

Signia August 24, 2026 Launch
Lisa A. Perhacs, Au.D.

Signia: Live Noisy



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Webinar FAQs

- Where to get the handout:
 - Resources in the classroom and under Pending Courses in your account
- How to earn CEUs:
 - After the webinar, go to your Pending Courses and pass the multiple-choice exam.
 - Must have a paid membership to earn CEUs
- For assistance or tech support:
 - Call 800-753-2160
 - customerservice@audiologyonline.com



Learning Outcomes

Upon completion of this course attendees will be able to:

- 1) Define the improvements to Signia's latest platform, MaX
- 2) Explain how Signia MaX uses AI to improve speech understanding.
- 3) Describe the features and improvements of Signia's newest form factor, Pure C&G MaX



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.



Every conversation matters.





Welcome to the world of Signia Multi-adaptive Xperience (MaX)

Our most advanced platform yet, it revolutionizes how hearing aids adapt to life's complexity.

It's powered by breakthrough technologies that redefine how sound is personalized every situation, so wearers can contribute confidently to conversation, and

Live Noisy



Signia MaX: a new frontier in AI sound steering

AX Augmented
Xperience

Introduced Signia's
revolutionary **split processing**

IX Integrated
Xperience

Added the first **multi-stream architecture** that
could track and enhance
individual speakers

MaX Multi-adaptive
Xperience

Introduces **Acoustic Intelligence**, which
unites four DNNs to
steer multi-stream
sound processing in
even more precise and
powerful ways to
enhance the entire
acoustic scene



DNNs play an important role in the Signia MaX story and technology, so before we dive into that, let's start with a brief overview of DNN technology



What is a Deep Neural Network?

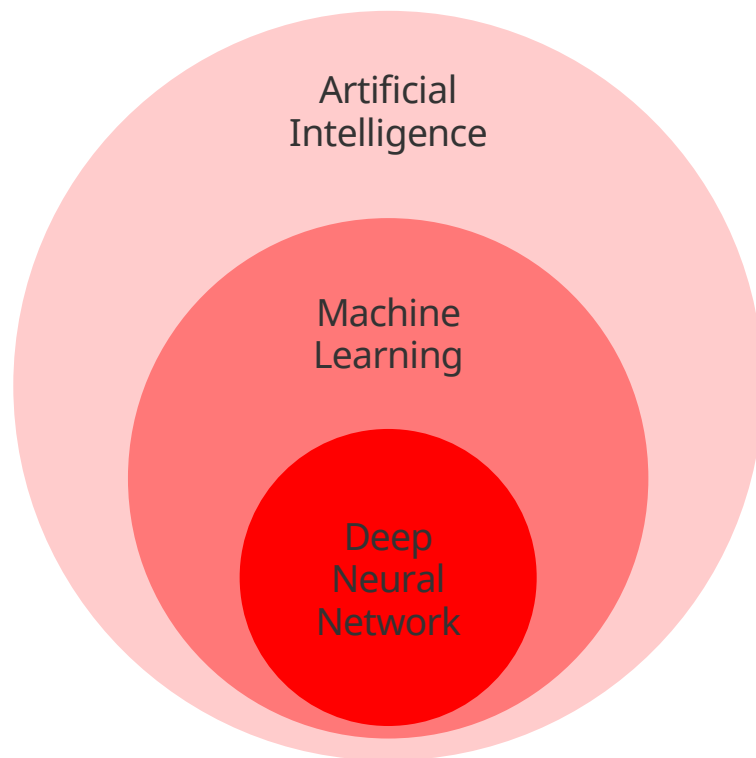
DNNs have received a lot of attention in the hearing aid industry...but what are they?

A Deep Neural Network, or DNN, is a type of artificial intelligence that learns patterns from large amounts of data.

- Instead of being programmed with fixed rules, a DNN is trained on a massive amount of data, allowing it to automatically learn complex patterns without needing programmed instructions
- A DNN learns the way a human brain learns



How DNNs relate to AI



AI is the broad concept of machines performing tasks that normally require human-like intelligence

Machine Learning is a subset of AI where the system learns patterns from data instead of being programmed only with fixed rules

A **Deep Neural Network (DNN)** is a deep learning model made of many connected layers that learn increasingly complex patterns



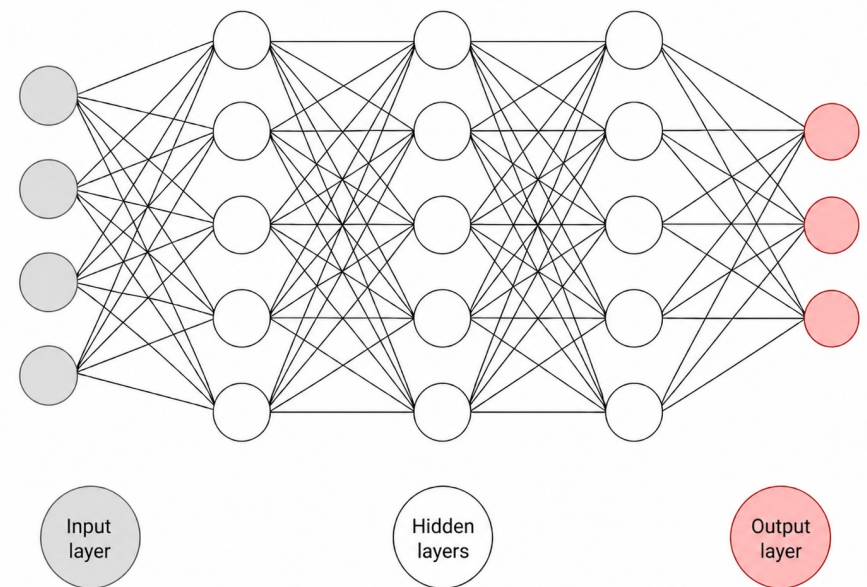
What would this look like in hearing aids?

Deep Neural Network (DNN)

Advanced machine learning/Generalized Intelligence

The DNN system is trained using examples

- Instead of telling a hearing aid exactly: “if the signal looks like X, classify it as speech,” a DNN can be trained on many examples of speech, noise, music, wind, and other sound scenes
- Rather than acting on a finite set of rules, a DNN “learns” what noise is or what speech is through many rounds of trial-and-error training
- The goal is not for the DNN to memorize every possible sound. The goal is for it to understand the underlying patterns well enough to recognize them in new real-world situations. **That is generalization.**



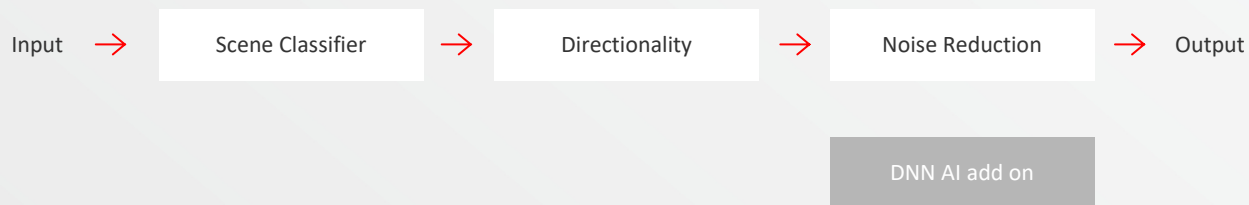
DNNs are powerful tools for sound analysis and processing

But like all tools, the benefit they provide depends
on how they are used...



