

# HIGHLIGHT SPSF Installation Manual



## Why us?

### **Innovative Technology**

High-efficiency solar and advanced LEDs deliver superior performance, long life, and maximum ROI.

### **Photometric**

We conduct photometric measurements on all our products to ensure optimal performance and compliance with industry standards

### **Versatile Lighting**

We design and install solar-powered lighting systems tailored for all kinds of locations such as streets, parks, pathways, homes, etc.

### **Global Reach**

Worldwide success proves our adaptability and regulatory expertise.

### **Sustainable Savings**

These solutions enhance safety, promote sustainability and provide significant energy and cost savings.

### **Warranty**

SolarPath is dedicated to delivering architectural and commercial-grade solar lighting that can be customized to meet specific client requests, both in technical specifications and aesthetic design, ensuring a perfect fit for a diverse range of needs.

## Precautions

Before using the SPSF-Series, carefully read the following precautions to avoid damage or errors.

### Operating Conditions & Limits:

This product is rated as IP65 protection grade. Do not exceed the stated operating limits. The operating temperature range is from -4°F to 140°F and the charging temperature limit is within 32F to 140°F. If equipped with heating features, it may be used between -40°F and 140°F.

### Transportation & Storage:

This product contains lithium batteries. Please follow air transport regulations when shipping. It should be regarded as potentially flammable and explosive, and be isolated from other goods when stored, to avoid any damage. The solar panels of this product should be considered as fragile. There should never be more than 4 layers of boxes when stacked. To avoid damage to the panels, make sure no heavy pressure is applied to the boxes. Please store the product in temperature between 32F to 113°F. If stored for a long period, the product should be recharged every 6 months. Please only use the special charger (purchased from manufacturer) to avoid damage to the battery or device.

### Modification:

It is not on the terms of warranty if clients does modify or refit the light leading to no-proper working without authorization of Solarpath.

### Product Maintenance:

To ensure effective solar light absorbance, clean the surface of the panels regularly **with** water and a soft cloth. Do not use chemical solutions or abrasives. This Solar Street Light operates on a low voltage DC current. Unless customized otherwise, do not connect components or ports to an AC current or any higher rated DC voltage. Do not replace the original unit with unauthorized third party parts as they may cause serious damage to the product. To order replacement parts or to have them fitted, please visit our web site [www.solarpathusa.com](http://www.solarpathusa.com) or contact your local distributor.

### Product Recycling:

This product is made from recyclable, high-performance materials. All materials are compliant to the ROHS standard. Do not dispose of this product with other household waste. Please check your local regulations on collection and disposal of electronic items. Proper disposal of used product helps prevent negative impacts on the environment.

## Product Manual

### Introduction

The SPSF series is extremely versatile, robust Solar Street Light.

It features all of its components fully integrated within an attractive and compact design. It combines a highly efficient solar panel with a 'smart' and 'intelligent' charge controller to energize a high capacity lithium-ion battery that supplies power to Super-Bright Bridgelux LEDs to achieve multiple features such as high luminance, long lifespan, minimal maintenance and easy installation.

By choosing a wireless concentrator, user can wirelessly control the light, monitor working status, set custom working mode or review historical charging data. SPSF Light brings you a easier way to control the outdoor lighting than even before.

