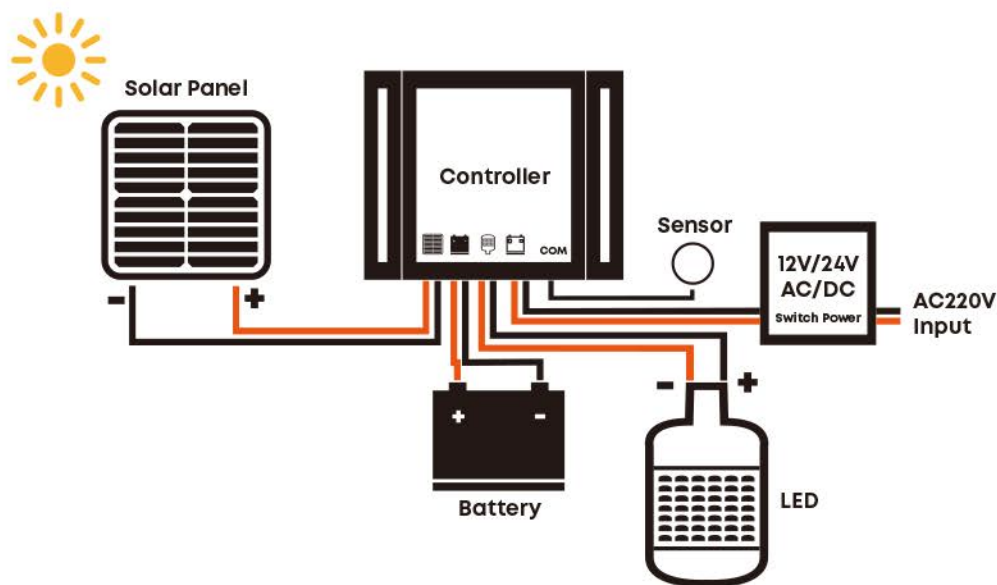


# SE Series Installation Guide

## Before Installation

This procedure is designed as an installation aid. Skilled tradespeople that are familiar with general construction and electrical installation techniques should perform the installation. Licensed electricians should provide electrical installation connections. Installations and connections should be done in accordance with all national and local codes and permits. In no way is this document intended to construe warranty or fitness of use of the products described, nor is it intended to provide safety instruction for those installing the product.

## - Working Way



The solar panel receives solar radiation energy and converts it into electricity, which is stored in the battery by the photovoltaic controller. At night, when the illumination gradually decreases to about 10LUX and the solar panel voltage is 5V, the charge and discharge controller detects this voltage value, and controls the battery to discharge for the LEDs to complete the process of daytime charging and evening discharge.

## - Packing List

- Instruction Guide \*1;
- LED Fixture \*1;
- Bracket \*1;

