

suinadoc

USER GUIDE|MANUAL|SAFETY

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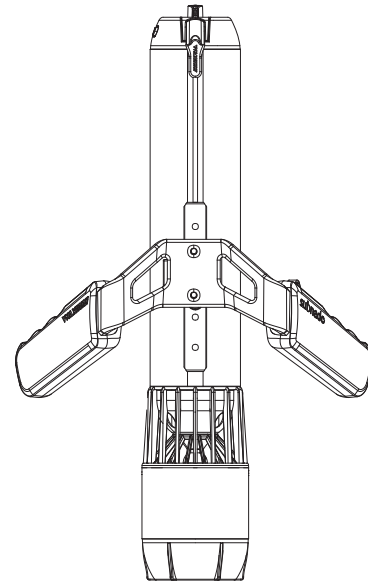
WAYDOO

Waydoo Technical Support

This guide may be updated without notice.

Check the official Waydoo website for the latest version

www.waydoootech.com



WAYDOO

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Read and understand this user manual and all safety instructions before using this product.

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I Disclaimer

Please fully read this product manual and related warnings and Safety Guidelines carefully before use. Please fully understand your legal rights, responsibilities, and safety instructions. This product is an underwater scooter. Improper use may cause the risk of severe injury or death. USE THIS PRODUCT AT YOUR OWN RISK. Users must understand and accept the inherent risks of using this product. Any misuse of this product may cause personal injury or property/product damage. When using this product, please be sure to use original accessories or Waydoo certified accessories. By using this product, you are deemed to have accepted the terms and content of this document in its entirety. Users are responsible for their actions and all consequences. As the developer of this product, Waydoo reserves the right to change components, specifications, or other information without prior notice. For the latest information, please visit www.waydootech.com

WARNING: Minors under 16 years of age must be good swimmers and accompanied by a competent guardian who is fully familiar with this product and this manual, including the Safety Guidelines. The Safety Guidelines contain only partial knowledge of operating safety and must be understood in connection with general safety knowledge and common sense. Please be sure to carefully read the Disclaimer's contents and the Safety Guidelines. Read the user manual carefully to familiarize yourself with the product's functions before use. Failure to operate this product properly may cause serious injury to yourself or others and damage the product and property. This product requires users to be fully familiar with it before use. Users need to learn about the product before operating. Never use any parts that are damaged, in need of maintenance or not supplied or recommended by Waydoo. Please strictly follow Waydoo instructions for installation and use. This document contains safety instructions, operation information, maintenance, etc. Please be sure to read all instructions and warnings carefully before assembling, setting up, and using.

FCC Cautions:

This device complies with part 15 of the FCC Rules .Operation is subject to the following three 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.
- Shenzhen Waydoo Intelligence Technology Co.,Ltd.
MADE IN CHINA

- (3)Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

II Overview

2.1 Brief Introduction

Established in 2018, Shenzhen Waydoo Intelligence Technology Co.,Ltd. is a high-tech enterprise integrating research and development, production, and sales of water sports high-tech products. With the experience of the R&D team and technological expertise, Waydoo launched the first underwater scooter, Waydoo Subnado, through several technical innovations. Subnado adopts an advanced built-in battery design, integrating a 98wh lithium battery, brush-less motor, motor drive, control, and charging circuit inside an aluminum cylinder with a diameter of only 60mm, which significantly reduces the volume of the product. Across the industry, Subnado is the first to use the USB-C charging system, which supports fast charging protocols such as PD 3.0 and charges up to 100w for fast charging and charging other USB devices. The power system adopts the form of a small diameter injection pump that achieves propulsion efficiency while obtaining up to 6.5 kg thrust. The compact size and portability make it ideal for travel. Waydoo provides users with various accessories, such as board and arm accessories. With the board accessories, users can leverage the Subnado for propulsion power to suit a variety of scenarios. Users can fix the Subnado on the arm without occupying both hands with the arm accessories, which is convenient to use underwater. The quick-release & installation system design enables users to switch between multiple scenarios. The Subnado provides you with the perfect experience underwater.

2.2 Safety Guidelines

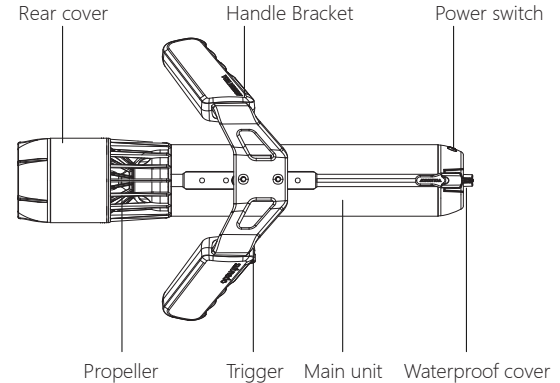
- ▶ Failure to follow these Safety Guidelines and warnings may result in serious injury or death.
- 1) Minors under 16 years of age must be accompanied by a guardian when using this product.
- 2) Please refer to the user manual and watch the tutorial videos carefully before using this product.
- 3) Do not use this product if you are under the influence of alcohol/drugs, or not physically or mentally fit for swimming, snorkeling, diving, or other water sports.
- 4) Keep the product away from fire. Avoid heavy pressure, squeezing and dropping.
- 5) Only operate this product underwater. Do not let the motor run in the air for more than 10 secs.
- 6) The ambient temperature for using this product is 0°C ~ 40°C (32°F ~ 104°F). The ambient temperature condition of storage is -10°C ~ 50°C (14°F ~ 122°F). Keep this product in the shade when not actively using it.
- 7) Please be sure to keep your fingers, hair, clothes, swimwear, drawstrings, necklaces, jewelry, netting and loose or dangling items away from the propeller during use to avoid personal injury or product damage.
- 8) Do not use this product in waters with a lot of mud, sand, debris, seaweed and algae, and floating objects to prevent foreign objects from getting into the propeller and damaging the power unit.
- 9) Before use, please pay attention to the water conditions. Make sure that the water is suitable for water sports activities and for using this product.
- 10) Before using the product, check carefully whether the product is broken, the waterproof cover is in place, and that the propeller is working normally.
- 11) When using this product, it is recommended to wear a swimming cap or helmet, avoid wearing loose clothing, and keep a safe distance from others, especially those with long hair or wearing loose clothing.
- 12) When using this product, please hold the Handle Bracket tightly and not point the front or tail at face, especially the eyes.
- 13) Do not use a damaged or defective product.
- 14) Do not use this product until you fully understand the operating procedures and inherent risks.
- 15) This product contains batteries and intricate integrated circuitry, which means users are not allowed to disassemble or repair it personally to avoid short-circuiting, electric-shock and fire.
- 16) This product is not a substitute for, or aid in, basic swimming ability.

⚠ WARNING This product contains an internal lithium-ion battery and therefore encompasses an inherent risk of fire, explosion and/or burns, including chemical burns. Inspect product housing for damage before charging. Never charge product if damaged, or placed near heat or attempt to open the housing/battery compartment. Never charge the battery while it is in, or near, water. Always ensure that the battery connections are dry. Avoid excessive vibration bumping or collision. Keep this product away from volatile substances, acidic materials, sharp objects, or placed under heavy objects. Disposal of products containing lithium-ion batteries require special handling that must be done in accordance with local laws and regulations. Never placed this product in a fire or furnace.

- ▶ This is not a lifesaving device or buoyancy aid. Use appropriate equipment such as a wetsuit, approved life vest or personal flotation device, and mask when using this product. Check the remaining battery life often so you can return to shallow water before losing battery power.
- ▶ Make sure you have a companion or spotter when using this product.
- ▶ When using this product, pay attention to the surrounding environment and maintain safe distance from watercraft, other people, animals, plants, obstacles, toys recreational equipment, or floating objects. Do not use this product in bad weather, strong offshore winds, or around hazardous waters, such as riptides, or undercurrents.
- ▶ If the user lets go of this product during use underwater, it will sink.

III Waydoo Subnado

3.1 Product Diagram



3.2 Product Feature

- ◆Two-speed thrust: The high and low gear provides two-speed thrust options. Users can switch to the high or low gear by pressing the trigger twice quickly. Users will hear one beep if they successfully switch to low gear or two beeps if they switch to the high gear.
- ◆Super gear: Quickly press the trigger three times. When hearing three beeps, users successfully switch to super gear; Within 1 minute, press the trigger to start the propeller. The propeller will spin at the maximum speed and provide the ultimate thrust.

