

**Paralenz®**



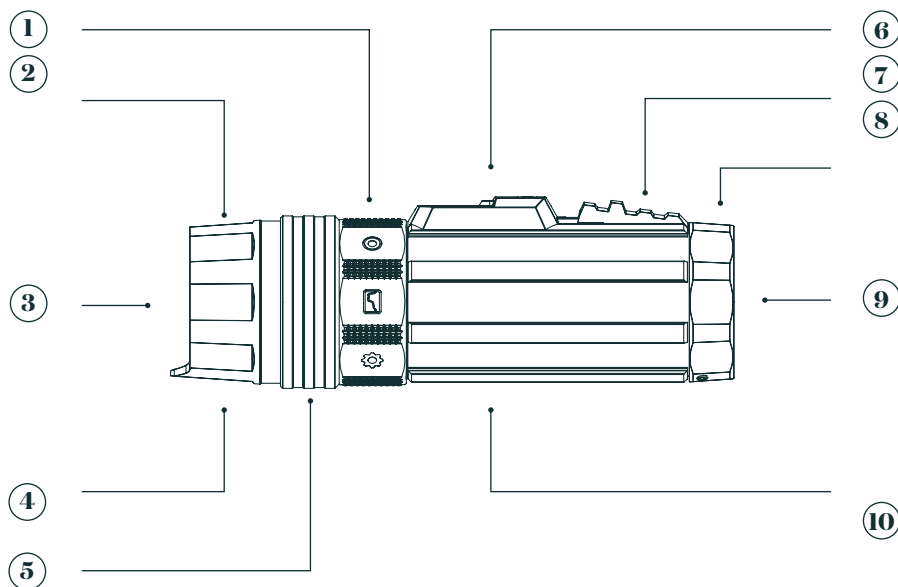
# **Vaquita User Manual**

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# The Paralenz Vaquita



**1.** Selector Ring

**2.** End Cap

**3.** Rear Glass

**4.** Eyelet

**5.** Quick Connector Ring

**6.** GPS Sensor

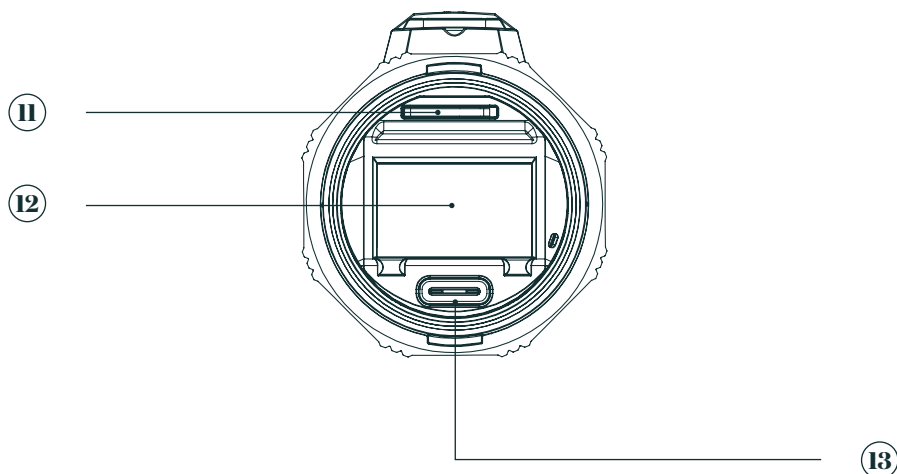
**7.** Activation Switch

**8.** Lens Lock Ring

**9.** Front Glass

**10.** Camera Body

# The Paralenz Vaquita



**11.** SD Card

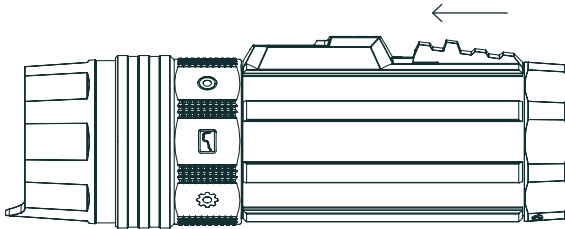
**12.** OLED Display

**13.** USB-C Port

# The Camera

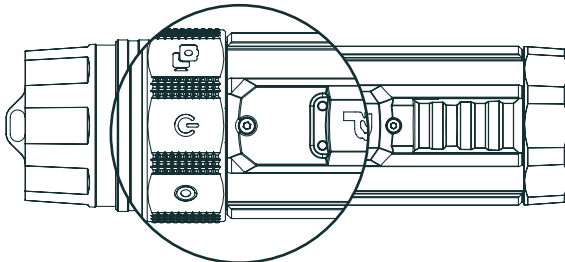
## Activation Switch

- **Click**  
Pull back the activation switch once and release quickly to 'click'.
- **Hold**  
Pull back and hold the activation switch for 1 second or more to 'hold'.



## Selector Ring

To switch between modes, rotate the selector ring. The icon aligned with the antenna will indicate the selected mode. Ensure that the selector ring is placed correctly (the selector ring will snap to each position).

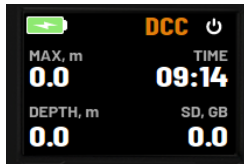