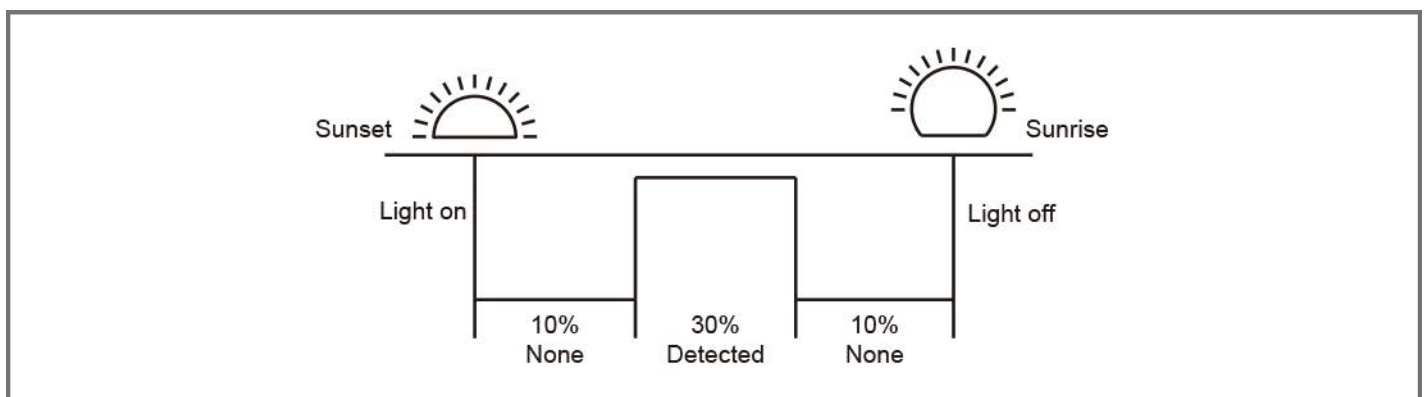
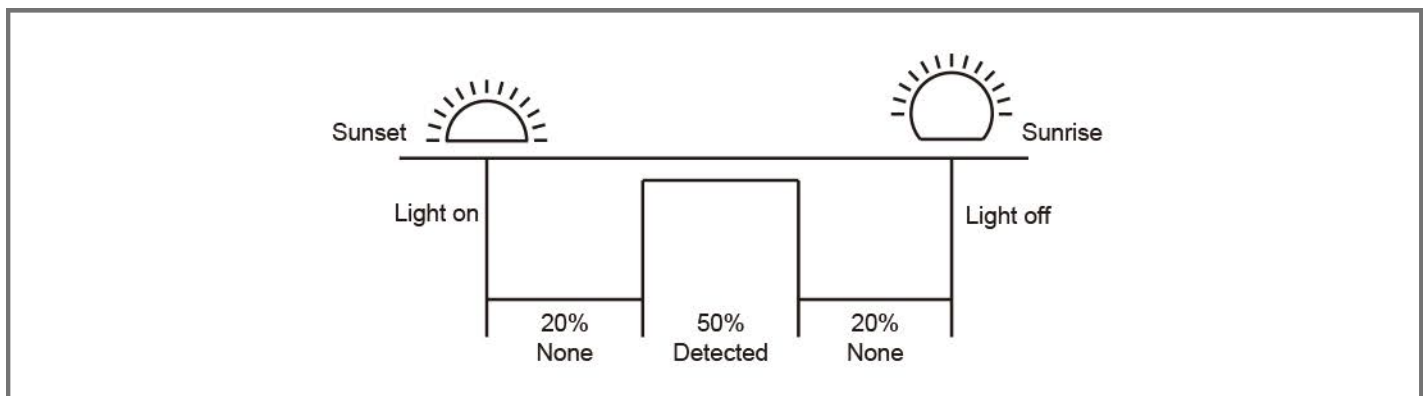
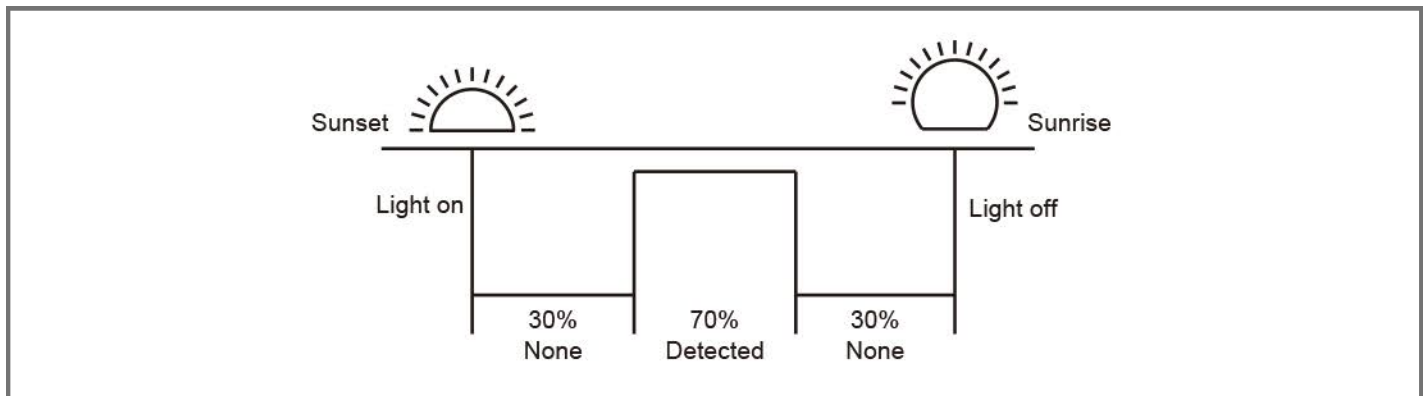
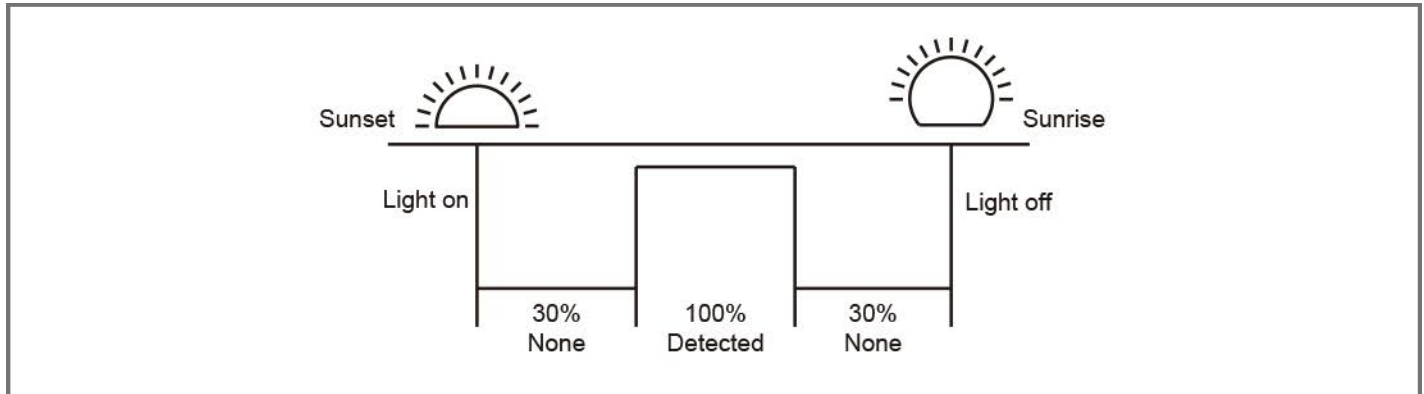
## - Test Before Installation

