

SUNLIKE

50W

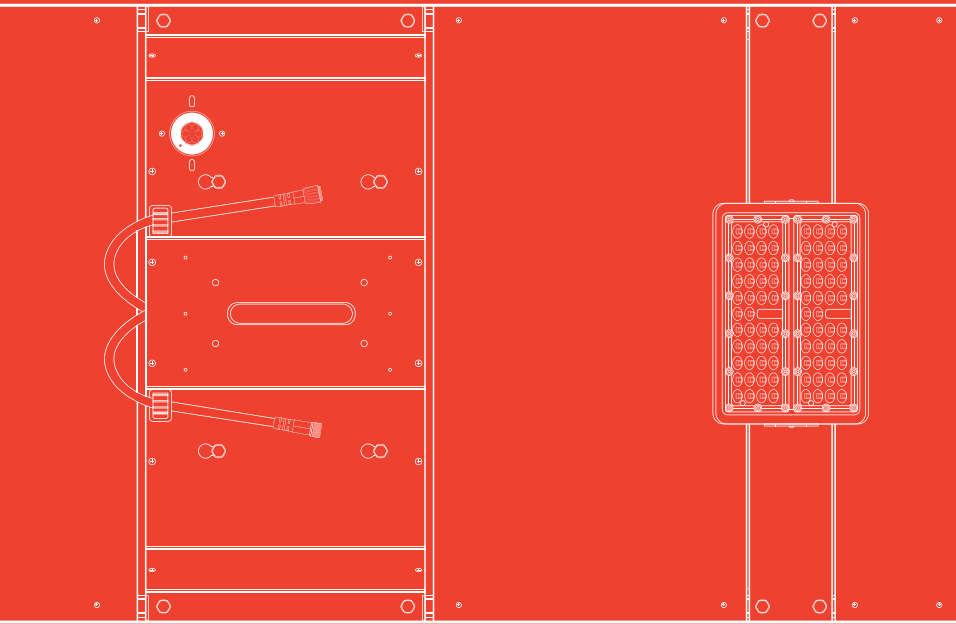
Installation Manual

SOLTECH Designs and Manufactures
Advanced, Solar-Powered
LED Technology.



SOLTECH

Smart Solar Lighting



SUNLIKE 50W



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01 Introduction

Thank you for purchasing SUNLIKE 50W Urban Lighting Products.

Introduction

The high-performance SUNLIKE 50W is a municipal-grade solar outdoor lighting system that provides bright off-grid light. This heavy-duty commercial dedicated series is ideal for highways, city streets, large parking lots, and area lighting. It comes in a wide choice of configurations, lighting outputs, and recommended pole heights. The SUNLIKE 50W is optimized to provide years of bright, reliable light. Industry-leading efficiency, dense batteries, and advanced controls to guarantee the highest possible off-grid autonomy.

Important

In order to avoid deep discharge of the battery during storage, please fully recharge your battery every 4 months. Please make sure that the light is installed in an area with sufficient sunlight irradiance. A strict minimum of 3.5 hours/day of sunshine on average is recommended. Select the right operating mode according to the local legislation needs and the local sunshine conditions. Keep it away from shadows. Self-cleaning available when the light fixture have minimum angle of 15 degrees.

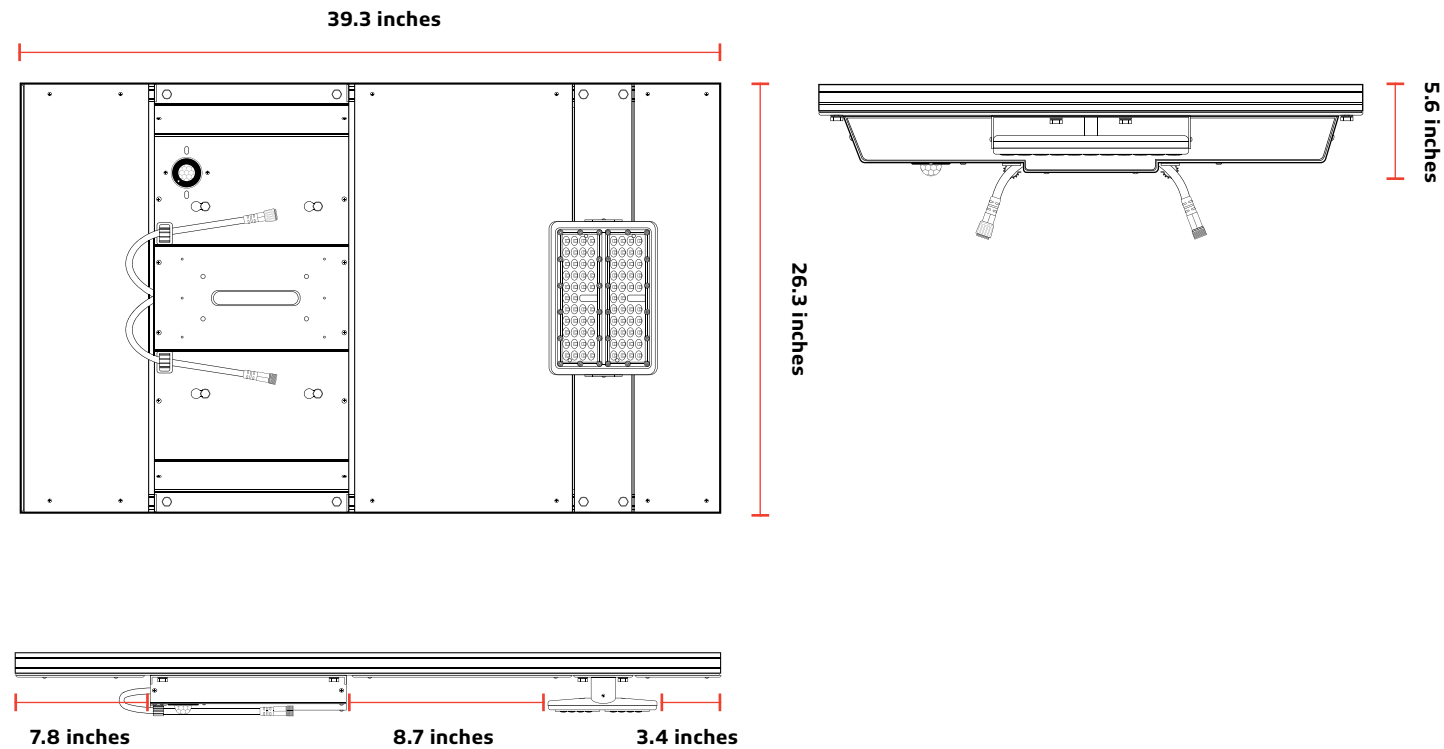
Please save these instructions. Read all of the instructions carefully before attempting to carry out any installation or wiring. Do not open or attempt to repair the product on your own, as it may cause serious damage and would void the product warranty. Contact your local distributor for any questions concerning the installation.

Range of the light module on the lighting fixture is 20–26 feet (6–8 meters). The ideal installation spacing is >16 feet (5 meters). When installing two or more lighting fixtures on one pole, select desired operating mode before installation. Interference can cause delay or malfunction when using the remote control to change operating modes after installation.

Precautions when working with solar panels

When the solar panel is exposed to sunlight, a voltage appears at the output terminals of the solar panel turning it into a source of electricity. To avoid a shock hazard, make sure the solar panel is covered with an opaque (dark) layer such as paper or cloth during the installation. Do not make contact with the terminals when the panel is exposed to sunlight or any other light source.

