

CARDO FREECOM 2

Bluetooth Communication System

MANUAL



For easy reference while on the road, download the Pocket Guide from cardosystems.com/quick-guides/.

This is version 1.0 of the FREECOM 2 Manual. The latest version of the manuals in your preferred language and various tutorials can be found at cardosystems.com/product-manuals/.

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1. INTRODUCTION

Thank you for choosing the Cardo FREECOM 2 Bluetooth® communication and entertainment system for motorcycle helmets.

This Manual describes the features of your FREECOM 2 and how to use them.

We wish you a great FREECOM 2 experience and encourage you to write to us at support@cardosystems.com regarding any questions, suggestions or comments you may have.

If you have not yet installed the FREECOM 2 unit in your helmet, please install it as described in the Installation Guide provided in the package.

2. CHARGING THE FREECOM 2

Make sure that your FREECOM 2 battery is charged for at least 4 hours before initial use.

To charge the FREECOM 2:

1. Using the supplied USB cable, connect your computer or a wall charger to the FREECOM 2 USB port.



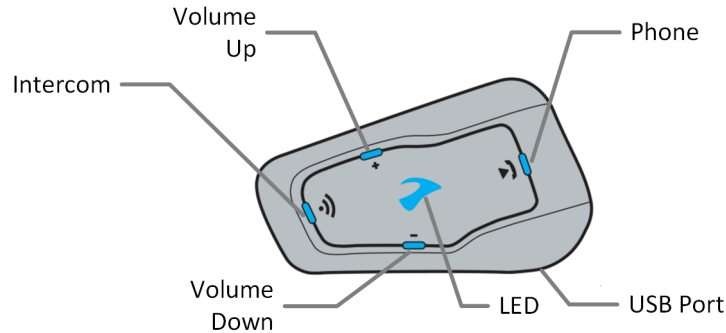
- Charging with the wall charger is faster than via a computer USB port.
- Charging your unit switches it off automatically. To use your unit while it is being charged, switch it on. (see [Switching Your Unit On/Off](#) on page 6).

During charging, the LED indicates charging status as follows:

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

3. GETTING STARTED

3.1 GETTING TO KNOW YOUR FREECOM 2



3.2 SWITCHING YOUR UNIT ON/OFF

To switch your FREECOM 2 on:

- Press and for 1 second. The speaker plays an ascending tone and a voice message "Hello FREECOM 2".

In all battery states, the LED flashes blue three times repeatedly, confirming that your FREECOM 2 is on.

To switch your FREECOM 2 off:

- Tap and .

In all battery states, the LED flashes red three times repeatedly, confirming that your FREECOM 2 is switching off. The speaker plays a descending tone and a voice message "Goodbye".

Connecting your unit to a charger switches off the unit.

3.3 DIFFERENT WAYS TO OPERATE YOUR FREECOM 2

You can operate the various features by any of the following methods:

- Pressing a button or combination of buttons on the unit.
- Using the SmartSet app on your mobile device (once it is paired with the unit).
- Using the Voice-Assisted Menu in combination with unit buttons. or with the VOX (voice activation). VOX is for hands free operation of your FREECOM 2. You can say a word or phrase loudly when the voice-assisted menu reaches the function you want to use and your FREECOM 2 performs that function. You can also adjust VOX sensitivity for the microphone, see [Configuring Your FREECOM 2 Basic Settings through the SmartSet App](#) on page 14.

LEDs, tones and voice announcements guide you while using the functions of your FREECOM 2, as described in [FREECOM 2 Modes and Events - LED Indications](#) on page 33.

This manual describes the most suitable method or methods to operate each feature.

3.4 BASIC FUNCTIONS

To turn the volume up for current audio source:

- 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 for current audio source:

- 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 when an audio source is active:

- Tap  and .

A descending tone is played on the speaker.

Automatic Gain Control (AGC) adjusts your speaker volume according to ambient noise and riding speed. To adjust AGC sensitivity, see [Configuring Your FREECOM 2 Basic Settings through the SmartSet App](#) on page 14.

3.5 PAIRING YOUR UNIT TO BLUETOOTH DEVICES


Your FREECOM 2 has two Bluetooth channels for connection to Bluetooth devices such as mobile phones, GPS devices and Bluetooth music players with A2DP.

To connect your FREECOM 2 to a Bluetooth device, you must first pair them while in Standby (see [FREECOM 2 Modes and Events - LED Indications](#) on page 33). Once paired, they automatically recognize each other whenever they are within range.



3.5.1 PAIRING THROUGH THE UNIT BUTTONS

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.


To pair Bluetooth channel 1 to a mobile phone:

1. Enable Bluetooth on the mobile phone.
2. Press  for 5 seconds. The LED flashes red and blue.
3. Search for Bluetooth devices on your mobile phone as described in your phone's instructions.
4. After a few seconds the phone lists your FREECOM 2. Select it.
5. If prompted for a PIN or Passkey, enter 0000 (four zeros).
6. 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 (such as mobile phone, GPS device, music player).
2. Press  for 5 seconds. The LED flashes red and blue.
3. Tap  twice. The LED starts flashing red and green.

If you are pairing a GPS device, make sure you perform the next step.

4. If you are pairing a GPS device, tap . The LED flashes slower.
5. On the device you are pairing, search for Bluetooth devices (as described in its instructions).
6. After a few seconds the device lists your FREECOM 2. Select it.
7. If prompted for a PIN or Passkey, enter 0000 (four zeros).
8. 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 2, set one as default for making calls (see [Setting the Default Mobile Phone](#) on page 21).
- 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 or red and green.

To reset all Bluetooth device pairing:





- Press  and  for 5 seconds.

In all battery states, the LED flashes purple slowly five times, confirming that pairing has been reset.

