OTICON | **Own SI**

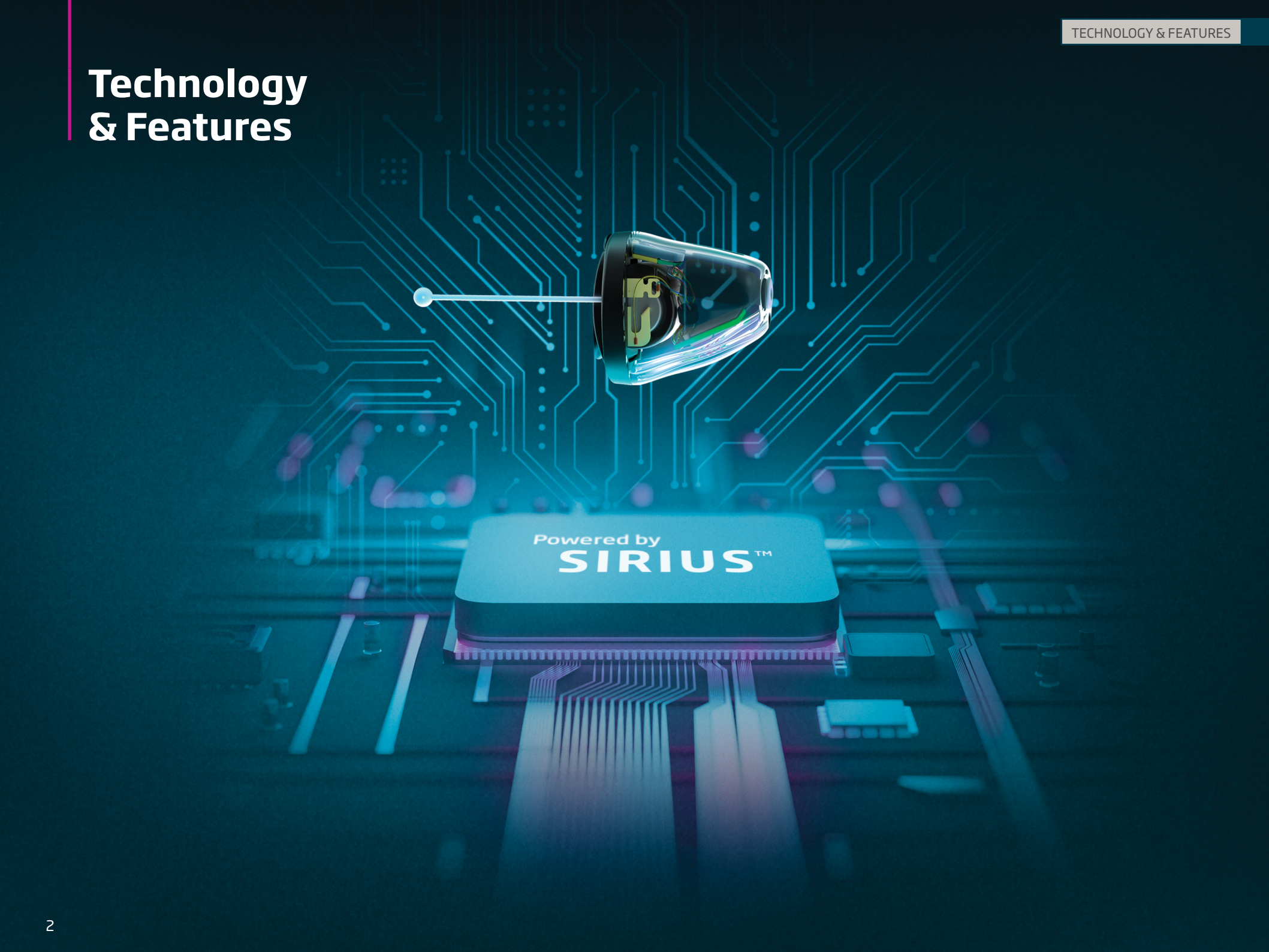
Product Guide

2025

oticon

life-changing **technology**

Technology & Features



The Sirius™ platform

Seamless adaptation of support for a cleaner, clearer sound

Sirius is a cutting-edge platform that's purpose-built for hearing aids. With its high processing capacity it runs several acoustic sensors detecting sound level and signal-to-noise ratio. These enable Oticon Own SI™ to combine the different inputs necessary to seamlessly adapt the support it gives the user, in order to ensure access to the full, open sound scene.

Sirius includes our next-generation Deep Neural Network 2.0 (DNN 2.0). DNN 2.0 is trained using real-life sound samples with even greater diversity than for the first-generation DNN. This ensures advanced preservation of the original sound, better noise suppression, and more clarity.

Sirius enables even lower frequencies, with a bandwidth from 80 Hz to 10,000 Hz, giving a fuller sound scene with a richer representation of the environment. Signal processing is performed in 24 frequency channels, giving precise processing of sound and personalized fine-tuning of gain.

The Sirius platform is future-ready, meaning Oticon Own SI hearing aids can be updated with our latest improvements.

TELL YOUR PATIENT

Oticon uses a powerful minicomputer that's designed purely for hearing aids.

