



LESS IS MORE IN NATURAL HEARING



SOUND LIKE NO OTHER

The image features a large, flowing, white fabric-like surface that appears to be draped or blowing in the wind. The fabric has a smooth, slightly glossy texture and is set against a light grey background. On the right side of the image, there is a vertical bar of dark grey color. Centered on the white fabric is the text "LESS IS MORE IN NATURAL HEARING" in a clean, black, sans-serif font.

LESS IS MORE
IN NATURAL HEARING

At Widex, we believe the natural auditory system is the best tool for processing sound. That's why we do all we can to let our hearing aid processing respect the way the auditory system works.

To achieve this, we take a different approach than the rest of the industry. We manipulate less to craft a more natural hearing experience.

Because we believe that feeding the auditory system with as authentic and detailed sound as possible enhances speech understanding, increases social engagement, and enriches quality of life. But it requires hard work to achieve a more natural hearing experience with less manipulation.

Learn more about our sound philosophy and how we craft a more natural hearing experience to help people forget about their hearing loss.



WE STRONGLY BELIEVE THAT THE
NATURAL AUDITORY SYSTEM IS BEST
EQUIPPED FOR PROCESSING AUTHENTIC
AND DETAILED SOUND.

SO, WE MANIPULATE LESS
TO CRAFT A MORE
NATURAL HEARING EXPERIENCE.



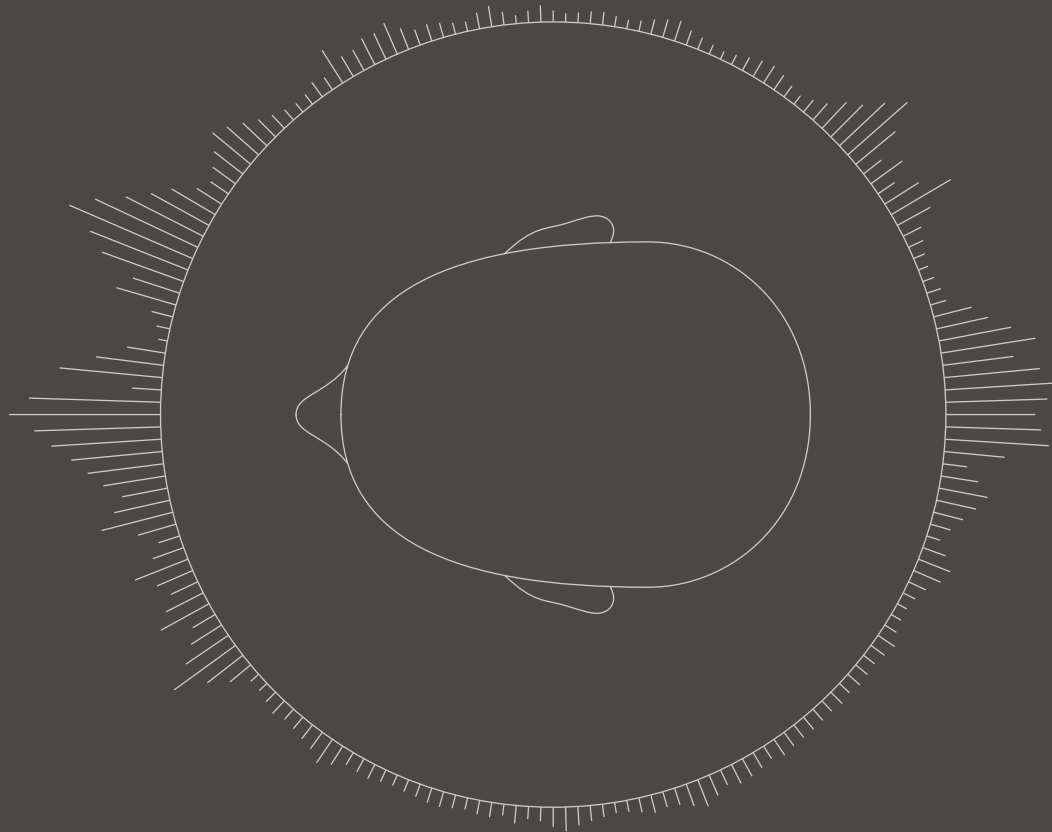
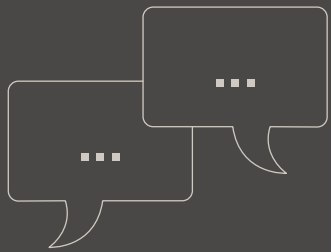
WE STRIVE TO MATCH THE NATURAL ABILITY TO BALANCE FOCUS AND AWARENESS

Ability to focus and communicate while still sensing and detecting what goes on around you are part of a natural hearing experience.