Hearing aid technology has become one-dimensional

The vast power of AI is used for noise reduction alone.
Hearing aids still struggle to adapt to complex soundscapes.



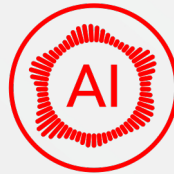
One-dimensional AI processing

Different scenarios, different demands, similar results

Situation	Analysis	Action	→	Outcome
① waiting in lively restaurant				
② in active discussion with multiple people in noise	noise above threshold	DNN noise reduction Directional beam on		Sound catering to one dimension
③ wearer waiting outside				



Signia MaX introduces multi-dimensional AI system intelligence that understands the full moment



Acoustic Intelligence™



Not just noise reduction – sound steering

A. DNN as a noise reduction engine

Recognizes speech patterns.
Recognizes unwanted background noise.
Supports noise reduction while preserving speech cues.
Valuable because speech in noise is a major wearer challenge.

B. DNN as steering intelligence

Uses analysis to guide the whole hearing aid response.
Can help steer noise reduction, gain, conversation streams, own voice processing, environmental adaptation and comfort.
Turns DNN analysis into system-level decision support.



4 DNNs work together, controlled by one Acoustic Intelligence

Speech Detection DNN

Detects external talkers in real time

Own Voice Detection DNN

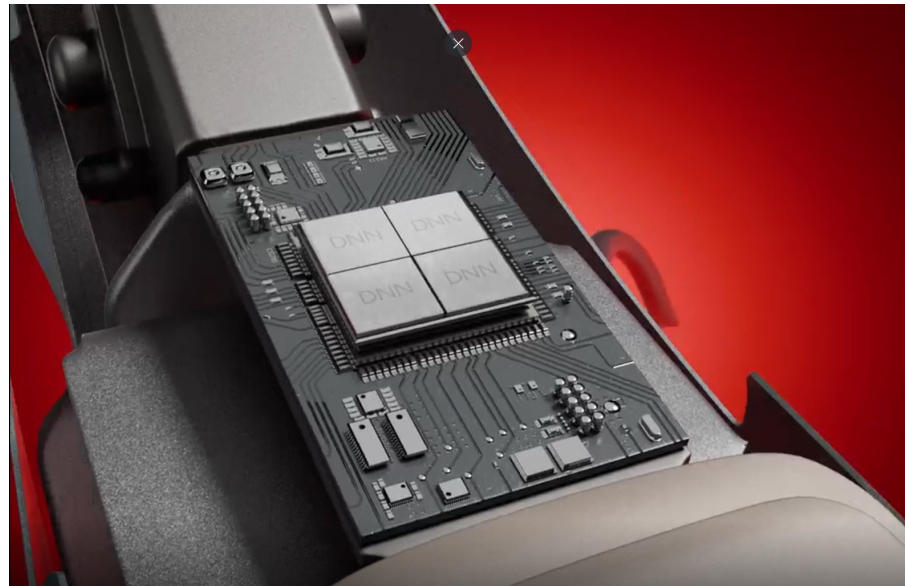
Instantly recognizes the wearer's voice out of the box

Scene Analysis DNN

Continuously interprets the sound environment

Noise Analysis DNN

Identifies and understands the type of noise



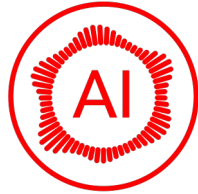
A unified system-level intelligence

Acoustic Intelligence unifies and coordinates the 4 DNNs to understand the full acoustic environment with breakthrough precision

- Trained on 40 million samples across eleven languages, six music genres, and thousands of real voices and listening environments, Acoustic Intelligence is built on one of the most diverse AI training bases ever applied to hearing aids
- It reacts to changes in the environment in just 0.01 seconds for instant, real-time adaptation to the entire soundscape

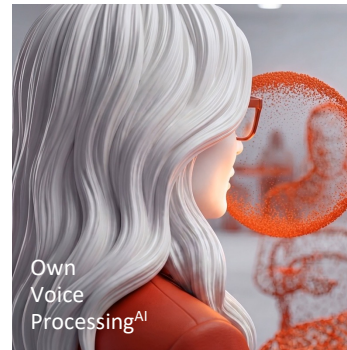
It's not feature-level intelligence, it's system-level intelligence controlling every processing aspect in real time





