

Noise Reduction Algorithm



PureAudio®

PureAudio® is a noise canceling algorithm that enhances speech-centric applications by sampling an ambient noise environment and attenuating the noise sources around the desired speech signals, delivering a *pure* audio signal. Continuous and repetitive noise is effectively removed from the audio input, providing higher recognition rates and improved communications. Designed specifically to improve signal-to-noise ratio, PureAudio works best in canceling stationary noises such as computer fans, engines, tire noise, etc.

Market Applications

PureAudio enhances a wide variety of speech-centric market applications including desktop speech recognition, cellular, Internet telephony, videoconferencing, multi-player gaming, voice verification, voice chat, surveillance, automotive telematics systems, wearable computers, military and embedded devices. In essence, PureAudio can be applied to any audio-input.

Integration

PureAudio can be embedded directly into an application or device, but more importantly, PureAudio is scalable to the user environment. Andrea Electronics can deliver an algorithm to cancel 8 dB of noise or 18 dB of noise, designed specifically to meet your application needs. PureAudio can run on a Digital Signal Processor (DSP), Pentium® or any other PC processor.

PureAudio can run as an independent noise canceling algorithm for single-element microphone solutions, or enhance a host of Andrea Electronics' digital solutions including DSDA®, (far-field Digital Super Directional Array microphone). Together with PureAudio, this algorithm offers an advanced system of increasing signal-to-noise ratio and providing an optimum audio input solution.

