

# LEVIATHAN



Leviathan 5000

User Manual

Thanks for choosing Leviathan intelligent Wave pump.

Please read the user manual clearly before use.

## SAFETY GUIDE

Attached are the warning level with different situation. Read carefully to keep the best performance and safely

### ATTENTION GRADE

 DANGER	Contents that it is assumed that the possibility of death or serious injury is imminent
 WARNING	Contents that it is assumed that the possibility of death or serious injury is imminent
 ATTENTION	Contents that the possibility that a person will suffer damage, or a content that may cause property damage

### MARK

 FORBID	 MUST	 UNPLUG THE POWER
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### HANDLING OF POWER PLUG , POWER CORD & SOCKET

#### WARNING

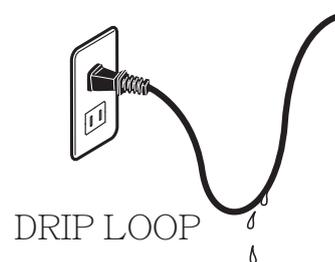
 **MUST** Use the correct ballast come with the Leviathan and make sure the spec. is suitable. Use others ballast may caused the pump break or the ballast burn. You can contact the distributor or the shop to replace / buy the ballast if the ballast broke.

 **FORBID** Do not bend, pull, twist, put heavy things on, pinch, or process the power cord or the ballast. It may caused to damage the power cord and cause a fire or electric shock.

 **FORBID** Do not connect or disconnect the power with wet hands. It may cause an electric shock.

 **MUST** Do not bend, pull, twist, put heavy things on, pinch, or process the power cord or the ballast. It may caused to damage the power cord and cause a fire or electric shock.

 **MUST** Always have a drip loop on the power cord. Do not allow water droplets to travel through the cord and come in contact with the outlet as it may cause a fire or electric shock.



# SAFETY GUIDE

## HANDLING OF POWER PLUG , POWER CORD & SOCKET

### WARNING



Unplugging the power during maintenance.  
It may cause an electric shock.



Dust on ballast needed to be cleaned regularly. Accumulated dust may cause fire due to moisture. Please wipe off with a dry cloth.

## INSTALLATION

### WARNING



Do not install in places that get hot (closed fire, heat appliances, under the sun, etc.) or exposed to direct sunlight. It can only be used indoors below 35 ° C.



Do not install in places where the power cord or ballast get wet. There is a possibility of electric shock and leakage.

### ATTENTION



Be careful when handling, carrying, setting, etc. not to give an impact to this product. Impact may cause damage or failure.



Do not install that may close to children. It may cause danger to children.



Do not use or placed at outdoors. It may cause overheat, explosion, etc.

## WHILE OPERATION

### WARNING



When abnormal (such as burnt odor), immediately unplug the power and stop using it. It may cause overheat or fire. Please contact the retailer you purchased or us.



Do not operate when the pump can not circulate water and the pump is not filled with water. It may cause damage or fire.

### ATTENTION



Do not modify or process this product. It may cause damage or injury.



Do not use for any purpose other than recommended. It may cause an unexpected accident or danger.

## ● Package contents / Name of each part



## ● Before Use

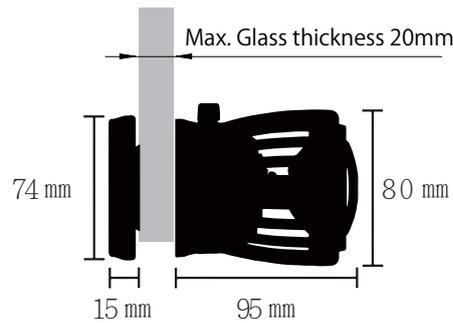


- This product only use inside water.
- Compensation for the live stock is not performed by stopping the pump.

- Make sure that the pump does not run idle due to a drop in water level, etc.
- Please be careful that sand and foreign matter are not sucked into the body. This can cause serious damage. Also, the warranty does not apply in this case.
- Do not use in corrosive or abrasive liquids.
- When holding the pump, do not lift the pump by the cord.
- Clean it regularly to avoid the adhesion of lime algae, calcium components, and moss.
- Connecting the ballast to the controller before connected to the socket.
- Do not use any adapter other than we provided.

