

## AQQA AQ143

# AQQA AQ143 Intelligent Aquarium Heater User Manual

Model: AQ143 | Brand: AQQA

## 1. INTRODUCTION AND OVERVIEW

The AQQA AQ143 Intelligent Aquarium Heater is designed to maintain a stable and precise water temperature for your aquatic pets. Featuring advanced safety mechanisms and an external controller, this heater ensures optimal conditions for fish, reptiles, and aquatic plants in tanks ranging from 3 to 220 gallons, depending on the wattage model.

### Key Features:

- **Durable Construction:** Protective case made of corrosion-resistant, high-temperature materials with an explosion-proof quartz glass tube.
- **Rapid Heating:** High purity nickel wire ensures quick and efficient heating.
- **External Dual Display Controller:** High-definition display for accurate real-time and set temperatures.
- **Precise Temperature Control:** Set temperature range from 59°F-93°F (15°C-34°C) with 1-degree increment adjustments.
- **Automatic Power Off (Out of Water):** Heater automatically powers off and displays error code E1 if it leaves the water surface by 2.4 inches. Resumes normal operation when fully re-immersed.
- **Ultra-high Temperature Automatic Power-off:** Automatically cuts off power and displays error code HH if water temperature exceeds 95°F (35°C). Alarm releases when temperature drops below 95°F (35°C).
- **Memory Function:** Retains settings after power failure.
- **Versatile Use:** Suitable for both fresh and saltwater aquariums.

## 2. SAFETY INSTRUCTIONS

Please read all safety instructions carefully before operating the AQQA AQ143 Intelligent Aquarium Heater to prevent injury or damage to the product and your aquarium inhabitants.

- **Full Immersion:** The heater must be completely immersed in water for use. Never operate the heater out of water.
- **Cool Down Period:** If you need to remove the heater from the water, disconnect the power and allow it to cool down for at least 15 minutes before handling.
- **Pre-use Inspection:** Before first use, carefully check the glass tube for any cracks or damage. Do not use if damaged.
- **Power Cord Safety:** Ensure the power cord is not damaged or frayed. Do not use if the cord is damaged. Avoid creating a “drip loop” to prevent water from traveling along the cord to the outlet.
- **Placement:** For optimal performance and safety, it is recommended to place the heater at a vertical inclination of 30-45 degrees within the aquarium.
- **Household Use Only:** This heater is intended for household use only.

### 3. PACKAGE CONTENTS

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Upon opening the package, ensure all items are present and in good condition:

- 1 x AQQA Intelligent Aquarium Heater Unit
- 1 x External Temperature Controller with Power Cord
- 2-3 x Suction Cups (quantity may vary by model)
- 1 x User Manual

### 4. SETUP

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1. **Attach Suction Cups:** Securely attach the provided suction cups to the heater unit. These will hold the heater in place against the aquarium glass.
2. **Position the Heater:** Place the heater inside your aquarium, ensuring it is fully submerged in water. For best results, position it at a vertical inclination of 30-45 degrees. Ensure the heater is not obstructed by decorations or substrate to allow for proper water circulation.
3. **Connect to Power:** Plug the external temperature controller's power cord into a suitable electrical outlet. Ensure a drip loop is formed to prevent water from reaching the outlet.



Image: AQQA Aquarium Heater installed in a fish tank, showing proper placement and the external controller.

## Ultra-high Temperature Automatic Power-off



## Memory Function



Image: Diagram illustrating correct vertical and angled placement of the heater, and incorrect horizontal placement or partial immersion.

Video: An easy installation guide for the AQQA Aquarium Heater, demonstrating how to place it in the tank and connect the controller.



## 5. OPERATING INSTRUCTIONS

The AQQA AQ143 heater features an external controller for easy temperature adjustment and monitoring.

