Engaging patients and empowering lives

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oticon
life-changing technology

Learner outcomes

After this course, participants will be able to:

- . . . explain three key benefits of Oticon’s deep neural network.
- . . . list three product families in Oticon’s product portfolio.
- . . . describe two updates to Oticon connectivity options for Oticon Intent™.

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Risks / benefits

- The applicability and accuracy of the course content may vary by the clinical, geographical, and cultural context; you should evaluate the course accordingly.
- As healthcare is rapidly evolving, new findings may change the validity of the information presented in this course. Providers should always consult the latest research and guidelines from professional associations.
- The interventions discussed in this course may be limited in generalizability, requiring practitioners to consider specific individual and population factors.
- The course may not cover all possible risk factors, diagnostic methods, or treatment options, and complex cases may require additional considerations.
- Healthcare providers should apply cultural competence and sensitivity to ensure effective and respectful care based on their patients' diverse needs.
- Providers should always evaluate the limitations of diagnostic and screening tools, considering their potential for false results as well as any ethical implications.
- It is the responsibility of course participants to critically evaluate the evidence from multiple sources to guide professional practice.

Supporting the clinical experience

Performance without compromise

No compromises

The right support all day in every situation

Oticon Intent™

Five facts about **Oticon's DNN**

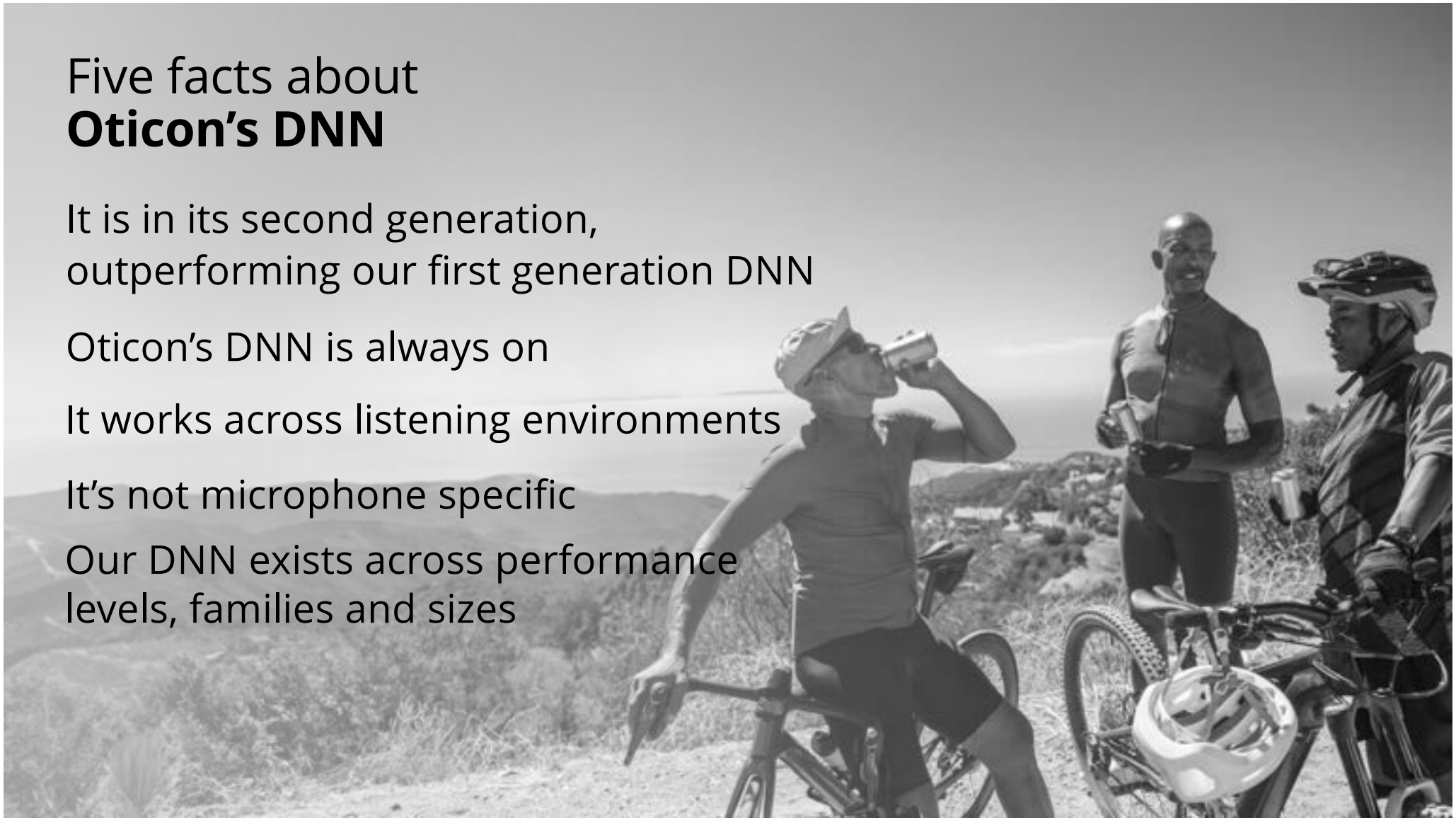
It is in its second generation, outperforming our first generation DNN

Oticon's DNN is always on

It works across listening environments

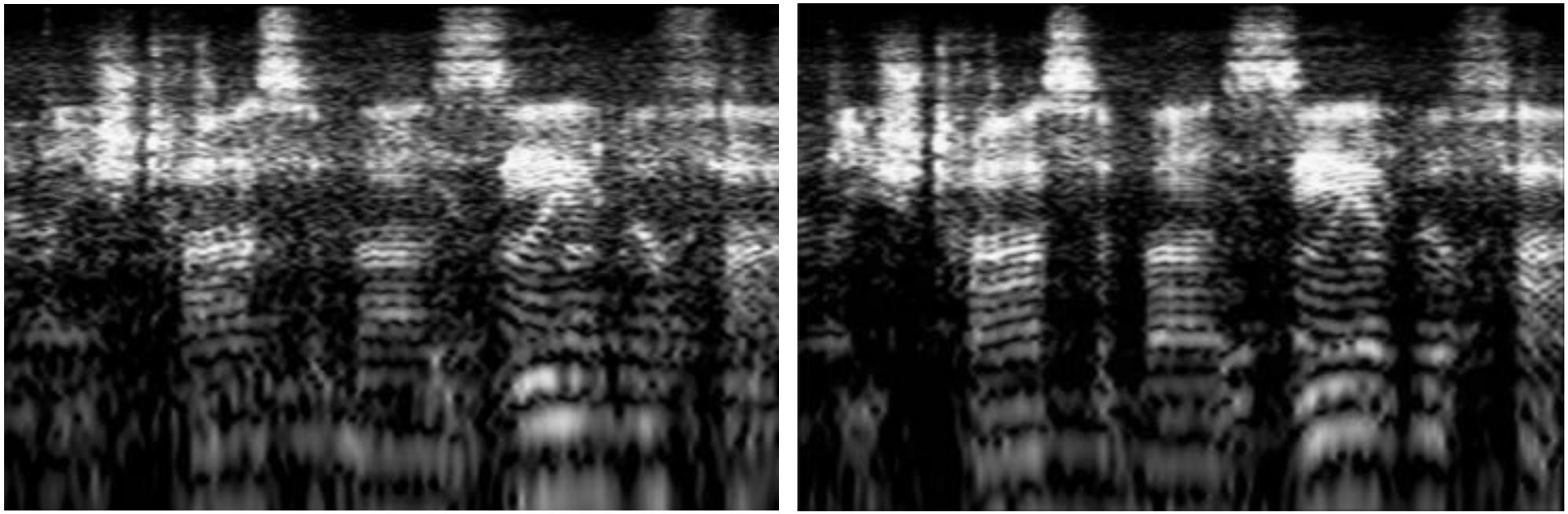
It's not microphone specific

Our DNN exists across performance levels, families and sizes



Oticon Real™ versus Oticon Intent™

Difference in processing for intimate conversations



“The street was very busy"

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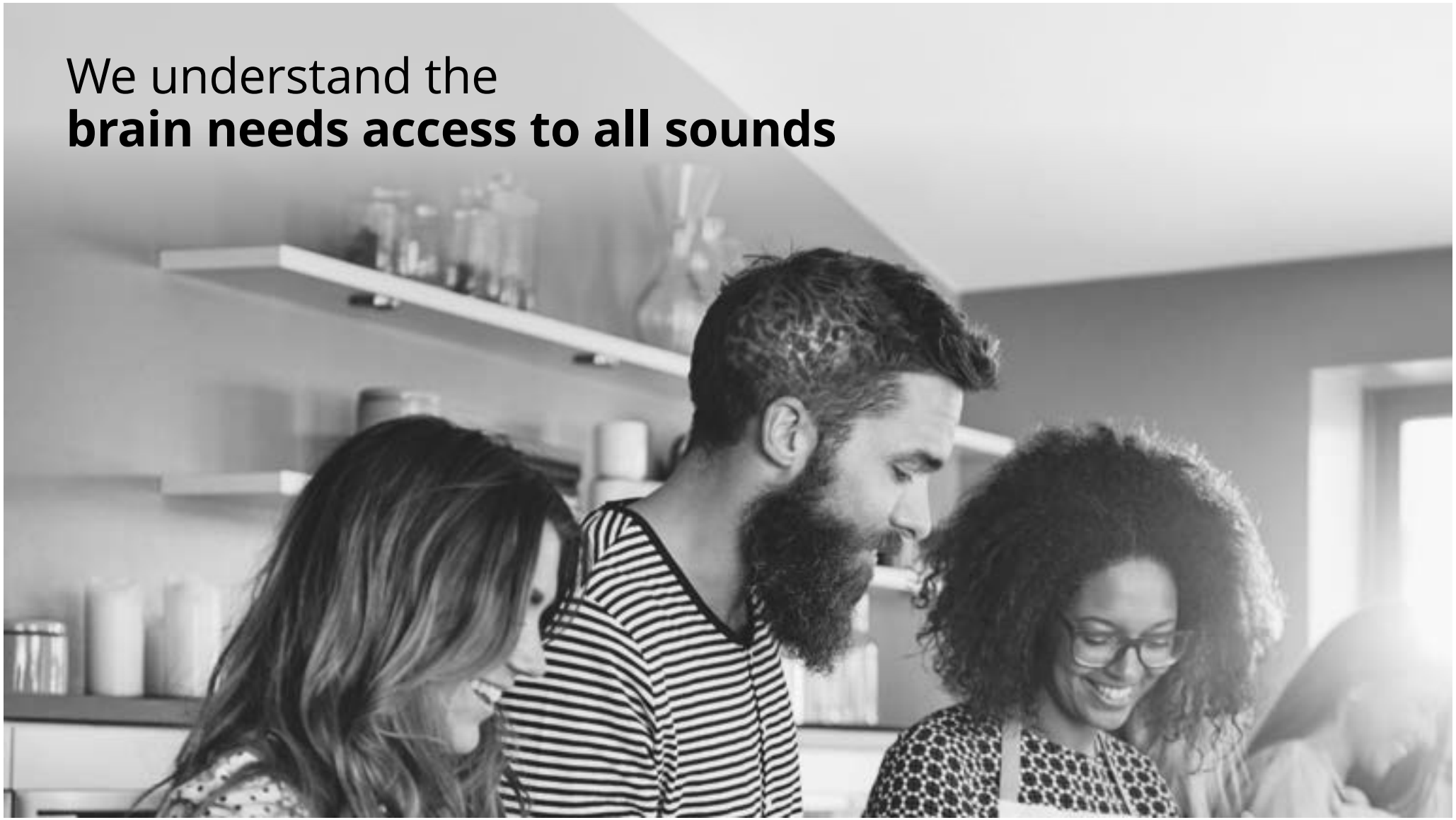
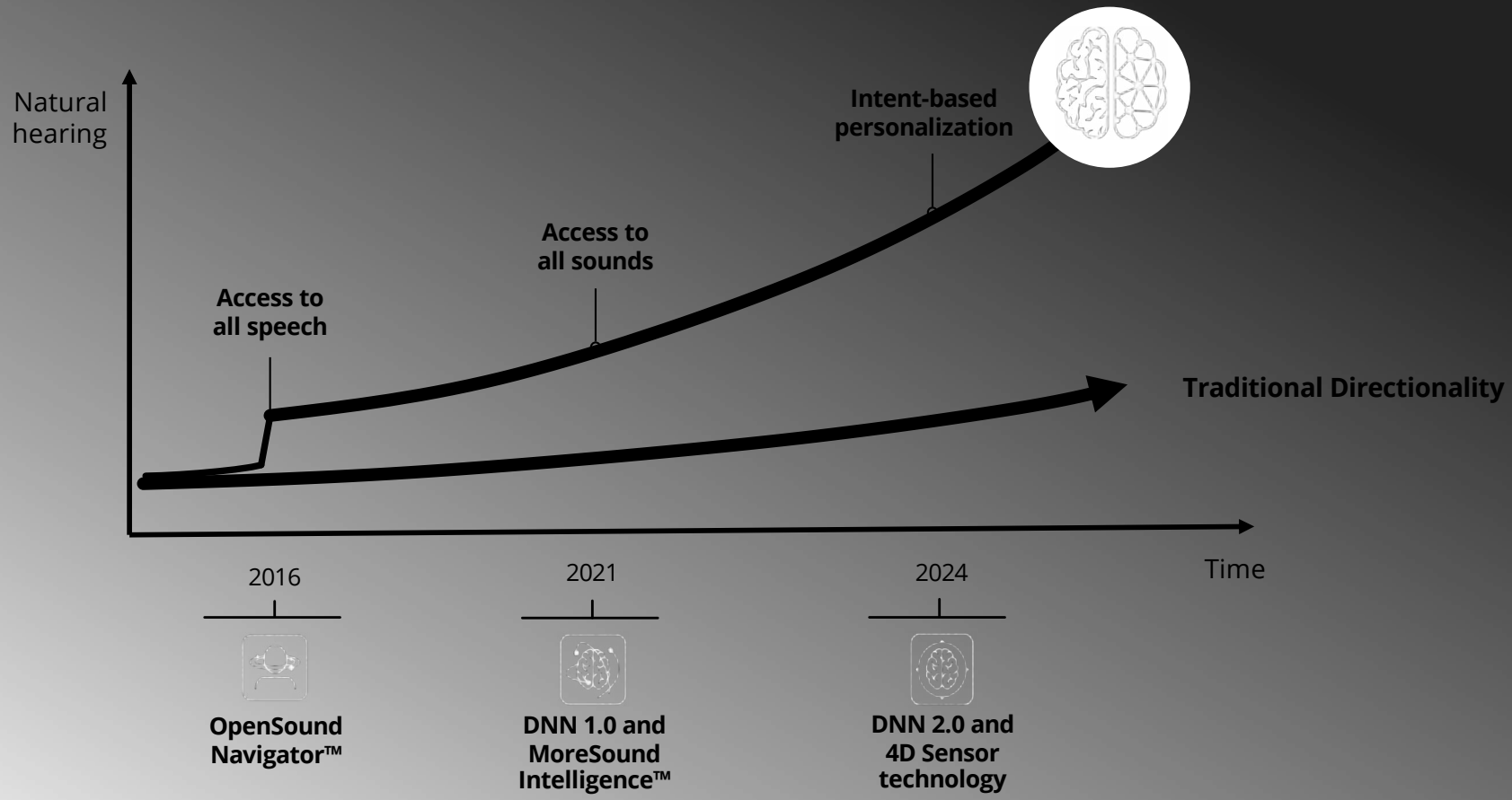
Eriksholm Research Center

