

eLEDing® Model EE814WDC User Manual

Built with **CREE** LED Smart Solar Light
LED Lighting



IMPORTANT Read this User Manual Before Installing...!!!

Included in this package:

- | | | |
|------------------------------------|--|--------------------------------|
| 1 – eLEDing Solar Light Body | 1 – Rechargeable Li-Poly Battery | 1 – Tempered Glass Solar Panel |
| 1 – Wall Mounting Plate w/hardware | 2 – Hardware Package with Screws and Anchors | |

Initial Installation (Refer to Fig. 1)

Connecting the Battery before setting up

1. The battery has been pre-charged before shipping and the light is ready for use
2. Make sure the main switch is in the **OFF** position
3. Open the battery compartment cover on the back of the light and plug the battery into the connector and carefully make sure the plug position is correct then replace the cover (Fig. 1-1)
4. Initially check the LED illuminator and battery by moving the main switch to position **A or B**, it should light up, then turn the switch back to **OFF** for installation

Mounting the Light Body

1. The light body **must only be mounted in a vertical position** and it should be mounted at least 6 to 10 feet above the ground
2. Choose a flat and safe mounting surface. Mark the screw positions through the mounting plate screw holes onto the mounting surface Use 2 or 4 hole mount, (Fig. 1-2 & 1-3)
3. For wood, vinyl and metal surfaces mount the back plate directly with provided screws. Drill clearance holes using a 3/16" masonry bit for surface of concrete, brick or stucco. Insert the anchors provided with screws then position the mounting plate and screw the fasteners in securely
4. Attach the light body unit to the wall mounting plate by connecting the top hinges. Then secure the light body unit in place by firmly pushing the light body in toward the mounting base where it locks in position, (Fig. 1-4 & 1-5)
5. With the light body firmly secured in it's mounting position, the **Pan & Tilt** adjustment features can be used to adjust the direction of the motion detector and the light head directions for optimal performance and coverage. The direction and angle of the motion detector can be adjusted (Fig. 1-6). The LED light head can also be adjusted horizontally 180°, forward and backward 120° (Fig. 1-7)

Mounting and Connecting the Solar Panel

1. The solar panel must be mounted in a non-obstructed position where it will receive an average of at least 4 hours daily of direct sunlight all year round. It should be mounted with a tilt of 35°- 80° degrees (Fig 1-8). A sturdy mounting location such as a wall, roof, on top of patio, under the eaves, secure pole, or floor/ground base. This is required to make sure the solar panel is fastened down properly for all weather conditions
2. For Northern hemisphere installations the solar panel should be mounted with a Southerly facing position and visa-versa for Southern hemisphere installation the solar panel should face to the North (Australia, South Africa, South America e. g.)
3. Attach the hardware mounting bracket to the solar panel. Determine what length of the 10' connecting wire cord is needed to reach the position of the light body and then tie the unused cord behind the solar panel with the plastic zip-tie that is provided (Fig. 1-9)
4. Then mark the screw holes through the mounting bracket and secure the solar panel in position with the provided hardware
5. Firmly plug the solar panel plug into the bottom of the light body. **The RED-LED indicator (inside the motion ball) will begin making a double flash** indicating that charging status is active during a normal sunny, partially sunny or cloudy day (Fig. 1-10). If this does not happen please check that the plug is fully plugged into the light body or if there is a problem with the wire or solar panel

