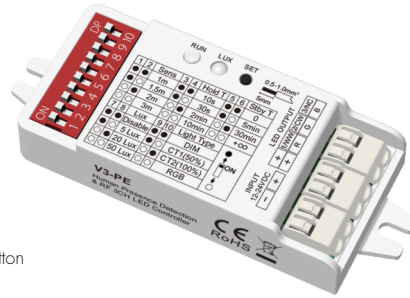
V3-PE

Sensor

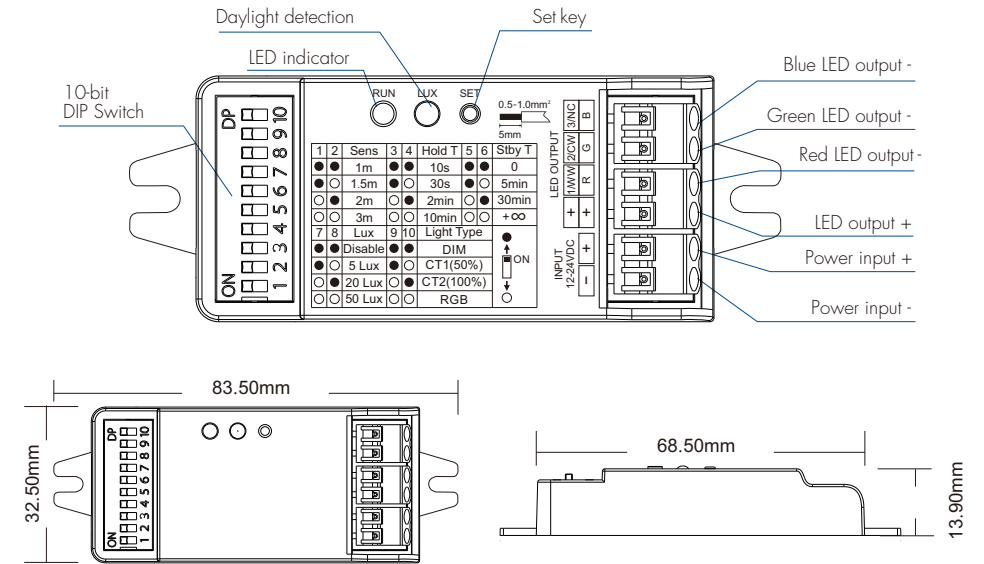
Microwave Human Presence Sensor + RF Dimming 3 Channel Constant Voltage LED Controller

Features

- RF dimming 3 channel constant voltage LED controller, built-in 24GHz human presence detection radar module and daylight sensor.
- Determine the presence of the human body by detecting the accumulation of tiny movements such as human breathing.
- Sensing distance, hold time, standby time, daylight detection threshold, light type can be set via 10-bit DIP switch.
- Support 3 induction control modes: on/off, two-stage dimming, three-stage dimming.
- Support 3 kinds of light sensor switch control: single color, color temperature, RGB color light.
- Light brightness, color temperature or color can be adjusted by pressing a button or remote control.
- Match with RF 2.4G single zone or multiple zone DIM, CCT or RGB remote control optional.
- Can be used as a remote control to output RF 2.4G signal to inductively remote control other RF controllers or RF dimming power supplies.
- Reverse / Over-heat protection.
- Suitable for staircase, corridors, bedroom, living room, closet, aisle and other light sensor switch control.