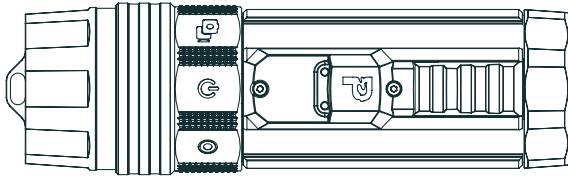


# The Camera

## Power On

Rotate the selector ring to the power mode position and pull back the activation switch and hold for 4 seconds to turn on the camera.

The camera will vibrate shortly after, and the Paralenz logo will appear. When the camera is ready to use, the display will show the Home screen.



## Power Off

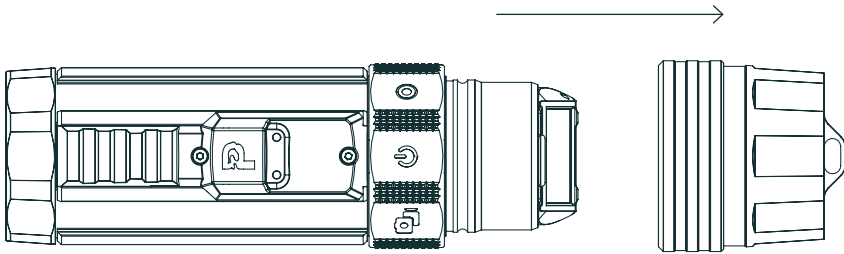
Rotate the selector ring to the power mode position and hold the activation switch for 4 seconds to turn off the camera. The display will then show 'Goodbye', and the camera will vibrate. When the display turns black, the camera has been turned off.

# Getting Started

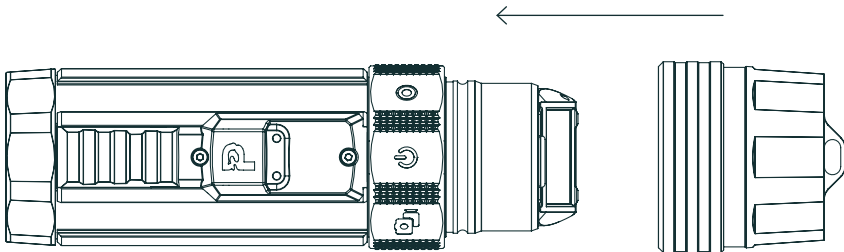
## Pull Off the End Cap

To access the USB-C port and SD-card, pull off the end cap.

The end cap is using a quick release system. Pull back the lock ring and then pull off the end cap - a bit of force is needed.



To put the end cap back on, pull back the lock ring on the end cap, and push the end cap back on.





