

THE MAKERS OF

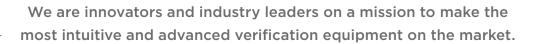






# WHY AUDIOSCAN?

# BECAUSE EVERYONE DESERVES THE BEST POSSIBLE HEARING EXPERIENCE.



#### HERE ARE 4 FACTS YOU SHOULD KNOW ABOUT US:



We are the leading supplier of verification equipment in North America.



We have 30+ years of experience in developing hearing instrument verification equipment.



We provide expert education and support directly and through our global distribution network.



We are constantly innovating so you can provide your patient with the best possible hearing experience.

# LEADING-EDGE INNOVATION

We look ahead and push forward, envisioning and developing the next level of hearing aid verification. The Audioscan team is always focused on creating refined and easy-to-use solutions.



### OUR PIONEERING SPIRIT HAS RESULTED IN MANY FIRSTS, INCLUDING:

- Portable real-ear and test box
- 1<sup>ST</sup> Binaural test box
- Calibrated real-speech signals
- Dedicated, speechactivated directional test

- 1st Binaural REM patient positioning tool
- Sensory loss simulator
- Percentile analysis of speech
- Speechmap auditory mapping / SPL verification



# FEATURES & BENEFITS

# Speechmap<sup>®</sup>

Speechmap's guided workflow makes hearing instrument verification intuitive while offering accurate results using the industry's most advanced tools.

#### **Guided Workflow**

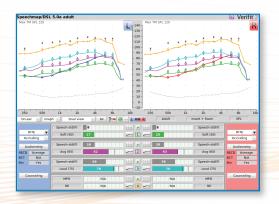
· Increases verification efficiency and offers ease of use

#### **Audibility Mapping**

- Verify audibility and listening comfort for amplified signals
- · Verify to validated, generic fitting formula targets
- · Accurately assess hearing instrument output relative to dynamic range of the patient

#### Percentile Analysis

· Document hearing instrument compression and accurately assess the provided audibility.



### **Probe***GUIDE*™

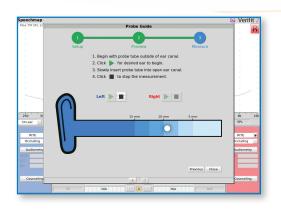
Probe *GUIDE* provides real time, software-assisted probe tube placement. Real-ear verification is easier than ever and there is no need for additional hardware, software licenses or complicated techniques.

#### Real-time assistance

- Constantly tracks the probe tube, giving real-time feedback that enables accurate
  placement while avoiding patient discomfort from eardrum contact
- Supports confident probe tube placement

#### Algorithm developed using machine learning

- Accurate prediction of probe tube tip distance from eardrum results in easier REM and more precise REM results\*
- Provides reliable REM results across clinicians and clinic locations
- Resistant to the ambient noise that can occur in a busy clinical environment



### **Verifit** Skull Simulator

Objectively verify audibility and adaptive features with bone-anchored hearing devices (BAHDs).

#### No external power supply required

 Easy to set up and use, just plug Verifit Skull Simulator into the coupler jack inside the test box

#### **DSL-BCD** targets in Speechmap

 Objectively verify that appropriate levels of audibility are provided for various speech signals

# ANSI/IEC, directional, noise reduction testing

 Conduct quality control testing and assess the impact of advanced features

#### No license required

No extra cost for an additional software suite

# Wideband Measurement

Measure the high frequency amplification of hearing instruments that claim extended bandwidth.

# Wideband audiogram entry and hearing instrument verification to 12.5 kHz

- Ensure patients have access to valuable speech information above 8 kHz
- Obtain the sound quality improvements that accompany wideband amplification

## **Verifit**L/NK™

Verify and adjust hearing instruments to target automatically through a direct interface with the fitting software.

- Ensures an objective verification against clinically-validated targets
- Provides accurate target match equivalent to manual methods in significantly less time\*\*

# **Office** *Integration*

Easily integrates into your existing office systems and clinical test space to support multiple workflows.