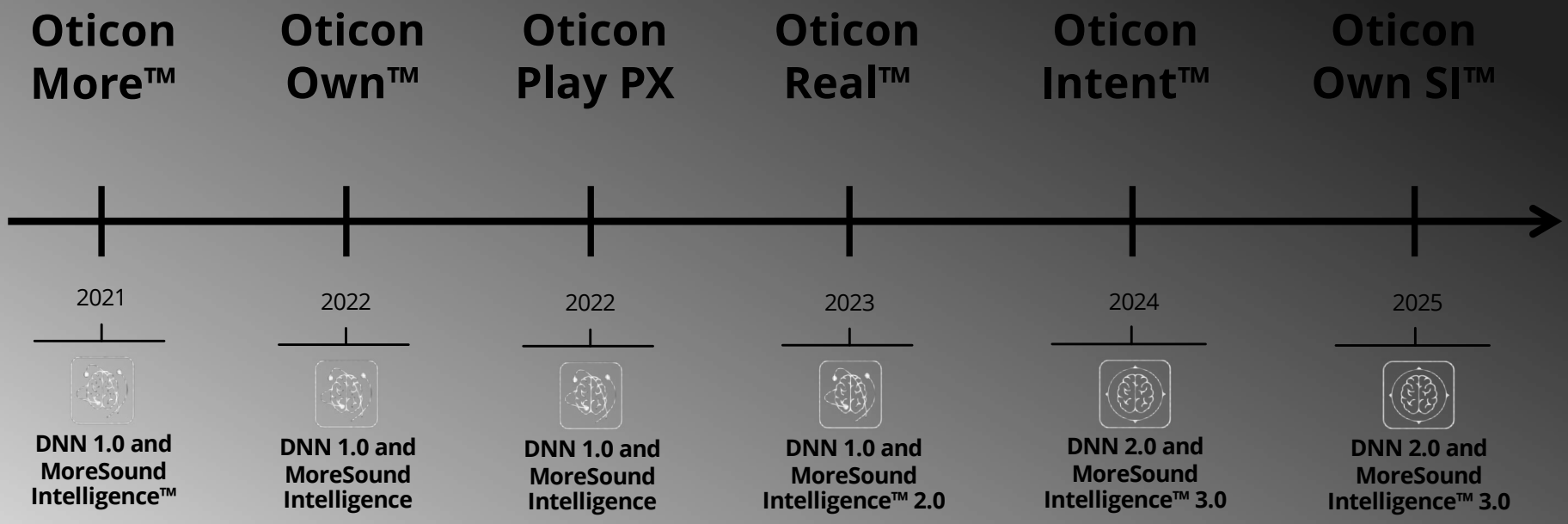

We understand the
brain needs access to all sounds

Our DNN is trained to
support ”open sound”

