# EH-R(WT)

# WiFi PIR Motion Sensing Switch

- Ceiling-mounted PIR motion sensor switch, built-in daylight sensor, real-time detection of human motion and ambient light level in the sensing area.
- Output 1 channel 0/1-10V signal, connect with 0/1-10V dimmable driver.
- High voltage AC input, High voltage AC relay output with zero-cross detection.
- Tuya smart APP cloud control, smart linkage to other Tuya devices.
- Set the sensor sensitivity, hold time, stand-by time and light sensing threshold via APP.
- $\bullet$  Hold time, stand-by time and light sensor threshold can also be set with the 3 knobs.
- Work as RF remote, output RF 2.4G signal, matched with RF LED controller or RF dimmable LED driver optional.
- Suitable for office, meeting room, classroom and other indoor space light sensor control.

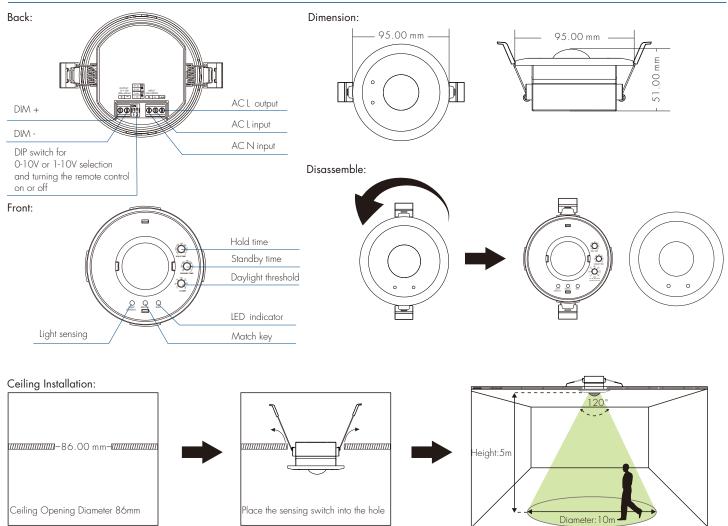


# CE RoHS

#### **Technical Parameters**

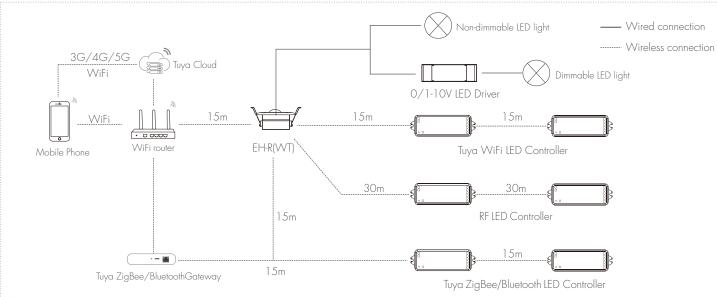
Input voltage	100-240VAC	Hold time	10s/30s/90s/3min/10min/30min/+∞
Output signal	0/1-10V (Max.30mA), RF 2.4GHz	Stand-by time	Os/30s/90s/3min/10min/30min/+∞
Output current	Max 4A (AC)	Daylight threshold	10lux/30lux/50lux/100lux/150lux/200lux/Disable(off)
Power consumption	<1.8W(Operation)	Operation temperation	ure Ta: -20°C ~ +50°C
Detection zone	Max.(DxH) 10 x 5m	IP rating	IP20
Mounting height	5m Max	Warranty	5 years
Detection angle	120°		

# Mechanical Structures and Installations





### System Wiring

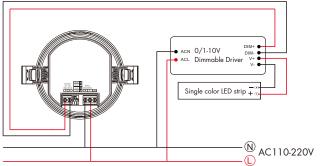


Note:

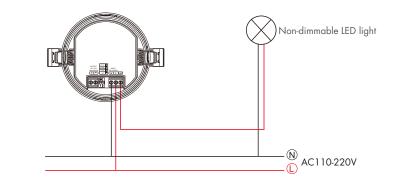
- 1. The above distance is measured in spacious (no obstacle) environment, Please refer to the actual test distance before installation.
- 2. Please check if the WiFi router net in 2.4G band, the 5G band is not available, and do not hide your router network.
- 3. Please keep the distance between EH-R(WT) devices and router close, and check the WiFi signals.
- 4. WiFi signal strength detection: open the main interface of social security, click 🗹 enter the device interface, click "check device network" for testing.