1. Open the package and check that there' s no damage on the package and the accessories are complete.
2. Open the power switch to test the charge and discharge function;

# SE Series Installation Guide

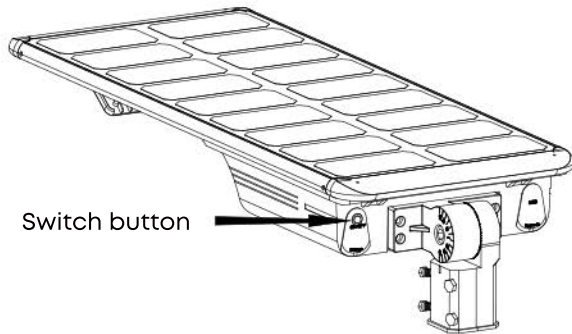
## - Operating Mode

- 1) 4H-Detected 100%, None 30%;
- 2) 3H-Detected 70%, None 30%;
- 3) 3H-Detected 50%, None 20%;
- 4) 4H-Detected 30%, None 10%;
- 5) Subject to specific order

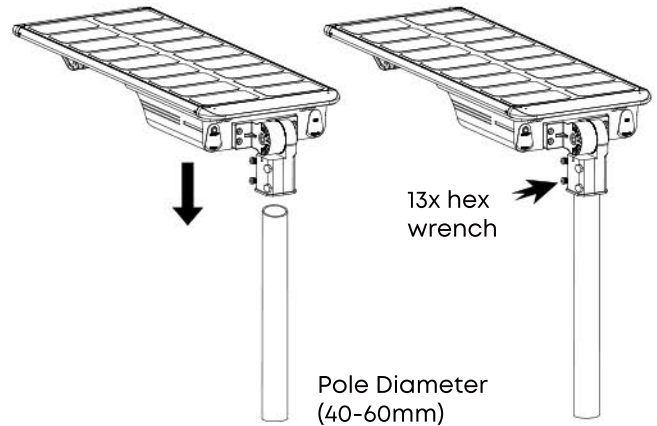


## - Installation Procedure TYEP-A Slipfitter

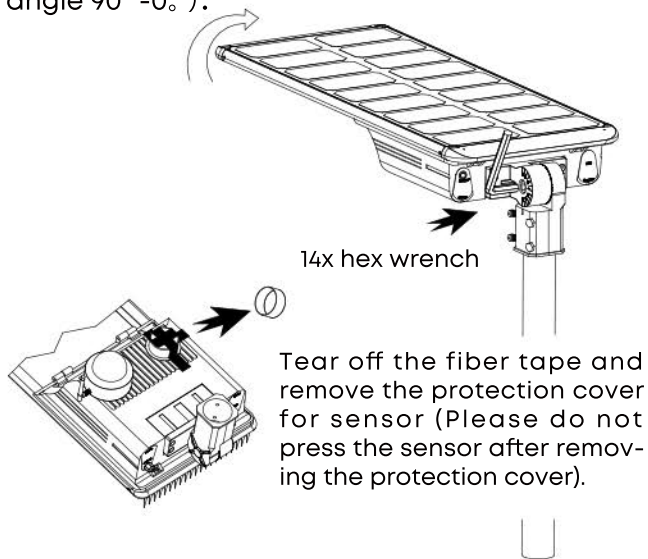
1. Open the package and check whether the appearance of lamps is in good condition, Click the switch button to test whether the lamp is working.



