

# **Nucleus® 8 Sound Processor Patient FAQs**

# The Cochlear™ Nucleus® 8 Sound Processor

# **Frequently asked questions**

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#### General

#### 1. What is the Nucleus® 8 Sound Processor?

The Cochlear™ Nucleus® 8 Sound Processor is the world's smallest and lightest behind-the-ear sound processor.¹ It's 32% smaller and 34% lighter than the Nucleus 6 Sound Processor⁺, and 15% smaller and 13% lighter than the Nucleus 7 Sound Processor.#

Featuring enhanced SmartSound® iQ 2 with SCAN 2 technology, it senses changes in your environment and automatically adjusts your listening settings to help you hear clearly, no matter where the day takes you.<sup>2-5,></sup> The improved ForwardFocus<sup>†</sup> feature powerfully reduces distracting background noise when you want to hear face-to-face conversations in noisy places like restaurants, workplaces or shopping centres.<sup>6</sup>

Building on the direct streaming capabilities introduced with the Nucleus 7 Sound Processor, the Nucleus 8 Sound Processor is ready for next-generation Bluetooth® LE Audio technology, bringing sound to you – in more places and from more devices than ever before. You'll be able to connect directly to what's being broadcast at public venues such as airports, conference centres and theatres with Bluetooth Auracast™. Whether you're listening to music, taking a phone call, or watching your favourite film, Bluetooth LE Audio aims to get you the best available audio experience. The Nucleus 8 Sound Processor is also compatible with Apple, Android™ and Cochlear True Wireless™ Devices.

Access to remote and self-managed hearing care solutions can offer you the flexibility to manage your listening settings or connect with your clinician. With the Nucleus Smart App, you can adjust your listening settings to hear better in noisy situations, keep track of your hearing information and set daily goals for listening to speech. You can even save yourself a trip to the clinic by using our Remote Care<sup>±</sup> solutions to do a hearing check or video appointment with your clinician from home.<sup>10</sup>

Development of the Nucleus 8 Sound Processor is inspired by your needs and designed to help you hear your best. How with stand tough environments, yet simple to use, it's splash-proof and dust-proof, with the highest available water-resistance rating in a sound processor (IP68). With six different colours to choose from and personalisation covers to add colour or decoration, you can express your personal style while you enjoy better hearing.

- 1. Cochlear Limited. D1190805, Processor Size Comparison
- 2. Mauger SJ, Warren C, Knight M, Goorevich M, Nel E. Clinical evaluation of the Nucleus 6 cochlear implant system: performance improvements with SmartSound iQ. International Journey Of Audiology. 2014, Aug; 53(8): 564-576. [Sponsored by Cochlear]
- 3. Mauger S, Jones M, Nel E, Del Dot J. Clinical outcomes with the Kanso™ off- the-ear cochlear implant sound processor. International Journal Of Audiology. 2017, Jan 9; 1-10. [Sponsored by Cochlear]
- 4. Wolfe J, Neumann S, Marsh M, Schafer E, Lianos L, Gilden J, O'Neill L, Arkis P, Menapace C, Nel E, Jones M. Benefits of Adaptive Signal Processing in a Commercially Available Cochlear Implant Sound Processor. Otol Neurotol. 2015 Aug;36(7):1181-90. [Sponsored by Cochlear]
- 5. Cochlear Limited. D1864200 SCAN-X Design Description.
- 6. Cochlear Limited. D1964109 CLTD5804 Clinical Investigation Report Feb 2022
- 7. Introducing Bluetooth® LE Audio, Nick Hunn. January 2022 https://www.bluetooth.com/learn-about-bluetooth/recent-enhancements/le-audio/
- 8. Cochlear Limited. D1631375 Nucleus 8 Sound Processor Product Definition.
- 9. https://www.bluetooth.com/blog/a-technical-overview-of-lc3/ Accessed 28 February 2022
- 10. Cochlear Limited. D1698858. Evaluation of Remote Care App and Nucleus Smart App with CP1000 sound processor. Clinical Investigation Report. 24 Feb, 2020.
- 11. Cochlear Limited. D1932780. Cochlear Nucleus Reliability Report, Volume 20 December 2021.
- 12. Cochlear Limited D1980144 CP1110 IEC60529 IP68 Certificate & Test Report.
- + Comparison made using a Power Extend Battery Module with Nucleus 8 Sound Processor and an equivalent Standard Rechargeable Battery Module with Nucleus 6 (CP910) Sound Processor.
- # Comparison made using the Compact Battery Module for Nucleus 8 Sound Processor and the Compact Rechargeable Battery for Nucleus 7 Sound Processor.
- > Compared to previous generation SSiQ with SCAN.
- † ForwardFocus is a clinician enabled, user-controlled feature. It's recommended for children over the age of 12.

