

Nucleus 7
Sound Processor



Nucleus Kanso
Sound Processor



Why it matters

Sound Processor Type

Behind-the-ear (BTE)	•		A BTE sound processor is worn on the ear and a small coil is held in place against the head with a magnet. The Cochlear™ Nucleus® 7 Sound Processor is our most advanced BTE sound processor that offers our innovative technologies including SmartSound® iQ* with SCAN, exclusive True Wireless™ technology and smartphone compatibility.
Off-the-ear (OTE)		•	An OTE sound processor provides a comfortable, discreet hearing solution without compromising hearing performance. The Kanso® Sound Processor is worn off the ear as a single unit and features our advanced SmartSound iQ* and exclusive True Wireless technologies. battery pack and coil into a single, easy-to-use unit.

Technology

Hybrid™ Hearing	• Three receiver options for acoustic component		Hybrid™ Hearing combines acoustic amplification of any natural hearing you have after surgery with cochlear implant technology to provide access to the sounds you're missing. The result can be a richer hearing experience.
SmartSound® iQ with SCAN	•	•	SmartSound iQ is Cochlear's most advanced sound processing technology. It works by filtering out background noise and automatically adapting to optimise your hearing experience, focusing on sounds that are most important to you. SCAN is the industry's first automatic scene classifier – designed to detect the unique features of sound and use them to determine the listening environment.
ForwardFocus†	•		ForwardFocus is a control feature enabled by the clinician that you can switch on to help you hear better in challenging listening environments. It works by reducing any noise coming from behind you, so you can more easily enjoy face-to-face conversation.
mySmartSound™	•	•	mySmartSound allows you to fine tune your hearing in real-world listening environments by allowing you to adjust bass, treble and master volume.
Dual microphones	•	•	Cochlear was the first to market with dual microphone technology, which allows for advanced input processing, reduces background noise to help you better understand speech in noisy surroundings.
Nucleus Smart App	•		The Nucleus Smart App has been developed exclusively for the Nucleus 7 Sound Processor. Available for compatible Apple® and Android™ devices, it is easy to use and offers the convenience of controlling your hearing from your smartphone. Parents may find the Nucleus Smart App especially useful to manage their child's hearing.
Made for iPhone compatibility	•		The Nucleus 7 Sound Processor is the world's first and only Made for iPhone cochlear implant sound processor, ¹ meaning that you can listen to your favorite music, videos and entertainment – streaming directly from your compatible Apple device.
Telephone use - standard headset	Microphone or telecoil	Microphone or telecoil	Use the telephone to easily connect with family and friends. Third party accessories may also be available to use with standard telephone headsets.
Telephone use - smartphone streaming	Direct streaming through Made for iPhone (compatible Apple devices) Other smartphone devices streaming with Cochlear Wireless Phone Clip	Streaming with Cochlear Wireless Phone Clip	Audio streaming can give you better sound quality and convenience. With audio streaming, you can control the amount of background noise you hear through your processor microphones with a simple adjustment of your mixing ratio. The Nucleus 7 Sound Processor has a direct streaming feature for iPhone®, while Kanso offers streaming via the Phone Clip.
Telecoil	• Optimised for loops	• Optimised for loops	A telecoil picks up electromagnetic signals and turns them into sound. The telecoil in both in both the Nucleus 7 Sound Processor and Kanso Sound Processor is optimised for loops for everyday convenience, so you won't miss a public announcement or a single beat at the theater.
Compatible with Cochlear True Wireless™ devices	•	•	The True Wireless accessories are designed to help you hear better in noisy situations, without the need for neck-worn loops. You have the option to connect directly to the Mini Microphone 2+, Phone Clip or TV Streamer.
Wireless Phone Clip	•	•	Bluetooth®-enabled wireless technology allows you to connect to your smartphone to stream calls or music.
Wireless TV Streamer	•	•	With the TV Streamer, you get stereo-quality sound directly from your television. You get a balanced experience, with sound from the TV streamed directly to your sound processor while you're still switched on to what's going on around you.
Mini Microphone	•	•	By streaming speech directly to your sound processor, the Mini Microphone 2+ helps you to hold conversations in noisy places and hear clearly over distances.
Remote Control	CR310	CR210	The small Remote Control features a handy display screen for changing simple settings, allowing you to manage your hearing in a discreet way.
Advanced Remote Assistant	Nucleus Smart App	CR230	The Remote Assistant is a full-featured device which allows you to control and monitor your Kanso Sound Processor settings, and puts troubleshooting at your fingertips.
Bimodal†/Bilateral streaming	Made for iPhone & True Wireless range	True Wireless accessories	Having sound streamed to both ears allows for a richer hearing experience.
FM connectivity	•	•	Being able to connect to FM systems can be important for children, especially at school. Having options for hearing better in school is important for academic and social success. The Mini Microphone 2+ is an affordable and portable alternative to FM systems and can be used in and out of the classroom.
Auto-On	•	•	The sound processor turns on automatically when you connect a battery.

Features

Size	Smallest BTE sound processor to date	Small and discreet OTE sound processor	The Nucleus 7 Sound Processor is Cochlear's smallest behind-the-ear sound processor to date, 25% smaller than its predecessor. ² The Kanso Sound Processor is the smallest off-the-ear sound processor available. ³
Weight	Lightest BTE sound processor to date	Lightest OTE option available	Designed for comfort, the Nucleus 7 Sound Processor is Cochlear's lightest BTE processor, 24% lighter than its predecessor. ³ The Kanso Sound Processor is the lightest off-the-ear sound processor available ³ so you can hear your best with the added comfort of nothing on your ear.
Color range	6 Color Options	8 Color Options	Personalized color options available, based on preference and lifestyle.
Water and dust resistance ratings	• Water resistant (IP57) with rechargeable batteries Waterproof (IP68) when worn with Aqua+	• Water resistant (IP54) Waterproof (IP68) when worn with Aqua+	Both the Kanso Sound Processor and the Nucleus 7 Sound Processor give you full confidence when caught in the rain, being splashed with water or sweating it out in the gym. Adding Aqua+ opens up a world of water activities such as swimming underwater, surfing, taking a shower and more.