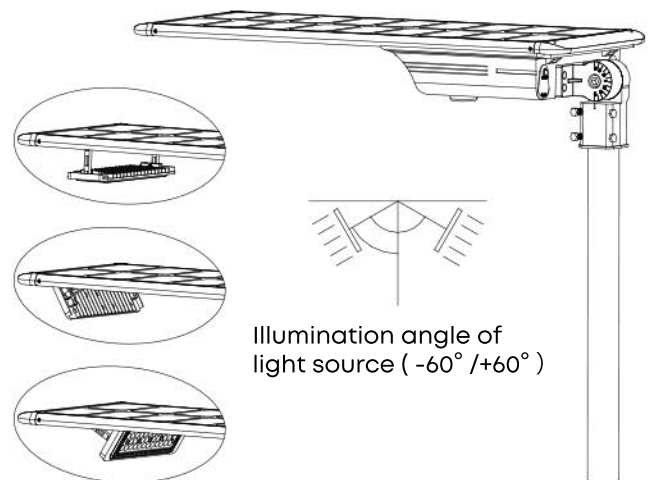
2. Put the fixture on the post top and tighten the screws (6\*Allen key)



3. Loosen the screws on the slipfitter, and adjust the solar panel to proper irradiation angle, then, tighten the screws (Adjustable angle  $90^{\circ} - 0^{\circ}$  ).



4. Adjust the LED modules toward the area need to illuminate and turn on the switch button.

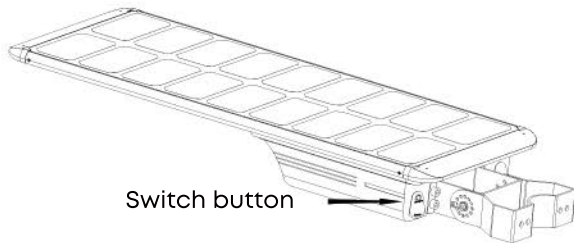


### Caution:

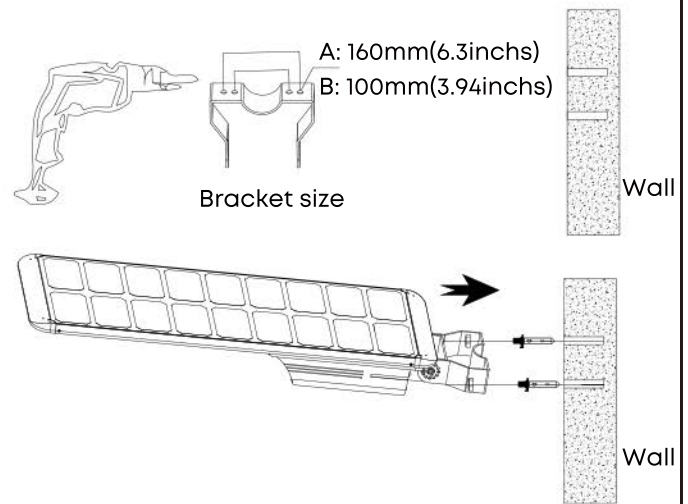
1. Turn the power off during installation. Do not connect or disconnect under load.
2. Caution risk of fire.
3. Please do not put this product into municipal waste, check the local regulations to deal with the electronic products.

## - Installation Procedure TYEP-B Wall Mount

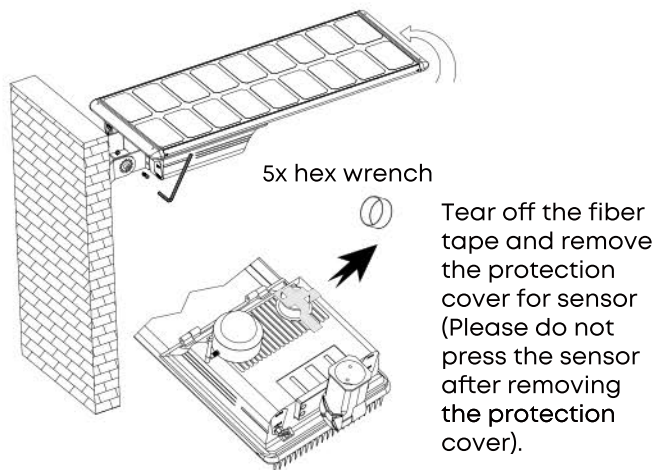
1. Open the package and check whether the appearance of the fixture is in good condition, Click the switch button to test whether the fixture is working.



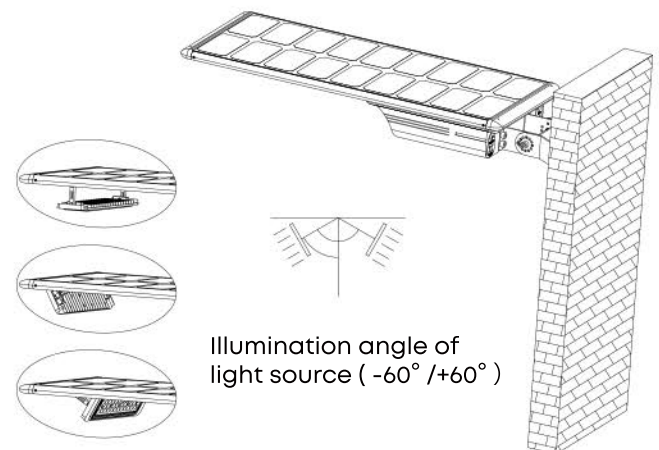
2. Drill holes in the wall and fix the metal expansion screws, fix the lamp on the expansion screw.