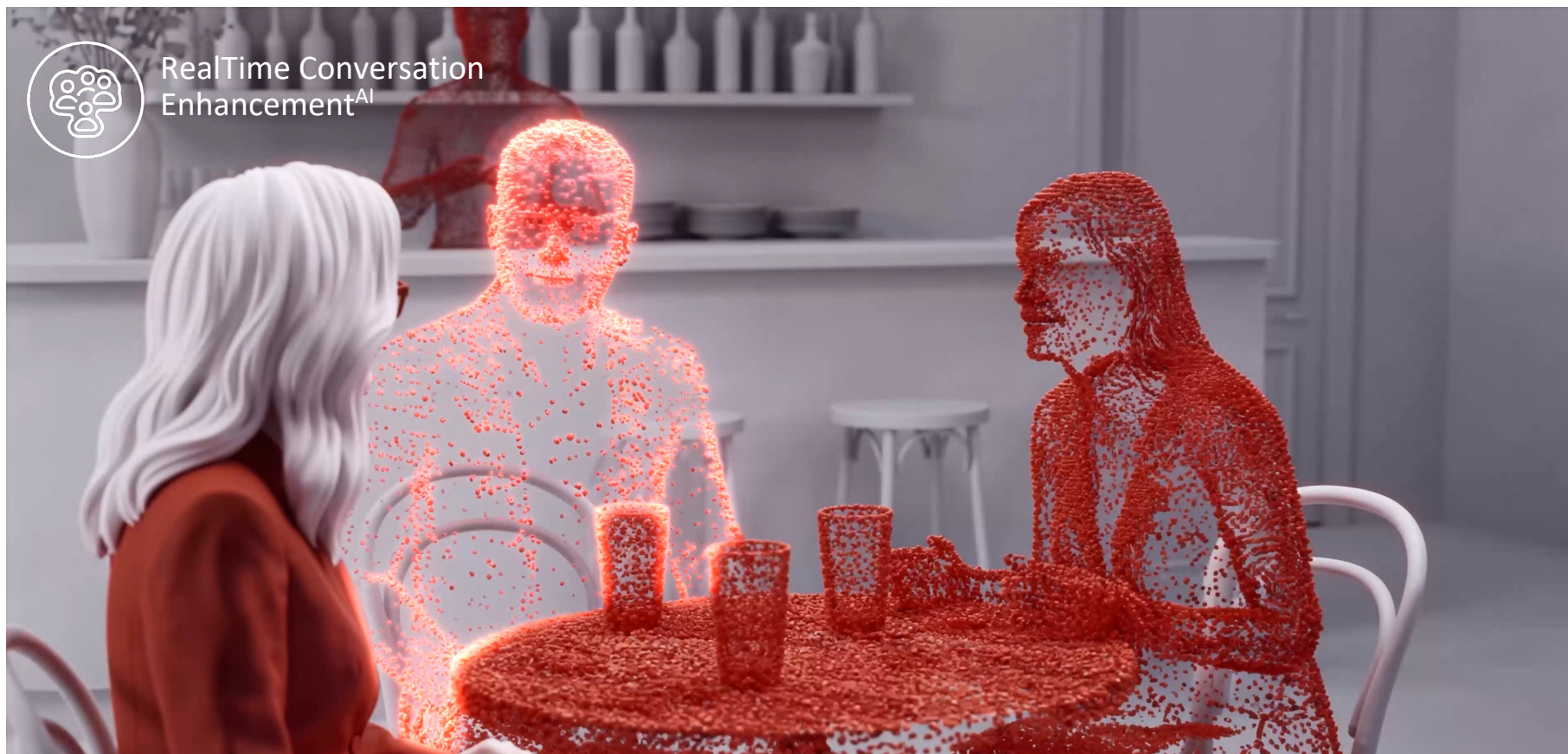
Acoustic Intelligence

Unites and controls 4 DNNS
Combining into 4 key features
With one coordinated response





RealTime Conversation
Enhancement^{AI}





RealTime Conversation Enhancement^{AI}



Signia IX

dedicated group conversation enhancement technology

tracking and enhancing multiple speakers simultaneously, in real time

proven benchmark in group conversation enhancement

Signia MaX

AI trained specifically to isolate speech

75% more data points per second processed

Stronger, more targeted speech enhancement

97%

Perform better in noisy group conversations Vs. Key competitors*

*Jensen et al. (2026). Signia Multi-adaptive Xperience outperforms key competitors in group conversation in noise. Signia White Paper.







Own Voice Processing^{AI}

**Trained on
1.5 million voice
samples**

Immediate voice
recognition – no clinic
training

**Enabled
by default for
every wearer**

Nothing to set
up, nothing to remember

**Reduce return
rates by up to
30%***

Faster acclimatization, and
a comfortable own voice

* Jensen, N. S., Lotter, T., & Samra, B. (2025). Own Voice Processing 2.0 linked to 23% fewer returns. Signia Data Insights.





Ambient Scene
Adaptation^{AI}





Ambient Scene Adaptation^{AI}

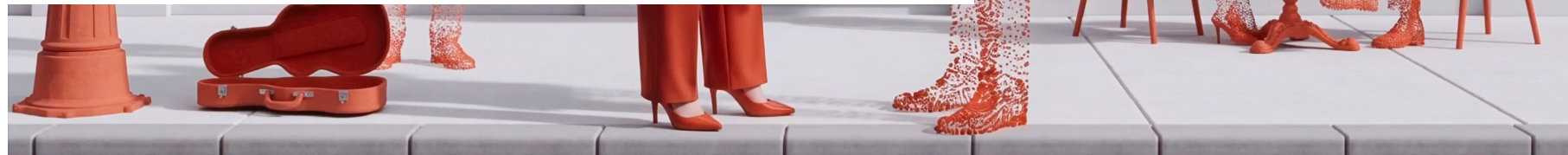
Moving beyond traditional scene classification.

AI trained on
real-world acoustic
complexity

Simultaneously analyses
and optimises across
multiple environmental
parameters

Optimising up to
800 million
parameters per
second

No fixed scenes.
No mode changes.
No lag.





Dynamic Noise Control ^{AI}





Dynamic Noise Control ^{AI}

In conversation in noise

Speech prioritised

Noise reduction increases as complexity increases

No speakers present

Balanced awareness

Balanced noise reduction for comfort and immersion

Stood in Traffic noise

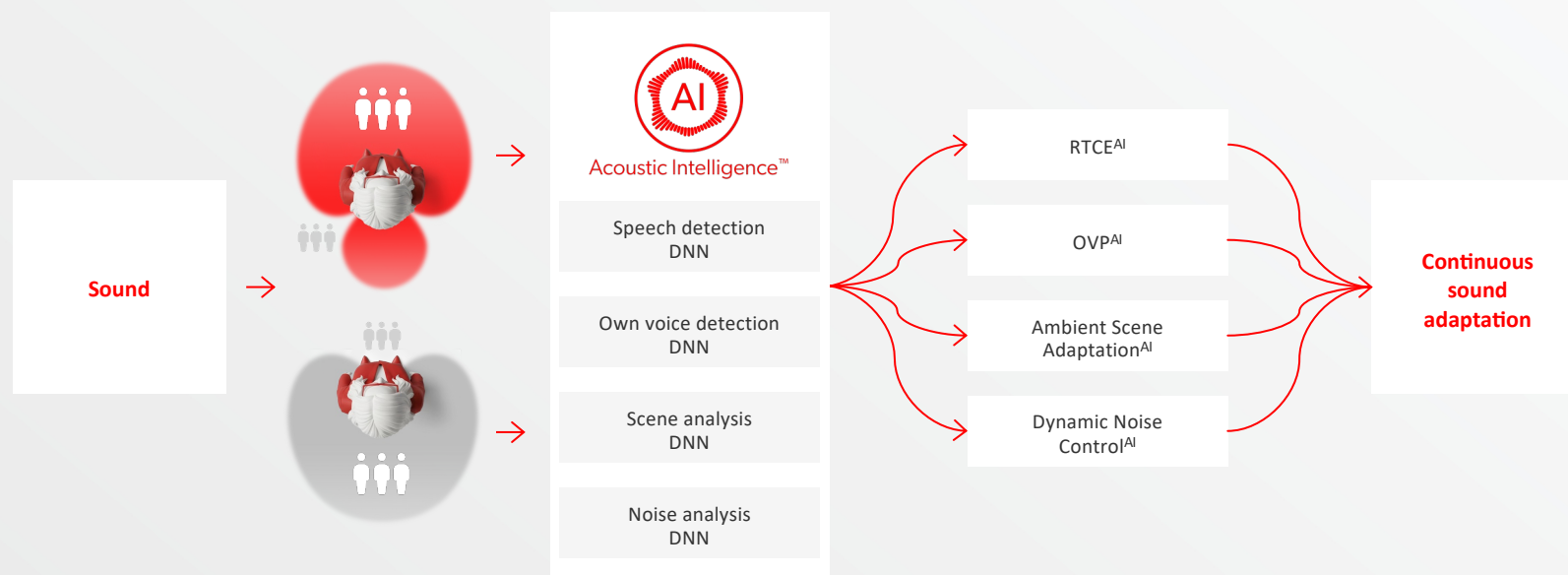
Awareness prioritized

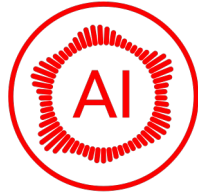
Comfortable and safe awareness preserved



Signia MaX Multi-Dimensional Sound Processing

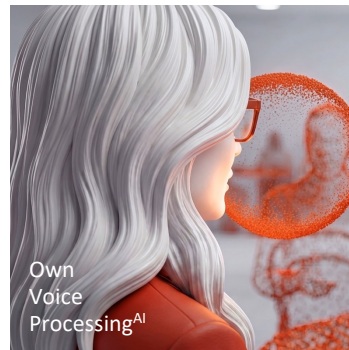
Four DNNs working as one





Acoustic Intelligence

Steering four key features.
One coordinated response.



