



USER GUIDE

Firmware Version: 1.2.x

Last updated on Oct 13, 2025

CAVALRY 2

SMART HALF HELMET WITH MESH COMMUNICATION



The firmware version 1.2.x indicates that this manual is applicable to all firmware updates within the version 1.2 series.

QUICK REFERENCE

 : (+) button

 : (-) button

 : Mesh Intercom button

 : Center button

Type	Operation	Button	Duration
Basic operations	Power on	 & 	Press for 1 second
	Power off	 & 	Single tap
	Volume up/down	 or 	Single tap
Phone	Phone pairing		Press for 5 seconds
	Answer phone call		Single tap
	End phone call		Press for 2 seconds
	Reject phone call		Press for 2 seconds
	Activate voice assistant		Press for 3 seconds
	Speed dial		Press for 3 seconds
	Play/Pause music		Press for 1 second
	Track forward/back	 or 	Press for 1 second
Mesh Intercom™	Mesh Intercom on/off		Single tap
	Mute/unmute mic		Press for 1 second
	Channel selection		Double tap
	Mesh grouping		Press for 5 seconds
	Mesh Reach-Out request		Triple tap
	Reset mesh		Press for 8 seconds
Wave Intercom™	Wave Intercom on		Double tap
	Wave Intercom off		Single tap
	Switch to Mesh Intercom		Single tap
Configuration menu			Press for 10 seconds

BEFORE GETTING STARTED

I Sena Motorcycles App

Download the Sena Motorcycles app from the Google Play Store or the App Store.



I WAVE Intercom App

Download the WAVE Intercom app from the Google Play Store or the App Store.



For detailed information on the Wave Intercom, please refer to the Wave Intercom User Guide at sena.com.

CLICK ANY SECTION TO BEGIN



ABOUT THE
CAVALRY 2



BASIC OPERATION



PAIRING WITH
BLUETOOTH
DEVICES



USING WITH A
SMARTPHONE



MESH INTERCOM



WAVE
INTERCOM

WAVE INTERCOM



FIRMWARE UPDATE



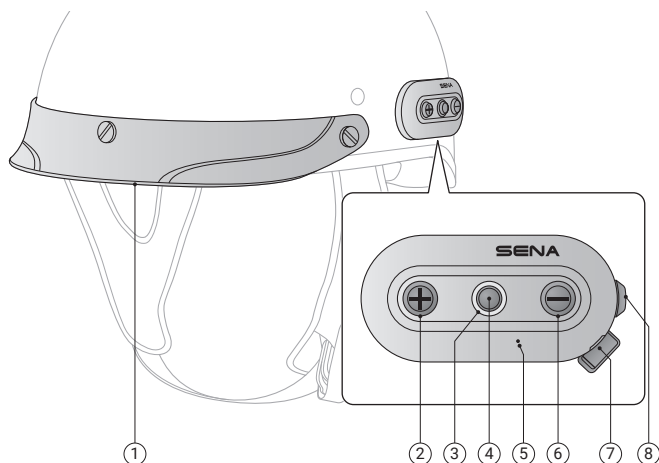
TROUBLESHOOTING



01 ABOUT THE CAVALRY 2

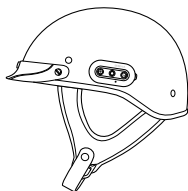
Key Features

- Mesh Intercom 3.0 - delivers improved sound quality, a more robust connection, and extended talk time
- Dual version Mesh - Mesh 2.0 for backward compatibility
- Wave Intercom Compatible
- Advanced Noise Control™
- Bluetooth® version 5.2
- Over-the-Air (OTA) firmware update

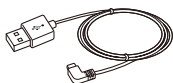


- ① Visor
- ② (+) button
- ③ Status & charging LED
- ④ Center button
- ⑤ Reset pinhole
- ⑥ (-) button
- ⑦ USB-C charging port
- ⑧ Mesh Intercom button

