



# INSYDE

User manual



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For easy reference while on the road, download the Quick Start Guide from the following url:

<https://www.cardosystems.com/support/>

This is version 1.0 of the INSYDE User manual.

The latest version and various tutorials are available on:

<https://www.cardosystems.com/support/>

## **PRODUCT REGISTRATION**

Registering your INSYDE allows you to download software patches, enjoy new features that are offered from time to time, and most importantly, assures smooth handling of any warranty issues you may have. In the future, your registered INSYDE may also be eligible for free product upgrades.

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# 1 SAFETY INFORMATION

Please ensure that the product is properly used by observing the warnings and cautions below to prevent any risk and/or damage to property.

## 1.1 PRODUCT STORAGE AND MANAGEMENT

- Keep the product free of dust. It may damage mechanical and electronic parts of the product.
- Do not store the product in high temperatures as this may reduce the life span of electronic devices, damage the battery, and/or melt plastic parts of the product.
- Do not store the product in cold temperatures. Abrupt changes in temperatures may cause condensation and damage electronic circuits.
- Do not clean the product with cleaning solvents, toxic chemicals, or strong detergents as this may damage the product.
- Do not paint the product. Paint may obstruct moving parts or interfere with the normal operation of the product.
- Do not drop or otherwise shock the product. It may damage the product or its internal electronic circuits.
- Do not disassemble, repair or modify the product as this may damage the product and invalidate the product warranty.
- Do not store the product in humid environments, especially for long time storage.

## 1.2 PRODUCT USE

- In some regions, it is prohibited by law to ride motorcycles while wearing headsets or earbuds. Therefore be certain to comply with all relevant laws in the region before using the product.
- The headset is for motorcycle helmets only. To install the headset, you must follow the installation instructions shown in the User's Guide.
- Use of the product at a high volume for a long period of time may damage your eardrums or hearing ability. Keep the volume at a modest level to prevent damage.
- Do not cause impact to the product or touch it with sharp tools as this may damage the product.
- Do not use the product in high-temperatures or apply heat to the product as this may cause damage, explosion, or fire.
- Keep product away from pets or small children. It may damage the product.



- In any place where wireless communication is prohibited, such as hospitals or airplanes, turn off the power and refrain from using the product. In a place where wireless communication is prohibited, electromagnetic waves may cause hazards or accidents.
- Do not use the product near hazardous explosives. When it is near any explosion hazards, turn off the power and heed any regulations, instructions, and signs in the area.
- When using the product, be certain to conform to laws regarding the use of communications devices while riding.
- Do not put the product where it may hamper the rider's vision or manipulate it while riding. This may cause traffic accidents.
- Before riding, fasten the product to the helmet, and double-check that it is fastened. Separation of the product while riding may cause damage to the product or accidents.
- If the product is damaged, stop using it immediately. It may cause damage, explosion, or fire.

## 1.3 BATTERY

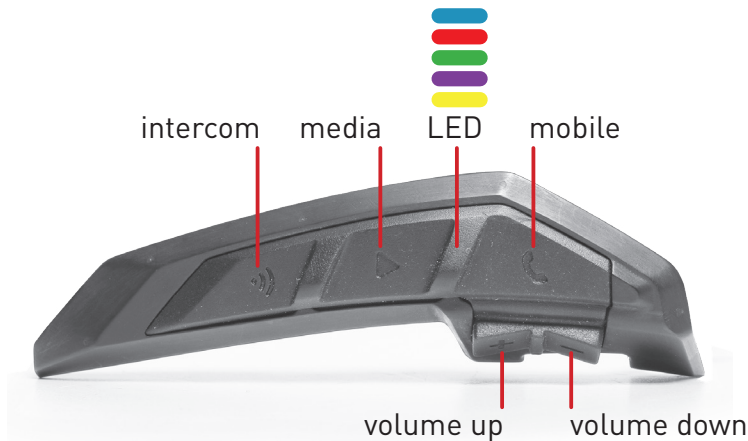
This product has an irreplaceable rechargeable battery inside. When using the product, make sure to adhere to the following:

- Never separate the battery from the product as this may damage the product.
- The battery performance may be reduced over time with usage.
- Any 3<sup>rd</sup> party USB charger can be used with Cardo Systems products if the charger is approved by either the FCC, CE, IC or other locally approved agencies that Cardo Systems accepts.
- Store the battery at temperatures of 15°C ~ 25°C (59°F ~ 77°F). Higher or lower temperatures may reduce the capacity and life of the battery, or may cause temporary non-operation. Do not use the product in sub-zero temperature, because it may cause serious reduction of the battery performance.
- If you apply heat to the battery or throw it into fire, it may explode.
- Do not use the product with a damaged battery. It may explode and/or cause accidents.
- Never use a damaged charger. It may explode and/or cause accidents.
- Battery life may vary depending on conditions, environmental factors, functions of the product in use, and devices used with it.



## 2 GETTING STARTED

### 2.1 GETTING TO KNOW YOUR INSYDE



### 2.2 CHARGING INSYDE



Make sure that your INSYDE battery is charged for at least 4 hours before initial use.

#### **To charge the unit:**

Using the supplied USB cable, connect your computer or wall charger to the USB port on your INSYDE.



