

OTICON | Own Product Guide 2022



# World-class hearing technology. Made for you

#### The world's first custom hearing aid featuring an on-board **Deep Neural Network**

Oticon Own<sup>™</sup> is a technological breakthrough within custom hearing aids. By training a Deep Neural Network<sup>†</sup> (DNN) with 12 million real-life sound scenes, Oticon Own can recognize and handle a wide range of sounds - not only speech - giving your patient a more real-life listening experience, and supporting the natural way that their brain works. We call this our BrainHearing<sup>™</sup> approach because extensive research shows that we hear with our brains, not just our ears.

#### Technology that provides access to the full sound scene

Groundbreaking hearing technology powered by our Polaris<sup>™</sup> platform gives your patient full access to the sound scene.\* MoreSound Intelligence™ scans and analyzes the full sound scene 500 times per second, organizes these sounds, and then utilizes the on-board DNN to properly balance them. Following that, MoreSound Amplifier<sup>™</sup> works to preserve this balance, and unlike conventional compression – amplify sound in a way that retains important detail and contrast. Oticon Own even features MoreSound Optimizer™, a proactive feedback elimination tool that prevents feedback before it even occurs.

#### Completely invisible in 9 out of 10 ears\*

Oticon Own IIC is made to be unnoticed. By implementing cutting-edge miniaturization techniques, we're able to meet the needs of even more of your patients. As you know, more and more patients are looking for discreet hearing aid options, so we've dedicated ourselves towards design and process improvement. A combination of more advanced design software, miniaturization methods, and innovative modeling techniques now enables us to deliver our most discreet hearing aids, ever.

#### Five styles. Five colors. Five performance levels

Oticon Own is available in a wide range of different styles, colors, and performance levels in order to suit the hearing needs, style, and personal budget of more of your patients. Each style is hand-made to match each of their unique ear shapes - and designed to be as discreet as possible - while delivering a high level of audiological performance.

† DNN is only available in Oticon Own 1, 2 and 3 \* Rumley et al. (2022). Oticon Own evidence. White paper.



#### Oticon Own IIC is truly invisible in 9 out of 10 ears\*



Groundbreaking technology Oticon Own features our latest technology such as MoreSound Intelligence, MoreSound Amplifier, and MoreSound Optimizer - giving your patients access to the full sound scene.\*

\* Effect and availability of features vary with hearing aid style and performance level.

**Discover our latest expansion on the Polaris platform** Delivering exceptional sound and finding the perfect solution for your patient has never been easier with Oticon Own.





Oticon Own is a Made for iPhone® hearing aid, and it is also compatible with the new Android protocol for Audio Streaming for Hearing Aids (ASHA) – making it possible to stream directly from iPhone, iPad®, iPod touch®, and select Android devices.\*\*

**É iPhone** | iPad | iPod



Hands-free communication Now your patients can make and receive hands-free calls on their iPhone and iPad\* using their Oticon Own hearing aids as a headset.\*\*

Works with

android 🗪

## Made for

\* Hands-free communication is available with iPhone 11 or later running iOS 15.2 or later, and iPads running iPadOS 15.2 or later

\*\* Only available in styles with 2.4 GHz. See which hearing aids and devices are compatible here: oticon.com/ support/compatibility

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INSTRUMENTS

#### CONNECTIVITY & ACCESSORIES



# Polaris<sup>™</sup> platform

# The world's first purpose-built platform featuring an on-board Deep Neural Network

The Polaris platform is the backbone of Oticon Own. It is purpose-built for hearing aids. This focused approach allows it to constantly run an embedded Deep Neural Network and at the same time power all the technologies in Oticon Own with more speed, precision, and capacity than ever possible before.

Detectors have been updated for more precise processing of sound sources, and the embedded Deep Neural Network has been trained for the specific purpose of sound processing in a hearing aid. In addition, the amplification is now based on processing in two simultaneous paths prioritizing the optimal amplification for all sound scenes.

By including 28nm technology, the chipset has room for more than 154 million transistors – which is more than twice the number of transistors compared to Velox S<sup>™</sup> – without adding to the size of the chipset.

Compared to Velox S, the technology provides 8 times more solid state memory, twice as much computation capacity, and twice the working memory (RAM). Signal processing is done in 24 frequency channels (50% more than Velox S), allowing for a doubling of the signal processing precision between 1.5 and 5 kHz, and a more personalized fine tuning of gain.

The Polaris platform provides the user with much more processing power than any previous Oticon platform.



#### TELL YOUR PATIENT

Delivering the full perspective of sounds demands our most intelligent platform ever – Polaris.

# MoreSound Intelligence<sup>™</sup>

#### A quantum leap in sound scene processing

MoreSound Intelligence processes sound in a way that results in a more natural representation of all sounds in a clear, complete, and balanced sound scene.

The process runs in three parts: Scan and analyze, Spatial Clarity Processing, and Neural Clarity Processing - as seen in the graphic to the right. The way sound is handled is entirely determined by whether the sound scene has been labeled by the user as easy or difficult. This is defined in the fitting software (see page 10).

Processing happens in 24 linked channels. This means all channels can 'see' what is happening in the other 23 channels. This minimizes the risk of artifacts.

#### Scan and analyze

The sound scene is scanned 500 times per second, which results in a precise analysis of all sounds and the complexity of the surroundings. The user's personal listening preferences, as set in Oticon Genie 2, are applied to establish a clear target for how to handle sound scenes.

#### Spatial Clarity Processing

Placing a hearing aid in the ear reduces the ability to utilize the natural spatial cues provided by the pinna. Spatial Clarity Processing recreates these natural cues in easy environments by utilizing Virtual Outer Ear. Virtual Outer Ear is three different true-to-life pinna models which can be chosen based on the user's spatial sound needs. In difficult environments Spatial Clarity Processing utilizes Spatial Balancer, which quickly balances distinct sound sources in the environment, even when they are moving.

#### Neural Clarity Processing

Classic signal processing in hearing aids was based on algorithms written and developed by engineers. The rules they wrote represented their best estimations on how to process sound data. Neural Clarity Processing is different. With it, sound is processed by a Deep Neural Network (DNN). The DNN learns similarly to the way the brain learns, and then uses this knowledge to process sound. This makes the DNN capable of creating contrast between identified sounds and suppressing unwanted noise. For more detail on the DNN, please see page 12.

