

**XEPA™**  
TECHNOLOGIES

**XP645DS**  
Pure Digital Version

## **Motion Activated Solar Powered LED Matrix Light**



**Please do not return this item to the store.**

For service or questions about your solar light, call our customer service associates at (866) 427-3946.

## **Introduction**

Thank you for purchasing the XP645DS light with the world's first digitally controlled system. With its easy setup and lightweight design, the XP645DS conforms to most of your lighting needs. It's the most cost-effective way to illuminate and protect areas around your home, business and recreational area, especially where AC is not accessible.

No matter the area, environmentally friendly solar energy is converted to electricity so that lighting is available wherever and whenever you desire. Simply install or set the solar charging panel in a suitable area facing the sky where sun exposure is prevalent. The attached 15' cable provides sufficient length for easy placement. When fully charged and switched to the ON mode, the XP645DS will provide up to 14 hours of continuous illumination. A full charge will require 2-3 days of direct sun exposure. In AUTO mode, (normal operation setting) the light illuminates when it is dark and motion is detected, then automatically resets. Charging time results may vary depending upon weather conditions, season, and geographic location.

## **Important Safety Information**

- Never look directly into the light or shine in another person's eyes.
- Do not expose the light to fire or intense heat.
- Do not dispose of battery in fire.
- Do not immerse in water.
- Do not dispose the rechargeable battery in a regular waste system, waterway, stream or any other body of water.
- Preserve the environment by disposing battery in accordance with local, state and federal regulations
- Consult your local construction safety guidelines for installing the light fixture on a building.
- Use Xepa Technologies rechargeable batteries only.

# What's Inside the Package

- LED matrix solar light with battery
- Solar charging panel with 15' cable
- User manual
- Mounting template
- Screws (8)
- Anchors (8)
- Locking Screw (1)

# Installation Recommendations

- The XP645DS light fixture should be installed on a flat and stable surface. The higher the installation the larger the area of illumination.
- Avoid installing the light near an air conditioner, heater or high voltage system as quick changes in temperature may cause the motion detection system to produce false triggers and illuminate the light needlessly.
- Avoid positioning the motion sensor head towards street traffic or where other movements may trigger the light needlessly and therefore drain the battery prematurely.
- The solar panel should be installed in a sunny area facing the sky where direct sunlight can shine on the panel for at least 3-5 hours per day.
- Motion detection is most sensitive to movement moving across the device and less sensitive when motion is moving directly towards or away.
- Use a soft damp cloth to periodically clean the solar panel from accumulated dust or snow. This will preserve solar panel efficiency when charging the battery.



Shown with optional table-top cradle. Sold separately.  
See page 10 for more details.

# Installation



**1) Remove mounting plate from the light by sliding in a downward motion.**



**2) Open the battery compartment, plug in the battery and close the battery cover.**



**3) Use mounting template or mark the holes through the mounting plate screw holes (2 or 4).**



**4) Drill holes with a 3/16" drill bit and insert plastic anchors into stucco, concrete or brick.**



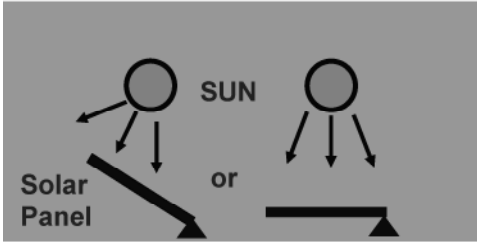
**5) Place the mounting plate on the wall and secure with screws.**



**6) Slide the light onto the mounting plate. Then secure the light with the locking screw (optional).\***

\*NOTE: The locking screw is meant for permanent mounting of the light to the mounting plate. You may choose not to insert the locking screw, so the light can easily be removed for portable use (see page 11).