SUNLIKE 50W



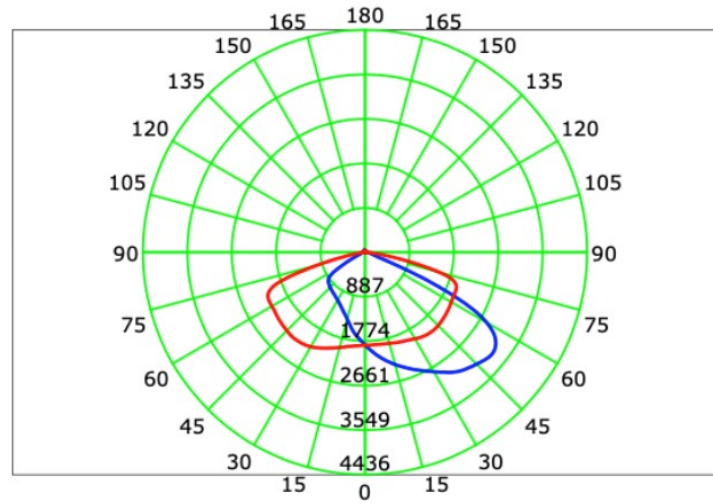
02 Specification

Specification	SUNLIKE 50W
LED Nominal Power	50W
Solar Panel	18V 115W
LiFePO ₄ Battery	691.2WH 12.8V 54AH
Weight	58.7 lbs
Lumen Output@5000K	9000
CRI	> 70
LED Chip	Lumileds 5050 (210lm-CR>70)
EPA	8.62
Waterproof Rate	IP65
Casting	Aluminum
Efficiency@5000K	180 lm/W
* Charging Time	11hrs
Run Time(@Full Power)	13hrs
Operation Mode	Remote control and One-key Setting
Installation Height	9 to 20ft
* Operating Temperature	-4 °F to 122 °F
* Charging Temperature	32 °F to 149 °F
Maximum Autonomy	
Motion Sensor Mode	40%–100% 32hrs 20%–80% 55hrs
Time Control Mode	Night Owl 28hrs Early Bird 25hrs
Constant Mode	100% 13hrs 70% 19hrs 40% 34hrs

* The temperature can impact the battery's charging and normal operation. If your place's temperature is under 32°F, we advice you to use the Sunlike 50W Pro version to achieve better lighting results. * The solar charge time data is base on 77 degree F ambient temperature with the panel pointed directly at the solar radiation. The standard radiation value is 1000W/m².

03 Luminous Distribution

SUNLIKE 50W Type III



ATTENTION

After opening the SUNLIKE 50W, package, you will notice that the solar panel is covered, and the indicator is flashing every 5 seconds. It signifies that the fixture is in open circuit mode. Once the fixture is taken out of the package, and the solar panel is no longer covered, the SUNLIKE 50W will automatically turn on, and the indicator will begin flashing every 2.5 seconds. The light head will then turn on for 1 minute and then shut off again. It means the fixture is switching from open circuit mode to standard working mode.

If you wish to shut off the light, you must first cover the solar panel. Then press the off button on the remote. You can also just press the off button to turn off the lights during the night. When the solar panel detects light, the fixture will activate and resume normal operation again.

04 Battery Notes

1. The LiFePO₄-battery-powered SUNLIKE lights are visibly brighter than other outdoor solar lights, and their performance overall is more reliable.
2. To charge the battery fully may take up 6 to 12 hours.
3. Output will be reduced to 40% when the battery is below 40% of its capacity.
4. Battery will stop charging when the ambient temperature is below 32°F or above 149°F.

Battery Status is indicated by the red indicator on the lighting fixture as follows:

- > Slow red light flashing (Every 2.5s) = Working
- > Slow red flashing (Every 5s) = Open circuit
- > Red light continuously on = Non-working
- > Quick red flashing (Every 0.5s) = Charge fault
- > Quick red flashing (Every 0.1s) = Over current or Short circuit

Storage

To avoid over discharge of the battery during storage, please recharge the lighting fixture every 3 months. Use the dedicated charger to charge, reset the switch when done.

Battery Replacement

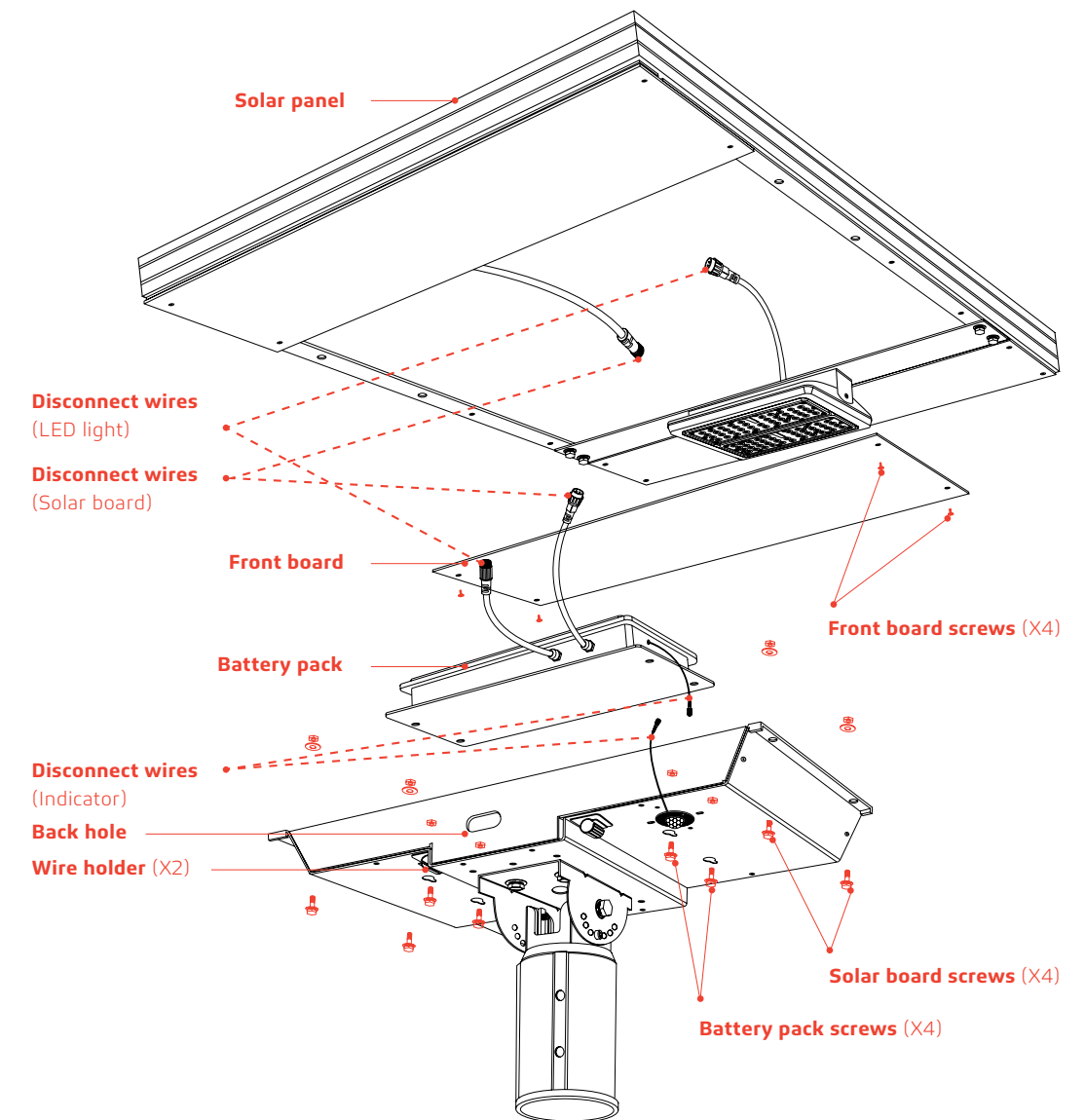
1. Loose the screws of the solar board and front board, and remove solar board and front board.
2. Disconnect all wires of solar board, LED light and indicator.
3. Loose battery pack screws and replace the battery pack with a new one.
4. Tighten the screws of battery pack.
5. Connect the wire connectors of LED light and indicator.
- 6 Install the front board and solar board.
7. Connect the wire connectors of solar board.
(Be sure the solar board wires go out from the back hole and stay on wire holders of each side when you connect them).