Why does Acoustic Intelligence coordinate and combine **four separate DNNs** instead of just using one large-scale DNN?





Multipurpose DNN

High Power Consumption
Big Chip Size
Inflexible in Future



Task-Specific DNNs

Slim Footprint
Low Power Consumption
Highly Efficient Training
Scalable Architecture (Future Proof)



Signia MaX chip

Delivering Acoustic Intelligence
from morning to night

50%

more efficient
For all-day, always on
performance



54x

more processing
power
powering 4 DNNs
along the entire processing
pathway

2x

the memory
handling the data
for continuous,
real-time analysis



one-dimensional AI

Analysis
Noise above
threshold

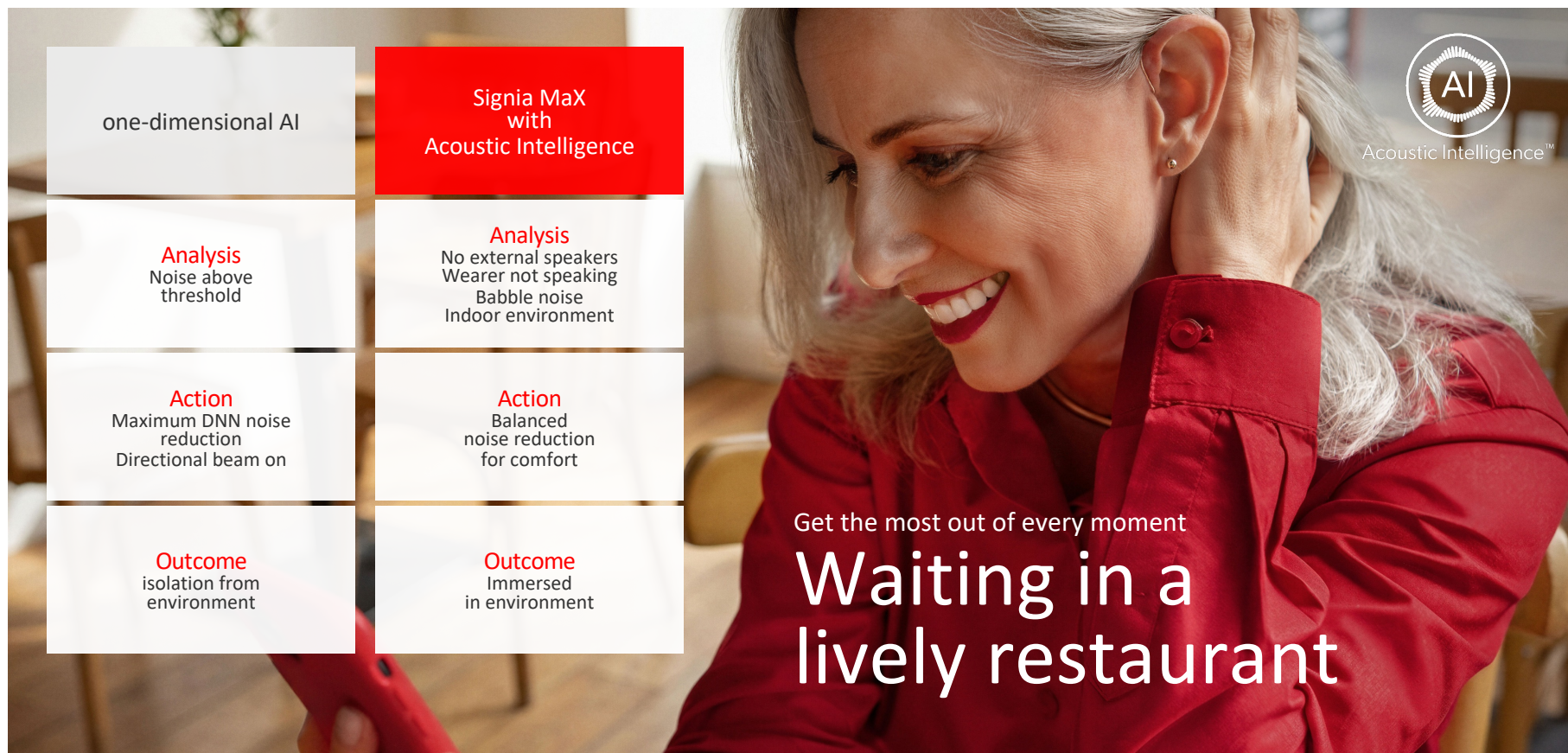
Action
Maximum DNN noise
reduction
Directional beam on

Outcome
isolation from
environment

Get the most out of every moment

Waiting in a lively restaurant





one-dimensional AI	Signia MaX with Acoustic Intelligence
Analysis Noise above threshold	Analysis No external speakers Wearer not speaking Babble noise Indoor environment
Action Maximum DNN noise reduction Directional beam on	Action Balanced noise reduction for comfort
Outcome isolation from environment	Outcome Immersed in environment

Get the most out of every moment

Waiting in a lively restaurant





Get the most out of every moment

Lively discussion with multiple people

one-dimensional AI

Analysis

Noise above
threshold

Action

Maximum DNN noise
reduction
Directional beam on

Outcome

Struggles to keep up



A photograph of three women standing outdoors in front of a red door, engaged in a lively conversation. The woman on the left is wearing a pink shirt and glasses. The woman in the middle is wearing a red shirt and a red bag. The woman on the right is wearing a blue shirt. The background shows a red door and some greenery.



Acoustic Intelligence™

Get the most out of every moment

Lively discussion with multiple people

Signia MaX with Acoustic Intelligence	one-dimensional AI
Analysis Multiple conversation partners Own voice Babble noise Indoor environment	Analysis Noise above threshold
Action Track and enhance conversation partners Own voice reduced Increased noise reduction	Action Maximum DNN noise reduction Directional beam on
Outcome Contributes to the conversation	Outcome Struggles to keep up



one-dimensional AI

Analysis
Noise above
threshold

Action
Maximum DNN noise
reduction
Directional beam on

Outcome
Reduced awareness

Get the most out of every moment

Wearer
waiting outside



one-dimensional AI	Signia MaX with Acoustic Intelligence
Analysis Noise above threshold	Analysis No external speakers Wearer not speaking Traffic noise Outdoor environment
Action Maximum DNN noise reduction Directional beam on	Action Ambient sound awareness increased
Outcome Reduced awareness	Outcome Full awareness of surroundings and feeling of safety

Get the most out of every moment

Wearer waiting outside





Acoustic Intelligence™ delivers an
optimized response for every
sound scene.

