

Cochlear Family

Keeping you supported, connected, inspired

July 2023

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on how Professor
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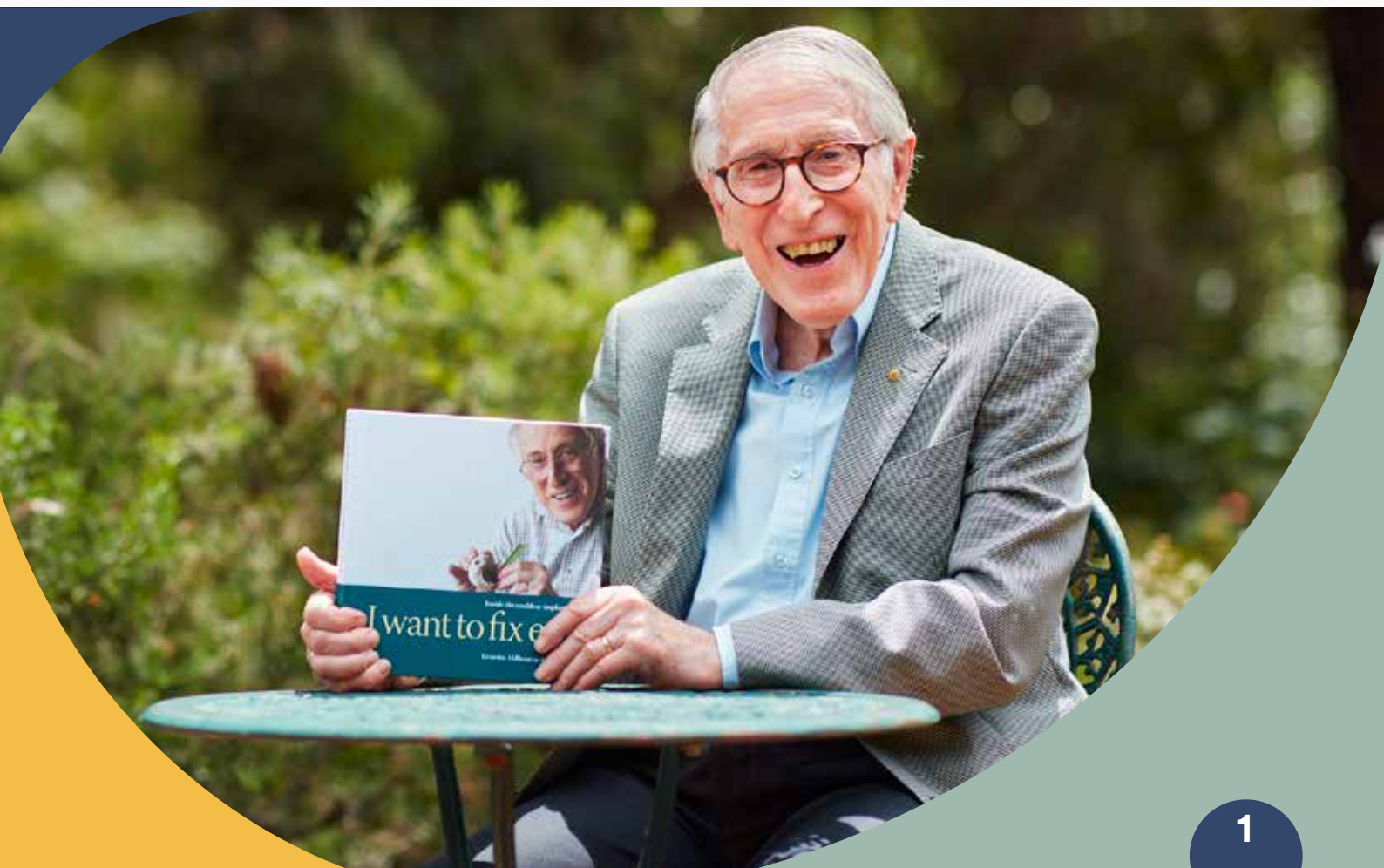
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A daughter reflects on how Professor Clark helped her father