However, individuals with hearing loss often experience an imbalance between focus and awareness.

We strive to address this by seamlessly amplifying sounds of focus and gently reducing others while preserving the user's awareness of the surroundings.

However, achieving the right balance is challenging because it is crucial to know exactly when and how much to reduce sounds as well as when to focus on specific sources. Failing to strike this important balance may result in challenges to engage effectively in conversations or in a reduced and unnatural awareness of what goes on in the surroundings.



Focus on speech

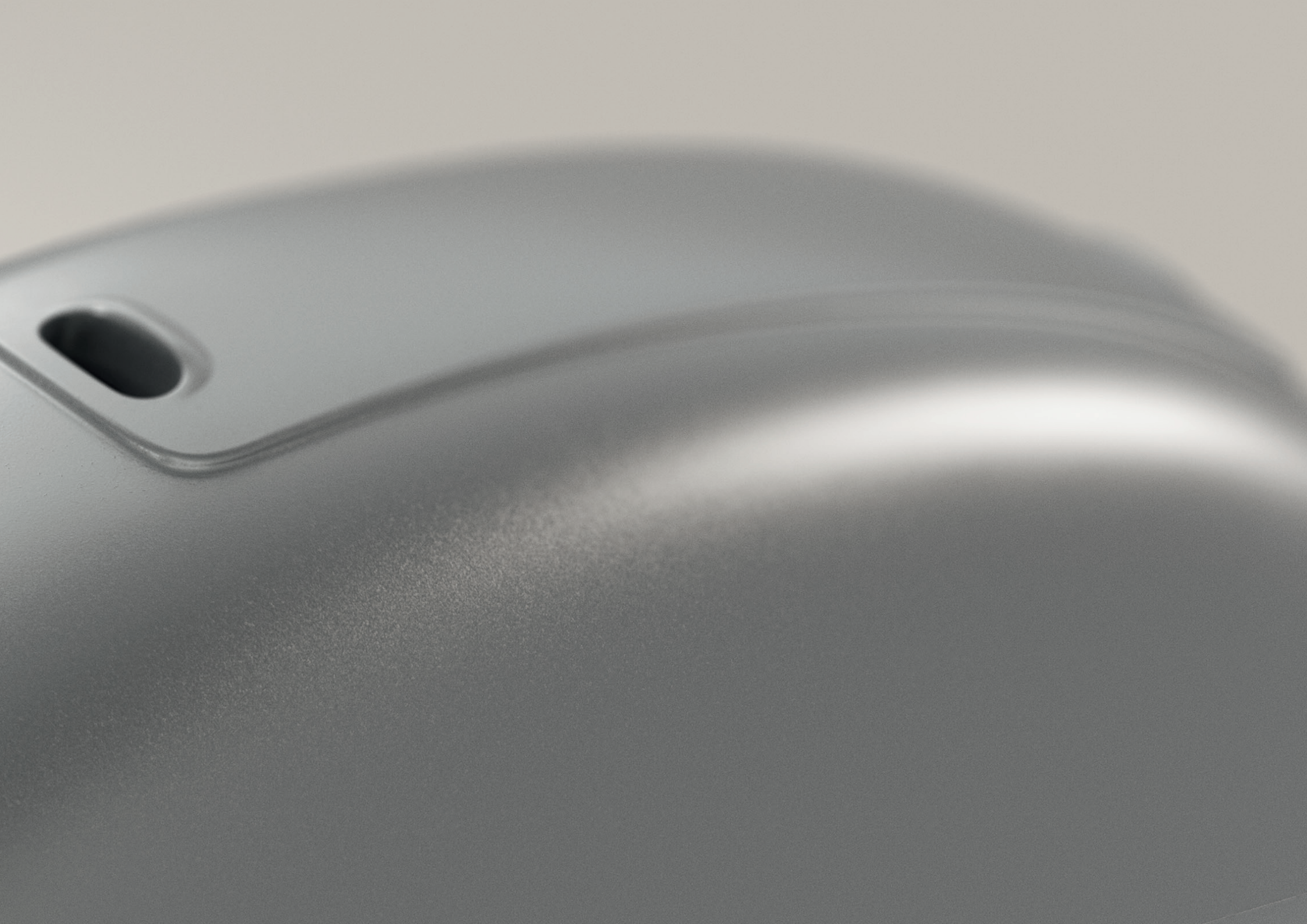
If there is too much focus on speech, you can distort the user's awareness of what goes on around them.

