TRAINING MANUAL

A V A N T

REM_sp_™

MedRx®

Contents

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#0086

MedRx

www.medrx-usa.com

Introduction

The AVANT REMsp represents a new era of precision in-situ verification for your office. Compact yet rugged, this PC-Based system is USB powered and supports ANSI and IEC Real Ear tests. The software includes targets for **DSL i/o** 5.0 and **NAL-NL2**. The REMsp is an affordable, single probe device which utilizes MedRx's in-situ method for getting the fitting right the *first* time, *every* time. The following section of this manual will familiarize you with the physical features and accessories of the REMsp system.

This manual assumes that the system hardware, software and drivers are installed and working properly. Please refer to the MedRx AVANT REMsp Installation Manual for assistance.

The scope of this manual is to get you "up and running" with the Avant REMsp System. Please consult the interactive Help System within the software for more detailed information of features and functionality. To access this tool, press the F1 key at any time, or click the Help icon or menu item with your mouse.

The AVANT REMsp Software

General Overview

The AVANT REMsp software will either run as a measurement module within NOAH™ (figure 1) or as a stand-alone module (figure 2), or in the TIMS NOAH-Compatible Office System.

The software includes a context-sensitive interactive Help System. To access this tool, press the F1 key at any time, or click the Help menu with your mouse. This will display additional information and instructions for the specific section of the software you are working in.


Figure 1 The AVANT REMsp in NOAH

Figure 2 The AVANT REMsp
Main Screen Stand Alone

Launching the REMsp Software

Stand Alone

NOAH and TIMS

1. Double click the **AVANT REMsp** shortcut on your Windows Desktop.
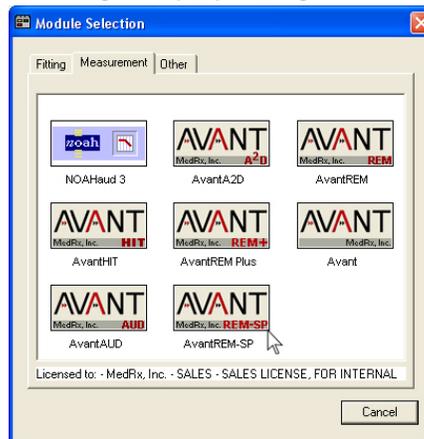
1. Launch **NOAH.**
2. Click the Real Ear Measurement Toolbar Icon.
3. Or, from the Module Selection screen, double click the AVANT REMsp icon.

Software Options

Basic Options

Several options are available which allow the user to customize the AVANT REMsp Software to meet their needs.

Access these options from the File Menu on the Avant REMsp Main Screen as shown below.
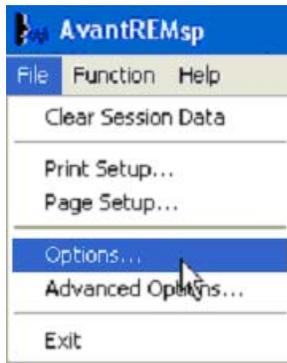
The Options may also be accessed from within the Avant REMsp main program by clicking on the Options text menu as shown below.

