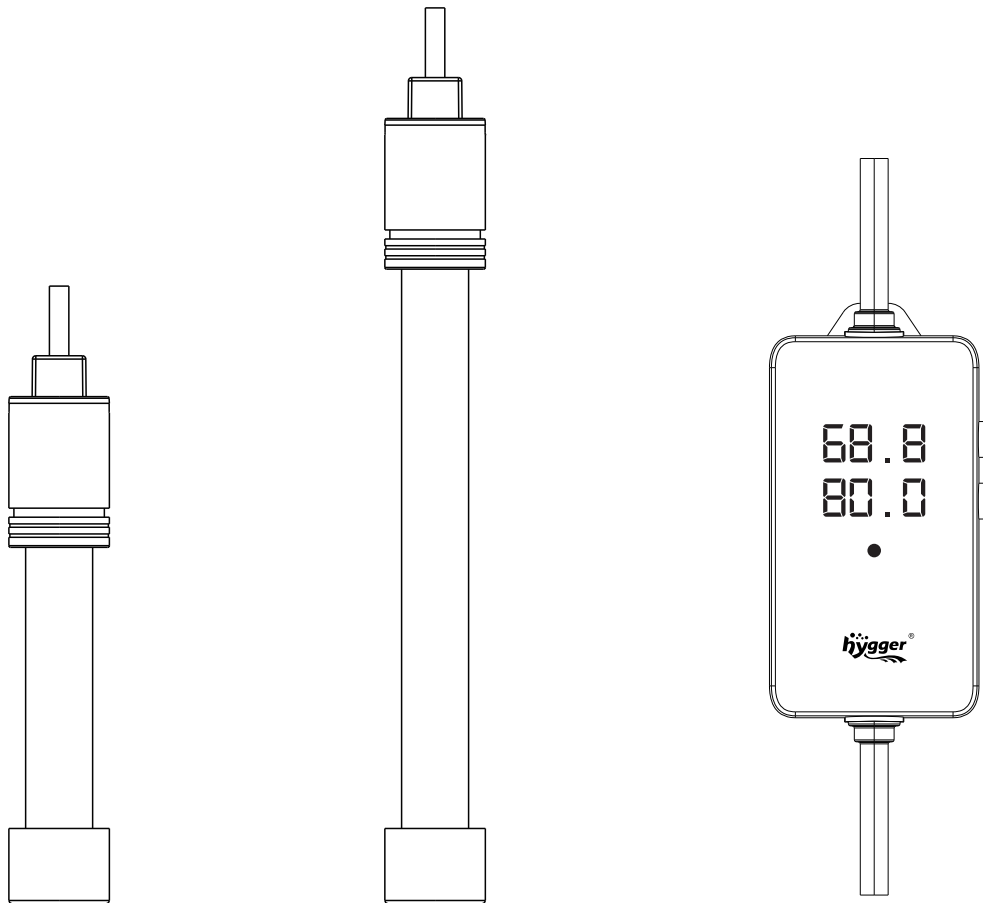




# HG253 USER MANUAL

## hygger Precise Aquarium Heater



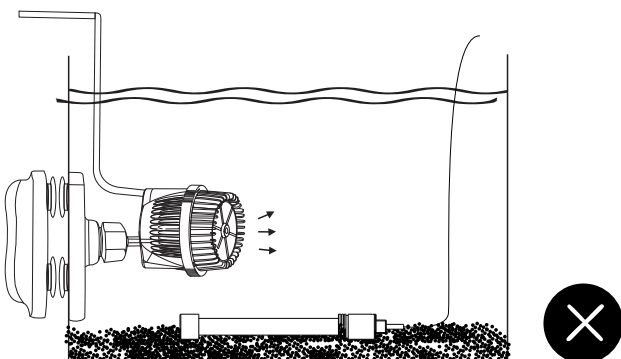
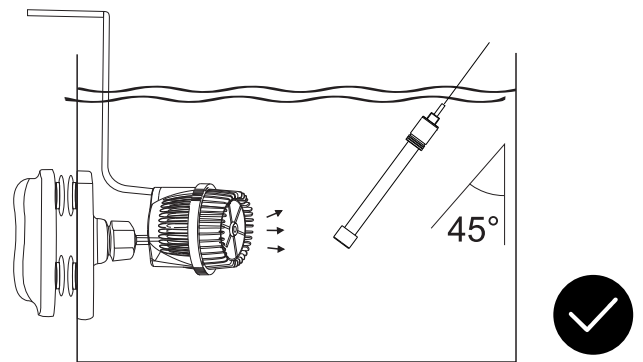
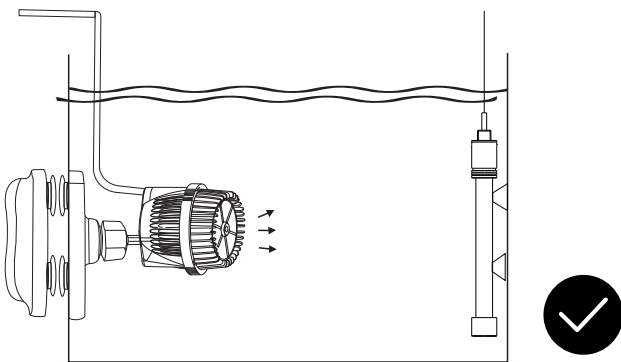
hygger Precise Aquarium Heater is a perfect heater for your freshwater or saltwater aquariums.

