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AHJ 300W(40-55-75 Gallon)

AHJ Aquarium Heater User Manual

Model: 300W (40-55-75 Gallon)

1. PRODUCT OVERVIEW

The AHJ Aquarium Heater is a submersible fish tank water heater designed for accurate temperature control in both saltwater and freshwater aquariums. It features advanced safety protections, quick heating capabilities, and an external controller for ease of use.



Image 1.1: The AHJ Aquarium Heater, showing its main unit, external controller, power cord, and suction cups.

2. SAFETY INFORMATION

This appliance has been designed with multiple safety features to ensure the well-being of your aquatic environment. Please read and adhere to all safety precautions before use.

- **Over-Temperature Protection:** The heater automatically shuts off if the water temperature exceeds 94°F (34°C). The LCD display will show "HH" and flash as a warning.

- **Anti-Dry Burning Function:** If the water level in the fish tank drops too low, the heater will auto-shut off to prevent dry burning. The LCD display will show "E1".
- **Durable Construction:** Features a thick quartz tube and a high-temperature resistant protective case to prevent accidental contact by fish and to protect aquatic plants.
- **UL Certified Cable:** Equipped with a 1.5m/4.75 ft cable that is U.S. UL Certified for safety.
- **Full Submersion Required:** The heater must be fully submerged in water to operate correctly and safely.



Safety Durable and Reliable

Over Temperature Protection Function
Anti-dry burning functions

Over temperature protection
Over 94 F will auto stop heating and turn up error warning

Anti-dry Burning Function
leaving lowest water line will auto stop heating

Image 2.1: Visual representation of the heater's over-temperature protection (HH display) and anti-dry burning function (E1 display).

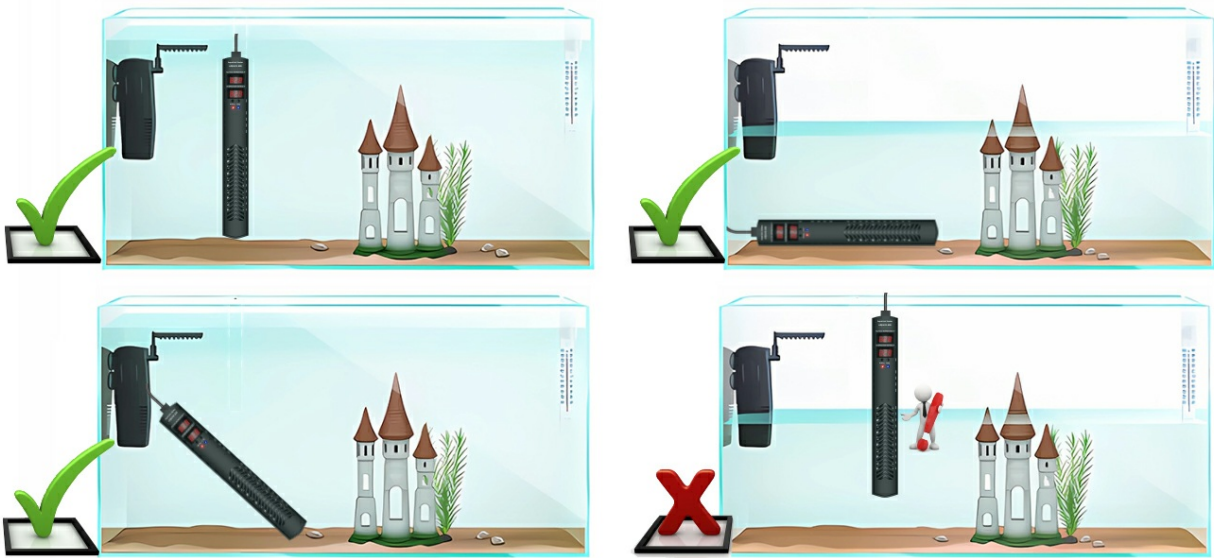


Image 2.2: Proper and improper placement of the heater within an aquarium, emphasizing full submersion.

