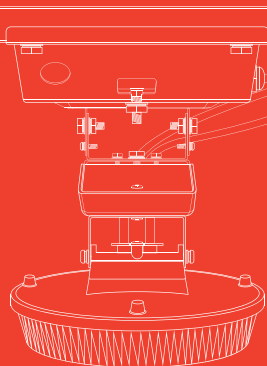




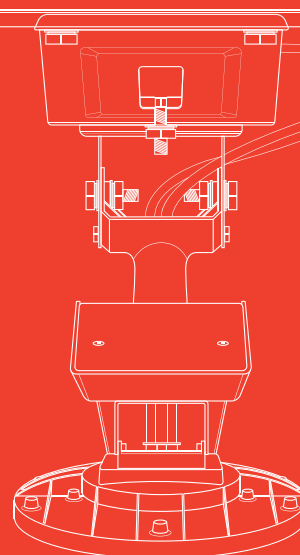
# CEGONIA

8W 20W 30W  
**Installation Manual**

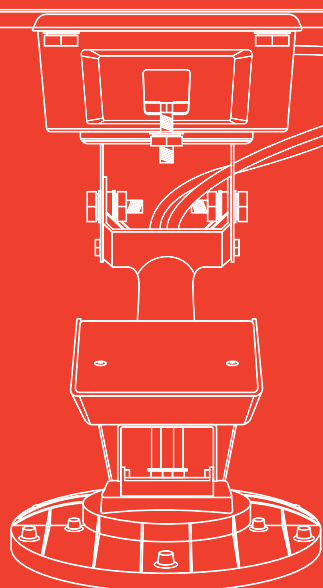
SOLTECH Designs and Manufactures  
Advanced, Solar-Powered  
LED Technology.



**CEGONIA 8W**



**CEGONIA 20W**



**CEGONIA 30W**

# Contents

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01	Introduction	04
02	Luminous Distribution	06
03	Battery Notes	07
04	Installation and Wiring Compliance	08
05	Mounting Accessories	09
06	Installation	010
07	Panel Angle	012
08	Remote Control Guide	014

# 01 Introduction

---

**Thank you for purchasing CEGONIA Urban Lighting Products.**

## **Introduction**

CEGONIA combine stylish design with high efficiency. You can adjust both the tilt angle and the azimuth to make sure the panel is in the optimal position to capture the sun's energy. It is a perfect fit for courtyards, parks, schools, communities and paths.

