

AMi

USER MANUAL

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1. Introduction

Thank you for choosing the AMi Headset solution.

The AMi Headset is a smart, high-performance communication headset designed for use by professional teams. AMi Headset redefines the boundaries of what is possible with short-range, critical voice-communications by wrapping together a unique combination of Bluetooth and Dynamic Mesh Communication (DMC®) intercom technologies.

Bringing in years of field experience, the new AMi Headset delivers an autonomous group-communication performance like no other solution on the market today.

Designed for professional, safety, and industrial markets, AMi Headset connects two to fifteen team members on the go. Always-on communication coupled with natural voice operation, connectivity to 2-way radios, built-in FM radio, smartphone music streaming, and hear-through capabilities provide a unique blend of top-class communication offerings.

The AMi Headset is equipped with two tactical level dependent microphones that enable situation awareness, meaning that the microphones allow some of the ambient noise through, while reducing other ambient noise to a specific, regulation-allowed level if it gets too loud. At the same time, the system amplifies low ambient noise making sure you do not need to remove your headset to hear important sounds, such as warning signals.

Operating without the need for any infrastructure, the AMi Headset maintains multi-party intercom connectivity between free-moving team members in virtually any environment. With millions of Cardo intercom products sold to date, the AMi Headset is a mature solution from day one, covering all your bases and then topping them up with game-changing capabilities.

The AMi Headset comes with the standard headband version or the helmet mount.

This User Manual describes how to use the AMi Headset, that in turn enables you to experience all the capabilities of the PRO-1 module embedded in this headset.

Important

Please read, understand, and follow the safety instructions in this User Manual prior to working with the AMi Headset.

2. Before using the device

Millions of employees across the world are exposed to excessive levels of noise at their workplace. Because of this, many suffer work-related hearing loss, tinnitus, and other related medical conditions which may have a permanent, negative effect on their quality of life.

To ensure that items of hearing protection are fit-for-purpose, and in line with the requirements of the Control of Noise at Work Regulations 2005, ear protection products for sale in Europe must meet the EN352 series of European standards. The USA/Canada require ANSI S3.19-1974, and Australia & New Zealand require AS/NZS1270:2002.

2.1 When is hearing protection needed?

In Europe, according to the Control of Noise at Work Regulations 2005, the exposure level at which employers need to provide hearing protection is a daily or weekly personal noise exposure of 85 dB (decibels). Those who work in noise levels between 80 dB (lower action level) and 85 dB must be provided with suitable hearing protection on request. Where noise levels reach or exceed 85 dB (upper action level), suitable hearing protection must be supplied and worn.

The exposure limit is 87 dB; this figure considers any reduction in exposure provided by hearing protection. Workers must not be exposed to noise levels exceeding 87 dB whether they are wearing hearing protection or not.

The AMi Headset has been designed to comply with this certification to protect your hearing.

2.2 Important user information

Disclaimer: Make sure you act in accordance with the following user information. Failing to do so can severely reduce the protection and function of the AMi Headset.

- Inspect the AMi Headset before each use.
- The AMi Headset includes disposable items (such as the cushion and microphone shield) that can deteriorate or get damaged over time. You should replace these parts if they are damaged.
- The AMi Headset should be cleaned and disinfected periodically. You can use a moist cloth. Do not dip it into water.
- Ensure that the headset is adjusted to your ears properly to have maximum noise reduction.
- The headset should be worn at all times in noisy environments.
- The headset should be regularly inspected for cracking, leakage, or damage that may affect the hearing protection. Do not use a damaged headset.
- Adjust the volume setting to the lowest acceptable level.
- Use the Level Dependent feature for Situation Awareness – that allows you to hear your environment while protecting you from loud noise.
- Make sure the headset is fully charged to enable protection and communication throughout the day.
- Make sure to store the headset, when not in use, in a dry and cool place that doesn't exceed 55 degrees.

2.2.1 Technical Data

2.2.1.1 Headband Version

- Material of headband: Steel, textile, and polyurethane
- Material of ear cushion: PVC and polyurethane
- Material of cups: ABS

2.2.1.2 Helmet Mount Version

- Material of headband: Steel
- Material of ear cushion: PVC and polyurethane
- Material of cups: ABS

2.2.2 Warnings

2.2.2.1 General

All headsets with hearing protection provide limited noise protection. It is your responsibility to select the correct device, with the appropriate noise reduction, for your work environment. Improper selection of the device, or improper use and maintenance, may lead to serious hearing loss.