So you can live in the moment,
and contribute confidently.
So you can **Live Noisy.**



Additional MaX Technology Advancements



Be
Brilliant™



e2e 5.0

Signia's powerful
binaural connection
was upgraded

32%

Higher audio data-rate
for higher quality binaural audio

35%

Stronger signal
For a more robust & reliable
binaural connection

1

New fast data channel
Enabling enhanced SoundSmoothing
2.0



NFMI broadcast frequency changed to 10.6 MHz from
3.7 MHz for less interference from external devices



Additional MaX features

Supporting the full wearer journey

SoundSmoothing 2.0

Signia MaX is better than key competitors at reducing sudden sounds while also preserving speech

eWindscreen 2.0

74% more speech enhancement in wind noise compared to Signia IX*



Signia Assistant

Natural language troubleshooting and guidance for more immediate and personal hearing care

* Jensen et al. (2026). Signia Multi-adaptive Xperience with Acoustic Intelligence: Holistic AI-driven enhancement of conversations in noise. Signia White Paper.



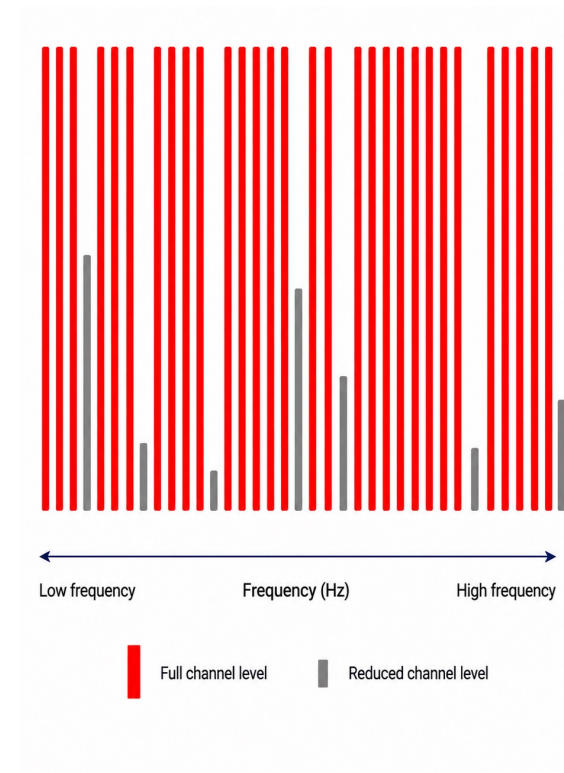
Enhance speech and comfort with SoundSmoothing 2.0

Previously: 2-channel broadband sudden sound reduction worked independently on each hearing aid

Now: Targeted high resolution reduction of sudden sound across **48 channels + binaural synchronization**

Why it matters:

- Clear speech remains intact
- Comfort is increased without needing to reduce gain
- Sound is accurately represented with localization preserved
- Aids in acclimatization and retention



No hearing aids



Volume



Hearing aid Without a binaural link



Volume



Volume



No hearing aid



Volume



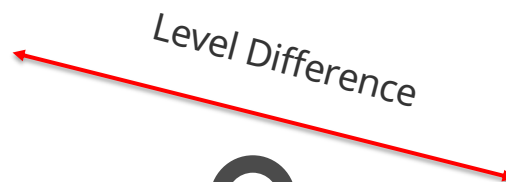
Volume



With SoundSmoothing 2.0



Volume



Volume



Remove the wind **and** enhance speech with eWindScreen 2.0

Previously: broadband wind reduction across all microphone inputs

Now:

- Automatically selects the microphone with the best SNR
- Detects and reduces wind in the lowest 16 frequency channels

Why it matters:

- High resolution targeted wind noise reduction for **increased comfort** outdoors while **preserving speech**
- Aids in acclimatization and retention



OneConnect Technology

Ready for today and tomorrow

Because your patient's audiological needs are more important than what phones they have.

Bluetooth®
Classic
Broad, proven compatibility
today

Auracast
Ready for shared and public
audio experiences as they
roll out

Telecoil
Trusted access in
public spaces

LE Audio
The next generation of low-
power, low-latency, high-
quality connectivity

Auracast will be enabled via a firmware update delivered through the Signia One app or fitting software by Spring 2027.



OneConnect universal connectivity

LE Audio and Bluetooth Classic compatibility in the same device

No more choosing a hearing aid based on phone or computer compatibility

Telecoil-equipped for now

Auracast for the future

Auracast: Ready for shared and public audio experiences as they roll out. It will be enabled via a firmware update delivered through the Signia One app or fitting software by Spring 2027



Signia MaX wearers are ready for Auracast

Auracast compatibility coming via firmware update by Spring of 2027

It will be possible for Signia MaX hearing aid wearers to get the firmware update in one of two ways:

- In clinic via Connexx 10
- Via their own phone and the Signia One app – a new “over the air” firmware update functionality will be launched for the Signia One app at the time of the Auracast firmware release

Auracast is in the early stages of roll-out in public spaces, so **Pure C&G MaX wearers will be able to take advantage of Auracast as it continues become more available**

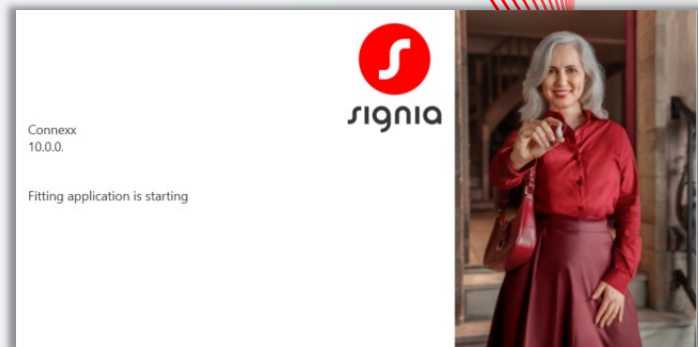
However, Pure C&G MaX is also equipped with an **integrated telecoil** for direct streaming from public systems with FM loops, which are currently still much more widely available than Auracast

Signia Pure C&G MaX is equipped for now *and* ready for the future!



Introducing Connexx 10

Updated and enhanced to empower HCPs to leverage the unique benefits of the Signia MaX platform for their clients



Be
Brilliant™



Three enhancements to the HCP and wearer experience

1 Fit

Streamlined first fit.
Fewer clicks and fewer screens
increase efficiency.

2 Fine-Tune

Acoustic Intelligence
customization for more
personalized hearing.

