

# Freelite™

Model: PVP600-CC

**JOVI LED Solar Street and Carpark Light with microwave sensor**

## **Installation Instructions**



**ENSURE YOU READ THE INSTRUCTIONS FULLY BEFORE COMMENCING INSTALLATION.**

**This solar lighting product must be installed by a qualified electrician.**

This streetlight features a large area photovoltaic panel and tiltable LEDs to reduce light wastage. High power LEDs , photovoltaic panel and battery with MPTT brand Energy Management System (EMS) with microwave sensor are all in one, with a Remote included to set the lighting modes. The low ULOR of only 0.31% means this light is night sky friendly and reduces light pollution.

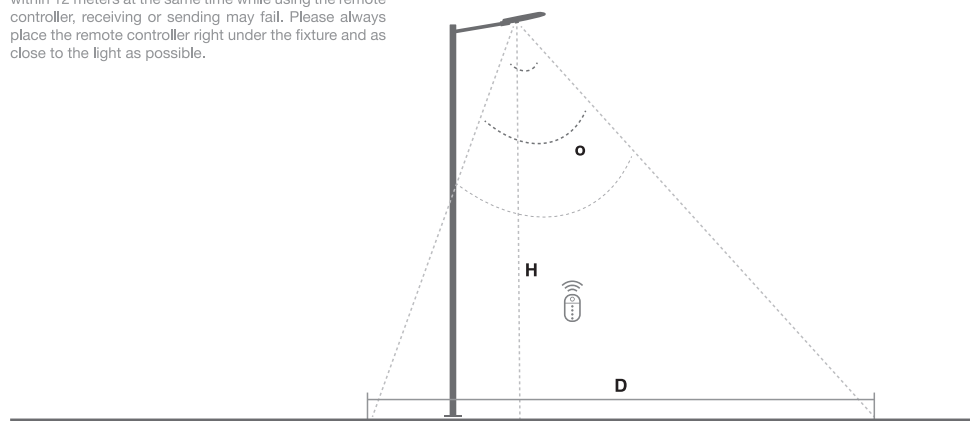
## LOCATION OF INSTALLATION

For best results your PVP panel should be exposed to as much direct sunlight as possible. When positioning the light, account for objects that may cast shade for example buildings and trees. In winter, the sun sits lower, and days are shorter, so ensure the PV panel has clear exposure to maximize battery charge during shorter days.

The microwave sensor detects vibration changes, triggering the light. To avoid unwanted activation, carefully choose the lights location, avoiding areas near occupied buildings or air conditioning unit motors etc, which may set off the sensor.

Remote control distance 5-7 meters to the luminaire, installation height and environment and other factors may affect the controller sensitivity.

Note: If possible, 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. Please always place the remote controller right under the fixture and as close to the light as possible.



| Detection range  | O         | H      | D       |
|------------------|-----------|--------|---------|
| Microwave Sensor | 65 degree | 6-10 m | 7 -10 m |

When the microwave sensor detects movement, Light output will be boosted and stay there until there has been no movement for a period of 30 seconds.

## Light Head:



■ **Adjustable LED Module:**

Each LED module is adjustable from -10 to +30 degrees.

■ **Motion Sensor**

■ **Red indicator light**

■ **ON/OFF Switch**

■ **M6 Screws:**

Access to battery box via these 6 screws.

■ **Shaft Screw:**

Loosen this screw if you need to adjust the angle of the light, re-tighten once the desired angle is set.

■ **Screws:**

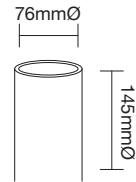
Tighten these screws once the light is installed on the pole.

## Red indicator light status:

|                   |   |
|-------------------|---|
| <b>Light on</b>   | <b>Normal:</b> Idle/discharge   |
| <b>Slow flash</b> | <b>Charging</b>   |
| <b>Fast flash</b> | <b>System Fault:</b> Short circuit, open circuit, over discharge, over temperature, BV over temperature, EMS over temperature |

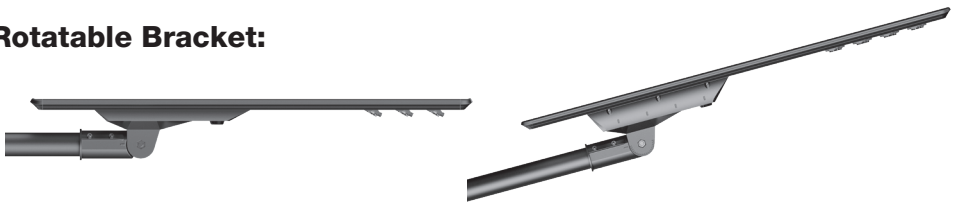
## INSTALLATION: Post Installation.