3. PRODUCT FEATURES

- **Accurate Temperature Control:** Maintains water temperature within $\pm 1^{\circ}\text{F}$ of the set temperature, thanks to an integrated PID temp-chip and nickel-chromium wires for rapid detection and regulation.
- **Fast and Stable Heating:** Designed for quick temperature adjustment and efficient heating for tanks ranging from 40-70 gallons (300W model).
- **External Controller:** Allows for convenient temperature adjustments without needing to wet your hands.
- **Clear Digital Display:** An LCD screen shows both real-time water temperature and the set temperature.
- **LED Indicators:** A red LED light will illuminate when the heater is actively working and heating the water. A blue LED light signifies that the water temperature is stable and maintained.
- **Versatile Use:** Suitable for both saltwater and freshwater aquarium environments.



Ultra-Safe Intelligent Water Sensor Accurate Temperature Control

keep water temperature consistent around setting temperature $\pm 1^{\circ}\text{F}$

Temperature monitoring

Real-time Temperature

74.0 °F

Temperature setting

74.0 °F



- External controller
- One key setting
- Easy to use

Image 3.1: The heater's digital display showing real-time and set temperatures, highlighting the external controller for easy adjustment.



Quick Heat-Up & Energy Saving

Smart Energy Saving Tech

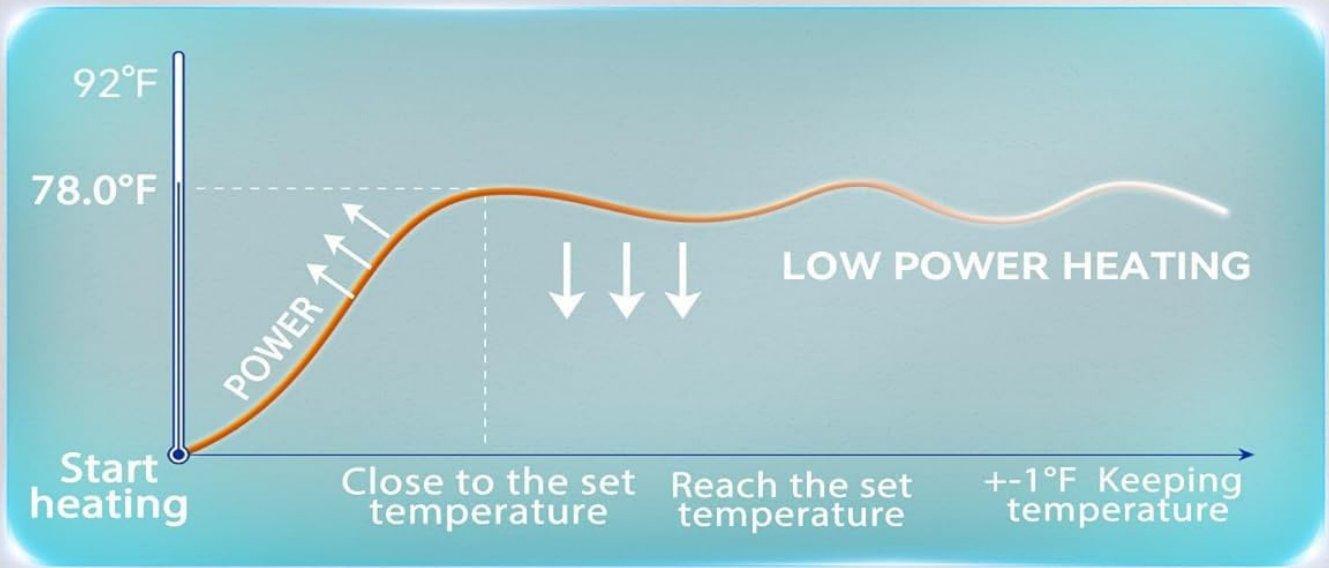


Image 3.2: A graph demonstrating the heater's efficient heating process, showing rapid temperature increase followed by stable temperature maintenance with low power consumption.