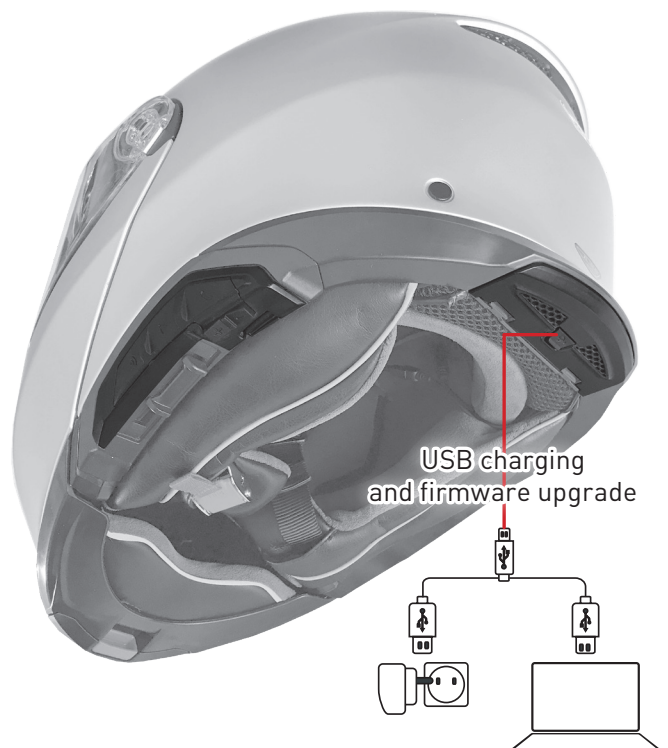
Charging with the wall charger is faster than via a computer USB port. Charging your unit switches it off automatically. To use your unit while it is being charged, switch it on (see Switching your unit on/off).

While charging, the LED indicates the charging status as follows:

- red LED on: charging
- red LED off: charging complete



You can check the battery charge at any time by saying “Hey Cardo, battery status.”





## 2.3 SWITCHING ON/OFF

### To switch your *INSYDE* on:

- Press both  and  for 1".




→ The speakers play an ascending tone and a voice message greets you.

The LED confirms your *INSYDE* is on (only with unit starting up in DMC mode):

- Normal and low battery: the LED flashes blue three times, then green.
- Charging: the LED flashes red and purple three times.

### To switch your *INSYDE* off:

- Press both  and  .



→ The LED flashes red three times, confirming that your *INSYDE* is switching off. The speakers play a descending tone and a voice message, "Goodbye".

## 2.4 USING YOUR *INSYDE*

You can operate the various features of your *INSYDE* in the following ways:

- Press a button or combination of buttons on the unit.
- Use the Cardo Connect App on your mobile device (once it is paired with the unit).
- Use automatic voice recognition (by saying a command, for example "Radio on").

## 2.5 PAIR YOUR UNIT TO BLUETOOTH® DEVICES

Your *INSYDE* has two Bluetooth® channels for connection to Bluetooth® devices such as mobile phones, GPS devices, and Bluetooth® music players with A2DP.

To connect your unit to a Bluetooth® device, you must first pair them. Once paired, they automatically recognize each other whenever they are within range.




If you are pairing more than one device, Cardo recommends that you pair the mobile phone to channel 1, and the additional device (such as GPS, music player or additional mobile phone) to channel 2.



If you are pairing the unit to more than one mobile phone, the phone paired with channel 1 is the default phone for outgoing calls.



### **To pair Bluetooth® channel 1 to a mobile phone:**


1. Enable Bluetooth® on the mobile phone.
2. On the unit, press  for 5".



→ The LED flashes red and blue.

3. On your mobile phone, search for Bluetooth® devices.
4. When your INSYDE appears in the list of available devices, select it.
5. If prompted for a PIN or Passkey, enter 0000 (four zeros).  
→ The phone confirms that pairing has succeeded and the LED flashes purple for 2".

### **To pair Bluetooth® channel 2 to another Bluetooth® device:**

1. Enable Bluetooth® on the device (for example, your mobile phone, GPS device, or music player).
2. Press  for 5".



→ The LED flashes red and blue.

3. Tap  twice.



→ The LED flashes red and green.

4. If you are pairing a GPS device, tap  .



→ The LED flashes slower.

5. On the device you are pairing, search for Bluetooth® devices.
6. When your INSYDE appears in the list of available devices, select it. If prompted for a PIN or Passkey, enter 0000 (four zeros).  
→ The device confirms that pairing has succeeded and the LED flashes purple for 2 seconds.





If pairing is not completed within 2', the unit automatically returns to Standby.  
If you have paired two different mobile phones directly to your INSYDE, set one as default for making calls (see Setting the Default Mobile Phone).  
Not all Bluetooth® mobile phones broadcast Bluetooth® Stereo music (A2DP) even if the phone has an MP3 player function. Consult your mobile phone's user manual for more information.  
Not all Bluetooth® GPS devices allow connection to Bluetooth® audio devices. Consult your GPS User. Manual for more information.

**To cancel the pairing process:**

- Press  for 2".



→ The LED stop flashing red and blue/green.

**To reset all Bluetooth® device pairing:**



Resetting all Bluetooth® device pairing also resets all Bluetooth® intercom pairing.

