



HONYA CO., LTD
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OCTO pulse

Instruction Manual

OP-2

OP-4



Dear Customer

Thank you for choosing OCTO, a quality product manufactured by HONYA CO., LTD. In order for you to safely use our product for optimum results, please read the instruction prior to use. We would strongly suggest that you retain this Instruction for future reference.

Safety on Magnet

- **CAUTION-Extremely Strong Magnets**, please handle with care.
- Keep magnets out of reach of children.
- Do not snap both magnets together directly.
- Keep the magnets away from electronics products and magnetic storage devices such as credit cards, pacemaker etc.

Notes

- Never handle any electrical component when your hands are wet.
- Ensure that all components (power adapter, controller, wires, etc) are properly set –up to prevent accidental damage.
- For indoor use ONLY.
- For controller operation, please refer to the instructions as per this manual.
- Keep controller cool and dry, do not expose to direct sunlight or heat.
- **Pump Protection System** – if pump is detected to be running dry, it will stop operating after about a minute. To restart the pump, off the power, re-position the pump to ensure that it is submerge in the water then turn on the power.
- Should in the unlikely event that your pump stop working, please refer to the trouble shooting page in this manual.
- Please maintain your pump as per this manual.

Overview

- Introducing our new OCTO series Direct Current (DC) Wave Pump, OCTO Pulse features a Multiple Angle Adjustment, an all new controller with a 0-10V port, 4 pre-program pulsing patterns, high quality ceramic shaft and bearing to reduce wear and tear, and the latest variable speeds flow technology for refined control, enhanced performance, energy-efficiency and safer operations.
- With the bespoke controller, users have full control over the flow rates by selecting amongst eight preset speed settings; indicated by eight LEDs. A 15 or 60 minutes feed mode can also be engaged or disengaged with the push of a button.

Features & Benefits

- 360° Range of Adjustment
- Low-profile Magnetic Mount
- Strong Rare-earth Magnet Impeller
- Compact & Durable Construction
- Silent operation
- 4 Preprogrammed Flow Patterns
- Dual Feed Mode - 15 or 60 min
- 0-10v External Controller Connection

Product Specification

OCTO Pulse Wave Pump										
Item #	Product	Max Flow Rate		Power	Tank Water Volume		Suggested Tank size		Max Wall Thickness	
		LPH	GPH	W	L	US GAL	cm	in	mm	in
110401	OP-2	6000	1585	5-10	80-300	21-80	40-100	16-40	12	1/2
110402	OP-4	17000	4490	11-32	300-1800	80-475	100-180	40-71	15	5/8

