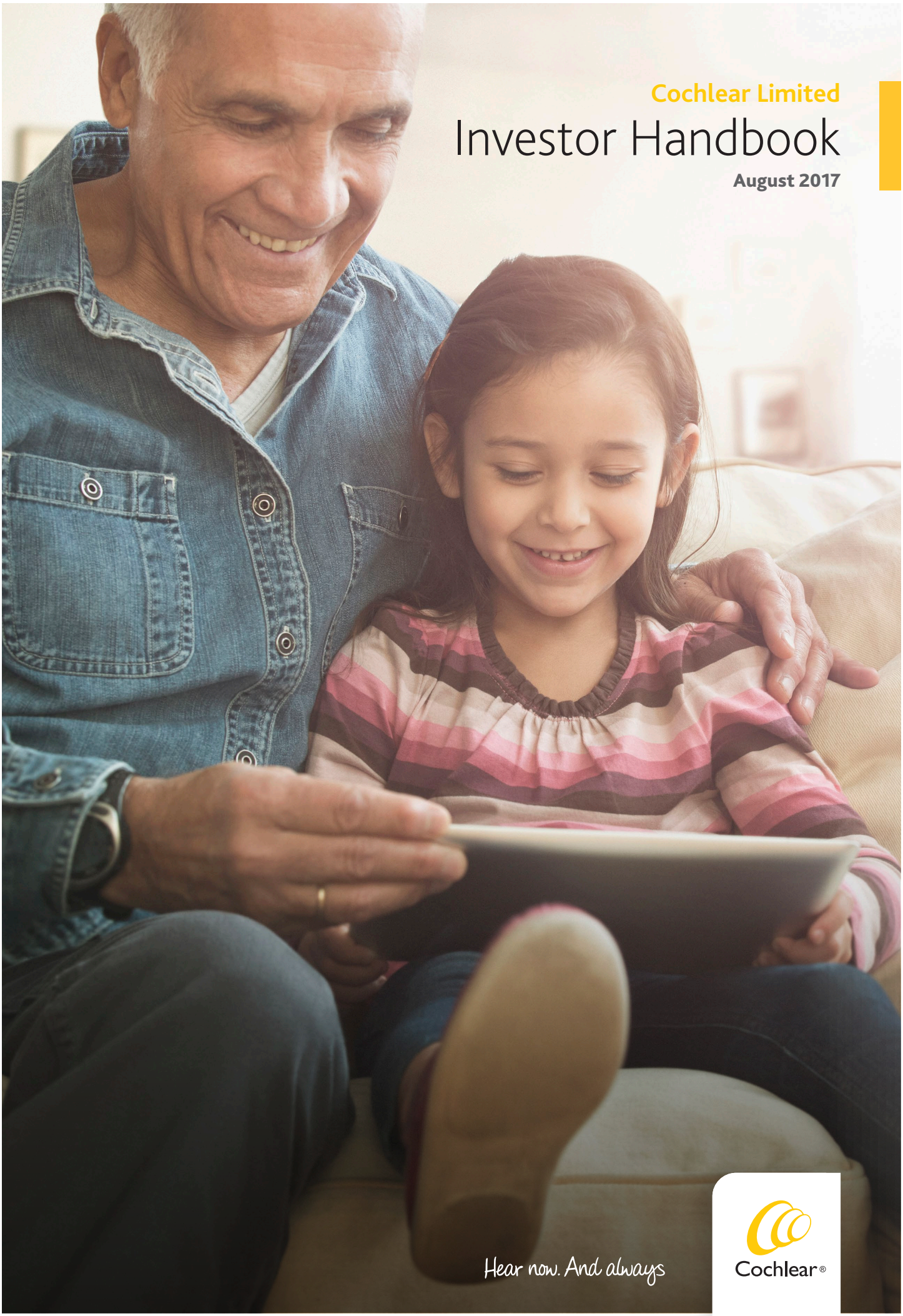

Cochlear Limited
Investor Handbook
August 2017
Hear now. And always
Cochlear®

Contents

About Cochlear

Cochlear is the global leader in implantable hearing solutions

Cochlear commenced operations in 1981 as part of the Nucleus group. In 1995, the company listed on the Australian Securities Exchange. Today, it is a global company with principal manufacturing facilities in Australia and Sweden. Cochlear has its global headquarters on campus at Macquarie University in Sydney, Australia, with regional headquarters in Asia Pacific, Europe and the Americas. Cochlear has direct operations in over 20 countries and has over 3,000 employees.

Cochlear develops a range of products including cochlear implants, bone conduction implants and acoustic implants, which address different types of hearing loss. Whether these hearing solutions were implanted today or many years ago, Cochlear aims to provide new technologies and innovations to its recipients. The company invests more than A$150 million each year in research and development and currently participates in over 100 collaborative research programs worldwide.

Over 450,000 people of all ages, across more than 100 countries, now hear because of Cochlear.

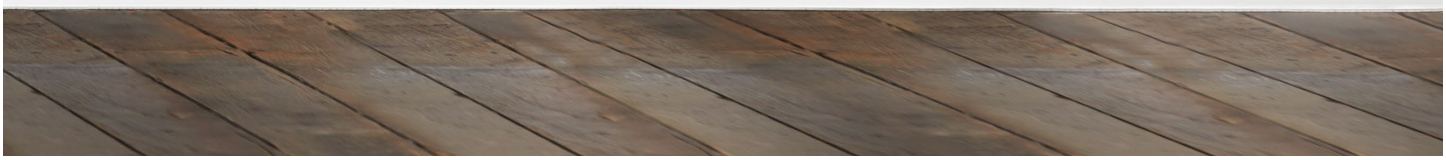
Our mission

We help people hear and be heard.

