scala rider®
FREECOM™ 1
COMMUNICATION SYSTEM FOR BIKERS

MANUAL

cardo
communication in motion®

scala rider FREECOM 1™

Bluetooth®

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

This is version 1.0 of the FREECOM 1 Manual. The latest version of the manuals in your preferred language and various tutorials can be found at cardosystems.com/product-manuals/.

CONTENTS

1. INTRODUCTION

Thank you for choosing the Cardo FREECOM 1 Bluetooth® communication and entertainment system for motorcycle helmets.

This Manual describes the features of your FREECOM 1 and how to use them.

We wish you a great FREECOM 1 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 1 unit in your helmet, please install it as described in the Installation Guide provided in the package.

2. CHARGING THE FREECOM 1

Make sure that your FREECOM 1 battery is charged for at least 4 hours before initial use.

To charge the FREECOM 1:

1. Using the supplied USB cable, connect your computer or wall charger to the FREECOM 1 USB port.
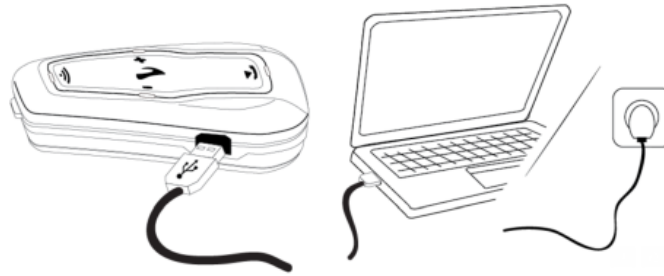
- Charging with the wall charger is faster than via a computer USB port.
- Charging your unit switches it off automatically. To use your unit while it is being charged, switch it on. (see Switching Your Unit On/Off on page 6).

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 1

3.2 SWITCHING YOUR UNIT ON/OFF
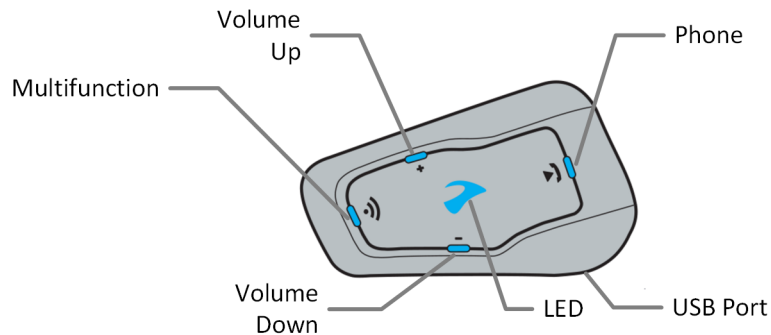
To switch your FREECOM 1 on:

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

  In all battery states, the LED flashes blue three times repeatedly, confirming that your FREECOM 1 is on.

To switch your FREECOM 1 off:

- Tap ⦿ and ⊖.

  In all battery states, the LED flashes red three times repeatedly, confirming that your FREECOM 1 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 1

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).

LEDs, tones and voice announcements guide you while using the functions of your FREECOM 1, as described in FREECOM 1 Modes and Events - LED Indications on page 21.

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 1 Basic Settings through the SmartSet App on page 10.

3.5 PAIRING YOUR UNIT TO BLUETOOTH DEVICES

Your FREECOM 1 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 1 to a Bluetooth device, you must first pair them while in Standby (see FREECOM 1 Modes and Events - LED Indications on page 21). 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.

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 1. 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 1. 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 1, set one as default for making calls (see Setting the Default Mobile Phone on page 13).

- 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.

4. BEFORE YOU RIDE

Get the most out of your FREECOM 1 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 1 through the SmartSet App on page 10).

- Cardo Community on Windows / Mac - minimum requirements - Windows® 7 / Mac OS X 10.8 (see Configuring Your FREECOM 1 through Cardo Community on page 11).

- Unit buttons.

