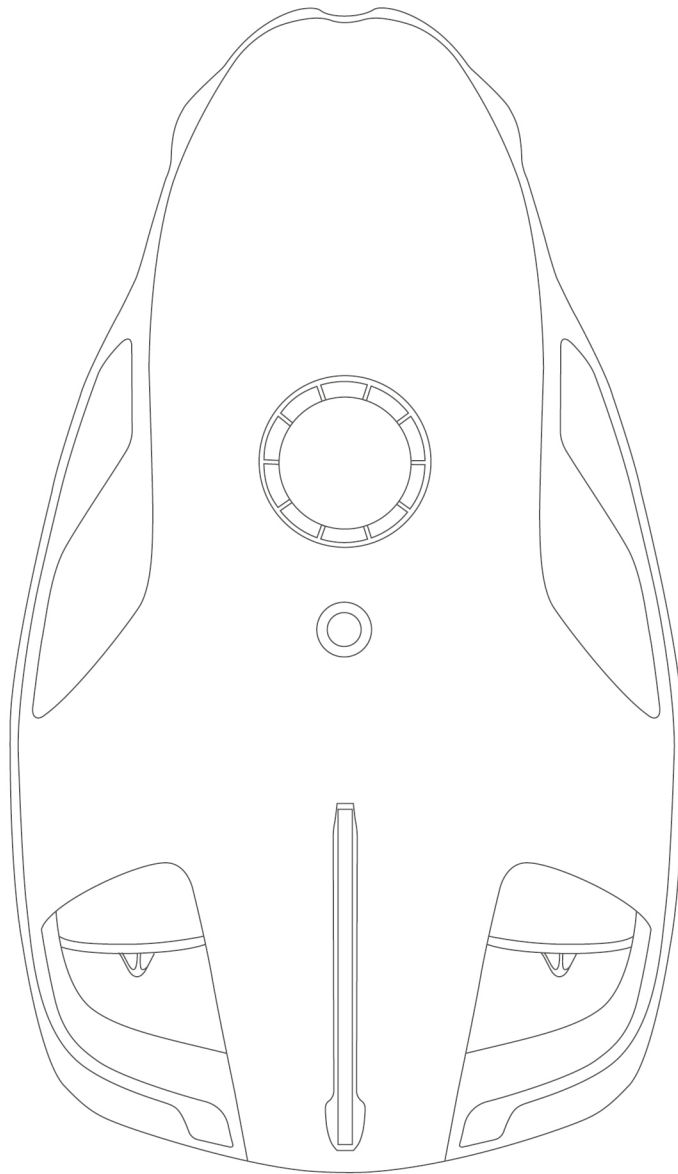


PowerRay

PowerRay User Manual

PEGF-E2.0



CONTENTS

P o w e r R a y

Product overview 1

- Introduction/01
- Function highlights/01
- List of items/02
- Charging and device connector/03
- Navigation preparation/03
- Activation and navigation/05

PowerRay Body 6

- Host overview/06
- Body part name/06
- Navigation mode/07
- Status indicator/08
- Battery check/08

Remote controller 9

- Remote controller overview/09
- Remote controller part name/09
- Remote controller preparation/10
- Remote control and operation/11
- Remote controller pairing/15

Base station 16

- Base station overview/16
- Part name/16
- Base station operation/17

Fish Finder **18**

- Overview/18
- Part name/19
- Fish Finder operation/19
- Charging/20
- Line-towing fishing rig/21

VR **22**

Vision+ APP **23**

- App download/23
- App connection and login/23
- App main interface introduction and navigation interface function introduction/24
- App motion operation control navigation/26

Photo and video export **28**

- Mobile device export and share/28
- Export videos and photos via Power View/29

Navigation safety **30**

Product Overview

■ Introduction

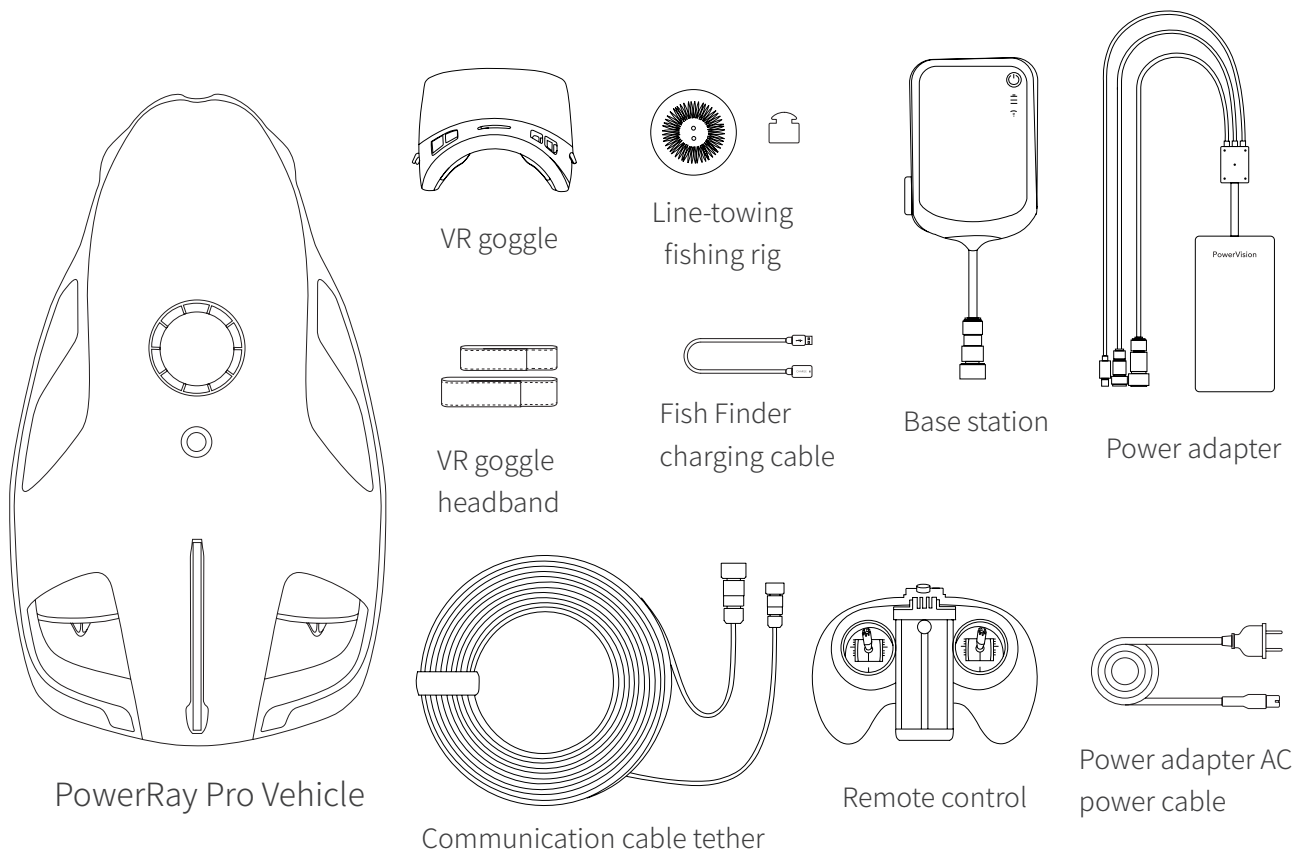
PowerRay can be used in freshwater or saltwater environments up to 30 meters underwater. It can realize underwater direction-fixed and depth-fixed navigation. The PowerRay can also shoot, seek fish and assist fishing underwater, and realize real-time image preview and motion control through VR goggles, remote controller and App. The equipped 4K camera can achieve 12 Megapixels photos and 4K video shooting.

- The Angler version and Wizard version are equipped with Fish Finder and auxiliary fishing functions. (Does the Angler version exist)
- Only Wizard version is equipped with VR goggle.

■ Function highlights

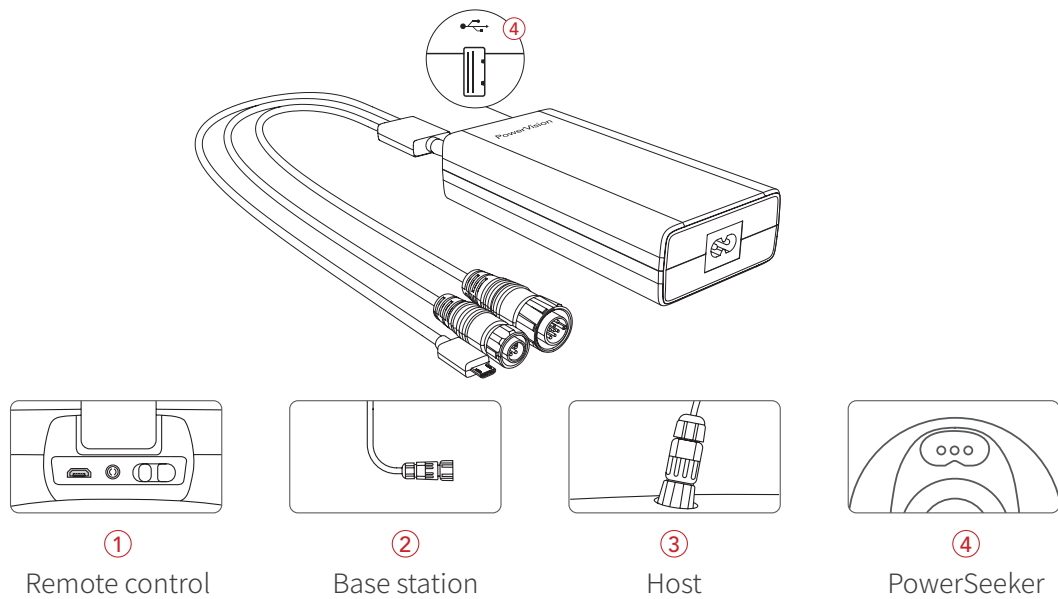
- Maximum depth capacity 30 meters, and top cruise speed of 4 knots
- Equipped with Power Seeker Fish Finder which can be used alone to meet various use scenarios
- Mobile phone App produces real-time monitor underwater fish information, water temperature, depth, and underwater landscape
- Immersive Zeiss VR goggle, supports connection to multiple devices simultaneously, head movement control navigation capabilities
- 4K UHD, 1080P real-time streaming, 12 megapixels, burst mode photo shooting at 5 fps, 32GB/64GB storage

Product part display

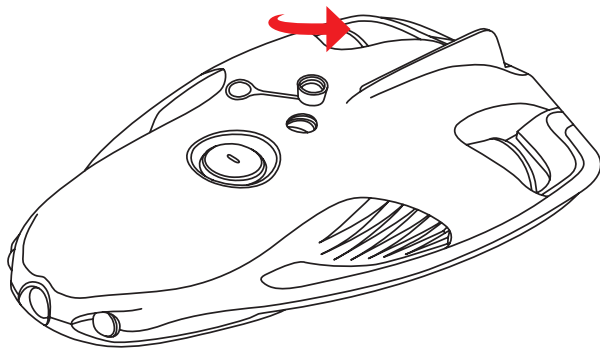


Explorer version	Angler version	Wizard version
• PowerRay (32G, exclusive electromagnet, with rubber plug) • Wireless base station • Communication cable tether (50m) • Standard remote controller • Standard remote controller supported mobile device • Power adapter • Power adapter AC power cord	• PowerRay (32G, include electromagnet, without rubber plug) • Wireless base station • Communication cable (50m) • Standard remote controller • Standard remote controller supported mobile device • Power adapter • Power adapter AC power cable • Fish Finder • Fish Finder charging cable • Line-towing fishing rig	• PowerRay (64G, with electromagnet, without rubber plug) • Wireless base station • Communication cable tether (70m) • Standard remote controller • Standard remote controller supported mobile device • Power adapter • Power adapter AC power cable • Fish Finder • Fish Finder charging cable • VR goggle • VR goggle headband • Line-towing fishing rig

