



# USER GUIDE

**Firmware Version: 2.2.x**

Last updated on Jan 21, 2025

## R2 EVO

SMART ROAD CYCLING HELMET



The firmware version 2.2.x indicates that this manual is applicable to all firm-ware updates within the version 2.2 series.

# BEFORE GETTING STARTED

## Sena Cycling App

Download the Sena Cycling App from the Google Play Store or the App Store.



## Sena Device Manager

Download the **Sena Device Manager** at [sena.com](https://sena.com).

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# 1. ABOUT THE R2 EVO

## 1.1 Key Features

- Mesh Intercom™ 3.0 - delivers improved sound quality, a more robust connection, and extended talk time
- LED Taillight
- Advanced Noise Control™
- Fast Charging
- Bluetooth® 5.2
- Over-the-Air (OTA) Update

## 1.2 Helmet Information

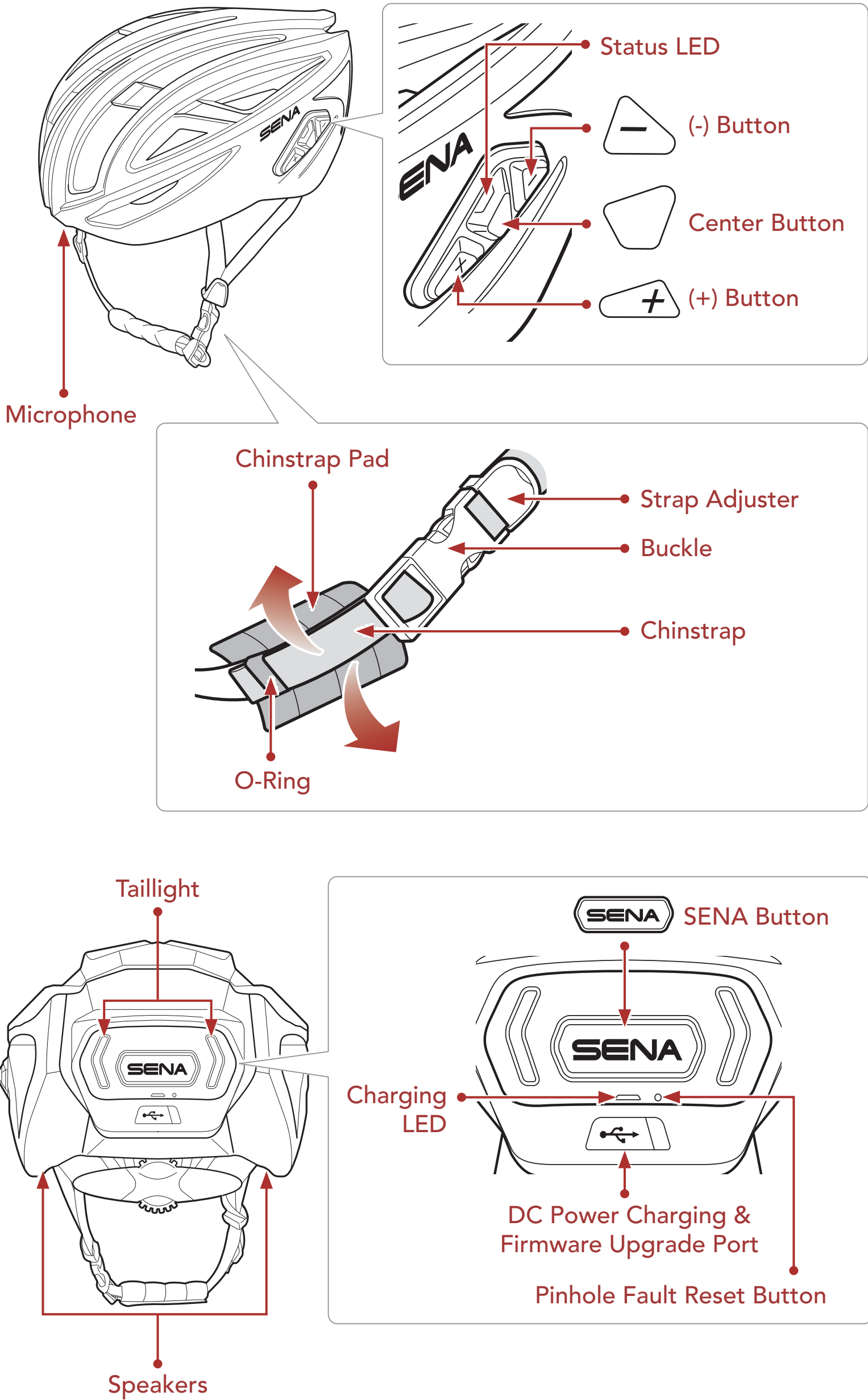
This product is a road cycling helmet. Do not use it for any other purpose than riding a bicycle. If you use the helmet for anything else, it may not provide sufficient protection in an accident.