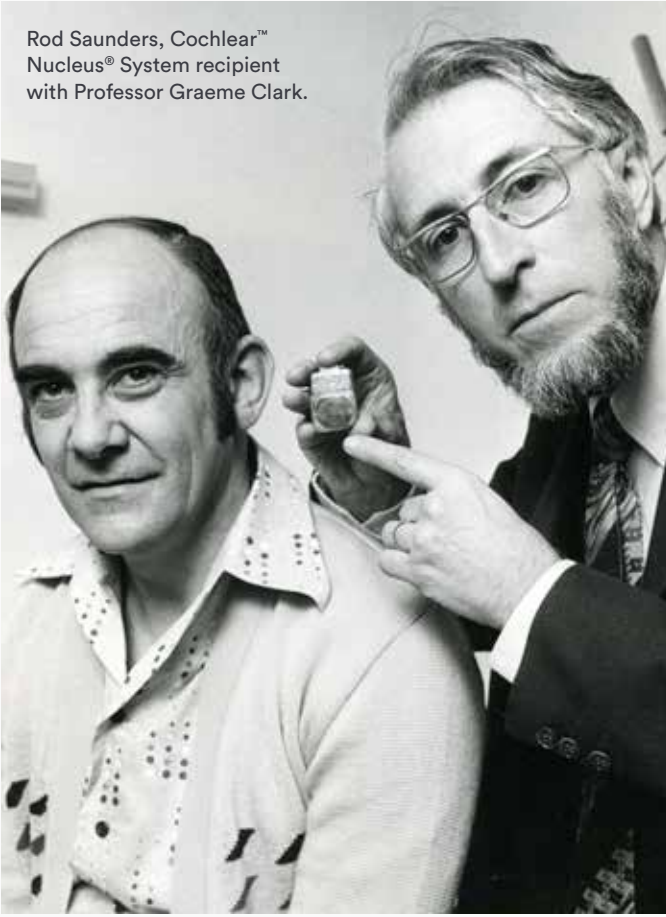
When Rod Saunders lost his hearing in 1977 as the result of a car accident, there was no way to predict what an important role he would play in the history of the multichannel cochlear implant.

Losing his hearing at the age 45 caused a huge impact on Rod and his family's life. "At the time, a specialist described Rod's tinnitus as being so severe, it sounded like a jet engine taking off," recalls his daughter Christine.

"I don't know what we would have done had my father continued on his downward spiral.... He was the breadwinner in the house. He was the one who took us to our tennis, our netball, the musicals we were in. He was so much involved in our lives," Christine adds. ▶



Rod Saunders, Cochlear™
Nucleus® System recipient
with Professor Graeme Clark.



- ◀ Rod went on to become the world's first cochlear implant recipient in 1978, an invention developed by Professor Graeme Clark.

Christine was speaking at a recent book launch at Melbourne University in Australia for Professor Graeme Clark's memoir: *I want to fix ears – Inside the cochlear implant story*. The book was published in 2021, but the launch was delayed due to the pandemic.

The memoir follows Professor Clark's journey – from ridicule by medical peers who called him "Clark the Clown" for what seemed an unachievable vision, to helping Rod to hear again, and beyond. Today, hundreds of thousands of people worldwide can communicate thanks to his ground-breaking technology.

"Every time I see [Professor Clark], I just well up with emotion and gratitude and love for this man, who is so selfless and so dedicated to helping people. He puts himself second and he's got this drive," says Christine.

"People might joke about this drive, and how he's very targeted and can't be swayed. But it's

that dedication that has led to helping hundreds of thousands of people around the world. And my little family owe so much to him. And so many people in the world."

For Professor Clark, meeting Rod was serendipitous, as he explains in his memoir: "In 1977, I had no patients. No doctor would refer any, as they did not believe what I was doing was acceptable. But unknown to me, Rod Saunders had a major car accident on 15 January 1977. He was knocked unconscious and made totally deaf."

