

Biling SP055B

Biling 8W Solar Fountain Pump User Manual

Model: SP055B

1. PRODUCT OVERVIEW

The Biling 8W Solar Fountain Pump is designed for various water features such as bird baths, garden ponds, fish tanks, and hydroponics. It features an upgraded solar panel, a durable water pump, and a 3600mAh battery backup for continuous operation.

Key features include:

- **Upgraded Solar Panel:** Made of A+ grade monocrystalline silicon with a hard glass protective layer for efficient energy conversion.
- **Longevity Water Pump:** Features a ceramic motor shaft for increased durability and quieter operation (reduced to 30 dB).
- **Rechargeable Battery Backup:** Stores excess solar energy to power the pump during cloudy days or after sunset. Note: The pump does not operate during dark nights.
- **Security Protection:** Built-in water shortage detection system and a simple filtration system to prevent damage from debris and algae.
- **DIY Solar Pump Kit:** Includes floating sponges and water tubing for versatile use in shallow or deep water, and for connecting to water projects.

2. PACKAGE CONTENTS

Verify that all components are present in the package:

- Solar Panel (10.1 in x 7.16 in)
- Water Pump (2.17 in x 1.57 in x 1.2 in)
- Mounting Bracket
- PVC Tubing (5 ft)
- Nozzles & Rods (various types for 8 spray patterns)
- Filter Sponges (2 pieces)
- Floating Board (4.72 in diameter)
- Power Cord (9.85 ft)

Package Included



Figure 1: All components included in the Biling 8W Solar Fountain Pump kit.

3. SETUP INSTRUCTIONS

Follow these steps to set up your solar fountain pump:

- 1. Assemble the Nozzles:** Choose your desired spray pattern from the provided nozzles and rods. Connect them securely to the water pump outlet.
- 2. Connect the Solar Panel:** Attach the power cord from the water pump to the solar panel. Ensure the connection is firm.
- 3. Place the Pump:** Submerge the water pump completely in water. The floating board can be used to allow the pump to float on the surface, or it can be placed at the bottom of the water feature. Ensure the water level is sufficient for the pump to operate without running dry.
- 4. Position the Solar Panel:** Place the solar panel in a location that receives direct sunlight for most of the day. Use the mounting bracket to secure it if necessary. The long power cord allows for flexible placement.



Figure 2: Visual guide for assembling and placing the solar fountain pump.



Figure 3: Examples of the 8 available spray patterns.

4. OPERATING INSTRUCTIONS

The Biling 8W Solar Fountain Pump operates automatically based on sunlight availability and battery charge.

- **Daytime Operation:** When the solar panel receives sufficient direct sunlight, the pump will start operating, creating a water fountain. Excess energy generated during this time will charge the internal 3600mAh battery.
- **Battery Backup Operation:** On cloudy days or after the sun sets, the fully charged battery will automatically provide power to the water pump, allowing it to continue operating.
- **Nighttime Operation:** The fountain pump will not operate during dark nights, even with a charged battery. The battery backup is designed for extended daytime operation or during periods of faint sunlight.
- **Water Shortage Protection:** The pump is equipped with a water shortage detection system. If the water level is too low or the pump is not submerged, it will automatically stop to prevent damage.



Figure 4: Operation with built-in battery backup under varying sunlight conditions.

5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your solar fountain pump.

- **Clean the Solar Panel:** Periodically wipe the solar panel surface with a soft, damp cloth to remove dust, dirt, or debris that may reduce its efficiency.
- **Clean the Water Pump:** The pump has a simple filtration system. Regularly remove the pump from the water and clean the filter sponges to prevent clogging from debris and algae. This helps maintain water flow and extends pump life.
- **Check Water Level:** Ensure the water feature always has sufficient water to keep the pump fully submerged. The water shortage protection will activate if the level is too low.
- **Winter Storage:** In freezing conditions, remove the pump and solar panel from the water and store them indoors to prevent damage.



Figure 5: Internal components and features for extended product life.

6. TROUBLESHOOTING

If your solar fountain pump is not functioning as expected, consider the following:

- **Pump Not Working:**
 - Ensure the solar panel is receiving direct sunlight.
 - Check if the water level is sufficient to fully submerge the pump.
 - Clean the pump filter and impeller to remove any blockages.
 - Verify all connections between the pump and solar panel are secure.
- **Weak Water Flow:**
 - Clean the solar panel surface.
 - Clean the pump filter and nozzles.
 - Ensure the solar panel is in direct, unobstructed sunlight.
- **Pump Stops Intermittently:**
 - This may occur if sunlight is inconsistent or if the battery is low. Allow the battery to fully charge in direct sunlight.
 - Check for debris temporarily blocking the pump or nozzles.

For further assistance, please contact customer service.

7. SPECIFICATIONS

Feature	Specification
Model Number	SP055B
Solar Panel Power	8W
Battery Capacity	3600mAh
Pump Noise Level	30 dB
Material	Acrylonitrile Butadiene Styrene (ABS)

Power Source	Solar Powered
Item Weight	2.23 pounds (1.01 Kilograms)
Package Dimensions	11.06 x 7.76 x 2.24 inches
Battery Cell Type	NiMH

8. WARRANTY AND SUPPORT

The Biling 8W Solar Fountain Pump comes with a **60-day money-back guarantee** and a **1-year warranty** from the date of purchase.

For any questions, troubleshooting assistance, or warranty claims, please contact Biling customer service. Refer to the product packaging or the retailer's website for contact information.