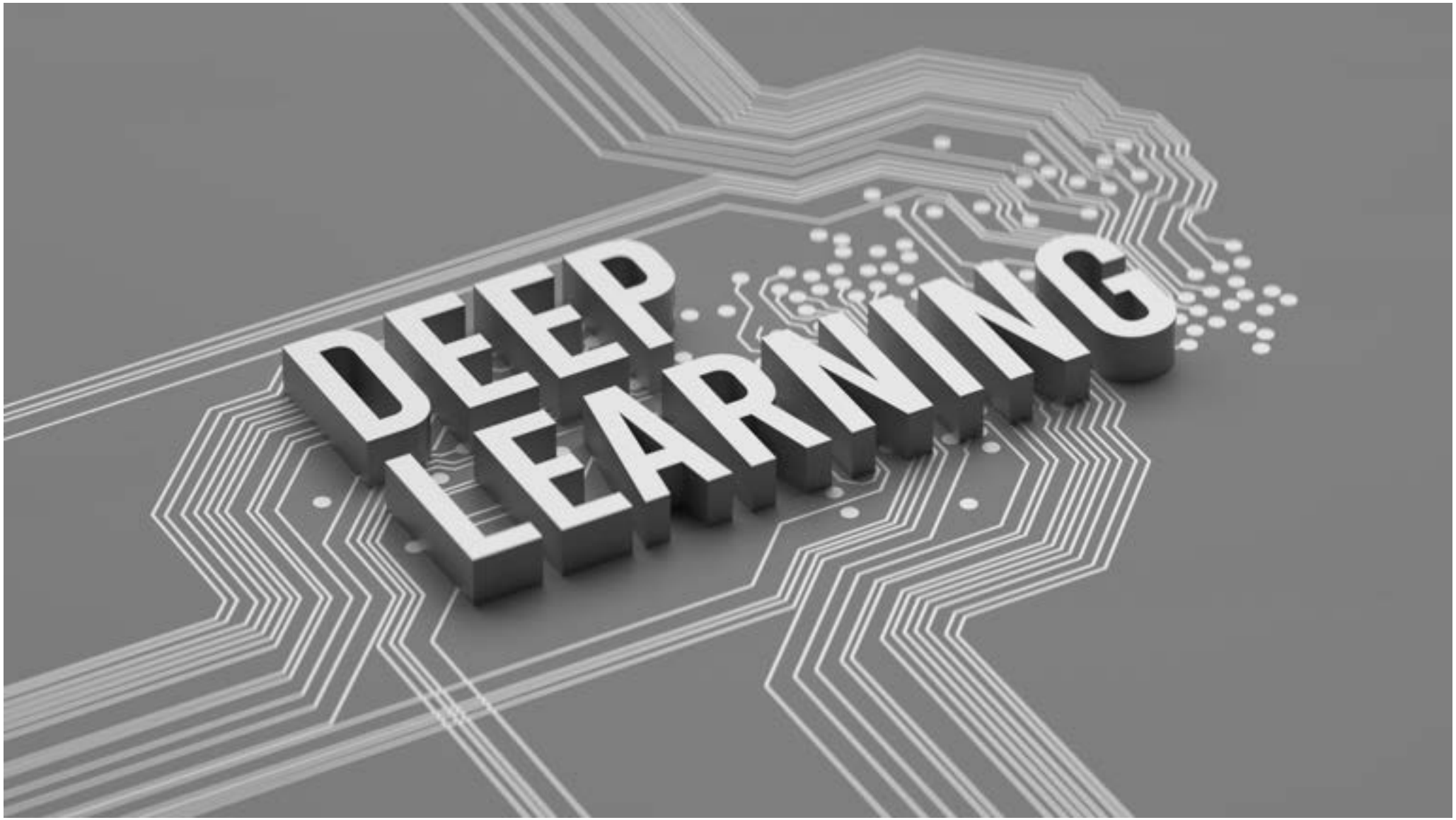
BrainHearing™ Innovations



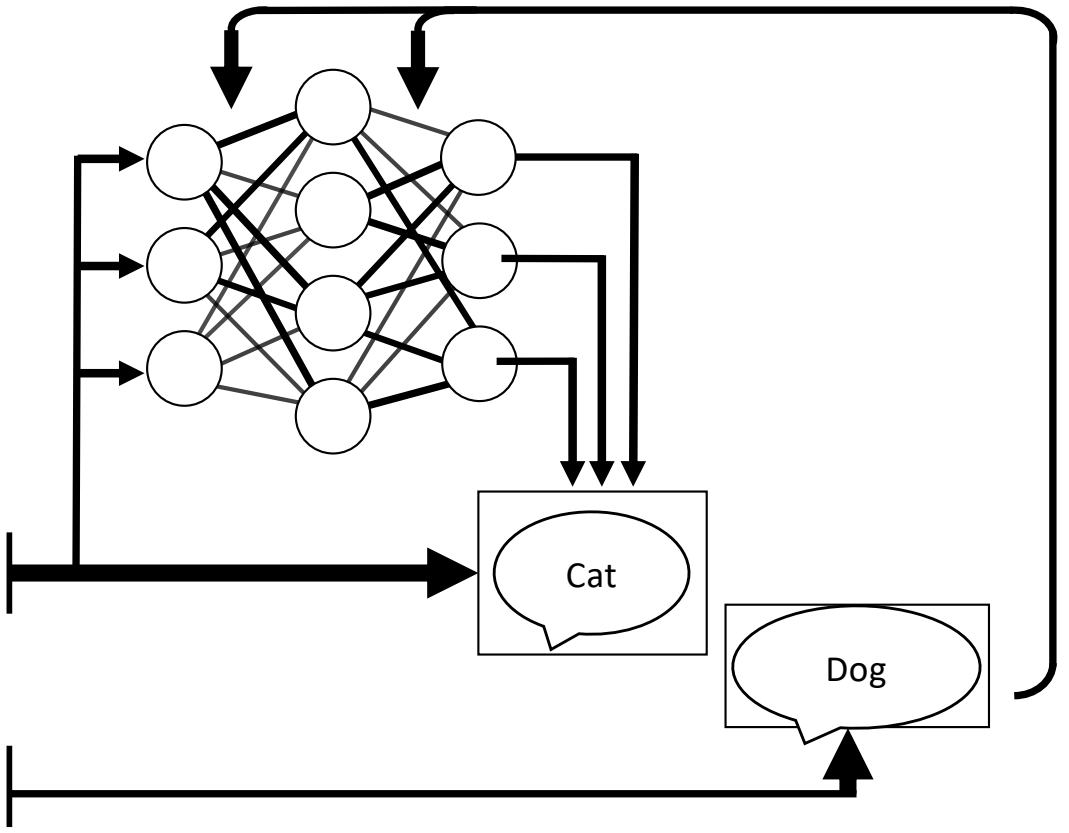
DNN evolution



How the Oticon DNN works


DEEP
LEARNING

Error used to update connections



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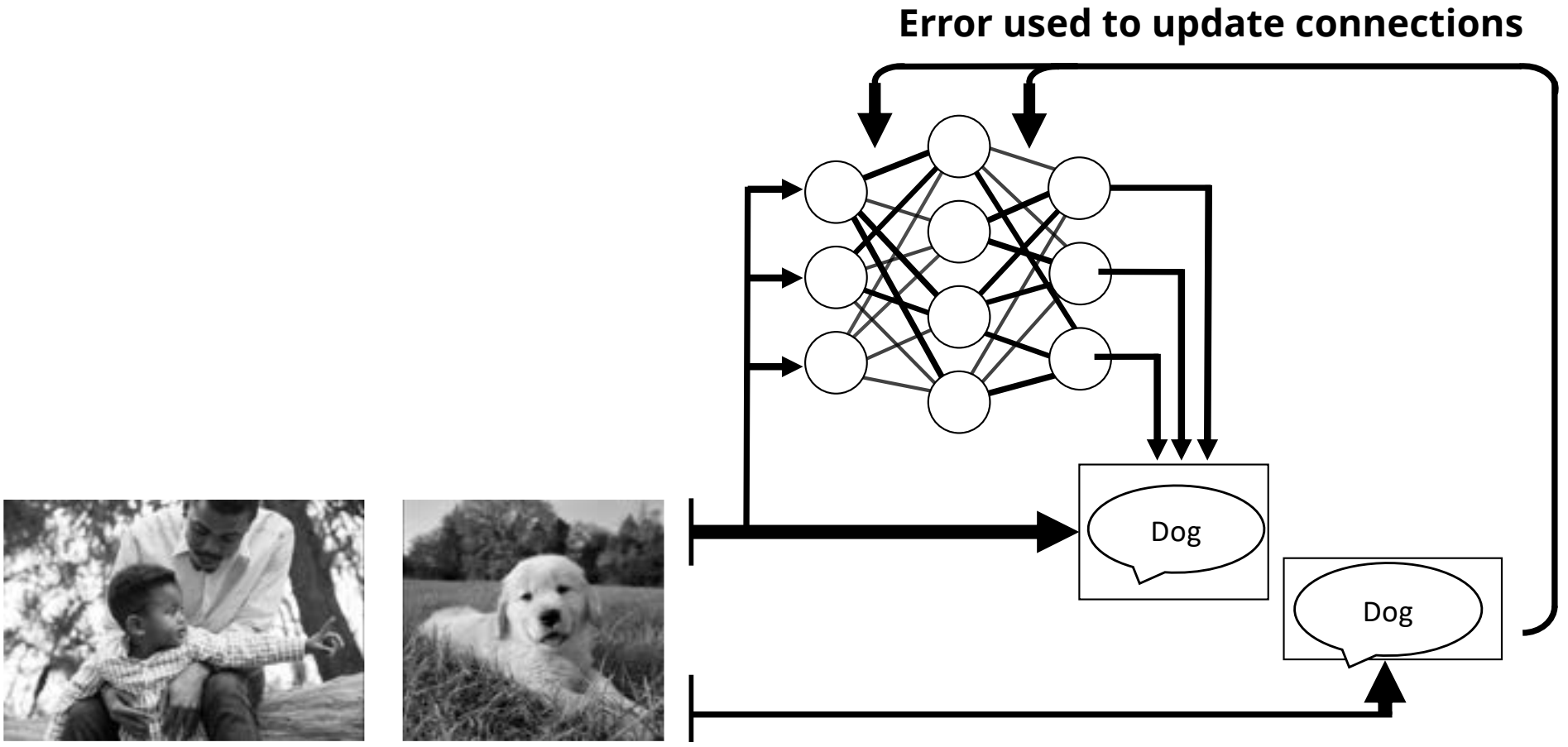

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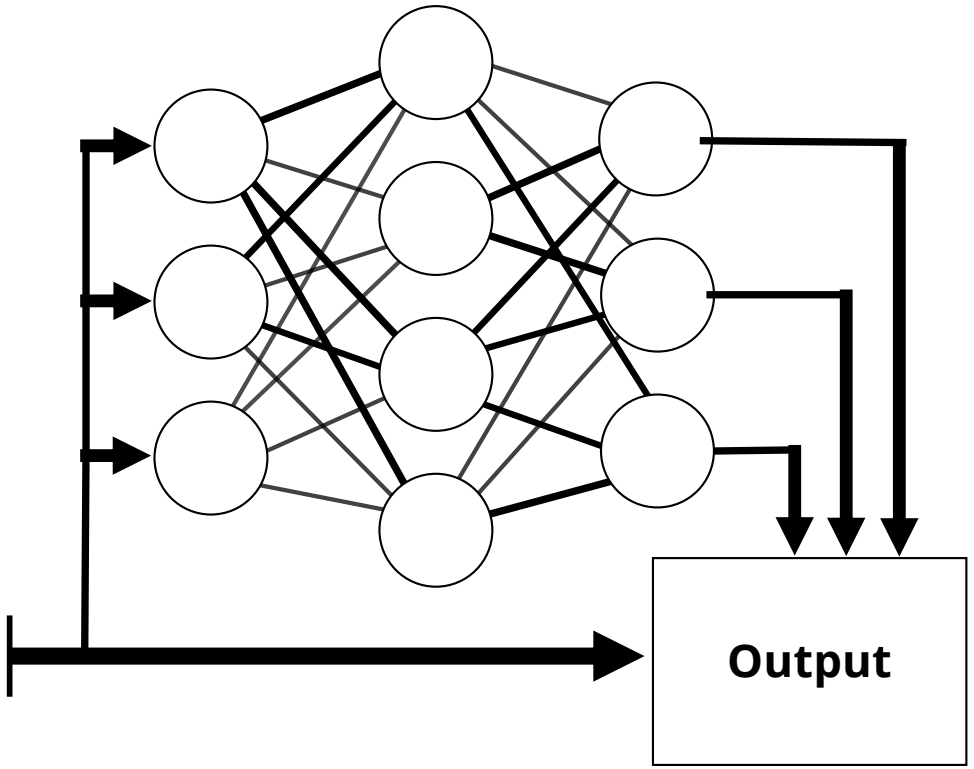
- Computing system that has an architecture **modeled on the human brain**

- A DNN **learns or improves** its ability to do tasks by considering examples

Speech in Noise



Andersen, et. al., 2021

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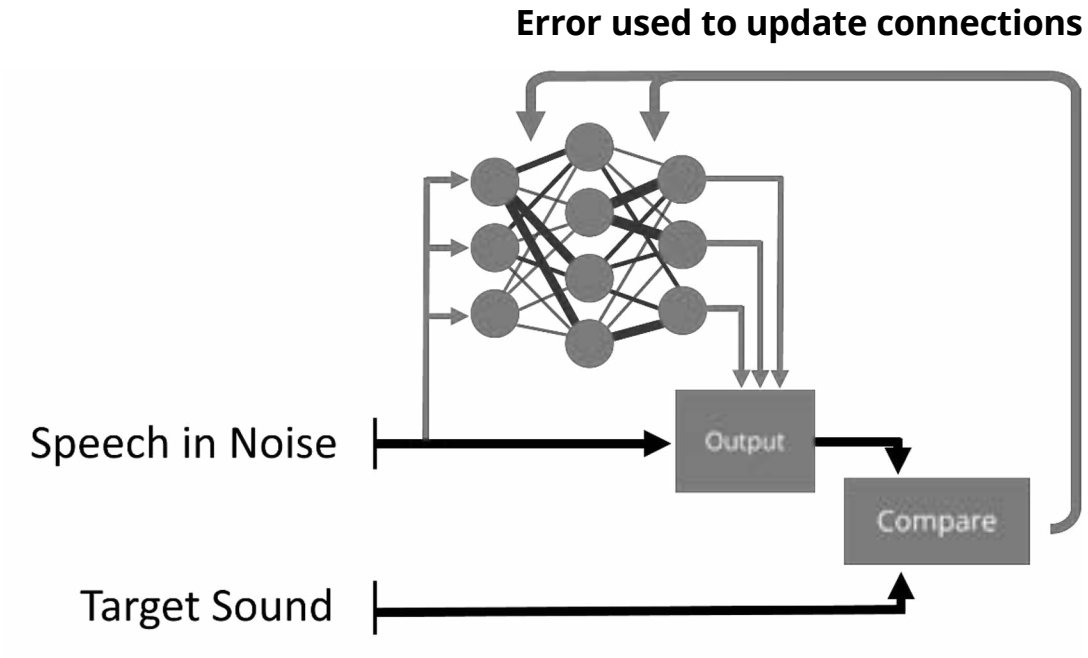
- Output is mathematically compared to the **clean target speech**

- Properly trained DNN can be used to **accurately process new sound**



Andersen, et. al., 2021

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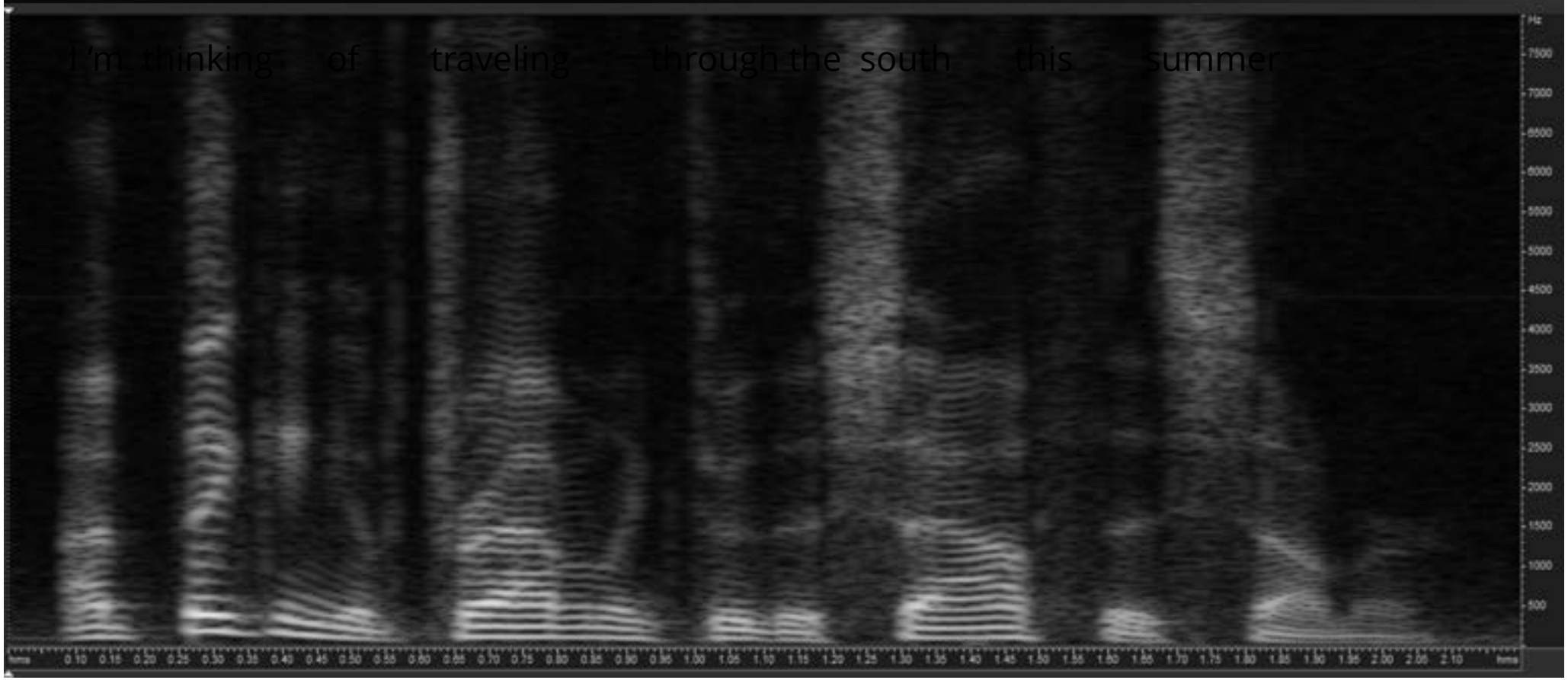
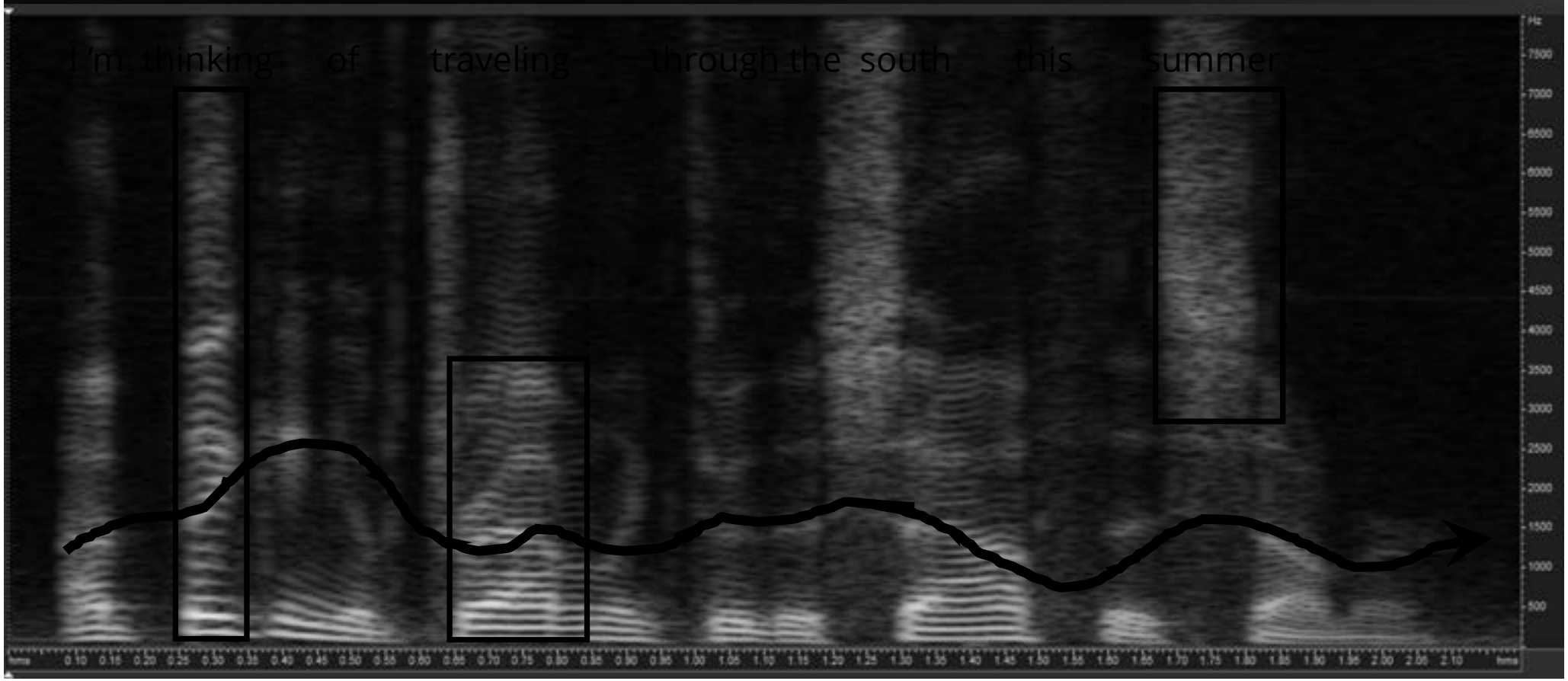
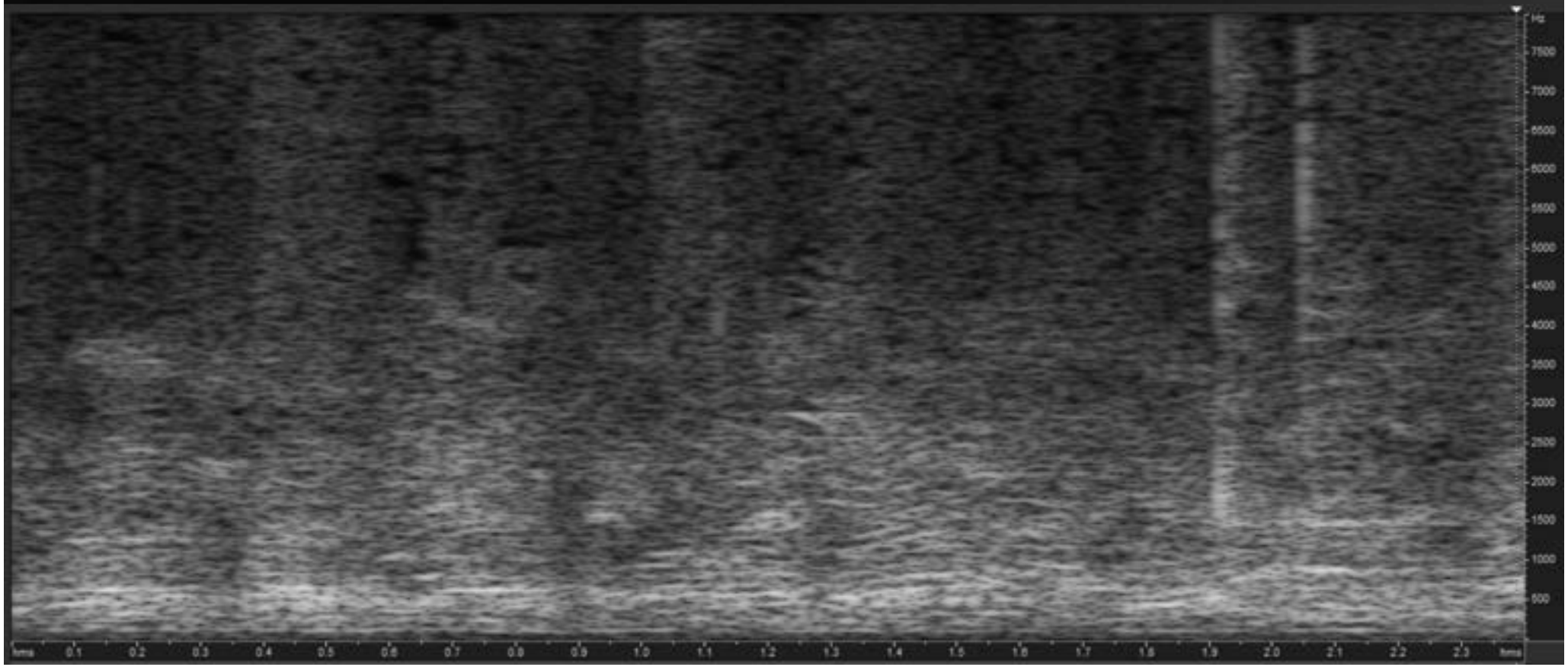
CLEAN SPEECH