Professor Clark needed a patient to test his invention – and the rest is history.

And he still shares the same drive and dedication to people with hearing loss:

"When I think about the implant and what it does... They have enabled adults to communicate with each other, taking them out of their loneliness and their isolation. And it's had a dramatic effect on children. They are able to communicate with their peers. They can... develop their true potential. It's been dramatic."

Yet he's not resting on his accolades. Professor Clark wrote the book to further support ongoing research and initiatives to help more people access cochlear implant technology – particularly children in countries where this still remains a challenge.

One quarter of the book's proceeds will go to the **Graeme Clark Research Institute** and another 25% will help fund Professor Clark's charitable foundation, **The Graeme Clark Foundation**, which supports direct giving initiatives and research that help people with sensory disorders to reach their true potential.

"Professor Clark and the cochlear implant saved my father and indirectly saved us as a family."

Christine, daughter of Rod who is a Cochlear™ Nucleus® System recipient.

Practical daily life tips for managing two hearing devices

Do you manage two different types of hearing devices? Cochlear™ Baha® System recipient, Michelle, shares how she manages her busy job, family and more while using a hearing aid on one ear and a Baha 6 Max Sound Processor on the other.

Michelle, Cochlear™ Baha® System recipient.

From answering the phone in her customer service role, spending weekends camping with her husband to helping plan her daughter's wedding, Michelle, 55, shared her strategies for getting the best from her hearing, no matter where she is and what she's doing. ▶



Set a daily routine

Part of Michelle's daily routine is putting on her Cochlear Baha 6 Max on one ear, and her hearing aid on the other.

"I definitely notice when I don't wear my Baha [Sound Processor]. I've gotten to the point that it's one of the first things I do. It's the first thing I put on when I start getting ready for work and get ready to leave.

"I clean my abutment to make sure it's clean and it's dry before I put my device on. So I get my hair dry, get ready and then that's when I go 'okay, it's fine'. Then I put my device and hearing aid on and it's 'let's go'."

At the end of each day, Michelle, who lives in Colorado, spends time preparing her sound processor for the next day.

"I actually live in a dry climate, so I don't have to worry about the moisture as much. But if there is really a lot of moisture in the air, I do have a dry container that I'll take and put it in there when I need to. Other than that I wipe it down to make sure everything's good. I always put fresh battery as soon as I know it's needed."

Choose streaming to the side that lets you hear more

When she started using a hearing aid two years ago, Michelle had to figure out how to make hearing adjustments to two different hearing devices.

Currently, Bluetooth® only allows connection to one device at a time, so Michelle had to choose which hearing device app to have on her smartphone. As her natural hearing is better on her left side, she prioritises her hearing aid app to stream to the left side.

This meant Michelle had to find a way to change her Baha 6 Max settings without using the Baha Smart App* on her smartphone. Instead, she uses the app on her iPad at home. When she's at work or elsewhere, she uses the Cochlear Wireless Phone Clip# to make quick changes.

"It is difficult when you have two different types of devices. How do I control the volume on my device? How can I try to adjust the other one? And that's how I've come up with just using the Phone Clip for my Baha, and I use my phone for my hearing aid."

Michelle uses the Phone clip to change the program and volume. ▶



Michelle, Cochlear™ Baha® System recipient.

"I don't even need to wear the Phone Clip. I just take it out and do what I need, kind of like the remote control."

Michelle, Cochlear™ Baha® System recipient.

Ask for support at your workplace

“My office has been supportive and asked me if I need any accommodations. As of right now the only thing I need is the ability to keep my cell phone handy or my remote out on the desk if needing to make any adjustments with my Baha or hearing aid.”

“The office did have hard surface floors and the last few years carpet was added to help filter sound to make it easier to hear. If there is a need for further accommodations, they are open to them. All I need to do is ask.”