Mechanical Structures and Installations



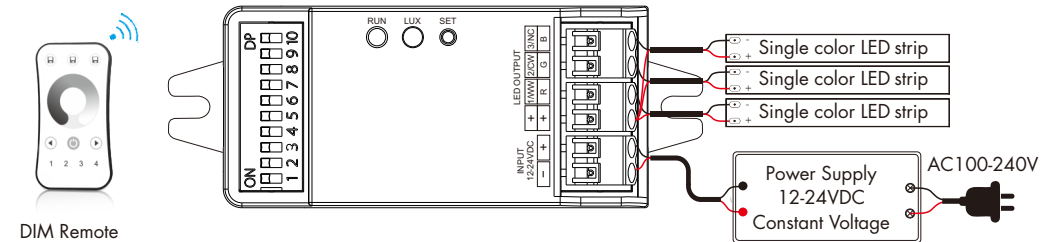
CE RoHS

Technical Parameters

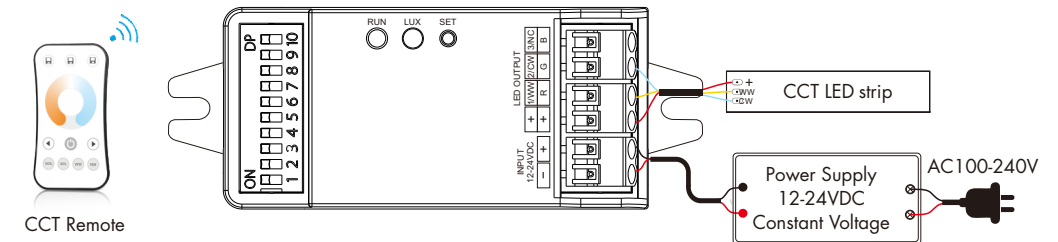
Input and Output		Sensor data		Safety and EMC	
Input voltage	12-24VDC	Input signal	Microwave, RF 2.4GHz	EMC standard	EN IEC 55015/EN IEC 61547 ETSI EN 301 489-1/-3
Output current	3CH, 2A/CH	Microwave frequency	24GHz	Safety standard	EN 61347-1/-2
Output power	3x(24-48)W	Detection range(Max.)	Max.(DxH) 6 x 3m	Radio Equipment	ETSI EN 300 440
Output type	Constant voltage	Detection angle	120°	Certification	CE RoHS
Dimming data		Installation height		Warranty and Protection	
Control distance	30m(Barrier-free space)	Installation height	Max. 3m	Warranty	5 years
Environment		Operation temperature		Protection	
Dimming gray scale	4096 (2^12) levels	Operation temperature	Ta: -20°C ~ +55°C	Protection	Reverse, Over-heat
Dimming range	0-100%	Case temperature (Max.)	Tc: +85°C	Package	
Dimming curve	Logarithmic	IP rating	IP20	Size	L90 xW42 xH24mm
PWM Frequency	2000Hz			Gross weight	0.039kg

Wiring Diagram

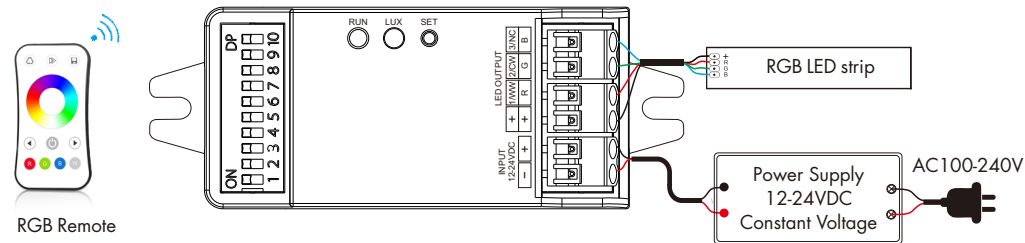
- V3-PE connect to single color LED strip



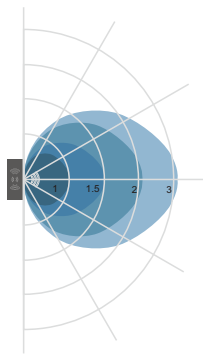
- V3-PE connect to CCT LED strip



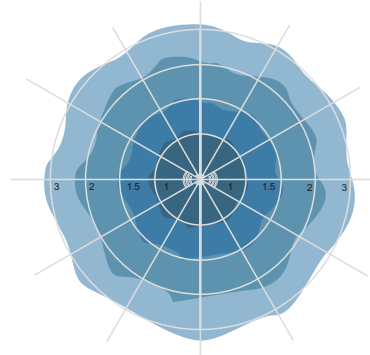
- V3-PE connect to RGB LED strip



Detection Pattern



Wall mounting pattern(Unit:m)
Suggested installation height: 1.1-1.8m



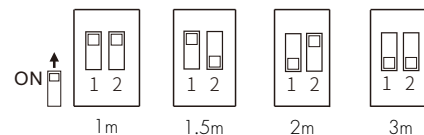
Ceiling mounting pattern(Unit:m)
Suggested installation height: 2.5-3m

DIP Switch Setting

Sensing distance:

Set the sensing range size.

DIP switch 1-2 set 4 levels of sensing distance: 1m, 1.5m, 2m, 3m.

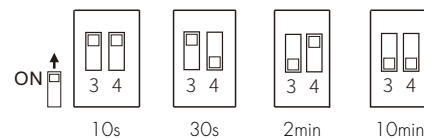


Hold time:

Turn on the light after the human body existence is detected, and keep the light on 100% of the time.

DIP switch 3-4 set 4 levels of hold time: 10s, 30s, 2min, 10min.

Note: The factory default hold time brightness is 100%, which can be changed by SET key or RF remote control.



Standby time:

After the human body is detected to leave, the light from 100% to 20% brightness, and maintain 20% brightness time.

DIP switch 5-6 set 4 levels of standby time: 0, 5min, 30min, +∞(always standby).

