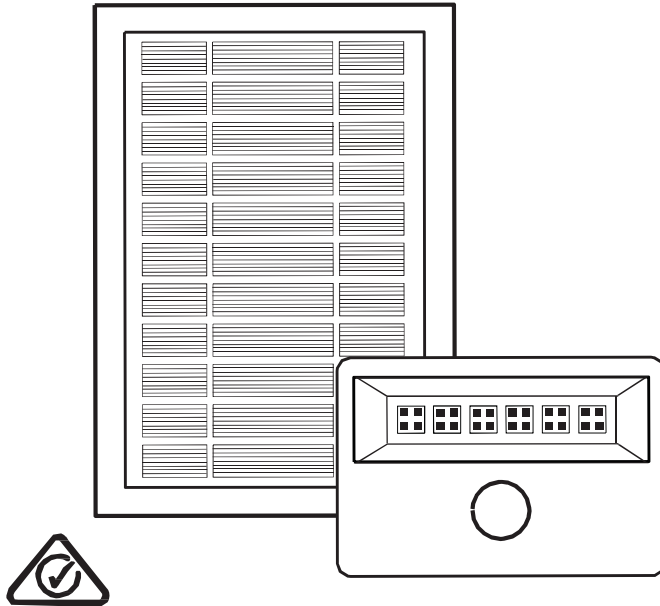


16W & 28W Solar Rechargeable Floodlights with PIR

I N S T R U C T I O N S



**Model No: DIO-FL16W-WM-SP
DIO-FL28W-WM-SP**

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SET UP GUIDE

NOTE: The unit will not operate correctly unless it is fully charged. When charging the Diodor LED Solar Floodlight, the charge LED should flash RED. If LED is flashing orange, this indicates a battery fault or the battery may not be connected correctly. Remove the battery, clean the contacts with a non-metallic cloth and carefully slide the battery back on.

- 1) Unpack and check the contents in the box, and check to make sure you have the correct tools for installation. (See page 9-10 for kit contents).
- 2) Remove lithium battery from the packaging, taking care when handling it. Carefully slide lithium battery onto the back of the light fitting, and the unit is now ready to charge.
- 3) To charge the unit, plug the solar panel and light fitting together. Once exposed to sunlight, the red charge LED should flash to indicate the unit is now charging.
- 4) We suggest you charge the battery before installation, in direct sunlight for at least 5 hours. Keep out of reach of children. Once fully charged, remove the battery (place somewhere safe) and disconnect the solar panel.
- 5) Find a suitable location to install your new Diodor LED Solar light fitting, (See page 7 for choosing a location).
- 6) Mount the solar panel and light fitting to the wall either with wall brackets, or 'U' brackets to 50mm pipe, taking into account the length of the cables.
- 7) Align the solar panel facing the sun at around 10 o'clock for optimum charging and then tighten the solar panel to the bracket accordingly.
- 8) Carefully slide the battery onto the back of the light fitting and ensure it is fully locked in place. At this point do not plug the solar panel to the light fitting. Please take care not to touch the metal connections on the bottom of the battery.

- 9) Fix the battery waterproof protection cover in place with the four screws provided.
- 10) Install the Diodor LED Solar Floodlight fitting on to the bracket using the knurled bolts provided. Position the light fitting for optimum PIR coverage (See Fig. 1)
- 11) Plug the solar panel cable and the light fitting together.
- 12) Installation is now complete. To test that the unit is working satisfactorily, cover up the solar panel and you will be able to walk test the unit in daylight.

