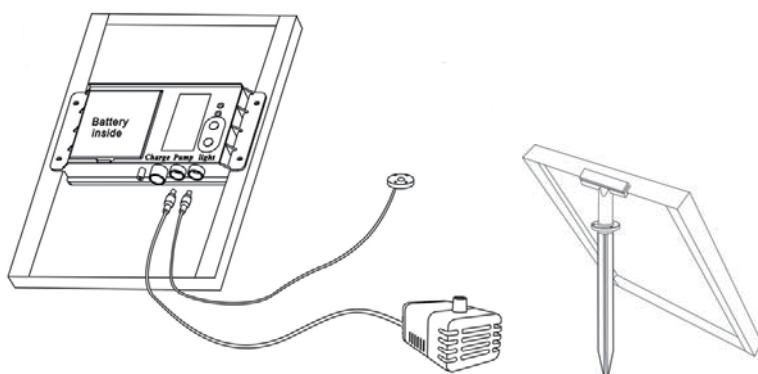


USER'S MANUAL

1. OVERVIEW

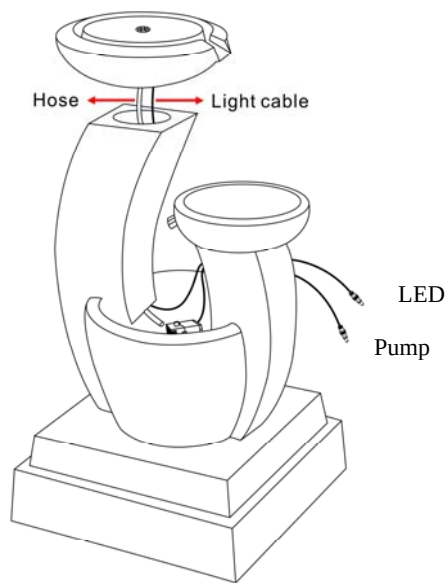
- ✧ The solar pump is designed for fountain, pond or outdoor use, design dry run protection prevents to protect the pump from burning out when fountain, pond or pool dries out. In order to make the pump work, the solar panel needs to be in direct sunlight
- ✧ This solar pump is designed with “solar powered” and “battery powered” mode. You can use this solar pump almost day and night.

2. ASSEMBLY



- Unpack all components carefully.
- Place the pump underwater and make sure that, it is **fully immersed** in water. In case the pump tube is too far from the surface of water, you can raise the pump by using stones or brick underlay.
- Connect fountain heads and LED light as required;
- Install the 4pcs AA size rechargeable battery into the battery case.
- Connect the spike to the edge of the aluminum frame and place the solar panel under direct sunlight;
- Connect the pump cable to the socket of the control housing on the rear side of the solar panel;
- Connect the LED light cable to the socket of the control housing;
- Make sure the solar panel gets direct sun light.

The solar birdbath & cascade fountain is now ready for 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), and especially keep away from flammable liquids.
- ✧ Do not strike the solar panel.

4. OPERATING INSTRUCTIONS

Mode of “Solar powered”:

We recommend you use this mode on day. Press the “solar on/off” button, the green indicator light of solar powered is on or off ; The pump will only run in bright or good sunlight conditions. On bright sunny days surplus power will charge the battery. The pump will not work on cloudy days as there is insufficient power to run the pump.

Mode of “Battery powered”:

We recommend you use this mode at night or a cloudy day. When the system is on, press the “Battery on/off” button, the red indicator light of the battery powered is on; On bright sunny days the battery will fully charge and the pump will run for up to 4hours. On cloudy days the pump will run for significantly less time. The mode will switch to “solar power” automatically when 4 hours is ending.

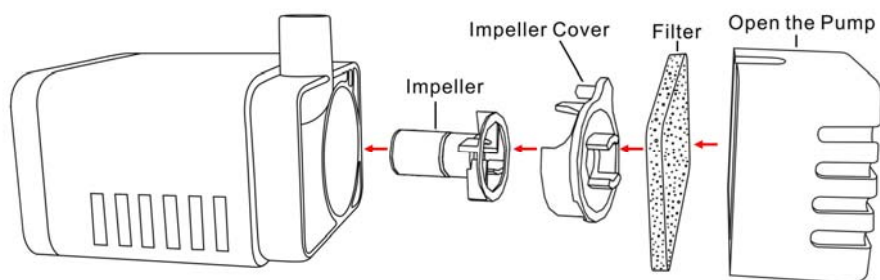
Adjustable water rate: while the mode is “battery powered” , water rate can be adjusted by keep pressing the button “High” , the water flow will be adjusted higher or lower. Be away from the “high” button when you are satisfied with the height of the water flow.

Low battery: if the battery is flat, the red indicate light “battery powered” will blink to show the battery status. Now you need allow the solar panel to charge the pump at least 4 hours in direct sunlight and don’t frequently turn on the pump.

5. CLEANING AND 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.



6. REPLACE BATTERIES

Rechargeable battery becomes less efficient with repeated charge and discharge cycles. If you find that the battery appears less efficient or does not run as long. We suggest you try to boost charge the battery. To do this, disconnect the pump for 2 to 3 sunny days to allow the maximum charge to the battery. If after this boost charge your battery still does not perform to expectations. The battery is beyond its lifespan. You may open the battery cover to replace 4pcs AA size new rechargeable battery.

7. TROUBLE SHOOTING

(b) Pump does not operate even though the solar panel is in full sunlight.

Check: No connection to the solar panel – check connection to the solar panel; 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.

(c) 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.

8. TECHNICAL DATA

Solar panel	2.5W
Pump Operation Voltage	DC 6V-9V
Maximum Water lift	1.2 meters
Maximum Flow Rate	250 L/H
LED light Operation Voltage	DC 6V
Rechargeable Battery	AA NI-MH 1500mAH