We **empower** people to connect with others and live a full life.

We **transform** the way people understand and treat hearing loss.

We **innovate** and bring to market a range of implantable hearing solutions that deliver a lifetime of hearing outcomes.



Global Footprint

450,000+
implant recipients

20+
countries with direct operations

A$150m+
in annual R&D investments

A$1.2b+
in annual sales revenue

3000+
employees around the world

4
key manufacturing sites

100+
collaborative research programs worldwide

Why invest in Cochlear?

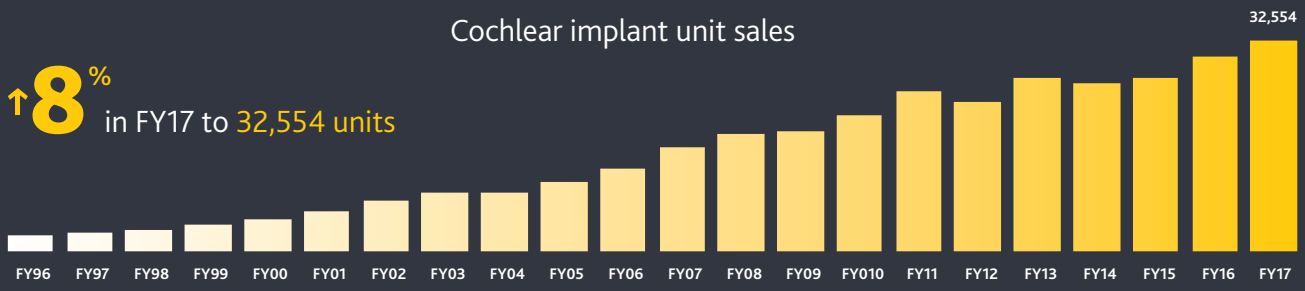
- **Global leader** in implantable hearing devices with over 450,000 recipients and around 70% of the global implant recipient base
- **Long-term market growth opportunity** with a significant, unmet and addressable clinical need for implantable hearing solutions and <5% market penetration
- Unrivalled **commitment to product innovation**, bringing innovative new products to market as well as products and services for all generations of Cochlear's recipient base
- **Growing annuity income stream** from servicing of the expanding recipient base
- **Strong free cash flow generation** provides funding for market growth activities and R&D as well as the ability to reward shareholders with a strong and growing dividend stream