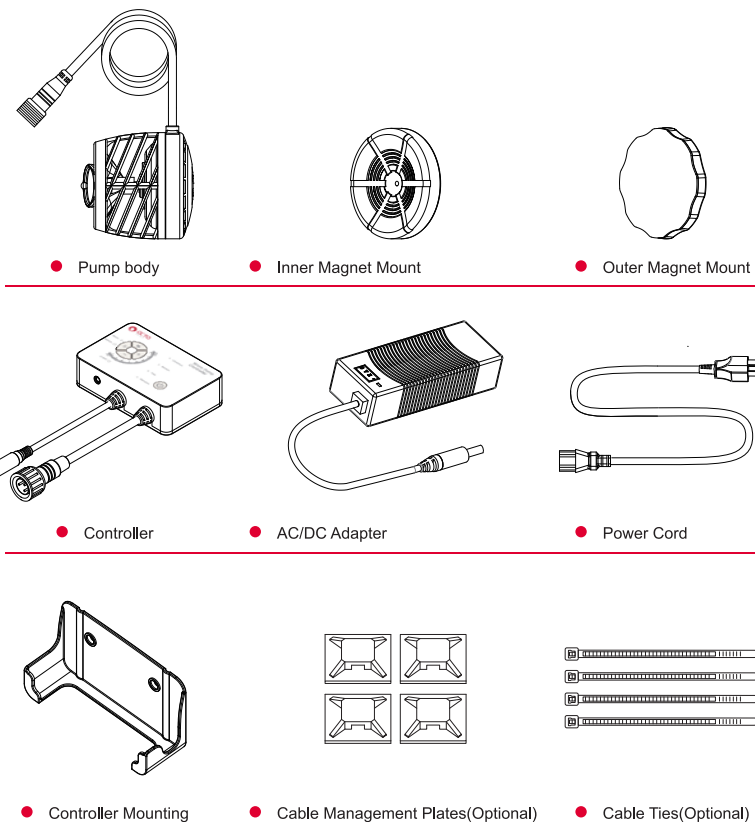
Flow Rate Charts

Step	OP-2		
	Power W	Flow Rate LPH	Flow Rate GPH
1	5.0	3200	845
2	6.0	3800	1000
3	6.5	4050	1070
4	7.0	4450	1170
5	7.5	4720	1250
6	8.5	5100	1350
7	9.5	5820	1540
8	10.0	6000	1585

Step	OP-4		
	Power W	Flow Rate LPH	Flow Rate GPH
1	11	5360	1410
2	14	7900	2080
3	17	9600	2530
4	20	11300	2980
5	22	12400	3270
6	25	14100	3720
7	28	15900	4200
8	32	17000	4490

Package

Please check the content in the package



Attention:

DC24V /1.0A (AC/DC Adapter) suitable for OP-2

DC24V /2.5A (AC/DC Adapter) suitable for OP-4

Installation



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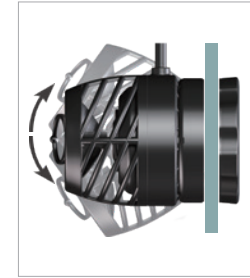


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- Slide the Inner and Outer Magnet into your desired position(image 1/2). DO NOT Snap both Magnets together.
- Mount the Pump to the Inner Magnet, ensuring that the power cable is on top (image 3/4).
- Tie the cord to the Cable Management Plate using a Cable Tie. Do not tighten the Cable Tie till confirmation of Pump Position. Ensure to have some allowance for final adjustment of pump position before cutting off the excess Cable Tie.



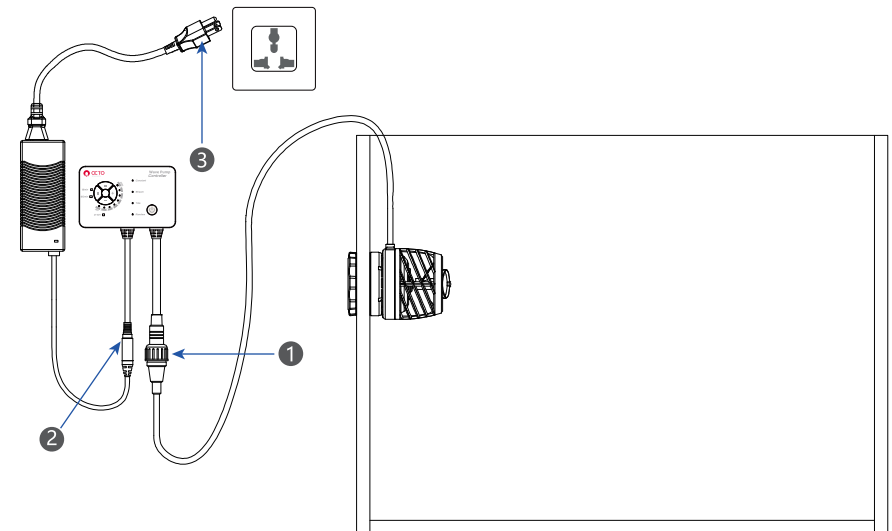
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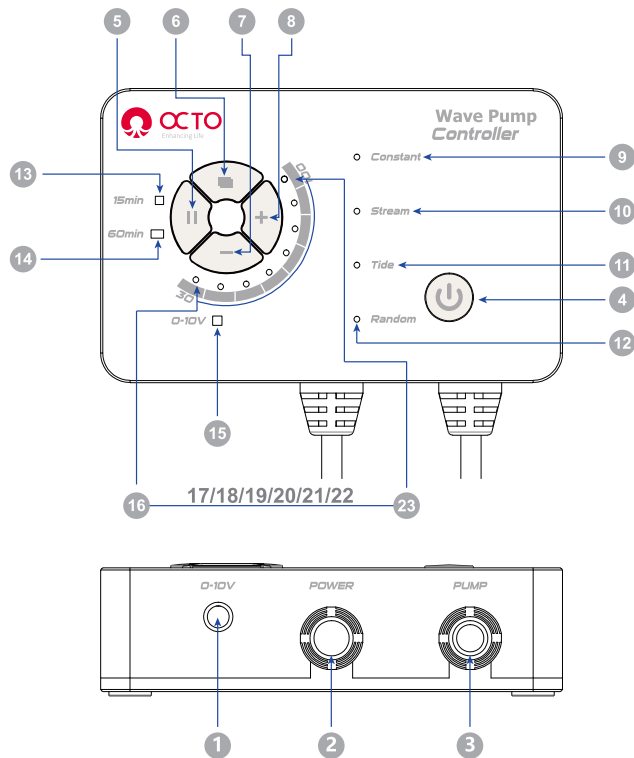
- Adjust angles according to your requirements(image 7/8).