ATTENTION

DO NOT recommend replace battery pack on your own. Please contact SOLTECH for any battery's questions.

(IAP) Intelligent Adaptive Program Battery Control Technology

In order to extend the off-grid autonomy of the SUNLIKE 50W under shady trees, heavy rain, and thick clouds, our controllers now integrate an adaptive smart control feature to actively track battery capacity and adjust light output accordingly. Before integrating this feature, selecting a light output percentage on the remote would yield an accurate percentage of max LED brightness. Now with (IAP), the controller actively monitors the battery and regulates the electrical current to the LEDs. The controller makes light output of the selected percentage on the remote relative to battery capacity rather than max LED output. This smart-control feature can increase our off-grid performance by up to 40%.



01

Loose the screws of the solar board and front board, and remove solar board and front board.


02

Disconnect all wires of solar board, LED light and indicator.

03

Loose battery pack screws and replace the battery pack with a new one.

05 Installation and Wiring Compliance

1. Installation and wiring must comply with the State and National Electrical Codes.
2. The SUNLIKE 50W models are intended for outdoor use only and should not be installed in an unventilated area, and shall be installed in an environment within the operational temperatures defined for the product.
3. The average sunshine in the installation area should be above 3.5 hours/day in order to ensure full function of the lighting fixture. Avoid areas with shades.
4. Before installation, if applicable, please ensure the light pole and its foundation are solid enough to withstand the lighting fixture(s).
5. Before installation, please ensure that the battery is fully charged. Install during sunny days if possible.
6. Before installation, please press the  ON/OFF key in the remote control and check whether it shows a red light on the indicator. Please cover the panel and check if the light module turns on normally within 1 minute.

After Installation

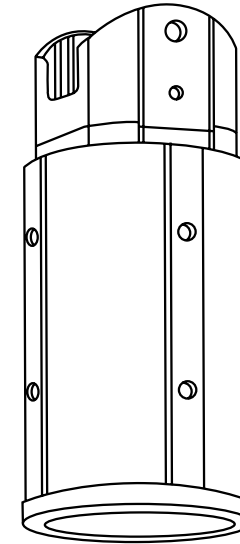
The lighting fixture will automatically turn on at night and turn off during daylight.

Important

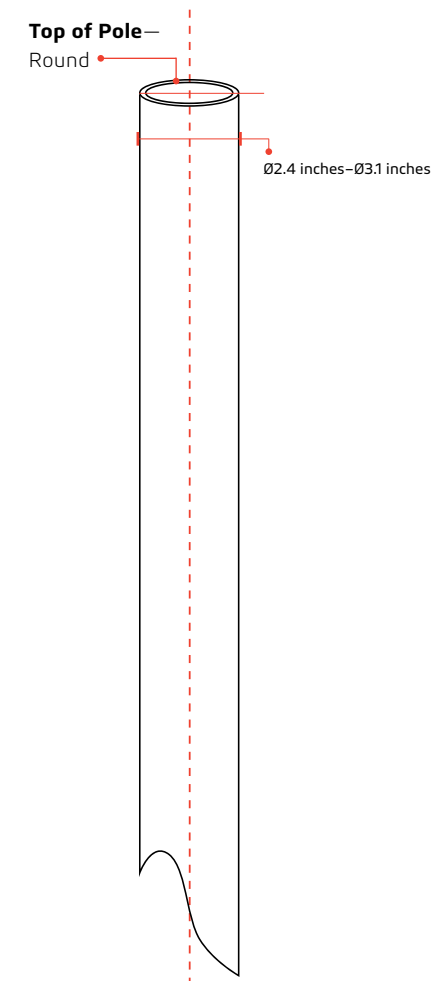
Always orient the solar panel facing the equator (e.g. facing south if in northern hemisphere).
Always have a tilt angle of at least 15° to avoid dust accumulation (0°=horizontal plane).

06 Mounting Accessories

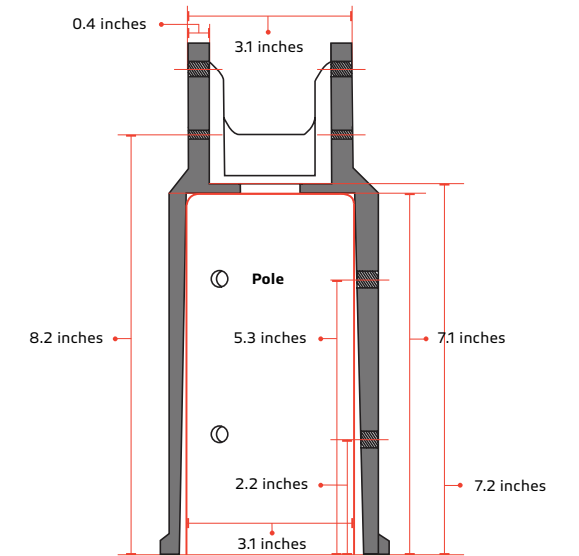
MOUNTING SLEEVE



POLE ASSEMBLY



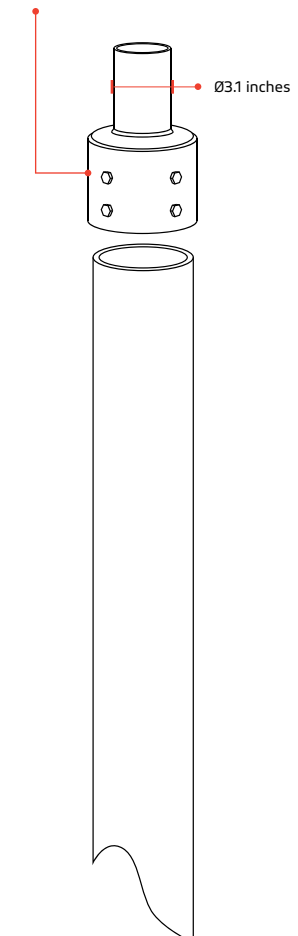
MOUNTING SLEEVE—CUTAWAY



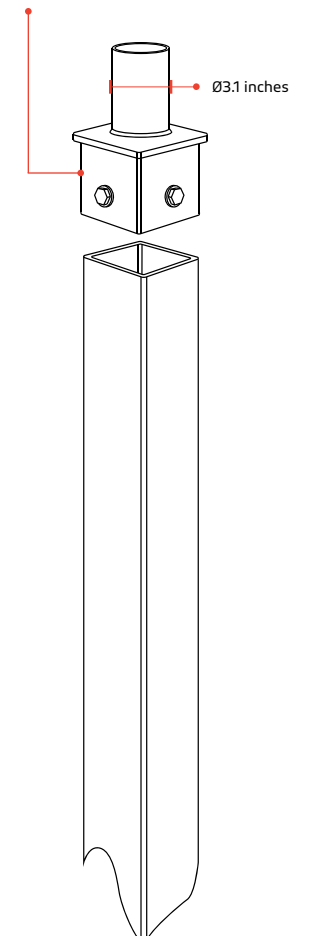
TENON ADAPTER

If your round pole size is over 3.1 inches, or you use square pole, please connect with pole manufacturer for the tenon adapter.

