



Genlight Series

Commercial Solar Sign Light



Genlight-12V-108LED-v3

Solar Sign Light



Installation Manual

Installation
Operation
Maintenance

Components & Getting Started

Overview

This product is one of the most novel solar LED lights that Silicon Solar has to offer. It can be used for a variety of functions such as sign lighting, pathway lighting, entrance way lighting or any type of outdoor area that requires a significant amount of light. The many benefits associated with this light are its sleek design, its savings in energy cost, automatic nighttime operation, and maintenance free operation. This unit will also lower its light output when battery power gets low (eventually turning off) to protect the battery and increase its lifespan.

Included System Components

- ☒ ① Solar Panel
- ☒ ② Light Fixture with Enclosed Battery
- ☒ ③ Panel Mounting Stake

Tools You Will Need

- ☒ 9/16" Socket Wrench

Important Information.



- 1) Be sure to do the testing and installation procedure as early as possible in the morning so that the battery has a full day of charge before first time use.
- 2) Shadows are the number one reason for premature battery failure in solar systems which result in a non working product. So to ensure maximum battery life and unit operation, the solar panel must be installed in a location where no shadows from foliage , buildings, poles and the like will cast shadows across it throughout the day. It is best to observe the panel once a month between the hours of 10am and 2pm every hour on the hour to ensure no shadow castings on the panel. Shadows move clockwise throughout the day and grow longer closer to the fall/winter months so just because a shadow wasn't crossing the panel at the time of the installation doesn't mean that one will not cross it at a later time or day. Failure to follow these guidelines will guarantee product defectiveness.
- 3) This light will automatically turn on after a 15-20 second delay when no sunlight is available (or shadow is cast across the panel surface for 15 seconds or more). It will then turn off after a 15-20 second delay when sunlight strikes the panel. This is to prevent false dusk/dawn detection (bright light hitting the panel at night or a shadow crossing the panel for a moment). The light will provide full brightness when the battery capacity is at 100-80%. After this the light switches to semi state at reduced brightness to save power and extend the lighting time and battery life. When the battery reaches a 50% capacity the light unit will shut off to prevent over discharge of the battery preserving its life expectancy.
 - i. Switch Description:
 1. Move switch to left (Off Position) - Storage Mode: Light does not operate and battery does not charge.
 2. Move switch to right (On Position) - Operation Mode and Charge Mode: Light will operate at night and battery will charge during the day.

Please note: Light must be in "ON" mode during the day when you are charging your battery for the first time. Make sure you turn the fixture to "Off" at night while charging the first 3 days.

Installation Process

Light Testing Procedure

1. Connect the solar panel wire to the light fixture wire.
2. Face the panel in direct sunlight then turn the switch on the light fixture to the ON position (Fig1). The light should turn on and then shut off automatically after 15-20 seconds.
3. Turn the panel face down to the ground so no sunlight can hit the panel surface (or cover with cardboard or other dense solid material to block sunlight). After 15-20 seconds the light should automatically light up. Continue onto light installation if light passes testing procedure. If it does not light up, charge the unit for a day and try again as the battery may not be charged.

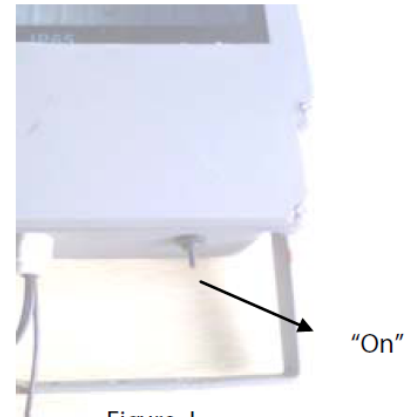


Figure 1

Light Installation

- 1) Turn the power off on the light fixture.
- 2) Install the light fixture in desired location, adjust angle and then tighten the fixture mounting bracket bolts . 10ft of cord between the light fixture and panel has been provided, so keep this in mind when installing.
- 3) Utilizing the ground stake provided with the unit, attach it to the solar panel and stake it into the ground with the panel facing the south (if you live in northern hemisphere. If you live in the southern hemisphere then face the panel north). Be sure panel is in a location where no other object such as foliage, poles, buildings and the like will cast shadows across the panel throughout the day.
- 4) After light and panel are installed in desired location redo the testing procedure above to ensure light is working properly. If the light works properly leave it in the ON position since the light will automatically turn ON and OFF when dusk or dawn.

Note: You must charge the battery in the "ON" position of the fixture and allow the GenLight to charge in direct sunlight for 2-3 days before initial use. Make sure you switch the fixture to "OFF" each night and back to "ON" each morning while charging the battery for the first time. This will allow the battery to fully charge and maximize the longevity of the battery.



Maintenance

Battery Maintenance & Replacement

Maintenance

If you plan to store this light and not use it for any reason over a period of 1 month or more then charge the unit for a 20 hours or more by turning it on in the morning and off before dark (for at least 2 days). After which you can then leave it in the off position and store the unit. **After 3 months of storage you must complete this charge cycle again or risk damaging your battery.**

Replacement

If you notice that your lights brightness is dimmer when it first turns on at night or that it does not light for as long as it used to then you should think about replacing the battery. Follow this procedure when doing so:

1. Unscrew the 6 screws on the face of the light
2. Remove the cover very gently to prevent the wires from being damaged
3. Pull off the 2 terminal connections on the battery and remove the battery from the fixture.
4. Replace the new battery by following this procedure backwards.

WARNING!!:

1. **Do this very carefully to prevent damage to wires**
2. **Be sure when connecting the new battery that the polarities are correct (+ and -). Connecting wrong polarity is very dangerous to you and will cause the unit to become defective.**
3. **Do not dispose of battery. Recycle it at a department store that sells batteries. They have to by law accept the battery.**