Install a professionally prepared lamp post with a 76mmØ x 145mmL mounting at the top end. The recommended height of the post is 4 to 8 metres. The light can be mounted onto a vertical post for pathways, car parks or can be mounted to posts with a horizontal overreach if the purpose is for road or pedestrian crossing lights. Simply adjust the rotatable bracket to fit either of these scenarios.

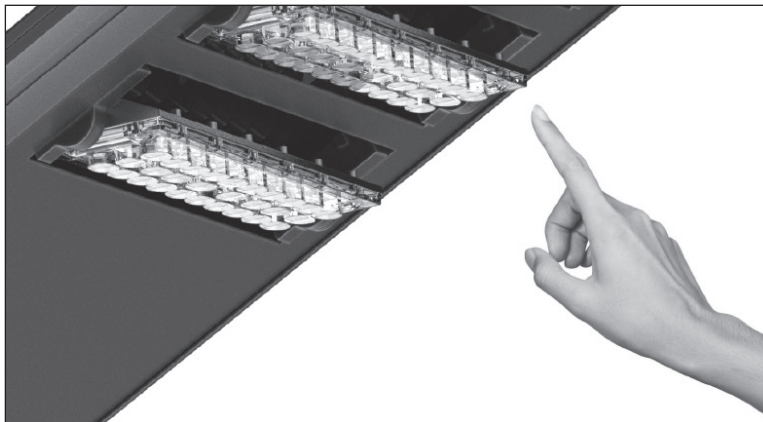


Pole mount dimensions  
outside diameter.  
Purchase pole separately

## Rotatable Bracket:



The LED modules rotate manually from -10 to +30 degrees and can be set as desired. This helps direct the light where it is most needed and reduces light wastage and nuisance lighting.



## PREPARATION BEFORE INSTALLATION:

Before unpacking the light, prepare a soft, clean surface like cardboard to avoid damage from harsh surfaces like concrete.

- Unpack and inspect the contents for damage.

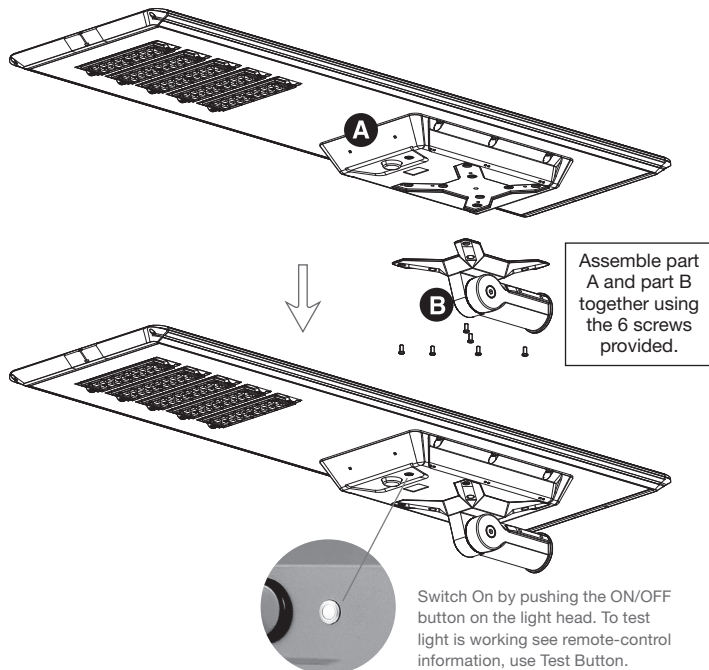
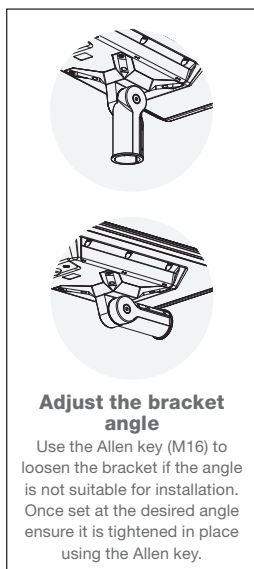
This solar street light is divided into two parts: A and B. Please follow the instructions to install.

### Part A

Includes lighting fixtures  
(excluding mounting brackets)

### Part B

Includes mounting bracket  
and fixing screws.



## Installing the light head:

Once assembly of the light and testing is completed and the on button is switched on you may install onto the professionally installed pole. Place mounting bracket over pole end. Tighten the 4 screws on the mounting bracket and ensure it is held in place securely.