Awareness of the surroundings

If you prioritize the capture of all sounds to enhance awareness of the surroundings, you can make it too challenging to focus and engage in conversations.

NOTHING UNNECESSARY ADDED.
NOTHING IMPORTANT TAKEN AWAY.







IT REQUIRES HARD WORK TO ACHIEVE
A MORE NATURAL HEARING EXPERIENCE
WITH LESS MANIPULATION

WSaudiology

OUR 3 FUNDAMENTAL PRINCIPLES

Principle no. 1

RESPECT ALL SOUNDS

We craft an authentic sound experience that respects how the auditory system works, preserving the details and applying extreme sound processing only when necessary.

Principle no. 2

TAILOR TO THE USER

We provide a tailored sound experience where intelligent technology shapes sound delivery to each individual user and their preferences.

Principle no. 3

FOCUS ON WHAT MATTERS

We create a seamless sound experience with advanced analysis continuously adapting processing to any challenging situation – reducing distracting noise and improving speech clarity.





PRINCIPLE NO. 1 RESPECT ALL SOUNDS

We craft an authentic sound experience that respects how the auditory system works, preserving the details and applying extreme sound processing only when necessary.

PRINCIPLE NO. 1 - RESPECT ALL SOUNDS

WE BELIEVE THAT FEEDING THE
AUDITORY SYSTEM WITH AS NATURAL
SOUND INPUT AS POSSIBLE WILL
ENHANCE SPEECH UNDERSTANDING,
INCREASE SOCIAL ENGAGEMENT,
AND ENRICH QUALITY OF LIFE.



PureSound* is preferred by 85% of hearing aid users with mild-to-moderate hearing loss and 100% of normal-hearing users, demonstrating its effectiveness in providing a more natural and superior hearing experience.**

*Our program with the least aggressive sound manipulation

**Balling, Townend, Stiefenhofer, Switalski (2020). Reducing hearing aid delay for optimal sound quality: a new paradigm in processing. Hearing Review, 27(4), pp. 20–26.



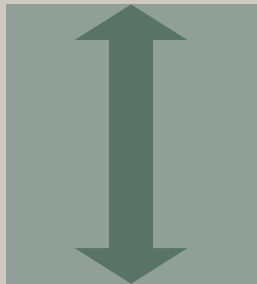
PRINCIPLE NO. 1 - RESPECT ALL SOUNDS

WE APPLY EXTREME SOUND PROCESSING ONLY WHEN NECESSARY

Preserving and reproducing the details of sound

We use unique technology to preserve, replicate, and reproduce all sounds. However, preserving the details and levels of sound is an art, when having to compress into a patient's limited dynamic range.

This means that, besides using advanced technology that enables us to capture all sounds and replicate them as close to the original as possible, we also need to find the right balance in adaptation times for gain calculations and automatic processes.



Widex access to soft sounds

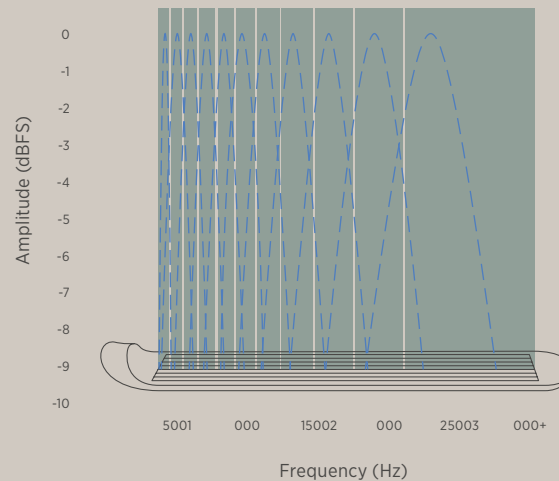


Limited access to soft sounds

Fewer filters to mimic the auditory system

Our time-domain filter bank is designed with varying filter widths, using narrower bands for lower frequencies and broader bands for higher frequencies and in this way mimicking the auditory filters in the cochlea.