Sena recommends that you choose a helmet which provides the most coverage, as a helmet that covers more of your head may provide additional protection. Always wear your road cycling helmet low in the front to protect the forehead, as this area is most likely to be impacted in a bicycle crash. Make sure the helmet fits comfortably and is tightly fastened at all times.

### **WARNING**

- Your helmet will not protect against injury in all types of accidents. Even while wearing a helmet, low speed accidents may result in serious head injury or death. A road cycling helmet will not protect against injuries to the spine, neck or face. In the event of any impact, do not use this helmet. There may be damage invisible to you, which may reduce the ability of the helmet to reduce the harmful effects of a blow to the head. Such helmet should be returned to Sena for inspection, or destroyed and replaced.
- Do not modify or remove any original part of the helmet. Do not use heat damaged helmets. Heat damaged helmets will appear to have uneven or have bubbly surfaces.
- This User's Guide and the stickers inside your helmet contain many instructions and warnings about your helmet. It is important for you to understand everything communicated in them before your first ride. If you do not, please contact your authorized Sena Retailer with any questions you may have. Failure to follow any of the provided instructions or warnings could void your warranty, and most importantly, could result in severe personal injury or death. If you are a parent or guardian and this helmet is for your child, please take the time to read this manual as you should make sure your child understands everything in this User's Guide.

1.3 Product Details



# 1.4 Package Contents



R2 EVO Helmet



USB-C Charging Cable



Helmet Pouch



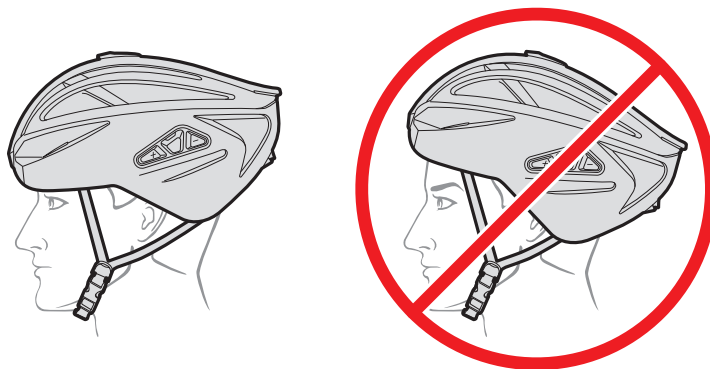
## 2. WEARING THE HELMET

### 2.1 How to Wear The Helmet

For proper use, the helmet must sit level on the head and low on the forehead. The Sena helmet uses a simple, quick-release buckle system that, once adjusted, can be buckled and unbuckled without changing the adjustment. For proper use, the straps must be tight and evenly tensioned.

To properly wear your helmet:

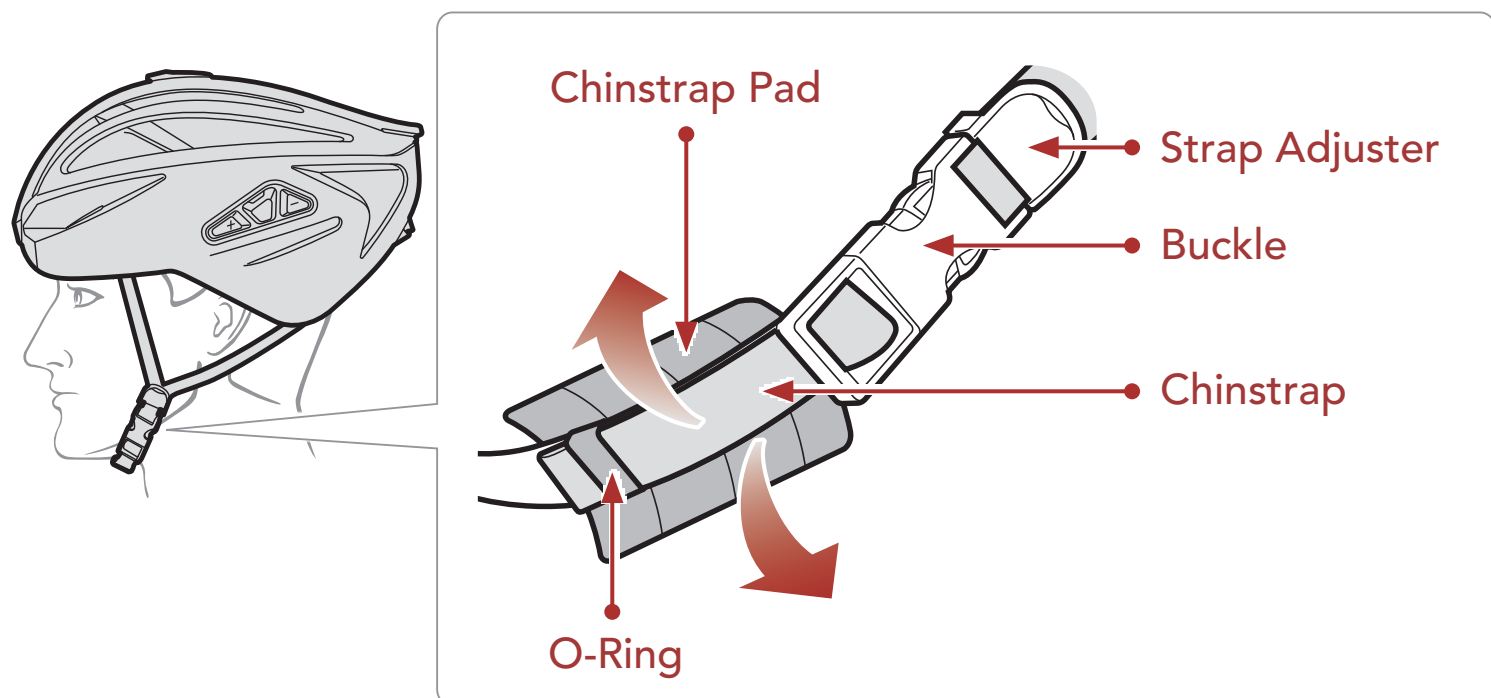
1. Position the helmet on your head with the front covering your forehead. If the helmet is tipped back and is not covering your forehead then the helmet is not in the proper position.
2. Position the strap adjuster centered, just below your ears.



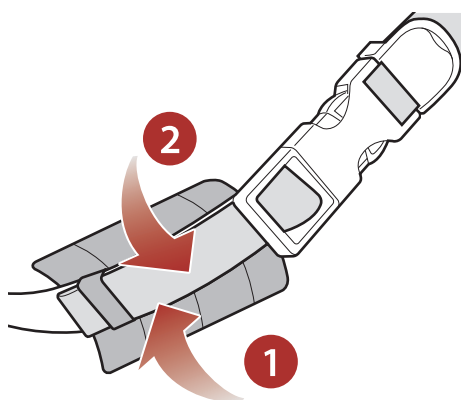
**⚠ WARNING:** Always wear the helmet in the proper position on your head with the front of the helmet covering your forehead for maximum protection. Never wear the helmet tipped back as the helmet will be in the improper position causing your forehead to be exposed. All fitment adjustments need to be made with the helmet in the proper position.

3. Position the helmet low on your forehead with the buckle under the chin and back against the throat. The straps should fit comfortably around both ears.

4. After removing the chinstrap pad, adjust the chinstrap tension at the buckle with the strap adjuster in the proper position. Adjust the tension so the chinstrap is tight and comfortable by pulling the chinstrap end through the buckle to either tighten or loosen as needed.

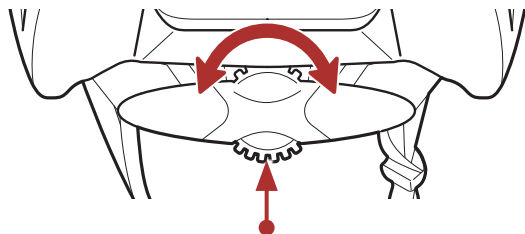


5. Secure the excess strap with O-ring and then attach the chinstrap pad. Always wear the helmet with the chinstrap buckle fastened and the chinstrap pulled tight and positioned back against the throat. With the strap buckled and the helmet positioned, you should feel the chinstrap pull firmly against your chin as you open your mouth. When properly adjusted the helmet will wrap around your head and cradle it with firm, but comfortable pressure.

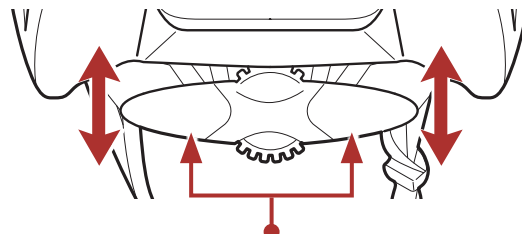


6. Your helmet is equipped with an adjustable retention system which helps stabilize the helmet in the correct position when you ride. When wearing the helmet, turn the retention system knob clockwise to tighten the helmet or counterclockwise to loosen the helmet.

