Gpxhbcb AL-300

Gpxhbcb Water Chiller AL-300 User Manual

Model: AL-300 | Brand: Gpxhbcb

1. Introduction

The Gpxhbcb AL-300 Water Chiller is designed to maintain a stable and optimal water temperature for various aquatic environments, including aquariums, hydroponic systems, and seafood cultivation. This device ensures efficient heat exchange, providing a controlled temperature range suitable for sensitive aquatic life and plants. It is equipped with a compressor cooling system and features for effective heat dissipation and quiet operation.

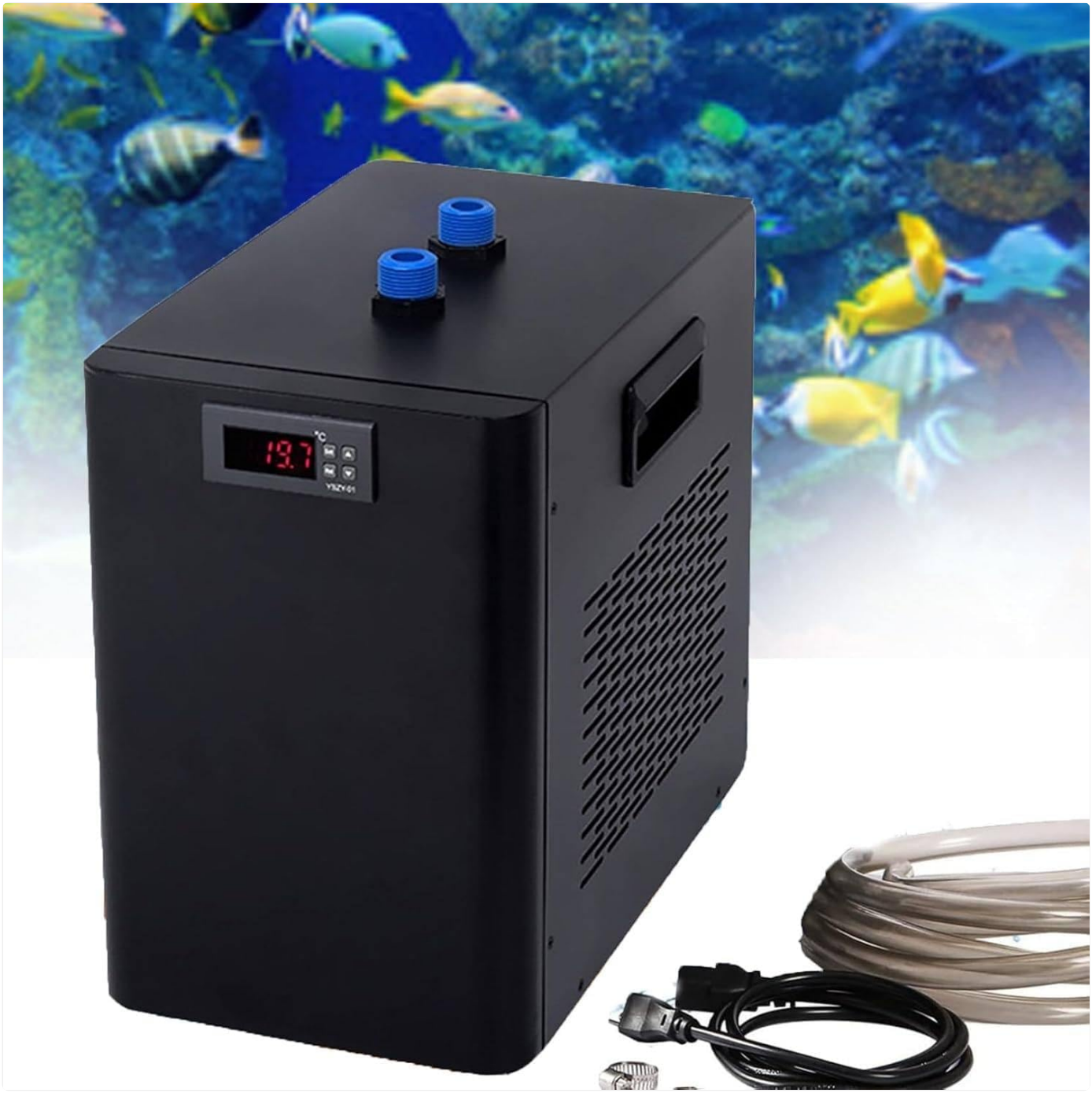

Image 1.1: The Gpxhbcb AL-300 Water Chiller unit shown with its power cord, water pipes, and connectors, ready for installation.

2. Safety Information

- Always ensure the chiller is placed on a stable, level surface.
- Maintain a minimum clearance of 6 inches (15 cm) around the chiller for adequate air circulation and heat dissipation.
- Do not operate the chiller if the power cord or plug is damaged.
- Ensure all water connections are secure to prevent leaks.
- Unplug the unit from the power outlet before performing any maintenance or cleaning.
- This appliance is intended for indoor use only.
- Keep out of reach of children and pets.

3. Package Contents

Upon unpacking, verify that all the following components are present:

- 1 x Gpxhbcb AL-300 Aquarium Cooler Unit
- 1 x Water Pump
- 1 x 3-meter Water Pipe
- Connectors and Clamps

