Bluetooth® 5.2

cardo®

SPIRIT HD

MANUAL



Waterproof | 600m | FM Radio | 40mm HD

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1. INTRODUCTION

Thank you for choosing the Cardo SPIRIT HD communication and entertainment system for motorcycle helmets.

We wish you a great SPIRIT HD experience and encourage you to visit www.cardosystems.com/support/spirit-hd/ regarding any questions, suggestions or comments you may have.

If you have not yet installed the SPIRIT HD unit on your helmet, please install it as described in the Installation Guide provided in the package. You can also watch the installation video accessible on that link www.cardosystems.com/spirit-installation/

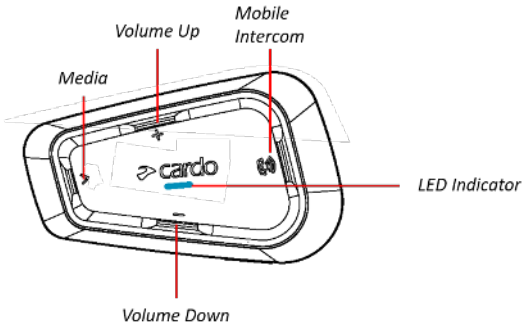
For easy reference while on the road, download the Pocket Guide from www.cardosystems.com/wp-content/uploads/guides/pocket/en/spiritHD.pdf

And don't forget to register your SPIRIT HD. Registering your SPIRIT HD allows you to download software updates, enjoy new features that are offered from time to time, and assures smooth handling of warranty issues you may have. Also rest assured: Cardo does not share your details with others.

This is version 1.0 of the SPIRIT HD Manual. The latest version of the manuals in your preferred language and various tutorials can be found at www.cardosystems.com/wp-content/uploads/guides/manual/en/spirit-hd.pdf

2. GETTING STARTED

2.1 GETTING TO KNOW YOUR SPIRIT HD

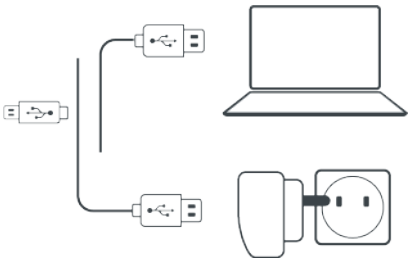


2.2 CHARGING YOUR SPIRIT HD

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

To charge the unit:

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



2. Fast charging
   - You will have 2 hours of talktime after 20 mins of charging. (1.5 - 2 hours for full charge).
3. Charge while riding:

   In case you need to charge it, connect your unit to a power outlet. You can continue charging while riding.

   The battery of your SPIRIT HD supports up to 13 hours of talktime.

- 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).

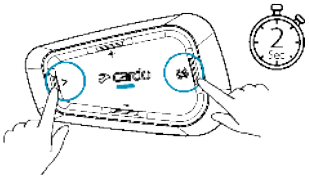
While charging, the LED indicates the charging status as follows:

- Red LED on — charging
- Red LED off — charging complete

2.3 SWITCHING YOUR UNIT ON/OFF

To switch your SPIRIT HD on:

- Press both and and for **2 seconds**.



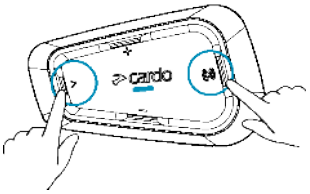
The speaker plays an ascending tone and a voice message greets you.

The LED confirms your SPIRIT HD is on:

- Normal battery — LED flashes blue three times.
- Low battery — LED flashes blue three times, then red.
- Charging — LED flashes red, blue and purple.

To switch your SPIRIT HD 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.