Contents

TECHNOLOGY & FEATURES

INSTRUMENTS

MoreSound Intelligence™ 3.0

Provides the full sound environment in high clarity
For single-microphone custom hearing aids, having an always-on DNN is especially important. Without the benefits of dual-microphone processing, the DNN is the ultimate enabler of better speech clarity and noise suppression when the listening environment gets more challenging.

MoreSound Intelligence 3.0 (MSI 3.0) in Oticon Own SI provides our latest technologies optimized for single-microphone audiology, providing users with the full sound scene in much higher clarity, in any situation.

How the sound processing works
An IIC or CIC hearing aid calibrated for placement inside the ear canal can allow for pinna cues similar to a normal hearing ear. Allowing the user to take advantage of the natural spatial awareness permits the listener to localize sounds in the different planes – horizontal, vertical, front-back, and distance.

Using acoustic sensors, MSI 3.0 scans and analyzes the full sound scene 500 times per second, resulting in a precise analysis of all sounds and the complexity of the surroundings. Based on the input from the analysis, the system distinguishes between easy and difficult environments for further sound processing. The definition of an environment as either easy or difficult depends on the individual user's settings in Oticon Genie 2.

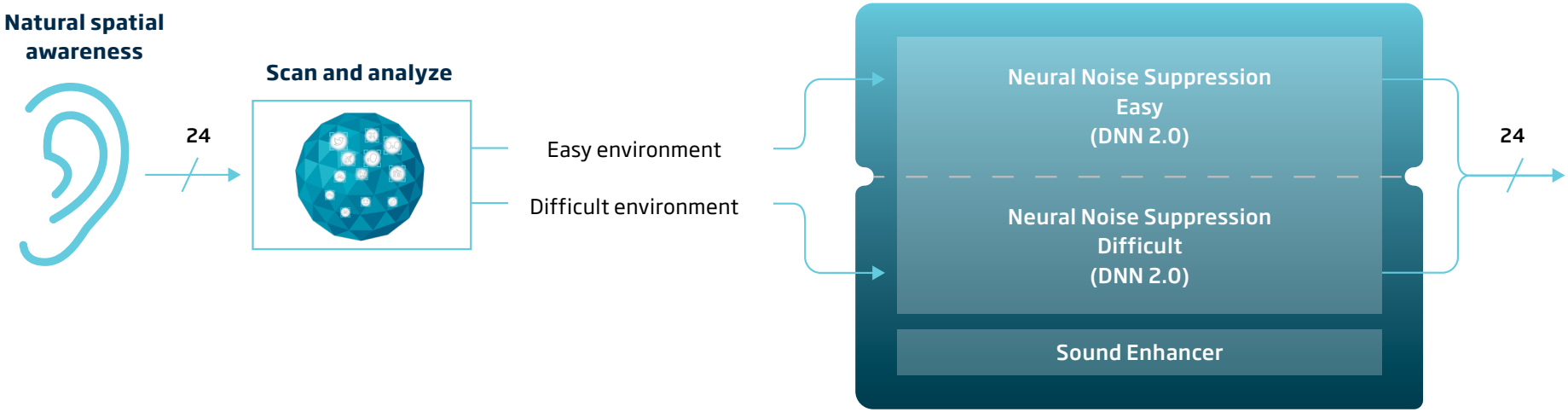
Our next-generation Deep Neural Network 2.0 creates contrast between the identified sounds. It is trained to ensure an even clearer sound environment with a more natural representation of all sounds for both easy and difficult environments. When needed for individual listeners, the contrast is even better, with the option of a 12 dB noise suppression setting in Oticon Genie 2 for difficult environments.

The overall outcome of this sound processing architecture for MoreSound Intelligence 3.0 is better support for the brain, making it easier to separate sounds and focus on what's important.

Sound Enhancer dynamically adds sound details in difficult environments, mainly in the frequency regions important for speech.

TELL YOUR PATIENT

The noise suppression system is always on and automatically adjusts the amount of help you need in different environments, making it easier for your brain to focus on what is important.


Natural spatial awareness
24
Scan and analyze
Easy environment
Difficult environment
Neural Noise Suppression Easy (DNN 2.0)
Neural Noise Suppression Difficult (DNN 2.0)
Sound Enhancer
24

MoreSound Intelligence 3.0 in Oticon Genie 2

Easier fitting with an interactive counseling tool
The MoreSound Intelligence 3.0 screen in Oticon Genie 2 has been developed as a counseling tool for use together with your patients, so you can optimize help-in-noise system settings together with them, and ensure a clear and balanced sound scene in all environments.

MoreSound Intelligence 3.0 optimizes ease of use and simplicity, without compromising the need for extensive customization options and fitting handles. The initial settings of the handles in MSI 3.0 are based on the personalization done using either Audible Contrast Threshold (ACT™) or the questionnaire. Adjustments of the handles can be done based on a dialogue and feedback from the user.

1. Environment classifier
Use the Environment classifier tool to specify which hearing situations the user finds easy and difficult. The way sound is handled will differ between the Easy and Difficult categories.