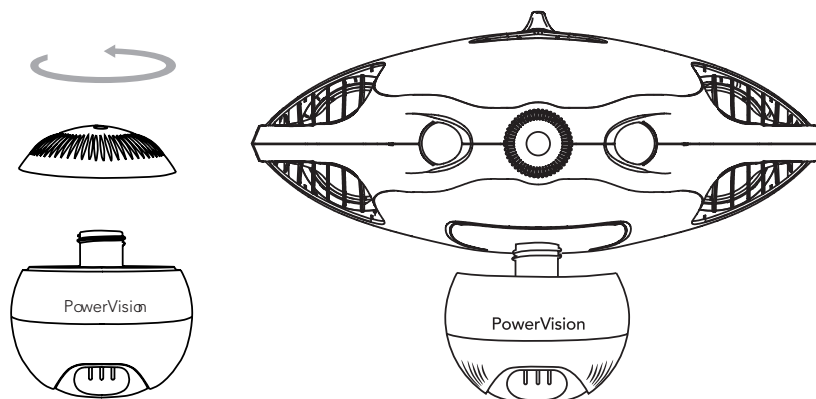
| Charging and part connector



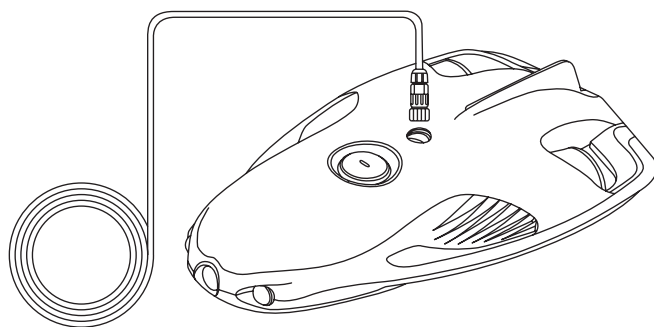
| Navigation preparation



1. Open the switch cover of the PowerRay.

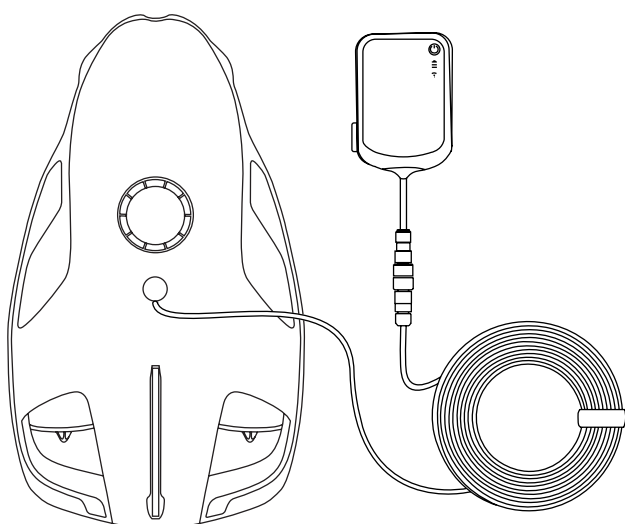


2. Open the bottom cover of the PowerRay, remove the top cover of the Fish Finder, and install the Fish Finder clockwise on the PowerRay.



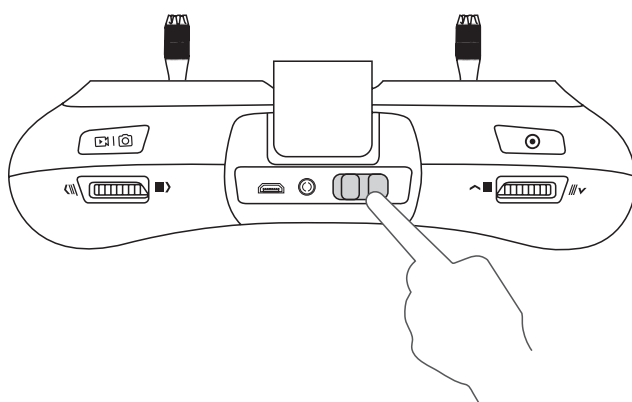
3. Insert the 12-pin end of the communication cable into the host communication cable jack/charging jack and tighten the connector. (Automatically turn on after successful access.) The power is turned on with a prompting sound and a blue light will light up on the tail fin.

*Please make sure to tighten the communication cable connected to the PowerRay.



4. Insert the 4-pin end of the communication tether cable into the base station communication jack/charging jack and tighten the connector. Long press the base station switch, and the base station will be powered on after the WIFI indicator is on.

5. Turn on the remote controller switch, and the colored light flickers during the connection process. There's a prompting sound after successful connection with green light on.

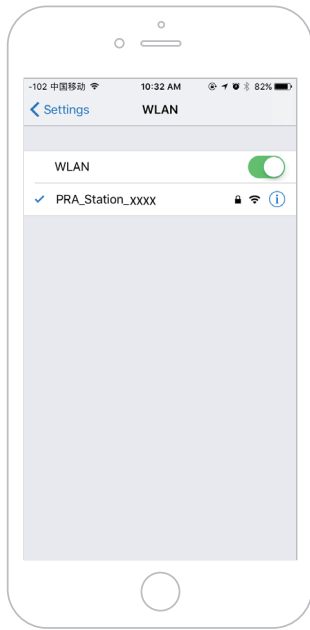


*Please avoid collision between the PowerRay and hard obstacles.

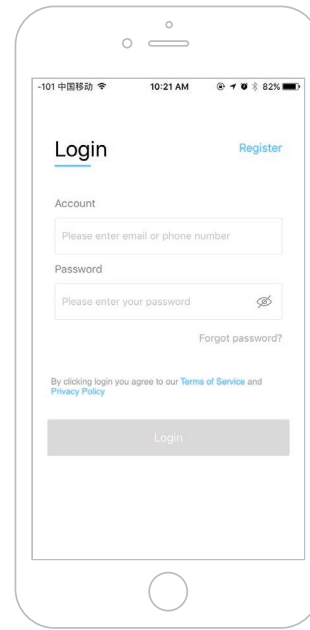
*To avoid body corrosion, please rinse the body with clean water after each use either in fresh water or saltwater.

*Please wipe PowerRay dry of any water and then store.

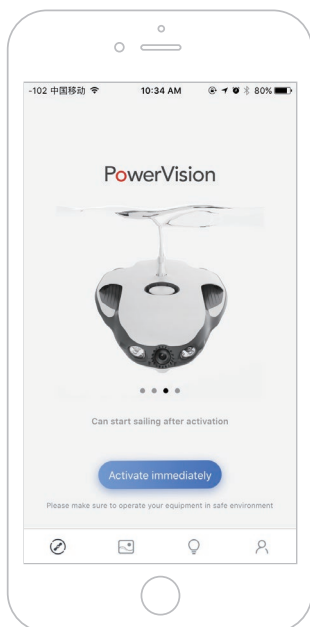
| Activation and navigation



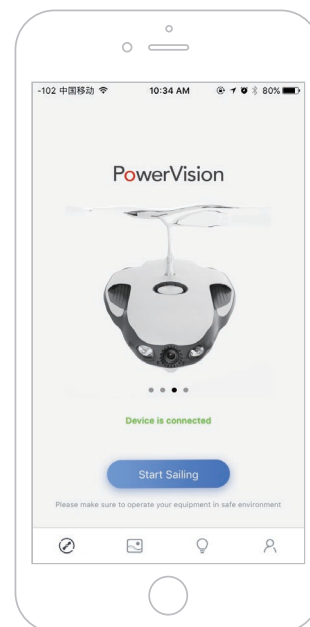
1. Turn on the mobile device WIFI, search and access the wireless base station hotspot: PRA_Station_xxx. Default password: 1234567890.



2. Open the App, complete registration and log into the App.



3. If the device is not activated, the App page will display the “One Touch Activation” button. Click on the button to activate the device.



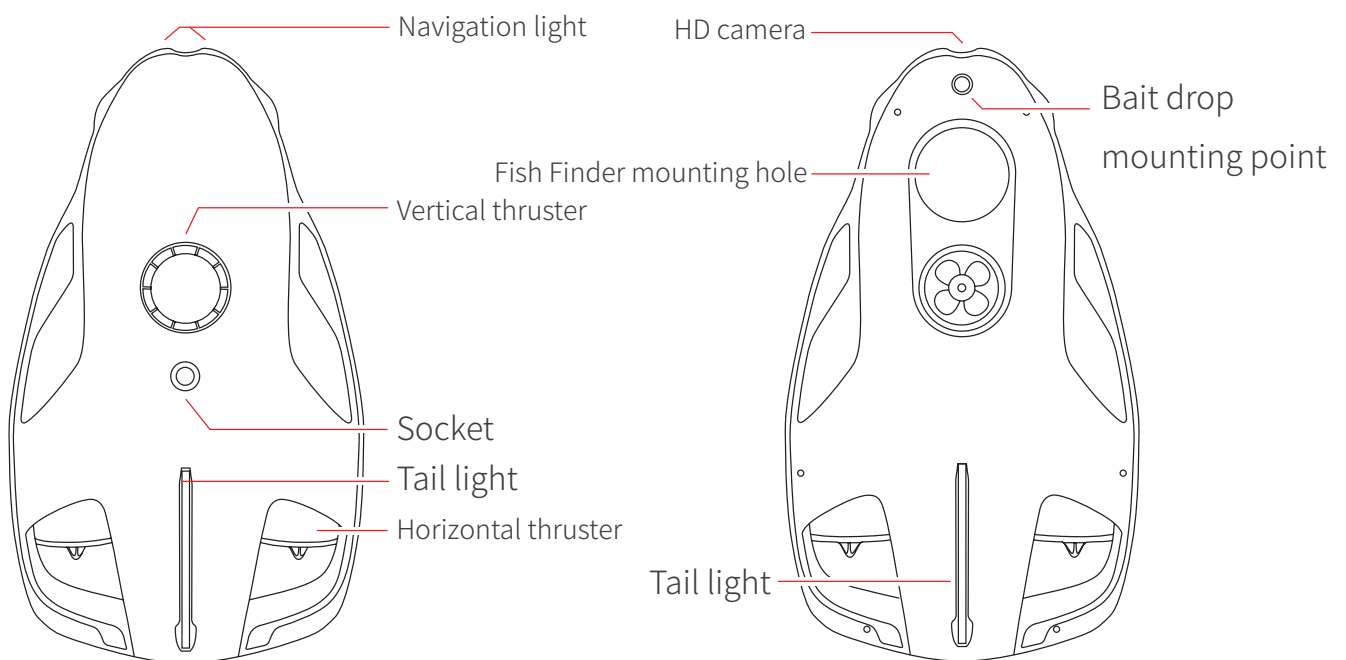
4. If the device is activated, the App page will display the “Start Navigation” button. Click on the button to start the device navigation.

PowerRay host

| Host overview

PowerRay can be used in freshwater or saltwater environments up to 30 meters underwater. It can realize underwater direction-fixed and depth-fixed navigation. The equipped 4K camera can achieve 12 Megapixels photos and 4K video shooting.

| Host part



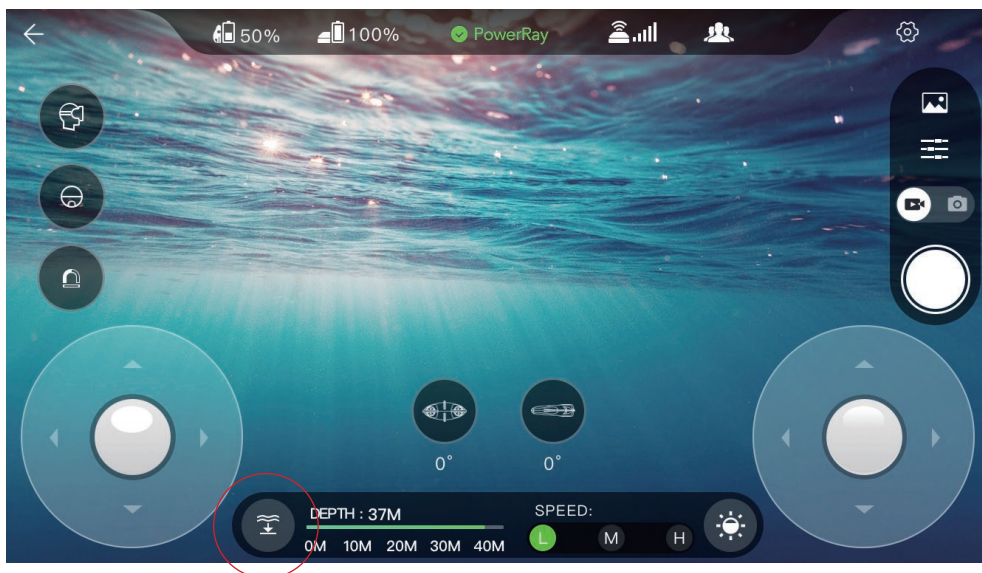
Navigation mode

The device's navigation mode is divided into "stable image mode" and "depth-fixed mode". The navigation mode can be switched by the mode switch button on the remote controller or on the App. The two navigation modes are described as follows:

- Stable image mode: adjust the angle of the PowerRay and the horizontal plane by the up-and-down joystick and change the view of the PowerRay camera by changing the attitude of the PowerRay, to achieve stable image shooting.