Connections as per below diagram. OCTO Pulse system has a built-in safety mechanism. Make sure all cables are connected(1 and 2), mount the controller before turning on the power(3)



Attention: Before starting the pump, please ensure that livestock are not near the pump.

Quick Start Guide



Legend

- 1 0-10V Input (3.5mm TRS Audio port)
- 2 Power supply Connection (DC24V)
- 3 Connection for OCTO Pulse Wave Pump

Press

- 4 Power ON Switch – press once to toggle unit On/Off. During “Pause” function, press once to cancel “pause” function
- 5 Pause function – 15mins or 60mins options. Press once for 15mins and twice for 60mins “pause” function. Once set, lights indication (13 or 14) will be lighted.
- 6 Press 6() for Wave Mode Selection. Continue Pressing will select the desired modes.
 - 9 Constant
 - 10 Stream
 - 11 Tide
 - 12 Random
- 7—8 Flow Rate Controller for Wave Pump “+” and “-” to adjust desired flow rate

Lights Status Monitor

- 15 0-10V light “on” = 0-10V connected
- 16—23 8 Steps Flow Rate Indicator Lights

Attention:

- 1 When using 0-10V to control DC Pump, flow rate will not be indicated on the 8 Steps Flow Rate Indicator.
- 2 For Constant Flow Mode, adjustment for maximum and minimum flow rate is possible. For the other Flow Modes, you can only adjust the maximum flow (indicated RED line) to a lower rate, as the minimum flow rates are prefix. See the attached flow rate charts.

0-10V Wiring diagram :



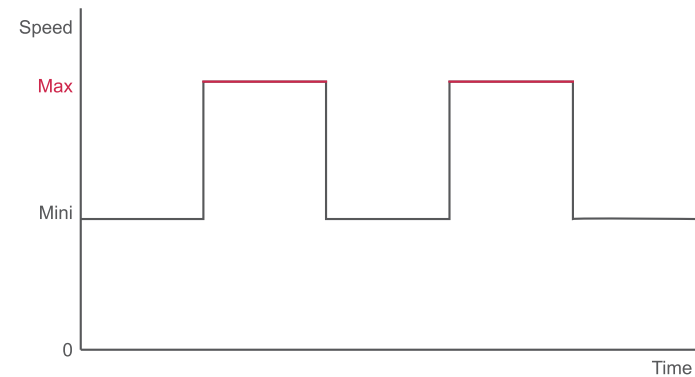
Wave Mode flow patterns

• Constant Flow Mode



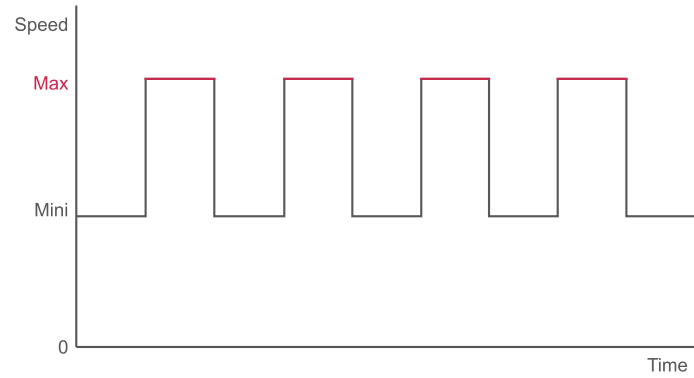
Speed: Flow rate can be adjusted via (7 or 8)