Note: After one minute, the unit will automatically exit Super gear and switch to the gear before Super gear. To re-enter Super gear, quickly press the trigger again three times.

Note: The battery SOC should satisfy a specific range to enter the setting gear. (refer to figure 1)

Gear	Battery SOC requirement
High gear	> 25%
Super gear	> 37.5%

figure 1

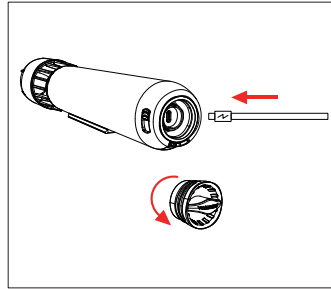
Note: When the battery SOC is below 25%, it will automatically switch from high gear to low gear. When the battery SOC is below 37.5%, it will automatically exit super gear and switch to high gear.

- ◆USB-C fast charging: Use a standard USB-C interface charger to charge Subnado; support PD3.0, QC2.0, QC3.0, BC2.1, and other charging protocols. The maximum charging power can reach 100W.
(Note: It needs to be supported by the charger and use of an e-Mark charging cable to reach 100W charging power).
- ◆Reverse charging: Subnado can be used as a power source to charge other devices. Reverse charging supports standard protocols such as PD3.0, PPS, QC3.0, QC2.0, and BC1.2. The maximum reverse charging power can reach 100W.
(Note: It needs to be supported by the charging device and use of the e-Mark charging cable to reach 100w charging power)
- ◆Cruise Mode: In this mode, the unit will enter auto cruise after 15-seconds of the propeller's continuous rotation, and users can release the trigger. Pull the trigger again to exit auto cruise.

IV Charging

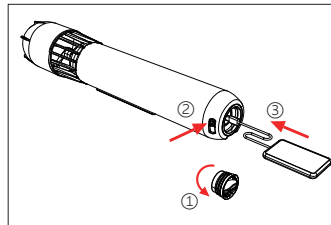
4.1 How to charge Subnado

1. Select a charger that supports PD protocol to speed up charging.
2. Open the waterproof cover (facing down to prevent water from falling in). Check for moisture around and inside the USB-C port. If there is water, it needs to be dried first; if there is seawater, it must be thoroughly cleaned with alcohol. After confirming that there is no abnormality, insert the USB-C charging cable to start charging.
3. During the charging process, the power indicator is displayed circularly in the form of a marquee, and the number of lights indicates the current power.
4. The speed of the marquee indicates the charging speed; the faster the marquee speeds, the faster the charging is.



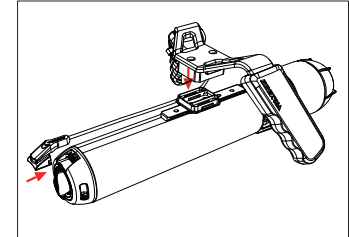
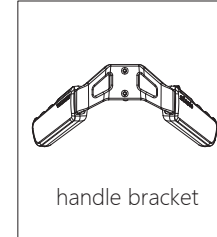
4.2 Reverse charging function

1. Open the waterproof cover (make sure that no water enters inside the USB-C plug or remains on the surface).
2. Power on the Subnado first, then plug in the USB-C cable. Connect the cable to the target device, charging begins. (Note that Subnado needs to be powered on before connecting the device)
3. After charging is completed, unplug the charging cable and turn off the Subnado.
4. Install the waterproof cover.



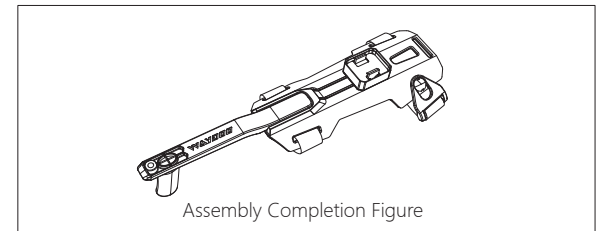
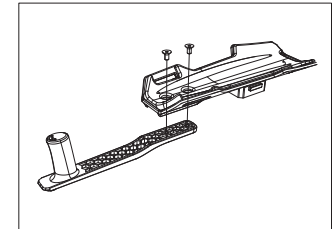
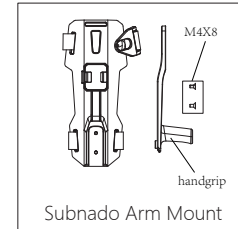
V Assembly Steps

Install the handle bracket on the main unit and install the Wired Thumb Controller on the corresponding position.

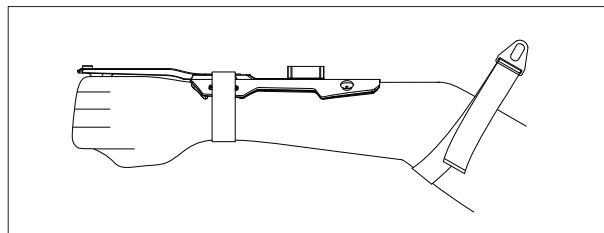


Accessories Use Instruction

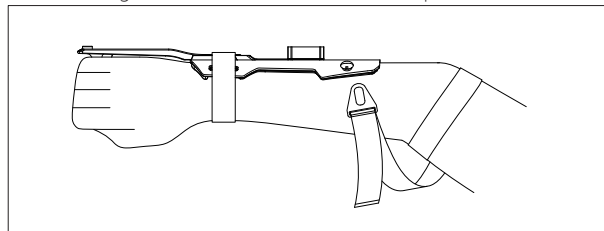
Use M4X8 screws to connect handgrip to Arm mount (as shown in the figure)



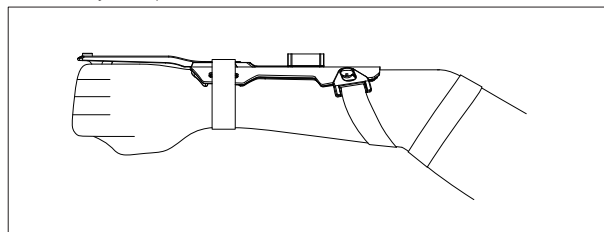
1. Hold the handgrip and place the Arm mount on the outside of the forearm. Wrap the strap around the forearm 1-2 times, depending on the arm circumference.



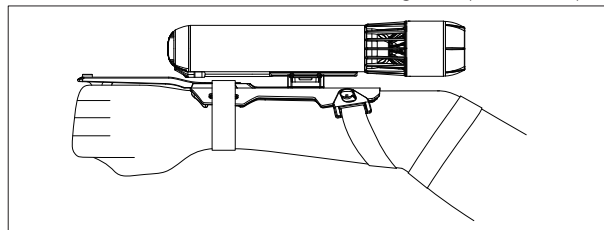
2. Fasten the gourd buckle on one end of the strap.



3. According to the forearm circumference, wrap it 2-3 times and finally fix it with nylon tape.

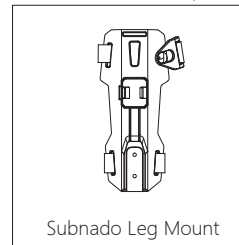


4. Install the main unit to the Arm mount through the quick release part.

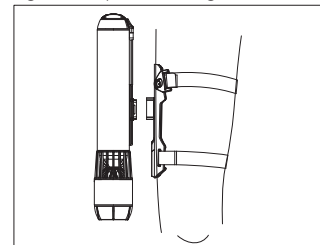


Fix the Subnado leg mount to the outside of the leg. Install the main unit to the leg mount through the quick release part.

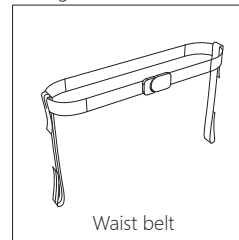
Note: Please use the specially designed straps for the leg mount.



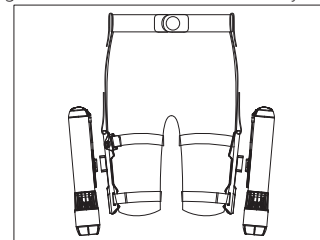
Subnado Leg Mount



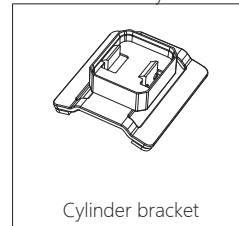
Fasten the belt around the waist. Pass the straps on both sides of the waist belt through the holes above the leg mount, and then fix them with nylon straps.



