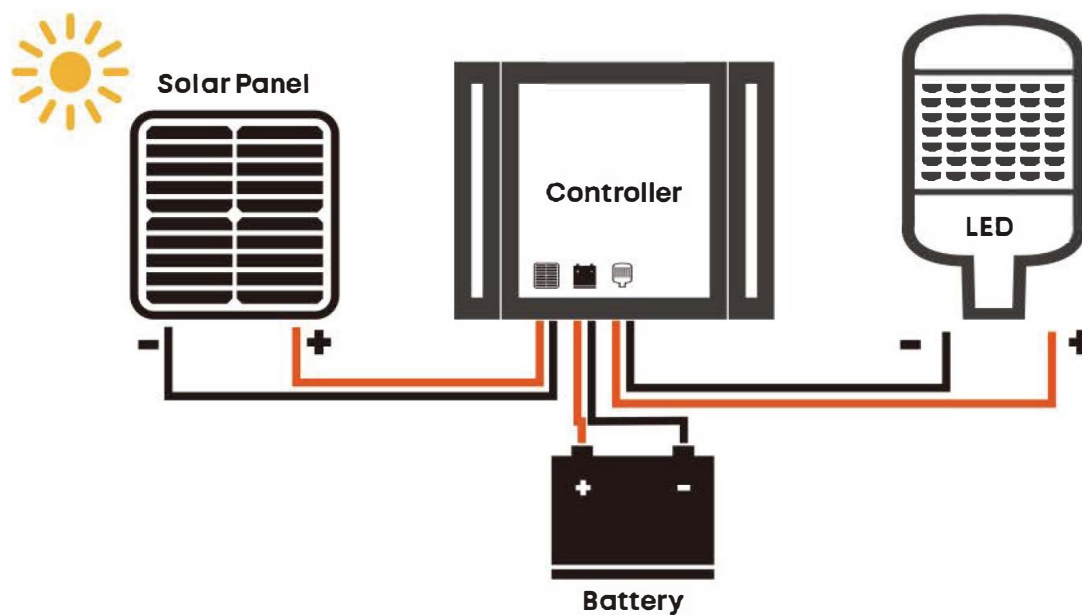


# CERES Installation Guide

## Before Installation

This procedure is designed as an installation instruction. Skilled sales 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. This document is not 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 in 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;