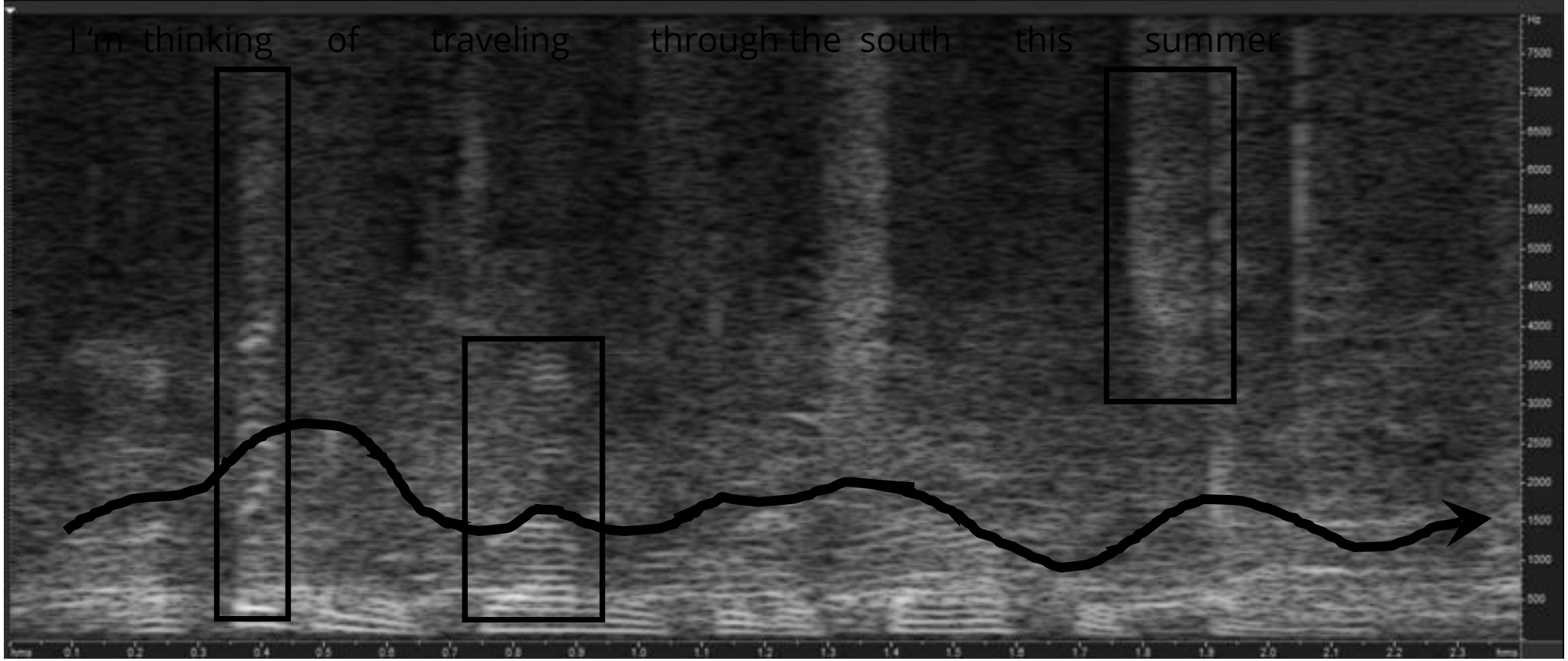
CLEAN SPEECH

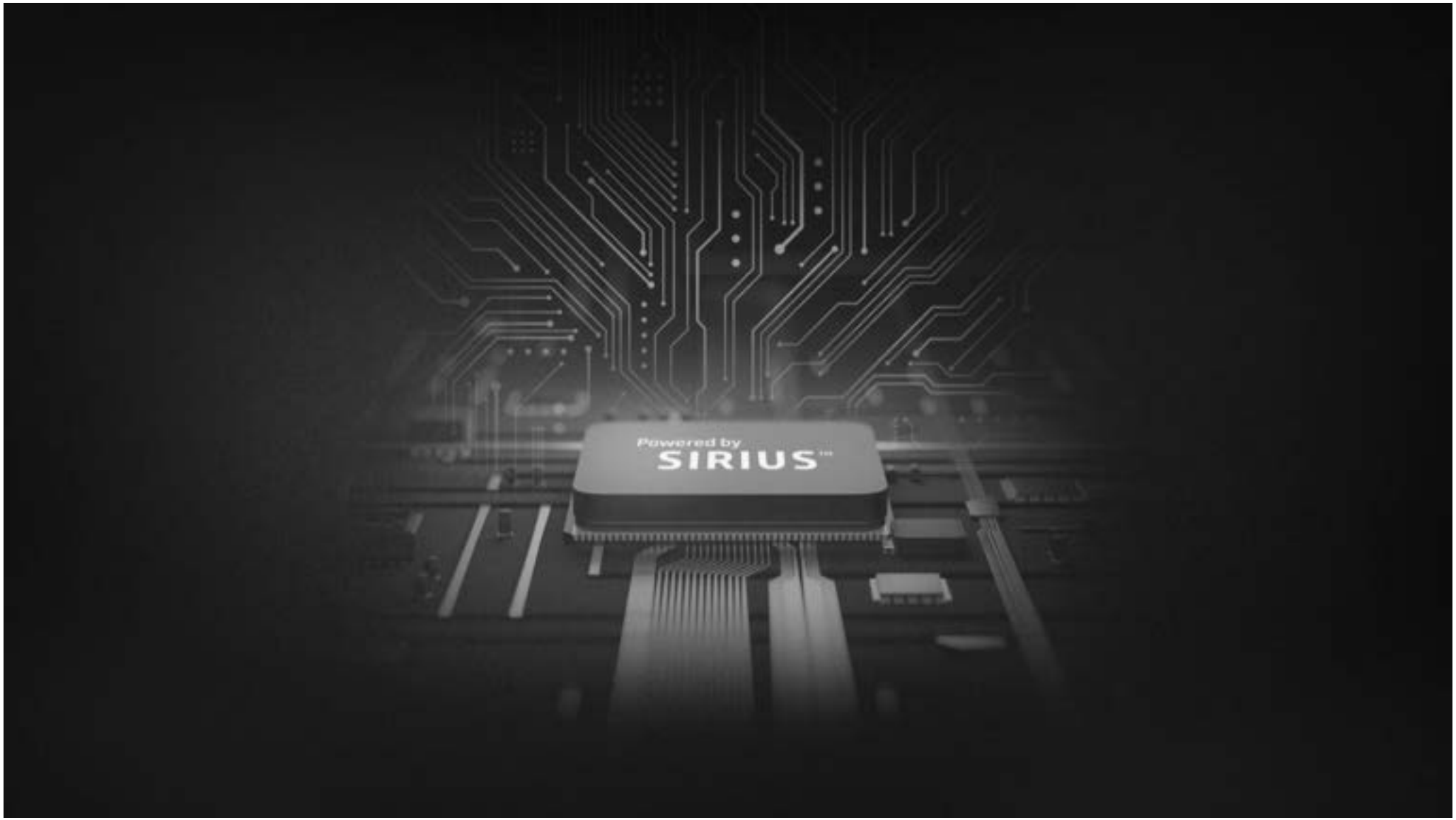


CAFÉ NOISE


Hz
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
hms
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
2.3
hms