Package Contents



CAVALRY 2



USB-C charging cable

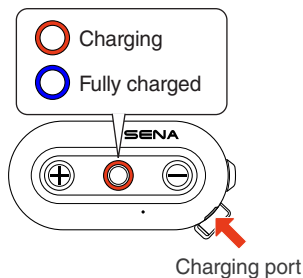


Helmet pouch

02 BASIC OPERATION

	Tap Tap the button the specified number of times
	Press and Hold Press and hold the button for the specified amount of time
	Voice Prompt
	LED

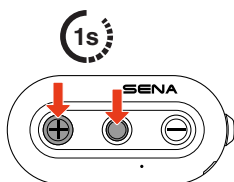
Charging



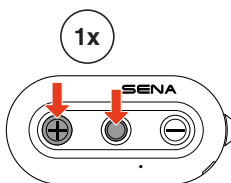
It takes 2.5 hours to fully charge.

- The CAVALRY 2 automatically powers off during charging for safety reasons.
- Any third-party USB charger can be used, as long as it is approved by the FCC, CE, IC, or other locally recognized regulatory agencies.
- Using a non-approved charger may cause fire, explosion, leakage, and other hazards, potentially reducing the battery's lifespan or performance.

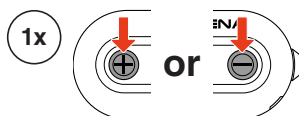
Power On



Power Off

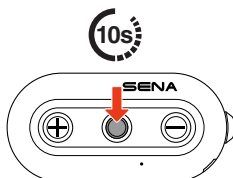


Volume



Configuration

Enter Configuration

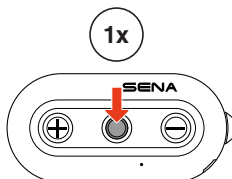


 "Configuration menu"

Navigate



Confirm

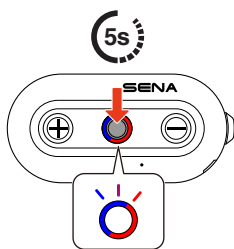


03 PAIRING WITH BLUETOOTH DEVICES

When using the CAVALRY 2 with other Bluetooth devices for the first time, they need to be paired. The CAVALRY 2 can pair with multiple devices, including two mobile phones and one GPS. However, it supports only one additional device, alongside a mobile phone, for simultaneous connection.

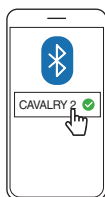
Phone Pairing

1.



 "Phone pairing"

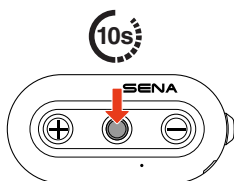
2.



- When you turn on the CAVALRY 2 for the first time or reboot it after a factory reset, the CAVALRY 2 will automatically enter phone pairing mode.
- To cancel phone pairing, press any button.

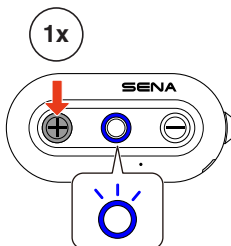
Second Mobile Phone Pairing

1.



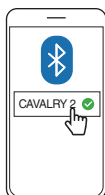
"Configuration menu"

2.



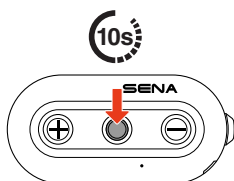
"Second mobile phone pairing"

3.



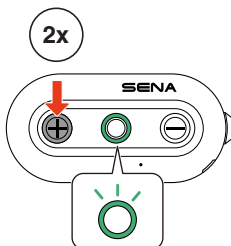
GPS Pairing

1.



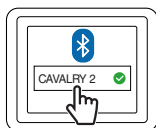
"Configuration menu"

2.



"GPS pairing"

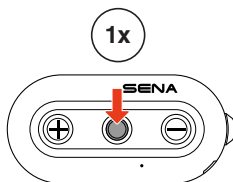
3.



