



HAVELLS ENVIRO ALL-IN-ONE SOLAR STREET LIGHT NG SERIES

USER MANUAL



*IMAGES ARE FOR REFERENCE PURPOSE ONLY , ACTUALS MAY VARY .

1. SAFETY CAUTION

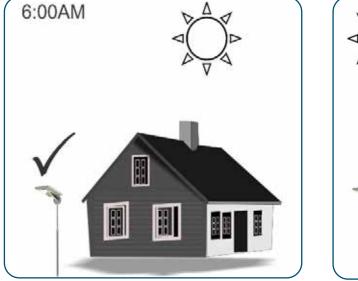
- 1. Thank you for Purchasing Havells Enviro ALL-IN- ONE Solar Street Light.
- 2. Before you install and commissioning the Light, please carefully read the user manual.
- 3. The ALL-IN- ONE Solar Street light system is to be installed by an experienced technician in strict accordance as per the manual, to guarantee that it can work normally.
- 4. Please do not try to open products casing to repair by yourself.
- 5. Please do not put any load on the top of Street light or Box.
- 6. After receiving open the box carefully and check if any physical damage is there or not. In case of any issue please report to Havells Dealer.

2. ALL IN ONE SOLAR STREET LIGHT

ALL-IN-ONE Solar Street Light consist of components like Mono Crystalline Solar PV Module, LED Light Panel, MPPT Solar Charge Controller, Lithium Ferro Phosphate battery mounted on a single Extruded Aluminium Body. Solar PV Module generate DC Power through Sun Light available during day time. The DC Power is used to charge the battery. Stored power is use by LED panel in night time to Power the LED Light.

The ALL-IN-ONE Solar Street Light is designed to work with pre-defined backup and had dusk to dawn operation.

ALL-IN-ONE SSL is specially designed by Progressive Intelligent Dimming which automatically control the dimming and brightness of light, which increase the backup time.

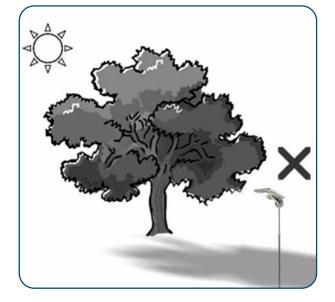


i. Install AIO SSL Facing South Direction , if Possible .



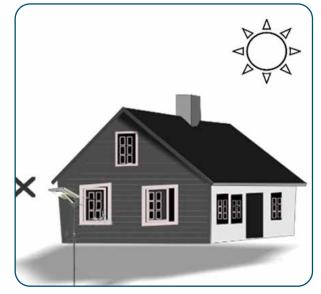


ii. Install in a location that has good sun exposure throughout the year



V. PRE INSTALLATION PROCESS

 iii. Do not choose a sludgy or gravely ground for installation. Do not perform the installation in light rain, morning dew or strong winds.



- 1. ALL-IN-ONE SSL (AIO) could not work without Sunlight, please select the place where you get the maximum sunlight and the light throw will be on the road.
- 2. ALL-IN-ONE SSL (AIO) comes with Lithium Ferro Phosphate battery for storing energy during the daytime with temperature range from 0°C to + 55°C. In case of temperature goes lower than 0® C the BMS will stop system automatically to protect the battery, and start when temperature goes higher than 0®C. for discharging at night the temperature range is -20°C to + 50°C, in which the system will perform and stop automatically if temperature goes out of range.
- 3. ALL-IN-ONE SSL (AIO) can be stored for 6 month after fully charged. In case storing the AIO for Longer period please charge it fully be placing under sunlight.
- 4. While Installation of AIO, please ensure solar panel towards direction of sun as possible and avoid house and shadow of obstacles such as tree at same time, otherwise it will reduce the generating efficiency of solar panel.
- 5. ALL-IN-ONE internal parts are with good waterproof design, all reach IP65 standard. Ventilation holes are specially designed for cooling and drainage.

VI. INSTALLATION PROCESS

- 1. Integrated solar street light comes in 2 parts.
 - The integrated light assembly with solar panel
 - The pole mounting bracket
- 2. Since proper functioning of all solar products depends on receiving unrestricted sunrays, so this light should be installed at a location free from shadows / obstruction to sunrays.

3. Luminaire With pole mounting bracket needs to be fixed onto a pole using C-clamps with 4 Nos of M8 X 80 mm GI Bolt and M8 GI Nut.

