

News

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Two Pi pushes the envelope in Wind Noise Cancellation

WIND NOISE CANCELLATION - WNX, the latest outcome of Two Pi's comprehensive scientific program, perfectly rounds out the premium algorithm portfolio for manufacturers in the hearing healthcare, ear protection and professional communications industries.

Designed as a dual microphone system, **WNX** addresses the problem of annoying wind noise with innovative acoustical signal restoration. This advanced method fully outperforms common approaches that narrow the processing bandwidth at low frequencies to reduce the wind disturbance - thus negatively affecting the entire acoustical content.

Acoustical signal restoration utilizes a source separation concept to effectively recover the desired signal that is hidden in the contaminated mixture. **WNX** delivers an improvement of the signal-to-noise-ratio of up to 15 dB while preserving the spectral character of the desired signal.

In addition to signal restoration, **WNX** delivers a robust wind noise indicator to be used for optimization of the overall acoustical sound quality. Other active algorithms working in concert such as Dynamic Range Compression (DRC), Noise Cancellation (NC) and (Acoustic Comfort Optimization (ACO) are automatically adjusted based upon the acoustical environment, resulting in increased user comfort.

WNX is available as plug-in DSP library: this time-domain pre-processing block can easily be added as a front end to any software project. The additional time delay is less than 0.5 ms, and the extra processing incurred amounts to 1.1 MIPS for a sampling frequency of 16 kHz.

WNX boosts speech intelligibility and listening comfort, and is a perfect complement to QUADTRAE, Two Pi's premium level hearing aid algorithm suite. **WNX** also adds value to cochlear implants and professional communication devices.

For further information visit www.two-pi.com

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