



Welcome

Congratulations on your purchase of a Cochlear™ Wireless Mini Microphone 2+, a high-quality portable speech and audio streamer.

Intended use

The Cochlear Wireless Mini Microphone 2+ is intended to be a wireless remote microphone or connection to an audio device for a compatible Cochlear sound processor.

Indications:

This accessory has no therapeutic indications in itself. It will support the therapeutic indications of the Cochlear wireless sound processor used with this accessory.

Clinical Benefit:

The Cochlear Wireless Mini Microphone 2+ is intended to further improve audibility of speech and/or other sounds.

Key to device See figure 1

- ON/OFF button
- Microphones
- Status indicator light (LED)
- FM connector
- Mode selector button
- Pairing button
- Mounting clip
- Mode and battery indicator lights (LED)
- Line-in connector
- Volume down
- Mute button
- Volume up
- Micro USB for charging
- Mode indicator light (LED)

Introduction

The microphone supports one-to-one communication and can be used as a table microphone to pick up speech from multiple speakers. Additionally, the microphone supports connection with induction loop systems, FM systems (European FM receiver required) and Line-in signals.

Please read this manual carefully to fully benefit from the Microphone. Ask your hearing care professional if you have any questions.

For more information and a full list of compatible sound processors visit www.cochlear.com/compatibility

For your safety, carefully read the chapter "Important Information".

Warranty

The warranty does not cover defects or damage arising from, associated with, or related to the use of this product with any non-Cochlear processing unit and/or any non-Cochlear implant. See "Cochlear Global Limited Warranty card" for more details.

Contacting customer service

We strive to provide the best possible products and services to our clients. Your views and experiences with our products and services are important to us. If you have any comments you would like to share, please contact us.

Key to symbols

The following symbols will be used throughout these documents.

	Caution
	CE-mark
	UK Conformity mark
	Serial Number
	Medical device
	Unique device identifier
	Date of manufacture
	"Consult instructions for use" or "Operating instructions"

When streaming is activated, an audible melody or a flashing light (depending on the type of sound processor) will be followed by streamed audio into the microphone.

Note: You can also start and stop streaming, adjust volume levels and mute the microphone from a Cochlear Baha® Remote Control 2 (optional accessory) or a Cochlear App offering control functionality. You can also start and stop streaming using a CR230 or CR210 Remote. Ask your hearing care professional for more information.

Stop streaming

- Press the wireless streaming/program button on your sound processor. This will return the sound processor to the last program used.

Note: If you move out of your microphone's range but return within the range before 5 minutes have passed, your sound processor will automatically reconnect and continue streaming.

Microphone Mode

Attach the microphone See figure 4

Clip your microphone on the speaker's jacket, other clothing or hanging around the neck using the included neckstrap. Place the microphone within a range of 10 - 40 cm (4 - 16 inches) from the speaker's mouth. When using the clip, make sure that the microphone is mounted vertically with the status LED pointing towards the mouth. When worn vertically, the microphone automatically switches into directional mode, minimising background noise.

Use the microphone as a table microphone

Place the microphone horizontally on a level surface (e.g. a table) in close proximity to the speakers. When you place the microphone horizontally on a table it automatically switches into an optimised omnidirectional mode, picking up the voices of multiple speakers.

Other modes of operation

The microphone also offers extended audio source connectivity options.

Telecoil (TC)

From the built-in Telecoil, receiving audio from an induction loop system (available at some theatres, schools, churches, etc.)

FM

To use this mode, insert a European DAI or FM receiver into the FM connector.

Line-in

From an external audio source (smartphone, tablet, laptop, TV, etc.) attached via the Line-in connector.

To use this mode, insert the included jack cable into the Line-in connector and plug the other end of the jack cable into the AUDIO OUT on the external audio device.

Change mode

To view the current mode of operation press the mode button once. The corresponding mode LED on the backside of the microphone will light up.

To change the mode of operation press the mode button again and repeat until the desired mode is obtained.