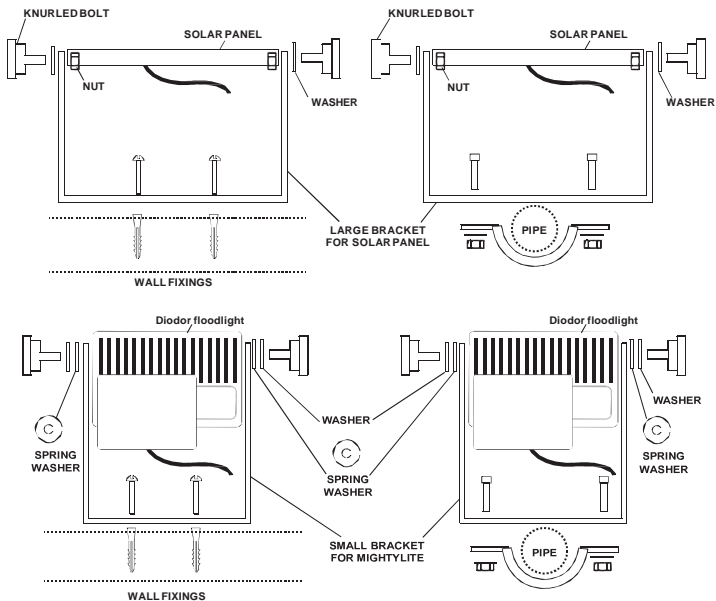


FIGURE 1

Fixing to a wall

- 1) Mark off the position using the bracket as a guide.
- 2) Drill two fixing holes for each bracket, taking into account the length of cable from the solar panel and light fitting.
- 3) Secure the brackets to the wall.
- 4) Mount the solar panel onto its fixing bracket (which should be above the light fitting), and set it to the appropriate angle and tighten.
- 5) Plug the solar panel into the socket on the light fitting.
- 6) Install the battery, this slides onto the back of the light fitting (take care handling the lithium battery).
- 7) Fit the weather protection case cover.
- 8) Mount the light fitting onto its fixing bracket and set to the optimum position for detection.
- 9) You can test that the system is working by covering the solar panel, the light fitting should now illuminate.

Fixing to a 50mm pipe

- 1) Attach the 'U' brackets, the light fitting and solar panel bracket to the pipe using the nuts and bolts provided. Take into account the length of the connection cable.
- 2) Mount the solar panel onto its fixing bracket (which should be above the light fitting), and set it to the appropriate angle and tighten.
- 3) Plug the solar panel into the socket on the light fitting.
- 4) Install the battery, this slides onto the back of the light fitting (take care handling the lithium battery).
- 5) Fit the weather protection case cover.
- 6) Mount the light fitting onto its fixing bracket and set to the optimum position for detection.
- 7) Point the PIR in the area you wish to detect.
- 8) Test the PIR by walking in front of the unit with the solar panel covered.

Precautions

Ensure normal safety precautions are taken when using tools and ladders. Install only in dry weather. Please read the Battery Warning (see page 12) before you install.

Tools Required for Installation (not sold with the product)

- Hammer power drill
- Phillips screw drivers
- Ladder
- No. 8 masonry bit (for wall mounting)
- Wrench and socket set (for pipe mounting)

HOW IT WORKS

The Diodor LED Solar floodlight floodlight uses a digital controller with no setting options, the unit is fully automatic.

During the day, the photovoltaic (PV) solar panel charges the Diodor's lithium batteries. When fully charged the Diodor LED Solar Floodlight provides continuous low-level courtesy lighting from dusk-till-dawn, boosting up to full power for 30 seconds when movement is detected by the built-in PIR.

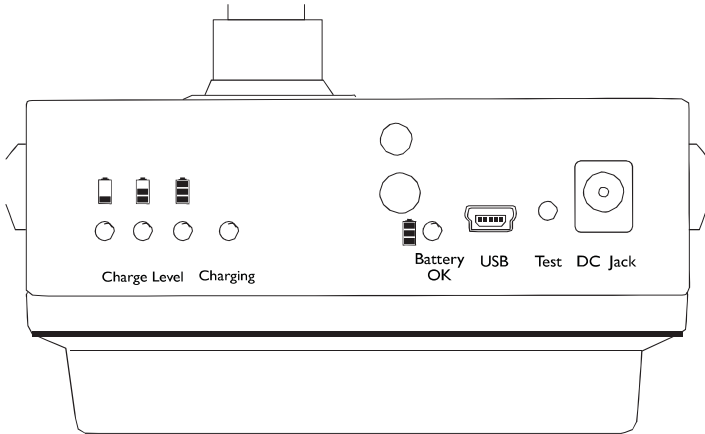
If the battery charge falls below 65%, the Diodor LED Solar Floodlight automatically operates at a lower light level from dusk-till-dawn, and restricts the on time after PIR detections to preserve battery life.

