



6. TROUBLE SHOOTING

(a) Pump does not operate even though the solar module is in full sunlight.

Check: No connection to the solar module – check connection to the solar module; Check connection to the DC pump, LED light.

Check: Impeller is blocked – To clean the pump, remove the cover as above.

Use a small brush or stream of water to remove any debris.

(b) Pump does operate but there is no water running through the fountainhead.

Check: build up of sediment or scale in the tubes or the filter- clean the tubes and the filter.

(c) On Mode of "battery powered", operating time is shorter than 2hours.

This pump is designed with a battery over discharge protection. Please allow the solar pump to charge at least eight hours in direct sunlight and don't frequently operate the solar pump during as the battery is charging.

7. TECHNICAL DATA

Solar Panel:	5 W
Operation Voltage:	6V – 10V DC
Water Flow Max.	500LPH
Water lift Max.:	1.4M
Water Projection Height	Max.0.8M
LED Light	4 LED white light
Cable Length	5M
Rechargeable Battery	Lead Acid 6V-4AH

Thank you for choosing our product. We stand behind our brand and the quality of the items we sell. Replacement parts or products will be sent at our discretion within the 1-year warranty period. Proof of purchase, with the date of purchase as well as photos of the merchandise defect, must be provided. Photos are used to determine the cause of defects and for future quality control.

If you have any questions, comments or concerns, feel free to contact us.

SOLAR PUMP USER'S MANUAL

1. OVERVIEW

- ♦ The solar pump is designed for fountain, pond or water reservoir. A solar panel powers the pump and charges the battery by converting sunlight into electricity;
- ♦ Design dry run protection prevents to protect the pump from burning out when fountain, pond or pool dries out
- ☆ This solar pump can be used almost any time: strong sunlight, weak sunlight or cloudy weather.
- This solar pump is designed with LED fountain light; when running the solar pump during the night, the fountain light will automatically illuminate the water spray.
- 2. ASSEMBLY



Unpack all components carefully.

- > Connect the ground stake to the read side of frame of the solar panel.
- Connect the solar panel to the control housing.
- Place the pump underwater and make sure that, it is **fully immersed** in water. Use the four flexible suction cups to stick to the bottom of fountain pool. In case the pump tube is too far from the surface of water, you can raise the pump by using stones or brick underlay.
- Select a favorable water jet and connect fountain heads and fountain light as diagram.
- Connect the pump cable and fountain light cable to the socket of the control housing;
- ➤ The solar pump is now ready to use.
- 3. CAUTIONS
- > Any altering of the product itself or changing of the components is forbidden.
- Do not connect the pump to any AC voltage power, it is intended ONLY for DC Voltage power.
- > Operate in freshwater only (never above 50° C).
- Do not strike the solar panel.

4. **OPERATING INSTRUCTIONS**

Once installed, allow the solar pump to charge at least eight hours in direct sunlight in order to fully charge the Battery.

Test the control system: press the "on" button, the "solar powered" indicator light is on; push the "Mode" button repeatedly, the indicator light will cycle through the "solar powered", "Battery powered" positions; push "OFF" button, the indicator light will be turn off.

Charging: once connected the solar panel with the control housing, and placed the solar panel in direct sunlight, the "Charging" indicant light will blink.



Press the "on" button, the red indicator light of solar powered is on ; The pump operates in direct sunlight only, any surplus power is used to charge the battery.

Mode of "Battery powered":

Press the "Mode" button to "Battery powered", the pump will run for 4 hours using battery power. If you run in this mode during darkness the LED fountain light will illuminate automatically.

Memory Function: The memory function is designed to remember the time at which you switch on the solar pump for the first time; this function will then switch on the pump at that time every day. The memory function is only reactive under Mode "Battery powered".

Adjustable water lift: water lift is controlled by a variable speed valve, you can only adjusted the water lift under mode of battery powered. (Note: greater water lift means more energy is consumed, therefore shorter operating time)

Lower battery: the system is designed with battery over discharge protect. When battery voltage lowers than design, the 4th indicant light will blink every 2 seconds. Allow the system recharges the battery for at least 3 hours in direct sunlight.

5. Maintenance

Solar panel: The panel should be cleaned periodically with a soft tissue. Regular cleaning of the panel is advised to maintain optimum conversion of the sun's energy into direct current.

Pump: If, after a period of time, the pump starts to lose power or stops working check for the build up of sediment, scale or dirt in the filter. Remove the pump cover and the impeller cover. Clean them and the filter by fresh water.



Mode of "Solar powered":