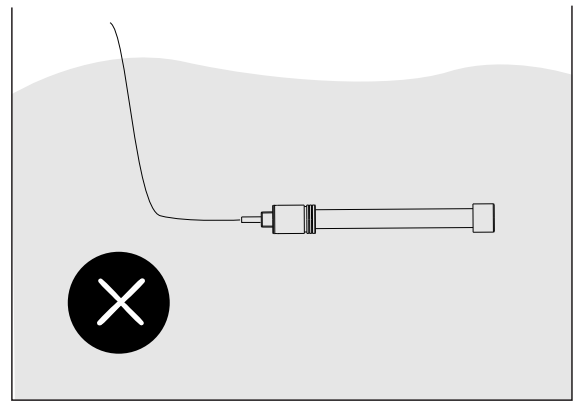
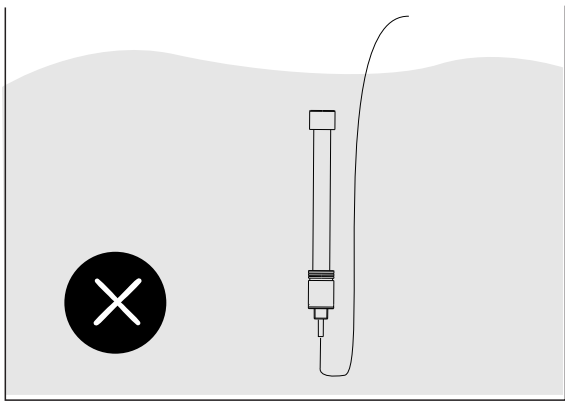
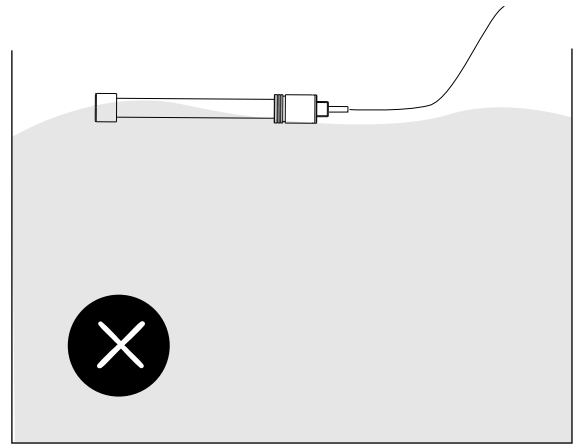
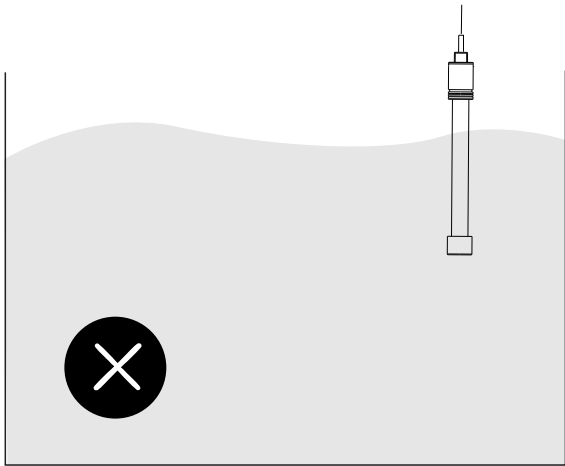
**\*\*Reminder: The controller is not waterproof; do not allow it to get wet\*\***