2.4 USING YOUR SPIRIT HD

You can operate the various features of your SPIRIT HD in the following ways:

- Press a button or combination of buttons on the unit
- Use the Cardo Connect App on your mobile device (once it is paired with the unit)

2.5 PAIRING YOUR UNIT TO BLUETOOTH DEVICES

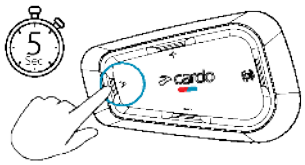
Your SPIRIT HD has two Bluetooth channels for connection to Bluetooth devices such as mobile phones, GPS devices, and Bluetooth music players with A2DP.

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**



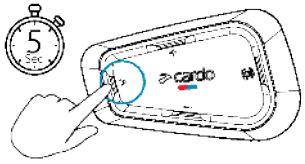
The LED flashes red and blue.

3. On your mobile phone, search for Bluetooth devices.
4. When your SPIRIT HD 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. Do the following:
   a. GPS device: Tap . The LED flashes red and green.
   b. Mobile phone: Tap . The LED flashes red and green. Tap .
3. On the device you are pairing, search for Bluetooth devices.
4. When your SPIRIT HD 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.
- 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 the **Media** button  for **2 seconds**.
  The LED stops flashing red and blue/green.

3. CARDO CONNECT APP

The Cardo Connect App enables you to configure the settings of your SPIRIT HD. In addition, the App offers you remote controlled operation from the screen of your smart.phone.

3.1 REGISTERING YOUR UNIT

1. Download the Cardo Connect App.

Download on the App Store

GET IT ON Google Play

2. Register your SPIRIT HD.



3. Select your language.



3.2 UPDATING YOUR UNIT

Before using your unit for the first time, and whenever a new software update is available, make sure to have the latest software update. Updating with the latest software keeps your unit free of bugs and provides you with additional new functionalities.

Your SPIRIT HD can be updated Over the Air, via Cardo Connect app.

To update your SPIRIT HD unit with the Cardo Connect App:

Whenever a new software update is available, a pop-up will open on your App screen. Press Install and follow the on-screen instructions.

If you press Remind me later, the pop-up will re-open the next day.



To update your SPIRIT HD at any moment

1. Open Cardo Connect app.
2. Press **Settings**.
3. Select your unit.
4. Select the software version.
5. Press **Update Now**.

When the update is finished, press **Finish** to go back to the main screen.

To update your SPIRIT HD unit with your computer:

1. Download and install the Cardo Update tool https://www.cardosystems.com/update
2. Open Cardo Update.
3. Register (first time only).
4. Connect the unit to the computer using an USB cable and update the firmware.

- Cardo Update on Windows / Mac - minimum requirements - Windows® 7 / macOS X 10.8

4. ON THE ROAD

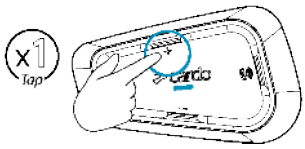
SPIRIT HD makes it easy for you to receive phone calls and listen to music in a convenient and safe manner.

4.1 BASIC AUDIO FUNCTIONS

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

To turn the volume up:

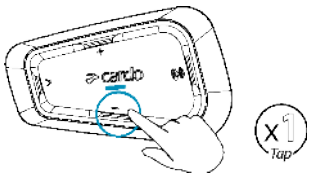
- Tap **Volume up** to increase the volume.



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:

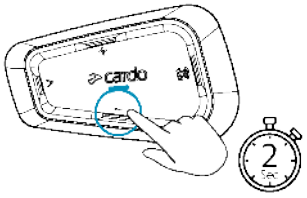
- Tap **Volume down** to reduce the volume .



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:

- Tap **Volume down** for **2 seconds** to mute the microphone.



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

- Tap any button.

4.2 MAKING AND RECEIVING PHONE CALLS

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

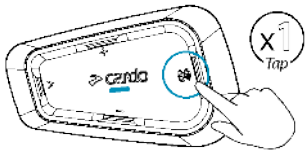
You can make a hands-free call using your mobile phone's voice dial option or using the Cardo speed dial or redial last call options.

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 dial your preset speed dial number, tap twice.