- ¥ When this technology becomes available a firmware update to your sound processor will allow you to connect to Bluetooth LE Audio compatible devices.
- The Cochlear Nucleus 8 Sound Processor is compatible with Apple and Android devices. For compatibility information and devices visit www.cochlear.com/compatibility
- ± Remote Care is not available in all markets and patient must have cellular or WiFi connection for use of Remote Care features.
- \* The Nucleus 8 Sound Processor is dust and water resistant to level of IP68 of the International Standard IEC60529. The Nucleus 8 Sound Processor with Aqua+ is dust and water resistant to level of IP68 of the International Standard IEC60529. Aqua+ can be continuously submerged under water to a depth of up to 3 metres for up to 2 hours.

#### 2. Is the Nucleus® 8 Sound Processor suitable for children?

Yes. As the world's smallest and lightest behind-the-ear cochlear implant sound processor, the Nucleus® 8 Sound Processor is designed for comfort. 1

Our latest hearing technology senses changes in a child's listening environment and automatically adjusts their settings to help them hear their best. Parents can enjoy the peace of mind that their child is hearing optimally, whether they are in the playground, classroom or at home.<sup>2-4</sup>

Built to withstand tough environments, yet simple to use, the Nucleus® 8 Sound Processor is splash-proof and dust-proof, with the highest available water-resistance rating in a sound processor (IP68).<sup>5,~</sup> Parents have the option to make their child's sound processor enhanced water resistant (IP68)<sup>~</sup> with the Aqua+ accessory, so they can feel confident that their child's sound processor is secured.<sup>6</sup>

There is a range of optional retention accessories available to help children wear the Nucleus 8 Sound Processor securely, with three different tamper-resistant features available: one that locks the earhook to the processing unit, one that locks the battery module to the processing unit and one that locks the battery cover to the battery holder.

With the Nucleus Smart App, parents can manage their child's processor, use the Hearing Tracker to monitor their child's hearing and Find My Processor to help them locate a misplaced sound processor.\*

- 1. Cochlear Limited. D1190805, Processor Size Comparison
- 2. Cochlear Limited. D1864200 SCAN-X Design Description
- 3. Mauger SJ, Warren C, Knight M, Goorevich M, Nel E. Clinical evaluation of the Nucleus 6 cochlear implant system: performance improvements with SmartSound iQ. International Journey Of Audiology. 2014, Aug; 53(8): 564-576. [Sponsored by Cochlear]
- 4. Mauger S, Jones M, Nel E, Del Dot J. Clinical outcomes with the Kanso™ off- the-ear cochlear implant sound processor. International Journal Of Audiology. 2017, Jan 9; 1-10. [Sponsored by Cochlear]
- 5. Cochlear Limited. D1980144 CP1110 IEC60529 IP68 Certificate & Test Report.
- 6. Cochlear Limited. D1932780. Cochlear Nucleus Reliability Report, Volume 20 December 2021.
- ~ The Nucleus 8 Sound Processor with Aqua+ is dust and water resistant to level of IP68 of the International Standard IEC60529. Aqua+ can be continuously submerged under water to a depth of up to 3 metres for up to 2 hours.
- The Cochlear Nucleus Smart App is available on App Store and Google Play. For compatibility information visit www.cochlear.com/compatibility

# **Upgrade**

#### 3. Can I upgrade to the Nucleus® 8 Sound Processor?

An important consideration when choosing a hearing implant is the ability to upgrade to new sound processor technology in the future. The Nucleus® 8 Sound Processor is compatible with the following Nucleus implants:

- Nucleus Profile™ Plus (CI600 series)\*
- Nucleus Profile™ (CI500 series, ABI541)<sup>^</sup>
- Nucleus Freedom® (CI24RE, CI422)
- Nucleus 24 (CI24M, CI24R, Nucleus 24 ABI)

It is not compatible with the Cochlear™ Nucleus 22 Implant. Ask your healthcare professional whether the Nucleus 8 Sound Processor is right for you or contact Cochlear to learn more.

- \* Nucleus Profile™ Plus (CI600 series) refers to Cochlear Nucleus CI612 cochlear implant with Contour Advance® electrode, Cochlear Nucleus CI622 cochlear implant with Slim Straight electrode, and Cochlear Nucleus CI632 cochlear implant with Slim Modiolar electrode.
- ∧ Nucleus Profile™ (CI500 series) refers to Cochlear Nucleus CI512 cochlear implant with Contour Advance electrode, Cochlear Nucleus CI522 cochlear implant with Slim Straight electrode, Cochlear Nucleus CI532 cochlear implant with Slim Modiolar electrode, and Cochlear Nucleus ABI541 Auditory Brainstem Implant.

