

# SmartEP-ASSR

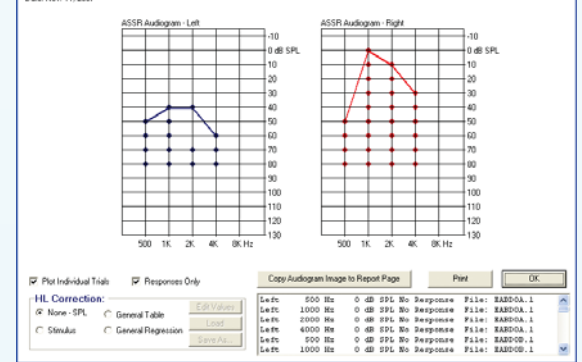
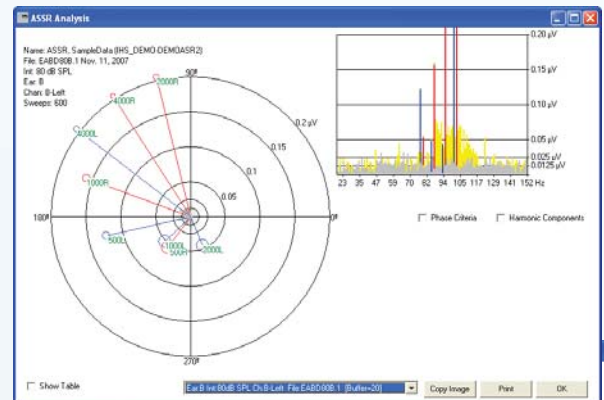


Quick and Objective Auditory Threshold Detection

## 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.

## Computer Requirements

- Windows® based computer, notebook recommended.
- Minimum 4GB RAM.
- Minimum 5GB available hard drive space.
- Minimum XGA display (1024x768 screen resolution).
- Two free USB ports.
- Removable media, network drive, or secure internet storage site for data backup recommended.

## Hardware

- USB Plug-and-Play.
- Up to 8 recording channels.
- Optional auditory transducers: insert earphones, bone vibrator, headphones, sound field (with external amplifier and speakers), high frequency transducers, and OAE probe.
- Easily upgradable to include SmartEP-ASSR, SmartDPOAE, SmartTrOAE, SmartAud, SmartScreener-Plus 2, IVRA.