# Getting Started

## Insert Micro SD-Card

Turn off the camera before inserting the micro SD card.  
Use only SanDisk class U3 or V30 SD cards.

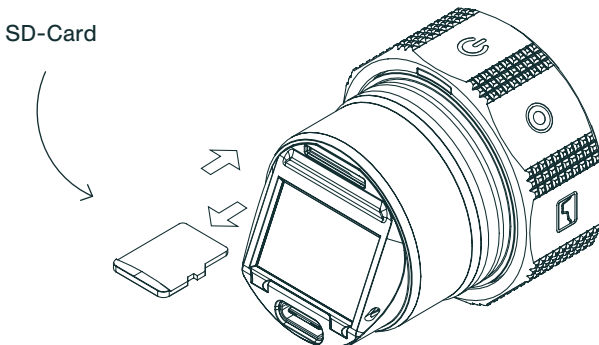
## SD cards compatible with the Paralenz Vaquita

- **Extreme**
- **Extreme PLUS**
- **Extreme PRO**

When using different types of SD cards, the recorded footage might appear black. A capacity of 32 GB or more is recommended. (Max. 128 GB).

## Insert:

1. Pull off the end cap
2. Insert the micro SD card (logo side pointing up towards the top of the camera)



# Getting Started

## Remove Micro SD-Card

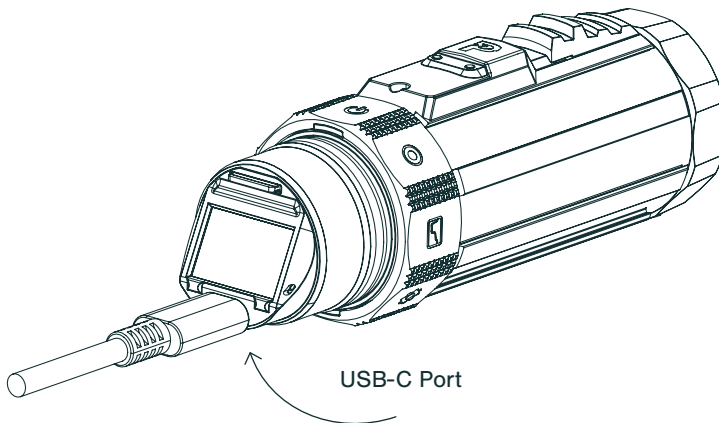
Make sure any recording is stopped when removing the SD-card.

### Remove:

1. Pull off the end cap
2. Push in the micro SD card, then release it and the card will automatically pop out
3. Press the end cap back on - If the red ring is visible, the end cap is not attached correctly

## Charge The Battery

You can use a variety of devices to charge your camera. Use a charger with 2.0 A output or higher for the minimum charging time. Use the included USB-C cable or any other compatible USB-C cable.



# Photos & Videos

## **Take Photo**

To take pictures, rotate the ring to the snap record mode. To take a picture, pull back on the activation switch and release quickly. The camera will vibrate to indicate that the picture was taken. The screen will now show the amount of photos you have taken.

## **Record Videos**

To record videos, rotate the ring to the video mode. To record a video, pull back on the activation switch and hold it for 1 second. The camera will now start to record. To stop the recording, pull back on the activation switch and hold it for 1 second. The camera will vibrate to indicate that the recording has started or stopped.

# Download Content

## The Paralenz App

The free Paralenz App makes downloading, sharing, and viewing your photos and recordings easy.

Download the app via App Store/Google Play. The app will guide you through the connection process.



Note that you can also update the camera firmware through the app. The app will notify you if there is a new firmware update available.

## Micro SD-Card

You can transfer your data from your micro SD-card by inserting the card into a card reader.

## Use USB-C Cable

By connecting your camera to a computer via the USB-C cable, you can access your footage on the camera from the computer.

# Maintenance

## **Always Clean The Camera In Fresh Water After Use**

Leaving the Paralenz Vaquita covered in salt water after usage can damage your product. It is important to wash the Paralenz Vaquita with fresh water after usage to ensure the functionality of the product.

