



# Cochlear™ Remote Control

**User Guide**

CR310



# Contents

Introduction . . . . .	2
Change the battery . . . . .	7
Turn on . . . . .	9
Turn off . . . . .	10
Out of range . . . . .	10
Pair . . . . .	11
Change programs . . . . .	13
Adjust volume or sensitivity . . . . .	15
Wireless accessories. . . . .	16
Telecoil . . . . .	17
FM accessory . . . . .	18
Travel . . . . .	18
Clean . . . . .	19
If your remote control gets wet . . . . .	19
Troubleshoot. . . . .	21
Warnings . . . . .	23
Other information. . . . .	25

# Introduction

## About this guide

This guide is intended for hearing implant recipients and their carers using the Cochlear™ Remote Control (Model CR310) with their sound processor. This guide can also be used as a reference by hearing care professionals.



### Note

- Refer to the Warnings section for cautions and warnings relating to the use of the Remote Control and batteries.
- Please also refer to your **Important Information** document for essential advice that applies to Cochlear implant systems.
- Not all products are available in all countries.

## Symbols used in this guide



### Note

Important information or advice.



### Tip

Time saving hint.



### Caution (no harm)

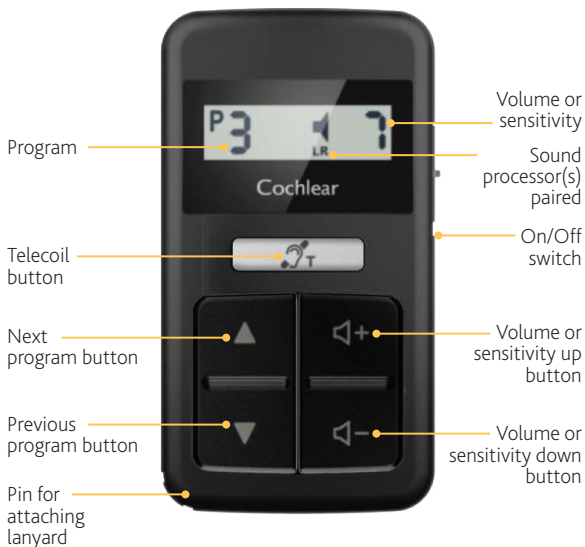
Special care to be taken to ensure safety and effectiveness. Could cause damage to equipment.



### Warning (harmful)

Potential safety hazards and serious adverse reactions. Could cause harm to person.

## Remote Control (CR310)



### *Other indicators on your remote control*



The Remote Control (CR310) is a hand-held device for controlling the commonly used functions of your sound processor.

The remote control allows you to:

- Change programs
- Turn volume or sensitivity (if available) up and down
- Control audio streaming from True Wireless™ Accessories
- Turn telecoil on and off\*

\* Nucleus® 8 Series and Nucleus 7 Series Sound Processors only. For Kanso® 2 Sound Processors, to use telecoil you need a Mini Microphone 2+.

If you have two sound processors (bilateral) from the list in *Indications* on page 5, your remote control can communicate with both sound processors at once.

## Intended purpose

The remote is intended to be used to control the normal operating functions of a processing unit as part of a hearing implant system.

## Indications

The Cochlear Remote Control (Model CR310) is indicated for Cochlear Nucleus implant recipients with a compatible Cochlear sound processor. Compatible Cochlear sound processors are as follows:

- Nucleus 8 Sound Processor
- Nucleus 7 Sound Processor
- Nucleus 7 SE Sound Processor
- Nucleus 7 S Sound Processor
- Kanso 2 Sound Processor.

## Contraindications

The Cochlear Remote Control (Model CR310) is not indicated for use with sound processors other than those listed in *Indications*.

## Intended patient population

The Cochlear Remote Control (Model CR310) is intended for patients with a compatible Cochlear sound processor. There are no restrictions for the intended patient population of the Cochlear Remote Control (Model CR310) in terms of age, weight, health or other condition.

## Benefits

The Cochlear Remote Control (Model CR310) operates in conjunction with a compatible Cochlear Nucleus implant system. Potential benefits of receiving a Cochlear Nucleus implant system include:

- Better understanding of speech in quiet
- Better understanding of speech in noise
- Increased satisfaction based on hearing capabilities.