#### Application:

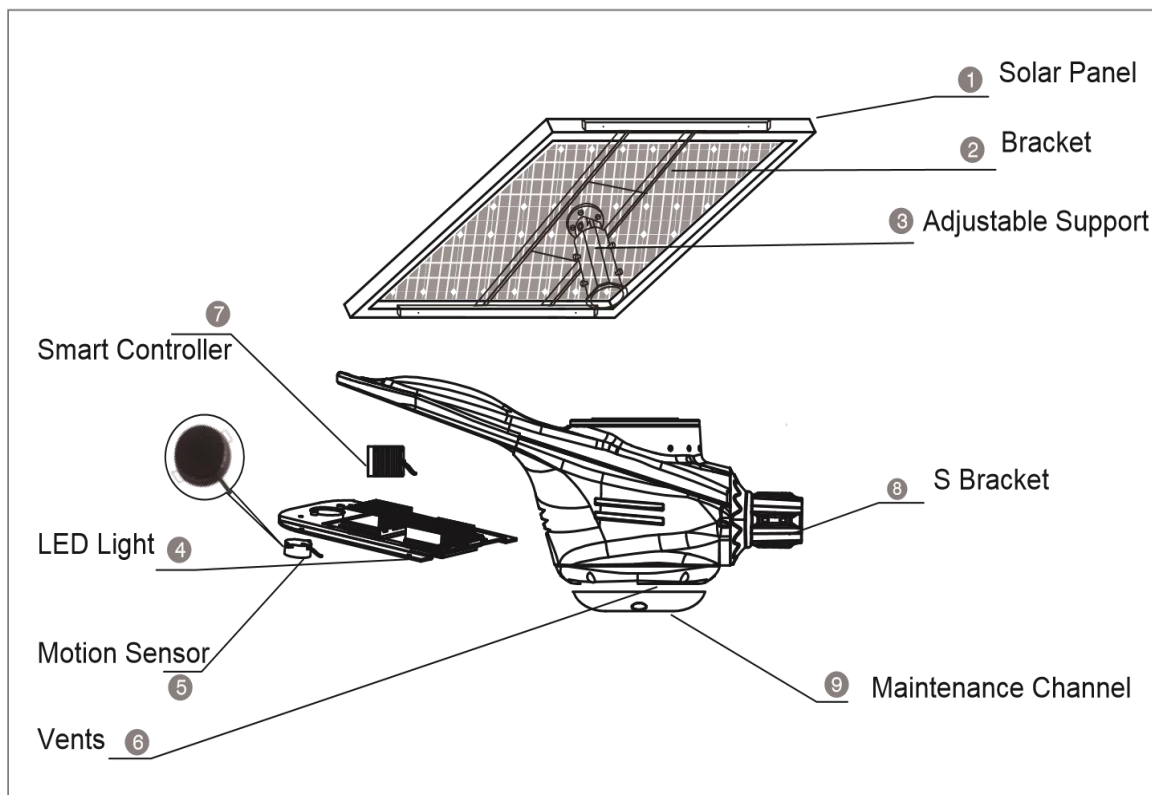
Multi options & wide Usage:

From 15W to 200W, all in one solar lighting system can be used for a wide range of area lighting.

Public areas, parks and campuses.

- Parking lots.
- Walking path.
- Bike path
- Resident and community Center
- Urban trunk road and slow lane

### Parts & Functions











## Installation Height and Distance

No.	Parts	Installation distance
1	Solar panel	Absorbs and converts solar energy into electricity
2	Bracket	Fixed the solar panel
3	Support	Connect device between solar panel and pole
4	LED light	Lighting the area
5	Microwave motion sensor	Detects movements
6	Vents	Heat dissipation
7	Smart controller	MPPT solar charge controller
8	S Bracket	Install the arm of pole
9	Maintenance channel	Quickly maintenance channel

## Packing List

When open the package please confirm that all parts are received,  
the parts are listed below:

Components	15W-200W	Images
Light body	1pc	
Solar panel	1pc	
Bracket	1pc	
Support	1pc	
M8x10 screw	4set	
M6x10 screw	4set	
User Manual	1pc	
Remote control	1pc	

Notice: If comes with wireless control system, you will find wireless concentrator + antenna together.



Wireless concentrator



Antenna

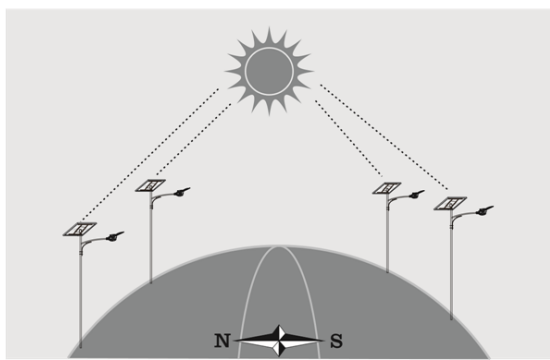
## Factory settings and motion detection functions:

The factory setting of the SPSF series switch is light-controlled (at a threshold of 30 Lux). The lamp automatically lights up when it is dark and turns off when there is light or at dawn. At night, when no one is around, it operates under power saving mode. When anyone approaches, its brightness increases by a factor of four. If the air temperature is close to human temperature, the motion detection may reduce in sensitivity.

