

User Manual

Smart Solar Spotlight

Model: SSL51



This user manual contains important information regarding the operation of your solar spotlight. Ensure you read this user manual fully before installing and operating the device. If you are installing this device for use by others, you must leave this manual (or a copy of it) with the end user.

Introduction

This smart solar spotlight supports three uses: Motion Activated, Dusk-to-Dawn, and Dusk-to-Dawn with Motion Alert, catering to your diverse needs. It can be installed using either ground stakes or wall mounting, providing flexibility in installation options. Once connected to the base station, the mobile app offers convenient management and customization of the lighting system, including features like remote control, light group management, and light schedule settings.

Product Overview



- ① Solar Panel
- ② Motion Sensor with LED Indicator
- ③ Pairing Button
- ④ USB Charging Port
- ⑤ Bracket
- ⑥ Knob
- ⑦ Ground Stake

Package Contents



Spotlight × 2
Bracket × 2
Knob × 2
Ground Stake × 2
Anchor Plug × 8
Screw × 8
Charging Cable × 1
User Manual × 1

Device Setup

Download the X-Sense Home Security App



To download the **X-Sense Home Security** App, scan the QR code or search for “**X-Sense Home Security**” in the Apple App Store or Google Play. Sign up with a valid email address. If you already have an account, make sure the app is updated to the latest version.

Note: *Make sure your smartphone supports iOS 11 and higher, or Android 8.0 and higher.*

Before connecting devices, make sure that:

1. You know your Wi-Fi network name and password.

2. You are connecting your device using a 2.4 GHz Wi-Fi network (incompatible with 5 GHz Wi-Fi network).
3. Make sure the Bluetooth on your phone is turned on.

Note: When the device is configured via Wi-Fi, make sure your mobile phone and device are as close to the router as possible, which can speed up device configuration.

Connect the Solar Spotlight to the Base Station

The solar spotlight can be connected to the base station through the wireless network. When the spotlight is connected to the base station, you can control it anytime, anywhere through the app.

Note

1. ***Before adding devices to the system, make sure the base station has been successfully added to the app.***
2. ***This product can only connect to the SBS50 base station and doesn't work with the Link⁺ wireless interconnected network.***

1. Tap "⊕", choose "Smart Light" in the product list, then select "Solar Spotlight (SSL51)."
2. Enter a name for the spotlight. Then tap "Next."
3. Follow the prompts on the page by quickly pressing the pairing button twice on the device until the LED flashes blue rapidly, indicating that the device is waiting to connect to the Wi-Fi.
4. Tap "Next" to add the device. You will hear "Ready to add the device."
5. After successfully connected, you will hear "Device added" and the "Device added" page will appear. Then, the app page will go to "Installation & Setup." Follow the instructions to complete the installation. Now, you can find the spotlight in the device list.
6. If you want to add multiple devices into the system, please repeat the above steps.

NOTE: If you fail to add the Spotlight to the network within 60 seconds, the device will automatically exit the network configuration. To re-enter the network configuration, you need to repeat the above steps.

Installation

Charging the spotlight



Before installation, please use the included USB charging cable and a 1 A or higher adapter to fully charge the spotlight. This process may take several hours. While charging, the indicator light will be red, and it will turn blue when fully charged.

Note: The spotlight will not respond to any operations while the USB charging cable is

connected.

Select the use of the spotlight in the app based on your needs:

1. Motion Activated

- For security lighting or energy-saving scenarios
- Motion detection ON
- Light remains off, and when motion is detected, the light will turn on. (When the ambient light is bright, motion detection will be deactivated.)

Note: For a better user experience, Dusk-to-Dawn does not come with a separate switch. If you want to activate Dusk-to-Dawn after selecting Motion Activated, please reselect your use as Dusk-to-Dawn or Dusk-to-Dawn with Motion Alert, and carefully follow the app instructions for installation.

2. Dusk-to-Dawn

- For continuous night illumination at pathways or entryways.
- Motion detection OFF.
- When ambient light is bright, the light remains off; when ambient light is dim, the light stays on.

Note: For a better user experience, Motion Activated does not include a separate switch. If you want to activate Motion Activated after selecting Dusk-to-Dawn, please reselect your use as Motion Activated or Dusk-to-Dawn with Motion Alert, and carefully follow the app instructions for installation.

3. Dusk-to-Dawn with Motion Alert

- For continuous night illumination with motion detection.
- Motion detection ON.
- When ambient light is bright, the light remains off; when ambient light is dim, the light stays on.

For the above three, if you want to use Light Schedule to turn on or off the light, please select the use based on whether Motion Detection is needed during the schedule. After completing the installation process, tap the Light Schedule option to create a schedule.