## Intended users

Intended users of the Cochlear Remote Control are:

- Recipients of a compatible Cochlear Nucleus implant.
- Carers of recipients, who carry out recipient functions as needed. Carers may include parents of paediatric recipients who are less than 12 years old, and nurses or other carers of otherwise dependant recipients.
- Audiologists and clinicians.



## Change the battery

Change the battery whenever you see the low battery indicator, or if the display stays blank when you try to turn the remote control on. A battery should last up to three months (if the remote control is used about 15 times a day).



### Warning

Swallowing Lithium batteries may lead to serious injury or death. If swallowed, immediately go to a hospital emergency room. Keep out of reach of children. Keep in original packaging until ready to use. Dispose of used batteries immediately.



1. Unlock the battery cover by turning the screw anticlockwise with a small Phillips head (cross-head) screwdriver.



2. Slide off the battery cover and remove the battery.



3. Insert the new battery. Make sure the plus sign “+” is facing up. Take care not to damage the battery contacts.



#### Caution

Use ONLY disposable CR2032 or 5004LC 3V standard lithium coin cell batteries in your remote control. NEVER use rechargeable coin cell batteries or other battery types.



4. Replace the battery cover, bottom edge first.



5. Lock the battery cover in place by turning the screw clockwise with a small Phillips head screwdriver until tight.

## Turn on

Slide the switch up to turn on.



When the switch is in the up position, the remote control will “go to sleep” when not in use.

Press any button to “wake” it again.

## Turn off

Slide the switch down to turn off.



### Tip

Turn off your remote control to stop it "waking" when not in use, for example, when carried in your pocket.

## Out of range



If your sound processor is out of range or experiencing interference, the remote control displays dashes (shown at left).

## Pair

Pairing allows two devices to communicate with each other. Your clinician may have already paired your remote control with your sound processor. If not, you will need to pair it the first time you use it.



If your remote control is not paired to any sound processor, it displays dashes (shown left) and “blinks” when you press buttons.

## Pair your sound processor and remote control

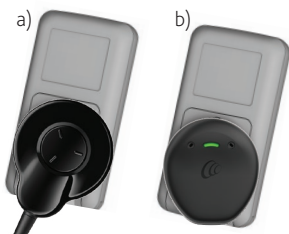
1. Turn off your sound processor and remote control.



2. Turn on your sound processor and remote control. They must both be “awake” and on at all times while pairing.



3. Depending on the type of sound processor you have, place either
- a) the coil, or
  - b) the sound processor
- on the back of your remote control.



4. The remote control will show pairing in progress.



5. The remote control then shows successful pairing of either left (L) or right (R) sound processor.



6. If you have two sound processors (bilateral), repeat steps 1-5 for the second sound processor.



## Change programs

Your clinician may program your sound processor with up to four programs which you can choose with your remote control.



## Control two sound processors

If you have two sound processors from the list in *Indications* on page 5, your remote can control both at the same time.

If your sound processors have different settings (perhaps because you adjusted one using the sound processor button), the remote will display the program and volume/sensitivity settings for the left sound processor. If either sound processor has telecoil or a wireless accessory turned on, the remote will display the relevant indicators.

## Display current settings

When you turn on your remote, it always displays the current settings (e.g. volume), even if you have adjusted those settings using the sound processor button (or the Nucleus Smart App), while the remote was off.



## Adjust volume or sensitivity

Usually, your clinician will set up your remote control to adjust the volume of the sound you hear. But your clinician can set it up to adjust sensitivity instead (if available).



### Caution

If you are adjusting volume settings often or if adjusting volume levels causes discomfort, consult your clinician.

Volume is the level of sound you hear. Sensitivity is the range of sounds you hear, for example, soft, background, close or far away. You can set Volume up to level 10 or Sensitivity up to level 21.



Press to turn up the volume or sensitivity

Press to turn down the volume or sensitivity

## Wireless accessories

If you use Cochlear True Wireless™ Accessories with your sound processor, your remote control can be used to control the wireless accessory and monitor its status.



### Note

Before you can stream audio, you must first pair the wireless accessory to your sound processor. See the *True Wireless Accessories User Guide* for details.

