

# SPECIFICATIONS

## Hearing Instrument Fitting System

Fit Counsel Verify

Specifications subject to change without notice

### Storage & Transportation

Temperature.....-20°C to +60°C  
Relative humidity (non-condensing).....5% to 95%  
Atmospheric pressure.....500-1060 hPa

### General

Overall dimensions.....15.5"x12.75"x4.25"  
Weight.....16.4 lbs (7.5kg)  
Power source.....100-240V, 50-60Hz, 250 VA  
Fuse.....2A type T, 250V  
Display type.....fluorescent backlit active color  
Display size.....12.1" diagonal  
Resolution.....800x600 (SVGA)  
Printer type.....thermal line printer  
Printer resolution.....200 dots per inch  
Paper width.....3" (80mm)  
Power amplifiers.....2  
Stimulus channels.....2  
Measurement channels.....1  
Connectors.....1-USB  
.....1 - Ethernet (RJ45)  
.....1 - RS232 serial (9D)  
.....2 - auxiliary audio outputs (1/4" mono)  
.....1 - RECD transducer(3.5mm st)  
.....1 - test chamber ref. mic.(3.5mm st)  
.....1 - coupler microphone(3.5mm st)  
.....1 - battery substitute(3.5mm st)  
.....1 - real-ear mic.(3.5mm st)

### Test Box

Working Space.....8.8"x3.5"x1.5"  
Test Box Isolation @ 1kHz.....>25 dB  
Speaker.....1 - 2"x3"  
Induction Coils  
.....1 - Telephone Magnetic Field Simulator (TFMS ANSI S3.22 - 2003)  
Battery Simulator.....per ANSI S3.22 2003  
Frequency Range.....200 - 8000 Hz  
Coupler microphone noise floor.....(200 - 8000 Hz): <40 dB SPL  
Test Stimuli.....tone, tone burst, pink noise, calibrated or live speech  
Test stimulus levels.....40 to 90 dB SPL in 5 dB steps  
Test stimulus levels (inductive).....31.6mA/m per ANSI S3.22 - 2003  
Test stimulus distortion  
.....<2% at 90dB SPL  
.....<0.5% at 70 dB SPL  
Test stimulus accuracy at reference mic. for tones (200-2000 Hz).....+/- 1.5 dB SPL  
Test stimulus accuracy at reference mic. for tones (2000-8000 Hz).....+/- 2.5 dB SPL  
Equalization method.....pressure method  
Analysis frequencies per octave.....12  
Analysis filter bandwidth.....1/12 octave  
Measurement accuracy at 1 kHz.....+/- 1db  
Measurement accuracy re 1 kHz  
.....+/- 1 dB (200-5000 Hz)  
.....+/- 2.5 dB (5000-8000 Hz)  
Measurement range.....30 - 140 dB SPL  
Harmonic distortion measurement.....2nd and 3rd or 2nd plus 3rd  
Harmonic distortion range.....200 to 4000 Hz  
Harmonic distortion accuracy.....+/- 1%  
Battery drain range.....0 - 20mA  
Battery drain accuracy.....+/- 5%  
Battery drain resolution.....+/- .01 mA

### ANSI S3.22 - 1996 and 2003 tests available

OSPL90.....Full-on Gain.....Reference Test Gain.....Frequency  
Response.....Frequency Range.....Maximum OSPL90.....Harmonic  
Distortion.....Attack & Release time.....Equivalent Input Noise.....Input/Output  
Curves.....Coupler SPL - Telephone Simulator.....Simulated Telecoil  
Sensitivity.....Battery Drain

### Other tests Available:

Speechmap® real-speech audibility measures.....Coupler SPL vs  
frequency.....Coupler gain vs frequency.....Spectral analysis.....Distortion vs  
frequency.....Manual measurement of output, gain and distortion

