

SmartEP-ASSR



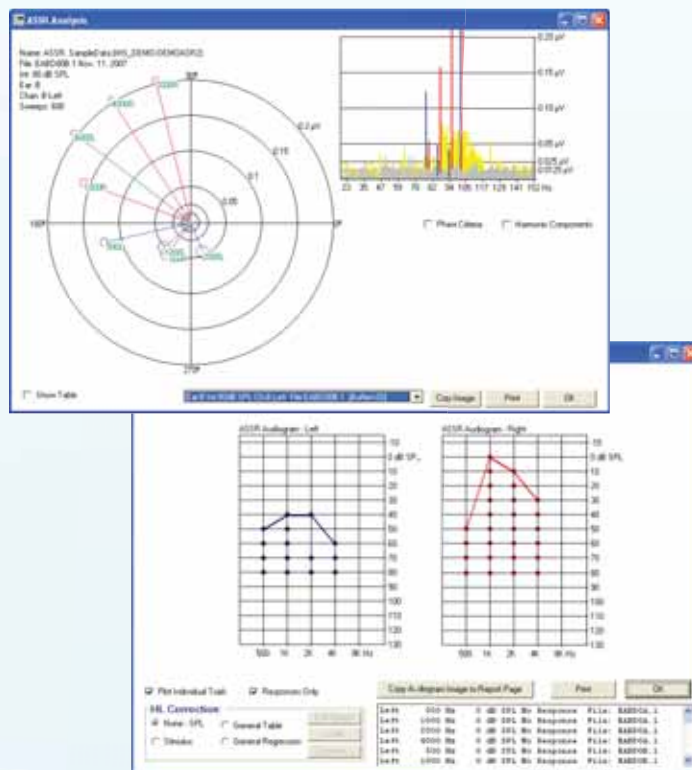
Quick and Objective Auditory Threshold Detection

The ASSR Advantage

ASSR speeds up audiometric evaluation by providing accurate threshold detection using automated statistical analysis, which also greatly reduces the potential for human error.



- Automatically generates an estimated audiogram for user-selected frequencies.
- Simultaneous, dual-ear stimulation technique reduces test time.
- Simultaneous, multi-frequency testing.
- Two channel option for both ipsilateral and contralateral analysis and bone conduction testing.
- Detection of mild, moderate, or profound hearing losses.
- “Response” or “No Response” evaluation result for each frequency and intensity level tested.
- Easy selection of test frequencies.
- Responses displayed in Audiogram, Spectral Analysis, and Phasor graphs.



Smart Features

Software

- Tests one or both ears at the same time.
- Simultaneous, multi-frequency testing.
- Default settings allow fast start-up and testing.
- Automated ASSR detection and threshold estimation for each frequency tested.
- Pre-programmed multi-frequency stimuli for the most commonly tested audiometric frequencies.
- Customizable protocols for automated user-defined data collection.
- User-specified stimuli using the included Advanced Stimulus Generation Utility.
- Adjustable artifact rejection level and time region.
- Spectral analysis provides ASSR amplitude values for each frequency tested.
- Activation of harmonic analysis feature further speeds up detection of responses.
- Multiple graphical displays, including recording spectral analysis and ASSR waveforms.
- Audiograms are automatically generated with recordings from one or multiple sessions by simply adding data to any one of ten display pages.
- Audiograms can be plotted in SPL or HL using a user-modifiable SPL-to-HL correction table or regression equations.
- Phasor plot shows the strength and repeatability of the steady state response.
- Phase-Intensity graph illustrates latency-intensity function.
- Print reports to any Windows® supported printer or directly to a PDF file.
- Integrated, shared database with all other IHS programs.
- Includes capability to export text files.
- Easy data backup, retrieval, and management.
- Built-in system calibration, self-check, and system diagnostics modules.

Stimulus Specifications

- Up to eight simultaneous frequencies per ear.
- Stimulus frequency range from 250 Hz to 8 kHz.
- Intensity: 0-125 dB SPL in 1 dB increments.
- User-defined repetition rates (modulation).
- Output in SPL allows for easy calibration.
- Contralateral masking available.
- User-modifiable, stimulus-specific SPL-to-HL conversion tables.
- Advanced stimulus generation module included:
 - Ability to specify amplitude modulation, frequency modulation, and ramping functions.
 - Ability to specify frequency specific transient stimuli including a wide variety of stimulus envelopes.

Hardware

- USB Plug-and-Play.
- Up to two EP recording channels.
- Optional auditory transducers: insert earphones, bone vibrator, headphones, sound field (with external amplifier), and OAE probe.
- May be upgraded to include: SmartEP, SmartDPOAE, SmartTrOAE, SmartAud, SmartScreener-Plus 2, IVRA.

Computer Requirements

- Windows® based computer.
- Minimum 2GB RAM.
- Minimum 5GB available hard drive space.
- CD or DVD drive for installation.
- Minimum XGA display (1024x768 screen resolution).
- Two available USB ports.
- Removable media, network drive, or secure internet storage site for data backup recommended.