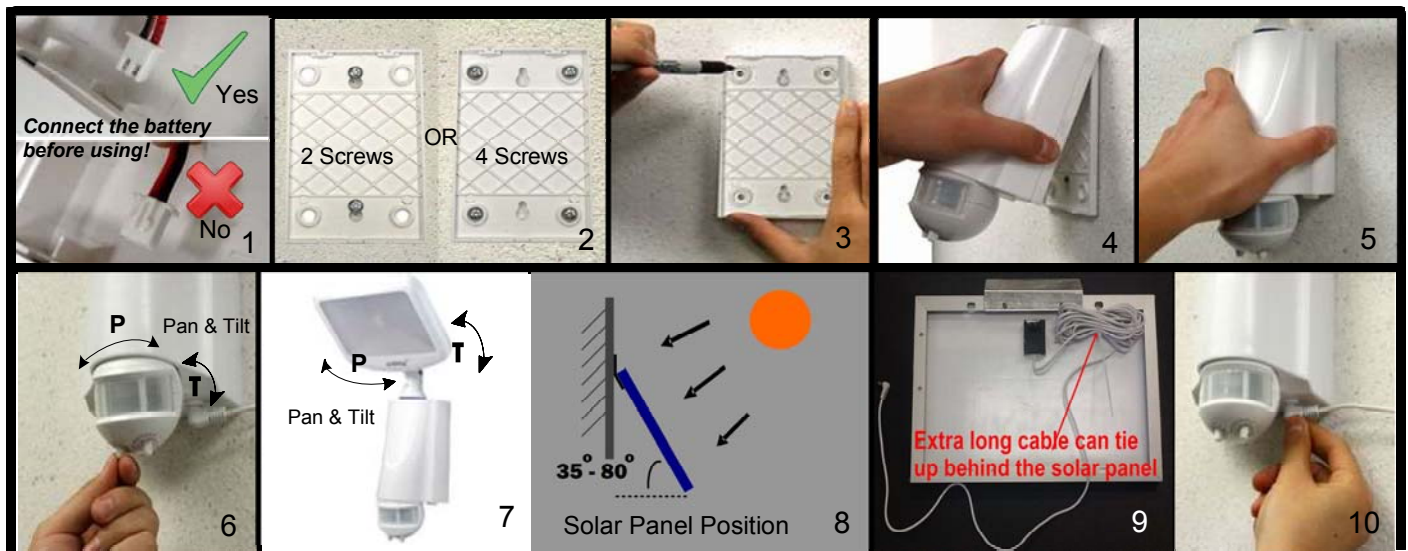


Fig. 1 Installation Steps

3 Mode-Selectable One step Set-up (Refer Fig-2, PG 2&3 more info)

1. SMART B Profile/Mode (Max-bright adjustable)- This mode is recommended and can be used for most illumination/lighting applications:

Set the **Main Switch** to **B** in the right position. Set the **Left Dial** between **L--H** for the desired Max-brightness level up from soft-glow illumination once activated by motion, (M--H is recommended), Set the **Right Dial** between **L to H** (M to below H is recommended).

2. SMART A Profile/Mode (Dimming bright adjustable):

Set the **Main Switch** to **A** in the center position. Set the **Left Dial** between **L--H** for the desired level of soft-glow illumination when motion is not detected, (L--M is recommended). Set the **Right Dial** between **L to H** (M to below H is recommended).

3. SMART AUTO Profile/Mode (Motion activated lighting only):

Set the **Main Switch** to either **A or B**. Set the **Left Dial** to **AUTO** in the far left position. Set the **Right Dial** between **L to H** (M to below H is recommended).