2.2.2.2 Battery Warning

Instructional safeguards, in accordance with Clause F.5, shall be provided to protect the battery from extreme conditions or user's abuse. Examples that shall be considered include:

- Replacement of a **battery** with an incorrect **battery**-type that can defeat a **safeguard** (for example, in the case of some lithium battery types).
- Disposal of a **battery** into fire or a hot oven, or mechanically crushing or cutting of a **battery**, that can result in an **explosion**.
- Leaving a battery in an extremely high temperature environment that can result in an **explosion** or the leakage of flammable liquid or gas.
- Subjecting a **battery** to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

2.2.2.3 Limitation of Liability.

In no event shall AMi be liable for any incidental, special, indirect, punitive, exemplary, or consequential damages, whether resulting from the use, misuse, or inability to use this device, or from defects in the device, or for any damages whatsoever resulting from the use of the device.

3. PPE safety statement

3.1 PPE Statement US

ATTENUATION DATA - Headband

Tested according to ANSI S3.19-1974

Frequencies (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR
Mean attenuation (dB)	24.2	25.2	32.2	34.9	33	34.2	38.5	39.4	37.5	26dB
Standard deviation (dB)	2.6	2.3	2.1	3.0	2.5	3.1	4.0	2.1	2.6	

Headband Force = 2.8lbs

ATTENUATION DATA – Helmet Mount

Tested according to ANSI S3.19-1974

Frequencies (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR
Mean attenuation (dB)	20.8	23.3	29.5	34.0	33.2	35.5	39.8	40.1	38.5	23dB
Standard deviation (dB)	3.6	4.1	4.2	3.3	2.6	4.1	4.5	3.8	3.0	

Headband Force = 2.6lbs

The level of noise entering a person's ear canal, when the hearing protector is worn as directed, is closely approximated as the difference between A-weighted environmental noise level and the NRR.

Example:

1. The environmental noise level as measured at the ear is 92 dBA.
2. The NRR is 26 decibels (dB).
3. The level of noise entering the ear canal is approximately 66 dBA.

CAUTION: For noise environments dominated by frequencies below 500Hz, the C-weighted environmental noise level should be used. Improper fit of this device reduces its effectiveness for attenuating noise. Consult the enclosed instructions for proper fit. Although hearing protectors can be recommended for protection against the harmful effects of impulsive noise, the Noise Reduction Rating (NRR) is based on the attenuation of continuous noise and may not be an accurate indicator of the protection attainable against impulsive noise such as gunfire. Constant or repetitive exposure to impulsive noise may lead to serious injury, including temporary or permanent deafness.

The Noise Reduction Rating (NRR) calculated from the attenuation data is 26dB. Earmuffs must be properly fitted to attenuate noise effectively. Refer to instructions.

3.2 PPE Statement Canada

ATTENUATION DATA- Headband and Helmet Mount

Tested according to ANSI S3.19-1974

CSA level AL

3.3 PPE Statement EU

Tested according to EN352-1:2002 (Headband)

Attenuation data – please see the enclosed instruction insert

SNR=32 dB	H=32 dB	M=31 dB	L=25 dB
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Size Range: Small/Medium/Large

Headband Force: Small = 10.4N / Medium = 10.8N / Large = 11.0N

3.4 PPE Statement EU

Tested according to EN352-3:2002 (Helmet Mount)

Attenuation data – please see the enclosed instruction insert

SNR=29 dB	H=31 dB	M=27 dB	L=20 dB
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Size Range: Small/Medium/Large

Headband Force: Small = 10.4N / Medium = 10.8N / Large = 11.0N

3.5 PPE Statement AUS/NZS

Tested according to AS/NZS 1270:2002 - Headband

Frequencies (Hz)	125	250	500	1000	2000	4000	8000	SLC80
Mean attenuation (dB)	22.6	22.8	28.7	34.4	31.5	36.3	37.2	30dB
Standard deviation (dB)	4.0	3.4	3.0	2.8	2.7	2.2	2.1	
Mean-Minus-Std, Deviation dB	18.6	19.4	25.7	31.6	28.8	34.1	25.1	

Clamping Force = 12.0N

Class Classification: Class 5

Tested according to AS/NZS 1270:2002 – Helmet Mount

Frequencies (Hz)	125	250	500	1000	2000	4000	8000	SLC80
Mean attenuation (dB)	17.1	18.2	25.3	31.4	29.6	35.1	36.2	26dB
Standard deviation (dB)	6.9	6.9	4.0	2.6	1.9	2.4	4.8	
Mean-Minus-Std, Deviation dB	10.2	11.3	21.3	28.8	27.7	32.7	31.4	

Clamping Force = 12.0N

Class Classification: Class 5

4. Statements Notices



4.1 Federal Communications Commission (FCC) Statement

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105 (b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference
2. This device must accept any interference received, including interference that may cause undesired operation.

FCC RF Radiation Exposure Statement:

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. The antenna used for this transmitter must not transmit simultaneously with any other antenna or transmitter, except in accordance with FCC/IC multi-transmitter product procedures. Instructions concerning human exposure to radio frequency electromagnetic fields - to comply with FCC Section 1.310 for human exposure to radio frequency electromagnetic fields, a distance of at least 2 cm. between the equipment and all persons should be maintained during the operation of the equipment.