3 Support

Improved data insights
enhance personalized care



Introducing Signia One App

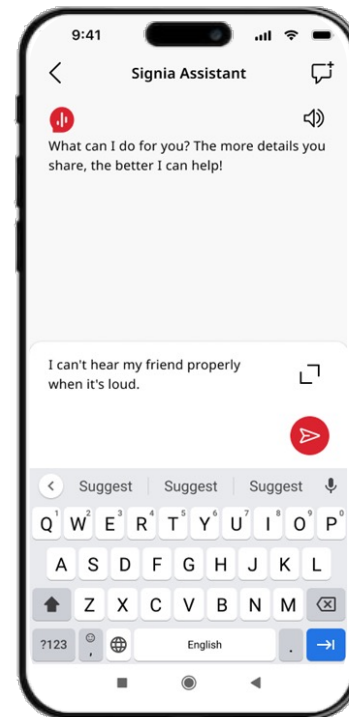


Be
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Introducing our next-generation Signia Assistant

The next-generation Signia Assistant offers enhanced interactive chat functionality via a **powerful new natural-language chat** powered by a Large Language Model AI



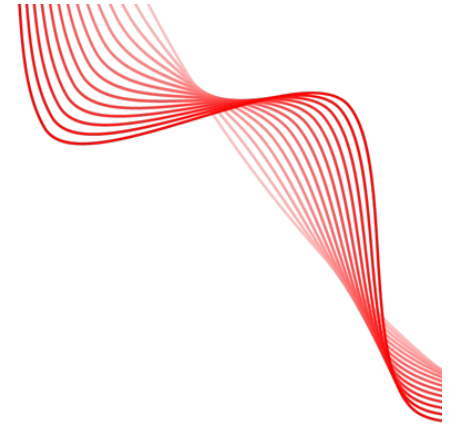
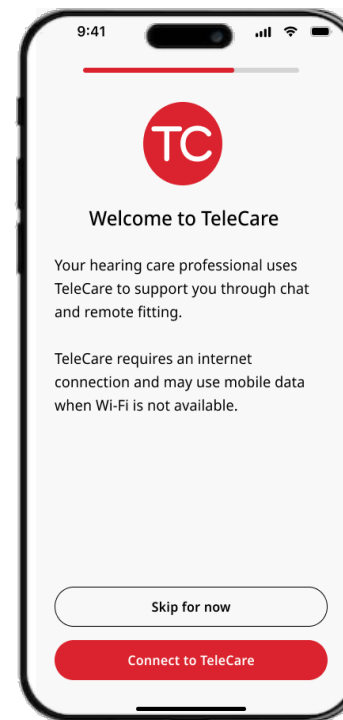
TeleCare is better than ever

One-to-one appointments take time — for both HCPs and wearers

With asynchronous remote fine-tuning in TeleCare, fitting adjustments and demo mode extensions can be made remotely and sent directly to the wearer's app, wherever they are

This is not just a convenience feature. It helps improve the client journey while giving clinics a more efficient way to support wearers after fitting.

Audio/Video calling is removed from Connexx 10. This provides a more stable user experience. Any preferred audio/video service/app can be used by the HCP and wearer



A woman with short, wavy white hair and a red button-down shirt is smiling and holding a small, white, C-shaped hearing aid device in her right hand. The device has the word "signia" printed on it. The background is a blurred stone wall.

Form factor and accessories



Introducing Pure C&G MaX

MaX 7

MaX 5

MaX 3

sDemo



Enhanced moisture protection

IP 68 rating

For protection against water and dust ingress



Enhanced moisture protection

Plasma-Enhanced Vapor Coating

Supports more robust everyday performance through enhanced protection from moisture exposure common in real world use

- Applied as a vapor to internal components
- Reaches areas that traditional liquid coatings may miss, such as very small and complex surfaces, tiny gaps, edges, joints, and other hard-to-access parts inside the hearing aid
- Creates an ultra-thin, moisture-repellent protective layer over internal components



All day power

- 30 hours (no streaming)
- 28 hours (incl. 5 hours of LE Audio streaming)
- 22 hours (incl. 5 hours Bluetooth Classic streaming)
- Up to 6 hours runtime after a 30 min recharge when battery is low



Pure C&G MaX Charging Options



Portable Charger
Pure 2.0



Desktop Charger
Pure 2.0



Multi Charger



Portable Charger Pure 2.0



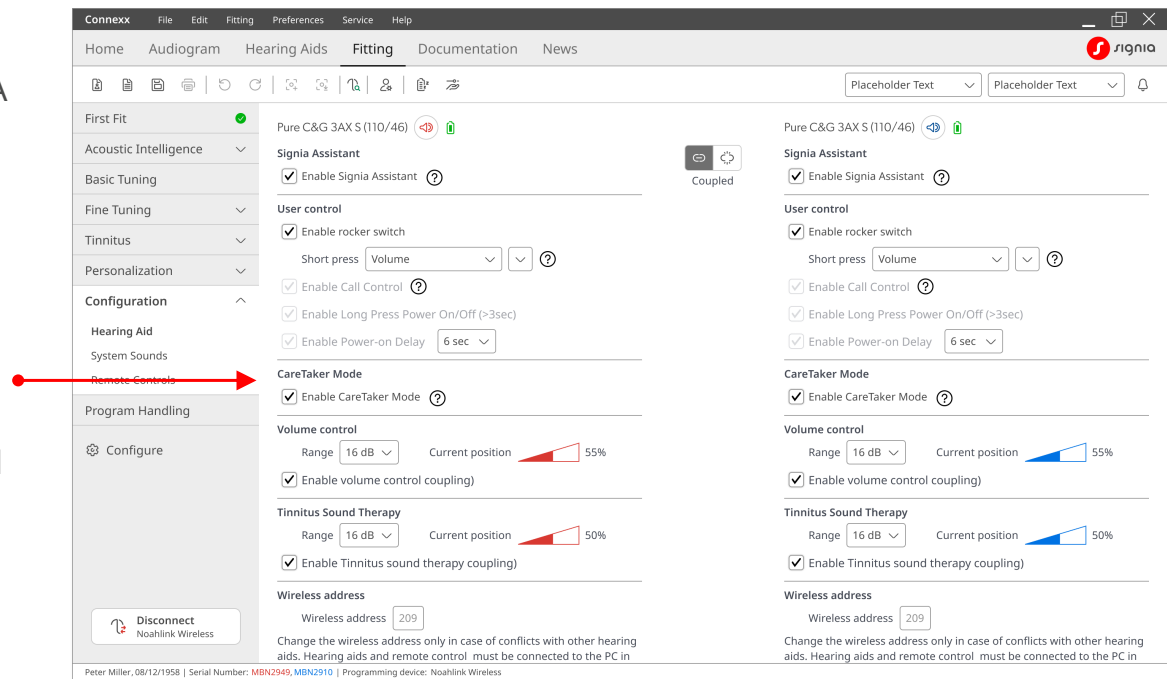
2-color LED enhances usability and accessibility

- **Two-color LED makes it easier:**

- **GREEN** solid illumination when HA removed from charger, or switched ON via push button
- **RED** rapid blinking when HA is switched OFF via push button

- **Caregiver mode increases accessibility:**

- Caregiver mode (must be enabled in Connexx) --> blinks
- **GREEN** every 5 seconds to show caregivers that HA is ON, blinks
- **RED** every 5 seconds to show that HA battery is low



Size Comparison: Pure C&G MaX vs Pure Charge&Go BCT IX

Pure Charge&Go BCT IX Pure C&G MaX



Pure C&G MaX is:

- 1.06mm shorter than BCT IX
- 0.27mm wider side-to-side than BCT IX
- 0.29mm wider front-to-back than BCT IX



