

## hygger HG166

# hygger Intelligent Wave Maker User Manual (Model HG166, 25W)

Comprehensive instructions for installation, operation, and maintenance.

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## 1. INTRODUCTION

Thank you for choosing the hygger Intelligent Wave Maker. This device is designed to create natural water flow and circulation within your aquarium, promoting a healthier environment for fish and corals. It features multiple wave modes, a night mode, feeding mode, and wireless connectivity for multi-pump setups. Please read this manual thoroughly before installation and operation to ensure proper use and longevity of your product.



Image: The hygger Intelligent Wave Maker controller and pump in operation, demonstrating water movement.

## 2. IMPORTANT SAFETY INSTRUCTIONS

- Read all instructions carefully before using the appliance.
- Do not operate any appliance if it has a damaged cord or plug, or if it malfunctions or has been dropped or damaged in any manner.
- To avoid the possibility of the appliance plug or receptacle getting wet, position the aquarium stand and tank to one side of a wall-mounted receptacle to prevent water from dripping onto the receptacle or plug.
- A "drip loop" should be arranged by the user for each cord connecting an aquarium appliance to a receptacle. The

drip loop is the part of the cord below the level of the receptacle, or the connector if an extension cord is used, to prevent water from traveling along the cord and coming into contact with the receptacle.

- Always unplug the appliance from the outlet when not in use, before putting on or taking off parts, and before cleaning. Never yank cord to pull plug from outlet. Grasp the plug and pull to disconnect.
- Do not use the appliance for anything other than its intended use.
- Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.
- Ensure the wave maker is fully submerged in water during operation.
- Keep out of reach of children.

### 3. PACKAGE CONTENTS

Upon unpacking, please verify that all the following components are included:

- Hygger Intelligent Wave Maker Pump Unit
- External Controller with Digital Display
- Magnetic Holder
- Power Adapter
- User Manual