4.2 Industry Canada (IC) FVIN: V1.0.0

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

IC RF Radiation Exposure Statement:

This equipment complies with the RSS-102 exemption from routine RF exposure evaluation for use in an uncontrolled environment.

4.3 European CE Notice

Your Cardo product (the “Product”) is in conformity with the following essential requirements of Council Directive 2014/53/EU: Articles 3.1a, 3.1.b and 3.2. The Product is manufactured in accordance with Annex II of the above directive.

For The complete EU Declaration of Conformity please refer to the Cardo CREW website: www.cardocreww.com

Operating temperature: The Product is designed to work in temperatures between -20° and 55° C (-4° and 131° F).

Charging temperature: Battery charging temperature limits: 0° - 40°C (32°-104°F).

AC/DC Adapters: When charging from a wall outlet, make sure that the plug-in AC/DC adapter meets the following criteria:

Input: 100-240 V, 50/60 Hz, 0.2 A maximum. Output: 5 V DC, 1 A maximum.

Equipment must be supplied by an external, specific limited power source, classified as PS1 according to IEC 62368-1.

OEM integrator can use CE DOC of the PRO1 module as part of its end product declaration, as long as the PRO-1 is the only Radio unit in the end product.

Declaration of Conformity (DOC)

The Product is compliant with, and adopts, the Bluetooth® Specification 4.2 and has successfully passed all interoperability tests that are specified in the Bluetooth® specification. However, interoperability between the device and other Bluetooth®-enabled products is not guaranteed.

Copyright

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WARNING:

You are hereby notified that your complete and undivided attention is required when using a communication device (the “Product”). Failure to avoid potentially hazardous situations could result in accident resulting in serious injury or death.

Cardo advises you to take all necessary precautions and remain alert in work environment. All publications are intended to address technical capabilities and should not be construed as encouraging the operation of Cardo’s Products in any manner that is unsafe or prohibited by law.

Exercise all due caution while using this Product and obey all applicable work laws. Always use the Product in a safe manner and do not become distracted by the Product while working. Do not operate the Product if it becomes unsafe to do so.

No part of the body should come in contact with the antenna during operation of the equipment. Use Product only where safe, and avoid usage at gas stations, fuel depots, or around explosives. Use with hearing aids and medical devices only after consulting a physician or specialist. Make sure to install and mount the Product in a stable manner.

Health Warnings:

Hearing Loss: Audio devices can cause hearing loss. Employ care and avoid exposure to excessive volume levels that may damage or impair hearing or lead to hearing loss. Permanent hearing loss may occur if products are used at high volume for prolonged periods.

RF Signals: Most electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals emanating from your wireless equipment.

Pacemakers:

The Health Industry Manufacturers Association recommends that a minimum separation of about six inches (or 16 cm) to be maintained between a mobile phone, or wireless device, and a pacemaker to avoid potential interference with the pacemaker. Be sure not to interfere with the functionality of personal medical devices.

Hearing Aids: Some devices may interfere with certain hearing aids. In the event of such interference, you should consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices: If you use any other personal medical device, consult the manufacturer of your device and/or your physician to determine if it is adequately shielded from interference caused by external RF energy. Your physician may be able to assist you in obtaining this information.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 2cm between the transmitter's radiating structure(s) and the body of the user or nearby persons.

This module is intended for OEM integration. The OEM integrator is responsible for FCC compliance and compliance with all applicable regulations including those for modular transmitters 47 C.F.R. 15.212. The OEM product must comply with all applicable labelling requirements including those contained in 15 C.F.R. 15.19. The OEM is solely responsible for certification and testing and labelling of its own products. In addition to any independently required labels, the OEM shall also affix to the outside of a device, into which the module is installed, a label referring to the enclosed module. This exterior label should be prepared in a legible font and permanently affixed using the wording "Contains Transmitter Module FCCID: Q95ER24".

The user must comply with all of the instructions provided by the Grantee, which indicate installation and/or operating conditions necessary for compliance.

The OEM is required to ensure that the end product integrates this module, so as to maintain a minimum distance of 2cm between the equipment's radiating structure(s) and the body of the user or nearby persons. The OEM shall also advise its end user of this requirement as required by applicable rules.

The OEM shall require that the end user of its product be informed that the FCC radio frequency exposure guidelines for an uncontrolled environment can be satisfied. The OEM shall further inform its end user that any change or modifications to this module, not expressly approved by the manufacturer, will void the warranty and the users' authority to operate the equipment.