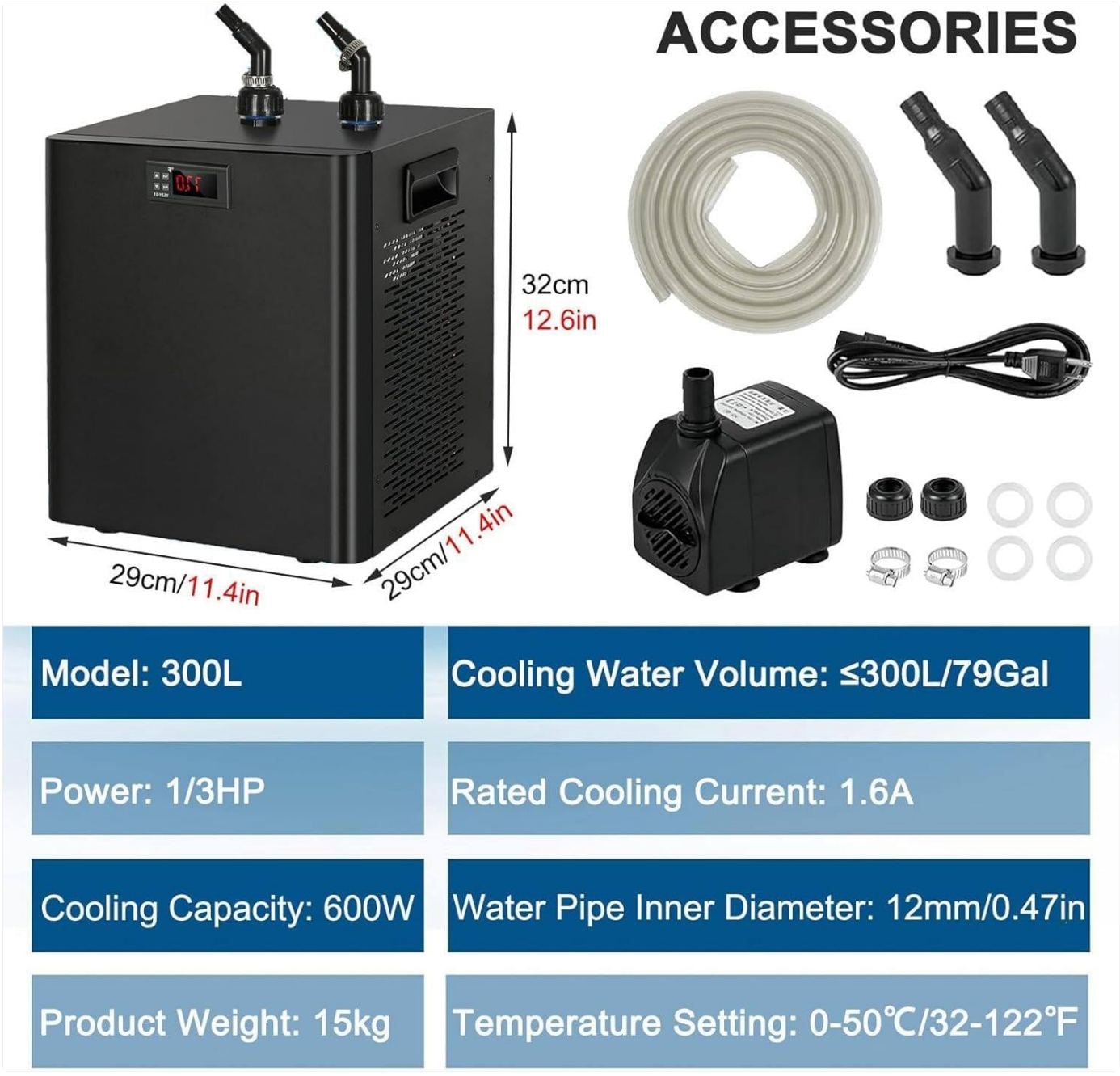

Image 3.1: The AL-300 chiller unit displayed with its dimensions and all included accessories, such as the water pump, tubing, and various connectors.

4. Specifications (Model AL-300)

Feature	Detail
Voltage	220V/110V (Please check your local voltage requirements)
Power	1/3 HP

Feature	Detail
Cooling Power	600 W
Cooling Rated Current	1.6A
Cooling Water Volume	≤300L (79 Gallons)
Inlet and Outlet Specifications	φ12 or φ6 (Inner Diameter)
Atomizer	Pure titanium coil
Product Size (L*W*H)	29 cm * 29 cm * 32 cm (11.4 in * 11.4 in * 12.6 in)
Net Weight	15 kg (33 lbs)
Temperature Setting Range	0-50°C / 32-122°F

5. Setup Instructions

1. **Placement:** Position the chiller on a flat, stable surface. Ensure there is at least 6 inches (15 cm) of clear space around all sides of the unit to allow for proper air circulation and heat dissipation. Avoid placing it in direct sunlight or in an enclosed cabinet.
2. **Connect Water Pump:** Attach the provided water pump to the inlet of your aquarium or hydroponic system.
3. **Connect Water Pipes:** Connect one end of the 3-meter water pipe to the outlet of the water pump and the other end to the "IN" port of the chiller. Connect a second pipe (not included, or use the remaining length of the provided pipe if suitable) from the "OUT" port of the chiller back to your aquarium or system. Secure all connections with the provided clamps to prevent leaks.
4. **Submerge Pump:** Place the water pump fully submerged in the water of your aquarium or hydroponic reservoir.
5. **Fill System:** Ensure your aquarium or system is filled with water to the appropriate level.
6. **Power Connection:** Once all connections are secure and the pump is submerged, plug the chiller's power cord into a grounded electrical outlet.

