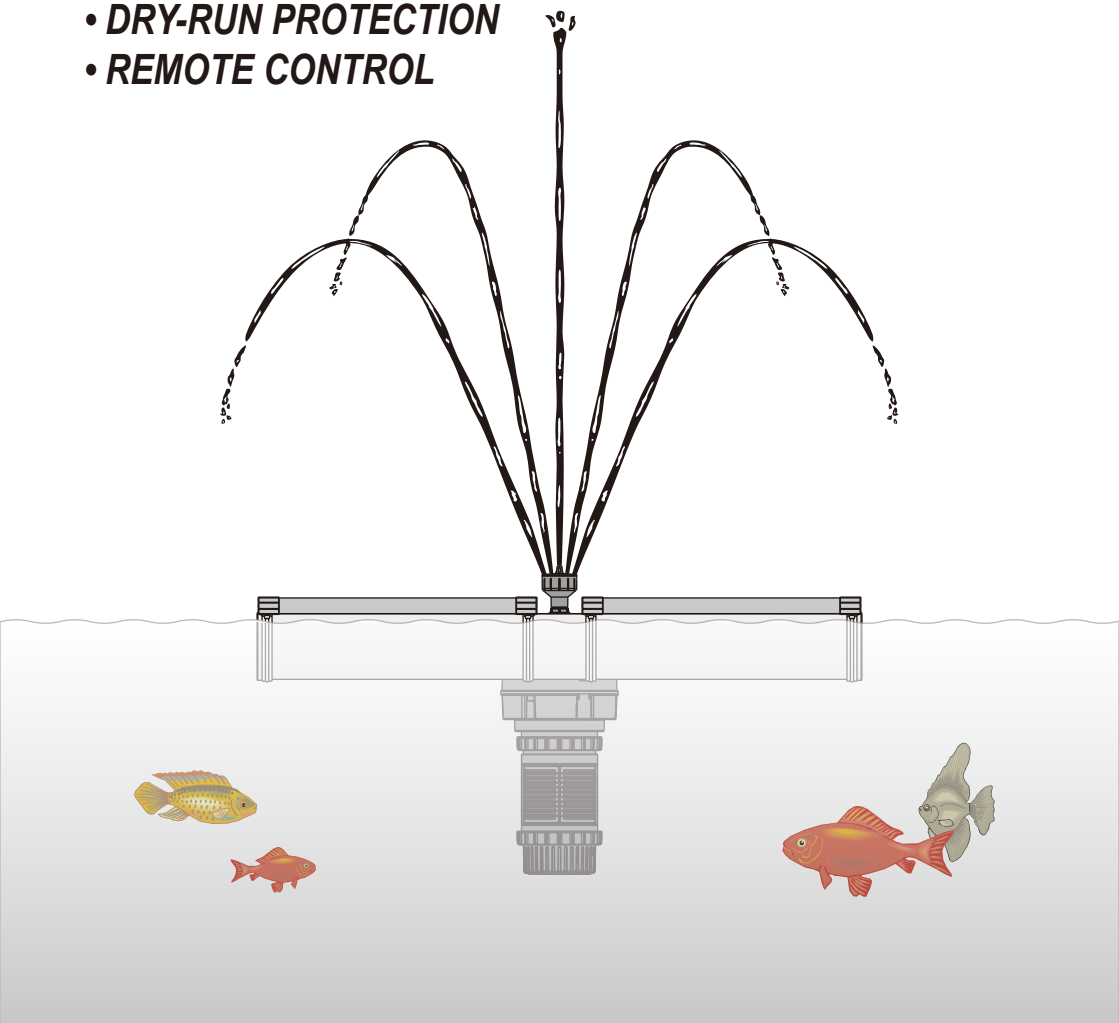
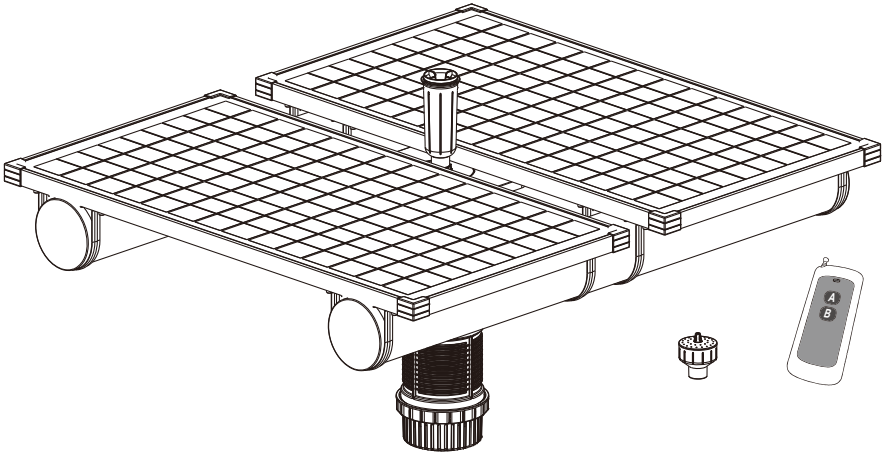
SOLAR FLOATING FOUNTAIN