1. Press  for 5".



2. Press both  and  for 2".



→ The LED flashes purple five times, confirming that pairing has been reset.



## 3 ON THE ROAD

INSYDE makes it easy for you to receive phone calls and listen to music in a convenient and safe manner.

### 3.1 BASIC AUDIO FUNCTIONS

The basic audio functions are the same whether you are listening to music, speaking on the intercom, or having a phone conversation.

**To turn the volume up:**

- Tap **+**.



→ With each tap, a louder tone is played on the speaker until you reach the maximum volume, as indicated by the maximum volume tone.

**To turn the volume down:**

- Tap **-**.



→ With each tap, a quieter tone is played on the speaker until you reach the minimum volume, as indicated by the minimum volume tone.

**To mute the microphone completely and lower the speaker volume to the minimal level:**

- Tap **+** and **-**.



→ A descending tone is played on the speaker.



**To unmute the microphone and raise the speaker volume to the previous level:**

- Tap **+** and **-**.






→ An ascending tone is played on the speaker.

## 3.2 MAKING AND RECEIVING PHONE CALLS

You can use your mobile phone to make and receive phone calls while paired to your INSYDE.

You can make a hands-free call using your mobile phone's voice dial option or using the Cardo speed dial or redial last call options.

**To make a phone call:**

- To dial using your mobile phone's voice dial option, tap  or say "Hey Siri" (if you are using an iOS phone) or "OK Google" (if you are using an Android phone), then make your call as per the instructions for your mobile device.
- To redial the last number called on your mobile device, tap  twice or say "Hey Cardo, redial number."
- To dial your preset speed dial number, tap  three times or say "Hey Cardo, speed dial." (the speed dial number must be set in the Cardo Connect App prior to use).



If you connected two mobile phones to your unit, you cannot make an additional phone call from the other phone while a phone call is already active.

During Bluetooth® intercom 3 or 4-way calls, riders that are connected on both channels A and B (see Bluetooth® Intercom) cannot receive phone calls.

**To answer a call:**

- Tap  or  or , or say "Answer".



**To reject a call:**

- Press  for 2".





**To ignore a call:**

- Tap and at the same time, or say "Ignore".



**To end a call:**

- Tap .



### 3.2.1 SWITCHING BETWEEN TWO CALLS ON TWO MOBILE PHONES

Your INSYDE can toggle between two calls on two mobile phones when both mobile phones are paired to your unit.

**To toggle between two calls on two mobile phones (without disconnecting either call):**

- Tap twice.



**To disconnect the current call and switch to the other call:**

- Tap .



### 3.3 LISTENING TO MUSIC

You can stream music from your paired device to your INSYDE.

**To start music streaming from your paired device:**

- Tap or say "Hey Cardo, music on."





**To stop music streaming:**

- Press for 2" or say "Hey Cardo, music off."







**To skip to the next track (while streaming):**

- Tap   or say "Hey Cardo, next track."



**To skip to the previous track (while streaming):**

- Tap   or say "Hey Cardo, previous track."

## 3.4 LISTENING TO FM RADIO

The INSYDE is equipped with a built-in FM radio.

**To turn on the FM radio:**

- Tap  twice  or say "Hey Cardo, radio on."





When you switch on your FM radio, the station that was playing when you last switched off resumes playing.



**To turn the FM radio off:**

- Press  for 2"  or say "Hey Cardo, radio off."



**To skip to the next station:**

- Tap   or say "Hey Cardo, next station."

**To skip to the previous station:**


- Tap  twice  or say "Hey Cardo, previous station."

**To scan for and select a station:**

1. Press  for 2". 

→ The FM radio plays each station that it finds for several seconds.



2. When you hear a station you want to select, tap .



**To store a scanned station in the active preset:**

- Tap  within 20" of stopping the scan.



## 3.5 SWITCHING MUSIC RESOURCES

If two music (A2DP) audio sources are paired, INSYDE uses the audio source from which you last played music.

**To switch to the other audio source:**

1. Stop music (A2DP) playback from the current device (see Listening to Music).
2. Play music (A2DP) from the other device.  
→ INSYDE automatically remembers your last played device.

## 3.6 VOICE COMMANDS

You can use voice commands for hands-free operation of certain INSYDE features. Voice commands use voice recognition. You loudly say a command and INSYDE performs the action. Voice commands are available in various languages. English is the default language. You can change the language to another available language.

INSYDE uses the following predefined voice commands.

TO:	SAY:
Turn on the radio	"Hey Cardo, radio on"
Turn off the radio	"Hey Cardo, radio off"
Jump forward to the next preset radio station	"Hey Cardo, next station"
Jump backward to the previous preset radio station	"Hey Cardo, previous station"
Turn on music	"Hey Cardo, music on"
Turn off music	"Hey Cardo, music off"
Play the next music track	"Hey Cardo, next track"
Play the previous music track	"Hey Cardo, previous track"
Raise volume	"Hey Cardo, volume up"
Lower volume	"Hey Cardo, volume down"
Mute audio	"Hey Cardo, mute audio"
Unmute audio	"Hey Cardo, unmute audio"
Call the default number (configurable)	"Hey Cardo, speed dial"



Redial the last number	"Hey Cardo, redial number"
Answer an incoming call	"Answer"
Reject/Ignore an incoming call	"Ignore"
Access Siri (when connected to an iOS device)	"Hey Siri"
Access Google (when connected to an Android device)	"Ok Google"
Check the battery status	"Hey Cardo, battery status"
Initiate a Bluetooth® intercom call	"Hey Cardo, call intercom"

## 4 RIDING WITH OTHERS

Your INSYDE features two distinct intercom communication modes: the traditional Bluetooth® protocol and the Cardo's Dynamic Mesh Communications (DMC) technology.

