

Solar Home Energy System Installation Guide

Step 1: Mounting of Solar PV Panel – Solar PV panel can be installed in three (3) different ways:

- I. Mount or fix the solar PV panel on a wooden pole using the iron strip provided with the unit.
- II. Mount or fix the solar PV panel on the roof using the iron strip provided with the unit.
- III. Place the solar PV panel on an elevated plain surface. Ensure that the surface is not prone to flooding/water logging, or hazardous circumstances.

Note: <u>Mount or place</u> the solar PV panel <u>in a shadow-free area</u>. Ensure the area receives direct sunlight for at least five to six hours daily.

Step 2: Battery Charging – The Charge Controller has a built-in battery. When using the Solar Home Energy System for the first time, charge the battery for a minimum of five (5) to six (6) hours before use. To charge the battery:

- I. Place the charge controller on an elevated surface free of obstructions and waterlogging.
- II. Connect the solar PV module to the charge controller by inserting the cable attached to the solar PV module into the appropriately labelled port.
- III. Ensure that the switch (Red colour) is ON, and the load MCB switch is OFF. The Green light on the Charge Controller shows that the battery is charging.
- IV. If the Green light on the Charge Controller does not appear, recheck to ensure that the cables are connected properly.
- V. If required, one can relocate the system by firstly disconnecting the Charge Controller from the solar module and securely strap the cables appropriately before transport or storage.

Step 3: Fixing the LED Lights and Cables -

- Mount the LED tube lights on the wall using clamps, screws, and wall plugs (provided with the SHE system).
- II. Ensure the cables are placed flat onto the wall using the saddles provided in the kit (along with nails).
- III. Ensure that the cables are not submerged in the water at any time.

Step 4: Connecting the LED Lights and Fan -

I. Connect the LED lights and fan to the charge controller using the plug/cables.

Step 5: Switching ON the LED Lights and Fan -

- I. Switch ON the load DC MCB (The DC MCB is provided to protect the system during any abnormal conditions, always keep the MCB in the ON position).
- II. The next step is to switch ON the LED light and fan, using the switches attached to each, to use the lights and fan.

Step 6: Mobile Charging -

I. Charge mobile devices or tablets using the USB ports and the multi-pin mobile charging cable provided with the system.