The Diodor LED Solar Floodlight is constructed with an impact-proof UV stabilized Polycarbonate facing, tough aluminium body and is weatherproof (certified to IP66) and highly resistant to birds, insects and extreme weather conditions.

The compact polycrystalline silicon solar panel is designed to operate in hot environments, continuing to charge the battery in temperatures as high as 50°C.

BATTERY CONDITION LEDs

- A) Charge Level: indicators for the battery charge level
- B) Charging: indicates when the solar panel is charging
- C) Battery OK: Battery check LED



Battery Condition 100%

Operates on Med Light from Dusk till Dawn Operates on Max Light for 30 secs after PIR detection



Battery Condition 60%

Operates on Min Light from Dusk till Dawn Operates on Max Light for 20 secs after PIR detection



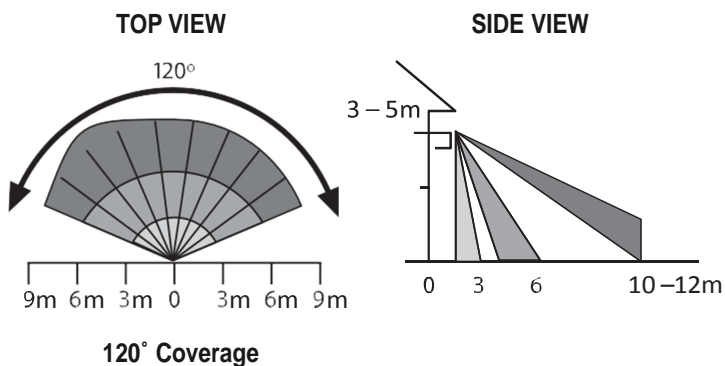
Battery Condition 35%

PIR function only Operates on Max Light for 10 secs after PIR detection

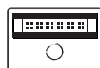
CHOOSING A LOCATION

The solar module should be placed outside in direct sunlight away from shade (e.g. tree, building etc.) Position it so that it will not get damaged by animals or debris.

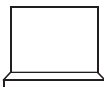
Mount the light fitting onto a solid wall or pipe 3-5m above the ground. Avoid positioning the Diodor Solar floodlight near heat sources such as hot ventilation ducts or air conditioning units which may interfere with its operation. Avoid pointing the light towards objects that may move in the wind such as trees or shrubs, or highly reflective surfaces. When positioning the light fitting, note that the PIR sensor is more sensitive to a heat source moving across its coverage area and less sensitive to a heat source that moves directly towards the PIR Sensor.



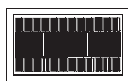
KIT CONTENTS



1 x Solar Floodlight



1200Lm, 16W - 1 x 12Ah Battery
2300Lm, 28W - 1 x 18Ah Battery



1200Lm, 16W - 1 x 36 Watt Solar Panel
2300Lm, 28W - 1 x 60 Watt Solar Panel



1 x Waterproof Cover & Rubber Ring
(for covering the batteries)



1 x Large Bracket for Solar Panel
(for mounting the solar panel)



1 x Small Bracket for Light
(for mounting the light)



2 x Pipe Mount Brackets
(for mounting on poles)

KIT CONTENTS: FIXING KIT BAG



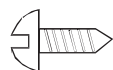
2 x Knurled Bolt & Washers & Spring Washer
(for light fitting)



2 x Knurled Bolt & Retaining Nuts (M6)
(for solar panel)



