

PondMAX

**- ULTRA SERIES -
PMI600SP SOLAR PUMP**



INSTRUCTION MANUAL


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PondMAX

- ULTRA SERIES - PM1600SP SOLAR PUMP

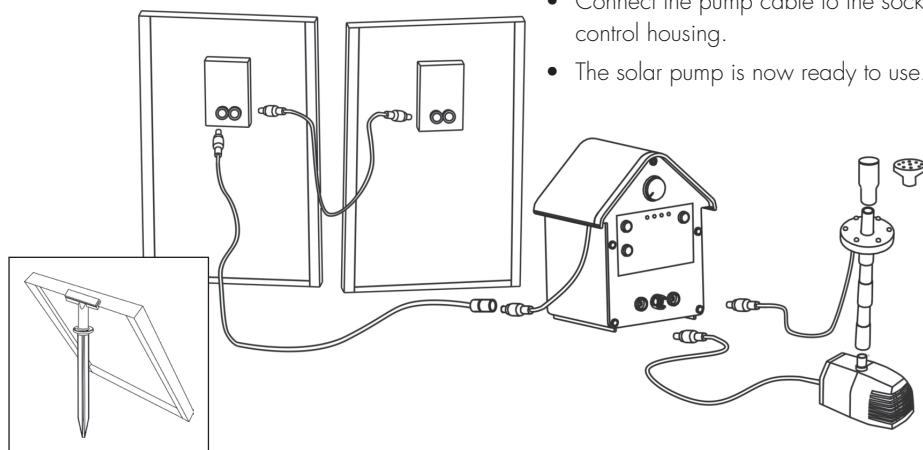
PM1600SP	
SOLAR MODULE	16W (2x 8W SOLAR PANEL)
PUMP (VOLTAGE)	12 - 18V DC BRUSHLESS PUMP
MAXIMUM (FOUNTAIN JET HIGH)	2 METERS
MAXIMUM FLOW RATE	1600 L/H
RECHARGEABLE BATTERY	Lead Acid 12V - 4AH

DESCRIPTIONS AND FEATURES

- The solar pump is designed for fountain, pond or water reservoir. Solar panel powers the pump and charges the battery by converting sunlight into electricity;
- This solar pump can be used almost any time: strong sunlight, weak sunlight or cloudy weather.

ASSEMBLY

- Unpack all components carefully.
- Connect the ground stake to the rear side of frame of the solar panel.
- Connect the two solar panels and then to the control housing.
- Place the pump underwater and make sure that, it is fully immersed in water. If needed, use the four flexible suction cups to stick to the bottom of fountain pool.
- Connect tubing to the outlet or fountain head of your choice.
- Connect the pump cable to the socket of the control housing.
- The solar pump is now ready to use.



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 35°C).
- Do not drop or impact the solar panel.
- Do not let the pump run dry.

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/off" button, the "solar powered" indicator light is on; push the "Mode" button repeatedly, the indicator light will cycle through the "solar powered", "Battery powered" and "Charging" positions; push "ON/OFF" button again, the indicator light will be turn off.

Mode of "Charging": If you would like to charge the battery quickly, switch to the Mode "charging", the system will charge all energy from sunlight to the battery without running the pump. We recommend you turn to "Charging" mode under direct sunlight for at least 8 hours when you first time use it. We have an overcharge protection design in the system. It will extend the life span of the battery.

Day Mode: Press the "on" button, the first indicator light, "solar powered" will illuminate; The pump operates in direct sunlight only, any surplus power is used to charge the battery. The performance of the pump with vary according to sunlight conditions.

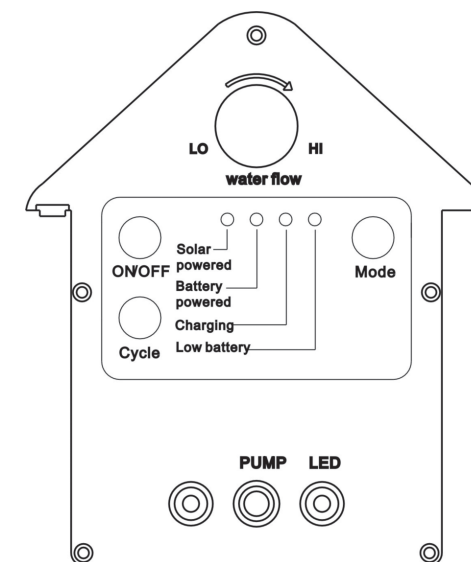
Night Mode: Press the "Mode" button to "Battery powered", the second indicator light will blink, the pump will run for 2 hours only using battery power.