- Depth-fixed mode: adjust the depth of the PowerRay in the water by the up-and-down joystick to adjust the PowerRay position and view.



| Status indicator

- Charging

Charging: the tail light is slowly flashing light and the head lights are off.

Charging completed: the tail light is on solid and the head lights are off.

- Low battery display

When the power is 10%, there' s a low battery alarm and the tail light flickers.

- To Lock and unlock

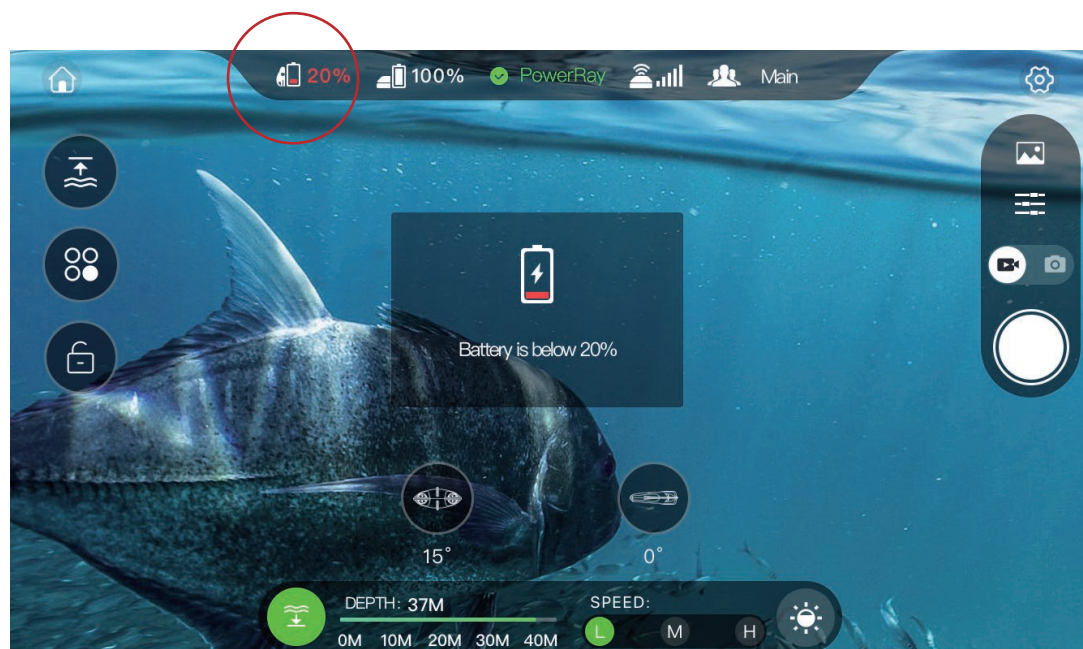
Lock: tail light flickers for about 1s, and the brightness is set to 15% after locking.

Unlock: tail light flickers for about 1s, and the brightness is set to 80% after unlocking.

- Power-on status

Head light brightness 15%, and tail lights are on.

| Battery check

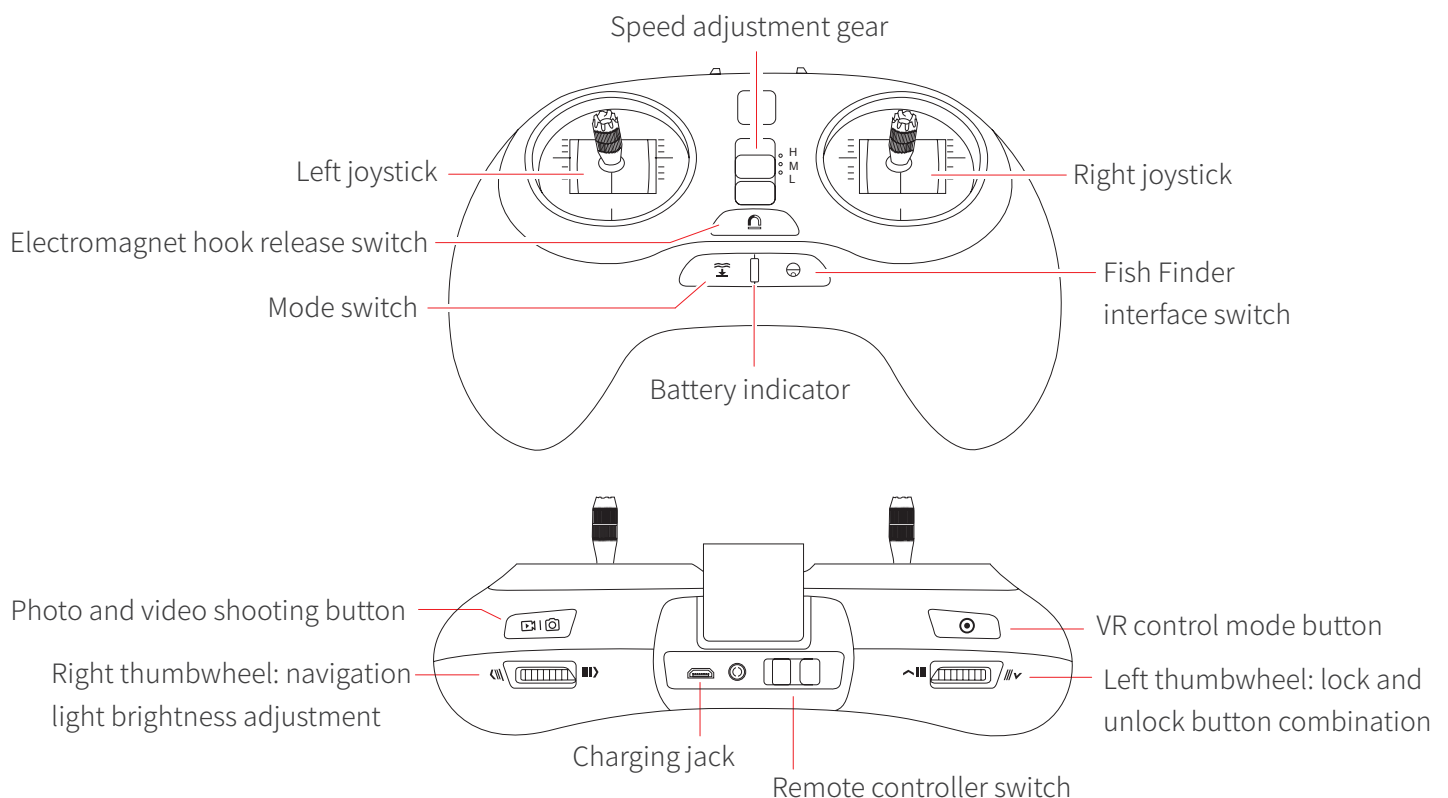


Remote controller

Overview

- The PowerRay remote controller can be connected to the base station wirelessly, integrating motion control, light adjustment, speed adjustment, photo shooting, video shooting, hook release, depth-fixed control and other functions. Users can easily complete PowerRay operations with the help of the remote controller.
- The PowerRay remote controller has a built-in rechargeable battery capacity of 3000 mAh and can operate for up to 20 hours. The battery indicator can show the current battery level.

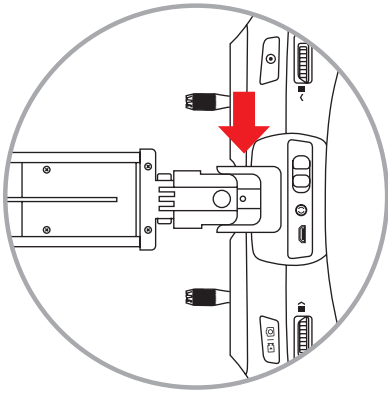
Part name



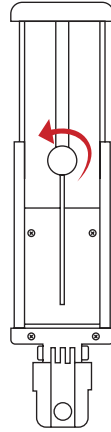
*The remote controller has no waterproof function. Please do not drop it into the water.

| Remote controller preparation

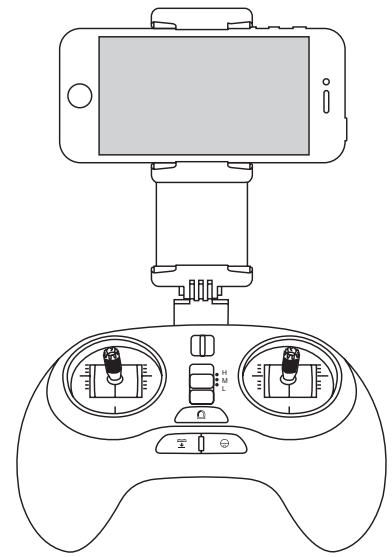
- Remote controller preparation



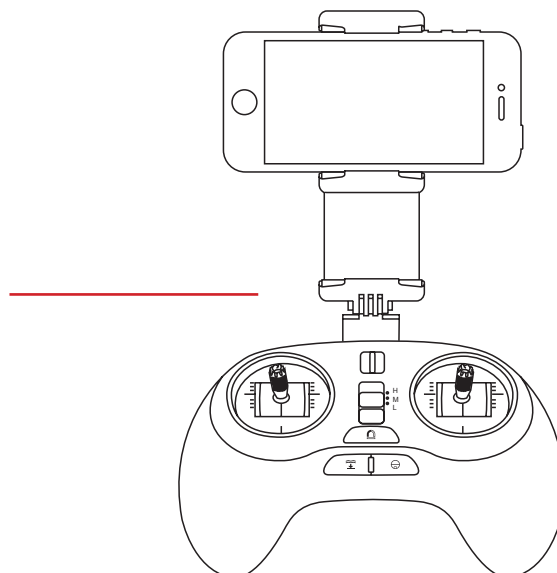
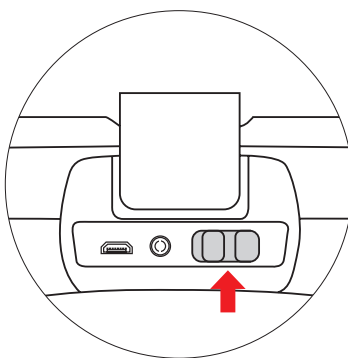
1. Take out the standard remote controller and the supported mobile device and install the lower end of the mobile device into the remote controller mobile device socket.



2. Rotate the button on the back of the supported mobile device and pull up the upper end of the mobile device.

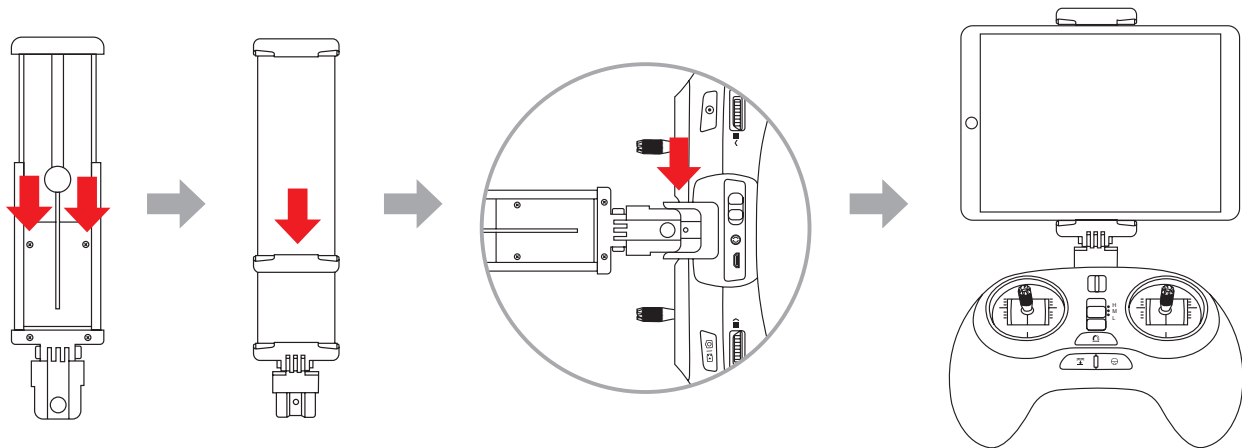


3. Clip the phone on the front bracket and make sure it is clamped.



4. Turn on the remote controller switch, and the remote controller will automatically search and connect to the matching base station. The indicator will turn green with a prompting sound.

- Supported mobile device iPad installation illustration

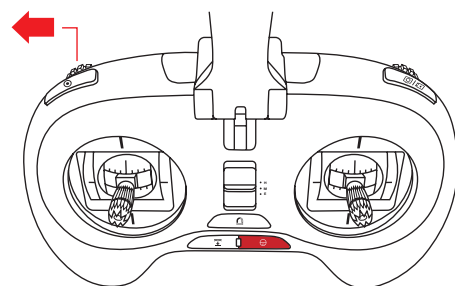


- 1.Pull out the screw on the supported mobile device.
- 2.Remove the middle splint from the front of the supported mobile device.
- 3.Install the lower end of the mobile device into the remote controller mobile device socket.
- 4.Clip the iPad on the front of the mobile device and make sure it is clamped.

