

PULACO FR-PPU12-150

PULACO DC 5V USB Mini Submersible Water Pump Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the safe and efficient use of your PULACO DC 5V USB Mini Submersible Water Pump. This compact and quiet pump is designed for various applications, including pet fountains, small aquariums, fish tanks, tabletop fountains, water gardens, and hydroponic systems. Please read this manual thoroughly before installation and operation.

2. PRODUCT OVERVIEW

Key Features

- **Safety USB Power:** Operates on DC 5V 3W USB power, minimizing electrical risk.
- **Ultra-Quiet Operation:** Engineered for low noise output, providing a quiet environment.
- **Adjustable Flow Rate:** Features an adjusting knob to control water flow up to 50 GPH (Gallons Per Hour).
- **Compact Design:** Small dimensions (1.5 x 1.5 x 1.1 inches) for versatile placement.
- **Detachable & Cleanable:** Easy to disassemble without tools for convenient cleaning.
- **Accessories Included:** Comes with 2 suction cups, one nozzle, and 3.3 feet of tubing.

Components

The PULACO Mini Submersible Water Pump package includes:

- PULACO DC 5V USB Mini Submersible Water Pump
- USB Power Cord (approximately 4.9 ft / 1.5 m)
- Tubing (approximately 3.3 ft / 1 m, 0.3 inch diameter)
- Nozzle (0.3 inch diameter)
- 2 Suction Cups



Image 1: The PULACO DC 5V USB Mini Submersible Water Pump, shown with its included tubing and USB power cable.



Image 2: An exploded view illustrating the detachable components of the pump for easy cleaning, alongside the USB power cord and its length specification.

3. SETUP INSTRUCTIONS

3.1 Assembly

1. Ensure the pump is clean and free of debris.
2. Attach the provided nozzle to the pump's outlet.
3. Connect one end of the tubing to the nozzle.
4. If desired, attach the suction cups to the bottom of the pump for secure placement.

3.2 Placement

Place the assembled pump completely submerged in water within your pet fountain, aquarium, or other water feature. Ensure the water level is sufficient to cover the pump entirely to prevent dry running, which can damage the motor.