## Attentions:

- 1)The heater must be fully submerged in water when in operation. Unplug the heater and wait 15 minutes before changing the water or removing the heater from the aquarium. When removing the rod, do not pull the wire connected to the heating rod forcefully. Instead, hold the rod itself and take it out.
- 2)Our heating rod should be placed where the water flows faster or at the water inlet and tilted about 30-45 degrees for more accurate temperature measurements.
- 3)Please do not bury the heating rod or use it near the sand.
- 4)The area of the out-of-water sensing needs to be cleaned regularly to keep its protection function effective. (The accumulation of algae or dirt may cause the power-off function to fail when the heater is exposed to air)
- 5)As the out-of-water sensing is located at the top of the heating rod, when the heating rod is placed horizontally, the power-off protection function cannot be activated.





6)The controller is not waterproof; please keep it away from water.

7)Please do not disassemble this product or make any modifications that alter its structure, as such actions may cause harm to the product or the user.

8)If the power cord is damaged, it must not be used further to prevent potential hazards. The power cord cannot be repaired for reuse or replaced with another one.

9)Do not use this product with an incompatible voltage, as it may cause power display discrepancies and potentially damage the device.

# 1. PRODUCT FEATURES

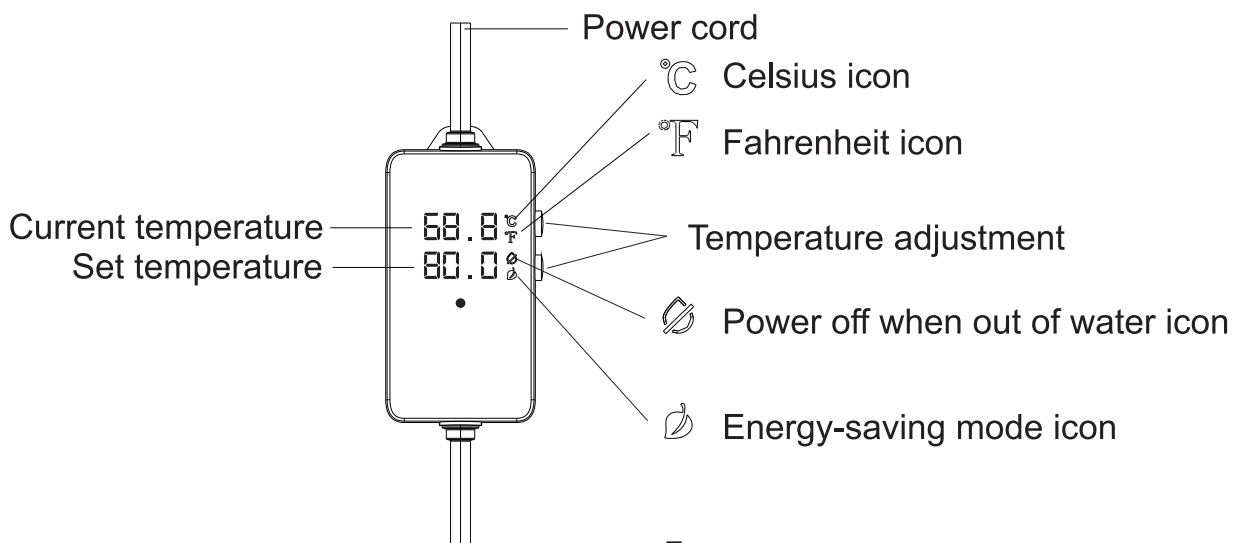
- ① **Reliable and Durable:** The heating rod is made of explosion-proof quartz glass, comes with a highly temperature-resistant nickel-chromium heating wire, and a heat conductor made of magnesium powder—safer, scientific, durable, and with a longer service life.
- ② **Malfunction Protection:** The alarm emits a buzzing sound and flashes its icon. If the heater does not work properly, it automatically triggers a buzzing alarm. If the heater is exposed to air, it will automatically cut off the power supply and display a warning signal to prevent accidents.
- ③ **Two Heating Modes:** Precise Mode and Energy-saving Mode, to meet the heating requirements at different times and environments.
- ④ **Temperature Calibration Function:** The product is equipped with an internal temperature calibration function, ensuring more accurate temperature measurement.
- ⑤ **Free Switching Between Fahrenheit and Celsius:** The temperature display unit can be switched whenever needed.
- ⑥ **Children Protection Function:** To prevent wrong operation by children, press and hold any of the buttons on the side for 3 seconds before starting the settings.