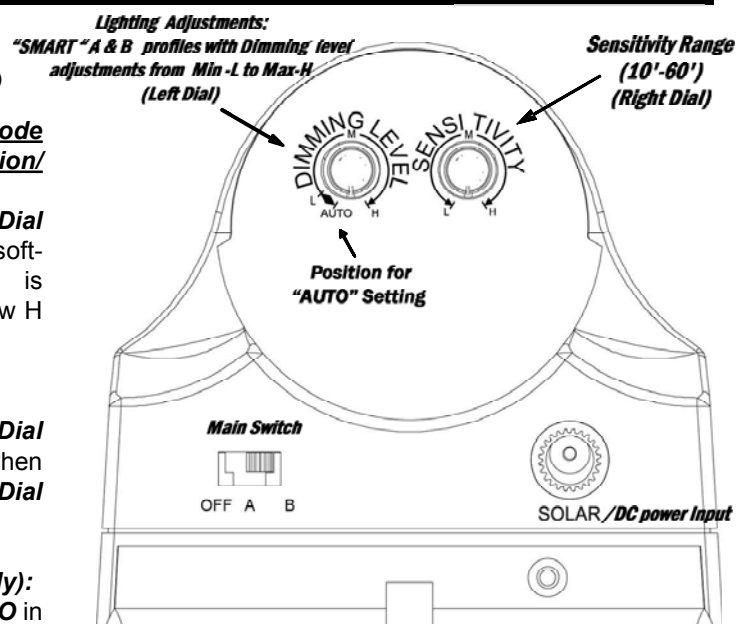


Fig. 2 Light Profiles & Settings

eLEDing SMART Light user related additional information

Our latest generation of software based **eLEDing** Solar-Hybrid powered Light offers three principal SMART operating profile modes. The Sensitivity/Range of motion, length of illuminating time, and levels of brightness and dimming are set and controlled with adjustable dials. (Fig. 2). The family of **eLEDing** solar lights use an exclusive **Intelligent Power Management (IPM)** embedded and self-compensated feature for managing and optimizing the Lithium based battery (either Li-Poly or LiFePO4) for a full range of operation. This optimizes the battery's life cycle to adapt to most environmental conditions allowing both the battery and light to perform for many years.

Optimization of SMART Profiles Operation

In either **A or B position**, if the **Left Dial** is set to **Auto** (turned all the way to the far left past "L" to the "Auto" position) then this light will convert to operate as a traditional motion sensing light. In this **SMART AUTO mode** it will light up to full brightness when motion is detected.

When the **Left Dial** is set at the **AUTO** position the illumination time has a fixed 60 second delay time for the light to be **ON** after motion is detected and the lighting will be extended as long as motion is continually detected. It will not turn off until the motion detection has stopped and after the illuminating **Delay Time** has expired.

The motion Sensitivity/Range can be adjusted using the **Right Dial** (Ref. Fig. 2, page 1), to set the desired Sensitivity/Range for the application. This adjustment has a motion sensing range from Low 10', Med. 35', High 60' (**For most applications set the dial to between M--H, in warmer temperature environmental locations set this slightly higher.**)

Cautions: 1) Adjust the **Sensitivity/Range** so that it is not set too sensitive, this will increase false activations and reduce stored battery energy. 2) If the **IPM** feature detects that the battery does not have enough stored energy to operate at full brightness when set with the left dial in the **SMART AUTO** position then it will automatically reduce the light level to half brightness in order to maintain a level of safe lighting until it again receives enough sunlight in good weather conditions to restore it back to normal status.

In **SMART A or B** profiles (switch position set to **A or B position**) the solar light operates as a true **Dusk to Dawn** light. The unit senses its surrounding ambient light level and will turn on in darkness providing adjustable moonlight soft glow lighting all night long. When motion is detected it lights up to its full brightness or pre-set max-brightness within the set sensitivity range. For either new installations or replacing existing AC light applications the **B** position is the recommended **SMART profile** when used as an outdoor or indoor light for Security and Safety. It can also be used to enhance CCTV applications by providing full color white light image illumination for the area of camera coverage without AC/DC power source or power shortage limitations.



Fig.5 Table Stand & DC Power (option)



Fig. 4 Unusual Positions

In **SMART B** profile the motion activated brightness level is controlled and set by the user. In this mode the Left Dial functions as a **Brightness adjusting dial** for setting the light level from lowest (L) to highest (H) brightness. **When motion is detected it will brighten up to the level as pre-set by the Left Dial and when motion stops it will slowly dim down to the lowest factory fixed pre-set moonlight soft glow lighting level.** It is recommended that for most country locations with good sunshine that this setting should be **H**, and for geographic locations with poor sunshine it should be set at a lower level between **M to below H**. **SMART B** also allows the brightness level to be adjustable between **L to M**. Set the **Right Dial** to **H** when using the light as a portable or table reading/studying light for outdoor or indoor use (Fig. 5).