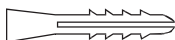
4 x Nuts & Bolts & Washers - For Pipe and Solar
(for assembling both pipe mounts)



4 x Cover Screws - (T8) 2.5*7
(for assembling waterproof box)



4 x Wall Screws - 8*1.5"
(for assembling to the wall)



4 x Wall Plugs - M8
(for assembling to the wall)

WARNING: KEEP OUT OF REACH OF CHILDREN

TROUBLESHOOTING

If your solar charged light does not come on at dusk despite observance of all the instructions, please try the following steps:

- 1) Make sure that the solar light is not being affected by any other light source
- 2) Ensure the solar light is not positioned in the shade during the day
- 3) Check that the battery is installed correctly

NOTE: The performance of the Diodor Solar floodlight will vary with the time of year. It will deliver more light when it has had a full day in the sun rather than a day in overcast weather.

Winter Time Tips

Keep snow, ice or debris from building up on the solar panel so that the battery can recharge. If the solar panel is covered for an extended period of time, clean it and allow the batteries to charge in full. Batteries require 6 hours of direct sunlight to reach their maximum capacity.

WARNING: LI-ION BATTERY WARNING

Take great care when handling the battery.

Lithium-ion cells and battery packs may get hot, explode or ignite and cause serious injury if exposed to extreme conditions. Be sure to follow the safety warnings listed below:

- Do not connect the positive terminal and negative terminal of the battery to each other with any metal object (such as wire).
- Do not carry or store battery together with necklaces, hairpins or other metal objects.
- Do not pierce the battery with nails, strike the battery with a hammer, step on the battery or otherwise subject it to strong impacts or shocks.
- Do not expose battery to water or salt water, or allow the battery to get wet.
- Do not place the battery in or near flames, on stoves or other high temperature locations.
- Do not place the battery in direct sunlight, or use or store the battery inside cars in hot weather.
- Doing so may cause the battery to generate heat, explode or ignite. Using the battery in this manner may also result in a loss of performance and a shortened life expectancy.
- Do not disassemble or modify the battery. The battery contains safety and protection devices, which, if damaged, may cause the battery to generate heat, explode or ignite.
- Immediately discontinue use of the battery if, while using, charging or storing the battery, the battery emits an unusual smell, feels hot, changes colour or shape, or appears abnormal in any other way.

- Do not place the battery in microwave ovens, high-pressure containers or on induction cookware.
- In the event the battery leaks and the fluid gets into your eye, do not rub the eye. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid could cause damage to the eye.

SPECIFICATIONS

	16W (56-129)	28W (56-128)
Sensor Type:	Passive IR	Passive IR
Detection Range:	10 - 12m	10 - 12m
Detection Angle:	120°	120°
Time Adjustment:	Depends on battery condition	
Colour Temp:	5400K	5400K
LED SMD:	24 LED Array	24 LED Array
Wattage:	16W	28W
CRI:	≥85%	≥85%
Battery:	12Ah	18Ah
Battery Voltage:	4.2V System	4.2V System
Battery Life:	3 Years	3 Years
Solar Panel:	36Wh (based on 6 sun hrs)	60Wh (based on 6 sun hrs)
Water Resistance:	IP65	IP65



MANUFACTURER'S WARRANTY

This Diodor product is guaranteed for a period of 2 (Two) years from date of purchase, provided the product has been installed in accordance with this instruction manual and local electrical wiring regulations and codes of practice.

This guarantee shall become invalid if this product has been incorrectly installed, misused, tampered with or accidentally damaged.

If the goods are defective, we undertake to repair or replace the goods or any part of them that is defective; or provide again or rectify any services or part of them that are defective; or wholly or partly recompense you if they are defective.

This guarantee is in addition to other rights and remedies available to consumers, all of which are given by us to you if you are a consumer. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage.

You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. If you wish to make a warranty claim, please return this product to the original place of purchase together with your purchase receipt, or contact us using the below details.

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