Financial history

since listing in 1995

Cochlear implant unit sales

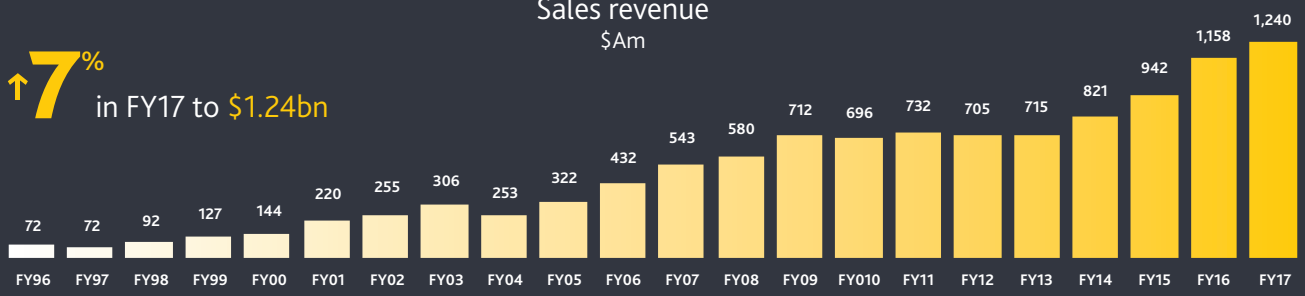
↑8% in FY17 to 32,554 units



Sales revenue

$Am

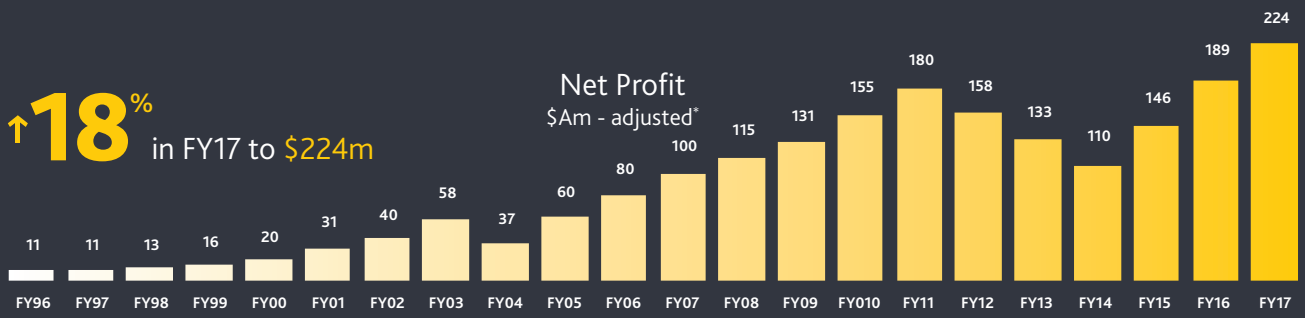
↑7% in FY17 to $1.24bn



Net Profit

$Am - adjusted*

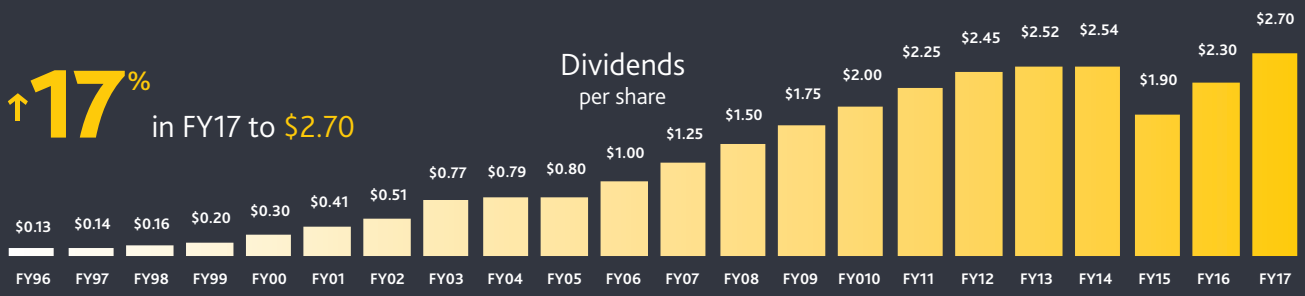
↑18% in FY17 to $224m



Dividends

per share

↑17% in FY17 to $2.70



* Excludes FY12 product recall costs of $101 million after tax and FY14 patent dispute provision of $16 million after tax.

Hearing loss market opportunity

Over 360 million people worldwide experience disabling hearing loss, with nearly one in three people over the age of 65 affected by hearing loss. With the global market penetration for implantable hearing solutions at less than 5%, there remains a significant, unmet and addressable clinical need that is expected continue to underpin the long-term sustainable growth of the business.

360 million

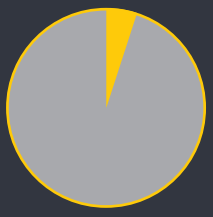
Over 5% of the world's population - 360 million people - has disabling hearing loss* (328 million adults and 32 million children).[1]

1 in 3

Nearly one out of every three people over the age of 65 are affected by hearing loss. It affects communication and can contribute to social isolation, anxiety, depression and cognitive decline.[2]

37,000,000

people could benefit from a cochlear implant to treat severe to profound hearing loss.[3,4]



<5%

Market penetration.[5]

* Disabling hearing loss refers to hearing loss greater than 40 decibels (dB) in the better hearing ear in adults and a hearing loss greater than 30 dB in the better hearing ear in children.

1. Who. int. WHO | Deafness and hearing loss [Internet]. 2015.
2. Who. int. WHO | 10 facts on deafness [Internet]. 2015.
3. Hearing Loss Prevalence in the United States [Internet]. Lin, Niparko, Ferrucci [cited 26 April 2016].
4. The Severely to Profoundly Hearing-Impaired Population in the United States [Internet]. Blanchfield, Feldman, Dunbar, Gardner [cited 26 April 2016].
5. Market penetration. This figure is a global estimate based on Cochlear sourced data.


Cochlear

Company strategy

Cochlear aims to make cochlear implantation the standard of care for people with severe to profound hearing loss and provide Baha for patients with conductive hearing loss, mixed hearing loss and single sided deafness.

Cochlear's priorities are centred on the customer with activities aimed at growing awareness and access to the industry for implant candidates. And with a growing recipient base, now numbering over 450,000, the Company is actively strengthening its servicing capability to provide products, programs and services to support the lifetime relationship with recipients.

Cochlear is commited to being the technology leader in the industry by investing in research and development to improve hearing outcomes and expand the indications for implantable solutions so recipients can have the quality of life they expect.

The Company's priorities are centred on four strategic platforms for the business:

Grow the core business

- Strengthen the technology leadership position
- Stimulate market growth by increasing awareness of hearing loss
- Improve access for candidates
- Business model innovation

Build a service business

- Support the growing recipient base with upgrades, accessories and seamless service and repair
- Increase connectivity and engagement with recipients
- Introduce technology solutions for clinicians

Shape the organisation

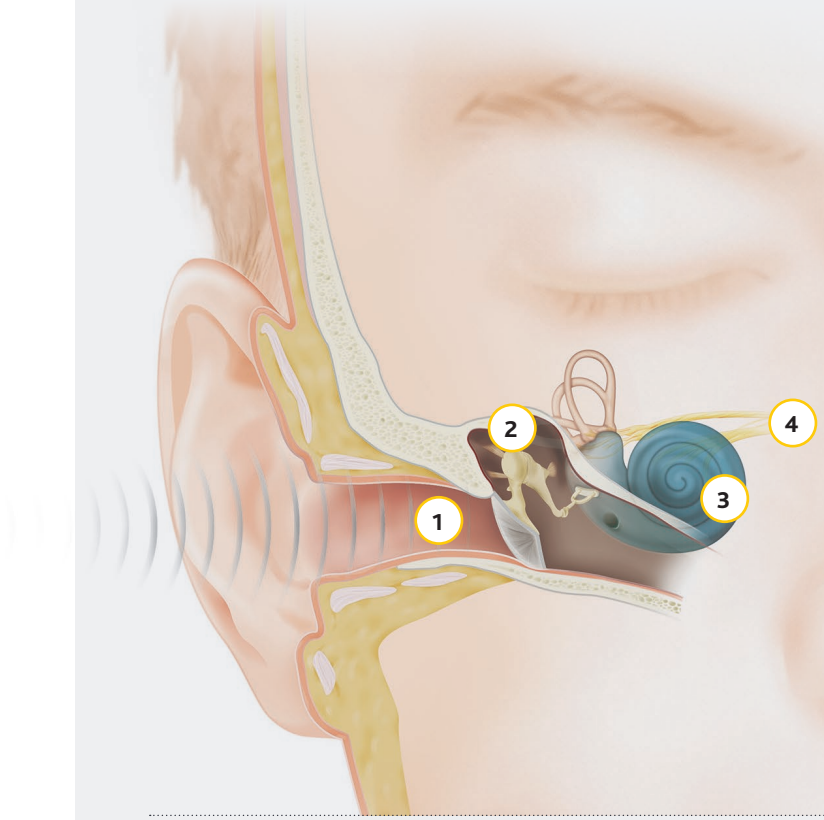
- Expand the Company's presence in customer facing activities
- Globally integrate enabling activities
- Build organisational capabilities to support customer-focused activities