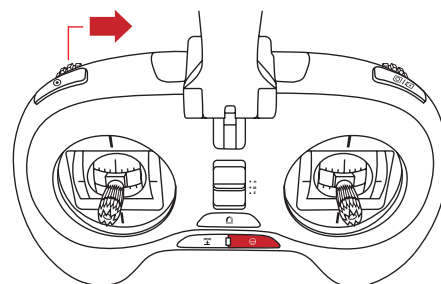
Control and operation

In order to prevent accidental joystick control damage to people or equipment, the PowerRay first needs unlock operation to control the propeller through the joystick. After locking, the propeller is not controllable.

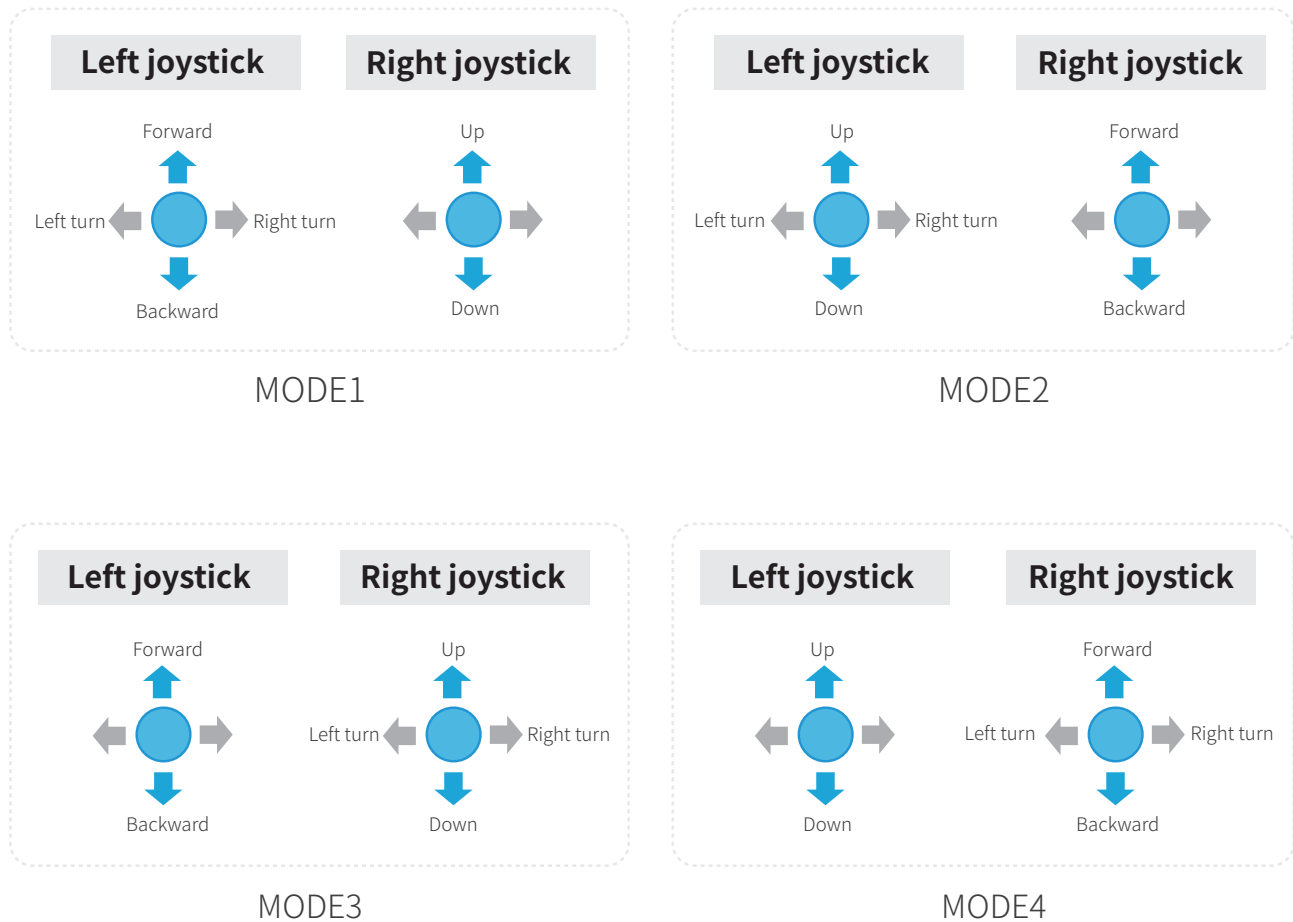
- Unlocking: first dial the left thumbwheel to the very left, then press the camera/Fish Finder interface switch button until 1 second later, there' s vibration to unlock. After unlocking, the joystick can control the propeller rotation. battery level.



- Locking: first dial the left thumbwheel to the very right, then press the camera/Fish Finder interface switch button until 1 second later, there' s vibration to lock. After locking, if controlling the joystick, the propeller will not be responding.

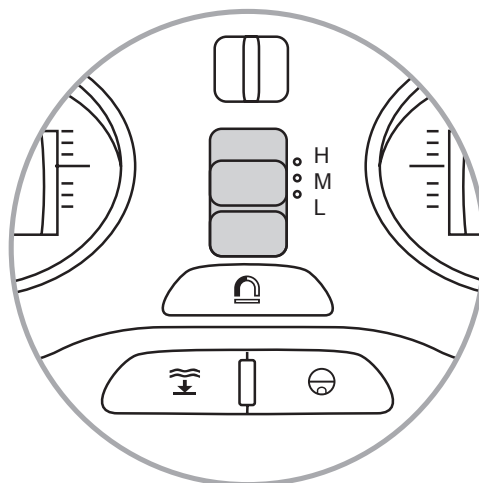


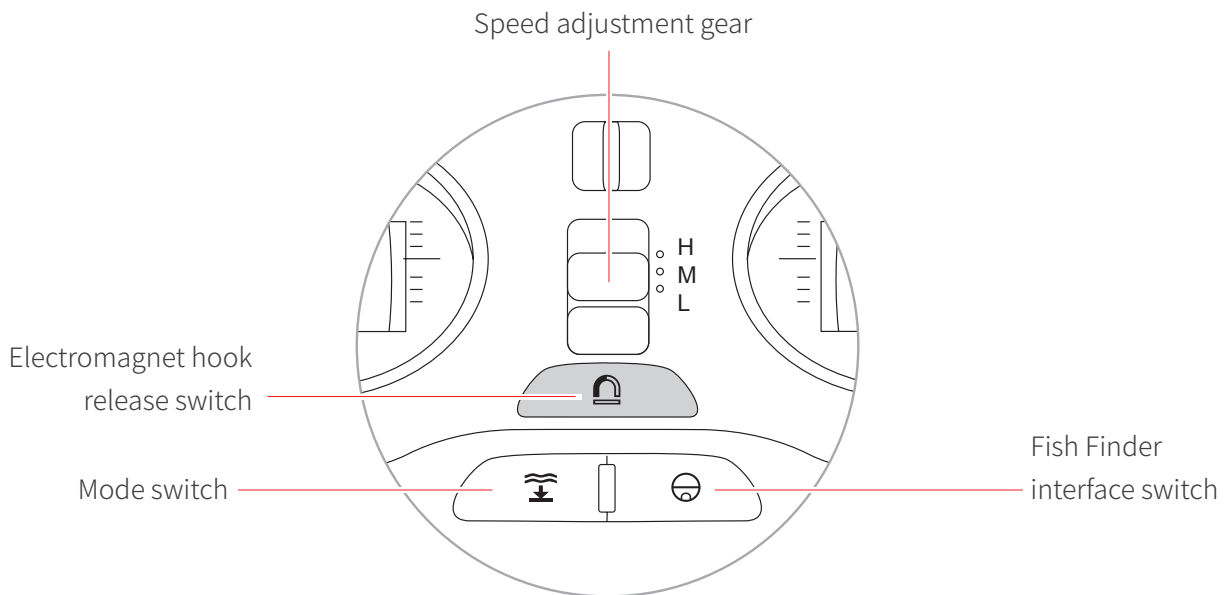
- The control mode of the PowerRay remote controller joystick is divided into 4 modes. Users can choose their own control mode through APP.



*The default joystick mode of the remote controller is “MODE 4” . The left joystick controls the PowerRay up/down and left/right turn. The right joystick controls the PowerRay forward/backward.

- Navigation gear selection: the remote-control switches gears by the gear shift button in the middle of the two joysticks.





● Gear button

The three gear switches set the three speed gears of the power system, from bottom to top:

L (low gear 0.5m/s) (1 knot)

M (medium gear 1m/s) (2 knots)

H (high gear 2m/s) (4 knots)

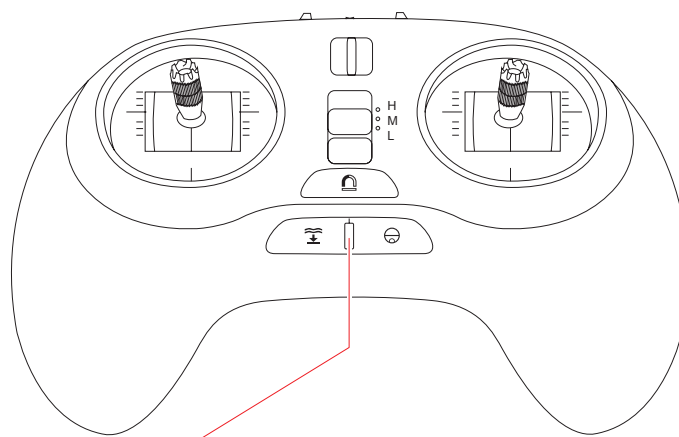
● Electromagnet hook release switch

- Long press for 2 seconds to switch the hook release switch.

- 2.The hook release status, indicator off.

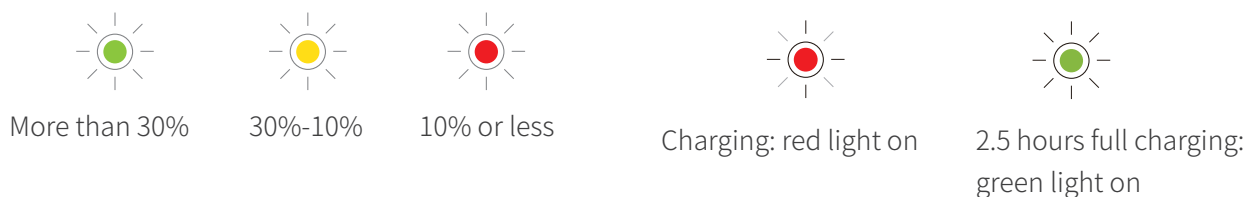
- 3.The hook adsorption status, indicator on with blue.

| Charging and battery display



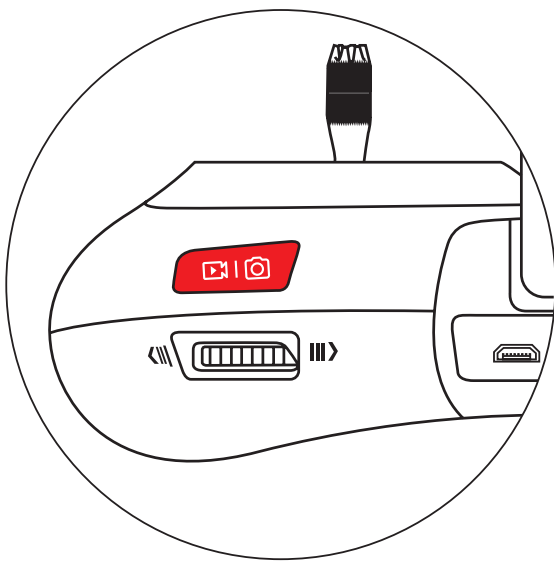
Battery check indicator

Charging status



● Battery indicator/wifi connection status light

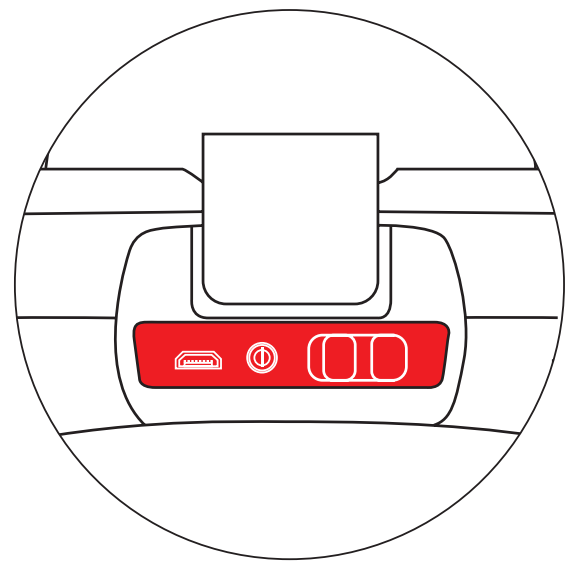
1. The battery indicator is divided into red, yellow and green light.
2. Battery>30%, green light on.
3. Battery 10%~30%, yellow light on.
4. Battery<10%, red light on.
5. After the WIFI is connected to the base station, the indicator light is on, and different colors will be displayed according to the battery.
- 6.If the WIFI is connected abnormally, the indicator will flicker with different colors.