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

3.5.2 PAIRING THROUGH THE VOICE-ASSISTED MENU

To pair your FREECOM 2 with devices through the voice-assisted menu:

1. Tap  and .
2. When the voice-assisted menu reaches "Advanced Features", tap  or use VOX.
3. When the voice-assisted menu reaches the required option, tap  or use VOX.

- To reset all Bluetooth pairing, select the menu option "Reset Mobiles and GPS Pairing".

3.6 PAIRING THE BLUETOOTH INTERCOM


The FREECOM 2 allows full-duplex Bluetooth intercom communication for chatting with another rider on Cardo or non-Cardo units.

To connect your unit to another unit with a Bluetooth intercom, you must first pair their channels.




- Pairing a channel replaces any existing paired unit on that channel with the new unit.
- If you have purchased the FREECOM 2 MultiSet, the retail package contains two pre-paired units.
- Your FREECOM 2 is compatible with most Cardo models for Bluetooth intercom calls. In addition, it is also compatible with the Schuberth SRC-System™.
For details on how to pair and use your FREECOM 2 with other Cardo units, go to www.cardosystems.com/freecomcompatibility.

3.6.1 PAIRING THE BLUETOOTH INTERCOM TO OTHER CARDO UNITS


To pair your Unit with Cardo units through the unit buttons:

1. Confirm your unit is in Standby mode (LED flashes slowly).
2. On your unit, press  for 5 seconds. The LED flashes red.

3. On the other Cardo unit, activate Bluetooth intercom pairing mode (see the other Cardo unit user manual at cardosystems.com/product-manuals/).
4. The unit confirms that pairing has succeeded and the LED flashes for 2 seconds.





- 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.
- To reset all Bluetooth intercom pairing while in Bluetooth intercom pairing mode:
 - Press  and  for 2 seconds. The LED flashes purple 5 times slowly, confirming that pairing has been reset.

To pair your FREECOM 2 with Cardo units through the SmartSet app:

1. Confirm your unit is in Standby mode (LED flashes slowly).
1. Open the SmartSet app and tap .
2. Tap **Bluetooth**.
3. Under **Riders**, tap **Add** (or **Change** if you are changing to whom the channel is paired) and follow the on screen menus.
4. On the other Cardo unit, activate Bluetooth intercom mode (see the other Cardo unit user manual at cardosystems.com/product-manuals/).
5. The unit confirms that pairing has succeeded and the LED flashes for 2 seconds.

- To reset all Bluetooth intercom pairing, tap **Delete all**.



To pair your FREECOM 2 with Cardo units through the voice-assisted menu:




1. Confirm your unit is in Standby mode (LED flashes slowly).
2. Tap  and .
3. When the voice-assisted menu reaches "Advanced Features", tap  or use VOX.
4. When the voice-assisted menu reaches "Pair Intercom Channel A", tap  or use VOX.
5. On the other Cardo unit, activate Bluetooth intercom pairing mode (see the other Cardo unit user manual at cardosystems.com/product-manuals/).
6. The unit confirms that pairing has succeeded and the LED flashes for 2 seconds.

3.6.2 PAIRING THE BLUETOOTH INTERCOM TO NON-CARDO UNITS


The Cardo gateway enables Cardo units to connect to non-Cardo units over Bluetooth.

To pair your FREECOM 2 with non-Cardo units through the unit buttons:





1. Confirm your unit is in Standby mode (LED flashes slowly).
2. On your unit, press  for 5 seconds. The LED flashes red.
3. Tap  to activate the Cardo gateway. The LED flashes red and blue.
4. On the non-Cardo unit, activate Bluetooth mobile pairing mode (see the non-Cardo unit user manual).
5. The unit confirms that pairing has succeeded and the LED flashes purple for 2 seconds.

- 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.
- To reset all Bluetooth intercom pairing while in Bluetooth intercom pairing mode:
 - Press  and  for 2 seconds. The LED flashes purple 5 times slowly, confirming that pairing has been reset.

To pair your FREECOM 2 with non-Cardo units through the SmartSet app:

1. Confirm your unit is in Standby mode (LED flashes slowly).
2. Open the SmartSet app and tap .
3. Tap **Bluetooth**.
4. Under **Riders**, tap **Add** (or **Change** if you are changing to whom the channel is paired) and follow the on screen menus.
5. On the non-Cardo unit, activate Bluetooth mobile pairing mode (see the non-Cardo unit user manual).
6. The unit confirms that pairing has succeeded and the LED flashes purple for 2 seconds.

To pair your FREECOM 2 with non-Cardo units through the voice-assisted menu:

1. Confirm your unit is in Standby mode (LED flashes slowly).
2. Tap  and .
3. When the voice-assisted menu reaches "Advanced Features", tap  or use VOX.
4. When the voice-assisted menu reaches "Pair Cardo Gateway", tap  or use VOX.
5. On the non-Cardo unit, activate Bluetooth mobile pairing mode (see the non-Cardo unit user manual).
6. The unit confirms that pairing has succeeded and the LED flashes purple for 2 seconds.

4. BEFORE YOU RIDE

Get the most out of your FREECOM 2 by changing the settings and customizing your unit according to your own personal preferences, using either of the following methods:

- SmartSet App on iOS / Android (see [Configuring Your FREECOM 2 through the SmartSet App](#) on page 14).
- Cardo Community on Windows / Mac - minimum requirements - Windows® 7 / Mac OS X 10.8 (see [Configuring Your FREECOM 2 through Cardo Community](#) on page 18).
- Unit buttons.
- Configuration voice menu on your device.

Cardo recommends customizations and settings before getting out on the road.