Value creation

- Develop alliances and partnerships
- Build long term shareholder value
- Meet or exceed our forecast financial targets

How hearing works

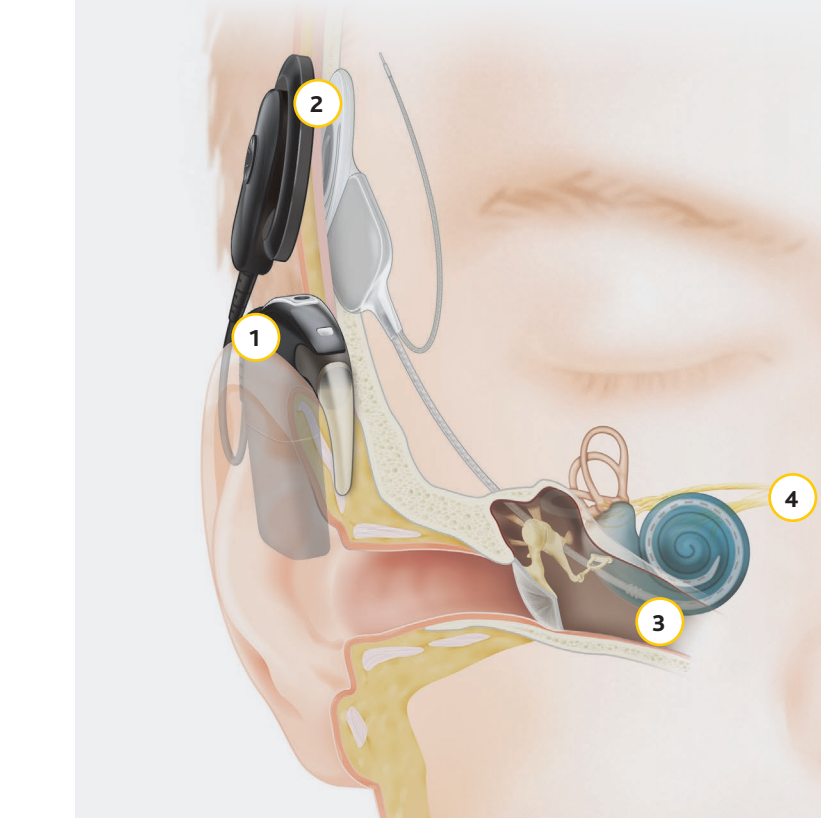
Natural hearing



Sound is perceived naturally by way of air and bone conduction.

1. Sound waves travel through the ear canal and strike the eardrum.
2. These sound waves cause the eardrum and the three bones within the middle ear to vibrate.
3. These vibrations are transferred to the fluids in the inner ear – known as the cochlea – and cause the tiny hair cells in the cochlea to move.
4. The movement of the hair cells produces neural impulses which are sent along the hearing nerve to the brain, where they are interpreted as sound.

Hearing with a cochlear implant

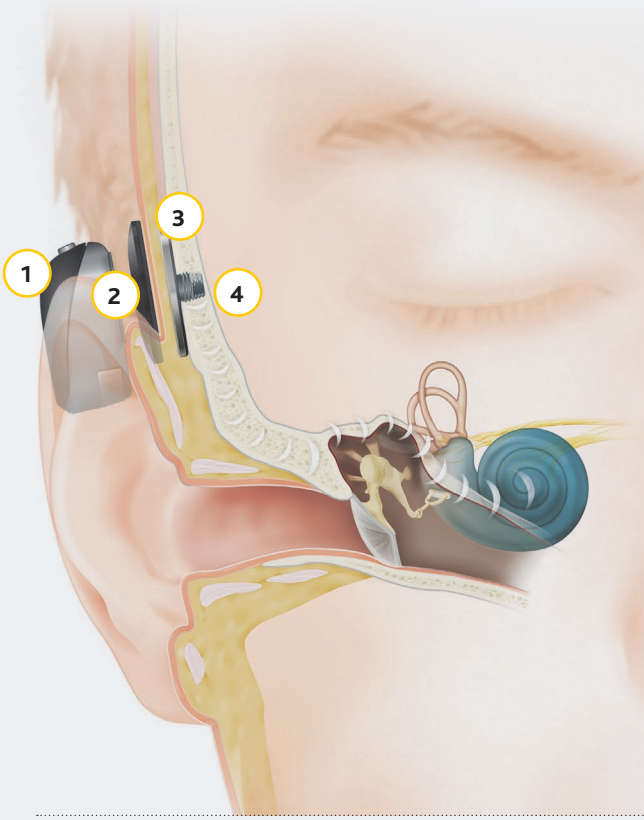


Cochlear implants are typically indicated for people with sensorineural hearing loss, a term that describes sensory loss involving the inner ear and neural loss involving the hearing nerve. Congenital hearing loss is present at birth and is the most common problem seen in newborn babies. Acquired hearing loss can be caused by a wide range of factors including trauma, noise, age and disease.