5. Getting Started

5.1 Getting to Know Your AMI Headset

The buttons on your AMI Headset control the following functionalities:

MFB (Multi-Function or MF button):

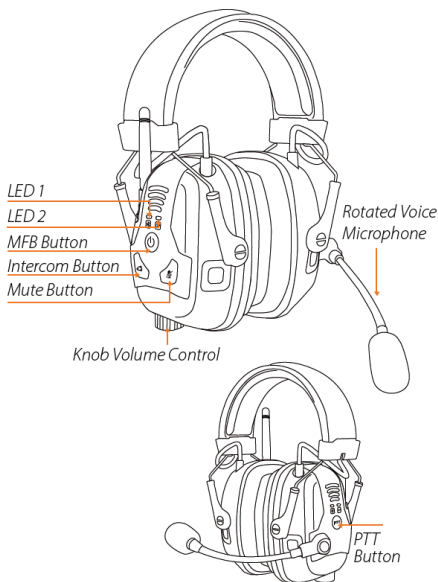
- Power On/Off
- Main Voice Menu
 - Music Control
 - FM Control
- Bluetooth Pairing

INT (Intercom):

- Intercom Grouping
- Voice Menu
 - Bridge
 - Private Call
- Emergency Call
- Ambient Noise Control

PTT (Push-to-Talk)

Mute
Volume knob (up/down)



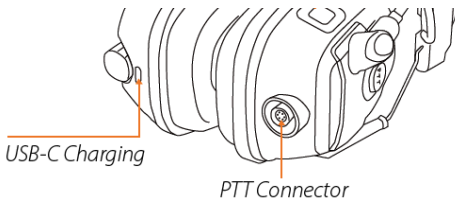
The connectors on your AMi Headset control the following functionalities:

USB-C Charging:

- Charge your device

PTT Connector (Intercom):

- Connection to 2-Way Radio using dedicated cable

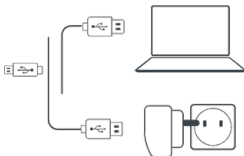


5.2 Charging the AMi Headset

Make sure that your AMi Headset battery is charged for at least 3 hours before initial use.

To charge the unit:

- Using the USB-C cable, connect your computer or wall charger to the USB port on your AMI HEADSET.



- 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 back on.
- Charging is possible only if using Li-Ion batteries.

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

- Red LED on — charging
- Green LED on — charging complete

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

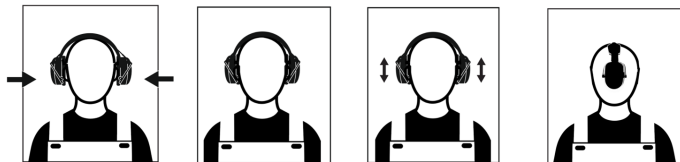
5.3 Wearing Instructions

5.3.1 Wearing Instructions for AMi Headset Headband Type

To place the headset in the appropriate manner, make sure that you:

- Position the cups over your ears in a way that they fully enclose the ears
- Seal the cushions tightly against your head
- Adjust the height of the cups by sliding them up or down

Note: The headband should sit straight on top of your head.



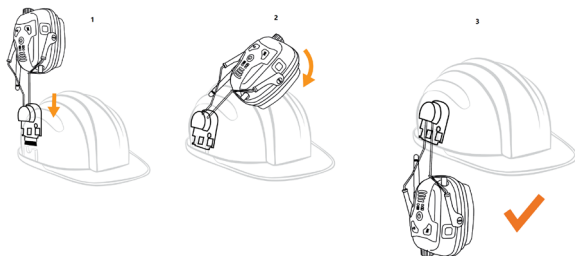
5.3.2 Wearing Instructions for AMi Headset Helmet Mount

The AMi Headset also includes a Helmet Mount version. It supports helmets with a standard euro slot (30mm) - (For example: 3M G3000, MSA V-Gard).

To check if your specific helmet can be used with the AMi Headset helmet mount, please contact your seller.

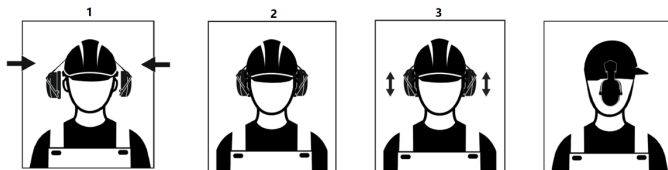
To install the headset on your helmet and fit it on your head:

1. Insert the slot adapters into the slots on the sides of the helmet.
2. Press them all the way down until you hear a snap.
3. Rotate the headset to vertical position.



To fit the helmet with the headset on your head:

1. Tighten the headset so that they press on your ears. Press until you hear a distinct click.
2. Position the earmuffs on your ears in a way that fully seal your ears.
3. You can adjust the earmuffs' height up or down for optimal fit.
4. When you are not in a noisy environment, you have the option to rotate the headset over the helmet.



5.4 Switching Your Unit ON/OFF

To switch your AMi Headset on:

- Press both the **Intercom** and the **Multi-Function (MF)** buttons for 1 second.

The speaker plays an ascending tone, and a voice message greets you. The LED confirms your AMi HEADSET is on:

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

To switch your AMi Headset off:

- Press both the **Intercom** and **MF** buttons for 1 second.
The LED flashes red three times, confirming that your unit is switching off. The speaker plays a descending tone and a voice message, "Goodbye."