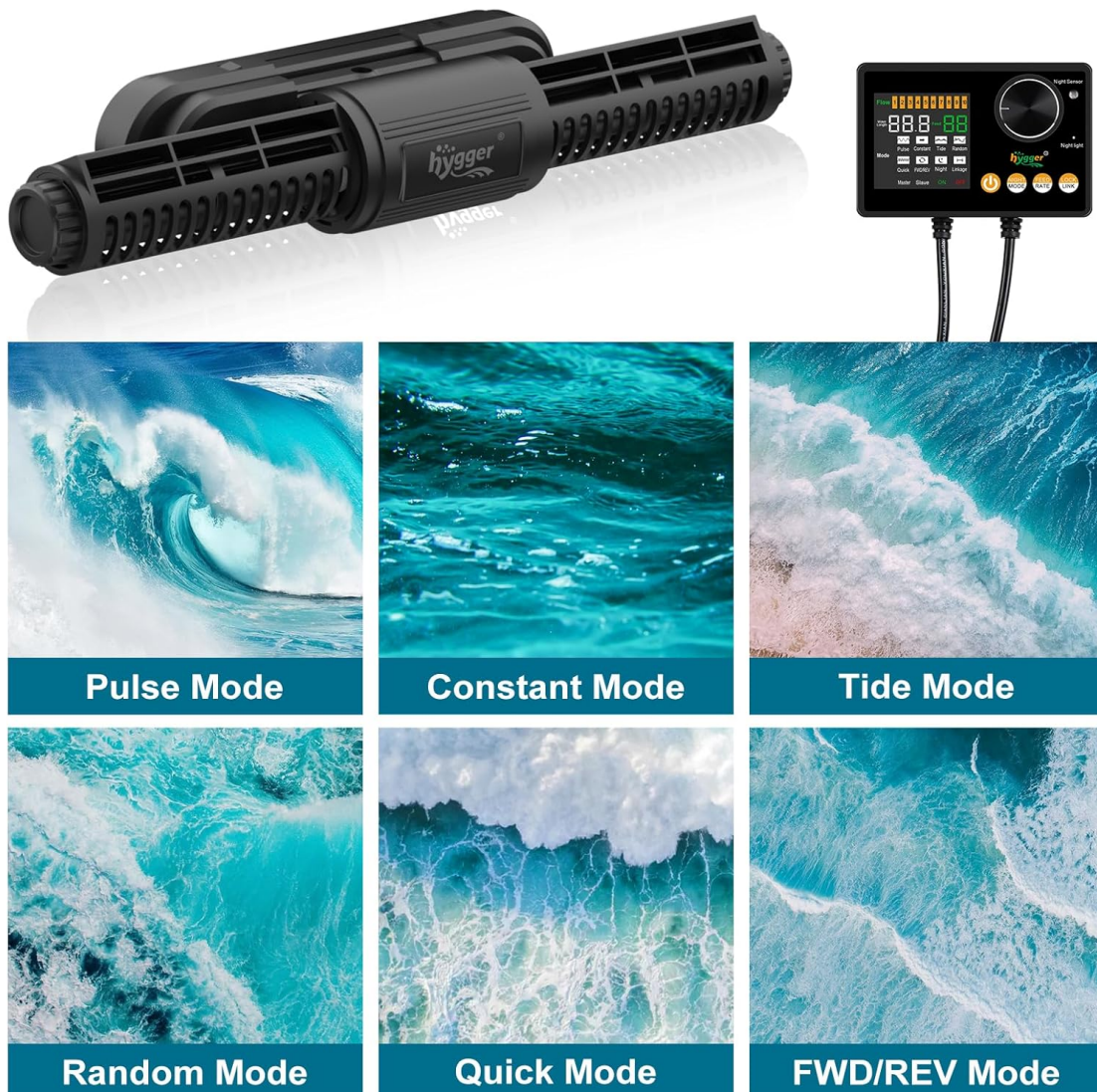


Image: The main components of the hygger Intelligent Wave Maker: the pump unit and the external controller.

### 4. PRODUCT OVERVIEW

#### 4.1 Components

The hygger Intelligent Wave Maker consists of a submersible pump unit and an external controller. The pump unit features a rotatable wide wave outlet for multi-directional flow. The controller provides a digital display and intuitive buttons for mode selection and adjustments.



