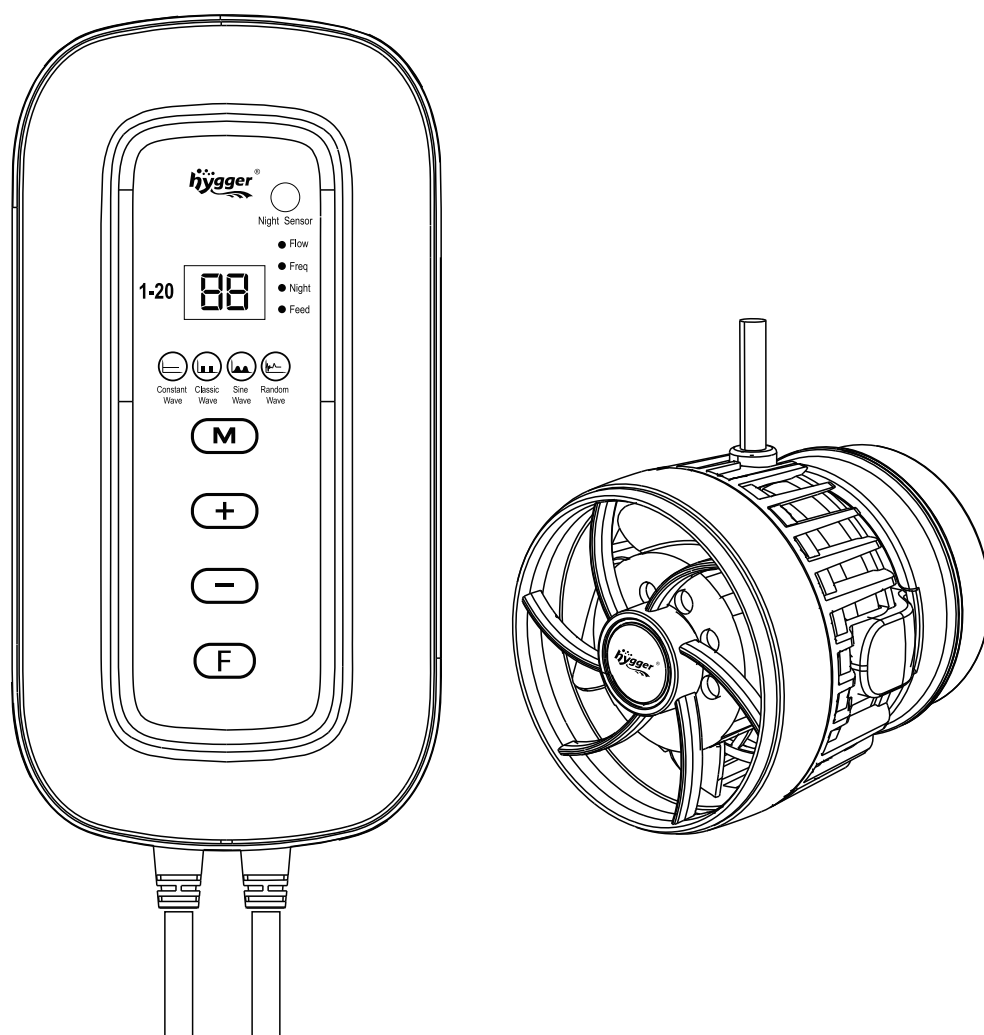




# HG165 USER MANUAL

## hygger Flow One Aquarium Wave Maker

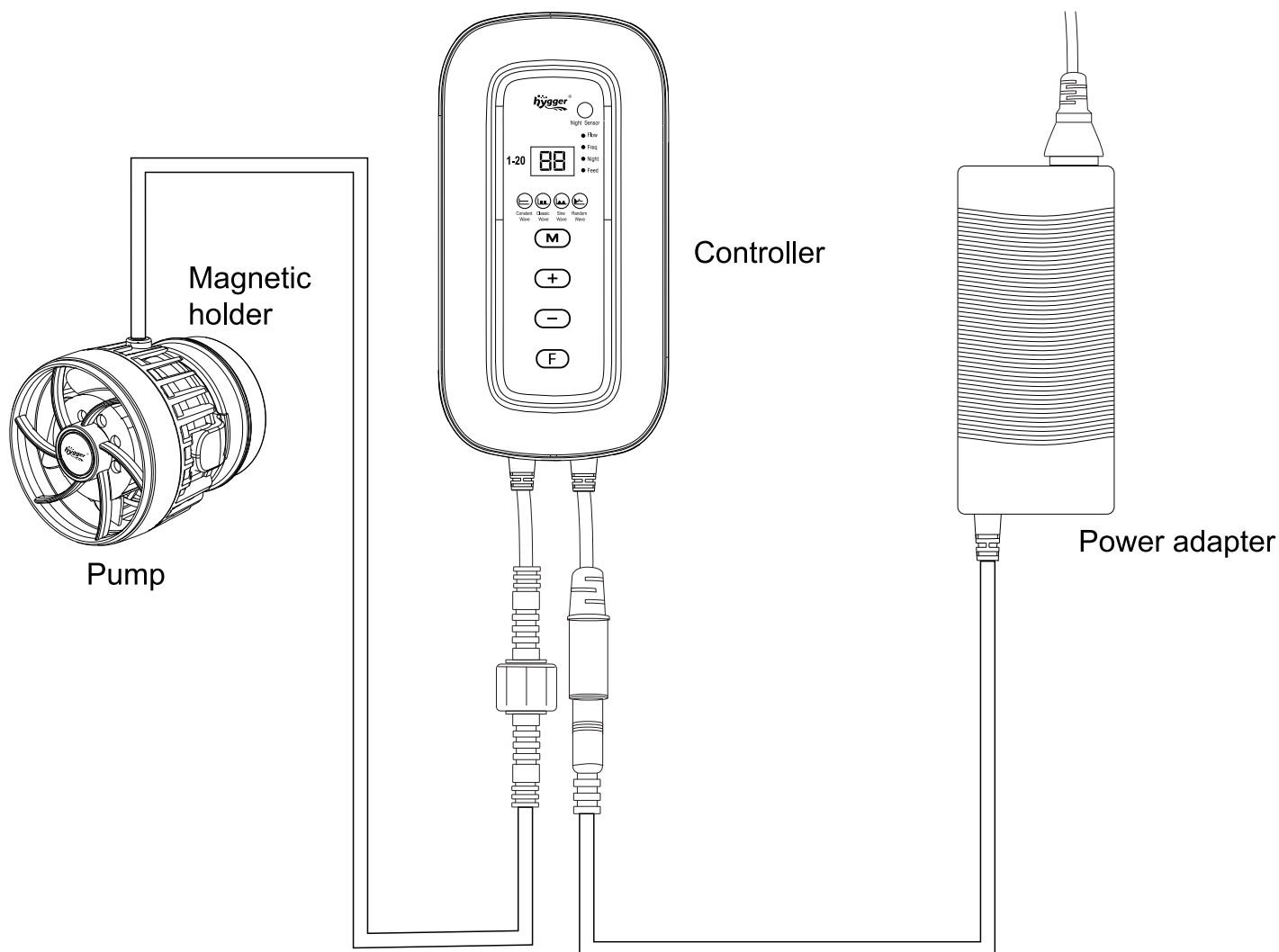


hygger Flow One Aquarium Wave Maker is an intelligent digital display controller that allows you to individually set wave modes, flow rates, and wave frequencies. The impeller is compact in size and powerful in performance. Please read this user manual carefully before use and keep it for future reference. Follow the instructions to ensure proper pump operation.