Tenon Adapter—Round



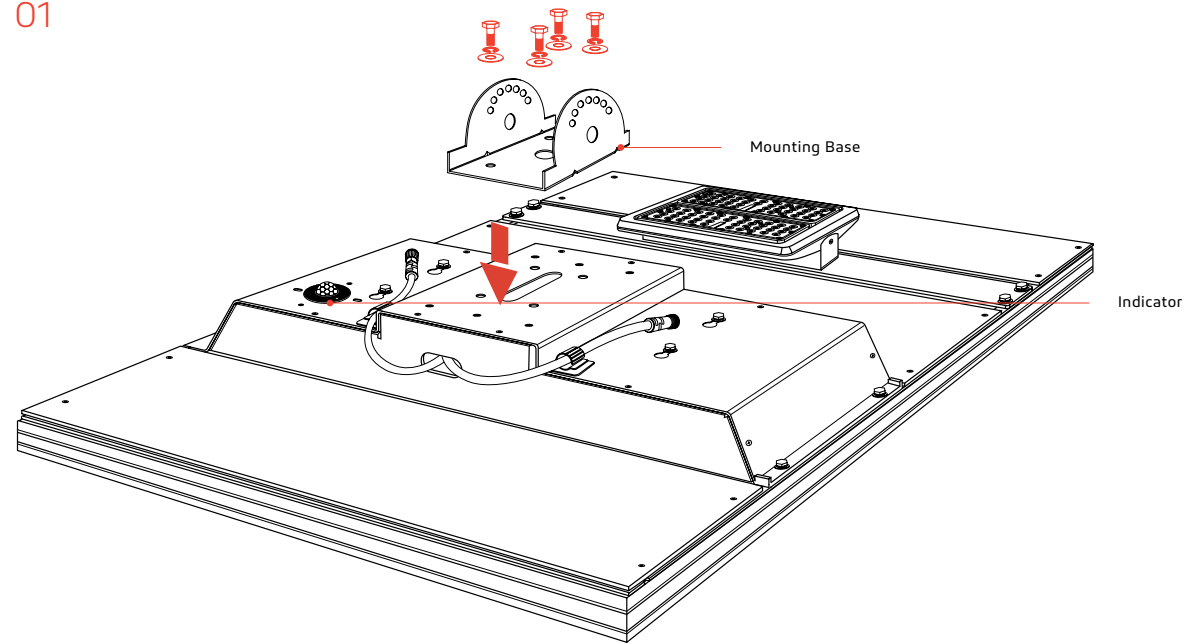
Tenon Adapter—Square



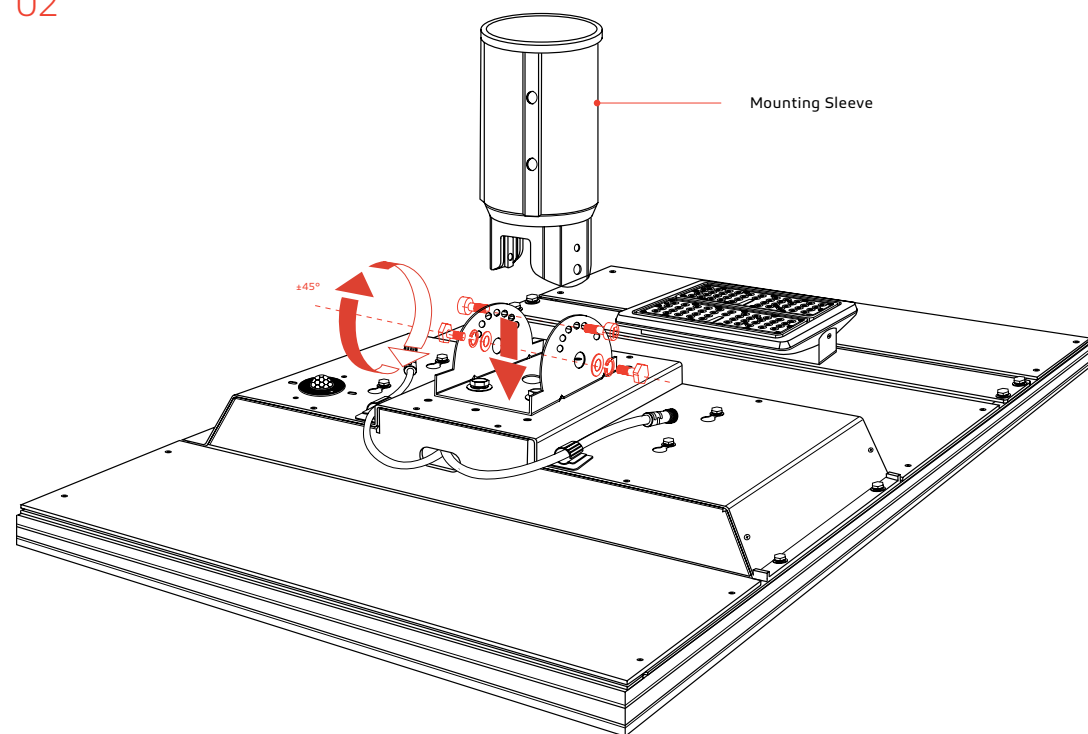
07 Installation

SUNLIKE 50W

01

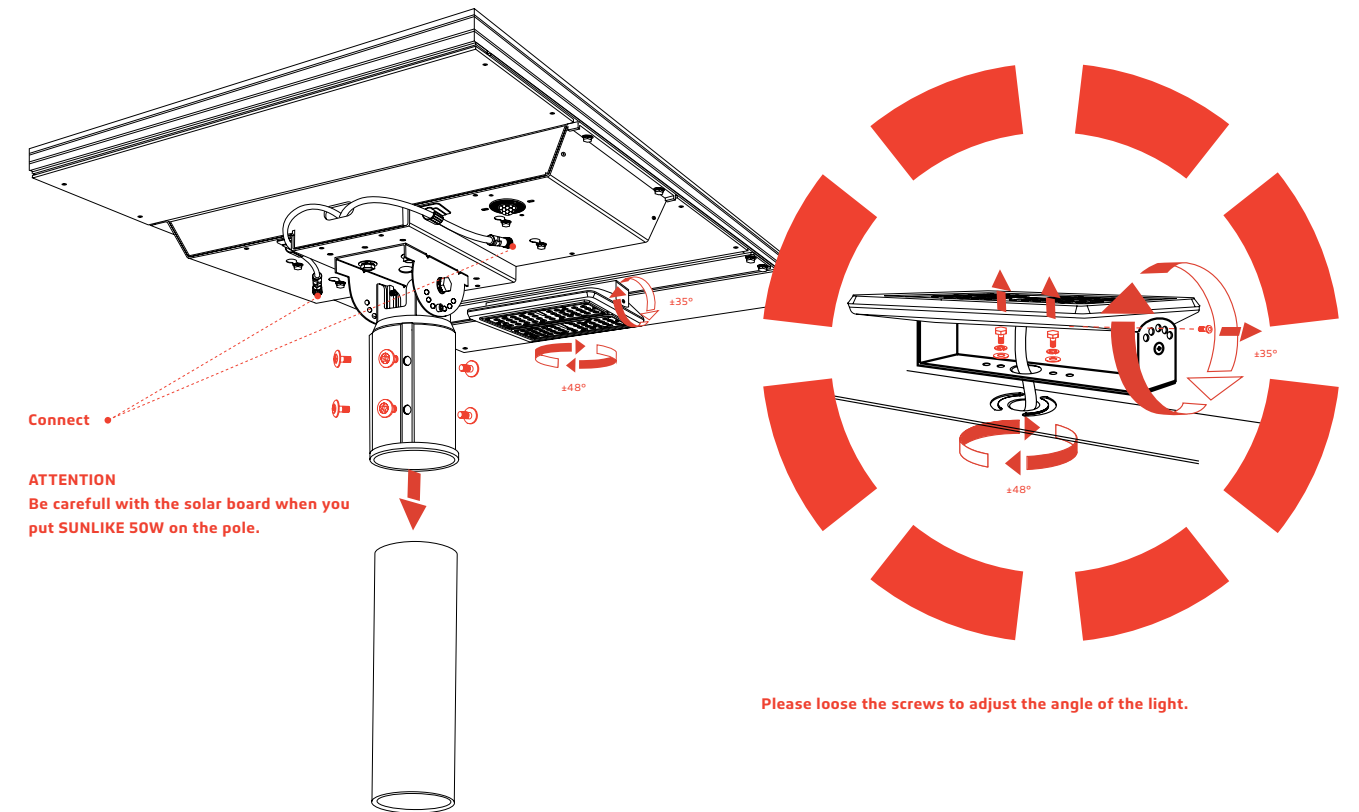


02



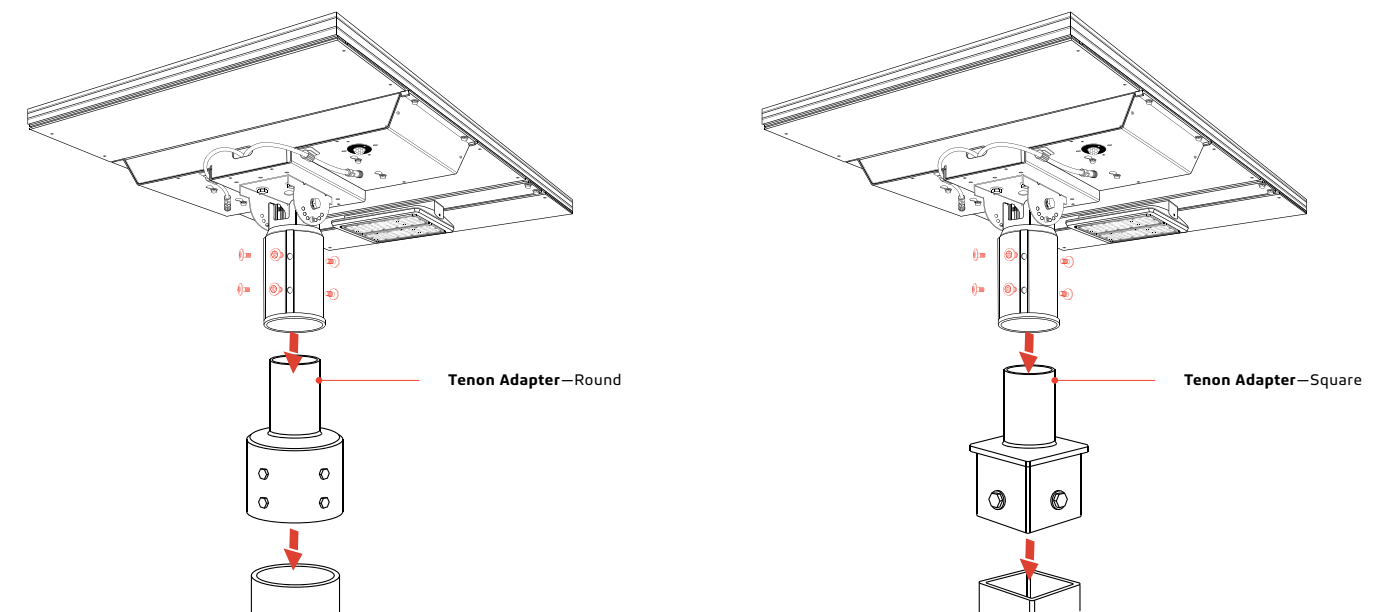
010

03



TENON ADAPTER

If your round pole size is over 3.1 inches, or you use square pole, please connect with pole manufacturer for the tenon adapter.



011

08 Panel Angle