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

Object	Default Value	Description	SmartSet App (iOS/Android)	Cardo Community
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.	✓	✓
Background Audio Level	N/A	Sets the background audio volume when parallel audio streaming is on (see Parallel audio streaming (Enable/Disable) below).	✓	✗
Bluetooth friendly name	FREECOM 1	Sets the name that appears on your phone while pairing and in the SmartSet app.	✓	✓
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 1 Basic Settings through Cardo Community on page 12.	✗	✓
Language	According to Your Region	Voice announcements 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.	✓	✗
Parallel audio streaming (Enable/Disable)	Enable	You can hear two audio sources simultaneously. For example, hear GPS while listening to music. Limitations may apply when using certain iOS devices.	✓	✓
Set speed dial numbers	Empty	Pre-set phone numbers for automatic dialing.		✓

Object	Default Value	Description	SmartSet App (iOS/Android)	Cardo Community
Spoken Status Announcements (Enable/Disable)	Enable	Voice announcements inform you to whom or to what device you are connected.	✔	✔
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 performance varies 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 1 THROUGH THE SMARTSET APP

You can configure your FREECOM 1 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:

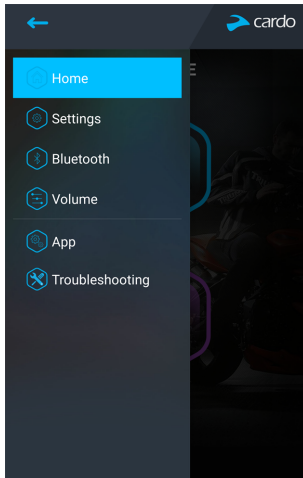- Android: 4.0 and higher
- IOS: 8 and higher

4.1.1 CONFIGURING YOUR FREECOM 1 BASIC SETTINGS THROUGH THE SMARTSET APP

To configure your FREECOM 1 through the SmartSet app:

1. Make sure that your unit is paired to the mobile device on which the SmartSet app is installed.
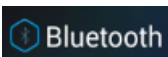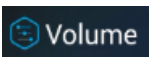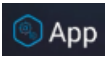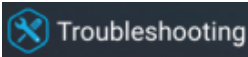
2. Open the SmartSet app and tap ☰ :
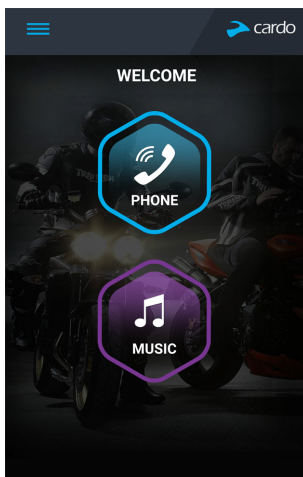
3. The following screen appears.

4. Use the appropriate menu to configure your FREECOM 1 settings:

- **Settings** - FREECOM 1 features:

Group	Description/Options
MY DEVICE	• Change **Device Name**.
LANGUAGE	• Set **Language**.
Spoken Status Announcements	• Enable/disable.
VOX	• Enable/disable **VOX Activation**. • Set **VOX Sensitivity** (low, medium, or high).
AGC	• Enable/disable **AGC Activation**. • Set **AGC Sensitivity** (low, medium, or high).
FEATURES	• Enable/disable **Parallel Audio Streaming**.
Reset to Factory	• Resets the unit to factory defaults.

- **Bluetooth** - manage devices.

- **Volume** - sets the level for each audio source (mobile phone, music, announcements, parallel audio streaming).

- **App** - SmartSet app preferences and general information.

- **Troubleshooting** - **FAQ**, email Cardo **SUPPORT**, **FEEDBACK**.

4.2 CONFIGURING YOUR FREECOM 1 THROUGH CARDO COMMUNITY

You can configure your FREECOM 1 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 1 BASIC SETTINGS THROUGH CARDO COMMUNITY

