

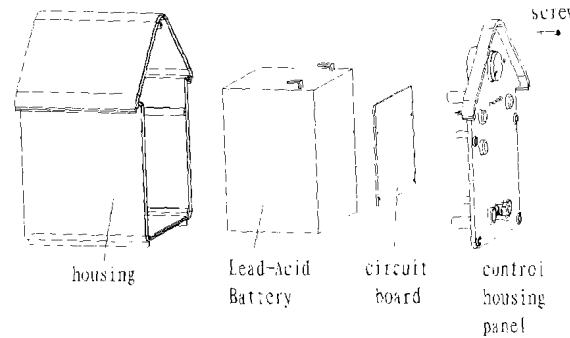
You may open the control housing to change a new rechargeable battery.

AP-P010:

Lead-Acid 12V-4AH

AP-P011:

Lead-Acid 6V-4AH



7. 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) Operating time is shorter than preset time.

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.

8. TECHNICAL DATA

	AP-P010	AP-P011
Solar Module	8W	3W
Pump (Voltage)	DC 12-20V	DC 6-10V
Maximum Water lift	2 meters	1.2 meters
Maximum Flow Rate	800 L/H	300 L/H
LED light (Voltage)	DC 12V	DC 6V
Rechargeable Battery	Lead Acid 12V-4AH	Lead Acid 6V-4AH

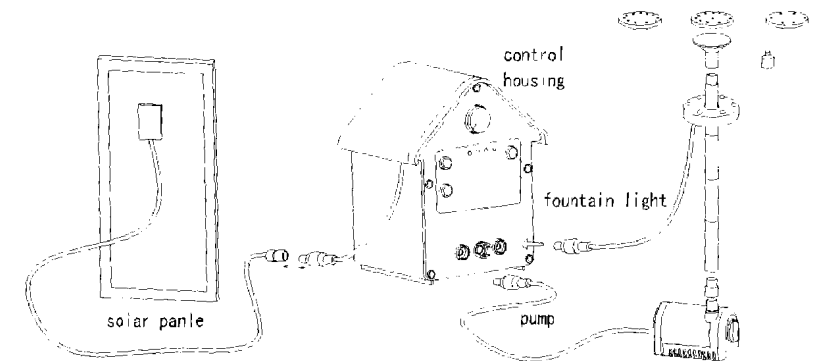
SOLAR PUMP USER'S MANUAL

AP-P010 AP-P011

1. OVERVIEW

- ✧ The solar pump is designed for fountain, pond or outdoor use. In order to make the pump work, the solar module needs to be in direct sunlight
- ✧ 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.
- ✧ This solar pump is designed with Memory Function 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.

2. ASSEMBLY



- Unpack all components carefully.
- Turn the solar pane face down, connect the 2pcs solar panel together (only for AP-P010) , and 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.
- Connect fountain heads and fountain light as required;
- Adjust the water jet as needed
- Connect the pump cable to the socket of the control housing;

- Connect the fountain light cable to the socket of the control housing;
- The solar pump is now ready to use.

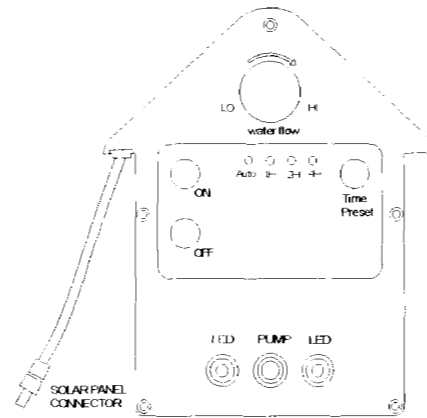
3. CAUTIONS

- ❖ 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), and especially keep away from flammable liquids.
- ❖ Do not strike the solar panel.
- ❖ Do not let the pump run dry.

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: push the “on” button, the first red indicator light is on; push the “time preset” button repeatedly, the red indicator light will cycle through the “Auto”, “1H” “2H”, and “4H” positions; push “off” button, the pump and the fountain light will stop working.



Auto: the pump keeps running until the battery is drained. Be aware that if insufficient power is stored the pump will not operate in poor light conditions

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.

- ❖ Push the “on” button. This will start the memory function.
- ❖ Push the “time preset” button repeatedly to set the length of time for which the pump will remain in operation (e.g. one hour).
- ❖ The solar pump will begin to work and will stop when it reaches your chosen length of time, or when the electricity stored in the battery is used up.
- ❖ The pump will begin operation automatically at the same time every day after you initiate the memory function.

- ❖ Push the “off” button to stop the pump and the memory function, and to reset when required.

Time preset: in order to save battery energy, it is strongly recommended presetting working time. As a rule of thumb, here recommend time preset as below:

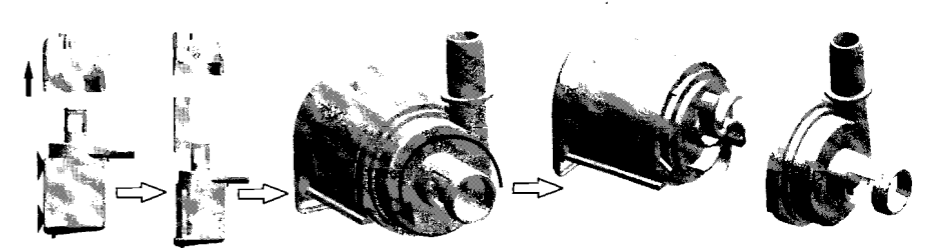
Weather				
Time preset	Auto	1 hour	2 hours	4 hours

Adjustable water rate: water rate is controlled by a variable speed valve. (Note: greater water rate means more energy is consumed, therefore shorter operating time)

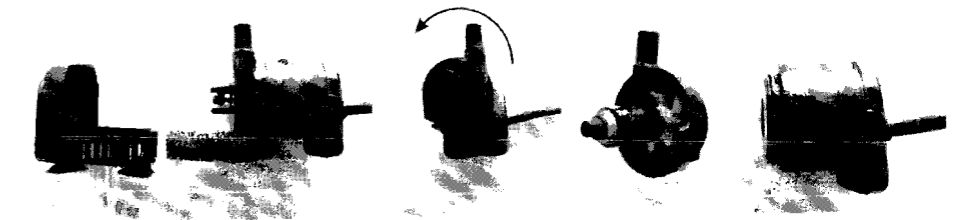
5. CLEANING AND MAINTENANCE

If after some time the pump starts losing power or stops working, please clean up sediment in the pump shell. Please note the pump can be opened by pull out the filter housing.

Pump for AP-P010:



Pump for AP-P011:



6. REPLACE BATTERIES

If the pump stops working after it has been used for a long time (about over 12-18 months), maybe the battery is beyond its lifespan.