#### 4. Should I upgrade to the Nucleus® 8 Sound Processor?

If you're considering an upgrade, the Nucleus® 8 Sound Processor offers many benefits:

- World's smallest behind-the-ear sound processor: Designed for next-level comfort, the Nucleus 8 Sound Processor is the world's smallest and lightest behind-the-ear sound processor. It's 32% smaller and 34% lighter than the Nucleus 6 Sound Processor, and 15% smaller and 13% lighter than the Nucleus 7 Sound Processor.
- Smarter hearing technology: Enhanced<sup>></sup> SmartSound<sup>®</sup> iQ 2 with SCAN 2 hearing technology senses changes in your listening environment and automatically adjusts to provide clear sound.<sup>2-4</sup> An improved ForwardFocus<sup>†,></sup> more powerfully reduces distracting background noise when you want to focus on face-to-face conversation.<sup>5</sup> Now with the choice to manually operate ForwardFocus via the Nucleus Smart App or have it fully automated, you can focus on what's important.
- Better connected: The Nucleus 8 Sound Processor is the first cochlear implant sound processor that's ready for next-generation Bluetooth® LE Audio technology.<sup>6-8,¥</sup> Enabling you to stream sound from any compatible device, Bluetooth LE Audio technology will make it easier for you to bring sounds closer in more places and from more devices than ever before.<sup>6-8</sup> You can also stream audio directly from compatible Apple, Android™ and True Wireless™ Devices.<sup>\*</sup>
- More care options at your fingertips: Adjust your listening settings to hear better in noisy situations, keep track of your hearing information and set daily listening goals. You can even save yourself a trip to the clinic by using our Remote Care^solutions to do a hearing check or video appointment with your clinician from home. For added peace of mind, use the Find My Processor feature to help find a misplaced processor.
- Reliable and simple to use: Development of the Nucleus 8 Sound Processor is inspired by your needs. Built to withstand tough environments, yet simple to use, it's splash-proof and dust-proof, with the highest available water-resistance rating in a sound processor (IP68). 10,~
- 1. Cochlear Limited. D1190805, Processor Size Comparison
- 2. Cochlear Limited. D1864200 SCAN-X Design Description
- 3. Mauger SJ, Warren C, Knight M, Goorevich M, Nel E. Clinical evaluation of the Nucleus 6 cochlear implant system: performance improvements with SmartSound iQ. International Journey Of Audiology. 2014, Aug; 53(8): 564-576. [Sponsored by Cochlear]
- 4. Mauger S, Jones M, Nel E, Del Dot J. Clinical outcomes with the Kanso™ off- the-ear cochlear implant sound processor. International Journal Of Audiology. 2017, Jan 9; 1-10. [Sponsored by Cochlear]
- 5. Cochlear Limited. D1964109 Clinical investigation Report CLTD5804 Feb 2022
- 6. Introducing Bluetooth® LE Audio, Nick Hunn. January 2022 https://www.bluetooth.com/learn-about-bluetooth/recent-enhancements/le-audio/
- 7. Cochlear Limited. D1631375 Nucleus 8 Sound Processor Product Definition.
- 8. https://www.bluetooth.com/blog/a-technical-overview-of-lc3/ Accessed 28 February 2022
- 9. Cochlear Limited. D1715545 NSA product definition (inc Remote Check)
- 10. Cochlear Limited. D1932780. Cochlear Nucleus Reliability Report, Volume 20 December 2021.
- 11. Cochlear Limited. D1980144 CP1110 IEC60529 IP68 Certificate & Test Report.
- + Comparison made using a Power Extend Battery Module with Nucleus 8 Sound Processor and an equivalent Standard Rechargeable Battery Module with Nucleus 6 (CP910) Sound Processor
- # Comparison made using the Compact Battery Module for Nucleus 8 Sound Processor and the Compact Rechargeable Battery for Nucleus 7 Sound Processor
- > Compared to previous generation Nucleus 7 and Nucleus 6 Sound Processors
- † ForwardFocus is a clinician enabled, user-controlled feature. It's recommended for children over the age of 12.

- ¥ When this technology becomes available a firmware update to your sound processor will allow you to connect to Bluetooth LE Audio compatible devices.
- \* For information regarding the compatibility of Cochlear's Sound Processors with True Wireless, Apple or Android devices, visit www.cochlear.com/compatibility
- A Remote Care is not available in all markets and patient must have cellular or WiFi connection for use of Remote Care features.
- ~ The Nucleus 8 Sound Processor with Aqua+ is dust and water resistant to level of IP68 of the International Standard IEC60529. Aqua+ can be continuously submerged under water to a depth of up to 3 metres for up to 2 hours.

