





MOTORCYCLE BLUETOOTH® COMMUNICATION SYSTEM WITH MESH INTERCOM™



USER'S GUIDE





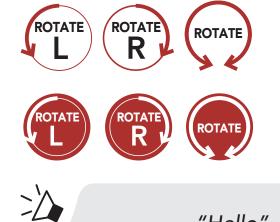
LEGEND:



Tap button/Jog Dial the specified number of times



Press and Hold button/Jog Dial for the specified amount of time



Rotate Jog Dial clockwise (right) or counterclockwise (left).

Rotate while Pressing Jog Dial clockwise (right) or counterclockwise (left).

"Hello"

Audible prompt

TABLE OF CONTENTS

1.	ABOUT THE MOTORCYCLE BLUETOOTH COMMUNICATION SYSTEM WITH MESH INTERCOM TM	7	
1.1	Product Details	7	
	1.1.1 Headset Main Unit	7	
	1.1.2 Universal Clamp Kit	7	
1.2	Package Contents		
2.	INSTALLING THE HEADSET ON YOUR HELMET	9	
2.1	Helmet Installation	9	
2.2	Using the Glued Surface Mounting Adapter	10	
2.3	Switching the Microphone	12	
	2.3.1 Wired Boom Microphone	12	
	2.3.2 Wired Microphone	13	
2.4	Earbuds		
2.5	External Mesh Intercom Antenna		
3.	GETTING STARTED	14	
3.1	Button	14	
3.2	Downloadable Sena Software	14	
	3.2.1 Sena 50 Utility App	14	
	3.2.2 Sena Device Manager	15	
3.3	Powering On and Off	15	
3.4	Charging	15	
3.5	Checking the Battery Level	16	

3.6 Volume Adjustment

4. PAIRING THE HEADSET WITH OTHER BLUETOOTH DEVICES

4.1 Phone Pairing

- 4.1.1 Pairing When the 50S is Turned Off
- 4.1.2 Pairing When the 50S is Turned On

17

17

17

18

4.2	Second Mobile Phone Pairing - Second Mobile Phone, GPS, and SR10		
4.3	Advanced Selective Pairing: Hands-Free or A2DP Stereo 4.3.1 Phone Selective Pairing - Hands-Free Profile	19 20	
	4.3.2 Media Selective Pairing - A2DP Profile	20	
4.4	GPS Pairing	21	
5.	MOBILE PHONE USAGE	22	
5.1	Making and Answering Calls	22	
5.2	Siri and Google Assistant	22	
5.3	Speed Dialing	23	
	5.3.1 Assigning Speed Dial Presets	23	
	5.3.2 Using Speed Dial Presets	23	
6.	STEREO MUSIC	24	
6.1	Playing Music with Bluetooth Devices	24	
6.2	Playing Music with non-Bluetooth Devices	24	
6.3	Music Sharing	25	
7		24	
7.	MESH INTERCOM	26	
7.1	What is Mesh Intercom?	26	
	7.1.1 Open Mesh	27	
	7.1.2 Group Mesh	28	
7.2	Starting Mesh Intercom	28	

7.3	Using the Mesh in Open Mesh		28
	7.3.1	Channel Setting (Default: channel 1)	29
7.4	Using Mesh in Group Mesh		30
	7.4.1	Creating a Group Mesh	30
	7.4.2	Joining an Existing Group Mesh	31
7.5	Reset	t Mesh	33

7.6	Toggling Open Mesh/Group Mesh		
7.7	Enable/Disable Mic (Default: Enable)	33	
8.	BLUETOOTH INTERCOM	34	
8.1	Intercom Pairing	34	
8.2	Two-Way Intercom	35	
8.3	Multi-Way Intercom8.3.1Starting a Three-Way Intercom Conference8.3.2Starting a Four-Way Intercom Conference8.3.3Ending Multi-Way Intercom	36 36 37 38	
8.4	Three-Way Conference Phone Call with Intercom Users	38	
8.5	Group Intercom	39	
8.6	Mesh Intercom Conference with Bluetooth Intercom Participant	40	
8.7	Universal Intercom	42	
8.8	Mesh Intercom Conference with Two-way Universal Intercom Participant		
9.	USING THE FM RADIO	44	
9.1	FM Radio On/Off	44	
9.2	Seek and Save Radio Stations	44	
9.3	Scan and Save Radio Stations		
9.4	Temporary Station Preset		
9.5	Navigating Preset Stations	46	

9.6 Region Selection

10. AMBIENT MODE

47

48

11. VOICE COMMAND

12.	FUNC UPGR/	TION PRIORITY AND FIRMWARE ADES	50
12.1	2.1 Function Priority 2.2 Firmware Upgrades		
12.2			
13.	CONF	IGURATION SETTING	51
13.1	Heads	et Configuration Setting	51
	13.1.1	Delete All Pairings	52
	13.1.2	Remote Control Pairing	52
13.2	Softwa	are Configuration Setting	52
		Speed Dial	52
	13.2.2	Channel Setting (Default: channel 1)	52
	13.2.3	Unit Language	52
	13.2.4	Audio Equalizer (Default: Off)	53
	13.2.5	VOX Phone (Default: Enable)	53
	13.2.6	VOX Intercom (Default: Disable)	53
	13.2.7	VOX Sensitivity (Default: 3)	53
	13.2.8	Bluetooth Intercom Audio Multitasking	
		(Default: Disabled)	54
	13.2.9	Intercom-Audio Overlay Sensitivity (Default: 3)	54
	13.2.10	Audio Overlay Volume Management (Default: Disable)	54
	13.2.11	HD Intercom (Default: Enable)	55
		HD Voice (Default: Enable)	55
		Smart Volume Control (Default: Disable)	55
		Sidetone (Default: Disable)	55
		Voice Prompt (Default: Enable)	56
		RDS AF Setting (Default: Disable)	56
		FM Station Guide (Default: Enable)	56