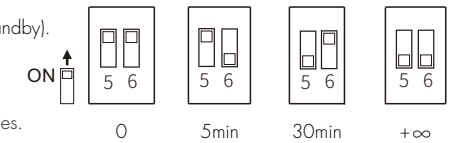
When the standby time is set to 0, the light is automatically turned off after the hold time reaches, and the switch control is realized.

When the standby time is set to 5 minutes or 30 minutes, the light automatically decreases to 20% brightness after the hold time reaches.

And automatically turn off the light after the standby time, to achieve three-stage dimming control.

When the standby time is set to +∞, the light automatically decreases to 20% brightness after the hold time reaches, and the light does not turn off, achieving two-stage dimming control.

Note: The standby brightness is fixed at 20% of the hold time brightness and changes with the hold time brightness.



Daylight detection threshold:

By setting different light thresholds,

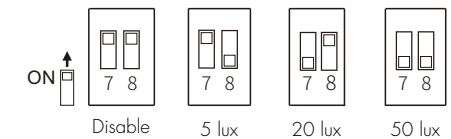
the user can choose under what conditions the sensor will work or not work.

DIP switch 7-8 set 4 levels of daylight detection threshold:

Disable: the sensor work day and night.

5 lux: the sensor only work in the dark.

20 lux or 50 lux: the sensor only work in the dusk or dark.



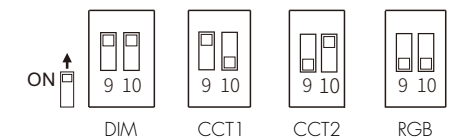
Light type:

Select according to the connected low voltage LED strip color.

DIP switch 9-10 set 4 light types: DIM, CCT1, CCT2, RGB.

CCT1: NW = 50%WW + 50%CW

CCT2: NW = 100%WW + 100%CW



SET Key Function

Adjust the brightness, color temperature or color by SET key. Different lighting types, the SET key function is different.

For CCT or RGB light types, the SET key only changes the light color,

when the application scene needs to adjust the brightness, please use the RF remote control.

(1) DIM light type

Short press: Switch 5 levels brightness (10%,25%,50%,75%,100%) in sequence.

(2) CCT light type (CCT1 or CCT2)

Short press: Switch 5 levels color temperature (warm white-positive white-cool white sequence) in sequence.

(3) RGB light type

Short press: Switch 7 kinds static colors (red, yellow, green, cyan, blue, purple, white) and 2 kinds dynamic effects (7 color jump, 6 color smooth) in sequence.

Sensor Controller Match RF Remote Control (optional)

Sensor controller can optionally match with RF remote control to realize human motion sensor control and RF remote control at the same time.
Please select the RF remote control for the corresponding light type according to the light type settings.
There are two ways to match/delete:

Use sensor controller's SET key

Match:
Long press SET key for 2s and then release it.
The LED indicator will blink twice and enter match status.
Immediately press on/off key (single zone remote)
or zone key (multiple zone remote) of the remote.

Delete:
Press and hold SET key for 5s to delete all match
and factory reset, the LED indicator blinks 3 times.

Use Power Restart (standby)

Match:
Switch off the power, then switch on power, 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:
Switch off the power, then switch on power, 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.

Sensor Controller Used as RF Remote Control

The sensor controller can be used as RF remote control to match one or multiple RF LED controllers/RF dimming LED drivers (including single-color, dual-color, RGB LED controllers or drivers).
Turn other light fixtures on/off via human motion sensor.

Use sensor controller's SET key

Match:
Short press controller's match key.
Immediately press sensor controller's SET key.
The LED indicator blinks fast means match is successful.

Delete:
Press and hold controller's match key for 5s
to delete all match and factory reset,
The LED indicator blinks fast means all matched remotes
were deleted.

Use Power Restart (standby)

Match:
Switch off the power of the RF LED controller,
then switch on power of the RF LED controller, repeat again.
Immediately short press sensor controller's set key 3 times.
The light blinks 3 times means match is successful.

Delete:
Switch off the power of the RF LED controller,
then switch on power of the RF LED controller, repeat again.
Immediately short press sensor controller's set key 5 times.
The light blinks 5 times means all matched remotes were deleted.

Precaution

1. The sensor is designed for indoor use only.
2. The sensor should be installed by a professional electrician. When installing the wiring, disconnect the power supply.
3. The distance between two sensors should be at least 3m to avoid any interference.
4. Ensure the sensor is not near or obstructed by high density materials such as metal, glass, concrete walls, etc.
These materials can reduce or block microwave signals and cause false triggering.
5. Sensors mounted inside plastic and glass lampshades are less sensitive.
For every 3mm increase in thickness, the sensitivity is reduced by 20%.
6. Light sensing thresholds are tested in an environment with adequate sunlight, without shadows and diffuse reflection of ambient light.
Ambient light intensity may vary depending on the environment, weather, time of day, time delay, and season.