DMC is the best way to communicate in a group. In DMC mode, you can instantly create or join a dynamically fluid network of up to 15 riders to communicate in full conference mode. Unlike Bluetooth®, DMC allows anyone in the group to roam freely, overtake each other or even leave the group altogether, without affecting the ongoing conversations of the remaining fellow riders. You can also use the DMC intercom to communicate privately with another rider.

Of course, you can still use Bluetooth® to connect to devices, such as your smartphone or GPS, or to communicate with riders with headsets that don't include DMC technology. For details, see Bluetooth® Intercom.

### ***How Does DMC Work?***

Anyone can start a new DMC group.

In DMC intercom mode, riders can join, leave, and rejoin existing DMC groups without affecting the ongoing conversation among the other group members. If a group member goes out of range, the remaining riders are automatically re-connected within split seconds to a closer group member, bypassing the absent or remote rider. This way, all active riders remain connected to each other.

## 4.1 DMC INTERCOM

You can use the DMC intercom to speak with other riders in your DMC group (for more information on creating DMC intercom groups, see Setting Up DMC intercom Groups).

Using the DMC intercom, all riders in a group speak hands-free. A rider in a group performs no additional operation to speak to or hear other riders in the group.

Using the DMC intercom, you can also:

- Chat privately with another rider in your DMC group, see Chatting Privately.
- Bridge a non-DMC passenger or rider, see Adding a non-DMC Passenger.



- Mute/unmute DMC intercom groups, see Muting/Unmuting DMC Intercom Groups.
- Delete DMC intercom groups, see Deleting DMC intercom Groups.
- Listen to music while in DMC intercom groups, see Background Audio Level and Audio Source Priorities.
- Switch between DMC intercom and Bluetooth® intercom, see Switching between Intercom modes.

## 4.1.1 SETTING UP DMC INTERCOM GROUPS

You can manage DMC intercom groups to suit your riding requirements, this includes creating groups, joining groups, leaving and rejoining groups or changing your active group.

DMC intercom groups are created and deleted by a group creator. Each group can have up to 15 riders: one group creator/admin and a maximum of 14 group member.



When creating a group, all members should be within 3 meters (10 feet) of the creator. The group continues functioning even if the creator is no longer available.

If a rider's connection is lost, the rider remains part of the group and reconnects automatically once in range.

### 4.1.1.1 Creating DMC intercom groups

When creating a DMC group, you must coordinate with the other riders who will be the group creator.

#### **To create a DMC group:**

1. Confirm all group units are in DMC intercom mode (LED flashes green slowly).  
If your INSYDE is not in DMC intercom mode, tap  and .



2. The group creator and all group members: press  for 5" .



→ The LED flashes green quickly.

3. Only the group creator: tap .



→ The LED flashes red and green quickly.





4. Other members must join the group within 2 minutes.
5. After each member joins successfully, the LEDs of the joined unit and of the creator's unit flash purple.

After grouping is completed, the DMC intercom conference starts automatically.

#### 4.1.1.2 Joining DMC intercom groups



You can join or rejoin a DMC intercom group created by another rider.

If your DMC group connection is lost, you remain part of the group. Once in range of any other group member, you automatically reconnect.


If your DMC group splits with some group members remaining in range of each other but not in range of all group members, you can continue speaking with the members still in range. Once in range of any other group member, you automatically reconnect.

If you join a new DMC group, you automatically leave your existing DMC group.

##### **To join an existing DMC group:**

1. Confirm both your INSYDE and the creator's unit are in DMC intercom mode (LED flashes green slowly): if your INSYDE is not in DMC intercom mode, tap  and .



2. Both you and the group creator: press  for 5 seconds.



→ The LED flashes green quickly.

3. Only the group creator: tap .




→ The LED flashes red and green quickly.

The color of the flashing LED indicates whether you have been added to the group:



- Purple: successfully joined the group.
- Yellow: can't join the group because it has reached the maximum number of riders.
- Red: failed to join.



### 4.1.1.3 Deleting DMC intercom groups:

 If you delete a DMC intercom group, you must rejoin it if you want to connect to it again in the future.

#### *To delete a DMC group:*

1. Confirm your INSYDE is in DMC intercom mode (LED flashes green slowly): if your INSYDE is not in DMC intercom mode, tap  and .



2. Press  for 5".



3. Press  for 2".




## 4.1.2 SETTING UP DMC INTERCOM GROUPS

### 4.1.2.1 Joining DMC intercom groups

You can use the DMC bridging feature to add a non-DMC rider or passenger to the intercom group.