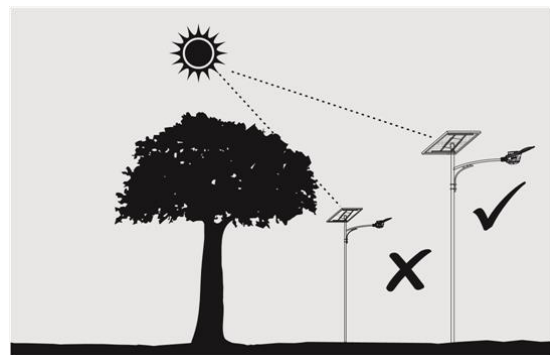
## Installation

### Environment

**1**. Please select the appropriate product according to the installation site's sunlight intensity and required operating time. If you are in the northern hemisphere, face the solar panels towards the south as far as possible when installing the SPSF series; if you are in the southern hemisphere, face the solar panels towards the north.



**2**. For maximum operation efficiency of the solar panels, make sure the sunlight is not blocked by buildings or trees.



## How to turn ON solar streetlights

Notice: Please do not need Press ON button of the small blue remote to turn on the lamp, because our solar lamps have Automatic Activation Function.

### Activation:

Remove the SPSF light from package box, let the solar panel absorb energy from sun, connect the waterproof cable between solar panel and lamp, then the lighting system can be activated, the SPSF light will be lighting automatically at night.

If you want to check whether the SPSF light are lighting during the daytime:

Cover the solar panels with shelters, the lamp will be lighting.

Press Demo Button after the lighting system has been activated, the lamp will be lighting for a few mins then turn off automatically.

Press Demo Button after the lighting system has been activated, the lamp will be lighting for a few mins then turn off automatically



## Pole:

Recommend use the upper diameter of pole: 2.99 inch (see Figure 1),

Recommend use 39.37 in arm pole (see Figure 2)

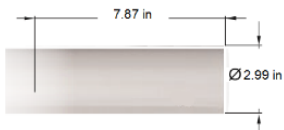


Figure 1

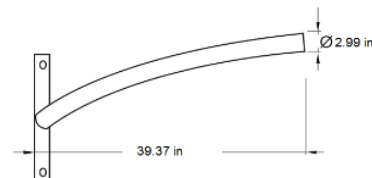
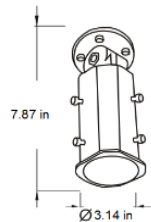
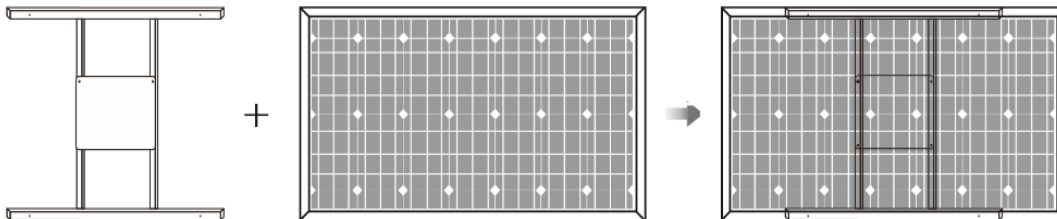