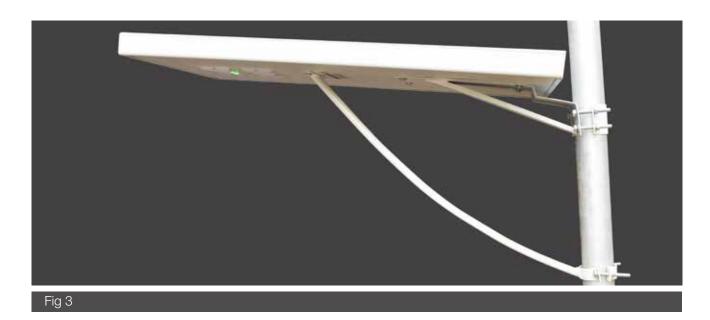
The bulged part of C-clamp should be on the outer side of the pole as shown in Fig 1 & Fig 2.

- 4. As an additional Support to Luminaire, a Holding Clamp/ Pipe is fixed from Centre of Luminaire to Pole using C-clamps with 2 Nos of M8x80mm GI Bolt and M8 GI Nut as shown in Fig 3.
- 5. The light should be mounted at 6m to 7m Height depending Upon the Model Chosen. Kindly ensure that the pole on which light is mounted is sturdy and can support the weight of this light even in windy conditions.
- 6. Tighten the fuse the fuse of given rating properly in the fuse holder.
- 7. Once the light is mounted, turn ON the Switch provided beside the light mounting clamp. As soon as the Switch is ON, the SSL will start working and its Red/Green LED indicator will start glowing / blinking depending upon daytime and battery condition.
- 8. If battery is low (RED Indication glow) then retain the Fuse in Luminaire Itself and keep switch in off condition for 2-3 days in sunlight for sufficient charge.





Fig 2





SYMPTOMS	CAUSES	REMEDY
Light is not glowing after mounting	Operation switch is at OFF position	Make sure that light operating switch is at "ON" position
	Battery is not charged	Charge the battery by keeping the light under sunshine with switch at "OFF" position
	Sunlight falling on solar panel	This light is design to switch ON automatically only after sunset.
Not getting full night backup	Solar panel is receiving shadow of adjacent building/ tree during day time.	Light should be installed at a location free from shadows throughout day time.
	Light installed with solar panel facing North direction (light in South direction)	Light should be installed with solar panel facing clear south/East/West direction only
	Solar panel dirty (Solar panel covered with dust/birds dropping)	Clean the solar panel with a soft cotton cloth using water
	Cloudy or foggy condition during daytime	Solar street light requires clear sunshine for properly charging the battery during daytime. The problem should not come on clear days.

VII. LED INDICATIONS

- i. Green LED Indicator: By glowing it indicates the charging of batteries, when it is actually being charged (True charge indication)
- ii. Red LED Indicator: By glowing it indicates the Low Voltage of the batteries.

VIII. DO'S and DON'TS

i. DO'S:

- i. Mount the AIO SSL where they will get maximum sunlight.
- ii. Panel Cleaning is to done twice in 1 month.

ii. DON'TS:

- i. Don't mount the solar panels in the shade of a tree, building, or any other structure or you will limit the amount of sunlight on the panels, and thus limit the energy the solar panels can put into your battery.
- ii. Do not use abrasive cleansers to clean the solar panel glass.

iii. MAINTENANCE:

- i. For maximum efficiency, clean the solar panel glass twice in month with water and any other glass cleaning product. Do not use abrasive cleansers to clean the solar panel glass. Scratches in the glass will negatively affect the solar panel performance.
- ii. Store AIO SSL in Dry and clean place if you do not use them for a month or more.









WARRANTY CARD

Serial No
Name of Purchaser
Address
DateofPurchase
Dealer's Name

* Warranty Terms & Conditions

This product is covered with a warranty of Twenty four months from the date of purchase against a defect which has arisen, wholly or substantially as a result of faulty manufacture, parts or workmanship during warranty period.

Company warrants to the original purchaser provided the product is still in possession and used by original purchaser, from the date of shipment from the company

Consumer shall have no coverage or benefits under this warranty in the event of any of the following conditions are applicable.

a) The product has been subjected to abnormal use or conditions, improper storage, exposure to excessive moisture or dampness, exposure to excessive temperature, unauthorized modification, unauthorized repair (including but not limited to the use of unauthorized spare parts in repairs), abuse, accident, act of God, spill of food or liquid, improper installation and breakage or damage.

b) The consumer has not notified the defect of the product to the company during the warranty period.

- c) The product serial no. code or the accessory code has removed, defected or altered.
- d) The seals are broken or show evidence of tempering.

e) All metal surface and all other externally exposed parts that are scratched or damaged due to abnormal customer use.

The warranty is offsite in nature, the consumer will have to take the product to the company authorized service Centres for repair and will have to take it back at his/her own expenses.

No other express warranty is applicable to this product. The duration of any implied warranties, including the implied warranty of marketability or fitness for particular purpose or use is limited to the duration of express warranty herein. The company shall not be liable for the loss of use of the product inconvenience, loss or any other consequent damage arising out of the use or inability of use, of the product of for the batch of any express or implied warranty of market ability or merchantability or fitness applicable to the product.

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