# Installation



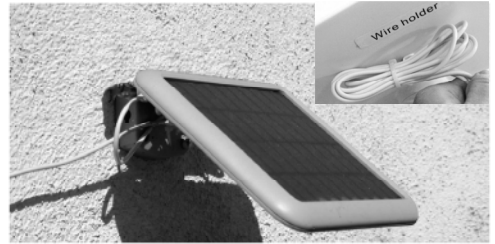
7) Find a location for the solar panel that receives direct sunlight for a minimum of 3-5 hours a day and within 15' of where the solar light will be installed.



8) Use mounting template or mark the holes through solar panel screw holes. Drill holes with a 3/16" drill bit and insert plastic anchors into stucco, concrete or brick.



9) Mount the solar panel using 4 screws.



10) Tilt the solar panel to an angle similar to the pattern of the sun and wrap the excess cable using the zip-tie behind the panel.



11) Completely insert the cable plug from the solar panel into the INPUT located at the bottom of the light.



12) Adjust the motion detection sensor towards the desired coverage area.

Proceed with the Initial Set Up Test on the following page.



# Initial Set Up Test

After the installation is complete and before first use, perform the Initial Set Up Test in order to adjust light/motion settings for best coverage and performance.

Fig. A

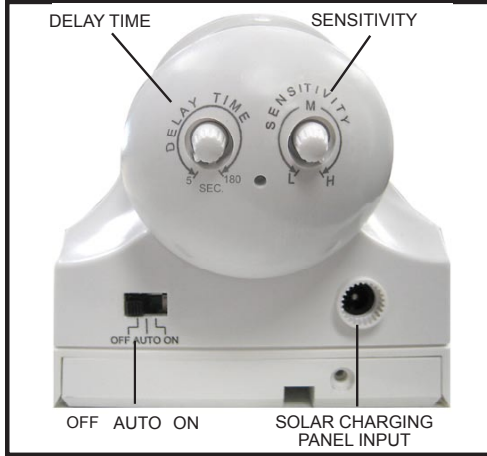
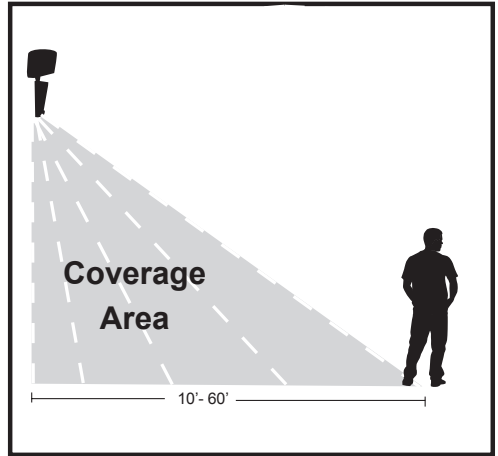


Fig. B



1) Switch to the AUTO position to activate a 10-minute test period when any motion detected within the coverage area will trigger and illuminate the light during daylight hours. (Fig. A)

2) Adjust the motion range SENSITIVITY knob between L (minimum motion detection range, 10'-15') and H (maximum motion detection range up to 60'). For most applications, set the SENSITIVITY knob to M (approximately 30').

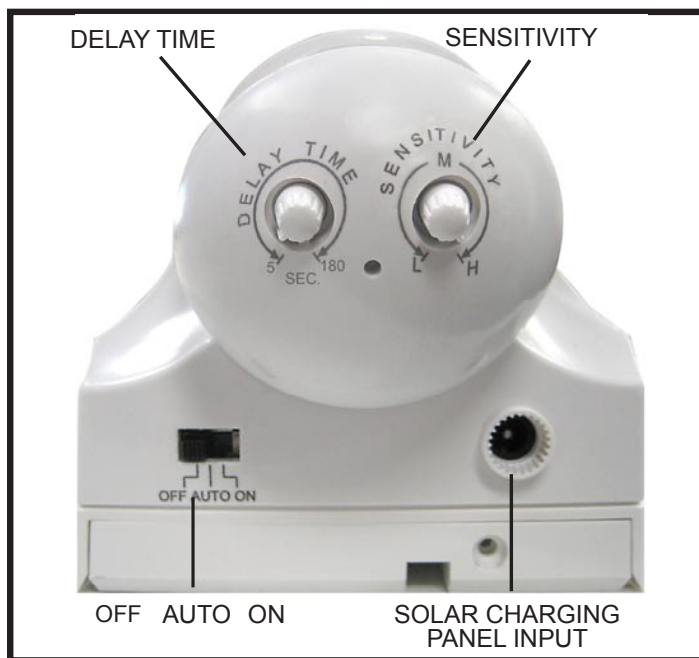
3) Adjust and position the motion detection sensor head (pan & tilt) towards the desired coverage area. (Fig. B) The green LED indicator located on the front of the light will illuminate whenever motion is detected.