#### **Optional Noah Module**

- Quickly transfer audiometry stored in Noah into the Verifit2
- Store and retrieve test results electronically, giving you the flexibility to go paperless
- Easily generate PDF reports that integrate with EMR systems via shared network folders

#### **Remote Operation on PC**

- Teleaudiology compatible
- View/operate Verifit2 from a PC
- On-top mode allows hearing instrument measurement and adjustment to occur together on one screen

#### **Printing Flexibility**

 Multiple printing options: print via the Noah module, a network connected printer, a USB-connected printer, or print-to-file

#### PATIENT COUNSELING

#### VERIFIT2 IS AS EFFECTIVE FOR COUNSELING AS IT IS FOR VERIFYING HEARING INSTRUMENTS.

#### **Dedicated Counseling Tool**

Improves patient counseling and provides a better hearing instrument experience

#### Quick-Access SII Counseling

Quickly generate an individualized SII graph to show potential benefit of amplification for speech understanding

#### Sensory Loss Simulator

Models conductive and sensorineural hearing losses for counseling family members on the patient experience



# **Binaural** Measurement

Simultaneous binaural measurement makes verification as efficient as possible.



Simultaneous Binaural Measurement, REM & Test Box

Faster, easier verification

Assess binaurally linked operation of hearing instrument features

# Unique-to-Verifit2 Binaural Test Box

Faster, more accurate testing of hearing instruments

Demonstrate old versus new hearing instrument technology

Adapters and quick-connect couplers make testing hearing instruments easy and efficient



**Real-Time Headphone Monitoring** 

Assists hearing instrument programming decisions

Enables troubleshooting of hearing instrument sound quality issues



#### NUMBER 1 IN VERIFICATION

#### STANDARD VERIFICATION

- Binaural REM and Test Box
- Wideband verification to 12.5 kHz
- Calibrated real speech & percentile analysis
- DSL, NAL, & CAMFIT targets
- Wideband RECD & REDD
   measurement
- ANSI/IEC test box measurement
- · Binaural monitor headphones

#### ADVANCED VERIFICATION

- Binaural Sound Field Assist for simultaneous binaural REM
- · Speech-activated directional test
- Noise reduction, feedback, occlusion tests
- SII target ranges in DSL adult & child
- · RMS error from target
- Ambient noise level check for REM
- Verifit Skull Simulator (optional)
- FM fitting protocol
- Frequency lowering fitting protocol
- CROS/BiCROS fitting
- · Telecoil testing in Speechmap

#### **EASE-OF-USE FEATURES**

- ProbeGUIDE probe tube placement tool
- VerifitLINK automated fit-to-target
- Noah module via wired or wireless networking
- PC control/display capability (On-top mode)
- · Puttyless coupling in the test box
- · Quick-connect couplers
- Automated Speechmap test sequencing
- Context sensitive help with instructive pictures

#### **COUNSELING:**

- · Sensory Loss Simulator
- · Quick-access SII Counseling
- Speechmap Counseling Tool

### 4 REASONS TO CHOOSE VERIFIT2:

- Speechmap
  Intuitive workflow for advanced hearing instrument verification and patient counseling
- Probe*GUIDE*Guided probe tube placement simplifies REM, saves time, and ensures consistent measurement results
- Binaural Measurement (REM & Test Box)
  Efficient verification and counseling with the industry's only binaural test box
- Gold Standard
  Highly regarded and trusted by clinicians and researchers for decades

### CONTACT US TODAY FOR A FREE DEMO AT AUDIOSCAN.COM/DEMO







# Verifit<sup>2</sup> product specifications

### REAL-EAR (REM) Per IEC 61669/ANSI S3.46#

**REM Speakers** dual 5 x 9 cm w/ ducted ports **Probe modules** dual probe and ref. microphones

**Probe microphone tube** silicone 1 mm diameter x 75 mm

Analyzer frequency range 200 – 16000Hz

**Analyzer filter parameters** tones, warble 1/12 octave

speech, noise 1/3 octave

**Analyzer display range** 200 – 12500 Hz

Probe microphone noise floor (200 – 12500 Hz) <45 dB SPL

Frequency accuracy 1%

Measurement dynamic range 30 – 135 dB SPL (200 – 2500 Hz)

30 - 140 dB SPL (2500 - 12500 Hz)

**Speech-like stimuli** calibrated speech (level and spectrum), ISTS, band-limited and s/sh for verifying frequency lowering, live speech

