



由衷地感谢您选购博宇公司WM-4造浪泵系列产品，为使您能正确安全使用本产品，请在使用前详细阅读本说明书，并将之妥善保管以备日后参考之用。

Sincerely we thank you for purchasing BOYU WM-4 series wave maker. For safe and correct use. Of this product, please read this instruction manual thoroughly before use, and keep it properly for future reference.

产品简介 INTRODUCTION OF PRODUCT

1. 本泵采用永磁同步电机驱动，高效节能，使用寿命长。
It adopts permanent-magnet synchronous motor for driving. High efficiency, energy-saving and long service lifetime.
2. 造型新颖美观，多种安装形式，方便用户使用。
Its appearance is novel and beautiful, and various installation types are available for users to use easily.
3. 专利技术的叶轮结构，造浪效果好，乱流多，解决了普通水泵的单一流速太快等缺陷。
The structure of impeller adopts patent technology; the effect of forming surfs is good, and it can form large numbers of confused stream. And it can solve the defect of single stream-forming method and fast speed of stream created by common pumps.
4. 工作于安全电压，实现了微处理定向功能提高本机的工作效能。
It can work under safe voltage. Directional function is carried out by microcomputer, and the working efficiency of this pump is enhanced.
5. 出水方向角度可调节，为您的海洋生物营造一种自然的生态环境。
The directions and angles of water-outlet can be adjusted. It can create a natural ecological environment for your halobios.

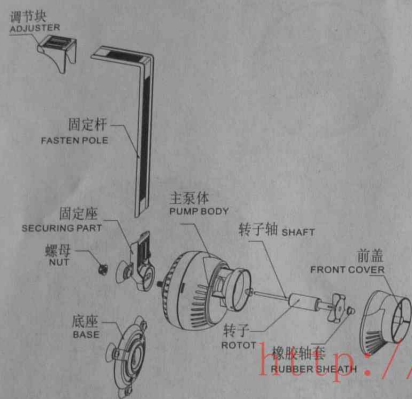
使用前检查及注意事项: NOTICE AND EXAMINATION BEFORE USE

1. 在使用本产品之前，请先确认所使用的电源、电压/频率与产品适配器所标注的规格是否相符。
Before using this product, please confirm that the voltage and frequency of power supply are up to the specifications marked on the adapter of this product.
2. 电源控制器禁止置放在潮湿的环境中，禁止在高温强电磁干扰，强腐蚀性环境中使用。
Never use the controller of power in damp environment. Never use it in environment under high-temperature, with interference of strong electromagnetic waves or strong corrosion.
3. 产品严禁在转子室内无水的状态下长时间运转。
This product is not allowed to run for a long time without water in the rotor-room.
4. 不得在含有固体颗粒或条状物的淡海水中使用。
Never use it in freshwater or seawater with solid grains or sticks.
5. 使用过程中，当发现异常情况时，请立即拔掉电源插头，并与您的经销商店或专业维修中心联系。
If any abnormal phenomenon is found in use, pull off the plug immediately and contact the franchiser or professional maintenance center.

主要技术参数 MAIN TECHNICAL DATA

主要技术参数见产品铭牌
Technical parameters are shown on nameplate of product

部件名称 MAIN TECHNICAL DATA



安装形式 INSTALLATION:



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1. 把橡胶吸盘底座安装在机座上, 然后选择水族箱底部或水族箱壁上合适位置, 用轻力按压水泵。

Install the rubber cupule-base on the pump-base, then choose a proper position on the inner wall of aquarium or bottom of aquarium. And slightly press the pump.

2. 也可以用固定杆挂在水族箱的边沿上, 水泵水深可以调节。

You can also hang the pump on side of aquarium with a fixing-bar, and the depth of pump can be adjusted.

3. 另一种安装形式, 用磁吸底座吸牢固定在水族箱的合适位置上, 安全又方便。

Another way of installation is to use the magnetic pedestal to adsorb and fix the pump onto the proper position of the aquarium, safe and convenient.