## **Cleaning The O-Rings**

Check that the O-rings placed inside the end cap have not been stretched and do not show any visible cuts or tears. To lubricate the O-rings, apply silicone grease and run the O-rings through your fingers while gently rubbing the grease onto them. Do not use spray lubricant or petroleum-based grease.

## **Prevent The Camera From Flooding**

The triple O-rings in the end cap keep the camera from flooding. They have been tested to a max depth of 350 m/1148 ft./36 ATM. To ensure their functionality, properly maintain the O-rings and don't open the camera below the water. Remember to press the end cap on and make sure the red ring, located on the end cap, is not visible when using the camera underwater.

## **Cleaning The Lens**

To clean the lens, wipe with a soft, lint-free cloth. You can use Eyeglass Cleaning Fluid – but do not use strong liquids such as petrol or alcohol.

# Camera Modes



## Snap Record

The snap record mode allows you to take pictures and record short clips.

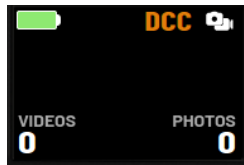
- **Picture**

To take a picture, pull back on the activation switch and release quickly.

- **Video**

To record a video, pull the activation switch back and hold. The camera will keep recording for as long as you hold the activation switch.

The snap record screen will show how many pictures you have taken and how many videos you have recorded.



## Video

The video mode lets you record videos in different resolutions and frame rates.

To record a video, turn the selector ring to the video mode, pull back on the activation switch, and hold it for 1 second. The camera will now start to record. To stop the recording, pull back on the activation switch and hold it for 1 second. The camera will vibrate to indicate that the recording has started or stopped.

# Camera Modes



## Custom 1 & 2

The vaquita camera has two custom modes. You can assign different functions to these two modes. You choose which modes to assign in the camera settings.

### The Possible Functions Are:

- Video - different resolution and frame rate from the normal video mode
- Photo log - take pictures in an interval of your choice (1, 2, 5, 10, 60, or 120 sec.)
- Media viewer - view the pictures you have taken on the camera

### To Change The Settings

1. Rotate the ring to the settings icon
2. Navigate through the menu to custom mode you want to change settings for
3. Enter to the desired mode
4. Hold the activation which on 'enable' to select this setting

Further adjustments can be set in this settings menu.

# Camera Modes



## Settings

The settings mode allows you to choose the settings for the camera and activate other functions. The settings menu consist of different items:

- **Submenus**

Hold activation switch to go to the next menu. Submenues are indicated with a small arrow pointing towards the right ( > ).

- **Radio Button**

Hold to select list of possible settings ( ○, ● ).

- **Toggle**

Hold activation switch to enable or disable a setting ( □, ■ ).

- **Activate**

Hold activation switch to perform an action - e.g. start Wi-Fi or calibrate depth ( □ ).

- **Back**

Hold activation switch to go to the previous menu ( < ).

To go to the next menu item, “click” on the activation switch.

## Start Wi-Fi

Start Wi-Fi is the first menu item in the camera settings. Hold the activation switch to activate the Wi-Fi. When the Wi-Fi is activated, you can find the camera in your Wi-Fi settings on your device. The device will ask for a password when connecting to the camera’s Wi-Fi.

The camera’s Wi-Fi password is: **1234567890**

To access content from the camera, download the Paralenz app and go to the camera tab to connect to the camera.



# Camera Modes



## DCC

### What Is DCC

DCC (Depth Controlled Color) is a dynamic digital filter that automatically adjusts the colors of your footage to the depth and the color of the water. The DCC analyses the current conditions and can take some time to adjust to the local conditions.

To change the DCC state, go to the DCC menu item. Hold to enable or disable the DCC setting.

### When To Use DCC?

If you're recording in daylight, and not using external light, you can use DCC. The DCC will make your footage look more colorful. The DCC will reintroduce those colors that are absorbed by the water when descending.