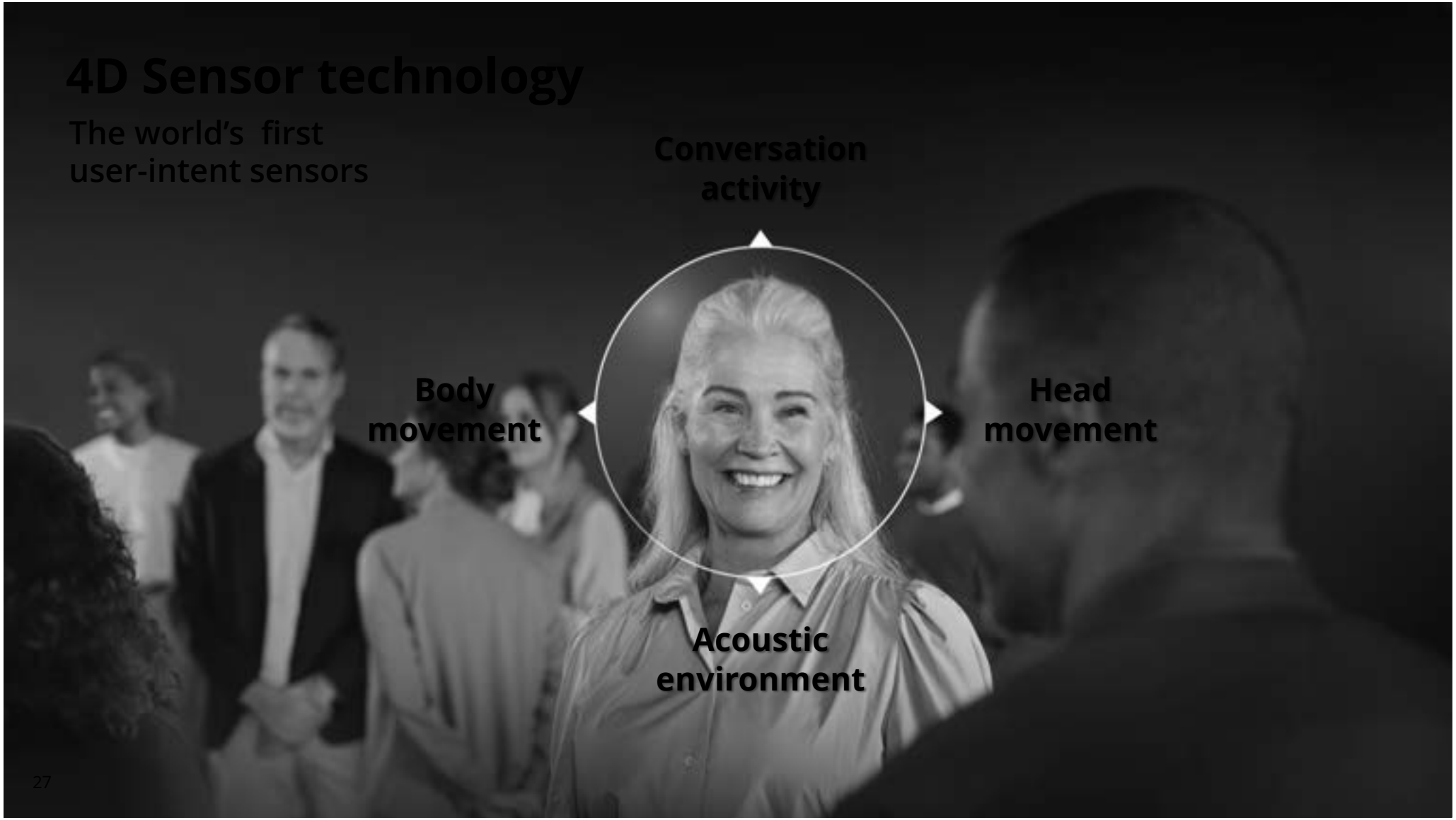
SPEECH + CAFÉ NOISE




Powered by
SIRIUS™

4D Sensor technology

The world's first
user-intent sensors



Our DNN evolution

Oticon Intent™

Oticon Own SI™

Oticon Own™

Oticon Play PX

Oticon Real™

Oticon More™

Oticon CROS & CROS PX*

*Not compatible for Oticon Own SI or Own

What’s new

Introducing Oticon Own SI™

The discreetness users want – the audiology they need

What do people with hearing loss expect from hearing aids?

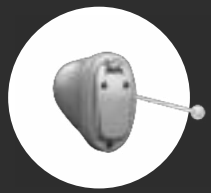
Discreetness?

Fit into active lifestyles?

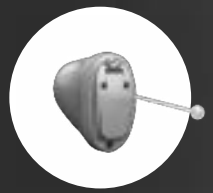
Concerns about behind-the-ear solution?

Two discreet styles

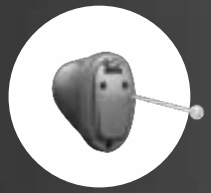
Made to match individual preferences



C001
Beige



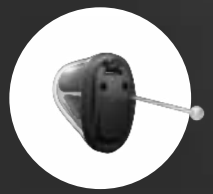
C002
Light Brown



C003
Medium Brown

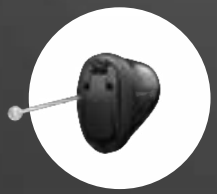
C004
Dark Brown

C005
Black



Transparent

Transparent
Blue



Transparent
Red

Oticon Own SI

Performance levels

Own SI 1 Own SI 2 Own SI 3 Own SI 4

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Invisible-In-Canal

(IIC)

	IIC
Battery	10
Fitting levels	**75 90**
NFMI	
Microphones	1
Push-button	

Tinnitus SoundSupport™ not available

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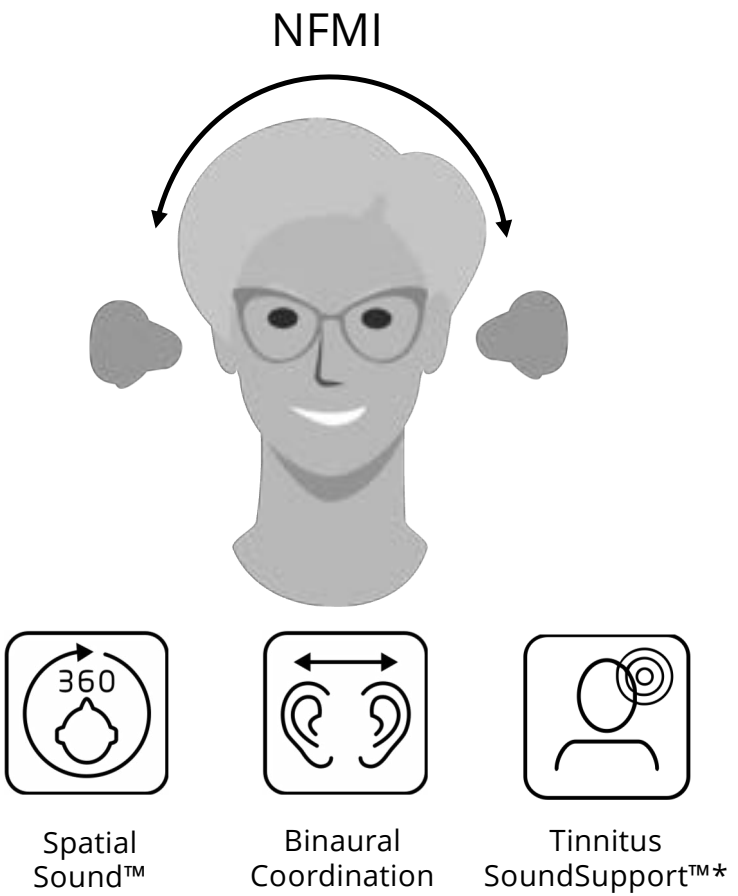
Near-Field Magnetic Induction (NFMI)

Travels well around the head & body

Low interference with other devices

Minimal power consumption



*NFMI and push-button required

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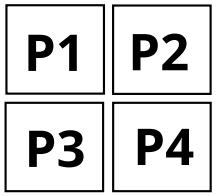
Completely-In-Canal
(CIC)

	CIC
Battery	10
Fitting levels	**75 90**
NFMI	o
Microphones	1
Push-button	o

Spatial Sound


Better-Ear Priority




Binaural Coordination


Tinnitus SoundSupport*

o Option

* If NFMI + push-button are selected

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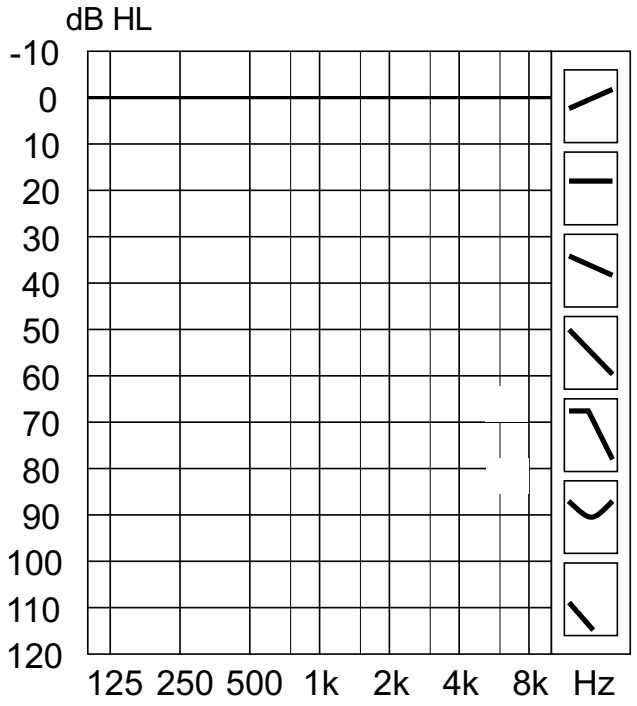
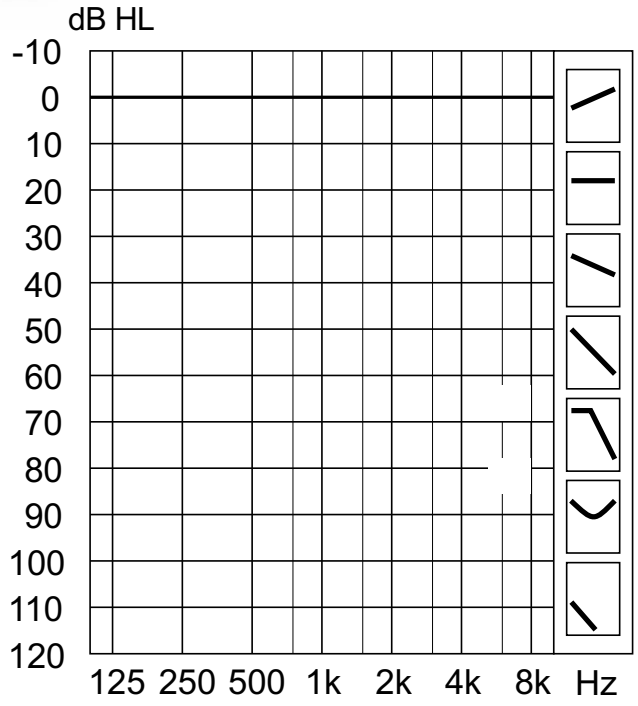
Fitting ranges



Oticon Own SI 1*

*Bandwidth 10 kHz



Oticon Own SI 2, Own SI 3, Own SI 4**

**Bandwidth 8 kHz

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Strong coating

IP68 rating of vital components

Battery performance

Expected number of hours

	75	90
	45 - 55	40 - 55
	50 - 55	30 – 55

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ProWax miniFit

Redesigned resulting in a 53% reduction in plastic consumption

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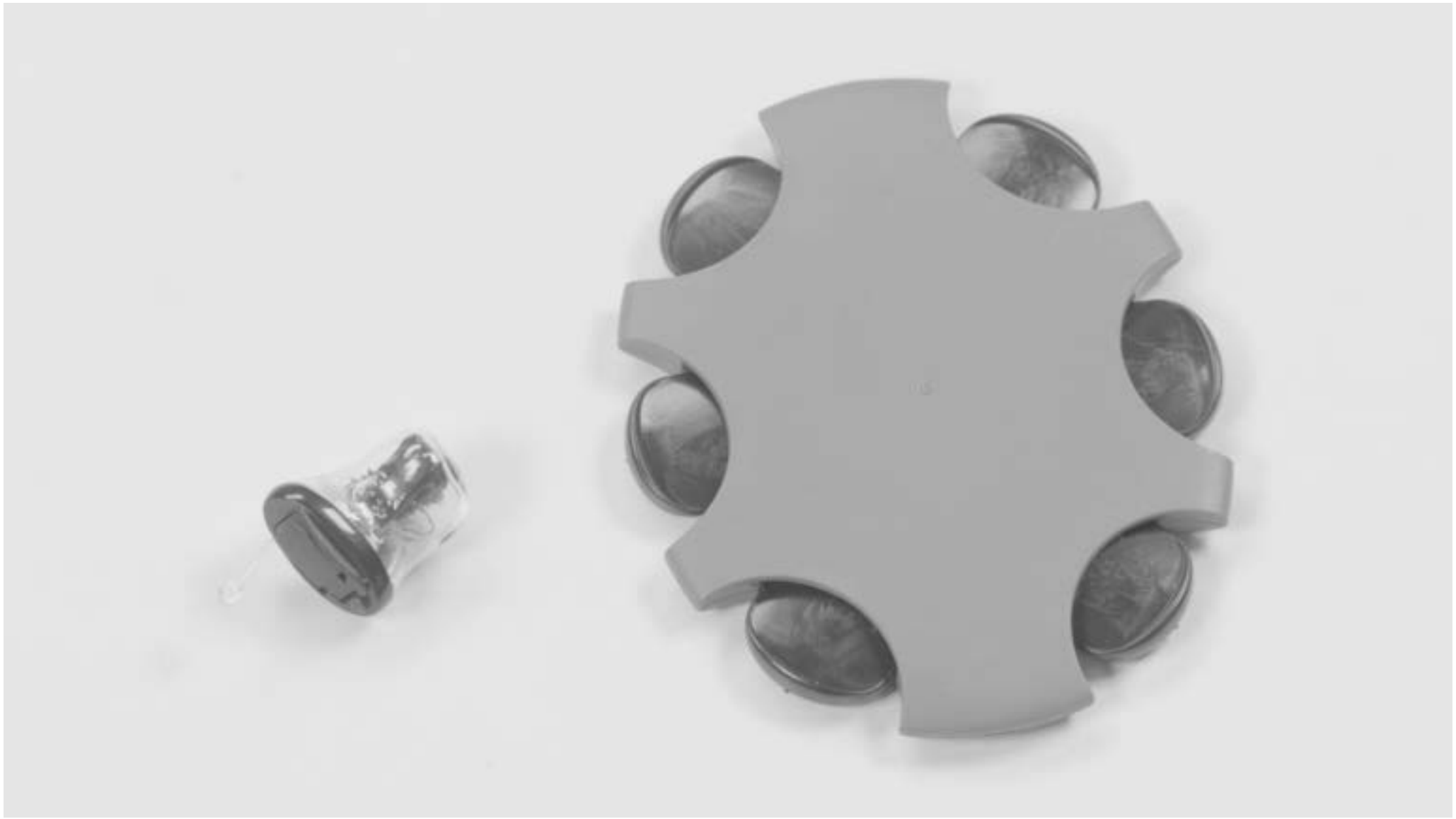