In both Spatial Clarity and Neural Clarity Processing, Sound Enhancer provides more details or more comfort in difficult situations based on user preference by dynamically adding sound detail.

MoreSound Intelligence provides not only a more precise and natural representation of individual sounds, but also a clearer and more distinct contrast between sounds, which results in a complete and balanced sound scene. This more nuanced sound scene helps the brain orient and identify the interesting sound to focus on. The focus gives the brain clear information, and makes it easier to make sense of sound. MoreSound Intelligence expands these benefits by giving the brain more sounds to select from when focusing. This expanded sound scene makes it easier to enjoy, follow, and engage in conversations with friends and family.

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

The full processing of MoreSound Intelligence is available in custom hearing aids with two microphones. For MoreSound Intelligence in custom hearing aids with one microphone see page 8.

#### **TELL YOUR PATIENT**

This way of processing sound results in a more natural representation of all sounds in a clear, complete, and balanced sound scene.



# MoreSound Intelligence in single-microphone hearing aids



In single-microphone hearing aids, MoreSound Intelligence works slightly different. Spatial Clarity Processing is not part of the processing flow, as it requires input from two microphones. Instead, the user can utilize the natural pinna for spatial awareness. The three-step process is then -

Natural spatial awareness, Scan and analyze, and Neural Clarity Processing.

#### Natural spatial awareness

An IIC or CIC hearing aid calibrated for placement inside the ear canal can allow for pinna cues similar to a normal hearing ear. Pinna cues allow the listener to localize sounds in the different planes - horizontal, vertical, front-back, and distance.

#### Scan and analyze

MoreSound Intelligence updates 500 times per second based on sound input to ensure that all details in the sound environment are captured. The signal-to-noise ratio, calculated based on the input, is the main driver used for distinguishing between easy and difficult environments. The definition of an environment as either easy or difficult depends on the individual user's settings in Oticon Genie 2.

#### Neural Clarity Processing

Neural Clarity processing is handled by the Deep Neural Network (DNN). In singlemicrophone hearing aids the absence of Spatial Clarity Processing means that the DNN is operating on input that has been enhanced by natural spatial cues provided by the pinna and ear canal. The scan and analyze functions continue to categorize the environment as easy or difficult and the DNN responds differently and according to the user settings in Oticon Genie 2, just as it does in dualmicrophone hearing aids.

#### Sound Enhancer

Sound Enhancer provides dynamic sound detail when noise suppression is active - mainly in difficult environments - which allows the output to be individualized. In single-microphone hearing aids the calculations behind Sound Enhancer are based solely on the dynamic suppression achieved by the DNN.

For more information on MSI for single-microphone hearing aids, please see Brændgaard, M. (2022). MoreSound Intelligence™ for single-microphone custom hearing aids. Oticon Tech Paper



**TELL YOUR PATIENT** 

When having an IIC or CIC your outer ear provides natural cues for localization.



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# MoreSound Intelligence in Oticon Genie 2

#### Fine-tuning for user needs

In Oticon Genie 2, the MoreSound Intelligence fitting screen provides the hearing care professional with different handles to fine-tune the settings of the hearing aid in order to make the most optimal fitting for each individual user. This tool was developed with user feedback, and is designed to optimize ease of use and simplicity, without compromising the need for extensive customization options and fitting handles.

The adjustment of the first three handles mentioned here can be considered in the first fitting session after having a dialogue with the user. The last two handles are preference handles which can be adjusted at later visits based on user feedback after trying the hearing aids in daily life.

#### **1. Environment Configuration**

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

#### 2. Neural Noise Suppression - Easy

Ambient noise suppression in easy environments provided by the DNN. 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 the DNN. Creates clearer contrasts in sound between the background and the foreground around the user where more help from the hearing aid is needed.

#### 4. Virtual Outer Ear\*

Three true-to-life and very accurate pinna simulations. Provides the user the option of more or less frontal focus or awareness of all sounds around them. The Balanced setting is default. Applies to easy environments.

#### 5. Sound Enhancer

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. Applies to difficult environments.

\* For custom hearing aids with one microphone the handle for Virtual Outer Ear is not available.



TELL YOUR PATIENT

Oticon Own comes with plenty of fine-tuning options to make the fitting just right for you.



# The Deep Neural Network

#### Optimal support for the brain

Oticon Own utilizes the intelligent capabilities of a fully trained Deep Neural Network to mimic the way the brain functions. This means that the DNN also needs to learn, just like the human brain needs to learn. When the 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. It is an intelligent feature that outperforms man-made algorithms.

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

Once collected, 12 million sound scenes were used to train the DNN. The sound scenes were fed to the DNN and the output from the DNN was then compared to a known target, indicating to the DNN if the processing was good or bad. Based on the feedback provided to the DNN, 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 under or overtrained. If it is undertrained, it will not have enough knowledge to handle all sound scenes and will therefore make many errors. If it is overtrained, it will be too specialized to handle real life sound scenes different from what was used in the training. To make sure the DNN is trained to the right level, it has been trained in the development phase. The DNN has completed its training when the hearing aid is worn by the user. The DNN is embedded on the chip so that all the incoming sounds in the sound scenes around the user can be processed incredibly fast. The DNN processes 500 inputs each second.

A Deep Neural Network enables the sounds of the world to be handled precisely and automatically. This optimizes the way Oticon Own makes sounds more distinct, working seamlessly across varying listening environments. With this integrated intelligence, Oticon Own has learned to recognize all types of sounds, their details, and how they should ideally sound – all in order to optimally support the brain.



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



#### **TELL YOUR PATIENT**

A Deep Neural Network creates contrast between sounds, making it easier for you to separate sounds.

# MoreSound Amplifier<sup>™</sup>



#### **Rapid high-resolution amplification**

MoreSound Amplifier is a dynamic and balanced amplification system that seamlessly adapts its resolution and speed to the nature of the prevailing sound scene.

With a sixfold increase in resolution and an adaptive speed pilot, MoreSound Amplifier makes 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 making it easier for the brain to access the information. As an example, when processing speech which changes rapidly in amplitude, frequency, and time, we need to prioritize high precision in time, so processing in the 4-channel path is chosen. This safequards the speech envelope. However, if a steady narrow band noise is present, which does not change much in either amplitude or frequency, we need to prioritize high precision in frequency, so processing in the 24-channel path is chosen. A steady narrow band noise could be a typical everyday alarm tone, which will then be handled in a narrow frequency range in order to be amplified correctly, without disrupting amplification of sounds in neighboring frequency channels.