### On-Ear

Speakers.....1 - 2"x 3"  
Probe microphone tube.....Silicone 1.0 mm diameter x 75 mm  
Probe microphone noise floor.....(200 - 8000 Hz): <45 dB SPL  
Frequency Range.....200 to 8000 Hz  
Test Stimuli.....tone, tone burst, pink noise, calibrated or live speech  
Freq. modulation.....sawtooth +/- 3% over 128 ms  
Test stimulus levels for tones.....40 - 85 dB SPL in 5 dB steps  
Test stimulus accuracy at reference mic. for tones (200 - 2000Hz).....+/- 1.5 dB SPL  
Test stimulus accuracy at reference mic. for tones (2000- 8000 Hz).....+/- 2.5 dB SPL  
Equalization Method.....pressure method (stored for open fittings)  
Frequencies per octave (swept tones).....12  
Frequencies per octave (tone burst).....3  
Analysis bandwidth (speech, noise).....1/3 octave  
Measurement accuracy at 1 kHz.....+/- 1 dB  
Measurement accuracy re 1 kHz  
.....+/- 1 dB (200-5000 Hz)  
.....+/- 2.5 dB (5000-8000Hz)  
Battery drain resolution.....+/- .01 mA  
Measurement Range  
.....20-135 dB SPL (200-2500 Hz)  
.....30-140 dB SPL (2500-8000Hz)

### ANSI S3.46 - 1997 tests available

Real-Ear Unaided Response.....Real-Ear Aided Response.....Real-Ear Occluded  
Response.....Real-Ear Insertion Gain

### Other tests available

Speechmap® real-speech audibility measures.....On-ear harmonic  
distortion.....On-ear spectral analysis.....Manual measurement of output, gain,  
and distortion

### Fitting methods available

Speechmap® with DSL 5.0a, NAL-NL1, CAMFIT  
Insertion gain with NAL-RP, NAL-NL1, Fig6, Pogoll, Berger, Libby

### Sensory Loss Simulator

Simulation types.....Linear conductive  
.....Non-linear outer hair cell cochlear loss  
Simulation bands.....65



**audioscan**

Best Science. Best Fit.

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**RM500 SL**

Best Science. Best Fit.

# RM500 SL

Best Science. Best Fit.™

## The Best Science Means The Best Fit

And the best fit is the key to building your practice. Audioscan's easy to use Speechmap® fitting environment ensures the best fit by utilizing the only available properly controlled and analyzed speech signal... which is also repeatable for accurate comparison. This exclusive scientific method is your best fit guarantee.

## You can take it with you

Other hearing instrument fitting systems claim to be portable, offering cases, bags, and even wheels! The RM500 SL is the portable champion. Unplug it, close it and go. Its has an extremely durable case and the frame is constructed of custom aluminum casting to ensure toughness and low weight.

**If you need portability you need an RM500 SL.**

## Higher Customer Satisfaction.

Your customer's satisfaction (and likelihood of returning a hearing aid) is determined by three things: your counseling, their first fitting experience, and your ability to resolve subsequent problems. Audioscan's RM500 SL can provide the assurance that your customers will be satisfied customers and will reduce your overall return rates. It gives you unequalled fact-based tools for counseling, for making sure the first fit is the best fit, and for verifying or troubleshooting any hearing aid problems that occur.



## All New Features

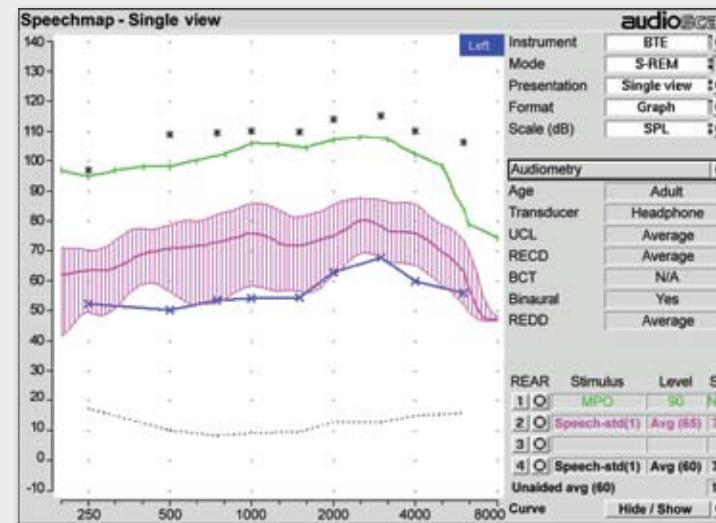
- ▶ Noise reduction test
- ▶ Feedback test
- ▶ Sensory Loss Simulator™
- ▶ 12.1" color display
- ▶ Battery drain test\*
- ▶ Built-in telecoil test
- ▶ Open fit protocol for valid and accurate open fittings.
- ▶ DSL®5.0a, NAL-NL1, CAMFIT
- ▶ Choose from calibrated real speech, tone, or noise stimuli.
- ▶ Valid for all types of instruments and fittings including open type fittings.
- ▶ Easily re-enter audiometric data using the optional scanner.\*\*
- ▶ Nearly 40% smaller than the original RM500!

