

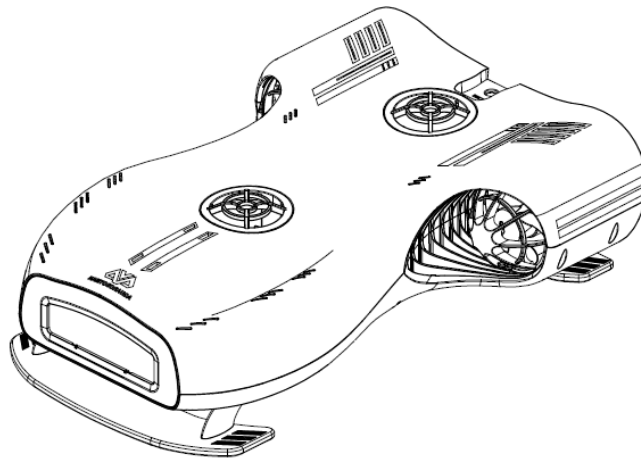


Underwater Motion Camera

AR133NE

NEMO

User Manual V1.5



Reading Suggestions

Recommendations

We recommend users to watch the instructional video, read the disclaimer and product return and exchange policy before reading this manual.

Video Tutorial

Users can view the video tutorial via the link below which includes instructions on how to use the product correctly and safely, possible problems in use and solutions.

<https://www.youtube.com/watch?v=qo-piE7QJhY>

Download the Aquarobotman App

Users can scan the QR code on the right to download the Aquarobotman app.

Note: Users should only use this app with this product, or the app may not operate normally.



IOS & Android

Contents

| | |
|---|----|
| Reading Suggestions | 2 |
| Recommendations..... | 2 |
| Video Tutorial | 2 |
| Download the Aquarobotman App..... | 2 |
| Product Overview | 5 |
| Introduction | 5 |
| Features..... | 5 |
| Module Composition | 5 |
| Dynamic System..... | 8 |
| Lighting System..... | 8 |
| Underwater motion camera Functions..... | 8 |
| Smart Protection System | 8 |
| Smart Battery..... | 9 |
| Wi-Fi base station | 10 |
| Introduction | 10 |
| KEVLAR Zero Buoyancy Cable | 10 |
| Wi-Fi Signal | 10 |
| Protection System..... | 10 |
| Aquarobotman App | 11 |
| Introduction | 11 |
| Main Interface | 11 |
| Settings Interface..... | 13 |
| VR Interface | 14 |
| Help Interface | 14 |
| Preview Interface..... | 15 |
| Operation Guide | 16 |
| Installation | 16 |

| | |
|--|----|
| App Operation | 16 |
| Controller Operation..... | 21 |
| Controller Operation..... | 22 |
| VR Control..... | 22 |
| Video Download | 24 |
| Sensor calibration | 29 |
| Battery Charging | 30 |
| Precautions | 30 |
| Usage Environment Requirments | 31 |
| Things to Inspect Before Using | 31 |
| Post-use Maintenance | 31 |
| Media Data Export | 31 |
| Appendix..... | 33 |
| Specifications | 33 |
| After-sales and service warranty information | 35 |
| Product return and exchange policy | 35 |
| Warranty policy | 36 |

Product Overview

This section introduces the functions and features of Nemo and the names of the various modules.

Introduction

The Nemo underwater motion camera is equipped with a high resolution 4K UHD camera system and 4-duct stabilization system, making it capable of shooting real-time, stabilized, and high definition underwater footage. It can travel at up to 2m/s while underwater and can continue to operate underwater for 3 hours. A modularized design makes the Nemo easy to carry and extends its battery life.

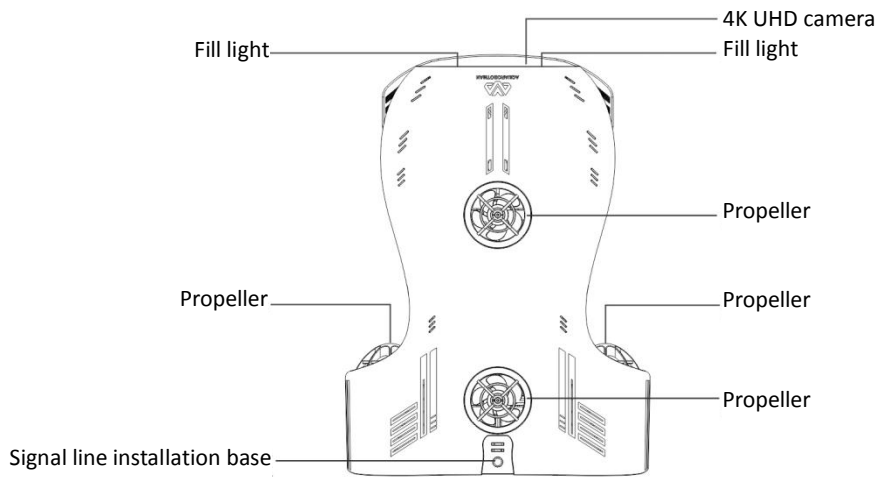
Features

- 1. High Resolution 4K Lens.** Supports up to 4K video and 16 megapixel photography. Supports video shooting at up to 120 frames per second and comes with QAS-Balance system that makes it possible to capture high quality dynamic pictures.
- 2. QAS-Balance System.** The 4 thruster design and the independently developed control system allow the Nemo to travel underwater with great stability and take stable videos and photos.
- 3. Detachable Battery Design.** The underwater motion camera battery is removable; the twist cap on the outer casing of the underwater motion camera opens the battery compartment. The underwater motion camera battery can be replaced with another one when it runs out of power. The battery for the Reel with Wi-Fi Base Station can be replaced independently.
- 4. Multiple Experience Methods.** Multiple operating methods are available including using the mobile app and VR headset with controller. The app control interface is easy to use and can be learned easily. Under VR mode, the hand controller can be used simultaneously with VR headsets. The controller replaces app control and somatosensory mode is configured under the VR mode where the underwater motion camera will move in sync with the head movements to bring users a realistic experience.

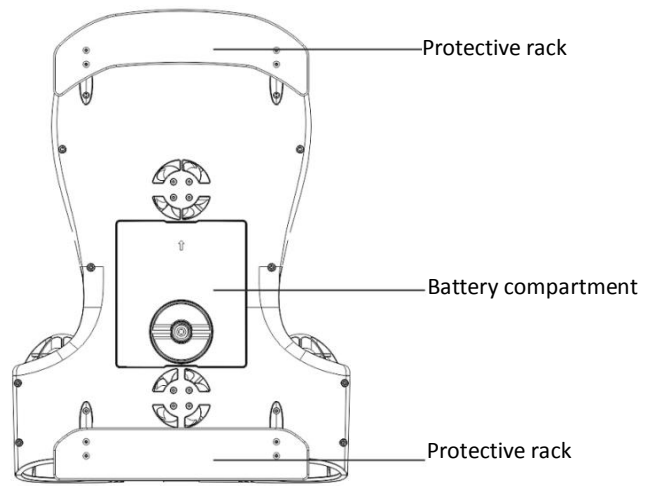
Module Composition

The modules will be introduced and described in this section. For details on the specifications and parameters, please check the specification table in the appendix.

1. Main unit

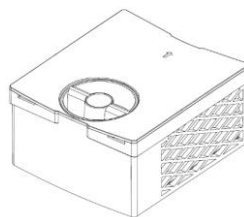


Top

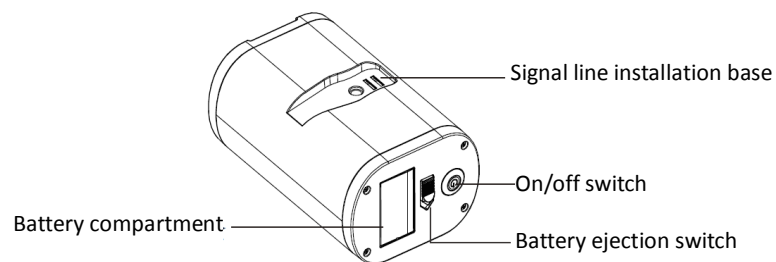


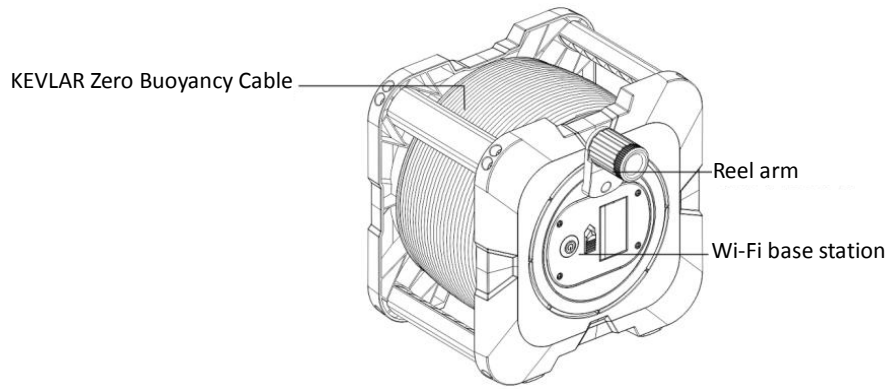
Bottom

2. Nemo battery

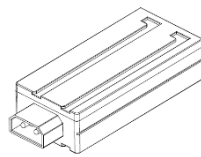


3. Wi-Fi base station

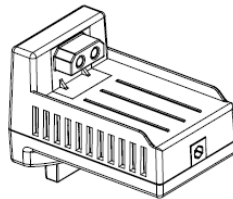




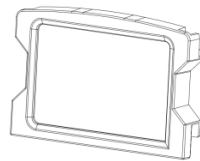
4. Wi-Fi base station battery



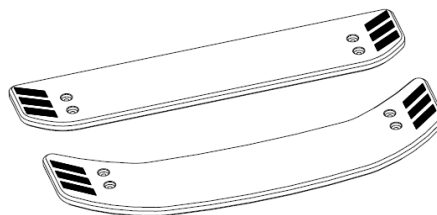
5. Nemo charger



6. Filter



7. Protective rack



Dynamic System

The dynamic system is mainly formed by a 4-duct propeller system composed of 2 horizontal + 2 vertical propellers. The propeller is made with customized waterproof and anti-corrosive motors and fitted with custom designed propeller blades that increases the performance of the motor to its maximum potential.

