



Air and bone
audiometry testing

Speech audiometry

Ipsi/contra lateral
masking

Hearing Instrument
Simulator (Optional)

Excellent sound
quality in patient
communication and
monitoring system

Customize your
workflow

Wide range of
special tests

Internal power
supply for CD player

Easy switching
between left and
right

Every function is at
your fingertips

Smart rotary knobs

Diagnostic Audiometer

MADSEN Itera II combines top performance in a stylish cabinet and offers a range of options so that you can configure the best solution for your clinic or dispensing practice.

Discover the **benefits** of Hearing Instrument Simulation

With the automatic Hearing Instrument Simulator you will be able to show your patients the benefits of wearing hearing instruments. Benefits which can sometimes be very difficult to explain – especially to someone who has never worn a hearing instrument before. This is all done in a quick, easy and efficient way, as the Hearing Instrument Simulator is automatically setup based on the stored audiogram.

Opening up a new world of possibilities

With its compact footprint, angled front panel and easily accessible connection panel, Itera II is ideal for use in a sound booth setting and with its integrated microphones, NOAH3 interface and automatic Hearing Instrument Simulator it is also the perfect choice for the dispensing practice. Finally weighing in at just ten compact pounds or under 5 kg, the Itera II diagnostic audiometer is also well-suited for portable use.



Technical specifications:

Channels

2 separate and identical channels.

Tone Test

Frequency range:

Air and Sound Field: 12 standard frequencies from 125 to 12500 Hz
 With **High Frequency Option**: up to 16000 Hz
 250 – 8000 Hz standard frequencies

Bone:

Insert phones: 125 - 8000 Hz

Accuracy: Better than $\pm 0.1\%$

Signals:

Tone: Continuous pure tone

Warble: 1 - 20 Hz in 1 Hz steps. Mod. width 1% - 25%
 in 1% steps

Pulse: Pulsing signal, frequency range 0.25 to 2.5 Hz
 Impulse: Single pulse presented for a preset period of
 time: 0.25 to 2.5 sec.

Masking:

Contralateral
 Narrow band noise or White noise

Speech Test

Monaural or binaural testing using any input/masking signals.
 Automatic update of selected word count method.
 Storage of up to ten sets of counter value and dB HL.

Microphone: Live voice through gooseneck mic. or optional
 Talk-over/Talk-back mic./monitor headset

External input: CD/Tape 2 channel input for recorded speech/noise

Masking: Ipsi or Contralateral
 Speech noise or White noise

Special Tests

SISI: Brief random increases in intensity.
 Automatic update of % of correct response.
 5, 4, 3, 1, 0.75, 0.50 or 0.25 dB HL increments.

Fowler (ABLB): Alternating tone presentation to Left and Right ear.
 Five sets of 'equal loudness balance' values can be
 stored.
 Alternation frequency selectable from 0.25 to 2.5 Hz.

Stenger: Binaural tone test

HIS: Automatic Hearing Instrument Simulation that
 enables you to show the benefit of wearing a
 hearing instrument in a quick, easy and efficient way.

Hearing Level Range

Maximum output will be limited by the transducer capability.

Typical values are:

Air: -10 to 120 dB HL at mid-frequencies
 Bone: -10 to 70 dB HL at mid-frequencies

Outputs

AC = Air Conduction: Phones (TDH39, HDA200, and E-A-RTONE® 3A)

BC = Bone Conduction: B71

SP = Special: Sound Field using speakers (internal amp. 2 x 2.3 W
 at 8 Ohm) or Air Conduction using Phones

	Test signal		Masking signal	
	Monaural	Binaural	Ipsi	Contra
THR	X			X
SPEECH	X	X	X	X
SISI	X			X
ABLB		X		
STEN		X		
HIS		X		

External Inputs

CD/Tape: 2 channels, 0.1 to 2.0 Vrms, 10 kOhm
 Internal power supply to CD player (1.5 - 10 V)

Talk-over: 2 channel external microphones
 Electret or dynamic microphones
 Alternatively use the built-in microphone

Talk-back: 1 channel, 0.002 to 0.02 Vrms
 (Electret or dynamic microphones)

Operator Monitoring

Two stereo monitor sockets for headphones.
 One socket is fitted with a Talk-over Mic. input option.

Data Interface

RS232 Serial Interface connection to PC for data transfer using the Audi-
 Link software.

Power Supply

Internal, 100 - 240 VAC, 50/60 Hz

Dimensions & Weight

(W x D x H) 450 x 290 x 85 mm, 17.7 x 11.4 x 3.3 in.
 Net Weight approx. 4.5 kg, 9.9 lbs.

Standards

Audiometer: EN60645-1, EN60645-2, EN60645-4, and ANSI S3.6
 Safety: EN/UL60601-1, Type B; U2601-1; CAN/CSA-C22.2
 NO 601.1-90
 EMC: EN60601-1-2