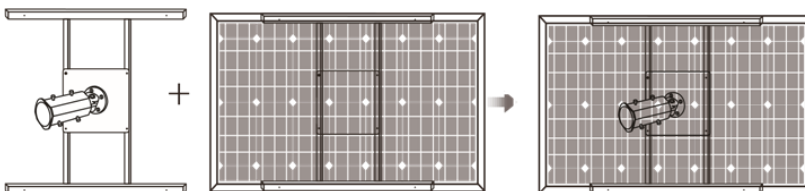
Figure 2

## Installation:

1. Fix the bracket on solar panel with 4pcs M6x0.39"/10mm screws



2. Fix the support on bracket with 4pcs M8x10mm screws



3. Install the solar lamp to the arm of pole, connect the waterproof connector between solar panel and lamp.

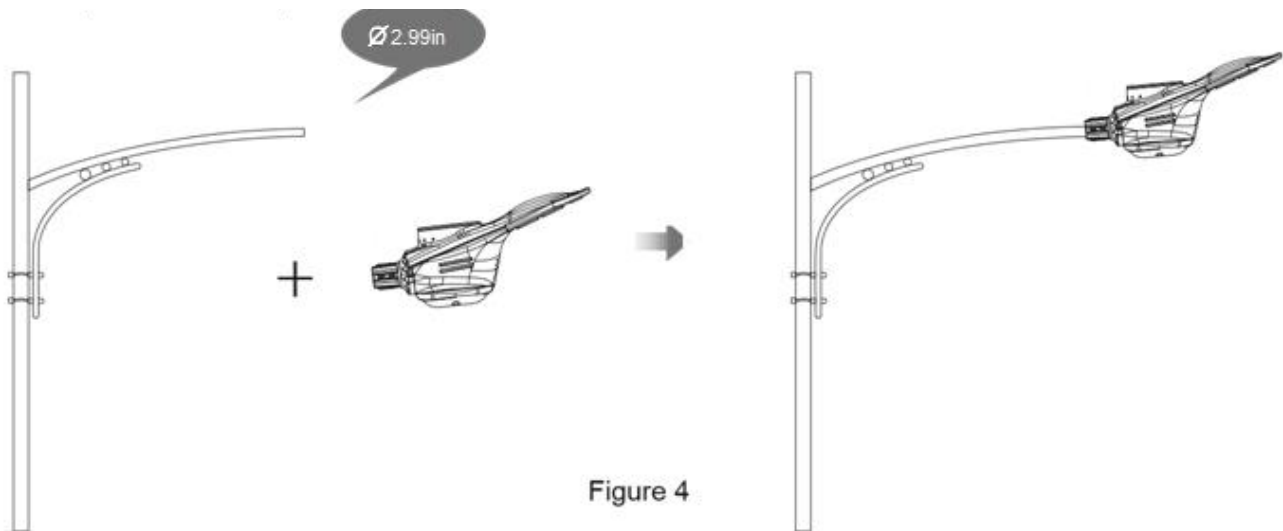


Figure 4

4. Fix the pole with support.

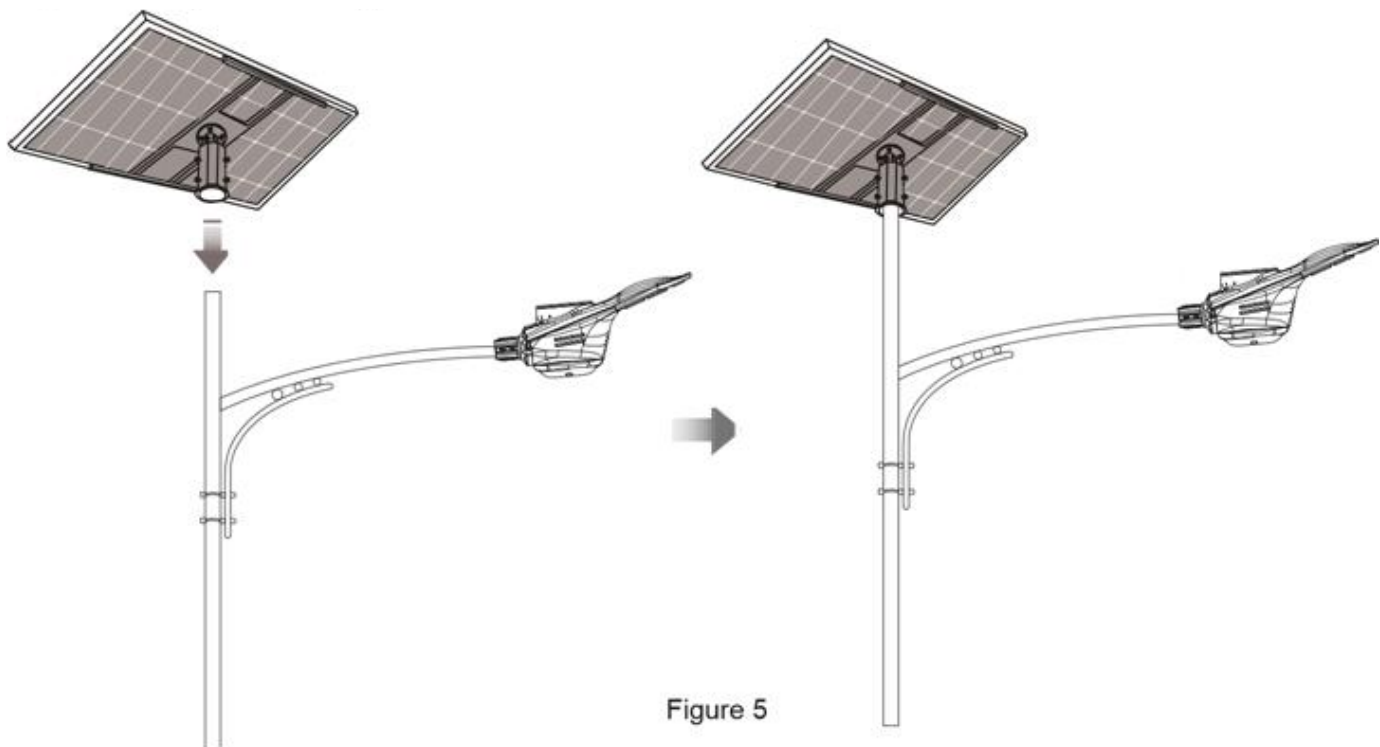


Figure 5



## Trouble Shooting

No.	Situation	Trouble shooting steps	Solution
1	No light at night	Check if the solar panel is blocked from the sunlight by houses, trees and other obstacles	Clear obstructions or change installation location
		Check if there is any artificial light source(s) illuminate on the solar panel at the night	Remove the artificial light source(s) of interference or change the installation location
		Check the battery have power or not( There will be a red light flashing on microwave sensor if the battery have power)	Put the solar lamp in strong sunshine charging 4-6 hours, then observe the lights at night
		If all step above have no problem	Disconnect the cable between the solar panel and lamp, then connect it again then press M button working mode, then wait for 1 min, lamp will be lighting again
		Test battery voltage	If the battery voltage is lower than 11 V, the battery has been protected automatically. Please use solar panel charge the battery directly (do not through solar charge controller), after full charged, battery voltage shows 14V or above 14V, then observe the lighting situation at night
		Test solar panel voltage	Test solar panel voltage at sunshine. if the voltage of solar panel lower than 10v, please replaced damaged battery
2	A serious shortage of working time	Check if the solar panel is blocked from the sunlight by houses, trees and other obstacles	Clear obstructions or change installation location
		Check if the surface of the solar panel is dusty or covered	Clean the surface of solar panels as detailed above
		Confirm the working mode is correct or not	Use the remote control to readjust the working mode to M
		Lighting installation area is a long time cloudy and rainy days (more than 5 days)	Under normal circumstances, sunny day after charging the solar panel to observe the lights at night
3	Lights fail to turn on properly when humans approach	Check the working mode is correct or not	adjust working mode to M or U
		Check if the air temperature close to human body temperature	when the air temperature is close to human temperature, motion detection may slow down. It will return to normal after the air temperature changes
		Check if the installation height is too high	It is out of motion sensor detection range when installation height exceeds 10m. It is recommended to reduce the height or use other operating modes



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