The Nucleus® cochlear implant bypasses parts of the ear that no longer work properly by sending signals directly to the hearing nerve.

1. Microphones on the sound processor pick up sounds and the processor converts them into digital information.
2. This information is transferred through the coil to the implant just under the skin.
3. The implant sends electrical signals down the electrode into the cochlea.
4. The hearing nerve fibres in the cochlea pick up the signals and send them to the brain, giving the sensation of sound.

Hearing with a bone conduction implant



Bone conduction implants are indicated for those with conductive or mixed hearing loss or for single-sided deafness. Conductive hearing loss is due to problems with the outer ear or middle ear. Mixed hearing loss refers to a combination of conductive and sensorineural hearing loss. Single sided deafness refers to no hearing or very little hearing in only one ear and normal hearing in the other ear.

The Baha® Attract System sends sound signals via bone conduction, naturally stimulating the inner ear.

The system consists of:

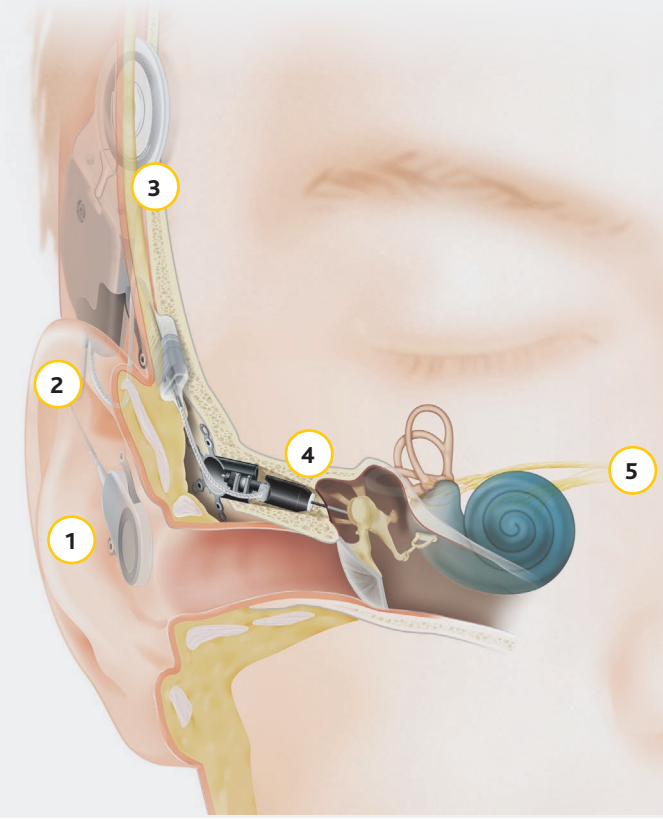
1 Sound processor that detects sound and transforms it into vibrations.

2 Sound processor magnet that transfers the vibrations from the sound processor through the skin to the implant magnet.

3 Implant magnet that attracts the sound processor magnet and receives the vibrations.

4 Implant that transfers sound vibrations to the inner ear.

Hearing with an acoustic implant



Hearing with a Carina® System.

1 The microphones implanted behind the ear pick up sounds.

2 The information is transferred to the implant through the lead.

3 The Carina implant processes the information and sends an analogue signal to the actuator.

4 The actuator converts the signal into mechanical vibrations which stimulate the cochlea via the ossicles. The vibrations are transmitted through the ossicular chain to the cochlear fluid, activating the hair cells.

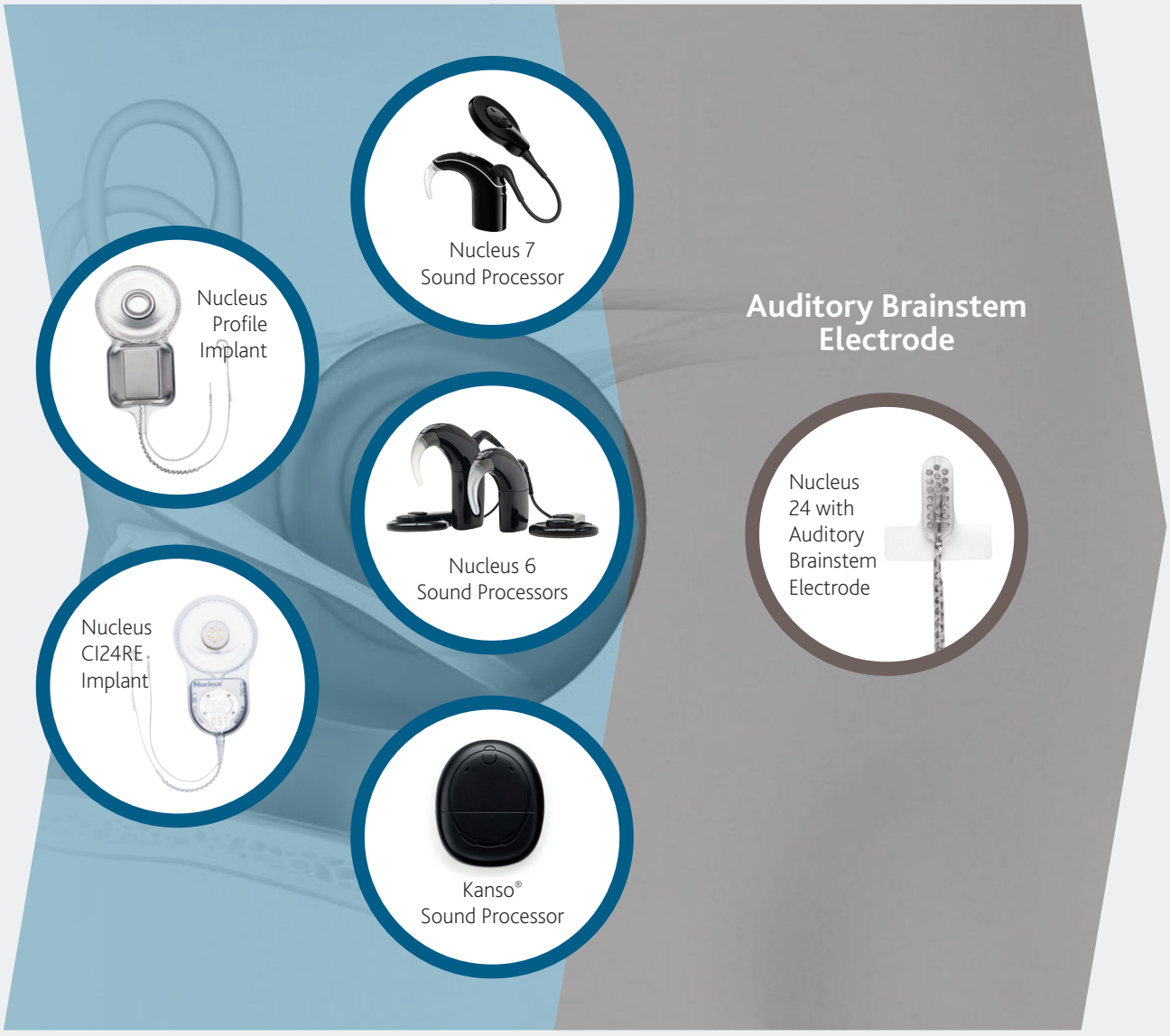
5 The hearing nerve fibres in the cochlea pick up the signal and send them to the brain, giving the sensation of sound.