DCC will give you the best results from 0 to 25 meters. After 25 meter most of the colors are absorbed by the water. Below 25 meter you need a dive light to bring back the colors.

The DCC can also be enabled or disabled in the video mode or power mode by clicking three times on the activation switch.



# Camera Modes



## Video Settings

This menu allows you to change the settings for the video mode. You can select at which resolution and frame rate you want to record in.

### Available resolutions and frame rates:

- 4K (3840 x 2160) at 30 FPS
- 4K (3840 x 2160) at 60 FPS
  
- 2.7K (2720 x 1530) at 30 FPS
- 2.7K (2720 x 1530) at 60 FPS
  
- 1080P (1920 x 1080) at 30 FPS
- 1080P (1920 x 1080) at 60 FPS
- 1080P (1920 x 1080) at 120 FPS
- 1080P (1920 x 1080) at 240 FPS
  
- 720P (1280 x 720) at 30 FPS
- 720P (1280 x 720) at 60 FPS
- 720P (1280 x 720) at 120 FPS
- 720P (1280 x 720) at 240 FPS

# Camera Modes



## Custom 1 & 2

There are two custom submenus - one for each of the custom icons on the ring.

### Example:

To change the settings in custom 1 or 2, do the following.

**In the submenu, three modes are presented:**

- **Video**
- **Photo Log**
- **Media Viewer**

By entering the mode, and enabling it, the mode is assigned to the ring position.

### Custom Video

The custom video menu works like the normal video settings - see the video settings section for more information.

### Custom Photo Log

The photo log setting, when activated, will take pictures in an interval. The possible intervals are:

- 1 second
- 2 seconds
- 5 seconds

# Camera Modes



- 10 seconds
- 60 seconds
- 120 seconds

To start the photo log, go to the custom mode that has the photo log assigned. Hold the activation switch for 1 second to start the photo log. To stop the photo log, hold the activation switch for 1 second.

## Custom Media Viewer

The media viewer allows you to look through the pictures that were taken. Click on the activation switch to navigate through the pictures. The newest pictures are shown first. By holding, a menu will appear. This menu allows you to reverse the direction or go back to the first photo.

## Auto Record

The camera can start a video recording at a certain depth when the auto record is activated. The video mode is the only mode that supports auto record.

### **The depths at which the camera can start a recording by itself are:**

- 0.5 meter / 2 feet
- 1.5 meters / 5 feet
- 3 meters / 10 feet
- 6 meters / 20 feet

# Camera Modes



## Advanced

The advanced submenu contains items that are less commonly used.

### Reset All Settings

To restore the factory setting, activate this mode.

### Calibrate Depth Sensor

If the depth is not showing exactly 0.0 on the surface, it's a good idea to calibrate the sensor. By activating the depth sensor calibration. The sensor will show 0.0 at the current pressure level.

### Time/Date

The time/date submenu allows you to switch between 24H clock and 12H clock. The time is set by the GPS signal, so it is important that the right time zone is selected.

### Units

In the units submenu, you can choose between meters and feet, Celsius and Fahrenheit.

### Idle Off (Auto Power Off)

In the idle off submenu, you can choose if the camera should turn off after a given time, if the camera is not submerged, recording, or connected to Wi-Fi. You can choose between:

- Never
- 10 min

# Camera Modes



- 20 min

## Manual Settings

The manual settings submenu gives you further adjustment possibilities for the image quality.

### Reset Manual Settings

By resetting the manual settings, all manual options will be set to auto.

### White Balance

You can select to have a fixed white balance at a certain Kelvin. The options are:

- 3500K
- 5000K
- 5600K
- 6500K

The values above will make the image appear neutral when using lights with the same color temperature as the value.

### Exposure

The exposure submenu lets you set the shutter speed and ISO.