Caution - The higher the brightness level is set to the more stored battery energy is used when activated by motion. If the **IPM** detects that the battery does not have enough capacity to run this mode it will automatically convert to **AUTO mode** for energy saving and turn on only when motion is detected until it receives enough sunlight to operate the SMART feature correctly.

In **SMART A** profile the lower soft glow lighting level is controlled and set by the user. The Left Dial is used for setting the dimming level of moonlight soft glow lighting from the level of lowest (L) to highest (H) brightness. When motion is detected the light will brighten up to the factory fixed max full brightness level and then dim back down to the moonlight level set by the user. It is recommended that for most country locations with good sunshine that this setting should be middle level **M** or less. For locations with poor sunshine it should be set at a the lowest level **L** (or switch to **SMART B profile is recommended**).

SMART A with the Left Dial set at its highest (H) the light operates as a projecting spot light. In the **H** position with the battery fully charged the light will be ON at its brightest illumination and it will provide continuous lighting for a time period of up to 8 hrs.

Caution - The higher the minimum soft glow level is set to the more stored battery energy is used to provide soft glow lighting. If the **IPM** detects that the battery does not have enough capacity to run this mode it will automatically convert to **AUTO mode** for energy saving and turn on only when motion is detected until it receives enough sunlight to operate the **SMART** feature correctly.

In either **SMART A or B profile**, if user geographic location has outstanding daytime sunlight conditions all year (California, Arizona, New Mexico, Florida of USA e.g.) then this SMART light provides a wide range of adjustability in lighting performance. Using the **SMART A** profile you can increase the **Moonlight Dusk-to-Dawn** dimming level up to full-brightness as peak ON. Using the **SMART B** profile you can increase up to Max-brightness on peak when motion is detected. **For most applications using the SMART B profile with the factory preset Dial settings is recommended.**

In both A and B profile if the **IPM** detects that the battery does not have enough capacity to operate these modes in critical weather conditions then it will convert to **AUTO mode**. And if the IPM detects that there is insufficient battery reserve to operate in Auto mode then it will automatically disable illuminating functions leaving only the charger active to protect the battery from over discharge causing damage. After enough sunlight is received to charge the battery, the unit will first return to **AUTO mode** for motion activated lighting until it receives enough sunlight energy to operate the **SMART** profiles properly.

User Tips (video reference: www.eesgi.com)