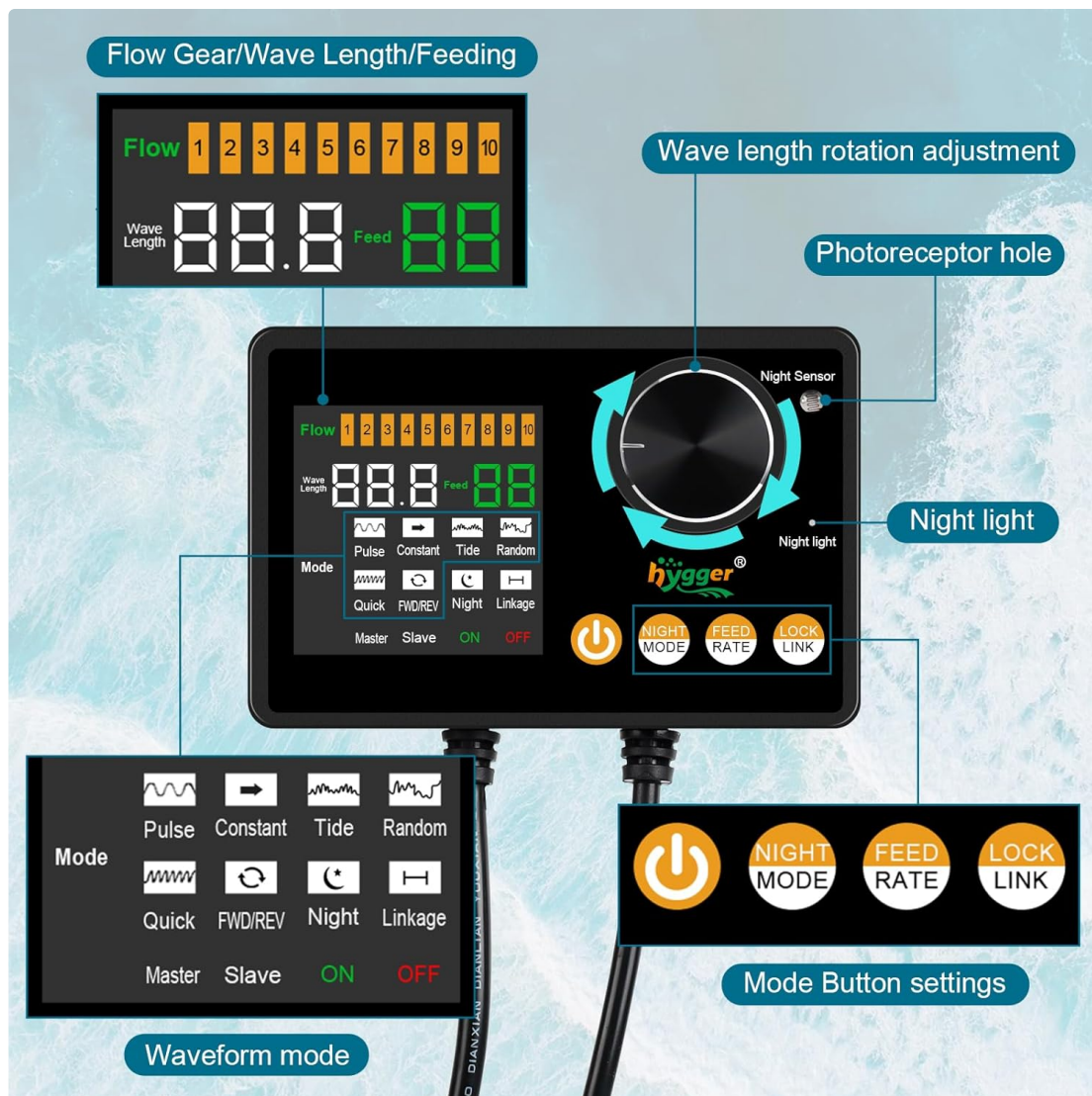


Image: Detailed view of the controller, highlighting the digital display, mode buttons, night sensor, and wave length adjustment knob.

## 4.2 Key Features

- **6 Wave Maker Modes:** Constant, Pulse, Tide, Random, Quick, FWD/REV.
- **Adjustable Wave Length and Flow Rate:** Customize water movement for various aquarium needs.
- **Rotatable Wide Wave Outlet:** Directs water flow in multiple angles, reducing impact on fish and plants.
- **Night Mode:** Automatically switches to a lower flow rate when ambient light dims, promoting fish rest.
- **Feeding Mode:** Temporarily pauses the pump for 10 minutes during feeding.
- **Wireless Connection:** Allows multiple pumps to operate alternately under a single master controller.
- **Memory Function:** Retains settings after power loss.
- **Low Water Level Protection:** Automatically stops operation if water level is too low.
- **Strong Magnetic Base:** Secure and easy installation/removal, with silicone sleeve for noise reduction and tank protection.



Image: Visual representation of the Memory Function, Protection Reminder, and Feeding Mode features.

## 5. INSTALLATION AND SETUP

## 5.1 Connecting Components

1. Connect the wave maker pump unit cable to the controller.
2. Connect the power adapter to the controller.
3. Plug the power adapter into a suitable electrical outlet, ensuring a drip loop is formed.



Image: Connection diagram illustrating how to link the wave pump, controller, and power adapter.

## 5.2 Mounting the Wave Maker

- Place the wave maker pump unit inside the aquarium, ensuring it is fully submerged.
- Attach the external magnetic holder to the outside of the aquarium glass, aligning it with the internal pump unit. The strong magnets will secure the pump in place.
- Ensure the silicone sleeve on the magnetic holder is properly positioned to prevent scratching the tank wall and reduce noise.
- Position the pump to direct water flow as desired. The outlet can be rotated to adjust direction.



Image: The wave maker pump unit securely mounted inside an aquarium using its strong magnetic base holder.

## 5.3 Initial Power-On and Low Water Protection



Once connected and mounted, the unit will power on. The controller will display current settings. The wave maker is equipped with low water level protection. If the water level in the aquarium is too low, the pump will automatically stop operating to prevent damage. Ensure the pump is always fully submerged during operation.



Image: The controller display indicating low water protection, along with visuals for feeding mode and wireless connection setup.