Cochlear's implantable hearing solution portfolio

Cochlear provides a range of implantable hearing solutions* for people with moderate to profound hearing loss.

* Not all products available in all countries

Cochlear Implants



Cochlear implant systems

For over 30 years people of all ages have been connected to a world of sound through cochlear implants.

Implant range

Nucleus CI24RE

Launched in 2005, the Nucleus CI24RE Series has helped to improve hearing in around 170,000[1] ears around the world, and its reliability rating of 99% within 12 years is the best in the industry.

Nucleus Profile Series

Our latest generation of implants are the thinnest implant in the world, designed to better conform to the natural shape of the head. Commercially released in 2014, the Profile Series sets a new standard in implant reliability with a 99.94% combined cumulative survival percentage within three years.

1. Registered implants as at 30th January 2017.

Electrode portfolio

Cochlear offers the widest range of electrode options including the Slim Modiolar, Contour Advance®, Slim Straight and Hybrid™ L24 electrodes.

Slim Modiolar Electrode (CI532)

The Slim Modiolar Electrode is the world's thinnest full length perimodiolar electrode[1] designed for consistent scala tympani placement[2] and sits closest to the hearing nerve to deliver optimal hearing performance[3]. It combines the unique benefits of a thin electrode with the perimodiolar positioning closer to the spiral ganglion cells.

Contour Advance® Electrode (CI512)

The Contour Advance is the perimodiolar electrode that gets closer to the hearing nerve through its unique design. Proximity to the spiral ganglion cell population has been proven to provide targeted stimulation and minimize physiological factors correlated to the distance from the modilous.[4-5]

Slim Straight Electrode (CI522)

The industry's thinnest full length electrode. A soft tip combined with thin diameter, apical flexibility, and smooth lateral wall surface facilitates an easy single stroke insertion designed to protect the delicate cochlear structures.

Hybrid L24 Electrode

Industry's only electrode for high frequency losses and preservation of apical structures. The Hybrid L24 Electrode provides electrical stimulation in the basal section of the cochlea, while protecting the apical section to provide benefit from acoustic stimulation. This combination of stimulation is indicated in patients with mild to moderate hearing loss in the low frequencies and severe to profound hearing loss in the high frequencies.

1. Data on file - Hi-Focus Mid-Scala Electrode brochure (028-M270-03). https://www.advancedbionics.com/content/dam/ab/Global/en_ce/documents/professional/HiFocusMid-Scala_Electrode_Brochure.pdf and Flex 2. http://s3.medel.com/downloadmanager/downloads/maestro_2013/en-GB/22676.pdf.
2. Data on file - CLTD5446: Clinical investigation of the Nucleus CI532 cochlear implant.
3. Holden, LK., Finley, CC., Firszt, JB., Holden, TA., Brenner, C., Potts LG, et al. Factors affecting open-set word recognition in adults with cochlear implants. Ear and Hearing. 2013 May-Jun; 34(3): 342-60.
4. Holden LK, Finley CC, Firszt JB, Holden TA, Brenner C, Potts LG, Gotter BD, Vanderhoof SS, Mispagel K, Heydebrand G, Skinner MQ. Factors Affecting Open-Set Word Recognition in Adults With Cochlear Implants. Ear Hearing, 2013 Jan 23
5. Cohen, L., et al. Spatial spread of neural excitation in cochlear implant recipients: comparison of improved ECAP method and psychophysical forward masking (2003).

Cochlear implant systems

Sound processors

Nucleus 7 Sound Processor

Launched in 2017, the Nucleus 7 Sound Processor is the smallest and lightest behind-the-ear cochlear implant sound processor from Cochlear. It is the world's first Made for iPhone cochlear implant sound processor, allowing recipients to make phone calls, listen to music in high-quality stereo sound, watch videos and have FaceTime® calls streamed directly to their cochlear implant.