3. Loosen the screws on the LI-shape bracket, and adjust the solar panel to proper irradiation angle, then tighten the screws ( Adjustable angle- $90^{\circ}$  - $+90^{\circ}$  ).



4. Adjust the LED modules toward the area need to illuminate and turn on the switch button.

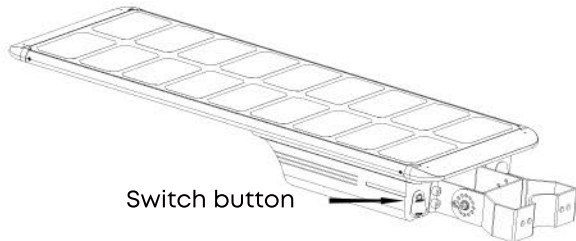


### Caution:

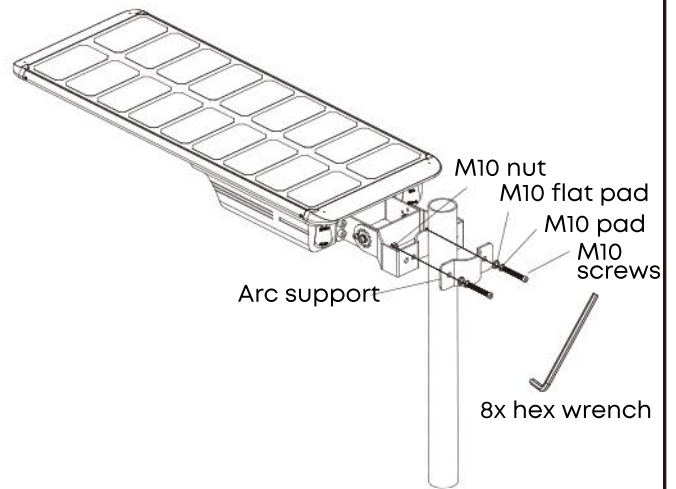
1. Turn the power off during installation. Do not connect or disconnect under load.
2. Caution risk of fire.
3. Please do not put this product into municipal waste, check the local regulations to deal with the electronic products.

## - Installation Procedure TYEP-C Round Pole Bracket

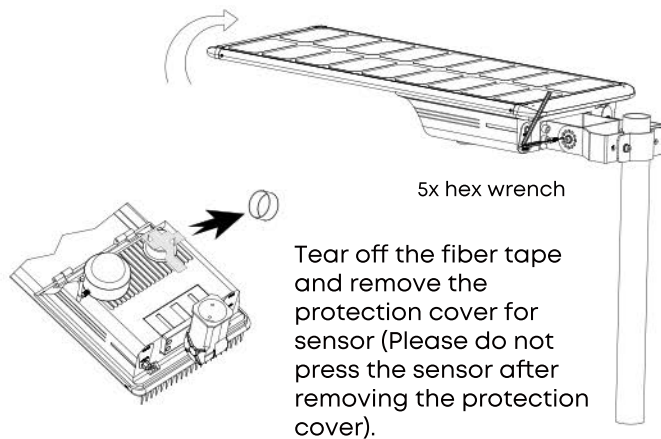
1. Open the package and check whether the appearance of the fixture is in good condition, Click the switch button to test whether the fixture is working.



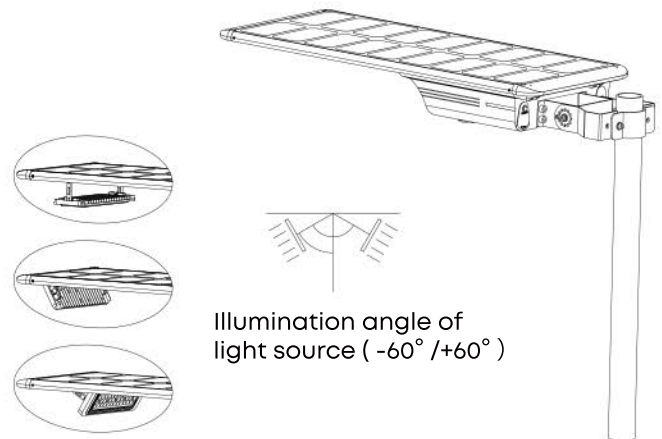
2. Fix the arc buckle and the lamp on the round lamp pole with screws, and lock the screws.