Know your tech support options

Michelle stresses the importance of knowing how to get the help you need when you need it. If she needs help with her hearing devices, she knows where to turn.

As well as contacting Cochlear support when she has questions for her Baha 6 Max, she finds Apple accessibility support services helpful, using their dedicated phone number and chat service.

“Apple in America has an accessibility phone number. So if you have an issue because of your accessibility for your iPhone, there’s a phone number, and you can contact them for help with your iPhone and your accessibility for it. So if you have a hearing aid or if you have Baha, they can help you with those iPhone related issues,” she says.

You can contact Apple support for chat and phone accessibility support in Australia, the UK, United States and mainland China. “If something is not working right, you need to say something and do something.”

Advocate for yourself

Michelle’s daughter was born with bilateral hearing loss. This was a major “aha” moment for Michelle to start advocating for herself and be a role model for her daughter.

With her daughter now planning a wedding, Michelle is happy her daughter knows what questions to ask and how to proactively manage her hearing.

“I think I did a good job. She knows the questions she needs to ask. She doesn’t just accept answers. That’s the biggest thing. She’s now 26 years old and actively manages her hearing. She will say to me: ‘Mom, they said if my hearing loss drops anymore, then I might look into cochlear [implants].’

Watch Michelle talks about how the Baha 6 Max helps her connect to the people and activity she loves.

Michelle, Cochlear™ Baha® System recipient.



“It doesn’t matter how you communicate, as long as you can communicate. And that was always our advocacy for my daughter”

Michelle, Cochlear™ Baha® System recipient.

Clinical research shows 3 reasons to update your sound processor



Are you comfortable with your current sound processor? Or do you feel overwhelmed at the idea of learning new technology or adjusting your hearing to a new device?

Clinical research shows there are three key benefits to updating your current sound processor to the latest device. ▶

1 Better hearing experience in your daily life

Even if you've had your implant for more than 20 years, you can experience significant performance improvements by accessing the latest-generation sound processor technology.²

That's because our newest sound processors offer improvements in how you hear in different environments. From a busy café, windy park or in a quiet place, newer sound processors automatically adjust your listening settings so you can experience clearer sound, particularly in challenging and noisy environments.² Our latest device, the Cochlear™ Nucleus 8® Sound Processor, senses changes in your environment and automatically adjusts your listening settings to help you hear clearly wherever you go.^{2,4,5}

If you're after an off-the-ear option, the Nucleus Kanso® 2 Sound Processor also features advanced technology to help you in challenging environments.⁷

Similarly, face-to-face conversations are an important part of everyday life, but can be challenging when you're in a noisy setting. Research confirms that improved hearing performance, through features like ForwardFocus⁺, is a key reason to upgrade to next-generation technology.² ForwardFocus works by significantly reducing noise coming from behind you, so you can more easily enjoy face-to-face conversations in noisy environments.² (This is available with Nucleus 8, Nucleus 7 and Kanso 2 sound processors.)

2 Improvements no matter when you received your implant

It doesn't matter when you received your implant, you can experience benefits with a new sound processor.²

A clinical study showed that even patients who received their implant more than 20 years ago can achieve performance improvements today by upgrading their sound processor to access the latest sound processing technology.²

"The continual upgrades have always had a positive effect on my life, whether it be at work or socially, because with every upgrade there's always something that makes it better," Bernie explains. "There's always a feature or an accessory that makes getting the upgrade better, both for home and for work." ▶

"There are some significant differences between the Nucleus 6, which I had, and the Nucleus 8. Particularly at sporting events, I find if I [turn on] the ForwardFocus, I can hear the people next to me quite easily,"

Bernie, Cochlear™ Nucleus® System recipient.