This constant priority of processing paths depending on the incoming signal ensures that the brain has access to the important information it needs to make sense of sound.



For more information see Brændgaard, M. 2020. An introduction to The Polaris™ platform. Oticon Tech Paper.



#### **TELL YOUR PATIENT**

The dynamic and balanced amplification system ensures the full sound scene is audible.

# MoreSound Optimizer<sup>™</sup>

#### Prevents feedback before it occurs

Everyday situations like wearing a hat, hugging loved ones, eating, talking, and holding a phone to the ear - all normal dynamic movements in and around the head and neck - can introduce intrusive feedback noise. The extremely fast MoreSound Optimizer breaks the feedback loop by detecting and preventing feedback proactively, before it occurs. This makes it possible for the hearing aid to ensure that your patient's access to sound is not restricted by feedback.

The technology in MoreSound Optimizer represents a breakthrough in preventing audible feedback and delivering increased comfort – even in the most challenging listening situations. MoreSound Optimizer protects the sound quality by using ultra-fast signal processing:

- Predicts acoustic response by performing rapid measurements in 28 independent channels
- Counters detected acoustic changes immediately using targeted breaker signals in one or more frequency channels
- Stops breaker signal as soon as the acoustic response is stabilized

MoreSound Optimizer offers three different settings: Normal, Low, and Off. Each can be set in Oticon Genie 2 for individual programs. Normal is the recommended setting. The normal setting provides the full benefit of the system. Low is an alternative setting that might be suitable for musicians or others who find that MoreSound Optimizer affects the sound quality in specific situations. Off turns the entire feedback management system off and might result in audible feedback.

MoreSound Optimizer works with Feedback shield to avoid false detections. See the section on Feedback shield for details.

Benefits may vary depending on hearing loss.



#### TELL YOUR PATIENT

This super-fast technology ensures you can enjoy clear, stable sound without worrying about whistling and bad sound quality.

# Spatial Sound<sup>™</sup>



#### Locate the sounds of interest

Spatial Sound combines several advanced technologies - providing more precise spatial awareness in order to help users identify where sound is coming from.

Using the energy-efficient and fast binaural communication offered by NFMI, Spatial Sound preserves interaural level differences in four frequency bands. This maintains the sense of location and direction naturally provided by the head shadow effect.

The multi-band analysis prevents low frequencies from masking higher frequencies. This ensures that interaural differences are preserved over the entire frequency spectrum.

As part of Spatial Sound, Better-Ear Priority emphasizes sounds on the better ear in asymmetrical noise situations.

Head shadow effect



Availability depends on style



**TELL YOUR PATIENT** 

Provides a richer, more realistic sound picture so you perceive the location and direction of sounds with greater ease.

# Speech Rescue<sup>™</sup>

#### Making high frequency sounds more audible

Missing high frequency sounds such as /s/ or /sh/ can negatively impact the flow and understanding of conversation. The Oticon methodology of frequency lowering, called frequency composition, increases speech understanding by 'rescuing' speech cues that might otherwise be lost.

MoreSound Intelligence's precise ability to improve SNR makes Speech Rescue more effective in two ways: High-frequency noise is suppressed to clean the inaudible high-frequency speech, and that speech is then copied into noisecleaned medium frequencies. Combined with MoreSound Amplifier, this gives users with moderate to severeto-profound hearing loss (in the high frequencies) access to inaudible high frequency sounds. The three step 'copy and keep' methodology copies inaudible high frequency sounds, places them on the edge of the maximum audible output frequency (MAOF), and ensures that the low frequencies are preserved, so that vowel information and sound quality are maintained.





TELL YOUR PATIENT

Increases speech understanding by letting you hear more speech sounds like /s/ and /sh/.

# Soft Speech Booster



#### Improves soft speech understanding

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, Soft Speech Booster improves soft 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 questions and sound files in Oticon Genie 2 - ensuring a fitting matched to each user's unique perception of soft sound for the best possible balance between details and comfort.





#### **TELL YOUR PATIENT**

Increases access to soft sounds to improve soft speech understanding without turning up the volume.

# **Clear Dynamics**



#### Better sound quality with less distortion in loud environments

Clear Dynamics expands the input dynamic range, processing input sounds up to 113 dB SPL, to provide better sound quality without distortion and artifacts at loud input levels, while keeping the sound quality of soft input levels intact.

With speech cues preserved at high input levels, users enjoy a better listening experience without distortion, even in loud environments. Clear Dynamics is especially valuable for users when listening to music or during conversations in busy, dynamic environments, where peaks can often be louder than the available input dynamic range.





#### **TELL YOUR PATIENT**

Experience superior sound quality especially when you are enjoying music or engaging in conversations in noisy environments.

# Wind Noise Management

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#### Better access to speech in situations with wind noise

Wind Noise Management offers highly efficient wind noise suppression. High speed estimators analyze the presence of wind noise 500 times per second for fast and precise application of up to 30 dB wind noise suppression in 24 frequency channels. Wind Noise Management attenuates wind bursts in less than 50ms, making it fast enough to precisely attenuate wind between words.

The purpose of Wind Noise Management is to attenuate the wind noise, and quickly ensure a stable and comfortable loudness level for hearing aid users, so they can focus on the speech that's important to them. When speech is present, the signal-to-noise ratio is preserved, because wind noise is suppressed when it is louder than speech. When no speech is present, the system will aggressively suppress wind noise to ensure comfort in windy situations.



Availability depends on style



**TELL YOUR PATIENT** 

Effectively suppresses annoying wind noise, even between the words in a conversation.

# Feedback shield



# Dual-microphone feedback system for reducing and suppressing feedback

Feedback shield supports MoreSound Optimizer's ultra-fast reaction and preventive abilities in order to avoid feedback.

Working together, the two technologies combine the strengths of rapid, proactive feedback elimination with a stable adaptive system in order to avoid false detections and activation of Feedback shield's gain control.

The well-known Feedback shield operates in two separate paths – one for each microphone. In each path, three distinct technologies work together to suppress feedback and ensure stable amplification. Frequency shift optimizes phase inversion, and gain control may be applied if needed. Thanks to MoreSound Optimizer, the gain control is used far less.