13.2.18 Advanced Noise Control[™] (Default: Enable) 56

14. TROUBLESHOOTING

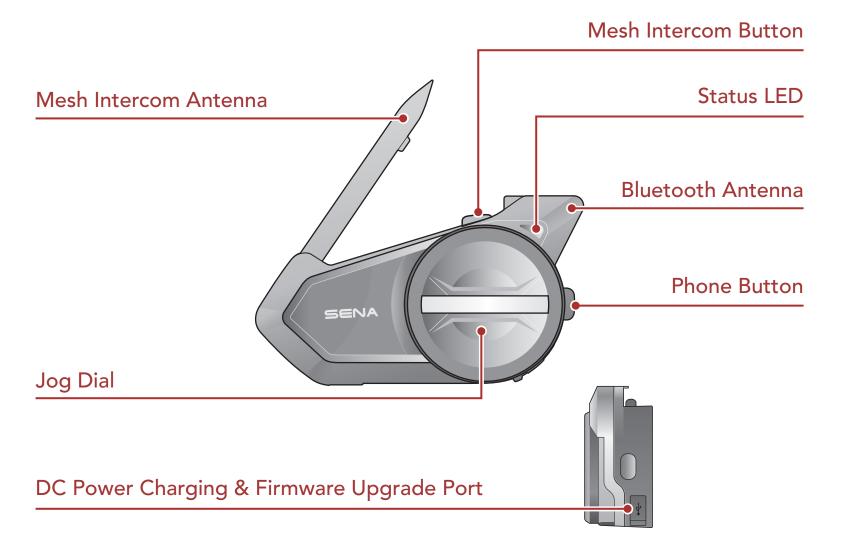
57

14.1 Fault Reset14.2 Factory Reset

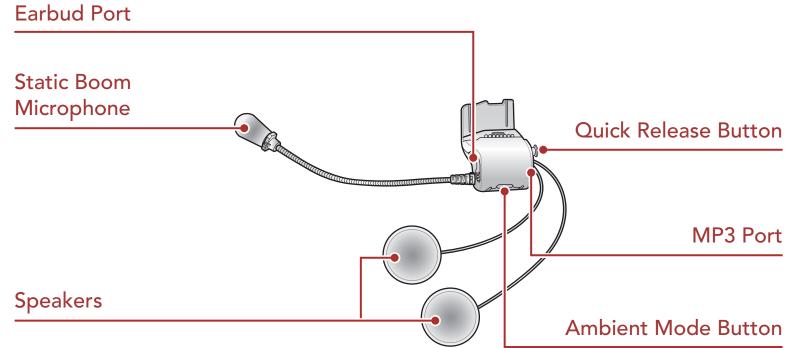
57 58

1. ABOUT THE MOTORCYCLE BLUETOOTH COMMUNICATION SYSTEM WITH MESH INTERCOM™

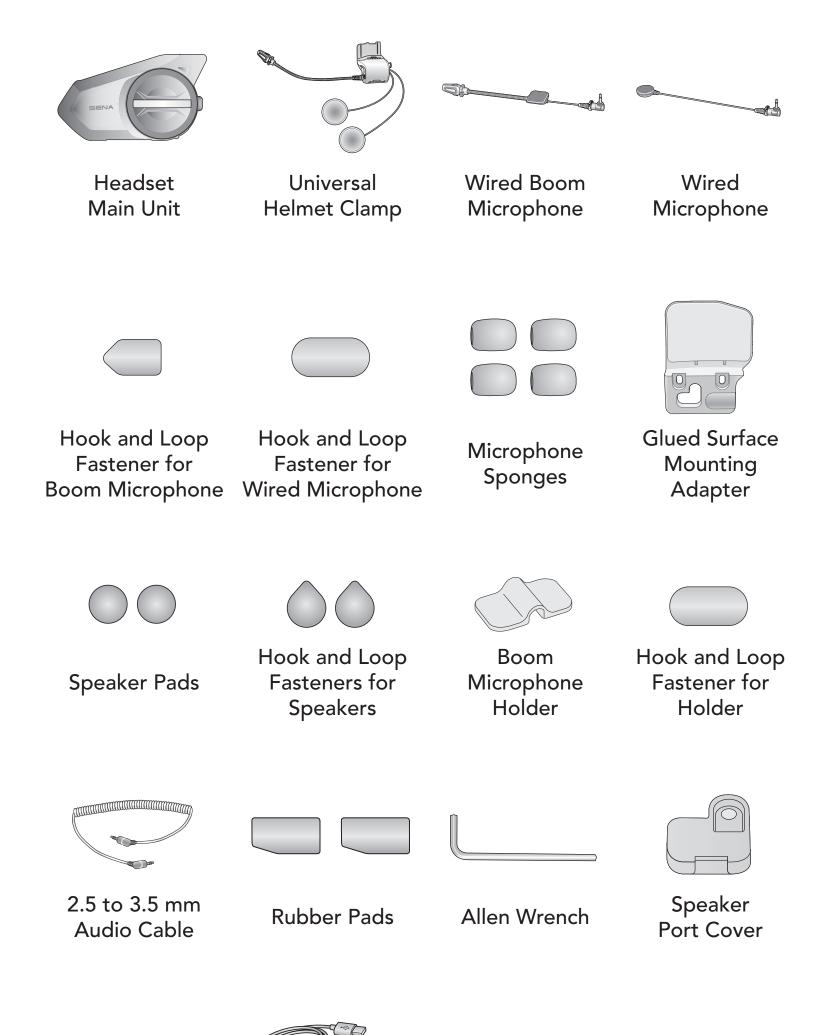
- **Product Details** 1.1
- 1.1.1 Headset Main Unit



1.1.2 Universal Clamp Kit



1.2 Package Contents







USB Power & Data Cable (USB-C)

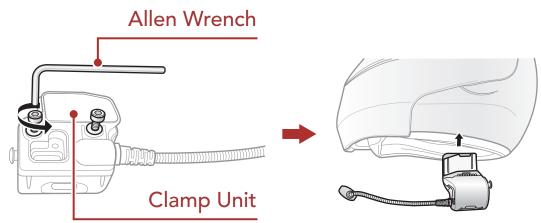
WiFi Adapter

2. INSTALLING THE HEADSET ON YOUR HELMET

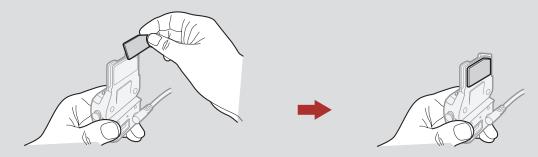
2.1 Helmet Installation

To securely install the headset on the helmet, please follow this procedure.

1. Insert the back plate of the clamp unit between the internal padding and the external shell of the helmet, and tighten the two screws.

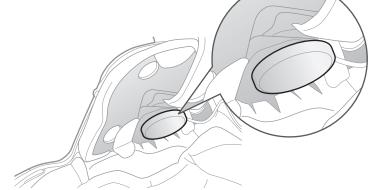


Note: Depending on the size and shape of your helmet, you may need to change the thickness of the rubber pad between the clamp plates using the two extra rubber pads in the box. To increase the overall thickness, attach the thinner one to the original rubber pad or replace the original rubber pad with the thicker one.

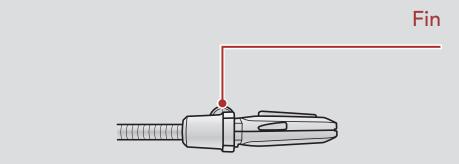


2. Place the helmet speakers along with the hook and loop fasteners, centered to your ear, in the ear pockets of the helmet. If the helmet has deep ear pockets, you can use the speaker pads to place the speakers closer to your ears.

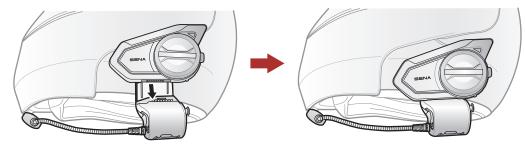




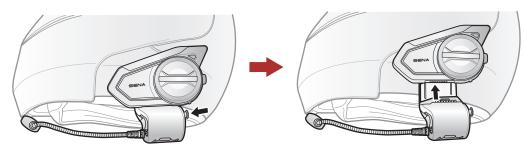
Note: Make sure that the microphone is located properly close to your mouth when you wear the helmet. Adjust the direction of the microphone so that the fin side of the microphone is facing outward, away from your lips.



3. Attach the headset main unit to the clamp unit. Slide the main unit down onto the clamp unit until it clicks firmly into the bottom portion of the clamp unit.



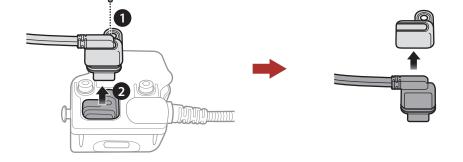
4. To remove the main unit from the clamp unit, press the Quick Release Button to slide it off the clamp unit.



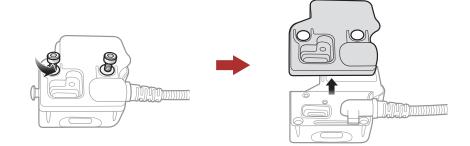
2.2 Using the Glued Surface Mounting Adapter

If you have any problem equipping the clamp unit on the helmet for any reason, you may use the glued surface mounting adapter to attach the clamp unit on the external surface of the helmet.

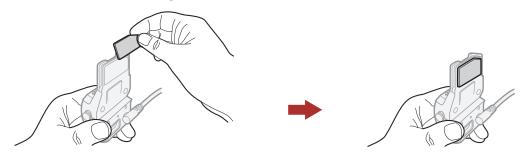
1. Remove the speaker unit.



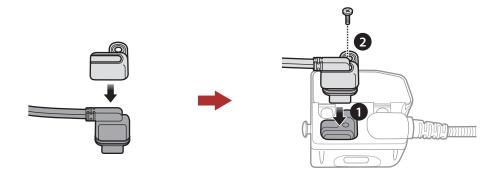
- 2 INSTALLING THE HEADSET ON YOUR HELMET
- 2. Remove the back plate.



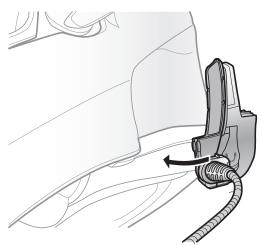
3. Remove the rubber pad and replace it with the thicker rubber pad included in the package.



- 4. Hook on the adapter to the clamp unit then screw in the glued external adapter to the clamp unit.
- 5. Reconnect the speaker cable to the speaker port.



- 6. Locate a proper surface on the helmet to attach the unit then clean the helmet surface location with a moistened towel and allow to dry thoroughly.
- 7. Peel off the cover of the adhesive tape of the adapter and attach the unit on the proper surface of your helmet.



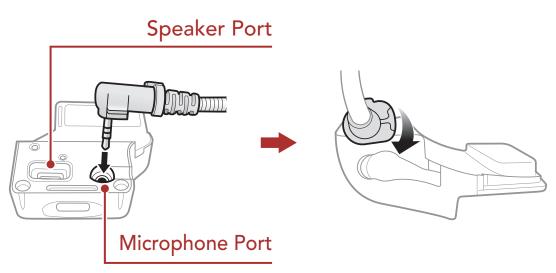
Caution: Sena recommends using the clamp unit. The glued surface mounting plate is provided for convenience, but is not the recommended mounting method. Sena is not responsible for its use.

2 INSTALLING THE HEADSET ON YOUR HELMET

2.3 Switching the Microphone

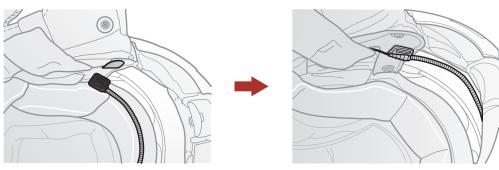
If you want to use a different microphone instead of the static boom microphone, please refer to the following steps.

- 1. Remove the back plate of the clamp unit.
- 2. Connect the microphone according to your helmet type.
- 3. Lock the microphone to the clamp.
- 4. Reattach the back plate to cover the microphone and the speaker port.



2.3.1 Wired Boom Microphone

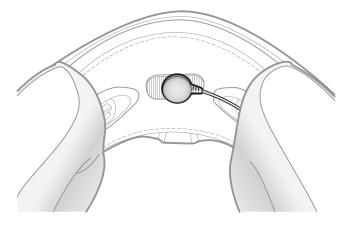
When installing the included wired boom microphone, place the hook and loop fastener at the end of the boom microphone between the internal helmet cheek pad and the internal wall of the helmet shell. The boom microphone should be mounted so it is facing close to your mouth when you wear the helmet.



2 INSTALLING THE HEADSET ON YOUR HELMET

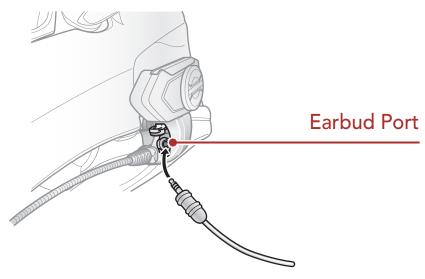
2.3.2 Wired Microphone

In case of the wired microphone, attach the enclosed hook and loop fastener for the wired microphone to the inside of the chin guard for full-face helmets. Place the wired microphone on the hook and loop fastener and connect it to the connector of the clamp unit.



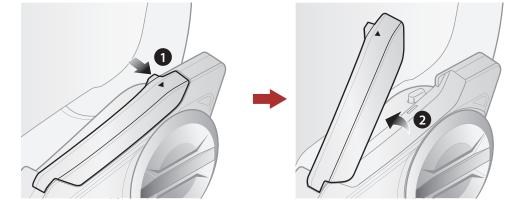
2.4 Earbuds

You can connect your earbuds to the clamp while having the speakers connected to the clamp. The sound of the earbuds will be active while the sound of the outer speakers becomes inactive.