7. To change the height of the retention system, firmly pull or push the retention system upward or downward to a different position.



Retention System Knob



Retention System

**⚠ WARNING:** For maximum protection, this helmet must be fitted and attached properly to the wearer's head in accordance with the following instructions. If after adjustment the helmet does not fit properly, do not use the helmet. Return it to the retailer or Sena.

## 2.2 Helmet Fitment Check

With the retention system knob turned clockwise until comfortably tight and the chinstrap buckled under the chin and back against the throat, grab the helmet with both hands and try to remove it by rolling the helmet forward and backward as far as you can. This is an important test to ensure that the helmet fits correctly. When you do this, you should feel the chinstrap pull against the underside of your chin and the helmet will resist any movement. If this isn't the case, tighten the chinstrap and try it again until this happens. If you cannot achieve the proper fit, **DO NOT USE THIS HELMET**. Replace it with a different size until the correct fit is achieved.

Also, for a proper **Helmet Fitment Check** if you can roll the helmet forward such that it blocks your vision or if you can roll the helmet backwards such that your forehead is not covered, tighten the chinstrap and the retention system and try again until you cannot roll the helmet forward or backwards.

### **WARNING**

- Do not wear anything underneath your helmet, such as a cap, hood, bundled hair, headphones, or barrettes, as the helmet may loosen or come off. Do not wear anyone else's helmet and don't loan your helmet to anyone else.
- Always make sure the buckle is properly fastened before you ride. Failure to follow this instruction could result in serious personal injury, as the helmet may not stay in position while riding or during a fall. For proper use, make sure the loose end of the chinstrap is tucked through the rubber "O" ring.
- Check for proper fit and adjustment often, including each time you wear it, and periodically during use.
- This helmet has been designed for recreational bicycling. This helmet has not been approved and is not intended for extreme uses such as downhill racing at high speeds, jumping or leaping with a fully suspended bicycle, snow sports, water sports, motor sports, street hockey, playground activities, or other activities where face, ear, or greater protection or coverage is desired.
- Always wear a helmet when bicycling. When you get off your bicycle, remove your helmet. Do not wear a helmet while climbing trees, in play areas, on playground equipment, or, at any time while not riding a bicycle. Parents: Instruct children to follow this warning. Failure to follow this warning could result in serious personal injury, death or death by strangulation.

# 3. BASIC OPERATION

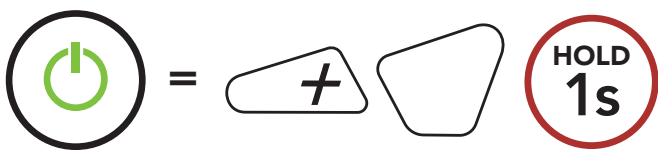
**(TAP 1x)** Tap button the specified number of times

**(HOLD 3s)** Press and Hold button for the specified amount of time

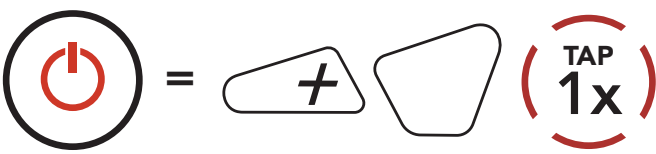
 "Hello" Audible prompt

## 3.1 Powering On and Off

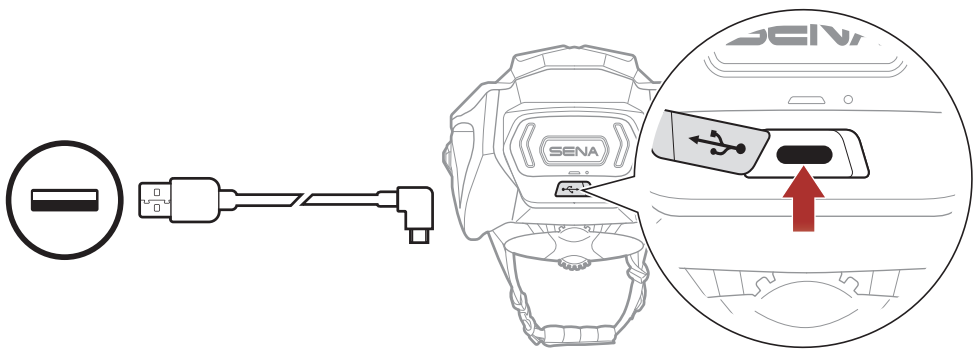
Powering On



Powering Off



## 3.2 Charging



Depending upon the charging method, the R2 EVO will be fully charged in about 3 hours.