• Tide Flow Mode



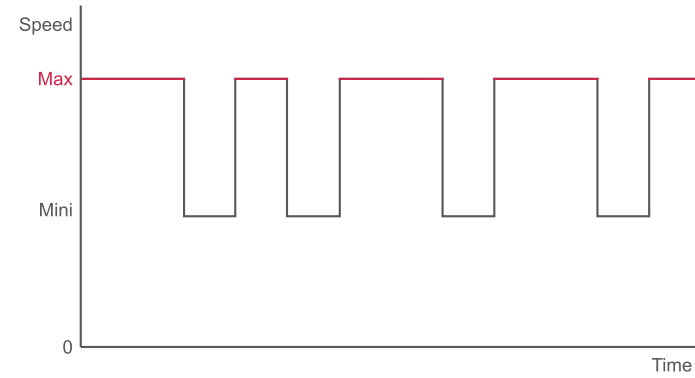
Max Speed: Flow rate can be adjusted via (7 or 8)

• Stream Flow Mode



Max Speed: Flow rate can be adjusted via (7 or 8)

• Random Function Mode



Random Mode will randomly select Constant/Stream/Tide
Max Speed: Flow rate can be adjusted via (7 or 8)

Dismantling and Maintenance



1



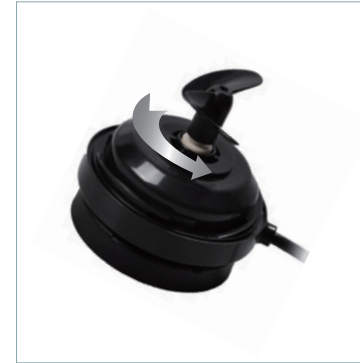
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- Turn Pump Cover Anti-Clockwise to remove cover (image 1)
- Use a Flat Tip Screwdriver to remove the impeller plate (image 2/3)
- Wash with fresh water.
- Snap Back the impeller cover plate evenly (image 4)

- Ensure that impeller is running smoothly before use (image 5)

Trouble Shooting

16-23 Indicator Lights Blinking	Pump Protection System Activated. Ensure pump is submerge into the water before continue operating.
	Slipping Impeller- change Impeller (wear and tear)
Both 13 & 14 Indicator Lights Blinking	Turn Off the Device and Check all connections
	Open up the Impeller Cover Plate to make sure no foreign objects is stuck within.
	Ensure that Impeller is in place and free spinning

Notes

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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OCTO pulse 造浪泵

产 品 说 明 书

OP-2

OP-4



亲爱的客户

感谢你选择OCTO产品！
为确保您的安全及使用时得到最佳效果，
请详细阅读此使用说明。

(阅读后，请保存这份手册，以备以后参考)

磁铁安全

- 警告-产品含有强磁磁铁，请谨慎操作
- 请将磁铁置于远离小孩拿取范围之外
- 请勿直接将两片磁铁放在一起
- 请将磁铁远离电和磁性存储设备，如信用卡、起搏器等。

使用注意事项

● 使用 pulse 造浪泵前

拆除所有保护造浪泵、控制器和电源适配器的塑胶袋和包装材料

● 电源安全

电源---请勿损害安全极性或接地式插头，请勿在您手潮湿的情况下拿插头或电源线
电源线保护---请将电源线按一定路径放置，以便不会被放置在其上或其下面的物体踩踏或挤压，如果电源线损坏不可继续使用，需立即更换该电源线配套组件

● 安装

安装仅限于室内，并且采用厂家提供和规定的附属装置和配件

● 操作

使用控制器时，始终遵循使用手册中规定的操作说明

● 热量

电源适配器和控制器需远离诸如散热器之类的热源，不要暴露于诸如太阳、火或其它类似物的过高热量环境中

● 湿气

为了使用安全，降低火灾或电击风险，禁止把电源适配器和控制器暴露于下雨、潮湿、滴水或溅湿环境中
造浪泵从水中取出时，避免一手同时提着泵和控制器；防止泵身的水顺着电线流入控制盒。