## **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.

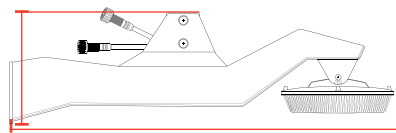
## CEGONIA 8W

SOLAR PANEL: 3.9 Lbs

SOLAR LAMP: 5.9 Lbs

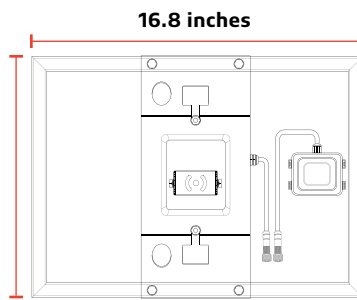
BATTERY ASSEMBLY: 6.1 Lbs

6.0 inches



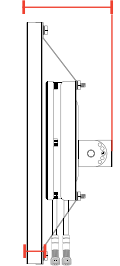
22.5 inches

13.8 inches

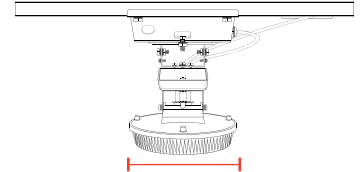


16.8 inches

5.0 inches



1.0 inches



7.5 inches

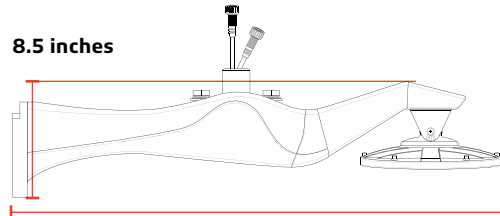
## CEGONIA 20W

SOLAR PANEL: 8.2 Lbs

SOLAR LAMP: 12.1 Lbs

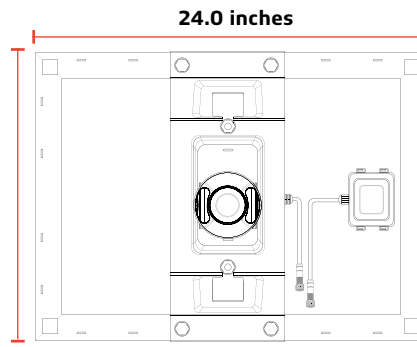
BATTERY ASSEMBLY: 14.3 Lbs

8.5 inches



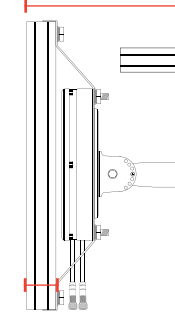
30.4 inches

20.1 inches

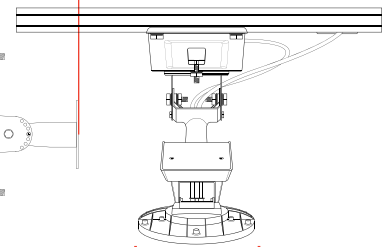


24.0 inches

11.0 inches



1.2 inches



9.5 inches

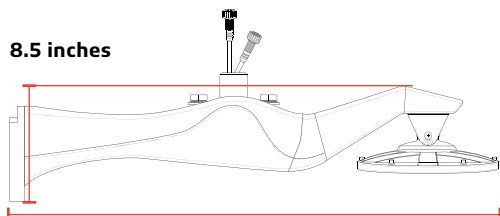
## CEGONIA 30W

SOLAR PANEL: 9.9 Lbs

SOLAR LAMP: 13.6 Lbs

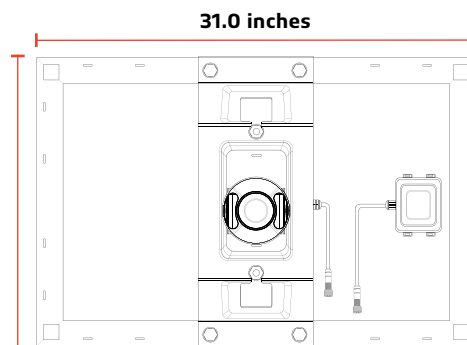
BATTERY ASSEMBLY: 16.9 Lbs

8.5 inches



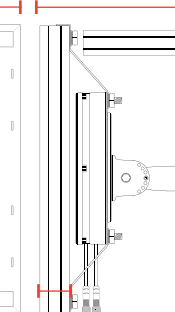
30.4 inches

20.1 inches

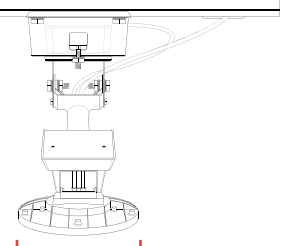


31.0 inches

11.0 inches



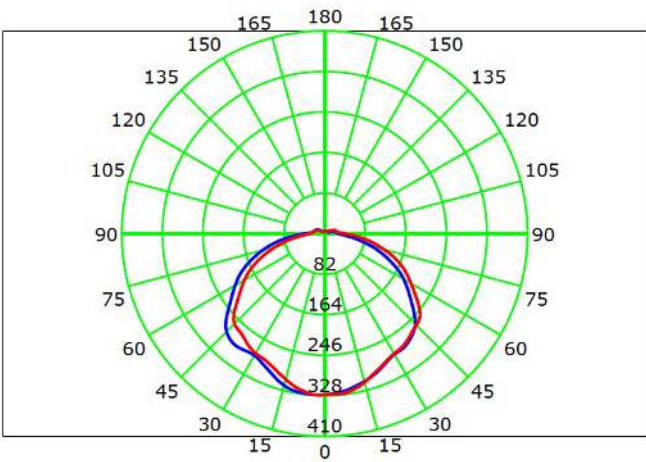
1.2 inches



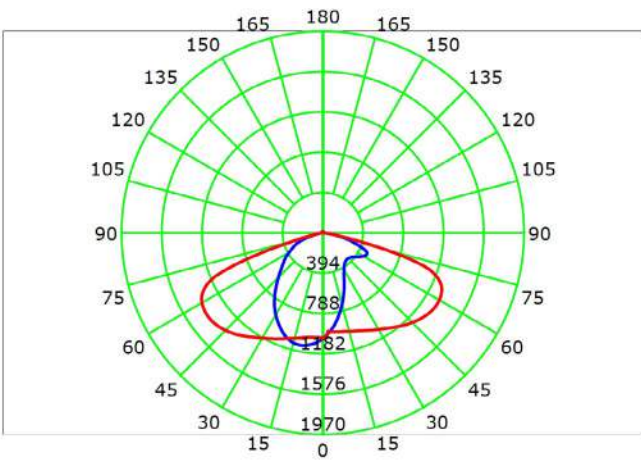
9.5 inches

# 02 Luminous Distribution

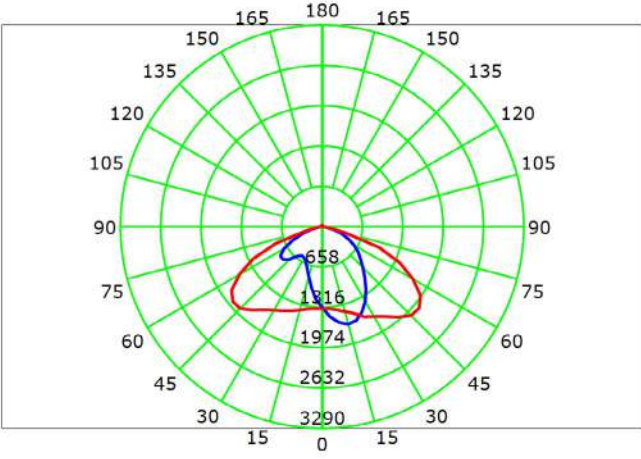
CEGONIA 8W Type III



CEGONIA 20W Type III



CEGONIA 30W Type III



# 03 Battery Notes

1. The  $\text{LiFePO}_4$  -battery-powered CEGONIA 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/green indicator on the lighting fixture as follows:

- Red indicator (Charging)
  - > Slow red light flashing = Charging
  - > Red light continuously on = fully charged
  - > Quick red flashing = charge fault
- Green indicator (not charging)
  - > Green light continuously on = more than 40% of the battery capacity remaining
  - > Slow green light flashing = battery capacity below 10%
  - > Quick green light flashing = battery below 0% mode—Protect battery does not over discharging

## Storage

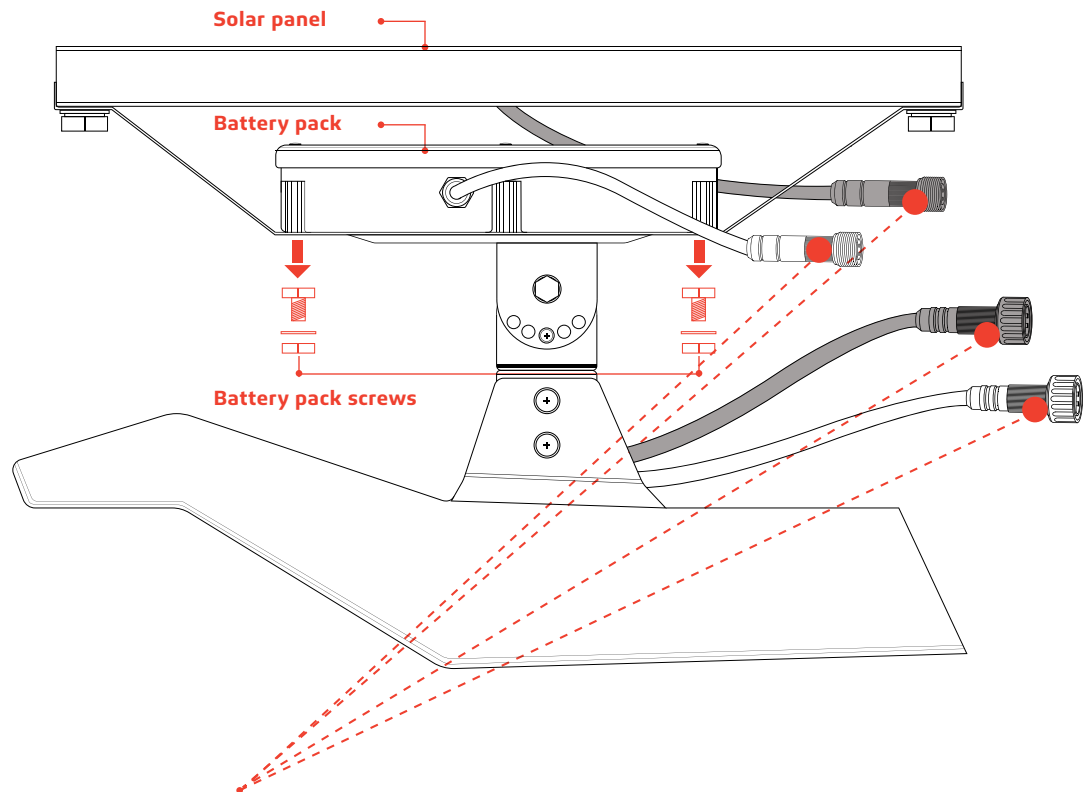
To avoid over discharge of the battery during storage, please recharge the lighting fixture every 3 months. Use the dedicated charger to charge, reset the switch when done.