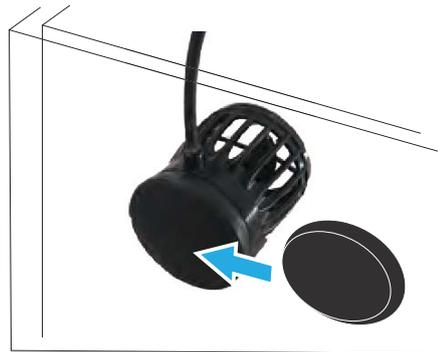
# ● Specification

Model	Leviathan 5000
FLOW RATE	50~20,000 L /h
SUITABLE FOR AQUARIUM	150~2,200L
MAX. POWER CONSUMPTION	24W (±5%)
MIN. POWER CONSUMPTION	0.4W (±5%)
GLASS THICKNESS	Max. 20mm



# ● INSTALLATION

Do not turn on the power when the pump is not setting up correctly inside the water.

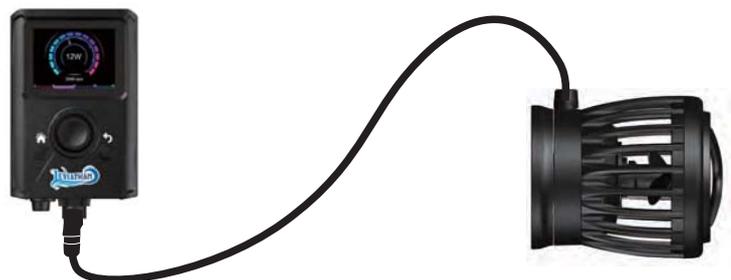
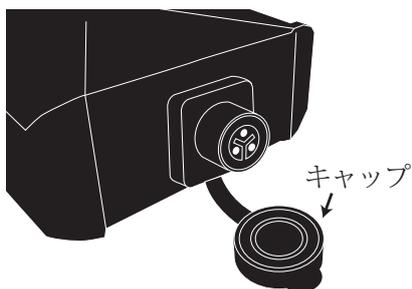


1. Please clean the glass which you plan to place the external magnet.
2. Place the pump in correct place and slide the external magnet close to the internal magnet.(see ref. at Right)

- ※ Do not direct attach the magnet together and it might cause injury and damage of the glass.
- ※ The placement of pump too close to the corner of glass might cause noise / sound reflection.

3. You can take out the rotor / pump body without remove the magnet.

4. Remove the cover of connector attached on controller and connect to the pump.  
You can use the extend cable if necessary.

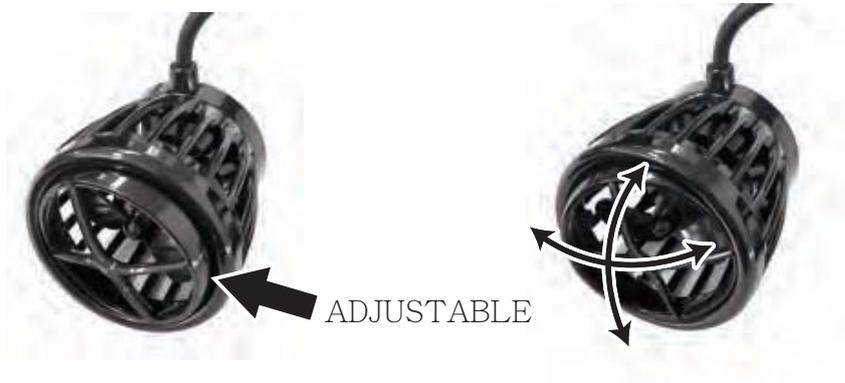


## 5. CONNECTION GRAPH



**ATTENTION** FOR SAFTLY USE THIS PRODUCT , PLEASE CONNECT EACH PARTS IN THE CORRECT WAY FROM ABOVE PICTURE.  
MAKE SURE TO SETTING UP DRILL LOOP IN EACH WIRE AND LOCK THE CONNECTOR FIRMLY.  
THE PUMP WILL AUTOMATIC TURN ON IN MIN. POWER(5%) WHEN YOU CONNECTED ALL PARTS AND THE POWER CORRECTLY.

