

# DNN 360



AUDIBEL

Leveraging predictive intelligence to optimize hearing aid performance in real time.

## How it helps

Aris AI hearing technology features the world's first multi-channel deep neural network (DNN)-powered directional system, which instantly and intelligently predicts optimal hearing aid settings to enhance speech intelligibility while preserving spatial awareness. This results in a more seamless and natural listening experience tailored to each individual user.

## How it works

DNN 360 utilizes advanced DNN-powered models trained on large, diverse datasets and subtle environmental speech cues to create an intelligent, continuously adaptive processing system. At its core are two new DNN-powered models, DNN Spatial Awareness and DNN Directionality, working together to determine when and how to apply directionality with speed and efficiency.

Traditional signal processing methods rely on real-time input from the hearing aid microphones, making them susceptible to fluctuations caused by the dynamic nature of sound. Aris AI hearing technology leverages proprietary training and DNN architecture to instantly and reliably predict the most appropriate hearing aid settings for that moment (*Figure 1*). This enables a more stable, adaptive, and context-aware listening experience across a wide range of real-world environments.

## Proof Points

With up to 8 dB signal-to-noise (SNR) advantage for improved spatial awareness and 28% better speech intelligibility compared to previous technology, your patients can stay connected to their surroundings while enjoying exceptional sound quality and industry-leading battery life<sup>1</sup>.

## Where to find it

Aris AI RICs		
24	20	16
●		

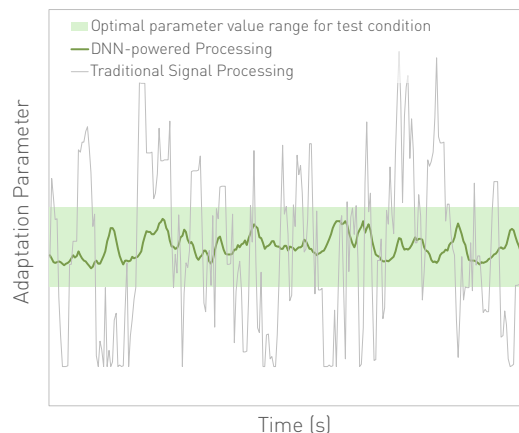


Figure 1: Example depiction of the differences between traditional estimation methods (gray line) versus a DNN-powered prediction approach (green line) in a laboratory measurement using Aris AI. The figure demonstrates the advantages of the DNN approach in its ability to better predict the most optimal parameters (shaded green area) for a given situation<sup>1</sup>.

## Tell your patients

Your hearing aids anticipate your needs and adjust instantly—wherever you are—  
**to help you hear clearly in every direction.**

<sup>1</sup>Marquardt, D., Xiao, J., Ganeshkumar, K., Xu, J. Taylor, L., and McKinney, M. [2025] Enhancing Directionality with Deep Neural Networks. Audibel white paper. Audibel and Audibel logo are registered trademarks of Starkey Laboratories, Inc. DNN 360 and Aris are trademarks of Starkey Laboratories, Inc. ©2026 Starkey Laboratories, Inc. All Rights Reserved. 1/26 FLYR4498-00-EN-AB