3 A new sound processor can improve everyday living

Patients of all ages report a difference in their everyday experiences of life with a new sound processor, research shows.²

Long-term users of Nucleus sound processors experienced fewer hearing difficulties following a change to newer sound processor technology, which boosted their confidence in engaging with the world around them.²

A study found that the mobile connectivity**, usability and comfort available with Nucleus sound processors resulted in recipients feeling more satisfied with their hearing in multiple listening situations and happier with the perceived listening effort.¹

“What’s great about the Nucleus 8 [Sound Processors] are the features that come with it – the audio streaming from the phone to allow you to make phone calls, talk to people, and obviously listening to music,” says Bernie.

“They’ve made a huge difference, particularly in phone conversations. The clarity is so much better than holding it to your ear or holding it to the processor. It’s like someone’s talking directly into your ears. It’s fantastic and so much easier.”

And more ways to connect are coming: the Nucleus 8 Sound Processor is ready for the next release of Bluetooth® technology** in the future, which will allow you to connect to more places and from more devices than ever before.⁸⁻¹⁰

You’ll be able to connect to what’s being broadcasted at public venues such as airports, conference centres, sports clubs and gyms supporting Bluetooth® Auracast™ broadcast audio**. It’s also set to deliver better sound quality than the previous generation~ to help you get the best possible audio experience.^{9,10}

To learn more about the benefits of changing to a next-generation sound processor, talk to your clinician.

Find out what a new sound processor could mean for you.



Phone rehab tips for seniors

- 1** Schedule regular 5-minute calls with the senior two to three times a week at a time when you know they are feeling refreshed and relaxed.
- 2** Make sure the senior is in a quiet place to take your phone calls, so there is no background noise to distract them.
- 3** Make sure you are also in a quiet place, so there is no risk of interference or background noise, and you can focus all your attention on helping the senior.
- 4** Before you get started, ask the senior to inform you straight away if they don't understand something. Ask them to be clear with their instructions for example, "I did not understand." "Please say it again." "Could you speak slower?"
- 5** Always check that they've heard things correctly by asking them to repeat what you've just said. Repetition will help them to recognise and identify different words.
- 6** Give them a newspaper article to read to you over the phone, then read the same article back to them. This will help them to tune in to the way your voice sound on the phone.
- 7** As they become more confident, suggest different topics to discuss on the phone. Knowing the topic in advance will give them some context about the vocabulary and subject matter you will be using and serve as a guide to help the conversation flow.
- 8** Rehearse real-life situations such as making an appointment with the doctor or ordering a takeaway meal. Ask them to repeat the phone numbers and times to check they've heard them correctly.
- 9** As they make progress, ask them to challenge themselves by taking phone calls in different rooms of the house or moving outside to familiarise themselves with listening when there is competing noise.
- 10** Once they have become more confident, try to find other phone rehab partners for the senior, so they can get used to hearing different voices on the phone.

The toolkit every young recipient needs



Who better to turn to for tips to thrive at school than a teacher with a cochlear implant, who works with deaf children?

“Because of my experiences navigating the public school system as a deaf student with a cochlear implant, I can personally relate to many of the challenges and/or barriers that my students face. And it’s not always easy,” explains Heidi, who teaches primary school children with varying degrees of hearing loss in the US.

“The one advantage that many of my students have today is that they have tools. In addition to their hearing devices, they are also learning sign language at an early age and learning how to advocate for their hearing and communication needs. My students are light years ahead of me when I was their age!”

Heidi is all about equipping children with a “tool belt” of skills and devices to live with hearing loss. And it comes from personal experience.

While receiving a cochlear implant at age 12 was a turning point for Heidi to be able to hear and perform better in school, she says it “wasn’t enough”. ▶

Heidi, Cochlear™ Nucleus® System recipient.

- “I was still missing information and not fully understanding what was going on around me. This was evident when playing sports, socialising with groups of friends, or even preparing for tests. At the time, I didn’t understand why things were so hard.”

The next turning point came in college when she took a sign language class and was offered the resource of a sign language interpreter.

“This is when my world opened up. I met others who were deaf like me. I no longer felt different and alone. In college, I found that I could use my cochlear implant to help understand the professor, and a sign language interpreter to access missed information and to help follow class discussions.