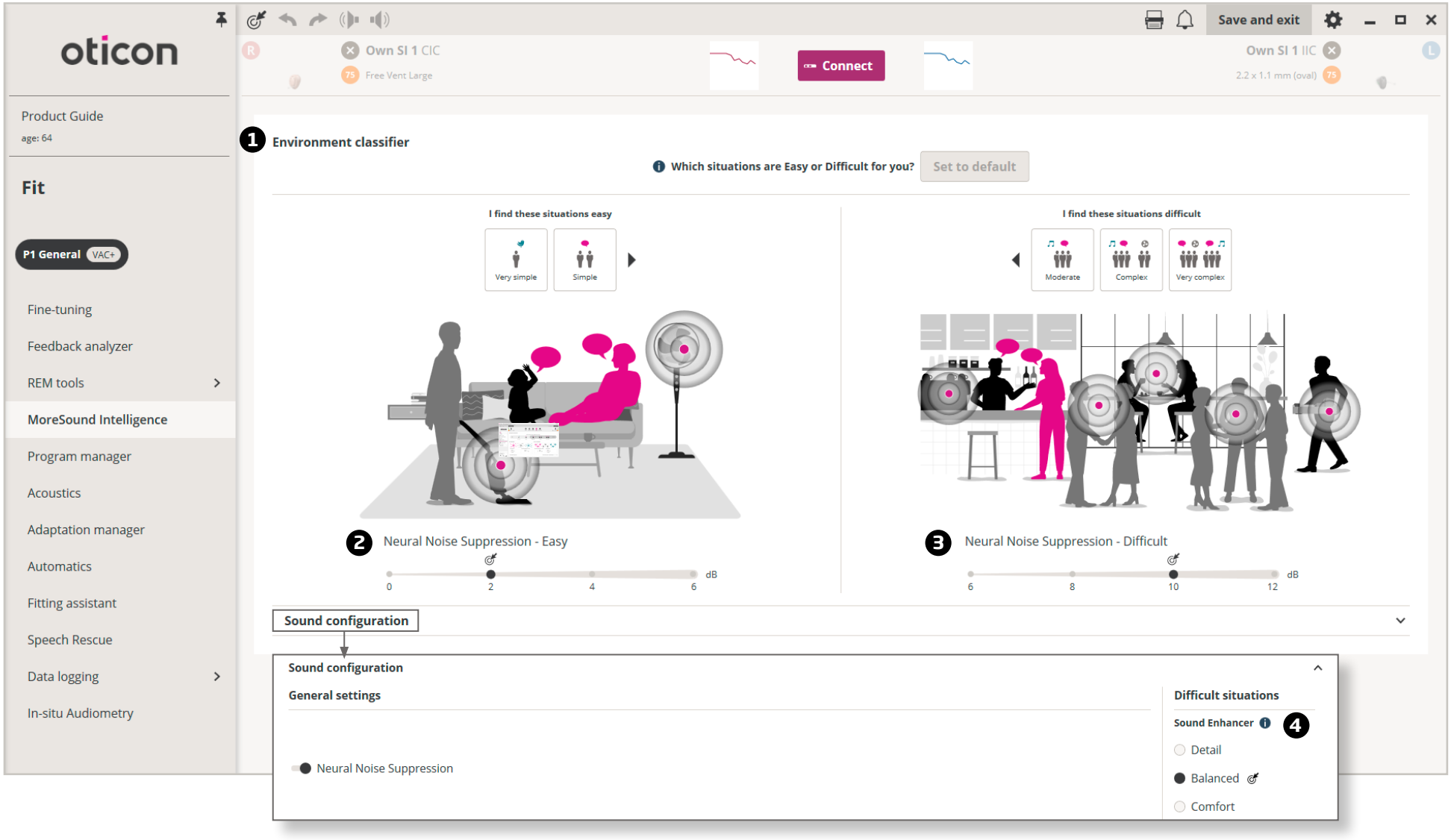
2. Neural Noise Suppression - Easy
Ambient noise suppression in easy environments provided by DNN 2.0. Creates clearer contrasts in sound between the background and the foreground around the user where less help from the hearing aid is needed.

3. Neural Noise Suppression - Difficult
Ambient noise suppression in difficult environments provided by DNN 2.0. Creates clearer contrasts in sound between the background and the foreground around the user where more help from the hearing aid is needed.

4. Sound Enhancer
Applies to difficult environments. Provides dynamic sound detail based on user preference when noise suppression is active. Added detail is mainly provided in the 1-4 kHz area, primarily enhancing speech sounds.

TELL YOUR PATIENT

Oticon Own SI helps us work together to get the settings just right for your hearing and your lifestyle needs.


oticon
Product Guide
age: 64
Fit
P1 General VAC+
Fine-tuning
Feedback analyzer
REM tools
MoreSound Intelligence
Program manager
Acoustics
Adaptation manager
Automatics
Fitting assistant
Speech Rescue
Data logging
In-situ Audiometry
Save and exit
Own SI 1 CIC
Free Vent Large
Connect
Own SI 1 IIC
2.2 x 1.1 mm (oval)
1 Environment classifier
Which situations are Easy or Difficult for you?
Set to default
I find these situations easy
Very simple
Simple
I find these situations difficult
Moderate
Complex
Very complex
2 Neural Noise Suppression - Easy
0 2 4 6 dB
3 Neural Noise Suppression - Difficult
6 8 10 12 dB
Sound configuration
Sound configuration
General settings
Neural Noise Suppression
Difficult situations
Sound Enhancer
4
Detail
Balanced
Comfort

Deep Neural Network 2.0

Enables better and more accurate representation of sound in the brain
Oticon Own SI has our next-generation Deep Neural Network (DNN) which mimics the way the brain functions, enabling Oticon Own SI to handle the sounds of the world precisely and automatically.