Microphone protection

T-Cap: IIC and CIC

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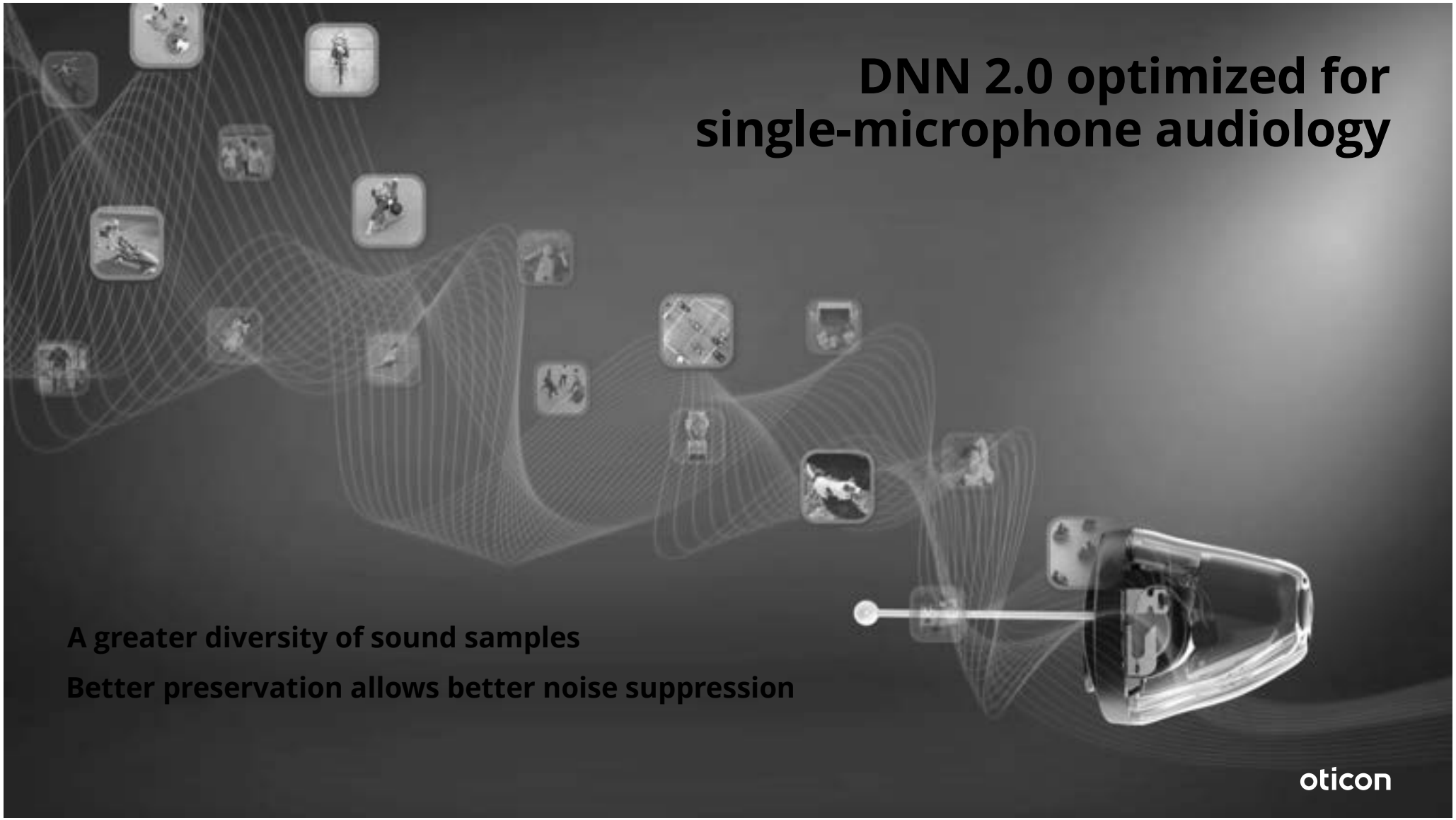
Small never sounded so good

Made to support the brain

Ultra-discreet solutions
– without compromising on premium audiology

Superior sound quality and **proven BrainHearing™** technology


DNN 2.0 optimized for single-microphone audiology
A greater diversity of sound samples
Better preservation allows better noise suppression
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Training the Deep Neural Network

Behind the scenes

Analysis of the output of the DNN analyzed in 256 frequency bands

Resulted in greater accuracy and a better signal-to-noise ratio in DNN 2.0

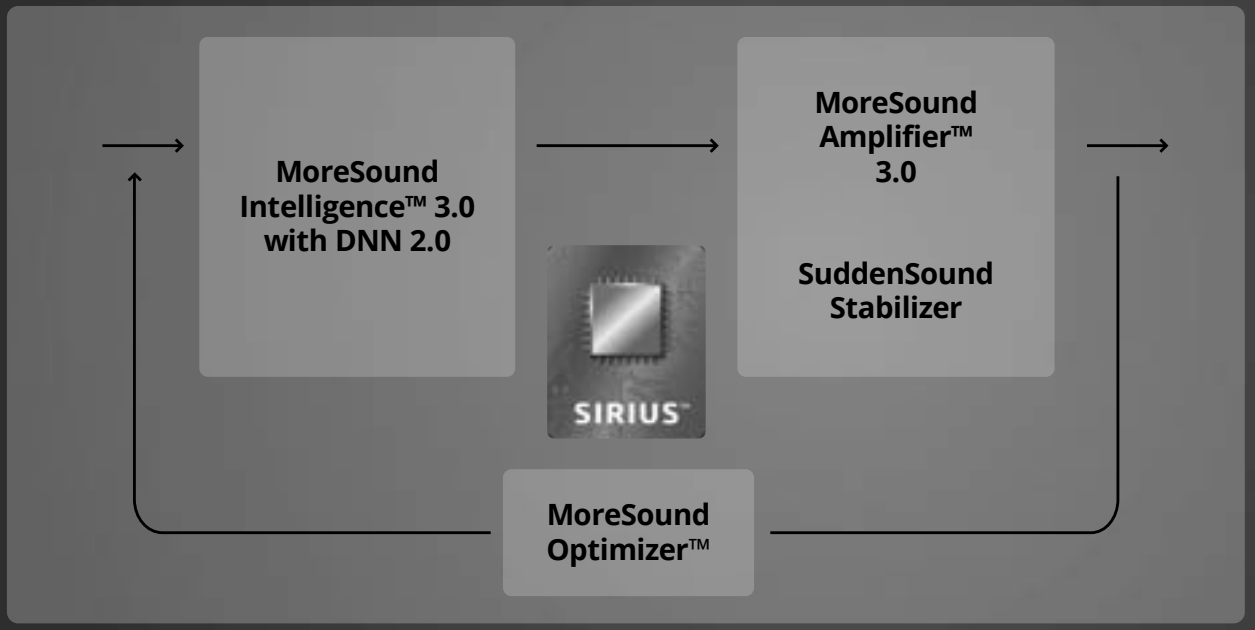
More advanced sound processing

More clarity and precision with MoreSound Technologies

Full sound scene and provides **clear contrast** and **balance**

Precise and **balanced sound amplification**

Detection and **prevention** of **feedback before** it **occurs**



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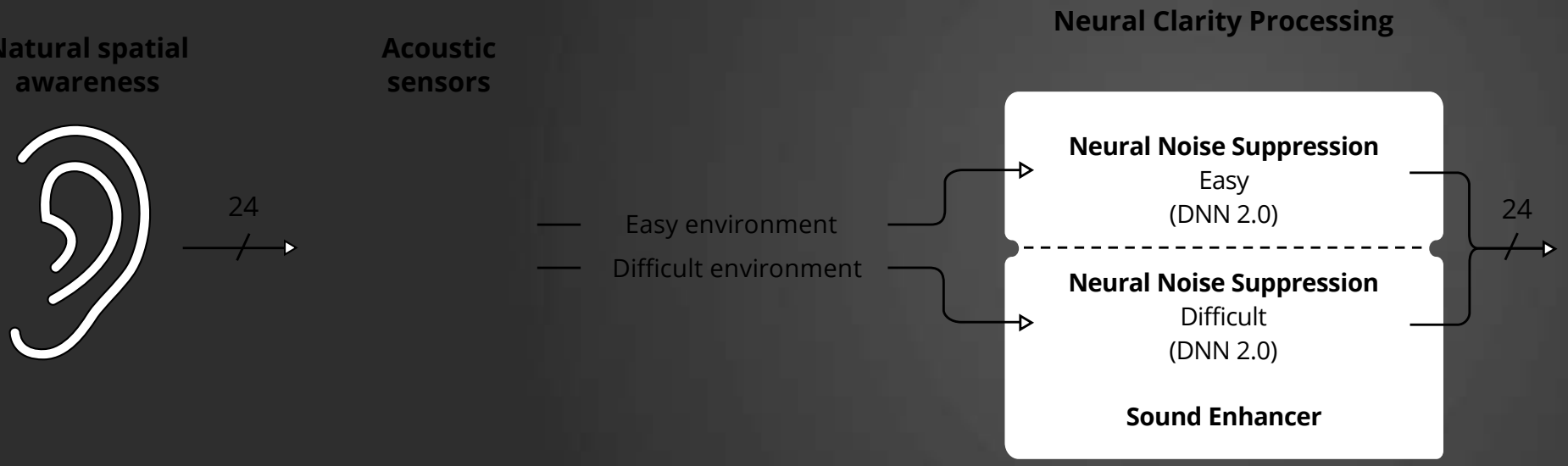
MoreSound Intelligence™ 3.0

The full sound environment – clearer than ever



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What's new in MoreSound Amplifier™ 3.0

for Oticon Own SI

SuddenSound Stabilizer

Expanded frequency bandwidth

Instant and precise balancing of sudden sounds

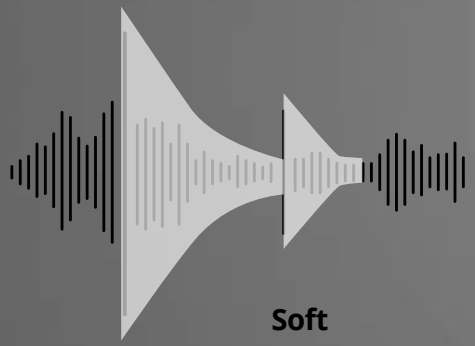
With SuddenSound Stabilizer

Instant attack and release

High precision

Better access to speech

Traditional technology
Affects speech audibility



SuddenSound Stabilizer
Preserves speech audibility

Sudden sound — Speech — Sudden sound —

More nuance

With expanded bandwidth

A frequency range
spanning from
80 to **10,000 Hz**

MoreSound Optimizer™

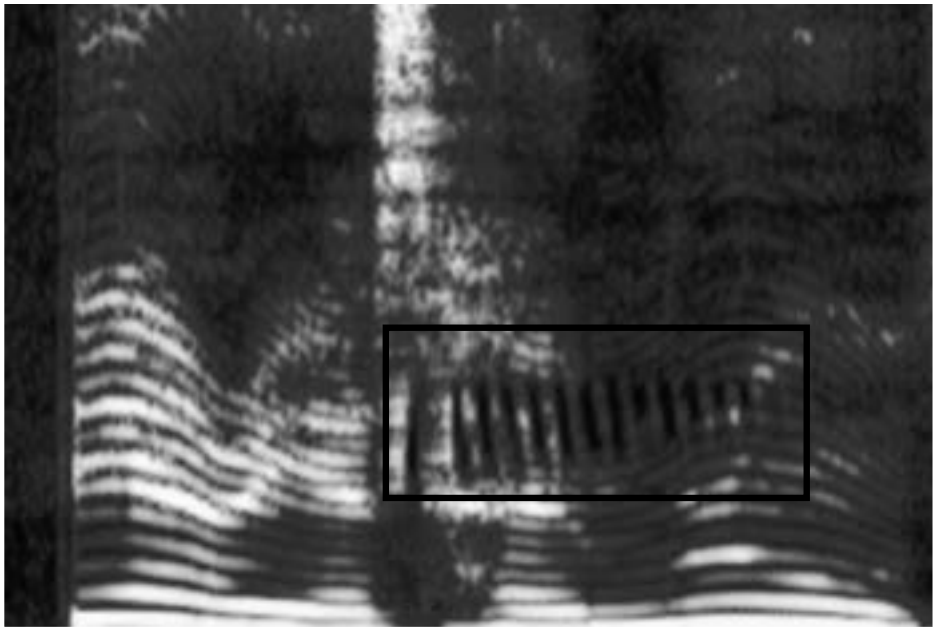
Proactive feedback prevention

Easier listening experience, **without uncomfortable feedback**

MoreSound Optimizer™

Uses a Spectro Temporal Modulation breaker-signal

- Predicts feedback rapidly by measuring in 28 independent channels
- The targeted breaker-signal is precision deployed
- Stops the breaker-signal when the feedback risk has passed
- Non-intrusive and effective at stopping feedback
- Can handle a positive loop gain of 6 dB