## Battery Replacement

1. Disconnect the wire connectors.
2. Loose the screws of the battery pack and take out the battery pack.
3. Replace a new one.
4. Tighten the screws of battery pack.
5. Connect the wire connectors (Be sure you match the color when you connect them).

## (IAP) Intelligent Adaptive Program Battery Control Technology

In order to extend the off-grid autonomy of the CEGONIA 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

Disconnect wires

02


Loose the screws of the battery pack and take out the battery pack.

03

Replace new battery pack and tighten the screws.

# 04 Installation and Wiring Compliance

---

1. Installation and wiring must comply with the State and National Electrical Codes.
2. The CEGONIA 8W, 20W and 30W 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

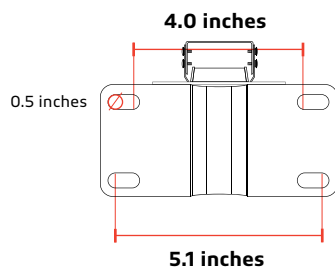
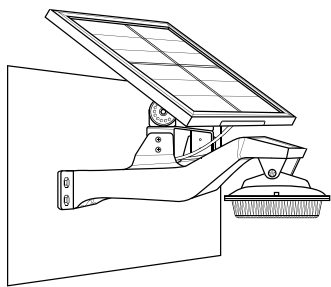
Always orient the solar panel facing the equator (e.g. facing south if in northern hemisphere).

Always have a tilt angle of at least 15° to avoid dust accumulation (0°=horizontal plane).

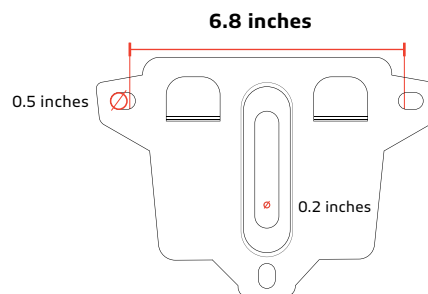


# 05 Mounting Accessories

## A. TRUNNION—Wall Mount

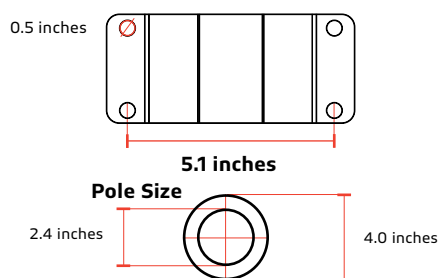
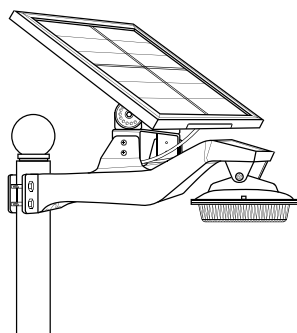


A-a. STLSTE-08-WM (for CEGONIA 8W)

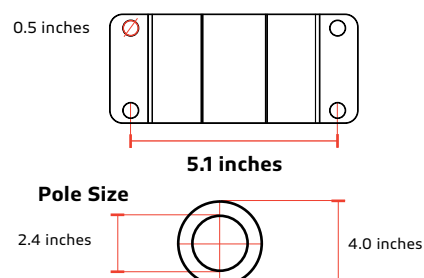


A-b. STLSTE-20/30-WM (for CEGONIA 20W/30W)

## B. TRUNNION—Round

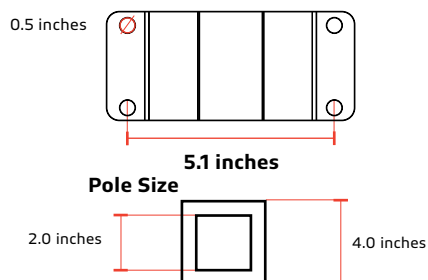
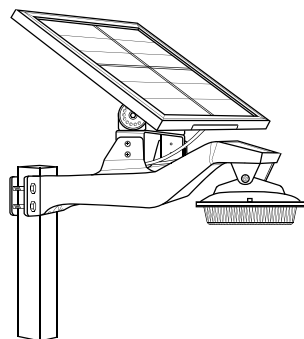


B-a. STLSTE-8W-TRR (for CEGONIA 8W)  
works with 2.4 inches to 4.0 inches poles.

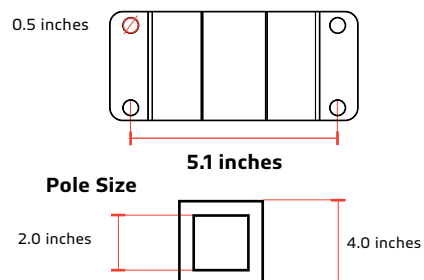


B-b. STLSTE-20W/30W-TRR (for CEGONIA 20W/30W)  
works with 2.4 inches to 4.0 inches poles.