#### *To bridge a non-DMC passenger/rider:*

1. Verify that the passenger/rider is paired via Bluetooth® (see Setting Up Non-DMC Intercom Groups).
2. On your unit, press .



#### *To disconnect the bridge:*

- Press .




### 4.1.2.2 Chatting privately

You can chat privately with a specific member of your DMC group.



This option is also available through the Cardo Connect app.

#### To chat privately:



1. In the Cardo Connect app, select the rider you want to speak with in private or pair with the rider's device on Bluetooth® channel 2. (For details on pairing, see Pairing Your Unit to Bluetooth® Devices).
2. To start or stop a private chat, tap  twice .




### 4.1.2.3 Muting/unmuting DMC intercom groups

Muting the DMC intercom mutes your microphone and speaker. Unmuting the DMC intercom restores sound to your microphone and speaker.

#### To mute/unmute the DMC group:

1. Confirm your INSYDE is in DMC intercom mode (LED flashes green slowly). If your INSYDE is not in DMC mode, tap  and  .



2. On your unit, press  for 2".




### 4.1.2.4 Background audio level and audio source priorities

The INSYDE can use parallel audio streaming to stream audio from two connected sources simultaneously, so that you can listen to your music or the FM radio while holding a DMC intercom conversation. INSYDE automatically manages your music and FM radio volume while using DMC intercom. INSYDE also automatically manages DMC intercom volume with mobile phone calls and GPS. For more information on background audio level and audio source priorities, see Using Parallel Audio Streaming.



## 4.2 BLUETOOTH® INTERCOM



To connect your unit to another unit with a Bluetooth® intercom, such as a Cardo Bluetooth® unit or other Bluetooth® enabled devices, you must first pair their channels. Once paired, the units automatically recognize each other whenever they are in range (line of sight up to 1.3 km subject to terrain).

 Pairing a channel replaces any existing paired unit on that channel with the new unit. The Intercom range with other models is limited to the distance of the unit with the shorter range. For details on how to pair and use your INSYDE with other Cardo units, go to Setting Up Non-DMC Intercom Groups.

### 4.2.1 SETTING UP NON-DMC INTERCOM GROUPS

DMC is always the best way to connect a group of riders. If you happen to ride with a group of riders that do not have DMC devices (such as Bluetooth® communicators by Cardo or by other brands), you can switch your unit to Bluetooth® mode and create or join a non-DMC group. The participating riders are connected in a chain with a maximum total of four riders.



#### To set up a Cardo non-DMC group:

1. Confirm your unit is in Standby Bluetooth® intercom mode (LED flashes blue slowly). If your unit is not in Bluetooth® intercom mode, tap  and .




For more information, see Switching between Intercom modes.

2. To initiate 2-way pairing:

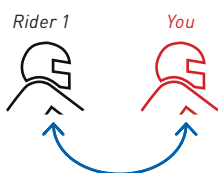
- On your unit, press  for 5"  to enter pairing mode with the device of



another user.

 Bluetooth® intercom pairing needs to be initiated on the other device.

- The unit confirms that pairing has succeeded.



→ The following announcement is heard: Rider A pairing.



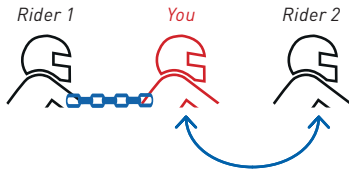
3. To add a 3<sup>rd</sup> rider:

- Press  for 5".



→ The LED flashes red.

- Tap  twice.

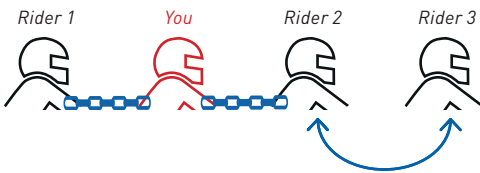


→ The following announcement is heard: Rider B pairing.



Bluetooth® intercom pairing needs to be initiated on the other device.



4. To add a 4<sup>th</sup> rider, Rider 1 or Rider 2 connects to the additional rider on his free channel.



Bluetooth® intercom pairing needs to be initiated on the additional device.




### To pair a non-Cardo Bluetooth® intercom group unit:

1. Confirm your unit is in Standby Bluetooth® intercom mode (LED flashes blue slowly).  
If your unit is not in Bluetooth® intercom mode, tap  and .





For more information, see Switching between Intercom modes.

2. To initiate 2-way pairing:
  - On your unit, press  for 5".



→ The LED flashes red.

- Tap   to activate the Cardo getaway.

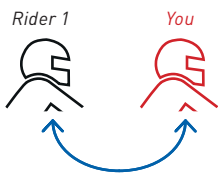


→ The LED flashes red and blue.



Bluetooth® intercom pairing needs to be initiated on the other device.

- The unit confirms that pairing has succeeded.





3. To add a 3<sup>rd</sup> rider:

- Press  for 5".



→ The LED flashes red.

- Tap  2 times.

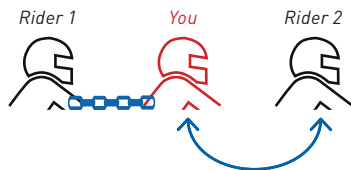


→ The LED flashes blue.

- Tap .

