The Neuro System –
Designed for a future of sounds
A cochlear implant solution
from one of the world’s leading hearing health care companies

The history of Oticon Medical is the history of a century-long passion for helping people with their hearing impairments.

It can be traced back to 1902 when the Danish-born Princess Alexandra was crowned Queen of England and wore her hearing aid at the coronation. Hans Demant, a fellow Dane, heard about the device and immediately wanted to get it to help his hard-of-hearing wife. The following year, he made the journey from Denmark to England to buy the device. That same year, he founded the company Oticon – making it the oldest of its kind in the world.

As part of the global hearing health care group William Demant, Oticon Medical is an international player in implantable hearing solutions. All of our solutions combine over 100 years of hearing expertise with decades of experience in cochlear implants, so you can confidently look forward to the best hearing experience – now and in the future.

Because at Oticon Medical, we understand that when it comes to quality of life, sound matters.

Choosing a cochlear implant means choosing a hearing partner for life.
The Neuro System

- Neuro One
- sound processor
- Neuro Zti implant
The Neuro Cochlear Implant System is the result of the latest advancements in hearing research and technologies. It consists of:

- The Neuro Zti implant – a powerful and future-proof technology platform that enables the optimal hearing experience now and in the future
- The Neuro One sound processor – designed for better speech understanding

The implant is designed to be robust and reliable and can be adapted for high tesla scanning, such as MRI.

Once connected to the sound processor, Neuro Zti’s powerful technology platform lets you enjoy the full variety of sounds around you in the highest quality. And as new sound processing technology becomes available, the future-proof Neuro Zti implant allows you to upgrade so your system can continue to deliver an unparalleled hearing experience.

The ultra-thin and compact shape of the Neuro Zti implant has been adopted to make surgery as simple and safe as possible.

The Neuro Zti implant design enables the optimal hearing experience – now and in the future.
Designed for living
The sound processor that matches your lifestyle

People with active lifestyles need a sound processor they can rely on. With its robust design, high performance and comfortable ease of use, Neuro One is designed to support you in whatever you do.

For most people, each day brings new listening challenges. Your sound processor has to be able to adapt to these different situations – and Neuro One does just that.

Furthermore, at Oticon Medical we appreciate that your lifestyle is as individual as you are. That’s why our fitting solutions allow audiologists to customise Neuro One to match your exact needs for a truly personalised sound experience.

The following pages will give you more insight into the features and advantages of the Neuro One sound processor.
Neuro One
The premium sound processor from Oticon Medical
Built for better understanding

INIUM

Proven technological platform

The Neuro One sound processor uses Oticon’s advanced Inium chip platform. This enables automatic features and advanced sound processing that takes cochlear implant performance to a completely new level.

Automatically adapts

With its intelligent listening environment detection system, Neuro One constantly analyses your surroundings, and automatically adapts to changes in listening conditions. This means you can hear the sounds around you without having to adjust your sound processor.

Neuro One
The premium sound processor from Oticon Medical

Automatic speech enhancement

Neuro One’s exclusive Coordinated Adaptive Processing automatically delivers the perfect balance between its different sound processing technologies. Whatever the environment, Neuro One draws on the technology needed in that situation to enhance listening and speech understanding. This lets you easily engage in conversations with the people around you.
Focus on the sounds that matter

Free Focus

The Free Focus feature constantly analyses your environment and detects the voice or voices closest to you. Once found, it automatically zooms in on them and fades out background sounds so you can clearly focus on what people are saying.

This feature uses three different directionality modes that correspond to the most common listening situations. By automatically placing you in the best listening situation, this lets you enjoy the sounds around you wherever you are.

8% of time is spent in loud environments with background noise, such as parties or crowded places.

Full directionality – party 8%

72% of the time, no directional effort is needed. This is when the listening environment is quiet, for example, when watching TV.

No directionality – watching television 72%

The remaining 20% of the time is where Neuro One really makes a difference. This is time spent in environments where sound is moderate or loud, such as a half-full restaurant.

Split directionality – half-full restaurant 20%

This diagram shows the most common listening situations and directionality mode used with the average percentage of time people normally spend in these situations.

Placing you in the best listening situation. That’s Free Focus.
Keeping speech guarded from distortion

Voice Guard

Every day you are exposed to a multitude of sounds at many different levels. Using Oticon’s high-performing microphones, Neuro One lets you enjoy the most complete sound picture – from softer sounds like the wind rustling through the trees to loud sounds, such as a bell ringing or a bus approaching.

But capturing the overall sound picture is only the first step. The Voice Guard feature goes further.

By amplifying quiet sounds so that they become clearer while dampening louder sounds so they become softer and more pleasant to hear, Voice Guard preserves the natural characteristics of speech to make it easy to distinguish voices.

And when the sound environment changes abruptly, Voice Guard adjusts instantaneously and continues to maximise speech information without you ever being aware that your listening needs have altered.

In short, this innovative feature keeps your focus on speech understanding – even in environments where different noises and sounds compete for your attention.