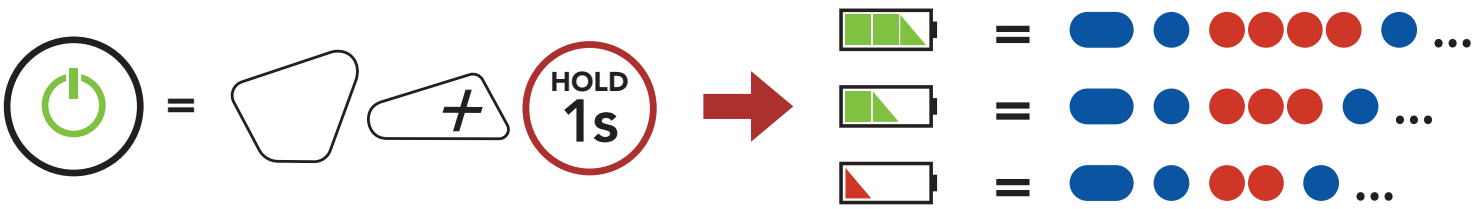
**Note:**

- The R2 EVO includes a **Fast Charging** feature which allows it to charge quickly over a short period of time. For example, a user can get up to 2.0 hours of Mesh communication after charging the R2 EVO for 20 minutes.
- Please make sure to take off your helmet while charging. The R2 EVO automatically turns off during charging.
- Any 3rd party USB charger can be used with Sena products if the charger is approved by either the FCC, CE, IC, or other locally approved agencies.
- Use of a non-approved charger may cause fire, explosion, leakage, and other hazards which may also reduce the life time or performance of the battery.

### 3.3 Checking the Battery Level

Instruction is for when powering the R2 EVO on.

#### Powering On



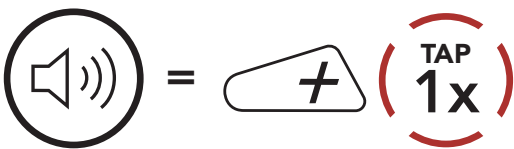
**Note:**

- The battery performance may be reduced over time with usage.
- Battery life may vary depending on conditions, environmental factors, functions of the product in use, and devices used with it.

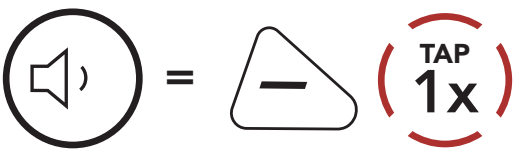
### 3.4 Volume Adjustment

Volume is set and maintained independently at different levels for each audio source, even when the R2 EVO is rebooted.

#### Volume Up



#### Volume Down



### 3.5 Taillight On/Off



The taillight can be customized through the Sena Cycling app.

# 4. PAIRING WITH OTHER BLUETOOTH DEVICES

When using the R2 EVO with other Bluetooth devices for the first time, they will need to be “paired.” This enables them to recognize and communicate with one another whenever they are within range.

The pairing operation is required only once for each Bluetooth device. The R2 EVO can pair with multiple Bluetooth devices such as a mobile phone or GPS via **Mobile Phone Pairing** and **Second Mobile Phone Pairing**.

## 4.1 Phone Pairing

1. Press and hold the **Center Button** for **5 seconds**.



2. Select **R2 EVO** in the list of Bluetooth devices detected. If your mobile phone asks for a PIN, enter 0000.

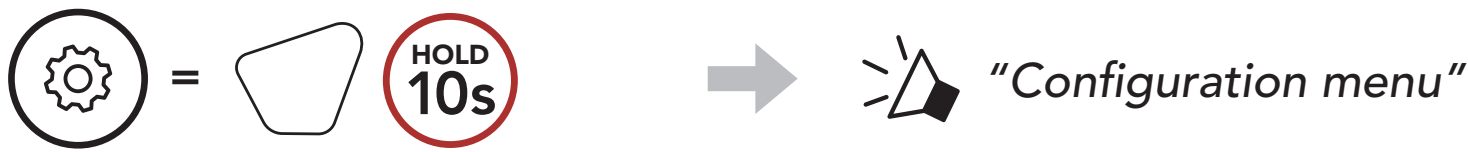


**Note:**

- When you turn on the R2 EVO for the first time or reboot it after a factory reset, the R2 EVO will automatically enter phone pairing mode.
- To cancel phone pairing, press any button.