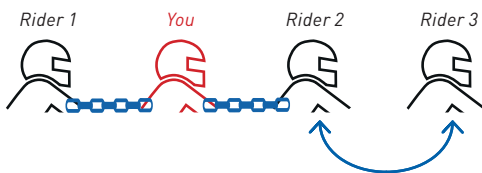


→ The LED flashes red and blue.




Bluetooth® intercom pairing needs to be initiated on the other device.

4. To add a 4<sup>th</sup> rider, Rider 1 or Rider 2 connects to the additional rider on his free channel.



Bluetooth® intercom pairing needs to be initiated on the other device.




To cancel the pairing process, press  for 5". The LED stops flashing. If pairing is not completed within 2 minutes, the unit automatically returns to Standby.



## 4.2.2 USING THE BLUETOOTH® INTERCOM

### 4.2.2.1 Starting / Ending Bluetooth® intercom calls

**To start or end communication with Rider 1:**

- Rider 1: tap  .

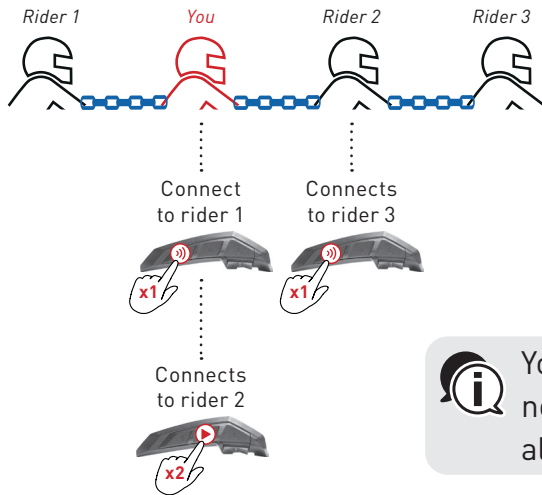


**To start or end communication with Rider 2:**

- Rider 2: tap  twice.



**To initiate a 4-way Bluetooth® conference:**



You can also start the Bluetooth intercom by making a loud noise, for example, by saying "Hey." If channels A and B are already paired, the conversation starts for both of them.

### 4.2.2.2 Receiving Bluetooth® intercom calls

If another paired unit calls you via Bluetooth® intercom and in standby, the call begins instantly.



## 4.2.3 USING THE BLUETOOTH® INTERCOM

Resetting Bluetooth® intercom pairing also resets all Bluetooth® device pairing.

**To reset Bluetooth® intercom pairing:**

1. Press  for 5".



2. When the LED flashes red, press  and  for 2".



→ The LED flashes purple five times slowly, confirming that pairing has been reset.





## 4.3 SHARING MUSIC AND RADIO

You can share music and FM radio with a passenger or other rider. Music sharing is more suitable for rider/passenger combinations, whereas FM radio is also intended for rider/rider combinations.



You can share music only in Bluetooth® intercom mode.

Music and radio can be shared with only one passenger/rider.

Bluetooth® intercom calls are disabled when sharing music.

FM radio sharing opens a Bluetooth® intercom call automatically.

If you paired your unit to two mobile phones, music will be shared from the mobile phone through which you last played music.

When sharing FM radio, either passenger/rider can change station while the Bluetooth® intercom call remains open.

When you stop sharing FM radio, the Bluetooth® intercom call remains open and the FM radio continues to play independently on each passenger/rider's unit.

When stop music sharing, music continues on your unit only.

### To start or end communication with Rider 2:

1. Confirm your INSYDE is in Bluetooth® intercom mode (LED flashes blue slowly).



If your INSYDE is not in Bluetooth® intercom mode, press and .

2. Start playing music or the FM radio.

3. Press for 2" to start sharing on Channel A (by default).



### To manually select the channel on which to share music or radio:

1. Start playing music or the FM radio.
2. Start a Bluetooth® intercom call on either channel (A or B).

3. Press for 2".



### To stop sharing:

- Press for 2".







## 4.4 SWITCHING BETWEEN INTERCOM MODES

Your INSYDE unit can work in only one intercom mode at a time.

The current intercom mode is indicated by the color of the LED:

- When in DMC intercom mode, the LED flashes green at approximately 4-second intervals.
- When in Bluetooth® intercom mode, the LED flashes blue at approximately 4-second intervals

**To switch from between intercom modes:**

- On your unit, tap  and .



→ The color of the flashing LED changes and a voice message indicates the current intercom mode.

## 5 TROUBLESHOOTING

### 5.1 SOFT RESET

If your INSYDE stops responding, reset it in one of these ways.



- Turning it off and then on again (see Getting Started).
- Using the supplied USB cable, connect your unit to the computer or wall charger for 30".

### 5.2 RESET PAIRING



This option deletes all paired units and devices.

**To reset pairing:**

1. Confirm your unit is in Standby Bluetooth® intercom mode (LED flashes blue slowly).  
If your unit is not in Bluetooth® intercom mode, tap  and .



For more information, see Switching between Intercom modes.



2. While in standby mode, press for 5".



3. When the LED flashes red, press and for 2".



→ The LED flashes purple 5 times slowly, confirming that pairing has been reset.

## 5.3 RESET TO FACTORY SETTINGS



This option deletes all paired units and devices.