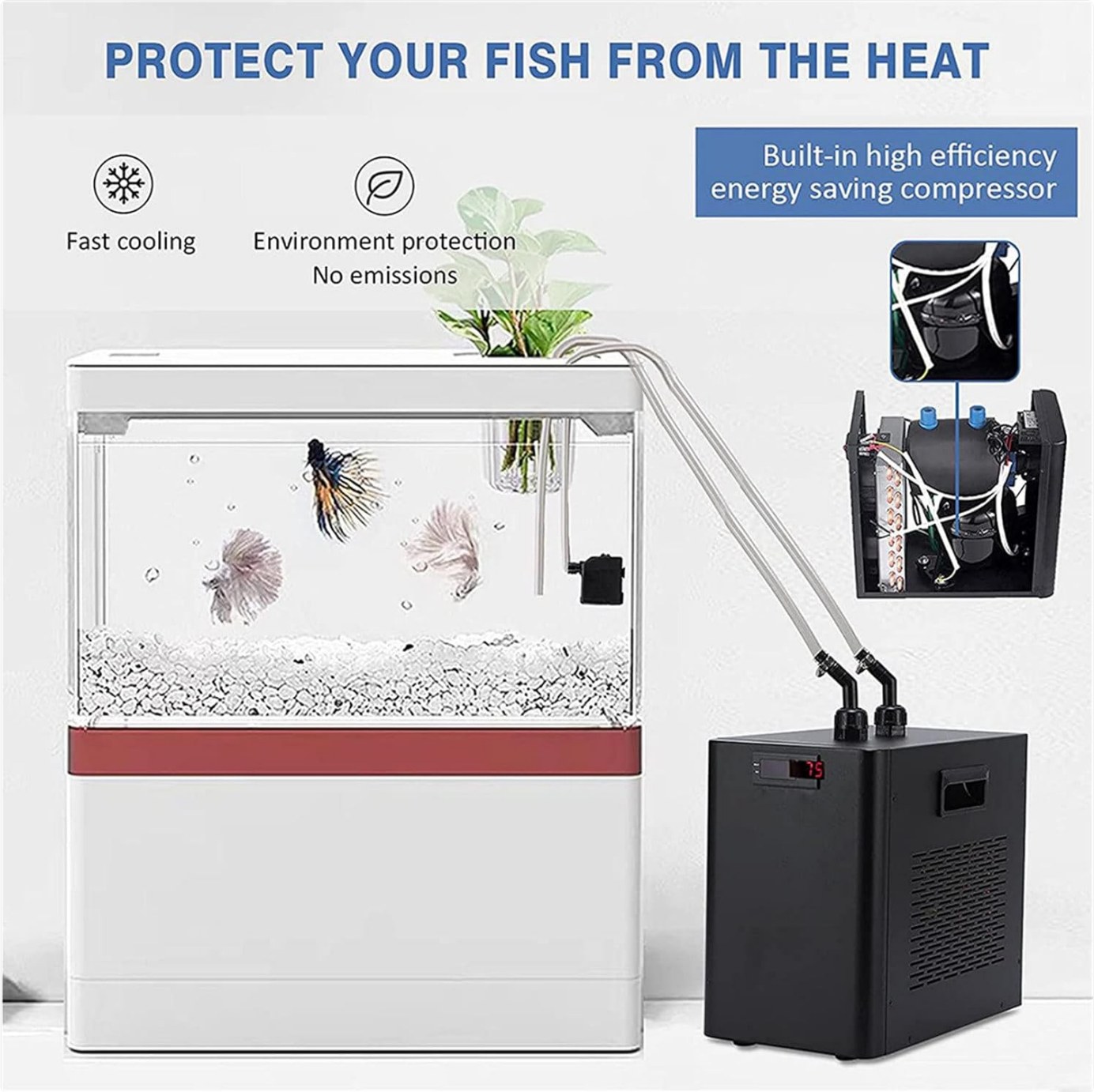

Image 5.1: An illustration demonstrating the connection of the water chiller to an aquarium, highlighting the flow of water and the importance of proper setup for temperature regulation.

6. Operating Instructions

The chiller features a digital control panel for easy temperature management.

1. **Power On:** After connecting the power, the chiller will power on. The digital display will show the current water temperature.
2. **Setting Shutdown Temperature (F1):**
    - Press the "Set" button once. The display will show "F1".
    - Use the "Up" or "Down" arrows to adjust the desired shutdown temperature. This is the temperature at which the chiller will stop cooling.
    - Press "Set" again to confirm and save the setting.
3. **Setting Startup Temperature (F2):**

- Press the "Set" button twice. The display will show "F2".
- Use the "Up" or "Down" arrows to adjust the desired startup temperature. This is the temperature at which the chiller will begin cooling again.
- Press "Set" again to confirm and save the setting.