Item No.: SFF160-801830

- *SOLAR POWERED*
- *LOCKED ROTOR PROTECTION*
- *DRY-RUN PROTECTION*
- *REMOTE CONTROL*



1. OVERVIEW



1) The innovative solar floating fountain is designed to make spray fountain to landscape a pond, pool, lake or small river as well as to aerate, circulate water to keep a healthy water environment.
2) Solar powered with no installation needed. The floating fountain operates at its full performance when the solar panels generate more power than it demands. The output power of the solar panels depend on the sunlight intensity and the incident angle at which sunlight strikes the panel surfaces.
3) The latest DC brushless motor technology is utilized in the pump design and manufacturing, so that the pump has high efficiency and long service life.
4) The pump has built-in functions of locked rotor and dry-run protection. While it leaves water, the system stops working.
5) The solar floating fountain can be operated by a remote controller, press the button **A**, it starts operating, and press the button **B**, it stops.

2. COMPONENTS

①

⑥

②

⑦

⑧

⑨

③

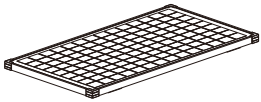
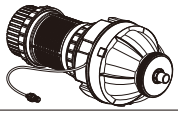
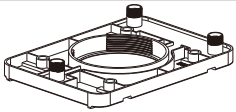
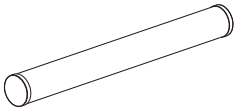
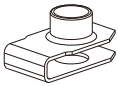
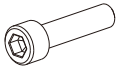
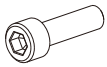
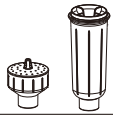
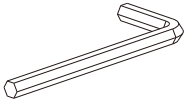
④

⑫

⑩

⑤

⑪

Part No.	Description	Specs	Quantity	Schematic
1	Solar panel	80 W / 18 V	2	
2	Pump	5000 LPH	1	
3	Remote controller		1	
4	Center mounting bracket		1	
5	Floating barrel	Φ125 *1150 mm	2	
6	Pipe clamp		8	
7	Clip reed nut	M6	20	
8	Bolt A	M6*25	4	
9	Bolt B	M6*20	16	
10	Fountain nozzle		2	
11	Anchor rope	10 M	1	
12	Spanner	M6	1	