The Solar charge in a battery pack won't last forever. The off-grid system relies on stored solar energy for autonomy. Angling your solar panels properly can boost the power intake of your solar lighting system. You want to angle your solar panels at a tilt based on the area's latitude.

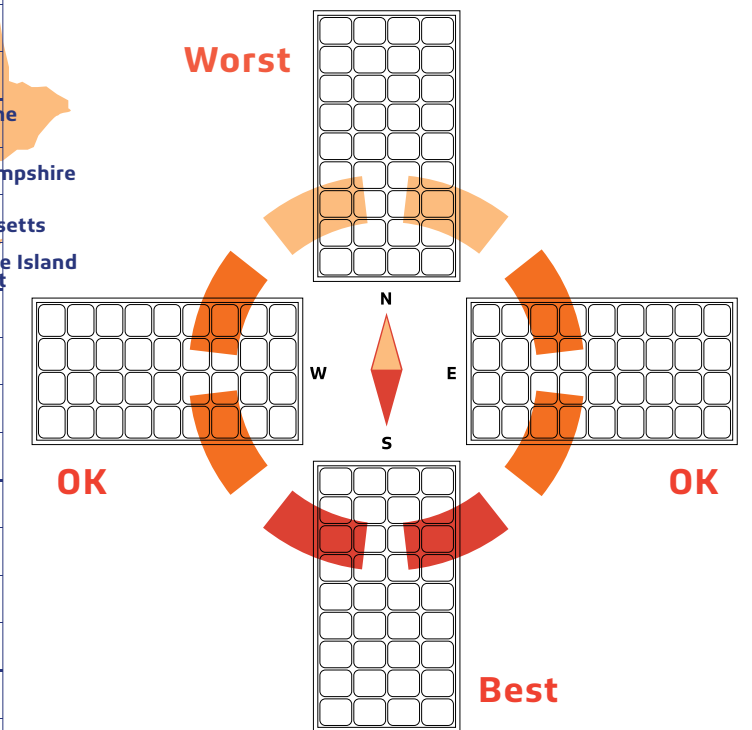
Tip

You can increase the tilt 15° in the winter or decrease 15° in the summer. In this way you can get the maximum sunlight to recharge the battery bank.