04 USING WITH A SMARTPHONE

Making and Answering Calls

Answer a Call



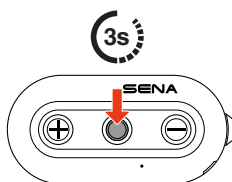
End a Call



Reject a Call



Activate Voice Assistant



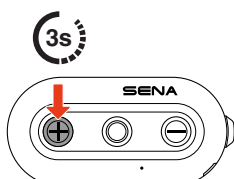
Speed Dial

Assign Speed Dial Presets

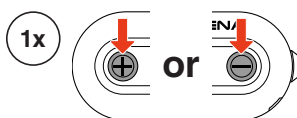
Speed dial presets can be assigned using the Sena Motorcycles app.

Use Speed Dial Presets

1. Enter the speed dial menu.
2. Navigate forward or backward through speed dial preset.

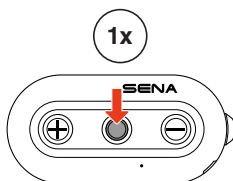


"Speed dial"



- ① Last number redial
- ② Speed dial (1→2→3)
- ③ Cancel

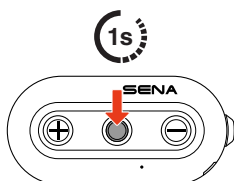
3. Tap the center button to confirm.



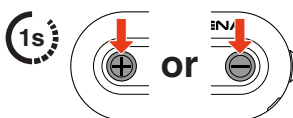
"Speed dial(#)"

Music

Play/Pause Music



Track Forward/Backward

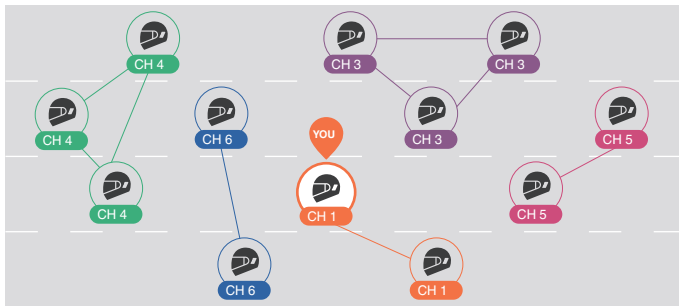


05 MESH INTERCOM

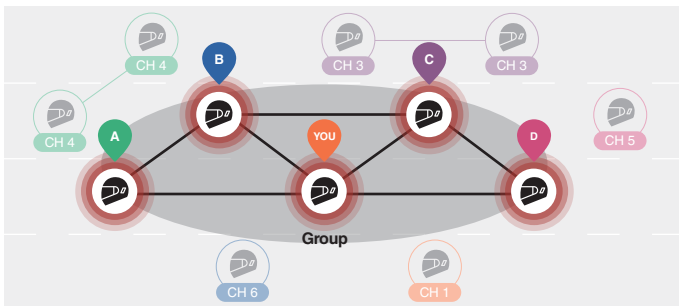
The CAVALRY 2 provides two Mesh Intercom modes:

- Open Mesh™ for open group intercom conversations.
- Group Mesh™ for private group intercom conversations.

Open Mesh



Group Mesh



Mesh Version Switch

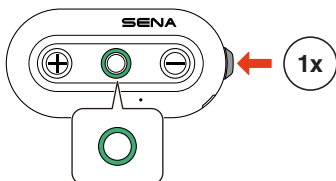
Switch to Mesh 2.0 for Backward Compatibility

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 Motorcycles app.

Open Mesh

You can freely communicate with virtually unlimited users in each of the 6 available channels. The default Mesh Intercom channel is 1.

Mesh Intercom On/Off



On: "Mesh intercom on,
Open Mesh, channel 1"



Off: "Mesh intercom off"

Mute/Unmute Mic

Press the Mesh Intercom button for 1 second to mute/unmute the microphone during Mesh Intercom communication.