## C. TRUNNION—Square



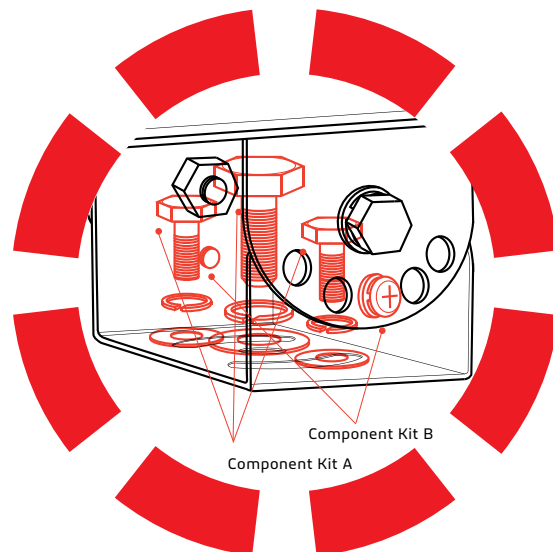
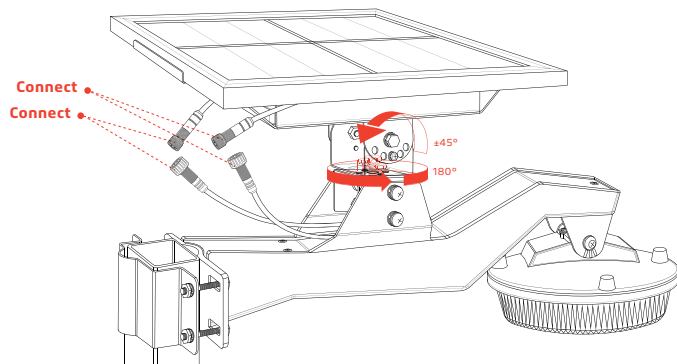
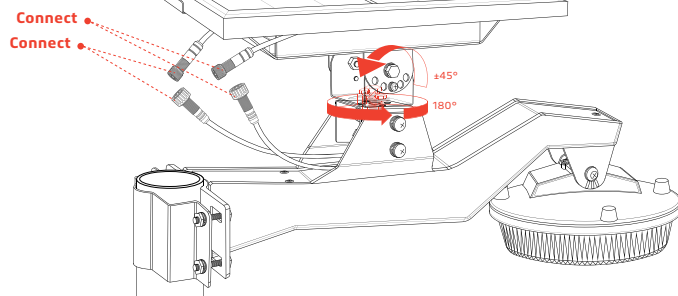
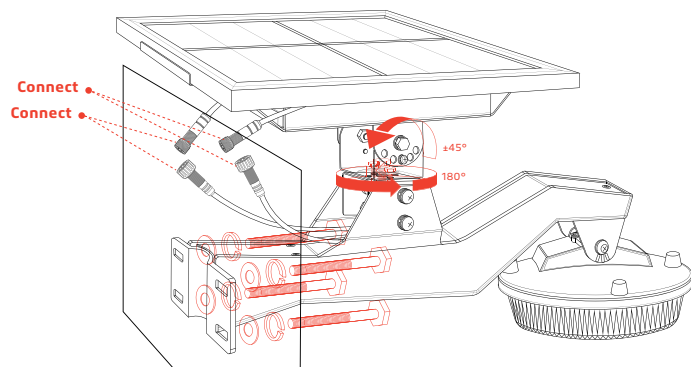
C-a. STLSTC-8W-TRS (for CEGONIA 8W)  
works with 2.0 inches to 4.0 inches poles.



C-b. TLSTC-20W/30W-TRS (for CEGONIA 20W/30W)  
works with 2.0 inches to 4.0 inches poles.

# 06 Installation

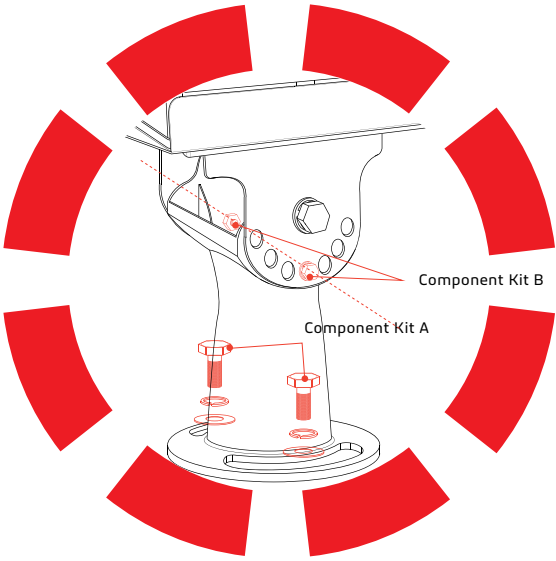
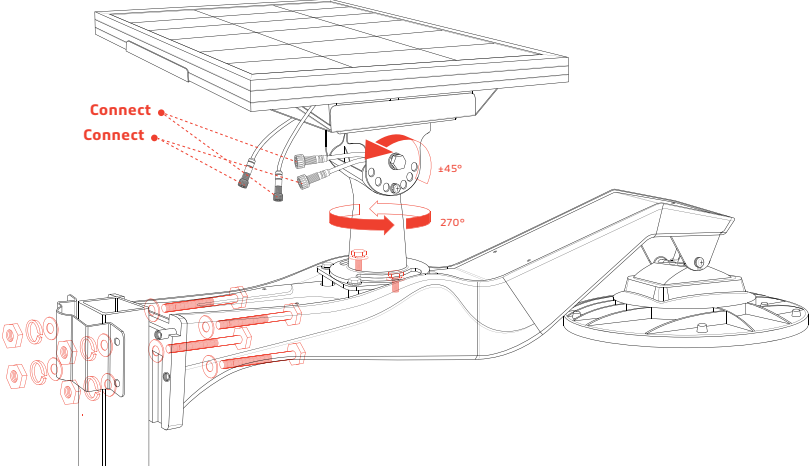
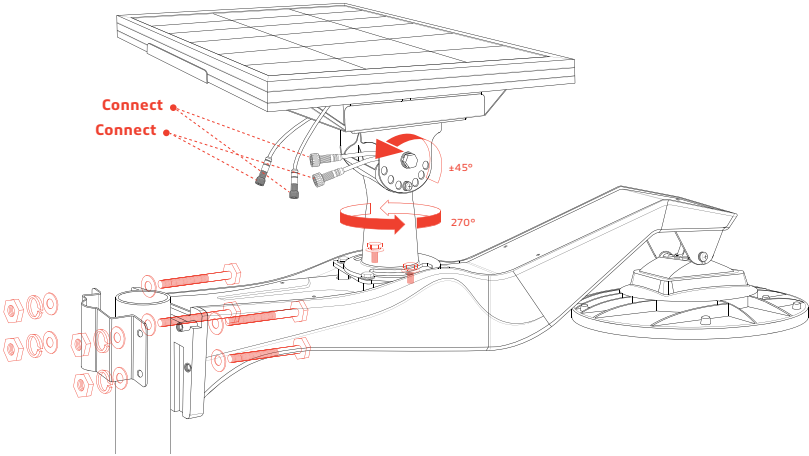
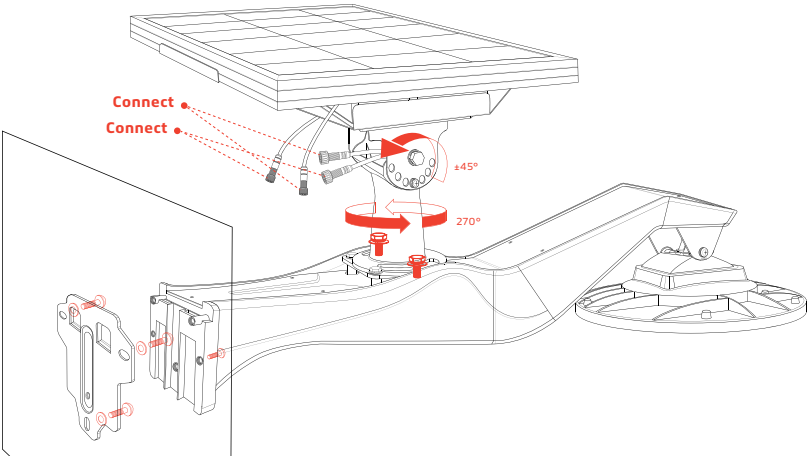
## CEGONIA 8W



Loose screws of component kit B to adjust the angle of solar panel.