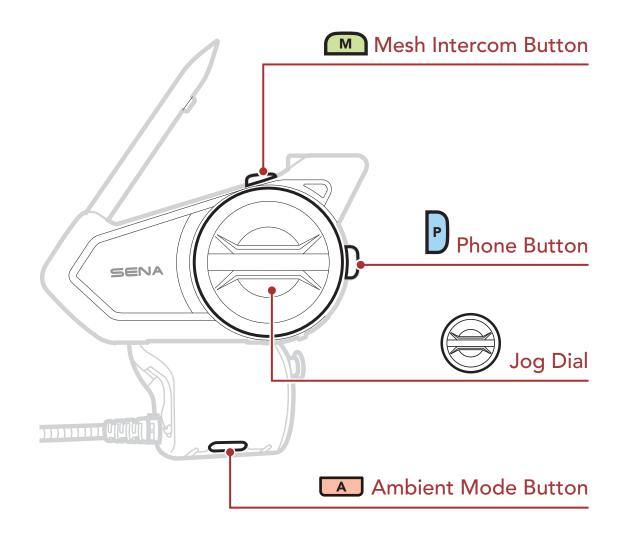
2.5 External Mesh Intercom Antenna

Pull the **Mesh Intercom** Antenna outwards slightly to unfold it.



GETTING STARTED 3.

3.1 **Button**



Downloadable Sena Software 3.2

3.2.1 Sena 50 Utility App

By simply pairing your phone with your headset, you can use the Sena 50 Utility App for quicker and easier set up and management.

- App Features: Mesh Intercom, Bluetooth Intercom, Music, Device settings, Quick Start Guide, and User's Guide.
- Download
 - Android: Google Play Store > 'Sena 50 Utility'

- iOS: App Store > 'Sena 50 Utility'





3.2.2 Sena Device Manager

The **Sena Device Manager** allows you to upgrade the firmware and configure its settings directly from your PC or Apple computer. Download the **Sena Device Manager** from **sena.com**.

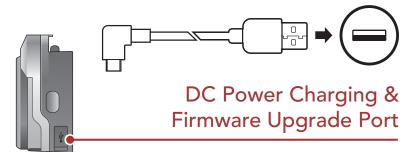
Click Here to Visit sena.com

3.3 Powering On and Off

Press and hold the **Jog Dial** and **Phone Button** at the same time to turn the headset on or off.

3.4 Charging

Charging the Headset



The headset will be fully charged in about 1 hour. (The charging time may vary depending on the charging method.)

Note:

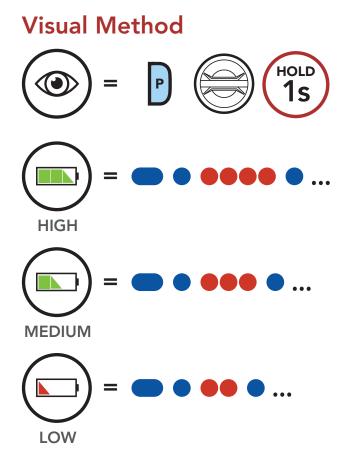
- The headset includes a **Fast Charging** feature which allows it to charge quickly over a short period of time. For example, a user can get up to 3.5 hours of Mesh communication or 6 hours of Bluetooth intercom after charging the headset for 20 minutes.
- Any 3rd party USB charger can be used with Sena products if the

charger is approved by either the FCC, CE, IC or other locally approved agencies that Sena accepts.

• The **50S** is compatible with 5 V input USB-charged devices only.

3.5 Checking the Battery Level

Instructions are for when powering the headset on.

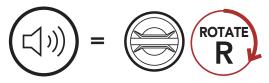


Note: When the battery is low while in use, you will hear a voice prompt saying **"Low battery"**.

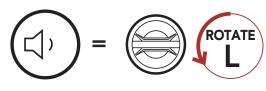
3.6 Volume Adjustment

You can raise or lower the volume by rotating the **Jog Dial** clockwise or counterclockwise. Volume is set and maintained independently at different levels for each audio source (i.e., phone, intercom), even when the headset is rebooted.

Volume Up



Volume Down



4. PAIRING THE HEADSET WITH OTHER BLUETOOTH DEVICES

When using the headset 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 headset can pair with multiple Bluetooth devices such as a mobile phone, GPS, MP3 player or Sena SR10 Two-Way Radio Adapter via **Mobile Phone Pairing, Second Mobile Phone Pairing and GPS Pairing**. The headset can also be paired with up to three other Sena headsets.

Pairs with up to Three Sena Headsets



Also Pairs with:



4.1 Phone Pairing

There are two ways to pair the phone.

4.1.1 Pairing When the 50S is Turned Off

1. Press and hold the **Phone Button** and **Jog Dial** for **3 seconds** when the **50S** is turned off.

Phone Pairing

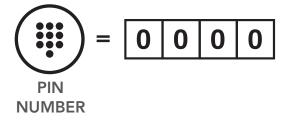


"Phone Pairing"



Alternating blue and red flashing lights indicate **device is now discoverable**.

- 4 PAIRING THE HEADSET WITH OTHER BLUETOOTH DEVICES
- 2. With your mobile phone in Bluetooth-pairing mode, select **Sena 50S** in the list of devices detected.
- 3. If your mobile phone asks for a PIN, enter 0000.



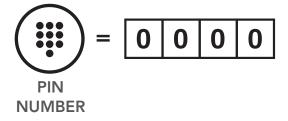
4.1.2 Pairing When the 50S is Turned On

1. Press and hold the **Phone Button** for **5 seconds** when the **50S** is on.



Alternating blue and red flashing lights indicate **device is now discoverable**.

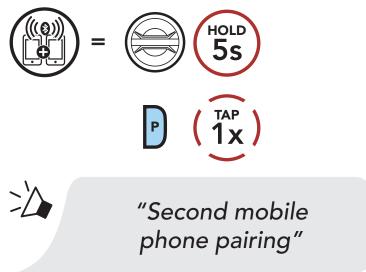
- 2. With your mobile phone in Bluetooth-pairing mode, select **Sena 50S** in the list of devices detected.
- 3. If your mobile phone asks for a PIN, enter 0000.



4.2 Second Mobile Phone Pairing - Second Mobile Phone, GPS, and SR10

1. Execute Second Mobile Phone Pairing.

Second Mobile Phone Pairing



Blue flashing light indicates **device is now discoverable**.

- 2. With your mobile phone in Bluetooth-pairing mode, select **Sena 50S** in the list of devices detected.
- 3. If your mobile phone asks for a PIN, enter 0000.

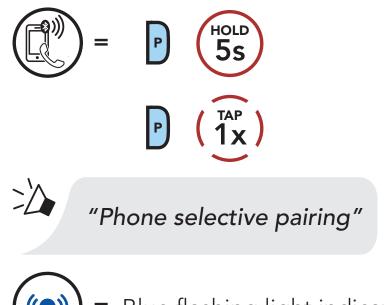
4.3 Advanced Selective Pairing: Hands-Free or A2DP Stereo

Phone Pairing allows the headset to establish two Bluetooth profiles: **Hands-Free** or **A2DP Stereo**. **Advanced Selective Pairing** allows the headset to separate the profiles to enable connection with two devices.

4.3.1 Phone Selective Pairing - Hands-Free Profile

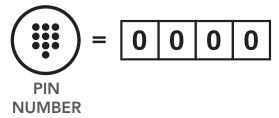
1. Execute Phone Selective Pairing.

Phone Selective Pairing



((•)) = Blue flashing light indicates **device is now discoverable**.

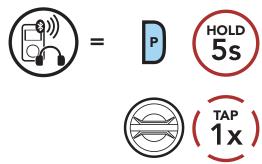
- 2. With your mobile phone in Bluetooth-pairing mode, select **Sena 50S** in the list of devices detected.
- 3. If your mobile phone asks for a PIN, enter 0000.

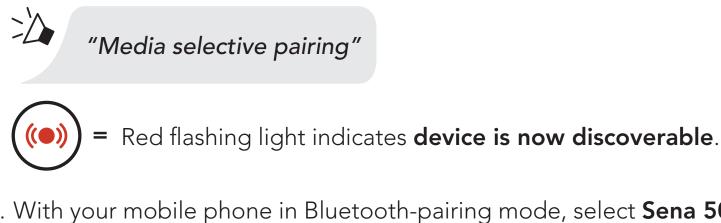


4.3.2 Media Selective Pairing - A2DP Profile

1. Execute Media Selective Pairing.

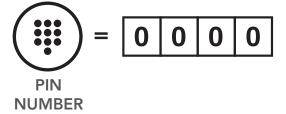
Media Selective Pairing





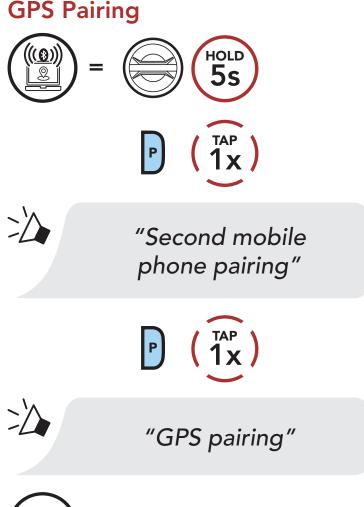
2. With your mobile phone in Bluetooth-pairing mode, select **Sena 50S** in the list of devices detected.

- 4 PAIRING THE HEADSET WITH OTHER BLUETOOTH DEVICES
- 3. If your mobile phone asks for a PIN, enter 0000.



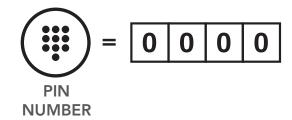
4.4 GPS Pairing

1. Execute GPS Pairing.



= Green flashing lights indicates **device is now discoverable**.

