

# FREECOM 4+



HIGH POWERED TECHNOLOGY





For easy reference while on the road, download the Pocket Guide from [www.cardosystems.com/support/](http://www.cardosystems.com/support/).

This is version 1.0 of the FREECOM 4+ Manual. The latest version of the manuals in your preferred language and various tutorials can be found at [cardosystems.com/support/](http://cardosystems.com/support/).

### **Register your FREECOM 4+**

Registering your device 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 FREECOM 4+ may also be eligible for free product upgrades.

It's easy, just visit [www.cardosystems.com/cardo-community](http://www.cardosystems.com/cardo-community) and you'll be done in no time. Also, rest assured: Cardo does not share your details with others.

**Be SMART, register your FREECOM 4+.**

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## 1. INTRODUCTION

Thank you for choosing the Cardo FREECOM 4+ communication and entertainment system for motorcycle helmets.

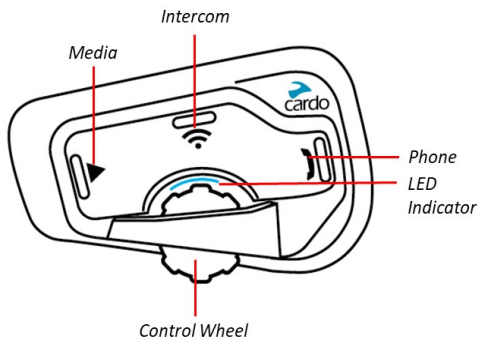
We wish you a great FREECOM 4+ experience and encourage you to write to us at [support@cardosystems.com](mailto:support@cardosystems.com) regarding any questions, suggestions or comments you may have.

If you have not yet installed the FREECOM 4+ unit on your helmet, please install it as described in the Installation Guide provided in the package.

And don't forget to register your FREECOM 4+ at [www.cardosystems.com/cardo-community](http://www.cardosystems.com/cardo-community).

## 2. GETTING STARTED

### 2.1 GETTING TO KNOW YOUR FREECOM 4+

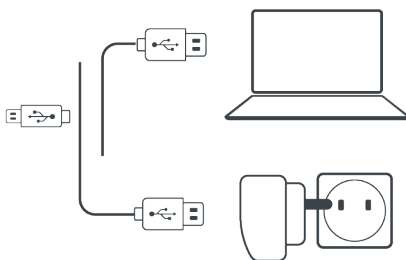


### 2.2 CHARGING THE FREECOM 4+

Make sure that your FREECOM 4+ 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 FREECOM 4+.



- 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](#) on page 5).



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

- Red LED on – charging
- Red LED off – charging complete

**TIP:** You can check the battery charge at any time by saying "Hey Cardo, battery status."

### 2.3 SWITCHING YOUR UNIT ON/OFF

To switch your FREECOM 4+ on:




- Press both  and  for **1 second**.  
The speaker plays an ascending tone and a voice message greets you.



The LED confirms your FREECOM 4+ is on:

- Normal and low battery – LED flashes blue three times.
- Charging – LED flashes red and purple three times.

**To switch your FREECOM 4+ off:**

- Press both  and . 
- The LED flashes red three times, confirming that your unit is switching off. The speaker plays a descending tone and a voice message, "Goodbye".

## 2.4 USING YOUR FREECOM 4+

You can operate the various features of your FREECOM 4+ in the following ways,;

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

You can also configure your unit by connecting it to a computer with the supplied USB cable and running the **Cardo Updater** while your computer is connected to the Cardo Community website.

## 2.5 PAIRING YOUR UNIT TO BLUETOOTH DEVICES

Your FREECOM 4+ 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 in standby mode, press  for **5 seconds**.   
The LED flashes red and blue.

3. On your mobile phone, search for Bluetooth devices.



4. When your FREECOM 4+ appears in the list of available devices, select it.  
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 seconds.

**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. On the unit in standby mode, press  for **5 seconds**. The LED flashes red and blue.
3. Tap  twice. The LED flashes red and green.
4. If you are pairing a GPS device, roll the control wheel forward.

The LED flashes slower.




5. On the device you are pairing, search for Bluetooth devices.
6. When your FREECOM 4+ 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 minutes, the unit automatically returns to Standby.
- If you have paired two different mobile phones directly to your FREECOM 4+, set one as default for making calls (see [Setting the Default Mobile Phone](#) on page 19).
- 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 seconds**.  
The LED stops flashing red and blue/green.



