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Fitnet AL-300L

Fitnet AL-300L 79 Gallon Aquarium Chiller Instruction Manual

Model: AL-300L

1. Introduction

This manual provides detailed instructions for the safe and efficient operation of your Fitnet AL-300L Aquarium Chiller. This unit is designed to maintain optimal water temperatures for various aquatic environments, including freshwater and saltwater aquariums, as well as hydroponic systems. Please read this manual thoroughly before installation and use to ensure proper function and longevity of the product.

Figure 1: Fitnet AL-300L Aquarium Chiller. This image shows the main chiller unit with its digital display and water inlet/outlet nozzles.

Product Features:

- **Efficient Cooling:** Features a high-efficiency compressor and R134a refrigerant for stable and precise temperature control.
- **Temperature Range:** Effectively maintains water temperature between 68°F-79°F (20°C-26°C).
- **Effective Heat Dissipation:** Equipped with multiple ventilation holes and two built-in cooling fans.
- **Low Noise Operation:** Designed with silent fans to minimize operational noise.
- **Versatile Application:** Suitable for freshwater and saltwater fish tanks, and hydroponic systems.
- **Complete Kit:** Includes water pump, water pipe, and connectors for immediate setup.

Figure 2: Versatile applications. This image illustrates the chiller's suitability for both hydroponic systems (top) and traditional fish tanks (bottom).

2. Safety Information

Please observe the following safety precautions to prevent injury or damage to the product.

- Always disconnect the power supply before performing any maintenance, installation, or cleaning.
- Ensure the chiller is placed on a stable, level surface.
- Maintain at least 6 inches (15 cm) of clear space around the chiller for adequate heat dissipation. Blocking vents can lead to overheating and reduced performance.
- Do not operate the chiller if the power cord or plug is damaged.
- Do not immerse the main chiller unit in water. The water pump is submersible, but the chiller unit is not.
- This appliance is for indoor use only.
- Keep out of reach of children.
- Use a Ground Fault Circuit Interrupter (GFCI) for all electrical connections to prevent electrical shock.

Figure 3: Recommended clearance for heat dissipation. This diagram illustrates the importance of maintaining at least 6 inches (15 cm) of space between the chiller and any walls or obstructions to ensure proper airflow and cooling efficiency.

3. Package Contents

Verify that all items are present in the package before proceeding with installation.

- Fitnet AL-300L Aquarium Chiller Unit
- Submersible Water Pump

- Water Pipe (Hose)
- Connectors and Clamps
- Power Cord
- Instruction Manual (this document)

Figure 4: Included components. This image displays the main chiller unit alongside the water pump, hoses, connectors, and clamps that come with the product.

Figure 5: Submersible water pump. This image shows the water pump, designed for submersion in fresh or saltwater, which circulates water through the chiller.

4. Setup Instructions

Follow these steps for proper installation of your aquarium chiller.

1. **Positioning the Chiller:** Place the chiller on a flat, stable surface near your aquarium or hydroponic system. Ensure there is at least 6 inches (15 cm) of clear space around all sides for optimal airflow and heat dissipation.
2. **Prepare Connectors:** Gather the provided connectors, including the white sealing washers.

3. **Install Inlet/Outlet Nozzles:**
    - Insert a white sealing washer onto each inlet/outlet nozzle.
    - Place the pipe joint into the black nut cap.
    - Tighten the black nuts onto the chiller's inlet and outlet ports.
4. **Connect Water Pump:** Attach one end of the water pipe to the outlet of the submersible water pump. Secure it with a clamp if necessary.
5. **Connect Chiller to System:**
    - Connect the other end of the water pipe from the pump to the chiller's inlet port.
    - Connect a second water pipe from the chiller's outlet port back to your aquarium or hydroponic system.
    - Ensure all connections are secure and watertight to prevent leaks.
6. **Submerge Pump:** Place the submersible water pump into your aquarium or hydroponic reservoir. Ensure it is fully submerged and positioned to draw water effectively.
7. **Power Connection:** Plug the chiller's power cord into a GFCI-protected electrical outlet. Plug in the water pump's power cord.

Parameters

Model	Product Size	Voltage	Pump power Pump Qmax	Suitable Pipe
AL-160/42gal	13.4*7.9*11.9	110V/60HZ	15W 600L/H	0.2"/0.4"
AL-300/79gal	11.4*11.4*12.6			

Figure 6: Chiller installation steps. This diagram illustrates the process of preparing accessories, installing sealing washers, attaching pipe joints, and tightening the black nuts for secure hose connections.

Figure 7: Chiller setup with an aquarium. This image shows the chiller unit connected to a small fish tank, illustrating the hose routing and the overall footprint of the chiller (dimensions: 12.6" H x 11.4" W x 11.4" D).

5. Operating Instructions

The chiller features a digital control panel for temperature setting and calibration.