## 6. OPERATION

### 6.1 Controller Functions

The external controller allows for easy adjustment of all settings:

- **Power Button:** Turns the wave maker ON/OFF.
- **Mode Buttons:** Select from the 6 wave modes (Pulse, Constant, Tide, Random, Quick, FWD/REV).
- **Night Mode Button:** Activates or deactivates the automatic low flow night mode.
- **Feed Rate Button:** Initiates a 10-minute pause for feeding.
- **Lock/Link Button:** Locks current settings or initiates wireless linking for multiple pumps.
- **Adjustment Knob:** Used to adjust flow rate (Flow 1-10) and wave length.
- **Night Sensor:** Detects ambient light levels for automatic night mode activation.

### 6.2 Wave Maker Modes

The wave maker offers six distinct modes to simulate various natural water movements:

1. **Constant Mode:** Provides a continuous, fixed waveform output water flow.

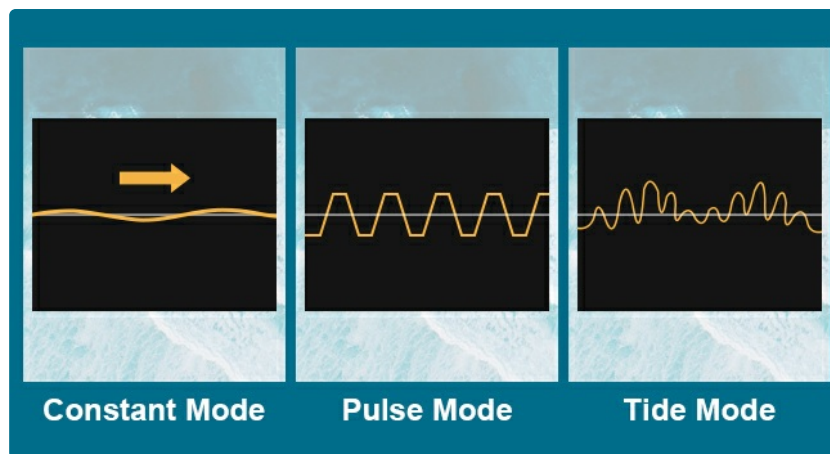


Image: Visual representation of Constant, Pulse, and Tide wave patterns.

2. **Pulse Mode:** The motor quickly pushes out a wave at maximum power, then drops to minimum power, repeating the cycle.
3. **Tide Mode:** The motor slowly increases to maximum speed and then slowly decreases, mimicking the rise and fall of tides.
4. **Random Mode:** The flow rate has no standard rhythm, operating randomly to create turbulent water movement.

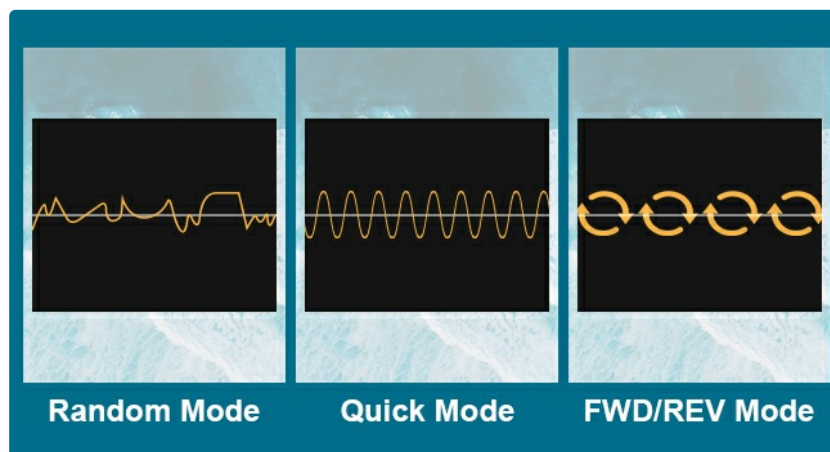


Image: Visual representation of Random, Quick, and FWD/REV wave patterns.

5. **Quick Mode:** The motor runs fast, providing a constant and strong flow of water.
6. **FWD/REV Mode:** The waveform operates alternately in forward and reverse directions.

### 6.3 Night Mode

The external controller includes a light sensor. When the room light dims, the sensor activates, and the wave pump defaults to the lowest flow rate (1st speed) of the current mode. When the light brightens, it automatically returns to the previously set normal mode. This mode can be toggled ON/OFF using the Night Mode button.



