# Solar Lighting International®, Inc.

# STEALTH II

## LED SOLAR STREET LIGHT
### USER MANUAL

## 40W / 80W / 120W

**IP66** CE ✓ **RoHS** ♻ 🗑

Please read and follow all instructions for operation. Save this manual for future reference.

*The Name Solar Lighting International® is a Registered Trademark.*

**SLI** Solar Lighting International®

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## Working Modes

### *BEFORE INSTALLING THE LIGHTS, READ THIS MANUAL.*

**Determine the optimal** charging **angle to face the light fixture/solar panel.** The optimal charging angle for the solar panel is your latitude and facing south. Then attach the light onto the pole.

1) Press the Power Button button on the light. The fixture LED light bar will light up for 3 seconds and then turn off. This indicates that the light is successfully activated. There should be a blinking green LED light which will indicate the fixture is charging.

2) To turn the system off for charging mode only, use the Remote and press the Remote Power Button, and the light bar will flash 3 times . The 3 flashes indicate the lights is in the off mode / charging only mode.

3) The light's battery does not come fully charged. You need to charge the light for 2 days, in the charge only mode, in full sun for proper operation.
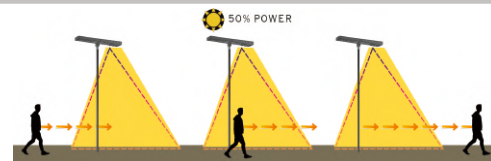
*The video link below will explain how to prepare and charge your light.*
**Go to https://www.solarlightingitl.com/stealth-charging-video/Video**

## FIXTURE LIGHTING OPTIONS

Press the button on the light to turn on the light.  Use the remote to select the preferred working mode as shown below. The light bar will light up for 3 seconds then turns off when each button is pressed.
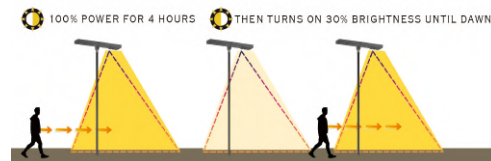
⏻ 🌞 📶 Ⓐ

### ⏻ Power Button

### 🌞 Constant Lighting Mode
Automatically operates at 50% brightness from dusk to dawn or until power is off.

This is the default lighting mode No action needs to be taken for this option

**50% POWER**

### 📶 Sensor Mode
Automatically operates at 30% brightness. When motion is detected, light increases to 100% until no motion is detected for 30 seconds, then returns to 30% brightness. Detection up to 50 feet.

**30% POWER    100% POWER    30% POWER**

### Ⓐ Customized Working Mode
Automatically turns on at dusk and remains at up to 100% brightness for 4 hours, then it automatically turns to 30% brightness until dawn.

**100% POWER FOR 4 HOURS    THEN TURNS ON 30% BRIGHTNESS UNTIL DAWN**

## Specifications

| Product Model | STEALTH II 40W-23 | STEALTH II 80W-23 | STEALTH II 120W-23 | STEALTH II 120W-23-O |
|---|---|---|---|---|
| Power | 40W | 80W | 120W | 120W |
| Lumen/ LED Type | 7,400 Lumens (Phillips 5050) | 14,800 Lumens (Phillips 5050) | 22,200 Lumens (Phillips 5050) | 22,200 Lumens (Phillips 5050) |
| Color Temperature | 4000K / 5000K | 4000K / 5000K | 4000K / 5000K | 4000K / 5000K |
| BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 | B1-U0-G2 |
| Battery | LiFePO$_4$ 24AH,12.8V / 307.2Wh | LiFePO$_4$ 48AH,12.8V / 614.4Wh | LiFePO$_4$ 36AH,25.6V / 921.6Wh | LiFePO$_4$ 48AH,25.6V / 1228.8Wh |
| Solar Panel | Mono-crystalline \| 48 Watt | Mono-crystalline \| 65 Watt | Mono-crystalline \| 100 Watt | Mono-crystalline \| 100 Watt |
| Light Dimensions | 34.1"×16.2"×3.94" | 45.9"×16.2"×3.94" | 65.6"×16.2"×3.94" | 65.6"×16.2"×3.94" |
| Working Time | Up to 14 Hrs if fully charged, Alternate working modes and working times, ranges from 3 - 6 nights. | | | Up to 16 Hrs if fully charged, Alternate working modes and working times, ranges from 3 - 6 nights. |
| Charging Time | Requires 6 hours of direct sunlight at optimal angle. Optimal direction is magnetic south and the optimal angle equals the latitude of the installation. Performance is reduced if product is installed different than the optimal angle or non-South facing. | | | |
| Beam Angle | 150 x 75 Type III * | | | |
| PIR Sensor | 2 PIR Sensors \| Detection angle: 150° \| Detection distance: up to 8 Meters / 26 Feet | | | |
| IP Class | IP66 | | | |
| Working Temp | -10°F - 140°F | | | |
| Housing Material | Powder Coated Aluminum \| Salt Spray Coating | | | |
| Weight N.W./G.W. | 41 lbs. \| 49 lbs. | 57 lbs. \| 71 lbs. | 71 lbs. \| 84 lbs. | 86 lbs. \| 102 lbs. |
| Box Dimensions | 43.9"×19.5"×7.1" | 55.7"×19.5"×7.1" | 75.4"×19.5"×7.1" | 75.4"×19.5"×7.1" |
| Installation Height | 10' - 15' | 15' - 25' | 20' - 30' | 20' - 30' |
| Installation Spacing | 32' - 50' | 50' - 100' | 100' - 150' | 100' - 150' |
| EPA | 2 | 4 | 6 | 6 |
| Warranty | 3 years ** | | | |