● 水损害

若电源适配器或控制器掉入水中，禁止伸手取出！首先应拔掉电源插头然后再取出。如内部的电子部件受潮，请立即拔掉该装置。

● 空载保护

泵体设计用于水下工作，请勿在没有进入水时运行。水泵控制器内设空载保护功能，无水运行1分钟泵会停转，需切断电源并确保水泵进水口有水后，再重新启动

● 停转

许多因素会使水泵停止动作，请按手册说明中的“常见异常检修”内容检修

● 清洁

请按手册说明定期清洁水泵

产品特点

- 4种造浪模式可选择
- 控制器8级调速功能，暂停15min/60min饲喂功能
- 控制器自带无水保护功能，无水干转1分钟控制器会切断电源，进入无水保护模式
- 控制器带有电机异常保护功能，当控制器检测到电机异常，如短路、断路等，会切断电机电源，进入异常保护模式，防止电机发热导致安全事故
- 可使用外部0-10V控制
- 工作电压DC24V，更安全
- 出水角度360° 自由设定
- 耐磨陶瓷轴、轴套（材质为增韧氧化铝，区别其他产品普通氧化铝）
- 无槽无刷电机，无齿槽效应，配合正弦波驱动方式、优质强磁四极转子；运转更平稳、静音
- 所有电子元器件外置，泵体内无电子元器件，避免因电子元器件质量而造成的水泵异常

Product Specification

OCTO Pulse Wave Pump										
产品编码	型号	最大流量		功率	适合水体		建议适合鱼缸		建议最大玻璃厚度	
		LPH	GPH		L	US GAL	cm	in	mm	in
110401	OP-2	6000	1585	5-10	80-300	21-80	40-100	16-40	12	1/2
110402	OP-4	17000	4490	11-32	300-1800	80-475	100-180	40-71	15	5/8

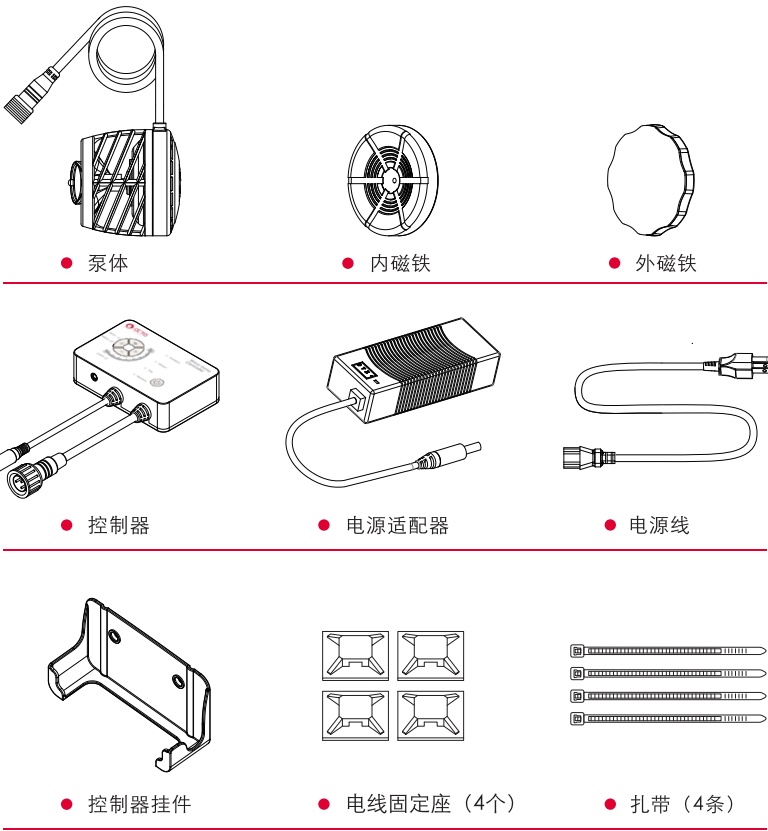
Flow Rate Charts

OP-2			
档位	功率	流量	
	W	LPH	GPH
1	5.0	3200	845
2	6.0	3800	1000
3	6.5	4050	1070
4	7.0	4450	1170
5	7.5	4720	1250
6	8.5	5100	1350
7	9.5	5820	1540
8	10.0	6000	1585

OP-4			
档位	功率	流量	
	W	LPH	GPH
1	11	5360	1410
2	14	7900	2080
3	17	9600	2530
4	20	11300	2980
5	22	12400	3270
6	25	14100	3720
7	28	15900	4200
8	32	17000	4490

