

Signia MaX with SoundSmoothing 2.0 and eWindScreen 2.0: Improving comfort without sacrificing clarity

The benefits of the new SoundSmoothing 2.0 and eWindScreen 2.0 features on the Signia Multi-adaptive Xperience (MaX) platform were demonstrated in technical measurements investigating the impact of transient sounds and wind on communication¹.

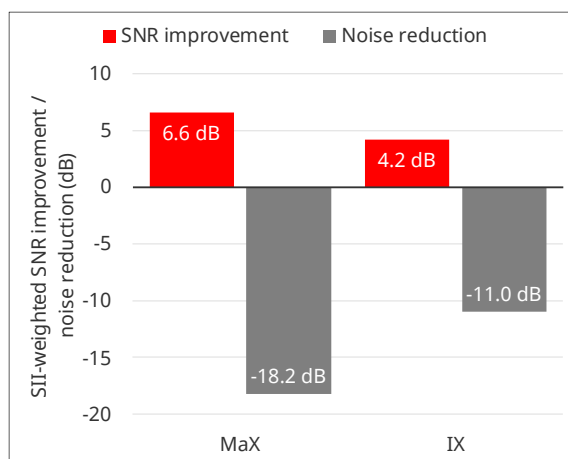
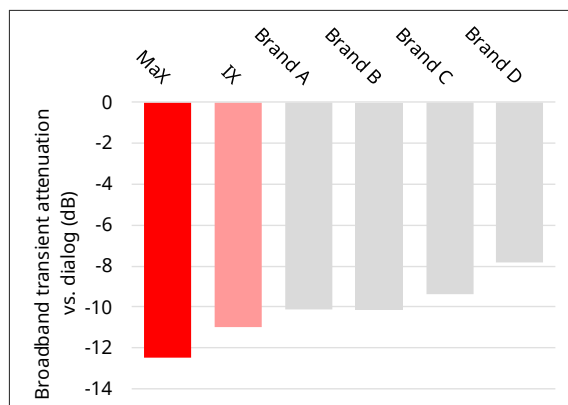
Besides its significant AI-driven improvements to speech-in-noise processing, the Signia MaX platform also enables other advantages. The platform's increased processing power and the improved binaural processing offered by e2e 5.0 enable higher-resolution reduction of sudden sounds and wind noise – without affecting speech.

Both features were tested in lab measurements where speech was presented from a loudspeaker while the hearing aids (fitted on a KEMAR) were subjected to either recordings of transient sounds or wind from a wind tunnel in front of the KEMAR. Different versions of the Hagerman procedure were used to obtain relevant outcome measures.

Signia MaX with SoundSmoothing 2.0 was compared to Signia IX and four key competitors. The upper figure shows the mean attenuation of the transient-to-speech ratio (with the unaided KEMAR as reference). Signia MaX provided the highest relative attenuation of transient sounds (12.5 dB), with **benefits over competitors reaching 4.7 dB, corresponding to a 66% reduction of the intensity ratio between transients and speech.**

In the wind noise measurements (lower figure), Signia MaX with eWindScreen 2.0 was compared to the predecessor version in Signia IX. The outcome measures were the improvement in signal-to-noise ratio and the attenuation of the wind noise (both relative to measurements with eWindScreen turned off). The results showed **7 dB more wind noise attenuation with MaX, accompanied by a**

2.4 dB SNR improvement, which corresponds to a 74% improvement in the intensity ratio between speech and wind noise.



Together, these results demonstrate that **Signia MaX increases listening comfort while preserving speech clarity.** By reducing the impact of sudden sounds and wind noise without compromising speech, Signia MaX supports the wearer's ability to communicate confidently and adapt more easily to their hearing aids.

1. Jensen, N.S., Samra, B., Kamkar Parsi, H., & Wilson, C. (2026). Signia Multi-adaptive Xperience with Acoustic Intelligence™: Holistic AI-driven enhancement of conversations in noise. Signia White Paper.

LIVE NOISY

The technical study data show how SoundSmoothing 2.0 and eWindScreen 2.0 not only effectively attenuate sudden sounds and wind noise, making them more comfortable, but also preserve concurrent speech, ensuring that speech clarity is maintained even in adverse conditions.

Signia MaX with Acoustic Intelligence changes what AI in hearing aids can be. It simultaneously understands sound across multiple dimensions to deliver hearing that adapts to the full moment, not just the noise. This enables wearers to LIVE NOISY. **Read the white paper here:**

