

Cochlear[™]Nucleus[®] Sound Processors

Inspired by possibilities

Compare our latest technology with previous generation devices



| | Nulsus P | | 2 |
|---|--|--|--|
| Key features | Nucleus 6 Sound Processor (Retired March 31, 2023) | Nucleus Kanso® Sound Processor | Nucleus 7 Sound Processor |
| Processor type | Behind-the-ear (BTE) | Off-the-ear (OTE) | Behind-the-ear (BTE) |
| Size and weight comparison | Nucleus 8 is 32% smaller and 34% lighter than Nucleus 6 ^{1,^} | Lightest OTE option ¹ | Nucleus 8 is 15% smaller and 13% lighter than Nucleus 7 ^{1,#} |
| Automated sound processing technology | SmartSound iQ with SCAN | SmartSound iQ with SCAN | SmartSound iQ with SCAN |
| ForwardFocus | | | |
| Waterproofed [±] IP68-rated | | | |
| Water-safe accessories | ② | • | ⊘ |
| Dual microphone directionality | Ø | ② | Ø |
| Battery type | Standard and compact rechargeable or disposable | Disposable | Standard and compact rechargeable or disposable |
| Rechargeable battery charger | • | | Y Charger for home and USB Portable Charger |
| Direct streaming capability | Via Cochlear Wireless Phone Clip | Via Cochlear Wireless Phone Clip | Compatible* Apple® or Android™ devices Cochlear Wireless Phone Clip* |
| Control | Remote Control (CR210) and Remote Assistant (CR230) | Remote Control (CR210) and Remote Assistant (CR230) | Nucleus Smart App* and Remote Control (CR310) |
| FM connectivity | Via Euro Accessory Adapter and Roger X FM receiver or Cochlear Wireless Mini Microphone 2+ and Roger X FM receiver | Via the Cochlear Wireless Mini Microphone 2+ and Roger X FM receiver | Via the Cochlear Wireless Mini Microphone 2+, Roger X FM receiver or Roger 20 FM receiver |
| Bimodal streaming with compatible ReSound hearing aids* | | | |
| Retention accessories | Snugfit, Mic Lock, LiteWear | Safety Cord/Line, Hair clip, Headband | Snugfit, Hugfit™, Koala Clip, Safety Cord/Line, Headband |
| Compatible with monitor earphones | (CP910 only) | | |
| Nucleus implant compatibility | • | Except for Nucleus 22 Implants | |

| Key features | Nucleus Kanso® 2 Sound Processor | Nucleus 8 Sound Processor |
|---|--|--|
| Processor type | Off-the-ear (OTE) | Behind-the-ear (BTE) |
| Size and weight comparison | Kanso 2 is 2.4% smaller than Kanso¹ | Smallest and lightest BTE sound processor ² |
| Automated sound processing technology | SmartSound iQ with SCAN | SmartSound iQ 2 with SCAN 2 |
| ForwardFocus | | Improved noise reduction (Option to automate) |
| Waterproofed [±] IP68-rated | | |
| Water-safe accessories | • | • |
| Dual microphone directionality | • | • |
| Battery type | Built-in rechargeable battery | Power Extend and Compact rechargeable or disposable |
| Rechargeable battery charger | All-in-one Home Charger and Portable Charger | Y Charger for home and USB Portable Charger |
| Direct streaming capability | Compatible* Apple or Android devices Cochlear Wireless Phone Clip | Bluetooth® LE Audio** locations and devices, including compatible* Apple or Android devices Cochlear Wireless Phone Clip |
| Control | Nucleus Smart App* and Remote Control (CR310) | Nucleus Smart App* and Remote Control (CR310) |
| FM connectivity | Via Cochlear Wireless Mini Microphone 2+ | Via Cochlear Wireless Mini Microphone 2+ with a three-pin Euro receiver or Roger 20 receiver |
| Bimodal streaming with compatible ReSound hearing aids* | | |
| Retention accessories | Safety Cord/Line, Hair clip, Headband, Halo | Snugfit, Hugfit, Koala Clip, Safety Cord/Line, Headband |
| Compatible with monitor earphones | Sound Check in the Nucleus Smart App | |
| Nucleus implant compatibility | Except for | Except for |