### ● FLOW DIRECTION ADJUSTMENT



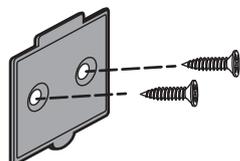
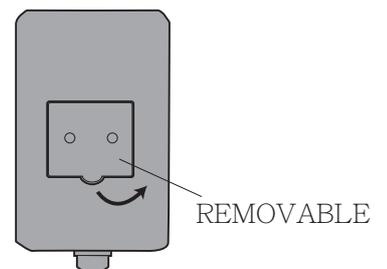
### ● Cable & Controller placement

#### ① Cable arrangement

Use the cable holder to fix the cable as your wish.

#### ② Controller Placement

You can fix the controller with built in fix plate.  
Remove the fix plate from the back of the controller.  
Screw to fix the plate to the right position.



Make sure the direction is correct

# ●CONTROLLER INTRODUCTION

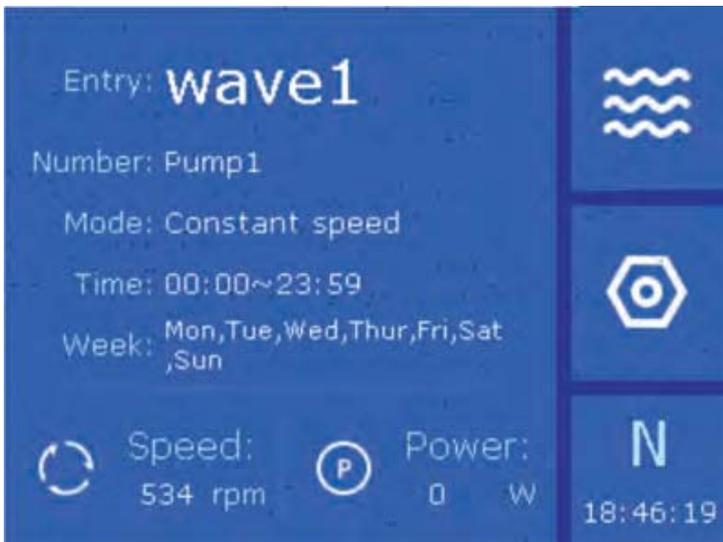


●HOME  
RETURN TO HOME PAGE

●ダイヤル  
回転させて 各種設定および値を選択します。  
ダイヤルを右に回すと数値が増加 左に回すと数値が減少します。  
ダイヤルを押して決定になります。

●RETURN  
RETURN TO LAST PAGE

# ●HOME SCREEN



Entry : Current Wave schedule.(Details please check “Wave schedule setting” )

Number : Current link up pumps.

Mode : Current mode of wave setting.

Time : Current wave setting operate time period.

Week : Current wave setting operate days in a week.

Speed : Current Speed (RPM) of the pump.

Power : Current power consumption of the pump.

Wave ICON (🌊): Setting wave schedule and details.

Setting ICON (⚙️):Advanced setting of pump and controller.

N : Current connection status.

※N=Normal Mode.(No connection with other Leviathan pumps / Standalone operation)

※M=Master Mode.(Master unit of connection with other Leviathan pumps)

※S=Slave Mode.(Master unit of connection with other Leviathan pumps)

※If left unattended for a while, the power consumption and the speed(RPM) will be displayed on the standby screen.