● Photo/video shooting mode switch

This button can also be used as a photo or video shooting button.

- 1.Long press the button to start/end video shooting.
- 2.Short press the button to take photos.



● Charging jack/power switch

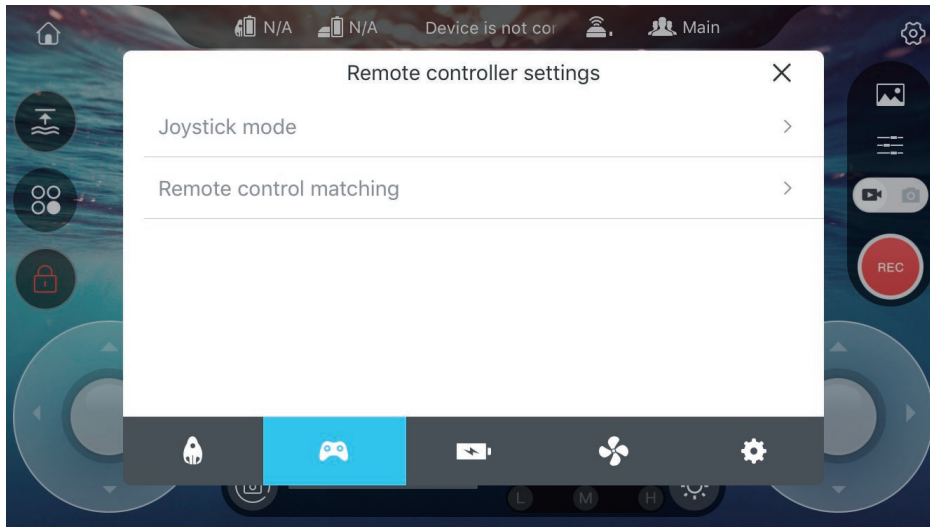
- 1.The left USB jack is a built-in battery charging jack.
- 2.The 3.5mm jack in the middle is currently undefined and cannot be used.
- 3.The right switch is the power switch.

● Remote controller alarm

When the remote controller is experiencing low voltage, the buzzer will alarm at 1HZ frequency, and the battery indicator on the remote controller light will turn red.

- 1.The low voltage of the remote controller is battery <10%.
- 2.The battery indicator on the remote controller lights up in red.
- 3.Buzzer alarm.

Remote controller pairing



Open Vision+ App, select the remote controller settings, and click on remote controller pairing.



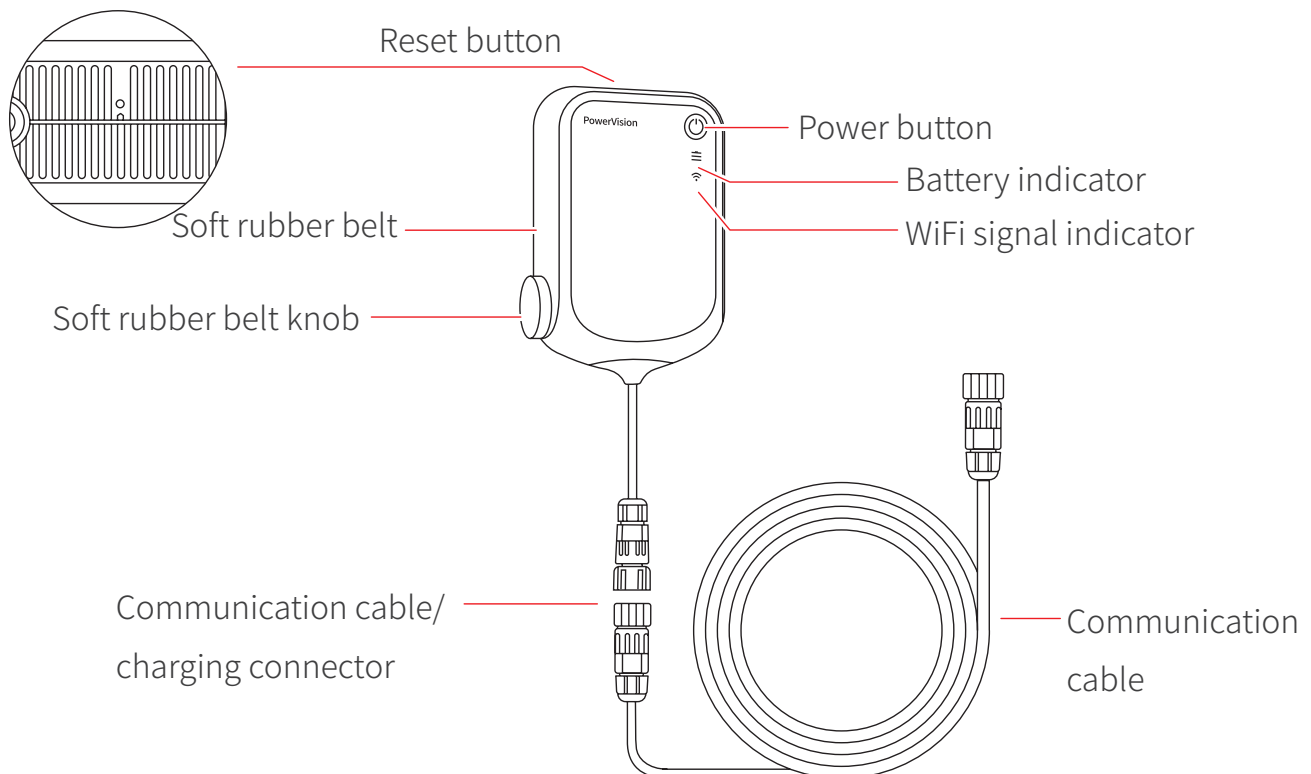
In the pop-up interface asks to input 6-bit SSID, enter the SSID of the remote controller.

Base station

| Base station overview

- The base station is connected to the PowerRay through the communication cable. The remote controller, mobile phone and VR goggle can be connected through the WIFI hotspot of the base station. After connecting, it can control the device, the camera and get real-time images.
- The base station has a built-in 3000mAh battery for 3 hours of continuous operation. The battery indicator can show current battery level.
- The base station is equipped with the soft rubber belt that can be used to hang the base station on a fixed object to prevent it from falling into the water.

| Base station part



*The base station is not waterproof . Please do not drop into the water.

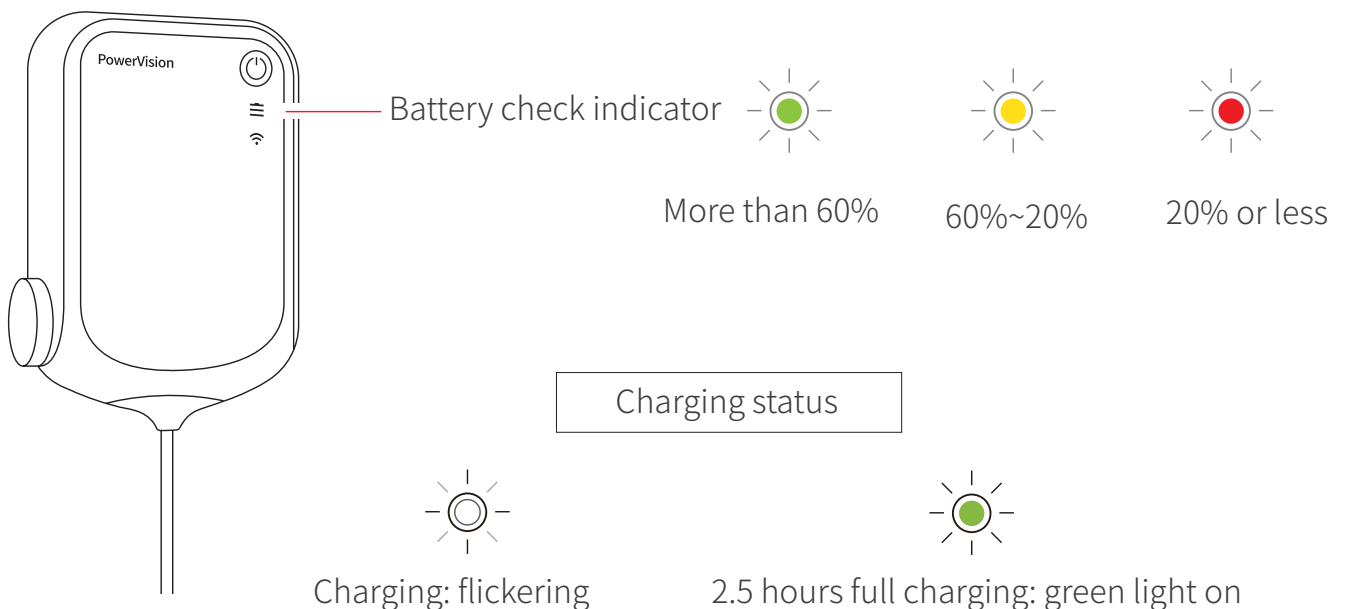
| Base station operation

- Turning on and off: long press the power switch button for 3 seconds the indicator light on, means the power is turned on successfully. Press again for 3 seconds to turn off until the indicator is off.

- Status indicator

battery display: After base station is turned on, check current battery status from based station' s power indicator;

wifi connection display: Base station wifi indicator staying solid light before any connection to mobile device; Base station wifi indicator flickers after successful connected to mobile device.



- Reset

Put a paper clip into the reset button on the top of the base station to restore the original settings to the base station.

- Soft rubber belt

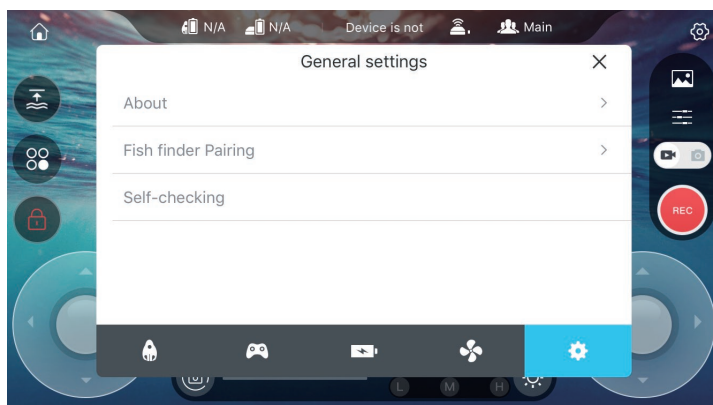
Use the soft rubber belt to connect the right end of the base station with the soft rubber belt knob to hang the base station to the carrier.

Fish Finder

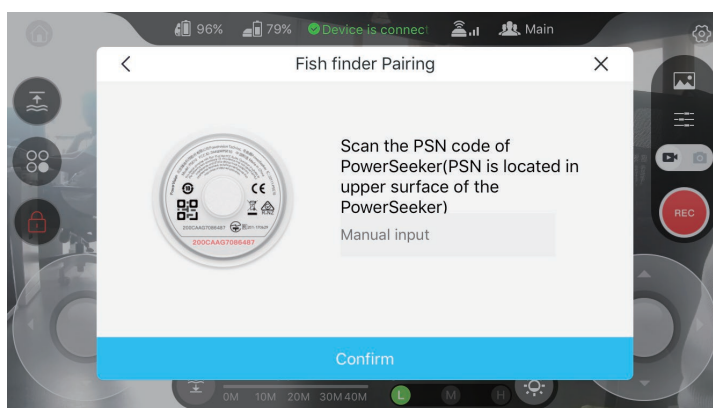
Overview

- PowerRay Fish Finder* can detect fish and terrain within 40m underwater and display it in real time via Vision+.
- The bottom of the Fish Finder is equipped with the fish luring light to actively attract fish.
- The Fish Finder can also be removed for independent use with a fishing pole.

*Only Angler version and Wizard version are equipped with the device and functions.