5.5 Using Your AMi Headset

You can operate the various features of your AMi Headset in the following ways:

- Press a button, or a combination of buttons, on the unit. The AMI Headset has an intuitive voice menu. Just listen to the commands and choose the right one.
- Use automatic voice recognition by saying a command (for example, "Hey Cardo, Radio On").
- Use the Cardo AMI Mobile App — PROmesh on your mobile device (once it is paired with the unit).

You can also configure your unit by connecting it to a computer with the supplied USB cable and running the Cardo AMI Configuration Tool.

5.6 Pairing Your Unit to Bluetooth Devices

Your AMI Headset has two Bluetooth channels for connection to Bluetooth devices such as mobile phones and 2-way radio devices.

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

To pair the AMI Headset to a mobile phone:

1. Enable Bluetooth on your mobile phone.
2. While the AMI Headset is in standby mode, press the **MF** button for 5 seconds. The LED flashes red and blue.
3. On your mobile phone, search for Bluetooth devices.
4. Once your AMI Headset appears in the list of available devices, select it. If prompted for a PIN or Passkey, enter 0000 (four zeros).
Your phone will confirm that pairing has succeeded and the LED flashes purple for 2 seconds.

To pair the AMI HEADSET with a 2-way radio Bluetooth device:

1. Enable Bluetooth on the 2-way radio device.
2. While the AMI Headset is in standby mode, press the **MF** button for 5 seconds. The LED flashes red and blue.
3. Tap the **MF** button once. The LED flashes red and green.
4. On the device you are pairing, search for Bluetooth devices.
5. Once your AMI Headset 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 2-way radio devices allow connection to Bluetooth audio devices. Consult your 2-way radio user manual for more information.

To cancel the pairing process:

- Press the **MF** button for 2 seconds. The LED stops flashing red and blue/green.

6. Operation

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

6.1 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:

- Turn the **Volume** knob to the right (clockwise).

A tone is played on the speaker until you reach the maximum volume, as indicated by the maximum volume tone. The tone in the high volume levels is different than the low volume ones to indicate that you are using high volume. Be sure to always protect your hearing.

To turn the volume down:

- Turn the **Volume** knob to the left (counterclockwise).
A tone is played on the speaker until you reach the minimum volume, as indicated by the minimum volume tone.

Mute Microphone

To mute the microphone completely, but keep speaker volume (to keep hearing communication):

- Press and hold the **Mute** button

To unmute the microphone:

- Release the **Mute** button

Mute Audio

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

- Using voice command – “Hey Cardo Mute Audio”

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

- Using voice command – “Hey Cardo unmute Audio”
- Or just tap any key

6.2 Making AND Receiving Phone Calls

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

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

To make a phone call:

- To dial using your mobile phone's voice dial option, say "Hey Siri" (if you are using an iOS device) or "OK Google" (if you are using an Android device), then make your call as per the instructions for your mobile device.
- To redial the last number called on your mobile device, tap the **MF** button, wait until you hear “Redial number” and tap again, or say “Hey Cardo, redial number.”
- To dial your preset speed dial number, tap the **MF** button, wait until you hear “Speed dial” and tap again, or say “Hey Cardo, speed dial.”

To answer a call:

- Tap the **MF** button or say “Answer.”

To reject a call:

- Press the **MF** button for 2 seconds.

To ignore a call:

- Say “Ignore.”

To end a call:

- Tap the **MF** button.

6.3 Streaming Music

You can stream music from your paired device to your AMi Headset. To control music streaming from your paired device:

To start music streaming:

- Tap the **MF** button, wait until you hear “Music on” and tap again, or say “Hey Cardo, music on.”

To stop music streaming:

- Tap the **MF** button, wait until you hear “Music off” and tap again, or say “Hey Cardo, music off.”

To skip to the next track (while streaming):

- Tap the **MF** button, wait until you hear “Next track” and tap again, or say “Hey Cardo, next track.”

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

- Tap the **MF** button, wait until you hear “Previous track” and tap again, or say “Hey Cardo, previous track.”

6.4 Listening to FM Radio

The AMi Headset is equipped with a built-in FM radio.

To turn on the FM radio:

- Tap the **MF** button, wait until you hear “Radio on” and tap again or say “Hey Cardo, radio on.”

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

To turn the FM radio off:

- Tap the **MF** button, wait until you hear “Radio off” and tap again, or say “Hey Cardo, radio off.”

To skip to the next station:

- Tap the **MF** button, wait until you hear “Next station” and tap again, or say “Hey Cardo, next station.”

To skip back to the previous station:

- Tap the **MF** button, wait until you hear “Previous station” and tap again, or say “Hey Cardo, previous station.”

To perform auto-scan (search for the next 6 stations):

- Tap the **MF** button, wait until you hear “Auto scan” and tap again.