## To use a Mini Microphone or TV Streamer



1. To start streaming audio, press and hold the telecoil button for 2 seconds, then release.  
The accessory icon will appear.



### Tip

You can long-press the telecoil button again to select the next paired wireless accessory.



2. To stop streaming audio, short-press the telecoil button.  
The accessory icon will disappear.



### Note

You use the controls on the Phone Clip to make and receive calls.

# Telecoil

Your clinician can set up your sound processor with manual telecoil so you can listen to room hearing loops. You cannot use telecoil at the same time as a wireless accessory.



## Note

- For Kanso 2 Sound Processors, you need the Mini Microphone 2+ to use telecoil.
- For phone use we recommend the Cochlear Wireless Phone Clip (see the *True Wireless Accessories User Guide*) or a compatible smartphone (see the *Sound Processor User Guide*).

## Turn telecoil on (if set up)



1. Short-press the telecoil button once.

The telecoil icon will appear.

## Turn telecoil off



1. Short-press the telecoil button once.

The telecoil icon will disappear.

## FM accessory

When you connect an FM accessory to your sound processor, the accessory will turn on automatically and your remote control will display an accessory icon.

If telecoil was turned on, it will be turned off automatically.

### Turn FM accessory off



1. Short-press the telecoil button once.

The accessory icon will disappear.

### Turn FM accessory back on



1. Short-press the telecoil button once.

The accessory icon will appear.

## Travel

Your remote control transmits high frequency radio waves when switched on.

Place it in a flight-safe mode (e.g. turn it off) during takeoff and landing. Check with airline staff before flying if you are unsure.

## Clean

Keep your remote control clean and dry.

Clean your remote control by wiping the display and buttons with a soft dry cloth.

## If your remote control gets wet



1. Dry the remote control with a soft dry cloth.



2. Remove the battery.

See *Change the battery* on page 7.



3. Leave the remote control in a warm and well ventilated place (out of reach of children and out of direct sunlight) to dry for approximately 12 hours.



**Caution**

Do not use a drying kit or household appliance (e.g. hairdryer) to dry the remote control.



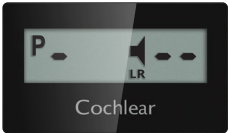
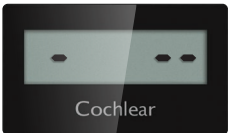

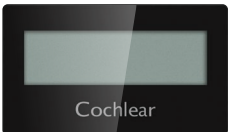
4. Insert a new battery.  
See *Change the battery* on page 7.



**Note**

Before replacing the battery, check for any remaining moisture. If moisture remains, repeat the earlier steps.

# Troubleshoot

Problem	Resolution
<p><b>Remote control won't change program or adjust volume/sensitivity</b></p> 	<ul style="list-style-type: none"><li>• If you have two sound processors, check both are turned on.</li><li>• Move the remote control closer to your sound processor(s).</li><li>• Move the remote control away from metal objects (e.g. keys) or other objects that might cause interference (e.g. mobile phone, Bluetooth and Wi-fi devices).</li></ul>
<p><b>Remote control shows only dashes</b></p> 	<ul style="list-style-type: none"><li>• Pair your remote control with your sound processor. See <i>Pair your sound processor and remote control</i> on page 11.</li></ul>
<p><b>Remote control shows pairing error</b></p> 	<ul style="list-style-type: none"><li>• Contact your clinician.</li></ul>
<p><b>Remote control won't turn on or 'wake up' (display remains blank)</b></p> 	<ul style="list-style-type: none"><li>• Replace the battery. See <i>Change the battery</i> on page 7.</li></ul>

Problem	Resolution
<b>Sound processor doesn't pair with remote control</b>	<ul style="list-style-type: none"> <li>• Make sure your sound processor and remote control are both turned on and "awake".</li> <li>• Make sure you hold your sound processor or coil in place until the remote control has finished pairing.</li> <li>• Contact your clinician.</li> </ul>
<b>Telecoil button doesn't turn telecoil on</b>	<ul style="list-style-type: none"> <li>• Make sure a wireless accessory is not streaming audio to your sound processor(s).</li> <li>• Contact your clinician to check if telecoil is set up on your sound processor(s).</li> </ul>
<b>Telecoil button doesn't turn telecoil off</b>	<ul style="list-style-type: none"> <li>• Wait at least five seconds without pressing any buttons on your remote control, then press the telecoil button once.</li> </ul>
<b>Telecoil button doesn't start/stop streaming audio from a wireless accessory</b>	<ul style="list-style-type: none"> <li>• Check that the wireless accessory is turned on.</li> <li>• Make sure the wireless accessory is paired to your sound processor(s).</li> </ul>