Image: A graph illustrating the difference in flow rate between daytime (higher, fluctuating) and nighttime (lower, constant) operation.

### 6.4 Feeding Mode

During daily feeding, press the Feed Rate button on the controller. The wave pump will temporarily stop running for ten

minutes, allowing fish to feed without strong water circulation. After ten minutes, the pump will automatically resume its previous operation.

### 6.5 Wireless Connection Mode (for multiple pumps)

For aquariums requiring multiple wave makers, this feature allows wireless synchronization. One controller acts as the master, and others as slaves. Each pump head operates alternately, sharing the master controller's settings. Refer to the controller's specific instructions for pairing multiple units.



Image: Illustrations demonstrating different water flow patterns achievable in an aquarium using wave makers, including multi-pump setups.

## 7. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your wave maker.

### 7.1 Cleaning the Pump Unit

- Unplug the power adapter before performing any maintenance.
- Carefully remove the wave maker pump unit from the aquarium.
- Disassemble the pump unit according to the diagrams (if provided in the physical manual) to access the impeller and internal components.
- Clean any algae, debris, or mineral deposits from the impeller, housing, and outlets using a soft brush and clean water. For stubborn deposits, a mild vinegar solution can be used, followed by thorough rinsing.
- Ensure all parts are clean and free of obstructions before reassembling and reinstalling.

### 7.2 Controller Care

- Keep the controller dry and away from water splashes.
- Wipe the controller surface with a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.

## 8. TROUBLESHOOTING

If you encounter issues with your hygger Intelligent Wave Maker, please refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Pump not running / No power	Power adapter unplugged, power outage, faulty connection, low water level protection activated.	Check power connections. Ensure the power outlet is functional. Verify water level is sufficient. Check for damaged cables.
Weak or inconsistent flow	Impeller clogged with debris/algae, pump not fully submerged, incorrect mode/flow setting.	Unplug and clean the impeller. Ensure pump is fully submerged. Adjust flow rate settings on the controller.
Excessive noise	Impeller obstruction, improper mounting, air trapped in pump, worn components.	Clean the impeller. Ensure the magnetic holder is securely and correctly positioned. Gently shake the pump to release trapped air. If noise persists, contact customer support.

Problem	Possible Cause	Solution
Controller display not working	Power issue, damaged controller.	Check power connections. If power is confirmed and display remains off, the controller may be faulty; contact customer support.

If the problem persists after attempting these solutions, please contact hygger customer support for further assistance.

## 9. SPECIFICATIONS (MODEL HG166-25W)

The following specifications apply to the hygger Intelligent Wave Maker Model HG166-25W:

Feature	Detail
Model	HG166-25W
Input Voltage	100-240V / 50/60Hz
Output Voltage	DC 24V
Maximum Flow Rate	2400 GPH (9085 L/H)
Suitable for Tank Wall Thickness	≤12mm (0.47 inches)
Suitable Tank Length	≤40 inches (100 cm)
Cord Length	6.2 + 8.2 inches
Item Weight	2.66 pounds
Dimensions (Pump Unit)	Approx. 6.7in (length) x 1.81in (width)





Model	Voltage	Flow rate Maximum	Suitable for fish tank wall thickness	Suitable tank (length)	Cord length
HG166-25W	Input: 100-240V /50/60Hz Output: DC 24V	2400GPH (9085L/H)	≤12MM	≤40inch (100CM)	6.2+8.2in
HG166-35W		2600GPH (9840L/H)	≤15MM	≤59inch (150CM)	6.9+8.2in
HG166-50W	Input: 110-120V/60Hz Output: DC 24V	3500GPH (13247L/H)	≤20MM	≤79inch (200CM)	3.7+4.3+8.2in

Image: A comparison table detailing specifications for different wattage models (25W, 35W, 50W) of the hygger wave maker.