- 2. With your Bluetooth device on the GPS navigation screen, select **Sena 50S** in the list of devices detected.
- 3. If your Bluetooth device asks for a PIN, enter 0000.



Note: If you pair your GPS device via GPS Pairing, its instruction will not interrupt your Mesh Intercom conversations, but overlay with them. Bluetooth intercom conversations will be interrupted by GPS instructions.

5. MOBILE PHONE USAGE

5.1 Making and Answering Calls



Note: If you have a GPS device connected, you will not hear its voice navigations during a phone call.

5.2 Siri and Google Assistant

The **50S** supports the **Siri** and **Google Assistant** access directly.

"Hey Google" or

"Hey Siri"

or

You can activate the **Siri** or **Google Assistant** using the voice through the headset's microphone, a wake word will be used. This is a word or groups of words such as **"Hey Siri"** or **"Hey Google"**.

Activate the Siri or Google Assistant Installed on Your Smartphone

5.3 Speed Dialing

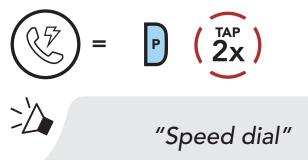
5.3.1 Assigning Speed Dial Presets

Speed Dial Presets could be assigned in the settings menu, accessible through Sena Device Manager or Sena 50 Utility App.

5.3.2 Using Speed Dial Presets

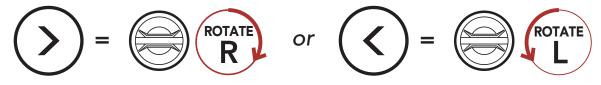
1. Enter into the **Speed Dial** menu.

Enter Speed Dial Mode



2. Navigate between the **Speed Dial Preset**.

Navigate Forward or Backward through Speed Dial Preset Numbers



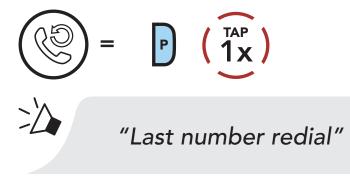
3. Call one of your **Speed Dial Presets**.

Call a Speed Dial Preset Number



4. Redial the last number called.

Redial Last Number

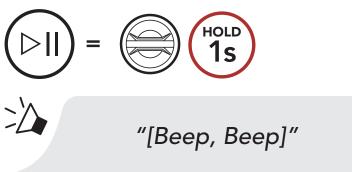


6. STEREO MUSIC

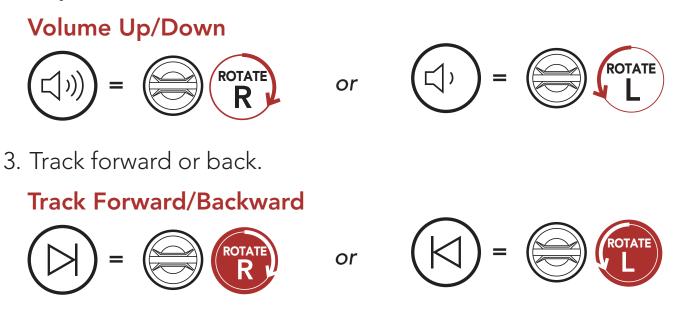
6.1 Playing Music with Bluetooth Devices

1. Play or pause music.



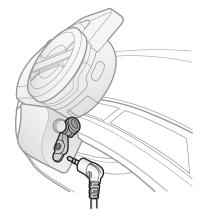


2. Adjust the volume.



6.2 Playing Music with non-Bluetooth Devices

You can play music that is stored on non-Bluetooth devices such as MP3 players. To connect your device to the headset, plug the enclosed 2.5 to 3.5 mm audio cable into the AUX ports, both on the headset and on your device.

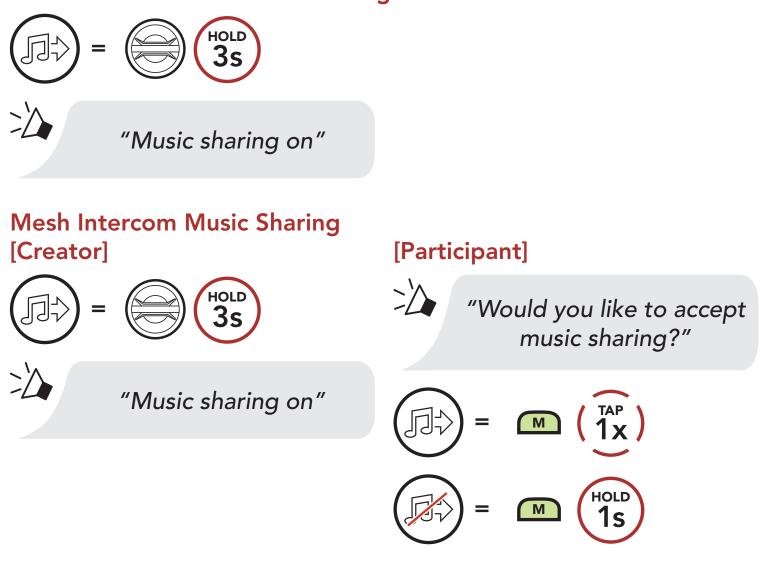


To adjust the volume, rotate the **Jog Dial** clockwise or counterclockwise. You can also adjust the volume directly on the connected device.

6.3 Music Sharing

You can start sharing music with one intercom friend using Bluetooth stereo music during a two-way intercom conversation and one participant of a Mesh. Both you and your intercom friend can remotely control music playback such as track forward and track back. If you start sharing music while Bluetooth intercom and Mesh Intercom are running at the same time, then music shared during Bluetooth intercom will take priority over music shared during Mesh Intercom. The Creator will send a request message to a headset connected during Mesh Intercom and will share music with the first participant that accepts the request.

Bluetooth Intercom Music Sharing



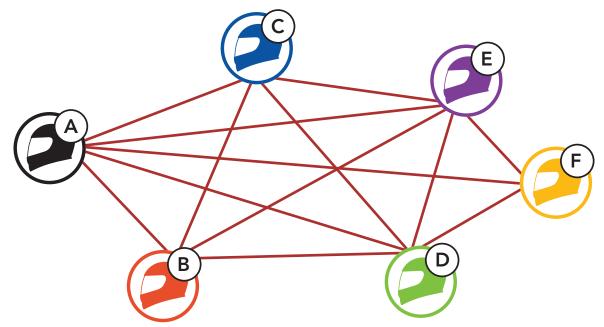
7. MESH INTERCOM

7.1 What is Mesh Intercom?

Mesh Intercom™ is a dynamic communication system created by Sena that provides instant and effortless bike-to-bike communication without a pre-grouping process. **Mesh Intercom** allows riders to connect and communicate with nearby users without the need to pair each headset together.

The working distance between each **50S** in **Mesh Intercom** can be up to 2 km (1.2 miles) in open terrain. In open terrain, the **Mesh** can be extended up to 8 km (5 miles) between a minimum of six users. Within the same channel in **Open Mesh™** or the same private group in **Group Mesh™**, six users can talk at the same time and enjoy the optimal quality for their conversation.

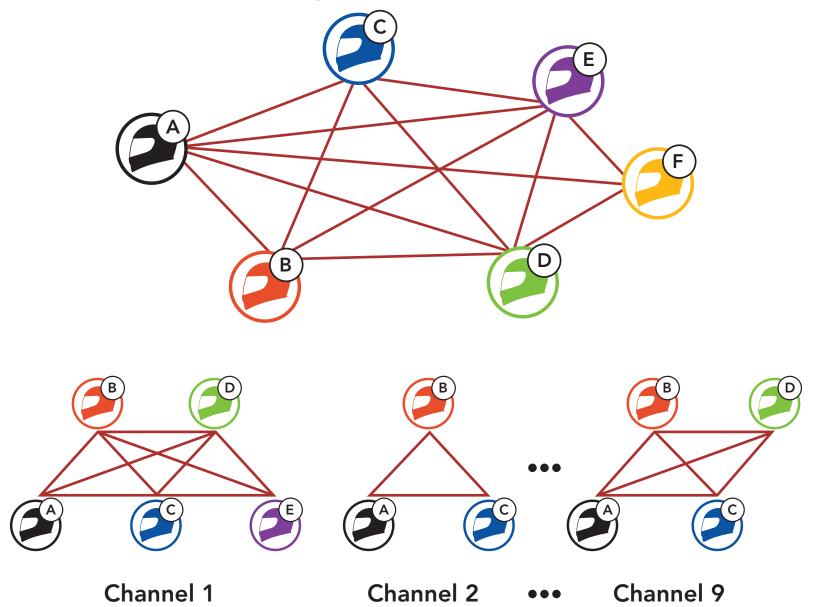
Mesh Intercom



7.1.1 Open Mesh

Open Mesh is an open group intercom function. Users can freely communicate with each other in the same **Open Mesh** channel and select which channel (1-9) to use through the headset.

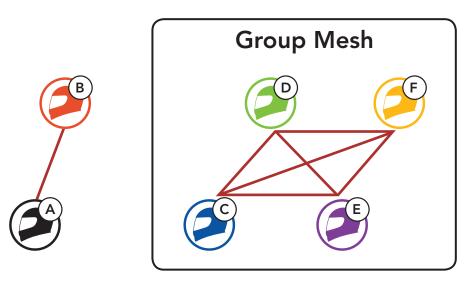
It can connect with a virtually unlimited number of users in each channel.



7.1.2 Group Mesh

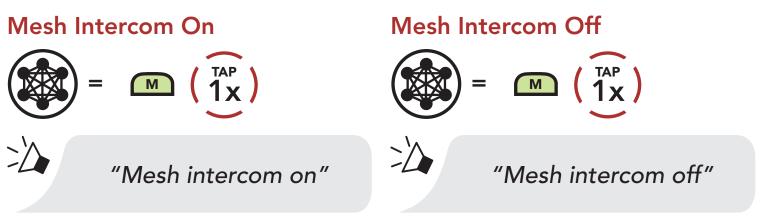
Group Mesh is a closed group intercom function that allows users to join, leave, or rejoin a group intercom conversation without pairing each headset. Users can freely communicate with each other in the same private group in **Group Mesh**.