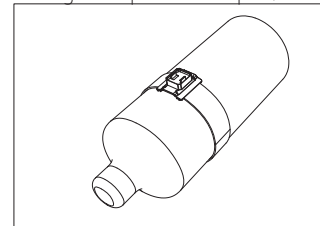
Waist belt



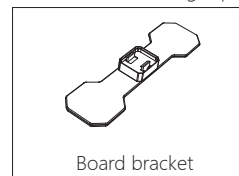
Install the cylinder bracket on the oxygen cylinder, and the main unit can be installed on the cylinder bracket through the quick release part.



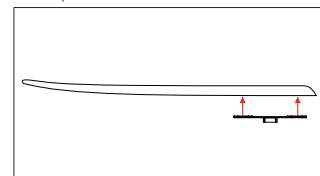
Cylinder bracket



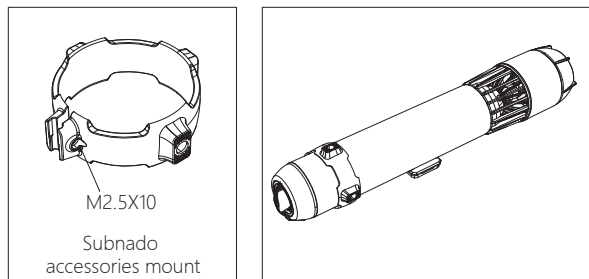
Tear off the sticker on the board bracket and glue it to the bottom of the board (such as a surfboard). Install the main unit to the pulp board bracket through quick-release part.



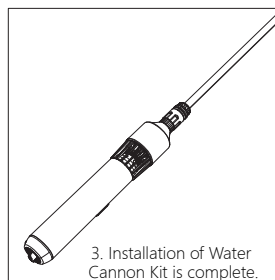
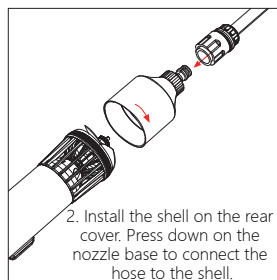
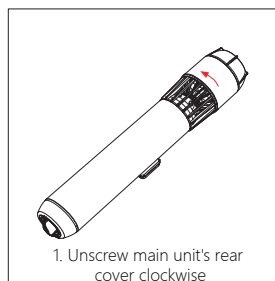
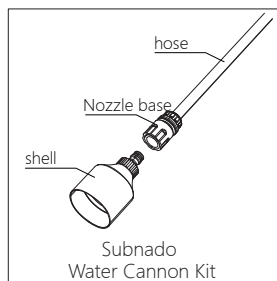
Board bracket



Install the accessories mount on the main unit and tighten the screws to secure.



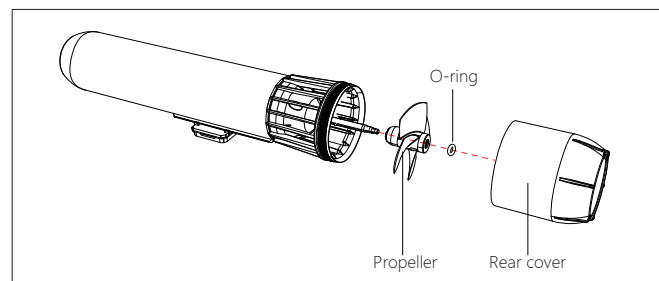
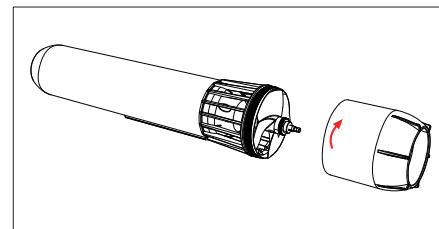
Installation steps for Subnado Water Cannon Kit.



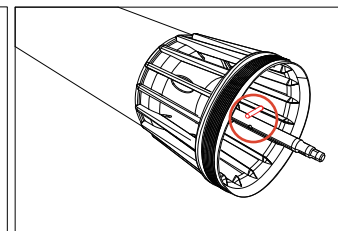
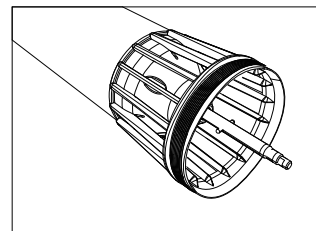
Note: Please turn clockwise and apply force to the unit first. After you feel the obvious two consecutive sudden jumps, it means that the thread is in the best installation position. At this time, apply appropriate force along the motor axis and rotate the shell counterclockwise. Otherwise, it is easy to fail to install or to install crookedly.

(6) If the users' fingers are relatively slender and are worried about injury during use, they can install the finger safe-guard. The following are the installation steps: (Note: Using a finger safe-guard will increase water resistance, resulting in increased power consumption which affects efficiency and reduces battery life and thrust)

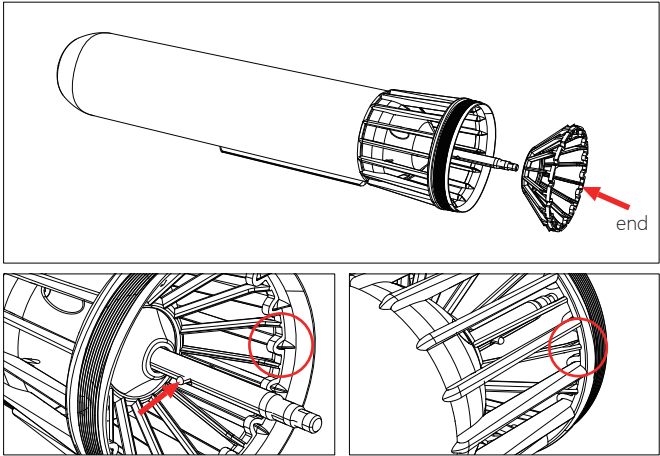
a. Unscrew the rear cover of the main unit clockwise, remove the O-ring, and take off the propeller.



b. Remove the pin

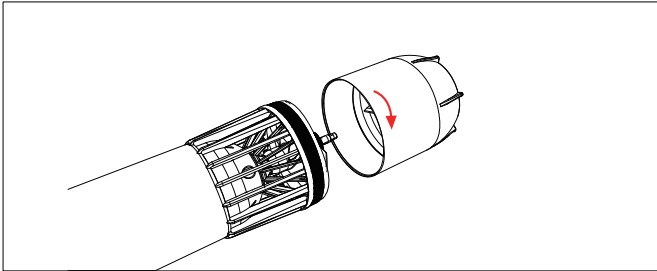


c. Put the finger safe-guard into the groove, press each end of the finger safe-guard into place, and make sure the end of the finger safe-guard is engaged with the notch in the groove (as shown in the figure)



d. Put the pin in place correctly and assemble the propeller.

e. Install the O-ring in place, place the rear cover center aligned with the shaft, and tighten the rear cover counterclockwise.












For assembling and using other accessories, please refer to the relevant documents on the official website. www.waydootech.com

VI How to use

- Power on the Subnado, confirm the power level (refer to figure 1) and the main unit's self-checking tone.
- Quickly press the trigger twice to switch to high or low gear. Quickly press the trigger triple times to switch on/off the super gear mode. The number of beeps indicates the gear that the user has entered. "One beep" prompts to enter low gear; "Two beeps" prompt to enter high gear; "Three beeps" prompt to enter super gear. (Note: The Super gear only maintains for 1 minute. To re-enter Super gear, you need to press the trigger 3 times quickly.)
- The Subnado supports two modes. To turn on/off the cruise mode, simultaneously hold down the trigger and power on the machine.

Mode	Regular Working mode
Power-on indication	 8 LED lights flash twice and shows the battery power level
How it works	Under regular working mode, the propeller rotates when pressing the trigger and stops after releasing.
Mode	Cruise mode
Power-on indication	 8 LED lights flash once and shows the battery power level
How it works	Under cruise mode, the propeller rotates when pressing the trigger. After 15 seconds, when there is a transient speed change, it enters auto cruise. Users can release the trigger, and the propeller will continue rotating. Press the trigger again, and the propeller will stop rotating and exit the auto cruise.

