UrbanSpark

Mounting Instructions (V3.1)



Important Safety Notice

The battery presents a risk of electrical shock and a high short circuit current. The Signify mounting instructions must be strictly followed, otherwise potential application, reliability, or safety issues may arise. Contact your local Signify service if the instructions cannot meet special field conditions.

Only a qualified Signify service representative who is knowledgeable in batteries and the required precautions is permitted to service the battery. Keep unauthorized personnel away from batteries.

Danger:

1. The battery package maybe explode by shock, please be careful during handling.

2. When moving batteries. Wear all appropriate safety clothing and equipment.

3. Prohibit dispose of the batteries in a fire. The batteries could explode.

Caution:

1. The misuse of this equipment could result in human injury and/or equipment damage. In no event will Signify be responsible or liable for either indirect or consequential damage or injury that may have resulted from the misuse of this equipment.

2. Use tools with insulated handles to avoid inadvertent shorts.

3. Verify circuit polarities before connecting.

4. Connect sequence: a) connect **load**,; b) connect **battery**; c) connect **charging source (PV)**.

5. Disconnect sequence: a) disconnect charging source (PV); b) disconnect battery;c) disconnect load.

Warning:

1. Failure to replace a battery before it becomes exhausted may cause the case to crack, possibly releasing electrolytes from battery and resulting in secondary issues such as odor, smoke, and fire.

2. The battery system must be in proper maintenance according to the "**Maintenance**" manual in this book. This is essential for safety and the reliability of the lighting system.

3. Do not dispose of batteries except through channels in accordance with local, state and federal regulations.

4. Positive and negative connectors of PV panel and battery are properly connected with charge controller. **Don't connect the battery positive to PV panel positive and vice versa.**

Notice: The mounting instructions in this document is for standard solar lighting system installation. It is vitally important that you observe the precautions recommended in this manual.

1 Field selection

Avoid Locations in the shade of the trees or buildings, if you can not avoid the shade, you must ensure the shade below the 2m of the pole.

If you do want to install the system at a shade area, please consult to Signify professional people.





Pole foundation and anchor bolts









Check List for Installation

(This checklist MUST be signed by the installer before system installation handover)

Project Name			Project Loca	ation
Sco	pe of check			
Site	Consrtuctor			
No.	ltem	Description	Result	Remark
1	Installation location	If the installation location avoid the shade of the trees or buildings	\Box yes	🗆 No
2	Base	If structural strength of base meet local pole specification	□ yes	🗆 No
3	Anchor bolts	If the anchor bolts location dimensions follow the MI	□ yes	□ No
4	Products	If all components no damaged	□ yes	🗆 No
5	Bolts	If four bolts are fixed	□ yes	□ No
6	Wiring	If the wiring is done as per the instruction	□ yes	🗆 No
7	Fixing of PV Cartridge with Pole	If all the screws are are properly tightened and rubber bolt cover are placed over.	□ yes	🗆 No
8	Work status	If the work status comply to the request	□ yes	🗆 No
9	Luminaire	If the luminaire can light on	🗆 yes	🗆 No
10	PV panel	If the PV panel can charge the battery normally.	□ yes	□ No
11	Charger configuration	If the the charger is configured as per the customer requirement.	□ yes	□ No

Person in charge of site construction

Signature/Date

Troubleshooting					
	Firstly, Check if you were followed the connection sequence we mention prior. If not, please disconnect one of the battery cable, and reconnect it, wait for 2-5 minutes, if still no light, please check below steps:-				
	Luminaire disconnect	Check if the the connection of luminaire is loose			
No light (Night time/	Luminaire overload	Replace a luminaire which is compatible to the system			
discharging time)	Luminaire damaged	Replace a good luminaire			
	LVD (Low voltage disconnect)	Wait for several sun days for recovering battery or recharge the battery by charger			
	Battery end of life	Replace a good battery			
	Battery damaged	Replace a good battery			
	CC broken	Replace a good controller			
	Panel is interfered by other light source	Check if there is other light source irradiate at panel			
	Program/ Configuration incorrect	Reconfigure the charge controller			
Less work time of	Battery capacity is low	Wait for several sun days for recovering battery or recharge the battery by charger			
light	Luminaire power is high	Reconfigure the charge controller			
	Part or all PV panel disconnection	Connect all PV panel			
	Dimming mode	Reconfigure the charge controller			
	RTE work mode enable	Reconfigure the charge controller			
	Power less than specifications	Reconfigure the charge controller			
	LED chip broken	Change luminaire			

Maintenance

Maintenance

Panel :-

1. Normally you don't need to clean the panel frequently, it depends on the local environment.

2. In heavy dust area, it is required to clean the solar module regularly with a damp towel to guarantee optimum performance of the solar panel.

3. Do not use any type of solvent for cleaning and be careful not to put too much pressure on the module while cleaning.

4. You Should clean small ads regular.

5. You should trim the trees and branches which cover the PV panel regular.

Battery:-

Battery normally does not need any maintenance within the warranty. If any abnormal symptom or special requirement, following tests can be taken: -

- 1. Check whether there is some loose connection.
- 2. Measure and record ambient temperature in the pole.
- 3. Check the battery if it has deformation.

Battery Storage:-

The battery should be stored in clean and dry environment. Storage time: battery is ex-work in fully charged, storage time should be limited. For ensuring battery performance, do not exceed storage time as following definition:

Under -20℃~25℃, six months.

Under -20℃~35℃, three months.

Under -20°C~45°C, one month.

Warning

1. The recycle of the used battery should strictly follow the local laws and regulations. It is forbidden to handle the battery as normal garbage for disposal.

- 2. Do not open, short circuit, or mutilate batteries as injury may occur.
- 3. Do not put the battery into a pool.
- 4. Never move battery by pulling the cables of the battery.
- 5. The installation is highly suggested during the day.
- 6. Only be charged with authorized charger by Signify.

7. Handle the panel pole and battery with great care during the installation and transportation.

8. Always keep sparks, flames and smoking materials away from the battery.

9. In case of fire: To extinguish a fire of a battery, use CO2, foam, or dry chemical extinguishing media. **Do NOT** discharge the extinguisher directly onto the battery. The resulting thermal shock may cause cracking of the battery case/cover.

Important

If you have any question concerning safety when working with the battery operated solar system, contact your local Signify sales/service representative.

Battery replacement

2.Positive and negative connectors of PV panel and battery are properly connected with charge controller. **Don't connect the battery positive to PV panel positive and vice versa.**