Operation Guide

Thank you for purchasing the Larson Electronics **HAL-LED-SOL-80C-C1D2-20C** solar powered Hazardous Location light. Follow the steps below for installing and maintaining your unit.

IMPORTANT

READ CAREFULLY BEFORE OPERATING THIS LIGHT. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

THIS FIXTURE SHOULD BE INSTALLED BY QUALIFIED TECHNICIANS IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ANY LOCAL REQUIREMENTS.

STANDARD PLUGS AND SOLAR PANEL MUST ONLY BE INSTALLED AND LOCATED OUTSIDE THE HAZARDOUS AREA!

IMPROPER USE OF THIS LIGHT, ASSOCIATED PLUG, RECEPTACLE, AND CORD CAN LEAD TO SERIOUS INJURIES OR DEATH TO PERSONNEL.

PERIODIC INSPECTION OF THE LAMP AND CORD IS NECESSARY.

THE CORD MUST BE ROUTINELY CHECKED FOR CUTS, BREAKS, OR ANY SEVERE ABRASIONS, AND IF ANY ARE FOUND, THE CORD MUST BE REPLACED BEFORE RESUMING USE OF THE HANDLAMP.

THE GLOBE IS MADE OF TEMPERED GLASS. IF THIS GLASS BECOMES SCRATCHED OR CHIPPED IT SHOULD BE REPLACED IMMEDIATELY.

HOW SOLAR LIGHT WORKS

Solar light must be placed outdoors. The solar panel collects and converts sunlight into DC power while the pre-installed rechargeable batteries store the energy to power the light at night.

Solar light illumination time

It depends on the seasonal sunlight availability in your geographical area under certain weather conditions. Stronger or longer sunlight hours enable batteries to store more energy which provides more lighting hours. On the contrary, weaker or shorter sunlight hours reduce the lighting hours and its brightness as well.

Solar panel mounting locations

Solar panel must be placed outdoor at a location with its solar panel receiving direct sunlight at least five hours each day. Shadowed locations will not allow batteries to be fully charged and will reduce both the brightness of the light and the lighting hours. Precautions (prior to first time use)

1. To maximize battery capacity, the solar panel should be fully charged by direct sunlight for five hours before initial use.
2. Under extremely cold temperatures, the batteries may not charge fully. In such cases, the Solar Lights may not stay illuminated as long.

MOUNTING SOLAR PANEL

This solar panel includes a permanent mounting system that allows for mounting to square/round poles or flat surfaces such as a wall or post shown in figure 1.

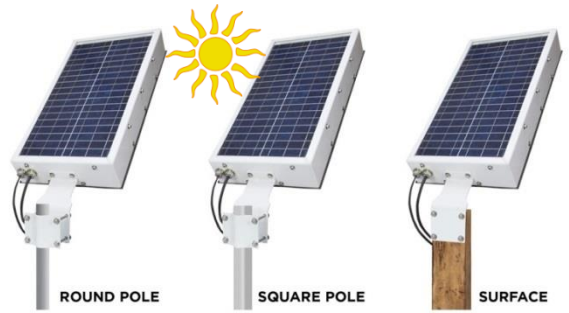
Position the solar panel in a location that receives the maximum amount of sunlight throughout the day. This may need adjusted depending on the season. With pole mounting, loosen the adjustment bolts to fit solar panel onto pole. Once mounted, tighten bolts snug to secure panel to pole. For surface mounting, remove additional plate and use the existing mounting holes to mount directly to surface.

MOUNTING

The light is connected to the panel by cord. Be sure the beacon is connected to the solar panel and that the connections are secure. Run the cord and mount the beacon nearby.



DEUTSCH CONNECTION



PENDANT

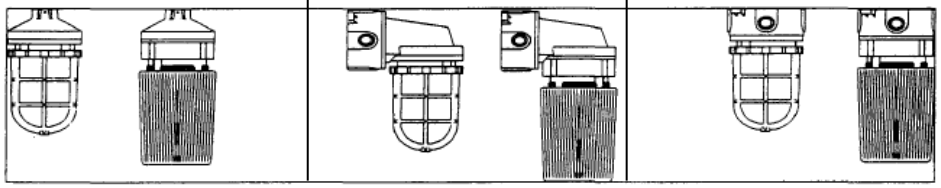
1. Thread the pendant mount onto the conduit, sealing around the conduit using approved N.E.C. procedures. Tighten with a wrench, then tighten set screw.
2. Connect wires coming from conduit to fixture wires.
3. Attach socket assembly to pendant mount. Install lamp. Insure seal. Install guard.