配件明细

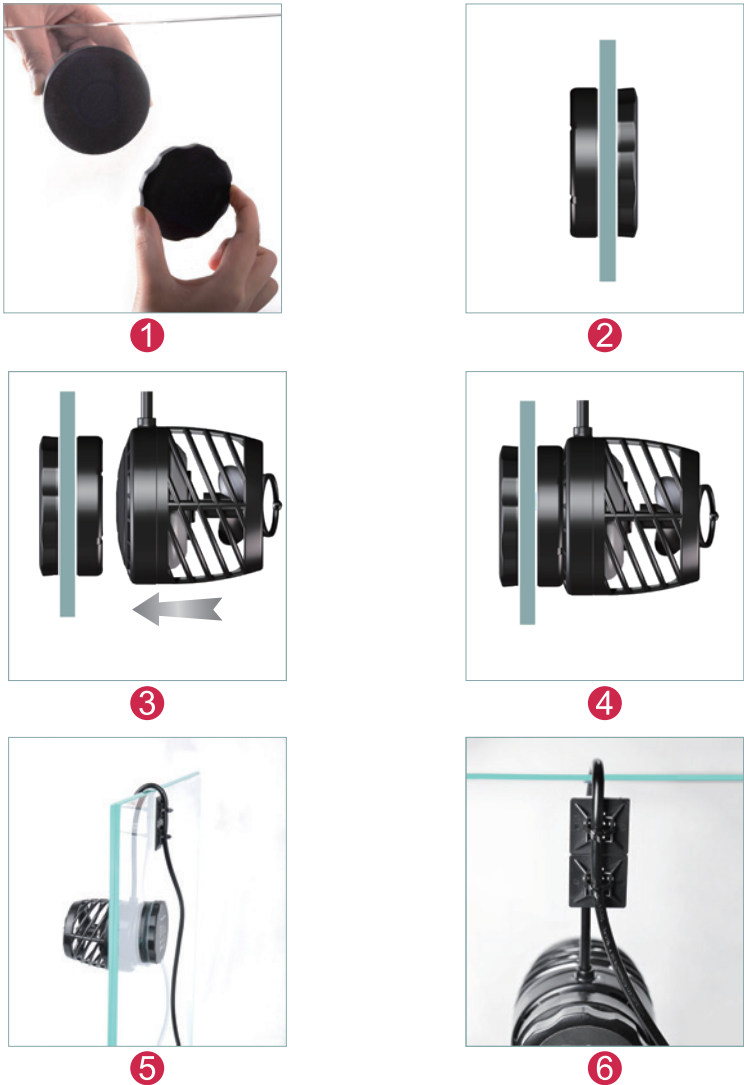
请检查包装内物件是否齐全



注意：
OP-2使用 DC24V 1.0A 电源适配器
OP-4使用 DC24V 2.5A 电源适配器

安装连接

● 固定泵体



- 固定内磁铁在鱼缸玻璃内壁，外磁铁沿着玻璃外壁滑动，使内外磁铁吸附在一起(如图1/2；请小心操作，谨防击碎玻璃)
- 将泵体吸附在内磁铁上，电线向上（如图3/4）
- 用扎带将泵体电线固定在鱼缸外壁（如图5/6）