Spectrogram showing
Spectro Temporal Modulation

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Feedback shield supports MoreSound Optimizer

A feedback system for reducing and suppressing feedback

Frequency shift

Phase inversion

Gain control

Operates in each microphone

Frequency shift and phase inversion are always on

Three distinct technologies work together to suppress feedback & ensure stable amplification

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Oticon Own SI evidence

Purpose:
Evaluate: single-microphone audiology in Oticon Own SI compared to its predecessor Oticon Own

Considering real-life listening needs for test design

Purpose:
Evaluate single-microphone audiology in Oticon Own SI compared to its predecessor Oticon Own

Test set-up:
Simulated a common speech-in-noise listening environment* and recorded the hearing aid output using a HATS:

Setup 1 with restaurant noise and sudden sounds (Figure 1)

Setup 2 with restaurant noise only (Figure 2)

Speech-intelligibility-index (SII)-weighted output SNR enhancement was calculated

Figure 1

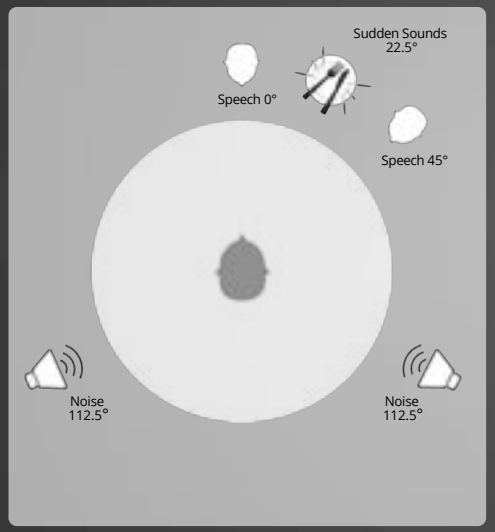
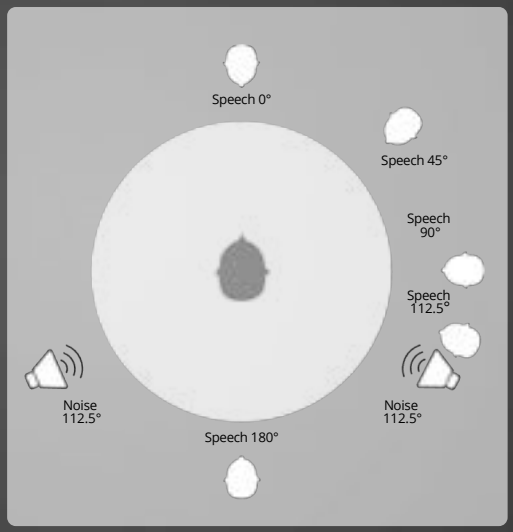


Figure 2



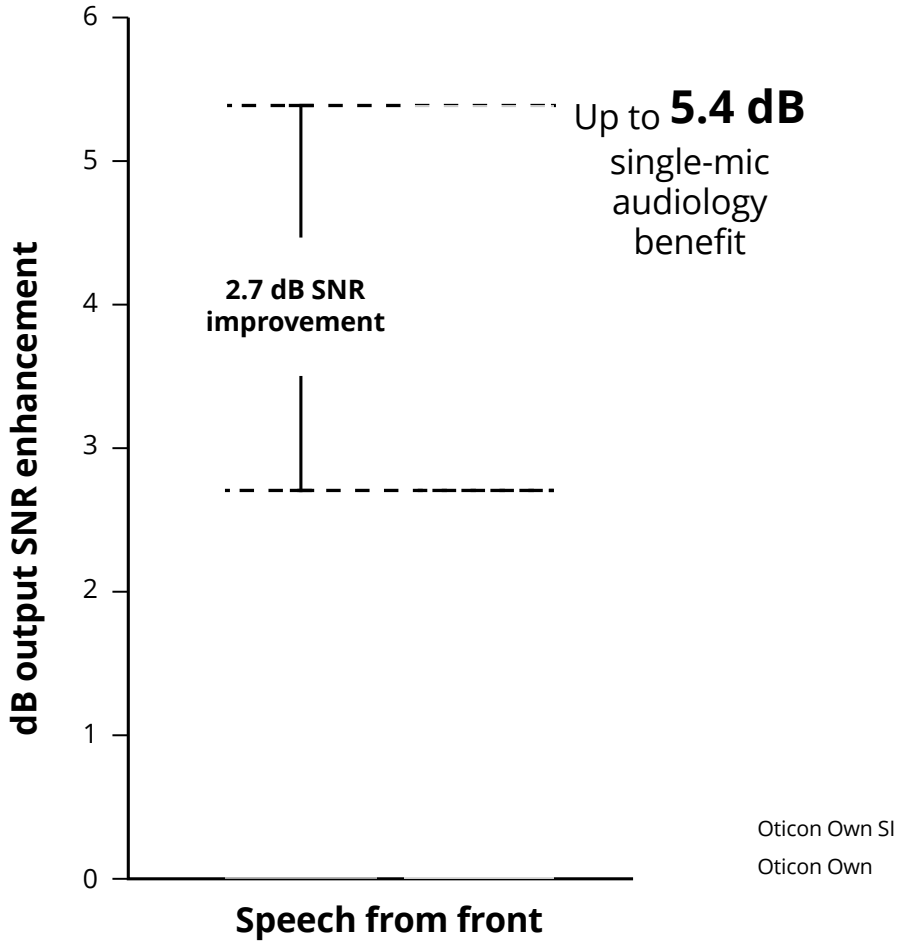
* Most of a typical user's day is spent in positive SNR environments per Wu et al. (2018). Characteristics of real-world signal to noise ratios and speech listening situations of older adults with mild to moderate hearing loss. Ear and Hearing, 39(2), 293-304
Denker & Santurette (2025). Better speech clarity in Oticon Own SI. Oticon Research Brief.

Improved speech clarity with DNN 2.0*

Oticon Own SI with
DNN 2.0 & SuddenSound
Stabilizer

VS

Oticon Own with
DNN 1.0 & Transient Noise
Management



*Compared to Oticon Own. Denker & Santurette, (2025). Better speech clarity in Oticon Own SI [Oticon Research Brief]

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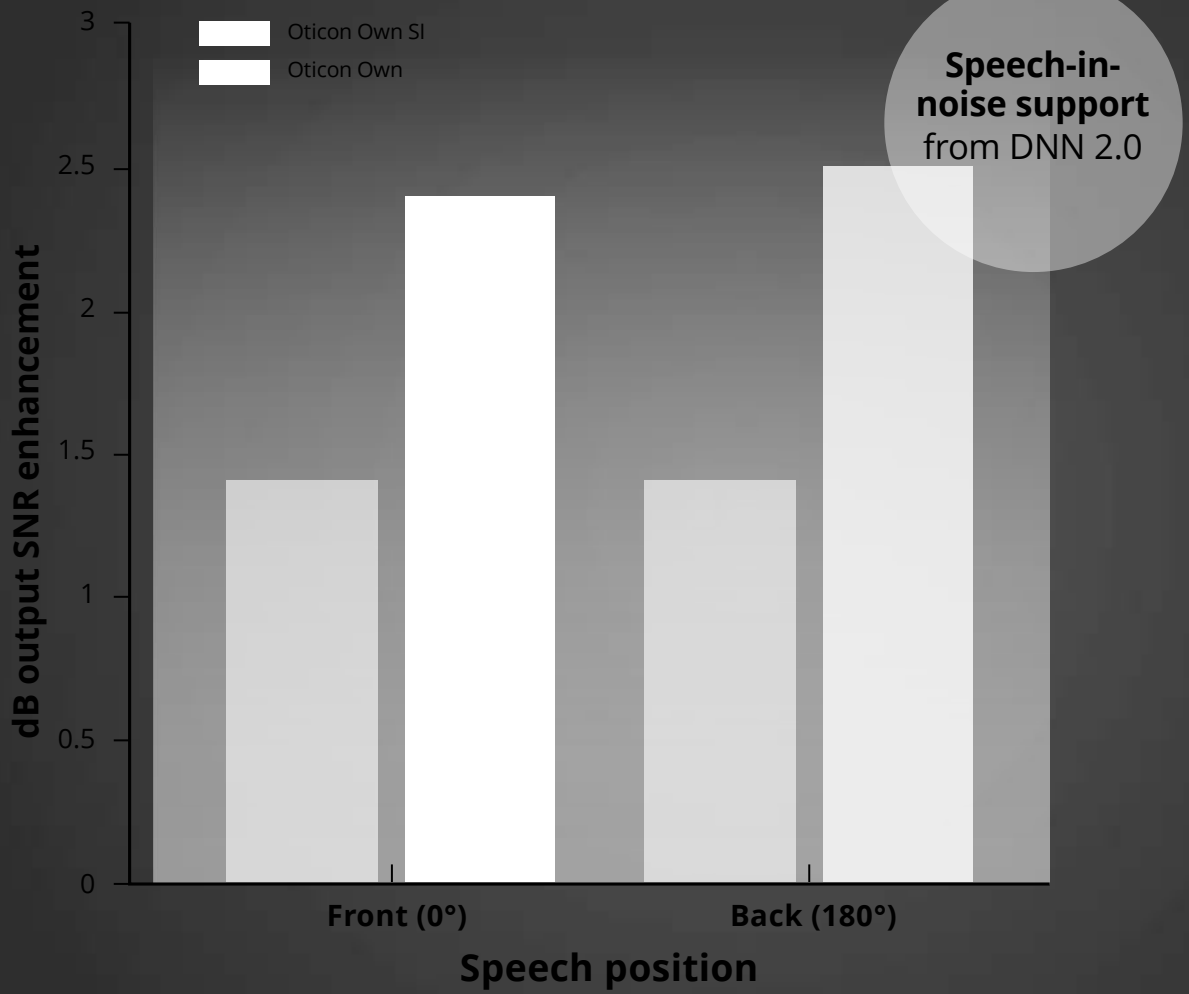
Enhanced speech clarity from all around*

A DNN 2.0 BrainHearing™ benefit

Oticon Own SI safeguards and elevates **the open sound listening experience**



*Compared to Oticon Own. Denker & Santurette, (2025). Better speech clarity in Oticon Own SI [Oticon Research Brief]