Figure 1

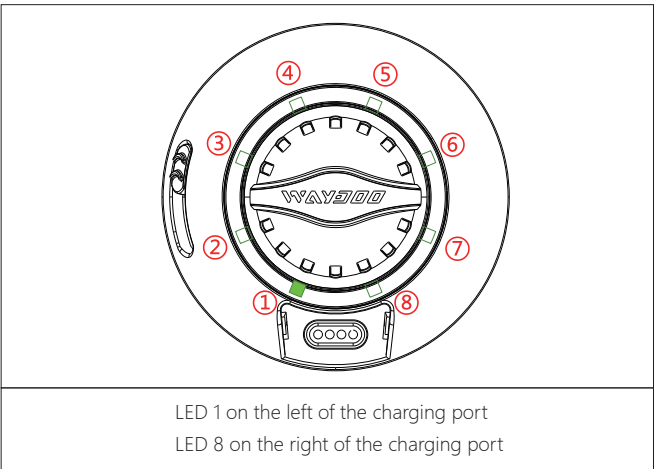
LED Light	Capacity
	<3%
	3%-12.5%
	12.5%-25%
	25%-37.5%
	37.5%-50%
	50%-62.5%
	62.5%-75%
	75%-87.5%
	87.5%-100%

Note: All of the above and below half-segment LED lights represent the flashing LED lights.

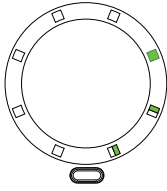
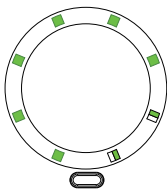
VII Product specifications

	Product weight	About 1.4kg
	Product diameter	About 377*60mm (propeller cover: 70mm)
	Maximum speed	1.4m/s
	Maximum depth	60m
	Battery life (maximum)	56mins
	Operating temperature	0°C ~ 40°C
	Maximum thrust	6.5kg (1min)
	Accessories Mount	support three 1/4 inch threaded mounting holes
	Charging voltage	5V ~ 20V
	Plug type	USB-C
	Maximum power	100W
	Charging temperature	0 ~ 40°C
	Charging time	1.2H

VIII Error and Tone Indication



8.1 Error indication and solution

Fault Indicator	Fault	Solution
	Cell under-temperature	Place the main unit in an environment of 10-30 degrees Celsius. Wait for the main unit temperature to rise to a suitable temperature, and the charging will start automatically.
	Cell over-temperature	1. Stop charging 2. Place the main unit in an environment with a lower room temperature, and wait for the main unit temperature to drop to a suitable temperature, and the fault will disappear.

8.2 Tone Indication

Tone	Indication
♪ 1 2 3 4	Main unit Self-checking passes
🔊 / 🔊 🔊 / 🔊 🔊 🔊	Gear switch: One beep indicates switching to low gear; Two beeps indicates switching to high gear; Three beeps indicates switching to super gear
🔊- (1s)	Unable to enter the setting gear
🔊-🔊-🔊-🔊-🔊	Remind users to power off the main unit to avoid running out of power (not pressing the trigger within 15 minutes / not charging or charging complete)

XI Maintenance

Improper maintenance, disassembling and repair may cause damage to this product, personal injury, including electric shock, and be deemed a waiver by the purchaser, owner and user of the product warranty as noted in the Warranty Terms and Limitation of Liability sections of this manual.

9.1 Cleaning after use

After each product use, please follow the guidelines to rinse the product to maintain the corrosion resistance and extend the product life. Please follow the principles below:

- 1) After using the product in seawater, please be sure to rinse the body shell with fresh water and dry it in time to avoid corrosion of the exterior and discoloration of the body.
- 2) Before rinsing the body with fresh water, please ensure the waterproof cover is tightened.
- 3) Always check that no stones, salt, sand, or dirt get into the Subnado when cleaning parts such as connecting parts, propellers, etc. Please clean up those objects which are within easy reach regularly if necessary.
- 4) If you find any foreign objects wrapped around the propeller, carefully remove the main unit's rear cover and clean.
- 5) After finishing the cleaning of the main body, please remove the waterproof cover and clean the charging port with clean and dry cotton swabs to ensure that there is no water, sand, or other foreign objects.
- 6) Please dry the main unit before removing the waterproof cover to avoid seawater dripping inside and damaging the USB-C port. If some water gets into the charging port, dry it in time.
- 7) If seawater drops in the connector of the wired thumb, use a little fresh water or alcohol to clean it and dry it in time to avoid poor contact caused by corrosion which will affect the subsequent use of the product.
- 8) If the oxide layer of the shell is accidentally damaged, it should be repaired in time to avoid accelerating the corrosion of the shell.

9.2 Storage

Please follow these storage guidelines:

- 1) Please ensure the power switch is off and keep the product away from strong magnetic environments, which may power on the main unit and consume battery power.
- 2) Please ensure that the storage temperature is within the range of -10°C~50°C.
- 3) Do not store Subnado in humid, direct sunlight and other harsh environments that may cause damage to electronic devices.
- 4) Do not place Subnado in open flames, and please keep out of reach of minors under the age of 16.
- 5) Please prevent the battery from being over-discharged due to prolonged non-use before storing the Subnado.
- 6) If you do not use the product for a long time, you should make sure that the power level is between 50% and 62.5% . At the same time, the unit needs to be charged every three months (charged to 50~62.5%).

Warranty Terms

Warranty Policy

Waydoo warrants that the Waydoo product(s) will be free from defects in materials and workmanship under normal use for under the warranty period. The warranty period for this product starts from the day you receive the goods. The warranty period for the main unit is 12 months. If you are unable to provide the proof of purchase, such as an invoice etc., the warranty period will start from the ex-factory date shown on the machine, or it will be specified by Waydoo.

How To Obtain After-sales Service

If the product does not function as warranted normally during the warranty period, please contact Waydoo to obtain the after-sales service.

Waydoo may not be able to provide after-sales service in some regions and details of the after-sales service policy may vary from region to region. Services outside the normal scope of mandatory service may result in additional charges. For more information, please contact Waydoo or the local authorized dealer.

Request For Warranty Service

Waydoo offers you the following warranty services. For more information, please contact Waydoo or the authorized Waydoo distributor. When reaching out to Waydoo, please provide a detailed description of the problem and the proof of purchase. Waydoo technical support team will attempt to diagnose and resolve your problem via email, or remote assistance. If your problem persists, Waydoo reserves the right to request that you send the product(s) back for testing if necessary, and Waydoo will arrange for repair under the warranty.

Replacement Products and Parts

When after-sales service involves the replacement of a product or part, the replacement item becomes your property, and the replaced item becomes Waydoo's property. Only unaltered Waydoo products and parts are eligible for replacement.

Replacement products or parts may not be new. However, they are certainly in good working condition and are at least functionally equivalent to the parts being replaced. The replacement product or part shall be covered by the time remaining in the original warranty and bound to a new serial number.

Use of Personal Contact Information and Data

If you obtain service under this policy, you will authorize Waydoo to store, use, and process your contact information, including name, phone number, address, and email address. We may contact you to inquire about your satisfaction with our service or notify you about any product recalls or safety issues. To achieve these aims, you authorize Waydoo to transfer your information to any country where we do business and provide it to entities acting on our behalf. We may also disclose your information where required by law.

After-Sale Warranty Policy Limitations

This policy does not apply to the following:

- × Collision or fire accidents caused by man-made and non-product quality problems.
- × Damage caused by private modification, disassembly not in accordance with official instructions or manuals.
- × Damage caused by incorrect installation, use, or operation not in accordance with the official instructions.
- × Damage caused by the customer's own maintenance and repair of parts not in accordance with the official instructions.
- × Product failure caused by use and storage in harsh environments.
- × Damage or abnormalities caused by handling the product in an environment with complex electromagnetic or strong interference.
- × Damage caused by forced operation when components have been aged or damaged.
- × Damage caused by the misuse of third-party parts or accessories not certified by Waydoo.
- × Damage to the battery caused by excessive discharge.

Limitation of Liability

WHEN RECEIVING SERVICE, WAYDOO IS RESPONSIBLE FOR LOSS OR DAMAGE TO YOUR PRODUCT ONLY WHILE IT IS IN WAYDOO'S POSSESSION OR IN TRANSIT IF WAYDOO IS RESPONSIBLE FOR TRANSPORTATION.

WAYDOO IS NOT RESPONSIBLE FOR THE LOSS OR DISCLOSURE OF ANY DATA, INCLUDING CONFIDENTIAL INFORMATION, PROPRIETARY INFORMATION, OR PERSONAL INFORMATION CONTAINED IN A PRODUCT.