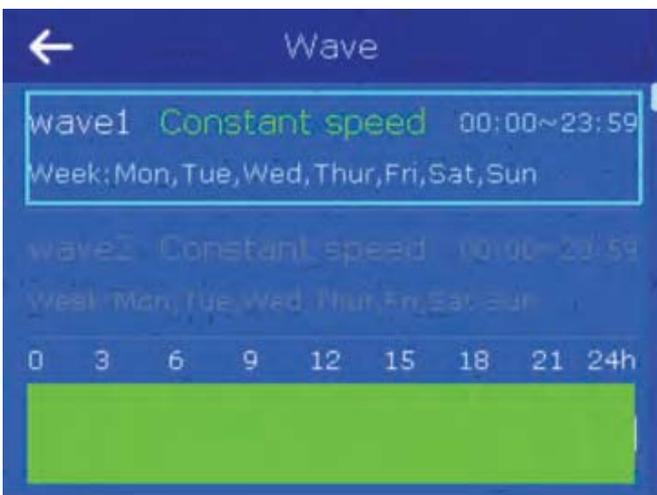
・ Press any button to return to the home screen.



# ● WAVE SCHEDULE SETTING

Setting up Wave schedule by different mode , time period and days.  
You can setting up to 16 schedule per day.

1. Click on Wave ICON (🌊)

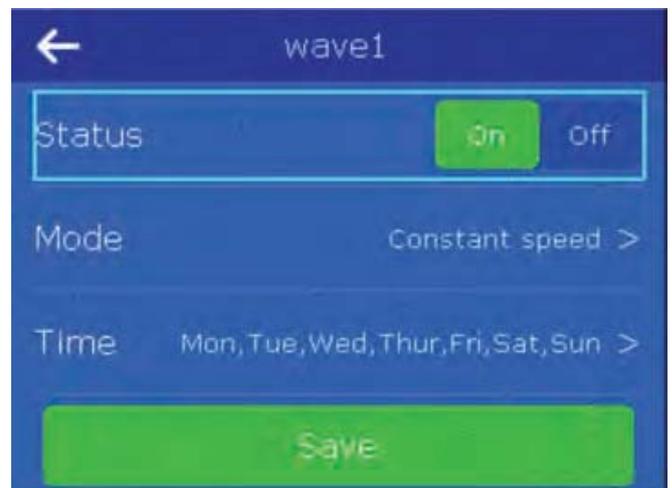


Press the dial, Wave1, Wave2, Wave3....  
and the Wave settings are displayed.  
(e.g.WAVE1 is working on the left picture. )

2. Turn the dial to WAVE1 and press the dial to enter the setting screen.  
(Status , Mode , Time and Save will display at the screen)

## Status :

Turn on this schedule with ON /OFF.



## Mode :

You can choose the wave mode.

There are 4 pre set Mode :Constant , Rough sea , Tide ,Random.

And Customs allows to fully setting up all details by advanced aquarist.

All settings are allowed to setup details separately.

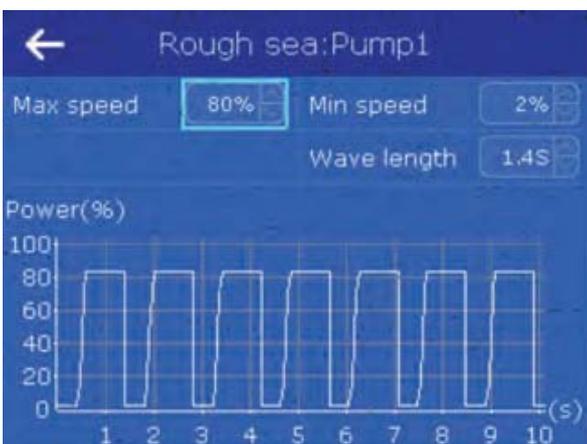


## Constant

Pumps are working with constant flow.

When you select constant, you will see the left screen, and you can set the power of the flow with Max. speed.

The graph below shows the pump's power, the horizontal axis is the elapsed time, and the operation of the pumps being set.



## Rough Sea

Simulation of strong wave like a rough sea.

