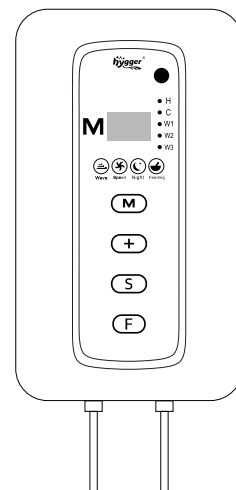
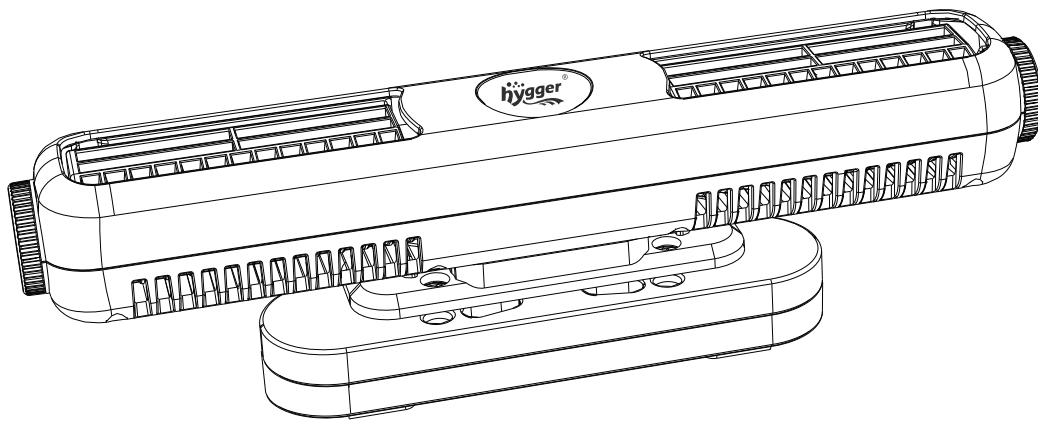




# HG295 USER MANUAL

## hygger Large DC Wave Maker



hygger Large DC Wave Maker is made of high quality material, beautiful and simple, easy to operate. It is suitable for wave generation, simulating tidal frequencies, and water circulation in aquariums and fish tanks.

# 1. PRODUCT FEATURES

**Advanced Control System:** Equipped with a unique control system, it features multiple wave-making modes and functions to meet any waveform required by users.

**Safe DC Frequency Conversion:** Adopt low-voltage frequency conversion DC pumps to enhance user safety.

**User-Friendly Operation:** An intuitive control panel enables easy setting of complex marine dynamic parameters.

**Adjustable Flow Direction:** You can adjust the water flow direction at an Angle as needed to realize customized current.

**Wide Voltage Input (AC 100-240V, 50/60Hz):** Compatible with various power grids and resistant to voltage fluctuations.

**Compact & High-Flow Design:** The space-saving size combined with a wide impeller for a powerful high-flow output.

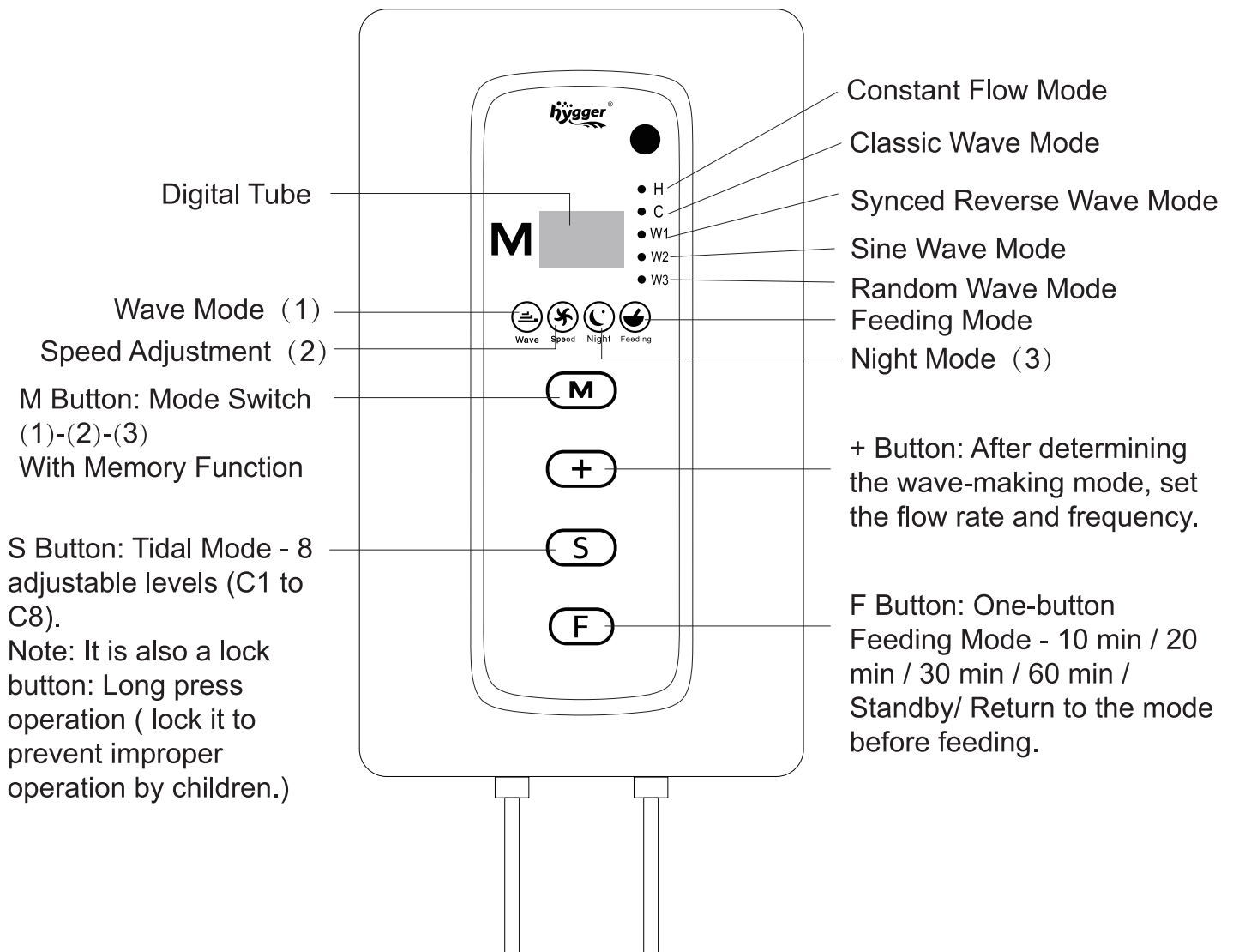
**Ultra-quiet Operation:** Adopting sine wave technology and an 8-pole silent motor, it achieves the lowest noise.

