Jebao wave makers are well designed as a good equipment to stimulate the natural sea environment by high technology, which offers a natural environment for different sea livings in the fish tank or in the pond. Before assembling and operating correctly, please read the manual carefully.

In case of printing error, we apologize for the inconvenience caused!

I. Function Overview

1. Unique control system allows to wave of different types and multiple function, which can achieve different wave patterns as desired.
2. Wireless controllers allow synchronize operation among wave makers. One main controller can remote control the sub-controllers.
3. Low voltage DC electronic pump with variable frequency provides a safe environment for user.
4. Easy operation to achieve the multiple seamovings.
5. Flow direction can be adjusted by different modes needed.
6. Large range of voltage input (AC100~240V 50/60Hz) allows to operate in various power system and prevent the impact on waves.

II. Assembly Notice

1. Suitable for most sizes of the fish tank, the tank thickness of less than 15mm would be better.
3. Pump assembly: Take away the magnet at the back of the pump basket, locate the pump in the center of the fish tank inside ad suck it closely by the rubber pad and shift the magnet slant to the same position on the outside wall. Take care of your fingers to be clamped because of the strong magnetism of magnet.
4. Peel off the protection paper on the double-side adhesive sticker and paste in
the center of back of controller. Peer off the other protection paper on the other side of
and paste the controller on the fish tank, as shown in fig.1.

This action can be omitted if the controller is not aimed to be sticked on water
tank.

5. Connect the pump with the 3-pin connection wire. Insert adaptor plug to the
controller and connect AC wire adaptor

Fig. 1: assembly and operation
Control panel of wireless controller

1. **Button and Knob**
   - **MODE/NIGHT**: press the button to select different modes and enter to the Night mode by long hold-down the button.
   - **SPEED/FEED**: press the button to adjust the flow rate and enter to the Feed mode by long hold-down the button.
   - **Wi-Le/LOCK**: Press the button to set Master control, Slave control or operate individually and Lock the setting by long hold-down the button.
   - **Knob**: Rotate the knob to adjust different wave period and patterns in W1 mode; to adjust the flow speed in W2 and ELSE mode. To shift the time in mode C.

2. **Function Description**
   Wireless controller is defined to allow operation without the wire among wave makers.

   - **MASTER Control**: Press “Wi-Le” once and enter into Master control when “Master” indicator lights. Master controller can operate all the functions for the Slave Control: Press “Wi-Le” until the “Salve” indicator lights and enter into Slave mode, where all operation is invalid except adjusting flow rate by rotate the knob.
   - Among two or more wave makers, set one as the Master and the others as Slave. You can achieve the same function and operation for all the pumps by adjusting the Master controller.

3. **Introduction of each mode**

   - **W1**: Wave Mode
     Removing the knob is necessary when operate this mode to adjust the wave patterns among one or more pumps at the same time. As the volume of water in tank is different from the capacity of the tank, wave period needed to be adjusted by switching the knob. The wave is biggest when wave length turn to be same as the length of tank; Increase the wave length by switching the knob in clockwise, and reduce in anti clockwise.
     - **Tips**: You should switch the knob gradually and notice the wave pattern in a certain period after each adjustment. Press “SPEED/FEED” to adjust the flow rate.

   - **W2**: Sine Mode
     One or more pumps can operate at the same time in this mode. The power varies between 30%-100% and the regulation looks like a sine curve.

   - **Else**: Random Mode
     One or more pumps can operate at the same time. It is a random mode as the power of pump is changing to a random data all the time without regulation.

4. **Flow Mode**
   One or more pumps can operate at the same time. In constant flow. Flow rate can be adjusted by “SPEED/FEED”

5. **Shift to flow mode**
   Two pumps are needed to be operated at the same time, when they shift wave and flow in cycles. P1 work, P2 stop; P2 work, P1 stop; P1 work, P2 stop. and cycles like this. Cycle period (1s-1min) can be adjusted by switching the knob and adjust the flow rate by pressing SPEED/FEED

   - **Night Function**: Enter into Night Mode by long press-down “MODE/NIGHT” button until yellow “NIGHT” indicator lights. It works normally during day time and enter into NIGHT mode automatically when it’s dark, when the water flows at the least speed. Quit the mode by long press down “NIGHT” button until the yellow indicator dims.

   - **SPEED Function**: Long press down “SPEED/FEED” button until the blue indicator light, and the pump stops working and allow fish to eat for 10 min. and back to normal mode after that. If need to return back to work during feeding, just long press down the “SPEED/FEED” button until the “10min” indicator dims.

   - **FEED Function**: Long press “SPEED/FEED” button until the blue indicator light, and the pump stops working and allow fish to eat for 10 min. and back to normal mode after that. If need to return back to work during feeding, just long press down the “SPEED/FEED” button until the “10min” indicator dims.

   - **Knob Locking Function**: Long press the Wi-Le/LOCK button until the red LOCK indicator light, which shows the setting is locked. Wave patterns and shift time is fixed without change. It prevents the wave pattern and time to be changed if adjust the knob or button on no purpose.

4. **Warnings**
   1. No water operation to ensure the performance
   2. Select a dry place to locate the controller to prevent water splashed on it.
   3. Be careful when assemble the magnet, better to shift parallel the pad close to the outside wall of fish tank to prevent breaking the fish tank.
   4. Never disassemble the controller and adaptor without professional guidance.

5. **Maintenance**
   1. Clean the controller regular to ensure good performance
   2. Rub the controller surface with dry cloth if there’re any water to prevent water drip into controller
   3. Sweep the waste in the pump by rotating the basket in anti clockwise to open and lock in clockwise direction.
   4. Use soft cloth to rub the blade and clean the dirts in the pump.
5. This product is indoor use only, never submerged in the water to cause unnecessary loss.

Appendix: PUMP LOCATING

Ref.1

Ref.2

Ref.3

Ref.4