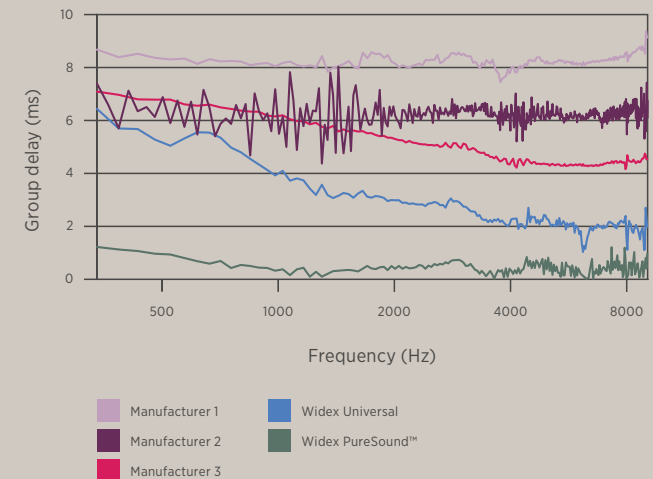
Due to the fewer bands, processing time and delay are reduced. The result is a purer and more natural sound quality.



Less processing delay for a purer sound

Signal processing results in a time delay, causing a sync issue between the hearing aid's sound and the direct sound reaching the eardrum, known as the comb-filter effect.

To address this, we created PureSound, streamlining the signal processing pathway to minimize delay to just 0.5 ms. This eliminates the artificial, metallic sound in hearing aids.





PRINCIPLE NO. 2 TAILOR TO THE USER

We provide a tailored sound experience where intelligent technology shapes sound delivery to each individual user and their preferences, enabling greater comfort.

PRINCIPLE NO. 2 - TAILOR TO THE USER

SOUND TAILORED TO THE USER,
USING INDIVIDUAL IN-SITU MEASUREMENTS.



Users experience a more individualized fitting process with Widex compared to their previous non-Widex hearing aids.*

*Of those survey respondents who expressed an opinion, 83% experienced a more individualized fitting with Widex, see Ziegler et al. (2023, forthcoming), Widex user satisfaction study, Survey of 3877 Widex Moment App users. WidexPress 53.

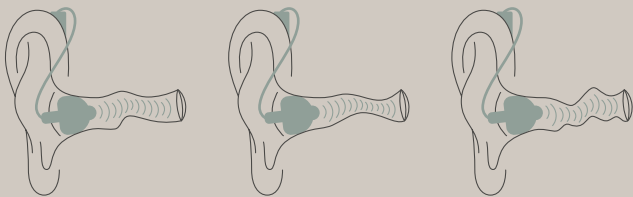


PRINCIPLE NO. 2 - TAILOR TO THE USER

NATURAL HEARING STARTS WITH TAILORED SOUND

Every ear canal is different

An ear canal has its own unique shape, size, curves, and grooves. So, instead of using average data gained from artificial measurements, we tailor the sound to each individual user. To shape sound delivery, we use advanced technology that intelligently measures and calculates the relationship between the unique ear canal's resonance, the potential sound leakage, and the level of amplified sound needed.

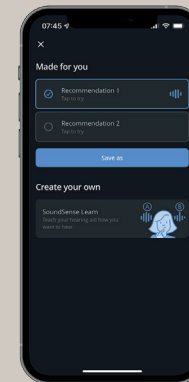
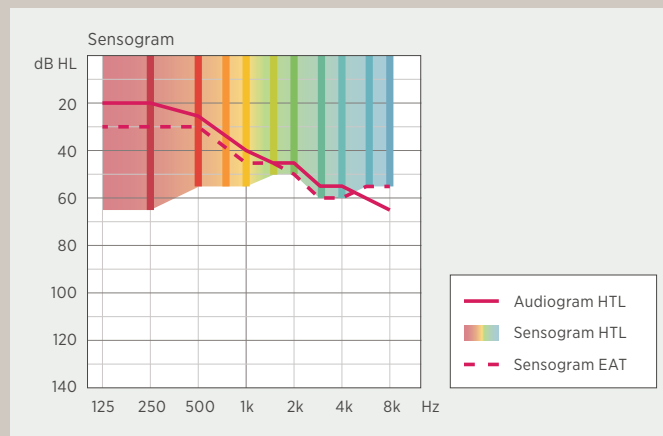


Every hearing aid placement on the ear affects sound

The hearing aid and ear-tip placement influence the remaining volume of the ear canal, and thereby its acoustics. To determine this effect for each individual user, audibility is measured via the hearing aid mounted on the ear. Results of these measurements are then seamlessly applied, specifying the individual gain needed and the individual advanced feature set-up.