For closed intercom conversations using **Mesh Intercom**, a **Group Mesh** needs to be created by the users. When users create a private group in **Group Mesh** by **Mesh Grouping**, the headset automatically switches from **Open Mesh** to **Group Mesh**. Up to 24 users can all be connected in each private group.



7.2 Starting Mesh Intercom

When **Mesh Intercom** is enabled, the **50S** will automatically connect to nearby **50S** users and allow them to talk to each other by pressing the **Mesh Intercom Button**.

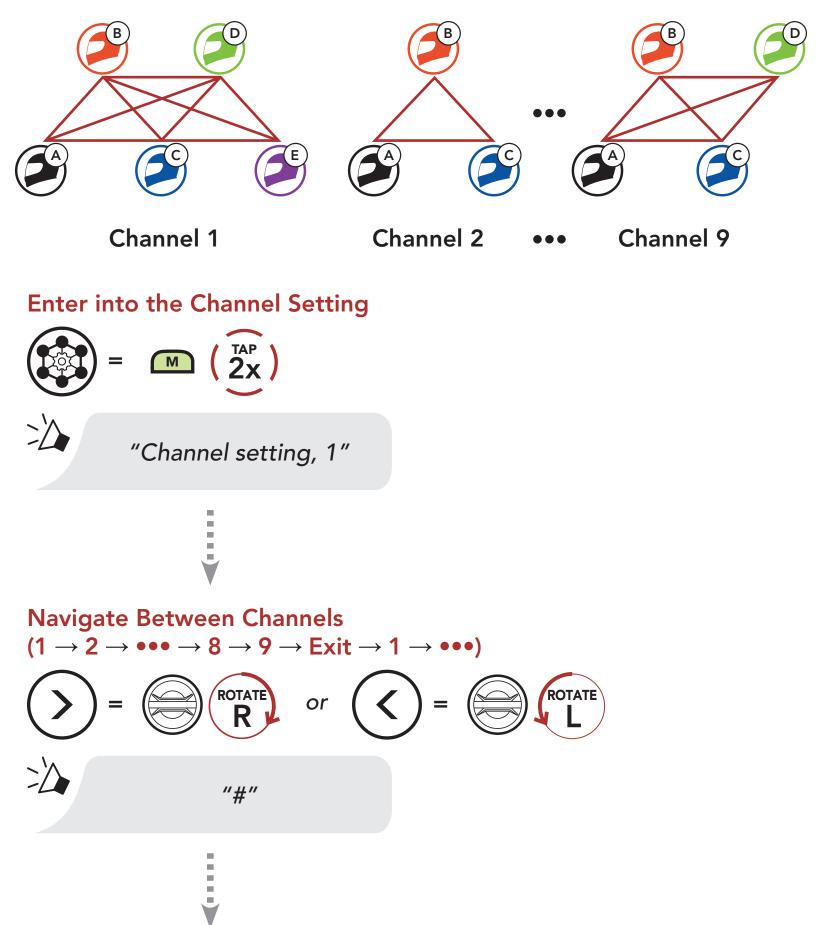


7.3 Using the Mesh in Open Mesh

When **Mesh Intercom** is enabled, the headset will be in **Open Mesh** (default: channel 1) initially.

7.3.1 Channel Setting (Default: channel 1)

If the **Open Mesh** communication experiences interference because other groups are also using **channel 1 (default)**, change the channel. You can select from channels 1 to 9.



Save the Channel



"Channel is set, channel #"

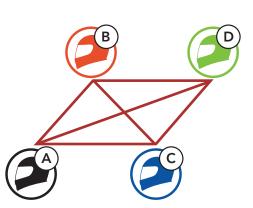
Note:

- **Channel Setting** always starts with channel 1.
- If you do not press any button for approximately **10 seconds** in a specific channel, the channel is automatically saved.
- If you want to cancel during **Channel Setting**, tap the **Phone Button**.
- The channel will be remembered even if you turn off the **50S**.

7.4 Using Mesh in Group Mesh

7.4.1 Creating a Group Mesh

Creating a Group Mesh requires two or more Open Mesh users.



1. Enter into **Mesh Grouping** to create a **Group Mesh**.

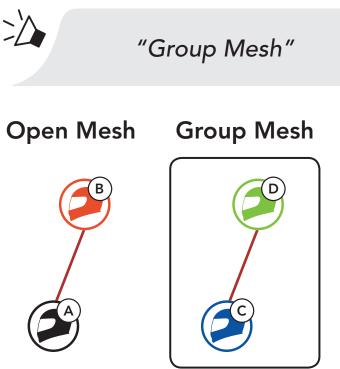


Open Mesh

.



2. The headsets complete **Mesh Grouping** and automatically switch from **Open Mesh** to **Group Mesh**.



Note:

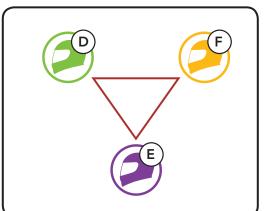
- If the **Mesh Grouping** is not completed within **30 seconds**, users will hear a voice prompt, **"Grouping failed"**.
- If you want to cancel during the **Mesh Grouping**, tap the **Mesh Intercom Button** or **Phone Button**.

7.4.2 Joining an Existing Group Mesh

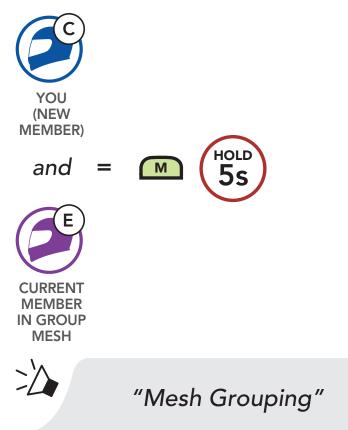
One of the members in an **Existing Group Mesh** can allow new members in **Open Mesh** to join the **Existing Group Mesh**.

New Members

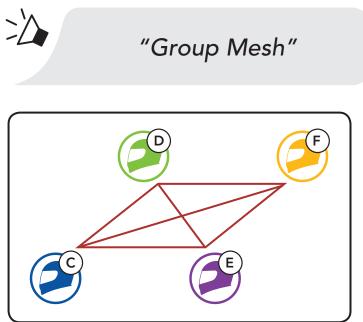
Existing Group Mesh and Current Members



1. One of the current members and a new member enter into Mesh Grouping to join the Existing Group Mesh.



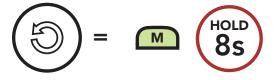
 The headsets complete **Mesh Grouping**. The new members will hear a voice prompt as their headsets automatically switch from **Open Mesh** to **Group Mesh**.



Note: If the **Mesh Grouping** is not completed within **30 seconds**, the current members will hear a low tone double beep and the new member will hear a voice prompt, **"Grouping failed"**.

7.5 Reset Mesh

If a headset in an **Open Mesh** or **Group Mesh** resets the **Mesh**, it will automatically return to **Open Mesh (default: channel 1)**.

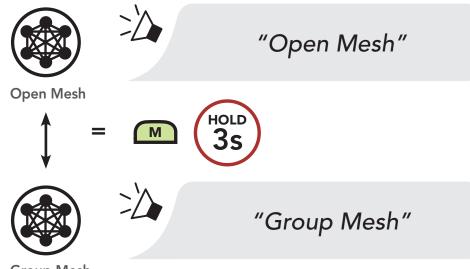


7.6 Toggling Open Mesh/Group Mesh

Users are able to toggle between **Open Mesh** and **Group Mesh** without resetting the **Mesh**. This allows users to keep the **Group Mesh Network** connection information while in **Open Mesh**.

Users can toggle to **Group Mesh** to communicate with participants from the stored **Group Mesh Network** connection information.

Toggle Between Open Mesh and Group Mesh



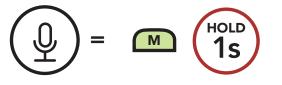
Group Mesh

Note: If you have never participated in **Group Mesh**, you cannot toggle between **Open Mesh** and **Group Mesh**. You will hear a voice prompt, **"No Group Available"**.

7.7 Enable/Disable Mic (Default: Enable)

Users can enable/disable the microphone when communicating in a **Mesh Intercom**.

Enable/Disable the Microphone

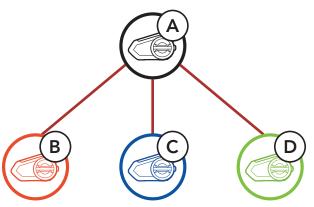


8. BLUETOOTH INTERCOM

8.1 Intercom Pairing

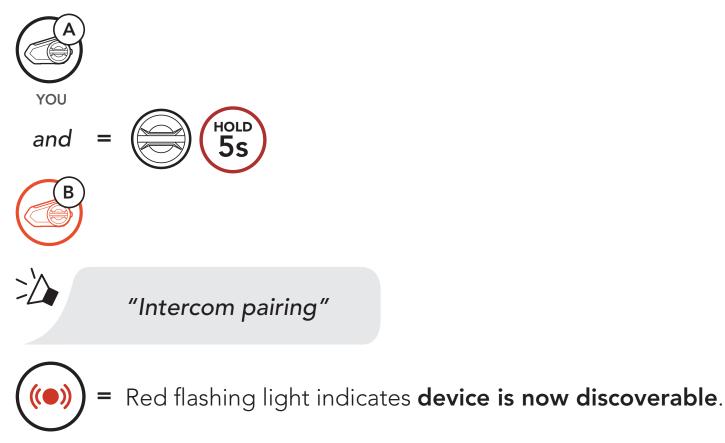
Up to three people can communicate via intercom with the headset simply by pairing their headsets.