3. Loosen the screws on the U-shape bracket, and adjust the solar panel to proper irradiation angle, then tighten the screws ( Adjustable angle-90° -+90. ).



4. Adjust the LED modules toward the area need to illuminate and turn on the switch button.

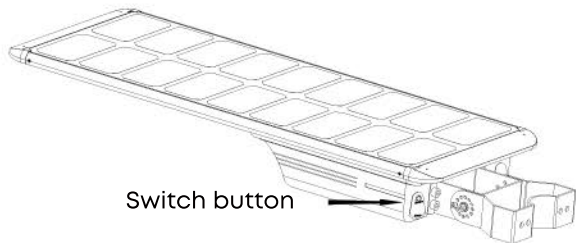


### Caution:

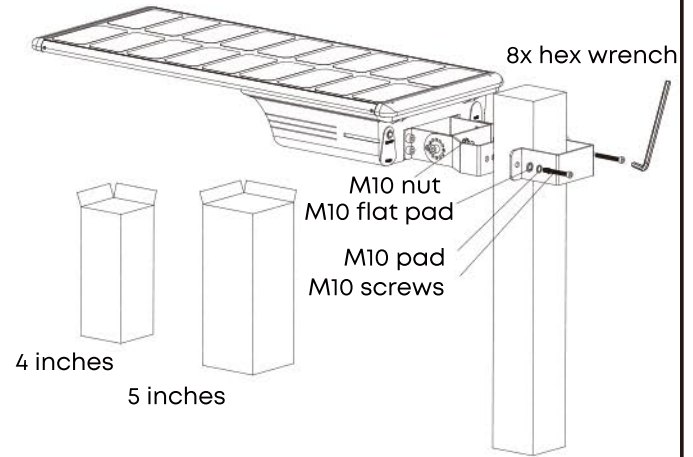
1. Turn the power off during installation. Do not connect or disconnect under load.
2. Caution risk of fire.
3. Please do not put this product into municipal waste, check the local regulations to deal with the electronic products.

## - Installation Procedure TYEP-D Square Pole Bracket

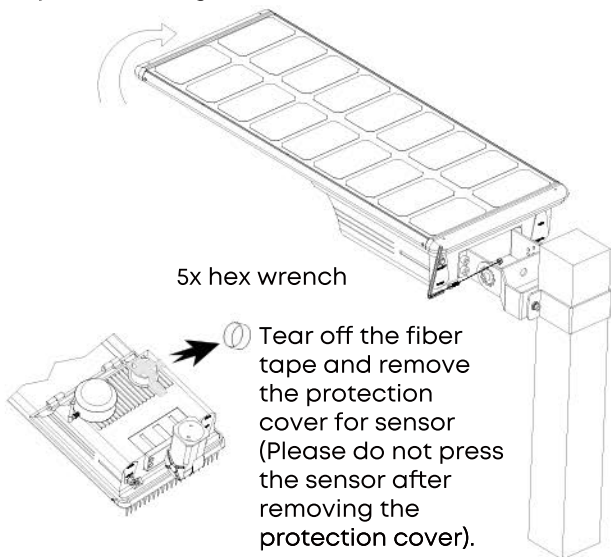
1. Open the package and check whether the appearance of the fixture is in good condition, Click the switch button to test whether the fixture is working.



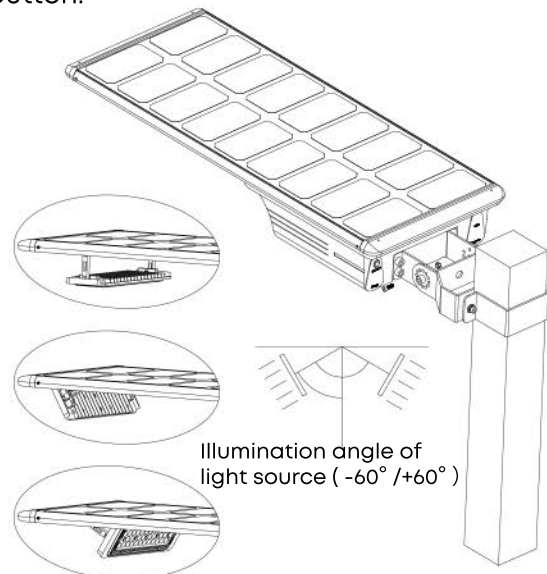
2. Fix the arc buckle and the lamp on the square lamp pole with screws, and lock the screws.



3. Loosen the screws on the U-shape bracket, and adjust the solar panel to proper irradiation angle, then tighten the screws ( Adjustable angle- $90^{\circ}$  - $+90^{\circ}$  ).