6.5 Level Dependent/ Listen Through

Using your hearing protection earmuff isolates you from your surroundings. This can be dangerous in some cases where you need to be aware of close hazards.

The AMi Headset 1 is equipped with two Level Dependent microphones (one on each muff) to enable some of the ambient noise to be heard. When the ambient noise gets too loud, the Level Dependent microphone cuts off and you are isolated again.

You can also control the ambient noise volume level from the AMi Headset.

To enable/disable the level-dependent feature:

- Tap the **Intercom** button, wait until you hear “Level Dependent enable/disable,” and then tap again.

To change the level-dependent volume:

- Tap the **Intercom** button, wait until you hear “Level Dependent volume control,” and then use the volume buttons to change the level-dependent volume.

6.6 Self-hearing Sidetone

When you are using the AMi Headset in very noisy environment, it is sometimes difficult to hear yourself and to know whether you can be heard over the Intercom.

When the self-hearing feature is enabled, you can hear yourself in your own speakers while talking, making sure your AMi members can hear you as well.

You can control the self-hearing volume level from the AMi Headset.

To enable/disable self-hearing:

- Tap the **Intercom** button, wait until you hear “Self-hearing enable/disable,” and then tap again.

To change the self-hearing volume:

- Tap the **Intercom** button, wait until you hear “Self-hearing volume control,” and then use the volume buttons to change the self-hearing volume.

6.7 Emergency Call

The AMi Headset supports an emergency announcement by you.

If you require assistance, initiating the emergency call will trigger an outgoing phone call to a predefined number (configured in the PROMesh mobile application or Cardo Configuration Tool) and bridge it to the active intercom call. It also announces to all the connected AMi members that an emergency call was initiated.

To initiate an emergency call:

- Press and hold the **Intercom** button for 2 seconds. The “Emergency call initiated” announcement is played. You have 3 seconds to cancel this call by pressing the **Intercom** button again.

6.8 Working with 2-way Radio

The AMi Headset supports working with 2-way radio devices. It can be connected to the 2-way radio device via cable or Bluetooth.

The AMi Headset has a special four pole audio connector for wired connection. A special connector produced by your partner should be attached to it when working with 2-way radio.

To start an outgoing 2-way radio session:

- Press and hold the **Push-to-Talk (PTT)** button while speaking. Releasing the button releases the transmission.

To start an incoming 2-way radio session:

There is nothing to do here. While you are connected to the 2-way radio device, any transmission in the network is automatically heard in the AMi Headset speakers.

- Compatibility with different brands and types (wired and wireless) require dedicated testing according to the chosen device.
- Some 2-way radio devices require to be in high volume, in your 2-way radio device, in order to hear it in the AMi Headset speakers.

6.9 2-way Radio Audio Mixing and Sharing

You can choose to hear the incoming 2-way radio audio in parallel with the intercom group audio.

To enable/disable 2-way radio audio mixing:

- Tap the **Intercom** button, wait until you hear "Enable/disable 2-way radio audio mixing," and then tap again.

You can also share your incoming and outgoing 2-way radio audio with your AMI members.

To enable/disable 2-way radio audio sharing:

- Tap the **Intercom** button, wait until you hear "Enable/disable 2-way radio audio sharing," and then tap again.

6.10 Voice Commands

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

AMI Headset uses the following predefined voice commands.

To ...	Say ...
Turn on the radio	"Hey Cardo, radio on"
Turn off the radio	"Hey Cardo, radio off"
Skip to the next pre-set radio station	"Hey Cardo, next station"
Skip to the previous present radio station	"Hey Cardo, previous station"
Turn on music	"Hey Cardo, music on"
Turn off music	"Hey Cardo, music off"
Play the next music track	"Hey Cardo, next track"
Play the previous music track	"Hey Cardo, previous track"
Raise volume	"Hey Cardo, volume up"
Lower volume	"Hey Cardo, volume down"
Mute audio	"Hey Cardo, mute audio"
Unmute audio	"Hey Cardo, unmute audio"
Call the default number (configurable)	"Hey Cardo, speed dial"
Redial the last number	"Hey Cardo, redial number"
Answer an incoming call	"Answer"
Ignore an incoming call	"Ignore"
Access Siri (when connected to an iOS device)	"Hey Siri"
Access Google (when connected to an Android device)	"OK Google"
Check the battery status	"Hey Cardo, battery status"
Initiate an emergency call	"Hey Cardo, emergency"
Initiate private chat	"Hey Cardo, private chat on"
Terminate private chat	"Hey Cardo, private chat off"
Current channel number	"Hey Cardo, what is my channel?"
To listen to all available commands	"Hey Cardo, command list"

7. Talking with Others

Your AMI Headset intercom communication functionality uses Cardo's Dynamic Mesh Communications (DMC) technology.

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

7.1 How Does DMC Work?

Anyone can start a new DMC intercom group.