# Wiring Diagram

• Used as dimmer or switch, connect with 0/1-10V dimming driver (no use AC OUT).







# **Application Notice**

- 1. The sensor is designed for indoor use only.
- The raining or wind blowing may trigger the microwave sensor even if without human motion when outdoor use.
- 2. please turn off the power before installing.
- 3. Ensure that the lens section is mounted exposed and unobstructed.
- 4. The distance between any two sensors should be at least 3m to avoid interference each other.
- 5. If the sensor is exposed to direct sunlight, interference signal will be introduced.
- 6. Make sure that the sensor stays away from heat source, such as countertops,
- kitchen appliances which generatehot steam, walls and windows in direct sunlight, air conditioner, heating, refrigerators, stoves and so on.
- 7. There should not be shelter(screen, furniture, large bonsai) within the range of detection.
- 8. Make sure there are no fans, DC motor, or other vibrating objects in installation area. The movement will trigger sensor as well.

#### Work as RF Remote (two match ways)

EH-R(VVT) can be matched with one or multiple RF LED controller or RF dimmable LED driver, RF ON ON Including single color, dual color, RGB, RGBW, RGB+CCT controller or driver, turn on or turn off light by motion detection.

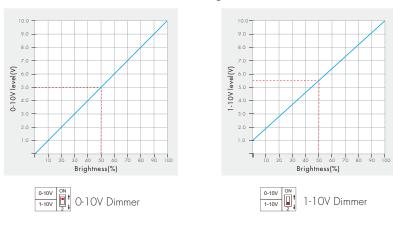
Before matching, User need to turn on the RF remote control function by DIP switch 1. can choose the suitable match/delete ways. Two options are offered for sele

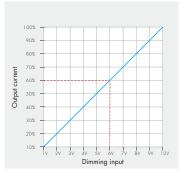
End user can choose the suitable match/ delete ways. Two options are offered for selection.				
Use the controller's Match key	Use Power Restart			
Match: Short press the match key of the controller, immediately press the match key of EH-R(VVT).	Match: Switch off the power of the controller, then switch on power, repeat again. Immediately short press the match key of EH-R(VVT) 3 times. The light blinks 3 times means match is successful.			
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.	Delete: Switch off the power of the controller, then switch on power, repeat again. Immediately short press the match key of EH-R(WT) 5 times. The light blinks 5 times means all matched remotes were deleted.			

The match key of EH-R(WT) supports manual on/off function, i.e., switching relay output on/off, turning 0/1-10V signal output on/off, and sending RF on/off commands.

# 0-10V or 1-10V Dimming Setting

Select 0-10V dimmer or 1-10V dimmer according to dimmable LED driver(DIP switch 2).





#### Note:

When the output channel is off, the output dimming signal is OV or 1V. Please read the dimming section of the dimming driver manual. If the dimming characteristic curve are as shown, you must select 1-10V dimmer and use AC OUT function, otherwise you can't turn off the lights.

# Knob Function Instruction



#### , Hold time:

 $\Gamma_{s}^{\xi}$  Refers to the time period remains light on state after no motion detected.



# Stand-by time:

Refers to the time period remains light on

) and dim to 20% brightness state if no new motion is detected.

Jused as a switch, must be Os.

STANDBY TIME Used as a dimmer, must be longer than Os.

If the stand-by time is set to  $+\infty$ , the light stays on (20% brightness).



#### Daylight sensor:

The sensor can be set to only allow the lamp to illuminate

when below a defined ambient brightness threshold.

When set to off (Disable) mode, the daylight sensor will switch uux on the lamp when motion is detected regardless of ambient light level.

#### Note:

Set the hold time, stand-by time, and daylight sensor parameter values while the sensing switch is powered up. After setting the parameters, when the EH-R(WT) senses a motion, the parameter value works. When setting the above three parameter values via the knob, it will be automatically synchronised to the Tuya Smart APP.

# **Application Example**

#### • Application 1: Used as a dimmer



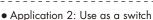
1. With sufficient ambient light, the sensor does not turn on the light.