To configure your FREECOM 1 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:
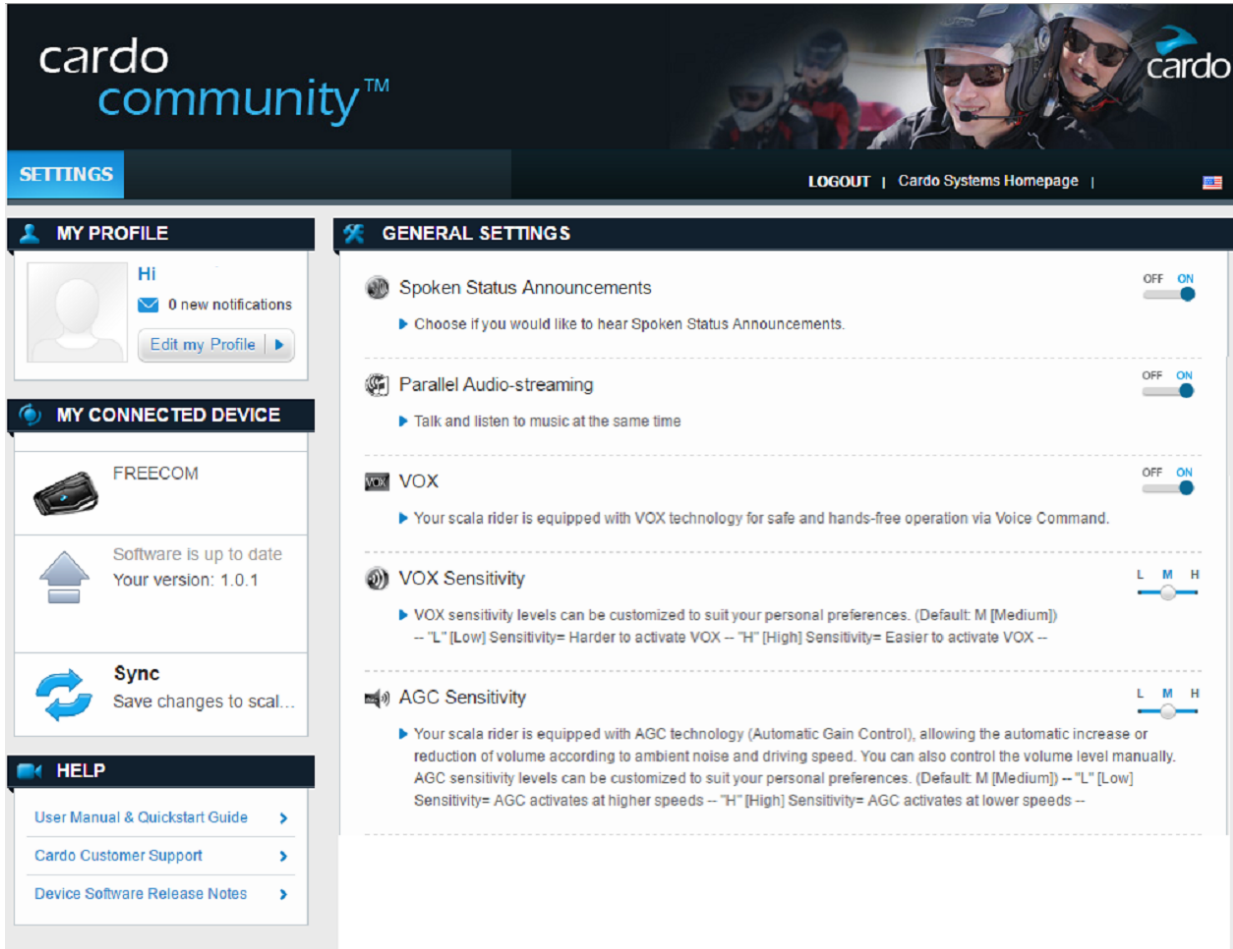
5. Set your preferred options for each feature and refer to the provided explanations as a guide.

> If a new firmware version is available, follow the instructions on the screen to update your FREECOM 1 with the latest features.

4.3 USING PARALLEL AUDIO STREAMING

With parallel audio streaming, you can hear GPS instructions during a mobile call or while listening to music.

Limitations may apply when using certain iOS devices.

Your FREECOM 1 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	Music
Foreground	Foreground	
	Foreground	Background
		Foreground[1]

[1]If you play music only, the music 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 18.

To configure parallel audio streaming:

- SmartSet app - see Configuring Your FREECOM 1 Basic Settings through the SmartSet App on page 10.
- Cardo Community - see Configuring Your FREECOM 1 through Cardo Community on page 11.

4.4 AUDIO SOURCE PRIORITIES

If Parallel Audio Streaming is disabled, FREECOM 1 manages the audio sources you hear through the speakers according to the following audio source priorities.

