

# **USER MANUAL GUARDA In-Ground Root Mount Solar Bollard Light**



## THANK YOU FOR YOUR PURCHASE PLEASE READ THESE INSTRUCTIONS CAREFULLY PRIOR TO INSTALLATION / MAINTENANCE

Made in China to

## **SPECIFICATIONS**

Wattage: 2W

**LED:** Epistar 2W, SMD 2835 LED Chips (120° Beam Angle)

Colour Temperature: CCT Switch - 3000K (Warm) / 6000K (Daylight)

Lumen Output: 220 - 240 lm

**LED Life Expectancy:** up to 50,000 hours

**Sensor:** Light / Charge Sensor

**Lighting Function:** 1hr 100% + 2hrs 80% + 2hrs 50% + 9hrs 30%

Illumination area: Up to 3m (diam.)

IP Rating: IP65

**IK Rating:** IK10 – MAIN BODY (polycarbonate lens IK07, solar panel IK06)

Height above ground: 800mm

**Battery Type:** Lithium - LiFePO4 3.2V/12Ah (replaceable)

Battery Charge Time: 6-8 hrs full sunshine (approx.) (AMI.5 1000W / m<sup>2</sup> 25°C)

Max Illumination Time at Full Charge: Up to 23hrs Solar Panel: 5V / 3.5W Monocrystalline Solar Panel – Grade A

Materials: 6063 Die Cast Aluminium (Electrophoresis) & High Impact PC

Finish: Powder Coated RAL 9005 Fine Texture (Black)

Weight: 7.2KG (approx.)

Mounting: In-ground Root Mount System (anchor bar)

Working Temperature: -25°C ~ 55°C

Included: Head c/w Battery, Tubular Body / Mount. Rubber Bung, 300\*10mm Anchor Bar

c/w 2x Flat Washers & Nuts, 8x Pin-Hex Security Screws c/w Socket Wrench (optional), Instructions

Optional Accessories: Compatible with Pro-solar Remote Control (dimming and timers) - sold separately



180mm 300mm

# WARNINGS



- If a fitting is found to be damaged, cease use immediately.
- The unit may get warm whilst on for a period of time.
- Always take care when installing your solar light.
- Fitting must be installed according to instructions or guarantee may be void.
- This Solar Light will not charge correctly if the panel is behind glass or artificial light is used.
- Ensure the waterproof bung is in place at all times, other than when turning on/off or adjusting LED.
- Due to temperature difference in and outside the fitting, condensation may be present internally but will not affect use.
- Do not tamper with wiring or batteries as this may result in a short circuit or shock.

### **CLEANING & MAINTENANCE:**

Occasional cleaning and care is recommended for this product. Wipe with a soft, slightly damp cloth to remove any surface dirt. To maintain efficiency, specifically clean the solar panel and polycarbonate lens on a regular basis. Also, keep the solar panel free of debris and snow to prevent reduced battery life or malfunction. Do not use abrasive cleaners or a lot of water as this could damage the fitting. Please refer to our website for more information on the best way to clean different materials.

## **RETURNS & DISPOSAL:**

If purchased from a 3rd party, please contact your supplier. If purchased direct, contact us by phone or email: Tel: +44 1327 871161 Email: sales@lumenalights.com Lumena Lights Ltd, Centre 33 Long March, Daventry, NN11 4NR Our full returns policy is available on our website.



DISPOSAL / RECYCLING: Waste Electrical Products & Batteries should not be disposed of with household waste. Please check with your local authority or contact us for more information. Please recycle packaging. Producer Registration Numbers: WEE/KC3440XY / BPRN0843

#### INSTALLATION:

The Guarda is designed to be set directly into wet concrete via the integrated root mount system.

Recommended spacing is approximately 3m apart for constant path lighting. Spacing / staggering will affect intensity of light.

**Location** – It is important that the installation location is carefully considered, avoiding shady areas. Ensure there is no other lights which could interfere with the light, imitating daylight and forcing the light off.

Pin-Hex Security Screws (stainless steel) – recommended for use where vandalism is a higher risk e.g. public areas.

- Remove the head from box I, turn on the flick switch (left for daylight / right for warm), hold to the light, then cover the panel to test. The Guarda will usually have a small amount of charge, but will require a full charge cycle upon installation. The unit must be turned on in order to charge.
- 2. An optional set of pin-hex security screws (and socket wrench) have been provided for use if installation is in an area where the unit could be tampered with. If you choose to use these, swap the 4x screws of the solar panel, retaining the other 4 for attaching the head to the tube.
- 3. Remove the tube and anchor bar from box 2. Insert the 10mm anchor bar through the two pre-drilled holes at the base of the bollard, and secure in place with the flat washer and nut provided on wither side of the tube. Adjust as necessary to ensure the anchor bar is central to the tube.
- 4. Dig a hole in the desired location, 300mm deep by 350mm wide.
- 5. Offer up the bollard tube to the hole to ensure it fits and the drainage hole will remain approx. 30mm above ground.
- 6. Once satisfied with placement check, fill with wet concrete and set the bollard in position, ensuring it is level
- 7. Temporarily remove the rubber bung from the tube (switch access point).
- 8. Remove the 4 head mounting screws and attach the head to the tube with the desired screws (Phillips or pin-hex), ensuring the colour switch is facing the direction of the colour switch access point. **TIP:** fasten each screws a little at a time and rotate around the head to ensure correct alignment.
- 9. Cover the panel to retest the solar bollard. Adjust colour switch if necessary using a blunt tool such as a wide flat head screw driver.
- 10. Replace the rubber bung to the colour switch access point.

**IMPORTANT:** Drainage hole located approximately 330mm from base of bollard, allowing 30mm clearance above ground. This must be uncovered and above ground at all times.



## **SETTINGS:**

The Guarda has a pre-set time controlled setting which cannot be changed. At dusk, the bollard will illuminate at full brightness, and then follow a gradual dimming sequence until it reaches 30% brightness after 5 hours. From then on it will remain at 30% until dawn. This sequence is to ensure maximum charge is retained.

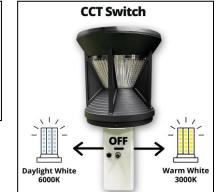
## IMPORTANT - SOLAR BOLLARD MUST BE TURNED ON AT ALL TIMES AFTER INSTALLATION

If the bollard is left in the off position, you may be prompted to turn the fitting on by strobing. Solar bollard will only charge when in the ON position.

### **CCT Colour Switch - Power Switch**

- Pull out the waterproof rubber bung located just below the polycarbonate lens, in-line with the Lumena Logo,
- Using a flat head screwdriver (or similar), flick the 3 position switch to the relevant setting.
- 3) Replace the waterproof, rubber bung.

**NOTE:** There will be a 2-5 second delay between turning the solar light on, and the bollard illuminating. In daylight, the light will turn back off within a few seconds, in darkness it will remain on and follow the time controlled cycle. If battery charge is low, the unit will dim to low brightness to retain charge for as long as possible.



# **STORAGE:**

When storing the bollard, be sure to turn the bollard to the off position by following the above steps (check by covering and uncovering the solar panel). Once pressed, the on/off button will release fully forward. Maximum 6 months storage when fully charged – recharge will be required periodically to prevent damage to battery over long periods of time.