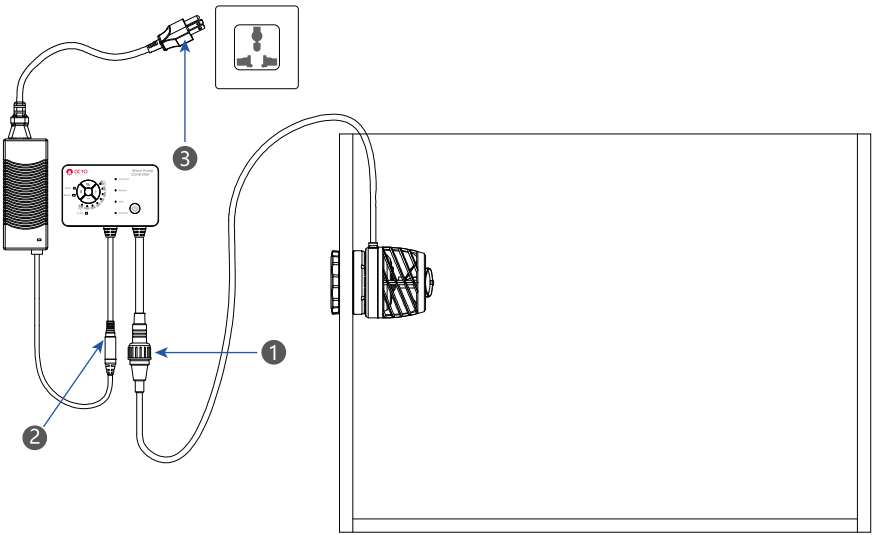
● 调整出水角度



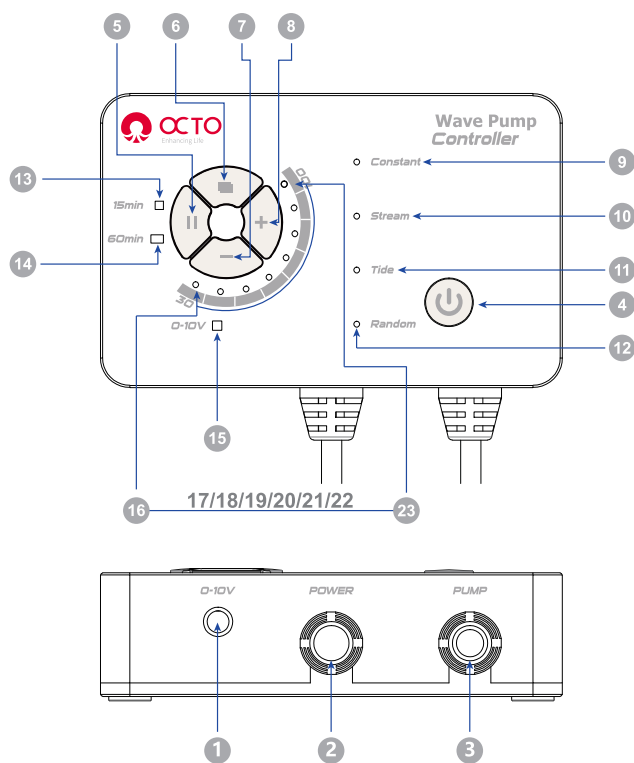
- 泵体可以沿着内磁铁的凹槽移动，调整出水方向（如图7/8）

● 连接顺序

水泵控制器具有保护泵体的功能设计，使用时必须先连接控制器与泵体(1处)，再连接电源适配器与控制器(2处),最后电源适配器接通电源(3处)。



注意： 安装时请确保缸中的生物与造浪泵保持适当的距离。



• 串口定义

- 1 0-10V信号接入口(3.5mm三段音频口)
- 2 电源插孔, 接DC电源(DC24V)
- 3 造浪泵连接口

• 按键定义

- 4 电源键: 控制器通电默认开启, 按一次关闭, 再按导通; 暂停状态下, 按一次此键结束暂停模式, 水泵恢复工作;
- 5 喂食暂停键: 按一次暂停15分钟, 按二次暂停60分钟, 再按循环选择;
- 6 造浪模式选用键()
- 7 减速键: 按一次降一档;
- 8 加速键: 按一次升一档;

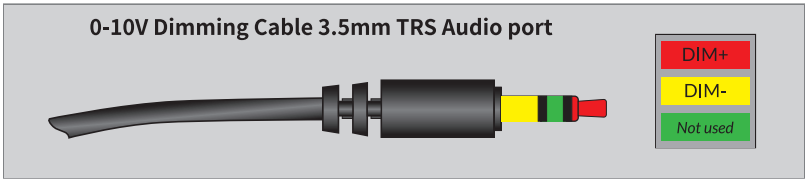
• 灯功能定义

- 9 恒速模式灯 [通过按键 6 () 来选择]
- 10 短波模式灯 [通过按键 6 () 来选择]
- 11 长波模式灯 [通过按键 6 () 来选择]
- 12 随机模式灯 [通过按键 6 () 来选择]
- 13 暂停灯, 设置暂停15分钟时灯亮
- 14 暂停灯, 设置暂停60分钟时灯亮
- 15 接通外部0-10V信号时, 此灯亮
- 16 — 23 转速档位灯, 指示当前转速档位

• 注意

- 1 使用0-10V控制功能时, 不能用控制盒手动调速/转换模式 (接入0-10V音频线后, 档位灯全灭; 并且按键只有开关功能和暂停功能有效);
- 2 加减速按键: 恒速模式时, 调节其恒定转速; 其它模式时, 所调节为该模式下其最大转速