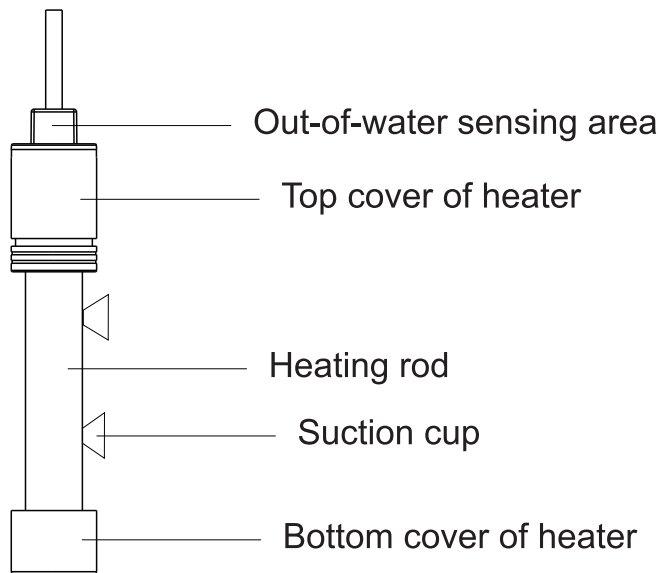
## 2. PRODUCT PARAMETERS

Model	HG253-50W	HG253-100W
Volt/Freq	US Standard: AC 110-120V/60Hz EU/UK/AU Standard: AC 220-240V/50Hz Japan standard:AC 100-110V/50-60Hz	
Power	50W	100W
Applicable tank size	5-10GAL (19-38L)	10-20GAL (38-75L)
Temp controller dimension	Φ30*145mm/ Φ1.2*5.7inches	Φ30*145mm/ Φ1.2*5.7inches
Cord length	3.3+3.93FT/1M+1.2M	
Control range	59°F-93°F ( 15°C-34°C )	
Temp accuracy	0.5°F ( 0.5°C )	
Temp tolerance accuracy	±2°F ( ±1°C )	
Display accuracy	0.1°F(0.1°C)	