5.1. Power On/Off

Locate the power switch on the back of the unit. Flip the switch to the 'ON' position to power on the chiller. The digital display will illuminate.

Figure 8: Power switch. This image shows the main power switch located on the rear panel of the chiller unit.

5.2. Temperature Setting (Assumed Target Temperature Range: 75-79°F)

The chiller will begin cooling after a 2-3 minute power-on delay. To adjust the target temperature:

1. **Set Shutdown Temperature:** Press the **Set** key. Use the ▲ (up) or ▼ (down) arrow keys to adjust the desired shutdown temperature (e.g., 77°F). Press the **Rst** key to save.
2. **Set Starting Temperature (F1 Code):** Long press the **Set** key until the **F1** code appears. Then, press the **Set** key again. Use the ▲ or ▼ arrow keys to adjust the temperature difference (e.g., to 4°F for a working range of 4°F).

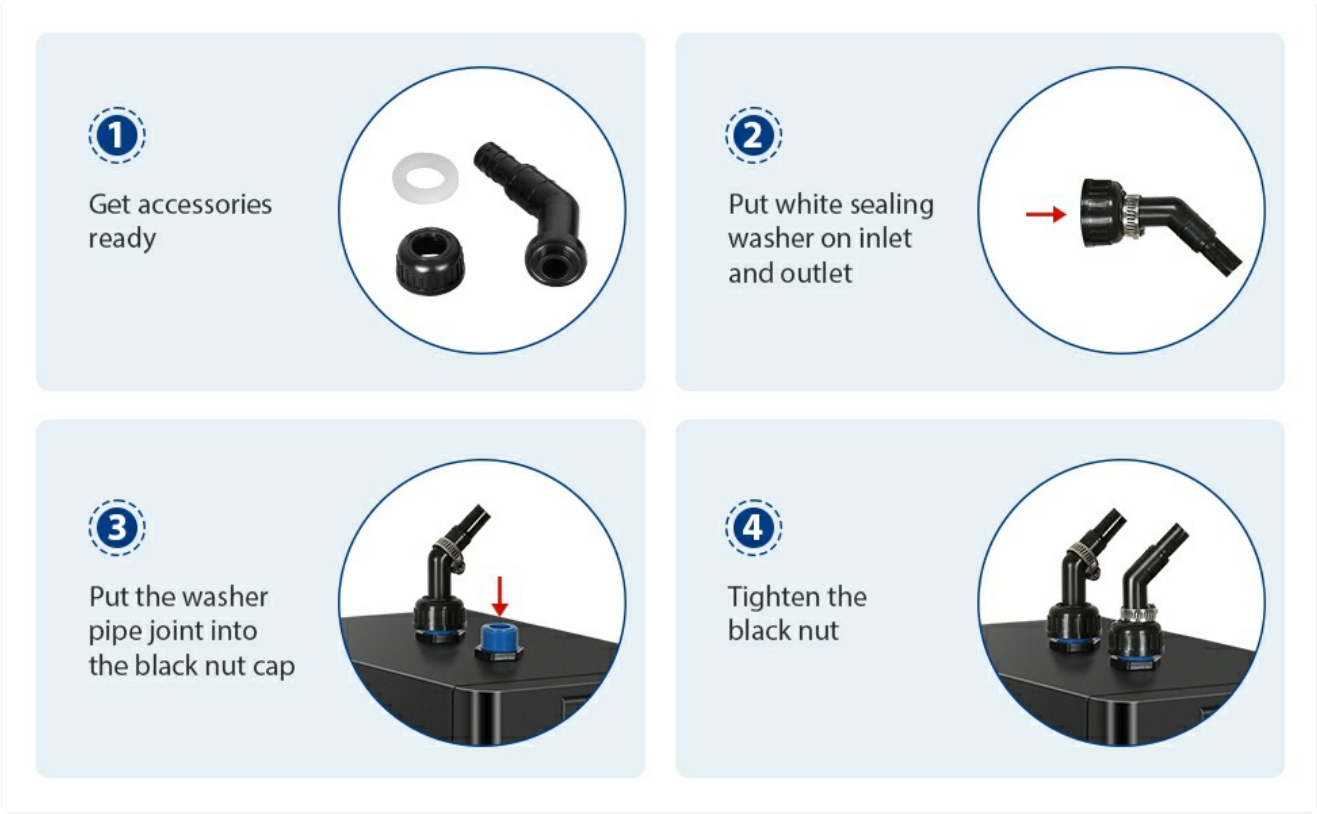

Figure 9: Temperature setting and F2 calibration. This image provides a visual guide to setting the shutdown temperature and adjusting the F1 code for the working temperature range, as well as the F2 calibration process.

5.3. F2 Calibration Setting

If the chiller's displayed temperature does not match an external thermometer, you can calibrate it:

1. Long press the **Set** key to display **F1**. Press the ▲ key to display **F2**. Press **Set** again.
2. Use the ▲ or ▼ arrow keys to adjust the offset value (e.g., to 5 if the chiller reads 77°F and the actual temperature is 72°F, meaning a -5 adjustment is needed). Press **Rst** to return to the current temperature display.