4. **Temperature Adjustment (F3 - Calibration):**
   - Press the "Set" button three times. The display will show "F3".
   - This setting allows for calibration if there is a discrepancy between the actual water temperature and the temperature displayed on the unit. Use the "Up" or "Down" arrows to adjust the offset.
   - Press "Set" again to confirm and save the setting.
5. **Cooling Operation:** The chiller will automatically activate when the water temperature rises above the set startup temperature (F2) and will stop when it reaches the set shutdown temperature (F1).

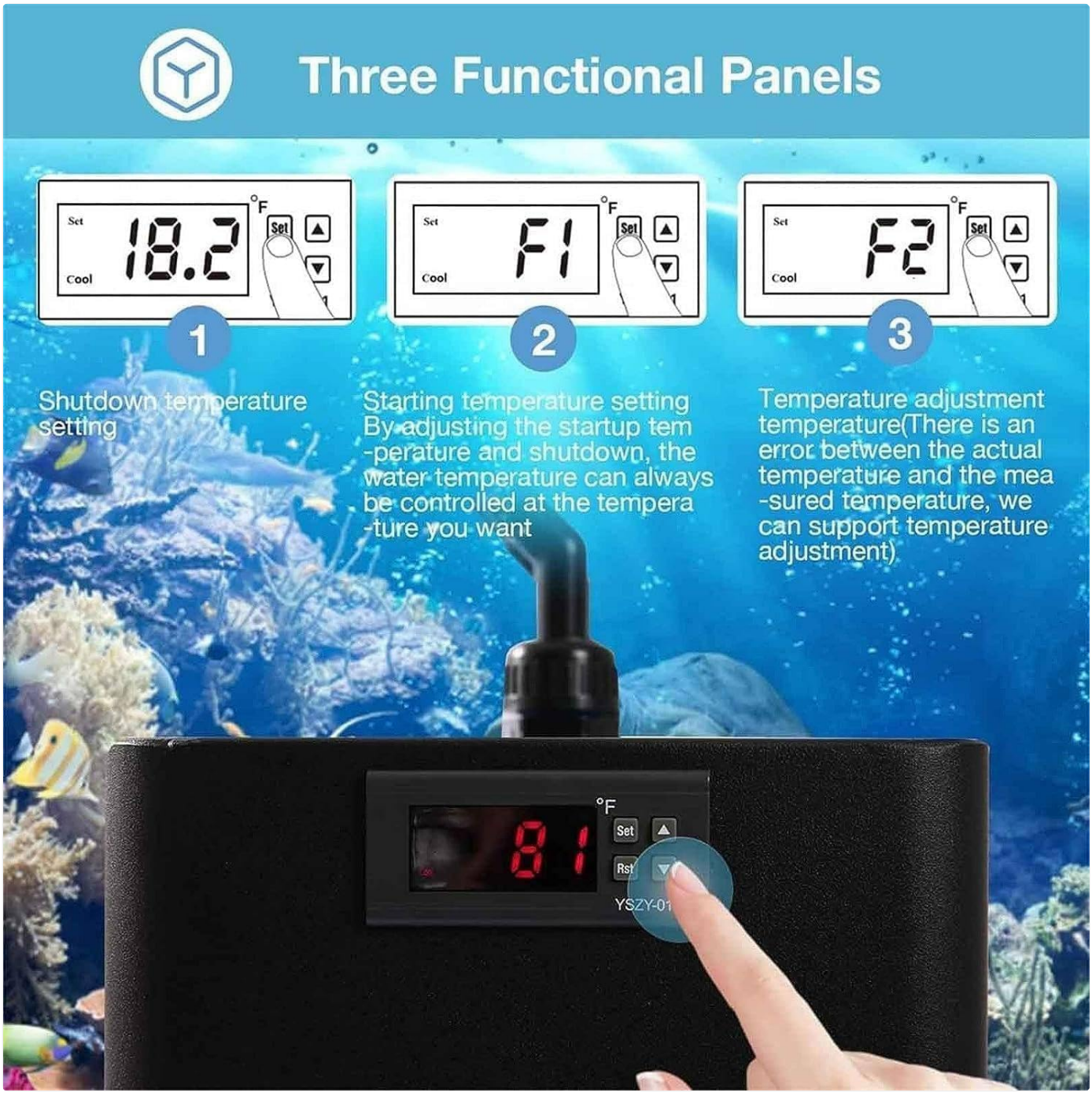

Image 6.1: A detailed view of the chiller's digital control panel, illustrating the "Set", "Up", and "Down" buttons used for adjusting temperature parameters (F1, F2, F3).

7. Maintenance

- **Regular Cleaning:** Periodically clean the exterior of the chiller with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Air Vents:** Ensure the air intake and exhaust vents are free from dust and debris. Blocked vents can hinder heat dissipation and reduce efficiency. Use a soft brush or vacuum cleaner to gently clear any obstructions.
- **Water Pump:** Clean the water pump regularly to prevent blockages and ensure optimal water flow. Refer to the water pump's specific instructions for cleaning.
- **Water Pipes:** Inspect water pipes for any signs of algae buildup or blockages. Clean as necessary to maintain unrestricted water flow.
- **Coil Inspection:** The pure titanium coil atomizer is designed for durability. However, if you notice a significant drop in cooling performance, consult a professional.