Choosing Installation Method



Inserted in the ground (recommended)



Wall mounted

IMPORTANT:

PLEASE FOLLOW THE INSTRUCTIONS PROVIDED IN THE APP CAREFULLY TO COMPLETE THE ENTIRE INSTALLATION PROCESS. INSTALL THE DEVICE IN AN OUTDOOR LOCATION WHERE IT WILL RECEIVE DIRECT SUNLIGHT.

App Features

Remote Control via App

With the app, you can have various controls at your fingertips, including remotely turning the light on and off, adjusting the brightness levels, setting the duration of lighting, and receiving notifications, and other features.

Light Group Management

You can add the light to a group using the app, allowing you to conveniently turn on or off the entire group of lights with just one tap. Additionally, when motion is detected by any light within the group, all the lights in that group will illuminate simultaneously.

Light Schedule

Using the app, you can create a schedule to automate the lighting based on specific times. You can set the lights to automatically turn on and off according to your desired schedule, and choose which days of the week this schedule should repeat.

Technical Specifications

Power Supply	Solar panel and built-in lithium battery (irreplaceable); supports USB charging
Battery Capacity	2,000 mAh
Battery Life	6–12 hours (depending on the battery level and specific usage method)
Product Life	≥ 3 years
Operating Temperature	14–140°F (-10–60°C)
Waterproof Rating	IP66
Color Temperature	6500 K cool white
Beam Angle	120°

Working Principle	Infrared sensing and light sensing
Detection Angle	Infrared sensing: detection distance of 20 ft (6 m) and horizontal detection angle of 120°. The effective detection range and angle may vary depending on the specific environmental conditions.
Product Materials	Super weather-resistant ASA and industrial grade silicone waterproof seal
Mounting Method	Inserted into the ground using a ground stake or secured to the wall using screws
Suitable Installation Location	Outdoor areas in direct sunlight
Alarm Volume	When the spotlight is triggered by motion, it doesn't make a sound but the LED flashes red. The base station sounds an alarm paired with the LED flashing red.
Indicator Light	Red/Blue
Maximum Number of Interconnected Units	50 devices can be added to the SBS50 base station
Operating Frequency	US: 915 MHz; EU: 868.0-868.6 MHz (25 mW e.r.p.)
Connection Distance (in Open Air)	Hundreds of feet; note that walls, trees, obstacles, etc. will reduce this distance.
App	X-Sense Home Security (both Android and iOS supported)
Wi-Fi Frequency	2.4 GHz (incompatible with 5 GHz Wi-Fi network)

LED Indicator of Solar Spotlight

Modes	LED Indicator
Powering On	Flashes red once.
Wi-Fi Pairing	Flashes blue rapidly.
USB charging (not full)	Stays solid red.
USB charging (full)	Stays solid blue.

Troubleshooting

PROBLEM	CAUSE	SOLUTION
The spotlight cannot be triggered by motion.	The network connection of the router and the mobile phone is abnormal.	Make sure the network connection of the router and the mobile phone is working normally.
	The distance between the base station and the spotlight is too far or	Place the base station closer to the window near the spotlight, reducing obstacles. Avoid enclosed spaces, especially those with metal objects. Keep the spotlight and base station closer together, as obstacles such as walls, trees, and other

	communication is obstructed.	obstructions may limit the maximum distance in open environments.
	Failure to strictly follow the installation procedure as guided by the app.	Follow the installation procedure provided by the app strictly, especially regarding the correct installation height and positioning of the bracket.
	Incorrect selection of the device's use in the app.	When selecting the use as Dusk-to-Dawn, the Motion Detection feature does not work. Motion Activated does not have a separate switch. For better use, reselect the use as Motion Activated or Dusk-to-Dawn with Motion Alert and carefully follow the app's instructions to complete the installation.
	It is currently daytime, or the ambient lighting around the light is bright.	The light will only be triggered by motion in dim conditions to save energy and avoid unnecessary activation during daylight.
	The sensor of the light is not directed towards the monitored area.	Adjust the sensor of the light to face the monitored area.
	The monitored object is beyond the detection range.	Ensure the object stays within the device's specified range: maximum 20 ft (6 m) and a horizontal angle of 120°. Actual detection range and angle may vary due to environmental conditions. Rely on the Motion Test for accurate results.
	The size of the monitored object is too small.	The device is primarily designed to detect human beings and large animals. Small objects, such as small dogs, may not be detected by the device.
	The weather is too cold.	The device operates between 14 to 140°F (-10 to 60°C). Temperatures below 14°F (-10°C) may reduce detection range or cause malfunctions. Normal operation resumes within the operating range.
The spotlight shows motion triggered even when no one passes by.	Failure to strictly follow the installation procedure as guided by the app.	Install the device strictly following the installation procedure provided by the app, especially regarding the correct installation height and positioning of the bracket.
	The sensor of the light is facing the sun or other heat sources (such as a furnace).	Avoid positioning the sensor of the light towards the sun or other heat sources, as it can cause false alarms.