UNDER NO CIRCUMSTANCES, AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY SET FORTH HEREIN, SHALL WAYDOO, ITS AFFILIATES, SUPPLIERS, RESELLERS, OR SERVICE PROVIDERS BE LIABLE FOR ANY OF THE FOLLOWING EVEN IF INFORMED OF THEIR POSSIBILITY AND REGARDLESS OF WHETHER THE CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER THEORY OF LIABILITY:

- 1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES;
 - 2) LOSS, DAMAGE OR DISCLOSURE OF YOUR DATA;
 - 3) SPECIAL, INCIDENTAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, BUSINESS REVENUE, GOODWILL OR ANTICIPATED SAVINGS. UNDER NO CIRCUMSTANCES SHALL THE TOTAL LIABILITY OF WAYDOO, ITS AFFILIATES, SUPPLIERS, RESELLERS, OR SERVICE PROVIDERS FOR DAMAGES FROM ANY CAUSE EXCEED THE AMOUNT OF ACTUAL DIRECT DAMAGES, NOT TO EXCEED THE AMOUNT PAID FOR THE PRODUCT. THE FOREGOING LIMITATION DOES NOT APPLY TO DAMAGES FOR BODILY INJURY (INCLUDING DEATH), DAMAGE TO REAL PROPERTY, OR DAMAGE TO TANGIBLE PERSONAL PROPERTY FOR WHICH WAYDOO IS LIABLE UNDER LAW.
- AS SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Your Other Rights

This Limited Warranty provides you with extra and specific legal rights. You may have other rights according to the applicable laws of your state or jurisdiction. You may also have other rights under a written agreement with Waydoo. Nothing in this Limited Warranty affects your statutory rights, including rights of consumers under laws or regulations governing the sale of consumer products that cannot be waived or limited by agreement.

For technical support or related inquiries, please send emails to support@waydootech.com or contact local authorized dealers.

Minors under 16 years of age must be accompanied by a guardian when using this product.

User must read and understand user manual before use.

Spinning propeller can cause serious injury.

Contains integrated lithium-ion battery.

Always abide by local laws while operating, transporting or disposing of this product.



subnado

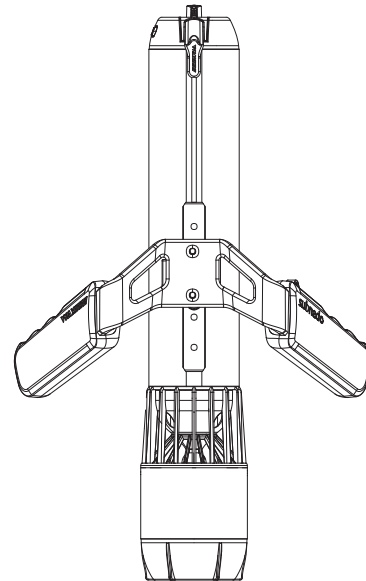
说明书

V1.0 2022.06

WAYDOO

Waydoo技术支持

本指引如有更新，恕不另行通知
您可以在Waydoo官方网站查询最新版本
www.waydootech.com



WAYDOO

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I 免责声明

请务必在使用前仔细阅读本使用手册以及相关警示，了解您的合法权益、责任和安全说明。本产品是一款水下运动助力推进器，不恰当使用本产品可能导致严重伤害甚至死亡的风险，用户须理解并接受使用本产品的固有风险，任何超出对本产品设计限制的滥用都可能导致产品损坏或人身伤害。请务必使用原厂配件或经过 Waydoo 认证的配件。一旦使用本产品，即视为您已理解、认可和接受本文档全部条款和内容。使用者承诺对自己的行为及因此而产生的所有后果负责。作为产品开发方，Waydoo 保留在不提前通知的情况下更改本产品的组件、规格或其他方面内容的权利。如需了解最新资料，请浏览 www.waydootech.com

警告：本产品有使用年龄限制，16 岁以下的未成年人需在成年人监护指导下使用。安全指引仅包含部分的操作安全知识，请务必仔细阅读免责声明和安全操作指引的全部内容。通过阅读整个用户手册，熟悉产品的功能之后再进行操作。如果没有正确操作本产品可能会对自身或他人造成严重伤害，或者导致产品损坏和财产损失。本产品需要经过一段时间熟悉后才能安全使用，并且使用者需要具备一些基本常识后才能进行操作。切勿使用非 Waydoo 提供或建议的部件，且必须严格遵守 Waydoo 的指引安装和使用产品。本指引文档包含安全、操作和维护等说明。在进行组装、设置和使用之前务必仔细阅读用户手册中的所有说明和警告。

II 基本信息

2.1 产品简介

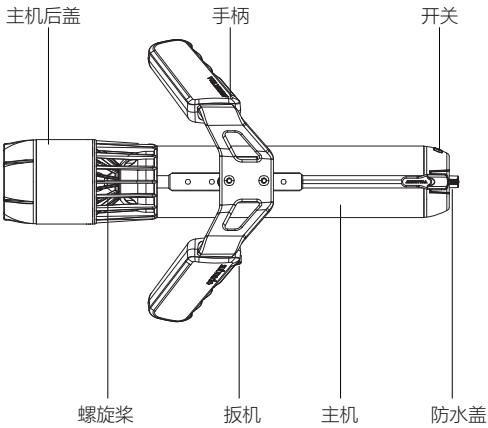
深圳市苇渡智能科技有限公司(Waydoo)成立于 2018 年，是一家集研发、生产及销售水上运动科技产品为一体的高科技企业。基于经验丰富的研发团队和稳定扎实的技术积累，苇渡通过多项技术创新，推出旗下第一款水下推进器--Waydoo Subnado。Subnado 采用了非常超前的内置电池设计，在直径仅 60mm 的铝合金筒身内集成了 98wh 的锂电池，无刷电机，电机驱动器，控制及充电电路，极大的缩小了产品的体积。Subnado 在同行业内首次使用 USB-C 充电系统，支持 PD 3.0 等快充充电协议，最大可以 100w 的充电功率进行快速充电，以及以最大 100w 的功率为其他 USB 设备充电。动力系统采用了小直径泵的形式，在兼顾推进效率的同时，更获得高达 6.5 公斤的推力。小巧便携，非常适合外出旅行。苇渡为用户提供了多种配件供选择，如板体配件，用于将 Subnado 安装在多种场景作为推进动力使用；手臂配件，使用者可以将 Subnado 固定在上臂上，不占用双手，在潜水时非常方便。快拆安装的设计，方便用户在多种场景中切换。Subnado，为您提供完美的水下体验。

2.2 安全指引

- 1) 16 岁以下的未成年人必须在监护人的陪同下使用本产品。
- 2) 请仔细参照用户手册和观看官方教学视频使用本产品。
- 3) 醉酒或身体状况不适合游泳、浮潜、潜水等运动的人士请勿使用本产品。
- 4) 本产品的任何零部件都不得接近火源，不可重压、跌落。
- 5) 本产品只能浸泡在水中使用，切勿在空气中长时间打开电机。
- 6) 本产品的使用环境温度条件为 0° C~40° C，本产品的任何零部件的存储环境温度条件为 -10° C~50° C。
- 7) 使用过程中请注意将手指、头发及衣物等远离螺旋桨部分，避免吸入主机导致人身、物品伤害或产品损坏。
- 8) 使用本产品前需留意将要进入的水域水质，确保所在水域适合进行游泳、潜水等活动，且允许使用本产品。避免在泥沙、杂物、带状漂浮物较多的水域使用，以免卷入螺旋桨损坏主机 动力装置。
- 9) 使用本产品前，应检查好产品无明显破损，防水盖已安装到位，螺旋桨正常工作，并检查电量。
- 10) 使用本产品时，建议配戴泳帽，切忌穿着宽松的衣物，并与周围长头发或身着宽松衣物的人群保持安全距离，避免长发或衣物卷入螺旋桨。
- 11) 使用本产品时，请务必紧握手柄，不要将本产品的前部及尾部对准您或他人的脸部，尤其是眼睛。
- 12) 请勿使用受损或故障的产品。
- 13) 请勿在未充分了解产品的操作步骤和固有风险前使用本产品。
- 14) 本产品内含电池和密集电路，不允许客户私自拆卸或维修，以免造成短路引发火灾。

III 关于产品

3.1 产品图示



3.2 功能特点

两档推力：高低两档推力设置，使用者可通过快速按压扳机 2 次进行切换，切换成功后可听到一或两声提示音，一声代表已进入低档，两声代表已进入高档。

Super 档：快速按压扳机 3 次，可听到 3 声提示音，代表机器成功进入 Super 档；在随后的 1 分钟内，按动扳机启动螺旋桨，螺旋桨将以最大的速度旋转，提供极限推力。