#### 5. How much smaller is the Nucleus® 8 Sound Processor?

The Nucleus® 8 Sound Processor is 15% smaller and 13% lighter than the Nucleus 7 Sound Processor.# And for recipients looking to upgrade from a Nucleus 6 Sound Processor, they can experience a 32% reduction in size and a 34% reduction in weight.<sup>1,+</sup>

- 1. Cochlear Limited. D1190805 Processor Size Comparison
- # Comparison made using the Compact Battery Module for Nucleus 8 Sound Processor and the Compact Rechargeable Battery for Nucleus 7 Sound Processor
- + Comparison made using a Power Extend Battery Module with Nucleus 8 Sound Processor and an equivalent Standard Rechargeable Battery Module with Nucleus 6 (CP910) Sound Processor

# **Hearing performance technology**

# 6. What is SmartSound® iQ 2 with SCAN 2?

SmartSound® iQ 2 with SCAN 2 hearing technology senses changes in your listening environment and automatically adjusts to provide clear sound. Whether you're in a noisy café, train station, or walking down a busy street, your sound processor continuously analyses your surroundings and automatically adjusts to optimise your hearing in different situations. SmartSound iQ 2 with SCAN 2 can help you to hear sound, speech and music more clearly, even when it's noisy or windy.<sup>1-4</sup>

- 1. Mauger SJ, et al. Clinical evaluation of the Nucleus 6 cochlear implant system: performance improvements with SmartSound iQ. Int J Audiol. 2014, Aug; 53(8): 564-576. [Sponsored by Cochlear].
- 2. Mauger SJ, Jones M, Nel E, Del Dot J. Clinical outcomes with the Nucleus Kanso off-the-ear cochlear implant sound processor. Int J Audiol. 2017, Apr; 56(4): 267-276. [Sponsored by Cochlear].
- 3. Wolfe J, et al. Benefits of Adaptive Signal Processing in a Commercially Available Cochlear Implant Sound Processor. Otol Neurotol. 2015 Aug;36(7):1181-90.
- 4. Cochlear Limited. D1864200 SCAN-X Design Description

#### 7. What is ForwardFocus and how has it been enhanced?

ForwardFocus<sup>†</sup> is a clinician-enabled feature that can be user controlled via the Nucleus® Smart App.\* It is designed to provide additional hearing support in noisy environments, and reduce unwanted background noise, so you can hear better face-to-face conversations in, for example, busy restaurants, shopping centres or cafeterias.<sup>1</sup>

With the Nucleus 8 Sound Processor, improved ForwardFocus more powerfully reduces background noise and now has the option to be fully automated. 1

- 1. Cochlear Limited. D1964109 CLTD5804 Clinical Investigation Report Feb 2022
- † ForwardFocus is a clinician enabled, user-controlled feature. It's recommended for children over the age of 12.
- \* The Cochlear Nucleus Smart App is available on App Store and Google Play. For compatibility information visit <a href="https://www.cochlear.com/compatibility">www.cochlear.com/compatibility</a>
- $\land \quad \text{Compared to Nucleus 7 Sound Processor with ForwardFocus on}.$

#### 8. Why are dual microphones important?

Research indicates that sound processors with two microphones provides significantly better hearing performance in noise than devices with a single microphone.<sup>1</sup>

1. Mauger SJ, Jones M, Nel E, Del Dot J. Clinical outcomes with the Nucleus Kanso off-the-ear cochlear implant sound processor. Int J Audiol. 2017, Apr; 56(4): 267-276. [Sponsored by Cochlear].

# Connectivity

#### 9. Can I stream audio directly to my sound processor?

Yes. The Nucleus® 8 Sound Processor can be paired with compatible Apple, Android™ and True Wireless™ Devices.\* This means that you can make phone calls and stream music, rehabilitation exercises, educational programs and more, directly to your sound processor. As the first cochlear implant sound processor that's ready for next-generation Bluetooth® LE Audio technology, it will be easier for you to bring sounds closer — in more places and from more devices than ever before.¹-3,¥

In addition to connecting to compatible smartphones and laptops or to any compatible device at home or at work, you'll be able to connect directly to what's being broadcast at public venues such as airports, conference centres and theatres with Bluetooth® Auracast™. <sup>1,3</sup>

- 1. Introducing Bluetooth® LE Audio, Nick Hunn. January 2022 https://www.bluetooth.com/learn-about-bluetooth/recent-enhancements/le-audio/
- 2. Cochlear Limited. D1631375 Nucleus 8 Sound Processor Product Definition.
- 3. https://www.bluetooth.com/blog/a-technical-overview-of-lc3/ Accessed 28 February 2022
- \* For information regarding the compatibility of Cochlear's Sound Processors with True Wireless, Apple or Android devices, visit www.cochlear.com/compatibility
- ¥ When this technology becomes available a firmware update to your sound processor will allow you to connect to Bluetooth LE Audio compatible devices.