“I learned that it doesn’t have to be either-or. I am most successful when using both my cochlear implant and sign language. I find the same to be true for many of my students too.”

We asked Heidi to describe the “tool belt” she teaches students and other important messages to help them thrive, using resources available in their school:

Q Why do children need a tool belt to live with hearing loss?

A. “In my experience, in the general education classroom most deaf and hard of hearing children need multiple ways of accessing information. Their hearing aid(s), FM system, and/or cochlear implant(s) alone do not provide full access to information. Many of the children I work with lack the vocabulary to communicate. This is not to say that the cochlear implants don’t help – they do – but they need other tools in the meantime, to support them along the way.”

Q What is a hearing loss tool belt?

A. “The idea is like a carpenter needing tools to build a house such as nails, a hammer, level, etc. Deaf and hard of hearing students need their own tools to access learning in the classroom. Some tools may be useful depending on the situation while others may be used more frequently. Students are taught early on how and when to utilise their tools.”

Q What’s in the tool belt?

A. “Aside from their hearing devices (hearing aids, cochlear implants), Deaf and hard of hearing students need additional tools such as having a sign language interpreter, visuals, closed captions, notetaker, FM system, etc. to support learning in the classroom. Students become experts at knowing which tools to use and when. For example, a 4th grade student with bilateral cochlear implants accesses the FM system and sign language interpreter during instruction. With these tools in place, the student is also able to successfully refer to visual aids to support understanding of new concepts and vocabulary.”

Q Why are self-advocacy and independence in the tool belt?

A. “Students become their own self-advocate by informing others when their tools are not working properly or when they don’t want to use certain tools. For example, before watching a film, a 3rd grade student with bilateral cochlear implants is connected to the FM system. She reminds her teacher to turn on the closed caption and asks the interpreter to not interpret while she reads the captions and watches the film.”

Q What advice do you have for parents?

A. “Deaf and hard of hearing children thrive when they have multiple ways of accessing information. For example, it doesn’t have to be either a cochlear implant or a sign language interpreter. It can be both. The more tools your child has, the more access he or she will have to learning in the classroom and beyond.”

Tips on care and maintenance of your CochlearTM Nucleus[®] Sound Processor ▸





Care & Maintenance of your Behind-The-Ear (BTE) sound processor

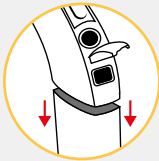
Daily



Wipe dry & clean with a soft dry cloth.



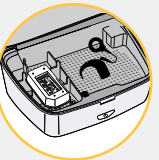
Brush the connector pins only using a soft brush.



Remove batteries, clean contact points.

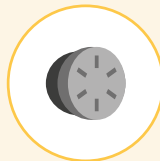
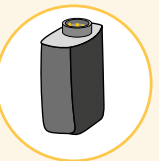


Untwist cable to avoid breakage.



At night, store the processor fully assembled in the Dry & Store[®] unit provided by Cochlear.

Weekly



Remove the battery module, coil, coil cable, magnet and clean the contact points using a soft dry cloth & soft brush.
(leave the ear hook in place)

Every 2 months



Replace Dry-Brik[®] dessicant.

Dry-Brik may lose its moisture absorption characteristics after 2 months of use in certain environments and hence might not be effective in ensuring that your sound processor is kept moisture free.

Every 3 months



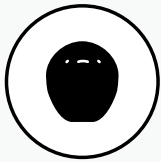
Replace the microphone protectors - this is very important for the quality of sound.

Seasonal



Use Aqua+ sleeve to protect from rain and excessive sweat.

Refer to your sound processor user guide for detailed guidance on care & maintenance



Care & Maintenance of your Off-The-Ear (OTE) sound processor

Daily

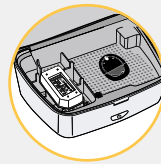


Check all parts of your sound processor and accessories e.g. Cochlear SoftWear™ pads, safety line, for dirt & grime. Wipe dry & clean with a soft dry cloth.