Wide Use for Saltwater And Freshwater



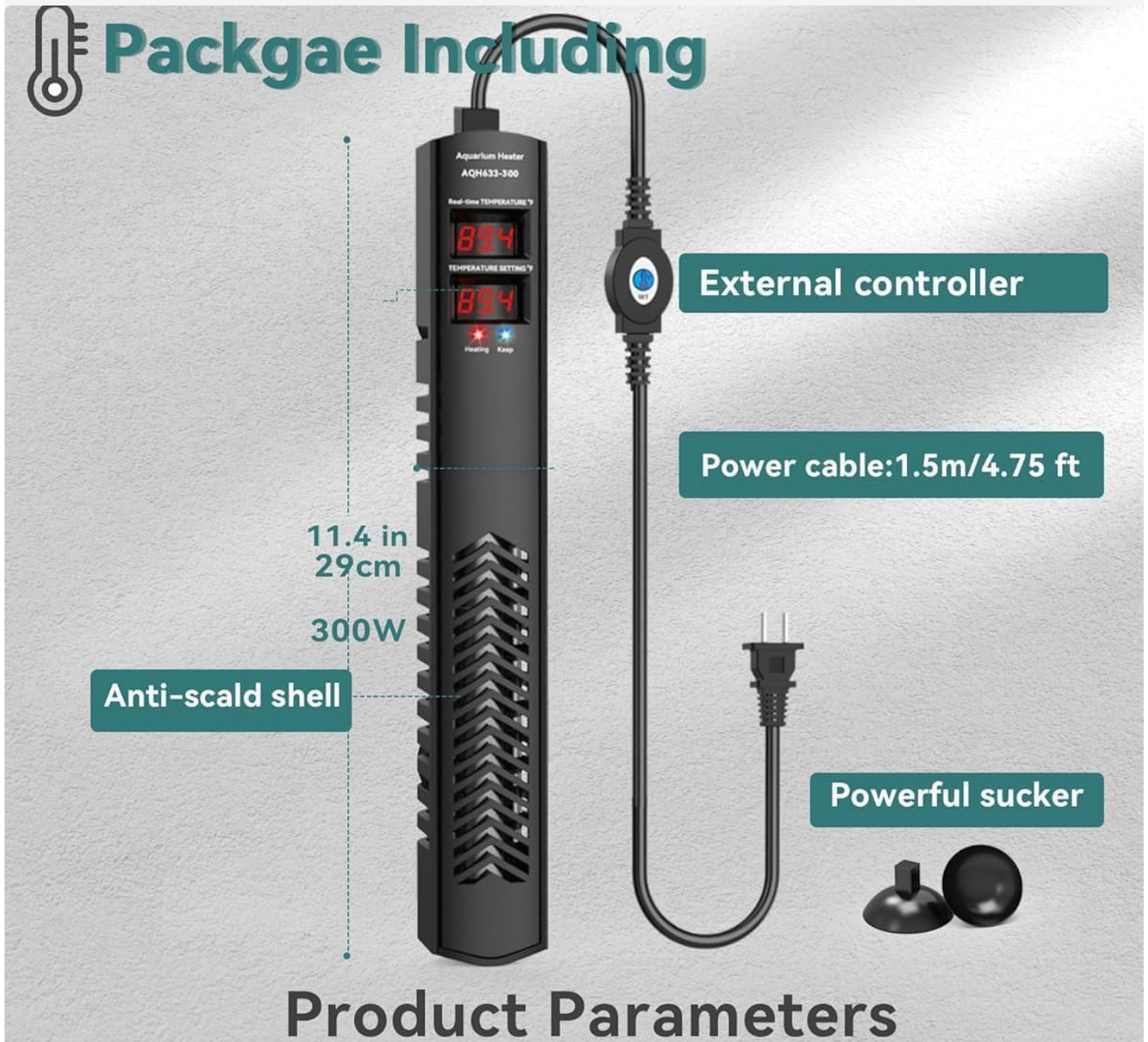
Image 3.3: Examples of freshwater and saltwater fish, illustrating the heater's suitability for both types of aquatic environments.

4. PACKAGE CONTENTS

Upon opening the package, please verify that all the following components are included:

- 1 x AHJ Aquarium Heater (with anti-scald shell)
- 1 x External Controller

- 2 x Powerful Suction Cups
- 1 x Power Cable (1.5m/4.75 ft)



Product Parameters

POWER	Suitable water bodies	Suitable Fish Tank	Heating rod size (Length, width and height)	Temperature control range	Power cord length
300W	100-200L	40~70 gallon tank	291*42*52mm/ 11.45*1.65*2 inch	63°F-94°F/ 17-34°C	4.95ft/ 1.5m
500W	200-300L	75~120 gallon tank	322*42*52mm/ 12.67*1.65*2 inch	63°F-94°F/ 17-34°C	4.95ft/ 1.5m

Image 4.1: A visual breakdown of the package contents, including the heater, external controller, power cable, and suction cups.