4) Adjust the light head (pan & tilt) towards the desired coverage area.

5) Walk through the entire coverage area to check for the desired response; readjust as necessary.

NOTE: The Initial Set Up 10-minute test period can be overridden by quickly moving the switch from AUTO to ON, then back to AUTO.

# Functions & Adjustments



- **OFF:** No illumination; recommended when charging the device before first use. Battery will charge when switch is set to the OFF or AUTO positions
- **AUTO:** recommended for normal use; light illuminates when motion is detected based on adjustments made for DELAY TIME & SENSITIVITY.
- **ON:** Light illuminates continuously until switched off or battery is drained; illumination time is based on the capacity of the battery. When the battery is nearly discharged, the light will switch to AUTO mode as an emergency reserve; the light will only illuminate if it is dark and motion is detected.
- To vary DELAY TIME (illumination time after motion stops): Turn the DELAY TIME knob to the desired estimated time of between 5-180 seconds. The light will illuminate when motion is detected. Once movement stops, light turns off automatically based on the delay time selected.
- Adjust the motion range SENSITIVITY knob between L (minimum motion detection range, from 10'-15') and H (60'). For most applications, set the SENSITIVITY knob to M (30'). This will maximize performance during dusk to dawn hours and prevent unnecessary battery consumption during daylight hours.

# Troubleshooting Tips

Symptom	Possible Solution
The light will not illuminate	<ul style="list-style-type: none"><li>• In <b>AUTO</b> mode, light illuminates only when motion is detected when it is dark.</li><li>• Make sure solar panel plug is fully inserted.</li><li>• In <b>ON</b> mode, light illuminates until battery is drained.</li><li>• Make certain the battery plug is connected inside the battery compartment.</li><li>• Battery energy is low; set switch to <b>OFF</b> or <b>AUTO</b> mode and allow solar panel to absorb direct sunlight for 2+ days in order to recharge battery fully.</li><li>• Make sure there is no other bright light source near the unit.</li></ul>
The light provides less than 14 hours of continuous illumination in <b>ON</b> mode	<ul style="list-style-type: none"><li>• Battery is at less than 100% full charge; set switch to <b>OFF</b> mode and allow solar panel to absorb direct sunlight for up to 2 -3 days in order to recharge fully.</li></ul>
Delay Time is too short	<ul style="list-style-type: none"><li>• Adjust <b>DELAY TIME</b> knob. The knob allows for an estimated 5 to 180 second delay (see page 7).</li></ul>
Motion is not detected within the coverage area	<ul style="list-style-type: none"><li>• Avoid installing the light near air conditioner, central heater, or hot air flow.</li><li>• Check the motion sensor lens for dust or damage.</li></ul>
The battery does not fully charge	<ul style="list-style-type: none"><li>• While in <b>AUTO</b> mode, if there is frequent activity from dusk to dawn or continuous overcast days, the solar panel may not convert sufficient ambient daylight to recharge the battery sufficiently.</li><li>• Reposition solar panel to receive more sunlight.</li><li>• Clean dust and debris from solar panel.</li><li>• Make sure the solar panel cable is not damaged.</li></ul>
The light stays on continuously while in <b>AUTO</b> mode	<ul style="list-style-type: none"><li>• Check the motion detector sensor head to ensure that it is not directed towards street traffic or where other movements may trigger the light needlessly.</li></ul>