Pairing with Intercom Friends



1. Press and hold the **Jog Dials** of two headsets for **5 seconds** until you hear a voice prompt, "**Intercom pairing**".

Pairing Headset A with Headset B

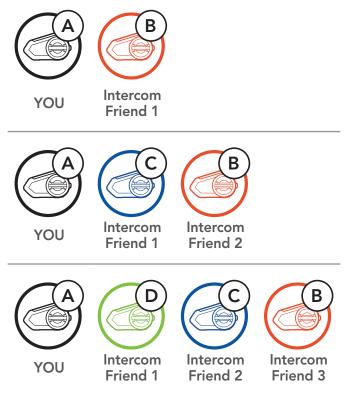


The **50S** will automatically pair with a Sena headset.

= Flashing blue LED confirms **intercoms are paired**.

2. Repeat step 1 to pair with Intercom Friends C & D.



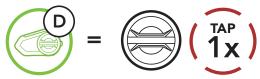


8.2 Two-Way Intercom

You can start or end an intercom conversation with an Intercom Friend by tapping the **Jog Dial**.

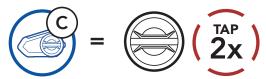
1. Tap once for Intercom Friend 1.

Start/End with Intercom Friend 1



2. Tap twice for Intercom Friend 2.

Start/End with Intercom Friend 2



3. Tap three times for Intercom **Friend 3**.

Start/End with Intercom Friend 3



8.3 Multi-Way Intercom

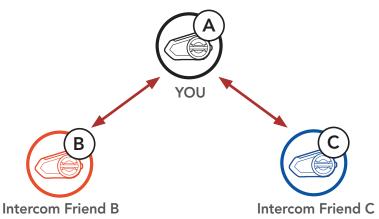
Multi-Way Intercom enables conference-call-style conversations with up to three **Intercom Friends** at the same time. While **Multi-Way Intercom** is in progress, mobile phone connection is temporarily disconnected. However, as soon as **Multi-Way Intercom** terminates, the mobile phone connection will be reestablished.

8.3.1 Starting a Three-Way Intercom Conference

You (A) can have a Three-Way Intercom Conference with two other Intercom Friends (B & C) by establishing two intercom connections simultaneously.

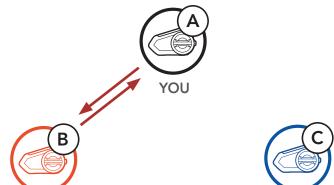
1. Pair your headset (A) with those of two other Intercom Friends (B & C).

Pair with Intercom Friends B & C



 Start an intercom conversation with one of the two friends in your intercom group. For example, you (A) may start an intercom conversation with the Intercom Friend (B). Or, Intercom Friend (B) may start an intercom call with you (A).

Starting an Intercom Conversation with Intercom Friend B

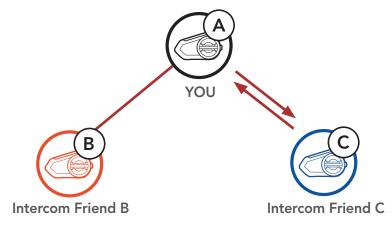






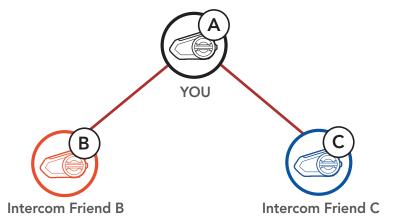
3. Then, **you** (A) can call the second **Intercom Friend** (C), or the second **Intercom Friend** (C) may join the intercom by making an intercom call to **you** (A).

Starting an Intercom Conversation with Intercom Friend C



4. Now you (A) and two Intercom Friends (B & C) are having a Three-Way Intercom Conference.

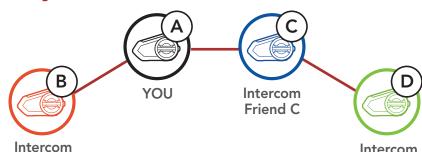
Three-Way Intercom



8.3.2 Starting a Four-Way Intercom Conference

With three **Intercom Friends** connected, a new participant **(D)** can make it a **Four-Way Intercom Conference** by making an intercom call to either **(B)** or **(C)**.

Starting a Four-Way Intercom



Friend B

Friend C

8.3.3 Ending Multi-Way Intercom

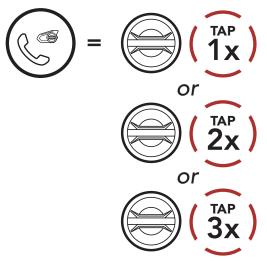
- 1. Press and hold the **Jog Dial** for **1 second** until you hear a beep to terminate all intercom connections.
- Tap the Jog Dial to disconnect from your first Intercom Friend. Double tap the Jog Dial to disconnect from your second Intercom Friend.

8.4 Three-Way Conference Phone Call with Intercom Users

You can have a **Three-Way Conference Phone Call** by adding an **Intercom Friend** to the mobile phone conversation.

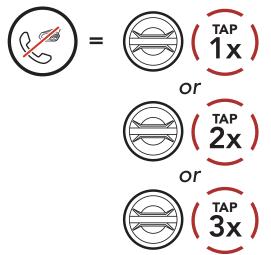
1. During a mobile phone call, tap the **Jog Dial once, twice or, three times** to invite one of your **Intercom Friends** to the conversation.

Invite an Intercom Friend into Phone Conference



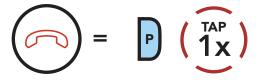
2. To disconnect the intercom during a conference phone call, tap the **Jog Dial once, twice or three times**.

Disconnect Intercom Friend from Conference



3. To disconnect the mobile phone call during a conference phone call, tap the **Phone Button**.

End Phone Call from Conference



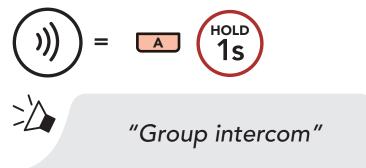
Note: When you have an incoming intercom call during a mobile phone call, you will hear high tone double beeps.

8.5 Group Intercom

Group Intercom allows you to instantly create a **Multi-Way Conference Intercom** with three of the most recently paired headsets.

- 1. Go through intercom pairing with up to three headsets you want to have **Group Intercom** with.
- Press and hold the Ambient Mode Button for 1 second to begin Group Intercom. The LED will flash green and you will hear a voice prompt, "Group intercom".

Start Group Intercom



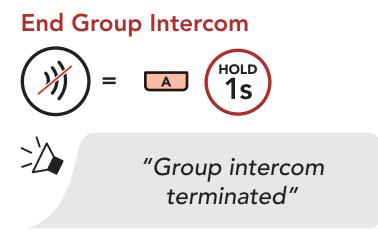
3. When all of the headsets are connected together, everyone will hear a voice prompt, "**Group intercom connected**."

"Group intercom connected"





4. To terminate **Group Intercom**, press and hold the **Ambient Mode Button** for **1 second** during **Group Intercom**. You will hear a voice prompt, "**Group intercom terminated**".

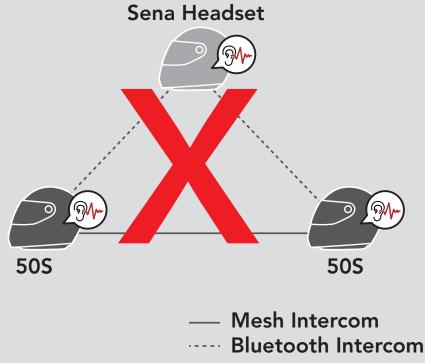


8.6 Mesh Intercom Conference with Bluetooth Intercom Participant

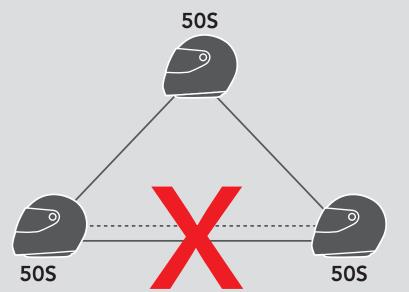
Users can use the existing Bluetooth intercom and **Mesh Intercom** function at the same time. In this case, it is recommended to communicate with other Sena headsets via Bluetooth intercom connection and use **Mesh Intercom** between **50S** headsets. A user who is in **Open Mesh** or **Group Mesh** when using Mesh Intercom is able to include up to 3 of their Bluetooth intercom friends. You can start a Two-Way Intercom conversation with one of your three Intercom Friends to include them in the Mesh.

Note:

- The audio quality will be reduced if a **50S** connects to 2 or more Bluetooth intercom friends while in **Open Mesh** or **Group Mesh** when using **Mesh Intercom**.
- If a closed loop is created, as shown below, each user will experience severe noise issues. Sena recommends that a closed loop not be created.



 If Bluetooth intercom is accidentally turned on during Mesh Intercom communication between 50S headsets, as shown below, you will hear a voice prompt, "Mesh intercom disabled, Bluetooth intercom connected" every 1 minute. If you turn off the Bluetooth Intercom or turn off the Mesh Intercom, the voice prompt will no longer come out.



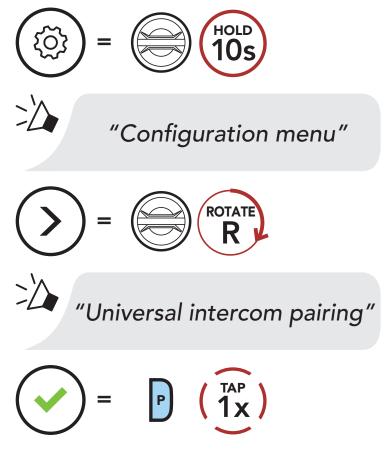
— Mesh Intercom Bluetooth Intercom

8.7 Universal Intercom

Universal Intercom allows you to have intercom conversations with users of non-Sena Bluetooth headsets. You can pair your headset with only one non-Sena headset at a time. The intercom distance depends on the performance of the Bluetooth headset to which it is connected. When a non-Sena Bluetooth headset is paired with the Sena headset, if another Bluetooth device is paired via **Second Mobile Phone Pairing**, it will be disconnected.

