

# Instruction Manual

## Aquarium Heater

SC-06

SC-13

SC-14

SC-16

SC-17

- Fully submersible for safety
- Automatically keeps water at a constant temperature
- Digital display and external temperature control for easy setting
- High accuracy up to 0.5F
- Dry run protection, overheating protection, and low water-level protection
- Automatic shut-off when the heater leaves water ( not for SC-17 )

1

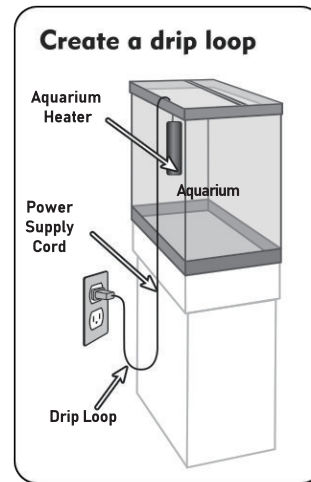
Thanks for buying our heater. To ensure you use the heater safely and correctly, please read carefully and thoroughly this instruction.

Please note that we are not responsible for any failure caused by misuse or improper maintenance. Save this instruction for future use.

### Important Safety Precautions

1. Please operate the appliance under the rated voltage and frequency indicated on pump rating label or instruction manual.

2. To avoid the possibility of the appliance, plug or outlet getting wet, position aquarium stand and tank (or any other reservoir that the heater will be used in) 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, should be arranged by



2

the user for each cord connecting an aquarium appliance to an outlet. The drip loop is that part of the cord below the level of the outlet or the connector to prevent water from traveling along the cord and coming in contact with the outlet.

3. The power cord is not replaceable. If the power cord or the plug is found hurt or damaged, or the plug is found aged, stop using the heater immediately. Return the heater to the retailer / distributor for disposal, or dispose it by yourself.

Do not attempt to shorten the power cord, or to remove the plug. Failure to meet this point may cause damage to the heater.

If an extension cord is necessary, a cord with proper rating should be used. A cord rated with less amperes or watts than the heater rating may result in overheating and can be very dangerous.

4. If abnormal smell or noise is found to the heater, unplug it immediately and check the cause. Contact your retailer / distributor if needed.

5. Make sure your hand and the plug is dry when plug in or unplug the heater. It is forbidden to plug or unplug the heater with a wet hand as this might cause electric shock.

6. Unplug the heater before installation and cleaning. Don't pull the power cord abruptly. To unplug, grasp the plug and pull it out from the receptacle.

3

7. Protect properly the heater. If severe collision happens to the heater, check if there is any damage. If there is any breakage, stop using the heater and destroy it.

8. This heater is for heating of fresh and marine water ONLY. DO NOT use it for any other liquids.

9. This heater is intended for HOUSEHOLD USE ONLY.

### Choose the right heater for your aquarium

It's critical to choose a device that can provide enough aquarium heat to maintain a healthy environment for your fish.

There are **three elements to consider** to determine the right heater for your aquarium size:

- Room temperature
- Aquarium water volume
- Desired temperature

Most aquarium experts recommend that you determine your heater's power in terms of watts per gallon (WPG). Typically, you will need around **2.5 to 5 watts per gallon** in your tank.

4

So for example, a 10-gallon aquarium would need a 25- to 50-watt heater.

Still, this is only a rough estimate—you will also need to consider the room temperature to make an accurate calculation.

If your room temperature is low, you will need a larger heater to raise the water temperature in your tank—a cold room may require more than 5 watts for each gallon of water.

Follow the chart below to choose the right heater for your aquarium.

TANK SIZE	HEAT (9°F/5°C)	HEAT (18°F/10°C)	HEAT (27°F/15°C)
6 Gallon (20 Liter)	25 Watt	50 Watt	75 Watt
10 Gallon (40 Liter)	50 Watt	75 Watt	75 Watt
20 Gallon (75 Liter)	50 Watt	75 Watt	150 Watt
25 Gallon (100 Liter)	75 Watt	100 Watt	200 Watt

- Hereby "HEAT" means the temperature you want to increase based on your room temperature.

#### How to use

##### ● Installation

Fit the provided suction cups to the heater, then fix the heater with the suction cups to the desired place in the aquarium / reservoir.

##### ● Correct positioning

The heater should be FULLY SUBMERGED in water and be placed in an area with good water flow.

The heater can be placed in water vertically or at an angle. Do not place in horizontally as this will cause the "power off when leaving water" function to fail.

##### ● Switching of Fahrenheit and Celsius

The temperature can be displayed in both Fahrenheit and Celsius. To make the switch, press and hold the SET button and plug in, the unit will be changed to another (either from F to C, or from C to F).

##### ● Connect to the power source

Fully submerge the heater in water, then plug into the power source. The digital screen on the thermostat will flash for 3 times and show the set temperature stored in the memory; then display the current water temperature.

##### ● Set the desired temperature

Short press the SET button once to enter the setting mode. The screen shows the set temperature. Adjust the number to the desired temperature by short pressing the button. When the number reaches the desired temperature, stop pressing, the number will flash for 3 times to confirm the setting is completed and this number will be stored in the memory. The screen will then automatically go back to display the current water temperature.

The valid temperature range is 64-93F or 18-34C. During the setting if the number exceeds 93F or 34C, the number will return to 64F or 18C.

##### ● Working status indicator

When the water temperature is lower than the set temperature by more than 0.2F or 0.2C, the heater will start to work. In this case the indicator will be in RED.

When the water temperature reaches the set temperature, the heater will stop heating. In this case the indicator will be in GREEN.

**Note that it may take hours for the heater to heat the water to the set temperature depending on the water volume, ambient temperature and the water movement situation.**

##### ● Overheating protection

If the water temperature exceeds 97F or 36C, the screen will show H1 and the heater will stop working.

The heater will start to work again when the water temperature goes lower than 93F or 34C.

#### Error codes

- E1. The heater is out of water and running dry. Fully submerge the heater into water, E1 will disappear.
- E2 / E3. The temperature sensor fails. In this case, please contact the retailer for help.

- H1. Overheating. Water temperature exceeds 97F or 36C. The heater will start to work again when the water temperature declines to be lower than 93F or 34C.

#### IMPORTANT REMINDER.

Heaters with a power rating above 300W should be placed at the water outlet or in areas with a water pump/filter for better circulation of hot water. Failure to do so may result in the hot water not dispersing promptly, leading to an H1 overheating situation.