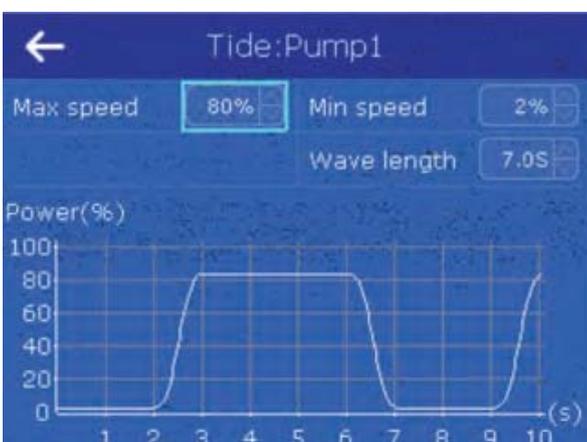
When you select Rough Sea, you will see the screen on the left.

You can set the following items on this screen:

Max Speed: Maximum wave power

Min Speed: Wave minimum power

Wave length: You can set the wave intensity interval. The shorter the speed, the more gradual the wave strength changes.



## Tide

Simulation of tide, gradually changes strength.

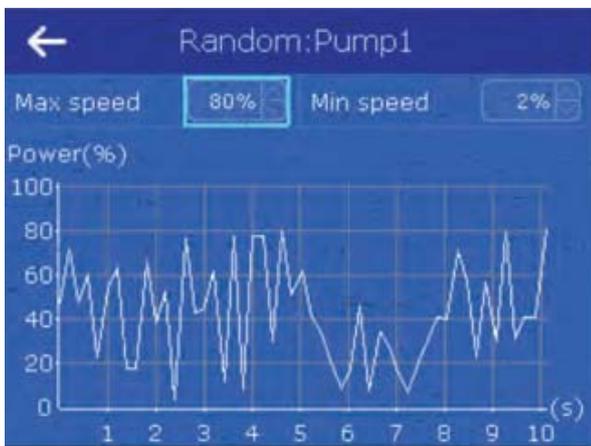
When you select Tide, you will see the screen on the left.

You can set the following items on this screen:

Max. Speed: Maximum wave power

Min. Speed: Minimum wave power

Wave length: You can set the gap between the strength of the wave. The shorter the speed, the more gradual the wave strength changes.



## Random

The gap between the strength and the wave becomes a random wave.

If you select Random, the left screen will be displayed.

You can set the following items on this screen.

Max Speed: Maximum wave power

Min Speed: Minimum wave power



## Custom

Fully custom wave pattern for advanced aquarist

If you select Random, the left screen will be displayed.

You can set the following items on this screen.

Max Speed: Maximum wave power

Min Speed: Minimum wave power

Rise Time: You can set the interval between the minimum and maximum times of the wave.

Fall time: Allows you to set the distance between the waves from the maximum time to the minimum time.

## 【Luminous Dial Ring】

The Dial Ring will illuminate the color of your current wave pattern.

Constant (Green) , Rough Sea (Blue) , Tide (Pink) ,Random (Orange),Custom(Purple)

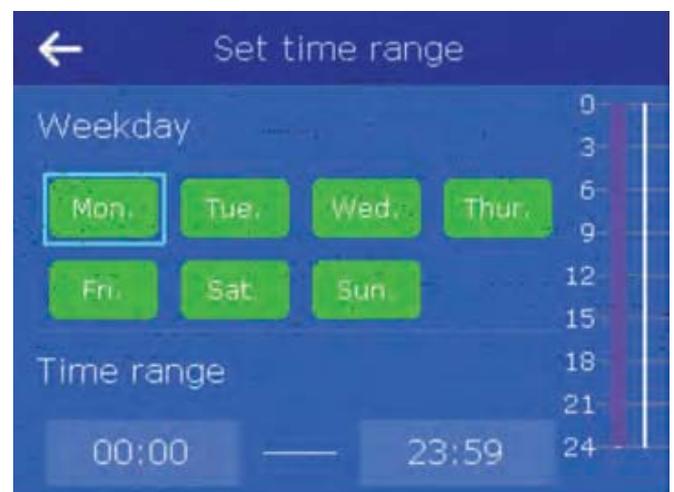
## Time :

Each wave schedule is available to setting up operate time period and day.