5. SETUP AND INSTALLATION

1. **Placement:** Ensure the heater is fully submerged in the aquarium water. It can be placed vertically or horizontally, but complete submersion is critical for proper operation and safety.

2. **Secure with Suction Cups:** Use the provided suction cups to firmly attach the heater to the inside wall of your aquarium.
3. **Connect Power:** Plug the heater's power cable into a suitable electrical outlet. Ensure a drip loop is formed with the power cord to prevent water from traveling along the cord to the outlet.
4. **Initial Power On:** Once plugged in, the heater's LCD screen will illuminate, displaying the real-time water temperature.

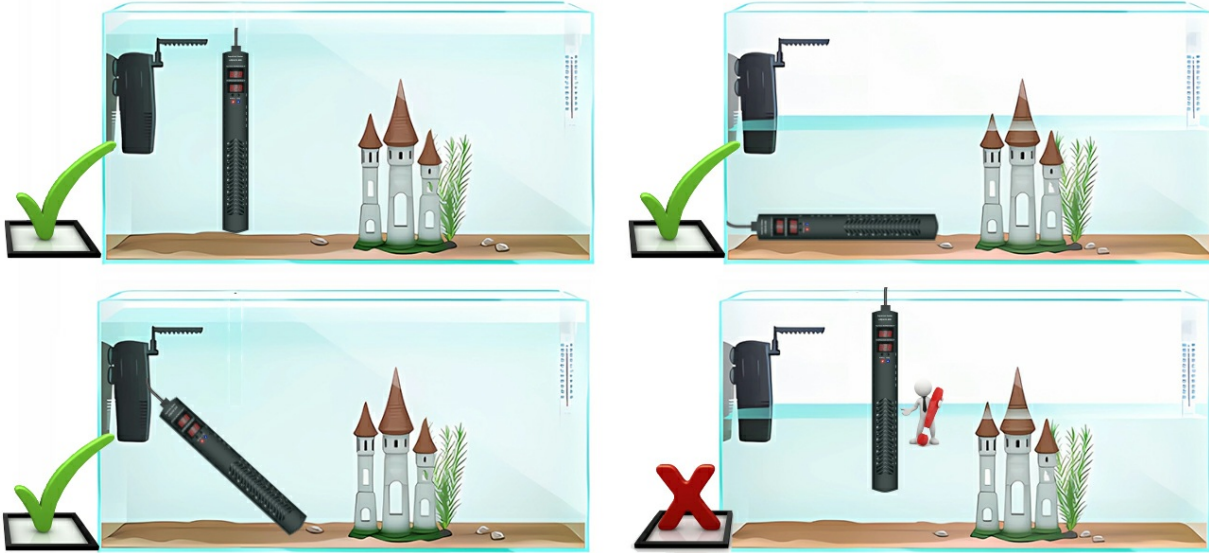


Image 5.1: Visual guide for correct heater placement, emphasizing full submersion and secure attachment.

6. OPERATING INSTRUCTIONS

1. **Setting Temperature:** Use the external controller to adjust the desired water temperature. Press the "SET" button on the external controller. Each press will cycle the setting temperature by 1°F within the range of 63°F to 93°F (17°C to 34°C).
2. **Monitoring Temperature:** The LCD screen on the heater will continuously display both the real-time water temperature and your set temperature.
3. **Heating Indicator:** A red LED light will illuminate when the heater is actively working and heating the water.
4. **Temperature Maintained Indicator:** A blue LED light will illuminate when the water temperature has reached and is being maintained at the set temperature.



Ultra-Safe Intelligent Water Sensor Accurate Temperature Control

keep water temperature consistent around setting temperature $\pm 1^{\circ}\text{F}$

Temperature monitoring

Real-time Temperature

74.0 °F

Temperature setting

74.0 °F



- External controller
- One key setting
- Easy to use

Image 6.1: Close-up of the heater's display and external controller, demonstrating how to set the temperature.

Your browser does not support the video tag.