Nucleus 6 Sound Processor

Launched in 2013, the Nucleus 6 Sound Processor offers superior hearing performance with SmartSound® iQ and SCAN technology, wireless connectivity with True Wireless™ accessories, data logging and water proofing with the Aqua+ accessory.

Nucleus 6 Sound Processor with acoustic component for Hybrid Hearing

Nucleus Kanso Sound Processor

Launched in 2016, the Nucleus Kanso Sound Processor is the industry's smallest and lightest off-the-ear sound processor, providing hearing performance equivalent to the Nucleus 6 Sound Processor.

Nucleus 5 Sound Processor

Launched in 2009, the Nucleus CP802 Sound Processor is popular in many of our emerging markets.

Accessories

True Wireless devices

True Wireless devices allow sound to be wirelessly streamed direct to a sound processor from the Phone Clip, Mini Mic or TV Streamer for improved hearing in a range of situations and over distance. The device allow recipients to watch TV without disturbing others, help hear speech in noisy or crowded environments and can connect to all types of electronic devices.

TV Streamer

Phone Clip

Mini Microphone 2 and 2+

Aqua+

The Aqua+ is a soft, flexible silicone sleeve that fits over the Nucleus Sound Processors. Featuring a water protection rating of IP68, the Aqua+ gives recipients the ability to swim with their sound processor without the need for any additional cables or cases.

Bone conduction implant systems

For more than 35 years, people all over the world have connected to sound through a Baha bone conduction implant.

Implant systems

Baha Connect System

The Baha Connect System transmits vibrations through an abutment which connects the sound processor to the implant. When using the DermaLock™ technology, the skin is left intact round the abutment. The major benefit is the efficient transmission of vibrations, providing maximum amplification.

Baha Attract System

The Baha Attract System transmits sound vibrations to the inner ear through a magnetic connection between the sound processor magnet and a magnet attached to the implant under the skin. The benefit is that there is no skin penetrating abutment, providing a good aesthetic outcome with no need for daily care.

Sound processors

Baha 5 Sound Processor

The Cochlear Baha 5 Sound Processor is the industry's smallest sound processor with fitting ranges up to 45 dB sensorineural hearing loss. It is the first sound processor that can stream sound directly from an iPhone, iPad and iPod touch. The Baha 5 Sound Processor also connects to Cochlear's True Wireless accessories.

Baha 5 Power Sound Processor

The more powerful Cochlear Baha 5 Power Sound Processor has a fitting range up to 55 dB sensorineural hearing loss.

Baha 5 SuperPower Sound Processor

The Cochlear Baha 5 SuperPower Sound Processor merges Baha and Nucleus technology to make it the first ear-level sound processor for bone conduction. It is the most powerful head-worn sound processor and has a fitting range up to 65 dB sensorineural hearing loss.

Cochlear's history of innovation

Implants




1982	1986	1997	1998	1999	2000
First commercial multi–channel cochlear implant	First Nucleus cochlear implant (CI22M)	Nucleus 24 implant (CI24M)	Nucleus 24 Auditory Brainstem Implant (ABI)	Nucleus 24 Double Array implant	Nucleus CI24R with Contour® electrode






2000	2002	2005	2008	2009	2010
Nucleus CI24R with Straight electrode	Nucleus CI24R with Contour Advance electrode	Nucleus CI24RE Series implants with Contour Advance or Straight electrodes	Hybrid L24 implant	Nucleus 5 implant (CI512)	Baha 3 implant (BI300)





2011	2013	2014	2014	2015	2016
Nucleus CI422 Implant (Slim Straight electrode on the CI24RE receiver/ stimulator)	Baha DermaLock Abutment	Baha Attract System	Nucleus Profile implant with Contour Advance electrode	Nucleus Profile implant with Slim Straight (CI522) and Auditory Brainstem (ABI541) electrodes	Nucleus Profile implant with Slim Modiolar (CI532)

Sound Processors







1982	1989	1994	1997	1998	2001	2002
WSP – Wearable Speech Processor	MSP – Mini Speech Processor	Spectra Processor introduced	SPrint™ Speech Processor	ESPrit™ Speech Processor	ESPrit 22 Speech Processor	ESPrit 3G Speech Processor







2005	2005	2007	2008	2009	2009	2009
Nucleus Freedom featuring SmartSound	Baha Divino Sound Processor	Baha Intenso Sound Processor	Cochlear Hybrid Sound Processor	Nucleus 5 Sound Processor (CP810)	Nucleus 5 Remote Assistant (CR110)	Baha 3 Sound Processor (BP100)







2011	2013	2014	2015	2016	2016	2017
Baha 3 Power Sound Processor	Nucleus 6 Sound Processors (CP910 & CP920)	Baha 4 Sound Processor	Baha 5 Sound Processor	Baha 5 Power Sound Processor Baha 5 SuperPower Sound Processor	Kanso Sound Processor	Nucleus 7 Sound Processor

Company history

For more than 30 years, Cochlear has been shaping the future of hearing restoration by pushing the limits of technology while maintaining the strictest quality standards. With a strong focus on product and service innovation, a pipeline full of products and opportunities, visionary leaders and dedicated employees, Cochlear is determined to maintain its leadership in providing the best possible hearing outcomes to people of all ages with moderate to profound hearing loss.

Company milestones

1967 Professor Graeme Clark, University of Melbourne, begins research into implantable hearing solutions for people suffering from sensorineural hearing loss.