Model	HG253-200W	HG253-300W	HG253-500W
Volt/Freq	US Standard: AC 110-120V/60Hz EU/UK/AU Standard: AC 220-240V/50Hz Japan standard: AC 100-110V/50-60Hz		
Power	200W	300W	500W
Applicable tank size	20-40GAL (75-151L)	40-60GAL (151-227L)	55-100GAL (208-378L)
Temp controller dimension	Φ30*233mm/ Φ1.2*9.2inches	Φ30*233mm/ Φ1.2*9.2inches	Φ30*278mm/ Φ1.2*10.9inches
Cord length	3.3+3.93FT/1M+1.2M		
Control range	59°F-93°F ( 15°C-34°C )		
Temp accuracy	0.5°F ( 0.5°C )		
Temp tolerance accuracy	±2°F ( ±1°C )		
Display accuracy	0.1°F(0.1°C)		

### 3. INSTRUCTIONS





## 4. TEMPERATURE SETTING STEPS

① Press and hold any button on the side of the controller for 3 seconds. The numbers on the display screen will flash. Release the button to enter the temperature adjustment mode.

② Press the upper button to increase the setting temperature, and press the lower button to decrease it. The temperature can be set between 59°F-93°F/15°C-34°C, and it can be precise to 0.5°F/0.5°C.

③ After selecting the desired temperature, the setting will be saved if you do not operate the device within 3 seconds. The temperature setting is complete.

### **Method for Setting Energy-saving Mode:**

① Press and hold the upper button for 6 seconds to activate the function of switching between Energy-saving Mode and Precise Mode. Then press it briefly to switch between the Energy-saving Mode and the Precise Mode. (The green energy-saving mode icon is always on, indicating entering energy-saving mode, while no display of the icon indicates entering precise mode.)

② In Energy-saving Mode, heating will be activated when the temperature drops by 1°C (1 ° F) below the set temperature.

③ In Precise Mode, heating will activate when the set temperature is 0.5 ° C /°F higher than the current temperature.

### **Temperature Calibration Method:**

First, hold on the upper button, unplug the power cord, and then plug it in, wait until the screen shows H01, and then enter the temperature calibration function. The left and right digits of the decimal point on the display screen will flash respectively. When flashing, you can increase or decrease the temperature by pressing the upper/lower button. After adjusting the temperature, wait for the display screen to flash for a few seconds and then stop flashing, which indicates that the calibration is complete. Please note that the maximum calibration temperature is  $\pm 3^{\circ}\text{C}$  ( $6^{\circ}\text{F}$ ). If it exceeds this range, all calibration parameters will be cleared.

### **Fahrenheit/Celsius Switching Function:**

First, hold on the upper button, unplug the power cord, and then plug it in, wait until the screen shows H01 and H02, activating the temperature switching function. The screen will display FFF or CCC (FFF indicates Fahrenheit and CCC indicates Celsius). Pressing the lower button can switch the display between FFF and CCC. After the Settings are completed, wait a few seconds for the screen to display the temperature, and the switching is done.

## **5. TROUBLESHOOTING**

<b>Faults</b>	<b>Explanations</b>	<b>Solutions</b>
E2	Overheating	Check if the heating rod is still heating. Yes - send it back to the factory for repair. No - check whether the water circulation is in good condition and other usage issues.
E3	Probe malfunction	Check if it is dry burning. Yes - cool it down and confirm again. No - send it back to the factory for repair.

<b>Faults</b>	<b>Explanations</b>	<b>Solutions</b>
E4	Communication failure	Do not share a socket with other devices. If it still can't be solved, send it back to the factory for repair.
L1 L2 H1 H2	Probe malfunction	Send it back to the factory for repair.

## **6. MAINTENANCE**

- 1.Regularly check the temperature display for any alarms or abnormal conditions.
- 2.Clean the water level detection area approximately once every three months by wiping off any attached algae or biofilm with your fingers.
- 3.Remove scale buildup from the rod by soaking it in a specialized descaling agent (recommended for purchase by the user).