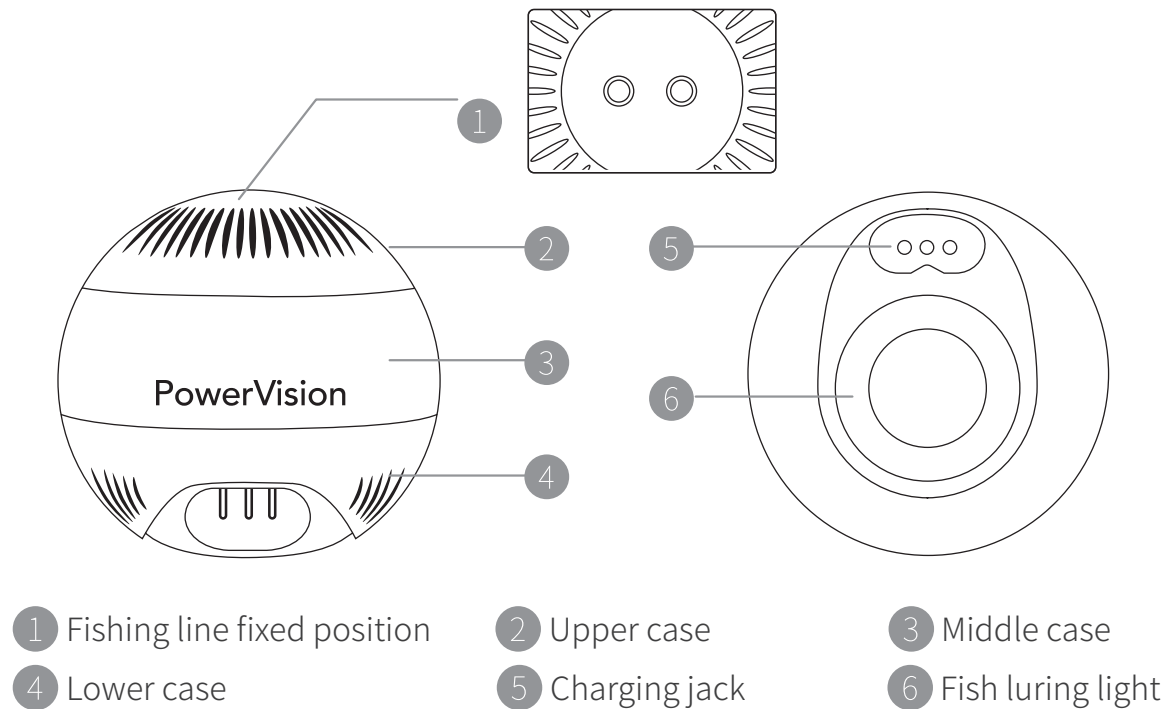


Select general settings and click on Fish Finder pairing to scan the QR code.



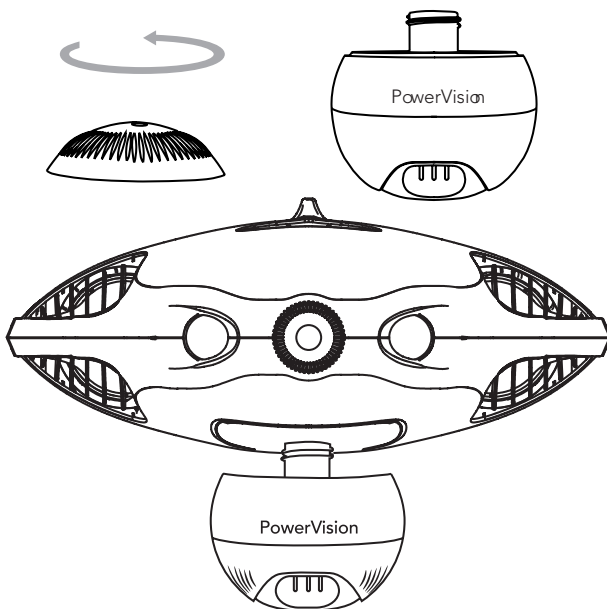
PowerSeeker Fish finder Pairing: 1) Scan the QR code of PowerSeeker, click "confirm" to complete pairing. 2)Manually input PowerSeeker PSN code, click "confirm" to complete pairing.

Part name

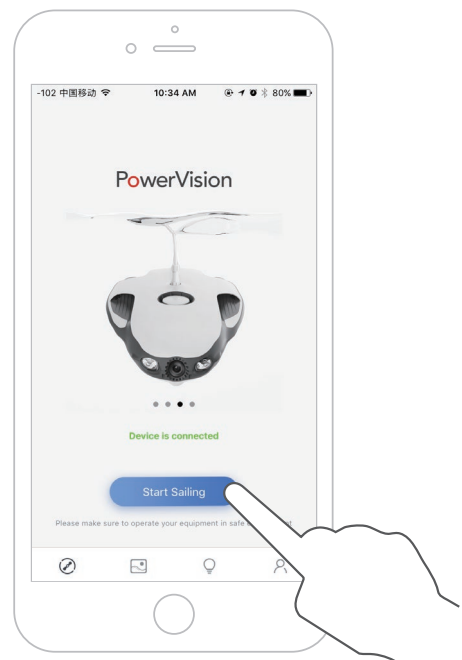


Use of the Fish Finder

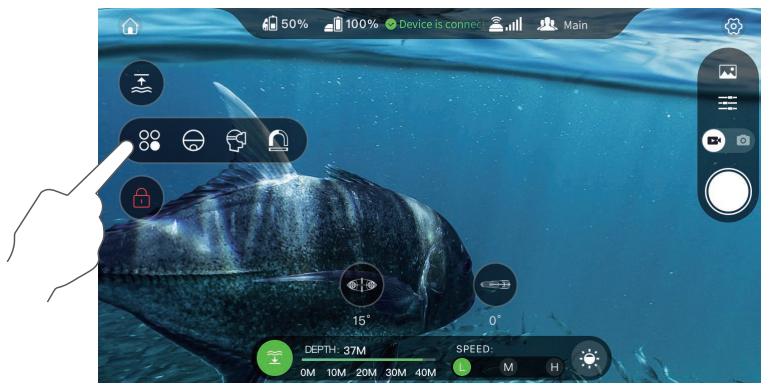
- Use with PowerRay



1. Open the hatch case at the bottom of the host, remove the upper case of the Fish Finder, and install it clockwise onto the PowerRay host.

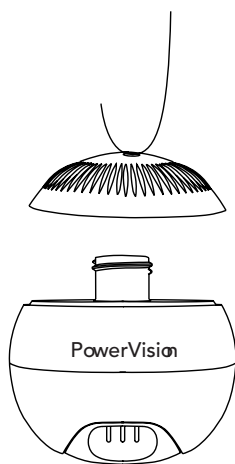


2. Open Vision+ App, enter PowerRay control interface, and click “Start Navigation” .

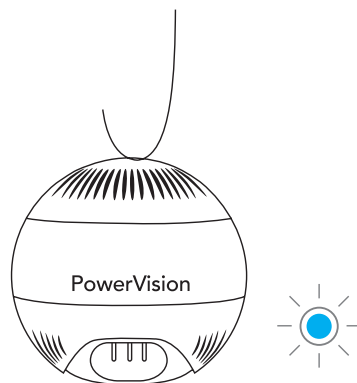


3. Click the Fish Finder icon button on the main interface or short press the Fish Finder/camera screen switch button to switch to Fish Finder interface and start to use these.

● Use Fish Finder alone



1. Open the upper case, thread the fishing line, and install back to the Fish Finder.

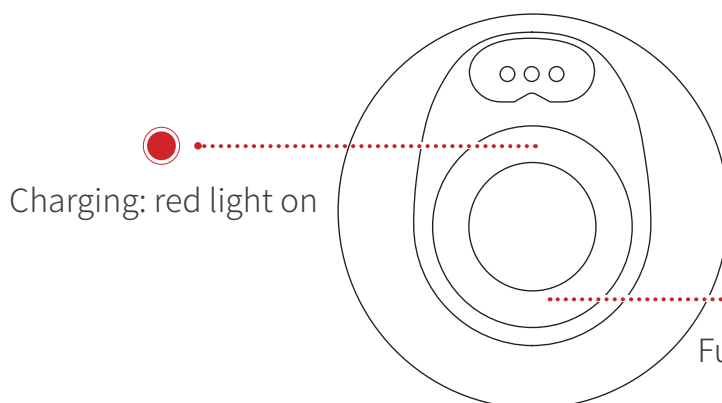


2. When the three probes of the Fish Finder are immersed into water, the system will automatically start, with the six blue fish luring lights at the bottom light on.



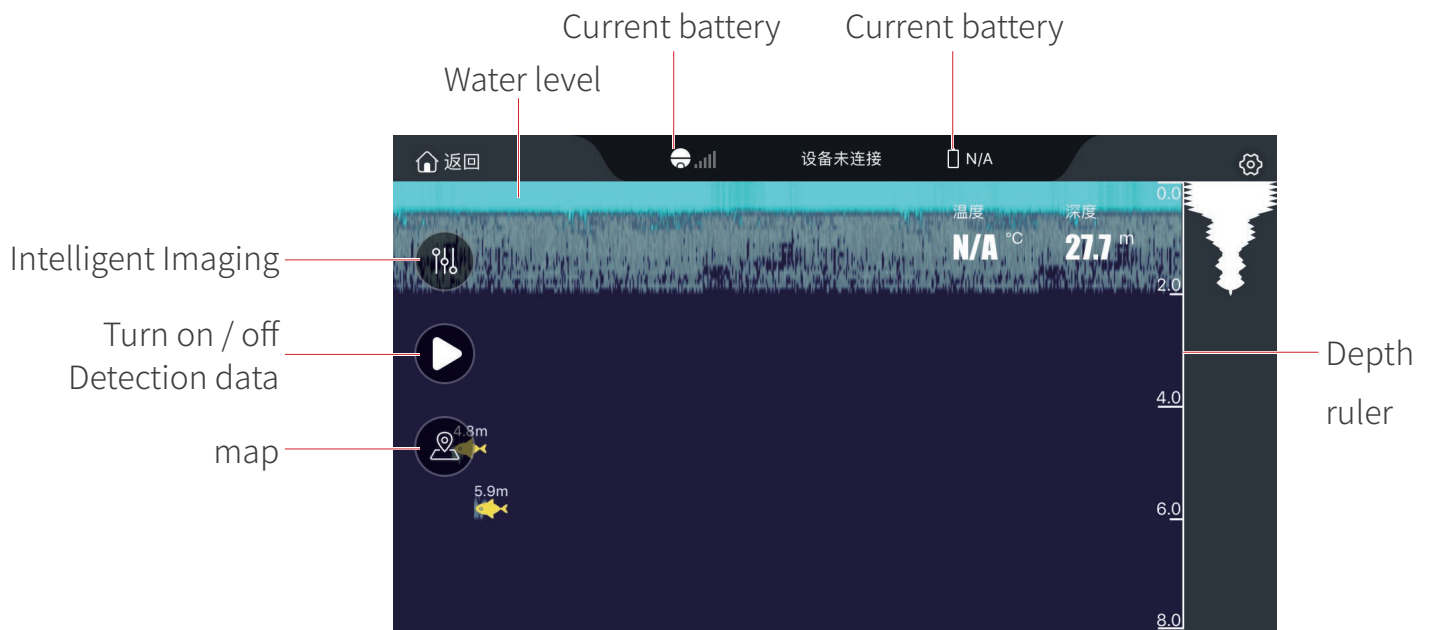
3. Turn on the mobile device WIFI, search and access the Fish Finder hotspot "PSE_xxx". No connection password.

| Charging



Note

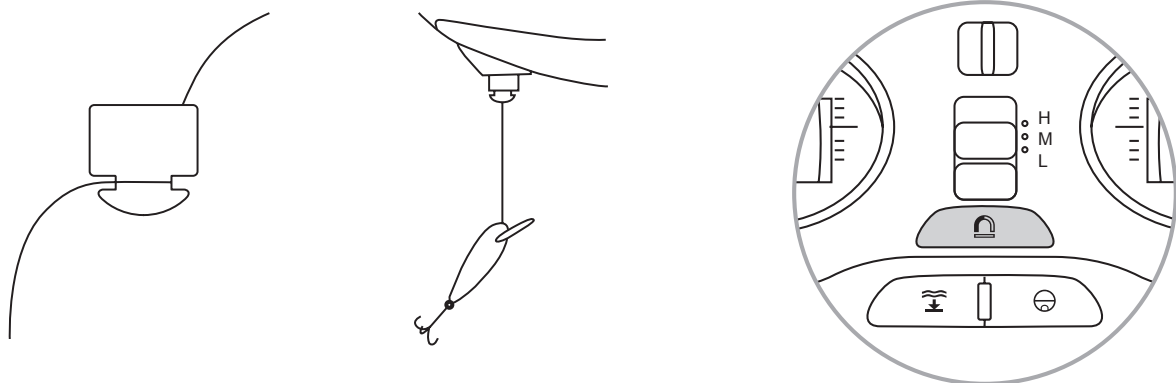
- Make sure the three probes are dry before charging.
- The charging input voltage is 5V, and the input current is suggested to be no less than 500mA.