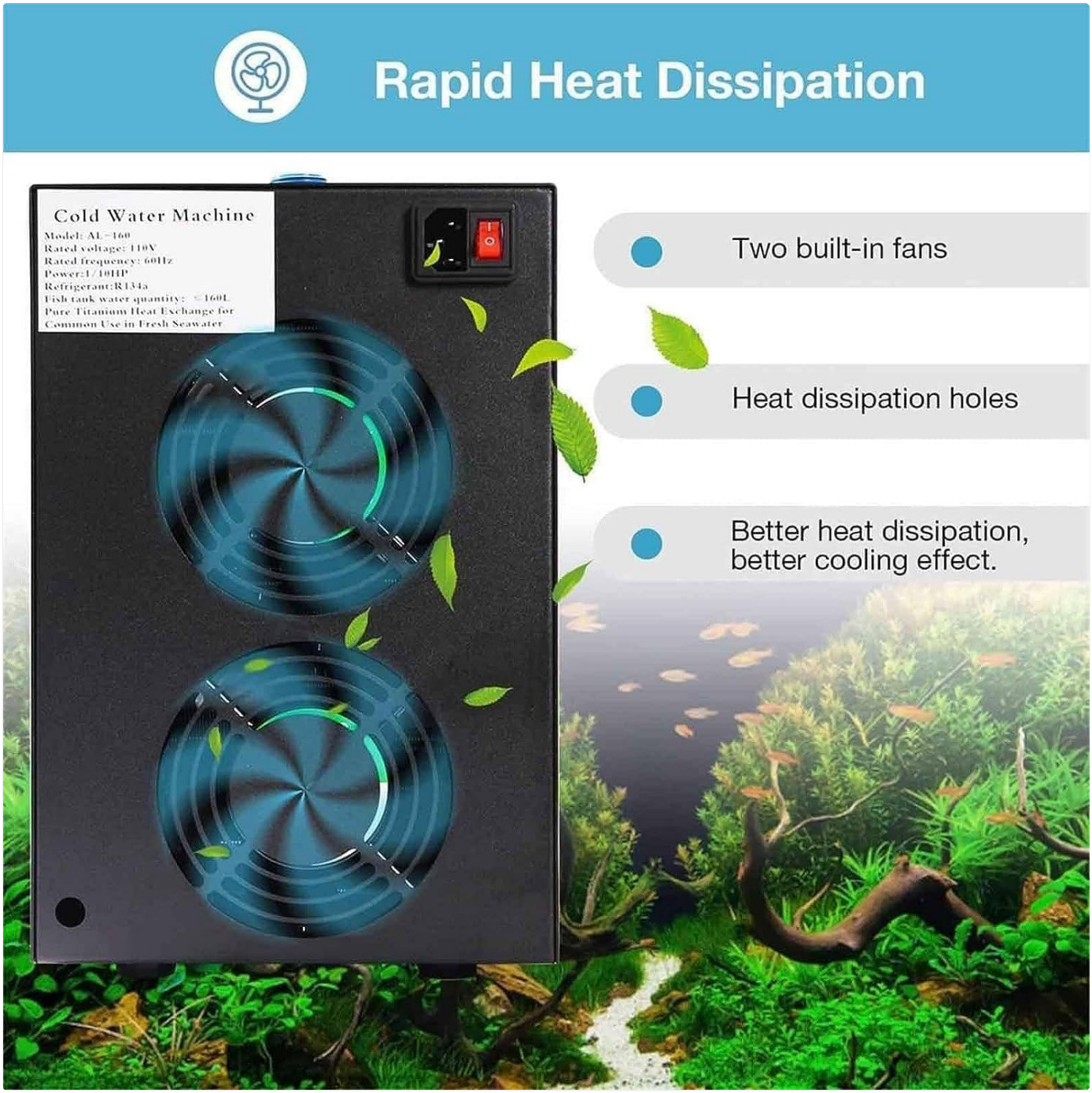

Image 7.1: A view of the chiller's side panel, highlighting the two built-in fans and numerous heat dissipation holes, which are crucial for maintaining efficient operation and preventing overheating.

8. Troubleshooting

- **Chiller Not Turning On:**
  - Check if the power cord is securely plugged into a working electrical outlet.
  - Verify that the power switch on the unit (if present) is in the "ON" position.
  - Ensure there is no power outage in your area.
- **Chiller Not Cooling Effectively:**
  - Confirm that the set temperature (F1) is lower than the current water temperature.
  - Check for obstructions in the air vents and clean them if necessary (refer to Maintenance section).
  - Ensure the water pump is operating correctly and water is flowing through the chiller.
  - Verify that the cooling water volume does not exceed the chiller's capacity (300L for AL-300).
  - Check for any kinks or blockages in the water pipes.
- **Unusual Noise or Vibration:**
  - Ensure the chiller is placed on a stable, level surface.
  - Check for any loose components or foreign objects near the fans.
  - While some compressor noise is normal, excessive noise may indicate an issue. Contact support if it persists.
- **Water Leakage:**
  - Immediately unplug the unit.
  - Inspect all pipe connections and ensure they are tightly secured with clamps.
  - Check for any cracks or damage to the pipes or chiller housing.

9. Applications

The Gpxhbcb AL-300 Water Chiller is versatile and suitable for a variety of aquatic and cultivation needs:

- **Aquariums:** Ideal for freshwater and saltwater fish tanks, providing a stable temperature for tropical fish, cold-water species, and sensitive aquatic life like crystal shrimp, corals, and jellyfish.
- **Hydroponics:** Maintains optimal nutrient solution temperatures for plant growth, preventing root rot and promoting healthier yields.
- **Seafood Cultivation:** Suitable for small-scale seafood cultivation equipment, ensuring appropriate water conditions.
- **Home Breeding:** Essential for maintaining specific temperature requirements for breeding various aquatic species.