## Warnings

- Swallowing Lithium batteries may lead to serious injury or death. If swallowed, immediately go to a hospital emergency room. Keep out of reach of children. Keep in original packaging until ready to use. Dispose of used batteries immediately.
- Do not use your remote control if it becomes unusually warm. Notify your clinician immediately.
- Small parts such as the coin battery could pose a choking hazard. Keep the battery cover locked at all times. Change battery out of reach of children. Do not allow small children to change the battery.
- No modification of this equipment is allowed.
- Do not disassemble, modify, deform or immerse your remote control in water. If your remote control is not working, return it to your clinician. Warranty will be void if opened.
- Use a soft dry cloth ONLY to clean the surface of your remote control.
- Do not use alcohol, household cleaners or abrasive materials to clean your remote control.
- Do not bend or compress the display on your remote control.
- Keep your remote control dry.

- Do not expose the remote control to heat (e.g. never leave it in sunlight, behind a window or in a car). Protect your remote control in environments where excessive moisture and dirt can damage it. Protect the display from objects that may scratch it.
- When the remote control is on, keep metal objects away from the display as they may cause interference.
- Do not place the remote control inside any part of your body (e.g. mouth).
- Keep the remote control out of reach of very young children.
- Your remote control radiates electromagnetic energy that may interfere with life supporting devices, (e.g. cardiac pacemakers and ICDs). Keep your remote control at least 15 cm (6 in) from such devices. Contact the manufacturer of the specific device to find out more.

## Magnetic resonance imaging (MRI)

The sound processor, remote control and related accessories (such as the Wireless Programming Pod) are MR Unsafe.



Full MRI safety information is available at [www.cochlear.com/warnings](http://www.cochlear.com/warnings) or by calling your regional Cochlear office (contact numbers available at the end of this document).

## Other information

### Physical configuration

The remote control comprises:

- analogue and digital integrated circuits based on a micro-processor design, with bidirectional wireless communication capabilities
- buttons and a switch for operation of unit
- buttons for remote control of sound processor
- a display for indicating system status and activity
- in-built coil sensor
- lanyard pin.

### Materials

The remote control housing and buttons are made of polycarbonate and acrylonitrile butadiene styrene (ABS). The display is made of ABS.

## Environmental conditions

Condition	Minimum	Maximum
Storage & transport temperature	-10° C (+14° F)	+55° C (+131° F)
Storage & transport humidity	0% RH	90% RH
Operating temperature	+5° C (+41° F)	+40° C (+104° F)
Operating relative humidity	0% RH	90% RH
Operating pressure	700 hPa	1060 hPa

## Dimensions

Component	Length	Width	Depth
CR310 Remote Control	66.0 mm	36.5 mm	10.6 mm

## Weight

Component	Weight
CR310 Remote Control (with battery)	35 g

## Operating characteristics

Characteristic	Value/range
Wireless technology	Proprietary low power bidirectional wireless link
RF frequency	2.4 GHz (range 2.40 GHz – 2.83 GHz)
Max. RF output power	0 dBm
Battery type	One disposable CR2032 or 5004LC lithium coin cell battery
Operating battery voltage	2.12 V – 3.00 V
Button and switch functions	Remote control lock and unlock, telecoil/wireless accessories on and off, program adjust, volume or sensitivity settings adjust
Remote communication range	At least 2 m
Display	Custom, icon based monochrome LCD

## Wireless communication link

The remote control wireless communication link operates in the 2.4 GHz ISM band using GFSK (Gaussian frequency-shift keying) on 4 channels. The link uses a proprietary bidirectional communication protocol and operates over a distance of at least 2 metres from the sound processor. The wireless communication link continuously switches between the 4 channels to avoid interference on any specific channel. The remote control indicates via its display when the sound processor is out of operating distance (or switched off) or when the link is interrupted due to broad spectrum interference (see page 10).