Key



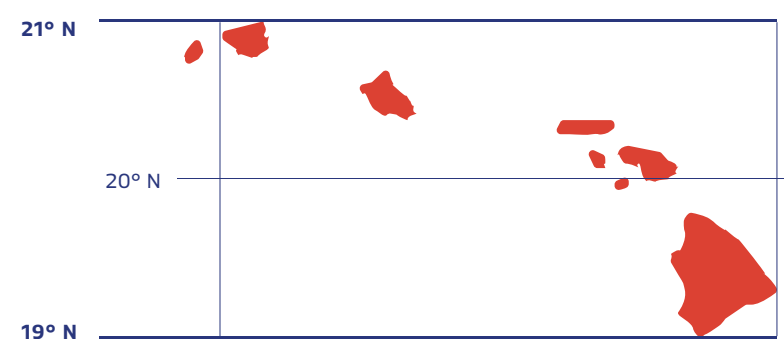
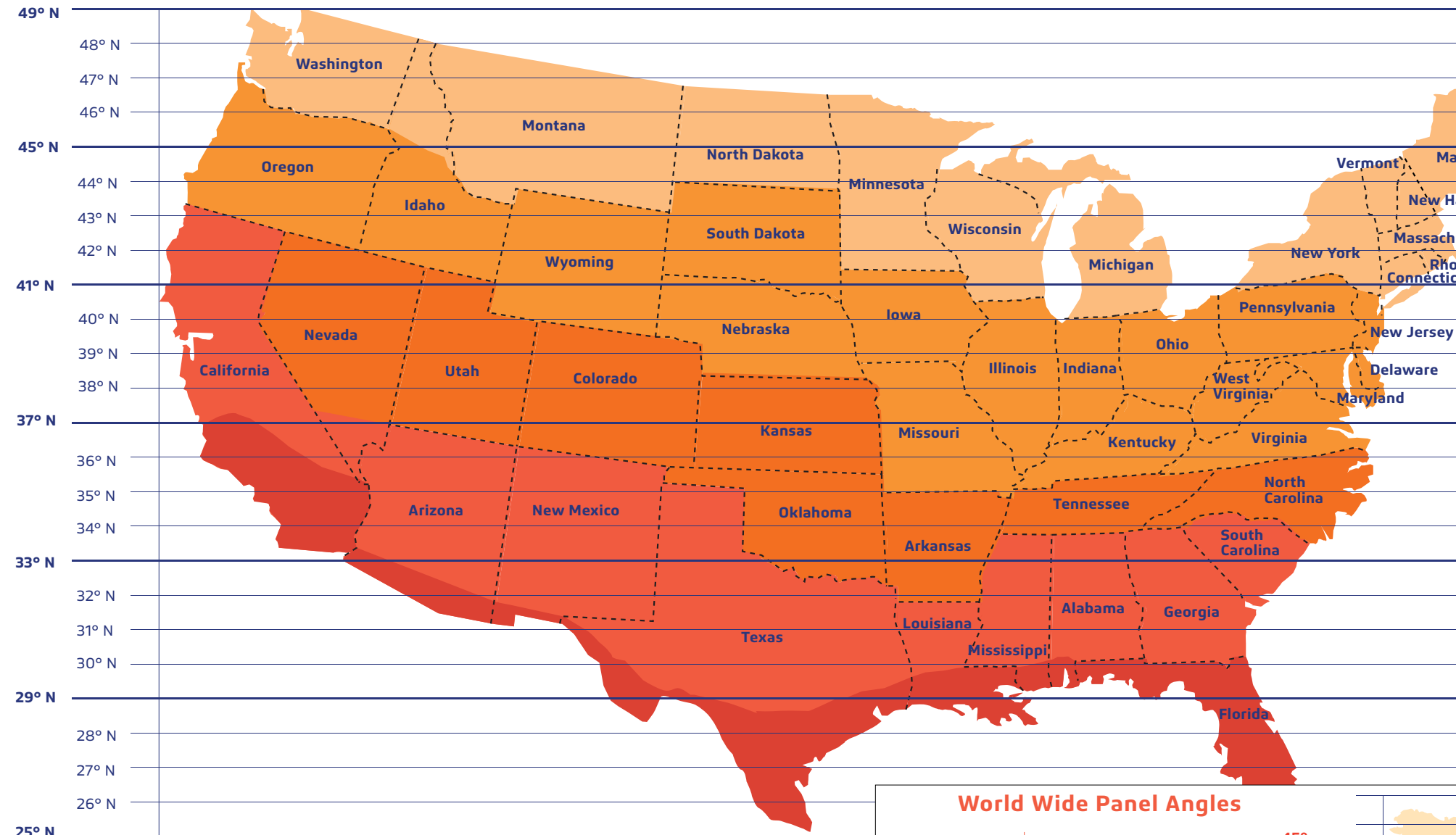
Best Facing Direction For The Solar Panel



The area will dictate the installation of the fixtures and will sometimes prevent the lights from facing south. But that's okay! Panels facing West & East won't get as much light as Southern facing panels, but will still collect a good amount of sunlight. A North facing panel also works, but it will take longer to charge than any other direction. This would mean that the solar charge will be less optimal if installations are facing North.

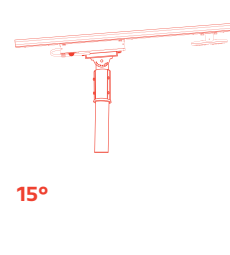
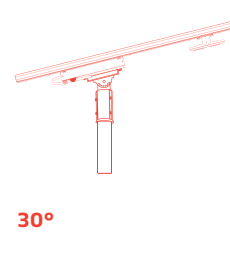
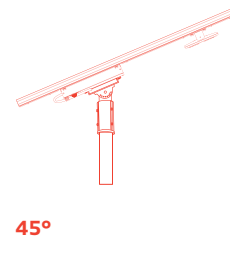
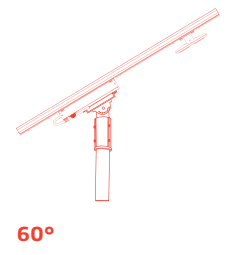
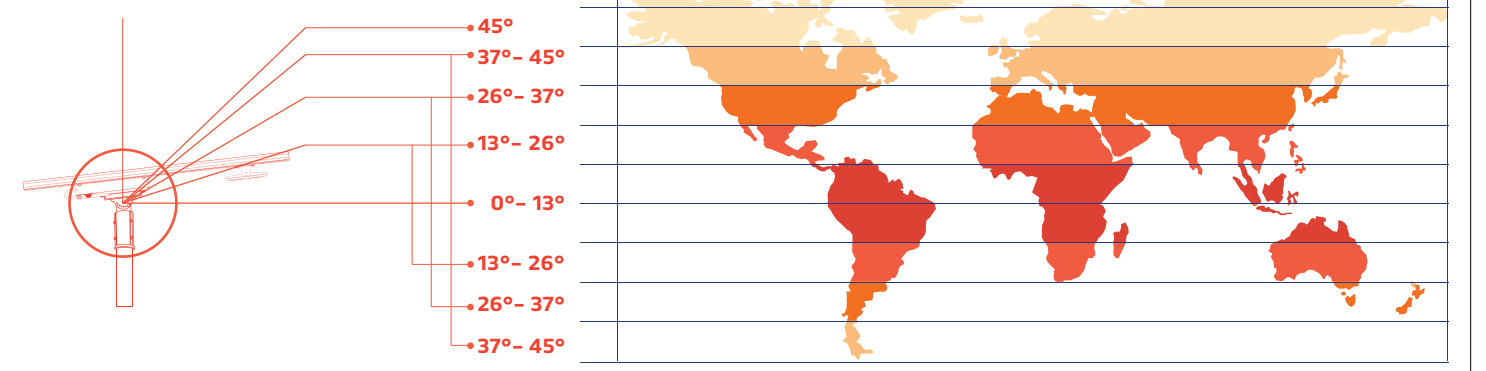