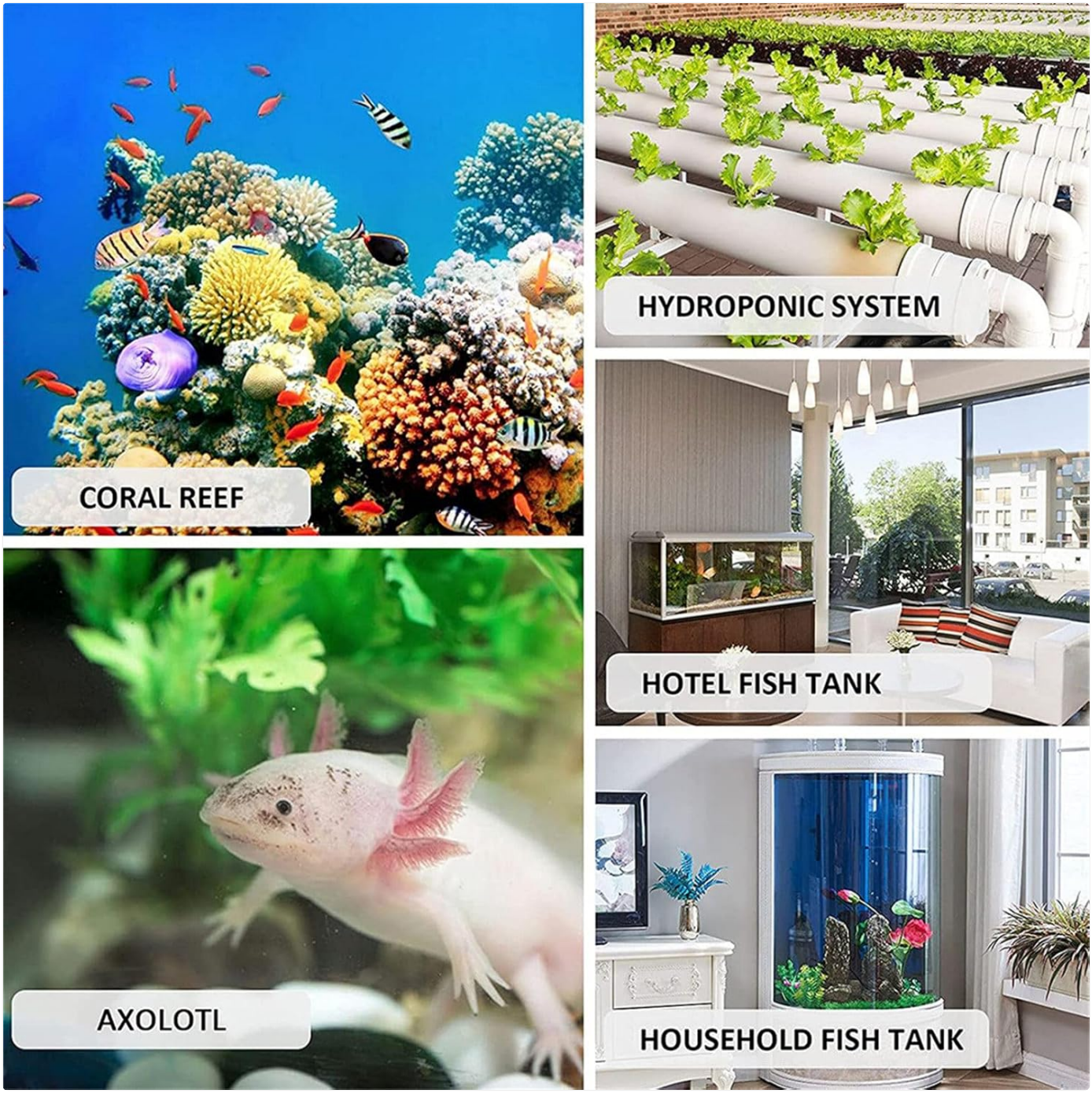

Image 9.1: A visual representation of the chiller's diverse applications, including maintaining coral reefs, supporting hydroponic systems, and regulating temperatures in various fish tanks, from household to hotel setups, and for specific species like axolotls.

10. Warranty and Support

For warranty information, technical support, or any questions regarding your Gpxhbcb AL-300 Water Chiller, please refer to the contact information provided at the point of purchase or visit the official Gpxhbcb website. Please retain your proof of purchase for warranty claims.

If you have any questions, please write to us, we will be happy to help you.