Designed for you to actively take part in life’s different situations – intuitively and effortlessly. That’s Voice Guard.
Hear better in noisy environments

Voice Track

Voice Track is an effective noise reduction system designed to shield against unwanted noise. By detecting steady background noise and lowering its volume, Voice Track protects important speech information. This makes conversation easier and the listening experience more comfortable. However, to ensure that you don’t miss any important sounds, such as an alarm going off or a car passing by, Voice Track only reduces the volume of a sound that has become repetitive and constant. This means you are always aware of what is going on around you.

Wind Noise Reduction

The automatic Wind Noise Reduction feature helps prevent the sound of the wind from affecting speech audibility. You can simply enjoy time spent outdoors without worrying about how the wind will affect your hearing or needing to switch off your sound processor.

This illustration shows how the Voice Track and Wind Noise Reduction features remove background and wind noise from the speech signal.

Helping you keep track of voices in loud environments. That’s Voice Track.
Enter a world of communication

Wireless Capabilities

Bluetooth technologies
Using Bluetooth® technologies, such as the user-friendly wireless amplifier HearIt Media, you can wirelessly access a wide variety of devices for better and clearer sound. HearIt Media can be used when watching television, listening to music and talking on your mobile phone.

Built-in telecoil
Included in every Neuro One pack, the Silhouette system is a discreet hands-free solution that works with the sound processor’s built-in telecoil, so you can enjoy clear inductive transmission from your mobile phone or MP3 player.

FM systems
Neuro One has an integrated auxiliary socket that is compatible with the most advanced FM systems on the market. For children in particular, this can make challenging situations, such as classroom learning, much easier as it can pick up and transmit what the teacher is saying directly to the sound processor.

Enjoy clearer sound sent directly to your sound processor.
The highest standards of safety

Built to last, Neuro One incorporates a variety of features that ensure reliability and robustness, as well as a perfect fit to your ear.

Inside the sound processor, a hardwearing repellent coating effectively protects the sensitive electronic board and its components from moisture, sweat, dirt and impact.

Neuro One has also been subjected to numerous reliability tests that measure its ability to withstand falls, daily wear and tear, as well as skin biocompatibility. All these tests have confirmed that Neuro One supports users’ active lifestyles.

In addition Neuro One maintains the highest levels of safety.

**Secure implant communication**

The Neuro One unique implant identification protocol is specially designed for children and bilateral users to protect against any sound processor mismatch.

**Battery door lock**

Neuro One has a locking system* to ensure the battery compartment remains closed during wear or if the processor is accidentally dropped.

**Self check diagnostic**

Neuro One has an integrated easy-to-use diagnostics system that checks whether your sound processor, cable and antenna are working properly.

* This feature does not replace adult supervision.
Comfortable design

Comfort and aesthetics are important for people wearing a sound processor every day. That’s why Neuro One is designed to match your lifestyle and personality.

Optimal fit for immediate comfort
With its rounded shape, Neuro One fits naturally and comfortably behind your ear. This ergonomic design, combined with the Easy-Snap hook made from an extra-soft material, gives you the confidence that your sound processor will stay in place whatever you do. In addition, Neuro One comes with an ultra-thin and lightweight antenna for a discreet and secure fit all day long.

Choose your style
Available in a wide variety of colours, there’s a Neuro One for all tastes and personalities. Make a statement with a lively colour or opt for the high-tech modern look of a white glossy sound processor. And if you don’t want to draw attention to your sound processor, select one of the colours that blends in with your hair or skin tone.
A wide range of accessories

Neuro One comes with a wide range of practical accessories for everyday performance and comfort. In addition, in some countries, users of a Neuro One sound processor can get the wireless HearIt Media System through a voucher system for free.

- Carrying cases
- Drying system
- Holding systems
- Audio accessory
- Microphone testing tool
- Set of Zinc Air batteries

*Available in different colours

Non-contractual photos
Comfortable design
Ergonomic rounded shape with soft hook and streamlined antenna

The safe choice
Implant recognition
Battery door lock
Self Check diagnostics

Wireless capabilities
Bluetooth technologies can be connected through built-in telecoil

Oticon technology inside
Most advanced hearing instrument platform – Automatic features

Breakthrough sound processing
Full package of advanced features

User-friendly
4-program push button
Light and sound indicators
Easy on/off

Neuro One

Meets individual needs
All accessories available in different sizes and colours
Because sound matters

Oticon Medical is a global company in implantable hearing solutions, dedicated to bringing the magical world of sound to people at every stage of life. As a member of one of the world’s largest groups of hearing healthcare companies, we share a close link with Oticon and direct access to the latest advancements in hearing research and technologies. Our competencies span more than a century of innovations in sound processing and decades of pioneering experience in hearing implant technology.

By working collaboratively with patients, physicians and hearing care professionals, we ensure that every solution we create is designed with user needs in mind. We share an unwavering commitment to provide innovative solutions and support that enhance quality of life for people wherever life may take them. Because we know how much sound matters.