Object	Default Value	Description	SmartSet App (iOS/Android)	Cardo Community	Configuration Voice Menu
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.	✓	✓	✓
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.	✓	✓	✓
Background Audio Level	N/A	Sets the background audio volume when parallel audio streaming is on (see Parallel audio streaming (Enable/Disable) below).	✓	x	x
Bluetooth friendly name	FREECOM 2	Sets the name that appears on your phone while pairing and in the SmartSet app.	✓	✓	x

Object	Default Value	Description	SmartSet App (iOS/Android)	Cardo Community	Configuration Voice Menu
Click-to-Link settings (Enable/Disable)	Enable	Spontaneous way to instantly initiate one-on-one intercom calls with a Cardo passenger/nearby rider, without being paired.	✓	✓	✓
Download the latest firmware upgrade	N/A	Stay up-to-date by downloading software updates whenever a new version is available (, see Configuring Your FREECOM 2 Basic Settings through Cardo Community on page 18.	✗	✓	✗
FM Band	According to Your Region	If you are in Japan, select Japan . Otherwise, select Worldwide .	✓	✓	✗
Language	According to Your Region	Voice announcements and voice-assisted menus language (see "Spoken Status Announcements" below). To select a language that is not in your region, you must first change your region through Cardo Community.	✓	✓	✓
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.	✓	✗	✗

Object	Default Value	Description	SmartSet App (iOS/Android)	Cardo Community	Configuration Voice Menu
Parallel audio streaming (Enable/Disable)	Enable	<p>You can hear two audio sources simultaneously. For example, hear GPS while listening to music.</p> <p>Limitations may apply when using certain iOS devices.</p>	✓	✓	✓
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.	✓	✓	✓
Set speed dial numbers	Empty	Pre-set phone numbers for automatic dialing.		✓	x
Set the 6 FM radio presets	107.5	Pre-set FM radio stations.	✓	✓	x
Spoken Status Announcements (Enable/Disable)	Enable	Voice announcements inform you to whom or to what device you are connected.	✓	✓	✓
VOX activation (Enable/Disable)	Enable	Enables voice activation of certain features for hands-free operation.	✓	✓	✓
VOX sensitivity (Low/Medium/High)	Medium	Adjusts your microphone sensitivity for voice activation while riding. For example, in high ambient noise situations, setting VOX sensitivity to low requires speaking loudly.	✓	✓	✓

AGC and VOX 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.

4.1 CONFIGURING YOUR FREECOM 2 THROUGH THE SMARTSET APP


You can configure your FREECOM 2 through your mobile phone by installing the SmartSet app available at Google Play Store and Apple App Store.

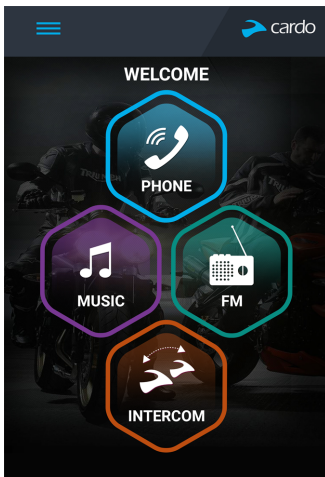
The minimum operating system requirements for the SmartSet app are:

- Android: 4.0 and higher
- IOS: 8 and higher

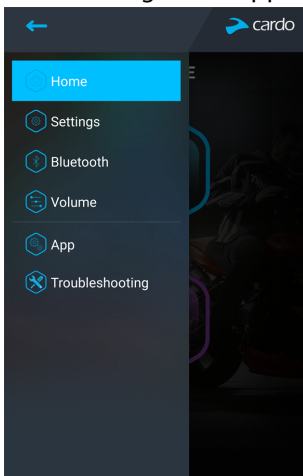
4.1.1 CONFIGURING YOUR FREECOM 2 BASIC SETTINGS THROUGH THE SMARTSET APP

To configure your FREECOM 2 through the SmartSet app:

1. Make sure that your unit is paired to the mobile device on which the SmartSet app is installed.
2. Open the SmartSet app and tap :





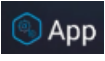
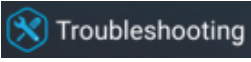
3. The following screen appears.



4. Use the appropriate menu to configure your FREECOM 2 settings:

-  **Settings** - FREECOM 2 features:

Group	Description/Options
MY DEVICE	<ul style="list-style-type: none"> Change Device Name.
LANGUAGE	<ul style="list-style-type: none"> Set Language.
Spoken Status Announcements	<ul style="list-style-type: none"> Enable/disable.
VOX	<ul style="list-style-type: none"> Enable/disable VOX Activation. Set VOX Sensitivity (low, medium, or high).
AGC	<ul style="list-style-type: none"> Enable/disable AGC Activation. Set AGC Sensitivity (low, medium, or high).
FEATURES	<ul style="list-style-type: none"> Enable/disable Click-to-link. Enable/disable IC to Phone. Enable/disable Parallel Audio Streaming. Set A2DP/IC Priority (A2DP or Intercom). Set FM Band Region (Worldwide or Japan).
Reset to Factory	<ul style="list-style-type: none"> Resets the unit to factory defaults.

-  **Bluetooth** - manage devices and passenger/nearby rider.
-  **Volume** - sets the level for each audio source (mobile phone, intercom, music, FM, announcements, parallel audio streaming).
-  **App** - SmartSet app preferences and general information.
-  **Troubleshooting** - **FAQ**, email Cardo **SUPPORT, FEEDBACK**.


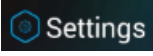
4.1.2 CONFIGURING YOUR FM RADIO

Your FREECOM 2 includes a built-in FM radio with six presets and Radio Data System (RDS), as described in the following sections.

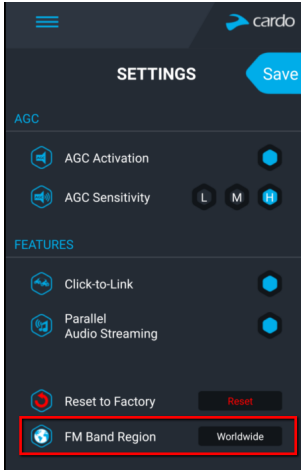
4.1.2.1 SETTING THE FM BAND

The FM Band Frequency is set to Worldwide FM frequencies by default. In Japan, you must change the FM Band.