3.5mm音频插线图:



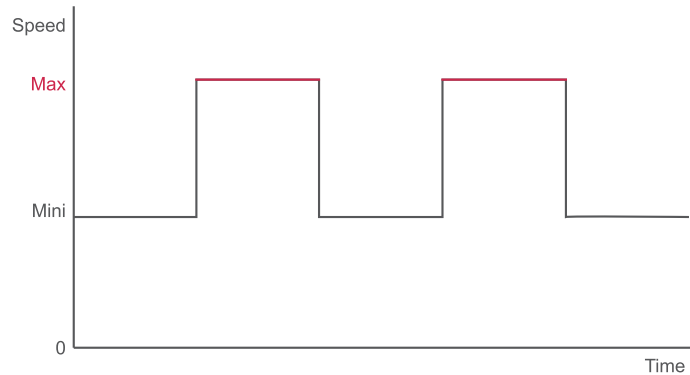
造浪模式介绍

● 恒速模式 Constant Flow Mode



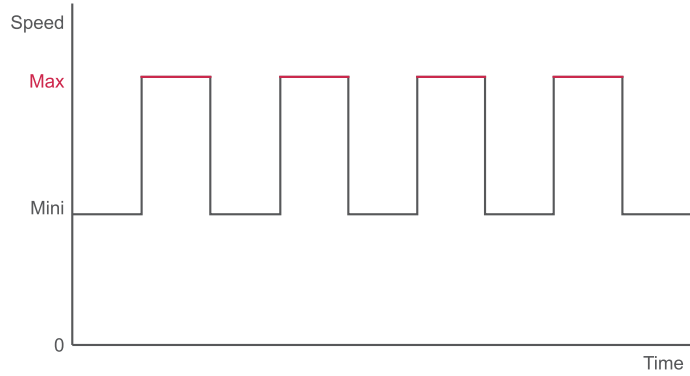
Speed: 使用者可以根据需求调整 (8个档位可选择)

● 长波模式 Tide Flow Mode



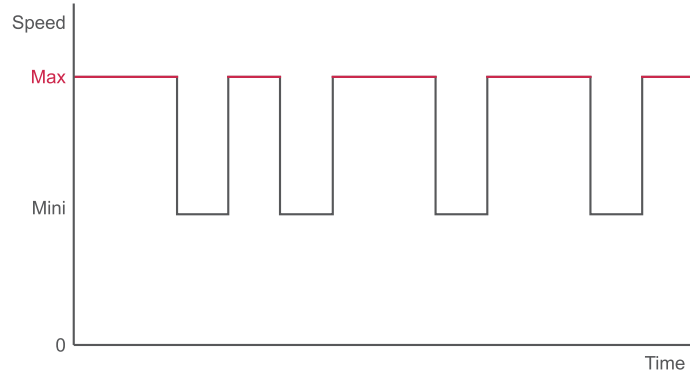
Max Speed: 使用者可以根据需求调整 (8个档位可选择)

● 短波模式 Stream Flow Mode



Max Speed: 使用者可以根据需求调整 (8个档位可选择)

● 随机模式 Random Function Mode



恒速/短波/长波三种模式随机交替工作

Max Speed: 使用者可以根据需求调整 (8个档位可选择)

拆装与清洁维护



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- 逆时针旋转防护罩，取下防护罩（图1）
- 用一字螺丝刀撬动转子，取出转子（图2/3）
- 清洗泵腔和转子
- 装入转子（如图4）

- 检查转子转动是否顺畅(如图5)，如不顺畅，重复图2/3/4步骤
- 顺时针方向旋转防护罩，安装防护罩（如图6/7）

常见故障/报警处理

报警提示	原因	解决办法
8个档位灯闪烁	水泵处以无水保护状态(无水运转或者水位低)	将泵放入水中，按下电源键
	轴打滑或者叶轮打滑	更换转子
两个定时灯闪烁	没有连接泵或者泵和控制器之间的插头没插好	接上泵/重新接好泵和控制器之间的接头，按下电源键
	没装转子	断电，装好转子；用手波动转子，要转动的很顺畅
	堵转/卡转	拆开泵头，看是否有异物在泵腔及转子叶轮上；安装转子，用手波动转子，要转动的很顺畅

Notes

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