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SunSun JDP-6000

SUNSUN JDP-6000 DC Variable Water Pump Instruction Manual

Model: JDP-6000

1. INTRODUCTION

Thank you for choosing the SUNSUN JDP-6000 DC Variable Water Pump. This pump is designed for efficient water circulation in marine and freshwater aquariums and ponds. It features a controllable DC motor, offering adjustable flow rates and quiet operation. Please read this manual thoroughly before installation and operation to ensure proper use and longevity of your pump.

2. SAFETY INSTRUCTIONS

- Always disconnect the power supply before performing any maintenance or installation.
- This pump is suitable for both submersible and external use.
- When using the pump externally, ensure water is poured into the pump housing before starting to prevent dry running.
- Do not operate the pump if the power cord or plug is damaged.
- Ensure the power outlet has a ground fault circuit interrupter (GFCI) for safety.
- Keep the controller and power adapter away from water.
- This product is intended for aquatic use only.

3. PACKAGE CONTENTS

Verify that all components are present in the package:

- 1 x JDP-6000 Water Pump
- 1 x Intelligent Controller
- 1 x Power Adapter
- Various Outlet Connectors/Hose Adapters



Image: All components included in the JDP-6000 package. Numbered items show (1) Pump, (2) Outlet Connectors, (3) Controller, and (4) Power Adapter.

4. PRODUCT FEATURES

- **Controllable DC Motor:** Features a multi-function intelligent control panel for adjustable flow and power.
- **Quiet Operation:** Engineered for super silent performance in both fresh and saltwater environments.
- **Amphibious Use:** Suitable for both submersible and external applications.
- **Smart Controller:** Offers 99 adjustable speed settings and a 10-minute pause feed mode. Includes a memory function to retain settings after restarts.
- **Removable Shell:** Designed for effective filtration and to prevent small fish from entering the pump impeller.
- **Shock Absorption:** Equipped with shock absorption supports to reduce vibration and noise.
- **Pure Copper Motor:** Utilizes advanced three-phase power with brushless and sensorless control technology for energy efficiency (up to 50% energy saving), long service life, stable operation, and overheat protection.

Removable Shell:

- ★ Effective filtration
- ★ Stop small fish



Shock absorption support:

- ★ Extenuate the shaking
- ★ Noise reduction

Image: Details of the pump's removable shell for filtration and shock absorption supports for noise reduction.

**Pure copper motor:
uses the latest three-phase power
with brushless and sensorless control technology,
energy saving up to 50%**



★ Long
service life



★ Stable
operation



★ Overheat
protection

Image: Illustration of the pure copper motor technology, emphasizing energy saving, long service life, stable operation, and overheat protection.

5. SETUP AND INSTALLATION

5.1 Component Connection

1. Connect the pump's three-wire cable to the designated port on the intelligent controller.
2. Connect the power adapter's output connector to the DC-24V input port on the intelligent controller.
3. Plug the power adapter into a suitable electrical outlet.



Image: Step-by-step connection guide for the pump, controller, and power adapter.

5.2 Hose Adapter Selection

Select the appropriate hose adapter for your tubing size. The JDP-6000 supports various hose diameters:

- 0.79 inch (approx. 20mm)
- 0.98 inch (approx. 25mm)
- 1.26 inch (approx. 32mm)



Image: Various hose adapters provided for the JDP-6000, indicating sizes 20mm, 25mm, and 32mm.

5.3 Placement (Submersible or External)

- **Submersible Use:** Place the pump entirely underwater in your aquarium or pond. Ensure the intake is clear of debris.
- **External Use:** Position the pump outside the water source. Ensure the pump is placed below the water level to allow for gravity-fed priming. **Important:** Before starting, manually pour water into the pump housing to prime it and prevent dry running.

6. OPERATING INSTRUCTIONS

The intelligent controller allows for precise control over the pump's operation.