Nucleus 22 Implants

Nucleus 22 Implants

More details

A behind-the-ear sound processor is worn on the ear and a small coil is held in place against the head with a magnet. An off-the-ear sound processor provides a more discreet hearing solution while delivering an equivalent hearing experience as a behind-the ear sound processor¹⁻³

At 15% smaller# than the Nucleus 7 Sound Processor and 32% smaller than Nucleus 6,[^] the Nucleus 8 Sound Processor takes comfort to the next level.^{6,†}

The Nucleus 8 Sound Processor features smarter hearing technology[^] designed to make communicating with people, particularly in noise, easier. As you move through the day, your new sound processor senses changes in your listening environment and automatically adjusts using enhanced SmartSound[®] iQ 2 with SCAN 2 to deliver clearer sound.^{3-6,5,>>}

The Nucleus 8 Sound Processor features an improved ForwardFocus that more powerfully reduces background noise when you want to focus on face-to-face conversation.^{6,+} Now you can choose to operate ForwardFocus manually via the Nucleus Smart App or have it automated.^{1,†}

Swim in the pool, bathe, or get caught in the rain without the need for additional accessories. The waterproofed* IP68 rated Nucleus 8 and Kanso 2 Sound Processors are dust-tight and can be continuously submerged in freshwater for 60 minutes at a depth of three feet. IP68 is the highest available water-resistance rating in a sound processor.

For saltwater activities, rushing water environments, or extended use in freshwater, fit your Nucleus 8 or Kanso 2 Sound Processor with the Aqua+ kit for additional protection. †

The Nucleus 8 Sound Processor has dual-microphone technology with fixed and adaptive directionality, which filters out background noise to enhance your understanding of speech, particularly in noise.9

With the choice of either disposable or two different rechargeable battery options, you can choose the best way to power your Nucleus 8 Sound Processor.

Whether you're at home, at work or away, your Nucleus 8 Sound Processor can be easily and conveniently recharged. The Y charger can recharge two batteries at the same time while the USB charger is an optional accessory for recharging one battery when you're on the go. With the Kanso 2 Sound Processor Home Charger, you can conveniently charge and dry your sound processor at the same time.

With the Nucleus Smart App,^{11,*} you can adjust your hearing settings, track hearing information and set daily goals for listening to speech. Where available, you may even save yourself a trip to the clinic by using our Remote Care solutions^{13–14,¶} to do a hearing check or video appointment with your clinician from home. For added peace of mind, the Find My Processor feature¹¹ can help locate a misplaced processor. If you don't have a compatible smartphone, you can change simple settings with the remote control.

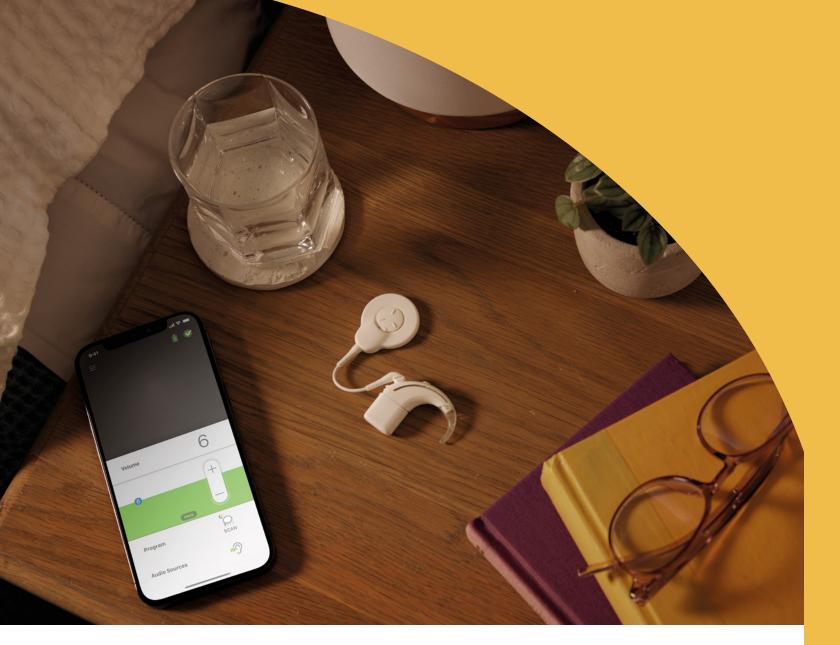
FM systems are among the most common hearing assistive technologies used with children, especially in school environments. They are designed to provide improved hearing in noisy situations or over a distance.