## 4.2 Second Mobile Phone Pairing - Second Mobile Phone and GPS

1. Press and hold the **Center Button** for **10 seconds**.



2. Tap the **(+) Button**.



3. Select **R2 EVO** in the list of Bluetooth devices detected. If your Bluetooth device asks for a PIN, enter 0000.

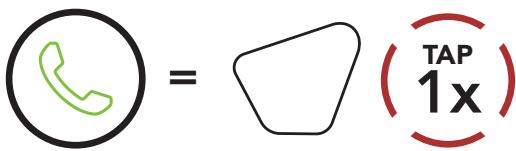




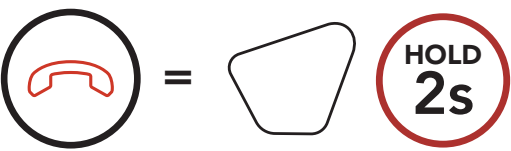
# 5. MOBILE PHONE USAGE

## 5.1 Making and Answering Calls

### Answer a Call



### End/Reject a Call



### Call a Voice Assistant



## 5.2 HD Voice (Always On)

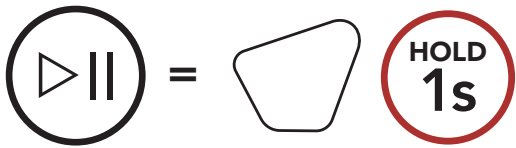
**HD Voice** allows you to communicate in high-definition during phone calls. This feature increases the quality so that the audio will be crisp and clear during phone call conversations.

**Note:** Refer to the manufacturer of your Bluetooth device that will be connected to the R2 EVO to see if it supports **HD Voice**.

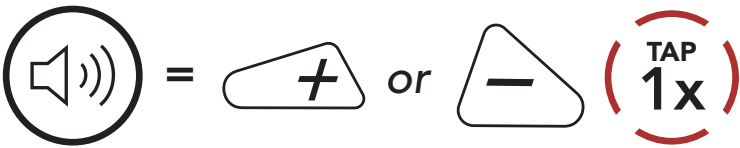
# 6. STEREO MUSIC

## 6.1 Bluetooth Stereo Music

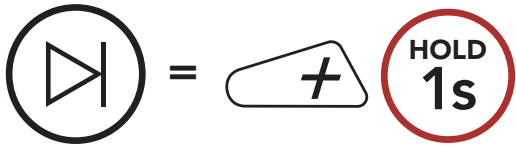
### Play/Pause Music



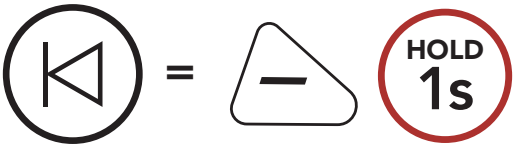
### Volume Up/Down



### Next Track



### Previous Track



# 7. MESH INTERCOM

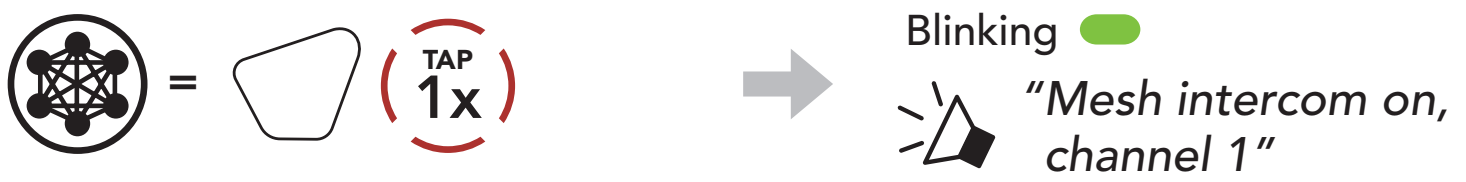
By turning on the Mesh Intercom, it automatically connects to nearby Mesh Intercom users on the same channel.

## 7.1 Switch to Mesh 2.0 for Backward Compatibility

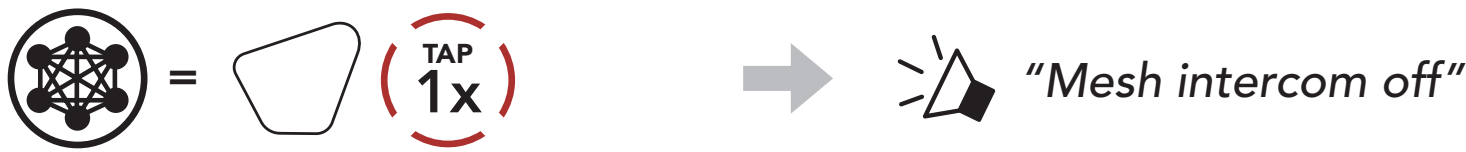
Mesh 3.0 is the latest Mesh Intercom technology, but to communicate with legacy products using Mesh 2.0, please switch to Mesh 2.0 using the Sena Cycling app.