#### The options for exposure are:

- 1/30
- 1/60

# Camera Modes



- 1/120
- 1/240
- 1/500
- 1/1000
- 1/2000
- 1/4000
- 1/8000

**The options for ISO are:**

- 100
- 200
- 400
- 800
- 1600
- 3200
- 6400

# Camera Modes



## Dive Log

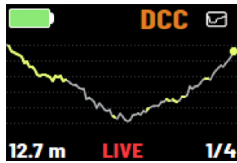
The dive logs mode lets you see your dive graph live.

The graph will take shape as you dive.

If you have dived with the camera before, you can see your previous dive logs by clicking on the activation switch.

The number in the right bottom corner indicates the number of dive logs and the current position.

The max depth for the specific dive is also displayed in the bottom left corner.





# Camera Modes

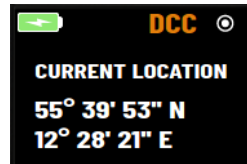
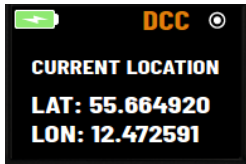


## Location

The position mode lets you see your current location. The camera gets the current location based on the GPS antenna on top of the camera. To get the best signal, the camera needs to be outside and above water.

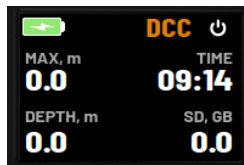
The camera will not immediately get a position. It can take some time for the camera to find nearby satellites.

The current position can be displayed in two different ways: Decimal Degrees (DD) and Degrees/Minutes/Seconds (DMS). To switch between the modes, click once on the activation switch.



## Power

The power screen is the first screen you see when you turn on the camera. You can see the current depth, max depth, time, and remaining space on the SD-card on the power screen.



# Software Updates

Software updates of the camera can be done through the app or by placing a firmware file on the SD-card.

To update through the app, download our Paralenz app, and go through the app's instructions.

## **To update the software manually, follow the following steps:**

1. Download the latest firmware for your camera from [www.paralenz.com](http://www.paralenz.com).
2. Copy the file ending with .plf onto the root of an empty SD-card (Not in a folder).
3. Make sure the battery has at least 50% power left or is connected to power. This is essential. You risk breaking your camera if this is not followed.
4. Insert the SD-card into the slot when the camera is on, or turn the camera on while the SD-card with the firmware is inserted.
5. The camera will display "Updating.. Camera will restart". The camera will restart. Do NOT turn the camera on. This will happen automatically.
6. The camera is now ready to be turned on, with the new firmware installed.

# Battery

The Paralenz Vaquita comes with an integrated LiPo 2000 mAh battery.

## Charging The Battery

Use the included USB-C cable for charging. Charge the camera through your computer or use a wall charger – preferably a 2.1 A USB power adapter. See page 10.

**WARNING:** Do not use the camera or the battery if it has been damaged – for example, if cracked or punctured. Disassembling or puncturing the battery can cause an explosion or fire. Do not store the camera where prolonged exposure to extreme temperatures can occur because it can cause permanent damage. Do not dry the camera or battery with an external heat source such as a microwave oven or hairdryer.

Do not store your battery with metal objects. If the battery terminals come in contact with metal objects, the battery may “short out” and cause a fire. Do not attempt to remove or change the battery.

# Troubleshooting

## **If The Camera Freezes Or Won't Turn On**

In the case of the camera freezing and not responding, you can always do a hard reset:

1. Turn the selector ring to the power position.
2. Plug in the charger.
3. Hold the activation switch for 10 seconds.

- The camera will now reboot.

## **If The SD-card Needs To Be Reformatted**

When formatting the memory card on a PC/MAC, it needs to be formatted with the FAT32 format (32kb) for up to 32 GB and ex-FAT for 64 GB cards.

The SD-card can also be formatted through the camera.

Formatting the SD-card will delete all data, so make sure to save the footage you want to keep on your computer before formatting the card.

# Warranty

The warranty covers all manufacturing defects and faults in design. During the warranty period, Paralenz will replace any defective units with a new or refurbished unit at our discretion.

