

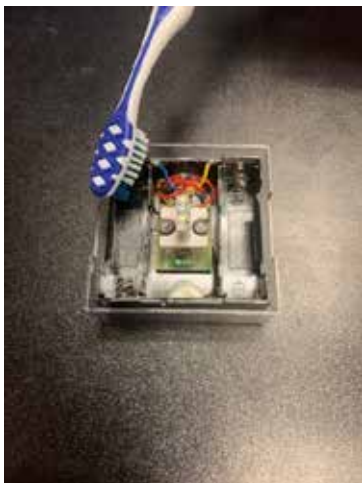
Solar Low Voltage Lighting Cleaning & Troubleshooting Tips

Cleaning Solar Low Voltage Lighting

Inspect the Solar Low Voltage Lights at least two times a year for any debris that may trap inside the battery compartment or build-up of grime on top of the solar panel. Remove batteries and LED light panel with a small metal pick or flat head screwdriver. While removing batteries, apply pressure with your tool of choice to the positive side of the battery (side without the spring), and carefully lift without damaging the batteries and then inspect the batteries for signs of corrosion or leakage. When removing the LED light panel, use your tool of choice to apply pressure inside the slot and lift it up on the tab, repeat for the other tab on the opposite side. Once all components are removed, inspect the electrical wiring to make sure all connections are still connected and are not showing signs of damage. Inspect the battery contacts within the battery compartment for any corrosion.



Remove any debris (corrosion, dirt, dust, spiderwebs, etc.) with a cotton swab or small brush before using a cleaning solution. It's best to start by getting as much dirt and debris off the contacts and solar panel as you can without using a cleaning solution.





Using a cleaning solution, you can use a cleaning solution meant for cleaning electrical contacts or try a household product, such as:

- Rubbing alcohol
- White vinegar

If you have purchased a special kit to clean your battery contacts, read through all of the manufacturer's instructions that came with it. The kit may include multiple types of solution, which may only be used on certain types of metal, such as gold, silver, or copper. The instructions should also provide information on how long to leave the product on before applying or wiping it off.

Insert the brush or swab into the battery tray onto the contact. Then, take the part of the brush or swab that you dipped into your solution and gently apply the solution onto the battery contact, or wipe the brush across the surface of the contact.

Make sure that the brush or swab is not dripping with the solution. If it is, dab it off on a paper towel before cleaning the contact.

Apply the solution. Make sure that the solar light is disassembled first before applying. Then, use the brush or swab to apply the cleaning solution to the contact. Cover the entire surface of the contact with the cleaning solution.

- Once the contact is completely covered, leave the solution on depending on the amount of corrosion build-up. This may range from a few minutes to a few hours, depending on how dirty the contacts are.
- For example, you might need to leave the solution on overnight if the contacts are extra dirty.

Wipe off the surface of the contacts with a brush or lint-free cloth. After the solution has been sitting for an amount of time, wipe or brush it off one more time. You can either use a brush or swab to wipe away any remaining debris from the surface of the battery contacts.

- If the contacts still appear dirty, repeat the process.

Allow the solar light to dry completely. After you finish wiping the contact and you are satisfied that it is clean, discard the brush or swab and place the item on a flat surface. Allow it to dry for at least 1 hour or until you are certain it is completely dry.

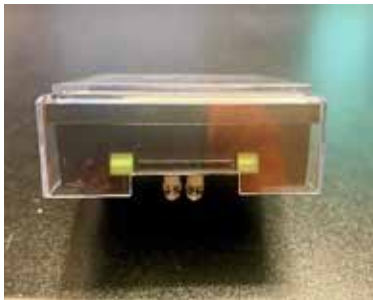
- Alcohol dries quickly, so it should be dry in a matter of minutes, but a cleaning solution or vinegar might take longer to dry.



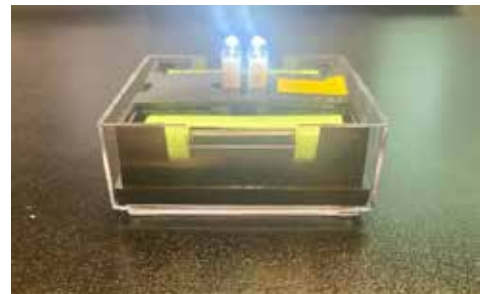
Troubleshooting Solar Low Voltage Lighting

The pull tab for batteries. Another common issue that can occur when you purchase new solar lights is that you forget to pull the tab near the batteries and is often used to preserve the battery power until the product is purchased.

Check for sensor function. The solar lights function based on a sensor which means that they do not work during the daytime. To see if the lights are working, you need to simulate darkness. The sensor located on top of the light, and it senses darkness to turn on the light.



Simulated light



Simulated darkness

Ensure that the solar panel is clean and functional. After installing the solar lights in your garden or lawn, they may stop working or provide reduced lighting. This can occur, especially if the lights have been out for quite a while. The lights can gather dust and debris on their solar panels, which can cause obstruction to the sunlight and prevent them from working. Similarly, the solar panel can be damaged, preventing the solar light's lights from working. So, make sure to clean your solar lights. Refer to cleaning instructions above.

The solar light is not receiving direct sunlight. Since solar lights work based on the light they receive from the sun. They must receive a plentiful amount and are in a position where the sunlight reaches them without any obstruction. This means shade or coverings that can cause the solar light not to get enough sunlight will result in the solar light not working or will generate a very dim light.

Rechargeable batteries. Sometimes, through the years of use, the rechargeable batteries used by the solar lights stop working or work poorly. If you notice that the lights are not working as brightly as they used to, it might be time to change the batteries. NiCd batteries are the common standard for rechargeable batteries, and NiMH is a suitable upgrade for rechargeable batteries.

Battery charge. When you purchase a new product, it comes with batteries complimentary installed; however, those batteries often lose their charge when it takes time for the product to be purchased. So, if your solar lights are not working after you have purchased them, it is a good idea to charge them in full sun for three days before using them.