Vision+ APP fish finding interface function introduction

Line-towing fishing rig

- Fix the fishing line on the fishing weight magnet and control the PowerRay through the remote controller or Vision+ APP to send the hook to the designated location for fixed delivery.



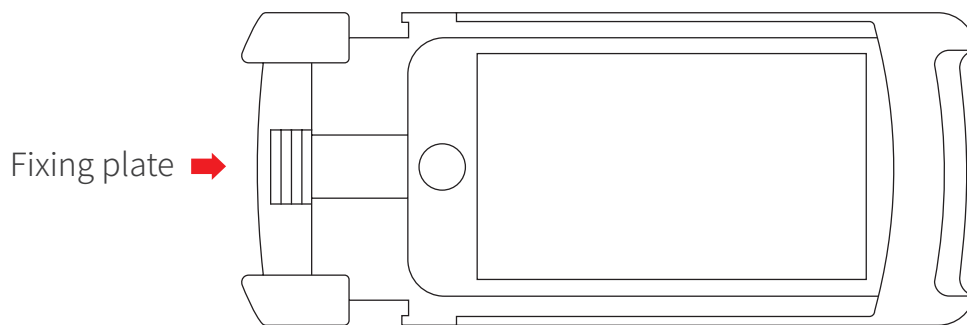
1. Tie the hook tightly on the fishing rig.
2. Long press the fishing rig magnet release button to detach the fishing magnet and the bait to the magnet.
3. Put the PowerRay into the water, unlock, deliver the hook to the designated location, click on  and release the hook.

*The Angler version and Wizard version are equipped with this device and functions.

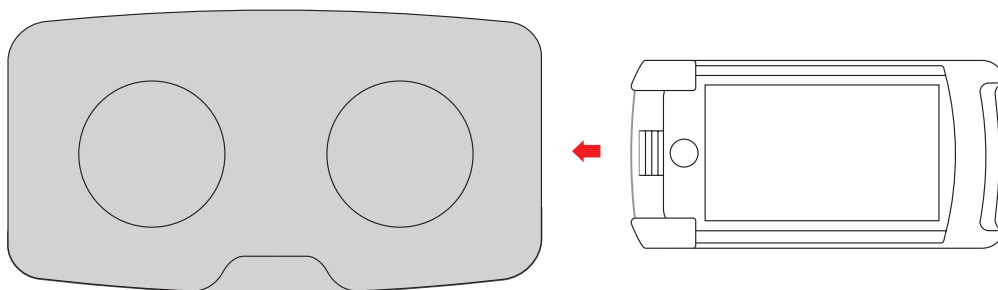
*During the hook delivery process, keep the device straight to prevent the communication cable from being entangled with the fishing line.

VR

- Switch the “Vision+” APP interface to VR mode and follow the prompts to insert the mobile phone into the VR goggle.



1. Put the mobile phone into the fixing plate and push to close the gap of the plate cover.



2. Insert the fixing plate cover into the VR goggle

3. About the VR head control function:

Head control activation: press the left shoulder button of the remote controller and move the VR goggle up, down, left and right to activate the function of rising, diving, left turns and right turns.

Head control exit mode: release the left shoulder button of the remote controller to exit the VR goggle head control mode.

**Only Wizard version is equipped with the device and functions.*

Vision+ APP

APP Download

- To download the Vision+ App, please scan the below QR code or via App Store, and watch video tutorials at Vision+ or www.powervision.me.



Asia

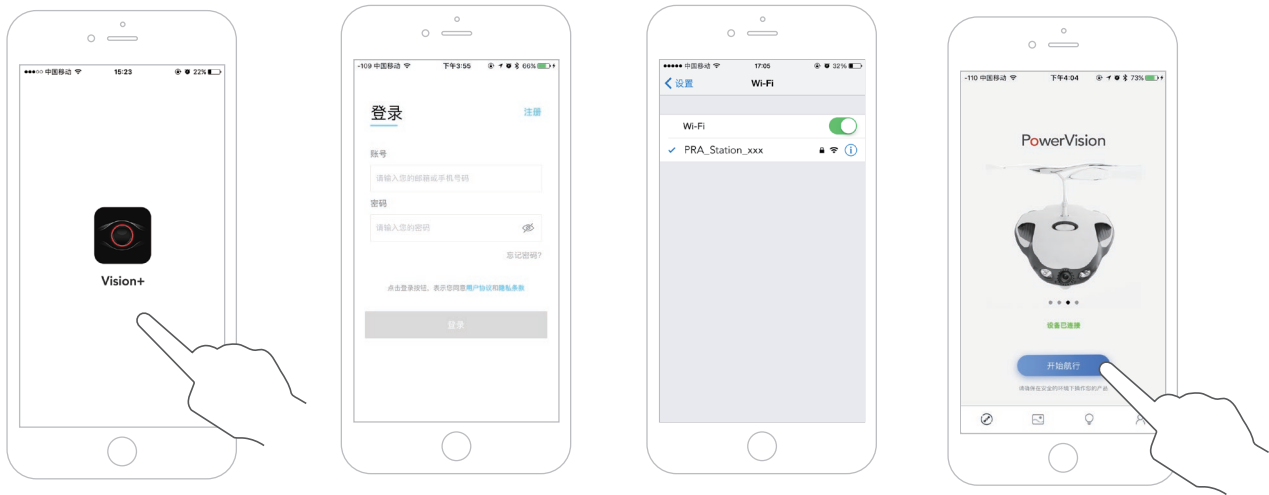


Europe



North America

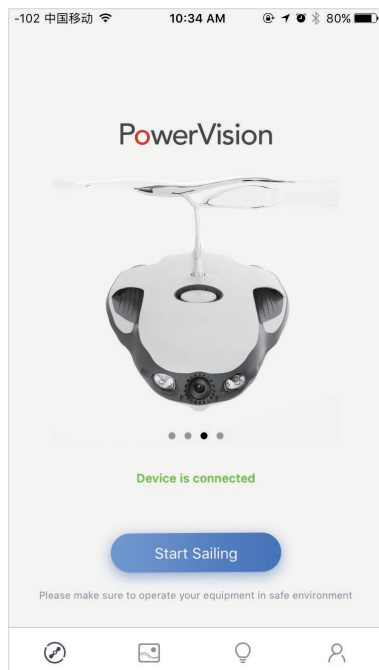
App connection and login



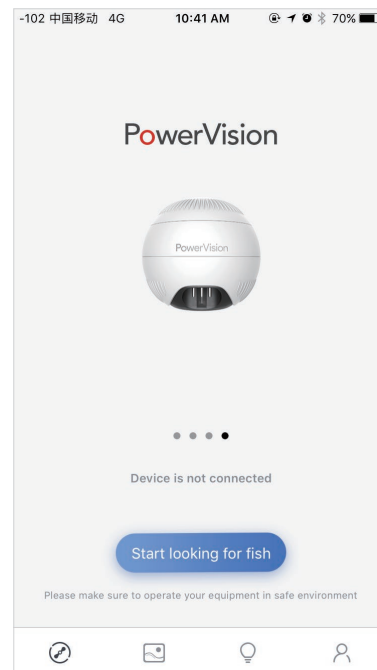
1. Open Vision+ APP.
2. Enter the “Personal Center” , register and log in.
3. Turn on the mobile device WIFI, search and access the wireless base station hotspot: PRA_Station_xxx. Default password: 1234567890.
4. After connecting, enter the PowerRay page which displays successful connection and click to start navigation.

*For the first use, the device needs to be activated. For details on how to activate it, see [Vison+ APP Activation Guide](#).

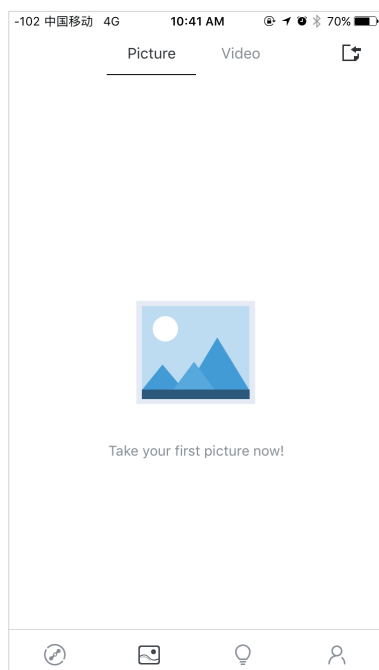
App main interface introduction and navigation interface function introduction



