



## Solar Illuminations

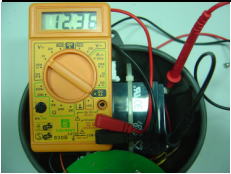
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SOLAR FLOODLIGHT 'FL' SERIES (PRODUCT CODES: FL05, & FL06)

### GENERAL TROUBLESHOOTING GUIDE

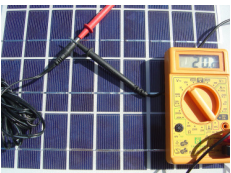
This solar powered LED floodlight requires several hours of full direct sunshine each day, for the battery to obtain a full charge. Therefore the solar panel needs to be installed in a location that receives full direct sunshine. Ideally, facing south and at about a 45 degree angle where possible. Illumination time can vary and is subject to many factors including your geographic location, installation location, weather conditions, seasons and the solar panel wattage you selected at time of purchase. Illumination times will therefore vary of up to 12 hours, in optimum conditions. The LED's never need replacing and the illumination output is equal to approx. 75w of regular lighting or about 270 Lumens, at source.

**IMPORTANT: BEFORE INITIAL USE, THE SOLAR PANEL MUST BE PLACED IN FULL DIRECT SUNSHINE FOR AT LEAST 2-3 DAYS WITH THE ON/OFF SWITCH IN THE 'OFF' (O) POSITION. THIS PROCEDURE ALSO APPLIES WHENEVER THE BATTERIES HAVE BEEN STORED FOR SOME TIME AND WHENEVER NEW BATTERIES HAVE BEEN INSTALLED.**



#### TESTING THE BATTERY

It's easy to check and test the battery with a simple battery tester or, ideally, a volt meter. If a battery is fully charged it should read 12v dc or greater. Be sure to set your volt meter to a low DC setting. Checking and testing the batteries is obviously the first check to be made when troubleshooting any solar light because without a good power source, the solar light cannot illuminate. We recommend the battery is replaced about every 12 to 18 months, depending upon its usage. The battery voltage and capacity (shown in Amps/Hour) is stamped on the original battery. Any replacement battery must be of the exact same voltage and capacity. Do not dispose of any batteries in regular trash. This will seriously pollute the environment and take thousands of years to rot away! Please recycle.



#### TESTING THE SOLAR PANEL

It's easy to check and test the solar panel with a volt meter. With the panel outside in full direct sun, the volt meter should register between 12v dc to 24v dc. The voltage changes depending upon the amount of sunshine. The inside of the plug (connector) is **+ve** and the outside is **-ve**. If voltage is zero or low then check the cable for any damage or shorts. You can also check the voltage at the back of the solar panel inside the black plastic connection box. If the cable is ever replaced, observe the correct polarity, during installation, to avoid damage to the battery and lamp.

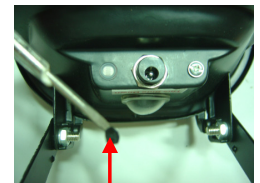


#### UNDERSTANDING THE PHOTOCELL (LIGHT SENSOR)

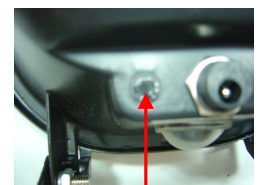
On the back of the floodlight, near the on/off switch, you will see a small clear/white round disc. It's about 1/4" (5mm) in diameter. This is the photocell. It's very sensitive light sensor that automatically controls when the light comes on and when it turns off (with a 20 second delay). The light will not illuminate at night time if the location has too much ambient lighting or if there are any other nearby lighting sources such as street lights, house lights, porch lights, security lights or parking lot lights.

#### TESTING THE PHOTOCELL

The photocell can be easily tested. If your light is not coming on at night time and you have confirmed that all of the batteries are fully charged, then you can place some layers of black electrical tape or duck tape to completely cover over the tiny photocell, at NIGHT TIME, to see if the light switches on. If it does, then you know the photocell is simply being affected by strong ambient lighting or a nearby lighting source. The floodlight can flash on/off if it is being affected by its own illumination or by its own light output reflecting back off a nearby object or surface. At this stage you have identified that there is nothing wrong with the light and you will need to consider one of the following: **(1.)** Adjusting the location or angle of the floodlight so that the photocell faces the other direction; **(2.)** Switch off the offending nearby light source; **(3.)** Cut out a small section of black electrical tape or black duck tape in a circular shape just a little smaller in size than the photocell. Then place the tape onto the photocell so that it is only partially masked, and leave it there. This usually helps to solve this problem by reducing the sensitivity of the photocell so that it doesn't react to nearby lighting sources or to its own light output reflecting back.



READY TO MASK PHOTOCELL



PHOTOCELL PARTIALLY MASKED

*It is essential that all troubleshooting efforts have been made in an attempt to resolve any problem before a return is made. Less than 1% of the solar lights that we sell, are returned for one reason or another. However, 80% of those returns that are claimed to be 'defective' are found to be working perfectly once we have inspected and tested them. There is a \$50 technician's fee charged (plus shipping) for any return that is found to be in normal working order.*

**SOLAR ILLUMINATIONS TECHNICAL SUPPORT IS AVAILABLE  
EVERY THURSDAY, 10AM TO 4PM EASTERN TIME, AT: 239-461-5520**