

## Diagnostic Audiometer AD226

- Efficient Hearing Examinations



# Audiometry. *precision*

### Features

- 125Hz - 8000Hz
- -10dB to 120dBHL output
- Air and Bone Conduction
- WN and NB masking
- 5dB and 1dB attenuators
- Insert Phones (optional)
- Pure, Warble and Pulsed tones
- Automatic Threshold test
- SISI and Bekesy tests
- Stenger and ABLB tests
- Tone in Noise test (Langenbeck)
- Talk Forward
- USB/RS232 connection for PC
- PC on-line monitoring available
- NOAH compatible
- Printing options via PC
- Carrying case (optional)

### Applications

The high quality of the AD226 makes it particularly well suited for any stationary or portable application where diagnostic testing of air and bone conduction thresholds is performed. The time saving automatic test function combined with the computer interface makes the AD226 ideal for modern healthcare environments. The Talk Forward function makes it easy to work with the AD226, especially with sound cabin installations. Full NOAH compatibility completes the picture.

### Automatic Testing

The AD226 incorporates a facility for performing threshold determination automatically. The test procedure is based on either the Hughson-Westlake method (up 5dB, down 10dB) or the standard OSHA procedure. Desired test frequencies may be selected freely by the user. The Bekesy test, featuring pure tone, pulsed tone, narrow

band noise or white noise as stimulus as well as masking with narrow band noise, is also incorporated. Upon test completion the test results can be recalled from memory of the AD226 or transferred to a PC for database storage or printing.

### ABLB / SISI / Stenger / Langenbeck

As well as the pre-programmed ABLB and SISI tests, the AD226 can perform the Stenger test for evaluating malingering. The Langenbeck Tone in Noise test is also included.

### Insert Phones

EarTone 5A Insert Phones (optional) may be supplied in addition to the standard TDH39 audiometric headset. These insert phones provide very low cross hearing and effectively reduce the need for masking. Ambient noise is also attenuated.

leading diagnostic solutions



# Interconnections



**Software for PC:**  
PrintView  
OtoAccess™ Database  
NOAH Modules



## General Technical Specifications

### Standards:

Audiometer: EN 60645 -1, ANSI S3.6, Type 3  
Safety: EN 60601-1, Class I, Type B.

### Medical CE-mark:

Interacoustics A/S meets the requirements of the Annex II of the Medical Device Directive 93/42/EEC. Approval of the quality system is made by TÜV – identification no. 0123.

### Audiometer Type: 3.

**Calibration:** AC: ISO 389-1 (TDH39), ISO 389-2 (EARTone5A), BC: ISO 389-3.

### Frequencies and Maximum Hearing Levels:

Hz	AC dBHL	AC dBHL	BC dBHL
	TDH39	EARTone5A	B71
125	90	95	
250	110	100	45
500	120	120	65
750	120	120	70
1000	120	120	70
1500	120	120	70
2000	120	120	75
3000	120	120	80
4000	120	120	80
6000	120	105	55
8000	110	100	50

**Extended Range Function:** If not selected, the AC output will be limited to 20dB below maximum output.

**Input:** Tone, Warble Tone +5%, 5Hz (true sine wave frequency modulation).

**Masking stimulus:** NB Noise / White Noise.

**Outputs:** Left, Right, Bone L+R, Insert Phones, Insert Masking.

### Transducers:

TDH39 Audiometric Headset  
EAR-Tone 5A Insert Phones (optional)  
B71 Bone Conductor

**Talk Forward:** Built in talk forward microphone. 0-110dB SPL continuously adjustable on operation panel.

**Tone Presentation:** Manual or Reverse. Single pulse.

Multiple pulses 250-5000 msec. on/off.

**Auto Threshold:** Patient controlled Hughson Westlake procedure according to ISO 8253 or OSHA procedure according to NIOSH.

**Frequency Selection:** 125Hz, 250Hz, 500 Hz, 750Hz, 1500Hz or 8kHz may freely be deselected if a quicker test routine is desired.

**Synchronous Masking:** Locks channel 2 attenuator to channel 1 attenuator.

**Store Function:** Internal memory for AC L/R and BC L/R.

### Tests:

**SISI** with auto score calculation. (5dB included for familiarisation).

### ABLB

**Stenger (Binaural pure tone stimulation).**

**Langenbeck (Tone in Noise).**

### Bekeyes Test:

Pure Tone or Narrow Band stimulation. Fixed frequency. Continuous and pulsed tone. OSHA automatic pure tone test procedure.

**Display:** Alpha-Numeric Display.

**Patient Signal:** Reed switch push button.

### Examples of Compatible Windows® Software:

Interacoustics OtoAccess™ database program and diagnostic modules software.  
PrintView for on-line PC monitoring and printing.  
NOAH hearing aid fitting software.

**Construction:** Plastic cabinet

### Attenuator controls:

Rotary switches (Push buttons optional)

**Power Supply:** External UPS400 (included). 100 - 115 V or 230 V Please specify.

**Consumption:** 40 VA

**Dimensions (WxDxH):** 30x23x9 cm / 12x9x4 inches.

**Weight:** 1.3kg/2.9 lbs. (external power supply UPS400 + 0.8kg/1.8 lbs.)

### Air freight packing (WxDxH):

1 case: 73x36x17 cm / 29x14x7 inches.  
Gross weight: 5.2 kg/11.5 lbs.

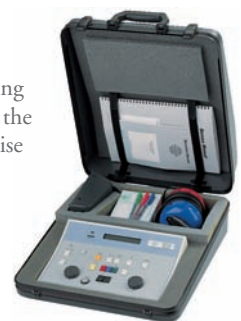
## Included Parts:

TDH39 Audiometric Headset  
B71 Bone Conductor  
APS3 Patient Response Button  
UPS400 External Power Supply  
200 AF12 Audiogram Charts  
3 Pens  
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 not extra cost)  
EARTone5A Audiometric Insert Phones  
IFC69 (9 pins) serial computer cable  
UCA40 USB computer cable  
Push buttons instead of rotary  
ACC26 Carrying Case  
OtoAccess™ Database and diagnostic modules software

The lightweight carrying case ACC26 will hold the AD226 as well as a noise reducing headset and audiogram charts etc.



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