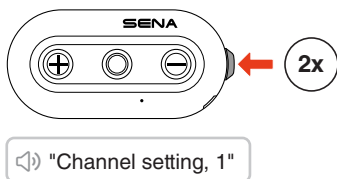


Mute: "Mic off"

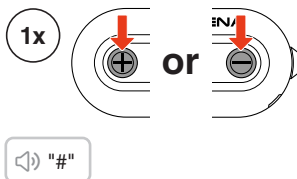
Unmute: "Mic on"

I Channel Selection

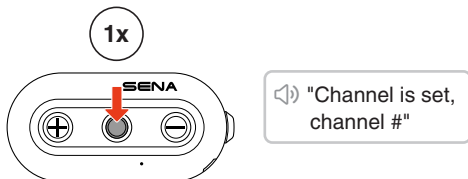
1. Enter the channel setting.



2. Navigate between channels.



3. Confirm and save the channel.

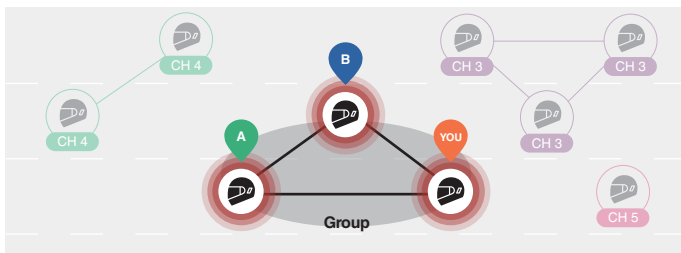


- The channel will be automatically saved if no buttons are pressed for 10 seconds on a specific channel.
- The channel will be saved even if the CAVALRY 2 is turned off.

Group Mesh

By using group mesh, a private conversation group can be created for up to 24 participants.

Create a Group Mesh



1. Users (You, A, and B) enter the mesh grouping by pressing the Mesh Intercom button for 5 seconds while staying in the open mesh. They don't need to be on the same open mesh channel to create a group mesh together.



2. When mesh grouping is completed, it automatically switches from open mesh to group mesh.

"Group Mesh"

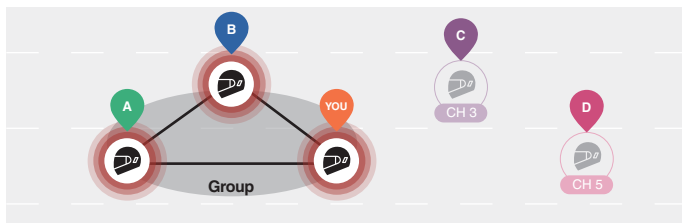
- If you want to cancel mesh grouping, tap the Mesh Intercom button.



- If the mesh grouping is not successfully completed within 30 seconds, users will hear a voice prompt saying, "Grouping failed."

Join an Existing Group Mesh

While you are in a group mesh, you can invite other users in open mesh to join the group.



You are already in group mesh with A and B, and the other users, C and D, are in open mesh.

1. You and the other users, C and D, enter mesh grouping by pressing the Mesh Intercom button for 5 seconds.



2. When mesh grouping is completed, the other users, C and D, automatically join the group mesh while leaving the open mesh.

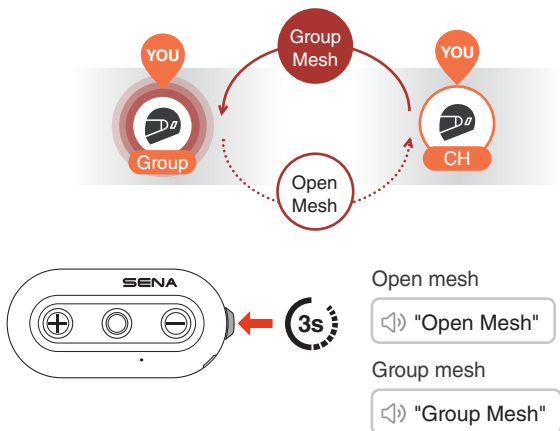
Speaker icon "Group Mesh"

New participants (C and D)

- If the mesh grouping is not successfully completed within 30 seconds, the current user (You) will hear a low tone double beep and the new users (C and D) will hear a voice prompt saying, "Grouping failed."

Toggle Open/Group Mesh

You can toggle between open mesh and group mesh without resetting the mesh.



- If you have never participated in group mesh, you cannot toggle between open mesh and group mesh. You will hear a voice prompt saying, "No group available."