Lighting System

The underwater motion camera uses adjustable matrix low beam fill lights with a maximum brightness of 1000lm.

Recommendation: turn off the fill light during daytime when there is enough light to save battery. The fill light is required during nighttime and when in caves where there isn't enough light.

Underwater motion camera Functions

1. **Depth Hold:** in situations with controlled horizontal orientation, the underwater motion camera will maintain its current depth and pitch angle. This mode relies on the underwater motion camera's internal sensors. In complex scenarios such as when there is strong magnetic field interference and so on, the underwater motion camera will be unable to operate regularly. In such situations please leave the area to a safe place to use it.
2. **Direction Hold:** the orientation of the underwater motion camera is maintained, and the snorkeling throttle controller can be used to move the underwater motion camera upwards or downwards.
3. **Full position operation:** this mode provides an open control mode and can enable complex underwater motion camera maneuvers such as moving upwards or downwards at large angles. This mode restricts the pitch angle of the underwater motion camera to $\pm 90^\circ$ and the speed of pitch angle change can be controlled at different speeds and so on.
4. **VR somatosensory operation:** this mode requires a compatible VR headset to operate. Under the VR mode, there is a somatosensory activation lock, the user must tilt their head upwards 60° or more then tilt their head downwards 60° or more and then return to the horizontal position to unlock the somatosensory function. After unlocking, the underwater motion camera view can be controlled by head movements.

Smart Protection System

When the underwater motion camera encounters unexpected situations, it will perform corresponding protective measures.

1. **Temperature protection:** the normal operating temperature of the underwater motion camera is between -2°C - 35°C . If the underwater motion camera detects an abnormal internal temperature, it will enter a protective state.

There are two scenarios:

- a) Operating in high temperature waters.
 - b) Underwater motion camera was turned on and left above the surface for too long and the internal temperature of the underwater motion camera got too hot.
2. **Humidity protection:** when the underwater motion camera detects too much humidity, it will take protective measures. These problems should not occur during normal operation. If they do occur then the underwater motion camera needs to be returned for repair.
 3. **Overcurrent protection:** the main causes are:
 - a) Propeller is entangled and cannot rotate.
 - b) Internal underwater motion camera fault causes short-circuit.
 4. **Low voltage protection:** this protective feature will be triggered when the battery voltage falls too low. When the voltage falls below 10%, there will be a notification on the app, and when the voltage drops to 0%, the battery will automatically shut down and the underwater motion camera will be unable to move. When this happens, the KAVLAR zero buoyancy cable can be used manually to pull the underwater motion camera back to the surface.
 5. **Motor protection:** in its unlocked state and when not controlled, if the underwater motion camera pitch or roll angles is greater than 60 degrees, the motor will stop and enter a protection mode until the underwater motion camera pitch and roll angles are both less than 60 degrees.

Smart Battery

As a standalone component, the underwater motion camera battery has a built-in smart control to ensure safety. The smart battery has the following features:

1. **Load detection:** before loading, the battery will be in sleep mode and will not discharge. Operation only begins after the battery has been connected to the underwater motion camera.
2. **Battery self-checking:** after installing the battery to the underwater motion camera, it will first do a self-check to detect whether or not the battery level satisfies the underwater motion camera's requirements.
3. **Battery short-circuit protection:** when the battery detects short-circuit, the output will be cutoff to protect the battery.
4. **Overcurrent discharge protection:** when there is an overcurrent during discharge, the output will be cutoff to protect the battery and external circuits.
5. **Battery storage:** the battery can be stored short-term in any state. If long-term storage is required, we recommend consulting the smart battery user manual.

USB Port

The micro-USB port is internal to the product and has no external connection and is not used in this product.

Wi-Fi base station

This acts as a communication hub between the underwater motion camera and the user.

Introduction

The Wi-Fi Base Station has an in-built Wi-Fi signal transmitter and its battery is separate and detachable. Wi-Fi connection with smartphones is available. Open the Aquarobotman app to connect and view the underwater motion camera status in real-time. For operation instructions, please read [Operation Guide](#). Users can use the cable reel for easier cable retraction.

KEVLAR Zero Buoyancy Cable

The KEVLAR cable's main function is for signal transmission. The cable has built-in reinforced KEVLAR fiber and can withstand a maximum of 100kg of pulling force. The cable has neutral buoyancy in freshwater and positive buoyancy in seawater.

Wi-Fi Signal

The 802.11a standard Wi-Fi is used, and the communication range is 50m in open areas.

Protection System

When the battery voltage is too low, the system will automatically cut off the power to protect the Wi-Fi base station battery.

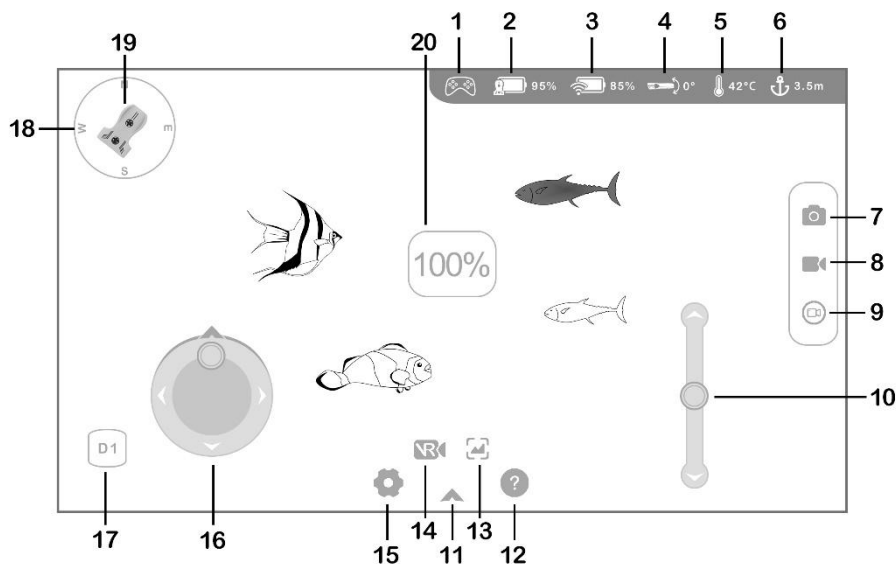
Aquarobotman App

About the app interface and usage instructions.


Introduction

The Aquarobotman app is used with the Nemo to control its movements and to setup the basic camera parameters. It can also be used to share photos and videos taken from the underwater motion camera directly to social networks.


Main Interface




1. Controller connection status

: displays the controller's connection status. A red icon with "x" means connection failed, a white icon and a blue "V" means connection successful, and a white icon means normal operation.

2. Underwater motion camera battery level

: battery level is shown as a percentage. The icon will turn red when the battery level is low there will be a pop-up notification


3. Wi-Fi Base Station battery level

: when the Wi-Fi Base Station battery level is low, the icon will turn red and there will be a pop-up notification


4. Underwater motion camera pitch angle

: real-time display of underwater motion camera pitch angle data.


5. Underwater motion camera working temperature

: displays the underwater motion camera's internal operating temperature and not the water temperature.


6. Current water depth

: displays the current water depth of the underwater motion camera in meters.


7. Camera shutter button

: takes a single photo.


8. Long video button

: starts taking a long video, the button will turn red and the time can be seen on the left side of the button. While taking the video, pressing the button again will end the video and the button will turn white again.


9. Short video button

: press the button to start taking a short video. A short video is 20 seconds, and the red outer ring is used to show the time recorded. The short video recording will be canceled if the button is pressed again before the video recording has completed. After the red outer ring has completed a full circle, the video will be automatically stored to local storage to be readily shared at any time.


10. Snorkeling throttle lever

: press on the middle dot area and slide up and down to make the underwater motion camera either float upwards or submerge downwards.


11. Show/hide menu column

: expands the secondary menu which includes help page, playback, VR mode, and settings. Press again to hide.

12. Help menu

: press help to display the function descriptions of the various buttons.


13. Gallery preview

: preview all videos and photos taken from the underwater motion camera. Files can then be selected to be downloaded to local storage or deleted.


14. VR mode

: enters VR mode where the interface splits into two screens and the VR headset can be used directly.

15. Settings

: provides related auxiliary settings including depth calibration, video resolution selection, version number, etc.

16. Directional control panel


: the directorial control panel provides 360° omni-directional control where the underwater motion camera can move in any direction on the horizontal plane.