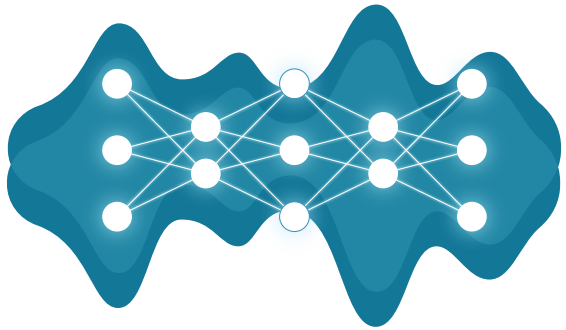
The DNN 2.0 is embedded on the Sirius chip, so that all the incoming sounds in the sound scenes around the user can be processed incredibly fast – processing 500 inputs each second. This intelligent feature outperforms man-made algorithms, optimizing the way Oticon Own SI makes sounds more distinct, and working seamlessly across varying listening environments.

Learning like the human brain
After a DNN has been trained and has learned how to process sound scenes, it can use this knowledge to process any sound scene presented to it. With this integrated intelligence, Oticon Own SI has learned to recognize types of sounds, their details, and how they should ideally sound – all in order to optimally support the brain.

Improvements over the first generation
The new DNN 2.0 builds upon the knowledge and insights from our first-generation DNN. From training with a greater diversity of sound samples, the DNN 2.0 has learned better strategies for real-world complex environments and acquired an improved ability to find and preserve soft speech components. By adding higher demands on the performance of the DNN 2.0 in the training phase and running the performance analysis in 256 channels, the output of the DNN 2.0 is more precise than its predecessor.

Training with real-life sound scenes
The sound scenes used for the training of the DNN 2.0 were real-life sound scenes recorded using a spherical microphone. This has 32 advanced, individual microphones that are evenly distributed across the sphere, making it possible to record sound scenes with spatial detail and accuracy.

The sound scenes were fed into the DNN 2.0, whose output was then compared to a known target, indicating if the processing was good or bad. Based on this feedback, the processing was adjusted until the optimal target was reached. It is important that a DNN is trained sufficiently for the given task – it should not be either undertrained or overtrained. If it is undertrained, it will not have enough knowledge to handle all sound scenes and will therefore make errors. If it is overtrained, it will be too specialized to handle real-life sound scenes different from those used in the training. To make sure the DNN 2.0 is trained to the right level, it has been trained in the development phase, and has completed its training before the hearing aid is worn by the user.



For more information on DNN, please see Brændgaard, M. 2020. MoreSound Intelligence. Oticon Tech Paper

DNN

TELL YOUR PATIENT

The Deep Neural Network understands how sounds should sound, so you hear them more clearly and with sharper contrast to other sounds.

MoreSound Amplifier™ 3.0

Provides more sound
MoreSound Amplifier 3.0 gives users precise and balanced amplification over a frequency range spanning from 80 Hz and all the way up to 10,000 Hz. This expansion into even lower frequencies provides a fuller sound scene with a richer representation of the environment.

With cleaner and clearer sound input from MoreSound Intelligence 3.0, MoreSound Amplifier 3.0 has a unique starting point for amplifying the range of sounds according to the needs of each person with hearing loss. This ensures it can provide meaningful sounds in the full frequency range for the available fitting rationales.

A dynamic and balanced amplification system
With high resolution and an adaptive speed pilot, MoreSound Amplifier 3.0 seamlessly adapts its resolution and speed to the nature of the prevailing sound scene, making the full sound scene audible while maintaining the fine contrast and balance between sounds. Sounds are constantly processed through two different paths: a 4-channel path and a 24-channel path. The system constantly identifies which type of information is present and what resolution (which path) should be prioritized when amplifying. This constant prioritization of processing paths depending on the incoming signal ensures the brain has access to the important information it needs to make sense of sound.

Instant and precise balancing of sudden sounds
Disruptive soft and loud sounds like clicking keyboards and slamming doors are everywhere, so SuddenSound Stabilizer as part of MoreSound Amplifier 3.0 quickly and precisely detects when they occur, provides the appropriate gain reduction, and then immediately releases the gain when the sound ends. What's more, SuddenSound Stabilizer can handle more than 500,000 sudden sounds daily. Presenting sudden sounds to users in a more balanced way reduces listening effort.

TELL YOUR PATIENT

The amplification system gives you all the details in excellent sound quality without letting sudden sounds disturb and overwhelm you.