To set the FM Band:

- Open the SmartSet app and tap :
- Tap .

- Under **FEATURES**, scroll to **FM Band Region** and tap **Worldwide** or **Japan** as required.



4.1.2.2 CONFIGURING YOUR FM RADIO MANUALLY

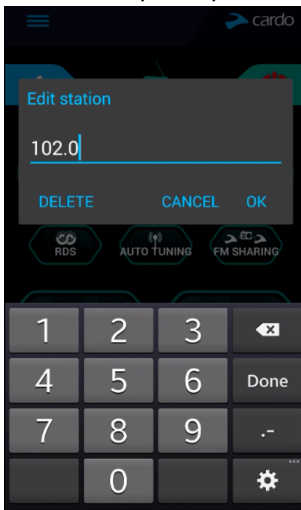
You can configure your FM radio preset stations manually or by using auto scan (see [Configuring Your FM Radio Using Auto Tuning](#) on page 17).

To configure the six FM radio preset radio stations manually:

- In the Home screen, tap **FM**.



- Press the required preset until the following screen appears:



3. Enter the desired FM station's frequency and tap OK.
4. To delete a preset station, tap **DELETE**.

- Preset radio station 1 cannot be deleted.
- During a station scan, deleted preset radio stations are skipped. The station scan automatically advanced to the next defined preset station. For more information, see [Listening to FM Radio](#) on page 26.


4.1.2.3 CONFIGURING YOUR FM RADIO USING AUTO TUNING

You can configure your FREECOM 2 FM radio preset stations using auto scan, which automatically locates FM stations and temporarily stores them.

To temporarily configure the six FM radio preset stations using Auto Tuning:

1. In the Home screen, tap **FM**.



2. Press . The presets are temporarily set to FM stations with the strongest signal available.


4.1.2.4 CONFIGURING FM RADIO RDS THROUGH THE SMARTSET APP

RDS allows the FM radio to automatically retune to the strongest frequency available for the FM station you are listening to when the signal becomes too weak.

To enable/disable RDS:

1. In the Home screen, tap **FM**.



2. Tap . RDS is enabled/disabled.

4.2 CONFIGURING YOUR FREECOM 2 THROUGH CARDO COMMUNITY

You can configure your FREECOM 2 unit by connecting the unit to a computer with the supplied USB cable and running the **Cardo Updater** while your computer is connected to the Cardo Community website.

The minimum operating system requirements for the Cardo Updater are:

- Windows® 7
- Mac OS X 10.8

4.2.1 INSTALLING THE CARDO UPDATER ON YOUR COMPUTER

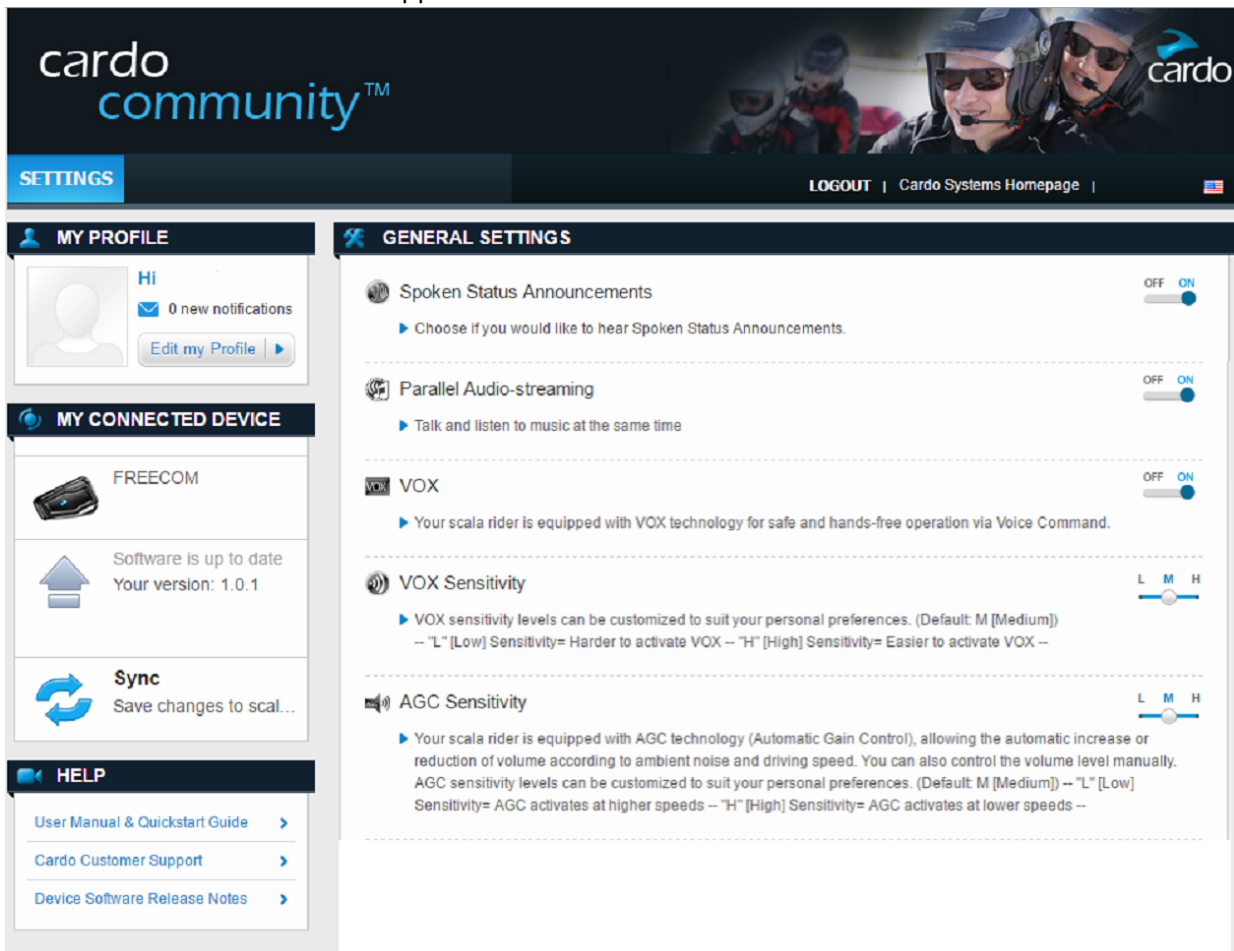
To install the Cardo Updater on your computer:

1. Go to <http://cardosystems.com/cardo-community/>, register and login.
2. Download the Cardo Updater from the provided link and install it on your computer.