注意：一分钟之后自动退出Super档，并切换至进入Super档之前的档位。若想重新进入Super档，请再次快速按压扳机3次。

档位	电量 SOC 要求
高档	> 25%
super 档	> 37.5%

注意：当电量低于 25% 的时候，自动退出高档进入低档。当电量低于 37.5% 时，自动退出 super 档进入高档。

USB-C 快充：使用市面上常见的 USB-C接口的充电器即可为 Subnado 充电；支持 PD3.0、QC2.0、QC3.0、BC2.1等充电协议，最大充电功率可达100W。
(注意：充电功率要达到100W需要充电器支持并使用e-Mark充电线)

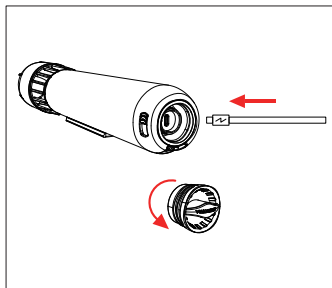
反向充电：利用主机作为电源对其他设备进行充电的功能。反向充电支持PD3.0、PPS、QC3.0、QC2.0和BC1.2等常见协议。最大反向充电功率可达100W。
(注意：充电功率要达到100W需被充电设备支持并使用e-Mark充电线)

定速巡航模式：在此模式下，用户可以在螺旋桨连续旋转 15 秒后松开扳机，进入巡航工作状态。再次扣动扳机，即可退出此状态。

IV 充电

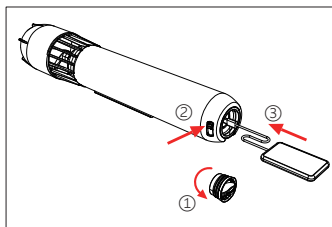
4.1 如何为 Subnado 充电

1. 选择支持 PD 协议的充电头，以加快充电速度。
2. 机头朝下（防止防水盖内有水落入）打开防水盖，检查USB-C周边及内部是否有水（如果有水需先晾干；如果有海水必须先使用酒精彻底清洗干净并晾干），无异常后插入 USB-C 充电线开始充电。
3. 充电过程中，电量指示灯以跑马灯形式循环显示，灯的数量指示当前电量。
4. 跑马灯的速度指示充电速度；跑马灯速度越快表明充电速度越快。



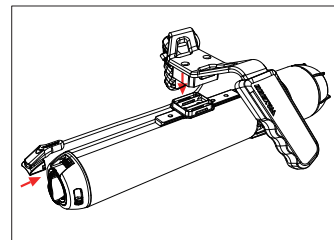
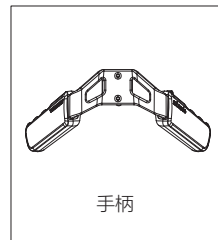
4.2 反向充电功能

1. 打开防水盖(如果机身有水，应避免进入USB-C插头周边或内部)。
2. 先打开主机电源，再插入 USB-C 线缆。连接需要充电的设备，开始充电。
(注意主机需要在连接设备之前开机)
3. 充电完成后，拔除充电线并关闭主机电源。
4. 安装好防水盖。



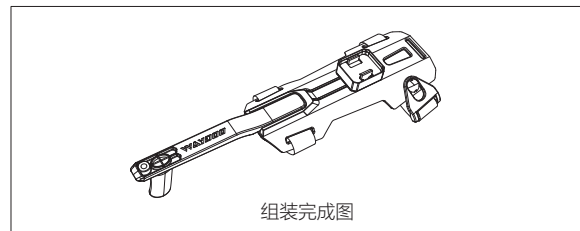
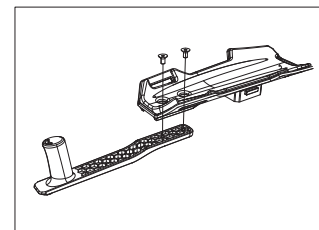
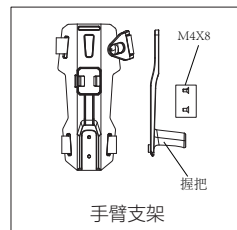
V 安装步骤

将手柄安装于主机，遥控线接口安装于对应位置。

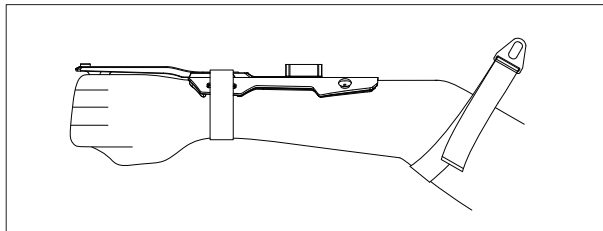


配件使用说明

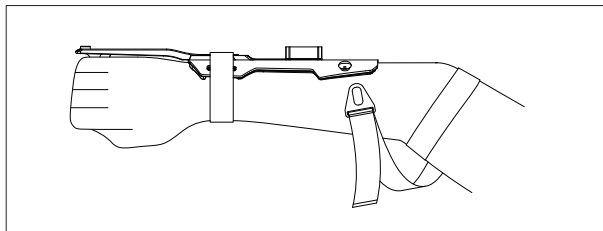
使用M4X8螺丝连接握把与手臂支架 (如图)



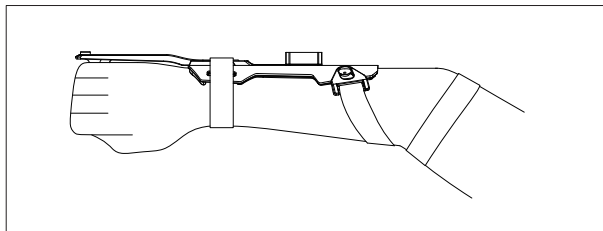
1. 握住握把，将手臂支架放置于手臂外侧。根据手臂粗细，将绑带缠绕手臂1-2圈。



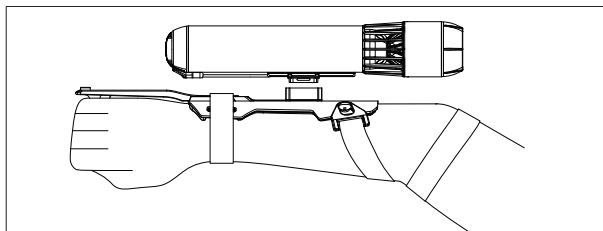
2. 绑带一端扣上葫芦扣。



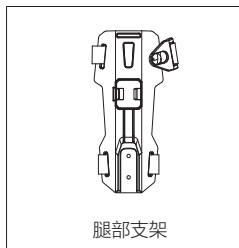
3. 根据手臂粗细缠绕2-3圈后与尼龙带粘贴固定。



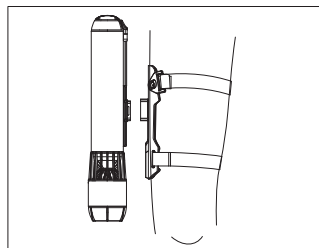
4. 手臂支架固定完成后，主机可通过快拆件与手臂支架连接。



腿部支架固定至腿部外侧，主机可通过快拆件与腿部支架连接。
注意：腿部支架有专用绑带，使用前请更换。



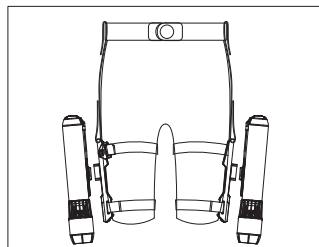
腿部支架



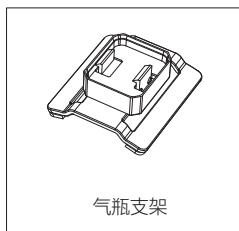
绑腿腰带固定至腰上。腰带两侧带子穿过腿部支架上方的孔后与尼龙带粘贴固定。



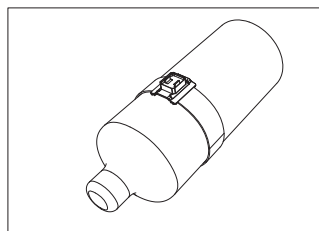
绑腿腰带



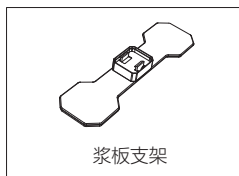
将气瓶支架安装于氧气瓶上，主机可通过快拆件与气瓶支架连接。



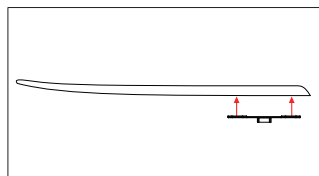
气瓶支架



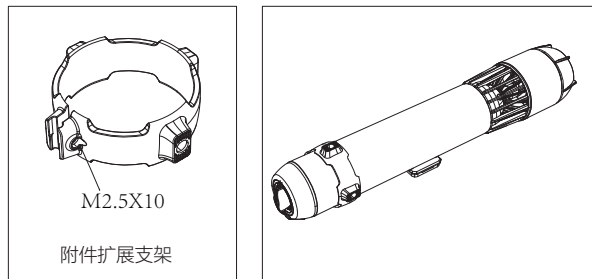
将浆板支架上的贴纸撕下粘合于板体（如：冲浪板）底部，主机可通过快拆件与浆板支架连接。