MoreSound Optimizer™

Maximizes listening comfort and prevents feedback
MoreSound Optimizer detects and prevents feedback proactively before it even occurs. MoreSound Optimizer's ultra-fast detection engages proactive modulation to instantly stabilize the system when a feedback risk emerges. This unique Spectro Temporal Modulation technology creates a breaker signal that stops audible feedback before it happens.

Avoids gain reduction whenever possible
Thanks to MoreSound Optimizer and the applied phase inversion and frequency shift in Feedback shield, gain control is minimally used – even in the most dynamic environments with physical barriers or activity around the head or neck region of the user.

Feedback shield reduces gain only when absolutely necessary
If a feedback risk persists, Feedback shield supports MoreSound Optimizer's ultra-fast reaction and preventive abilities using gain control. The modulation ensures that Feedback shield can adapt and stabilize. As Feedback shield engages, MoreSound Optimizer's modulation is gradually tapered off.

An effective combination of complementary technologies
Working together, the two technologies, Feedback shield and MoreSound Optimizer combine the strengths of rapid, proactive feedback elimination with a stable, adaptive system to avoid false detections and activation of Feedback shield's gain control.

TELL YOUR PATIENT

These features ensure your hearing aids won't whistle or howl when you hug someone or when something comes close to your hearing aids.

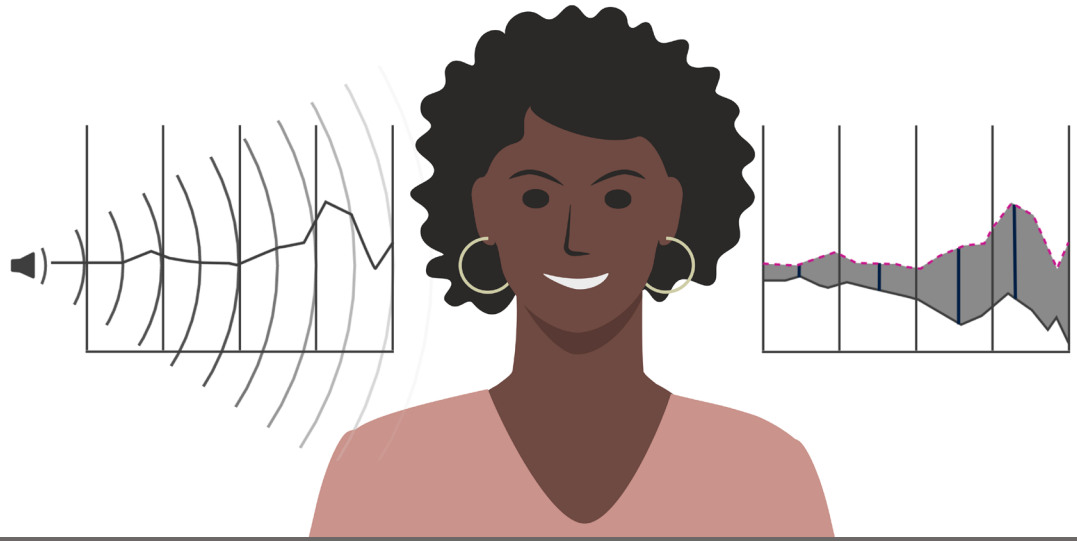
Spatial Sound™

Enhances natural sound location and spatial awareness
Spatial Sound combines several advanced technologies to provide more precise spatial awareness, helping users identify where sound is coming from.

It uses NFMI (Near-Field Magnetic Induction) for fast and energy-efficient binaural communication that preserves interaural level differences and maintains the sense of location and direction naturally provided by the head shadow effect.

By operating in four frequency bands, Spatial Sound prevents low frequencies from masking higher frequencies. This ensures interaural differences are preserved over the entire frequency spectrum.

Better-Ear Priority works with Spatial Sound and emphasizes sounds to the better ear in asymmetrical noise situations.



Availability requires NFMI – optional for CIC.

TELL YOUR PATIENT

Helps you naturally perceive the location, distance, and direction of sounds with greater ease.

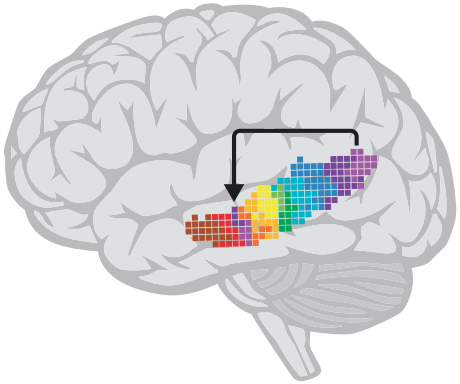
Speech Rescue™

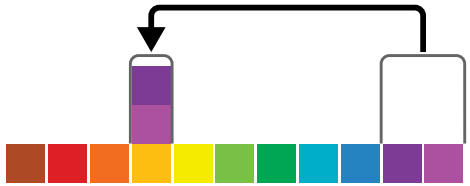
Makes high-frequency sounds audible again
The Oticon methodology of frequency lowering – called frequency composition – increases speech understanding by 'rescuing' speech cues such as /s/ or /sh/ that might otherwise be lost.

This gives people with moderate to severe hearing loss in high frequencies access to inaudible high-frequency sounds.