\* Battery drain testing requires battery pills which may be purchased from Audioscan  
 \*\* The scanner may be purchased as an accessory from Audioscan



## What Makes Audioscan Different? Speechmap®

Speechmap is a unique fitting environment that provides a variety of digitally-recorded real-speech signals and also allows the use of live speech. These recorded speech passages ensure that your measurements are repeatable. The speech passages are also controlled in real time to produce a calibrated spectrum in the sound field and the test box. DSL, NAL-NL1 and the Speech Intelligibility Index all assume specific spectra for speech, if this specific spectra is not applied significant errors will result.



**The Audioscan Speechmap system is the only system available that delivers the appropriate speech signal, properly analyzed.**

**With Audioscan you always get free software updates, free phone support, and an industry-leading two year warranty.**

## FM systems easily fit in the large test box.



**A test box bigger than that of most desktop units and a refined user interface means portability and ease-of-use are no longer mutually exclusive.**

## Do you need an Audioscan Verifit or SL?

Feature	RM500 SL	VERIFIT®
Real Speech (Calibrated)	✓	✓
Viewport™	-	✓
12.1" Color Display	✓	✓
Dual Probes	-	✓
Patented On-ear Directional Test	-	✓
Patented Test Box Directional Test	-	✓
Noise Reduction Test	✓	✓
Feedback Suppression Test	✓*	✓
Telephone Magnetic Field Simulator	✓	✓
Integrated Carrying Case	✓	-
Integrated Battery Drain	Accessory	✓
Network Ready	✓	✓
Soundbox (Integrated)	31 Square Inches	53 Square Inches
Barcoded Audiometric Data Entry	Accessory	Accessory
DSL®5.0a	✓	✓
NAL-NL1	✓	✓
RECD Transducer	Accessory	✓
Speechmap®	✓	✓
Integrated Probe Monitor	-	✓
ANSI S3.22-2003	✓	✓
External Monitor Capability	-	✓
External Speaker Capability	-	✓
Sensory Loss Simulator™	✓	✓

\*The feedback suppression test for the SL is only available as an on-ear test

## What Makes Audioscan Different?

### Demonstrate and Test Noise Reduction

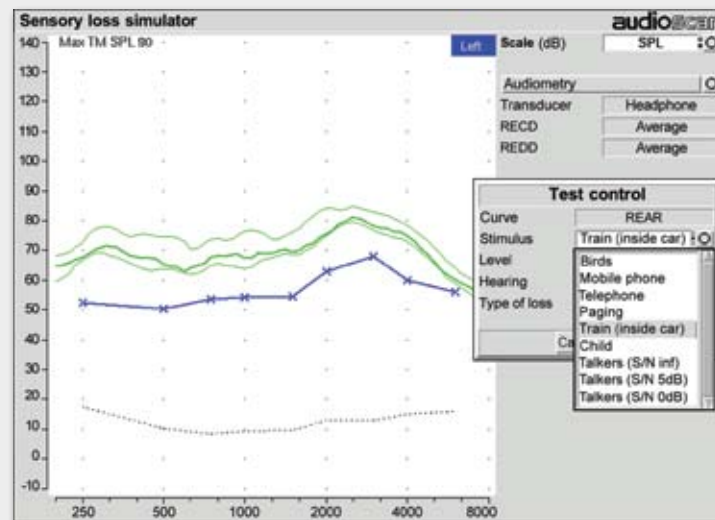
Show your patients the value of noise reduction and confirm its operation using everyday sounds. This **unique new test** shows you how much noise reduction is provided as well as how long it takes the instrument to recognize and react to a noisy environment.

### On the Edge of Feedback?

Until now, there has been no way to tell how close an instrument is to feedback. Our **exclusive feedback test** reveals even incipient feedback while processing real speech and highlights the frequency at which it occurs. Perfect for ensuring a feedback-free fit.

### Accurately Simulate a Hearing Loss

Replicate a cochlear or conductive loss using your patients audiogram! This one-of-a-kind simulation allows you to counsel and educate interested third parties.



**Contact your local representative to schedule a demo today!**

USA — 800-265-2093 Outside USA — 519-268-3313 — [www.audioscan.com](http://www.audioscan.com)