# 10. What is Bluetooth® LE Audio Technology?

Bluetooth® LE Audio is the next generation of Bluetooth audio. Building on 20 years of innovation, LE Audio enhances the performance of Bluetooth audio and adds support for hearing aids. In addition to connecting to compatible smartphones and laptops or to any compatible device at home or at work, you'll be able to connect directly to what's being broadcast at public venues such as airports, conference centres and theatres with Bluetooth® Auracast™.¹-3

- 1. Bluetooth LE Audio Communications Guide April 2022 <a href="https://www.bluetooth.com/bluetooth-resources/">https://www.bluetooth.com/bluetooth-resources/</a>
- 2. Introducing Bluetooth® LE Audio, Nick Hunn. January 2022 https://www.bluetooth.com/learn-about-bluetooth/recent-enhancements/le-audio/
- 3. https://www.bluetooth.com/blog/a-technical-overview-of-lc3/ Accessed 28 February 2022

#### 11. What is Bluetooth® Auracast™?

Bluetooth® Auracast™ is a new capability which gives you the ability to:

- Share your audio: Invite others to share your audio experience.<sup>1</sup>
- Unmute your world: Enjoy televisions in public spaces such as gyms, waiting rooms and sports clubs.<sup>1</sup>
- Hear your best: Hear your best in the places you go. Designed to improve accessibility and promote better living through better hearing, Bluetooth Auracast is expected to become the next major assistive listening technology.<sup>1</sup>

Whether you are listening to music, taking a phone call, or watching your favourite film, Bluetooth LE Audio aims to get you the best possible audio experience. <sup>2,3</sup> For example, with Bluetooth Auracast, a student in university will be able to find the LE Audio Network showing in their lecture hall and connect to it via their smartphone, much like we connect to available Bluetooth devices today. Once connected to this network, this will allow the audio to stream to their sound processor so they can better hear the lecturer in front.

- 1. Bluetooth LE Audio Communications Guide April 2022 https://www.bluetooth.com/bluetooth-resources/
- 2. Introducing Bluetooth® LE Audio, Nick Hunn. January 2022 https://www.bluetooth.com/learn-about-bluetooth/recent-enhancements/le-audio/
- 3. https://www.bluetooth.com/blog/a-technical-overview-of-lc3/ Accessed 28 February 2022

## 12. Why can't I find my sound processor in my iPhone Bluetooth® menu?

While Bluetooth® must be enabled for direct streaming with Apple devices, the pairing and management of Made for iPhone hearing device connectivity is done through Apple's Accessibility Menu. Therefore, your sound processor will not be seen in the Bluetooth menu.

For more information, please visit the device support page on cochlear.com or refer to the pairing guide.

# 13. When Bluetooth® LE Audio technology is available for the Nucleus 8 Sound Processor, how do I get access?

The Nucleus® 8 Sound Processor firmware upgrade can be completed at your next routine clinic visit. Your hearing healthcare clinician simply needs to connect your sound processor to the fitting software and follow a few simple steps to enable access to the next big thing in audio connectivity.

# 14. Can I use the Nucleus® 8 Sound Processor if I don't have a compatible smartphone?

Yes. You can enjoy access to Cochlear™ True Wireless™ technology, quality hearing performance, the comfort of a small device, retention accessories and water protection accessories without a compatible smartphone.\* You can also control your Nucleus® 8 Sound Processor via the sound processor button or Cochlear Remote Control (CR310).

\* For information regarding the compatibility of Cochlear's Sound Processors with True Wireless, Apple or Android devices, visit www.cochlear.com/compatibility

### 15. How do I pair my Nucleus® 8 Sound Processor with my compatible Apple or Android™ device?

The Nucleus® Smart App guides you through the pairing process with a compatible Apple or Android™ device.\* Be sure to turn Bluetooth® on when you pair your sound processor. For Apple devices, you can go to settings menu and follow the instructions in the pairing guide.

For more information, please refer to the pairing guide or visit the device support page on cochlear.com

\* For information regarding the compatibility of Cochlear's Sound Processors with True Wireless, Apple or Android devices, visit <a href="https://www.cochlear.com/compatibility">www.cochlear.com/compatibility</a>

# 16. Can I pair multiple devices to the Nucleus® 8 Sound Processor?

Yes, you can pair a Nucleus® 8 Sound Processor with up to five compatible Apple or Android™ devices\* and have the Nucleus Smart App installed on all of them, although the Nucleus 8 Sound Processor can only be actively connected to one compatible device at a time. Remember to make sure you turn Bluetooth® off on the device you are not connecting to because the connection is maintained as long as your devices are in range and Bluetooth is on.

For more information, please visit the device support page on cochlear.com or refer to the pairing guide.