When you select time, you will see the screen in the right picture.

Weekday: You can set the day of the week that the Wave schedule you are setting up currently.

Time range: Allows you to set the time period of the wave schedule you are setting up currently.



※ To keeping the Leviathan operate all day ,make sure to set up schedule from 00:00 ~ 23:59.

Please do not set up the time period from 00:00 ~ 00:00, it will have no response to your setting.

## Save :

Make sure to save after adjust the setting in each wave schedule .It will not response if you didn' t save the setting.

## ● Setting of multiple wave schedule

You can set the time period and the day of the week to schedule. Wave2, Wave3... after setting up Wave1.The schedule can be set up to 16 schedule per day(Wave1 to 16).

E.g.: If the Wave1 and Wave2 time settings conflict, the priority will follow the first schedule .In this case , the schedule will follow Wave1.

## ● Feed mode setting

Holding Home button  for 5 seconds will start the feed mode.

Feed mode will starting to count down for 10 minutes (you can setup time & power in setting page) and return to normal after finished.

Holding Home button  for 5 seconds will manual terminated feed mode count down.

On the standby screen, press the home button once, then press the home button for 5 seconds to start feed mode.

## ● Setting

Click the Setting ICON 

### ① Mode

Normal : Standalone mode.

Master / Slave : Multiple Leviathan connection.

### ② Wi-Fi Connect to the Wi-fi network for alert function.

### ③ Feed Custom Feed mode detail

Speed: Power of feed mode

Time: Lead ing time of feed mode °

### ④ Restore factory setting Restore factory setting °

### ⑤ Set system time Set the time °

### ⑥ Alarm email Register the E-mail address and the system will send email alert when error / power down occur .



## ● ERROR

### ① Jammed: Anything stuck the pump or jammed. System will send alert email automatically.

### ② Leakage of water: Water leakage warning. When there are leakage of water and the pump too close to the surface , the RPM will raise abnormally and system will send alert email automatically.

### ③ Power down: Power down for more than 15 minutes continued. System will send alert email automatically.

Solution of error : Solve the problem and restart the pump and controller.

## ● Multiple Leviathan connection

Leviathan can be connected up to 4 units.

### 【Method】

- ① Each leviathan is placed in aquarium.
- ② Click to Setting ICON , and click to Mode , assign 1 Leviathan for a Master unit and others are setting to be Slave unit
- ③ Leviathans will automatic connected after restart from changing Mode °
- ④ After pumps connected in a loop , all slave unit will follow the wave schedule from Master unit.

## ● Maintenance

Keeping to remove dirty and calcium components regularly (at least once a month) for safe use. Also, please remove dust and dirt such as electrical outlets.

- ※ Make sure that the power plug is unplugged before starting to maintenance.
- ※ Make sure you understand the structure of the pump.
- ※ Do not use detergents or stiff sponges or brushes.
- ※ When cleaning the power cord or outlet, clean it with a soft, dry cloth.

1. Remove the sponge from the pump and wash it with tap water.
2. To remove the rotor from internal magnet , twist the rotor counterclockwise.(See. Page 3)
3. Use the soft brush to remove the impeller and each part, and rinse well with tap water.

## ● Wi-Fi module important information:

The devices contain WiFi Module .This module allow to the follwoing functions:

- 1.Communiacte wirelessly with other products from us.(If available)
- 2.Sync, follow & share data and settings between our products.
- 3.Connect local netwrok to send / receive date to our cloud server to provide alert email about error , disconnetion of our products.

## ● Optional Parts

Back up battery module (Release on End of 2019)

Extension connector: Connects between the pump body and the controller to increase the convenience of cable extension and maintenance.

- If you have any trouble or problem, please contact the shop you purchase or contact us.

Manufacturer : Intelligent Star Technology Limited  
Global Distrubitor : ZOOX AQUARIUM LIMITED  
Email : sales@zooxanthellae.com

## FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-

Consult the dealer or an experienced radio/TV technician for help important announcement

Important Note:

## **Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.