4. Adjust the LED modules toward the area need to illuminate and turn on the switch button.



### Caution:

1. Turn the power off during installation. Do not connect or disconnect under load.
2. Caution risk of fire.
3. Please do not put this product into municipal waste, check the local regulations to deal with the electronic products.

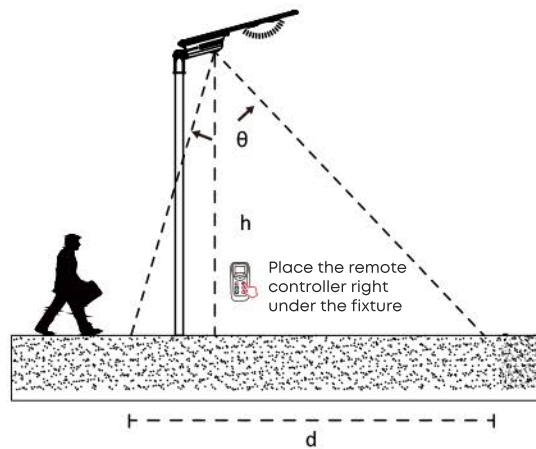
## - Indicator Status

Indicator	Status	Indicator Description
• Blue Light (Battery)	- Steady on - Off - Flash	- Battery works properly - Battery has no output voltage; - Battery is undervoltage;
• Red Light (Battery)	- Steady on - Off  - Flash - Slow flash	- Battery is fully charged; - Solar panel output voltage is lower than light control voltage (at night); - In charging; - During charging, start protection (flash once every 5 seconds) due to high or low temperature;
• Green Light (Load)	- Steady on - Off - Flash  - Slow flash	- Load is turned on; - Load is turned off; - Load output open circuited protection, short circuited protection, over current, over power protection; - During discharge, start protection due to high or low temperature (flash once every 5 seconds);
• Yellow Light (Sensor)	- Steady on	- Sense that someone is moving or objects are moving (the controller with the sensor has this light);
• Blue/Green/Red Light	- Keep turns	- BAT protection is on. The system is restarting the battery protection board. - The system cannot find the battery. There is no communication in the battery. It may be reverse connection, negative and positive poles are not properly connected, or there is something wrong with the battery.

Indicator	Status	Indicator Description	Remote Control System Status
• PV indicator	- Steady on - Off  - Double flash - Slow flash - Quick flash	- Solar panel voltage is higher than light control voltage; - Solar panel voltage is lower than light control voltage; - Fully charged; - In charging; - BMS protection or BAT overvoltage or Pv overvoltage; - Over temperature (ambient temperature) or power/current limited charging;	- Idle - Idle  - Fully charged - Charging - E-BMS Battery overvoltage  - PV panel overvoltage - Over temperature/Overcurrent
• BAT indicator	- Steady on - Off  - Quick flash	- Battery works properly; - Battery is not connected or lithium battery protection board over discharge protection; - Battery over-discharge;	- Idle -  - Over discharge
• LOAD indicator	- Steady on - Off - Slow flash - Quick flash	- Load is turned on; - Load is turned off; - Load is open circuited; - Load is short circuited;	- Dishcharging - Idle - Open circuit - Short circuit

# SE Series Installation Guide

## Detection distance



\*Remote control is optional

Inductive Type	$\theta$ (Angle)	h (Height of lamp rod)	d (Inductive width)
IR (Infrared)	60°	6-8m	6-10m
WB (Microwave)	65°	6-10m	7-10m

Remote control distance 5-8 meters, installation height and environment and other factors will affect the controller sensitivity, please refer to the actual field.

Note: Please do not place 2 or more lights within 12 meters at the same time while using the remote controller, receiving or sending may fail.

## Indicator status

Indicator Light	State of Indicator Light	Discription of Indicator Light	State of Remote Controller System
Red	Normally on	Normal system	Idle/discharge
	Slow flash	Charging	Charge
	Fast flash	System failure	Short circuit/open circuit/over-discharge/PV over-temperature/BV over-temperature/EBMS/over-temperature

## Remote control read state analysis

Remote control reading state	introduce	Troubleshooting Methods
OV-D	The battery is overdischarged and the voltage is low	It will recover automatically after the battery is fully charged. If the battery cannot be restored or charged, use a multimeter to test whether there is voltage at both ends of the battery. If there is no voltage, the battery is faulty. Replace the battery with a new one
OV-BV	battery volts high	Check whether the battery voltage is correct
L-SHT	Load short circuit	Use a multimeter to check whether the load is properly connected
OV-T	The battery temperature is too high.	Ventilate and cool the battery. The battery automatically recovers when the temperature drops. Such as temperature decreasing or display failure, first confirm the controller temperature sensor appearance whether have damage, if damaged need to replace the controller, if the normal appearance, the use of the remote control to read parameters, confirmation is properly aligned, 65 degrees Celsius temperature protection value, if set error, can be sent to the controller after the modification of the parame
L-OPN	Didn't pick up the load	Check whether the load is properly connected or the positive and negative terminals are inversely connected.
OV-C	The charging current of the battery is too large, and the PV charging power is limited	If the panel power exceeds the rated power, no handling is required.
OV-PV	The voltage of the PV panel is too high	Check whether the panel voltage exceeds the maximum voltage
P-REV	The positive and negative poles of the photovoltaic board are connected in reverse	Use a multimeter to check whether the positive and negative electrodes of the photovoltaic board are correctly connected
E-BMS	Lithium battery protection board overcharge protection	After the voltage drops, the lithium battery will automatically resume charging