## Environmental protection

Your remote control contains electronic components subject to the Directive 2002/96/EC on waste electrical and electronic equipment.

Help protect the environment by not disposing of your remote control or batteries with your unsorted household waste. Please recycle your remote control and batteries according to your local regulations.

## Equipment classification

Your remote control is an accessory to a medical device as described in the international standard IEC 60601-1:2005/A1:2012, Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance.

## Certification and applied standards

The CR310 Remote Control also fulfils the essential requirements listed in the EC directive 2014/53/EU on Radio Equipment as per the conformity assessment procedure in Annex III. The declaration of conformity may be consulted at [www.cochlear.com/wps/wcm/connect/intl/about/company-information/declaration-of-conformity](http://www.cochlear.com/wps/wcm/connect/intl/about/company-information/declaration-of-conformity)



## FCC (Federal Communications Commission) and Canadian ISED compliance

This device complies with part 15 of the FCC Rules and with RSS-210 of Innovation, Science and Economic Development Canada. Operation is subject to the following two conditions:

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

Changes or modifications made to this equipment not expressly approved by Cochlear Limited may void the FCC authorisation to operate this equipment.

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.

FCC ID: WTO-CR310

ISED: 8039A-CR310

CAN ICES-3 (B)/NMB-3(B)

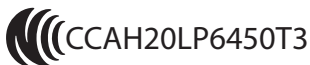


## Radio compliance for Korea



R-C-COH-CP1110

## Radio compliance for Taiwan



Any changes or modifications are not allowed. The product is subject to not cause harmful interference to radio communications and air flight safety. If this equipment does cause interference which can be determined, stop shipping until the product is improved.

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

## Labelling symbols

The following symbols may appear on your remote and/or packaging:



Refer to instruction manual



Consult instructions for use



Specific warnings or precautions associated with the device, which are not otherwise found on the label



Manufacturer



Compatible sound processors



Authorised representative in the European Community



Unique Device Identification



Medical Device



Catalogue number



Serial number



Batch code



Date of manufacture



Temperature limits



CE registration mark



Radio compliance certification for Australia and New Zealand



203-JN0605 Radio compliance certification for Japan



Radio compliance certification for Korea



Radio compliance certification for Taiwan

**Rx Only**

By prescription



Recyclable material



Dispose of electrical components in accordance with your local regulations



Keep dry



Type B applied part

## Legal statement

The statements made in this guide are believed to be true and correct as of the date of publication. However, specifications are subject to change without notice.

© Cochlear Limited 2022

## Trademark legal statement

ACE, Advance Off-Stylet, AOS, Ardium, AutoNRT, Autosensitivity, Baha, Baha SoftWear, BCDrive, Beam, Bring Back the Beat, Button, Carina, Cochlear, 科利耳, コクレア, 코클리어, Cochlear SoftWear, Contour, コントウア, Contour Advance, Custom Sound, DermaLock, Freedom, Hear now. And always, Hugfit, Human Design, Hybrid, Invisible Hearing, Kanso, LowPro, MET, MP3000, myCochlear, mySmartSound, NRT, Nucleus, Osia, Outcome Focused Fitting, Off-Stylet, Piezo Power, Profile, Slimline, SmartSound, Softip, SoundArc, True Wireless, the elliptical logo, Vistafix, Whisper, WindShield and Xidium are either trademarks or registered trademarks of the Cochlear group of companies.







# Hear now. And always

**Cochlear Ltd** (ABN 96 002 618 073)  
1 University Avenue, Macquarie University,  
NSW 2109, Australia.  
Tel: +61 2 9428 6555 Fax: +61 2 9428 6352

**Cochlear Ltd** (ABN 96 002 618 073) 14 Mars  
Road, Lane Cove, NSW 2066, Australia  
Tel: +61 2 9428 6555 Fax: +61 2 9428 6352

**ECREP Cochlear Deutschland GmbH &  
Co. KG** Karl-Wiechert-Allee 76A, 30625  
Hannover, Germany  
Tel: +49 511 542 770 Fax: +49 511 542 7770