## **7. WARNING**

To guard against injury, basic safety precautions should be observed including the following:

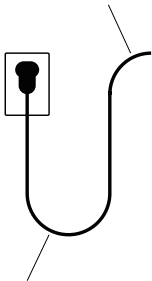
- 1.Read and follow this user manual strictly.
- 2.DANGER-To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium equipment. For each of the following situations, do not attempt to repair yourself; return the heater to an authorized service facility for service or discard the heater.
  - A.If the heater shows any sign of abnormal operation, unplug the power and remove the heater from water after 15 minutes.
  - B.Carefully examine the heater after installation. It should not be plugged

in if there is water on parts not intended to be wet.

C. Do not operate the heater if it has a damaged cord or plug, if it is malfunctioning, or if it is dropped or damaged in any manner. The power cord of this heater cannot be replaced; if the cord is damaged, the heater should be discarded.

D. To avoid the possibility of the heater plug getting wet, position aquarium stand and tank to one side of a wall mounted outlet to prevent water from dripping onto the outlet or plug. A “drip loop”, shown in the figure below, should be arranged by the user for each cord connecting the heater to the outlet. The “drip loop” is the part of the cord below the level of the outlet, or the connector. If an extension cord is used, to prevent water traveling along the cord and coming in contact with the outlet. If the plug or outlet does get wet, DO NOT unplug the cord. Disconnect the fuse to the circuit breaker that supplies power to the heater. Then unplug and examine for the presence of water in the outlet.

### **POWER CORD**



### **DRIP LOOP**

3. Close supervision is necessary when the heater is used near children. Daily supervision is necessary when the heater is being used.

4. This heater should not be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the heater by a person responsible for their safety.

5. To avoid injury, do not touch moving parts or hot parts.

6. Always unplug the heater from the outlet when not in use, before putting on or taking off parts, before maintenance, or placing hands in the water.

Never yank the cord to pull plug from outlet. Grasp the plug and pull gently to disconnect.

7. Do not use the heater for other than intended use. The use of attachments not recommended or sold by the appliance manufacturer may cause an unsafe condition and will void the warranty.

8. Do not install or store the heater where it will be exposed to the weather or to temperatures below freezing.

9. Only use in freshwater or saltwater aquariums; do not use the heater in other liquids.

10. Make sure the heater is securely installed before operating it.

11. Read and observe all the important notices on the heater.

12. If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less amperes or watts than the heater rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.

13. The heater is intended FOR HOUSEHOLD USE ONLY.

14. SAVE THIS USER MANUAL.

## 8. ATTENTION

- ✓ Please check all the items to inspect condition when unboxing the package.
- ✓ Please read and follow all the instructions carefully.
- ✓ Please choose a heater rated for your aquarium.
- ✓ Please place the heating rod in water flow and don't bury it in substrate.
- ✓ Please place the heating rod fully submersed in water when it's on duty. Unplug the heater and wait for 15 minutes before changing water or removing the heater.
- ✓ Please keep in mind that the heater can be turned off automatically when exposed to air, but it is a last resort and should be avoided.
- ✓ After using of the heater, calcium carbonate contained in algae or moss may clump and adhere to the heating rod.
- ✓ If dirt adheres to the heating rod, use a sponge or cloth and water to wipe it. Do not use alcohol or other chemicals as this may damage the heater and harm fish or livestock.
- ✓ When used for a prolonged period with dirt adhered to the heating element, be aware that it may cause failure due to the inability to control the temperature correctly.

## 9. DISPOSAL

Do not dispose this product as unsorted municipal waste. This product must not be disposed together with the domestic waste it must be disposed of at an authorized place for recycling of electrical and electronic appliances. By collecting and recycling waste, you help save natural resources, and make sure the product is disposed in an environmentally friendly way.



## 10. PACKAGE INCLUDED

- 1x Heater with a controller
- 2x Suction cup
- 1x User manual

## 11. CONTACT INFORMATION

E-mail: [service@hygger-online.com](mailto:service@hygger-online.com)

Website: [www.hygger-online.com](http://www.hygger-online.com) -11-

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