# SE Series Installation Guide

## - FAQ

### 1. How to activate the solar LED light?

After opening the package, turn on the power switch of the light (the button is in the state of power on when recessed), the fixture will be lighted up; If it is not, place the fixture under the sunlight for about 10 minutes, and then completely covered with the solar panel, the fixture will be lighted up.

### 2. How to test the charging and discharging function of solar LED light?

After turning on the power switch, completely cover the solar panel of the fixture or place it in a dark environment (no reflection), the light will be lighted up; Then place the fixture under the sunlight and the light will be turned off.

### 3. The fixture can not be lighted up since it is placed for a long time?

As the battery will consume power, the system will lose power completely. Leaving the battery for a long time may cause irreversible damage, so you need to charge it every three months if it is not in the use.

### 4. Shorter light time?

The shorter light time is due to low battery power, or low charging efficiencies, such as rainy days, solar panels covered by trees, and dust; Lithium-ion battery losses will also lead to less energy storage.

## WARNING

1.Solar panels are fragile, so please do not scratch or bump when installed. Scratches, dirt and shelter on the surface will affect the power generation efficiency of solar panels.

2.Solar lamp installation, such as in the northern hemisphere solar panel should face in the northern hemisphere, such as the southern hemisphere should face south.

3.The product must be charged every 3 months when idle; If it needs to be transported or stored for a long time, it is necessary to timely check, charge and record; otherwise, the battery will be damaged. Charging method: In sunny conditions, open the lamp switch, the solar panel is placed facing the sun, continuous charging for 1-2 days. Note: Use the remote control to read the status, display charging or charging, the battery voltage is more than 13V; or use a multimeter to test the voltage at both ends of the battery is more than 13V.

4.Installation location shall be away from WIFI, omnidirectional antennas for mobile communications, small base stations for telecommunications, TV antennas, etc. Signal source too close may disable, the dimming functions.

# SE Series Installation Guide

5. The luminaire should not be installed on vibrating surfaces, otherwise the sensor is easy to be triggered by mistake.
6. The luminaire shaking may cause the sensor to be triggered by mistake.
7. The dimming function of luminaire might be effected by the objects with vibration in its sensing area. The lamp should not be installed on the surface of vibration, and the lamp should not be covered (e.g. trees or leaves), otherwise the sensor may be triggered or not triggered by mistake.
8. The product has good penetration effect on plastic and wood. Avoid metal shielding around the antenna, which will reflect and block microwave and affect the actual induction effect.
9. Walls, glass, and ceramics will bring reflection and penetration attenuation of electromagnetic waves, and reduce the sensing distance of the sensor. The thicker the material is, the more serious the attenuation is.
10. The movement of animals and objects within the sensing range may cause the light to turn on, which is a normal phenomenon.
11. The electromagnetic wave emitted by microwave sensor in the practical application environment, the different reflectivity of obstacles will lead to different induction range, which is normal phenomenon.
12. Please turn on the power switch of the fixture before use, and test whether it is functional before installation;
13. Ensure that the power switch is on when working normally. Please test whether the lamps are charged and discharged normally before installation (the solar panel is charged by sunlight and the lamp is off; Solar panels block sunlight, do not charge, light)
14. View the entire installation guide. Do not disassemble by non-professional technicians or under the guidance of professional technicians.
15. Do not place the product in water or fire, as there may be explosion risk.
16. Please pay attention to the secondary transport protection, do not damage the lamp
17. Disposal at end of life: Battery to be removed by professional
18. The product contains lithium batteries, please follow the air transport regulations when shipping, should be regarded as flammable and explosive goods, storage should be separated from other items to avoid damage.
19. Charging and discharging requirements: Charging temperature is 0-45°C, discharging temperature is -10-60°C; Storage temperature: -10~60°C.
20. The installation distance, both transverse and longitudinal, should be greater than 1.5m. If the installation distance is too close, individual lamps may be misfit.
21. The final product interpretation authority of our company.

\*Due to the constant improvements in product development, individual parameters might change. Please refer to our sales or R&D team for most up-to-date content as specifications are subject to change without notice.