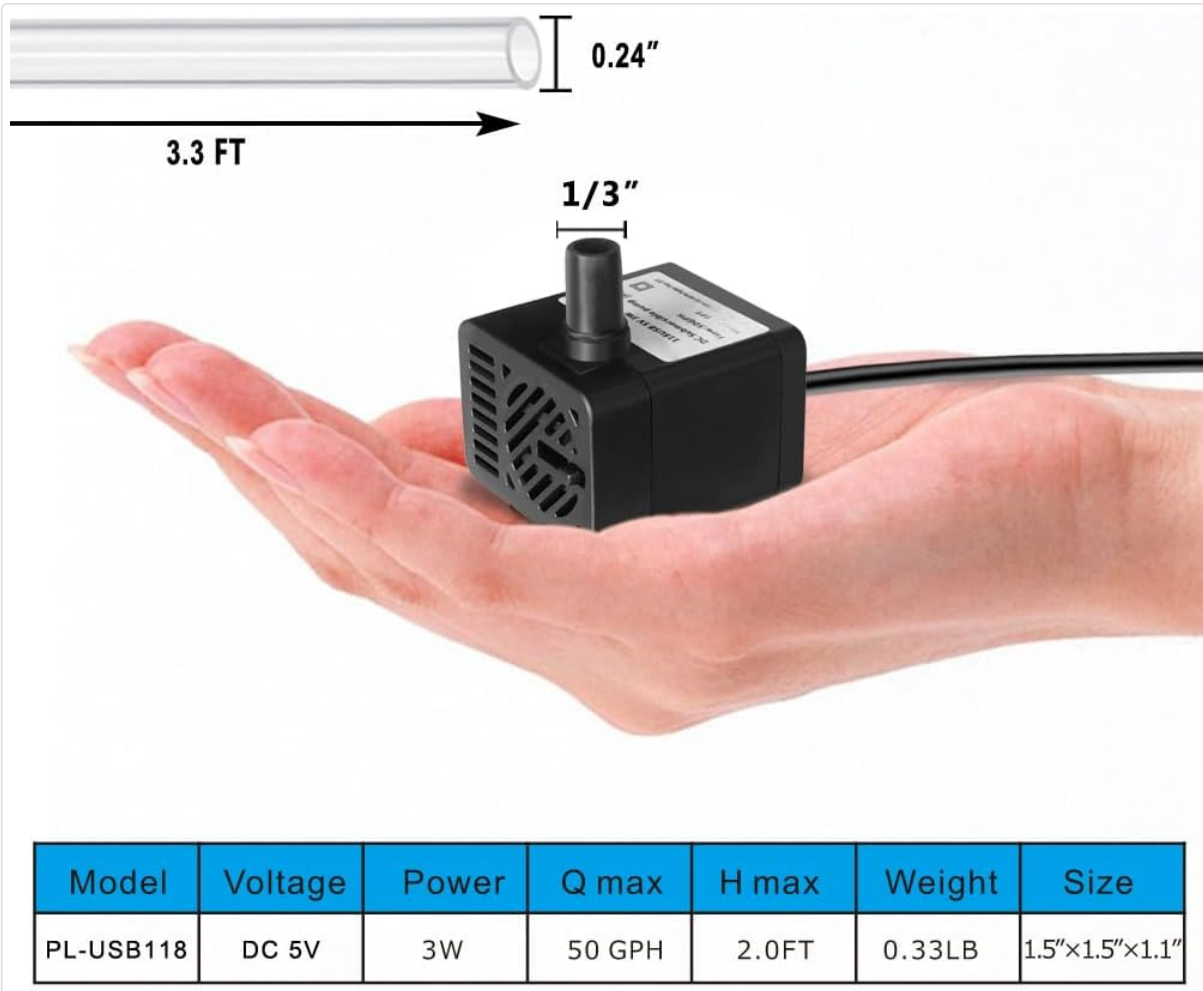


Image 3: The compact size of the PULACO pump demonstrated by being held in a hand, accompanied by a table of its key specifications.

3.3 Power Connection

Connect the USB power cord to a compatible DC 5V USB power source. This can include:

- USB wall adapter (e.g., phone charger)
- Power bank
- Computer USB port
- USB power strip



It Fits for Most 5V USB Power Transformers.



Image 4: The PULACO pump connected to its USB cable, with examples of compatible 5V USB power transformers such as wall adapters and power strips.

4. OPERATING INSTRUCTIONS

4.1 Powering On

Once the pump is fully submerged and connected to a power source, it will begin operating. There is no separate on/off switch; operation is controlled by connecting or disconnecting the USB power.

4.2 Adjusting Flow Rate

The pump features an adjustable knob located on its side. Rotate this knob to increase or decrease the water flow rate according to your application's requirements. The maximum flow rate is 50 GPH, and it can elevate water up to 2.0 feet.



Image 5: A visual representation of the PULACO pump's versatility, showing its use in aquariums, pet fountains, and various water features.

5. MAINTENANCE

5.1 Cleaning the Pump

Regular cleaning is essential to maintain the pump's performance and longevity. The pump is designed for easy disassembly without tools.

1. Disconnect the pump from its power source.
2. Remove the pump from the water.
3. Gently detach the front cover and impeller assembly. Refer to Image 2 for guidance on detachable parts.
4. Rinse all components under clean water to remove any accumulated debris, algae, or mineral deposits. A small brush may be used for stubborn residue.
5. Inspect the impeller for any damage or wear.
6. Reassemble the pump, ensuring all parts fit securely.
7. Place the pump back into the water and reconnect power.

Note: The frequency of cleaning depends on the water quality and usage environment. For continuous operation, weekly or bi-weekly cleaning is recommended.

6. TROUBLESHOOTING

If you encounter issues with your PULACO water pump, please refer to the following table for common problems and solutions:

Problem	Possible Cause	Solution
Pump not operating	No power supply Impeller blocked Insufficient water level	Check USB connection and power source Clean impeller and pump housing Ensure pump is fully submerged
Low water flow	Impeller partially blocked Tubing kinked or clogged Flow rate knob set too low	Clean impeller and pump Check and clear tubing Adjust flow rate knob to a higher setting
Excessive noise	Impeller obstructed Pump not fully submerged Vibration against hard surface	Clean impeller and pump Ensure pump is fully submerged Adjust pump position or use suction cups for stability
Pump stops intermittently	Overheating due to low water Loose power connection	Ensure adequate water level Secure USB power connection