Inaudible high-frequency sounds are placed on the edge of the maximum audible output frequency (MAOF) while ensuring the low frequencies are preserved, so that vowel information and sound quality are maintained.

Speech Rescue is made more effective by the precise ability of MoreSound Intelligence 3.0 to improve the signal-to-noise ratio. MoreSound Intelligence 3.0 suppresses high-frequency noise, giving a clean high-frequency speech signal. It also ensures medium frequencies are cleaned of noise, improving the clarity of the speech cues that are copied to the MAOF.





TELL YOUR PATIENT

Helps you hear more high-pitched speech sounds like /s/ and /sh/, improving your understanding of speech and helping conversations flow.

Soft Speech Booster

Increases access to lost sounds of speech
Soft Speech Booster makes soft sounds audible to people with hearing loss. By increasing access to the soft sounds that occur in most situations and conversations, this improves speech understanding.

The proprietary fitting rationale of Oticon, VAC+, uses multiple knee points to provide a clear focus on soft-to-moderate speech information, while preserving comfortable perception of louder sounds.

Soft Speech Booster can be personalized using Audible Contrast Threshold (ACT) or questions and sound files in Oticon Genie 2, ensuring you can fit them to each user's unique perception of soft sound for the best possible balance between details and comfort.

TELL YOUR PATIENT

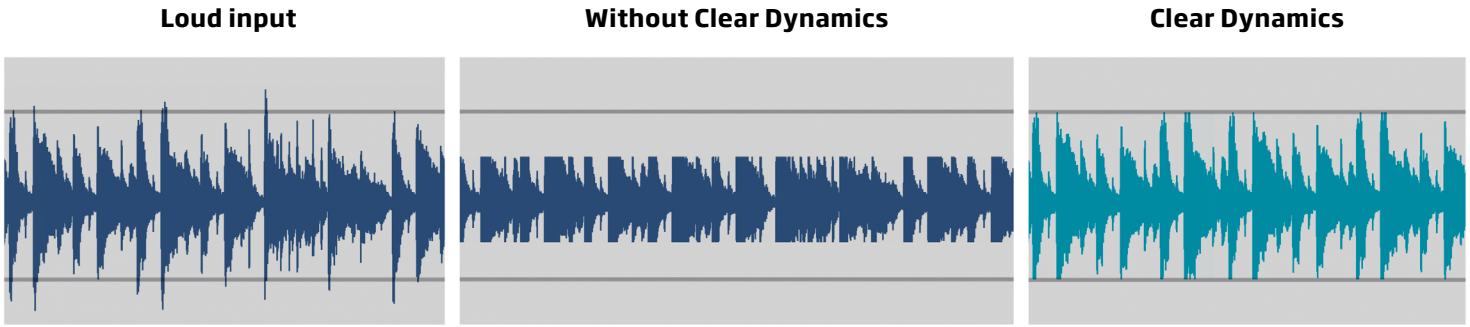
Helps you hear the soft sounds of normal speech, which improves your understanding without having to turn up the volume.

Clear Dynamics

Improves sound quality in loud environments
Clear Dynamics processes input sounds up to 113 dB SPL, avoiding distortion and artifacts at loud input levels while keeping the sound quality of softer input levels intact.

With speech cues preserved at high input levels, users can enjoy a better listening experience in loud environments, without distortion.

Clear Dynamics is especially valuable when listening to music or during conversations in busy, dynamic environments, where peaks can often be louder than the available input dynamic range of other hearing aid technologies.



TELL YOUR PATIENT

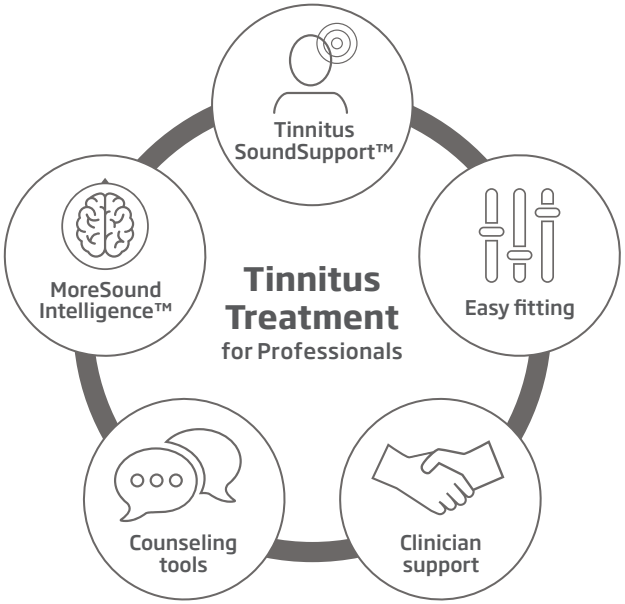
Helps improve sound quality when you are enjoying music or having conversations in noisy environments.

Tinnitus SoundSupport™

Generates a variety of customized relief sounds
Tinnitus SoundSupport offers a wide range of sound options for fully personalized treatment, while making fitting as simple and quick as possible.