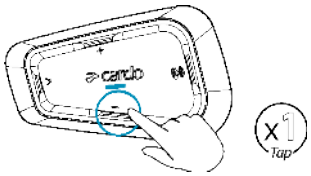
To answer a call:

- Tap the mobile button .



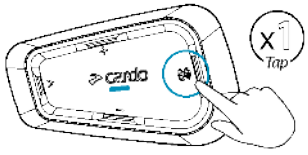
To ignore a call:

- Tap volume down .



To end a call:

- Tap the mobile button .

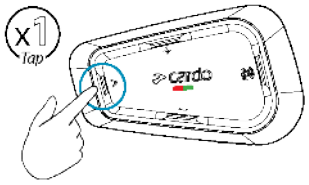


4.3 STREAMING MUSIC

You can stream music from your paired device to your SPIRIT HD.

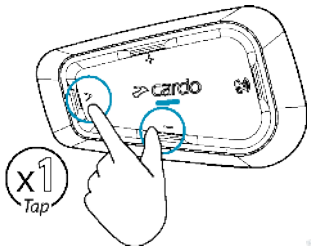
To start music streaming from your paired device:

- Tap the Media Button .



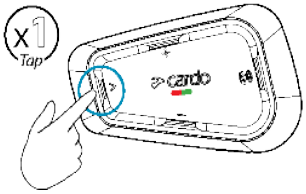
To stop music streaming:

- Tap mobile and volume down .



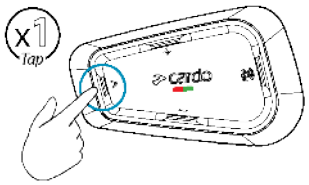
To skip to the next track (while streaming):

- Tap the media button .



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

- Tap the media button twice.

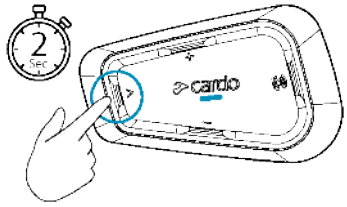


4.4 LISTENING TO FM RADIO

The SPIRIT HD is equipped with a built-in FM radio.

To turn on the FM radio:

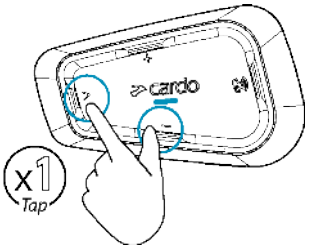
- Tap for 2 secondsor say "**Hey Cardo, radio on**" .



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

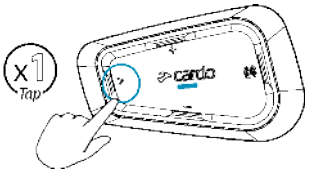
To turn the FM radio off:

- Tap and once.



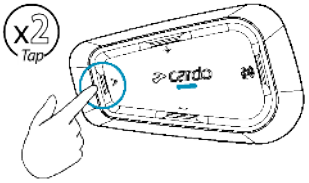
To skip to the next station:

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



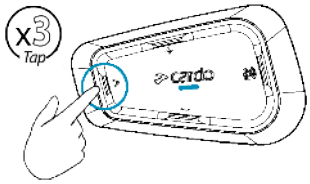
To skip back to the previous station:

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

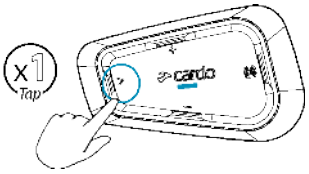


To scan for and select a station:

1. Tap  3 times.
   The FM radio plays each station that it finds for several seconds.

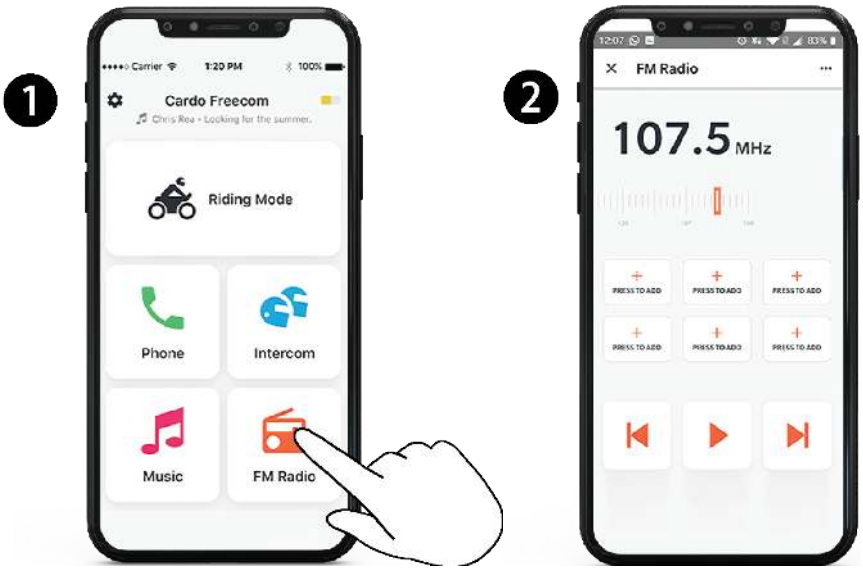


2. When you hear a station you want to select, tap .



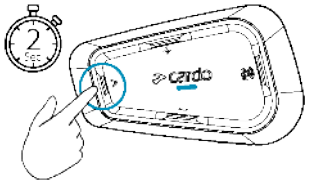
To store a scanned station in the active preset:

- Use the Cardo Connect App on your mobile device.



To toggle between FM and ATDP music:

- Press  for 2 seconds.



4.5 SWITCHING MUSIC SOURCES

If two music (A2DP) audio sources are paired, SPIRIT HD 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.
2. Play music (A2DP) from the other device.

SPIRIT HD automatically remembers your last played device.

5. RIDING WITH OTHERS

Your SPIRIT HD features the traditional Bluetooth protocol intercom communication mode.

5.1 BLUETOOTH INTERCOM

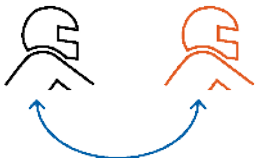
To connect your unit to another unit with a Bluetooth intercom, such as a Cardo Bluetooth unit or other Bluetooth-enabled devices, you must first pair their channels. Once paired, the unit automatically recognizes the other one whenever they are in range (line of sight up to 600m/0.4mi subject to terrain).

- Pairing a channel replaces any existing paired unit on that channel with the new unit.
- If you purchased the SPIRIT HD 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.

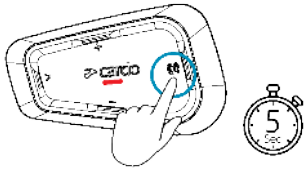
5.1.1 SETTING UP A BLUETOOTH INTERCOM CONNECTION

To set up a Bluetooth connection:

1. Confirm your unit is in Standby mode (LED flashes 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.

- 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 pair a non-Cardo Bluetooth intercom unit:

- The non-Cardo unit should be on phone pairing mode.
- All the steps are the same as with a Cardo Bluetooth intercom group.

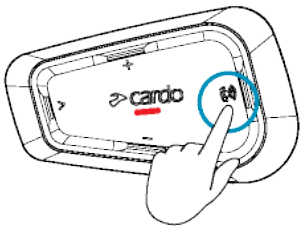
5.1.2 USING THE BLUETOOTH INTERCOM

5.1.2.1 STARTING/ENDING BLUETOOTH INTERCOM CALLS

To start or end communication with a rider or passenger:



- Press for 2 seconds .



If channels A and B are already paired the conversation starts for both of them.