4.2.2 CONFIGURING YOUR FREECOM 2 BASIC SETTINGS THROUGH CARDO COMMUNITY

To configure your FREECOM 2 through the Cardo Community:

1. Run the Cardo Updater.
2. Using the supplied USB cable, connect your unit to the computer USB port.
3. If this is the first time you are connecting your unit, the **Edit my Profile** screen appears. Click **SETTINGS**.
4. The **GENERAL SETTINGS** window appears:



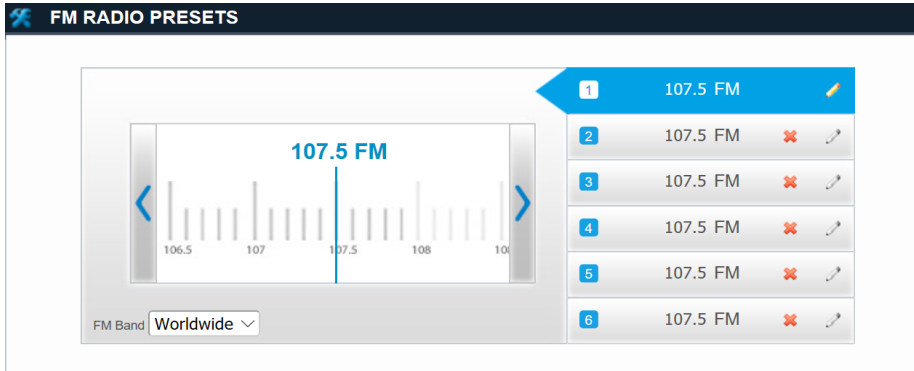
5. Set your preferred options for each feature and refer to the provided explanations as a guide.


If a new firmware version is available, follow the instructions on the screen to update your FREECOM 2 with the latest features.

4.2.3 CONFIGURING YOUR FM RADIO THROUGH CARDO COMMUNITY

To configure the six FM radio preset radio stations using Cardo Community:

1. Scroll down to **FM RADIO PRESETS** section.



2. On **FM Band**:
 - If you are in Japan, select **Japan**.
 - Otherwise, select **Worldwide**.
3. On the preset station you want to edit, click .
4. Enter the desired FM station's frequency and press **Enter**.

You can also use the left and right blue arrows on the frequency scale to update the preset frequency.




5. To delete a preset station, click .

Preset radio station 1 cannot be deleted.

4.3 CONFIGURING YOUR FREECOM 2 THROUGH THE CONFIGURATION VOICE MENU

You can configure your FREECOM 2 using the configuration voice menu in combination with either unit buttons or using VOX.

To configure your FREECOM 2 through the Configuration Voice Menu:

1. Confirm your unit is in Standby (LED flashes slowly).
2. Press  and  for 2 seconds.
3. When the voice-assisted menu reaches your required option ("Language", "A2DP Audio Priority", "Spoken Status Announcements", "Click-to-Link", "AGC", "RDS", "VOX Sensitivity", "VOX", "Parallel Audio Streaming"), tap  or use VOX to select.

4.4 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.

Limitations may apply when using certain iOS devices.

Your FREECOM 2 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	Music	FM Radio
Foreground	Foreground			
Foreground ¹		Foreground ¹		
	Foreground	Foreground		
	Foreground		Background	
	Foreground			Background
		Foreground	Background	
		Foreground		Background
			Foreground ²	
				Foreground ³

¹If you add an intercom call to a mobile phone call creating a conference call, the volume for both audio sources is the same.

²If you play music only, the music volume is not reduced.

³If 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 [FAQ](#) on page 30.

You cannot use music sharing for voice audio with a passenger during parallel audio streaming.

To configure parallel audio streaming:

- SmartSet app - see [Configuring Your FREECOM 2 Basic Settings through the SmartSet App](#) on page 14.
- Cardo Community - see [Configuring Your FREECOM 2 through Cardo Community](#) on page 18.

4.5 AUDIO SOURCE PRIORITIES

If Parallel Audio Streaming is disabled, FREECOM 2 manages the audio sources you hear through the speakers according to the following audio source priorities.

Priority	Audio Source
Higher Priority	Mobile phone, GPS device instructions
↑	Intercom (Click-to-Link) or Music ¹
	Music or Intercom (Click-to-Link) ²
Lower Priority	FM Radio

¹When audio priority is set to Intercom, you cannot hear navigation app or SMS messages from your phone during an ongoing intercom call.



²When audio priority is set to A2DP (music), the intercom is disabled while listening to music (via A2DP). A passenger/nearby rider calling you by intercom hears a sound indicating you are not available.

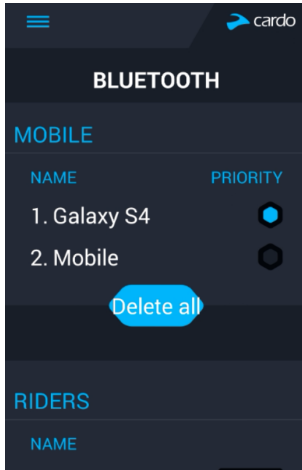
- Intercom modes all have the same priority, so ongoing intercom calls will not be interrupted by any other intercom call.
- Bluetooth intercom and Click-to-Link calls have the same priority, so Click-to-Link calls will not interrupt any Bluetooth intercom call in progress, and vice versa.