# 2. PRODUCT SPECIFICATIONS

Model	HG295-25W	HG295-35W	HG295-45W	HG295-55W
Power (W)	25W	35W	45W	55W
Volt/Freq	Input: AC 100-240V 50/60Hz Output: DC 24V			
Flow rate	2000GPH (8000L/H)	3100GPH (12000L/H)	3900GPH (15000L/H)	4750GPH (18000L/H)
Size of the pump	11.14*3.35*1.89"	11.18*3.35*1.89"	13.70*3.82*2.28"	13.70*3.86*2.28"
Recommend glass thickness	≤0.5"			
Recommend tank size	2.0-3.2FT (0.6-1.0M)	3.2-4.9FT (1.0-1.5M)	3.9-6.6FT (1.2-2.0M)	4.9-8.2FT (1.5-2.5M)
Cord length	7.5+4.9FT/2.3+1.5M			

### 3. INSTALLATION INSTRUCTIONS

1. Compatible with most fish tank sizes, it supports glass thicknesses of up to 15mm.
2. Package includes: 1x Smart Controller, 1x Power Adapter, 1x Power Cord, 1x Cross-Flow Wave Pump, 1x User Manual.
3. Use a powerful magnetic bracket to secure mount the water pump in the fish tank. Warning: Strong magnet - Please be careful to avoid pinching fingers.
4. Placement of the controller: Place the controller in a suitable and dry position outside the aquarium.
5. Connection: Connect the pump to the controller with the 3-pin quick-connect cable. Then, plug the adapter's DC plug into the controller and connect the AC power cord to the adapter.



## 4. DISPLAY INSTRUCTIONS

1. **Digital Tube Display:** During normal operation, it shows the current working flow rate range (L1-L9). When you need to adjust the frequency during wave-making mode, it shows the tidal frequency range (C1-C8). When in the feeding mode, it shows the remaining feeding time. In standby mode, it shows "—". For fault display, refer to the TROUBLESHOOTING.

2. **Functional Indicator Lights:** When the wave-making indicator is on, wave-making mode is available. When the speed adjustment indicator is on, you can adjust the pump's flow rate. When the night indicator is on, night mode is active. When the feeding indicator is on, it indicates that the pump is in feeding operation or standby mode.

3. **Operation Mode Indicators:** "H" constant current working mode, adjustable flow from L1 to L9. "C" classic wave mode (adjustable frequency from C1 to C8); "W1" Synced Reverse Wave Mode (adjustable frequency from C1 to C8); "W2" sin wave mode (adjustable frequency from C1 to C8); "W3" random wave mode (adjustable frequency from C1 to C8).

4. **Button Indicators:** When the button indicators are on, you can operate normally; when the indicators are off, the buttons are locked. Press and hold the S button to return to the normal state (for details, refer to the button instructions).

## 5. BUTTON INSTRUCTIONS

1. **(M)** Button: Switch the functions (Wave Mode) → (Speed Adjustment Mode) → (Night Mode).
2. **(+)** When the wave indicator is on, press "+" to switch the wave mode between H-C-W1-W2-W3. When in constant mode, press the "+" to adjust the flow rate speed between L1 and L9.
3. **(S)** Button: Adjusts the tide duration levels (C1-C8) when in C, W1, W2, or W3 mode. Press and hold to lock it to prevent improper operation by children.
4. **(F)** Button: Switch the feeding mode. Press during normal operation to cycle through feeding durations: 10 min → 20 min → 30 min → 60 min → Standby → Return to the mode before feeding.