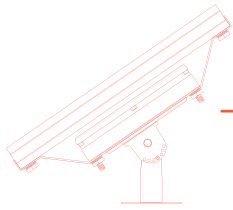
Loose screws of component kit A to rotate solar panel.

CEGONIA 20W 30W



Loose screws of component kit B to adjust the angle of solar panel.

Loose screws of component kit A to rotate solar panel.



60°

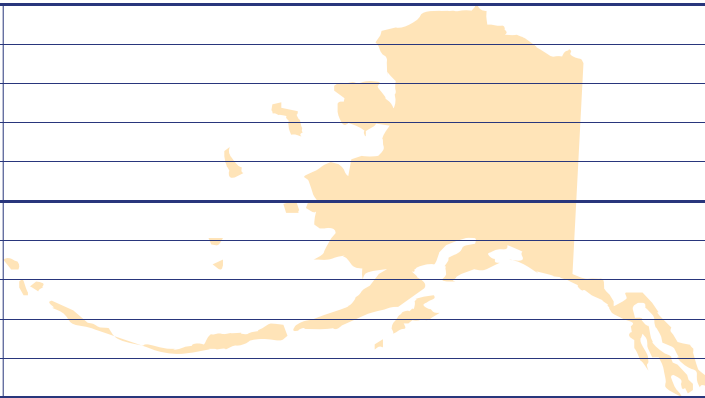
70° N

69° N  
68° N  
67° N  
66° N

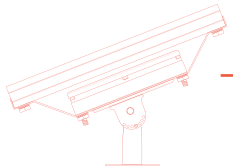
65° N

64° N  
63° N  
62° N  
61° N

60° N



Alaska



45°

49° N

48° N  
47° N  
46° N

45° N

44° N  
43° N  
42° N

41° N

40° N  
39° N  
38° N

37° N

36° N  
35° N  
34° N

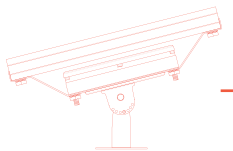
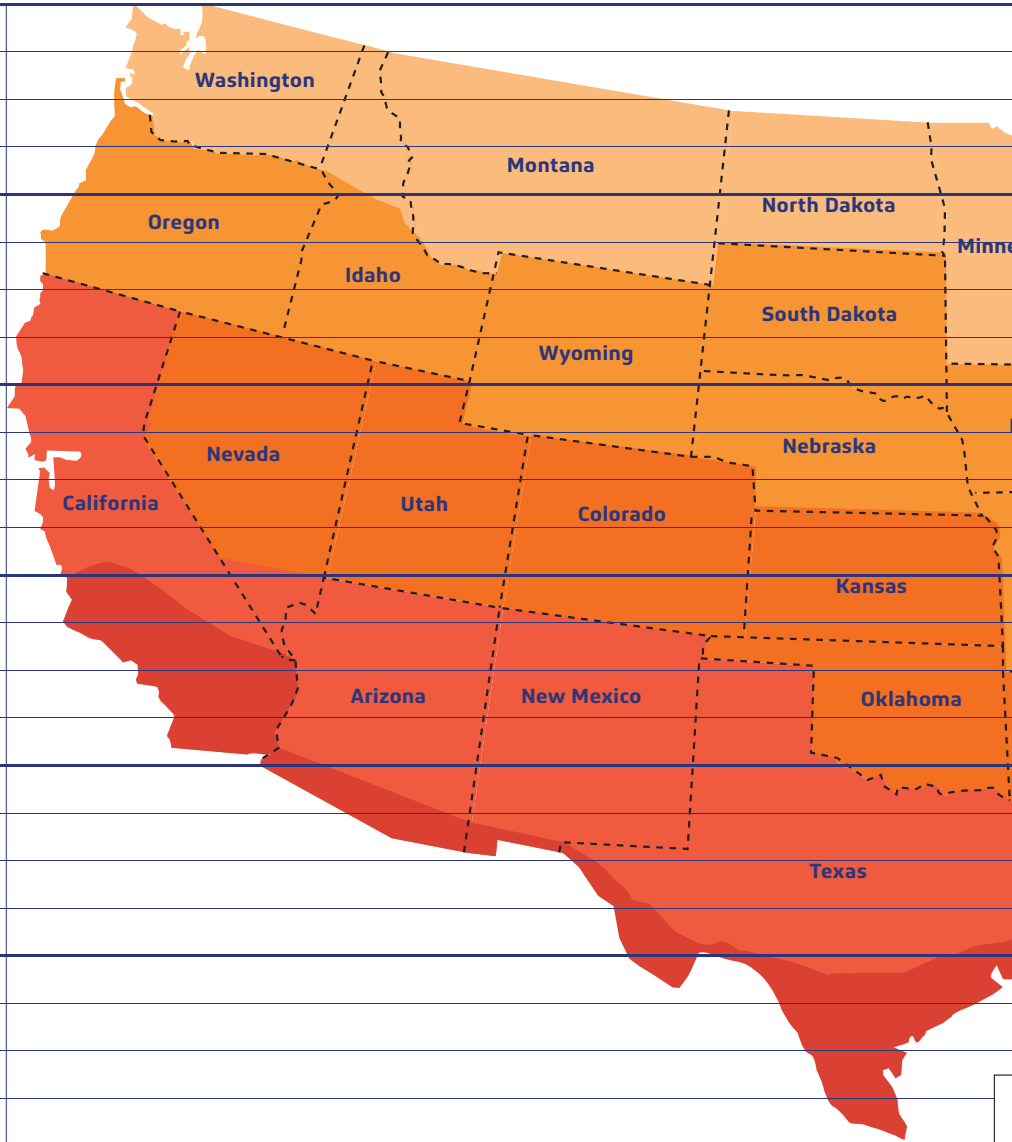
33° N