\* Default lens is Type III, other options available.
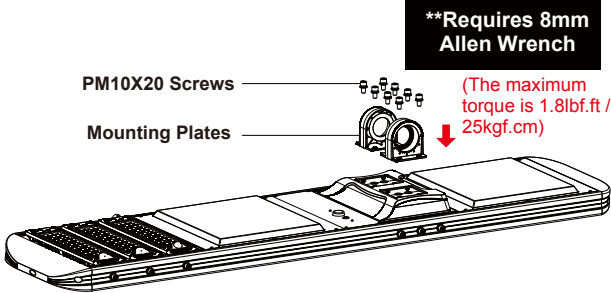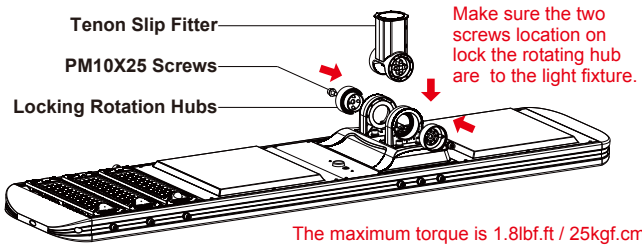\*\* Prorated if not installed per optimal instructions.

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## Installation

Please prepare tools and accessories before installation. Each box includes:

Solar Light **1pc**
Remote Control **1pc**
User Manual **1pc**

PM10x25 Screws **2pcs**
PM10x20 Screws **8pcs**
M10x20 Screws **4pcs**
M4x6 Screws **4pcs**

Mounting Plates **2pcs**
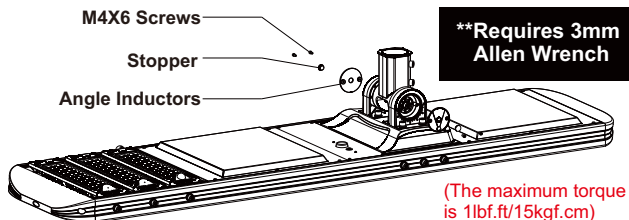Tenon Slip Fitter **1pcs** Locking Rotation Hubs **2pcs** Angle Inductors **2pcs** Stopper **2pcs**

1. Install the Mounting Plates for the pole mount according to the arrows shown below. Attach the Mounting Plates to the fixture with the washers and screws listed below.

**\*\*Requires 8mm Allen Wrench**

PM10X20 Screws

Mounting Plates

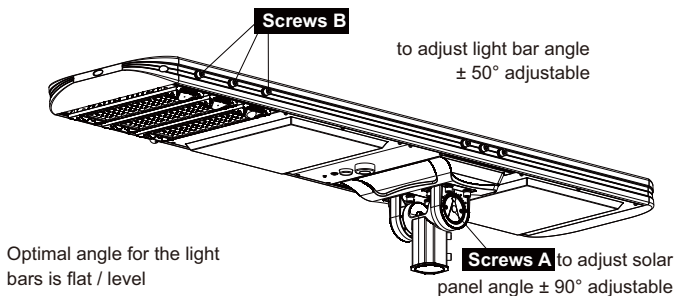(The maximum torque is 1.8lbf.ft / 25kgf.cm)



2. Slide the Tenon Slip Fitter into the Mounting Plates as shown, and insert the Locking Rotation Hubs into the sides of the Tenon Slip Fitter, then fasten them with the flat washers, lock washers, and screws.
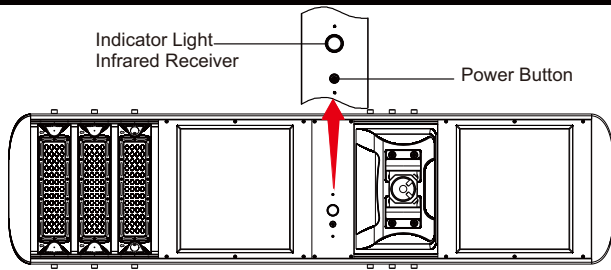
Tenon Slip Fitter

PM10X25 Screws

Locking Rotation Hubs

Make sure the two screws location on lock the rotating hub are to the light fixture.