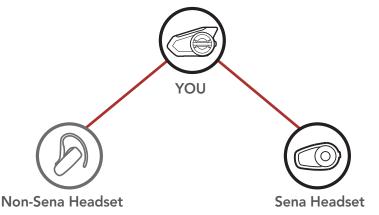
1. Execute Universal Intercom in the Headset Configuration Menu.

Access Universal Intercom in the Configuration Menu



- 2. Put the non-Sena Bluetooth headset in Pairing Mode. The headset will automatically pair with a non-Sena Bluetooth headset.
- 3. You can have **Two-Way Intercom** or **Multi-Way Intercom** communication with up to three **Intercom Friends** using non-Sena headsets by following the procedures described below.

Example of a Three-Way Universal Intercom





Note: Some non-Sena headsets may not support Multi-Way Universal Intercom.

8.8 Mesh Intercom Conference with Two-way Universal Intercom Participant

Users can use the existing **Two-way Universal Intercom** and **Mesh Intercom** function at the same time. In this case, it is recommended to communicate with **non-Sena headset** via **Two-way Universal Intercom** connection and use **Mesh Intercom** between **50S** headsets.

A user who is in **Open Mesh** or **Group Mesh** when using **Mesh Intercom** is able to include one **Universal Intercom friend**. You can start a **Two-way Universal Intercom** conversation with your **Universal Intercom Friend** to include it in the **Mesh**.

9. USING THE FM RADIO

9.1 FM Radio On/Off

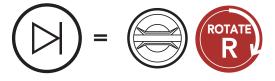


9.2 Seek and Save Radio Stations

The "Seek" feature searches for radio stations.

1. Search for radio stations.

Seek Stations Forward



2. Save the current station. Enter Preset Selection Mode



3. Navigate through the preset numbers that you want to store. Navigate Forward/Backward Through Preset Stations

Seek Stations Backward





or



4. Save the station in the preset number you choose or delete the station from memory.



9.3 Scan and Save Radio Stations

The **"Scan"** function automatically searches for radio stations, starting with the current station's frequency, then up from there.

1. Scan for stations.

Start Scanning

$$(\bigcirc) = (\bigcirc) (2x)$$

- 2. The Sena tuner pauses at each station it finds for **8 seconds** before moving to the next.
- 3. Save the current station. The station will be saved as the next preset number.

Save the Current Station

$$\mathbf{P} = \mathbf{P} \left(\mathbf{1} \mathbf{x} \right)$$

$$\mathbf{Save preset (\#)''}$$

4. Stop scanning.

Stop scanning

$$(2)$$
 = P $(2x)$

9.4 Temporary Station Preset

The **Temporary Preset** feature automatically finds and saves the nearest 10 radio stations without changing your existing preset stations.

1. Automatically find and save 10 stations.

Temporary Stations



2. The temporary preset stations will be cleared when the headset reboots.

9.5 Navigating Preset Stations

Using the methods above, up to 10 radio stations can be stored. You can navigate through the saved stations.

Navigate through Preset Stations

() = P (1x)

Note: You can use the **Sena Device Manager** or the **Sena 50 Utility App** to save the preset stations.

9.6 Region Selection

You can select the proper FM frequency range for your location from the **Sena Device Manager** or the **Sena 50 Utility App**. Using the region setting, you can optimize the seek function to avoid unnecessary frequency ranges.

Re	gion
	9.01

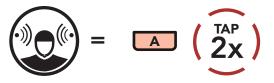
Frequency range

Worldwide	76.0 ~ 108.0 MHz	± 100 kHz
North America, South America and Australia	87.5 ~ 107.9 MHz	± 200 kHz
Asia and Europe	87.5 ~ 108.0 MHz	± 100 kHz
Japan	76.0 ~ 95.0 MHz	± 100 kHz

10. AMBIENT MODE

You can hear the ambient sound outside of your helmet by activating the **Ambient Mode**.

Start/Stop Ambient Mode



Note: The **Ambient Mode** has higher priority than mobile phone, so you cannot listen to music, or have an intercom conversation if the **Ambient Mode** is activated.

11. VOICE COMMAND

The **Voice Command** of the headset allows you to operate certain operations by simply using your voice. You can control the headset completely handsfree using the voice recognition. Multi-language Voice Command supports **English**, **French**, **German**, **Spanish**, **Italian**, **Chinese**, **Japanese**, **and Russian**.

Speak a Voice Command List

Mode Status	Function	Voice Command
Standby/ Bluetooth	Check battery	"Hey Sena, Check Battery"
	Volume Up	"Hey Sena, Volume Up"
	Volume Down	"Hey Sena, Volume Down"
Intercom/Mesh Intercom/FM	Phone Pairing	"Hey Sena, Phone Pairing"
Radio/Music	Bluetooth Intercom Pairing	"Hey Sena, Pairing Intercom"
	Start/End each Bluetooth Intercom	"Hey Sena, Intercom [one, two, three]"
Standby/ Bluetooth Intercom/FM Radio/Music	Turn on Mesh Intercom	"Hey Sena, Mesh On"
Mesh Intercom	Turn off Mesh Intercom	"Hey Sena, Mesh Off"
	Mesh Grouping	"Hey Sena, Mesh Grouping"
	Switch to Open Mesh	"Hey Sena, Open Mesh"
	Switch to Group Mesh	"Hey Sena, Group Mesh"
	End the Bluetooth intercom and Mesh intercom	"Hey Sena, End intercom"
Standby/ Bluetooth Intercom/Mesh Intercom	Play Music	"Hey Sena, Play Music"
Standby/ Intercom/Mesh Intercom/Music	Turn on FM radio	"Hey Sena, FM Radio On"

Mode Status	Function	Voice Command
Music/FM Radio	FM - Next PresetMusic - Next Track	"Hey Sena, Next"
	FM - Previous PresetMusic - Previous Track	"Hey Sena, Previous"
Music	Pause Music	"Hey Sena, Stop Music"
FM Radio	Turn off FM Radio	"Hey Sena, FM Radio Off"
Answer an Incoming Call		"Answer"
Ignore an Incoming Call		"Ignore"

Note:

- You can set a language to another language by using the **Unit** Language feature on the **Sena 50 Utility App**.
- If you set a language that does not support voice commands, the voice command will works only with English commands.
- You can see the another language's voice command list on the **Sena 50 Utility App**.
- Voice command performance may vary based on the environmental conditions including riding speed, helmet type and ambient noise. To improve the performance, minimize wind noise on the microphone by using a large microphone sponge and closing the visor.

12. FUNCTION PRIORITY AND FIRMWARE UPGRADES

12.1 Function Priority

The headset prioritizes connected devices in the following order:

(highest) Ambient Mode

Mobile phone

Voice command mode

Mesh Intercom/Bluetooth Intercom

Music sharing via Bluetooth stereo

FM radio

Stereo music by audio cable

(lowest) Bluetooth stereo music

A lower-priority function gets interrupted by a higher-priority function. For example, stereo music will be interrupted by an **Intercom Conversation**; an **Intercom Conversation** will be interrupted by an incoming mobile phone call.

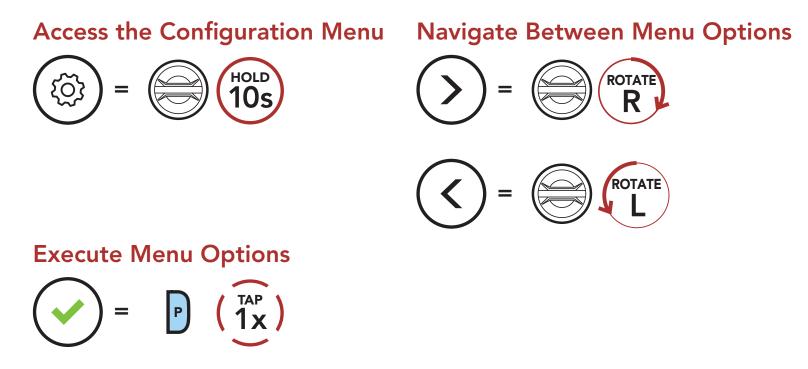
12.2 Firmware Upgrades

The headset supports firmware upgrades. You can upgrade the firmware using the **Sena Device Manager**. Please visit **sena.com** to check for the latest software downloads.

Click Here to Visit sena.com

13. CONFIGURATION SETTING

13.1 Headset Configuration Setting



Headset Configuration Menu

Voice Configuration Menu	Tap the Phone Button
Delete All Pairings	Execute
Remote Control Pairing	Execute
Universal Intercom Pairing	Execute
Exit	Execute

13.1.1 Delete All Pairings

Delete All Bluetooth Pairing Information stored in the Bluetooth system.

13.1.2 Remote Control Pairing

You can remotely control the headset using **Sena** Remote Control devices (sold separately).

- 1. Turn on the headset and the Remote Control device.
- 2. Execute Remote Control Pairing.
- 3. Enter pairing mode in the Remote Control device. The headset will automatically connect with the Remote Control device in pairing mode.

13.2 Software Configuration Setting

You can change the settings of the headset through the **Sena Device Manager** or the **Sena 50 Utility App**.

13.2.1 Speed Dial

Assign phone numbers for speed dialing to make a phone call quickly.

13.2.2 Channel Setting (Default: channel 1)

If the **Open Mesh** communication experiences interference because other groups are also using the **channel 1 (default)**, change the channel. You can select one of 1 to 9 channels.

13.2.3 Unit Language

You can select the device language. The selected language is maintained even when the headset is rebooted.