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

7.2 Intercom Operation

You can use the intercom to speak with other AMI members in your intercom group. For more information on creating DMC intercom groups, see [Creating Intercom Groups](#) on page 18.

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

Using the intercom, you can also:

- Chat privately with another crew member in your DMC group, see [Chatting Privately](#) on page 19.
- Bridge a non-crew Headset member, see [Using the Intercom](#) on page 19.
- Mute/unmute intercom groups, see [Muting/Unmuting DMC Intercom Groups](#) on page 19.
- Delete intercom groups, see [Deleting Intercom Groups](#) on page 19.
- Listen to music while in DMC intercom groups, see [Mixing the Intercom Audio with Music Streaming and FM Radio](#) on page 20.

7.2.1 Setting Up and Using DMC Intercom Groups

You can manage DMC intercom groups to suit your work requirements. This includes creating groups, joining groups, leaving and re-joining groups, or changing your active group.

Intercom groups are created and deleted by a group creator. Each group can have up to 15 crew members: one group creator/admin and a maximum of 14 group members.

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

If a crew member's connection is lost, they will hear a "Group disconnected" announcement. The crew member remains part of the group and reconnects automatically once in range.

7.2.2 Creating Intercom Groups

When creating an intercom group, you must coordinate with the other crew member who will be the group creator.

To create an intercom group:

1. The group creator and all group members: Press the **Intercom** button for 5 seconds. The LED flashes green quickly.
2. **Only** the group creator: Tap the **Intercom** button. The LED flashes red and green quickly.
3. Other members can join the group within 2 minutes.

4. After each member joins successfully, the LEDs of the joined unit and the creator's unit flash purple. After grouping is completed, the intercom conference starts automatically.
5. To stop the grouping process, press the **Intercom** button for 2 seconds.

7.2.3 Joining Intercom Groups

You can join or rejoin to an intercom group created by another crew member.

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

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

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

To join an existing intercom group:

- 1) Both you and the group creator: Press the **Intercom** button for 5 seconds. The LED flashes green quickly.
- 2) Only the group creator: Tap on the **Intercom** button. The LED flashes red and green quickly.

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

- Purple: You have successfully joined the group.
- Yellow: You cannot join the group because it has already reached the maximum number of AMI members.
- Red: Failed to join.

7.2.4 Deleting Intercom Groups

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

To delete an intercom group:

1. Press the **Intercom** button for 5 seconds. The LED flashes green quickly.
2. Press the **Volume Down** button for 2 seconds. The LED flashes purple 5 times slowly, confirming that group has been deleted.

7.2.5 Using the Intercom

7.2.6 Chatting Privately

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

This option is also available using the Cardo PROMesh app.

You have two options for choosing your private chat member.

Using Cardo PROMesh mobile application:

- In the mobile app, select the crew member you want to speak with in private.

Using the AMI Headset buttons:

- On both AMI Headset devices, press and hold the **Intercom** and **Volume Down** buttons for 5 seconds.

To start a private chat:

- Tap the **Intercom** button, wait until you hear "Private chat on" and tap again, or say "Hey Cardo, Private chat on."

To stop a private chat:

- Tap the **Intercom** button, wait until you hear “Private chat off” and tap again, or say “Hey Cardo, Private chat off.”
- When a user from the private chat moves out of range/Shut down/Mobile call/No one is talking – there is timeout of 30 seconds and then the private chat ends. You hear the announcement “Private Chat off.” After that, you return to the intercom group session.

7.2.7 Adding a NON-AMI Headset Member to the Intercom Group Conversation (Bridge)

You can use your connected mobile phone to connect a third party into the intercom group.

To add (bridge) a phone call member to the group:

- Tap the **Intercom** button while connected to a group and in an ongoing mobile phone call.

To close the bridge and disconnect the phone call member from the group:

- Tap the **Intercom** button while bridging is active.

7.2.7.1 Muting/Unmuting DMC Intercom Groups

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

To mute/unmute the DMC group:

- Tap the **Intercom** button, wait until you hear “Mute group” and tap again.

7.2.7.2 Mixing the Intercom Audio with Music Streaming and FM Radio

The AMI Headset can use parallel audio streaming to stream audio from two connected sources simultaneously, so that you can listen to your music, or the FM radio, while holding an intercom conversation.

The AMI Headset automatically manages your music and FM radio volume while using intercom.

Changing the volume while the intercom is active and Music/FM are in the background, changes the intercom volume.

To increase/decrease the Music or FM Radio volume while connected to an intercom group, use the Volume buttons while no audio is heard on the intercom group.

8. Troubleshooting

8.1 Soft Reset

If your AMI Headset stops responding, reset it in one of these ways:

- Turning it off and then on again.
- Using a USB cable, connect your unit to the computer, or wall charger, for 30 seconds.

8.2 Reset to Factory Settings

This option deletes all paired units, devices, and all configuration settings.
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To perform a factory reset:

- While the unit is connected to Promesh App, go to setting and press the device name on top and press “reset to factory setting “
- The LED flashes purple 5 times slowly, confirming that pairing has been reset.