17. Quick toggle button


: this button enables sliding control where parameters such as speed can be changed using the

directional control panel.

18. Hand-held compass direction

: displays the direction of the phone/tablet in real-time

19. Direction of the underwater motion camera relative to the phone

: direction of the underwater motion camera relative to the phone/tablet; can view the heading of the underwater motion camera in real-time.

Settings Interface

1. Sensor calibration

Horizontal calibration. Place the underwater motion camera on the ground or on the water surface and press the depth calibration button to perform depth calibration. This will take around 2 seconds. Compass calibration. After pressing the compass calibration button, rotate the underwater motion camera 360° in the air until the calibration completes. This will take around 30 seconds.

2. Camera settings

Video resolution and camera settings can be configured here. This provides more professional and more photography setting choices, as well as functions including changing video resolution, image pixels, photo quality, video quality, consecutive mode, time-lapse, and video watermarking.



Calibration interface

Camera parameters

3. Status info

View current underwater motion camera firmware version information. The underwater motion camera's internal humidity will also be displayed. This is used to detect whether or not any water has entered the underwater motion camera.

4. About us

Learn more about us and our products at the Aquarobotman website.

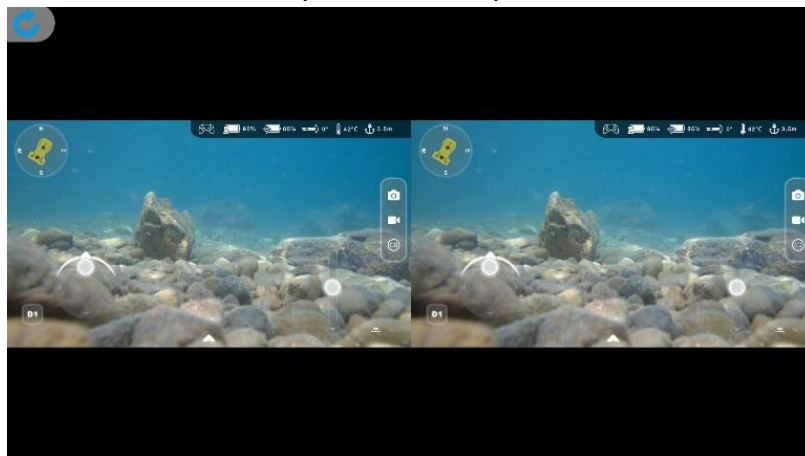


Status info

About us

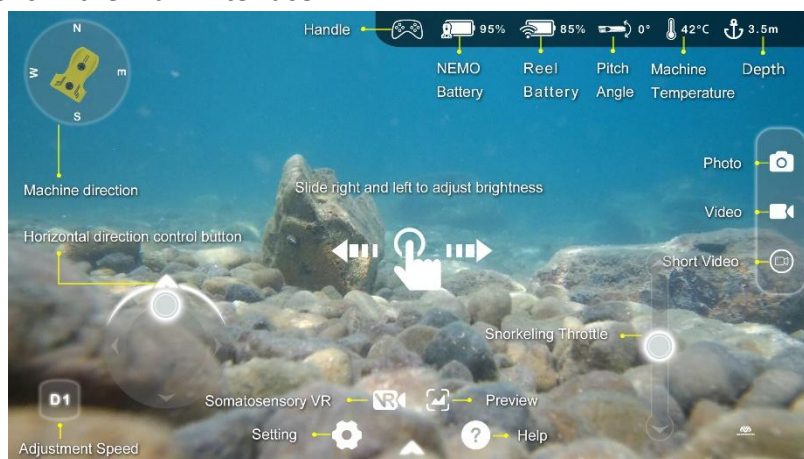
VR Interface

Split-screen display of video interface to be used with VR headsets. This mode also has somatosensory operation function which makes it easier for users with VR headsets to view underwater sceneries. The head position will translate into the underwater motion camera's real-time viewing angle which gives a strong immersive experience which feels like you are actually there.



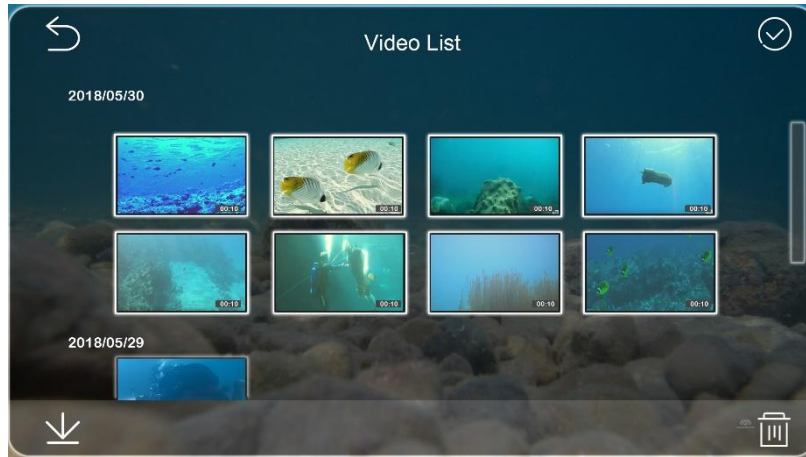
Help Interface

Descriptions of functions in the main interface.



Preview Interface

Displays all photos and videos taken with the underwater motion camera where they can be downloaded for deleted. Provides an easy to operate interface for the user to view photos and videos taken with the underwater motion camera.



Operation Guide

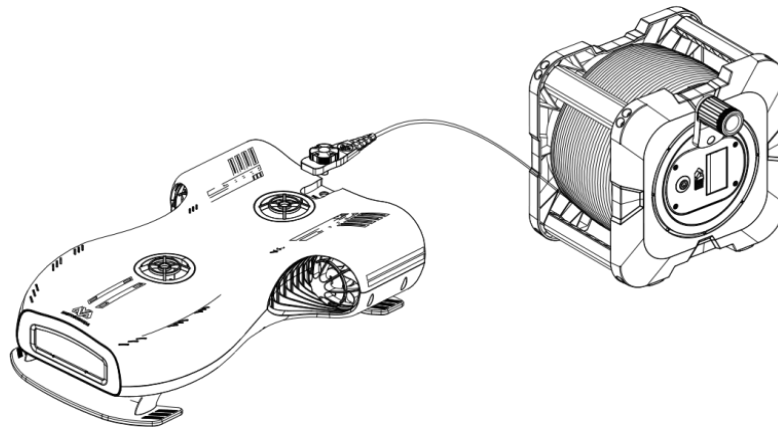
Detailed instructions for installation and operation.

Installation

1. Connect underwater motion camera

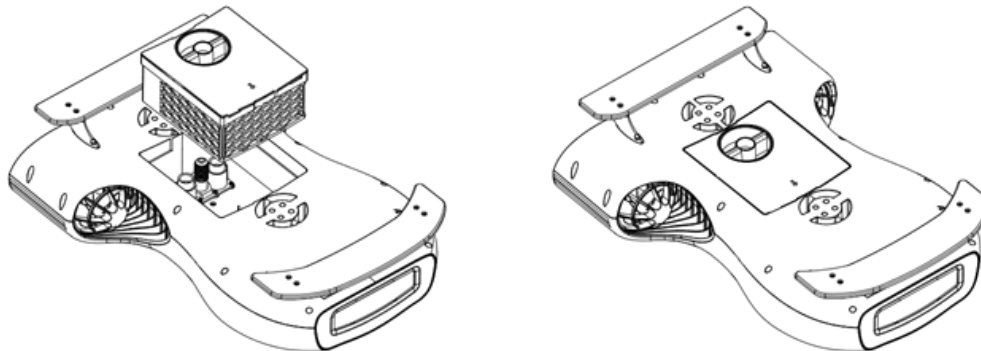
- a) Connect the reel KEVLAR cable with the tail section of the underwater motion camera.

Note: Poor connection at joint can result in poor contact and render the device unusable. Please make ensure that the joint contact is good.



- b) Insert the battery into the underwater motion camera's battery compartment, then press on the battery slightly while turning the knob clockwise to secure the battery in place.

Note: When the battery is installed successfully, there will be a prompt sound. However, the prompt sound is short and not too loud. If it is used outdoors, please listen carefully.



App Operation

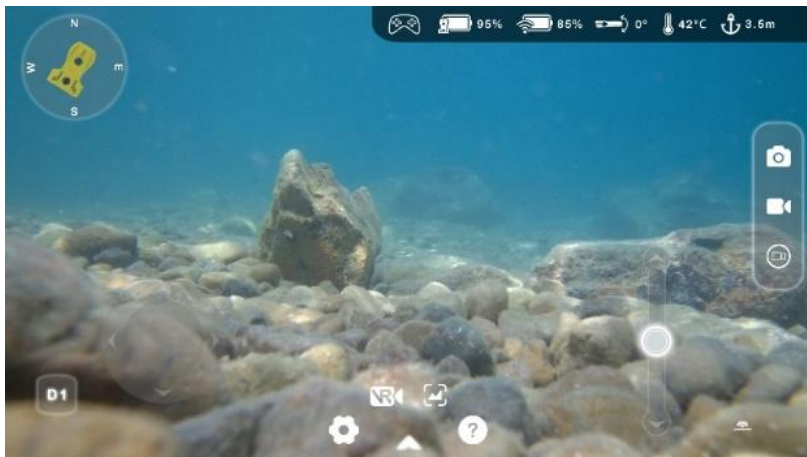
1. Connect app

- a) Connect with the Wi-Fi Base Station via Wi-Fi. The Wi-Fi name of the Base Station is "Aquarobotman".