## Specifications

Motion Detection Range: 180 degrees / variable up to 60'

Matrix Light: 45 super bright LEDs

Rechargeable Battery: 7.4V 1.5Ah lithium-polymer battery

Solar Charging Panel: 10VDC/2.5W Monocrystalline

Continuous Illumination Time: Up to 14 hours on a 100% full charge (2-3 sunny days)

Operation Temperature: -25F to +125F degrees

Complies with FCC Part 15 Class B and ICES-003:2004

Weight: 1.3 lbs.

# One Year Limited Warranty

Xepa Technologies warrants this product against defects in material or workmanship for a period of one (1) year from the date of original purchase. During this period, Xepa Technologies will replace a defective part with a new or refurbished part without charge to you. It is your responsibility to retain original packaging or provide like packaging in order to facilitate the warranty process. Xepa Technologies will incur no liability whatsoever to provide packaging for warranty items. Upon receipt of the warranty item, should it be determined that the packaging is insufficient, Xepa Technologies may at its discretion, void the warranty. The consumer is responsible for the transportation cost to Xepa Technologies. You must receive a return authorization number before sending a unit in for service.

## To Obtain Warranty Service

Should it be necessary to contact Customer Support, call (866) 427- 3946. You will be instructed on how your claim will be processed. Have pertinent information available including proof of purchase and an understanding of the issue.

You must retain the original bill of sale to provide proof of purchase. Call a customer support representative to assess the problem. No service or shipment will be accepted unless an RA# is provided to you and attached or printed to the shipping carton along with a copy of the bill of sale. This warranty is effective only if the product was purchased through an Authorized Retail Seller and the unit is operated in North America. You are responsible for all tariffs and taxes imposed to ship or receive warranty or replacement units to and from the U.S. Warranty extends only to defects in materials or workmanship and does not extend to any other products that have been lost, discarded or damaged by misuse, accident, neglect, acts of God, such as lightning, improper installation, improper maintenance or modification. Warranty does not cover cosmetic damage or lost accessories. The consumer is responsible for the installation, removal and reinstallation of the product.

This warranty gives you specific rights and these rights may vary from state to state. Some states do not allow limitation on how long the warranty lasts or exclusions or limitation of incidental or consequential damages, so the above may not apply to you.

# Accessories



## Table Top Cradle

Supports the XP645DS and converts it to a portable table lamp.



## Replacement Battery

Li-Polymer rechargeable battery for the XP645DS.

To order, please visit  
**[www.xepatech.com](http://www.xepatech.com)**

## Additional Uses: Portable Light

The XP645DS can also be used as a portable light. Use it as a long-lasting rechargeable flashlight and take it with you wherever you need it. When placed in the optional cradle (sold separately, see page 10) the XP645DS makes a bright, convenient cordless table light for the backyard, patio, deck, or anywhere you need additional light.

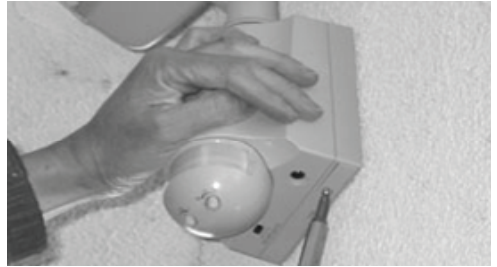


For portable use, simply disconnect the solar panel cable from the light (Fig.1), unscrew the locking screw (Fig.2), and remove the XP645DS from the mounting bracket by sliding the light upwards.

**Fig. 1**



**Fig. 2**



**XEP<sub>3</sub>PA**™  
TECHNOLOGIES  
[www.xepatech.com](http://www.xepatech.com)