3. ASSEMBLING

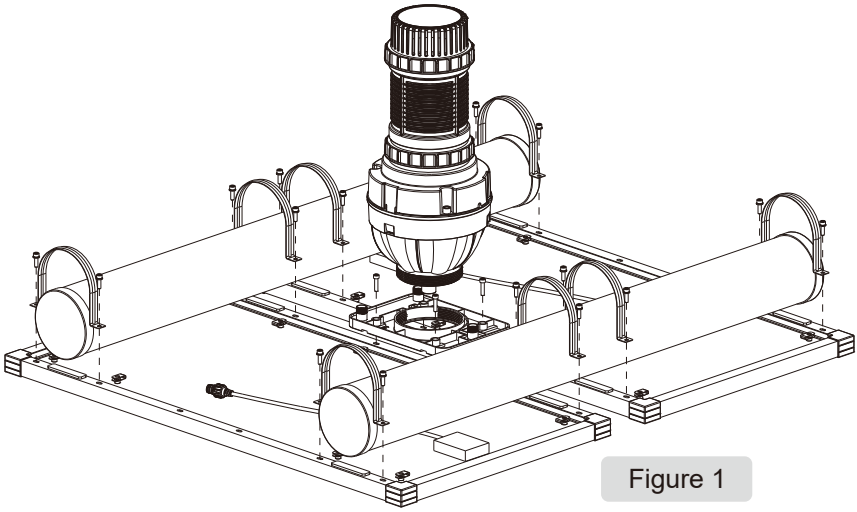


Figure 1

1) Unpack all components carefully.
2) Find a flat place such as a piece of soft ground on which solar panels are to be laid face down. It is important that the ground must be soft and flat to avoid shattering the panel. It is recommended to lay some kind of cushion sheet at the place to protect the solar panel.
3) Join the two solar panels with center mounting bracket and floating barrels as shown in **Figure 1**.
   a) Lay the two solar panels face down in parallel with the two terminal boxes on the opposite sides (referring to **Figure 2**).
   b) Put the center mounting bracket and the two floating barrels in place as shown in **Figure 3**.

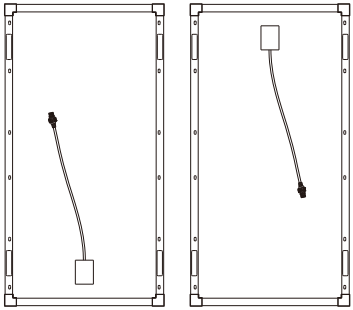


Figure 2

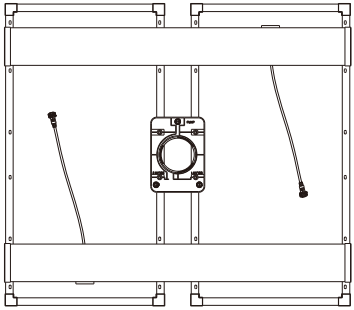


Figure 3

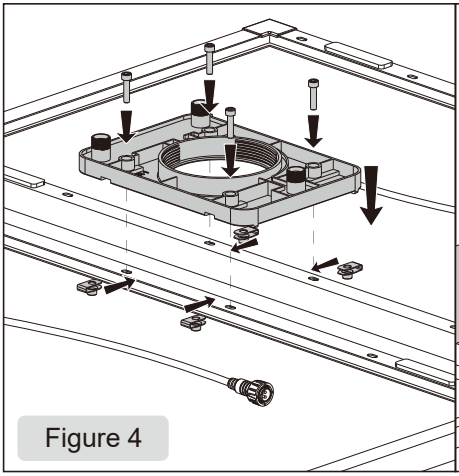


Figure 4

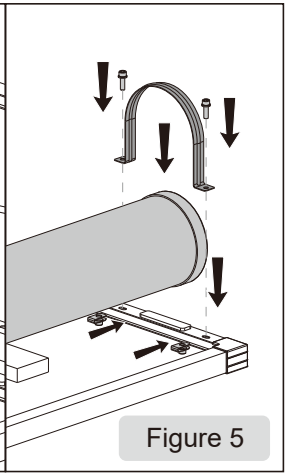


Figure 5

c) Join the center mounting bracket to the panels with 4 pairs of clip reed nuts and bolts **A (Don't tighten the bolts at the moment)** as shown in **Figure 4**.

d) Attach the two floating barrels on the panels with 8 pipe clamps and 16 pairs of clip reed nuts and bolts **B (Don't tighten the boltsat the moment)** as shown in **Figure 5**.

e) Adjust the positon of each floating barrel to make sure it is seated right in the balanced middle position and tighten all of the bolts one by one.