The warranty does not cover depletion of the battery or results from normal wear and tear. It also does not cover unauthorized repairs, negligence, improper use or accidents.

The warranty period begins from the date of purchase.

The warranty does not cover commercial or rental use.

In case you experience any fault with the Paralenz Dive Camera in the warranty period, please go to [www.paralenz.com/support](http://www.paralenz.com/support) and fill in a warranty claim, to start the replacement process.

For further information on how the warranty applies to your country please visit [www.paralenz.com/support](http://www.paralenz.com/support).

# Precautions

## General

The Vaquita camera is primarily made for underwater use. If the camera is used above water there is a risk of it overheating which will result in the camera shutting down until the temperature is stabilized.

## To Avoid Malfunction, Explosion, Or Fire

Do not microwave, open, drop, puncture, take apart, bend, crush, paint, or incinerate the camera.

Do not solder or glue parts onto the camera and do not insert foreign objects into any open-ings, such as the Micro USB port.

Do not use the camera if it is damaged, this includes a puncture, missing O-ring, or water inside and do not attempt to remove or change the battery.

Do not dry the camera in an oven, with a hairdryer or any other external heat source, espe-cially open fire.

Do not use the Paralenz Dive Camera for dives deeper than 350M/1150Ft/36 ATM.

When opening and charging the camera, make sure that your hands are not wet, and that water from other sources cannot enter the camera or charger. This may cause electrical shock.

The Paralenz Dive Camera should not in any way be used as a dive computer, or as a sup-plement to a dive computer.

When charging, make sure the charger is a USB type charger, of max 5V, or use a USB plug on a computer.

If the front lens on the Paralenz Dive Camera should break, take care to avoid injury. Keep out of reach of children.

## Precautions

The battery should be used in a temperature range from 14° to 104° F (-10° to 40° C). Use of the battery in an environment above 104° F (40° C) can lead to a fire or explosion. Use of the battery below 14° F (-10° C) can lead to permanent damage.

DO NOT charge the battery until it cools down to near room temperature. Charging the battery outside of the temperature range of 41° to 104° F (5 to 40° C) may lead to leakage, overheating, or battery damage.

# Regulatory Information



CE mark indicates that this product complies with the European requirements for safety, health, environment and customer protection.



The RCM is the compliance mark for all applicable Australian Communications and Media Authority (ACMA) regulatory arrangements, including all technical and record-keeping requirements.



This device is certified pursuant to two different Part 15 rules sections.



This symbol indicates separate collection of waste batteries in the EU countries. Please do not throw the batteries into domestic refuse. Please use the return and collection systems available in your country for the disposal of waste batteries.



The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Paralenz is under license.



# Regulatory Information



The Wi-Fi CERTIFIED logo is a registered trademark of the Wi-Fi Alliance.



iOS and App Store are registered trademarks of Apple Inc.



Android and Google Play are registered trademarks of Google Inc.

# FCC Statement

**WARNING:** 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.

**NOTE:** 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

The device must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

## **FCC Statement**

This device complies with FCC's radiation exposure limits set forth for an uncontrolled environment.

# IC Statement

This device complies with RSS247 of Industry Canada. Cet appareil se conforme à RSS247 de Canada d'Industrie. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

The device must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement: The product comply with the Canada portableRF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual.

Déclaration d'exposition aux radiations : Le produit est conforme aux limites d'exposition pour les appareils portableRF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.

This device complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment.

Cet appareil est conforme aux limites d'exposition aux rayonnements de la FCC et de l'IC établies pour un incontrôlé environnement.

# SAR

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network.

In general, the closer you are to a wireless base station antenna, the lower the power output. While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement.

# Support

Paralenz is dedicated to providing the best possible service. To reach our Customer Support, visit [paralenz.com/support](https://paralenz.com/support) or contact [support@paralenz.com](mailto:support@paralenz.com)



