

AD229e

Diagnostic Audiometer



*Save time on routine
Focus on results*



Interacoustics[®]

leading diagnostic solutions

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Save time on routine

The high quality of the AD229e makes it well suited for any stationary or portable application where diagnostic testing of air, bone and speech is performed. The time saving automatic test functions combined with the computer interface makes the AD229e ideal for modern healthcare environments. The talk forward and talk back functions make it easy to work with the AD229e, especially with sound booth installations. Full NOAH compatibility completes the picture.

Auto Threshold and Békésy

The AD229e incorporates a function for performing threshold determination automatically. The test procedure is based on the Hughson-Westlake method (up 5dB, down 10dB) and conforms to ISO 8253. Desired test frequencies may be selected freely by the user.

The Békésy Test, featuring pure tone, pulsed tone or narrow band noise as stimuli as well as masking with narrow band noise, is incorporated. After testing the test results can be recalled from the memory of the AD229e or transferred to a PC for database storage or printing. A buzzer is built in, allowing the operator to be informed about test status when doing automatic tests.

ABLB / SISI / Stenger / Tone in Noise

As well as the pre-programmed ABLB and SISI tests the AD229e can perform the Stenger Test with pure tones for evaluating malingering, or as a binaural speech test with a monophonic speech signal. The Langenbeck "Tone in Noise" Test is also available.

Master Hearing Aid

The AD229e has incorporated a 2 channel Master Hearing Aid for hearing aid simulation. The speech signal from the live voice microphone is transformed directly into digital signals, and all sound shaping filters work in the digital domain ensuring high sound quality.

Filters and acoustic gain can be selected individually for each channel.

Printing

PC connectivity provides options for data storage and full page reports via NOAH or the Interacoustics database software OtoAccess™.

Free Field capability

Speech and pure tone may be presented under free field conditions. The optional system including power amplifier and loudspeakers ranges from 90dB SPL to 115dB SPL and is medically approved. A set of connection panels, AFC8, is available for connection to a sound booth. Ask your local distributor for details.

Speech testing and communication

Live Voice speech testing is easy to perform using the built-in goose neck microphone. CD or tape players may be connected. Talk back is provided for sound booth installations. Talk forward is available using the built-in microphone. The intensity is easily adjusted on the front panel. Monitoring is possible either through the operator's headset or through the built-in monitor loudspeaker.

Other features

- Two-channel speech
- Synchronous masking



Hard shell carrying case

Tests

- Air conduction
- Bone conduction
- Speech
- Master Hearing Aid
- Stenger
- Free Field testing
- Auto Threshold
- Békésy
- ABLB
- SISI
- Langenbeck Tone in noise

PC-integration

The audiometer offers PC-integration using the Diagnostic Suite Windows® software for transferring audiometric data to the PC.

The diagnostic suite offers features such as:

- Audiometric data transfer
- Advanced print layout wizard
- Personalized and combined reporting
- Advanced report page
- Patient and session handling
- Audiogram symbol editor
- Full database integration: OtoAccess™ and Noah compatible

NOAH

The AD229e can transmit all test data to the NOAH audiometry module eliminating the need for time consuming manual data entry.

OtoAccess™

Interacoustics also offers OtoAccess™. This is an independent database program that can store and retrieve patient data, including audiometry. In addition, OtoAccess™ communicates with other Interacoustics products, allowing impedance, ABR, VNG and OAE data to be stored conveniently in the same patient file as the audiometry. Networking the software allows users secure access to patient data from other office computers at any time.



Diagnostic Suite software



AD229e

- Versatile deployment options
- Extensive diagnostic test battery
- PC integration for printing, storage, sharing and hearing aid fitting



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Technical Specifications

Intensity :	AC: -10 to 120 dB HL in 1 or 5dB steps. BC: -10 to 80 dB in 1 or 5 dB steps
Frequency range:	125-8000 Hz
Input:	Tone, Warble Tone $\pm 5\%$, 5Hz (true sine wave frequency modulation), tape/CD 1+2, mic.
Masking stimulus:	Automatic selection of narrow band noise (or white noise) for tone presentation and speech noise for speech presentation.
Outputs:	Left, Right, Bone L+R, Insert Phones, Insert Masking, FF1, FF2.
Talk forward:	Built-in talk forward microphone. 0-110dB SPL continuously adjustable on operation panel.
Monitor:	Output of tape or CD through built-in speaker or through external earphone or speaker.
Tone presentation:	Manual or Reverse. Single pulse. Multiple pulses 250-5000 msec. on/off.
Frequency selection:	125Hz, 250Hz, 750Hz, 1500Hz or 8kHz may freely be deselected
Special tests/test battery:	SISI. ABLB. Stenger. Stenger Speech. Langenbeck (tone in noise). Békésy Test. 2 channel speech, 2 channel Master Hearing Aid, Auto threshold.
Display:	Alpha-Numeric Display.
Examples of compatible Windows® software:	Diagnostic Suite for PC-integration (OtoAccess™ and Noah compatible)
Power supply:	External UPS400 (included). 100-240 V
Consumption:	60 VA
Dimensions and weight:	(LxWxH): 36x26x10 cm / 14x10x4 inches. Weight: 1.8kg/4.0 lbs. (external power supply UPS400 + 0.8kg/1.8 lbs.)
Standards:	Audiometer: EN 60645 -1, ANSI S3.6, Type 2. Speech: EN60645-2/ANSI S3.6 type B or B-E. Safety: EN 60601-1, Class 1, Type B. EMC: IEC 60601-1-2.
Medical CE-mark:	Yes
Included parts:	TDH39 Audiometric headset B71 Bone conductor APS3 Patient response button UPS400 External power Supply 200 AF12 Audiogram charts, 3 Pens Power cable Dust cover Operation manual CD Multilingual CE instructions for use
Optional parts:	21925 Amplivox audiocups, noise reducing headset 50250 Peltor noise reducing headset (may be supplied at no extra cost) ACC25 Carrying case EARTone5A Audiometric insert phones HDA200 Audiometric headset CIR22 Insert earphone set for masking or monitoring UCA40 USB computer cable IFC69 (9 pins) serial computer cable EM400 Talk back microphone MTH400 Monitor headset MTH400M Monitor headset with boom mic. Push buttons instead of rotary switches Diagnostic Suite Software Interacoustics database OtoAccess™

Sales and service in your area:

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Other audiometers:

- PA5 Pediatric Audiometer
- AS608/e Screening Audiometer
- AD226 Diagnostic Audiometer
- AD229b Diagnostic Audiometer
- AC33 Clinical Audiometer
- AC40 Clinical Audiometer
- Equinox^{2.0} Clinical Audiometer

Audiometry and Middle Ear Analyzer in one:

- AA222 Audio Traveller



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Read more here:
www.interacoustics.com/com/AD229e



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