The sound options include four broadband sounds: shaped to audiogram, white, pink, and red noise; while three ocean-like nature sounds show great promise in helping patients who need more dynamic and soothing sounds.*

You can also apply four modulation options to any of the broadband sounds to create a wider variety of relief sounds.



* Benefits may vary depending on the individual.
Availability requires NFMI and push-button – optional for CIC.

TELL YOUR PATIENT

Tinnitus SoundSupport gives you powerful tinnitus relief by affecting your perception of your tinnitus in a positive way.

Oticon MyMusic

A dedicated program for music lovers
With Oticon MyMusic, we've taken a giant step toward making an outstanding music listening experience.* Co-created with music lovers who have different types of hearing loss, Oticon MyMusic is tailored to deliver excellent music performance, with music-oriented signal processing strategies, such as an optimized compression scheme.

This processing captures the complex dynamics of music much better than trying to apply ordinary speech processing strategies to music.**

With this new capability, we've taken an impressive step in improving the music listening experience for people with hearing loss.

*Availability requires NFMI and push-button - optional for CIC.

**Brændgaard, M. (2021). The development behind Oticon MyMusic. Oticon Tech paper.

TELL YOUR PATIENT

Change the program to Oticon MyMusic whenever you want to listen to live or recorded music.

Short feature descriptions

Better-Ear Priority	Optimizes listening in asymmetrical, noisy situations.	Page 11
Clear Dynamics	Expands the dynamic input range, processing sounds up to 113 dB SPL, to preserve sound quality even at loud input levels.	Page 14
MoreSound Amplifier 3.0	Sound processing occurs in an adaptive path setup that gives priority to resolution or speed, based on the current sound scene. Includes SuddenSound Stabilizer, which provides instant and balanced amplification of both soft and loud sudden sounds.	Page 9
MoreSound Intelligence 3.0	Creates a clearer and more distinct contrast between sounds, and intelligently suppresses unwanted noise through our next-generation Deep Neural Network 2.0.	Page 4
MoreSound Optimizer	Improves listening performance and comfort with ultra-fast proactive feedback detection and prevention.	Page 10
Near-Field Magnetic Induction	Enables a continuous exchange of data and audio between two hearing aids to provide advanced binaural processing with minimal power consumption.	Page 11
Soft Speech Booster	Applies an individual amount of soft gain to increase soft speech understanding.	Page 13
Sound Enhancer	Dynamically provides gain primarily for speech sounds in difficult environments, based on user preference.	Page 6
Spatial Sound	Preserves interaural level differences to provide precise spatial awareness that helps users identify where sounds are coming from.	Page 11
Speech Rescue	Makes high-frequency speech sounds like /s/ and /sh/ more audible using frequency composition.	Page 12
Tinnitus SoundSupport	Provides a variety of relief sounds, including soothing ocean sounds, to meet the individual needs of people with tinnitus.	Page 15

Availability of features depends on style and technology level

Feature overview

75 90

		Own SI 1	Own SI 2	Own SI 3	Own SI 4
Speech understanding & listening ease	MoreSound Intelligence™ 3.0	Level 1	Level 2	Level 3	Level 4
	Environment classifier	5 configurations	5 configurations	3 configurations	Not adjustable
	Neural Noise Suppression Difficult/Easy	12 dB / 6 dB	10 dB / 4 dB	8 dB / 2 dB	6 dB / 0 dB
	Sound Enhancer	3 configurations	2 configurations	1 configuration	1 configuration
	MoreSound Amplifier™ 3.0	✓	✓	✓	✓
	SuddenSound Stabilizer	6 configurations	5 configurations	4 configurations	2 configurations
	MoreSound Optimizer™	✓	✓	✓	✓
	Feedback shield	✓	✓	✓	✓
	Spatial Sound™[1]	o	o	o	
	Soft Speech Booster	✓	✓	✓	✓
	Frequency lowering, Speech Rescue™	✓	✓	✓	✓
Sound quality	Clear Dynamics	✓	✓		
	Better-Ear Priority[1]	o	o	o	
	Fitting Bandwidth[2]	10 kHz	8 kHz	8 kHz	8 kHz
	Processing Channels	64	48	48	48
Personalization & optimized fitting	Fitting Bands	24	20	18	14
	Adaptation Management	✓	✓	✓	✓
	Fitting formulas	VAC+, NAL-NL1/ NAL-NL2, DSL v5	VAC+, NAL-NL1/ NAL-NL2, DSL v5	VAC+, NAL-NL1/ NAL-NL2, DSL v5	VAC+, NAL-NL1/ NAL-NL2, DSL v5
	Audible Contrast Threshold (ACT™) prescription	✓	✓	✓	✓
	Tinnitus SoundSupport™[3]	o	o	o	o

[1] Requires NFMI

[2] Bandwidth accessible for gain adjustments during fitting

[3] Requires NFMI and push-button

✓ Default

o Optional features only available for CIC

Instruments

Discreet in-the-ear hearing aids

Oticon Own SI IIC and CIC are our smallest in-the-ear styles. The hearing aids are powered by the Sirius platform and include Oticon BrainHearing™ technology. IIC and CIC are discreet hearing aids and both styles use disposable zinc-air batteries and can be fitted to patients with a hearing loss up to severe.