## 1. PRODUCT FEATURES

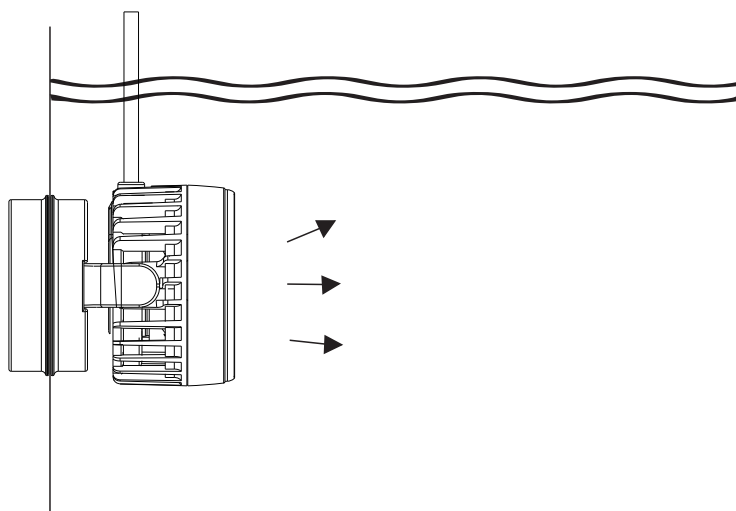
- The 24-volt DC power adapter is safe and energy efficient and consumes little power. Super quiet motor.
- Adjustable wave modes, flow rates, and wave frequencies.
- The super-quiet wave pump is controlled using sine wave technology.
- The strong magnetic holder is easy to install and move around.
- This pump is suitable for freshwater, saltwater, and reef aquariums.
- The pump is suitable for glass thicknesses up to 5/8 inches (15 mm).

## 2. PRODUCT DIAGRAM



## 3. INSTALLATION INSTRUCTIONS

- Detach the magnetic holder from the pump body.
- Connect the wave pump to the controller and the controller to the adapter. Plug in and go (Fig. 1)



- Place the pump at least 3 inches(7-8CM) underwater and attach it to the outer glass of the aquarium using the magnetic holder.

### CAUTION:

- Be careful not to pinch your fingers; the magnet is very strong.

## 4. INSTRUCTIONS FOR USING BUTTON FUNCTIONS

**Light Sensor**

**4 Function Modes:**

- 1) Flow
- 2) Frequency
- 3) Night
- 4) Feed

**4 Wave Modes:**

- 1) Constant Wave
- 2) Classic Cross-flow Wave
- 3) Sine Wave
- 4) Random Wave

**M Button: Mode Key**

Press once to select the wave mode from the four wave modes:  
Constant Wave Mode==>Classic Cross-flow Wave Mode==>Sine Wave Mode==>Random Wave Mode

**“+”or“—”Button**

Press “+”or“—”to adjust flow rate or frequency from 1~20.

**Attentions:**

- a. ONLY in constant wave mode can flow rates (from 1 to 20) be set; the frequency cannot be set.
- b. ONLY in Classic Cross-flow Wave Mode, Sine Wave Mode, and Random Wave Mode can frequency (from 1 to 20) be set; the flow rate cannot be adjusted.

**Feed Button**

Press briefly to activate the 10-minute feeding and press again to select between feeding minutes (20-30-60 minutes). Then press again to activate standby mode and then press to return to normal operating state.

## **\*\*Attentions \*\***

- Before starting up for the first time, make sure that your fish and invertebrates in the aquarium are larger than the grid size of the cover so that no animals are drawn into the pump.
- The controller is not waterproof. Please avoid contact with water to prevent electric shock and damage or injury.
- The pump should never run dry. Ensure that the appliance is always fully submerged when it is running, the water should be at least 3 inches(7-8CM) higher than the top edge of the pump to prevent damage.

## **5. HOW TO PROGRAM**

**4 Available Function Modes:** Flow, Frequency, Night, Feed

**4 Wave Modes:** Constant Wave Mode, Classic Cross-flow Wave Mode, Sine Wave Mode, Random Wave Mode.

### **How to set the Constant Wave Mode and Flow Mode?**

1. Briefly press the "M" button, and the icon of Constant Wave Mode  will light up, and the green indicator light "Flow" at the upper right corner will light up.
2. Then briefly press the "+" or "-" button again to select the flow rate, which can be set from 1 to a maximum of 20 levels. Two indicator lights  ● Flow light up to show that the setting is complete and the pump operates corresponding mode.