1. To set up your new **eLEDing** light for your applications the unit comes with an initial **Set-up/Walk** Test mode to ensure proper installation and performance is optimized. To activate this mode move the main switch from **OFF** to **B position as SMART B profile**. **This test mode can be reactivated at anytime (night or day) to adjust your settings for your application by sliding the switch to OFF then to B position and then making your dial settings.**
2. When the main switch is set initially to **SMART B profile from the OFF** position the Set-up/Test mode will be active for a period of 10 minutes allowing the user to adjust the light settings. This mode will work in day or night time conditions. The Motion Sensitivity/Range can be adjusted at this time for your application from 10' minimum to 60' maximum, also in conjunction with making the correct **Dial settings**, during this time you can also adjust the motion detector and light head using the **Pan** and **Tilt** features.
3. The **Set-up/Walk** Test mode is active as long as motion is detected and it will automatically disable itself if 10 minutes has passed without motion being detected. During this test period the Red LED indicator will flash through the motion detection lens (ball) providing visual motion sensing reference as a confirmation of motion detection adjustments. When a period of 10 minutes passes without motion detection the unit will automatically switch to normal operation mode. It will stop illumination if the set up test was made during daylight conditions and it will start illuminating again once it senses a change to darkness from daylight ambient light conditions.
4. After the initial **Set-up/Walk** Test is complete the main switch may either be kept in the **SMART B profile** or moved to the **SMART A profile** for Dusk-to-Dawn security and safety lighting. For most applications **SMART B position is the recommended mode providing both Security and Safety lighting.**
5. **Note: The Red LED indicator** light inside the ball head flashes for the following reasons: 1) To indicate motion activity during the 10 minutes initial Set up/Walk Test. 2) To indicate the battery is low when the sensor detects motion during darkness. 3) To indicate charging status during normal charging either in sunny, partly cloudy and cloudy daytime periods, or when the AC/DC-digital charger (optional) is being used for charging in any conditions.
6. **Storage:** If this unit has been stored over six months before initial operation then the battery may need to be re-charged. To re-charge the battery after storage turn the main switch to OFF, connect the battery, plug the wire cord from the solar panel into the light and place it in direct sunlight for 1-2 days. Or charge for 2-3 hours using only our **optional accessory AC-DC Digital/Switched Power Adapter (EE-DPS-0.8A)**. **The Li-Battery will charge in any of the three switch position including OFF.**
7. **Spot Light/Projection Lighting as Traditional full bright ON without motion:** This option converts the light to provide continuous adjustable up to full brightness level illumination for up to 8HRS or plus. It can be used as a wall washing light to project lighting on signs, flags, and areas that need spot lighting. Set the main switch to position **A**. Then make sure to adjust the Left Dial from M or all the way to the max (H) position as desired, and adjust the Right Dial (Sensitivity) to the lower (L) position (refer Fig 2).
8. **Table Light Conversion using optional Table Stand accessory (EE836DTS, Fig. 5).** This option converts the light to a portable table light for camping, picnics, reading/studying and other indoor or outdoor activities. Use as a Table Light during low ambient light level conditions. Move main switch to **position B** then make sure to adjust Left Dial (Dimming) for desired reading light level (L-M), and adjust the Right Dial (Sensitivity) for max (H) level.
9. **An optional AC-DC digital power adapter (EE-DPS-0.8A Fig. 5)** can be used as a quick charger. Also with this adapter it can be used in all profiles and modes as a standard AC/DC powered motion sensing flood light with battery back-up capability for indoor/outdoor security/safety lighting applications. It can be wall or table mounted, or used as a standard portable/table light (Fig. 5). Using this option it can be used in any of the three profiles.
10. **Avoid placing objects** in front of the motion detector that may affect detecting performance. Avoid installing the unit near air conditioners, central heaters, or high voltage systems. Avoid placing the motion detector head towards street traffic or other high movement areas which cause excessive triggers, resulting in shorter battery reserve capacity. If this situation is unavoidable, decrease the sensitivity and delay time to achieve optimal balance. Motion detector is more sensitive to motions across the device and less sensitive to motion moving towards or away from it. The solar panel should be mounted where maximum sunlight can be collected. Typically, the solar panel should face south and avoid facing north (for Northern Hemisphere only, opposite way for Southern Hemisphere) with 35°- 80° tilt up direction (Refer to Fig. 1-8). It's fine facing to West or East where sunlight can directly charge the panel for at least 4 hours per day on average.
Use a soft wet cloth to periodically (at least once a one year) clean the solar panel to avoid the reduction of energy output due to accumulated dust. Clean accumulated snow as soon as possible during the winter season.
11. **Important Note:** Lowering the Left Dial setting in either A or B profile will extend the battery capacity reserve and provide extended illuminating ability in geographic locations with poor sunlight, such as North West and North East of American e.g.

Product Specifications

Coverage: Up to 180° sensing angle	Detecting Range: 180°, up to 60'x 60' (L-10', M-35', H-60'+)
Light Head: 4W Single super bright -LED (CREE-USA)	Energy Storage: 15WH Li-poly battery
Solar Panel: 12VDC/4W Tempered Glass (with 10' cable)	Mode: A for 8-80+hurs continuous; B for 80+hurs
Weight: 1.0 LBs (Light Body)	Operation Temp.: -4°F to 125°F, Weatherproof IP54
Peak Bright: 60W Halogen Lamp (600lm+), 5000K color	Complies with: FCC Part 15 Class B and ICES-003:2004

Note: Installation with factory default settings is recommended for most applications

Optional Accessories:

AC-DC Power Adapter (EE-DPS-0.8A) : Must be switch type (digital) 12VDC/0.5-1.5A with current limited power supply (Fig. 5)
Table Stand (EE836DTS) : For use as a table light (Fig. 5). Auxillary Solar panel with 15' extension cable (EE-SPEC-15F).