MoreSound Optimizer's ultra-fast detection engages proactive modulation to instantly stabilize the system when a feedback risk emerges. If the risk is only momentary, MoreSound Optimizer disengages the modulation when the risk has passed. If the feedback risk persists, the modulation ensures that Feedback shield can adapt and stabilize. As Feedback shield engages, MoreSound Optimizer's modulation is gradually tapered off.

Combining Feedback shield and MoreSound Optimizer allows you to add more gain to reach the target. This gives you greater flexibility in the fitting process.



Benefits may vary depending on hearing loss



#### TELL YOUR PATIENT

Enjoy clearer sound without worrying about annoying whistling or squealing, even in feedback-prone everyday situations like greeting someone with a hug.

# Tinnitus SoundSupport<sup>™</sup>



## A variety of relief sounds to meet the unique needs of each person with tinnitus

The integrated sound generator offers a wide range of sound options, including broadband sounds (shaped to audiogram, white, pink & red), and three ocean-like sounds. These nature sounds are dynamic, yet soothing, and show great promise in decreasing the annoyance of tinnitus.\*

No two brains work the same, and some patients require sounds that are more dynamic, or sounds that have a unique quality.

Tinnitus SoundSupport aims to make fitting as simple and quick as possible, while giving patients a fully personalized treatment.

You can apply four modulation options to any of the broadband sounds in order to create a wider variety of relief sounds - helping to meet patients' individual needs and preferences.

Patients can adjust the volume level of relief sounds directly on the hearing aid or via the Oticon ON app. For the patient, it means easy and discreet handling and adjustment of relief sounds whenever needed.



\* Benefits may vary depending on the individual. Availability requires NFMI and push-button.



#### TELL YOUR PATIENT

Tinnitus SoundSupport and MoreSound Intelligence give you the combined benefit of a balanced and rich sound experience that

makes it easier for the brain to listen and provide a powerful solution for tinnitus relief. The goal is to affect your perception of your tinnitus in a positive way.

# TwinLink™

## Wireless connectivity and binaural processing in a small, energy-efficient solution

TwinLink technology uses two dedicated radio systems to meet distinct communication needs.

TwinLink technology supports seamless, energy-efficient communication between two hearing aids, and direct connectivity with external electronic and digital devices.

Near-Field Magnetic Induction (NFMI) enables a continuous exchange of data and audio between two hearing aids in order to provide advanced binaural processing. This communication is done with minimal power consumption. With NFMI, data and audio information are exchanged 21 times per second between the two hearing aids.

Oticon hearing aids with stereo Bluetooth® Low Energy technology connect to smartphones and other digital devices for easy, seamless wireless connectivity. This technology also allows for true wireless fitting.



Availability depends on style



#### **TELL YOUR PATIENT**

Hearing aids need to communicate with each other, but also with external devices. TwinLink gives you two technologies in order to provide you the best of both worlds.



# Feature overview Oticon Own 1, 2, and 3

Better-Ear Priority	Optimizes listening in asymmetrical, noisy situations	Page 15	Sound Enhancer	Dynamically provides gain primarily for speech sounds in difficult environments, based on user preference	Page 8
Clear Dynamics	Expands the input dynamic range, processing sounds up to 113 dB SPL, to preserve sound quality even at loud input levels	Page 18	Spatial Sound	Preserves interaural level differences to provide precise spatial awareness that helps users identify where sounds are coming from	Page 15
Feedback shield	Employs a proven and effective feedback management system to reduce the risk of feedback and suppress feedback if it occurs	Page 20	Speech Rescue	Makes high frequency speech sounds like /s/ and /sh/ more audible using frequency composition	Page 16
MoreSound Amplifier	Sound processing occurs in an adaptive path setup that gives priority to resolution or speed, based on the current sound scene	Page 13	Tinnitus SoundSupport	Provides a variety of relief sounds, including soothing ocean sounds, to meet the individual needs of people with tinnitus	Page 21
MoreSound Booster	Provides maximum help in easier environments when needed by the user. Must be activated in the Oticon ON app	Page 39	Transient Noise Management	Protects against sudden loud sounds with fast recovery to preserve audibility. Offers four different levels for fine tuning, including 'off'	
MoreSound Intelligence	Creates a clearer and more distinct contrast between sounds by swiftly scanning and analyzing, precisely organizing the spatial sound scene, and intelligently creating contrast and suppressing unwanted noise through the embedded Deep Neural Network	Page 6	TwinLink	Combines two distinct radio technologies in an innovative wireless communication system. Features one technology to support seamless, energy-efficient binaural communication between two hearing aids (NFMI) and one to support communication with external	Page 22
MoreSound Optimizer	Improves listening performance and comfort with ultra-fast proactive feedback detection and prevention	Page 14	Virtual Outer Ear	Provides a true-to-real ear pinna simulation with three different settings for	Page 10
Soft Speech Booster	Applies an individual amount of soft gain to increase soft speech understanding	Page 17	Wind Noise Management	user preterence Protects against the discomfort of wind noise	Page 19

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		Own 1	Own 2	Own 3
	MoreSound Intelligence™	Level 1	Level 2	Level 3
	- Environment configuration	5 Options	5 Options	3 Options
_	- Virtual Outer Ear	3 Configurations	2 Configurations	1 Configuration
ding	- Spatial Balancer	100%	60%	60%
itan	- Neural Noise Suppression, Difficult/Easy	10 dB/4 dB	6 dB/2 dB	6 dB/0 dB
ders	- Sound Enhancer	3 Configurations	2 Configurations	1 Configuration
nU	MoreSound Amplifier™	•	•	•
Speech	Feedback Prevention	MoreSound Optimizer™ & Feedback shield	MoreSound Optimizer™ & Feedback shield	MoreSound Optimizer™ & Feedback shield
•••	Spatial Sound™	4 Estimators	2 Estimators	2 Estimators
	Soft Speech Booster	•	•	•
	Frequency lowering	Speech Rescue™	Speech Rescue™	Speech Rescue™
.⊳	Clear Dynamics	•	•	N/A
ralit	Better-Ear Priority	•	•	N/A
Õ p	Fitting Bandwidth*	10 kHz	8 kHz	8 kHz
sour	Bass Boost (streaming)**	0	0	0
01	Processing Channels	64	48	48
ing	Transient Noise Management	4 configurations	3 configurations	3 configurations
Lister Comf	Wind Noise Management	•	•	•
tion ng	Fitting Bands	24	20	18
iliza mizi ing	Multiple Directionality options	•	•	•
Sona Optii Fitt	Adaptation Manager	•	•	•
Per <u>s</u> ۵ (	Fitting Formulas	VAC+, NAL-NL1/NAL-NL2, DSL v5.0	VAC+, NAL-NL1/NAL-NL2, DSL v5.0	VAC+, NAL-NL1/NAL-NL2, DSL v5.0
-	Hands-free communication**,***	0	0	0
orlo	Direct streaming**, ****	0	0	0
hew	Oticon ON & Oticon RemoteCare apps**	0	0	0
to t	ConnectClip**	0	0	0
ting	EduMic**	0	0	0
nect	Remote Control 3.0**	0	0	0
Con	TV Adapter 3.0**	0	0	0
	Phone Adapter 2.0**	0	0	0
	Tinnitus SoundSupport™*****	0	0	0