Note:

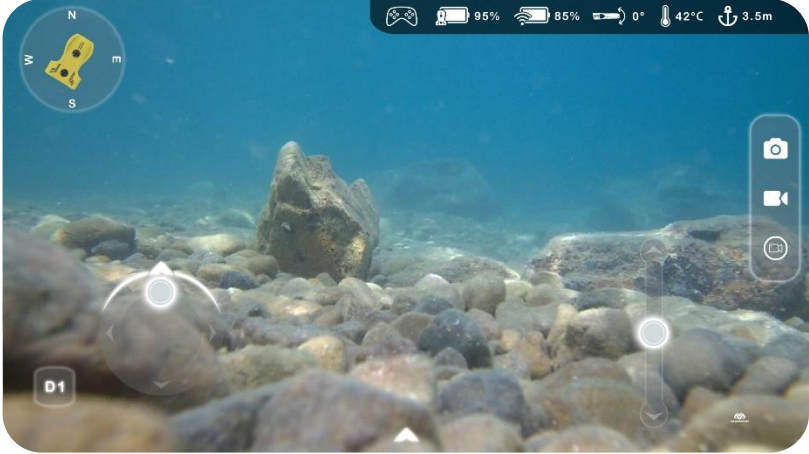
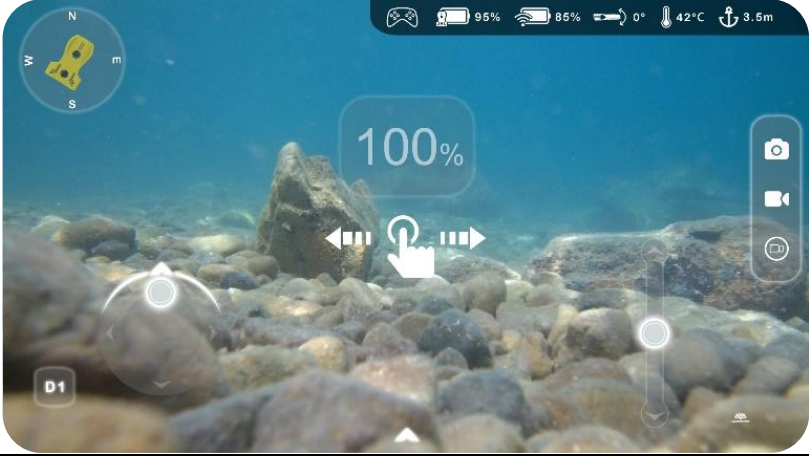

- i. In the Wi-Fi list of your phone or tablet, there will be two Wi-Fi networks including "Nemo_XXXXXX" and "Aquarobotman_XXXXXX". Make sure your phone or tablet is connected to "Aquarobotman_XXXXXX". If there is one WIFI: "Aquarobotman_XXXXXX", it means the Nemo battery is not installed well, please reinstall the battery.
 - ii. Before opening the APP, make sure the Wi-Fi "Aquarobotman" is connected. In addition, the APP cannot run in the background. If you have opened the APP before, please exit completely and restart the APP, otherwise the interface will always read "connecting video".
- b) After successful connection, you should see the app interface shown in the figure below.

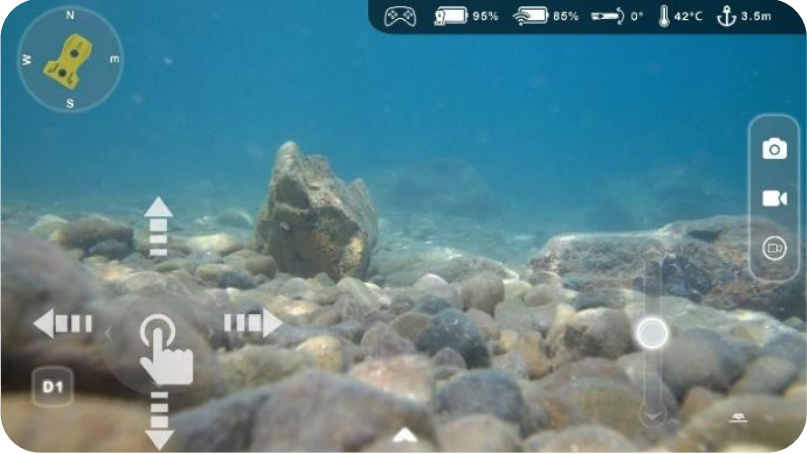


Note : When you open the APP, the word "connecting video" will appear on the interface for 10-60 seconds. When it disappears from the interface, you will see the picture in NEMO lens on the interface, indicating that the connection has been successful. In addition, there is a red icon on the icon bar at the top of the interface which represents the game handle. Only when you use the game handle to control NEMO will the icon turn white, and in other cases the icon is always red.






2. Operation


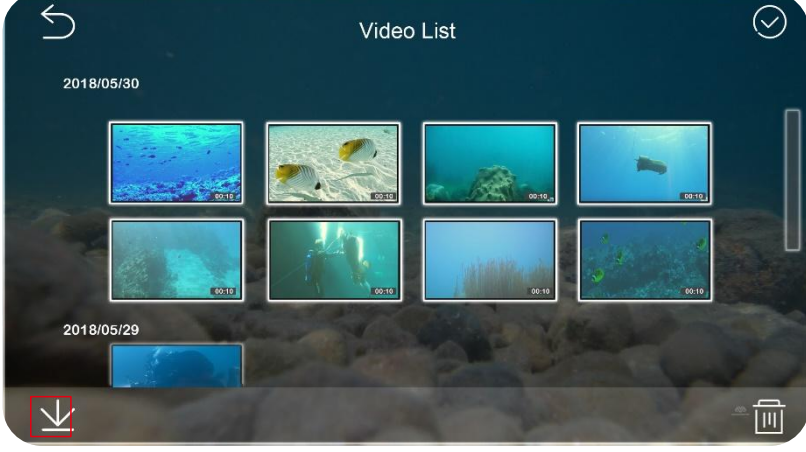
| Functions | Illustration |
|--|--|
| <p>Lock</p> <p>If the icon in the upper left is grey, this means that the underwater motion camera is locked and the propellers will not move</p> |  |

| Functions | Illustration |
|---|--|
| <p>Unlock</p> <p>If the icon in the upper left corner is yellow, this means that the underwater motion camera is unlocked and the propellers should operate normally</p> |  |
| <p>Fill Light Adjustment</p> <p>Use a sliding action on the screen to adjust the brightness of the underwater motion camera fill light</p> |  |
| <p>Speed Adjustment</p> <p>Adjust the horizontal underwater motion camera speed and use with the direction controls</p> |  |

| Functions | Illustration |
|--|--|
| <p>Horizontal Control</p> <p>Controls the underwater motion camera's horizontal movement</p> |  |
| <p>Snorkel Control</p> <p>Controls the upwards and downwards movement of the underwater motion camera</p> |  |
| <p>Snorkel Control</p> <p>By using the horizontal and snorkel control at the same time, the pitch angle can be changed while moving forward simultaneously. The pitch angle can reach a maximum of 90°.</p> |  |

| Functions | Illustration |
|---|--|
| <p>Photo</p> | |
| <p>The button will flash red and the screen will flash once when taking a photo.</p> |  |
| <p>Long Video</p> | |
| <p>The underwater motion camera will continue to record when recording a long video</p> |  |
| <p>Short Video</p> | |
| <p>Records a 20 second short video</p> |  |

3. Album management

| Functions | Illustration |
|--|---|
| Gallery preview | |
| <p>View and manage photos and videos taken on the underwater motion camera</p> |  |
| Download | |
| <p>Select video or photo to be downloaded. Download to local photo album and share with one button</p> |  |

Controller Operation

1. Connect: controllers connect to the app via Bluetooth. After the app is connected to the controller via Bluetooth, you will be notified of the controller connection. After connection, you can take photos and perform other control operations directly from the controller. The controller now replaces the app interface control. The app will notify you of a successful Bluetooth controller connection.

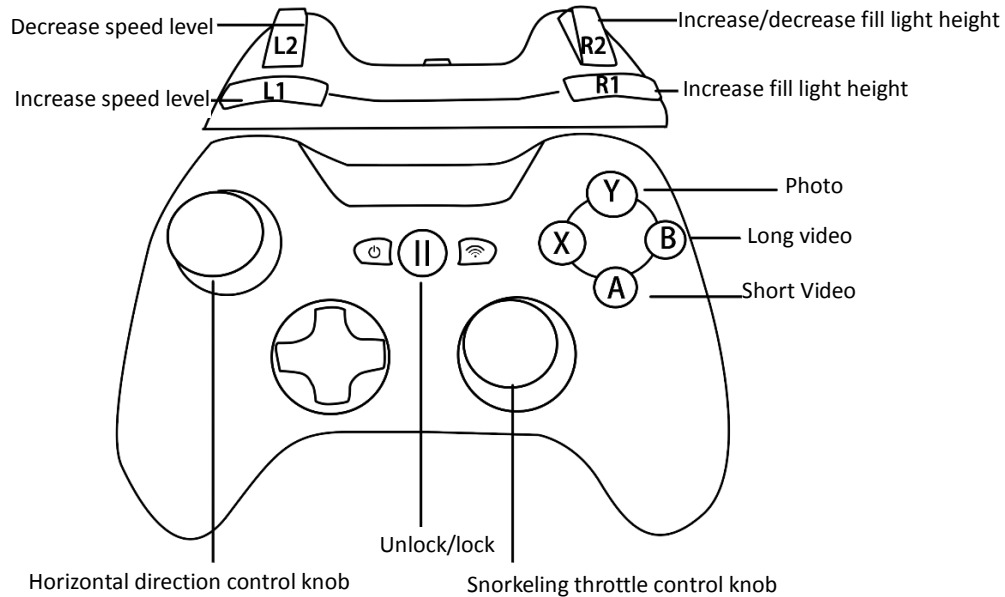
Operation Steps :

- a) Open controller (Please refer to operation guide).
- b) Open phone Bluetooth.
- c) Find the handle controller Bluetooth in the Bluetooth list of the mobile phone and connect it. After successful connection, the interface will display the prompt "receive Bluetooth handle connection".