#### Recommended knob setting:

Hold time: 90S Stand-by time: 3 min Daylight sensor: 50lux









1. With sufficient ambient light, the sensor does not turn on the light.

Recommended knob setting: Hold time: 90S Stand-by time: 0S







LUX



2. With insufficient ambient light,

when human motion is detected.

the sensor turns on the light

2. With insufficient ambient light, the sensor turns on the light when human motion is detected.

Daylight sensor: 50lux



3. After hold time, the light turns to 20% brightness, if no human motion detected.



Scene

Basement, night stairs, underground garage

Office workspace, conference room, kitcher

Hotel lobby, public library, operating theatre

Indoor corridors, bedrooms, warehouses

Gym, kitchen, office lounge area

Classrooms, shops, hospital corridors

4. After hold time, the light turns off if no human motion detected.



3. After elapse of stand-by time, the sensor turns off the light if no human motion detected.



Cloudy or dark environment

Slightly brighter environment

Bright environment

Brighter environment

Common low to medium illumination

Environment

Low light, outdoor shade or indoor low light

LUX value

10IUX

30LUX

50LUX

100LUX

150LUX

200LUX

# Tuya Smart APP Network Connection

#### • Download and open APP

Search for "Tuya Smart/Smart Life APP" in the app store, or scan the QR code on the right to download the APP. Register and login after installation.

#### • APP Pairing Network

Push twice Match key fastly, clear previous network connection, enter WiFi config mode, LED indicator flash fastly. If Tuya Smart APP network connection succeed, the RUN LED indicator will stop flash, and in Tuya Smart APP, you can find EH-R(WT) device.

When controlling the light with Tuya Smart/Smart Life APP, if the network connection is poor,

you can control the light with Bluetooth connection within the Bluetooth control range.

Power failure memory function: When the device is powered on again after power failure,

it will remember the hold time, stand-by time, and daylight sensor parameter values last set in Tuya Smart APP. Note: The light can't be directly controlled by Bluetooth without WiFi configuration.

PIR Se

Cds

#### • APP User Interface



# Main Interface

Motion Detection: Real-time detection of motion in the area. Real-time detection of ambient light levels.

#### Record:

The device linkage log can be accessed at any time, the time of movement and number of movements.

#### Smart linkage:

You can add LED controller or power linkage control that supports Tuya Smart APP.

# High

# Set interface





Smart Life

Tuya Smart

PIR sensitivity: 3 levels selectable: high sensitivity (for large space detection), medium sensitivity (for indoor general view), low sensitivity (for security scenes). 10S Keep time: off 7 levels selectable (10s, 30s, 90s, 180s, 600s, 1800s, off). 0.0 Cds: 7 levels selectable (10Lux, 30Lux, 50Lux, 100Lux, 150Lux, 200Lux, off). When the ambient light is less than the daylight sensing threshold, turn on the light. dp\_space\_time: 7 levels selectable(0s, 30s, 90s, 180s, 600s, 1800s, off). Payment service: When someone intrudes into the detection zone, the intrusion warning alert will notify you by SMS or phone call to notify you (purchase required).

# Smart Linkage Setting

Take EH-R(WT)+ WiFi LED controller as an example, set the mode to turn on the light when someone passes by. NO 24 D C ...... u e 121 b 🕫 🗰 0 R 12 D 7 00 All Devices 安臣 主い 29 B Select Euroction EH-R(WT) IR state RGB+CCT Keep time Launch Tap-to-Run Cds 305 ---dp\_spare\_tim Working vice status ch Record Change Arm Mode Smart When Alarm Triggered 😟 Set + 3. Add condition, select "When device status changes". 4. Select a device 5. Click "PIR state". 6. Select 1. Select Smart 2. Click '+'. Enter create scene interface. 'motion detector". 0212D70 02207070 00000000 0 2 1/1 D 7 00 14:07 🖸 All Devices 客厅 祖主 Canc Create Scene 彩光 Create Scene EH-R(WT) 🦂 RGB+CCT Time 0 White lig EH-R(WT) Ų. EH-R(W ON/OFF Change Arm Mode Then 0 0 Then I Single Devic RGB+CCT mart scene Validity Scope More Setting

10. Select the function:

switch(on).

mode(white light).

White light(set the brightness),

7. Add task.



8. Select to control single device.

9. Select the device you want to linkage control.

11. Complete the settings and click save.