Note:

- Line-in and FM Modes can only be selected if a cable or FM receivers are inserted into the microphone.
- The microphone will automatically switch into Line-in Mode when inserting a mini-jack plug.
- The microphone will automatically switch into FM Mode when inserting an FM or DAI receiver.

Battery status

To view the current battery status press and hold the mode button for at least 3 seconds until one or more of the Mode LEDs start to flash.

75 – 100 % – All mode LEDs flash
50 – 75 % – Three mode LEDs flash (FM + Line-in + TC)
25 – 50 % – Two mode LEDs flash (FM +Line-in)
<25 % – One mode LED flashes (FM)

Note: When less than 30 minutes of operating time is left the status LED will flash yellow.

Volume control

Use the volume "+" and "-" buttons to adjust the volume to a comfortable level.

A short yellow flash of the mute LED indicates every volume change. A longer yellow flash indicates that the maximum or minimum volume level has been reached.

Note: The microphone will revert to its define default level when restarted.

The volume can in some cases be further adjusted at the signal source, e.g. by turning the TV volume up or down.
In many cases this will adjust the volume of both streamed audio (transmitted wirelessly to your sound processor) and non-streamed audio (sounds reaching the sound processor through the microphone in the normal fashion). Of course, this will also affect listening volume for others in the room.

Mute

- To **mute** the signal press the mute button. The mute LED will flash yellow while muted.
- To **unmute** the signal press the mute button again.

Note: Restarting the microphone while muted will unmute the signal.

Volume Control Lock

For special purposes the volume of the microphone can be locked to a specific level. When the volume control is locked, it will be fixed to the level it had when the microphone was powered OFF and it is still possible to use the mute functionality.

- Determine the right volume level to lock in place.
- To lock the volume control switch off the microphone.
- Press and hold the volume "+" button and at the same time, press the ON/OFF button until the status LED turns green.

If the product is damaged, has been dropped or damaged, has a damaged cord or plug, or has been dropped in a liquid, discontinue use and contact your hearing care professional.
Described above but hold the volume "+" button instead of the volume "-" button.

The volume can be adjusted independently for Microphone and FM Mode. When locked, the volume levels for both Microphone Mode and FM Mode will be locked at the volume levels last used or set for each of these modes.

The volume levels for TC Mode and Line-in Mode can still be changed as described in the Volume Control section even if the volume is locked for Microphone Mode and FM Mode.

Drop detection

In the event that the microphone falls from at height of more than 75 cm, a built in sensor will mute the output streamed to the sound processor for up to 2 seconds. This is done to protect you from very loud and unpleasant impact noise should the unit be dropped during use.

Test Mode

(Test Mode information is intended for hearing care professionals.)
The Test Mode is primarily intended to be used for paediatric transparency measurements. The transparency measurement evaluates if the local (sound processor) and wireless (microphone) microphones provide equal outputs from the sound processor when presented with the same 65 dB SPL input stimulus.

When in Test Mode the microphone is set to omnidirectional mode with 0 dB gain when placed horizontally in the test chamber. Please refer to relevant guidelines for performing transparency measurements.

- To **enter Test Mode** switch off the microphone.
- Press and hold the mute button and at the same time, press and hold the ON/OFF button until the status LED turns green
- Continue holding the mute button until a green-yellow-red sequence is shown on the status LED.
- When in Test Mode the status LED will be solid yellow.
- When entering Test Mode the default volume is applied. If needed, volume can be adjusted on the microphone until transparency has been verified.
- To **exit Test Mode** and save settings turn off the microphone and lock the volume control (see the "Volume Control Lock" section).

Note: Adjustments to reach transparency can be made on the microphone. For Baha users, the mixing ratio can be adjusted in the Baha Fitting Software.

