ECO-WORTHY 5.5GPM-70PSI-110V

ECO-WORTHY 110V AC Fresh Transfer Diaphragm Water Pump

Model: 5.5GPM-70PSI-110V

Introduction

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your ECO-WORTHY 110V AC Fresh Transfer Diaphragm Water Pump. Please read this manual thoroughly before use to ensure proper function and longevity of the product. This pump is designed for transferring fresh water and is suitable for various applications including irrigation, garden hose use, sprinklers, and water boosting in homes and RVs.

Image: The ECO-WORTHY 110V AC Fresh Transfer Diaphragm Water Pump shown with various included accessories such as hose adapters and a strainer.

Safety Information

WARNING: Read all safety warnings and instructions before operating this pump. Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injury.

- Ensure the power supply voltage matches the pump's specifications (110V AC).
- Do not pump flammable liquids such as gasoline, kerosene, ethanol, or other volatile chemicals. This pump is designed for fresh water transfer only.
- Always disconnect the power supply before performing any maintenance or installation procedures.
- Protect the pump from freezing temperatures. Drain all water from the pump if it will be exposed to freezing conditions.
- Do not operate the pump dry (without water) for extended periods, as this can cause damage.
- Ensure proper ventilation around the pump to prevent overheating.

- Keep children and unauthorized persons away from the operating pump.
- The pump features thermal overload protection, which will automatically disconnect the circuit if the motor temperature exceeds 70°C (158°F).

Image: A visual warning indicating that the pump is suitable for fresh water, drinking water, low salinity liquid, and weakly acidic liquid, but explicitly warns against pumping flammable liquids like gasoline, kerosene, or ethanol.

Product Overview and Features

The ECO-WORTHY 110V AC Diaphragm Water Pump is engineered for high efficiency and reliable performance. Key features include:

- **Upgraded Pressure Switch:** Designed for extended durability and adjustable pressure settings. Activates when water is demanded and shuts off when flow stops.
- **Thermal Overload Protection:** Automatically protects the motor from overheating by disconnecting the circuit at temperatures above 70°C (158°F).
- **Bypass Switch:** Reduces pump circulation when water flow is low, contributing to stable operation.

- **Stable Base:** Engineered for low noise and resistance to wear and corrosion.
- **Extended 110V AC Power Cord:** Approximately 1.5 meters in length for convenient placement.
- **Larger Pure Copper Motor:** 9.45 inches in length, providing robust performance with over-heat/over-pressure protection and dynamic balancing for low vibration.
- **Aluminum Fan-shaped Tail:** Enhances heat dissipation for prolonged continuous operation (over 1 hour).

Image: A diagram highlighting the product's advantages, including the upgraded pressure switch, CE certification, overload protection, bypass switch, stable base, and extended 110V AC power cord.

Image: An internal view of the pump, illustrating the larger pure copper motor and the aluminum fan-shaped tail designed for efficient heat dissipation and continuous operation.

Specifications

Feature	Specification
Model	5.5GPM-70PSI-110V
Voltage	110V AC
Maximum Flow Rate	5.5 Gallons Per Minute (GPM)
Pressure Switch Setting	70 PSI (Adjustable 40-100 PSI)
Maximum Amps	1.6 Amps
Self-Priming Capability	Up to 9.8 vertical feet

Feature	Specification
Maximum Lifting Height	131 feet
Product Dimensions (L x W x H)	10.6" x 5.9" x 5.2"
Item Weight	6.91 pounds
Material	Stainless Steel (components), other materials for housing
Hose Adapter	1/2" Hose Adapter (included)
Garden Hose Adapters	1/2" NPT Female x 3/4" GHT Male, 3/4" GHT Female x 1/2" NPT Female (included)
Strainer	50 Mesh Detachable Strainer (included)

Image: A graphic detailing the pump's high efficiency specifications including voltage, water flow, PSI, amps, and max suction, along with various hose adapters.