## 7.2 Starting Mesh Intercom

### Mesh Intercom On

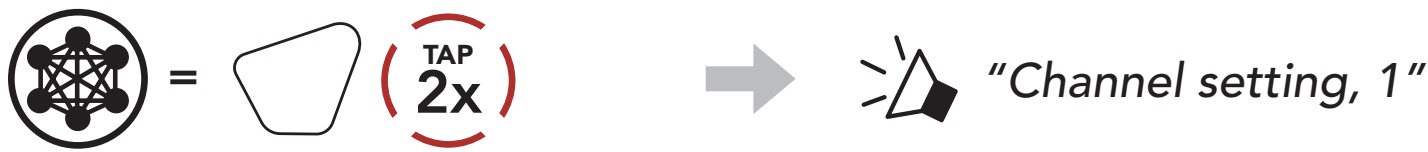


### Mesh Intercom Off

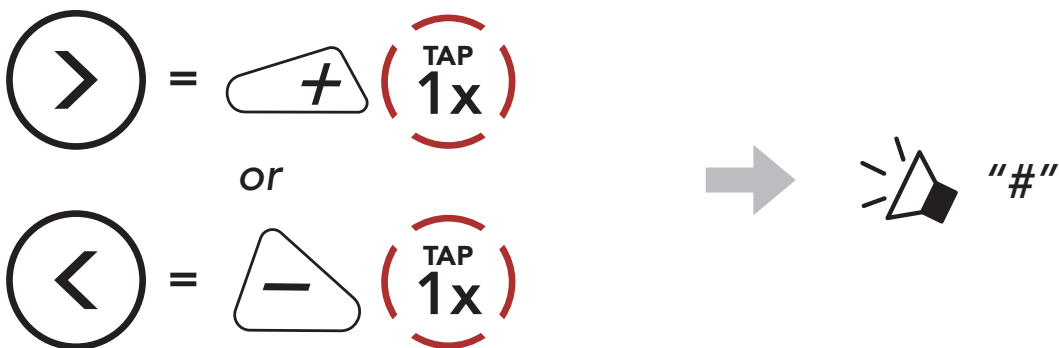


## 7.3 Channel Setting

1. Double tap the **Center Button**.



2. Navigate between channels.



3. Save the channel.

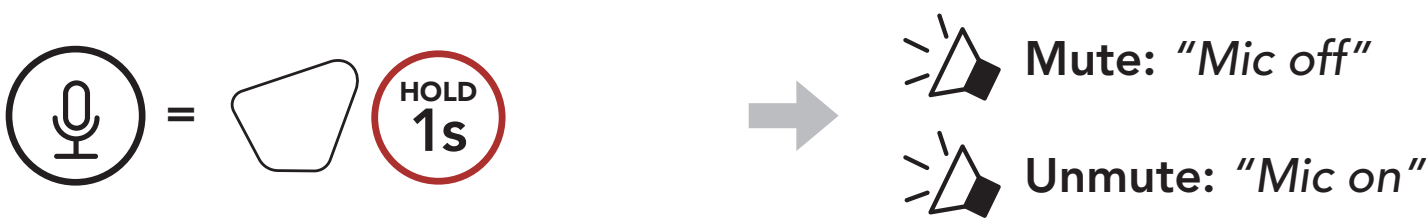


**Note:**

- If you do not press any button for approximately **10 seconds** in a specific channel, the channel is automatically saved.
- The channel will be remembered even if you turn off the **R2 EVO**.

7.4 Mute/Unmute Mic

Press the **Center Button** for **1 second** to mute/unmute the microphone during Mesh Intercom communication.



## 8. FIRMWARE UPDATE

### 8.1 Over-the-Air (OTA) Update

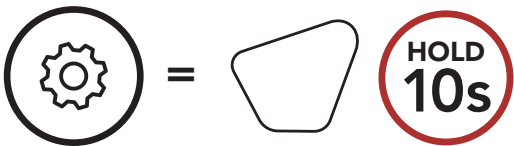
You can update the firmware via Over-the-Air (OTA) directly from the settings in the Sena Cycling app.