Alaska

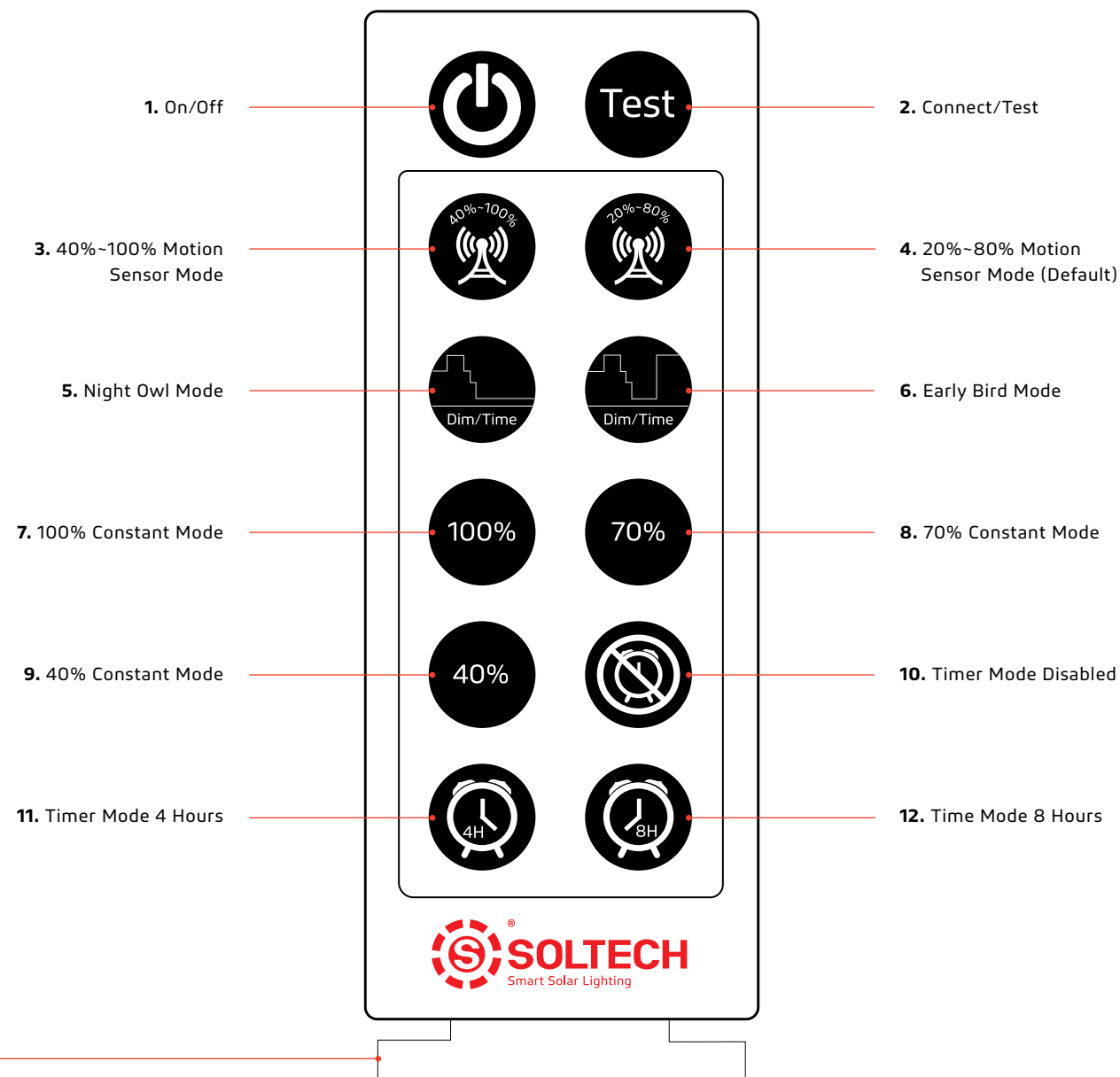


Hawaii

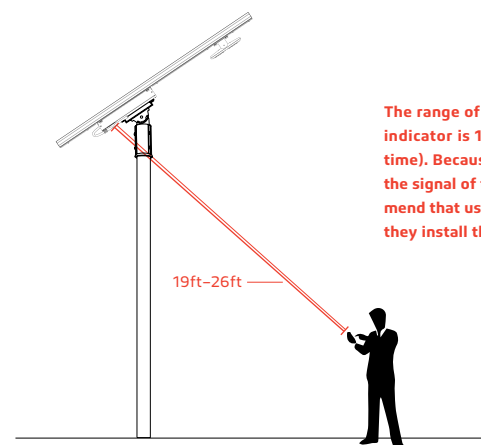
World Wide Panel Angles



09 Remote Control Guide



When using the remote for the first time, please remove the plastic piece at the bottom to make the remote turn on.

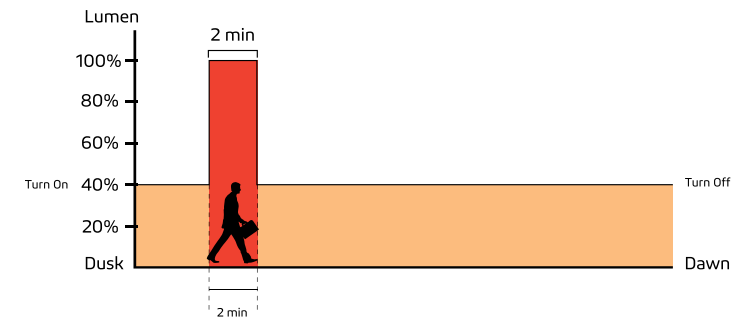


The range of the remote control to the indicator is 16ft (Day time) to 33ft (Night time). Because the sunlight will impact the signal of the remote control, we recommend that users setup the mode before they install the light.

- 1. On/Off**
When off is selected, the light will stop working. The solar panel will not charge the battery and the battery will not supply electricity to the light.
- 2. Connect/Test**
Remote control device can be connected with any lighting fixture, one at a time. To connect, press the button once. It also functions as a test button. To test, press the "Test" button once, the red light will indicate the fixture is charging, green light indicates that the fixture is operating. Testing lasts for 10 seconds, and then it goes back to the mode previously in use.

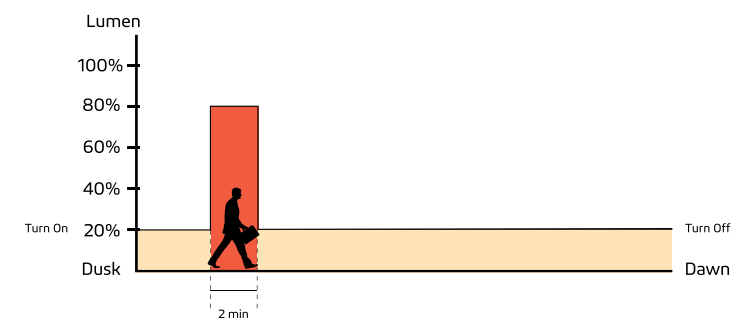
3. 40%-100% Motion Sensor Mode

Constant 40% brightness (turns on at dusk, turns off at dawn); 100% brightness turns on for 2 minutes when motion is detected.



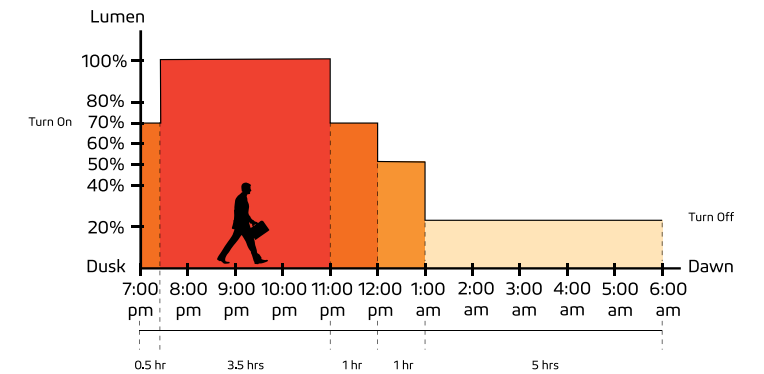
4. 20%-80% Motion Sensor Mode (Default)

Constant 20% brightness (turns on at dusk, turns off at dawn); 80% brightness turns on for 2 minutes when motion is detected.