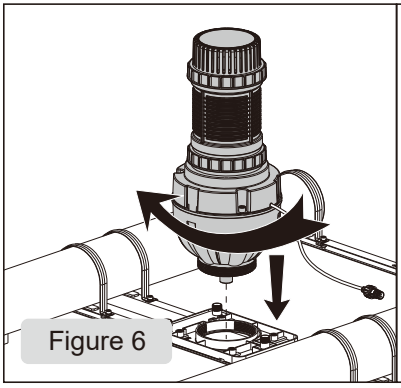


Figure 6

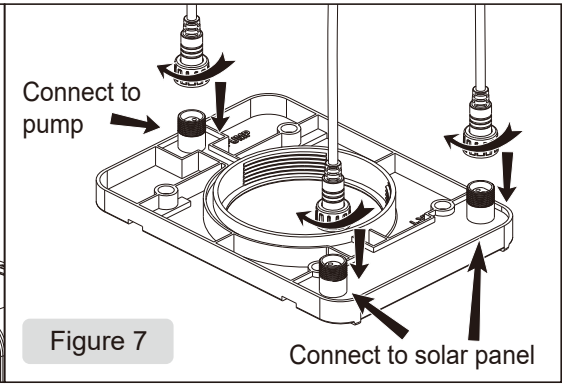


Figure 7

4) Screw the pump onto the threaded mounting hole in the middle of center mounting bracket and make sure it is tight as shown in **Figure 6**.

5) Electrically connect the two solar panels and the pump, make sure the water proof caps are tightened as shown in **Figure 7**.

6) Turn the solar floating fountain face up and place it on water carefully.

7) Switch off the pump with the enclosed remote controller first, then fit a fountain nozzle onto the pump outlet. There are two fountain nozzles enclosed to vary

the spray pattern, either a volcano shaped fountain or a bell shaped fountain.

8) Pay attention that solar panels should be free of shadows all day long. When needed, anchor the floating fountain in position by the enclosed rope.
9) The solar floating fountain is now ready to operate. Switch the pump on by the remote controller. It operates automatically while there is enough sun light shining on the solar panels.
10) Well keep the remote controller in case of need.

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 power directly, it's ONLY for DC power.
3) Operate the pump in water only (never above 40℃).
4) The connector is protected against reverse polarity as shown in **Figure 8**. Don't insert the plug with reverse polarity by using unnecessary force.
5) The pump is dry run protected. The pump will automatically stop when pump is no longer submerged in water as shown in **Figure 9**.

Figure 8

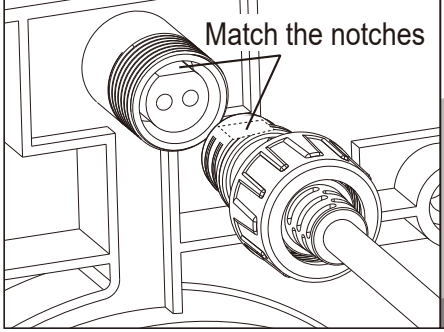
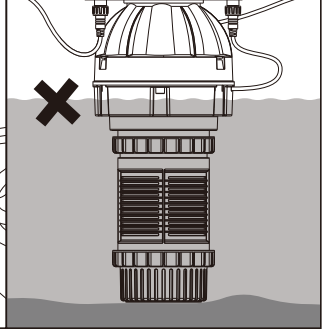


