

# SOLAR PUMP USER'S MANUAL

AquaJet Solar Pump  
SKU: AquaJet-Pro-PUMP1224

## 1. OVERVIEW

- 1) The brushless water pump is designed for outdoor or indoor fountain use, and is powered by DC power supply such as solar module, rechargeable battery or AC/DC adapter etc.
- 2) While using solar power, the solar module needs to be placed in the sunlight facing the sun, and the performance of the pump depends on the sunlight intensity and the angle of incident light.
- 3) The pump introduces the latest DC brushless motor technology with maximum longevity
- 4) The pump has built-in function of dry-run protection. Two sensor points are provided on the side of the housing for this. The pump works if these points are under water. If a point projects out of the water, the pump does not work.



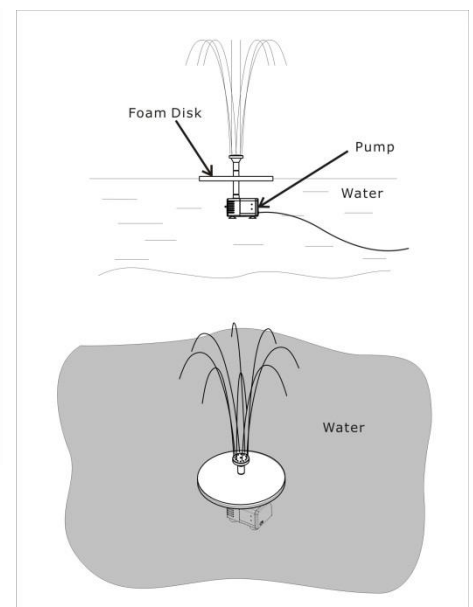
## 2. COMPONENTS



- 1) Pump
- 2) Nozzle (Optional)
- 3) Floating disk (Optional)

## 3. ASSEMBLING

- 1) Connect the pump to the related DC power supply.
- 2) For the application of producing waterfall feature in small garden water decorations, fit the pump outlet to the water inlet of the decoration.
- 3) For the application of creating a small spraying up fountain, just fix the pump at the base of a basin or small shallow pond etc.
- 4) Connect the fountain nozzles to the pump outlet tube according to the above photo; the attached nozzles can produce 2 different jet shapes.
- 5) To produce excellent fountain effect, please leave the fountain head above the water surface using the extension tubes. If these 4pcs of extension tubes are all used and the pump head is still immersed in the water, please uplift the pump body somehow.

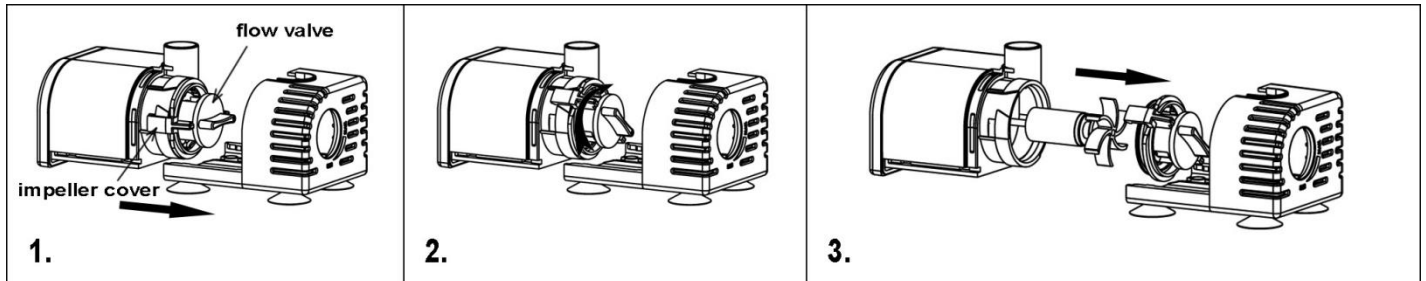


- 6) It can easily create a floating fountain by the optional floating disk, according to the above photo.
- 7) Make sure to place the pump fully underwater when the pump operates.

#### 4. CAUTIONS

- 1) Any altering of the product itself or changing of the components voids warranty.
- 2) Do not connect the pump to any AC voltage power directly; it's ONLY for DC voltage power.
- 3) Operate the pump in freshwater only (never above 40°C), especially keep it away from flammable liquids.
- 4) The most remarkable feature of the pump is dry protection. The pump will automatically stop when out of water.

#### 5. CLEANING AND MAINTENANCE



If the pump starts losing power or stops working after operating for a certain time, please clean the pump following the steps below (See the above figures for demonstration):

- 1) Disconnect the pump.
- 2) Press on the bottom of the filter housing and meanwhile move the filter housing apart from the pump.
- 3) Turn the impeller cover together with flow valve clockwise to the end and then carefully pull the impeller cover together with flow valve apart from the pump.
- 4) Remove the impeller wheel from the pump.
- 5) Wash every part to clean the debris.
- 6) Assemble the pump in reverse sequence.
- 7) Connect the pump.

**\*Be careful, never drop down the ceramic axis while cleaning the impeller, it breaks easily.**

#### 6. FUNCTIONALITY PROBLEMS

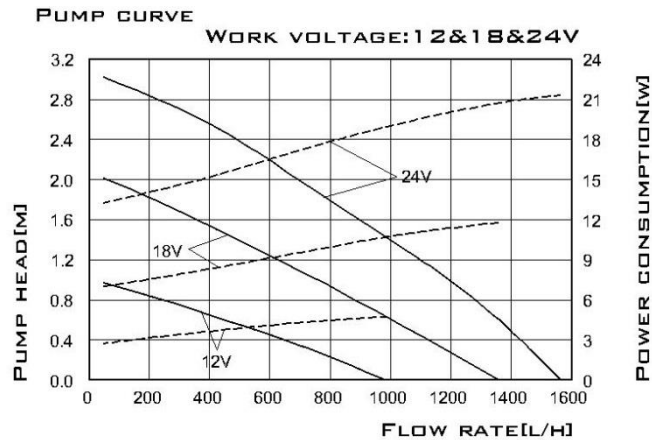
Pump does not operate, please check the below possible failures:

- 1) No connection to the power supply.
- 2) Impeller is blocked—to clean the pump, remove the front plate and the impeller, and use a brush or water to remove any debris.
- 3) To be sure the pump is fully submerged in water.

**\*Pump does operate but there is no water running through the tubes: Clear the tube and the filter to make sure the tube is through completely.**

#### 7. TECHNICAL DATA AND PUMP CURVE

Operating voltage	DC 12V-24V
Maximum pump head	1.0m@6V; 3.2m@9V
Maximum flow rate	980L/H@6V; 1560L/H@9V
Dimensions	5.1 x 3.3 x 2.8 inches
Net weight	2.1 lbs
Cable length	16.5 feet



### 8. Pump Assembly with Different Solar Modules

**Please Note:** performance curves and data will vary due to solar panel not being same as unit tested under our QTC (quality test conditions). This pump is designed for solar panel output in range of 6-9V @ 3-500ma. Warranty on pump for non-Silicon Solar Modules is only 1 Year.

#### Solar Panel with Junction/Terminal Box on back

1. Find spade terminal adapter
2. Connect spade terminal adapter to pump male connector
3. Connect spade terminals to Junction/Terminal Box (Size may vary)



#### Solar Panel Wires Only

1. Cut spade terminal adapter.
2. Splice/Strip Wires
3. Twist wires to same color or same polarities + and -