**Attention:** ONLY in constant wave mode can flow rates (from 1 to 20) be set; the frequency cannot be set.

### **How to set the Classic Cross-flow Wave Mode or Sine Wave Mode or Random Wave Mode and Frequency?**

1. Briefly press the "M" button, and the icon of Classic Wave Mode  will light up, and the green indicator light "Freq" at the upper right corner will light up. Then, press the "M" button alternately to select the desired wave mode. If a wave mode is selected, the corresponding indicator will light up.
2. Then briefly press the "+" or "-" button to adjust the frequency of classic cross-flow wave Mode, Sine Wave Mode, or Random Wave Mode.

**Attention:** ONLY in Classic Cross-flow Wave Mode, Sine Wave Mode, and Random Wave Mode can frequency be set; the flow rate cannot be adjusted.

### **How to set the Night Mode?**

1. The pump is delivered from the factory with the night mode light switched on automatically. The green night mode indicator light is always illuminated to indicate that this mode is switched on. However, this does not mean that the pump is operating in night mode at this time, but only when the light sensor detects that the light is dimming, the light sensor is switched ON and the night indicator ● Night lights up green, the pump is in low flow rate and "01" is displayed.
2. Press and hold the "M" button, the green indicator does not light up, means that the night mode is switched off. If you want to switch it on again, press and hold the "M" button, and the green "Night" indicator ● Night lights up, i.e., night mode is switched on.

## How to set the Feed Time?

3. Briefly press the "F" button to activate the 10-minute feeding, and the green indicator "Flow" will light up. Press again to select between feeding minutes (20-30-60 minutes). Then press again to activate standby mode and then press to return to normal operating state.

## 6. ATTENTION

The mains voltage and current frequency for the pump are specified. Your power supply must meet these requirements. Please do not use the wave pump with mains voltages and current frequencies other than those specified.

1. Never allow the pump to run dry for longer than 5 minutes. During operation, the device should always be completely covered by water to ensure a certain degree of cooling. The controller must not come into contact with water; you risk irreparable damage to the pump.
2. The device is suitable for use in fresh and salt water. Do not use it in flammable, acidic or corrosive liquids.
3. The appliance operates in clean water in a temperature range between 4 °C (39°F) and 35°C (95°F). Operation outside this temperature range may result in damage.
4. Never lift the device directly by the cable to avoid damaging it.
5. If the cable is damaged, take the appliance out of operation for safety reasons.
6. The controller must not fall into water or be operated in environments with high humidity. It is not waterproof. Please ensure that the controller is not placed in a dark location; so as not to cause the night function to fail.
7. The pump housing is held to the aquarium glass by a very strong magnet. Make sure that the two magnetic sides of the holder are never brought together without protection in between; they are very difficult to separate again.
8. Store the pump in its packaging when it is not in use.

## 7. TROUBLESHOOTING

Please note: Always disconnect the appliance from the power supply before troubleshooting.

| Error                      | Cause                                       | Solutions                                                                            |
|----------------------------|---------------------------------------------|--------------------------------------------------------------------------------------|
| The pump does not work     | Damaged power supply                        | Replace the power supply                                                             |
|                            | Damaged pump                                | Replace the pump                                                                     |
|                            | The controller is broken                    | Replace the controller                                                               |
|                            | The impeller is blocked                     | Remove the impeller and clean it                                                     |
|                            | The motor protection function has triggered | Disconnect the device from the power supply for two seconds and then plug it back in |
| Insufficient water current | The impeller is clogged                     | Clean the impeller                                                                   |
|                            | The water inlet or outlet is blocked        | Clean the water inlet or outlet                                                      |