Status indicator lights (LED)

Power on: long green flash

Normal operation: continuous green flashes

Volume locked: continuous green flashes

Power off: long red flash

Low battery: continuous yellow flashes

Low battery + volume locked: continuous yellow flashes

Test mode: solid yellow

Charging: solid red

Fully charged, still connected to charger: short green and long red flashes

Charging and turned on: quick green and long red flashes

Fully charged and turned on: short red and long green flashes

Charging and turned on + volume locked: quick green and long red flashes

Fully charged and turned on + volume locked: quick red, green, red and long green flashes

Statement
This device complies with Part 15 of the FCC Rules. This device is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: 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 power.
 - 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.
- Changes or modifications can void the user's authority to operate the equipment.
- Merkkien selitykset**
- Seuraavaan on koottu tässä asiakasohjeessa käytetyt kuvamerkit.
- | | |
|--|--|
| | Varoitus |
| | CE-merkintä |
| | Isen-Britannian vaatimustenmukaisuusmerkintä |
| | Sarjanumero |
| | Lääkinnällinen laite |
| | Yksilöllinen laitetunnus |
| | Valmistuspäivämäärä |
| | Lue käyttö- tai toimitaohjeet |
| | Tässä laitteessa on RF-lähetin, joka toimii taajuusalueella 2,4 GHz-2,48 GHz |
| | Häiriövaara |
| | ACMA-yhteensopiva (Australian Communications and Media Authority) |
| | Kyry neuvoa laitteen hävittämisestä kuuloonhuollon ammattilaisille. |
| | Lämpötilarajoitus |
| | Valmistaja |
| | Vain terveydenhuollon ammattilaisille |
| | Luettelonumero |
| | Radiovastaavuussertifikaatti (Korea) |
| | Radiovastaavuussertifikaatti (Japani) |
| | Radiovastaavuussertifikaatti (Taiwan) |

Changes or modifications can void the user's authority to operate the equipment.

Merkkien selitykset

The products are in compliance with the following regulatory requirements:

- In EU: the device conforms to the General Safety and Performance Requirements according to Annex I of Medical Device Regulation 2017/745 (MDR) and essential requirements and other relevant provisions of Directive 2014/53/EU (RED). The declaration of conformity may be consulted at www.cochlear.com.
- Products with wireless functionality are intended for sale in countries within the European Economic Area as well as Switzerland. Specification of restrictions: You are not allowed to operate the equipment within 20 km of the center of Ny Ålesund, Norway.
- In US: FCC CFR 47 Part 15, subpart C, section 15.249.
- Other identified applicable international regulatory requirements in countries outside the EU and US. Please refer to local country requirements for these areas.
- Products are in compliance with EN 300 328.
- In Canada the Mini Microphone is certified under the following certification number: IC: 8039C-SM2P.
- This device complies with Industry Canada licens exempt RSS standard(s).
- This Class B digital apparatus complies with Canadian ICES-003.

Serious incidents
Serious incidents are rare, any serious incident in relation to your device should be reported to your Cochlear representative and to the medical device authority in your country, if available.

Built-in battery care

Please observe the following:

- Your product is powered by a rechargeable battery. A new battery performs optimally after two or three complete charge and discharge cycles.
- The battery can be charged and discharged hundreds of times, but will eventually wear out.
- Unplug the charger from the main socket and the product when not in use.
- If left unused, a fully charged battery will lose its charge over time.
- Leaving the product in hot places will reduce the battery's capacity and service life.
- A product with a cold battery may not work temporarily, even if fully charged. Battery freezing is particularly limited in temperatures well below freezing.

Battery warning

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.

- The battery in your product cannot be removed or replaced by the user. Do not attempt to open the product. Any attempt to do so may result in damage. Using other batteries may present a risk of fire or explosion and void the warranty.
- Only recharge the microphone with the charger that was supplied with the product.
- Dispose of batteries according to local regulations. Please recycle when possible.
- Do not dispose of the battery as household waste or in a fire as it may explode.
- Batteries may also explode if damaged.

Caution: The battery used in this product may present a risk of fire or chemical burn if misused.</