Controller Operation

1. Connect: controllers connect to the app via Bluetooth. After the app is connected to the controller via Bluetooth, you will be notified of the controller connection. After connection, you can take photos and perform other control operations directly from the controller. The controller now replaces the app interface control.

2. Controller instructions: button functions are shown below:



3. Controller can be purchased through Tmall mall, jd.com, amazon, Ebay or other stores. The recommended controller brands are as follows:

iOS system: PXN

Android system: BETOP

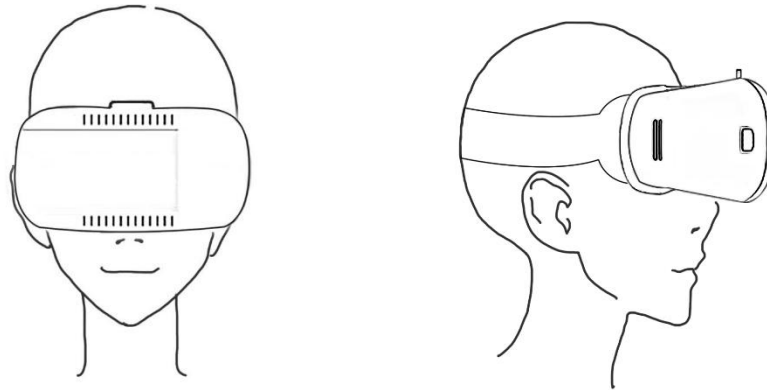
VR Control

In VR mode, users can change the perspective of the machine synchronously by changing the posture of the head to bring immersive experience. In the state of motion control, the device can only move up and down or left and right, and cannot move forward, backward, dive or float.

The usage method is as follows:

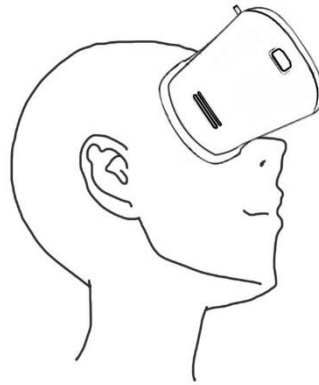
Switch to VR mode and put your phone into the VR headset.

1. Wearing the VR headset normally:

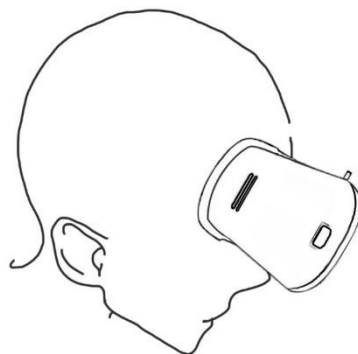


2. After wearing the VR headset, the device is locked. The user needs to unlock the somatosensory control function to experience. Follow these steps to unlock:

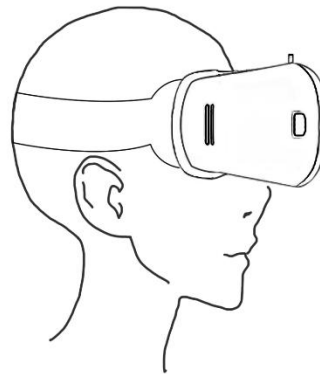
- a) Tilt head upwards 40 degrees or greater



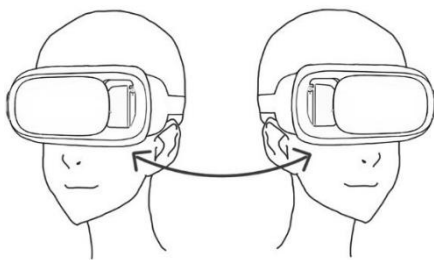
- b) Tilt head downwards 40 degrees or greater



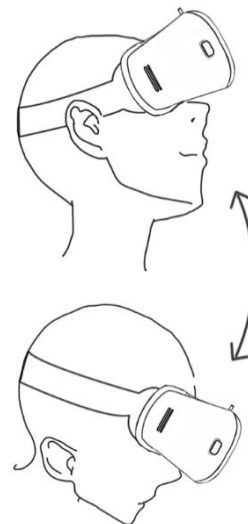
c) Return to original horizontal position



3. The somatosensory control function will be unlocked by following the steps above. Action can't be too fast in above operation, or it may fail to unlock. After unlocking successfully, the scene in the shot will appear in the field of vision. The underwater motion camera's viewing angle can now be controlled by moving the head around. This enables an immersive experience. The two following directions are enabled with the somatosensory control.



Moving head left and right



Moving head up and down

Video Download

Important tip: the underwater motion camera must be placed in water when downloading videos. When using Wi-Fi to export original data out of the underwater motion camera's internal memory via the Wi-Fi Base Station or from the Nemo, the front end of the underwater motion camera front must be immersed in cold water to prevent it from overheating. For specific operation methods please consult the [Media Data Export](#) part of the Precautions section.

Note: When downloading video, to prevent Nemo from overheating, the first half should be immersed in

cold water.

There are two ways to download videos from the underwater motion camera. One is via Nemo Tools and the other is via a browser.

Video can be downloaded from mobile phone and computer.

1 . Download from mobile phone:

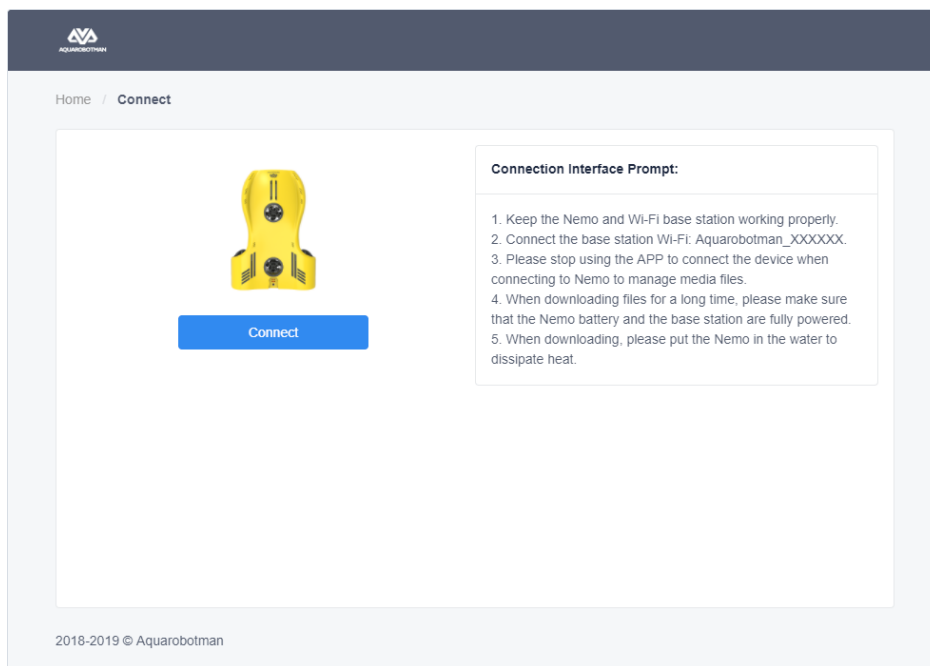
- a) Connect the mobile phone to the base station WIFI "Aquarobotman_XXXXXX" or the Nemo WIFI "Nemo_XXXXXX"
- b) Open APP and go to preview interface.
- c) Long press picture or video to download.