| Error                                    | Cause                             | Solutions                                                                                                                                                                                                                                                       |
|------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The pump switches off after a short time | Dirty water                       | Carry out a water change                                                                                                                                                                                                                                        |
|                                          | The water temperature is too high | Please note that the maximum temperature is 35 °C                                                                                                                                                                                                               |
| E1                                       | Overvoltage                       | When the voltage of the pump greater than DC29V, the pump will stop working. When the voltage returns to normal, the pump resumes operation                                                                                                                     |
| E2                                       | Undervoltage                      | When the voltage of the pump is less than DC14V, the pump will stop working. When the voltage returns to normal, the pump resumes operation                                                                                                                     |
| E3                                       | Overcurrent                       | If the current is more than 1 times the rated power, the pump will stop working                                                                                                                                                                                 |
| E4                                       | Dry running                       | When the pump runs dry, the pump will stop working. After a minute, the pump will start again, if the idling protection is detected again, the pump will stop working again. If this situation occurs repeatedly 5 times, the pump will stop working completely |
| E5                                       | Motor blockage                    | When the motor is blocked, the pump will stop working. After a minute, the pump will start again, if the motor blockage is detected again, the pump will stop working again. If this situation occurs repeatedly 5 times, the pump will stop working completely |

## 8. MAINTENANCE

1. Before carrying out maintenance work on appliances operating under water, always disconnect them from the power supply.
2. Cleaning: First disconnect the plug connection from the controller and pump. Remove the cover on the front of the pump and remove the impeller and axle. Then carefully clean all pump parts with a soft brush in clear water. After cleaning, reassemble the device as explained in the relevant operating instructions.
3. Make sure that the plug connections never get wet during cleaning.

## 9. PACKING LIST

- 1x Controller
- 1x Power adapter
- 1x 3M sticker
- 1x Pump
- 1x User manual

## 10. PRODUCT SPECIFICATIONS

| Model     | Voltage | Power                      | Max flow rate  | Applicable aquarium size |
|-----------|---------|----------------------------|----------------|--------------------------|
| HG165-18W | DC24V   | Maximum:18W<br>Minimum: 6W | 1850GPH/7000L  | 55-70Gallons(208-264L)   |
| HG165-25W | DC24V   | Maximum:25W<br>Minimum: 9W | 2642GPH/10000L | 70-120Gallons(264-440L)  |

## 11. WARNING

To avoid possible electric shock, do not immerse the switch in the water. If the switch falls into the water or becomes wet, do not touch it until you have unplugged it. Basic safety precautions that should be observed are as follows:

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. Instead, return the pump to an authorized service facility for maintenance or discard it.

A.If the pump shows any sign of abnormal water leakage or RCD (or GFCI- Ground Fault Current Interrupter), unplug the power and remove the pump from water.

B.Carefully examine the pump after installation. It should not be plugged in if there is water on parts that are not intended to be wet.

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

D.To avoid the possibility of the pump plug getting wet, position the aquarium and its stand 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, which connects the pump to the outlet. If an extension cord is used, the “drip loop” is the part of the cord below the level of the outlet or the connector that prevents water from 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 pump. Then unplug and examine for the presence of water in the outlet. If you are not sure, consult a certified electrician.

**POWER CORD**



**DRIP LOOP**

3. Close supervision is necessary when the pump is used near children.
4. To avoid injury, do not contact moving or hot parts.
5. Always unplug the pump from the outlet when not in use, before putting on or taking off parts, maintenance or placing hands in the water. Never yank the cord to pull the plug from the outlet. Grasp the plug and pull to disconnect.
6. Do not use the pump 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.

## 12. DISPOSAL

Do not dispose of this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary. This product has to be disposed of at an authorized place for the recycling of electrical and electronic appliances rather than being disposed of together with the domestic waste. Collecting and recycling waste is a way of saving natural resources. So, please consult with your local seller to make sure the product is disposed of in an environmentally friendly way.



## 13. CONTACT INFORMATION

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