## 6. OPERATION MODE INSTRUCTIONS

1. "H" - Constant Flow Mode: Flow rate is adjustable from L1 to L9.
2. "C"- Classic Wave Mode: Wave frequency is adjustable from C1 to C8.
3. "W1" - Synced Reverse Wave Mode: Wave frequency is adjustable from C1 to C8.
4. "W2" - Sine Wave Mode: Wave frequency is adjustable from C1 to C8.
5. "W3" - Random Wave Mode: Wave frequency is adjustable from C1 to C8.

## 7. INSTRUCTIONS FOR FUNCTIONS

**1.Night Mode:** When activated, the pump automatically switches to Constant Flow Mode and operates at the minimum flow level (L1).

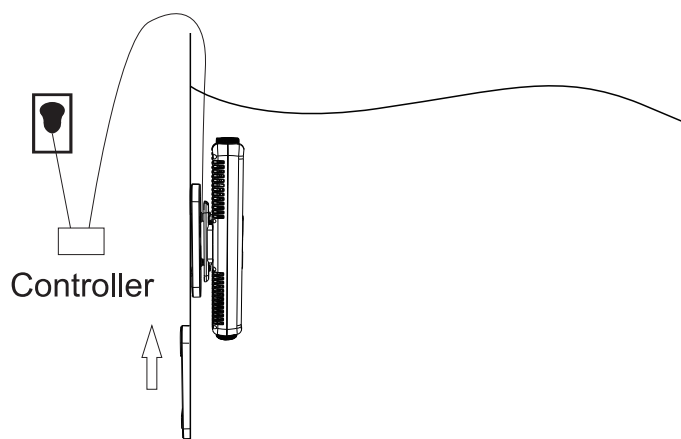
**2.Memory Function:** The pump retains settings after a power outage, including operation mode, flow rate level, tide duration level, and the lock status.

## 8. TROUBLESHOOTING

Fault	Display	Reason	Solution
Over-voltage Protection	E1	Input voltage exceeds 29V DC	Return to normal working voltage range
Under-voltage Protection	E2	Input voltage is below 14V DC	Return to normal working voltage range
Over-current Protection	E3	Motor current is too high	Return for inspection and repair
Dry-run Protection	E4	Pump enters protection mode after running dry for 1 minute	Fully submerge the pump and restart it
Locked-rotor Protection	E5	Pump enters protection mode after detecting a locked rotor	Return for inspection and repair

## 9. MAINTAINING

- Clean the pump regularly to ensure optimal performance.
- If the surface of the controller gets wet, please dry it immediately with a cloth to prevent water from seeping in.
- To remove debris from the pump, please rotate the front cover counterclockwise to unlock it. After cleaning the interior, rotate the cover clockwise to relock it.



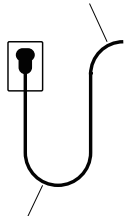
4. Gently wipe the impeller with a soft cloth and rinse the pump housing with water to remove dirt.
5. This product is for indoor use only. Do not immerse the controller and power adapter in water to avoid damage.

## 10. 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. When installing the magnetic holder, carefully align and secure the external mount by sliding it smoothly along the glass to avoid impact damage.
3. **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

4. Close supervision is necessary when the pump is used near children.
5. This pump is not allowed to 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 the use of the pump by a person responsible for their safety.
6. To avoid injury, do not contact moving or hot parts.
7. 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.
8. 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.
9. Do not install or store the pump where it will be exposed to extreme weather or temperatures below freezing. This pump is suitable for use in water temperatures between 40°F~95°F (4°C~35°C).
10. Do not run dry or out of water.
11. Only use the pump in freshwater or saltwater, do not use it in other liquids.
12. Make sure the pump is securely installed before operating it.
13. Read and observe all the important notices on the pump.
14. If an extension cord is necessary, a cord with a proper rating should be used, such as rated amperes or watts. A cord rated for fewer amperes or watts than the pump rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
15. The pump is intended FOR HOUSEHOLD USE ONLY. Do not use or mount this pump in such a way that the top vents are restricted or blocked. These vents are necessary to avoid overheating and ensure safe operating temperatures.
16. All the pumps will undergo professional water tests by manufacturers before shipment. If the pump you received has a little water, please don't worry, it was left due to the water test and is a normal phenomenon. The pump is definitely new and normal.
17. SAVE THIS USER MANUAL.

## 11 . 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.



## 12. PACKING LIST

- 1x Wave pump(an inside magnetic holder is included)
- 1x Controller
- 1x Power adapter with cable
- 1x Outside magnetic holder
- 1x User manual

## 13. CONTACT INFORMATION

Contact us at [www.hygger-online.com](http://www.hygger-online.com)  
Email: [mago@hygger-online.com](mailto:mago@hygger-online.com)