5.1.2.2 RECEIVING BLUETOOTH INTERCOM CALLS

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

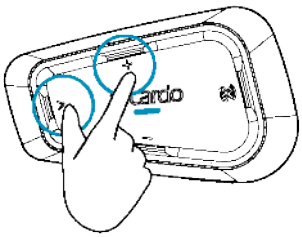
5.2 SHARING MUSIC

You can share music with a passenger or other rider. Music sharing is more suitable for rider/passenger combinations

- Music can be shared with only one passenger/rider.
- Bluetooth intercom calls are disabled when sharing music.
- If you paired your unit to two mobile phones, music will be shared from the mobile phone through which you last played music.
- When you stop sharing music, the music continues to play on your unit only.

To start sharing:

Press and for 2 seconds to start sharing on channel A (by default).



To stop sharing:

- Press the **Volume Up** button for 2 seconds.

6. TROUBLESHOOTING

6.1 SOFT RESET

If your SPIRIT HD stops responding, reset it in one of these ways:

- Turning it off and then on again (see Switching Your Unit On/Off).
- Using the supplied USB cable, connect your unit to the computer or wall charger for 30 seconds.

6.2 RESET TO FACTORY SETTINGS

This option deletes all paired devices and all configuration settings.

To perform a factory reset through the unit:

1. Check that your SPIRIT HD is in Standby mode (see SPIRIT HD Modes and Events - LED Indications).
2. Simultaneously press  for **5 seconds**.
   The LED flashes purple 5 times slowly, confirming that pairing has been reset.

6.3 FAQ

Additional answers to common problems can be found at www.cardosystems.com/support/spirit-hd/

7. PERSONALIZING YOUR DEVICE

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

- Cardo Connect App on iOS or Android devices.
- 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 Connect App (iOS/Android)
AGC sensitivity (Off/Low/Medium/High)	Medium	AGC automatically adjusts speaker volume according to ambient noise and riding speed. For example, when set to Low, higher ambient noise will cause the volume increase to kick in at a higher level.	✓
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 in Bluetooth mode (Enable/Disable) below).	✓
Bluetooth friendly name	SPIRIT HD	Sets the name that appears on your phone while pairing and in the Cardo app.	✓
Language	According to Your Region	Voice announcements and voice-assisted menus language (see "Spoken Status Announcements" below).	✓
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 in Bluetooth mode (Enable/Disable)	Disable	You can hear two audio sources simultaneously. For example, hear GPS while listening to music. Note: Parallel audio streaming may not work properly with some iOS devices (i.e., music player or GPS navigator) due to connected device limitations.	✓
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.	✓
Set the 6 FM radio presets	87.5	Pre-set FM radio stations.	✓
Spoken Status Announcements (Enable/Disable)	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.

7.1 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 SPIRIT HD 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[2,3]		Background
			Foreground [4]	
				Foreground [5]

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

[2]If you make two intercom calls simultaneously creating an intercom conference call, the volume for both audio sources is the same.

[3]If you make two intercom calls simultaneously creating an intercom conference call, you cannot hear the mobile phone or GPS.

[4]If you play music only, the music volume is not reduced.

[5]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).

You can configure parallel audio streaming via the Cardo app.

7.2 AUDIO SOURCE PRIORITIES

If Parallel Audio Streaming is disabled, SPIRIT HD 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[1] Intercom or Music[2] Music or Intercom[3] FM Radio

[1]Phone calls and GPS temporarily mute intercom, but group members remain part of the intercom group.

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

[3]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.

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

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 and microphone sensitivity according to ambient noise and riding speed.
Device	Mobile phone, GPS or music player.
	Voice announcements.
Unit	Cardo or non-Cardo Bluetooth Communication system.
Voice control	Voice activation (by saying a word or phrase)
Voice control sensitivity	Adjusts your microphone sensitivity for voice activation while you are riding.

9. SUPPORT

For additional information:

www.cardosystems.com/support/spirit-hd/

- To avoid potential problems and to receive our support and warranty coverage, we strongly recommend buying our products only from authorized Cardo dealers.
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