使用方法 USAGE:

本机控制器面板上设置有喂食按钮 (FEED) 喂食定时为10分钟, 昼/夜开关, A路工作时间设定旋钮 (A-TIME) B路工作时间设定旋钮 (B-TIME) 全左旋时, 水泵工作设定时间约为5秒, 全右旋时, 水泵工作设定时间约3分钟, 及A路流量控制旋钮 (A-WAVE), B路流量控制旋钮 (B-WAVE) 全左旋时流量最小, 全右旋时, 流量最大, 流量任意调节可以适用各种水族箱大小尺寸。

There is a "FEED" button on the controller-panel. And the feeding-time is set 10 min. And there are daytime/night switch, circuit-A working-time setting knob (A-TIME), and circuit-B working-time setting knob (B-TIME). When turn it left fully, the setting working-time of pump is about 5 seconds; when turn right fully, the setting working-time of pump is about 3 minutes. Furthermore, there are circuit-A flux control knob (A-WAVE) and circuit-B flux control knob (B-WAVE). When turn it left fully, we

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get minimum flux; when turn it right fully, we get maximum flux. The flux can be adjusted at will, and it is suitable for aquariums with various sizes.

指示灯状态表 FETTLER TABLE OF THE PILOT LAMPS:

喂食指示灯 FEED-INDICATOR (FEED)	闪烁 TWINKLE	水泵停止 THE PUMP PAUSES
昼指示灯 DAYTIME INDICATOR	亮 LIGHTING	水泵工作 THE PUMP WORKS
夜指示灯同时A或B路指示灯 NIGHT INDICATOR & (CIRCUIT-A OR B INDICATOR)	亮 LIGHTING	水泵工作 THE PUMP WORKS

设置 SETTING

一、喂食/Feeding

轻触FEED喂食按钮, 电路处于“喂食状态”, 待10分钟后电路能复位到正常驻状态, 也可以从喂食状态下轻触FEED按钮, 电路复位到正常状态。

Slightly touch "FEED" button and the circuit is in "feeding state", wait 10 minutes and the circuit can reset to normal state. Also you can slightly touch "FEED" button in "feeding-state" and the circuit can reset to normal state.

二、昼/夜转换/Transition of daytime/night

电路为昼状态时, (开关状态为) 昼 (DAY) 指示灯亮, 电路从A路工作 暂停约0.5秒 B路工作 暂停约0.5秒 再回到A路的工作循环。

电路为夜状态时, (开关状态为) 夜 (NIGHT) 指示灯亮。电路从A路工作 暂停约3分钟 B路工作 暂停约3分钟 再回到A路的工作循环。

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When the circuit is under "daytime" state, the state of switch is that DAY-indicator turns on. First the circuit-A begins to work, then pause for about 0.5seconds; and then circuit-B begins to work, and pause for about 0.5seconds. And return to the working circulation of circuit-A. When the circuit is under "night" state, the state of switch is that NIGHT-indicator turns on. First the circuit-A begins to work, then pause for about 3 minutes; and then circuit-B begins to work, and pause for about 3 minutes. And return to the working circulation of circuit-A.

故障指南 TROUBLE-SHOOTING:

出现故障请检查:

When malfunction occurs, please check:

1. 电源插头是否松动, 接触不良。
Whether the plug of power is loose and cause bad connection.
2. 适配器是否烧坏。
Whether the adapter is burnt.
3. 控制器的保险管是否烧坏。
Whether the fuse of controller is burnt.
4. 叶轮是否卡死
Whether the impeller is blocked.
5. 电机是否烧坏
Whether is motor is burnt.

解决这些问题后, 您就可以重新启动水泵, 并观察能否正常工作, 若产品出现较严重的故障, 请勿自行拆修, 应由生产厂商或专业人士进行。

Solving all of these problems you can restart the pump. Observe whether it can work normally or not. If there's any serious malfunction of this pump, don't dismantle it by yourself. If necessary, it should be repaired by its producer or by professionals.

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