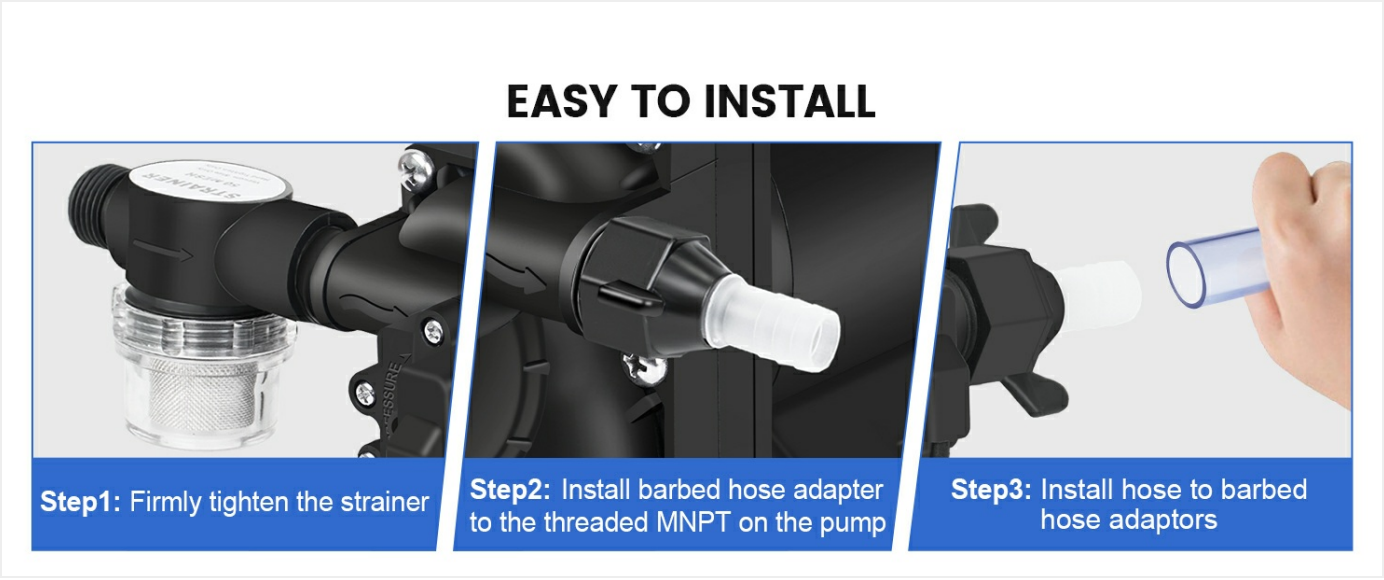

Image: A visual representation of the pump's dimensions (length, width, height) and a list of included accessories such as garden hose adapters, hose adapters, strainer, sealing tape, and a pressure regulator needle.

Setup and Installation

Follow these steps for proper installation of your water pump:

1. **Mounting:** Securely mount the pump on a stable, flat surface in a dry, well-ventilated area. Ensure the pump is protected from direct weather exposure and freezing temperatures.
2. **Connect Inlet Hose:** Attach your water source hose to the pump's inlet port. It is recommended to install the included 50 mesh detachable strainer on the inlet side to prevent debris from entering the pump. Ensure all connections are tight to prevent leaks.
3. **Connect Outlet Hose:** Attach your discharge hose (e.g., garden hose, sprinkler line) to the pump's outlet port. Use the appropriate adapters provided for your hose type.
4. **Prime the Pump:** Before connecting power, ensure the pump is filled with water. Open a faucet or valve on the discharge side to allow air to escape as water fills the pump and inlet line.
5. **Power Connection:** Once all hoses are securely connected and the pump is primed, plug the pump into a grounded 110V AC power outlet.