### *To reset the factory settings:*

1. Check that your INSYDE is in Standby (see INSYDE LED Indications).
2. Simultaneously press + + for 5".



## 5.4 FAQ

Additional answers to common problems can be found at:


<https://www.cardosystems.com/support/>



# 6 PERSONALIZING YOUR DEVICE

Get the most out of your INSYDE by changing the settings and customizing your unit according to your own personal preferences, using either of the following methods:

- Cardo Connect App on iOS or Android devices.

 Cardo recommends customizations and settings before getting out on the road. You can adjust any of these settings as required after experiencing them under road conditions.

Object	Default value	Description	Cardo Connect (iOS / Android)
AGC sensitivity (Off/Low/Medium/High)	Medium	AGC automatically adjusts speaker volume according to ambient noise and riding speed. For example, when set to Low, higher ambient noise will cause the volume increase to kick in at a higher level.	yes
Audio priority (A2DP/Bluetooth® intercom)	Bluetooth® intercom	Priority of audio source playing through speakers. Either music is not interrupted by an intercom call, or vice versa.	yes
Background Audio Level	N/A	Sets the background audio volume when parallel audio streaming is on (see Parallel audio streaming in Bluetooth® mode (Enable/Disable) below).	yes
Bluetooth® friendly name	INSYDE	Sets the name that appears on your phone while pairing and in the Cardo app.	yes
Create, join or leave a group of passengers/riders	Empty	DMC intercom groups. For more information, see Setting Up DMC intercom Groups.	yes
Download the latest firmware upgrade	N/A	Stay up-to-date by downloading software updates whenever a new version is available.	no
FM Band	According to your Region	If you are in Japan, select Japan. Otherwise, select World-wide.	yes
Intercom Mode (DMC/Bluetooth®)	DMC intercom	DMC intercom and Bluetooth® intercom.	yes
Language	According to Your Region	Voice announcements and voice assisted menus language (see "Spoken Status Announcements" below).	yes



Object	Default value	Description	Cardo Connect (iOS / Android)
Mobile priority	Mobile 1	If you paired your unit to two mobile phones, you must set one of them as the default phone for outgoing calls.	yes
Parallel audio streaming in Bluetooth® mode (Enable/Disable)	Disable	You can hear two audio sources simultaneously. For example, hear GPS while listening to music. Note: Parallel audio streaming may not work properly with some iOS devices (i.e., music player or GPS navigator) due to connected device limitations.	yes
RDS (Enable/Disable)	Disable	Radio Data System allows the radio to automatically retune to the strongest frequency available for the FM station you are listening to when the signal becomes too weak.	yes
Set speed dial numbers	Empty	Pre-set phone numbers for automatic dialing.	yes
Set the 6 FM radio presets	107.5	Pre-set FM radio stations.	yes
Spoken Status Announcements (Enable/Disable)	Enable	Voice announcements inform you to whom or to what device you are connected.	yes
Voice Control Enable	Enable	Voice activation (by saying a word or phrase loudly) of certain features for hands-free operation.	yes
Voice Control Sensitivity	Medium	Microphone sensitivity for voice activation functionality.	yes




AGC and voice control performance vary based on environmental conditions, including riding speed, helmet type and ambient noise. For improved performance, minimize the wind impact on the microphone by closing the visor and using the large microphone sponge.



## 6.1 SETTING THE DEFAULT MOBILE PHONE

If you paired your unit to two mobile phones, you must set one of them as the default phone for outgoing calls.

 If you do not set a default phone, the phone that you first paired with your unit is automatically set as the default phone.


**To switch from between intercom modes:**

- During a mobile call, press  for 5".



## 6.2 USING PARALLEL AUDIO STREAMING

With parallel audio streaming, you can hear GPS instructions during a mobile or Bluetooth® intercom call, or while listening to other audio sources, such as music or FM radio.

 Parallel audio streaming may not work properly with some iOS devices (i.e., music player or GPS navigator) due to connected device limitations.

Your INSYDE sets the various audio sources to either foreground (volume remains the same) or background (volume reduced) as described in the following table:

Mobile Phone 1/2	GPS	Intercom 1	Intercom 2	Music	FM Radio
Foreground	Foreground				
Foreground <sup>(1)</sup>		Foreground <sup>(1)</sup>			
	Foreground	Foreground			
	Foreground			Background	
	Foreground				Background
		Foreground		Background	
		Foreground			Background
		Foreground <sup>(2) (3)</sup>	Foreground <sup>(2) (3)</sup>		Background
				Foreground <sup>(4)</sup>	
					Foreground <sup>(5)</sup>

<sup>(1)</sup> If you add an intercom call to a mobile phone call creating a conference call, the volume for both audio sources is the same.

<sup>(2)</sup> If you make two intercom calls simultaneously creating an intercom conference call, the volume for both audio sources is the same.

<sup>(3)</sup> If you make two intercom calls simultaneously creating an intercom conference call, you cannot hear the mobile phone or GPS.



- <sup>(4)</sup> If you play music only, the music volume is not reduced.
- <sup>(5)</sup> If you play the FM radio only, the FM radio volume is not reduced.



In some cases, parallel audio streaming may not work properly due connected device limitations (music player or GPS navigator). For more information, see the FAQs. Cardo recommends that during a 3-way or 4-way Bluetooth® intercom conference call, the rider who is connected to only one intercom call listens for mobile phone and GPS announcements.