Broadband noise stimuli tone burst, pseudo-pink noise

Narrowband stimuli warble sawtooth modulated +/- 3% over 128 ms

User supplied stimuli WAV file, auto level

**Stimulus level range** 40 – 85 dB SPL in 5 dB steps

Measurement accuracy at 1 kHz (CAL position) +/- 1 dB

**Measurement accuracy re 1 kHz** 200 – 2000 Hz +/- 1.5 dB SPL 2000 – 8000 Hz +/- 2.5 dB SPL

8000 – 12500 Hz +/- 4 dB SPL

**Equalization** modified pressure method – concurrent and stored

\*Distance of .5m in a quasi-free soundfield, where the boundaries of the room exert a negligible effect.

#### TEST BOX (HIT) Per IEC 60118/ANSI S3.22

Test box speakers 1 front, 2 side, 30 mm independent

Working space 28w x 12.7d x 3.8h cm<sup>3</sup>

Isolation @1kHz >25dB

**Analyzer frequency range** 200 – 16000 Hz **Analyzer filter parameters** tones 1/12 octave

speech, noise 1/3 octave

**Analyzer display range** 200 – 12500 Hz

Coupler microphone noise floor (200 – 12500 Hz) <40 dB SPL

Frequency accuracy 1%

Measurement dynamic range 30 – 135 dB SPL (200 – 2500 Hz)

30 – 140 dB SPL (2500 – 12500 Hz)

**Speech-like stimuli** calibrated speech (level and spectrum), ISTS, band-limited and s/sh for verifying frequency lowering, live speech

Broadband noise stimuli tone burst, pseudo-pink noise

Narrowband stimuli pure tone

User supplied stimuli WAV file, auto level
Test stimulus levels 40 – 90 dB in 5 dB steps
Test stimulus distortion (tone) < 2% at 90 dB SPL

< 0.5% at 70 dB SPL

Measurement accuracy at 1 kHz (CAL position) +/- 1 dB

Measurement accuracy re 1 kHz 200 - 2000 Hz +/- 1.5 dB SPL

2000 - 8000 Hz +/- 2.5 dB SPL

8000 - 12500 Hz +/- 4 dB SPL

**Equalization** modified pressure method – concurrent

Harmonic distortion measurement 2nd and 3rd or 2nd plus 3rd

Harmonic distortion range 200 – 4000 Hz Harmonic distortion accuracy +/- 1%

Battery drain range (+/- .01 mA) 0 – 20 mA Battery drain accuracy +/- 5%

Telecoil loop accuracy +/- 3 dB
Telecoil stimulus 31.5 mA/m per ANSI S3.22

#### GENERAL -

**Temperature (storage)** -20 to +60°C

Relative humidity (non-condensing) 5% to 95%

**Atmospheric pressure** 810 – 1060 hPA

**Power source** 100 – 240V, 47 – 63Hz, 1.35A

Overall dimensions:

**Display unit WxHxD** 35.6 x 40.3 x 16.5 cm (14 x 16 x 6.5 in.) **Test box WxHxD** 35.6 x 13.7 x 32.8 cm (14 x 5.4 x 12.9 in.)

**Weight** 6.5 kg (14.4 lbs)

**Weight** 6.5 kg (14.4 lbs)

**Display type** LED backlit active color **Display size** 12.1 in. diagonal

Stereo headphone monitor amplifier

250 mW into 16 ohms, L/R

**Power amplifiers** 2 @ 5 watts each **Simultaneous stimulus channels** 2

Simultaneous measurement channels 2

Connectors

1 - Ethernet (RJ45)

5 - USB

1 - HDMI

2 - External speakers (RCA)

1 - Display unit/Test box interconnection (HDMI style)

1 - Probe dock (Mini-din)

2 - Probe microphone (3.5 mm TRS)

1 - WRECD transducer (3.5 mm TRS)

1 - Teletest handset (3.5 mm TRS)

1 - Binaural monitor headphone (6.3 mm TRS)

2 - Test box ref. mic. (3.5 mm TRS)

1 - Binaural coupler microphone (3.5 mm TRS)

1 - Battery substitute (3.5 mm TRS)

For detailed testing capabilities, see the Verifit2 user guide at https://audioscan.com/library

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