The default "battery powered" cycle time is 24hours. The pump will turn on automatically same time the next day.

Press the "Cycle" button if you wish the pump to operate for 2 hours once only, push "cycle" button and the second indicator light will illuminate.

Adjustable Flow Control: water flow is controlled by a variable speed valve, you can only adjust the water flow in the Night (battery) mode. (Note: greater water flow means more energy is consumed, therefore shorter operating time)

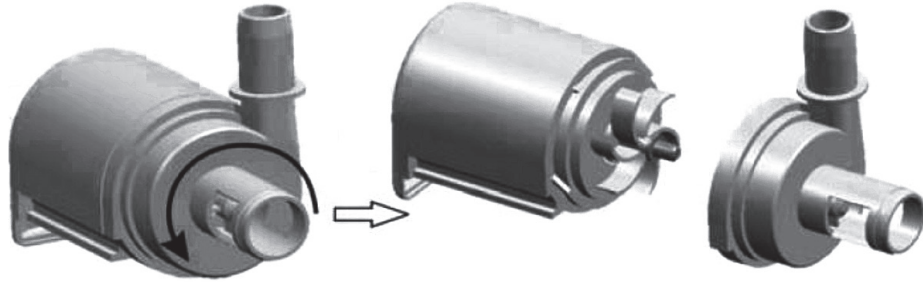
Low battery Function: the system is designed with battery over discharge protection. When battery voltage lowers than design, the 4th indicant light will blink. Allow the system recharges the battery for at least 4 hours in direct sunlight.



MAINTENANCE

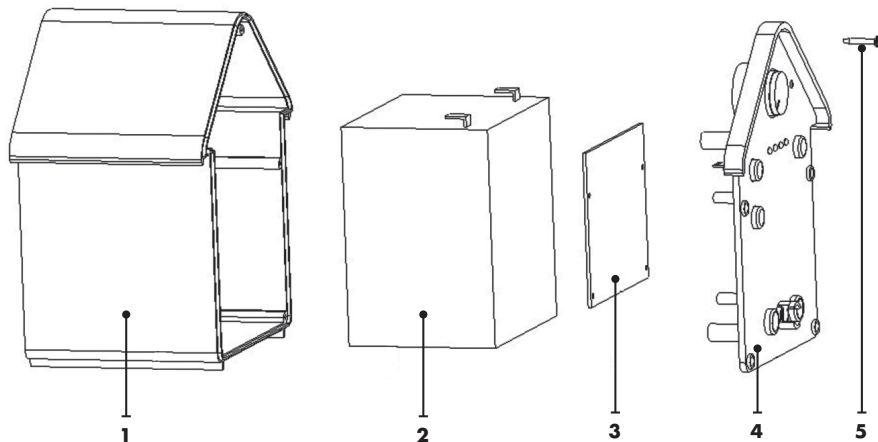
Solar Panel: The panel should be cleaned periodically with a soft tissue. Regular cleaning of the panel is advised to maintain optimum conversion of the sun's energy into direct current.

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 with fresh water.