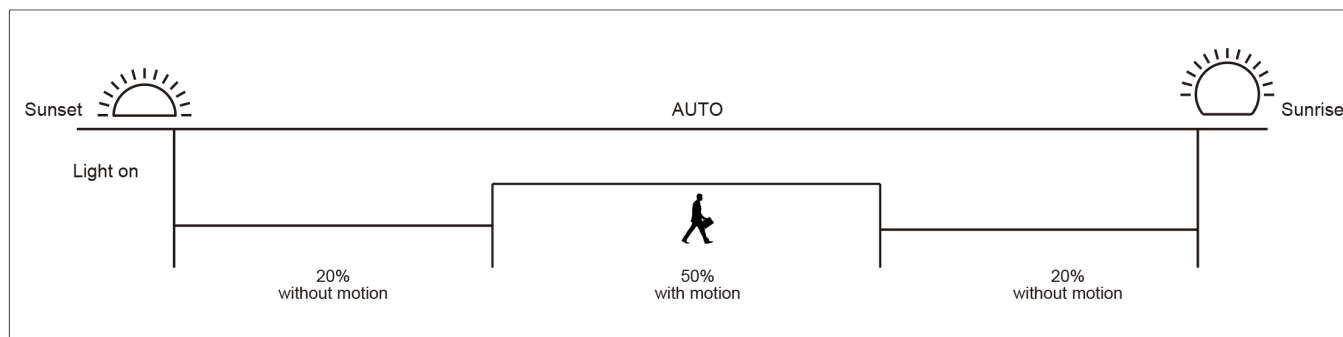
## - Test Before Installation

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

# CERES Series Installation Guide

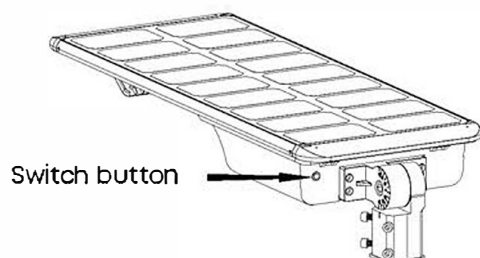
## - Operating Mode

- 1) 50% with motion
- 2) 20% without motion

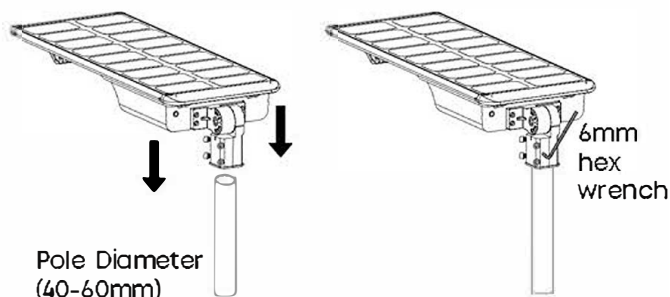


## - Installation Procedure TYPE-A Universal bracket

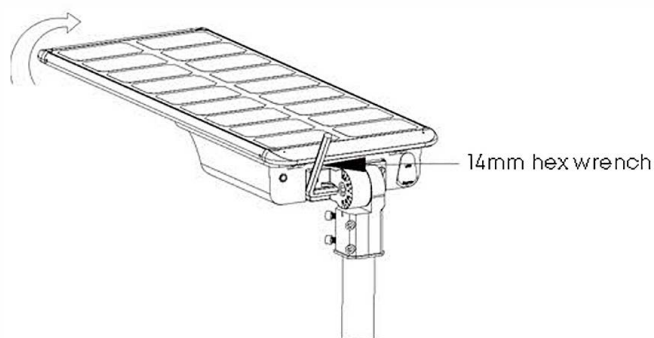
1. Open the package and check whether the appearance of luminaires is in good condition, Click the switch button to test whether the luminaire is working.



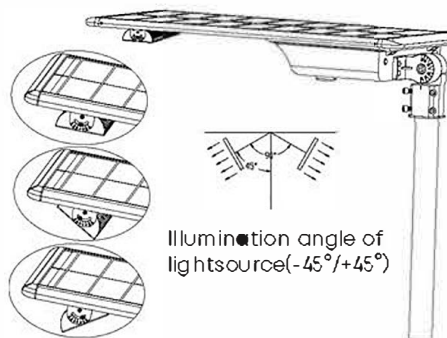
2. Insert the luminaire into the post and tighten the screws (6mm hex wrench)



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



4. Adjust the irradiation Angle of the light source using a screw or phillips screwdriver, and then turn on the switch button

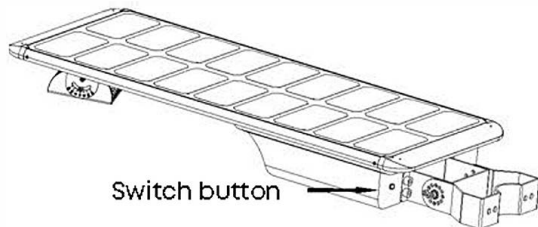


### Caution:

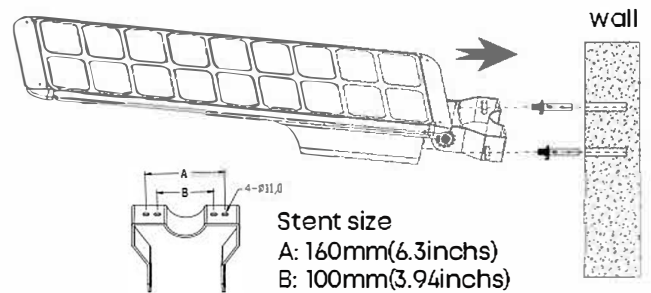
1. Turn the power off during installation. Do not connect or disconnect under load.
2. Caution risk of fire.
3. Please do not put this product into municipal waste, check the local regulations to deal with the electronic products.

## - Installation Procedure TYPE-B Wall bracket

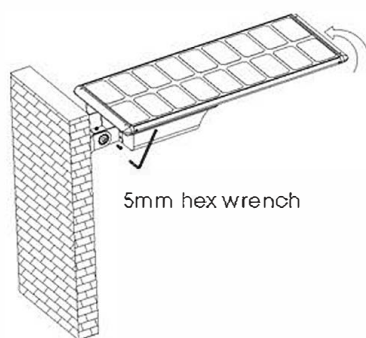
1. Open the package and check whether the appearance of luminaires is in good condition, Click the switch button to test whether the luminaire is working.