2 . Download from computer:

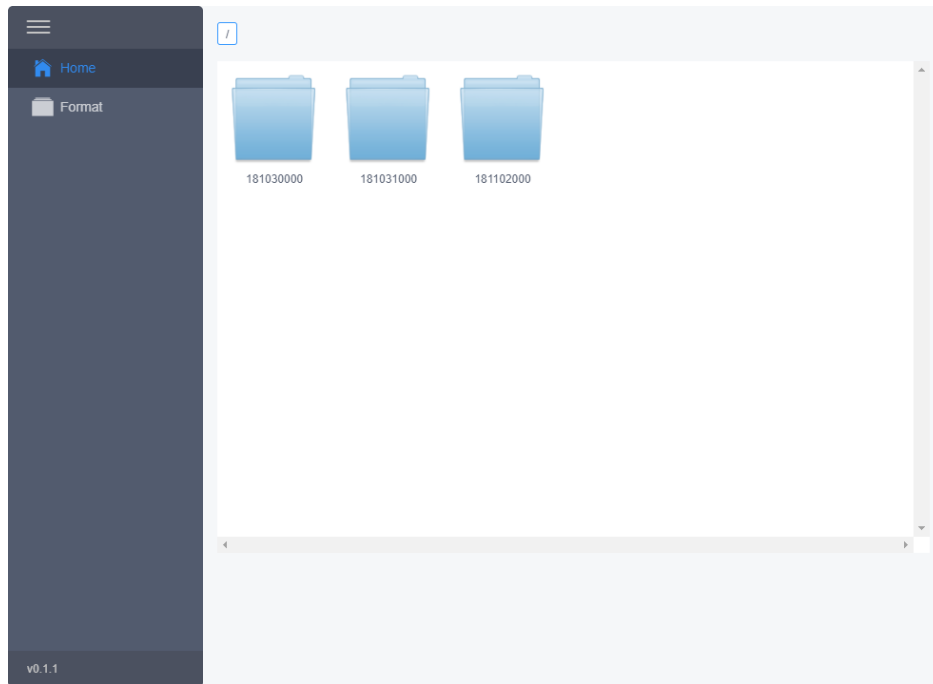
- a) Nemo Tools download.
- b) Browser download.

3 . Nemo Tools tutorial

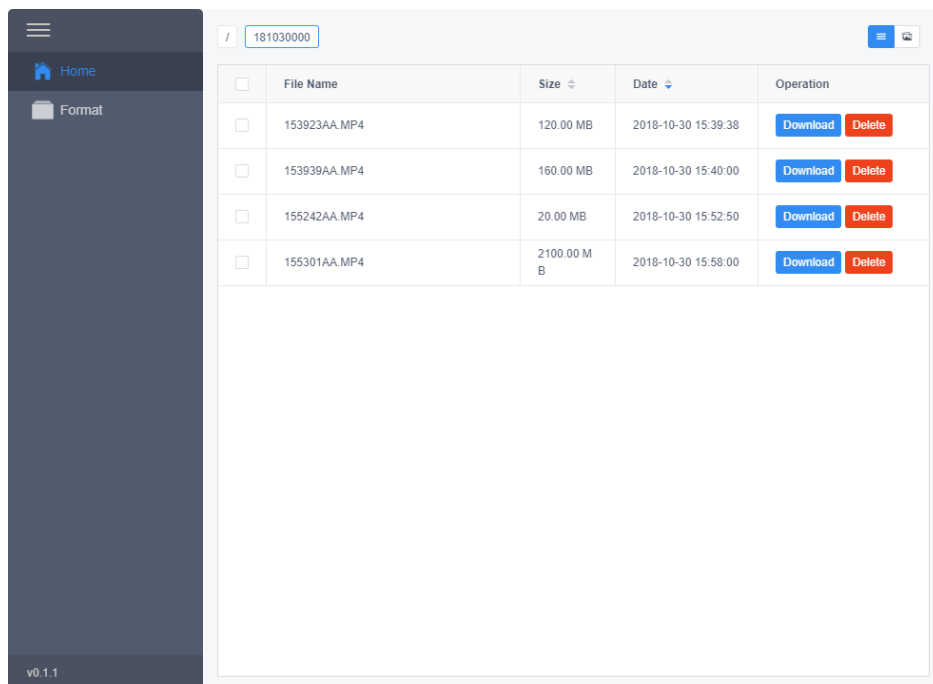
- a) The software can download videos or photo files and manage media files taken by the Nemo. Open Nemo Tools.exe on the PC, visit connected device interface, and connect Nemo.



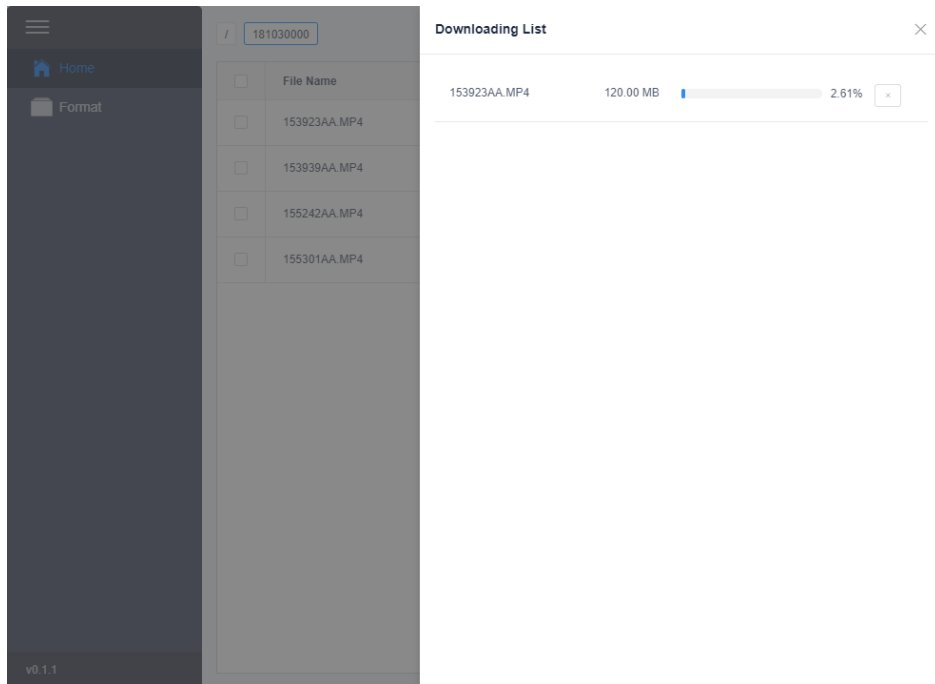
b) Go to file list and it displays the current media folder as shown below.



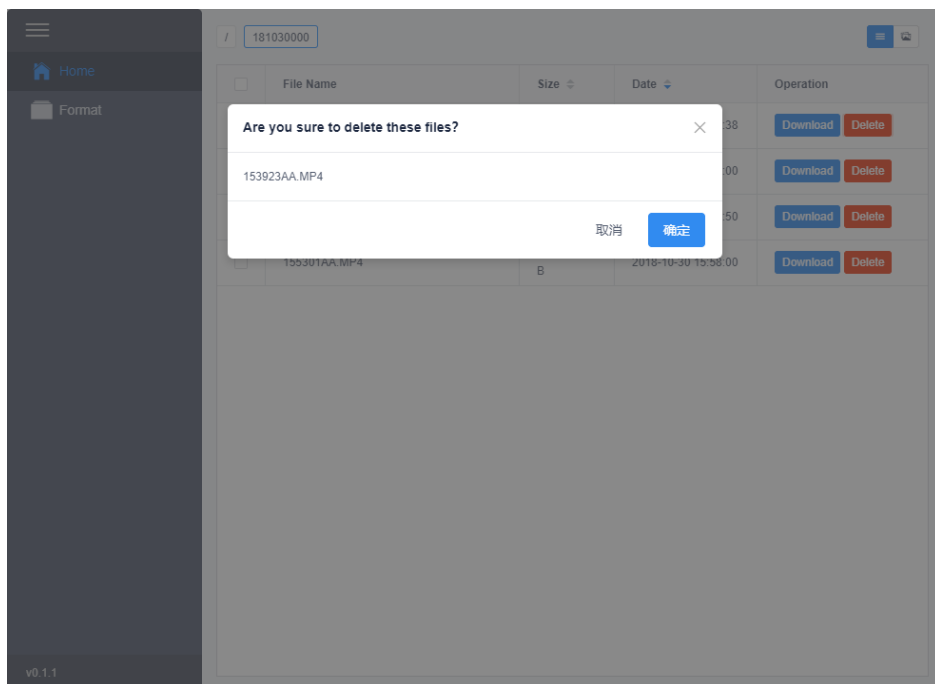
c) Enter the folder to download and delete files.



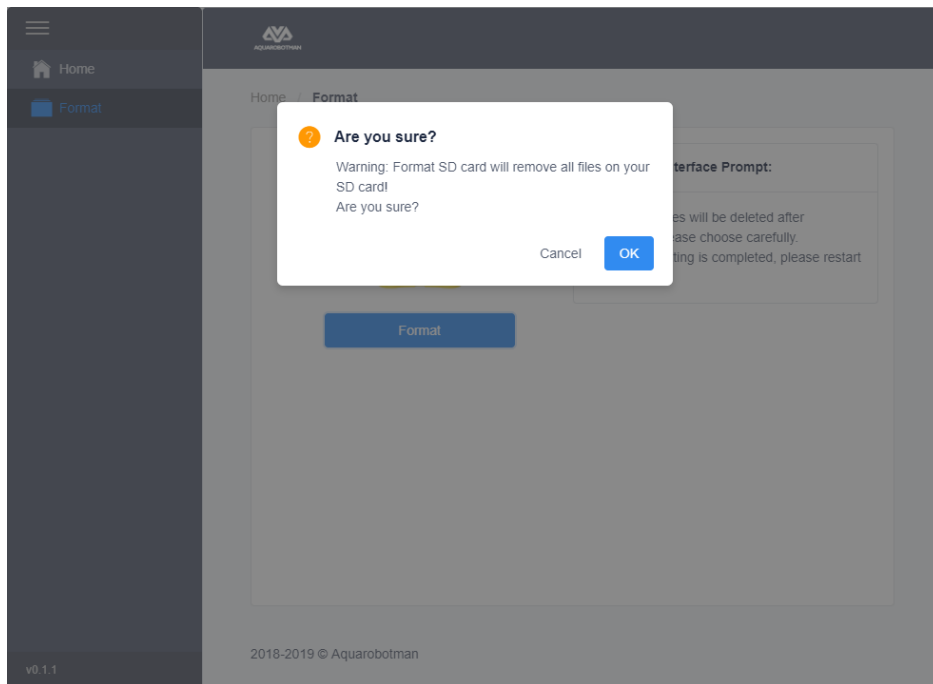
d) Click Download button and it shows download speed at the same time.



e) Select the file to be deleted, click the Delete button to confirm again, and then click OK to complete file deletion.