#### To reset all Bluetooth device pairing:

1. Press  for **5 seconds**.  
The LED flashes red and blue.



2. Press  and  for **2 seconds**.



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

### 3. ON THE ROAD

FREECOM 4+ 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:



- Roll the Control Wheel forward.  
An increasingly 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:



- Roll the Control Wheel backward.  
An increasingly 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:



- Roll the Control Wheel backward, then forward.

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




- Roll the Control Wheel in any direction.  
An ascending tone is played on the speaker.

#### 3.1.1 MAKING AND RECEIVING PHONE CALLS

You can use your mobile phone to make and receive phone calls while paired to your FREECOM 4+.

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.




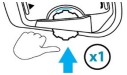
##### To make a phone call:

- To dial using your mobile phone's voice dial option, tap  or say "Hey Siri" (if you are using an iOS device) or "OK Google" (if you are using an Android device), 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, press and hold down  for 2 seconds or say "Hey Cardo, speed dial." (The speed dial number must be set in the Cardo Mobile App or community website 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 cannot receive phone calls.


#### To answer a call:

- Tap  or  or , or press the edge of the Control Wheel upward , or say **Answer**.




#### To reject a call:

- Press  or  or  for 2 seconds.

#### To ignore a call:

- Roll the Control Wheel backward, then forward, , or say **Ignore**.

#### To end a call:

- Tap  or , or press the edge of the Control Wheel upward .

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

Your FREECOM 4+ 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 .


### 3.1.2 STREAMING MUSIC

You can stream music from your paired device to your FREECOM 4+.

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

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

#### To stop music streaming:

- Press the edge of the Control Wheel upward  or say "Hey Cardo, music off."

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

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

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

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

**To toggle between FM and A2DP music:**

- Press  for 2 seconds.

### 3.1.2.1 SWITCHING MUSIC SOURCES

If two music (A2DP) audio sources are paired, FREECOM 4+ 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 [Streaming Music](#) on page 9).
2. Play music (A2DP) from the other device.

FREECOM 4+ automatically remembers your last played device.

## 3.2 LISTENING TO FM RADIO

The FREECOM 4+ 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 the edge of the Control Wheel upward  or say "Hey Cardo, radio off."

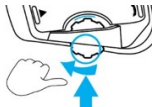

**To skip to the next station:**

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

**To skip back to the previous station:**

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

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

1. Press the edge of the Control Wheel upward and simultaneously roll it forward.  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 seconds of stopping the scan.

**To toggle between FM and A2DP music:**

- Press  for 2 seconds.

**3.3 VOICE COMMANDS**

You can use voice commands for hands-free operation of certain FREECOM 4+ features. Voice commands use voice recognition. You loudly say a command and FREECOM 4+ performs the action. Voice commands are available in various languages. English is the default language. You can change the language to another available language.

FREECOM 4+ uses the following predefined voice commands.

To ...	Say ...
Turn on the radio	"Hey Cardo, radio on"
Turn off the radio	"Hey Cardo, radio off"
Skip to the next preset radio station	"Hey Cardo, next station"
Skip 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"
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"
Open the call intercom	"Hey Cardo, call intercom"

## 4. RIDING WITH OTHERS

### 4.1 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 1.2 km / 3,900 ft subject to terrain).

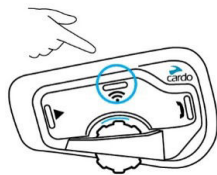
- Pairing a channel replaces any existing paired unit on that channel with the new unit.
- If you purchased the FREECOM 4+ DUO, the retail package contains two pre-paired units.
- The Intercom range with other models is limited to the distance of the unit with the shorter range.

### 4.2 SETTING UP BLUETOOTH INTERCOM GROUPS

You can use your FREECOM 4+ to create or join a Bluetooth group. The participating riders are connected in a chain with a maximum total of four riders.

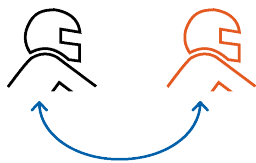
#### To set up a Bluetooth group:

1. Confirm your unit is in Standby mode (LED flashes blue slowly).
2. To initiate 2-way pairing:
  - On your unit, press  for **5 seconds** to enter pairing mode.





The LED flashes red.

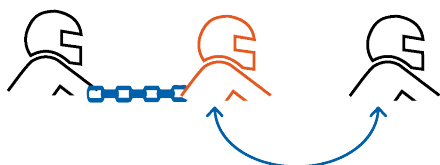
- The following announcement is heard: Rider A pairing.



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

The unit confirms that pairing has succeeded.