Important Safety Information

Please unplug the battery when shipping the light or packing for flight traveling. Do not dispose of battery in fire as this may result in an explosion. Do not expose the light to fire or intense heat as the battery may explode. Do not immerse in water. Never look directly into the light or shine it into another person's eyes. Follow proper safety tips to prevent injury such as falling from a ladder during installation. Consult your local By-laws or local safety guidelines for installing the light fixture on a building.

One Year Limited Warranty

EESGI guarantees this product to be free from defects in material & workmanship for one year.

This warranty does not apply to damage from misuse or incorrect installation/connection. This warranty does not cover accessories, bulbs, batteries, accidents, alterations, unauthorized use or repair, neglect, misuse, abuse, damages or defects resulting from normal wear and tear (including chips, fading scratches, abrasions or discoloration due to usage or sun exposure), or failure to follow instructions for care and maintenance, fire, flood, and Acts of God. This warranty does not include liability for incidental or consequential damages. **EESGI** is not responsible for any damages in excess of the retail purchase price of the product under any circumstances. The consumer is responsible for the installation of, removal of, and reinstallation of the product.

Customer Service: (877)579-3889 (M-F, 10am-5pm PDT), www.eesgi.com

Introduction and Intellectual Property Rights Statement

Thank you for purchasing the **eLEDing** LED Smart Solar Lights. With its effortless setup and lightweight design the **eLEDing** LED Smart Light conforms to all your lighting needs. It was designed and made to provide many years of trouble free service using environmentally friendly Solar-Hybrid-Lithium based energy technologies. Covered under multiple US, European, China and other international patents granted and pending worldwide. All rights reserved.

Introduction eLEDing Technology Related Green Systems

EE818WDC(BP)/(WW)

Solar Powered Ultra-Bright 8W **CREE** LED eMitter Flood, Spot, Building, Parking Lot and Street, Security & Safety Lights, white CCTV illuminator



Specifications

Coverage: Up to 180° sensing angle	Detecting Range: 180°, up to 70'x70' (L-15', M-35', H-70')
Light Head: 8W Single super bright -LED (CREE-USA)	Energy Storage: 28WH Li-poly battery
Solar Panel: 13VDC/8W Tempered Glass (with 10' cable)	Smart Mode: A for 80+hrs continuous; B for 9-80+hrs
Weight: 1.7 LBs (Light Body), Black/White light fixture	Operation Temp.: -4°F to 125°F, Weatherproof IP54
Peak Bright: 100W Halogen Lamp (1100Lm) 3M/5M color	Complies with: FCC Part 15 Class B and ICES-003:2004

EE815WDC(WW)/(BP)

Solar Powered Ultra-Bright 5W **CREE** LED eMitter Self-Contained Flood, Spot, Building Security & Safety Lights, white CCTV illuminator



Specifications

Coverage: Up to 160° x 120° angle	Detecting Range: 160°, up to 45'x45' (L-10', M-25', H-45+')
Light Head: 4W Single super bright -LED (CREE-USA)	Energy Storage: 15WH Li-Poly battery
Solar Panel: 12VDC/4W Mono-crystalline self-contained	Smart Mode: A for 6-60+hrs continuous; B for 60+hrs
Weight: 2.2 LBs (Light Body), Black/White light fixture	Operation Temp.: -4°F to 125°F, Weatherproof IP54
Peak Bright: 60W Halogen Lamp (600Lm), 3M/5M color	Complies with: FCC Part 15 Class B and ICES-003:2004

eStreet & ePower