4.6 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.

To set the default phone through the SmartSet app:

1. Confirm your unit is in Standby mode (LED flashes slowly).
2. Open the SmartSet app and tap :
3. Tap .
4. Tap **PRIORITY** for the default mobile phone.



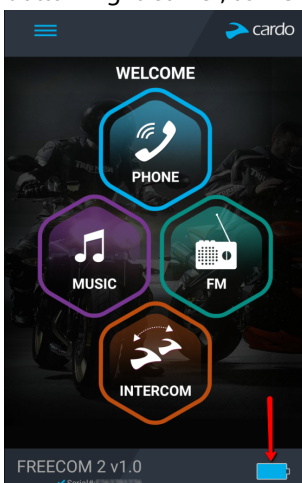
To set the default phone through the unit:

- During a mobile call, press  for 5 seconds.

4.7 CHECKING BATTERY STATUS THROUGH THE SMARTSET APP

Battery Status on Your Mobile Phone

If you installed the SmartSet app on your mobile phone, the unit battery indicator appears in the SmartSet app bottom right-corner, as well as in the notification bar.



If your FREECOM 2 battery level reaches 20%, you hear a battery status voice announcement warning you that your battery is low.

5. ON THE ROAD





5.1 MAKING AND RECEIVING PHONE CALLS

You can use your mobile phone normally to make and receive phones while paired to your FREECOM 2.

5.1.1 MAKING PHONE CALLS

You cannot make phone calls during mobile calls.




To make a phone call through the unit buttons:

- With your mobile phone's voice dialing - tap  and .
- Dialing the default speed dial number - tap  three times.
- Redialing the last number called - press  for 2 seconds.

To make a phone call through the SmartSet app:

- In the SmartSet app, tap **Phone** then do either of the following:
 - tap **REDIAL**.
 - tap **VOICE DIAL**.

To make a phone call through the voice-assisted menu:

1. Confirm your unit is in Standby mode (LED flashes slowly).
2. Tap  and .
3. When the voice-assisted menu reaches your required choice ("Voice Dial", "Redial" or "Speed Dial"), tap  or use VOX.

5.1.2 ANSWERING PHONE CALLS

To answer a phone call through the unit buttons:

- Tap  or .

To answer a phone call through **VOX**:

- Say a word loudly.

5.1.3 REJECTING PHONE CALLS

To reject a phone call through the unit buttons:

- Press  for 2 seconds.

To reject a phone call through **VOX**:

- Remain silent for 30 seconds.

5.1.4 ENDING PHONE CALLS

To end a phone call through the unit buttons:

- Tap .

To end a phone call through the SmartSet app:

1. In the Home screen, tap **PHONE**.
2. Press **END CALL**.

5.1.5 TOGGING BETWEEN TWO CALLS ON TWO MOBILE PHONES PAIRED TO YOUR UNIT

Your FREECOM 2 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 through the unit buttons:

- Tap  twice.

5.1.6 DISCONNECTING THE CURRENT CALL AND SWITCHING TO THE SECOND CALL

To disconnect the current call and switch to the call on the second phone when two mobile phones are paired to your unit, through the unit buttons:





- Tap .

5.2 MAKING AND RECEIVING BLUETOOTH INTERCOM CALLS


- To make and receive Bluetooth intercom calls, you must first pair the Bluetooth, see [Pairing the Bluetooth Intercom](#) on page 8.

5.2.1 MAKING A BLUETOOTH INTERCOM CALL

To start a Bluetooth intercom call with a passenger/rider, do one of the following:

- To use the unit buttons, tap .
- Use VOX.
- To use the SmartSet app: On the **INTERCOM** screen, tap **Channel A**.
- To use the voice-assisted menu:
 - a. Tap  and .
 - b. When the voice-assisted menu reaches "Call Intercom", tap  or use VOX.

To end a Bluetooth intercom call, do one of the following:

- To end the Bluetooth intercom connection, tap .
- To use the SmartSet app: On the **INTERCOM** screen, tap **A END**.

If you initiated the Bluetooth intercom call using [VOX](#) and remain silent for at least 30 seconds, the call ends.


5.2.2 RECEIVING BLUETOOTH INTERCOM CALLS

- If the other paired unit calls you via Bluetooth intercom, the call begins instantly.
- To receive Bluetooth intercom calls from unpaired units, see [Click-To-Link Calls](#) on page 24.

5.2.3 HOLDING A MOBILE/BLUETOOTH INTERCOM CONFERENCE CALL

You can hold a conference call between a mobile call and Bluetooth intercom call.

To add a Bluetooth intercom call to the current mobile call:

- To add the passenger/nearby rider to a call, tap  .

To disconnect the Bluetooth intercom conference call from the mobile call, do one of the following:

- To end the active Bluetooth intercom connection, tap  .
- To use the SmartSet app: On the **INTERCOM** screen, disconnected the active channel.

After disconnecting the Bluetooth intercom call, you can continue talking on the mobile call. Similarly, if you first disconnect the mobile call, you can continue talking on the Bluetooth intercom call.

5.2.4 BLUETOOTH INTERCOM BUSY SIGNAL

A busy signal is heard when you attempt a Bluetooth intercom call when the passenger/nearby rider is in a phone call.

5.2.5 CLICK-TO-LINK CALLS

Click-to-Link is a spontaneous way to instantly initiate one-on-one intercom calls with a nearby passenger/rider, without being paired.

- If other Cardo users are nearby, your next Click-to-Link call may randomly connect to any of them.
- To block incoming Click-to-Link calls, disable Click-to-Link (see [Before You Ride](#) on page 11).