A full portfolio **built on BrainHearing™**

Oticon Intent™

Oticon Own SI™

Oticon Own™

Oticon Play PX

Oticon Real™

Oticon Zircon

Oticon Xceed
Xceed Play

Clinical efficiencies

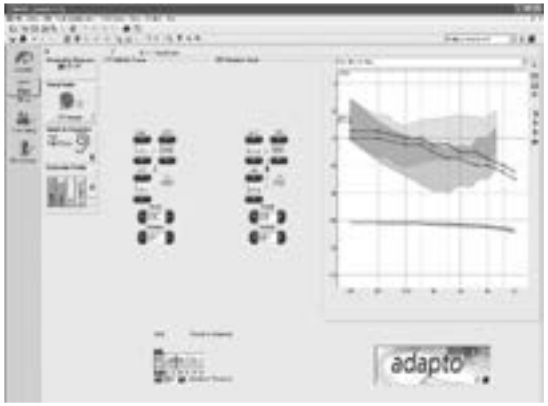
An evolution

Snapshots in the journey of Oticon Genie

2001

2003

2005



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An evolution

Snapshots in the journey of Oticon Genie

2007

2013

2016

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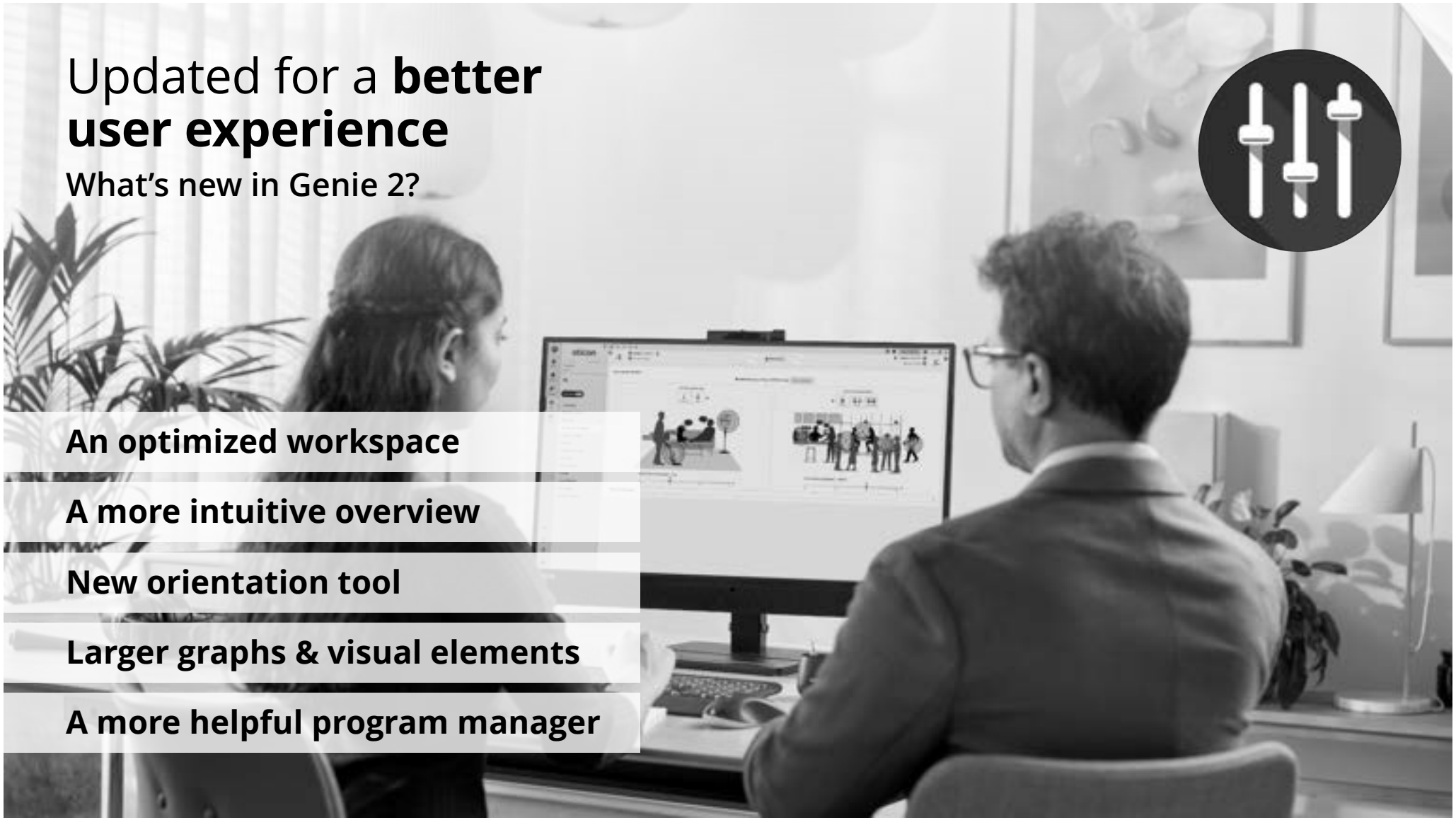

Updated for a **better user experience**

What's new in Genie 2?

- **An optimized workspace**
- **A more intuitive overview**
- **New orientation tool**
- **Larger graphs & visual elements**
- **A more helpful program manager**


NEW Genie
Resource Center
A one-stop shop for fitting-related support and resources

Feedback analyzer now available in RemoteCare

Available for **Oticon Intent** hearing instruments with **FW 1.2.0 or later**

Quiet surroundings needed for an accurate feedback measurement

Hearing instruments need to be **inserted correctly**

Sit still and minimize movement during the measurement

Performance improvements for Oticon Intent™

Firmware version 1.2.0

Compatibility with **Easy LE Adapter**

Feedback analyzer **enabled for Remote Fitting**

Compatibility with Tinnitus SoundSupport™:
Comfort pulse controls – Oticon Companion app

New spoken indicators in audible indicators

General improvements for **connectivity and performance**

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New Audible indicators – spoken notifications

Oticon Intent – FW version 1.2.0

Shutdown

Program change

Service check mode

Battery end of life

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Programming devices

Wireless or wired

Noahlink Wireless 2

HiPro®

ExpressLink

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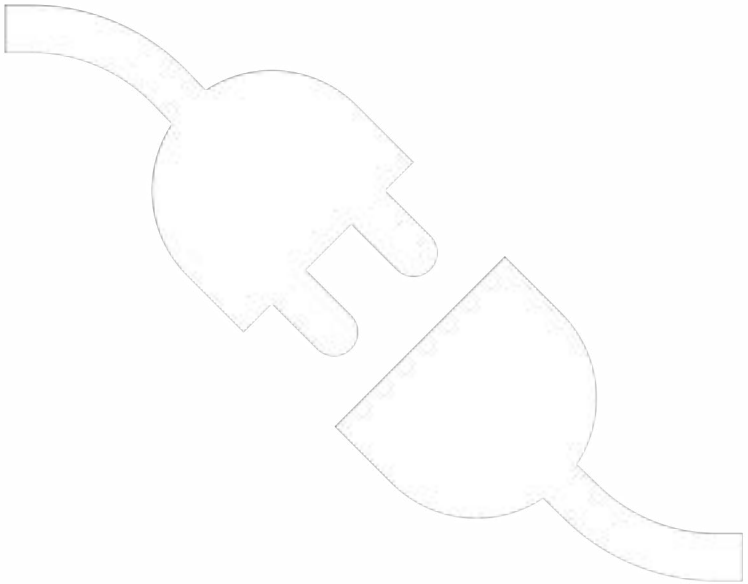
Cabled programming

Oticon Own SI



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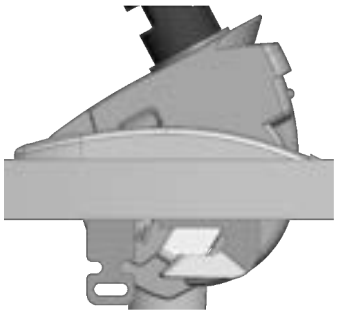
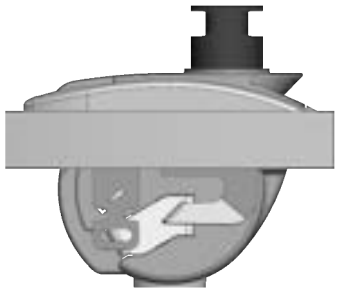
Programming Adapter Mini

IIC and CIC





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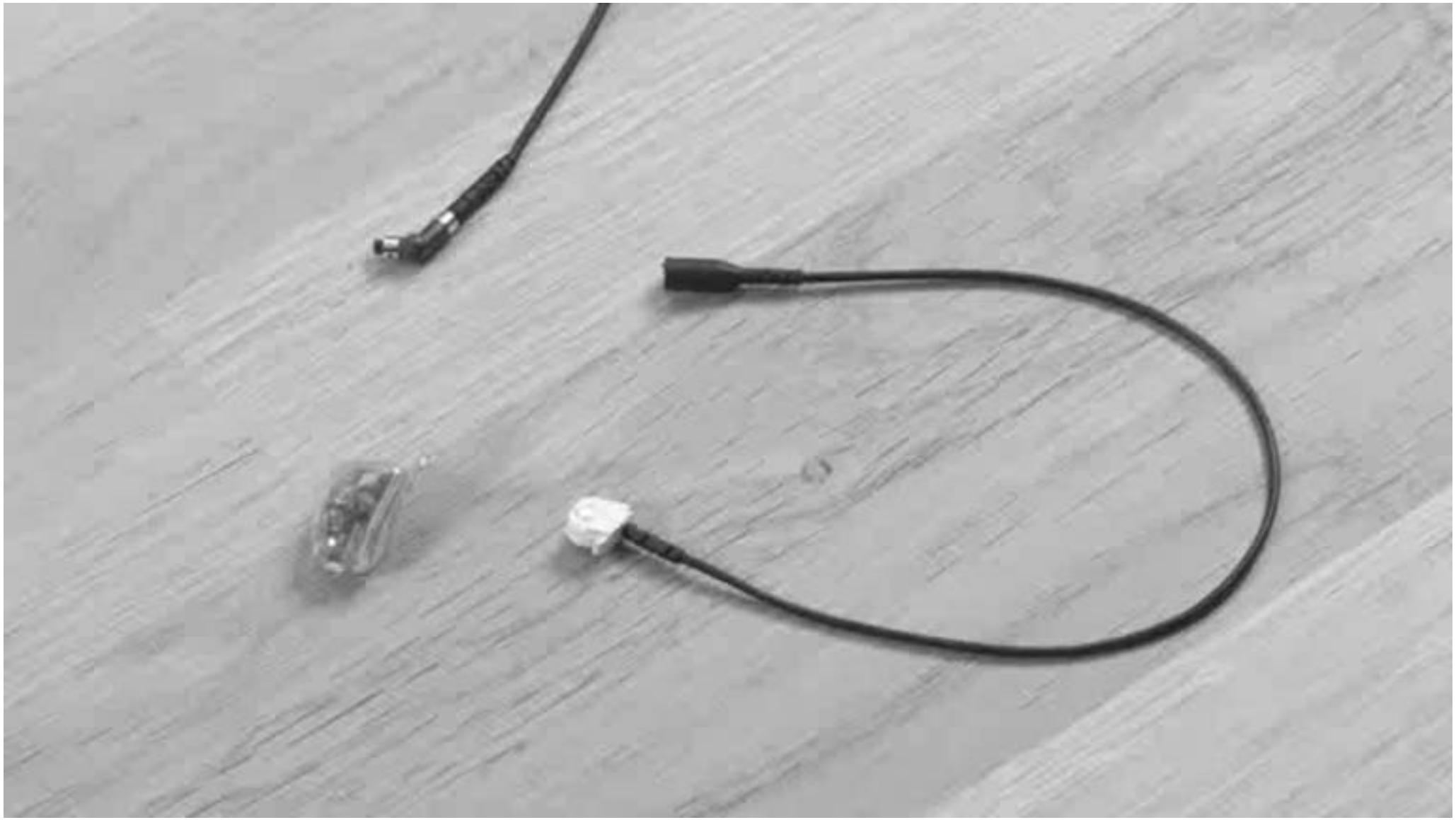

Easy LE Adapter

Bridges the technology gap

**Compatible with Oticon Intent firmware 1.2.0 or later*

Easy LE Adapter

Bridges the technology gap

Oticon Intent – FW 1.2.0

Compatible with Android™ phones, tablets, as well as PCs with a USB-C port

For USB-C devices that do not have Bluetooth® LE Audio

Enables direct streaming and hands-free communication on USB-C devices

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Easy LE Adapter compatibility

- Oticon hearing aids with Bluetooth LE Audio*
- Android phones and tablets with a USB-C port
- PCs with a USB-C port

- Most phones and tablets with a 3.5mm audio jack
- iPhone®, iPad®, Mac® & Vision Pro™
- Android phones that support Bluetooth LE Audio
- Call handling and controls via pushbutton & tap control

*Oticon Intent – FW 1.2.0

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Easy LE Adapter tips

- Restore connection by removing and reinserting into phone, tablet or PC.
- Inserting Easy LE Adapter into a USB-C port restarts Bluetooth on the phone.
- Reconnect hearing aids by turning Bluetooth OFF and ON.
- A pair of hearing aids can only be paired and connected to one Easy LE Adapter at a time.

Pass through charging **will not** support fast charging or charging through a PC

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What's new in the Oticon Companion app

Version – Android (1.5.0) and for iOS (1.5.1)

- **Comfort pulse tinnitus feature**
- **New dark mode setting**
- **New reconnection experience**
- **Enhanced pairing flow for iPhone**
- **Updated hearing aid naming**

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Oticon Companion app

Allowing users to personalize their tinnitus solution

Sounds tab to adjust the relief sound level

Surroundings tab to adjust the level of ambient sounds

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Comfort pulse

Four pulsation patterns and OFF are available

Available for **broadband** relief sounds

Available for all hearing aids **with 2.4 GHz***,**,***

*Custom styles also require NFMI and a push-button
**A firmware update may be required
***Except Play PX

‘Reliever’ changed to ‘Sounds’

New Comfort pulse option


No **compromises**

Engaging patients and empowering lives

Karen Toole, AuD
National Education and Training Specialist

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life-changing technology

References

- Compared to Oticon Own. Denker & Santurette, (2025). Better speech clarity in Oticon Own SI [Oticon Research Brief]