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Features			
Aqua+^^	•	•	Aqua+ is a soft, flexible silicone sleeve that fits over the sound processor, making it waterproof where additional protection is needed.
P2i coating	•	•	P2i is a water-resistant nano coating which protects against the effects of corrosion from sweat, humidity and general water damage.
One button interface	•	•	Both the Kanso Sound Processor and the Nucleus 7 Sound Processor have a one button interface for basic control functionality.
Batteries			
Disposable batteries (high power 675 zinc air)	Two required	Two required	Disposable batteries typically last several days, depending on the power needs of each recipient's equipment. (Battery life may vary by individual.)
Rechargeable batteries	•		Both standard and compact rechargeable battery modules are available.
Battery Life	Up to 80 hours (battery life may vary by individual)	Up to 60 hours (battery life may vary by individual)	The Nucleus 7 Sound Processor has been designed with efficiency in mind, to deliver long-lasting battery performance (x2 high power zinc air batteries).
Rechargeable battery charger	•		The Nucleus 7 Sound Processor features an additional USB charging option, allowing you to charge from a PC, or on-the-go in your car.
For Parents			
Tamper-resistant battery modules	•	•	Helps prevent children from opening the battery cover.
LED status monitoring	•	•	An easy way to quickly and easily assess the status of your child's sound processor.
Compatible with monitor earphones	•		Enables a parent to check the sound quality of the input from their child's sound processor, microphone or accessories.
Wearing & Retention Options			
Earhooks	•		Comfortably secures the sound processor to your ear.
Tamper-resistant earhook	•		Earhooks with additional tamper resistance.
Snugfit	•		Helps keep the sound processor securely in place, especially for active adults and children.
Hugfit™	•		Helps keep the sound processor securely in place, especially designed for smaller ears.
Mic Lock	•		Helps keep the sound processor securely on the ear when used with an earmold. For the Nucleus 7 Sound Processor, the Mic Lock or an earmold can be used in conjunction with the earmold adaptor.
Koala Clip	•		Clip-on retention device for babies and younger children.
Safety cord	•	•	Provides additional security when taking part in activities where you risk losing your sound processor.
Hair clip	•	•	Clips onto the hair, reducing the risk of losing your sound processor.
Earmold adaptor	•		Attaches to an earmold to help keep the sound processor securely in place.
Headworn adaptor	•		For temporary use only. Holds the sound processor and coil together in place on the side of the head.
Headband		•	Compatible with the Kanso Sound Processor. Useful for children or during physical activity.
Compatibility			
Implant compatibility	Compatible with CI24RE, CI500 and Nucleus 24 Series implants. Not compatible with Nucleus 22 implants.	Not compatible with Nucleus 22 implants	Cochlear is committed to ongoing innovation and developing new ranges of exciting products to help our recipients achieve their best possible hearing outcomes.

- References
1. Apple Inc. 'Compatible hearing devices' [Internet]. Apple support. 2017 [cited 24 February 2017]. Available from: <https://support.apple.com/en-au/HT201466#compatible>.
 2. Cochlear Limited. D1190805. CP1000 Processor Size Comparison. 2017, Mar; Data on file.
 3. Cochlear Limited. CP950 Kanso Sound Processor User Guide. Data on file, July 2016.

Disclaimers

* SNR-NR, WNR and SCAN are 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 2) report a preference for different program settings.

** The Acoustic Component should only be used when behavioral audiometric thresholds can be obtained and the recipient can provide feedback regarding sound quality.

† 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. It may be possible to have decreased speech understanding when using ForwardFocus in a quiet environment.

^ With compatible ReSound hearing aids. A list of compatible hearing aids is available online at: www.cochlear.com/nucleus/compatibility

^^The Nucleus 7 Sound Processor with Aqua+ is water resistant to level IP68 of the International Standard IEC60529. This water protection rating means that the sound processor with the Aqua+ can be continuously submerged under water to a depth of 3 m (9 ft and 9 in) for up to 2 hours. This water protection only applies when you use a Cochlear Standard Rechargeable Battery Module or Cochlear Compact Rechargeable Battery Module.

The Nucleus Aqua+ for Kanso is IP68 rated and approved for use with alkaline and nickel metal hydride batteries. The Nucleus Kanso Sound Processor is water-resistant without the Nucleus Aqua+ for Kanso accessory to level IP54 of the International Standard IEC60529.

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. Cochlear, Hear now. And always, Hugfit, Hybrid, Kanso, mySmartSound, Nucleus, SmartSound, the elliptical logo and True Wireless are either trademarks or registered trademarks of Cochlear Limited.

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 X, iPhone 8 Plus, iPhone 8, iPhone 7 Plus, iPhone 7, iPhone 6s Plus, iPhone 6s, iPhone 6 Plus, iPhone 6, iPhone SE, iPhone 5s, iPhone 5c, iPhone 5, iPad The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Cochlear is under license.

The Nucleus 7 Sound Processor is compatible with iPhone X, iPhone 8 Plus, iPhone 8, 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. The Nucleus Smart App is compatible with iPhone 5 (or later) and iPod 6th generation devices (or later) running iOS 10.0 or later. Apple, the Apple logo, FaceTime, 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 February 2018.

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