Designed to deliver a rich hearing experience, a bimodal solution can help you better locate where sound is coming from, enhance your music appreciation, and enjoy an improved quality of life than with hearing aids alone.^{15–18} Stream sound simultaneously to both your Nucleus 8 Sound Processor and compatible ReSound hearing aid with a smart bimodal hearing solution* that's ready for next-generation Bluetooth® LE Audio technology.^{10–12,**}

Cochlear Nucleus sound processors offer a wide range of retention options to suit your individual needs and lifestyle.

Check the sound quality of the microphone or accessory input to your child's or another's sound processor.

Our research and development is focused on offering the best hearing possible today, while also anticipating how technology and recipient needs will change over time. Cochlear is committed to ongoing innovation and developing new ranges of exciting products to help you achieve your best possible hearing outcomes at every stage of life.



References

- 1. Cochlear Limited. D1190805 Processor Size Comparison. 2023.
- 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™ offthe-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 2 Design Description. 2023.
- 6. Cochlear Limited. D1964109 Clinical Investigation Report CLTD5804 Feb 2022.
- 7. Cochlear Limited. D1671736. CP1150 IEC60529 Ingress Protection Test Report IP68.
- 8. Cochlear Limited D1980144 CP1110 IEC60529 IP68 Certificate & Test Report.
- 9. Sivonen V, Willberg T, Aarnisalo A, Dietz A. The efficacy of microphone directionality in improving speech recognition in noise for three commercial cochlear-implant systems, Cochlear Implants International, 2020; 21:3, 153-159.
- 10. Introducing Bluetooth® LE Audio, Nick Hunn. January 2022 https://www. bluetooth.com/learn-about-bluetooth/recent-enhancements/le-audio/.
- 11. Cochlear Limited. D1631375 Nucleus 8 Sound Processor Product Definition.

- 12. Bluetooth® SIG Website. Technical Overview of LC3. https://www.bluetooth. com/blog/a-technical-overview-of-lc3/
- 13. Cochlear Limited D1715545 NSA product definition (inc Remote Check).
- 14. Cochlear Limited. D1698858. Evaluation of Remote Care App and Nucleus Smart App with CP1000 sound processor. Clinical Investigation Report. 24 Feb. 2020.
- 15. Gifford RH, Dorman MF, McKarns SA, Spahr AJ. Combined electric and contralateral acoustic hearing: Word and sentence recognition with bimodal hearing. Journal of Speech, Language, and Hearing Research. 2007 Aug 1; 50(4):835-43.
- 16. Firszt JB, Reeder RM, Holden LK, Dwyer NY; Asymmetric Hearing Study Team. Results in Adult Cochlear Implant Recipients With Varied Asymmetric Hearing: A Prospective Longitudinal Study of Speech Recognition, Localization, and Participant Report. Ear Hear. 2018 Sep/Oct; 39(5):845-862.
- 17. Potts LG, Skinner MW, Litovsky RA, Strube MJ, Kuk F. Recognition and localization of speech by adult cochlear implant recipients wearing a digital hearing aid in the nonimplanted ear (bimodal hearing). Journal of the American Academy of Audiology. 2009 Jun 1; 20(6):353-73.d1715545.
- 18. Buchman CA, Herzog JA, McJunkin JL, et al. Assessment of Speech Understanding After Cochlear Implantation in Adult Hearing Aid Users: A Nonrandomized Controlled Trial. JAMA Otolaryngol Head Neck Surg. Published online August 27, 2020. doi:10.1001/jamaoto.2020.1584

