

Immittance Measurements: Another name for tympanometry.

Impression: A mold of the concha and ear canal made by a hearing healthcare professional to assist the hearing aid manufacturer in producing a custom fit hearing aid that sits in and seals the user's ear appropriately.

Incus: The middle bone of the ossicular chain, or the bones in the middle ear.

Induction Coil: The telecoil inside of a hearing aid that is activated by electro-magnetic energy coming from a telephone or assistive listening device.

Infrared: A signal used by some assistive listening devices to send sound via infrared light waves.

Inner Ear: The cochlea and vestibule. The snail-like portion of the ear system that converts mechanical sound energy coming from the middle ear into an electrical impulse prior to transmission to the brain. The vestibular system is composed of three fluid filled semicircular canals used for maintaining balance.

Insertion Gain: The difference between the amount of intensity present at the eardrum when a functioning hearing aid is in an ear and turned on versus the amount of intensity present when there is no hearing aid in the same ear.

In Situ: In place. The in situ gain of a hearing aid is measured with the hearing aid in place in the ear.

Intensity: The loudness or volume of a sound.

In-The-Canal (ITC) Hearing Aid: Smaller than an ITE hearing aid, it usually fills up a portion of the ear canal and a small portion of the outer ear. A mini-canal attempts to make the hearing aid even smaller by using a smaller battery.

In-The-Ear (ITE) Hearing Aid: A style of hearing aid in which all the parts of the hearing aid are fit into the concha or bowl area of the pinna and the ear canal. Variations of ITE hearing aids are:

Full Shell: A type of ITE in which the hearing aid fills up the entire bowl area.

Low Profile: A variation of a full shell ITE, it too fills up the entire bowl area, but is built thinner.

Half Shell: Smaller than a full shell ITE, in that it is designed to fill up the bottom 1/2 or 1/3 of the bowl area.

Intraoperative Monitoring: Electrophysical measurements of the auditory system made during a surgery to monitor the effects of the surgical procedure on the auditory system.

IROS (Ipsi-Lateral Routing Of Signal): A designation for a hearing aid or earmold that has a large vent.

Kneepoint: The sound level at which a compression device inside a hearing aid starts to function. The point on the slope of a hearing aid's input / output curve at which the linear amplification common for soft inputs changes to the non-linear amplification for louder inputs.

Labyrinth: The hollowed-out area of the skull's temporal bone that contains the cochlea and parts of the balance system.

Language Development Disorder (Hearing Related): The lack of timely development of language skills by a hearing-impaired child due to a detriment in the auditory input as a result of the child's hearing loss.

Lateralization: The perception by an individual that a sound is being heard on one side due to a timing and intensity difference, when in fact the sound was presented bilaterally.

Linear / Non-Linear: A linear hearing aid is one that adds the same amount of gain to the incoming signal, regardless of how soft or loud the incoming signal is, up to a cutoff point or saturation. A non-linear hearing aid is one that varies the amount of gain added to an incoming sound based upon the intensity of the incoming sound. Usually in non-linear hearing aids, soft incoming sounds have more gain added to them than loud incoming sounds.

Lip Reading: See speech reading.

Listening Stethoscope: A device used by hearing healthcare professionals to listen to a hearing aid for the purpose of assessing the hearing aid's performance and adjustments / repairs.

Lobule: The ear lobe. The bottom part of the pinna which does not contain cartilage.

Localization: The ability of the brain to determine the direction from which the sound originated by utilizing differences between the timing and intensity of a sound as perceived in one ear compared to the other ear.

Loop System: A type of assistive listening device that utilizes a small neck or large room loop to set up a magnetic field. The system allows for a transfer of a desired signal, with less background noise interference, to a hearing aid or other device using electro-magnetic energy.