You cannot use music sharing for voice audio with riders during parallel audio streaming. Music can be streamed in the background during an active DMC intercom call.

You can configure parallel audio streaming via the Cardo Connect app.

## 6.3 AUDIO SOURCES PRIORITIES

If Parallel Audio Streaming is disabled, INSYDE manages the audio sources you hear through the speakers according to the following audio source priorities.

<b>Priority</b>	<b>Audio Source</b>
Higher priority	Mobile phone, GPS device instructions <sup>(1)</sup>
↑	Intercom (Click-to-Link/DMC and Bluetooth® modes) or Music <sup>(2)</sup>
	Music or Intercom (Click-to-Link/DMC and Bluetooth® modes) <sup>(3)</sup>
Lower priority	FM Radio

- <sup>(1)</sup> Phone calls and GPS temporarily mute DMC intercom, but group members remain part of the DMC intercom group.
- <sup>(2)</sup> When audio priority is set to Intercom, you cannot hear navigation app or SMS messages from your phone during an ongoing intercom call.
- <sup>(3)</sup> When audio priority is set to A2DP (music), the intercom is disabled while listening to music (via A2DP). A rider calling you by intercom hears a sound indicating you are not available.



Intercom modes all have the same priority, so ongoing intercom calls will not be interrupted by any other intercom call.



If you paired your unit to two mobile phones (see Setting the Default Mobile Phone), music will be shared from the mobile phone through which you last played music.



## 7 LED INDICATIONS

Your INSYDE operates in various modes. Each mode consists of a group of features currently available for your use. For example, when INSYDE plays music, it will be in music playing mode, enabling features related to playing music such as skipping to the next and previous tracks.

Events are considered to occur whenever you operate a feature and when INSYDE responds. For example, turning on music is an event. INSYDE's current mode is indicated by the unit LEDs. You also hear voice announcements on your unit for mode changes and events.

The following table shows LED indications for modes and events according to the current battery state.

LED	Flashing	Battery state	Mode or Event
Blue	for 2"	Normal	Rider B connected Set voice control to enable
Blue	fast (three times)	Normal, low battery charging	Power on
Blue	fast (repeating fast)	Normal, low battery charging	Pairing intercom rider B
Blue	Slow (repeated at 3-second intervals)	Normal	Standby
Blue	Slow twice (repeated at 3-second intervals)	Normal	Incoming/outgoing call (intercom or mobile) Audio active (intercom, FM, A2DP, GPS)
Green	Fast twice (repeated at 1-second intervals)	Normal or low battery	Active DMC intercom call
Green	Fast (repeating)	Normal or low battery	Pairing DMC intercom
Purple	For 2"	Normal, low battery charging	Mobile pairing successful Mobile pairing connected
Purple	Slow (5 times)	Normal low battery	Reset pairing
Purple/Red	Purple twice slowly, then red	Charging	Incoming/outgoing call (intercom or mobile) Audio active (intercom, FM, A2DP, GPS)
Purple/Red	Slow purple and red (repeating)	Charging	Standby
Red	Slow twice (repeated at 3-second intervals)	Low Battery	Incoming/outgoing call (intercom or mobile) Audio active (intercom, FM, A2DP, GPS)
Red	For 2"	Normal or Low Battery	DMC intercom pairing failed
Red	Fast (repeated at 3-second intervals)	Low Battery	Standby DMC intercom
Red	Fast (repeated at 3-second intervals)	Low Battery	Standby
Red	Fast (repeating fast)	Normal Low Battery Charging	Pairing intercom rider A
Red	Fast (3 times)	Normal Low Battery Charging	Power off
Red	For 2 seconds	Normal Low Battery Charging	Rider A connected Set voice control to disabled
Red	Remains on	Charging	Off
Red/Blue	Alternating fast	Normal Low Battery Charging	Pairing Mobile 1
Red/Blue	Alternating slow	Normal Low Battery	Pairing GPS 1
Red/Green	Alternating fast	Normal Low Battery Charging	Pairing Mobile 2
Red/Green	Alternating slow	Normal, Low Battery	Pairing GPS 2
Yellow	For 2 seconds	Normal Low Battery Charging	Intercom call attempted without microphone or audio kit connected. DMC intercom pairing successful





## 8 GLOSSARY

Term / Abbreviation	Description
A2DP	Advanced Audio Distribution Profile (for music). A protocol for playing music over Bluetooth®.
AGC sensitivity	AGC (Automatic Gain Control) automatically adjusts speaker volume according to ambient noise and riding speed.
Device	Mobile phone, GPS or music player.
DMC	Dynamic Mesh Communications.
IC	Intercom.
Intercom Mode (DMC/Bluetooth®)	DMC intercom or Bluetooth® intercom.
Language	Voice announcements and voice commands language.
Unit	Cardo or non-Cardo Bluetooth® Communication system.
Voice control	Voice activation (by saying a word or phrase) of certain features for hands-free operation.
Voice control sensitivity	Adjusts your microphone sensitivity for voice activation while you are riding.

## 9 SUPPORT

[www.cardosystems.com](http://www.cardosystems.com)

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