Hear now. And always

People have always been Cochlear's inspiration, ever since Professor Graeme Clark set out to create the first multi-channel cochlear implant after seeing his father struggle with hearing loss. Since 1981, Cochlear has helped more than 700,000 people to hear across 180 countries, helping people of all ages around the world to hear. As the global leader in implantable hearing solutions, Cochlear connects people with life's opportunities, and welcomes them to the world's largest hearing implant community.

Cochlear has a global workforce of over 5,000 people, with a passion for progress, who strive to meet the needs of people living with hearing loss. The company continually innovates to anticipate future needs, investing more than AUD\$3 billion to date in research and development to push the boundaries of technology and help more people hear.

- # 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 Compact Battery Module with Nucleus 8 Sound Processor and an equivalent Compact Rechargeable Battery with Nucleus 6 Sound Processor.
- ^^ Compared to previous generation Nucleus 7 and Nucleus 6 Sound Processors.
- > It is recommended that SNR-NR, WNR and SCAN be made available to any recipient, ages 6 and older, who is able to 1) complete objective speech perception testing in quiet and noise in order to demonstrate and document performance and 2) report a preference for different program settings.
- >> SNR-NR, WNR and SCAN are FDA approved for use with any recipient ages 6 years and older, who is able to: 1) complete objective speech perception testing in quiet and in noise in order to determine and document performance; and 2) report a preference for different program settings.
- + Compared to Nucleus 7 Sound Processor with ForwardFocus on.
- † ForwardFocus is a clinician-enabled feature that can be user-controlled or automated. ForwardFocus can only be enabled by a hearing implant specialist. It should only be activated for users 12 years and older who are able to reliably provide feedback on sound quality and understand how to use the feature when moving to different or changing environments.
- ± The Cochlear Nucleus 8 Sound Processor with the rechargeable battery module and the Kanso 2 Sound Processor meet the IP68 rating of the International Standard IEC60529 of freshwater waterproof. These processor configurations were tested by continuous submersion in freshwater for 60 minutes at a depth of 1 meter and functioned as intended. Cochlear offers the Aqua+ accessory for additional protection during extended water use, in salty or rushing water environments. For additional information, please refer to the appropriate user guide.^{7,8}
- * For compatibility information and devices visit: cochlear.com/compatibility and resound.com/compatibility. The Cochlear Nucleus Smart App is available on App Store and Google Play.
- ** As Bluetooth LE Audio compatible devices become available, a sound processor firmware update will be required to use certain features. Auracast™ broadcast audio capability is subject to third party adoption of the Auracast protocol. The Bluetooth® and Auracast™ word mark and logos are registered trademarks owned by Bluetooth SIG. Inc. and any use of such marks by Cochlear is under license.
- ¶ Remote Check and Remote Assist for Nucleus sound processors are intended for ages 6 and older. Remote Check and Remote Assist features are only visible and accessible if they are enabled by a clinician. Clinicians should consider the suitability of the feature before enabling Remote Check and Remote Assist. Remote Check does not replace clinical care and does not involve remote programming of the sound processor. Only available at clinics that have enrolled in Remote Care.

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 read the instructions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information. Android is a trademark of Google LLC.

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10350 Park Meadows Drive, Lone Tree, CO 80124, USA Tel: +1 303 790 9010 Support: Tel: +1 800 483 3123

2500-120 Adelaide Street West, Toronto, ON M5H 1T1, Canada Tel: +1 800 483 3123 Fax: +1 416 972 5083

www.cochlear.com