To make a Click-to-Link call through the SmartSet app:

1. Open the SmartSet app and tap **Intercom**.
2. Tap **CLICK TO LINK**.

To end a Click-to-Link call through the unit buttons:

- Tap  .

To accept a Click-to-Link call through the unit buttons:

- Tap  .

To reject a Click-to-Link call through the unit buttons:

- Press  for 2 seconds.




To accept a Click-to-Link call through [VOX](#):


- Say a word loudly.

5.3 LISTENING TO MUSIC AND RADIO






5.3.1 LISTENING TO MUSIC

To start music streaming from your paired device, do one of the following:



- To use the unit buttons: tap  .
- To use the SmartSet app: tap **MUSIC**.
- To use the voice-assisted menu:
 - a. Tap  and  .

- b. When the voice-assisted menu reaches "Music On", tap  or use VOX.



To stop music streaming, do one of the following:

- To use the unit buttons: press  for 2 seconds.
- To use the SmartSet app: on the **MUSIC** screen, tap .
- To use the voice-assisted menu:
 - a. Tap  and .
 - b. When the voice-assisted menu reaches "Music Off", tap  or use VOX.










To skip to the next track (while streaming music), do one of the following:

- To use the unit buttons: tap .
- To use the SmartSet app: on the **MUSIC** screen, tap .





To skip to the previous track (while streaming music), do one of the following:



- To use the unit buttons: tap  twice.
- To use the SmartSet app: on the **MUSIC** screen, tap .

To forward auto scan tracks (while streaming music) and then play your desired track, do one of the following:

- To use the unit buttons:
 - a. Tap  and . Forward scan plays a few seconds of each track.
 - b. When you hear a track that you want to play, tap  or use VOX.
- To use the SmartSet app:
 - a. On the **MUSIC** screen, under **MUSIC SCAN**, tap . Forward scan plays a few seconds of each track.
 - b. When you hear a track that you want to play, on the **MUSIC** screen, under **MUSIC SCAN**, tap .
- To use the voice-assisted menu:
 - a. Tap  and .
 - b. When the voice-assisted menu reaches "Scan Tracks Up", tap  or use VOX.
 - c. When you hear a track that you want to play, tap  or use VOX.

To backward auto scan tracks (while streaming music) and then play your desired track:

- To use the SmartSet app:
 - a. On the **MUSIC** screen, under **MUSIC SCAN**, tap . Backward scan plays a few seconds of each track.
 - b. When you hear a track that you want to play, on the **MUSIC** screen, under **MUSIC SCAN**, tap .
- To use the voice-assisted menu:
 - a. Tap  and .

- b. When the voice-assisted menu reaches "Scan Tracks Down", tap .
- c. When you hear a track that you want to play, tap  or use VOX.

5.3.1.1 SWITCHING MUSIC SOURCES

If two music (A2DP) audio sources are paired, FREECOM 2 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](#) on page 24.
2. Play music (A2DP) from the other device (see (see) [Listening to Music](#) on page 24).

FREECOM 2 automatically remembers your last played device.





5.3.2 LISTENING TO FM RADIO

To turn on the FM radio, do one of the following:



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

- To use the unit buttons: tap  twice.
- To use the SmartSet app: on the **FM** screen, tap **ON/OFF**.
- To use the voice-assisted menu:
 - a. Tap  and .
 - b. When the voice-assisted menu reaches "Radio On", tap  or use VOX.



To turn the FM radio off, do one of the following:

- To use the unit buttons: press  for 2 seconds.
- To use the SmartSet app: on the **FM** screen, tap the On/Off button.
- To use the voice-assisted menu:
 - a. Tap  and .
 - b. When the voice-assisted menu reaches "Radio Off", tap  or use VOX.







To play a different preset station:

- To use the unit buttons, do one of the following:
 - tap  for the next preset
 - tap  twice for the previous preset
- To use the SmartSet app: On the **FM** screen, tap the desired preset.

To seek the next available station:

- To use the SmartSet app: On the **FM** screen, do one of the following:
 - tap .
 - tap .

To scan available stations and select your desired station:

- To use the unit buttons:
 - a. Tap  and . The FM radio plays each station that it finds for several seconds.
 - b. When you hear a station you want to select, tap  or use VOX.
- To use the voice-assisted menu:
 - a. Tap  and .
 - b. When the voice-assisted menu reaches "Scan Stations Up", tap  or use VOX.

To store a scanned station in the active preset:

- To use the unit buttons: tap  within 20 seconds of stopping the scan.






To set all presets efficiently using Cardo Community, see [Configuring Your FM Radio through Cardo Community](#) on page 19.

To set all presets efficiently using the SmartSet app, see [Configuring Your FM Radio Manually](#) on page 16.

Temporarily Storing New FM Radio Preset Stations Using Auto Tuning

You can temporarily store new FM radio stations in the presets using auto tuning and restore the original presets when you want.

To temporarily store new stations in the presets (auto tuning):

- To use the unit buttons: press  for 5 seconds.
- To use the SmartSet app: on the **FM** screen, tap .
- To use the voice-assisted menu:
 - a. Tap  and .
 - b. When the voice-assisted menu reaches "Auto Scan 6 Stations", tap  or use VOX.

To restore the original presets (following auto tuning):









- To use the unit buttons: switch your unit off then turn it back on.

5.3.3 SHARING MUSIC AND RADIO

You can share music and FM radio with a passenger.