Priority	Audio Source
Higher Priority ↑ **Lower Priority**	Mobile phone, GPS device instructions Music

During a mobile phone call (when Parallel Audio Streaming is disabled), GPS device instructions temporarily mute the mobile phone. If music is playing and you accept an incoming phone call, the music stops.
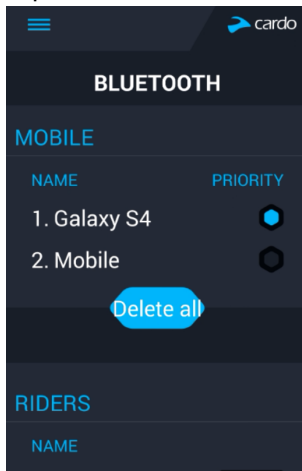
4.5 SETTING THE DEFAULT MOBILE PHONE

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.

4.6 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.
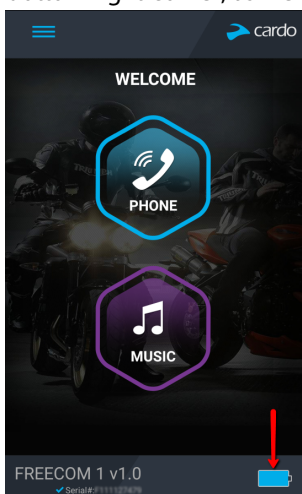
If your FREECOM 1 battery level reaches 20%, you hear a battery status voice announcement warning you that your battery is low.

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 1.

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**.

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.

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 TOGGLING BETWEEN TWO CALLS ON TWO MOBILE PHONES PAIRED TO YOUR UNIT

Your FREECOM 1 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 ⏩.

5.1.7 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 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 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 ⏹.
  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 ⏹.

5.1.7.1 SWITCHING MUSIC SOURCES

If two music (A2DP) audio sources are paired, FREECOM 1 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 16).

2. Play music (A2DP) from the other device (see (see Listening to Music on page 16)).

FREECOM 1 automatically remembers your last played device.

6. TROUBLESHOOTING

6.1 SOFT RESET

If your FREECOM 1 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 1 USB port for 30 seconds.

6.2 RESET PAIRING

> This option deletes all paired devices.

To reset pairing:

- Press 🔊 and 🔊 for 5 seconds.

6.3 RESET TO FACTORY SETTINGS

> This option deletes all paired 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 1 is in Standby (see FREECOM 1 Modes and Events - LED Indications on page 21).

  b. Simultaneously press 🔊 + ⊕ + ⊖ for 5 seconds

- To use the SmartSet app:

  a. Check that your FREECOM 1 is in Standby (see FREECOM 1 Modes and Events - LED Indications on page 21).

  b. Open the SmartSet app and tap ☰.

  c. Tap **Settings**.

  d. Tap **Reset to Factory**.

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

> Multinational E-commerce companies and online auction websites are not authorized to sell Cardo products and purchases from such sites are at your own risk. To receive warranty or customer service, you must submit original receipts from authorized Cardo dealers.
>
> 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.
Device	Mobile phone, GPS or music player.
Language	Voice announcements language.
Unit	Cardo or non-Cardo Bluetooth Communication system.
VOX sensitivity	Adjusts your microphone sensitivity for voice activation while you are riding.

APPENDIX A. FREECOM 1 MODES AND EVENTS - LED INDICATIONS

Your FREECOM 1 operates in various modes. Each mode consists of a group of features currently available for your use. For example, when FREECOM 1 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 1's responds. For example, turning on music is an "event".

FREECOM 1'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	• Power on
Blue	Slow (repeating every 3 seconds)	Normal	• Standby
Blue	Slow twice (repeating slowly every 3 seconds)	Normal	• Incoming/outgoing call (mobile) • Audio active (A2DP, GPS
Off	Off	Normal Low Battery	• Off
Purple	For 2 seconds	Normal Low Battery Charging	• Mobile pairing successful • Mobile connected
Purple	Slow (5 times)	Normal Low Battery	• Reset pairing
Purple/Red	Purple twice slowly and red on	Charging	• Incoming/outgoing call (mobile) • Audio active (A2DP, GPS
Purple/Red	Slow purple and red (repeating)	Charging	• Standby
Red	Slow twice (repeating slowly every 3 seconds)	Low Battery	• Incoming/outgoing call (mobile) • Audio active (A2DP, GPS
Red	Fast (repeating slowly every 3 seconds)	Low Battery	• Standby
Red	Fast (3 times)	Normal Low Battery Charging	• Power off
Red	Remains on	Charging	• Power 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

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The unit weighs 35 g (1.2 oz).