13.2.4 Audio Equalizer (Default: Off)

You can use the **Audio Equalizer** to increase/decrease the decibel level of different frequency ranges of audio.

Balance will adjust all of the frequency ranges to be the same volume level (0 dB). **Bass Boost** will increase the bass range of audio (20 Hz - 250 Hz). **Mid Boost** will increase the mid range of audio (250 Hz - 4 kHz). **Treble Boost** will increase the high range of audio (4 kHz - 20 kHz).

13.2.5 VOX Phone (Default: Enable)

If this feature is enabled, you can answer incoming calls by voice. When you hear a ringtone for an incoming call, you can answer the phone by saying a word such as **"Hello"** loudly or by blowing air into the microphone. **VOX phone** is temporarily disabled if you are connected to intercom. If this feature is disabled, you have to tap the **Jog Dial** or the **Phone Button** to answer an incoming call.

13.2.6 VOX Intercom (Default: Disable)

If **VOX Intercom** is enabled, you can initiate an intercom conversation with the last connected intercom friend by voice. When you want to start intercom, say a word such as **"Hello"** loudly or blow air into the microphone. If you start an intercom conversation by voice, the intercom terminates automatically when you and your intercom friend remain silent for 20 seconds. However, if you manually start an intercom conversation by tapping the **Jog Dial**, you have to terminate the intercom conversation manually. However, if you start the intercom by voice and end it manually by tapping the **Jog Dial**, you will not be able to start intercom by voice temporarily. In this case, you have to tap the **Jog Dial** to restart the intercom. This is to prevent repeated unintentional intercom connections by strong wind noise. After rebooting the headset, you can start the intercom by voice again.

13.2.7 VOX Sensitivity (Default: 3)

VOX sensitivity can be adjusted depending on your riding environment. **Level 5** is the highest sensitivity setting and **level 1** is the lowest.

13.2.8 Bluetooth Intercom Audio Multitasking (Default: Disabled)

Audio Multitasking (Bluetooth Intercom Audio Multitasking and Mesh Intercom Audio Multitasking) allows you to have an intercom conversation while simultaneously listening to music, FM radio, or GPS instructions. The overlaid audio is played in the background with reduced volume whenever there is an intercom conversation and will return to normal volume once the conversation is finished.

The Mesh Intercom Audio Multitasking feature is always on.

Note:

- For **Bluetooth Intercom Audio Multitasking** to work properly, you need to power the headset off and on. **Please restart the headset**.
- **Bluetooth Intercom Audio Multitasking** will be activated during two-way intercom conversations with a headset that also supports this feature.
- Some GPS devices may not support this feature.
- The Audio Multitasking feature can be configured through the Intercom-Audio Overlay Sensitivity and the Audio Overlay Volume Management settings.

13.2.9 Intercom-Audio Overlay Sensitivity (Default: 3)

The music, FM radio and GPS volume will be lowered to play in the background if you talk over the intercom while the overlaid audio is playing. You can adjust the intercom sensitivity to activate this background audio mode. **Level 1** has the lowest sensitivity and **level 5** has the highest sensitivity.

Note: If your voice is not louder than the sensitivity of the selected level, the overlaid audio will not be lowered.

13.2.10 Audio Overlay Volume Management (Default: Disable)

The music, FM radio and GPS overlaid audio reduces in volume whenever there is an ongoing intercom conversation. If **Audio Overlay Volume Management** is enabled, the volume level of the overlaid audio will not be reduced during an intercom conversation.

13.2.11 HD Intercom (Default: Enable)

HD Intercom enhances the two-way intercom audio from normal quality to HD quality. **HD Intercom** will become temporarily disabled when you enter into a multi-way intercom. If this feature is disabled, the two-way intercom audio will change to normal quality.

Note:

- The intercom distance of **HD Intercom** is relatively shorter than that of normal intercom.
- HD Intercom will become disabled temporarily when Bluetooth Intercom Audio Multitasking is enabled.

13.2.12 HD Voice (Default: Enable)

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.

If this feature is enabled, incoming phone calls will interrupt intercom conversations and audio from the SR10 will not be heard during intercom conversations. Three-Way Conference Phone Call with Intercom Participant will not be available if **HD Voice** is enabled.

Note:

- Refer to the manufacturer of your Bluetooth device that will be connected to the headset to see if it supports **HD Voice**.
- HD Voice is active only when Bluetooth Intercom Audio Multitasking is disabled.

13.2.13 Smart Volume Control (Default: Disable)

Enabling **Smart Volume Control** automatically changes the level of the speaker volume based on the level of the environment noise. You can enable it by setting the sensitivity to **low**, **medium** or **high**.

13.2.14 Sidetone (Default: Disable)

Sidetone is audible feedback of your own voice. It helps you to naturally speak at the correct level according to varying helmet noise conditions. If this feature is enabled, you can hear what you are speaking during an intercom conversation or a phone call.

13.2.15 Voice Prompt (Default: Enable)

You can disable voice prompts by software configuration settings, but the following voice prompts are always on.

- Headset configuration settings menu, battery level indicator, speed dial, FM radio functions

13.2.16 RDS AF Setting (Default: Disable)

Radio Data System (RDS) Alternative Frequency (AF) Setting allows a receiver to re-tune to the second frequency location when the first signal becomes too weak. With RDS AF enabled on the receiver, a radio station with more than one frequency can be used.

13.2.17 FM Station Guide (Default: Enable)

When **FM Station Guide** is enabled, FM station frequencies are given by voice prompts as you select preset stations. When **FM Station Guide** is disabled, the voice prompts on FM station frequencies will not be given as you select preset stations.

13.2.18 Advanced Noise Control[™] (Default: Enable)

When **Advanced Noise Control** is enabled, the background noise is reduced during an intercom conversation. When it is disabled, the background noise is mixed with your voice during intercom.

14. TROUBLESHOOTING

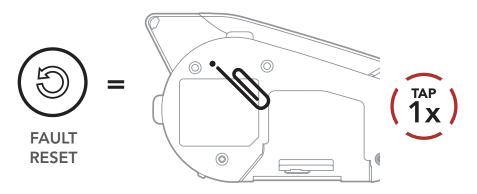
Please visit **sena.com** for answers to frequently asked questions. This detailed online FAQ section deals with troubleshooting, illustrates case studies and contains tips on using the headset.

Click Here to Visit sena.com

14.1 Fault Reset

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

- 1. Locate the **pinhole reset button** below on the back of the main unit.
- 2. Gently insert a paperclip into the hole and tap the **Fault Reset Button** with light pressure.

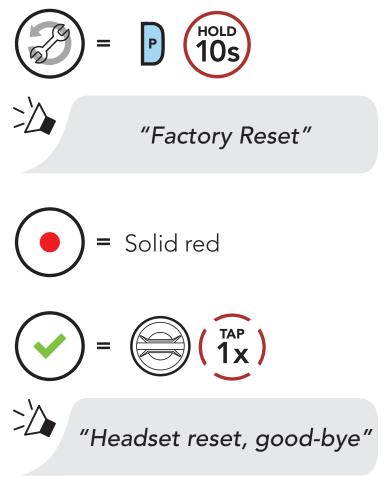


3. The headset will shut down.

Note: Fault Reset will not restore the headset to factory default settings.

14.2 Factory Reset

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



Note: If you press the **Phone Button** or do not press the **Jog Dial** within **5 seconds**, the reset attempt is canceled and the headset returns to standby mode. You will hear a voice prompt saying **"Canceled"**.



Copyright © 2020 Sena Technologies, Inc. All rights reserved.

© 1998–2020 Sena Technologies, Inc. All rights reserved.

Sena Technologies, Inc. reserves the right to make any changes and improvements to its product without providing prior notice.

Sena™ is a trademark of Sena Technologies, Inc. or its subsidiaries in the USA and other countries. SF1™, SF2[™], SF4[™], SFR[™], SRL[™], Momentum[™], Momentum INC[™], Momentum Lite[™], Momentum Pro[™], Momentum INC Pro[™], Momentum EVO[™], Cavalry[™], Latitude SR™, Latitude SX™, 30K™, 50S™, 50R™, 20S EVO™, 20S[™], 10S[™], 10C[™], 10C PRO[™], 10C EVO[™], 10U[™], 10Upad[™], 10R[™], 3S[™], SMH5[™], SMH5-FM[™], SMH5 MultiCom[™], SMH10[™], SMH10R[™], SPH10[™], SPH10H-FM[™], Savage[™], Prism Tube WiFi[™], Prism[™], Bluetooth Audio Pack for GoPro[®], R1[™], R1 EVO[™], R1 EVO CS[™], RC1[™], RC3[™], RC4[™], Handlebar Remote[™], Wristband Remote[™], PowerPro Mount[™], Powerbank[™], FreeWire[™], WiFi Docking Station[™], WiFi Sync Cable[™], +mesh[™], +Mesh Universal™, Econo™, OUTRUSH™, OUTSTAR™, EcoCom[™], SR10[™], SR10[™], SM10[™], X1[™], X1 Pro[™], Expand[™], Bluetooth Mic & Intercom[™], Tufftalk[™], Tufftalk Lite[™], Tufftalk M[™] are trademarks of Sena Technologies, Inc. or its subsidiaries. These trademarks may not be used without the express permission of Sena.

GoPro[®] is a registered trademark of Woodman Labs of San Mateo, California. Sena Technologies, Inc. ("Sena") is not affiliated with Woodman Labs, Inc. The Sena Bluetooth Pack for GoPro[®] is an aftermarket accessory specially designed and manufactured by Sena Technologies, Inc. for the GoPro[®] Hero3 and Hero4 allowing for Bluetooth capabilities.

The Bluetooth[®] word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Sena is under license. iPhone[®] and iPod[®] touch are registered trademarks of Apple Inc.

Address: 152 Technology Drive Irvine, CA 92618