1. **Power On:** Once plugged in, the external controller will display the real-time water temperature (labeled 'Real' or 'Water Temp') and the set temperature (labeled 'Set Temp').
2. **Set Temperature:** Press the 'Set' button on the controller to enter setting mode. The set temperature display will flash. Use the 'Up' and 'Down' buttons (or single button press, depending on model) to adjust the desired temperature between 59°F and 93°F (15°C-34°C). Each press increases/decreases by 1 degree. The setting will automatically save after a few seconds of inactivity.
3. **Fahrenheit/Celsius Conversion:** Press and hold the 'Set' button for 8 seconds to switch between Fahrenheit (°F) and Celsius (°C) display modes.
4. **Heating Indicator:** A red light on the controller indicates that the heater is actively heating the water. A blue light (or no light) indicates that the heater has reached the set temperature and is in standby mode.
5. **Automatic Operation:** The heater will automatically turn on when the water temperature falls below the set temperature and turn off once the set temperature is reached.



Image: External controller displaying real-time water temperature and user-set temperature, with heating indicator lights.

Video: Demonstration of the AQQA AQ143 Fish Tank Heater, showcasing its features and how to set the temperature.

Video: A demonstration of the product's use, including setting the temperature and observing its operation.

## 6. MAINTENANCE

Regular cleaning and inspection are essential for the longevity and efficient operation of your AQQA Aquarium Heater.

- **Cleaning Frequency:** Disassemble and clean the heater once every 1-2 weeks of continuous use.
- **Disassembly:** The heater is designed for easy disassembly. Gently pull the casing apart section by section to access the internal components for cleaning.
- **Cleaning Procedure:** Use a soft brush or cloth to remove any algae or mineral buildup from the heater unit. Rinse thoroughly with aquarium water. Do not use harsh chemicals or detergents.
- **Reassembly:** Ensure all parts are dry and correctly reassembled before placing the heater back into the aquarium.



Image: Step-by-step guide on how to disassemble and clean the heater, along with illustrations of correct and incorrect heater placement.



## 7. TROUBLESHOOTING

The AQQA AQ143 Intelligent Aquarium Heater is equipped with safety features that display error codes in certain situations.

- **Error Code E1 (Out of Water):** If the heater leaves the water surface by 2.4 inches, it will automatically power off and display 'E1'. To resolve, ensure the heater is fully re-immersed in the water. It will automatically return to normal operation.
- **Error Code HH (Ultra-high Temperature):** If the real-time water temperature is detected to be above 95°F (35°C), the heater will automatically cut off power and display 'HH'. The alarm will be released once the water temperature drops to 95°F (35°C) or below.
- **Heater Not Heating:** Check if the power cord is securely plugged in. Verify that the set temperature is higher than the real-time water temperature. Ensure the heater is fully submerged.
- **Inaccurate Temperature Reading:** Compare the controller's reading with a separate, reliable aquarium thermometer. If there's a significant discrepancy, ensure the controller's sensor is clean and properly positioned.

### Multiple Protection

Out Of  
Water Power Off



Ultra-high  
Temperature  
Automatic  
Power-off



Image: Visual explanation of the 'Out of Water Power Off' (E1) and 'Ultra-high Temperature Automatic Power-off' (HH) safety features.

## 8. SPECIFICATIONS

Feature	Description
Brand Name	AQQA
Model Name	Aquarium Heater (AQ143)
Item Weight	0.7 Pounds (11.2 ounces)
Item Package Dimensions L x W x H	7 x 4.9 x 2.28 inches
Power Options	50W, 100W, 150W, 250W, 400W, 500W, 800W
Voltage/Frequency	US STANDARD: AC 110V-120V/60Hz
Cord Length	3.8ft+0.8ft (1.15m+0.25m) for smaller models; 3.9ft+2.6ft (1.2m+0.8m) for larger models
Application (Tank Size)	25W: 2-6.6 gal (8-25L) 50W: 3-10 gal (11-38L) 100W: 10-21 gal (40-80L) 150W: 15-30 gal (57-115L) 200W: 21-40 gal (80-150L) 300W: 40-70 gal (150-270L) 500W: 80-130 gal (300-500L) 800W: 120-220 gal (450-830L)
Temperature Accuracy	±1°F / ±1°C
Control Range	59°F-93°F / 15°C-34°C
Color	Black
Included Components	1*heater
Specific Uses for Product	Warm fish water



Image: Detailed product specifications table and visual representation of different wattage heaters with their dimensions.

## 9. WARRANTY AND SUPPORT

The AQQA AQ143 Intelligent Aquarium Heater comes with a **2-year manufacturer's warranty**. For any warranty claims, technical support, or product inquiries, please contact AQQA customer service through the retailer where the product was purchased.