The maximum torque is 1.8lbf.ft / 25kgf.cm

**3. After Tenon slip fitter is mounted to the fixture, install the angle indicator to the locking rotation hub, Make sure the angle is set to zero**

M4X6 Screws

Stopper

Angle Inductors

**\*\*Requires 3mm Allen Wrench**

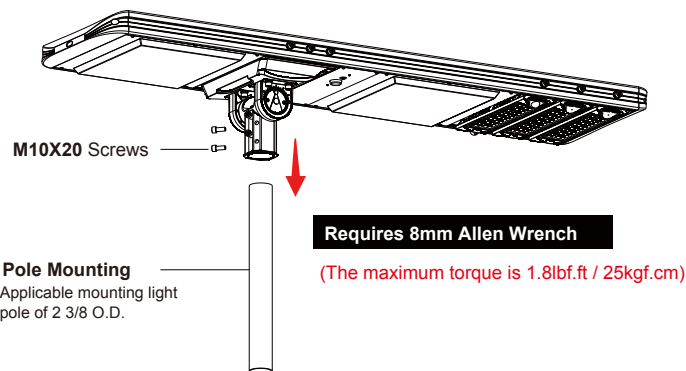(The maximum torque is 1lbf.ft/15kgf.cm)

**4. Loosen the solar panel screws (Screws A) and adjust the solar panel to the appropriate angle that captures the most sunlight and then tighten the screws back. Next, loosen the light bar screws (Screws B), adjust the light bar level to the ground**

Screws B

to adjust light bar angle ± 50° adjustable

Optimal angle for the light bars is flat / level

Screws A to adjust solar panel angle ± 90° adjustable

**5. According to the operation instructions, activate the light by pressing the power button, then select the desired working mode using the remote.Turn the light off using the remote (light bars will flash 3 times) and let charge for 2 days before using.**

Indicator Light
Infrared Receiver

Power Button

**6. Place the Tenon Slip Fitter onto the light pole, and screw the M10X25 screws in tight.**

M10X20 Screws

**Requires 8mm Allen Wrench**

(The maximum torque is 1.8lbf.ft / 25kgf.cm)

**Pole Mounting**
Applicable mounting light pole of 2 3/8 O.D.

## Special Notes

- Before installing the light onto the pole, **Press the power button on the light to activate and test the light.**
- Adjust the solar panel and then rotate light bar(s) flat for the optimal light distribution angle, then install the light onto the pole. The optimal angle for the solar panel is your latitude and facing south.
- If the fixture does not light up after unpacking, it is usually because of insufficient battery power. Charge it for 1-2 days before installing it. _Go to_ **https://www.solarlightingitl.com/stealth-charging-video/**
- It is recommended to install the light on a sunny day, so it can charge during the day prior to use without affecting the operation during the night.
- Install the light in a place with unobstructed, full sunlight to ensure it can be charged for the required 6 hours per day, which gives the light maximum working time.
- As this solar panel is photosensitive, it will automatically light up at dusk. Please be aware that it will not light up during daytime even if it's turned on.
- In order to ensure the light is in optimal working condition, clean the solar panel regularly. We recommend cleaning at least once every six months.
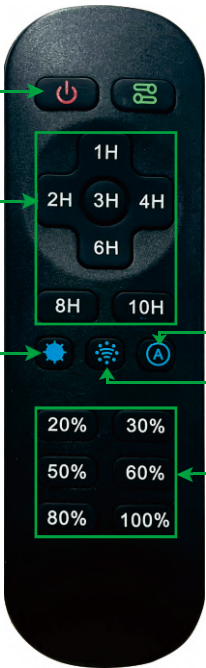
## Warning

- The light is equipped with an internal battery pack which is replaceable. If you have any need to replace it, please contact Solar Lighting International, Inc. for a new battery pack.
- If the battery pack is taken out and put back in or replaced with new ones, re-activate the light & remote control by pressing Power Button button on the light.
- Do not disassemble the light - **This will void your warranty.**
- Keep the light away from fire, oil or flammable materials to avoid explosion.