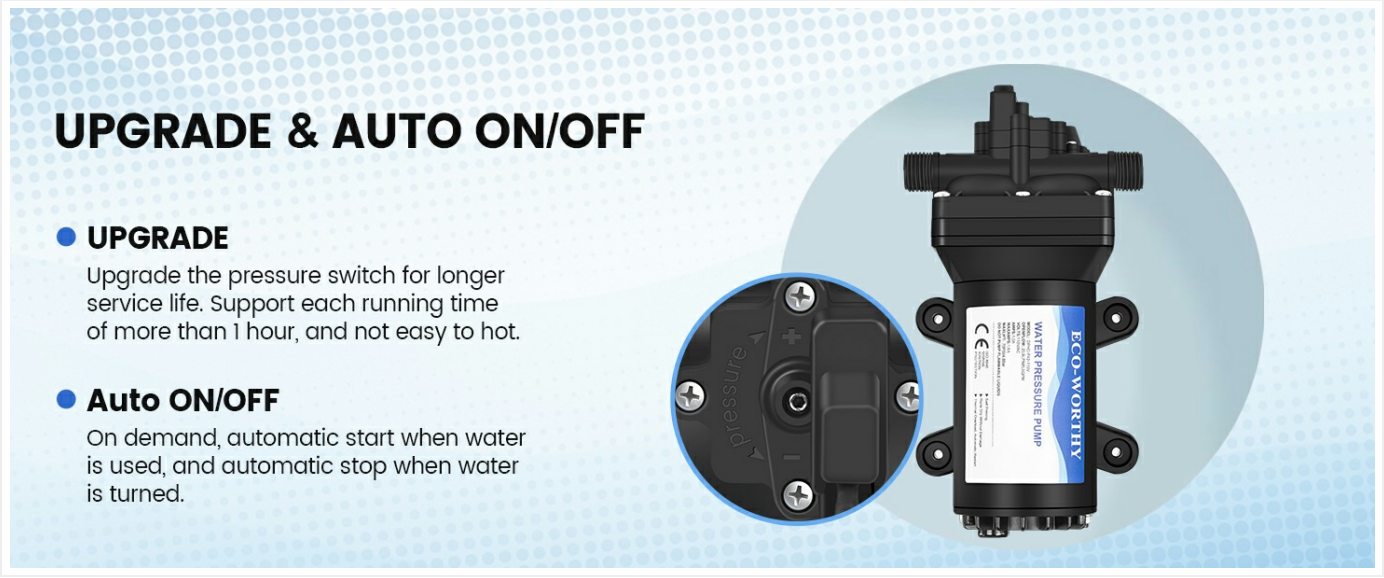

Image: A three-step visual guide demonstrating how to easily install the strainer and barbed hose adapters onto the pump.

Image: The water pump installed on a boat, showing the inlet and outlet hoses connected, with a strainer on the inlet side, illustrating a typical installation scenario for water transfer.

Image: A detailed diagram showing the components of the 50 mesh detachable strainer, emphasizing its easy-to-clean and assemble

design for attachment to the inlet side of the pump.

Operating Instructions

The ECO-WORTHY pump features an on-demand pressure switch for automatic operation.

1. **Starting the Pump:** Once connected to power and primed, the pump will automatically start when a faucet or valve on the discharge side is opened, creating a demand for water.
2. **Stopping the Pump:** The pump will automatically stop when the faucet or valve is closed and the system pressure reaches the set PSI (factory default 70 PSI).
3. **Continuous Operation:** The pump is designed for continuous running for more than 1 hour, suitable for extended tasks.
4. **Adjusting Pressure:** The pressure switch is adjustable from 40-100 PSI.
    - Locate the pressure regulator needle on the pressure switch.
    - Find the screw hole in the center of the switch.
    - Turning clockwise will increase the pressure, and turning counter-clockwise will decrease the pressure. Adjust gradually and test the pressure.

Image: A diagram illustrating the pump's upgraded pressure switch and its auto on/off functionality, which starts on demand and stops when water flow ceases.

Image: A three-step guide demonstrating how to adjust the pump's pressure from 40-100 PSI using the pressure regulator needle and screw hole on the switch.

Maintenance

Regular maintenance ensures optimal performance and extends the life of your pump.

- **Strainer Cleaning:** Periodically inspect and clean the 50 mesh detachable strainer on the inlet side. Remove any accumulated debris to maintain proper water flow and prevent pump damage.
- **Winterization:** If the pump will be exposed to freezing temperatures, it is crucial to drain all water from the pump and hoses to prevent damage from ice expansion. Store the pump in a warm, dry place.
- **General Cleaning:** Keep the exterior of the pump clean and free from dirt and dust. Do not use harsh chemicals or abrasive cleaners.
- **Connection Checks:** Regularly check all hose connections for leaks and tighten as necessary.

Troubleshooting

Refer to the table below for common issues and their solutions.

Problem	Possible Cause	Solution
Pump does not start	No power; Clogged inlet/outlet; Pressure switch malfunction; Motor overheating.	Check power connection and outlet; Clear any blockages in hoses or strainer; If motor is hot, allow it to cool (thermal protection may have activated); Consult customer support if pressure switch is faulty.
Low water flow/pressure	Clogged strainer; Air in system; Kinked hose; Low water source; Pressure switch set too low.	Clean strainer; Bleed air from system by opening discharge valve; Straighten hoses; Ensure adequate water supply; Adjust pressure switch to a higher setting.
Pump runs continuously (does not shut off)	Leak in system; Open faucet/valve; Pressure switch malfunction.	Check all connections and hoses for leaks; Ensure all discharge points are closed; Consult customer support if pressure switch is faulty.
Pump cycles on and off rapidly	Small leak in system; Pressure switch sensitivity; Insufficient water supply.	Check for minor leaks; Adjust pressure switch sensitivity (if applicable, refer to operating instructions); Ensure stable water supply.
Excessive noise or vibration	Loose mounting; Air in system; Debris in pump; Worn components.	Tighten mounting screws; Bleed air from system; Inspect for debris (disconnect power first); Consult customer support for worn components.

Warranty and Support

ECO-WORTHY is committed to providing high-quality products and customer satisfaction. For warranty information, technical support, or any questions regarding your pump, please contact ECO-WORTHY customer service through your purchase platform or visit the official ECO-WORTHY website.
Please have your model number (5.5GPM-70PSI-110V) and purchase date available when contacting support.
For more information, you can visit the ECO-WORTHY Store on Amazon.

© 2025 ECO-WORTHY. All rights reserved.