\* For information regarding the compatibility of Cochlear's Sound Processors with True Wireless, Apple or Android devices, visit <a href="https://www.cochlear.com/compatibility">www.cochlear.com/compatibility</a>

# 17. I have two children with cochlear implants. Can I control each child's sound processor from my compatible smartphone at the same time?

Apple and Android<sup>™</sup> devices only support the pairing of one user's sound processor(s) at a time. If you have two children with cochlear implants and wish to control both at the same time using the Nucleus<sup>®</sup> Smart App, you will need two separate compatible devices to do so.\*

For more information, please visit the device support page on cochlear.com or refer to the pairing guide.

\* For information regarding the compatibility of Cochlear's Sound Processors with True Wireless, Apple or Android devices, visit <a href="https://www.cochlear.com/compatibility">www.cochlear.com/compatibility</a>

### 18. Can I pair bilateral devices to my Apple or Android™ device?

Yes. If you have bilateral Nucleus® 8 Sound Processors, you need to pair both of your processors to your compatible device.\* To do this, be sure to pair both sound processors at the same time (during the same pairing window).

\* For information regarding the compatibility of Cochlear's Sound Processors with True Wireless, Apple or Android devices, visit <a href="https://www.cochlear.com/compatibility">www.cochlear.com/compatibility</a>

# **Bimodal hearing**

19. Can the Nucleus® 8 Sound Processor be worn with any hearing aid and what are the benefits of bimodal hearing?

The Cochlear™ Nucleus® 8 Sound Processor can be worn with any hearing aid, so no matter what hearing aid you're using, you'll get the benefits of hearing with both ears. Delivering a better hearing experience, a bimodal solution can help you locate where sound is coming from, enhance your music appreciation, and enjoy an improved quality of life compared to hearing aids alone.<sup>1-3</sup>

- 1. Sucher CM, McDermott HJ. Bimodal stimulation: benefits for music perception and sound quality. Cochlear Implants International. (2009 Jan); 1;10(S1):96-9.
- 2. Ching TY, Incerti P, Hill M. Binaural benefits for adults who use hearing aids and cochlear implants in opposite ears. Ear Hear (2004 Feb); 25, 9-21.
- 3. Potts LG, Skinner MW, Litovsky RA., et al. Recognition and localization of speech by adult cochlear implant recipients wearing a digital hearing aid in the nonimplanted ear (bimodal hearing). J Am Acad Audiol (2009 Jun); 20, 353–373.

#### 20. What is the benefit of pairing the Nucleus® 8 Sound Processor with a compatible ReSound hearing aid?

The Nucleus® 8 Sound Processor is compatible with a range of ReSound hearing aids.^ Using these two devices, a smart bimodal hearing solution is designed to offer an improved hearing experience.

You can stream audio to both ears when listening to music, taking a phone call or watching your favourite film from compatible Apple or Android™ devices.\* In addition, you can utilize your True Wireless Devices to stream sound simultaneously to both your sound processor and the compatible Resound hearing aid.

- For compatibility information and devices visit <u>www.cochlear.com/compatibility</u> and <u>www.resound.com/compatibility</u>
- \* For information regarding the compatibility of Cochlear's Sound Processors with Apple or Android devices, visit www.cochlear.com/compatibility

#### 21. Can I pair my smart bimodal hearing solution to my Apple or Android™ device?

Yes. If you are trying to pair your Nucleus® 8 Sound Processor and compatible ReSound hearing aid^ for audio streaming, these two devices must first be linked by your healthcare professional. Pairing and streaming instructions can be found in the user guide for the relevant sound processor or hearing aid. Instructions are also available in the Smart Hearing Alliance Bimodal Pairing and Streaming Guide.

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

# **Nucleus® Smart App**

# 22. What is the Nucleus® Smart App?

With the Nucleus® Smart App you can manage your Nucleus 8 Sound Processor directly from a compatible Apple or Android device.\* You can quickly and easily personalise and adjust your settings, control how you stream audio from Cochlear™ True Wireless™ Devices and even get help to locate a misplaced sound processor with the Find My Processor feature.

For more information on the Nucleus Smart App, visit cochlear.com

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

# 23. How do I download and install the Nucleus® Smart App?

The Nucleus® Smart App can be downloaded for free from the Apple App Store or Google Play Store.\* Open the App Store or Google Play Store on your compatible device and search for 'Nucleus Smart App'. Please be aware that the Nucleus Smart App may not be available in all countries and may therefore not appear in your search.

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

#### 24. How do I start using the Nucleus® Smart App?

Once you have downloaded the app, log in with your Cochlear™ Account and follow the instructions to pair your Nucleus® 8 Sound Processor with your compatible device. If you do not already have a Cochlear Account you can create yours by selecting the 'Create New Account' option within the Nucleus Smart App.