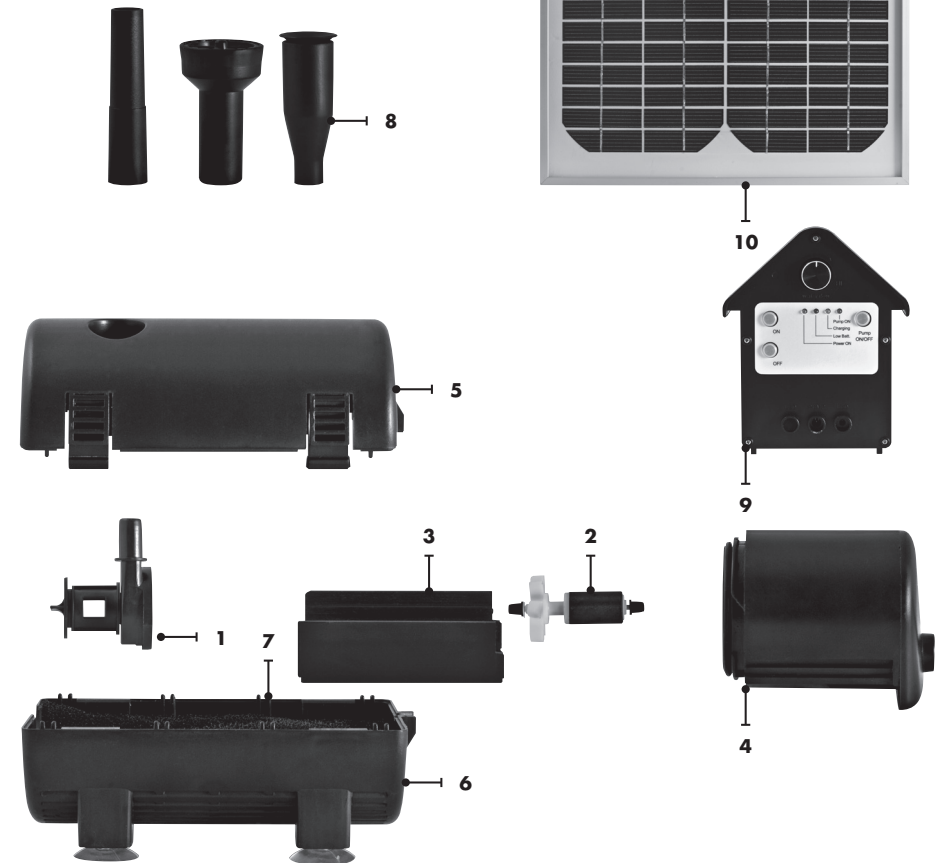


Battery: If the pump stops working after it has been used for about over 12-18 months, maybe the battery is beyond its life span. Open the control housing to change a new battery. Lead-Acid 12V-4AH

1. Housing
2. Lead-Acid Battery
3. Circuit Board
4. Control Housing Panel
5. Screw



1. Impellor Cover
2. Impellor
3. Pump Base (Sliding)
4. Pump Motor Body
5. Top Of Pump Cover
6. Bottom Of Pump Cover
7. Filter Sponge
8. Fountain Nozzle x2
9. Battery Housing
10. 8 Watt Solar Panel x2



TROUBLE SHOOTING

- 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.

- 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.

- 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.

IMPORTANT SAFEGUARDS

To guard against injury, basic safety precautions should be observed including, but not limited to the following;

- The pump should only be used in clean water. Do not use the pump in any solvent or liquid that is flammable.
- Do not operate the pump without water at any time, permanent damage may occur.
- Do not operate the pump if the pump, or any of the components of the pump such as the power cable, have been damaged.
- Always unplug the pump from the power supply when not in use or before performing any maintenance on the pump. Never pull the cord to disconnect the plug from the power supply. Grasp the plug and pull to disconnect.
- Do not install or store the pump where it will be exposed to extreme hot or cold temperatures.
- Keep out of reach of children or pets. This appliance should not be used by children or infirm persons without supervision.
- Do not cut the cord as this will result in voiding your warranty.
- Care should be taken to arrange the power cord so that it cannot be accidentally tripped over or pulled.
- Do not attempt to repair the pump yourself. Return to an authorized service centre or place of purchase if a fault occurs (regular maintenance is not considered repair and is required by user).

LIMITED WARRANTY

- Warranty covers only appliance defects and faulty material and workmanship within a 1 year period.
- Faults arising due to; accidents, misuse, not following manufacturer's guidelines/ instructions will not be covered.
- The impellor set is a consumable item and is therefore not covered under warranty.
- Batteries are replaceable parts and are not covered by warranty.
- Warranty will be void if any tampering, removal of warranty labels, or electrical circuitry is evident.
- Warranty will be void if the power cord is cut or damaged in any way.
- Warranty will be void if any visible signs of overheating are present.
- Loss of livestock, damage to property, or personal injury caused by this product will not be covered.
- Warranty claims caused by installation faults will not be covered.
- It is the customer's responsibility to return the faulty appliance for any warranty claim, to Aquatec.
- For any warranty to be valid, an original proof of purchase must be provided.
- Warranty will be void if the solar panel is damaged in any way.
- Use of any power source, replacement battery or parts, other than that sold by PondMax, will void the warranty.