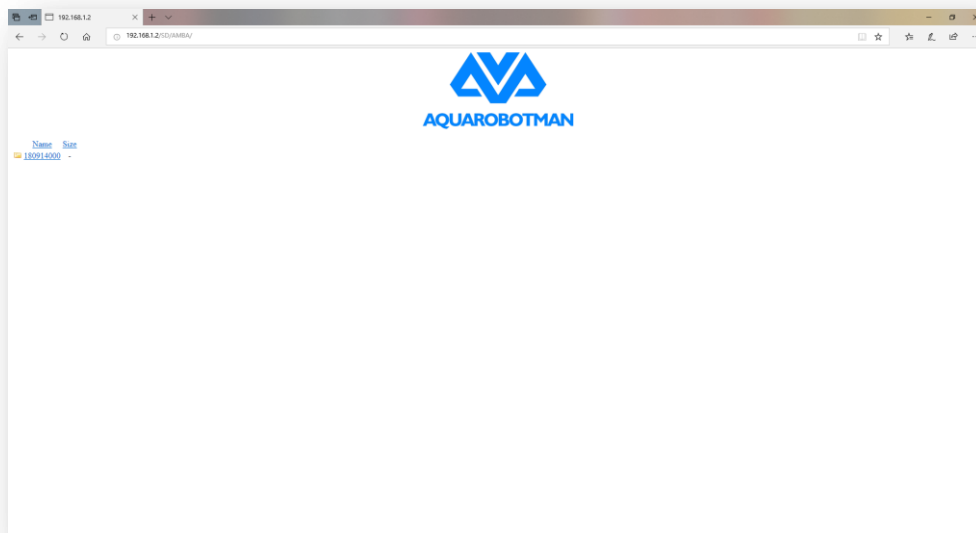


e) Format the Nemo. Click Format and confirm again whether to format the SD card and click OK.

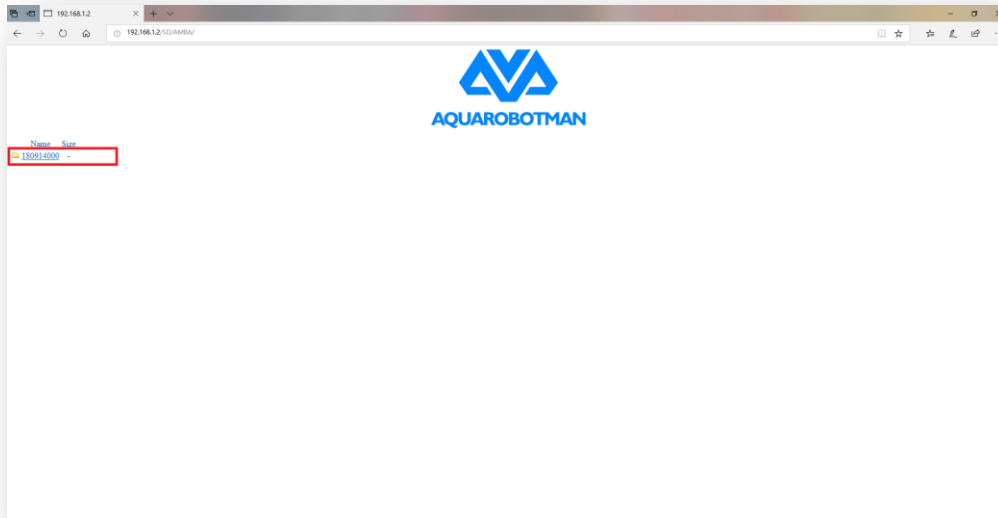


2. Downloading with browser

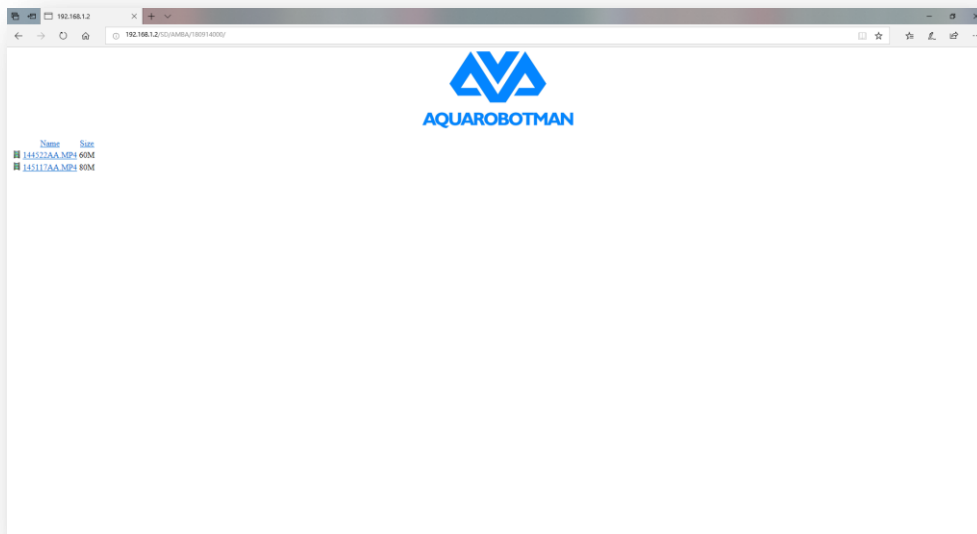
e) Enter <http://192.168.1.2/SD/AMBA/> into your browser (Microsoft Edge recommended). You should see the interface below:



f) Click the folder with the corresponding date



g) Expand the video list and select the corresponding video or photo files, right click -> save target as.



h) Windows will change the file extension. The downloaded file will have a .html extension, change this to .MP4. This operation is not required for Apple systems.

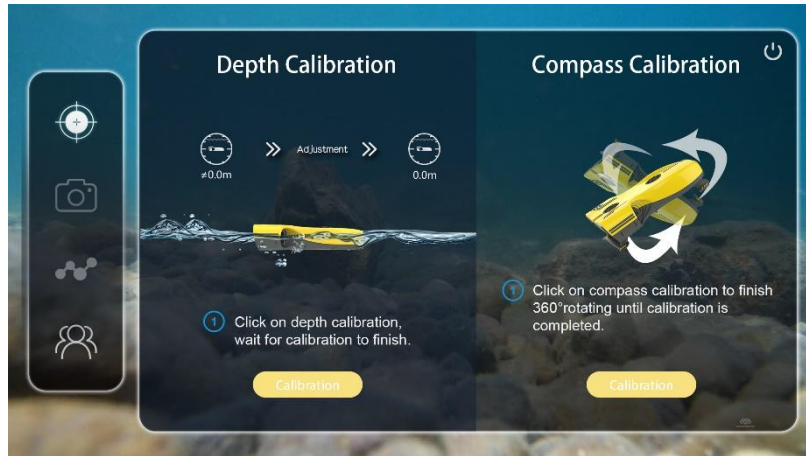
Sensor calibration

Underwater motion camera sensor calibration must be performed before using for the first time. After this, the sensors can be calibrated as required. The sensors that need to be calibrated include the compass and depth sensors.

1. Depth calibration: hold the underwater motion camera in the air and press depth calibration on the app to start calibrating. The fill light will turn on. Wait until the fill light turns off, this means the calibration

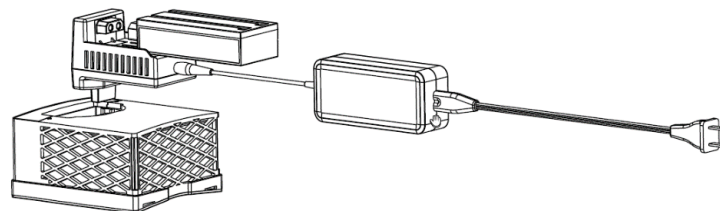
has completed.

2. Compass calibration: after pressing compass calibration, the fill light will turn on. Rotate the underwater motion camera 360° in the air until the light turns off, this means calibration has completed. The app operation steps are shown in the figure below.



Battery Charging

The Nemo charger must be used to charge the battery.



1. The battery light will turn red while charging.
2. It will turn green when the battery is fully charged.
3. Two batteries can be charged at the same time or charged separately.
4. Precautions:
 - a) The adapter provided by Aquarobotman must be used.
 - b) The charger provided by Aquarobotman must be used.

Precautions

Things to be aware of when using this product.

Usage Environment Requirements

Water quality: seawater or freshwater.

Temperature: water temperature should be between -2°C to 35°C.

Water depth; 0 - 100 meters.

Water environment: no obvious aquatic plants or other obstacles

Things to Inspect Before Using

1. Main unit

- a) Check to see if the main unit's protective rack is installed.
- b) Check to see if there are foreign objects attached to the camera lens.
- c) Check to see if anything is tangled in the thrusters on each propeller.
- d) Ensure that any camera filters you would like to use are properly attached.
- e) Check to see if the KEVLAR signal line is clean and free of debris.
- f) Check to see that the battery chamber and the electrode mounting slot are free of debris.