# Remote Control

**Remote Control Distance**: ≤ 30 Feet / 10 Meters

**Power Button:**
Turning off the light with the remote control.
This allows the unit to continue charging without turning on at night.

ON / OFF

HOURS OF RUNTIME SELECTION

CONSTANT LIGHTING MODE BUTTON

CUSTOMIZED WORKING MODE

SENSOR MODE

BRIGHTNESS OUTPUT SELECTION

| ON/OFF Button on the Remote Control | During Daylight Hours | At Night Time |
|---|---|---|
| Press to turn 'ON' | Lamp flashes one time, then turns off | Lamp turns on |
| Press to turn 'OFF' | Lamp flashes three times, then turns off and charges | Lamp flashes three times, then turns off |

## TURNING THE LIGHT ON:

Press the **Power Button on the light** The fixture will light up for 3 seconds then turn off; a green light will begin to blink which indicates that the light and the charging mode have been successfully activated.

## TURNING THE LIGHT OFF:

Press the Remote **Power Button** to completely turn off the light. The LED light bar will flash 3 times

## SENSOR MODE:

**Time and Brightness are NOT Adjustable.**
For the sensor mode, press the sensor mode button, the light will operate as follows: Automatically operates at 30% brightness. When motion is detected, light increases to 100% until no motion is detected, then returns to 30% brightness.
Detects motion up to 50 feet. The pole height will reduce the active sensing range.

# Constant Lighting Mode

*Changing to this mode will not provide dusk to dawn light*

**Under Constant Lighting Mode:**

*Brightness can be set to:* 20%/30%/50%/60%/80%/100%

*Lighting Time can be set to:* 1 H/2H/3H/4H/6H/8H/10H

Before setting the brightness or lighting time, press the **Constant Lighting** Mode button first, then press the Brightness or Lighting Time option desired. OPTION 1 : **Press**

**Default setting for** **Constant Lighting Mode:**

The lamp automatically turns on at dusk and will maintain 50% brightness until dawn or until the power runs out. Any modification to increase the light output will reduce the light runtime

*This mode does not provide dusk to dawn lighting.*

**OPTION 2: Press** **+ Select a Brightness Button**
**For example:**

Press **+ Press** `60%`

Lamp automatically turns on at dusk and maintains 60% brightness until the power runs out.

**Note:** Under constant lighting mode, when you change the brightness but not the lighting time; it will keep lighting at the chosen brightness until power runs out.

# Indicator Functions

There are 4 colors (green, red, blue, yellow) in the indicator light section.
Each color indicates the working status of different parts of the lamp so you can easily troubleshoot your light.

| Indicator Color | Indicator Status | Functions |
|---|---|---|
| •Green Charging Indicator | Slow Flash (Flashes once every 2 seconds and keeps repeating) | MPPT charging correctly |
| | Fast Flash (Fast flash 3 times, then off for 2 seconds, keeps repeating) | The output voltage of the solar panel is lower than the charging voltage of the battery. (Usually because it's early morning or the solar panel is covered.) |
| | Off | Solar panel wiring does have a good connection. |
| | | It's nighttime. |
| | | Battery is fully charged. |
| | | Battery wiring does have a good connection. |
| | | Battery can't be charged / Faulty or old battery. |
| •Red Battery Indicator | Off | Battery works normally. |
| | Slow Flash {Flash 1 time every 2 seconds, keep repeating} | Battery over discharge (Low Power). Light will not operate until the battery has adequate charge. |
| | Constant Lighting On (Green light OFF at the same time.) | Battery is fully discharged. |
| •Blue LED Indicator | Off | LEDs work normally. |
| | Fast Flash (Fast flash 3 times then off for 2 seconds, keeps repeating) | LED output over-voltage. |
| | | LEDs have short circuited. |
| | | LEDs are disconnected. |
| •Yellow PIR Sensor Indicator | Constant Lighting On | PIR sensor works normally motion is detected at night. |
| | Off | It's daytime. |

# Notes

**The solar panel must be washed annually for correct operation.**

You need a compass to determine which direction is south, do not guess.

For optimal light distribution, after the fixture is angled toward the sun, loosen the bolts on the sides of the light bars and adjust the light bars so they are level to the ground. This creates the full cutoff effect and Dark Sky compliance. When the light bars are flat, this is the correct placement for optimal light distribution.



Angle Finder to determine the correct angle for your current latitude. Check google for your local latitude angle.

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http://www.solarlightingitl.com