



3201 Interstate 30 • Suite K-2 • Mesquite, TX 75150-2602 • 972-686-8973

Some useful definitions

acoustic energy - The energy in a sound wave.

acoustic source - The place or object that produces a sound.

acoustic spectrogram - a display of the amplitude of a sound at different frequencies measured over time.

audio analysis - study of recorded material to determine information such as content, voice, noise content, intelligibility, and many other variables.

consonant - a speech sound that causes a reduction in airflow through the vocal tract.

periodic wave - a wave that repeats continuously.

phonetic - having to do with the production, transmission, and perception of speech.

psychoacoustics - the study of the relationship between physical stimuli and the psychological responses to which they give rise.

sound wave - a wave that is a fluctuation in the static pressure of a medium such as air or water.

spectral plot - a graph of the magnitudes of frequency components of sound (amplitude, intensity, sound pressure)

spectrogram - a plot of the changes in a sound as a function of time; generally showing time from left to right, frequency from bottom to top, and amplitude(volume) as shades of gray or color.

signal enhancement - the process of utilizing various analog and digital systems to “clean-up” and improve the content of a recording in order to obtain the best representation of the desired content as opposed to noise, interference, and other unwanted content.

tone or pitch - a sine wave; a single frequency.

transcript - a written or typed document of the verbal content of a recording.

voice identification - the process of identifying an unknown voice. Normally samples of a known voice are compared to similar examples of an unknown voice. These samples contain information that are similar to physical fingerprints.

waveform - a graph showing the variation of a physical quantity at one point as a function of time.

waveform plot - a graphic plot of a segment or continuous content of a sound waveform which shows amplitude of the signal with respect to time.