32° N  
31° N  
30° N

29° N

28° N  
27° N  
26° N

25° N



30°

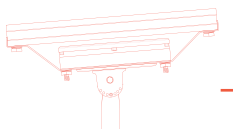
21° N

20° N

19° N



Hawaii



15°

# 07 Panel Angle

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

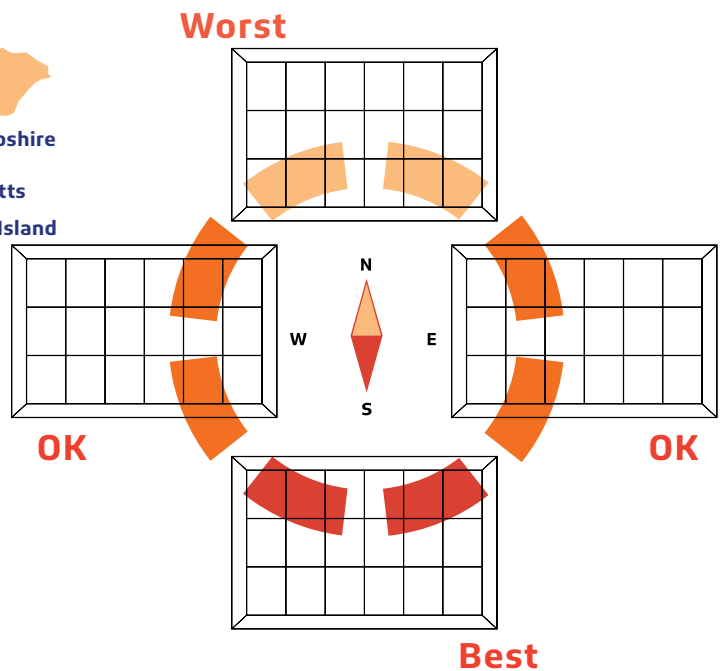
## Tip

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.

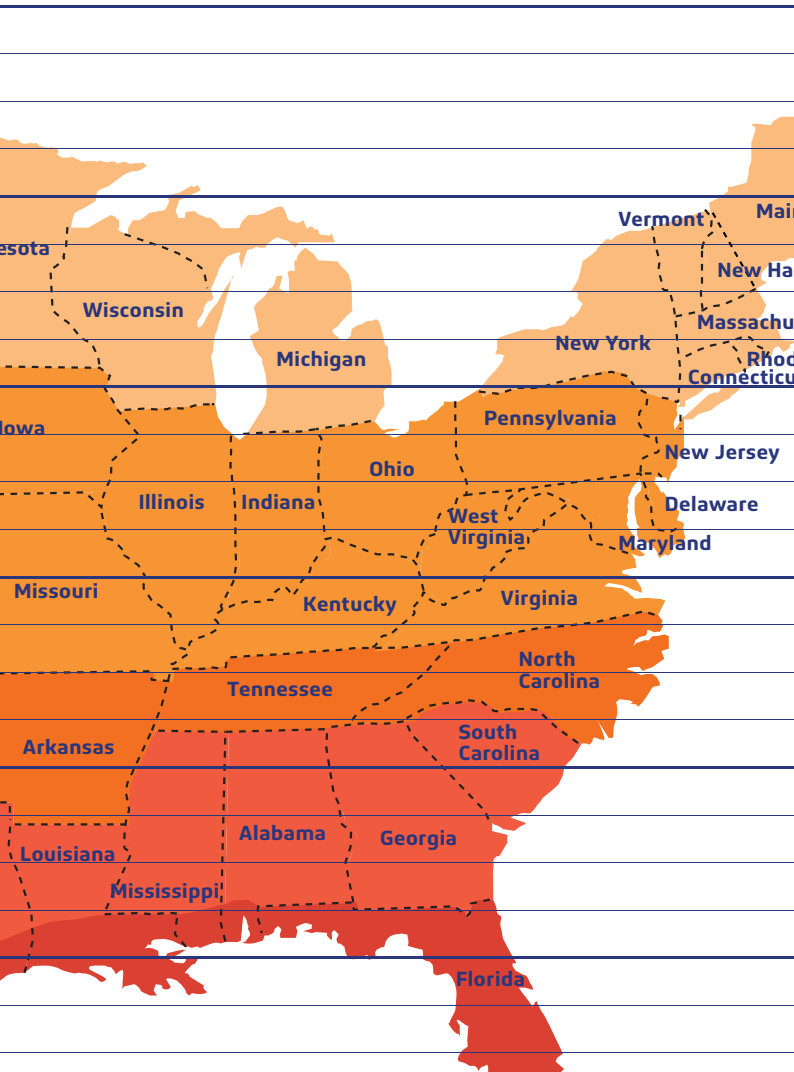
## Key



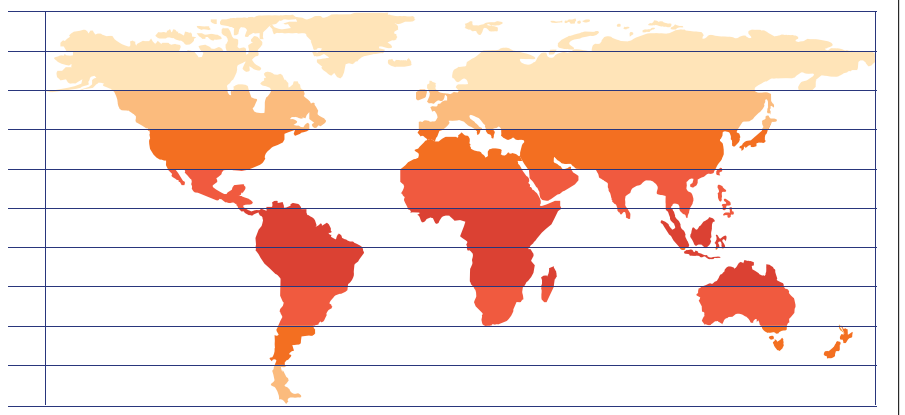
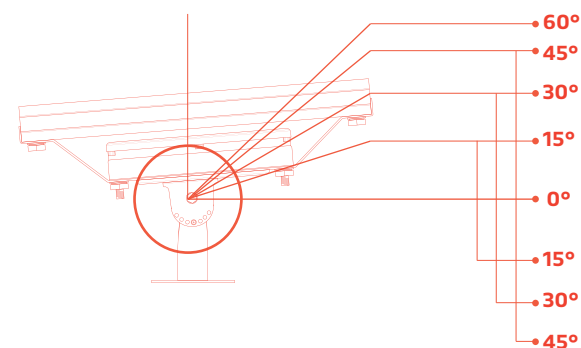
## Best Facing Direction For The Solar Panel