9. Personalizing Your Device

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

- Cardo Mobile App on iOS or Android devices
- Cardo AMI Configuration Tool - Windows® 7 / Windows® 10 / Mac OS X 10.8
- Unit buttons

Parameter	Default Values	Description
Language Setting	English	Choose the language of your product (voice prompts, voice operation, and speech recognition).
Device Bluetooth Name	Cardo PRO-1	Choose the product Bluetooth name.
Speech Recognition	Enable	Enable or Disable the ASR (Automatic Speech Recognition).
Level Dependent	Off	Power ON or OFF the Level Dependent (Listen Through) feature. When Level Dependent is on, you can hear the ambient noise.
Level Dependent Volume	30%	Adjust the Level Dependent (Listen Through) volume (10 levels).
Self-Hearing	Off	Power ON or OFF Self-Hearing (Sidetone) feature.
Self-Hearing Volume	30%	Adjust the Self-Hearing (Sidetone) volume (10 levels).
Background Audio Volume Level	60%	Define the volume level of the background (secondary) audio.
Intercom Voice Activity Detection Sensitivity	Medium	Adjust the threshold for detecting voice activity according to your voice strength: <ul style="list-style-type: none"> • Medium (default) • Low (less sensitive) • High (more sensitive)
Microphone Sensitivity	Medium	Adjust the microphone gain (e.g., higher gain means that the other side hears you louder): <ul style="list-style-type: none"> • Medium (default) • Low (heard lower) • High (heard louder)
Intercom & Media Mixing	Enable	Enable or disable the FM Radio or A2DP music streaming with the intercom audio mixing.
2-Way Radio Audio Mixing	Enable	Enable or disable 2-way radio audio with other audio sources such as the intercom, FM radio, and music streaming.
2-Way Radio Sharing	Disable	Enable or disable 2-way radio audio sharing with the intercom group. When enabled, all the group members will hear the 2-way radio audio.
Intercom Channel Number	3	Choose the intercom channel number from 1 to 8. All group members have to be on the same channel to communicate.
Emergency Number		Set Emergency Call number.
Speed Dial Number		Set Speed Dial number.
FM Radio Band	Worldwide	FM Radio frequency band: World Wide: 85-108Mhz Japan: 76-95Mhz
FM Radio RDS	Disable	Enable or disable the RDS (Radio Data System).
FM Pre-set Station - 1 to 6	95	Enter radio frequency for station 1.

10. Appendix A. AMI Headset LED Indications

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

Your AMI Headset 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 LEDs indications for modes and events according to the current battery state.

LED	Flashing	Battery State	Mode or Event
Green	Fast (3 times)	Normal Low Battery Charging	Power on
Green	Slow (repeated at 3-second intervals)	Normal	Standby
Green	Slow twice (repeated at 3-second intervals)	Normal	Incoming/outgoing call (intercom or mobile) Audio active (intercom, FM, A2DP)
Red and blue	Slow (5 times)	Normal Low Battery	Factory reset
Red and green/Red	Red and green twice slowly, then red	Charging	Incoming/outgoing call (intercom or mobile) Audio active (intercom, FM, A2DP)
Red and green /Red	Slow Red and green and red (repeating)	Charging	Standby
Red/Blue	Alternating fast	Normal Low Battery Charging	Pairing Mobile
Red and blue	For 2 seconds	Normal Low Battery Charging	Mobile pairing successful Mobile connected
Green	Fast (repeating)	Normal or Low Battery	Grouping intercom
Red/Green	Alternating fast	Normal Low Battery Charging	Intercom Grouping as a group creator Bluetooth pairing with 2-Way Radio
Red	Twice slowly (repeated at 3-second intervals)	Low Battery	Incoming/outgoing call (intercom or mobile) Audio active (intercom, FM, A2DP)
Red and green	For 2 seconds	Normal Low Battery Charging	Intercom grouping successful
Red	For 2 seconds	Normal or Low Battery	Intercom grouping failed
Red	Slow (repeated at 3-second intervals)	Low Battery	Standby
Red	Fast (3 times)	Normal Low Battery Charging	Power off
Red	Remains on	Charging	Off

11. Glossary

Term/Abbreviation	Description
A2DP	Advanced Audio Distribution Profile (for music). A protocol for playing music over Bluetooth.
Level Dependent / Listen through	Transferring the ambient noise into the earmuffs in a controlled way to protect your hearing.
Self-Hearing / Sidetone	Enables you to hear yourself while talking to verify that others can also hear you.
DMC	Dynamic Mesh Communications.
Language	Voice announcements and voice commands language.
Voice Control	Voice activation (by saying a word or phrase) of certain features for hands-free operation.
Voice Control Sensitivity	Adjusts your microphone sensitivity for voice activation while you are riding.



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