2. Wi-Fi base station

- a) If you have a reel, check to see if it rotates properly.
- b) Check that the Wi-Fi base station's power switch is working properly and that the power indicator light is illuminated normally.
- c) Check if the cable is damaged.

Post-use Maintenance

The user should perform the following maintenance tasks after using the underwater motion camera.

- a) Rinse or soak the main unit with freshwater (soak with the battery installed).
- b) Use fresh water to wash the reel and KEVLAR cable.
- c) Remove the battery from the main unit and turn off the power supply for the base station to prevent the battery from excessive discharge.

Media Data Export

The front half of the underwater motion camera must be immersed into cold water (as shown in the figure below) while exporting original data from the underwater motion camera's internal memory. This is to prevent it from overheating.

Possible issues:

| | Possible issues: | Solution |
|---|---|--|
| 1 | Not washing the underwater motion camera with fresh water | Put the underwater motion camera in fresh water for a while and wait until the salt dissolves off the surface. |

- after retrieving the underwater motion camera from the sea causing a layer of salt to form on the underwater motion camera surface
2. Underwater motion camera got wrapped in aquatic plants or other stripy material while operating underwater causing it to enter protective state
Remove the underwater motion camera from the water and remove the aquatic plant from the propeller blades, then restart and use again. We suggest not to use the underwater motion camera in places where there are lots of aquatic plants.
 3. Sand or rocks got into the underwater motion camera while traveling near the seabed
Shake the underwater motion camera underwater so that sand and rocks fall out
 4. Only one Wi-Fi "Aquarobotman" in the Wi-Fi list of phone or tablet.
Check whether the battery of Nemo is well installed and the signal line connector is in good contact with Nemo.
 5. Why are there two Wi-Fi? What do "Nemo" and "Aquarobotman" separately stand for?
"Aquarobotman" is the base station Wi-Fi, which is used to transmit signals and can be used by the Nemo underwater or onland."NEMO" is the Nemo Wi-Fi, which can only be used on land. When Nemo enters water, this Wi-Fi cannot be seen in Wi-Fi list. When on shore, if Nemo Wi-Fi is not listed, the battery is not installed, please reinstall the battery.
 6. APP stops at the beginning interface and error message appears.
Check whether Nemo battery is well installed, whether the signal line connector is in good contact with Nemo, and whether there are two Wi-Fi in the Wi-Fi list. After confirming zero error, please connect "Aquarobotman", completely exit the APP from the background, and then reopen the APP.

Appendix

Specifications

| Underwater motion camera | Parameter |
|--|--|
| Structure | 4 propellers (2 vertical + 2 horizontal) |
| Dimensions | 40.4*29.0*11.4cm |
| Weight | 3.4KG |
| Dynamic System | Waterproof and anti-corrosive motors, high efficiency 5-blade propellers |
| Maximum forward speed | 2m/s |
| Maximum diving depth | 100m |
| Underwater motion camera internal memory | 32G/64G |
| Wi-Fi base station | Parameter |
| Dimensions | 105mm*75mm*159mm |
| Weight | 337g |
| Signal frequency | 2.4G |
| Maximum communication range | 50m |
| Battery | Wi-Fi base station battery |
| Reel Wi-Fi base station | Parameter |
| Cable length | 50m/100m |
| Dimensions | 30*35*16cm |
| Weight | 0.6kg/1.1kg |
| Wi-Fi base station battery | Parameter |
| Dimensions | 47mm*120mm*27mm |
| Weight | 150g |
| Battery voltage | 8V |
| Charging voltage | 8.4V |
| Underwater motion camerabattery | Parameter |
| Dimensions | 112mm*125mm*65mm |
| Weight | 760g |
| Battery voltage | 11.1V |
| Charging voltage | 12.6V |
| Charging current | 2A |

| Nemo battery charger | |
|--|--|
| Parameter | |
| Dimensions | 68.5mm*53mm*85mm |
| Weight | |
| Input voltage | 15V |
| Output voltage | 12.6V / 8.4V |
| Nemo filter | |
| Parameter | |
| Dimensions | 70mm*45mm*10.5mm |
| Weight | 10g |
| Protective rack | |
| Parameter | |
| Dimensions (underwater motion camera head section) | 75mm*220mm |
| Dimensions (underwater motion camera tail section) | 45mm*220mm |
| Weight | 313g |
| Camera | |
| Parameter | |
| Video resolution | 4K:3840X2160 30P 16:9 2.7K:2704X1520 30P 16:9 1080P:1920X1080 30P 16:9 1080P: 1920*1080 120P 16:9 720P:1280x720 30P 16:9 |
| Image pixels | 16M (4608x3456 4:3) 14M:4252x3264 4:3 12M:4000x3000 4:3 8.3M:3840X2160 16:9 |
| Consecutive mode | Off, 3 shots/sec, 5 shots/sec |
| Time-lapse photo | Off/1s/2s/5s/10s/30s |
| Video quality | Normal/good/very good |
| Video watermark | Off/on |

After-sales and service warranty information

Detailed policy on after-sales returns, exchanges, and repairs

Product return and exchange policy

1. Goods can be returned if the following conditions are met.
 - a) The customer returns the product within 7 days of receiving it; the product is free from damage or defects; the outer packaging, accessories, gifts, and instruction manual are intact and free from any man-made damage that would prevent the item from being resold.
 - b) Damage or failure not due to man-made factors, that are discovered within 7 days of receiving the product
2. In the situations below, we **reserve the right to reject** customers' requests for product returns
 - a) Return requests are made after 7 days of receiving the product
 - b) The returned product is not intact; the outer packaging, accessories, gifts, and instruction manual are incomplete; or there is man-made physical damage to the product.
 - c) Product returns that are not accompanied by legal proof of purchase or invoices, or are accompanied by forged or altered invoices.
 - d) Problems caused by impact, burning, unsupported modification, improper installation, and failure to use and operate the product according to the instruction manual, that are not attributable to the quality of the product itself.
 - e) The product is damaged due to acts of god such as fires, floods, lightning strikes, traffic incidents, and other similar events.
 - f) The customer fails to mail out the product within 7 days of initiating the returns process with customer support.
 - g) Other circumstances described in the policy.
3. Goods can be exchanged if the following conditions are met
 - a) Within 15 days of receiving the product, the product is found to be damaged during shipping and the customer is able to provide proof of damage issued by the shipping company;
 - b) Within 15 days of receiving the product, the product is found to be grossly inconsistent with the original product description in one or more important aspects.
 - c) Within 15 days of receiving the product, the customer discovers performance failure issues that are not due to man-made factors and damage.
4. In the situations below, we reserve the right to reject customers' requests for product exchanges
 - a) Product exchange requests that are made after 15 days of receiving the product;

- b) Product exchanges that are not accompanied by legal proof of purchase or invoices, or are accompanied by forged or altered invoices;
- c) Product to be exchanged is incomplete or has man-made physical damage;
- d) Upon examination by the Aquarobotman technical support team, it is found that there are no issues with the product quality.
- e) Problems caused by impact, burning, unsupported modification, improper installation, and failure to use and operate the product according to the instruction manual, that are not attributable to the quality of the product itself.
- f) The product is damaged due to acts of god such as fires, floods, lightning strikes, traffic incidents, and other similar events
- g) The customer fails to mail out the product within 7 days of initiating the returns process with customer support.
- h) The customer has claimed product damage arising from shipping and handling, and wants to exchange the product but is unable to provide proof of damage from the shipping company.
- i) Other circumstances described in the policy.

Warranty policy

If there are performance failures during the warranty period, you can apply for our product warranty service.

1. To enjoy full coverage under the product warranty, the following conditions must be met:
 - a) The product is subject to normal use during the specified product warranty period, when it is discovered that there is performance failure not attributable to man-made factors.
 - b) The product has not been disassembled beyond what is specified and allowed in the instruction manual, and there are no unsupported modifications, additions, or damage attributable to man-made factors.
 - c) The customer must produce valid proof of purchase, invoices, and invoice numbers.
2. The following conditions are **not** covered by the product warranty
 - a) Impact and burning that are due to man-made factors and are not attributable to the quality of the product itself.
 - b) Damage caused by modification, disassembly, or dismantling of the product without official instructions;
 - c) Damage caused by improper installation, use, and operation that are not in accordance with the instruction manual;
 - d) Damage caused by self-repair or installation of components without official instructions;
 - e) Damage caused by improper circuit modification or the use of incompatible battery packs and chargers without official instructions;
 - f) Damage caused by filming or operating the product in ways that are not in accordance with the

instruction manual;

- g) Damage caused by operating the product in harsh environments, including large waves, complex underwater terrain, and places with low visibility;
- h) Damage caused by operating the product in situations where there is interference with other wireless devices; this includes WiFi signal interference, etc.;
- i) Damage caused by loading the product beyond the safe weight;
- j) Damage caused by forcibly starting or operating the product with ageing or damaged components;
- k) Damage caused by reliability or compatibility issues from operating the Aquarobotman with unauthorized third-party components;
- l) Damage caused by insufficient discharge from using batteries with quality problems when the product battery level is low;
- m) The customer fails to mail out the product within 7 days of initiating the warranty service process with customer support.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.