3. To add a 3rd rider:
  - Press  for **5 seconds**. The LED flashes red.
  - Tap  2 times. The LED flashes blue.

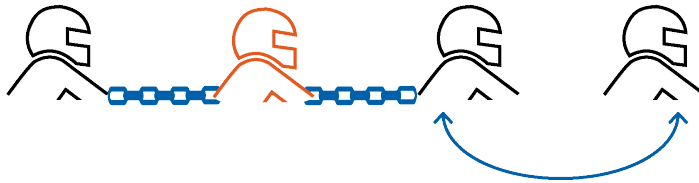


The following announcement is heard: Rider B pairing.

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

The unit confirms that pairing has succeeded.

- To add a 4th rider, Rider 1 or Rider 2 connects to the additional rider.

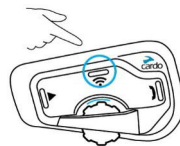



Bluetooth intercom pairing needs to be initiated on the other device.

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

- Confirm your unit is in Standby mode (LED flashes blue slowly).
- To initiate 2-way pairing:

- On your unit, press  for **5 seconds**. The LED flashes red.

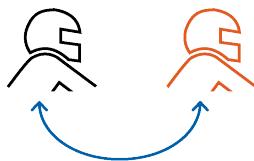


- Tap  to activate the Cardo gateway. The LED flashes red and blue.





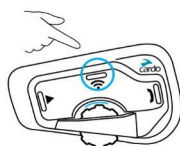
Mobile phone pairing needs to be initiated on the other device.

- The unit confirms that pairing has succeeded.

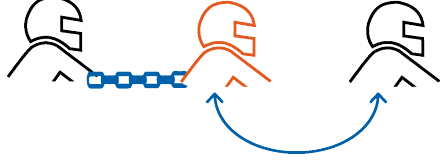


- To add a 3rd rider:

- Press  for **5 seconds**. The LED flashes red.
- Tap  2 times. The LED flashes blue.



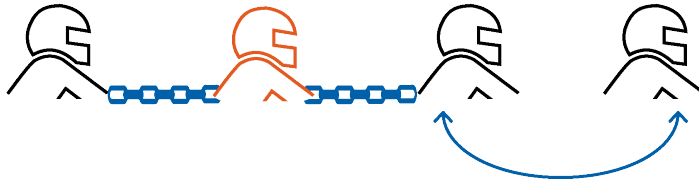
- Tap . The LED flashes red and blue.




Mobile phone pairing needs to be initiated on the other device.

The unit confirms that pairing has succeeded.

4. To add a 4th rider, Rider 1 or Rider 2 connects to the additional rider.



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

### 4.3 STARTING/ENDING INTERCOM CALLS

You can initiate Bluetooth intercom calls with other riders, including non-Cardo riders.

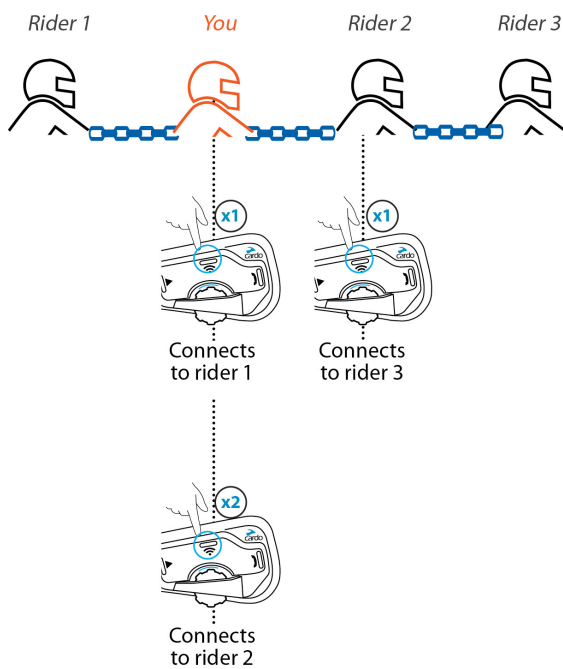
**To start or end communication with Rider 1:**



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



**To initiate a 4-way intercom conference:**



#### 4.3.1 RECEIVING BLUETOOTH INTERCOM CALLS

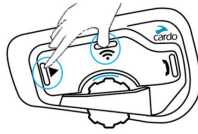
If another paired unit calls you via Bluetooth intercom, the call begins instantly.

### 4.4 RESETTING BLUETOOTH INTERCOM PAIRING

Resetting Bluetooth intercom pairing also resets all Bluetooth device pairing.