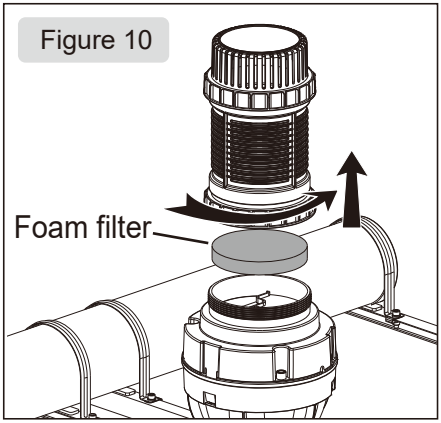
Figure 9



5. CLEANING AND MAINTENANCE

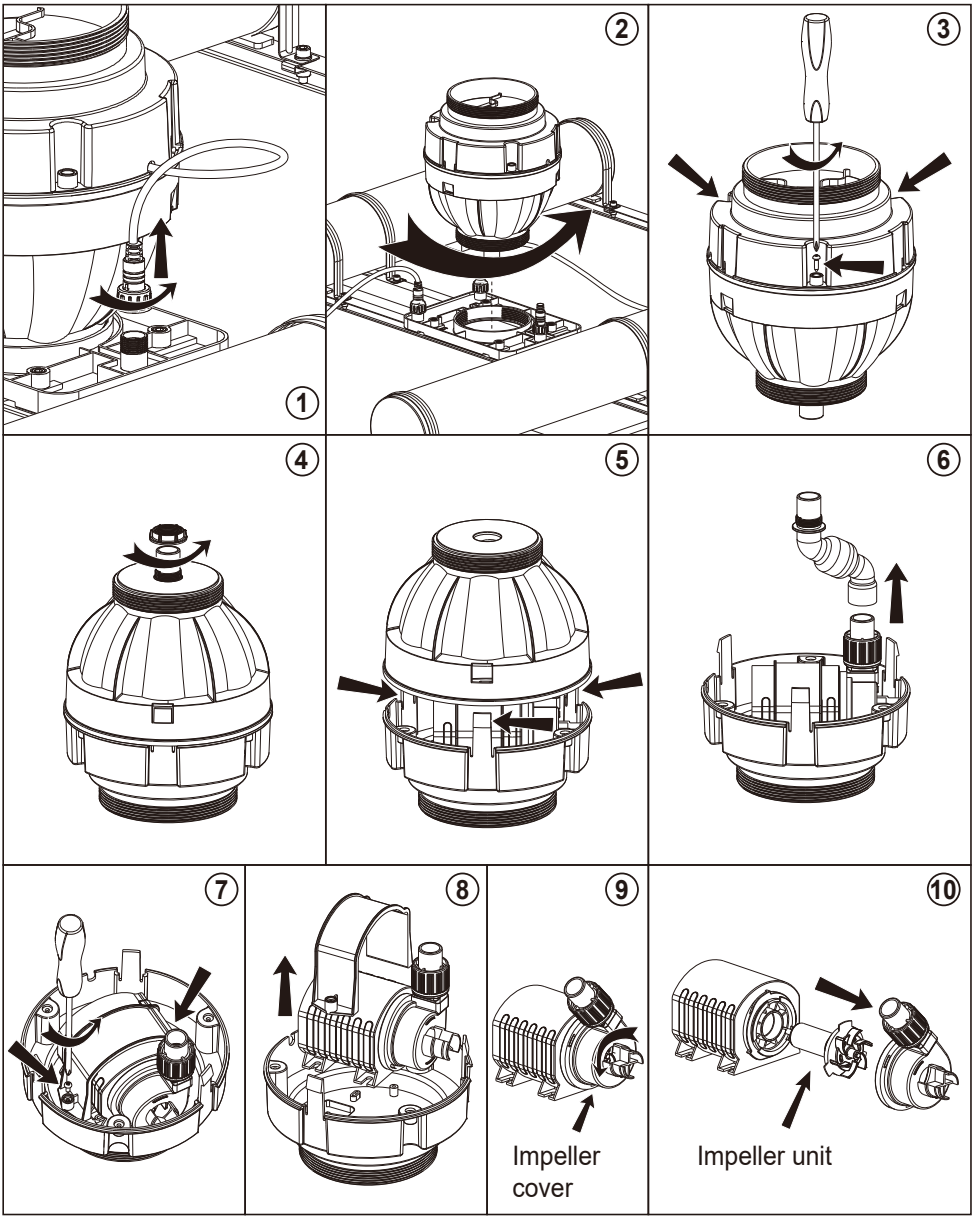
If the pump starts losing power or stops working after operating for a certain time, please clean up the debris on the foam filter and the filter housing.