Eight color options



MaX Acoustical Performance

EarWear 3.0 compatibility

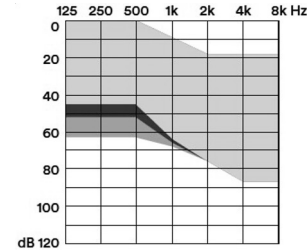
eartips 3.0
sleeves 3.0
round 3.0
miniReceiver 3.0



2cc coupler measurements

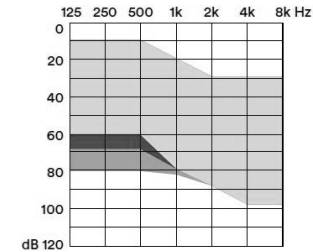
miniReceiver 3.0 S

44 dB / 111 dB SPL



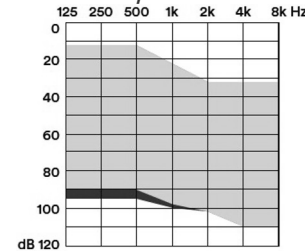
miniReceiver 3.0 M

59 dB / 119 dB SPL



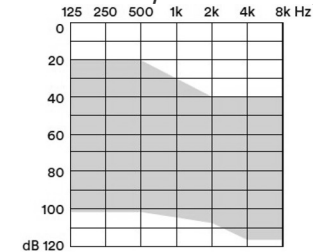
miniReceiver 3.0 P

65 dB / 122 dB SPL



miniReceiver 3.0 HP

75 dB / 131 dB SPL



Pure C&G MaX Accessories



TV Sound



Remote Control



Program using
Noahlink Wireless



Compatible with TV Sound

Streams TV audio directly to hearing aids via Bluetooth

- Now works out-of-the-box – no configuration by HCP required

TV Sound streaming signal is accessed in two ways:

- via the button **in the app**
- via **medium press** (1.4 – 5 seconds)
 - Medium press allows “out of the box” TV streamer usage for wearers who do not use the app



New Remote Control replaces miniPocket



Discreet remote control for volume and program changes

Paired acoustically with hearing aids

Same pairing process and functionality as the miniPocket

Same compatibility with all Signia hearing aids

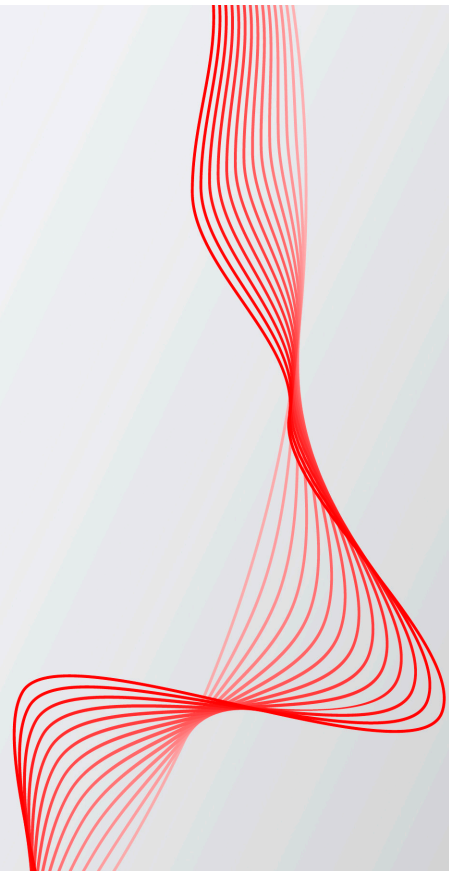


One intelligence. Three performance levels.

MaX 7, MaX 5 and MaX 3

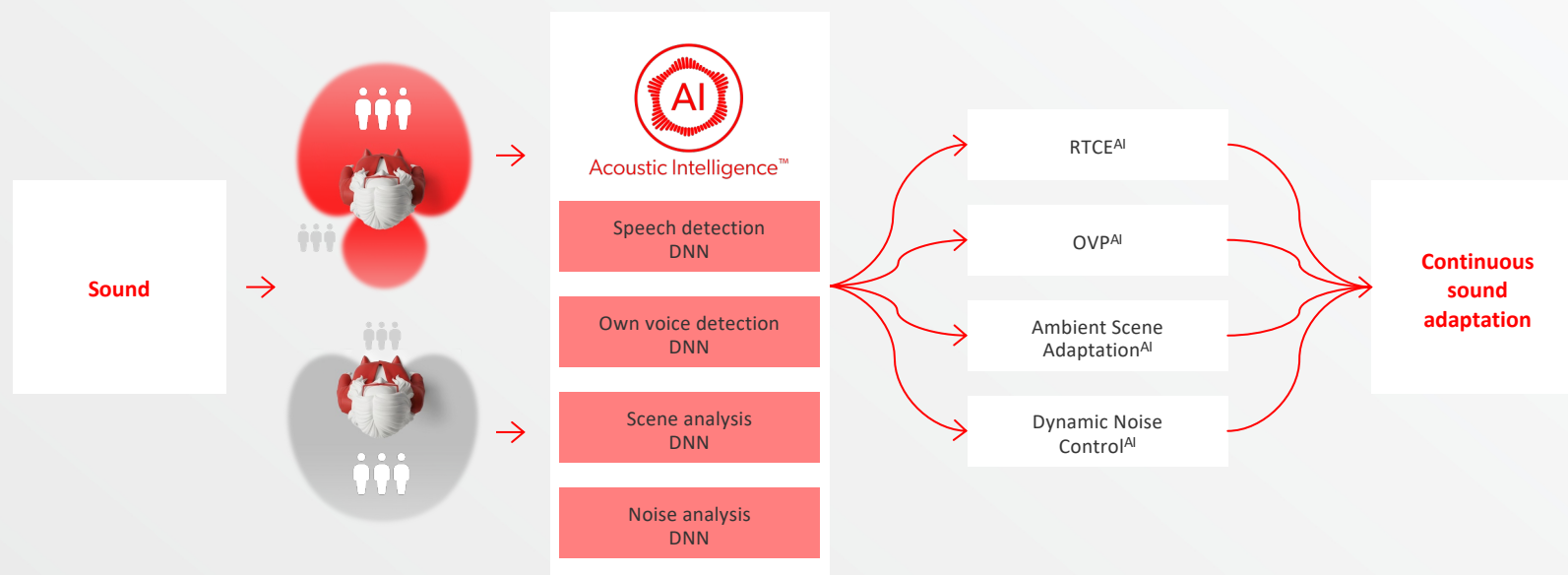
**Identify the listening moment, then match the
performance level.**