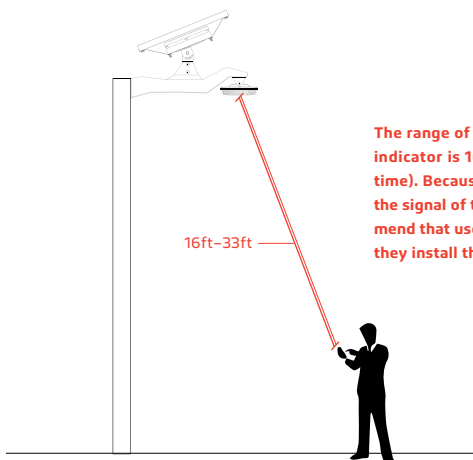
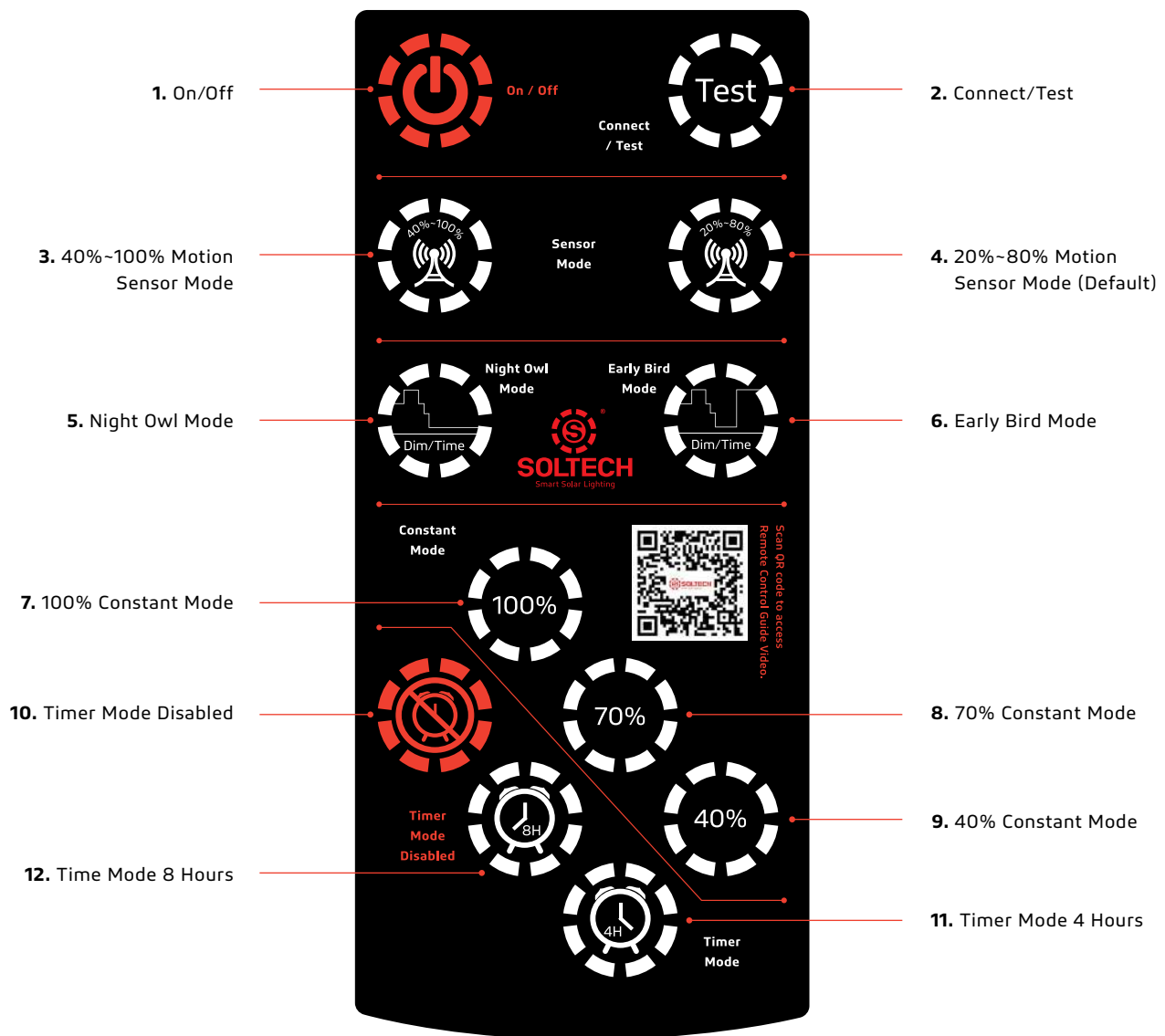
The area will dictate the installation of the fixtures and will sometimes prevent the lights from facing south. But that's okay! Panels facing West & East won't get as much light as Southern facing panels, but will still collect a good amount of sunlight. A North facing panel also works, but it will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



## World Wide Panel Angles



# 08 Remote Control Guide



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

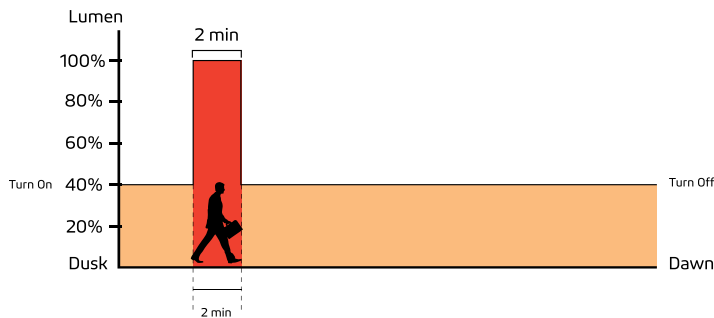
When off is selected, the light will stop working. The solar panel will not charge the battery and the battery will not supply electricity to the light.

## 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.

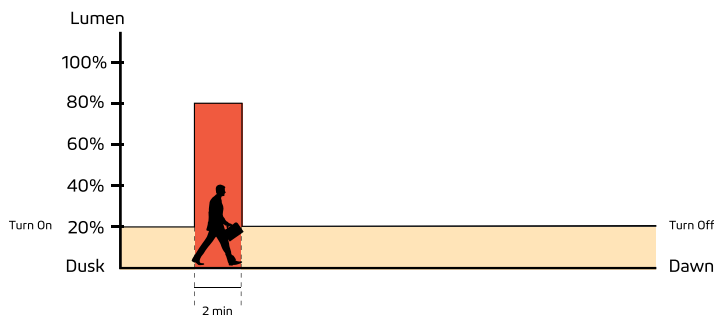
### 3. 40%~100% Motion Sensor Mode

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.