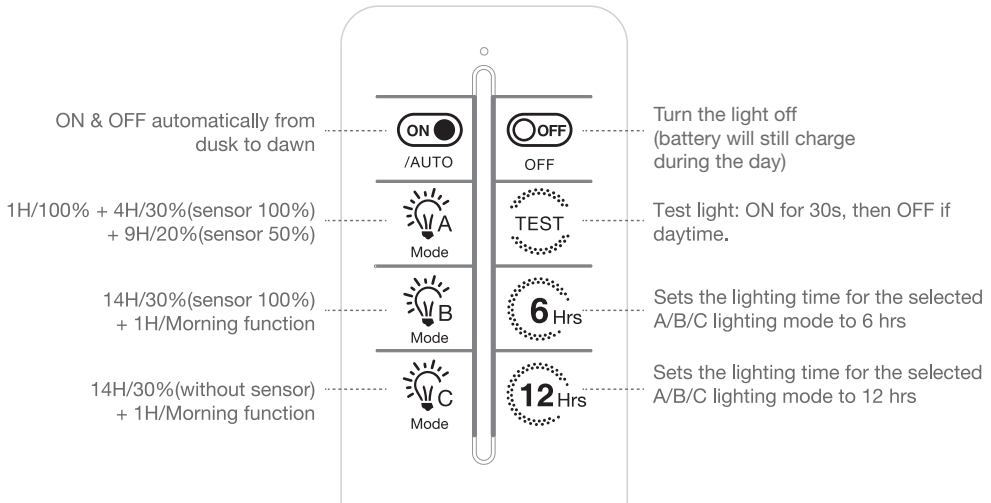
### Note:

Adjustment of the LED modules and angle of the mounting bracket are possible before or after placement onto the pole. Please consider which is more appropriate for your installation scenario.

## To set the lighting Function, use the provided remote control.

All modes use the Energy Management System (EMS) this gradually steps down the light level during the night to ensure a battery level is retained for subsequent nights with a similar lighting cycle. The EMS ensures the light is running throughout the whole night, it automatically turns the light on at dusk and turns it off at dawn.

## REMOTE CONTROL:



## NOTES:

- Switch the light on via the button on the light head first in order to be able to use the remote
- Default lighting mode is mode A
- Press OFF to turn the light off (battery will still charge during the day), When turned back on it will restore to the last set mode.
- Morning function: Light turns on to 40% light output for the last 1 hour (no sensor)
- 6Hrs/12Hrs buttons: Push mode A/B/C first then push the 6Hrs or 12Hrs button.

Example

$$\begin{aligned}
 &\text{Mode A} = 1\text{H}/100\% + 4\text{H}/30\%(\text{sensor } 100\%) + 9\text{H}/20\%(\text{sensor } 50\%) \\
 &\text{Mode A} + 6\text{Hrs} = 1\text{H}/100\% + 4\text{H}/30\%(\text{sensor } 100\%) + 1\text{H}/20\%(\text{sensor } 50\%) \\
 &\text{Mode A} + 12\text{Hrs} = 1\text{H}/100\% + 4\text{H}/30\%(\text{sensor } 100\%) + 7\text{H}/20\%(\text{sensor } 50\%)
 \end{aligned}$$



## PRODUCT SPECIFICATIONS:

|                                 |   |
|---------------------------------|---|
| <b>Model</b>                    | <b>PVB600-CC</b>  |
| <b>PVP Voltage</b>              | 18V monocrystalline   |
| <b>Battery Voltage</b>          | 12.8V lithium Iron Phosphate LiFePO <sub>4</sub>  |
| <b>LED wattage</b>              | 50 Watts high output  |
| <b>PV peak wattage</b>          | 64W   |
| <b>Battery Watt-hours</b>       | 384 WH  |
| <b>Colour Temperature</b>       | 2,800K  |
| <b>Measured Lumens</b>          | 8500lm  |
| <b>Battery autonomy</b>         | 2 days or 3 to 4 days in sensor mode  |
| <b>Dimensions</b>               | 1100mm Long x 420mm Width x 350mm Height, mounts onto 76mmØ x 145mmL post end.                            |
| <b>Weight</b>                   | 12.30Kg   |
| <b>Light beam angle</b>         | 140 degrees   |
| <b>Water Ingress Protection</b> | IP65  |
| <b>Materials</b>                | Die Cast Aluminium construction and tempered stainless steel.<br>Charcoal Grey powder coated paint finish |
| <b>Impact resistance</b>        | IK08  |

## MAINTENANCE.

### Important:

Important: Rain will wash dust off from the PVP however other debris will need cleaning off periodically with soapy water and a soft brush to maintain battery condition.

If this product is not working and is still not working after referring to the info centre guide on [www.alphalighting.co.nz](http://www.alphalighting.co.nz) do not attempt to repair the fitting yourself – please contact Gartner Superlux Ltd for advice.

### Note:

The battery is a recyclable item, at the end of life ensure you dispose of the product responsibly.

Due to continuous design improvement, specifications are subject to change without notice.

**IMPORTANT KEEP INSTRUCTION SHEET  
IN A SAFE PLACE FOR FUTURE REFERENCE**