WALL

1. Attach wall box using two mounting ears.
2. Attach conduit as required, and pull wires into box. Connect wires to fixture.
3. Attach arm with mounting screws.
4. Attach socket assembly to arm.
5. Install lamp. Install globe and tighten to insure seal. Install guard (If applicable).

CEILING

1. Attach ceiling box using two mounting ears.
2. Attach conduit as required, and pull wires into box. Connect to fixture
3. Attach socket assembly to arm. Install lamp. Install globe and tighten to insure



Mount the control box using the mounting ears on the back. This contains the lead acid batteries charged by the solar panel used to power the light. The control box should remain closed during operation. Check rating requirements for the installation area prior to installation.

LAMP INSTALLATION

1. Remove guard(if applicable) and globe from light fixture.
2. Unscrew light bulb.
3. Replace with equivalent lamp not exceeding rated wattage.

ON/OFF SWITCH

The on/off switch powers the beacon on or off with the flip of a switch. The power switch is located on the solar panel for operating the beacon at a moment's notice.

After the batteries have been fully charged, the beacon will illuminate with configured panel operation listed.
The solar panel surface must be kept clean to collect sunlight effectively.

DAY/NIGHT SENSOR (If Equipped)

The dusk to dawn photocell activates the light at night and turns it off at dawn. For operating the unit full time, slide the cover over the photocell sensor to disable it. This can be repositioned by loosening the set screw on the side and tightening once desired angle is achieved. The selected location should not be near night time light sources such as porch lights or street lights as they may cause the beacon to turn off at night.

MOTION SENSOR (If Equipped)

When the motion sensor detects movement, the strobe light is turned on. Once the motion has stopped, the strobe will stop. **Sensitivity**, **Time Delay** and **Lux** can be adjusted with their respective control dials on the base of the motion sensor.



1. The **SENSITIVITY** setting controls the distance in which the motion sensor will work. The lowest setting will trigger the motion sensor when motion is close. The highest setting will trigger the motion sensor when motion is far.

2. The **TIME** setting controls how long the unit remains illuminated following activation & after all motion ceases. The minimum time (fully anti-clockwise) is approximately 5 seconds and the maximum time (fully clockwise) is approximately 5 minutes. Set the control to the desired setting between these limits.

3. The **LUX** setting determines the level of darkness required for the unit to start operating. The setting is best achieved by the procedure below:

Set the LUX control knob fully anti-clockwise. The unit will now start operating at dusk. If you require the light to activate earlier, wait until the ambient light level reaches the level of darkness at which you wish the lamp to become operative, slowly rotate the control in a clockwise direction until a point is reached where the lamp illuminates. Leave the control set at this point. At this position, the unit should become operative at approximately the same level of darkness each evening. Observe the operation of the unit. If the unit is starting to operate too early (e.g. when it is quite light), adjust the control slightly anti-clockwise. If the unit starts to operate too late (e.g. dusk), adjust the control slightly clockwise. Continue to adjust until the unit operates as desired.

MOTION SENSOR POSITION

The motion sensor's position can be adjusted by loosening the hand screw on the side, repositioning, and tightening the hand screw.

CHARGING

With up to 5 hours of daily sunlight, this beacon is designed to function 15 hours. Ensure there are no obstructions that could result in little to no sun reaching the panels.

MAINTENANCE

If the lens or solar panel becomes dirty, wipe down with a mild soap and water solution.

Keep snow and debris clear of the solar panel so the batteries can charge. If the panels are covered by snow or debris for an extended period of time, allow the battery to charge in full direct sunlight for at least 5 hours for the battery to reach its full capacity.

It is recommended to occasionally inspect the unit for any defects.

TROUBLESHOOTING

If for any reason the LED beacon does not power on:

- ➔ **Batteries not fully charged:** Make sure the fixture is placed in an area where the solar panel gets the maximum amount of full, direct sunlight every day. If the solar panel does not receive enough sunlight during the day (e.g. due to cloudy or overcast weather conditions), it will be recharged on the next sunny day and resume operation.
- ➔ **Other light sources:** (For units equipped with a day/night sensor.) If your solar light is located too close to street lights, porch lights or other lights, the solar panel may turn off the fixture. Relocate the solar panel or eliminate those other light sources.
- ➔ **Not enough direct sunlight:** Ensure that the fixtures are not installed in a shady area, for example, in the shadow of a tree or a house. If necessary, move the fixtures to an area that gets full direct sunlight.
- ➔ **Switch is in the OFF position:** (For units equipped with a power switch.) Cycle power button in a dark room. The light(s) should come on when the switch is in the on position if the unit is fully charged.

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