\* Bandwidth accessible for gain adjustments during fitting

\*\* Requires 2.4 GHz

\*\*\* Hands-free communication is available with iPhone 11 or later running iOS 15.2 or later, and iPad running iPadOS 15.2 or later

\*\*\*\* From iPhone, iPad, iPod touch, and select Android devices

\*\*\*\*\* Requires push-button

Feature overview is shown for ITC/ITE HS/ITE FS. For IIC and CIC overviews see the Technical data sheets.

Default
Optional

N/A Not available

# The audiological features of Oticon Own 4

Oticon Own performance level 4 provides a different feature set from those seen in Oticon Own 1, Own 2, and Own 3. The most important features for this performance level are described here, and the full feature overview can be seen on the next page.

#### **OpenSound Navigator™** Access to speech all around

In order to provide custom hearing aid users with a 360° open sound experience within our essential category, we've incorporated OpenSound Navigator into performance level 4 of Oticon Own. This technology allows your patient to comfortably locate and separate incoming speech sources, while keeping them aware of their entire surroundings.

OpenSound Navigator works by analyzing the complete sound scene, balancing out individual sounds like speech, lowering surrounding noise levels, and removing noise that would otherwise make the listening environment uncomfortable. In the ITC, ITE HS, and ITE FS styles the full functionality of OpenSound Navigator is provided based on the two microphones in the hearing aid. In the IIC and CIC models, OpenSound Navigator continuously analyzes the environment and removes any disturbing noise. However, these hearing aids are placed so discreetly within the ear canal that the natural pinna will provide relevant spatial cues.

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#### Speech Guard™

Improves speech understanding in noisy environments By using adaptive compression, Speech Guard amplifies speech - while preserving important speech cues. This allows for a more natural, clear sound experience, improving your patient's overall speech understanding. With Speech Guard, linear amplification is applied in a 12 dB dynamic range window to preserve amplitude modulation cues in speech signals. When large changes in level occur, Speech Guard quickly adapts gain in order to maintain audibility, and fit all the sounds within the reduced dynamic range of the user.



#### SuperShield

**Rapidly and intelligently prevents feedback before it occurs** SuperShield and Feedback shield work together to constantly analyze the incoming signal for feedback build-up. SuperShield then applies a breaker signal as soon as the feedback loop exceeds 0 dB - preventing feedback before it even occurs, while Feedback shield makes sure the signal stays stable over time. This technology ensures that your patient can be close to their loved ones, without experiencing irritating feedback.



Access to natural sounding speech is provided in 360° without irritating feedback.

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		Own 4
Speech Understanding	OpenSound Navigator - Balancing power effect - Max. noise removal Difficult/Simple Speech Guard™ Frequency lowering	• 40% 6 dB/0 dB • Speech Rescue™
Sound Quality	Fitting Bandwidth* Bass Boost (streaming)** Processing Channels	8 kHz o 48
Listening Comfort	Feedback Management Transient Noise Management Wind Noise Management	SuperShield & Feedback shield On/Off •
Personalization & Optimizing Fitting	Fitting Bands Multiple Directionality options Adaptation Manager Fitting Formulas	14 • • VAC+, NAL-NL1/NAL-NL2, DSL v5.0
F Connecting to the world	Hands-free communication**,*** Direct streaming**, **** Oticon ON & Oticon RemoteCare apps** ConnectClip** EduMic** Remote Control 3.0** TV Adapter 3.0** Phone Adapter 2.0**	0 0 0 0 0 0 0 0 0
	Tinnitus SoundSupport™****	0

\* Bandwidth accessible for gain adjustments during fitting

\*\* Requires 2.4 GHz

\*\*\* Hands-free communication is available with iPhone 11 or later running iOS 15.2 or later, and iPad running iPadOS 15.2 or later

\*\*\*\* From iPhone, iPad, iPod touch, and select Android devices

\*\*\*\*\* Requires push-button

Feature overview is shown for ITC/ITE HS/ITE FS. For IIC and CIC overviews see the Technical data sheets.

Default

0 Optional

# The audiological features of Oticon Own 5

Oticon Own performance level 5 runs on its own set of features. The most important features for this performance level are described here, and the full feature overview can be seen on the next page.



Multiband Adaptive Directionality Quickly adapts to changing soundscapes by fluently applying directionality

Multiband Adaptive Directionality provides the fast and responsive adaptation of directional modes in 15 independent frequency bands, putting front-facing speech more in focus when the environment around the user becomes noisy.



#### **Noise Reduction**

Attenuates disturbing noise extremely quickly, even between words

Noise reduction removes unwanted noise, providing the user with a more comfortable listening experience. This feature adapts extremely quickly, so that even noise between words can be removed.



SuperShield Rapidly and intelligently prevents feedback before it occurs

SuperShield and Feedback shield work together to constantly analyze the incoming signal for feedback build-up. SuperShield then applies a breaker signal as soon as the feedback loop exceeds 0 dB – preventing feedback before it even occurs, while Feedback shield makes sure the signal stays stable over time. This technology ensures that your patient can be close to their loved ones, without experiencing irritating feedback.



#### TELL YOUR PATIENT

A great hearing aid that adapts to the sound environment, removes background noise really fast, and also prevents annoying whistling.