### 8.2 Sena Device Manager

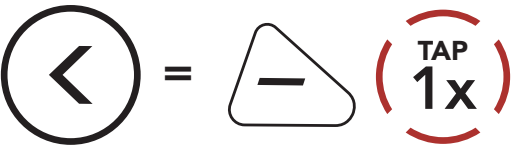
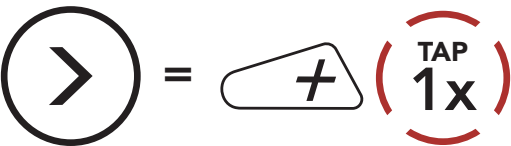
You can update the firmware via the **Sena Device Manager**. Download the **Sena Device Manager** at [sena.com](https://sena.com).

# 9. CONFIGURATION MENU

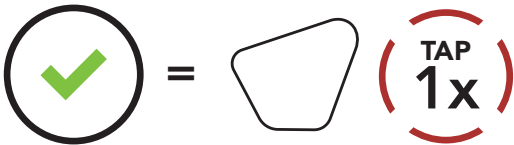
## Accessing the Configuration Menu



## Navigating Between Menu Options



## Execute Menu Options



Configuration Menu

| Voice Configuration Menu    | Tap the Center Button |
|-----------------------------|-----------------------|
| Second Mobile Phone Pairing | None                  |
| Factory Reset               | Execute               |
| Exit Configuration          | Execute               |

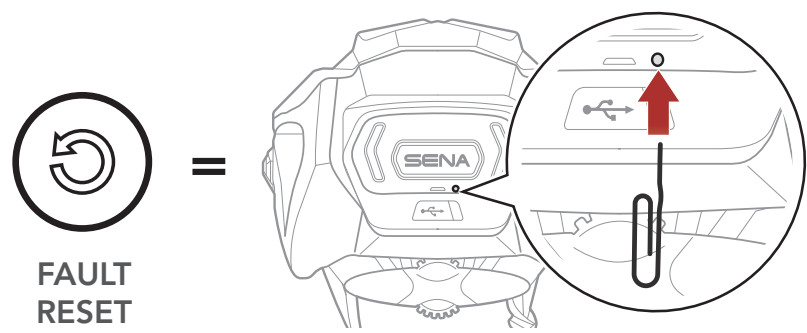
# 10. TROUBLESHOOTING

Please visit [sena.com](https://sena.com) for more troubleshooting information.

## 10.1 Fault Reset

When the R2 EVO is not working properly, you can easily reset the unit:

- 1. Locate the **Pinhole Fault Reset Button** below Sena logo at the back side of the helmet.
- 2. Gently insert a paper clip into the hole and press the **Pinhole Fault Reset Button** with light pressure.



- 3. The R2 EVO will shut down.

**Note:** Fault Reset will not restore the R2 EVO to factory default settings.

## 10.2 Factory Reset

To erase all of your settings and start fresh, the R2 EVO can be restored to factory default settings using the **Factory Reset** feature.

- 1. = **HOLD 10s** → "Configuration menu"
- 2. = **TAP 2x** → "Factory reset"
- 3. = **TAP 1x** → "Headset reset, good-bye"

# 11. MAINTENANCE AND CARE

The inner lining of the helmet is completely removable. Its headliner can be washed by hand using only water, mild soap, at a maximum temperature of 30°C (86°F), and non-abrasive cloths to clean the helmet's shell, pads and retention system. Allow the padding to dry at room temperature. Store the helmet in a dry, dark, well-ventilated location, out of the reach of children and animals. High temperatures (above 110°F, 43°C) may melt the helmet's shell.

## WARNING

- Never use gasoline, diesel fuel, thinners or solvents to clean the helmet. These substances can cause serious damage to the helmet, even though the resulting damage may not be visible. This helmet can be damaged by contact with common substances (for example, certain solvents (ammonia), cleaners (bleach), paints, abrasives) and this damage may not be visible to the wearer. Do not use this helmet if it has been exposed to such substances. The full safety function of the helmet can no longer be guaranteed if exposed to damaging substances.
- Do not store your helmet in your car or anywhere else near a heat source. Do not use if the shell has been melted or deformed. Always position the helmet so that it cannot fall to the floor. Damage that occurs in this way is not covered by the warranty.
- Do not attach anything to your helmet, including mirrors or lights.

The shell of this helmet is constructed of expanded polystyrene foam. Ventilation holes may allow harmful objects to pass in the helmet interior.

The protective capability of your helmet will diminish over time, dependent upon many factors such as dents, dings, and exposure to pollution, harmful chemicals and long term exposure to the sun. Sena recommends that helmets be replaced after five years.

**Note:** The useful life of your helmet may be less than five years as a result of exposure to sunlight, rough, handling/storage that results in dents or cuts or as a result of heavy use.





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