**Be
Brilliant™**



Signia MaX Multi-Dimensional Sound Processing

Four DNNs working as one



Every MaX level has the same expert sound engineer

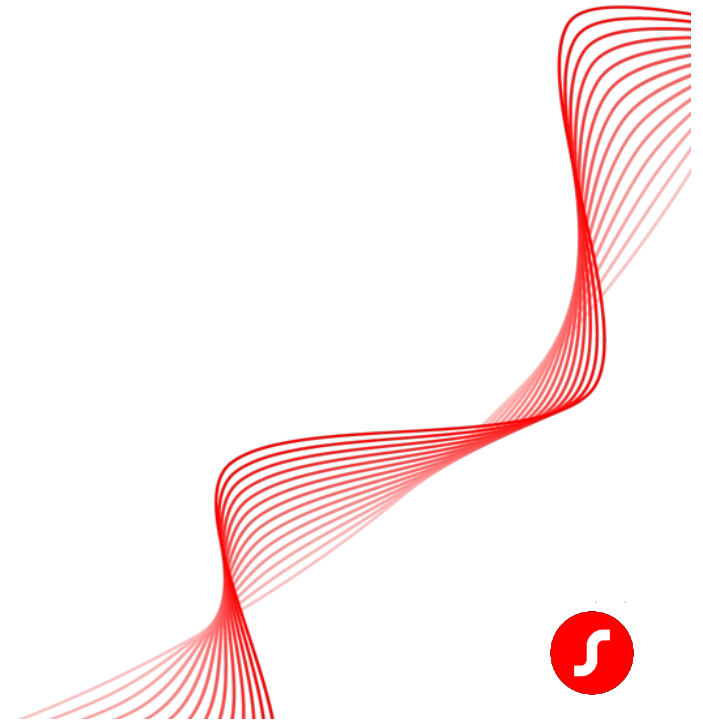
THE ANALOGY

Acoustic Intelligence listens to the whole soundscape through the same four DNNs.

Higher levels give the same expert a larger mixing desk:

- | | | |
|-----------|---------------------------|---------------------------------|
| 01 | More focus streams | Track and enhance more talkers. |
| 02 | More channels | Adapt with greater precision. |
| 03 | More features | Respond in harder environments. |

Same expert. Larger mixing desk.

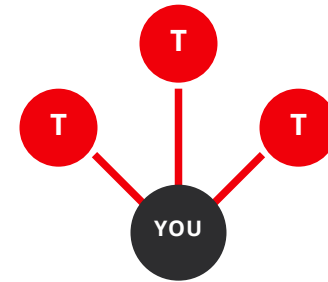


MaX 7: Most help, least effort

All three AI Focus Streams

Every talker stands out—even when the wearer is not facing them.

Focus streams track and enhance talkers around the wearer, so the whole group pops above the background.



All talkers stand out

3

AI Focus streams for whole-group tracking

12 kHz

Extended bandwidth for better access to speech cues

48 / 20

Highest amount of frequency channels for highest sound quality and increased fitting precision

Maximum enhancement for socially active wearer regularly attending demanding environments

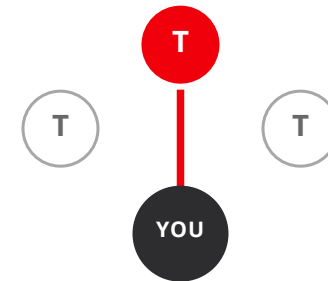


MaX 5: Great help, some effort

One Dedicated AI Focus Stream

Maximum enhancement for the talker in front

Off-center talkers are still enhanced, but the strongest lift comes when the wearer faces the talker.



Maximum Enhancement in front

1

AI Focus streams for individual talker enhancement

10 kHz

Bandwidth for great access to speech cues

36 / 18

Reduced frequency channels, slightly reduced sound quality and decrease in fitting precision

For a wearer who finds themselves in demanding environments but is not often in busy group conversations.



MaX 3: Core solution

BEST FIT

Wearers who want increased comfort, with milder speech enhancement and whose listening needs are mainly everyday and predictable.

- **Same intelligence**

The same four DNNs. Including DNN Noise Control

- **Accurate everyday fitting**

32 channels and 16 handles provide essential fitting precision.

NO DEDICATED FOCUS STREAMS

Enhancement follows the environment

Adapts to noise and complexity, with less speech enhancement than MaX 5 or MaX 7.

- **Adaptive support**

Enhancement changes with environmental noise and complexity rather than independently tracking talkers.

- **Everyday comfort and choice**

eWindScreen 3 of 5 and one HD Music program.

Core enhancement for those who are generally in less complex environments and conversations



A few controls separate the three levels

Meaningful differentiator	MaX 7	MaX 5	MaX 3
Shared four-DNN intelligence	Yes	Yes	Yes
Group conversation experience	All talkers stand out	Max enhancement in front	Broadly adaptive
Dedicated AI focus streams	3 all talkers	1 front	0
Reverberant listening	Room + Auto Echo	Room Program	Core
Access to speech cues	12 kHz / more cues	Standard	Standard
Wind comfort	5 / 5	4 / 5	3 / 5
Fitting precision	48 / 20	36 / 18	32 / 16
Music choice	3 programs	3 programs	1 program

Shared foundation also includes Augmented Focus, core directionality, full connectivity, Signia Assistant, app and TeleCare.



Identify the moment. Then match the level.

01

Find the hardest moment

Identify the listening challenge that is vivid, frequent and personally important.

02

Start with MaX 7

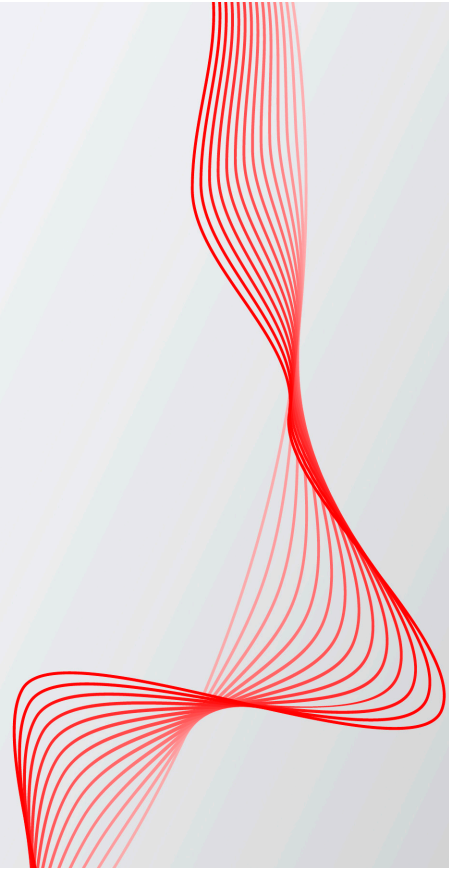
Show what maximum technology offers before deciding which tools can be stepped away.

03

Step down by need

Choose MaX 5 or MaX 3 only when the additional controls are not relevant.

Identify which moments they refuse to miss.



Signia MaX

Going beyond
noise reduction
alone with multi-
dimensional
Acoustic Intelligence™



Enabling your
clients to contribute
to the conversation
and **Live Noisy**







Signia MaX

Live Noisy





Thank you!

SigniaUSA

800-766-4500



References

- 1) Jensen et al. (2026). Signia Multi-adaptive Xperience outperforms key competitors in group conversation in noise. Signia White Paper.
- 2) Jensen et al. (2026). Signia Multi-adaptive Xperience with Acoustic Intelligence: Holistic AI-driven enhancement of conversations in noise. Signia White Paper.