		75 90 100
		Own 5
Speech Under- standing	Multiband Adaptive Directionality Noise Reduction Single Compression Frequency lowering	• • Speech Rescue™
Sound Quality	Fitting Bandwidth* Bass Boost (streaming)** Processing Channels	8 kHz o 48
Listening Comfort	Feedback Management Wind Noise Management	SuperShield & Feedback shield •
Personalization & Optimizing Fitting	Fitting Bands Multiple Directionality options Adaptation Manager Fitting Formulas	12 • • VAC+, NAL-NL1/NAL-NL2, DSL v5.0
F Connecting to the world	Hands-free communication**,*** Direct streaming**, **** Oticon ON & Oticon RemoteCare apps** ConnectClip** EduMic** Remote Control 3.0** TV Adapter 3.0** Phone Adapter 2.0**	0 0 0 0 0 0 0 0 0
	Tinnitus SoundSupport™*****	0

\* Bandwidth accessible for gain adjustments during fitting

\*\* Requires 2.4 GHz

\*\*\* Hands-free communication is available with iPhone 11 or later running iOS 15.2 or later, and iPad running iPadOS 15.2 or later

\*\*\*\* From iPhone, iPad, iPod touch, and select Android devices

\*\*\*\*\* Requires push-button

Feature overview is shown for ITC/ITE HS/ITE FS. For IIC and CIC overviews see the Technical data sheets.

Default

0 Optional

# The audiological difference in Oticon Own

Oticon Own is built on our BrainHearing philosophy. This approach supports how we listen with our brains – not our ears. The latest independent research\* shows that the brain needs access to all sounds in order to work in a natural way. Oticon Own processes the full sound scene in a holistic and balanced manner. It gives the brain input from all types of meaningful sounds, supporting the brain's natural ability to make sense of sound around us.

Oticon Own comes in five different performance levels, making sure that high quality custom hearing aids are available to as broad a group of users as possible. The different performance levels differ by the amount of support they provide for the brain.

Oticon Own 1, Own 2 and Own 3 run on MoreSound Intelligence – processing sound in a way that results in a more natural sound scene, inclusive of all meaningful sounds. The effect of the system, and the fine-tuning options differ between performance levels. For instance, Virtual Outer Ear, with three options in Oticon Own 1, provides more fitting flexibility in easy environments. Also, the effect of the Spatial Balancer and DNN is greater in Oticon Own 1, providing better access to speech, more options for the release of noise, and more comfort.\*\*

\* O'Sullivan, J., Herrero, J., Smith, E., Schevon, C., McKhann, G. M., Sheth, S. A., ... & Mesgarani, N. 2019. Hierarchical Encoding of Attended Auditory Objects in Multi-talker Speech Perception. Neuron, 104(6), 1195-1209. Hausfeld, L., Riecke, L., Valente, G., & Formisano, E. 2018. Cortical tracking of multiple streams outside the focus of attention in naturalistic auditory scenes. NeuroImage, 181, 617-626. Puvvada, K. C., & Simon, J. Z. 2017. Cortical representations of speech in a multitalker auditory scene. Oticon Own 4 runs on OpenSound Navigator, providing access to 360° speech. Finally, Oticon Own 5 runs Multiband Adaptive Directionality, offering a more traditional directionality system, focusing on speech in front. Oticon Own 4 and Own 5 both have fixed settings in their respective systems.

Furthermore, both fitting bandwidth and fitting bands are broader in Oticon Own 1. This performance level allows the hearing aid to be fine-tuned and personalized more flexibly for the individual user. It also offers the greatest effect and number of option settings. This provides maximum support for the full perspective of sounds across different sound scenes, patient ages, and lifestyles.

Journal of Neuroscience, 37(38), 9189-9196. See also Man, B. & Ng, E. 2020. BrainHearing – The new perspective. Oticon Whitepaper.

\*\*The described examples relate to a hearing aid with two microphones



TELL YOUR PATIENT

Oticon Own offers great audiological benefits in all performance levels. It's just a matter of choosing the right version.

# Features dependent on certain hardware

Two microphones enable	NFMI enables	2.4 GHz wireless technology enables
Virtual Outer Ear in MoreSound Intelligence	Spatial Sound	Hands-free communication**
Spatial Balancer in MoreSound Intelligence	Better-Ear priority	Bass Boost (streaming)
Wind Noise Management	Binaural coordination	Direct streaming***
Multiple Directionality options	Tinnitus SoundSupport*	Oticon ON app & Oticon RemoteCare app
		ConnectClip EduMic Remote Control 3.0 TV Adapter 3.0 Phone Adapter 2.0 (via ConnectClip)

\* Requires push-button

\*\* Hands-free communication is available with iPhone 11 or later running iOS 15.2 or later, and iPad running iPadOS 15.2 or later

\*\*\* From iPhone, iPad, iPod touch, and select Android devices

Note: Availability of features depends on performance level

# Instruments



# Discreet in-the-ear hearing aids

Oticon Own offers a wide range of in-the-ear hearing aids, from the extremely small IIC, to the ITE, which gives an opportunity for adding several features. All in-the-ear hearing aids are powered by disposable zinc-air batteries, and can be fitted to patients with a hearing loss up to severe.

With new groundbreaking features, the hearing aids give your patient access to the full perspective of sounds. Oticon Own ITC/ITE hearing aids with Bluetooth® Low Energy technology can stream directly from iPhone, iPad, iPod touch, and select Android devices.\* They are Made for iPhone hearing aids, and they also support ASHA – the Android protocol for Audio Streaming for Hearing Aids. A wide variety of connectivity options, as well as telecoil and Tinnitus SoundSupport are available. The hearing aids are robust and reliable with a certified rating of IP68 for dust and water resistance. All vital components are nano-coated inside and out.