1) Switch off the fountain by the remote controller.
2) Remove the fountain nozzle.
3) Pull the system out of water carefully and lay it face down on a soft ground or turn it over on the water directly.
4) Remove the filter housing by unscrew the gland nut on the pump housing and take out the foam filter as shown in **Figure 10**.
5) Clean the foam filter and the filter housing with water, then reassemble and put it back to work in reverse sequence.



6) If necessary **(not recommended)**, clean the sediments inside the pump following the steps below.
   a) Electrically disconnect the pump as shown in **step** ①.
   b) Unscrew the pump from center mounting bracket as shown in **step** ②.
   c) Open the pump case as shown in **step** ③,④,⑤,⑥,⑦.
   d) Take out the pump body that sits on the base.Open the impeller cover by turning it counterclockwise to the end and pull out the impeller assembly as shown in **step**⑧,⑨,⑩.
   e) Clean all the parts with water.
   f) Reassemble the floating fountain and put it back to work in reverse sequence.

***Please clean the dusts or tree leaves on the solar panel when necessary.**

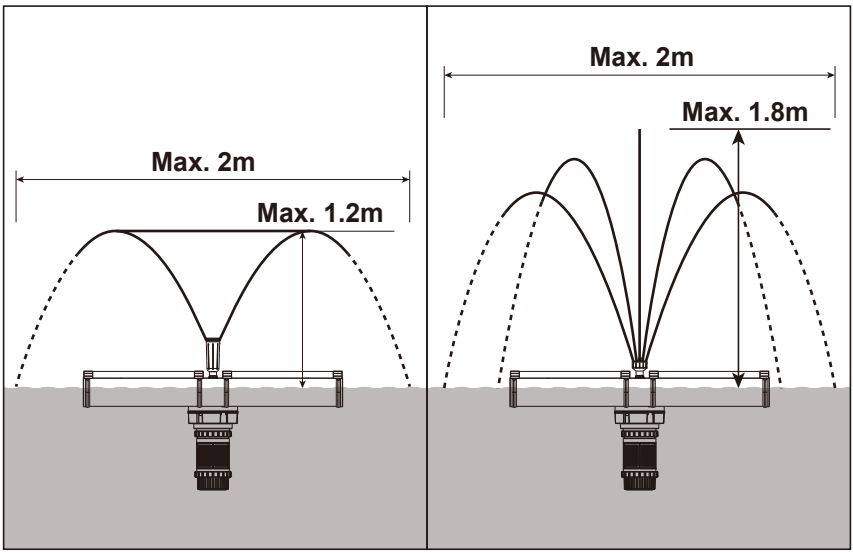

1
2
3
4
5
6
7
8
9
Impeller cover
10
Impeller unit

6. TROUBLE SHOOTING

Pump does not operate, please check the following possible reasons:

1) Bad or reverse connection to the power supply.
2) Impeller is blocked—clean the pump as described in **"CLEANING AND MAINTENANCE"**.
3) Make sure the pump is fully submerged in water. The pump is dry run protected, it works only when it is submerged in water.
4) Make sure solar panel surfaces are free of dust or tree leaves. The solar cells are connected in series, a tiny shade on one solar cell could significantly compromise the pump performance.

7. IDEAL FOUNTAIN SHAPES



Bell shaped fountain Volcano shaped fountain

8. TECHNICAL DATA

Peak power of solar panel	80 W *2
Operating voltage	18 V
Maximum pump power	48 W
Maximum pump head	3 M
Maximum flow rate	5050 LPH
Operable distance of remote controller	100 M