6. Maintenance

Regular maintenance ensures optimal performance and extends the lifespan of your chiller.

- **Clean Air Vents:** Periodically check and clean the air intake and exhaust vents to prevent dust and debris buildup, which can impede heat dissipation. Use a soft brush or vacuum cleaner.
- **Inspect Hoses and Connections:** Regularly check hoses and connections for any signs of leaks, kinks, or damage. Replace damaged components immediately.
- **Clean Water Pump:** Disconnect power to the pump and remove it from the water. Disassemble and clean the impeller and pump housing to remove any algae or debris that may affect water flow.
- **Water Quality:** Maintain good water quality in your aquarium or hydroponic system to reduce the buildup of contaminants in the chiller's internal components.

7. Troubleshooting

If you encounter issues with your chiller, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
Chiller not cooling or insufficient cooling.	◦ Insufficient airflow around the unit. ◦ Water pump not operating or clogged. ◦ Ambient room temperature too high. ◦ Water volume too large for chiller capacity. ◦ Temperature settings incorrect.	◦ Ensure 6 inches (15 cm) clearance around the chiller. ◦ Check pump for power and blockages; clean if necessary. ◦ Reduce room temperature or consider a higher capacity chiller. ◦ Reduce water volume if possible, or allow more time for cooling. ◦ Verify temperature settings (Section 5.2).
Water leaking from connections.	◦ Loose hose connections. ◦ Damaged sealing washers or hoses.	◦ Tighten all hose clamps and connections. ◦ Inspect and replace any damaged washers or hoses.
Chiller making unusual noise.	◦ Vibrations from compressor (normal to some extent). ◦ Fan obstruction. ◦ Unit not level.	◦ Ensure unit is on a stable, level surface. ◦ Check fan vents for obstructions and clean if necessary. ◦ Some compressor noise is normal; ensure it's not excessive.
Digital display shows incorrect temperature.	◦ Calibration needed.	◦ Perform F2 calibration as described in Section 5.3.

8. Specifications

Feature	Detail
Model Name	AL-300L
Capacity	79 Gallons / 300 Liters

Feature	Detail
Dimensions (L x W x H)	12.6 x 11.4 x 11.39 inches
Refrigerant	R134a
Recommended Temperature Range	68°F - 79°F (20°C - 26°C)
Material	Aluminum
Color	Black
Manufacturer	Fitnet
Pump Power (Qmax)	15W, 600L/H
Voltage	110V/60HZ

9. Warranty and Support

Fitnet offers a **1-year manufacturer's guarantee** for this 79-gallon water chiller. This warranty covers defects in materials and workmanship under normal use.
For warranty claims, technical support, or any questions regarding your Fitnet Aquarium Chiller, please contact Fitnet customer service through your original purchase platform or the official Fitnet website.
Please retain your proof of purchase for warranty validation.

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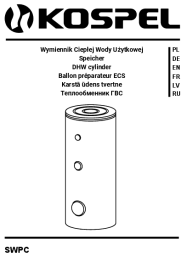
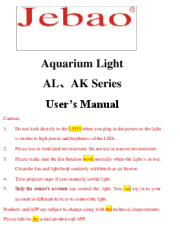
Related Documents - AL-300L

	Poafamx Aquarium Water Chiller 42GAL/160L AL-160G Instructions Instruction manual for the Poafamx AL-160G Aquarium Water Chiller (42GAL/160L). Learn about installation, operation, parameters, and troubleshooting for maintaining optimal water temperature in aquariums and hydroponic systems.
	Baoshishan Aquarium Water Chiller Handling Instructions This document provides handling instructions for Baoshishan Aquarium Water Chillers, covering introduction, safety precautions, parameters, installation, testing, temperature settings, cleaning, maintenance, and troubleshooting for models AL-60, AL-160, and AL-300.

	[Water Pump/Filter User Manual: Safety and Operation Guide] This user manual provides essential safety precautions and operating instructions for submersible water pumps used in aquariums, pools, and other water circulation applications. It covers installation, usage, and maintenance guidelines.
	[Kospel SWPC 300L Water Heater Manual] Installation, operation, and technical specifications for the Kospel SWPC 300L domestic hot water cylinder.
	[Jebao AL & AK Series Aquarium Light User Manual - Setup, Features, and App Control] Comprehensive user manual for Jebao AL and AK Series aquarium lights. Covers product introduction, specifications, installation, Wi-Fi setup, app download and control, modes, and troubleshooting.
	[Alpina Watches: Warranty and Operating Instructions Manual] Comprehensive warranty and operating instructions for Alpina watches, covering model details, care, maintenance, and international warranty information. Includes guides for various models like AL-235, AL-240, and more.