- 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.
- While sharing music, you cannot use Bluetooth intercom.
- 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/stop sharing, do one of the following:

- To use the unit buttons:
 - a. Confirm your FREECOM 2 is in Standby mode (LED flashes slowly).
 - b. Start playing music or the FM radio.
 - c. Press  for 2 seconds.
 - d. To stop sharing, press  for 2 seconds.
- To use the SmartSet app:
 - a. Confirm your FREECOM 2 is in Standby mode (LED flashes slowly).
 - b. Start playing music or the FM radio.
 - c. Either:
 - on the **MUSIC** screen, tap .
 - or
 - on the **FM** screen, tap .
 - d. To stop sharing, either:
 - on the **MUSIC** screen, tap .
 - or
 - on the **FM** screen, tap .
- To use the voice-assisted menu (applicable only for Channel A):
 - a. Confirm your FREECOM 2 is in Standby mode (LED flashes slowly).
 - b. Start playing music or the FM radio.
 - c. Tap  and .



d. When the voice-assisted menu reaches:

- "Start Music Sharing", tap  or use VOX.

or

- "Start Radio Sharing", tap  or use VOX.

e. To stop sharing, do one of the following:

- FM radio - tap  . The Bluetooth intercom call ends.
- FM radio or music - press  for 2 seconds. If FM radio was shared, the Bluetooth intercom call remains on.

6. TROUBLESHOOTING

6.1 SOFT RESET

If your FREECOM 2 stops responding, reset it by either:

- Turning it off and then on again (see [Switching Your Unit On/Off](#) on page 6).
- Using the supplied USB cable, connect your computer or wall charger to the FREECOM 2 USB port for 30 seconds.

6.2 RESET PAIRING

This option deletes all paired units and devices.









To reset pairing:

- Press  and  for 5 seconds.

6.3 RESET TO FACTORY SETTINGS

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

To perform a factory reset through the unit, do one of the following:


- To use the unit buttons:
 - a. Check that your FREECOM 2 is in Standby (see [FREECOM 2 Modes and Events - LED Indications](#) on page 33).
 - b. Simultaneously press  +  +  for 5 seconds
- To use the SmartSet app:
 - a. Check that your FREECOM 2 is in Standby (see [FREECOM 2 Modes and Events - LED Indications](#) on page 33).
 - b. Open the SmartSet app and tap .
 - c. Tap **Settings**.
 - d. Tap **Reset to Factory**.
- To use the voice-assisted menu:
 - a. Tap  and .
 - b. When the voice-assisted menu reaches "Advanced Features Menu", tap  or use VOX.
 - c. When the voice-assisted menu reaches "Reset to Factory Settings", tap  or use VOX.

6.4 FAQ


Additional answers to common problems can be found at www.cardosystems.com/faqs.

7. SUPPORT

For additional information:

 www.cardosystems.com

 support@cardosystems.com

 USA and Canada: 1-800-488-0363 / International: +49 89 450 36819

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Products that were imported from North America must be serviced in the USA.

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.
Click-to-Link	Spontaneous way to instantly initiate one-on-one intercom calls with another Cardo passenger/nearby rider, without being paired.
Device	Mobile phone, GPS or music player.
IC	Intercom.
Language	Voice announcements and voice-assisted menus language.
RDS	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.
Unit	Cardo or non-Cardo Bluetooth Communication system.
VOX	Voice activation (by saying a word or phrase loudly) of certain features for hands-free operation.
VOX sensitivity	Adjusts your microphone sensitivity for voice activation while you are riding.

APPENDIX A. FREECOM 2 MODES AND EVENTS - LED INDICATIONS

Your FREECOM 2 operates in various modes. Each mode consists of a group of features currently available for your use. For example, when FREECOM 2 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 2's responds. For example, turning on music is an "event".

FREECOM 2'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	Fast (3 times)	Normal Low Battery Charging	<ul style="list-style-type: none"> Power on
Blue	Slow (repeating every 3 seconds)	Normal	<ul style="list-style-type: none"> Standby
Blue	Slow twice (repeating slowly every 3 seconds)	Normal	<ul style="list-style-type: none"> Incoming/outgoing call (intercom or mobile) Audio active (intercom, FM, A2DP, GPS, Feature/Settings menu)
Off	Off	Normal Low Battery	<ul style="list-style-type: none"> Off
Purple	For 2 seconds	Normal Low Battery Charging	<ul style="list-style-type: none"> Mobile pairing successful Mobile connected
Purple	Slow (5 times)	Normal Low Battery	<ul style="list-style-type: none"> Reset pairing
Purple/Red	Purple twice slowly and red on	Charging	<ul style="list-style-type: none"> Incoming/outgoing call (intercom or mobile) Audio active (intercom, FM, A2DP, GPS, Feature/Settings menu)
Purple/Red	Slow purple and red (repeating)	Charging	<ul style="list-style-type: none"> Standby
Red	Slow twice (repeating slowly every 3 seconds)	Low Battery	<ul style="list-style-type: none"> Incoming/outgoing call (intercom or mobile) Audio active (intercom, FM, A2DP, GPS, Feature/Settings menu)
Red	Fast (repeating slowly every 3 seconds)	Low Battery	<ul style="list-style-type: none"> Standby
Red	Fast (3 times)	Normal Low Battery Charging	<ul style="list-style-type: none"> Power off
Red	For 2 seconds	Normal Low Battery Charging	<ul style="list-style-type: none"> Passenger/rider connected Set VOX to disabled
Red	Remains on	Charging	<ul style="list-style-type: none"> Off
Red/Blue	Alternating fast	Normal Low Battery Charging	<ul style="list-style-type: none"> Pairing Mobile 1
Red/Blue	Alternating slow	Normal Low Battery	<ul style="list-style-type: none"> Pairing GPS 1

LED	Flashing	Battery State	Mode or Event
Red/Green	Alternating fast	Normal Low Battery Charging	<ul style="list-style-type: none"> Pairing Mobile 2
Red/Green	Alternating slow	Normal, Low Battery	<ul style="list-style-type: none"> Pairing GPS 2
Yellow	For 2 seconds	Normal Low Battery Charging	<ul style="list-style-type: none"> Intercom call attempted without microphone or audio kit connected.

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The unit weighs 35 g (1.2 oz).