Video 6.1: Official product video demonstrating the "Over-Temp Protect" and "Auto Shut-Off" features of the AHJ Fish Tank Heater.

7. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your aquarium heater.

- **Cleaning:** If the heater's temperature readings become inaccurate after a few months of use, it may be due to algae buildup.
 - a. Cut off the power to the heater.
 - b. Carefully remove the heater from the aquarium.
 - c. Clean any algae or debris attached to the heater.
 - d. For stubborn algae, soak the heater in a disinfectant (e.g., 84 disinfectant) for 1-2 hours. Ensure to rinse thoroughly before reintroducing to the tank.

Note: Algae attachment on the heater can affect its ability to accurately sense and transmit temperature.

8. TROUBLESHOOTING

Refer to the following common issues and their solutions:

Problem	Possible Cause / LCD Display	Solution
Heater keeps heating over the set temperature.	The aquarium or container is too small for the heater's wattage, causing rapid heating.	This is normal for small containers; the heater will stop heating after 3 to 5 minutes once the temperature stabilizes. Ensure the heater wattage matches your tank size.
LCD displays "HH" and flashes.	Over-temperature alarm: Water temperature exceeds 94°F (34°C).	The heater has automatically shut off for safety. Check ambient temperature or tank size. Allow water to cool naturally.
LCD displays "LL".	Low temperature alarm: Water temperature is lower than the set temperature.	This typically occurs during water changes or when the heater is first powered on in cold water. The heater will begin heating to reach the set temperature.
LCD displays "E1".	Lack of water protection: The water level is too low, or the heater is not fully submerged.	Immediately unplug the heater. Add water to the tank until the heater is fully submerged. Wait 15-20 minutes before plugging it back in.
LCD displays "E2".	Fish tank heater failure.	Unplug the heater. If the error persists after replugging and ensuring proper conditions, contact customer support.
Temperature is inaccurate.	Algae or debris attached to the heater's sensor.	Refer to the "Maintenance" section for cleaning instructions.

Questions & Answer

1. Before using, put the heater into a small container to test, find the heater keep heating over the setting temperature, why it happen?

A: The container is too small, the heater heating fast and higher than setting temperature. It will stop heating after 3 to 5 mins.

2. After a few months of use, the heater has an error and the temperature is inaccurate. What should I do?

A: Tips 1 : Cutting off the power, clean the heater to remove the algae attached to it., by Soak it in 84 disinfectant for 1-2 hours. The algae attachment on the heater will affect the sensing and transmission of the temperature

A: Tips 2 : Before you feel disappointment, Contact seller after-sale service, we believe communicate will help solve problems.

3. Why it show up HH/ LL/E2?

Low temperature alarm: LL, the water temperature lower than setting temperature, normally turn up at change water time.

The tank water level is too low: LCD displays letter E1

Fish tank heater failure: LCD displays letter E2

Image 8.1: Visual representation of common troubleshooting questions and their solutions.

9. SPECIFICATIONS

Specification	Detail
Brand Name	AHJ
Model Name	Fish tank heater
Item Model Number	heaters
Size	300W (40-55-75 Gallon)
Color	Black
Item Weight	1.3 pounds
Item Package Dimensions L x W x H	15.51 x 4.57 x 2.17 inches
Heating Rod Size (Length, Width, Height)	11.45 x 1.65 x 2 inches (291 x 42 x 52 mm)
Temperature Control Range	63°F - 94°F (17°C - 34°C)
Power Cord Length	4.95 ft / 1.5 m
Suitable Water Bodies	100-200L
Suitable Fish Tank	40-70 gallon tank
Target Audience Keyword	Fish
Age Range Description	All Life Stages
Date First Available	March 28, 2024



Packgae Including



Product Parameters

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Image 9.1: Detailed product parameters and dimensions for the AHJ Aquarium Heater.

10. WARRANTY AND SUPPORT

The AHJ Aquarium Heater comes with a **1-year warranty** from the date of purchase.

For any questions, concerns, or technical support, please contact our customer service. We are committed to providing innovative, reliable products and ensuring customer satisfaction.

If you encounter any issues not covered in the troubleshooting section, or if a problem persists, please reach out to us. We believe communication will help solve problems effectively.

You can visit the official AHJ Store on Amazon for more information and contact options:[AHJ Store](#)