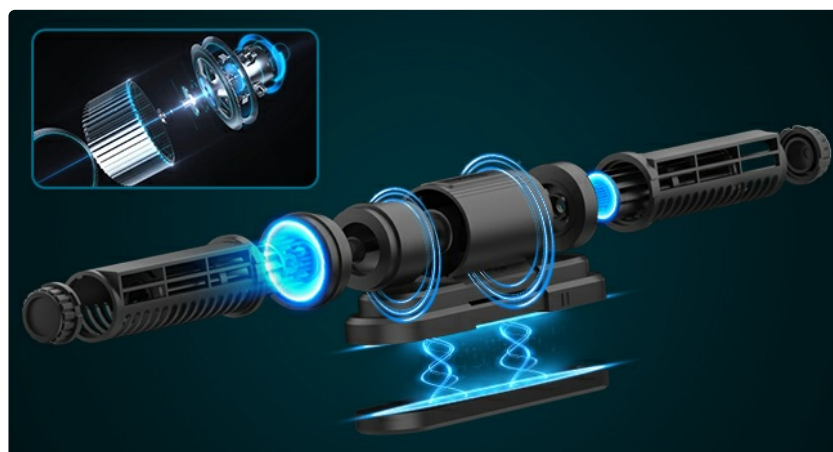


Image: Visual guide for selecting the correct wave maker model based on aquarium wall thickness and length.







## 10. WARRANTY AND SUPPORT

The hygger Intelligent Wave Maker (Model HG166) comes with a **1-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

For warranty claims, technical support, or any questions regarding your product, please contact hygger customer service. You can typically find contact information on the hygger official website or through your retailer.

Please retain your proof of purchase for warranty validation.

## Related Documents - HG166

 <p>hygger® HG165 USER MANUAL hygger Flow One Aquarium Wave Maker</p> <p>Hygger Flow One Aquarium Wave Maker is an intelligent digital display, adjustable and programmable, which can be used to create waves for your aquarium. Please refer to the manual carefully before use and keep it handy.</p>	<p><a href="#">Hygger HG165 Aquarium Wave Maker User Manual</a></p> <p>Comprehensive user manual for the Hygger HG165 Flow One Aquarium Wave Maker, detailing product features, installation, operation, troubleshooting, and maintenance.</p>
 <p>hygger®</p> <p>© 2025 hygger® All rights reserved. hygger.com</p>	<p><a href="#">Hygger HG172 User Manual: Lite Aquarium Wave Maker DC Pump</a></p> <p>Comprehensive user manual for the Hygger HG172 Lite Aquarium Wave Maker DC Pump, detailing features, specifications, installation, operation, warnings, troubleshooting, and maintenance for optimal aquarium wave generation.</p>
 <p>hygger® HG-010 USER MANUAL HYGGER WAVE MAKER</p> <p>Hygger wave maker is a professional and reliable product. It is designed to create natural water currents in aquariums. Please refer to the manual carefully before use and keep it handy.</p>	<p><a href="#">Hygger HG-010 Wave Maker User Manual</a></p> <p>This user manual provides comprehensive instructions, features, parameters, installation guides, maintenance procedures, troubleshooting tips, and safety warnings for the Hygger HG-010 Wave Maker, designed to simulate natural water currents in aquariums.</p>
 <p>hygger® HG119 USER MANUAL hygger circulation wave maker pump</p>	<p><a href="#">hygger HG119 Wave Maker Pump User Manual   Installation &amp; Operation Guide</a></p> <p>Comprehensive user manual for the hygger HG119 circulation wave maker pump. Learn about product features, installation, operating instructions, maintenance, and troubleshooting for your aquarium.</p>
 <p>hygger® HG151 USER MANUAL hygger DC PRO Aquarium Wave Maker</p>	<p><a href="#">Hygger HG151 DC PRO Aquarium Wave Maker User Manual</a></p> <p>User manual for the Hygger HG151 DC PRO Aquarium Wave Maker, detailing product features, specifications, controller functions, maintenance, troubleshooting, and disposal.</p>
 <p>hygger® HG170 USER MANUAL hygger Cylindrical Aquarium Wave Maker</p> <p>NOTES: 1. To ensure performance, do not let the pump run dry. 2. Do not use the pump for long periods of time. The pump may overheat. 3. Do not immerse the pump in water or other liquids. 4. Do not use the pump for long periods of time. The pump may overheat. 5. The pump is available in two sizes: 100mm and 150mm.</p>	<p><a href="#">Hygger HG170 Aquarium Wave Maker User Manual</a></p> <p>User manual for the Hygger HG170 Cylindrical Aquarium Wave Maker, detailing its features, specifications, installation, maintenance, and disposal.</p>