#### **Custom dexterity**

Standard options

- Nail grip
- Pull out clothing loop
- Large ball removal line
- Raised push button
- Raised volume wheel (high knob)







\* Only available in styles with 2.4 GHz. See which hearing aids and devices are compatible here: oticon.com/support/compatibility



A hearing aid with Bluetooth technology will enable you to stream from iPhone and select Android devices

# Oticon Own styles and fitting options

Sty	le	Battery size	Fitting level	NMFI	2.4 GHz	Micro- phones	Push- button	Volume Telecoil wheel		Hardware certification (IP68 - Water and dust resistant)	<b>Wireless</b> fitting (Noahlink Wireless)
٢	IIC	10	75 90	N/A	N/A	1	N/A	N/A	N/A	•	N/A
	CIC	10	75 90	0	N/A	1	0	N/A	N/A	•	N/A
	ITC	312	75 90 10	•	0*	2	0	0	0*	•	0
	ITE HS	312	75 90 10	•	0*	2	0	0	0*	•	0
	ITE FS	312	75 90 10	•	0*	2	0	0	0*	•	0



Default
Optional
N/A Not available

\* Not possible to combine 2.4 GHz and telecoil

Note: Choosing 2.4 GHz or telecoil can make the size of the custom product larger. For ITCs, this may result in a larger style (ITE HS) depending on the ear size and shape.

# Oticon Own fitting ranges\*









# **TC/ITEHS/ITEFS** 90

125 250 500 1k 2k



#### OSPL90 (peak)

Ear simulator119 dB SPL2cc coupler108 dB SPL

Full-on gain (peak)Ear simulator53/57 dB2cc coupler42/47 dB

OSPL90 (peak) Ear simulator 128 dB SPL 2cc coupler 119 dB SPL

Full-on gair (peak)Ear simulator58/64 dB2cc coupler50/56 dB

OSPL90 (peak) Ear simulator 120 dB SPL 2cc coupler 109 dB SPL

#### **Full-on gain (peak)** Ear simulator 58 dB

2cc coupler46 dB

OSPL90	(peak)
Ear simulator	129 dB SPL
2cc coupler	119 dB SPL

4k 8k Hz

#### Full-on gain (peak)

Ear simulator63 dB2cc coupler54 dB

<b>0</b> S	PL90	(p	e	al	k)	
			_			

Ear simulator	134 dB SPL
2cc coupler	126 dB SPL

#### Full-on gain (peak)

Ear simulator72 dB2cc coupler64 dB

## Oticon Own colors



C001

Beige





C003



CO05 Black

Transparent Red

Shell





Transparent Blue Shell

Transparent Shell

COO2 C Light Brown Mediu

COO3 Medium Brown

Dark Brown

\* Fitting ranges are based on Oticon Own 1. Fitting ranges for Oticon Own 2, Own 3, Own 4, and Own 5 is limited to 8 kHz. More details are available in the Technical data sheets.

# Connectivity & Accessories

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## Bluetooth® technology in hearing aids

Bluetooth technology enables devices to speak together and transfer data wirelessly – be it speech, commands, or other types of data.

Bluetooth can refer to two different wireless technologies: classic Bluetooth technology and Bluetooth Low Energy technology. Bluetooth Low Energy is the standard used in Oticon hearing aids - because it is a newer technology that consumes much less power than classic Bluetooth, thus ensuring a longer battery life for the hearing aids.

- Oticon Own ITC/ITE hearing aids with Bluetooth Low Energy technology are Made for iPhone hearing aids and they also support hands-free communication,\* making it possible for your patients to make or receive handsfree phone and video calls from their iPhone and iPad. It also enables direct streaming, meaning your patients can stream sound directly from iPhone, iPad, and iPod touch.\*\*
- Android uses a protocol based on Bluetooth Low Energy called Audio Streaming for Hearing Aids (ASHA). ASHA makes it possible for Android users to enjoy direct streaming of phone calls, music, or any other audio from an ASHAcompatible phone.\*\*
- If hands-free communication or direct streaming are not supported by your phone or hearing aids, ConnectClip is the perfect intermediary device to connect the phone to the hearing aids and enjoy hands-free calls. ConnectClip acts as a microphone, and streams sound between the hearing aids and other sound devices.

To know more about the compatibility of Oticon Own with smartphones, apps and connectivity products, consult oticon.com/support/compatibility



\* Hands-free communication is available with iPhone 11 or later running iOS 15.2 or later, and iPad running iPadOS 15.2 or later

\*\* Only available in styles with 2.4 GHz. See which hearing aids and devices are compatible here: oticon.com/support/compatibility

# \*

#### DID YOU KNOW

Oticon Own with Bluetooth Low Energy technology is available in the ITC and ITE styles. They are Made for iPhone hearing aids, and they also support hands-free communication,\* making it possible for your patients to participate in hands-free phone and video calls from their iPhone and iPad. Oticon Own is also compatible with the Android protocol for Audio Streaming (ASHA), meaning your patients can stream sound directly from both their iPhone, iPad, iPod touch, and select Android devices.\*\*

### Hands-free communication

Oticon Own ITC/ITE hearing aids\* with Bluetooth Low Energy technology are Made for iPhone hearing aids that also support hands-free communication,\*\* making it possible for your patients to make or receive hands-free phone and video calls from their iPhone and iPad. Your patients can call their loved ones on the road, take calls when they are out exercising, and enjoy all the possibilities of multi-tasking with their hands free.

#### How it works:

- Your patient makes or receives a call on their iPhone or iPad
- The call audio is sent wirelessly to their hearing aids
- The hearing aid's microphones capture your patient's voice
- Their voice is sent to the iPhone or iPad

## Streaming directly from a mobile device

Oticon Own ITC/ITE styles are available with Bluetooth Low Energy technology, offering an immersive streaming experience with excellent sound quality from mobile devices.

#### iPhone, iPad and iPod touch

Oticon Own is a Made for iPhone hearing aid. It can directly connect to iPhone, iPad and iPod touch for streaming audio and thereby act as wireless headphones – without the need for an intermediary device.

#### **Android devices**

Oticon Own also supports Audio Streaming for Hearing Aids (ASHA) and can therefore stream audio directly from Android devices that also support ASHA.\* Users of devices that do not support ASHA should use the ConnectClip as an intermediary device.





<sup>Made for</sup> **∉**iPhone | iPad | iPod

Works with android a

\* Only available in styles with 2.4 GHz. See which hearing aids and devices are compatible here: oticon.com/support/compatibility \*\* Hands-free communication is available with iPhone 11 or later running iOS 15.2 or later, and iPad running iPadOS 15.2 or later.



#### TELL YOUR PATIENT

Bluetooth Low Energy technology in the ITC and ITE styles\* makes it possible for your patients to make or receive hands-free phone and video calls from their iPhone and iPad\*\* - without the need for the ConnectClip.