**To reset Bluetooth intercom pairing:**

1. Press  for 5 seconds. The LED flashes red.



2. Press  and  for **2 seconds**.

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


#### 4.5 SHARING MUSIC AND RADIO

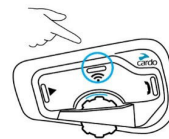
You can share music and FM radio with a passenger or other rider. Music sharing is more suitable for rider/passenger combinations, whereas FM radio is also intended for rider/rider combinations.

- 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 you stop sharing music, the music continues to play on your unit only.


#### To start/stop sharing:

1. Start playing music or the FM radio.

2. Press  for 2 seconds 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 seconds.

#### To stop sharing:

- Press  for 2 seconds.



## 5. TROUBLESHOOTING

### 5.1 SOFT RESET

If your FREECOM 4+ stops responding, reset it in one of these ways:




- Turning it off and then on again (see [Getting Started](#) on page 5).
- Using the supplied USB cable, connect your unit to the computer or wall charger for 30 seconds.

### 5.2 RESET PAIRING

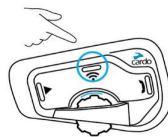
The options below delete all paired units or devices.




**To reset mobile device pairing:**



1. While in standby mode, press  for **5 seconds**.  
The LED flashes red and blue.
2. Press  and  for 2 seconds.  
The LED flashes purple 5 times slowly, confirming that pairing has been reset.

**To reset intercom pairing:**



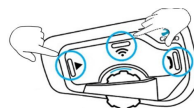
1. While in standby mode, press  for **5 seconds**.  
The LED flashes red
2. Press  and  for **2 seconds**.  
The LED flashes purple 5 times slowly, confirming that pairing has been reset.




### 5.3 RESET TO FACTORY SETTINGS

This option deletes all paired units, devices and all configuration settings.

**To perform a factory reset through the unit:**

1. Check that your FREECOM 4+ is in Standby mode (see [FREECOM 4+ LED Indications](#) on page 22).



2. Simultaneously press  +  +  for **5 seconds**.  
The LED flashes purple 5 times slowly, confirming that pairing has been reset.

### 5.4 FAQ

Additional answers to common problems can be found at [www.cardosystems.com/support](http://www.cardosystems.com/support).

## 6. PERSONALIZING YOUR DEVICE

Get the most out of your FREECOM 4+ by changing the settings and customizing your unit according to your own personal preferences, using either of the following methods:

- Cardo Mobile App on iOS or Android devices.
- Cardo Community on Windows / Mac - minimum requirements - Windows® 7 / Mac OS X 10.8
- Unit buttons.

Cardo recommends you customize your settings before going out on the road. You can adjust any of these settings as required after experiencing them under road conditions.

Object	Default Value	Description	Cardo Mobile App (iOS/Android)	Cardo Community
<b>AGC sensitivity (Off/Low/Medium/High)</b>	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.	✓	✓
<b>Audio priority (A2DP/Bluetooth intercom)</b>	Bluetooth intercom	Priority of audio source playing through speakers. Either music is not interrupted by an intercom call, or vice-versa.	✓	✓
<b>Background Audio Level</b>	N/A	Sets the background audio volume when parallel audio streaming is on (see <a href="#">Parallel audio streaming in Bluetooth intercom (Enable/Disable)</a> below).	✓	✗
<b>Bluetooth friendly name</b>	FREECOM 4+	Sets the name that appears on your phone while pairing and in the Cardo app.	✓	✓
<b>Download the latest firmware upgrade</b>	N/A	Stay up-to-date by downloading software updates whenever a new version is available.	✗	✓
<b>FM Band</b>	According to Your Region	If you are in Japan, select <b>Japan</b> . Otherwise, select <b>Worldwide</b> .	✓	✓
<b>Language</b>	According to Your Region	Voice announcements and voice-assisted menus language (see <a href="#">Spoken Status Announcements</a> below).	✓	✓
<b>Mobile priority</b>	Mobile 1	If you paired your unit to two mobile phones, you must set one of them as the default phone for outgoing calls.	✓	✗
<b>Parallel audio streaming in Bluetooth intercom (Enable/Disable)</b>	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.	✓	✓
<b>RDS (Enable/Disable)</b>	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.	✓	✓

Object	Default Value	Description	Cardo Mobile App (iOS/Android)	Cardo Community
<b>Set speed dial numbers</b>	Empty	Pre-set phone numbers for automatic dialing.	✓	✓
<b>Set the 6 FM radio presets</b>	107.5	Pre-set FM radio stations.	✓	✓
<b>Spoken Status Announcements (Enable/Disable)</b>	Enable	Voice announcements inform you to whom or to what device you are connected.	✓	✓


AGC and voice control performance vary based on environmental conditions, including riding speed, helmet type and ambient noise. For improved voice control 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 set the default phone:

- During a mobile call, press  for **5 seconds**.