Every user has their own preferences

We understand that only the user knows their exact intent and sound preference in any situation. With MySound in the Widex app, we empower the user to leverage AI to get the right amount of control for personalization at every moment.





A close-up photograph of a woman smiling as a man, likely a dentist, works on her teeth. The scene is brightly lit, and the focus is on the woman's face and the dentist's hands. The background is blurred, showing other people in a clinical setting.

PRINCIPLE NO. 3 FOCUS ON WHAT MATTERS

We create a seamless sound experience with advanced analysis that continuously adapts sound processing to any challenging situation - reducing distracting noise and improving speech clarity.

PRINCIPLE NO. 3 - FOCUS ON WHAT MATTERS

LET THE USER STAY FOCUSED
AND FEEL COMFORTABLE.



80% of hearing aid wearers face difficulties in hearing speech in noisy surroundings, while approximately 30% experience issues related to sound, including background noise and poor sound quality.*



PRINCIPLE NO. 3 - FOCUS ON WHAT MATTERS

HEAR SEAMLESSLY IN ANY SITUATION

Stay focused in any sound environment

We provide users with an enhanced hearing experience during their daily activities without the need for manual adjustments.

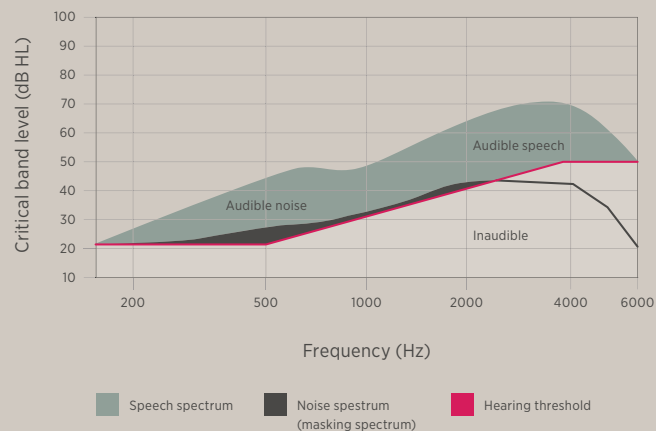
Our technology seamlessly adapts to the user's real-life listening environments, such as car rides, conversations, or forest walks, continuously monitoring for prominent speech and making discreet automatic adjustments.



Stay focused in every conversation

We use speech and noise detection mechanisms and information about the unique user's audibility level to emphasize the desired speech signal.

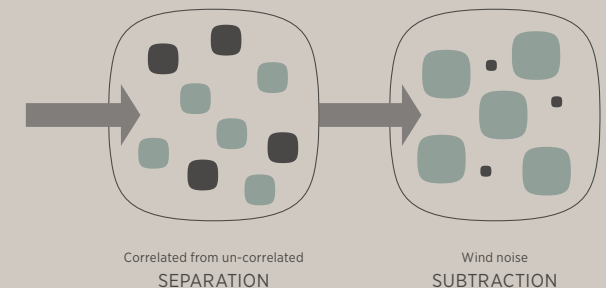
Through advanced analysis that continuously adapts sound processing to any challenging situation, we reduce bothersome background noise to below the audibility level of the user, without compromising speech.



Stay focused living an active life

Wearing hearing aids outdoors can be a challenging experience when wind hits the microphones. It creates loud turbulence and makes it hard to follow conversations.

Our technology cleverly detects what part of the signal is wind noise and what is speech, it separates the two and subtracts the wind noise. Using this approach, we help the user living an active life outdoors.



THESE ARE OUR PRINCIPLES OF LESS IS MORE IN NATURAL HEARING.

By following these principles in everything we do,
we craft a more natural hearing experience and let users
experience improvement in:

- Effective communication
 - Social interaction
 - Quality of life*



90% of users are satisfied
with the sound quality in
Widex hearing aids.

88% of users are satisfied
with the naturalness of
Widex hearing aids.*

*Ziegler et al. (2023, forthcoming), Widex user satisfaction study,
Survey of 3877 Widex Moment App users. WidexPress 53.



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