**CHIREP Cochlear AG** EMEA Headquarters,  
Peter Merian-Weg 4, 4052 Basel, Switzerland  
Tel: +41 61 205 8204 Fax: +41 61 205 8205

**Cochlear Americas** 10350 Park Meadows  
Drive, Lone Tree, CO 80124, USA  
Tel: +1 303 790 9010 Fax: +1 303 792 9025

**Cochlear Canada Inc** 2500-120 Adelaide  
Street West, Toronto, ON M5H 1T1, Canada  
Tel: +1 416 972 5082 Fax: +1 416 972 5083

**Cochlear Europe Ltd** 6 Dashwood Lang  
Road, Bourne Business Park, Addlestone,  
Surrey KT15 2HJ, United Kingdom  
Tel: +44 1932 26 3400 Fax: +44 1932 26 3426

**Cochlear Benelux NV** Schaliënhoeverdreef  
20 i, B-2800 Mechelen, Belgium  
Tel: +32 15 79 55 11 Fax: +32 15 79 55 70

**Cochlear France S.A.S.** 135 Route de  
Saint-Simon, 31035 Toulouse, France  
Tel: +33 5 34 63 85 85 (International) or 0805  
200 016 (National) Fax: +33 5 34 63 85 80

**Cochlear Italia S.r.l.** Via Trattati Comunitari  
Europei 1957-2007 n.17, 40127 Bologna  
(BO), Italy  
Tel: +39 051 601 53 11 Fax: +39 051 39 20 62

**Cochlear Nordic AB** Konstruktionsvägen 14,  
435 33 Mölnlycke, Sweden  
Tel: +46 31 335 14 61 Fax: +46 31 335 14 60

[www.cochlear.com](http://www.cochlear.com)

**Cochlear Tıbbi Cihazlar ve Sağlık  
Hizmetleri Ltd. Şti.** Çubuklu Mah. Boğaziçi  
Cad., Boğaziçi Plaza No: 6/1, Kavacak,  
TR-34805 Beykoz-Istanbul, Turkey  
Tel: +90 216 538 5900 Fax: +90 216 538 5919

**Cochlear (HK) Limited** Room 1404-1406,  
14/F, Leighton Centre, 77 Leighton Road,  
Causeway Bay, Hong Kong  
Tel: +852 2530 5773 Fax: +852 2530 5183

**Cochlear Korea Ltd** 2nd Floor, Yongsan  
Centreville Asterium, 25, Hangang-daero  
30 gil, Yongsan-gu, Seoul, Korea (04386)  
Tel: +82 2 533 4450 Fax: +82 2 533 8408

**Cochlear Medical Device (Beijing) Co., Ltd**  
Unit 2608-2617, 26th Floor, No.9 Building,  
No.91 Jianguo Road, Chaoyang District,  
Beijing 100022, P.R. China  
Tel: +86 10 5909 7800 Fax: +86 10 5909 7900

**Cochlear Medical Device Company India  
Pvt. Ltd** Ground Floor, Platina Building, Plot  
No C-59, G-Block, Bandra Kurla Complex,  
Bandra (E), Mumbai – 400 051, India  
Tel: +91 22 6112 1111 Fax: +91 22 6112 1100

**株式会社日本コクレア(Nihon Cochlear  
Co Ltd)** 〒113-0033 東京都文京区本郷  
2-3-7 お茶の水元町ビル  
Tel: +81 3 3817 0241 Fax: +81 3 3817 0245

**Cochlear Middle East FZ-LLC** Dubai  
Healthcare City, Al Razi Building 64, Block A,  
Ground Floor, Offices IR1 and IR2, Dubai,  
United Arab Emirates  
Tel: +971 4 818 4400 Fax: +971 4 361 8925

**Cochlear Latinoamérica S.A.** International  
Business Park, Building 3835, Office 403,  
Panama Pacífico, Panama  
Tel: +507 830 6220 Fax: +507 830 6218

**Cochlear NZ Limited** Level 4, Takapuna  
Towers, 19-21 Como St, Takapuna, Auckland  
0622, New Zealand  
Tel: + 64 9 914 1983 Fax: 0800 886 036



P1893591-D1818786 V2 2022-10

**Cochlear®**