Glossary of Terms

Adaptive AGC: An AGC hearing aid with slow-activation compression. To obtain an accurate measurement, these hearing aids require an additional time delay between the moment a signal is presented and the moment the measurement is taken.

AGC: Automatic Gain Control or Automatic Volume Control. A device in the hearing aid that automatically adjusts the gain depending on the input level (AGC-I) or output level (AGC-O). Also known as "Compression."

AIDED RESPONSE: Amplified response. The response of the hearing aid within the ear. (Also called the "In-situ Response") Subtract the "Unamplified Response" from the "Amplified Response" to obtain the Insertion Gain Response. When the Amplified Response is measured on a real ear (as opposed to a dummy), it is called the "Real Ear Aided Response" or Amplified Real Ear Response (or REAR).

ANSI: American National Standards Institute. A national organization that sets standards for testing equipment. The section number and date (year) following the initials "ANSI" designate the standard being referenced.

ATTACK TIME: The amount of time it takes for an AGC hearing aid to react to a loud sound when previously exposed to a soft sound.

AVG: Short for "average."

BI-CROS: A CROS hearing aid that has two microphones, one in each ear, sending both signals to one ear.

BTE: Reticulated hearing aid.

CIC: Completely-in-the-canal or deep-insertion hearing aid.

COMPOSITE: A continuous, real-time, speech-weighted signal (with a spectral shape similar to long-term averaged speech) composed of 79 distinct frequencies that are updated 5 times per second. The composite signal gives you the advantage of being able to see how a hearing aid behaves in the presence of noise that closely simulates speech and lets you immediately see how the hearing aid responds to any changes in signal amplitude.

COUPLER: A device that connects a test microphone to the hearing aid to provide an accurate test situation.

CROS: A type of hearing aid indicated for cases of unilateral profound sensor neural hearing loss with normal hearing in the other ear. It uses a wired or wireless system to send a signal to the opposite ear.

TARGET CURVE: See "Target."

HARMONIC DISTORTION: See "Harmonic Distortion"

DISTORTION MEASUREMENT: A measure of distortion in the signal created by the hearing aid. Hearing aid. Distortion is usually referred to as "harmonic distortion," although it can sometimes refer to intermediation distortion.

DSL: "Desired Sensation Level." DSL WDRC is the fitting formula used with non-linear hearing aids. DSL LIN is the formula used with linear hearing aids.

EQUIVALENT INUT NOISE: The amount of internal noise produced by the hearing aid's circuitry.

FLAT WEIGHTED: Same as "UNWEIGHTED," this refers to a signal that has equal amplitude at every frequency.

FOG MEASUREMENT: "Full-on gain" measurements. Taken when the hearing aid's volume control is set to its maximum position.

FOURIER TRANSFORM: A mathematical process that changes "time" information into "frequency" information.

FREQUENCY RESPONSE: Frequency Response. A measure of a device's output or gain across a range of input signal frequencies.

FULL-ON GAIN: The adjustment of the hearing aid's volume control for maximum output.

FUN-TAK: The brand name of the clay-like substance used to glue and seal hearing aids to the couplers.

GAIN: The amplification or increase in sound power in a hearing aid. In testing, it is obtained by subtracting the input level from the hearing aid's output level.

HARMONIC DISTORTION: The presence of harmonics in a reproduced signal that was not present in the original signal.

HFA: High Frequency Average: According to ANSI S3.22-1987, the averaged response at 1000, 1600, and 2500 Hz.

HEAD BAFFLE EFFECT: Refers to the increase Relative density of high-frequency sound caused by diffraction of low-frequency sound caused by the head and the pinna, which mix to produce the effect.

HL: Hearing Level.

HTL: Hearing Threshold Level.

ICRA: International Colloquium of Rehabilitative Audiology. Refer to section 2.5.2.1 on filters for more information.

IEC: International Electro technical Commission. An international organization that determines all standards for measurements.

I/O MEASUREMENTS: Input/output Measurements. A measurement of a hearing aid's output in response to a series of signals.