Mesh Reach-Out Request

You (caller) can send a Mesh Reach-Out request to turn on Mesh Intercom to nearby* friends who have it turned off.

1. If you want to send or receive a Mesh Reach-Out request, you need to enable it in the Sena Motorcycles app.
2. You can send a Mesh Reach-Out request using the Mesh Intercom button or the Sena Motorcycles app.

Caller



Caller: "Mesh reach-out request"

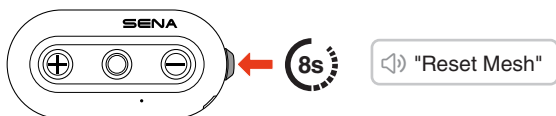
Nearby Friends: "Mesh intercom requested"

3. Friends who receive the Mesh Reach-Out request need to manually turn on their Mesh Intercom.

* Up to 330 ft in open terrain

Reset Mesh

If the CAVALRY 2 resets the mesh while in open mesh or group mesh, it will automatically return to open mesh, channel 1.



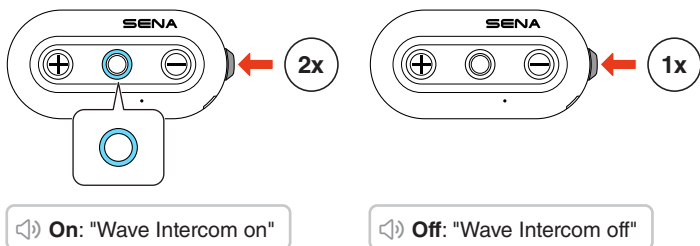
06 WAVE INTERCOM

Wave Intercom enables open communication using cellular data. For detailed information, please refer to the Wave Intercom User Guide on sena.com.

Wave Intercom On/Off

Open the WAVE Intercom app, then double-tap the Mesh Intercom button to join Wave Intercom.

- You must open the app before starting Wave Intercom.

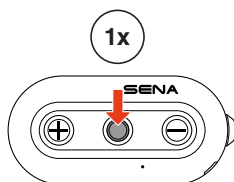


When you start Wave Intercom, you will automatically connect with users in the Wave Zone. The Wave Zone covers a 1-mile radius in North America and a 1.6-km radius in Europe.

To end Wave Intercom, single-tap the Mesh Intercom button.

Switch between Wave Intercom and Mesh Intercom

You can easily switch between Mesh Intercom and Wave Intercom with a single tap on the center button.



Wave to Mesh: "Wave Intercom off. Mesh Intercom on."

Mesh to Wave: "Mesh Intercom off. Wave Intercom on."

07 FIRMWARE UPDATE

Over-the-Air (OTA) Update

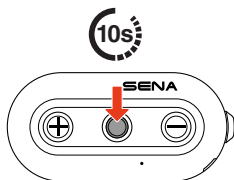
You can update the firmware via Over-the-Air (OTA) directly from the settings in the Sena Motorcycles app.

08 TROUBLESHOOTING

Factory Reset

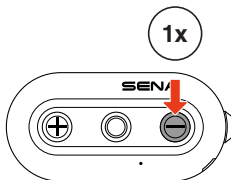
To restore the CAVALRY 2 to its factory default settings, simply use the factory reset feature.

1.



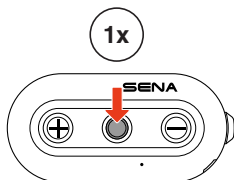
"Configuration menu"

2.



"Factory reset"

3.



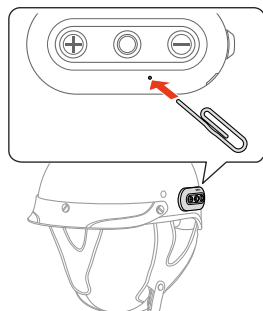
"Headset reset, good-bye"

Fault Reset

If the CAVALRY 2 is on but not responding, you can perform a fault reset to restore normal functionality.

Use a clip to press the reset pinhole below the center button.

All settings will remain unchanged.





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Sena Technologies, Inc.
152 Technology Drive, Irvine, CA 92618