## 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 FREECOM 4+ 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 to connected device limitations (music player or GPS navigator). For more information, see [cardosystems.com/support](http://cardosystems.com/support).

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.

You can configure parallel audio streaming via the Cardo app or the Cardo Community.

### 6.3 AUDIO SOURCE PRIORITIES

If Parallel Audio Streaming is disabled, FREECOM 4+ manages the audio sources you hear through the speakers according to the following audio source priorities.

Priority	Audio Source
<p><b>Higher Priority</b></p> <p style="text-align: center;">↑</p> <p><b>Lower Priority</b></p>	<p>Mobile phone, GPS device instructions Intercom or Music<sup>1</sup> Music or Intercom<sup>2</sup> FM Radio</p>

<sup>1</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>2</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](#) on page 19), music will be shared from the mobile phone through which you last played music.

## APPENDIX A. FREECOM 4+ LED INDICATIONS

Your FREECOM 4+ operates in various modes. Each mode consists of a group of features currently available for your use. For example, when FREECOM 4+ 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 FREECOM 4+ responds. For example, turning on music is an event.

The device'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 seconds	Normal	<ul style="list-style-type: none"> <li>Rider B connected</li> <li>Set voice control to enabled</li> </ul>
Blue	Fast (three times)	Normal Low Battery Charging	<ul style="list-style-type: none"> <li>Power on</li> </ul>
Blue	Fast (repeating fast)	Normal, Low Battery Charging	<ul style="list-style-type: none"> <li>Pairing intercom rider B</li> </ul>
Blue	Slow (repeated at 3-second intervals)	Normal	<ul style="list-style-type: none"> <li>Standby</li> </ul>
Blue	Slow twice (repeated at 3-second intervals)	Normal	<ul style="list-style-type: none"> <li>Incoming/outgoing call (intercom or mobile)</li> <li>Audio active (intercom, FM, A2DP, GPS)</li> </ul>
Purple	For 2 seconds	Normal Low Battery Charging	<ul style="list-style-type: none"> <li>Mobile pairing successful</li> <li>Mobile connected</li> </ul>
Purple	Slow (5 times)	Normal Low Battery	<ul style="list-style-type: none"> <li>Reset pairing</li> </ul>
Purple/Red	Purple twice slowly, then red	Charging	<ul style="list-style-type: none"> <li>Incoming/outgoing call (intercom or mobile)</li> <li>Audio active (intercom, FM, A2DP, GPS)</li> </ul>
Purple/Red	Slow purple and red (repeating)	Charging	<ul style="list-style-type: none"> <li>Standby</li> </ul>
Red	Slow twice (repeated at 3-second intervals)	Low Battery	<ul style="list-style-type: none"> <li>Incoming/outgoing call (intercom or mobile)</li> <li>Audio active (intercom, FM, A2DP, GPS)</li> </ul>
Red	Fast (repeated at 3-second intervals)	Low Battery	<ul style="list-style-type: none"> <li>Standby</li> </ul>
Red	Fast (repeating fast)	Normal Low Battery Charging	<ul style="list-style-type: none"> <li>Pairing intercom rider A</li> </ul>
Red	Fast (3 times)	Normal Low Battery Charging	<ul style="list-style-type: none"> <li>Power off</li> </ul>
Red	For 2 seconds	Normal Low Battery Charging	<ul style="list-style-type: none"> <li>Rider A connected</li> <li>Set voice control to disabled</li> </ul>
Red	Remains on	Charging	<ul style="list-style-type: none"> <li>Off</li> </ul>
Red/Blue	Alternating fast	Normal Low Battery Charging	<ul style="list-style-type: none"> <li>Pairing Mobile 1</li> </ul>
Red/Blue	Alternating slow	Normal Low Battery	<ul style="list-style-type: none"> <li>Pairing GPS 1</li> </ul>

LED	Flashing	Battery State	Mode or Event
<b>Red/Green</b>	Alternating fast	Normal Low Battery Charging	• Pairing Mobile 2
<b>Red/Green</b>	Alternating slow	Normal, Low Battery	• Pairing GPS 2
<b>Yellow</b>	For 2 seconds	Normal Low Battery Charging	• Intercom call attempted without microphone or audio kit connected

## 7. GLOSSARY

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



## 8. SUPPORT

For additional information:

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

✉ [support@cardosystems.com](mailto:support@cardosystems.com)

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