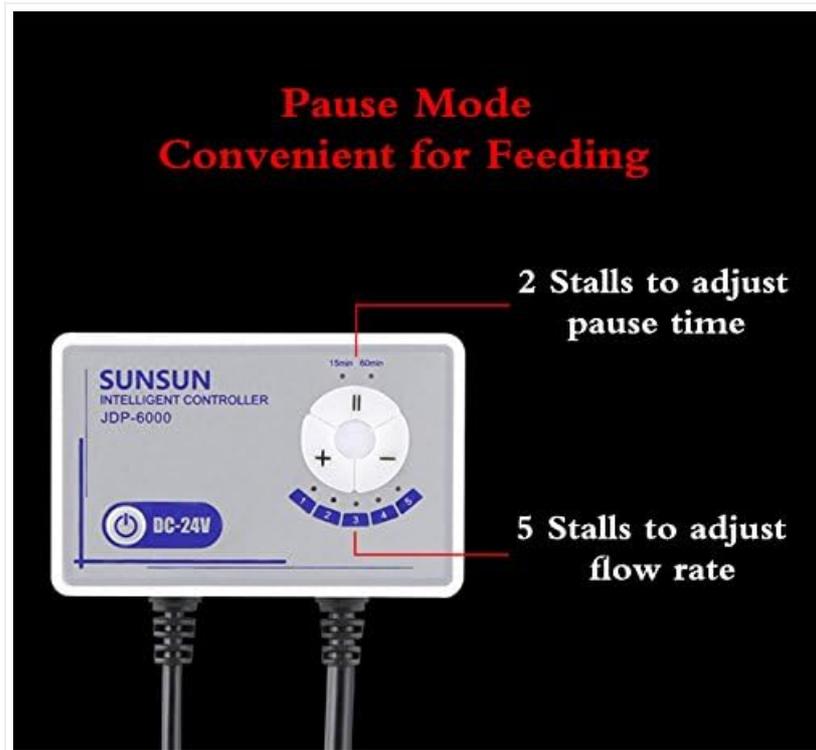


Image: The intelligent controller with indicators for pause time adjustment (2 stalls) and flow rate adjustment (5 stalls).

6.1 Power On/Off

- Press the power button (usually labeled with a power symbol) on the controller to turn the pump on or off.

6.2 Adjusting Flow Rate

- The controller features 5 stalls (levels) to adjust the flow rate. Use the '+' and '-' buttons to cycle through these settings.
- Each stall corresponds to a different power consumption, head height (H-Max), and flow rate (GPH). Refer to the specifications table for details.

6.3 Pause Feed Mode

- The controller includes a pause button for a feeding mode.
- There are 2 stalls (settings) to adjust the pause time (e.g., 15 minutes or 60 minutes). Press the pause button to activate and select the desired duration. The pump will resume operation automatically after the set time.

6.4 Memory Function

- The controller is equipped with a memory function, which retains the last used settings after a power interruption or restart.

7. MAINTENANCE

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

7.1 Cleaning the Pump

1. Disconnect the pump from the power supply.
2. Remove the pump from the water (if submersible) or disconnect tubing (if external).
3. Carefully remove the front removable shell/intake cover. This shell provides effective filtration and prevents debris or small fish from entering the impeller.
4. Clean any accumulated debris, algae, or mineral deposits from the impeller, impeller housing, and the removable shell using a soft brush and clean water.
5. Inspect the impeller for any damage or wear.
6. Reassemble the pump, ensuring all parts are securely fitted.

8. TROUBLESHOOTING

If the pump is not operating correctly, try the following:

- **Pump not starting:** Check if the power adapter is securely plugged into the outlet and the controller. Ensure the controller is powered on.
- **Reduced flow:** Disconnect power and check for blockages in the intake, impeller, or tubing. Clean the pump as described in the maintenance section.
- **Unusual noise:** Disconnect power and check the impeller for any foreign objects or damage. Ensure the pump is placed on a stable surface if used externally, utilizing its shock absorption supports.
- **External use - pump not priming:** Ensure water is poured into the pump housing before starting. Verify that the pump is positioned below the water level of the source.

9. SPECIFICATIONS

Feature	Detail
Model	JDP-6000
Manufacturer	SUNSUN
Power Source	Corded Electric
Voltage	24 Volts DC
Max Wattage	60 watts
Max Flow Rate	1585 GPH (6000 L/H)
Max Head (H-Max)	5.0 meters
Product Dimensions	17.5 x 8.3 x 11.3 cm
Item Weight	1.97 kg (4.34 lbs)
Material	Plastic
Style	Submersible / External
UPC	843186100313

9.1 Performance Table (JDP-6000)

Model	Stall	Power (W)	H-Max (M)	Flow Rate (GPH)	Hose Adapter (in)	Product Weight (lb)
JDP-6000	1	13	1.6	792.52	0.79, 0.98, 1.26	4.19
	2	25	2.5	1056.70		
	3	36	3.4	1241.61		
	4	48	4.2	1426.53		
	5	60	5.0	1585.03		

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Image: Performance data for the JDP-6000 model, showing power consumption, maximum head, and flow rate at each of the 5 adjustable stalls.

10. WARRANTY AND SUPPORT

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