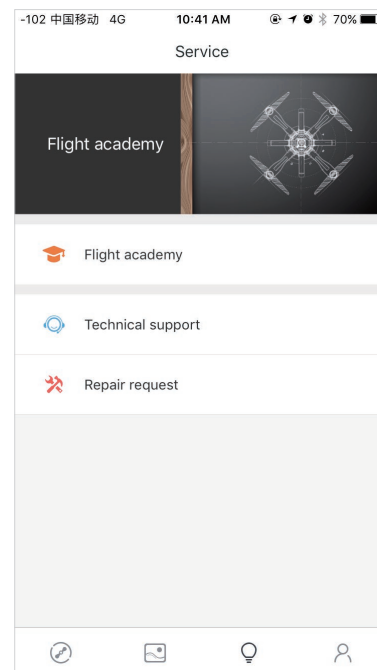
PowerRay Main Interface



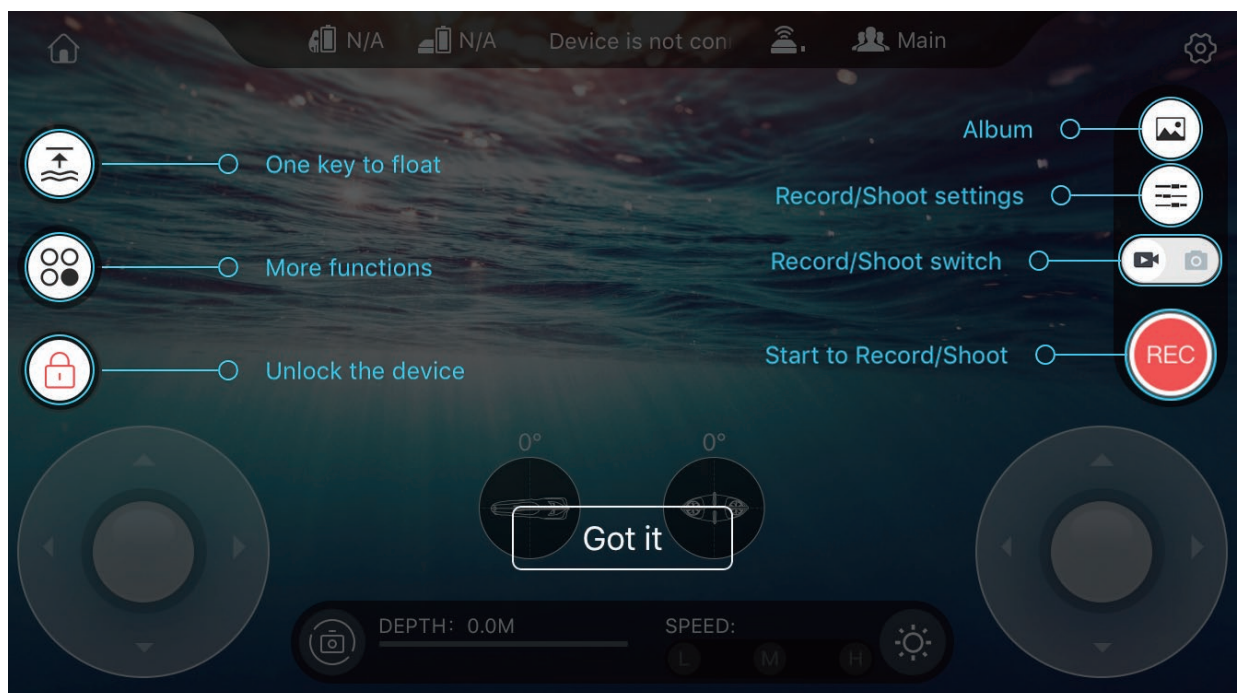
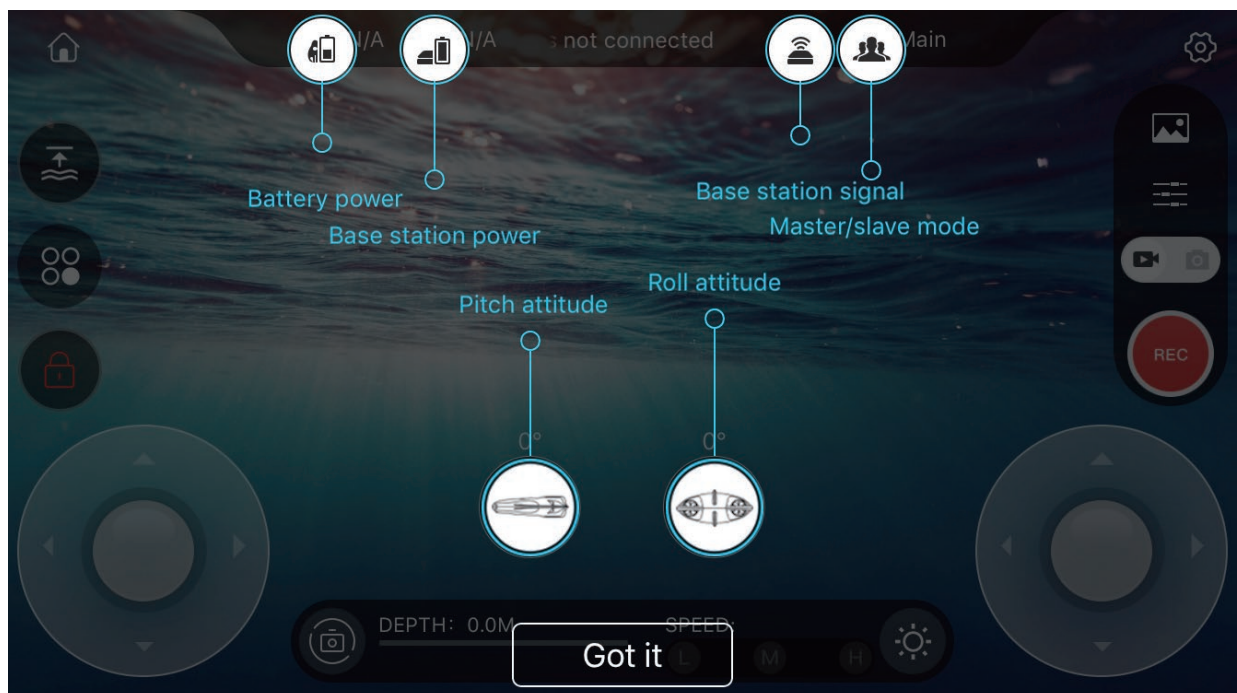
PowerSeeker Main Interface

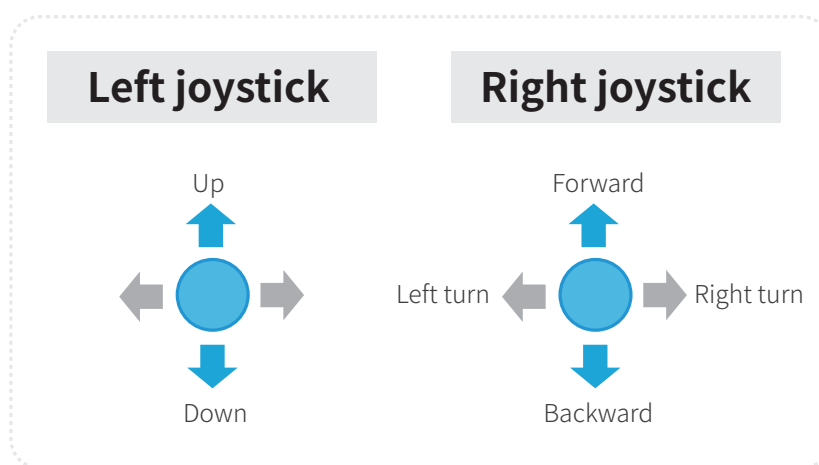


Picture / Video Interface



Service Interface

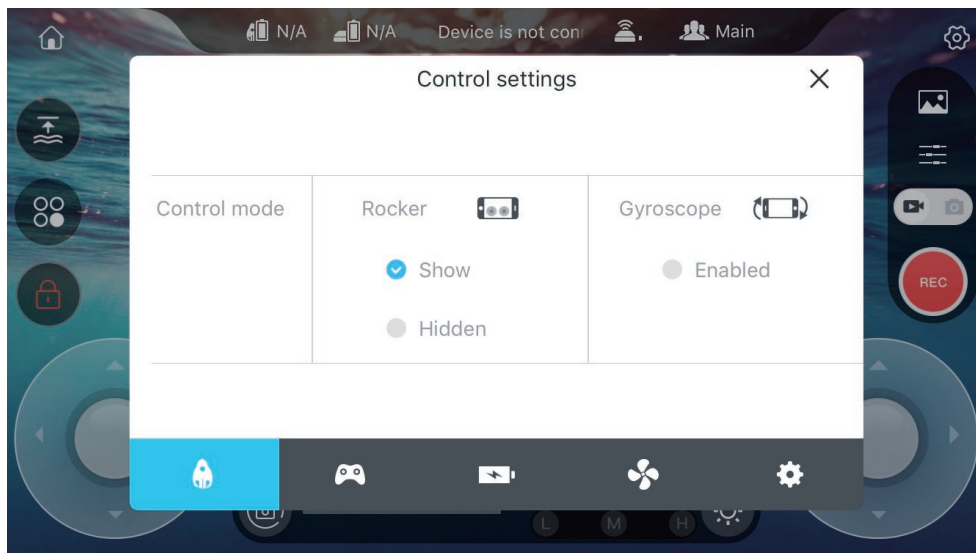




APP motion operation control navigation



Click the settings button on the top right corner.



Select control settings-motion mode.

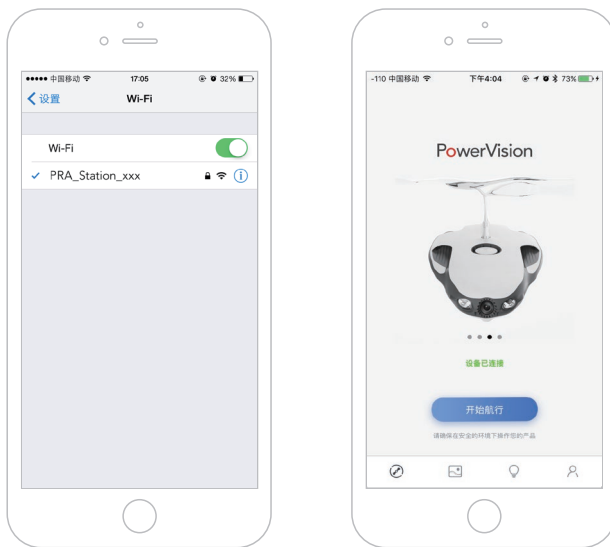


Press the motion control icon on the lower right corner to control.

Photo and video export

Mobile device export and share

1. Connect PowerRay, communication cable and wireless base station. Start the device.



2. Turn on the mobile device WIFI, search and access wireless base station hotspot: PRA_Station_xxx. Default password: 1234567890.

3. Open Vision+ APP and connect the device.

4. Click on the photo management icon() of PowerRay's photo interface on the APP.



5. Select photos and videos you want to download, click download, and the device photos will be automatically downloaded to the APP local media library.

6. Switch to “media library” interface to play and share photos.

7. iOS users choose photos and videos in the “media library” interface, click download, and the photos will be imported to the iOS phone album. If you want to edit, you need to connect the phone and the computer thru airdrop, and then import into the computer.

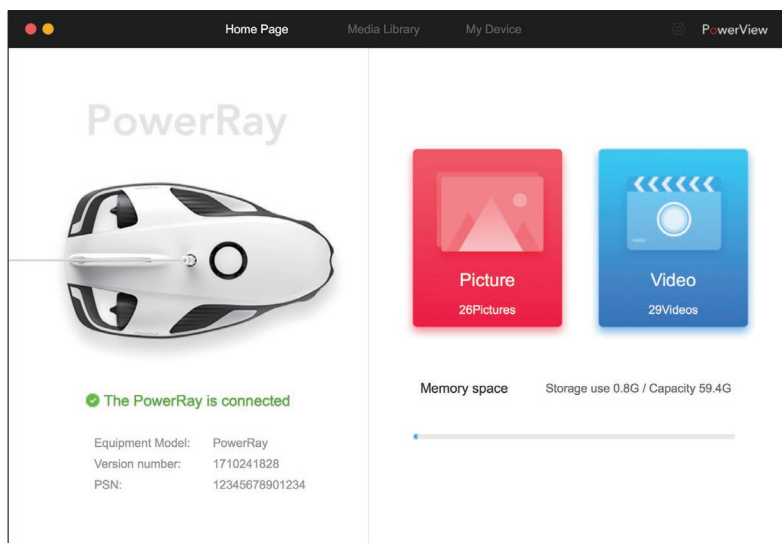
*Some mobile phones cannot browse 4K videos.

Export videos and photos using PowerView

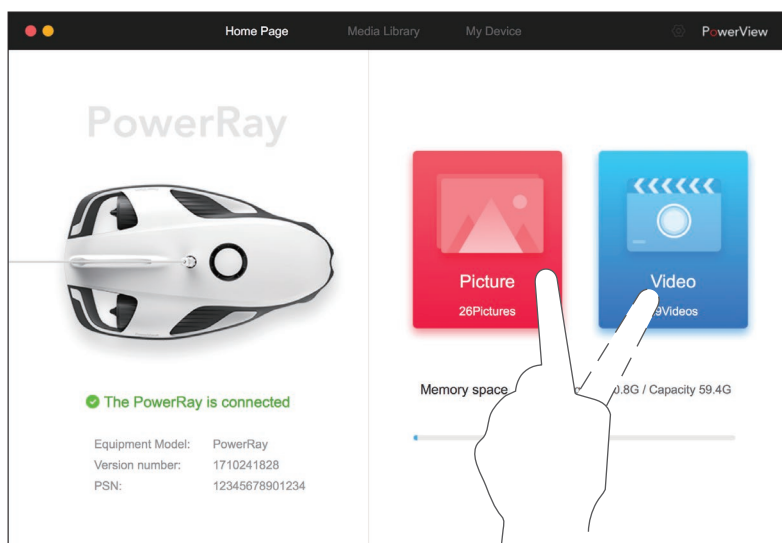
- PowerView is a photo and video export tool supporting PowerRay. You can visit the official PowerVision website to download and install the latest version.

1. Connect PowerRay, communication cables and wireless base station. Start the base station. Please ensure sufficient power of the device.

2. Switch on computer WIFI, search and access wireless base station hotspot: PRA_Station_xxxxxx. Default password: 1234567890.



3. Open PowerView, click connect and make sure the successful connection.



4. Click on the photo or video button according to the needs and export to your computer.

Navigation safety



Navigate in open and clear waters



Navigate within visual range



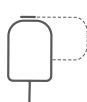
Do not try and dive more than 30 meters or 98 ft during operation



Stay away from crowds and ports. Also try and stay in depths of 5ft or more.



Please avoid aquatic plants, gravel and other underwater obstacles



Fix the base station away from water before use



Please do not drop into the water.



Try and avoid hand dragging the communication cable underwater



No throwing the PowerRay into water from high altitude



No placing in high temperature environment



Propellers cannot rotate while not in water



Do not touch rotating propellers, otherwise it may be subject to serious physical injury

China RoHS

Name and content of hazardous substances in products

Part name	Hazardous substance					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr6 ⁺)	Polybrominated biphenyls (PBB)	Polybrominated diphenylethers (PBDE)
Outer case	×	○	○	○	○	○
Circuit board	×	○	○	○	○	○
Cable	×	○	○	○	○	○
Camera	×	○	○	○	○	○
Motor	×	○	○	○	○	○

This form is compiled in accordance with SJ/T 11364-2014.

O: indicates the content of the hazardous substance in all homogeneous materials of the part is below the limit requirement of GB/T 26572.

X: indicates the content of the hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement of GB/T 26572.

Corresponding electronic information products(EIP) sold in China must comply with the Electronic Information Products Pollution Control Marking Requirements of Chinese Mainland. According to SJ/T 11364 requirements of China' s electronic industry standards, environmental protection periods should be marked on the products.

PowerVision



Available on the
App Store



Get it on
Google play

Copyright 2017 ©Powervision Robot Inc. All rights reserved.