#### TELL YOUR PATIENT

Stream sound directly from iPhone, iPad, iPod touch, and select Android devices to your Oticon More hearing aids.\*

## Control the hearing aids with Oticon ON

Oticon ON provides users of Oticon Own styles with 2.4 GHz a discreet way to control their hearing aids. With the app, users can:

- Adjust the volume of their hearing aids independently and switch between listening programs, including Oticon MyMusic
- Keep an eye on their battery level
- Find their hearing aids if they lose them
- Suppress environmental noise using the MoreSound Booster function whenever they need some extra help
- Fine-tune the sound when streaming music or a movie, for a personalized listening experience thanks to the streaming equalizer feature
- Handle wireless accessories paired with their hearing aids such as TV Adapter, EduMic or ConnectClip
- Set personal listening goals and track the progress of their daily hearing aid use through HearingFitness™

# Enjoy remote fittings with Oticon RemoteCare

With Oticon RemoteCare, users of Oticon Own styles with 2.4 GHz can enjoy remote support from their hearing care professional in real time. When it's not possible or convenient for them to physically visit the clinic, they can get their hearing aids adjusted or receive counseling through an app on their mobile device – while the hearing care professional connects to their hearing aids through Oticon Genie 2.

Through the app, the user can have an audio or video conversation – or just chat – with their hearing care professional. They can also get their hearing aids adjusted in real-time. Oticon RemoteCare also makes it possible to fine-tune the settings to fit a specific environment where a user might be struggling – be it at home with their spouse, at their workplace, or in a noisy restaurant setting.



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#### TELL YOUR PATIENT

Connect your smartphone to your hearing aids to control volume, switch programs, check battery level - and more - just with a tap of your finger.

oticor



#### TELL YOUR PATIENT

You can use this app to get your hearing aids adjusted or receive extra support whenever you need, from the comfort of your own home.

# Oticon MyMusic – a dedicated program for music lovers

With Oticon MyMusic, we have taken a giant step towards overcoming one of the toughest challenges for hearing aids: making an outstanding music listening experience.

Co-created with music lovers who have different types of hearing loss, Oticon MyMusic is tailor-made to deliver excellent music performance, with musicoriented 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.

## An extensive range of connectivity options

Oticon Own hearing aids with 2.4 GHz can connect wirelessly to a wide range of connectivity options:

- **ConnectClip** Transforms hearing aids into a wireless headset and also works as a remote microphone
- **TV Adapter** Streams TV sound directly to hearing aids without affecting the TV volume level
- Remote Control Helps people discreetly control their hearing aids
- **Phone Adapter** Connects hearing aids to a landline phone, together with the ConnectClip
- EduMic Helps people overcome distance and noise, by acting as a remote microphone, a telecoil receiver, or a media streamer





\* 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 music or streamed music.

oticon



#### TELL YOUR PATIENT

Expand the benefits of your hearing aids using Oticon connectivity devices.

## Calling hands-free with ConnectClip

#### From mobile devices

Oticon Own hearing aids with 2.4 GHz, used together with ConnectClip, allow for hands-free, two-way audio streaming of conversations from any device supporting classic Bluetooth technology. The hearing aids are transformed into a wireless headset, and the user's voice is picked up by ConnectClip's built-in directional microphones.

#### From a landline

Phone Adapter 2.0, used together with ConnectClip, allows for hands-free, two-way audio streaming of conversations between a landline and the hearing aids.

# Streaming from a computer or tablet with ConnectClip

Using ConnectClip, users can stream any sound wirelessly from their computer to their hearing aids – for instance music or an audiobook. They can also have video conversations, as their voice is streamed back to the computer using ConnectClip's microphone.

ConnectClip can be directly paired to the computer or via the BTD 800 USB dongle if the PC does not have integrated Bluetooth wireless technology.

## Streaming from a TV with TV Adapter 3.0

TV Adapter 3.0 enables users of Oticon Own with 2.4 GHz to wirelessly stream the sound from their TV or home entertainment system directly to their hearing aids. Users can set the volume to their preferred level – while keeping the TV volume comfortable for others in the room – and enjoy a quality listening experience free from the distraction of surrounding noise.

TV Adapter 3.0 offers multiple options to connect to TVs and other audio sources.

TV Adapter 3.0 can simultaneously stream to as many Oticon hearing aids as needed. Users of Oticon Own hearing aids with 2.4 GHz can pair with up to 4 TV Adapters, and use the Oticon ON app to select the one they wish to stream sound from.







#### TELL YOUR PATIENT

Stream video conversations between your computer and your hearing aids.



#### TELL YOUR PATIENT

Listen to your TV at the volume that you prefer, while keeping it comfortable for your family.

## Streaming from a hearing loop system



Oticon Own hearing aids with an optional telecoil\* can stream audio from hearing loop systems without any additional device.

## Making the most of education with EduMic

EduMic enables users to transmit their teacher's voice clearly and directly to their hearing aids. It has been shown to improve speech understanding in noisy and reverberant environments, for an enhanced learning experience.

EduMic streams sound from numerous media outlets directly to hearing aids. It also connects to existing FM classroom systems.



\*Telecoil and 2.4 GHz cannot coexist.



#### **TELL YOUR PATIENT**

Get access to sound from hearing loop systems in public places such as theaters, museums, lecture halls, or cinemas.



#### TELL YOUR PATIENT

Transmit your teacher's voice directly to your hearing aids to overcome distance and noise.

# Hearing from a distance with ConnectClip or EduMic

Oticon ConnectClip and EduMic are both remote microphones that can stream another person's voice directly to Oticon Own hearing aids with 2.4 GHz. They can help the user hear what's important, even in crowded and noisy environments, or when the speaker is some distance away.

Using the Oticon ON app, users can also adjust environmental noise to focus more easily on their conversation partner.

# Controlling hearing aids with Remote Control 3.0

Remote Control 3.0 is a small device that gives users discreet control over their Oticon hearing aids. It makes it possible to easily adjust volume, switch between programs, or mute the hearing aids without touching them. Remote Control 3.0 is especially beneficial for users with dexterity challenges, or for people in need of a discreet way to control their hearing aids in social situations.





#### TELL YOUR PATIENT

Hear the voice of your conversation partner clearly, directly in your hearing aids, even at a distance or in noisy environments.



#### TELL YOUR PATIENT

Control your hearing aids easily using a small and discreet device.

#### life-changing **technology**





Oticon is part of the Demant Group.