#### 25. Can anyone download the Nucleus® Smart App?

Yes, anyone with a compatible Apple or Android™ device can download the Nucleus® Smart App.\* It can be downloaded for free from the Apple App Store or Google Play Store. Please be aware that the Nucleus Smart App may not be available in all countries and may not appear in your search.

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

#### 26. How accurate is the Find My Processor feature in the Nucleus® Smart App?

The Nucleus® Smart App utilises Location Services on your compatible device to determine the location of the last place your misplaced sound processor was connected to the device. Depending on your device and available carrier services, Location Services uses a combination of cellular, Wi-Fi and GPS to determine the location. Accuracy will vary depending on the strength and type of signal. The nearby function of this feature requires that the processor has power so you may want your clinician to disable the "Auto-off" power saving feature of your sound processor.

#### 27. What are Cochlear™ Connected Care solutions?

Keeping your hearing at its best is a priority, so easy access to care is reassuring. Cochlear™ Connected Careˆ is available through the Nucleus® Smart App. It offers convenient ways to connect you with your hearing health professional and manage your hearing in everyday life. Our Connected Care solutions can help your clinician monitor and manage your progress in the clinic, but also when you are at home, at work, or away. With Connected Care you also have access to tools which build listening skills and help you actively manage your hearing, with the support of your clinician. If your clinic supports our Connected Care solutions, there is an enrolment process to get started.

^ Connected care is not available in all markets and patients mut have cellular or WiFi connection to access

#### 28. What is Remote Care?

Cochlear™ Remote Care<sup>±</sup> solutions make it possible for your clinician to monitor your progress and deliver quality care when it's needed, without a trip to the clinic.<sup>1,2</sup> With Remote Check, your hearing clinician can assign you hearing tasks and review your progress, and Remote Assist allows you to connect to your hearing health professional via a video appointment from the comfort of your home.

- 1. Cochlear Limited. D1631375 Nucleus 8 Sound Processor Product Definition.
- 2. Cochlear Limited. D1715545 NSA product definition (inc Remote Check).
- ± Remote Care is not available in all markets and patient must have cellular or WiFi connection for use of Remote Care features.

#### Using and controlling the Nucleus 8 Sound Processor

#### 29. Is the Nucleus® 8 Sound Processor water resistant?

Yes, the Nucleus® 8 Sound Processor is IP68 rated, which is the highest available water-resistance rating in a sound processor. If you're caught in the rain, splashed with water, or even in a dusty environment, your sound processor will remain protected.<sup>1,\*</sup>

- 1. Cochlear Limited. D1980144 CP1110 IEC60529 IP68 Certificate & Test Report.
- \* The Nucleus 8 Sound Processor with Aqua+ is dust and water resistant to level of IP68 of the International Standard IEC60529. The Nucleus 8 Sound Processor with Aqua+ can be continuously submerged under water to a depth of up to 3 metres for up to 2 hours.

#### 30. Can I go swimming with the Nucleus® 8 Sound Processor?

When used with the Nucleus® 8 Aqua+ (a reusable sealable silicone sleeve that covers the device) and the Nucleus 8 Aqua+ Coil, the sound processor is transformed into a water-safe solution. This means that you can confidently wear your Nucleus 8 Sound Processor while enjoying all your favourite water activities.<sup>1,\*</sup>

- 1. Cochlear Limited. D1980144 CP1110 IEC60529 IP68 Certificate & Test Report.
- \* The Nucleus 8 Sound Processor with Aqua+ is dust and water resistant to level of IP68 of the International Standard IEC60529.

  The Nucleus 8 Sound Processor with Aqua+ can be continuously submerged under water to a depth of up to 3 metres for up to 2 hours.

#### 31. Can I use Cochlear™ True Wireless™ Devices with the Nucleus® 8 Sound Processor?

Yes, the Nucleus® 8 Sound Processor is compatible with the Cochlear™ Wireless Mini Microphone 2+ and the Wireless TV Streamer. True Wireless means that you can enjoy your favourite TV shows and hear your best in noisy environments without the need for neck loops or additional wires.

#### 32. Is the Nucleus® 8 Sound Processor compatible with a remote control?

Yes. The Cochlear™ Remote Control (CR310) is a hand-held device that allows you to control and adjust the commonly used functions of your Nucleus® 8 Sound Processor. With the Remote Control, you can easily change programs, turn the telecoil on and off, control audio streaming from True Wireless™ Devices and, if enabled by your clinician, adjust the volume or sensitivity of your processor. Plus, if you have two Nucleus 8 Sound Processors, your remote can control both processors at once.

#### 33. Does the Nucleus® 8 Sound Processor support FM?

Yes, the Nucleus® 8 Sound Processor is fully compatible with FM. There are three ways to connect to FM: using the telecoil with an induction loop FM receiver, a standard 3-pin Euro receiver connected to the Mini Microphone 2+, or directly connecting the custom Phonak Roger 20 receiver between the battery and the processing unit. Auto FM is available when using the custom Phonak Roger 20 receiver.