1977 First patient receives bone conduction hearing implant.

1978 Rod Saunders becomes first multichannel cochlear implant recipient.

1981 Paul Trainor's Nucleus group starts commercial development of the multichannel cochlear implant.

1983 Cochlear Limited established with headquarters in Sydney, Australia (listed on Australian Securities Exchange since 1995).

1987 European office established in Basel, Switzerland. First paediatric recipient of a commercial Nucleus cochlear implant.

1998 Cochlear acquires Philips Hearing Instruments establishing research centre in Mechelen, Belgium.

2000 Cochlear acquires Entific Medical Systems, extending its portfolio to Baha bone conduction hearing solutions.

2001 Cochlear acquires the hearing related assets of Otologics LLC in the USA, extending its portfolio to middle ear implants.

2002 Australian Hearing Hub is opened at Macquarie University, Sydney, with Cochlear as a partner.

2005 Melbourne Cochlear Care Clinic opened.

2008 GN ReSound partnership announced.

More than 450,000 people worldwide rely on hearing solutions from Cochlear.

Product milestones

2017

NUCLEUS Launch of Nucleus 7 Sound Processor

2016

NUCLEUS Launch of the Kanso Sound Processor, the industry's smallest and lightest off-the-ear sound processor.

NUCLEUS Launch of the Slim Modiolar electrode.

2015

BAHA Launch of the Baha 5 Power and SuperPower Sound Processors, designed to help those with higher levels of hearing loss.

BAHA Launch of the Baha 5 Sound Processor and Smart App for iPhone.

2014

BAHA Launch of the Baha 4 Systems: the Baha 4 Connect System, the most advanced direct bone conduction implant system and the Baha 4 Attract System, the first magnetic bone conduction implant system.

2013

ACOUSTIC IMPLANTS Introduction of the Carina® (fully-implantable) and MET® middle ear implants as well as Codacs™ direct acoustic cochlear implants.

2012

NUCLEUS Introduction of the Nucleus 6 Sound Processor, the first sound processor with truly automatic scene classifier and wireless connectivity

BAHA Introduction of the Baha DermaLock Abutment for soft tissue preservation and Baha 4 Sound Processor offering smarter, wireless hearing.

2010

BAHA Introduction of the Baha 3 System and launch of Baha BP110 Power Sound Processor for patients with greater hearing loss.

2009

NUCLEUS Introduction of the Nucleus 5 System – a new benchmark in hearing performance

BAHA Release of Baha BP100 Sound Processor offering a new level of bone conduction technology.

NUCLEUS Introduction of the first Nucleus Hybrid Implant and sound processor with acoustic component.

NUCLEUS First Nucleus Freedom® splashproof sound processor introduced.

BAHA Introduction of Baha Divino® Sound Processor, the first Baha Sound Processor with digital signal processing, followed by Baha Intenso® Sound Processor, the most powerful headworn sound processor.

NUCLEUS First behind-the-ear sound processor with inbuilt telecoil.

NUCLEUS Introduction of the award-winning Nucleus 24 Contour® perimodiolar electrode array.

NUCLEUS First multichannel behind-the-ear sound processor.

Hear now. And always

As the global leader in implantable hearing solutions, Cochlear is dedicated to bringing the gift of sound to people with moderate to profound hearing loss. We have helped over 450,000 people of all ages live full and active lives by reconnecting them with family, friends and community.

We aim to give our recipients the best lifelong hearing experience and access to innovative future technologies. For our professional partners, we offer the industry's largest clinical, research and support networks.

That's why more people choose Cochlear than any other hearing implant company.

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

www.cochlear.com

Please seek advice from your medical practitioner or health professional about treatments for hearing loss. They will be able to advise you on a suitable solution for your hearing loss condition. All products should be used only as directed by your medical practitioner or health professional.

Not all products are available in all countries. Please contact your local Cochlear representative.

ACE, Advance Off-Stylet, AOS, AutoNRT, Autosensitivity, Beam, Button, CareYourWay, Carina, Cochlear, Cochlear SoftWear, コクレア, Codacs, ConnectYourWay, Contour, Contour Advance, Custom Sound, ESPrit, Freedom, Hear now. And always, HearYourWay, Hugfit, Hybrid, inHear, Invisible Hearing, Kanso, MET, MicroDrive, MP3000, myCochlear, mySmartSound, NRT, Nucleus, 科利耳, Off-Stylet, Slimline, SmartSound, Softip, SPrint, True Wireless, the elliptical logo, WearYourWay and Whisper are either trademarks or registered trademarks of Cochlear Limited. Ardium, Baha, Baha SoftWear, BCDrive, DermaLock, EveryWear, Vistafix and WindShield are either trademarks or registered trademarks of Cochlear Bone Anchored Solutions AB.

The Nucleus Smart App is compatible with iPhone 5 (or later) and iPod 6th generation devices (or later) running iOS 10.0 or later.

The Nucleus 7 Sound Processor is compatible with iPhone 7 Plus, iPhone 7, iPhone 6s Plus, iPhone 6s, iPhone 6 Plus, iPhone 6, iPhone SE, iPhone 5s, iPhone 5c, iPhone 5, iPad Pro (12.9-inch), iPad Pro (9.7-inch), iPad Air 2, iPad Air, iPad mini 4, iPad mini 3, iPad mini 2, iPad mini, iPad (4th generation) and iPod touch (6th generation) using iOS 10.0 or later.

Apple, the Apple logo, Made for iPad logo, Made for iPhone logo, Made for iPod logo, iPhone, iPad Pro, iPad Air, iPad mini, iPad and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc., registered in the U.S. and other countries.

Information accurate as of August 2017.

© Cochlear Limited 2017. D1220128 ISS1 AUG17

Cochlear®