



# INTELLIGENT HEARING

## S Y S T E M S



# Infant Screening

**The easy to use, fast, affordable, portable and expandable infant hearing screening systems**

## SmartDPOAE

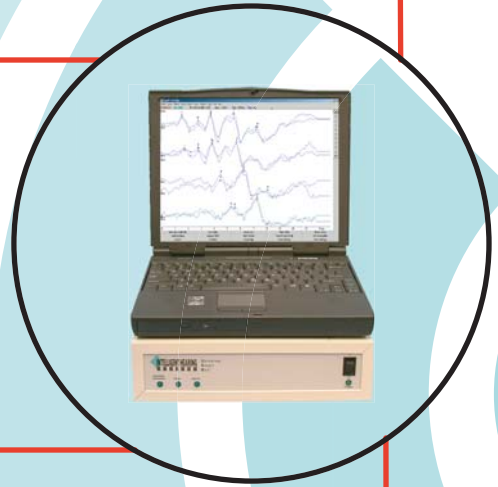
### Distortion Product Otoacoustic Emissions System

A full-featured diagnostic system with complete screening capabilities. Easy to set up protocols and testing parameters make infant screening a snap. Straightforward displays provide more than just PASS or REFER information for potential diagnostic needs. Stopping criteria algorithms accelerate testing for facilities where a large amount of patients need to be screened. Easy-to-define passing criteria allows for a response detection algorithm to best fit your particular geographic location or population.

## SmartScreener

### Auditory Evoked Potentials Infant Screener

A full-featured easy-to-use screening system that allows you to choose your own screening protocols or can automatically test right down to threshold. Based on advanced detection algorithms, get a probable response or no response outcome for each recording. Step-by-step demonstrations help first time users get acquainted with the screening procedure. The integrated database helps tracking of patient information across programs. Easily import data into SmartEP for further analysis.



## SmartEP-ASSR

### Auditory Steady State Response System

SmartEP-ASSR is an indispensable tool when acquiring an audiogram and performing a full audiometric evaluation without the need of patient feedback. It is also an objective tool for performing hearing aid fitting, especially when behavioral testing is impractical. Use the default settings for one click operation, allowing stopping and restarting. SmartEP-ASSR takes the guesswork out of audiometric evaluation by providing threshold detection with statistical analysis for easy diagnosis, allowing you to spend more time with your patients. Advanced screening algorithms allow you to perform rapid screening sessions; while advanced capabilities, such as testing up to 8 frequencies per ear at a time, reduce testing and response analysis time. Fast screening module based on Click ASSR Evoked Responses provides PASS and REFER information.

## Intelligent VRA

### Visual Reinforcement Audiometry System

This is the intelligent, automated and cost effective way to acquire behavioral thresholds. Using IVRA, audiometric testing can be performed by a single audiologist. The system comes pre-programmed with the 5 up/5 down algorithm, as well as our exclusive CAST fast screening and OHTA (Optimized Hearing Threshold) algorithms. Accuracy of the results are validated with the use of control trials and probe trials, reducing the potential for misdiagnosis.

# Smart Features

## SmartScreener

- Fast protocol setup, allowing to run tests automatically.
- Automatic stopping on satisfactory response.
- Multiple stimulus types. Select from click, 500, 1000, 2000 or 4000 Hz stimulus signals.
- Perform chain-stimuli testing.
- Save software and stimulation settings for easy test replication.
- Pause and restart the test at any time during acquisition.
- Optically isolated amplifier.
- Customizable amplifier settings (rejection, gain and filters).
- Customizable display layout and time scale.
- Immediate SNR and RN calculation as recording is acquired.
- Display EP recordings in split-sweep, averaged, plus-minus or spectral modes.

## SmartDPOAE

- Easy to use controls and testing options with automatic default parameters for fast start-up.
- Automatic stopping criteria once a satisfactory response has been acquired for rapid testing.
- Fast screening with the automatic PASS or REFER labels based on standard, or your customized criteria.
- Easy test setup for levels, ratios and number of test frequencies.
- Save software and stimulation settings for easy test replication.
- Pause and restart the test at any time during acquisition.
- Automated, variable artifact rejection based on measured noise.
- Built-in calibration module.
- Customizable display that allows to display data from one or both ears at a time; or view a detailed point by point analysis.

## SmartEP-ASSR

- Automatic default parameters allow for fast start-up and testing.
- User-selectable artifact rejection level and region.
- Automated response detection and threshold information for each tested frequency with the use of spectral techniques.
- Multiple graphical response displays, including time and spectral data representation.
- Phasor diagram to illustrate response strength and Phase-Intensity graph for tracking response delays.
- Up to eight simultaneous frequencies per ear: 250 - 8 kHz.
- Single or dual ear stimulation. Output in SPL.
- Built-in system calibration, self check and self diagnostics.
- User-modifiable frequency-specific SPL to nHL conversion tables.
- Optional Click ASSR screening module for fast screening

## IVRA

- Automatic testing procedures allow testing by a single examiner.
- Built-in test routines: Fast screening using the CAST algorithm. Built-in four-frequency threshold detection audiogram using the OHTA algorithm. Step-up/step-down staircase procedure for testing threshold one frequency at a time.
- Control trials to monitor test reliability.
- Automated training routine to orient the infant to perform the head turn task.
- User-modifiable, frequency specific SPL to nHL conversion table.
- Built-in system calibration, self check and self diagnostics.
- Integrated database with all other IHS programs.

# Smart Choices

## Universal Smart Box

### Features

- Light and portable
- Connects to any Windows® USB compatible desktop or notebook (recommended) computer
- Up to eight channel AEP  
High frequency option  
Ipsilateral masking option
- Up to one channel OAE  
High frequency option  
Suppression option
- Use inserts, headphones, bone vibrator, HF transducers and/or OAE probe
- Upgradable to include IVRA



## Universal Smart Box Jr

### Features

- Light and portable
- Connects to any Windows® USB compatible desktop or notebook (recommended) computer.
- Up to two channel AEP
- Up to one channel OAE
- Use inserts, headphones, bone vibrator and/or OAE probe



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