Keep your processor free from moisture by drying it every night:



In case of Kanso® 2 Sound Processor, store it fully assembled in the Home Charger.



In case of Kanso Sound Processor, store it fully assembled in the Dry & Store® unit.

Monthly



Replace the Cochlear SoftWear pad (if used) if it is worn or damaged.



Check if the Safety Line (if used) is showing signs of wear. Replace as needed.



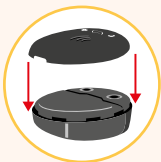
Additionally in case of Kanso Sound Processor, remove batteries and wipe the contacts with a soft dry cloth.

Every 2 months



If you use a Dry & Store unit, replace the Dry-Brik. Dry-Brik may lose its moisture absorption characteristics after 2 months of use in certain environments and hence might not be effective in ensuring that your sound processor is kept moisture free.

Every 3 months



Replace the microphone protectors - this is very important for the quality of sound.

Seasonal



Use Aqua+ sleeve to protect from rain and excessive sweat.

Refer to your sound processor user guide for detailed guidance on care & maintenance

Share your story with Cochlear Family

Cochlear Family wants to hear from you. Share your story, tips, tricks, advice, ideas and any questions you might have.

Get in touch >

Hear now. And always

As the global leader in implantable hearing solutions, Cochlear is dedicated to helping people with moderate to profound hearing loss experience a life full of hearing. We have provided more than 700,000 implantable devices, helping people of all ages to hear and connect with life's opportunities.

We aim to give people the best lifelong hearing experience and access to innovative future technologies. We have the industry's best clinical, research and support networks.

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

■ **Cochlear Limited** Second Floor, Platina Building, Plot No. C59, G Block, Bandra Kurla Complex, Bandra (E), Mumbai 400 051, India

www.cochlear.com

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*The Cochlear Baha Smart App is available on App Store and Google Play. For compatibility information, visit www.cochlear.com/compatibility

#For information regarding the compatibility of Cochlear's Sound Processors with True Wireless devices, visit www.cochlear.com/compatibility

! Compared to previous generation Nucleus 7 and Nucleus 6 Sound Processors.

~The previous generation was Bluetooth® Classic.

** As Bluetooth LE Audio compatible devices become available, a firmware update will be required for you to use certain features.

Auracast™ broadcast audio capability is subject to third party adoption of the Auracast protocol.

± ForwardFocus is a clinician-enabled feature that can be user controlled or automated.

The Kano 2 Sound Processor and Nucleus 8 Sound Processor is compatible with Apple and Android devices. For compatibility information and devices visit www.cochlear.com/compatibility and www.resound.com/compatibility

^ The Cochlear Nucleus 8 Sound Processor is dust and water resistant to level IP68 of the International Standard IEC60529. The Nucleus 8 Sound Processor was tested to a depth of up to 1 metre for up to 1 hour. Refer to the relevant user guide for more information.

Please seek advice from your health professional about treatments for hearing loss. Outcomes may vary, and your health professional will advise you about the factors which could affect your outcome. Always follow the instructions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information.

Views expressed are those of the individual. Consult your health professional to determine if you are a candidate for Cochlear technology.

The Cochlear Nucleus 8 Sound Processor is dust and water resistant to level IP68 of the International Standard IEC60529. The Nucleus 8 Sound Processor was tested to a depth of up to 1 metre for up to 1 hour. Refer to the relevant user guide for more information.

The Kano 2 Sound Processor is dust and water resistant to level of IP68 of the International Standard IEC60529.

The Cochlear Nucleus 8 and Kano 2 Sound Processor with Aqua+ is dust and water resistant to level IP68 of the International Standard IEC60529. The Nucleus 8 and Kano 2 Sound Processor with Aqua+ can be continuously submerged under water to a depth of up to 3 metres for up to 2 hours. Refer to the relevant user guide for more information.

The product images shown are for illustrative purposes only and may not be an exact representation of the product.

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