

## SunSun HW-302

# SunSun HW-302 3-Stage External Canister Filter Instruction Manual

Model: HW-302

## INTRODUCTION

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This manual provides detailed instructions for the safe and efficient operation, installation, and maintenance of your SunSun HW-302 3-Stage External Canister Filter. Please read this manual thoroughly before setup and retain it for future reference. This filter is designed to provide mechanical, biological, and chemical filtration for freshwater and saltwater aquariums up to 75 gallons.

## SAFETY INFORMATION

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- Always disconnect power to the filter and all other aquarium equipment before performing any maintenance or cleaning.
- Ensure the filter is placed on a stable, level surface below the aquarium water level to allow for proper siphoning and return flow.
- Do not operate the filter if the power cord or plug is damaged.
- This appliance is intended for indoor use only.
- Never run the filter dry. Ensure the canister is filled with water before starting the pump.
- Keep children and pets away from the filter during operation and maintenance.

## PACKAGE CONTENTS

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Carefully unpack all components and check against the list below. If any items are missing or damaged, contact your retailer.

- 1x Barrel Head (with integrated pump)
- 1x Main Canister Body
- 2x 5-foot lengths of flexible tubing
- 1x Draining Tray Cover

- 4x Draining Trays
- 1x Output Curvy Bar
- 1x Input Curvy Bar
- 2x Connected Bars
- 2x Spray Bars
- 1x Spray Bar Cover
- 3x Input Bars
- 1x Input Cover
- 3x White Fine Pad Cottons pads
- 1x Blue filter pad
- Activated carbon (approx. 1lb)
- Ceramic rings (approx. 1lb)
- Bio-balls (1 set)



Image: All components of the SunSun HW-302 canister filter, including the main body, head, hoses, intake/output pipes, and various filter media, laid out for inspection.

## SETUP INSTRUCTIONS

### 1. Filter Media Installation

1. Open the canister by releasing the clips on the sides and lifting the barrel head.
2. Place the filter media into the draining trays. Typically, mechanical filtration (blue pad, white fine pads) goes into the bottom trays, followed by biological media (ceramic rings, bio-balls), and then chemical media (activated carbon) in the top trays. Arrange the media to allow for optimal water flow.
3. Stack the trays inside the main canister body, ensuring they are seated correctly.

4. Securely reattach the barrel head to the canister body using the clips.



Image: Various filter media, including white fine pads, a blue filter pad, activated carbon, ceramic rings, and bio-balls, arranged with the filter trays.

## 2. Hose and Pipe Assembly

1. Connect the flexible tubing to the input and output connectors on the barrel head. Ensure a tight fit.
2. Assemble the input pipe (intake) using the input bars and input cover. Attach the input curvy bar to the end of the tubing designated for intake.
3. Assemble the output pipe using the connected bars and spray bars. Attach the output curvy bar to the end of the tubing designated for output. The spray bar cover can be used to direct flow.
4. Use the provided suction cups to secure the intake and output pipes inside the aquarium. Position the intake pipe near the bottom of the tank and the output spray bar near the water surface for optimal circulation and aeration.

## 3. Filter Placement

Place the canister filter on a stable surface below the aquarium's water level. This allows gravity to assist in water flow to the filter and ensures the pump can effectively return water to the tank.

## 4. Priming the Filter

1. Ensure all hose connections are secure and the canister clips are fully engaged.
2. Open the intake and output valves on the barrel head (if applicable).
3. Press the self-priming pump button on top of the barrel head repeatedly until water begins to flow into the canister and air is expelled from the output hose. Continue until the canister is full and a steady stream of water flows through the output hose.

4. Once primed, plug the filter into a grounded electrical outlet. The pump should start, and water should flow back into the aquarium.

## OPERATING INSTRUCTIONS

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Once properly set up and primed, the SunSun HW-302 filter will operate continuously to maintain water quality. The maximum flow rate is 265 GPH (1000 L/h).



Image: Front view of the SunSun HW-302 external canister filter, showing the main body, top head with hose connections,

and priming button.

## Adjusting Flow

The filter includes an adjustable spray bar. You can rotate the spray bar or adjust its position to control the direction and intensity of the water flow returning to the aquarium. This helps to create optimal water movement for your specific tank inhabitants.

## MAINTENANCE

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Regular maintenance is crucial for the efficient and long-term operation of your canister filter. Perform maintenance every 2-4 weeks, depending on your aquarium's bioload.

### 1. Disconnecting the Filter

1. Unplug the filter from the electrical outlet.
2. Close the intake and output valves on the barrel head to prevent water from flowing out of the aquarium.
3. Use the single valve disconnect feature (if present) to easily detach the hose assembly from the barrel head.
4. Carefully move the canister to a suitable location for cleaning, such as a sink or bucket.

### 2. Cleaning Filter Media and Canister

1. Open the canister by releasing the clips and lifting the barrel head.
2. Remove the filter trays.
3. Rinse mechanical filter media (pads) thoroughly in old aquarium water (from a water change) to preserve beneficial bacteria. Replace heavily soiled pads.
4. Rinse biological media (ceramic rings, bio-balls) gently in old aquarium water. Avoid excessive cleaning to protect bacterial colonies.
5. Replace chemical media (activated carbon) every 2-4 weeks, as it becomes exhausted over time.
6. Clean the inside of the canister body and the barrel head, including the impeller chamber, with a brush to remove any sludge or debris.



Image: Top view of the SunSun HW-302 filter head, showing the internal pump mechanism and connections, which should be cleaned during maintenance.

### 3. Reassembly and Restart

1. Reassemble the filter trays with cleaned or new media in the correct order.
2. Securely reattach the barrel head.
3. Reconnect the hose assembly to the barrel head.
4. Open the intake and output valves.
5. Prime the filter again using the self-priming button until water flows steadily.
6. Plug the filter back into the electrical outlet.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Reduced water flow	Clogged filter media; dirty impeller; air in the system; kinked hoses	Clean or replace filter media; clean impeller; re-prime the filter to remove air; check and straighten hoses
Filter not starting	No power; impeller jammed; not primed	Check power connection; clean impeller; ensure filter is primed with water
Leaking from canister	Lid not sealed properly; damaged O-ring; loose hose connections	Ensure clips are fully engaged; inspect and replace O-ring if damaged; tighten hose connections
Excessive noise	Air in the system; dirty or damaged impeller; filter not level	Re-prime the filter; clean or replace impeller; ensure filter is on a stable, level surface

## SPECIFICATIONS

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- **Model:** HW-302
- **Max Flow Rate:** 265 GPH (1000 L/h)
- **Recommended Aquarium Size:** Up to 75 gallons
- **Filtration Stages:** 3 (Mechanical, Biological, Chemical)
- **Item Weight:** Approximately 14 pounds
- **Item Package Dimensions:** 16 x 14 x 10 inches
- **Power:** (Not specified in input, typical for such filters is 18-35W, user should check product label)
- **Usage:** Indoor only

## WARRANTY AND SUPPORT

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For warranty information or technical support, please refer to the documentation provided with your purchase or contact SunSun customer service directly. Keep your proof of purchase for any warranty claims.