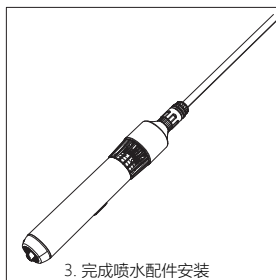
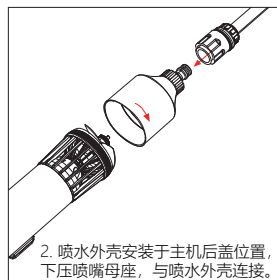
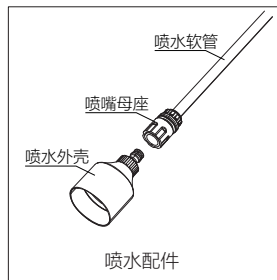
浆板支架



附件扩展支架安装于主机，锁紧螺丝以固定。



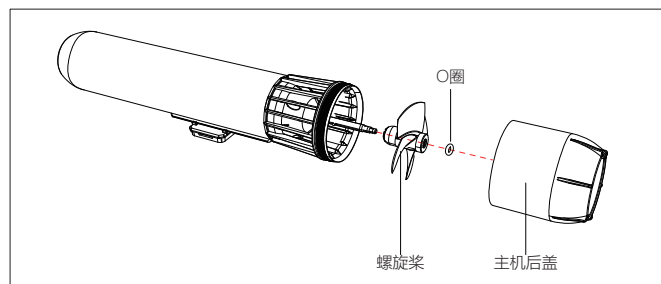
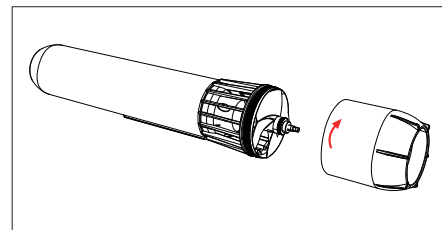
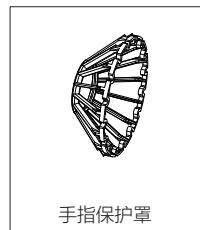
喷水配件安装步骤。



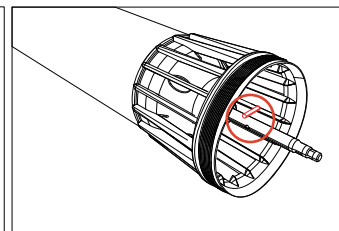
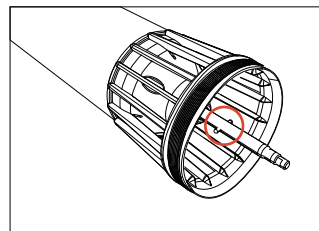
注意：请先顺时针旋转并向机身方向施力，感受到明显的连续两次突跳后，说明螺纹处于最佳安装位置，此时沿电机轴向施适当的力并逆时针旋转喷水外壳。否则安装容易装不上，或者装歪。

若使用者的手指比较纤细，担心使用中手指受伤，则可以安装随机标配的手指保护罩，以下是安装步骤：（注意：使用手指保护罩会增加水阻，导致功耗增加，影响效率，降低续航时间和推力）

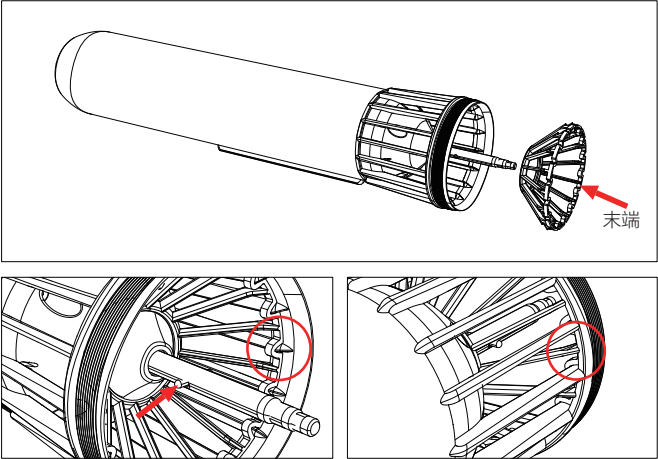
1. 顺时针拧开主机后盖，取下O圈，取下螺旋桨。



2. 拆下销钉。

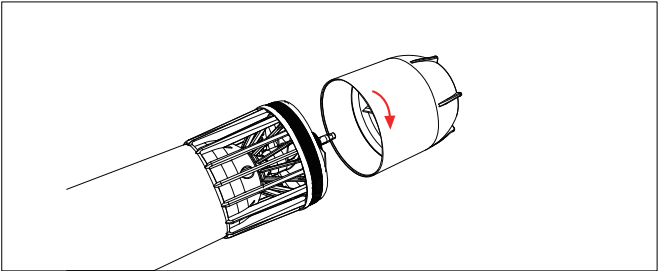


3. 将手指保护罩放入槽内，将手指保护罩每个末端压入到位，确保手指保护罩末端与槽内缺口扣合（如图）



4. 将销钉正确就位，组装好螺旋桨。

5. 装上O圈，将后盖中心对准轴安装，逆时针拧紧主机后盖。



注意：请先顺时针转并向机身方向施力，感受到明显的连续两次突跳后，说明螺纹处于最佳安装位置，此时沿电机轴向施适当的力并逆时针旋转后盖。否则安装容易装不上，或者装歪。

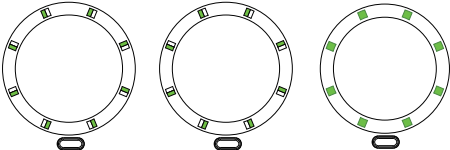
其他配件的安装与使用请参考官网相关文件。

VI 如何使用Subnado

1. 打开主机电源，确认电量（参考 figure 1），及检查主机自检提示音是否正常。
2. 快按遥控扳机 2 次，进行高低档位切换；快按遥控扳机 3 次，可启动 Super 模式。提示音的数量表示切换进入的档位。进入低档时发出一声提示音，进入高速档时发出两声提示音，进入 Super 档时 发出三声提示音。

注意：Super 档位只能保持 1 分钟，若要重新进入 Super 档位，需再次快按扳机 3 次。

Subnado 支持两种模式：定速巡航模式与正常模式。要开启/关闭定速巡航模式，请同时按住扳机并打开主机电源。

模式	正常模式
开机	 开机时，8个LED灯闪两次，之后显示电池电量
如何工作	在正常模式下，按下扳机时螺旋桨旋转，松开后停止。

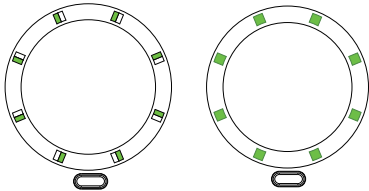
模式	定速巡航模式
开机	 开机时，8个LED灯闪一次，之后显示电池电量
如何工作	在定速巡航模式下，按下扳机15 秒后，当有瞬时变速时机器进入巡航工作状态。此时用户可以松开扳机，螺旋桨将继续旋转。再次按下扳机并松开，螺旋桨将停止旋转并退出此状态。

