# SOLAR POND FILTER BUILT-IN BATTERY

User Manual

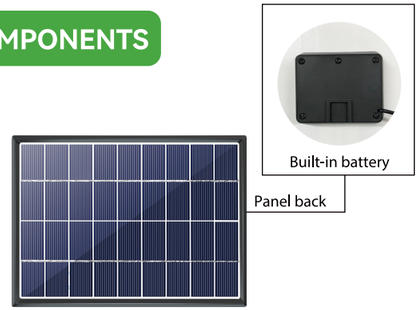
GET READY TO BUILD YOUR GARDEN POND
Forever Homes for Every Creature

CE FC RoHS MADE IN CHINA

## OVERVIEW

solar pond filter is made of more durable glass solar panel, brushless water pump and multi-layer filtration filter box, faster startup, high efficiency and stability, more efficient filtration. Suitable for bird baths, fish tanks, small ponds, garden decorations, water circulation for oxygen supply, etc., giving small animals a healthier habitat.

## COMPONENTS



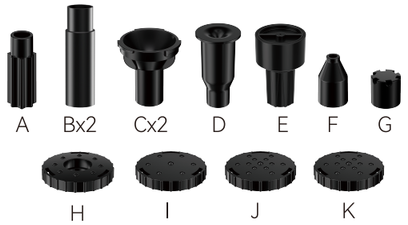

Solar panel




Water pump



Pond filter Kit




Nozzle accessories

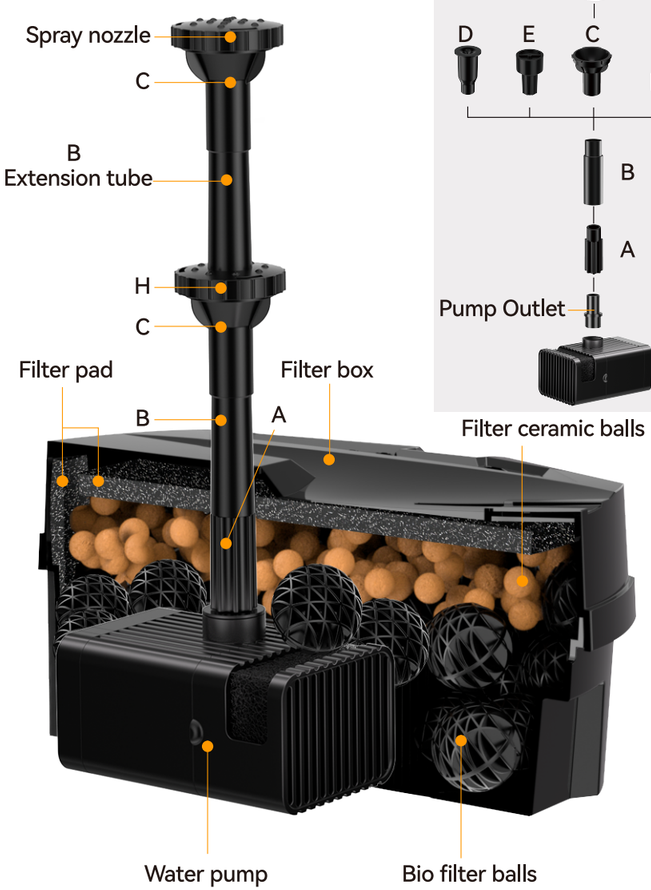


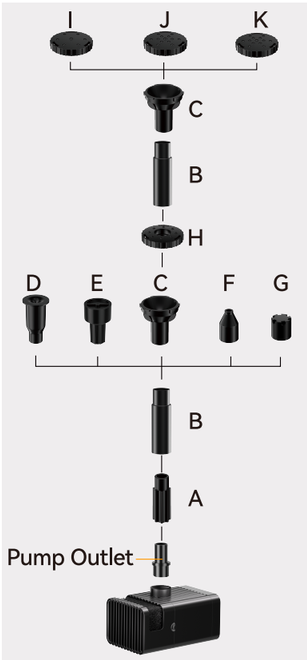
Tubing



Stakes

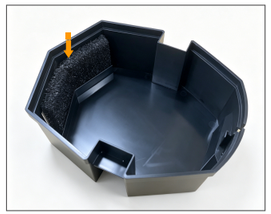
## ABOUT THE FILTER BOX



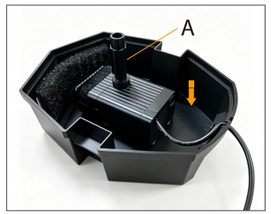




Ceramic filter rings and bio-balls: Promote the growth of nitrifying bacteria, help decompose organic waste and better filter impurities.