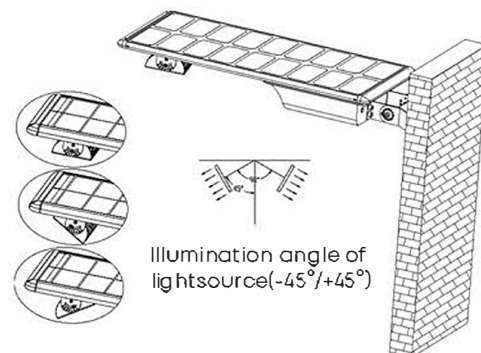
2. Drill holes in the wall and fix the metal expansion screws to fix the luminaire to the expansion screws.



3. Loosen the screws on the U-shaped support, adjust the appropriate solar panel irradiation Angle, and then tighten the screws ( Adjustable angle  $-90^{\circ}/+90^{\circ}$  ).



4. Adjust the irradiation Angle of the light source using a screw or phillips screwdriver, and then turn on the switch button

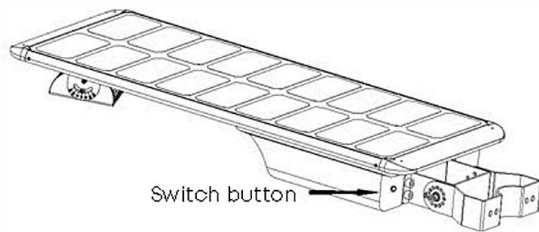


### Caution:

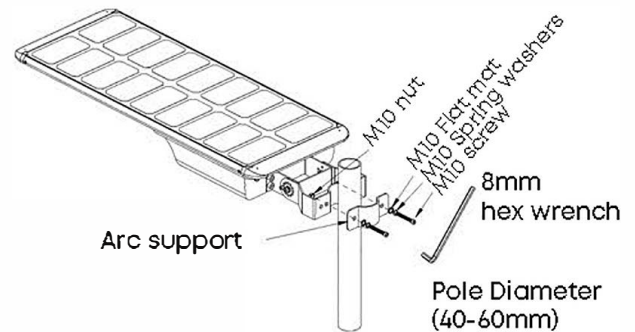
1. Turn the power off during installation. Do not connect or disconnect under load.
2. Caution risk of fire.
3. Please do not put this product into municipal waste, check the local regulations to deal with the electronic products.

## - Installation Procedure TYPE-C Arc support

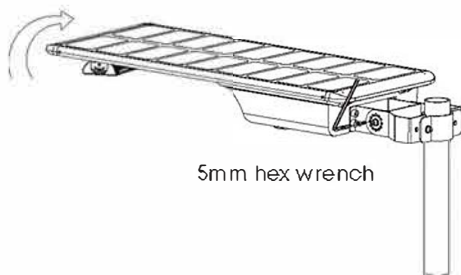
1. Open the package and check whether the appearance of luminaires is in good condition, Click the switch button to test whether the luminaire is working.



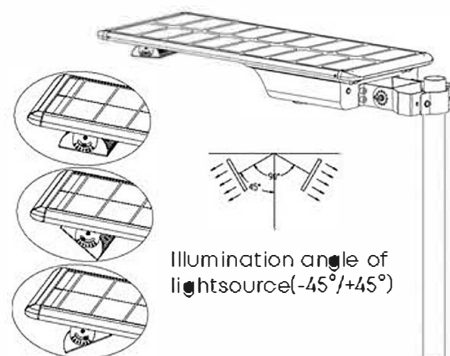
2. Fix the circular clip and luminaire on the circular luminaire post through screws, and lock the screws



3. Loosen the screws on the U-shaped support, adjust the appropriate solar panel irradiation Angle, and then tighten the screws (Adjustable angle  $-90^{\circ}$  /  $+90^{\circ}$  ).



4. Adjust the irradiation Angle of the light source using a screw or phillips screwdriver, and then turn on the switch button