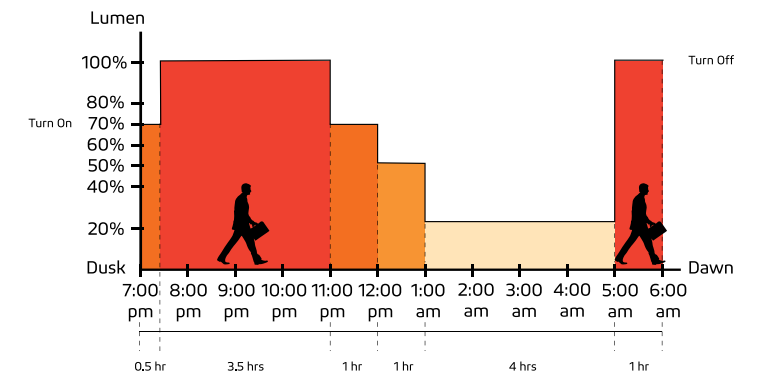
5. Night Owl Mode

Changes as natural light decreases/increases (turns on at dusk); 70% brightness for 0.5 hour, 100% brightness for 3.5 hours, 70% brightness for 1 hour, 50% brightness for 1 hour, 20% brightness for 5 hours (turns off at Dawn).



6. Early Bird Mode

Changes as natural light decreases/increases with increased brightness near dawn for early risers (turns on at dusk); 70% brightness for 0.5 hour, 100% brightness for 3.5 hours, 70% brightness for 1 hour, 50% brightness for 1 hour, 20% brightness for 4 hours, 100% brightness for 1 hour (turns off at Dawn).



(IAP) Intelligent Adaptive Program Battery Control Technology

In order to extend the off-grid autonomy of the SUNLIKE 50W under shady trees, heavy rain, and thick clouds, our controllers now integrate an adaptive smart control feature to actively track battery capacity and adjust light output accordingly. Prior to including this feature, selecting a light output percentage on the remote determined the constant percentage of max LED brightness. Now with (IAP), the controller actively monitors the battery and regulates the electrical current to the LEDs. The controller now applies the selected percentage output on the remote to the battery capacity, rather than the max LED output. This smart-control feature can increase our off-grid performance by up to 40%.

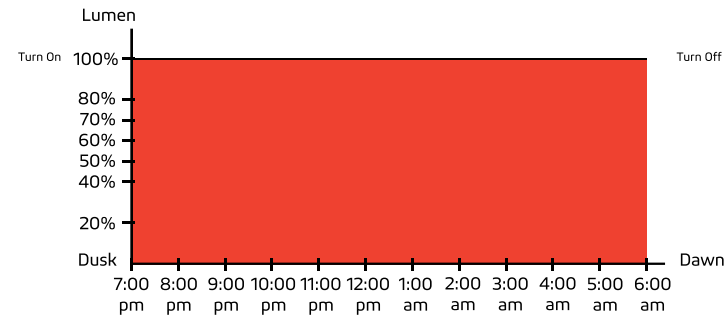
Important

Dusk and dawn time can vary for different locations and seasons. The sensors in our products will monitor the light levels where it is installed. The time period shown in the chart above is just an example to help you understand the different lighting modes.

09 Remote Control Guide

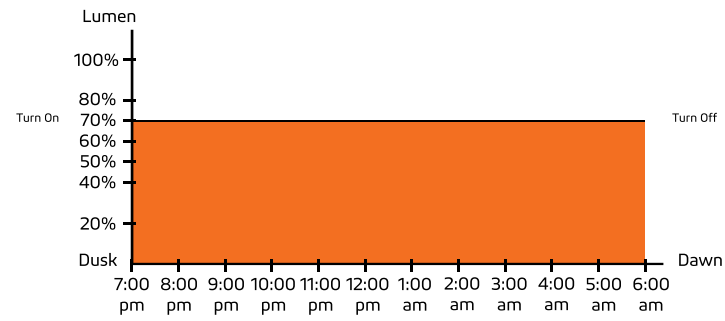
7. 100% Constant Mode

100% brightness from dusk to dawn.



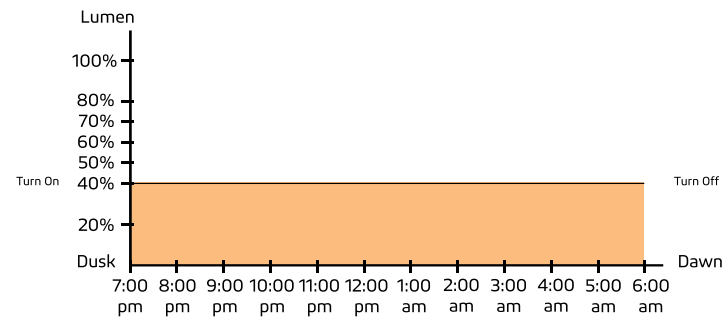
8. 70% Constant Mode

70% brightness from dusk to dawn.



9. 40% Constant Mode

40% brightness from dusk to dawn.

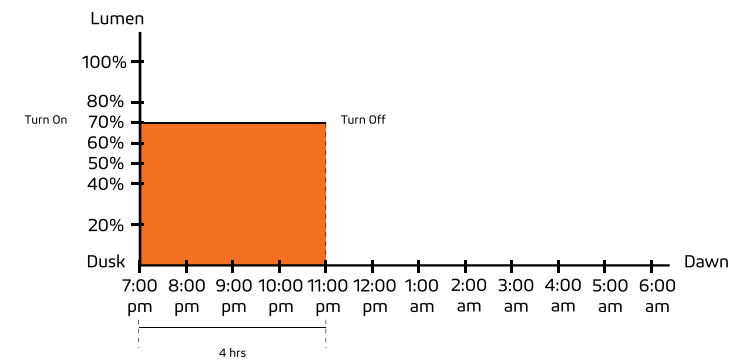


10. Timer Mode Disabled

Press this button to turn off Timer Mode; settings revert back to before Timer Mode was last activated.

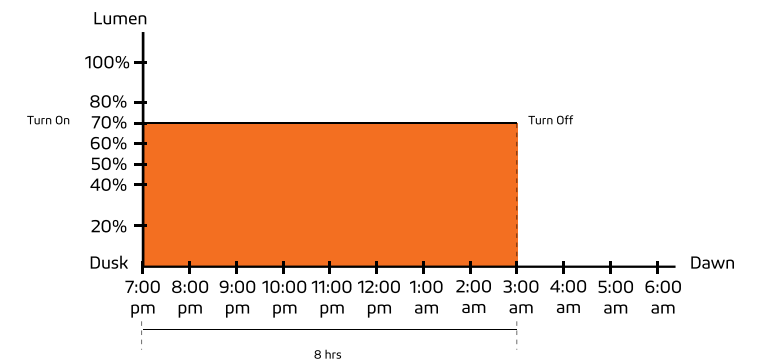
11. Timer Mode 4 Hours

This is an additional mode which can work with any other modes. For example: press this button at any time after you turn on 70% Constant Mode. If the light turns on at 7pm at dusk, it will turn off at 11pm. It will repeat the same schedule hereafter until it is canceled by pressing Timer Mode Disabled.



12. Time Mode 8 Hours

This is an additional mode which can work with any other modes. For example: press this button at any time after you turn on 70% Constant Mode. If the light turns on at 7pm at dusk, it will turn off at 3am. It will repeat the same schedule hereafter until it is canceled by pressing Timer Mode Disabled.



Important

Dusk and dawn time can vary for different locations and seasons. The sensors in our products will monitor the light levels where it is installed. The time period shown in the chart above is just an example to help you understand the different lighting modes.

SUNLIKE 50W is covered by a 5 year limited warranty. SOLTECH urban light warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 5 years from date of purchase. To obtain warranty service please contact your local distributor or sales rep for further instruction.



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SOLTECH LLC reserves the right to update all product data sheets at any time. Consult SOLTECH marketing specialists for publication updates at hello@soltechlighting.com

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