## CREATE A FOUNTAIN



1. Put small filter pad into the slot in box.



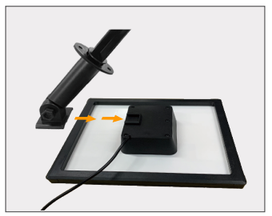

2. Connect Nozzle A to the pump and put into box.



3. Place ceramic ring and bio ball into box.



4. Cover the sponge pad and lid, fasten buckle.



5. Install the stake to the solar panel.



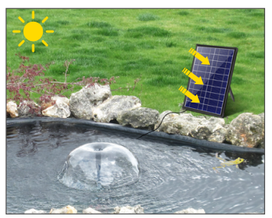

6. Connect the nozzles.



7. Install the nozzle on the filter box.



8. Connect the filter box with the panel.

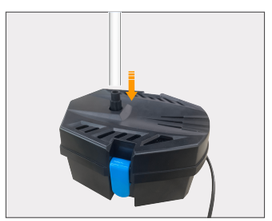


9. Put the box into water, the panel under the sun.

## CREATE A WATER FEATURE



1. Install the stake to the solar panel.



2. Connect the pvc tubing.



3. Put the filter box into water and connect panel.

## BATTERY INSTRUCTIONS

**Please Note: this solar fountain pump can't work at night.**

--The battery backup is mainly designed to ensure that the fountain can work continuously and stably during the day—even when the sunlight is occasionally blocked by clouds. When the sunlight is strong with minimal cloud coverage, the solar panel can power the pump and charge the battery at the same time. In this case, if the solar panel's voltage is higher than the battery pack's, the battery will be charged.

--However, on cloudy days or when sunlight is weak, the solar panel may not generate enough voltage, and the battery will automatically switch to output mode to keep the fountain running. So during the day, the battery may either be charging or discharging depending on the sunlight conditions

## CAUTIONS

1. Make sure the solar panel is exposed to direct sunlight without shade. It will works best when facing the sun.
2. The filfter box must be completely submerged in water and the nozzle top should be above the water to spray out water.
3. The filfter box with pump needs to be cleaned regularly to avoid clogging by dust and stop work. The pump is removable for cleaning (recommended once a week).
4. Please do not squeeze the nozzle and tube vigorously to avoid cracking nozzles and tube.

## TROUBLE SHOOTING

**If the filter pump is not working, check for the following possible problems.**

1. Make sure the solar panel is exposed to direct sunlight and no shade.
2. The filter box and pump may be clogged with dirt. Disassemble the filter box and pump for cleaning.
3. Make sure there is enough water so that the filter box is completely submerged and the nozzle is above the water surface.
4. Try disconnecting and reconnecting the solar panel to start the pump.
5. The pump is running but there is no water flowing in the pipe: Check whether the flow is normal: the control valve is in the closed position or clean the pipe and filter to ensure that the pipe has full flow .
6. Check whether the nozzle is firmly connected; check whether the power cord is damaged

**Warm Tip:**

1. To maximize the height of the fountain spout, make sure the fountain head is above the water surface, as shown in Figure 1.
2. For an apple-shaped fountain head, the fountain nozzle should be far enough above the water surface to create an ideal apple-shaped fountain. To get your preferred apple size, press or lift the top of the spout to adjust the drain gap, as shown in Figure 2. The larger the drainage gap, the smaller the apple balls.

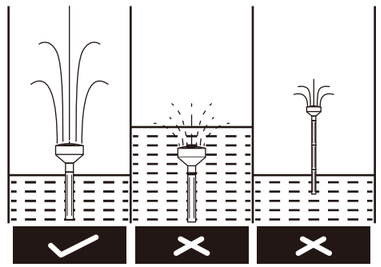


Fig 1

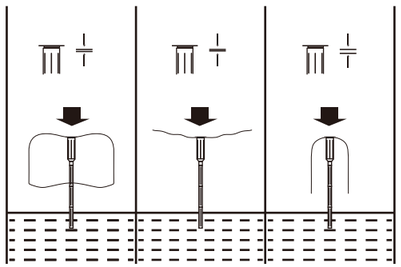
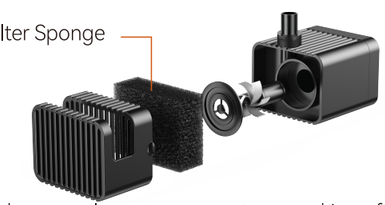


Fig 2

Smaller gap= Larger umbrella

## CLEANING AND MAINTENANCE




If the pump loses power or stops working after a period of time, follow these steps to clean the pump and filter box.

1) Remove the nozzle
2) Open the filter box and clean the filter cotton.
3) Disassemble the pump and clean the inside of the pump and filter.
4) Reinstall the water pump and filter box after cleaning.
5) Connect the nozzle.

## WATER SHORTAGE PROTECTION

The pump has built-in dry run protection. The water level sensor on the back of the pump provides protection to prolong the lifetime of your fountain. The pump will stop working automatically when the water level is low as.