Oticon Own SI provides premium sound with better speech clarity, sound quality, and noise suppression due to our next-generation always-on DNN. At the same time, it ensures reduced listening effort in the presence of sudden sounds thanks to the innovative SuddenSound Stabilizer*. Oticon Own SI CIC is available with NFMI and a push-button enabling Tinnitus SoundSupport. The hearing aids are robust and reliable with a certified rating of IP68 for water and dust resistance.

*Results are based on feature testing with a miniRITE style hearing aid. Santurette et al. (2023). SuddenSound Stabilizer – Evidence and user benefits. Oticon Whitepaper.

Oticon Own SI styles and fitting options

Style		Battery size	Fitting level	NMFI	Micro-phones	Push-button	Hardware certification (IP68 - Water and dust resistant)
	IIC	10	75 90		1		✓
	CIC	10	75 90	o	1	o	✓

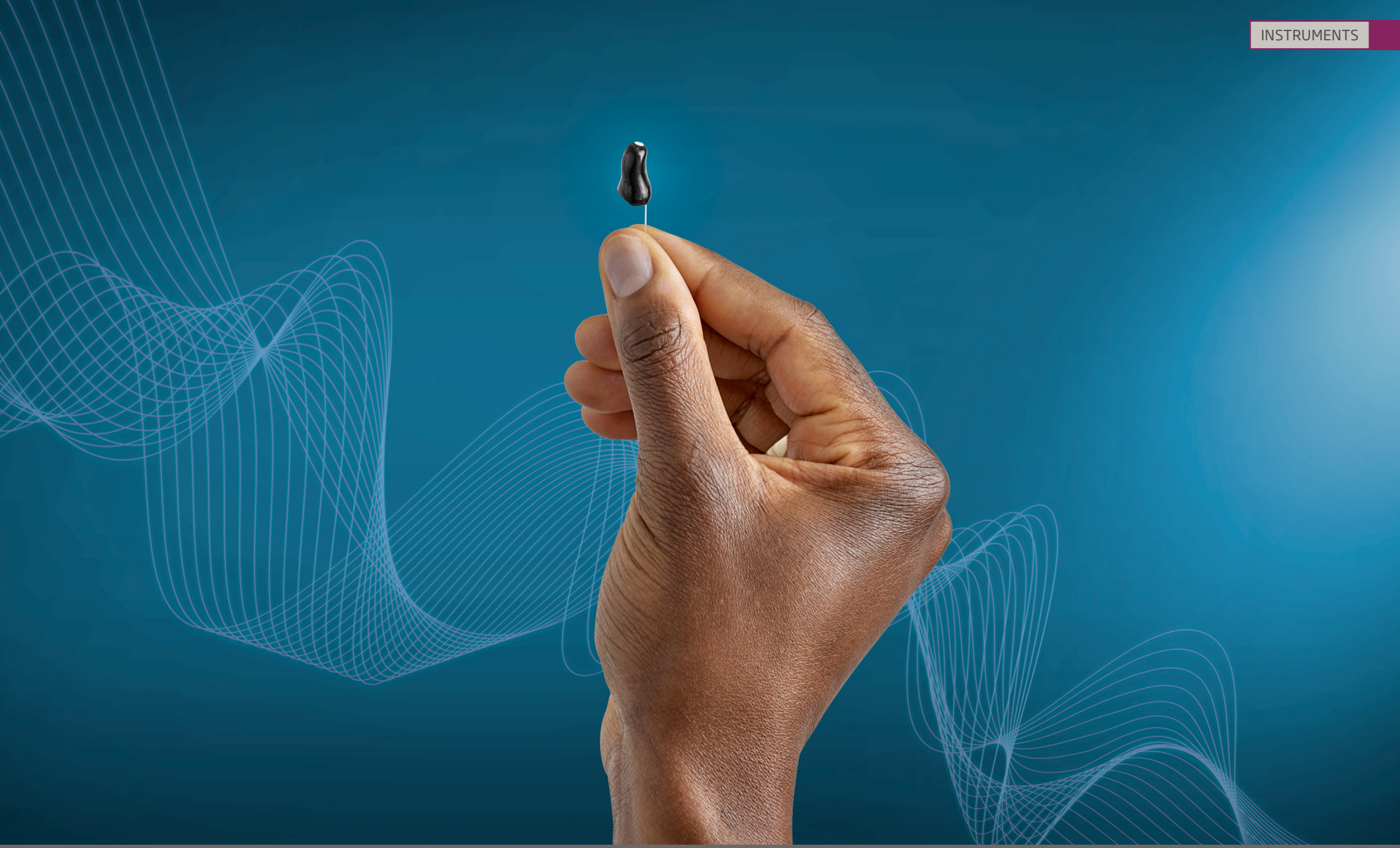
✓ Default

o Optional

Oticon Own SI colors

C0001 Beige | C0002 Light Brown | C0003 Medium Brown | C0004 Dark Brown | C0005 Black | Transparent | Transparent Blue | Transparent Red

Oticon Own SI is part of a complete custom portfolio.
Explore the Oticon Own product guide here.



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