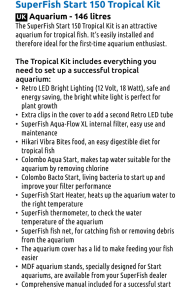




7. TECHNICAL SPECIFICATIONS

Specification	Detail
Model Number	FR-PPU12-150
Brand	PULACO
Power Source	DC 5V USB
Wattage	3 Watts
Voltage	5 Volts (DC)
Maximum Flow Rate	50 GPH (Gallons Per Hour) / 0.83 GPM
Maximum Lifting Height	2.0 Feet
Product Dimensions (L x W x H)	1.5" x 1.5" x 1.1"
Item Weight	0.28 Pounds (approx. 4.5 ounces)
Material	Plastic
Color	Black
Tubing Diameter	0.3 inches
USB Cable Length	4.9 feet (1.5 meters)

8. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the product packaging or contact PULACO customer service directly. Keep your purchase receipt as proof of purchase.

Related Documents - FR-PPU12-150

 <p>SuperFish Start 150 Tropical Kit Aquarium - 146 litres The SuperFish Start 150 Tropical Kit is an attractive aquarium for tropical fish. It's easily installed and therefore ideal for the first-time aquarium enthusiast.</p> <p>The Tropical Kit includes everything you need to set up a successful tropical aquarium:</p> <ul style="list-style-type: none">• Retro LED lighting (12 Volt, 18 Watts), safe and energy saving, the bright white light is perfect for plant growth• Extra clips in the cover to add a second Retro LED tube• SuperFish Aqua Flow XL internal filter, easy use and maintenance• Hikari Vibra Bites Food, an easy digestible diet for tropical fish• Colombo Aqua Start, makes tap water suitable for the aquarium by removing chlorine• Colombo Bacto Start, living bacteria to start up and improve your filter performance• SuperFish Start Heater, heats up the aquarium water to the right temperature• SuperFish thermometer, to check the water temperature of the aquarium• SuperFish fish net, for catching fish or removing debris from the aquarium• The aquarium cover has a lid to make feeding your fish easier• NSF aquarium stands, specially designed for Start aquariums, are available from your SuperFish dealer• Comprehensive manual included for a successful start <p>© 2023 HUNICOM</p>	<p>SuperFish Start 150 Tropical Kit: 146 Litre Aquarium for Tropical Fish</p> <p>The SuperFish Start 150 Tropical Kit is an attractive and easy-to-install 146-litre aquarium for tropical fish, ideal for beginners. It includes LED lighting, filter, heater, food, water conditioner, and more.</p>
 <p>SuperFish Start 20+30+50+60+70+100+150</p>	<p>SuperFish Aquarium Kits: Setup, Safety, and Maintenance Guide</p> <p>Comprehensive guide to setting up, maintaining, and safely using SuperFish aquarium kits (Start 20, 30, 50, 70, 100, 150). Includes safety instructions, warranty details, and care tips.</p>
 <p>SuperFish Start 20+30+50+60+70+100+150</p>	<p>SuperFish Start Aquarium Series: Setup, Maintenance, and Safety Guide</p> <p>A comprehensive guide for setting up and maintaining your SuperFish Start aquarium, covering models 20, 30, 50, 60, 70, 100, and 150. Includes detailed instructions, product specifications, and essential safety information for a thriving aquatic environment.</p>
 <p>HUNICOM</p>	<p>Hunicom Two-Way Radio User Manual</p> <p>User manual for Hunicom two-way radios, detailing operation, features, and specifications for models like the FR-168.</p>
 <p>Mitsubishi Electric</p>	<p>Mitsubishi Electric FR-A802-GF Separated Converter Type Inverter Hardware Instruction Manual</p> <p>Detailed hardware instruction manual for the Mitsubishi Electric FR-A802-GF separated converter type inverter, covering installation, wiring, safety precautions, and specifications.</p>



[Aquagarden Fountain Pump 35-75 / 75-150 User Manual](#)

Comprehensive user manual for Aquagarden Fountain Pumps (models 35-75 and 75-150) by Pennington. Includes safety instructions, installation, maintenance, troubleshooting, and guarantee information for water garden features.