#### 34. Does the Nucleus® 8 Sound Processor have a telecoil?

Yes, the Nucleus® 8 Sound Processor has an integrated telecoil optimised for induction loops. Telecoil is disabled by default and can be enabled by your clinician.

#### **Batteries**

# 35. What battery options are available with the Nucleus® 8 Sound Processor?

The Nucleus® 8 Sound Processor can be powered by the Compact and Power Extend rechargeable battery or disposable high power zinc air 675 batteries.

#### 36. How long will the different battery options last every day?

Battery life varies for every user, according to the age of the battery, programs used each day, your implant type, the thickness of skin covering your implant, and the size and type of battery. The Nucleus® 8 Sound Processor offers a typical battery life of 20 hours with the Power Extend Battery Module, a typical battery life of 10 hours with the Compact Battery Module and a typical battery life of 35 hours using zinc air disposable batteries. 1,^,\*

The Power Extend battery option is similar to the standard rechargeable battery from previous generation sound processors.

- 1. Cochlear Limited D1990593, Nucleus 8 Sound Processor Battery Estimations with CI500 and CI600 Implants September 2022
- ∧ Typical expected battery life is calculated using default map settings used with a CI600 Series or CI500 Series implant.
- \* Battery life varies for every user, according to the age of the battery, the programs used each day, your implant type, the thickness of skin covering your implant, and the size and type of battery used. Streaming from compatible devices, True Wireless devices or FM may decrease sound processor battery life depending on how often and for how long streaming is engaged.

#### 37. What is the lifespan of my Nucleus® 8 Sound Processor rechargeable battery?

A battery's lifespan for every individual is different. How you use, charge and store your battery can impact its usable life. The amount of charge a battery holds naturally diminishes over time. When a battery reaches its lifespan and can no longer be charged sufficiently, the charger will indicate the need for battery replacement by a flashing orange LED indicator.

#### 38. How do I get the best performance from my rechargeable batteries?

Lithium-ion rechargeable batteries are very commonly used today in devices such as mobile phones, laptops, smart watches and more. From the moment a lithium-ion battery is manufactured it starts to age. This means that the power a battery can store and deliver will reduce over time. Here are some tips to help you get the most from your batteries:

- 1. Charge your battery before storing and keep it in a cool, dry place.
- 2. Remember to recharge your battery before it completely runs out of charge.
- 3. It is not recommended to store the battery for extended periods of time without using or charging it. If you have more than one battery, rotate the batteries through usage.
- 4. Avoid exposure to temperature extremes and humidity in storage and use. We recommend keeping your battery out of direct sunlight and avoid leaving it inside a parked vehicle.

#### 39. What options do I have to charge my batteries?

The Nucleus® 8 Sound Processor has been designed so that you can easily charge your rechargeable batteries. There are two types of chargers available for rechargeable batteries: the Y Battery Charger, a mains powered unit capable of charging two batteries at a time, and the portable USB Battery Charger to charge one battery at a time.

## 40. Does streaming to the Nucleus 8 Sound Processor affect sound processor battery life?

Streaming from compatible devices, True Wireless™ Devices such as the Mini Microphone, or FM may decrease sound processor battery life depending on how often and for how long streaming is engaged. Actual battery life each day is dependent on a variety of factors including MAP settings, environmental sounds and accessory use.

#### 41. Why doesn't my USB charger work on my laptop?

The USB charger must be connected to USB ports that are USB 2.0 or higher. Please be aware that some laptops do not charge when they are in 'sleep' mode.

## Personalisation and wearing options

#### 42. What colours are available in the Nucleus® 8 Sound Processor?

The Nucleus® 8 Sound Processor is available in six different colours: black, grey, brown, sand, white and silver. There is also an optional personalisation cover – a clear plastic cover that you can place over the sound processor and coil to allow for further customisation.

#### 43. What wearing options are available with the Nucleus® 8 Sound Processor?

The Nucleus® 8 Sound Processor offers a broad range of retention accessories, such as different earhook sizes, Headband, Snugfit, Hugfit™ and the Koala Clip accessories. There are also loss prevention options like the Safety Cord, which attaches the processor to the wearer's clothing for extra peace of mind.

#### 44. Can I take advantage of my residual hearing with the Nucleus® 8 Sound Processor?

Yes, the Nucleus® 8 Sound Processor supports Hybrid™ hearing. This means that people with residual hearing after implantation can enjoy Hybrid hearing by adding an acoustic component to the Nucleus 8 Sound Processor. The acoustic component boosts your natural hearing by sending amplified acoustic sound into the ear canal, which is then further augmented by your cochlear implant.

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 directions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information.

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, コントゥア, 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.

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