	The sensor of the light is facing constantly moving objects (such as bushes).	Position the sensor of the light towards open areas and avoid directing it towards trees or bushes that may cause constant movement.
	The light is not installed on a sturdy surface and is swaying due to wind or other reasons.	Install the light on a sturdy surface to prevent it from swaying due to factors such as wind.
	Small animals approaching the sensor window.	When small animals (such as birds) come very close to the sensor window, the device can also be triggered.
	Extreme weather conditions.	In some cases, specific weather conditions can cause the device to be triggered. For example, if there is a sudden gust of hot wind when the ambient temperature is relatively low, it may trigger the device.
	The weather is too cold.	The device operates between 14 to 140°F (-10 to 60°C). Temperatures below 14°F (-10°C) may reduce detection range or cause malfunctions. Normal operation resumes within the operating range.
The battery gets depleted and the light is unable to turn on again after a short period of illumination.	Insufficient battery power.	Install the solar light in a sunny, unobstructed area following the provided guide. Charging speed varies with conditions like sunlight, location, weather, and seasons. If sunlight isn't enough, charge indoors via USB, then reinstall outdoors when fully charged.
	The brightness level is set too high.	If the brightness level, particularly the Dusk-to-Dawn Brightness, is set too high, it will significantly reduce the battery life. Please lower the brightness level of the light.
	The duration of lighting is set too long.	Both the manual duration and motion-triggered duration support multiple settings ranging from 30 seconds to 15 minutes. If the duration is set too long, it will significantly reduce the battery life. Please shorten the duration of lighting.
The device cannot be charged by sunlight, or it receives only a minimal amount of power.	The surface of the solar panel is blocked by dust and dirt.	Cleaning the dust and dirt off the surface of the solar panel will restore its normal functioning.
It is unclear how to keep the device waterproof.	The silicone plug at the bottom of the device is not tightly sealed.	Make sure the silicone plug at the bottom of the device is tightly sealed.
It's unclear how to activate Dusk-to-Dawn for the light, which automatically turns on at dusk and		If you have selected Motion Activated, Dusk-to-Dawn is not available as a separate switch. Please reselect the Dusk-to-Dawn or Dusk-to-Dawn with Motion Alert instead

off at dawn.		and follow the installation instructions provided in the app for better user experience.
		<p>If you have selected Dusk-to-Dawn or Dusk-to-Dawn with Motion Alert, simply keep Dusk-to-Dawn or Dusk-to-Dawn with Motion Alert turned on.</p> <p>Please note: Setting the Dusk-to-Dawn brightness to a high level will significantly reduce the battery life.</p>
The light does not turn on even though Dusk-to-Dawn is enabled.		When you enable Dusk-to-Dawn, the light will only turn on in dim conditions to conserve energy by avoiding unnecessary illumination during the daytime.
It is unclear to make the light automatically turn on and off according to the time as required.		Go to the details page of the spotlight app, tap Light Schedule, and follow the app instructions to set the desired automatic ON and OFF times. You can also specify which days of the week this schedule should repeat. You can add up to 5 schedules.
The spotlight cannot be added to the base station.	The spotlight did not enter pairing mode.	Quickly press the pairing button twice on the light until it flashes blue rapidly, indicating it has entered pairing mode.
When the light is triggered by motion, the base station does not emit a prompt sound.	Base station prompt sound is not enabled.	Enable Prompt Tone in the light settings.
The app push notification is delayed or there are no push alerts.	The battery ran out.	Wait for sunlight to charge the light, or take the light indoors for charging and then reinstall it in its original position.
	The app push notification permission is disabled.	Turn on the push notification permission on the phone.
	The base station is not within the network coverage of the router.	Reduce the obstacles between the base station and router. The distance between the base station and the router should be within 170 ft (50 m).
	The communication between the light and base station is not stable or they are too far apart.	Place the base station closer to the window near the spotlight, reducing obstacles. Avoid enclosed spaces, especially those with metal objects. Keep the spotlight and base station closer together, as obstacles such as walls, trees, and other obstructions may limit the maximum distance in open environments.
	The network connection of the router and the mobile phone is abnormal.	Make sure the network connection of the router and the mobile phone is working normally.

The app shows that the light is offline.	The communication between the spotlight and the base station is blocked or the distance is too far.	Reduce the obstacles between the light and the base station. The maximum distance between them is 1,700 ft (500 m) in an open environment.
	The battery ran out.	Replace the battery.
The app prompts low battery.	Low battery warning.	Wait for sunlight to charge the light, or take the light indoors for charging and then reinstall it in its original position.

Environmental Protection

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with Local Authority or retailer for recycling advice.



Manufacturer and Service Information

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FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party.

Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:

The equipment complies with FCC Radiation exposure limits set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

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