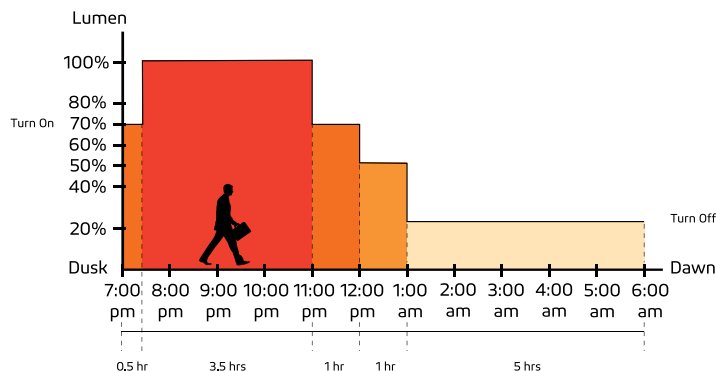


### (IAP) Intelligent Adaptive Program Battery Control Technology

In order to extend the off-grid autonomy of the CEGONIA 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%.

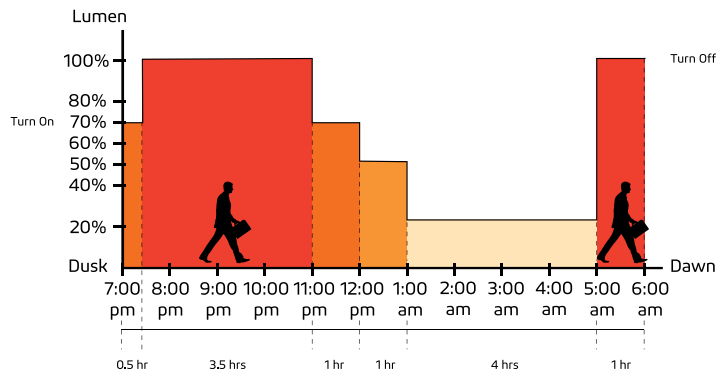
### 5. Night Owl Mode

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).



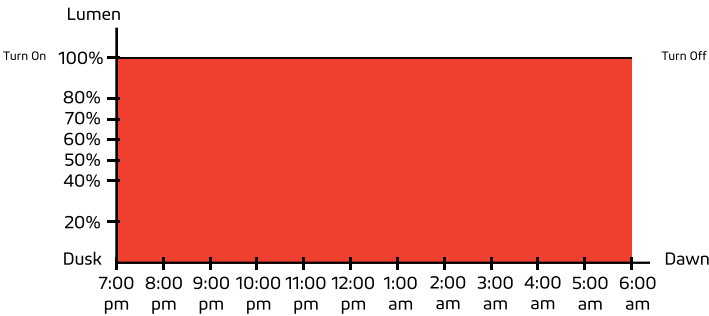
### Important

Dusk and dawn time may be different in other locations and seasons. The sensors of our products will follow the light patterns of where it is installed. The time period shown in the chart above is just an example to help you understand the different lighting modes only.

# 08 Remote Control Guide

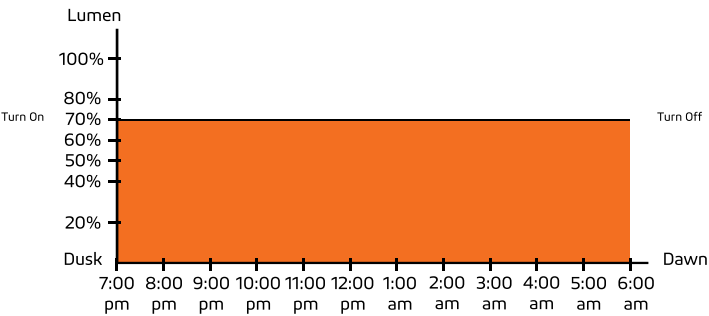
## 7. 100% Constant Mode

100% brightness from dusk to dawn.



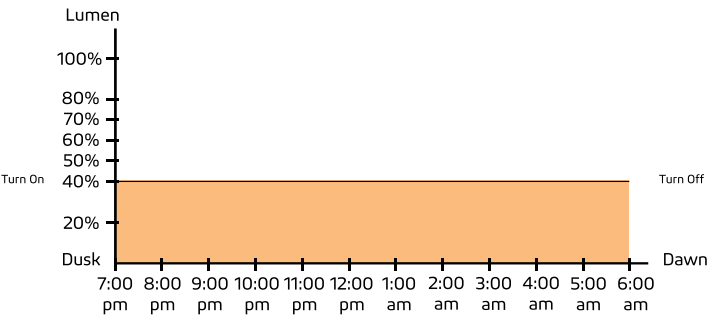
## 8. 70% Constant Mode

70% brightness from dusk to dawn.



## 9. 40% Constant Mode

40% brightness from dusk to dawn.



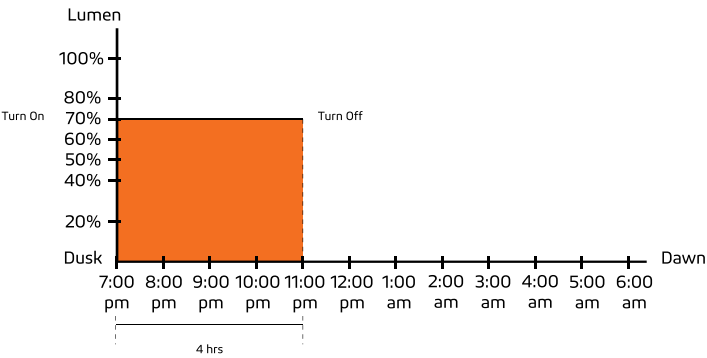
## 10. Timer Mode Disabled

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



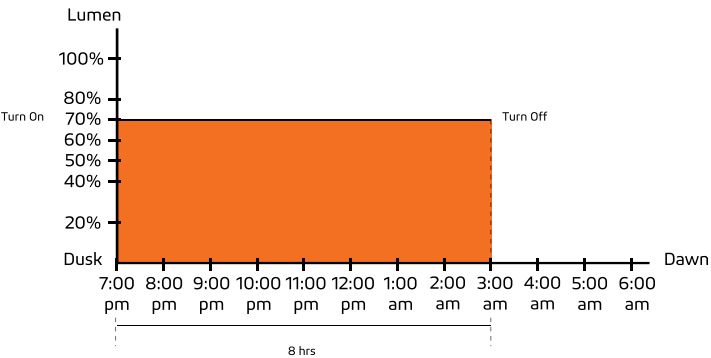
11. Timer Mode 4 Hours

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.

**CEGONIA products are 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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