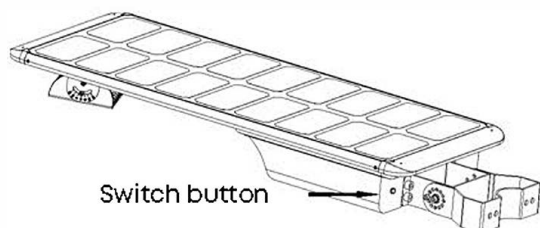


### Caution:

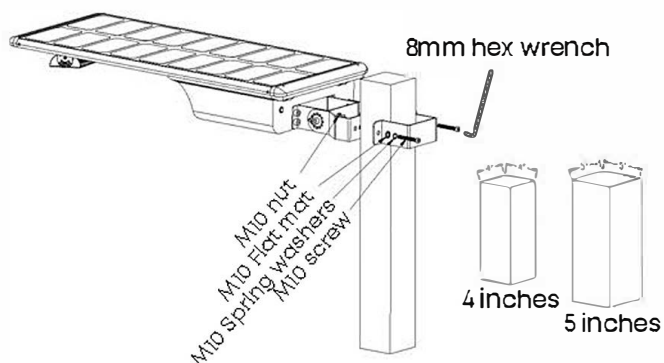
1. Turn the power off during installation. Do not connect or disconnect under load.
2. Caution risk of fire.
3. Please do not put this product into municipal waste, check the local regulations to deal with the electronic products.

## - Installation Procedure TYPE-D Square bar bracket

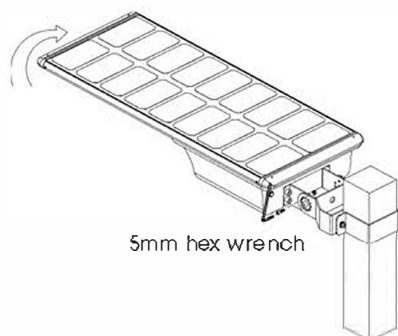
1. Open the package and check whether the appearance of luminaires is in good condition, Click the switch button to test whether the luminaire is working.



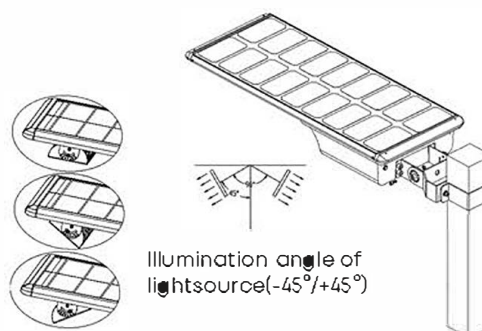
2. Drill holes in the wall and fix the metal expansion screws to fix the luminaire to the expansion screws.



3. Loosen the screws on the U-shaped support, adjust the appropriate solar panel irradiation Angle, and then tighten the screws (Adjustable angle  $-90^{\circ}$  /  $+90^{\circ}$  ).



4. Adjust the irradiation Angle of the light source using a screw or phillips screwdriver, and then turn on the switch button

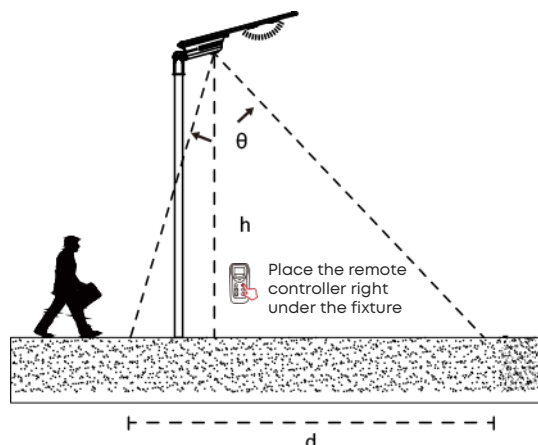


### Caution:

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.

# CERES Series Installation Guide

## Detection distance



\*Remote control is optional

Inductive Type	$\theta$ (Angle)	h (Height of luminaire 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	Description 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

# CERES 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, after these 90 minutes completely cover 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 has been stored 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 use.

### 4. Shorter light time?

The shorter light time is due to low battery power, or low charging efficiencies, such as rainy and cloudy 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. For a Solar luminaire installation, located in the northern hemisphere, the solar panel should face in the south, such as the southern hemisphere should face north.

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 luminaire 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.



# CERES Series Installation Guide

5. The luminaire should not be installed on vibrating surfaces, otherwise the sensor can be easily triggered by mistake.
6. The luminaire shaking may cause the sensor to be triggered by mistake.
7. The dimming function of the luminaire might be affected by vibrations in its sensing area. The luminaire should not be installed on the surface of vibration, and the luminaire should not be covered (e.g. trees or leaves), otherwise the sensor may be triggered or not triggered by mistake.
8. 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 will be.
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 a 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 turned on when working normally. Please test whether the luminaires are charged and discharged normally before installation (the solar panel is charged by sunlight and the luminaire is off; Solar panels with an sunlight, do not charge)
14. Read 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 luminaire
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 transversal and longitudinal, should be greater than 1.5m. If the installation distance is too close, individual luminaires may be misfit.

\*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.