Figure 1

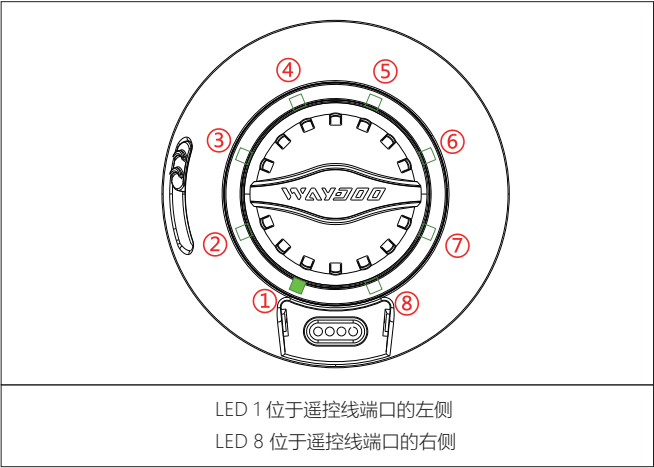
LED 灯	电量
	<3%
	3%-12.5%
	12.5%-25%
	25%-37.5%
	37.5%-50%
	50%-62.5%
	62.5%-75%
	75%-87.5%
	87.5%-100%

注：以上及以下半格 LED 灯均代表 LED 灯闪烁

VII 产品参数

	项目	参数
主机	重量	约1.4kg
	尺寸	约377*60mm（螺旋桨罩 70）
	最大速度	1.4m/s
	最大深度	60m
	续航时间（最长）	56mins
	工作温度	0℃～40℃
	最大推力	6.5kg（1min）
充电	外挂支持	附件扩展支架支持 3 个英制 1/4 螺纹孔
	充电电压	5V～20V
	接口类型	USB-C
	最大功率	100W
	充电温度	0～40℃
	充电时长	1.2H

VIII. 故障指示灯与指示音



8.1 故障指示灯与解决方案

故障指示灯	故障	解决方案
	电芯欠温	将主机放置于 10-30 摄氏度的环境内,等待主机温度上升 到合适的温度,充电将自行开始。
	电芯过温	1. 停止充电 2. 将主机放置于室温较低的环境内, 等待主机温度降低到合适的温度, 故障将会消失。

8.2 指示音

指示音	含义
♪ 1 2 3 4	主机自检通过
🔊 / 🔊 🔊 / 🔊 🔊 🔊	档位切换： 一声指示音为切换到低档； 两声指示音为切换到高档； 三声指示音为切换到 super 档
🔊- (1s)	无法进入设定档位
🔊-🔊-🔊-🔊-🔊	提醒用户关机，避免电量耗尽（15 分钟内没有按下遥控线扳机/ 没有正在充电或充电完成）

IX 维护保养

9.1 清洁事项

每次使用完本产品后，请务必按照指引冲洗本产品，延长产品的抗腐蚀性和使用寿命，以下是需要注意的要点：

- 1) 在海水中使用后，请务必及时用淡水冲洗主机机身并晾干，避免外壳腐蚀和机体变色。
- 2) 用淡水冲洗机身前，请务必确保防水盖拧紧。
- 3) 清洗某些部件如连接部位、螺旋桨等时，如果有发现盐分、沙子或其它碎屑，请务必清理干净。
- 4) 如果发现异物缠绕于螺旋桨，可将主机后盖打开进行清理。
- 5) 主机机身清洁完毕之后，请将防水盖取下，用干净、干燥的棉签清洁接口，确保无水、沙粒及其他异物。
- 6) 准备充电前请擦干主机，以免在打开主机防水盖时海水滴入 USB-C 连接器，损坏 USB-C 接口。一旦有海水滴入 USB-C 连接器，请及时使用淡水或酒精冲洗连接器，并及时晾干后才能使用。
- 7) 如果有海水进入遥控线接口，需要及时使用少许淡水或酒精清洗干净并晾干，避免腐蚀导致接触不良，影响产品后续使用。
- 8) 如果不小心将外壳氧化层破坏，应及时修补，以免加速对外壳的腐蚀。

9.2 存放

请遵照以下存放原则：

- 1) 请确保电源开关是关闭状态并将产品远离强磁环境，强磁环境可能会导致主机打开及耗光电量。
- 2) 请确保存放温度在-10℃~50℃范围内。
- 3) 请勿将 Subnado 在潮湿、阳光直晒等环境中存放，恶劣的环境会对电子设备造成损坏。
- 4) 请勿将 Subnado 放置在明火以及儿童易触达的地方。
- 5) 请在存放 Subnado 之前，防止电池因长时间不使用而过度放电。
- 6) 如果长期不使用，应确认主机电量在50%~62.5%之间后关机存放，以延迟电池寿命。同时需每三个月对电池进行一次充电(充电到50~62.5%)。

保修服务

售后政策

Waydoo 保证，在正常使用情况下，您购买的 Waydoo 产品在保修期内不会出现材料和工艺上的缺陷。本产品的保修期从您收到货物后的当日算起，主机保修期限为 12 个月。若您无法提供购买发票等有效购买证据，则保修期起始日期将以机器所示的出厂日期为准或由 Waydoo 另行规定。

如何获得售后服务

在保修期间，若产品不能实现所保证的功能，请联系 Waydoo 以获取相应的售后服务。Waydoo 可能在某些地区无法提供售后服务，且售后服务政策的内容也可能因地而异。常规服务范围外的服务可能导致额外费用的收取。如欲了解本地信息，请联系 Waydoo 或当地授权经销商。

申请保修服务

Waydoo 为您提供以下保修服务。详细信息，请联系 Waydoo 或 Waydoo 授权经销商。获得售后服务前的准备工作 联系 Waydoo 后，请您详细说明产品存在的问题。Waydoo 技术支持人员将尝试通电子邮件、或远程协助来诊断和解决您的问题。如果通过邮件无法解决您的问题，您需将产品寄回 Waydoo 将进行进一步检测。Waydoo 会按产品享有的保修服务安排维修。

更换产品和部件

如果保修服务涉及更换产品或部件，那么被更换的产品或部件将成为 Waydoo 财产，而更换的产品或部件将成为您的财产。只有未经改动的 Waydoo 部件方可进行更换。Waydoo 提供的更换产品或部件可能不是全新的，但它们肯定处于良好的工作状态，并至少在性能上与被更换件等同。更换的产品或配件在原产品剩余的保修期内享有同等的保修服务。

个人联系信息的使用

如果您根据本保修条款获取服务，即表示您授权 Waydoo、使用您的联系信息，包括姓名、电话号码、地址和电子邮件地址。Waydoo 可利用这些信息开展本政策项下的服务。我们可能会联系您，并询问您对我们的保修服务是否满意，或就任何产品召回或安全问题向您发出通知。为实现上述目标，您授权 Waydoo 将您的信息转移到我们开展业务的任何国家或地区，并可以将其提供给代表我们的机构。如果法律要求，我们 也可以披露这些信息。

非售后政策保障范围 本政策不适用于以下情况：

- × 发生人为的非产品质量本身问题导致的碰撞、烧毁事故；
- × 发生非官方说明书指导的私自改装、拆解、开壳等行为而造成的损坏；
- × 未按说明书指导的不正确安装、使用及操作所造成的损坏；
- × 在无官方说明指导的情况下，客户自行维修装部件导致的损坏；
- × 在恶劣的环境下使用及存放而导致的产品故障；
- × 在电磁环境复杂或强干扰源环境下操控而导致的产品异常或损坏。
- × 在零部件发生老化或损坏的情况下强制工作造成的损坏；
- × 使用非 Waydoo 认证的第三方部件导致的损坏；
- × 电池因过度放电而导致的电池损坏
- × 因保养不当导致的腐蚀等损坏

责任限制

Waydoo 仅在此类情况对产品的丢失或损坏负责：产品已为 Waydoo 所拥有；或产品在 Waydoo 负责运输的途中。

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(1) 当数据丢失或泄露的原因，是我方数据存储方面的技术不合格，即我方未能尽到合理的管理义务的，则即使有上述条款的约定，用户仍可向我方追责；

(2) 当数据丢失或泄露的原因，是用户自身行为，如：随意丢弃废旧产品的，则我方不需要就此承担责任。

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(1) 第三方向您提出损害索赔；

(2) 您的数据丢失、损坏或泄露；

(3) 特别的、附带的、间接的或继发的损害，包括但不限于利润、业务收入、商誉或预期可节省金额方面的损失。无论损害基于任何原因，Waydoo 及其关联企业、供应商、经销商或服务供应商的全部责任仅限于 您实际遭受的直接损失，并且不多于您购买产品付出的金额。

上述限制不适用于 Waydoo 应依法负责的人身伤害（包括死亡），以及不动产和有形动产的损失赔偿。某些国家或地区或司法辖区不允许对附带的或后果性的损害有任何的排查或限制，因此上述限制可能不适用于您。

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