

TIPS FOR SOLAR OUTDOOR LIGHTING

Outdoor Solar Lights have the advantage of providing free lighting. Despite the simplicity of the design, they do sometimes develop problems or not perform as expected due to different factors. The good news is that most of the problems are easy to troubleshoot and fix or can be avoided if known in advance.

1. TEMPERATURE

- Below 0°C; may cause the battery to fail or the light flashes.
- Higher than 45 °C; may cause the battery to fail or the light flashes.
- Large temperature difference between day and night will cause water mist on the lens surface, or the LED will suffer thermal damage due to thermal expansion and contraction.

2. WEATHER

- Cloudy or Rainy weather won't let the battery charge as in perfect conditions, so the product won't perform as expected. A battery not charged 100% can reduce the brightness, no light, or even start flashing. All these problems don't mean that the fixture has a quality problem, it just need more sun to charge as perform as in perfect conditions.
- Thunderstorm weather may cause the sensitive components of individual lamps to be broken down and become flashing or unlit.
- Long and strong outdoor winds can cause the individual luminaire connectors to loosen, making the luminaire flicker, reducing the brightness, and even don't letting the lights turned on.

3. ENVIRONMENT

- Dust, bird droppings, insect carcasses and other debris attached to the solar surface will reduce charging efficiency and cause severe damage to the solar panel.
- Insects will be drilled into the nest from the cooling holes or drain hole causing damage to the motherboard.

4. TRANSPORTATION

 Strong vibration during transportation can cause the individual luminaire connectors to loosen, making the luminaire flicker, reducing the brightness, and even don't letting the lights turned on.

5. AMBIENT LIGHT

• Peripheral light illuminates may cause the fixture don't work as in perfect conditions.

6. PHOTOSENSITIVE ELEMENTS

- Inaccuracy of the photosensitive element will result in inconsistent lighting and lighting-out times.
- Surrounding objects are easy to produce reflective surface causing the photosensitive elements to sense the emitted light, which is reflected in the lighting of the lamp.



7. RIGHT INSTALLATION

- Wrong installation, inclination and orientation may cause the lamps to be charged in different degrees, or percentages providing different brightness, or different lighting duration.
- Shadows formed by surrounding buildings, trees, or other objects, may decrease the efficiency of the solar panel, preventing the battery of been fully charged, and providing different brightness or diverse light duration in each fixture.
- Installing fixtures on both sides of the same location on the road will cause different charging degrees providing different brightness or diverse duration in each fixture.

8. GROUND SPECKLE

• Injection molding errors, can cause the formation of edge yellow spots through the lens that then is emitted to the ground.