The software allows you to set several default options as described below.
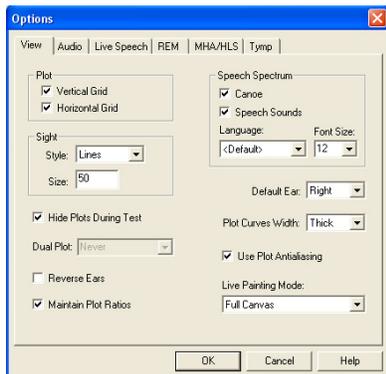
The **View** tab allows you to set the default appearance of the REMsp test environment. Values can be changed by using the check boxes and pull-down menus shown above.
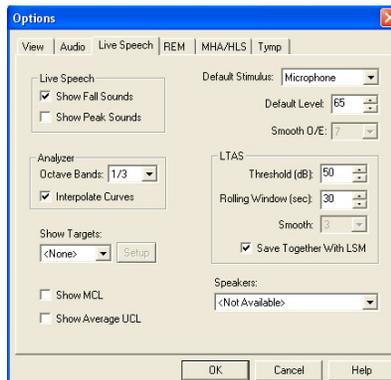
The **Live Speech** tab sets the look and behavior of the Live Speech Mapping function. Use the Show Targets pull-down to underlay DSL 5.0 or NAL-NL1 & NL2 targets below your speech maps.
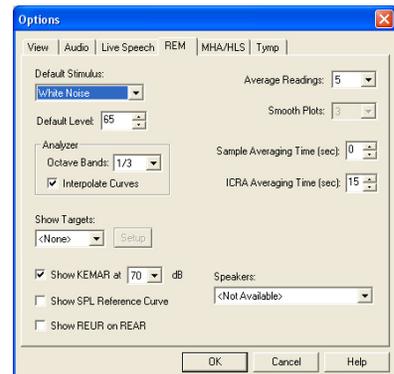
The **REM** tab sets the default look and behavior of conventional Real Ear Measurements.
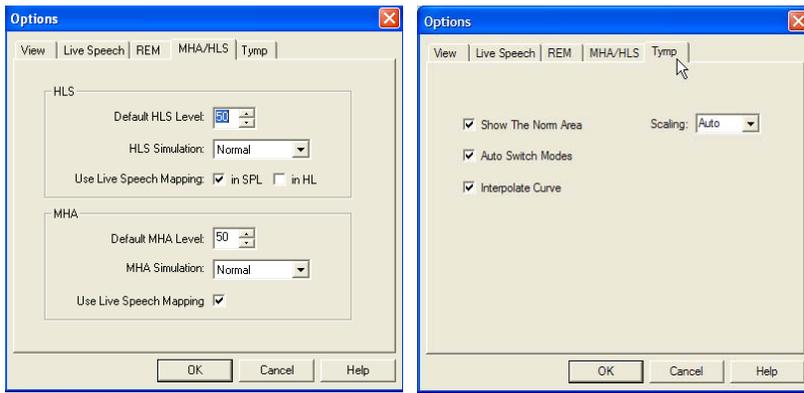
The **MHA/ HLS** tab sets the default look and behavior of the Master Hearing Aid and Hearing Loss Simulator.

If your system has a **Tympanometer** connected, this tab will assist in configuring the look of the display.

NOTE: Remember, that more information is always available in the Interactive Help System by clicking the Help Icon or pressing the F1 key.

Advanced Options

The **Advanced Options** screen allows you to configure your system to meet your individual clinical needs. It also provides MedRx Technical Support with tools for helping you troubleshoot problems. Access this screen from the File Menu on the Avant Main Screen as shown to the right.
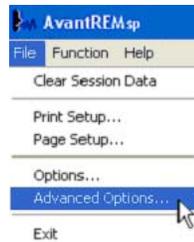
The key features of each tab are described below. For more in-depth information, consult the interactive Help system within the software.
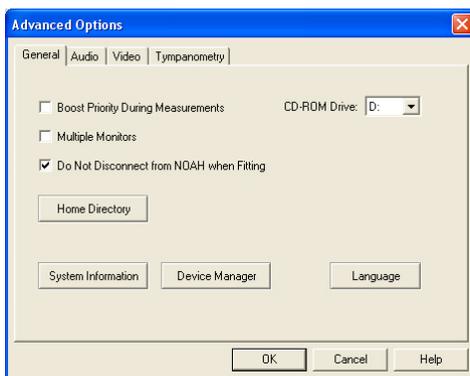
The **General Tab** configures the overall Avant REMsp behavior with respect to other Windows programs, specifically NOAH.
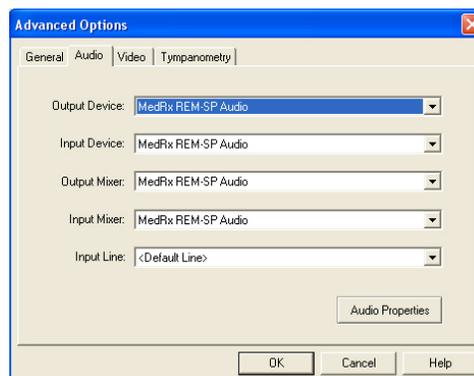
Use the **Audio** Tab to select the proper audio device for your Avant REMsp. This tab also provides access to the Windows Audio controls.
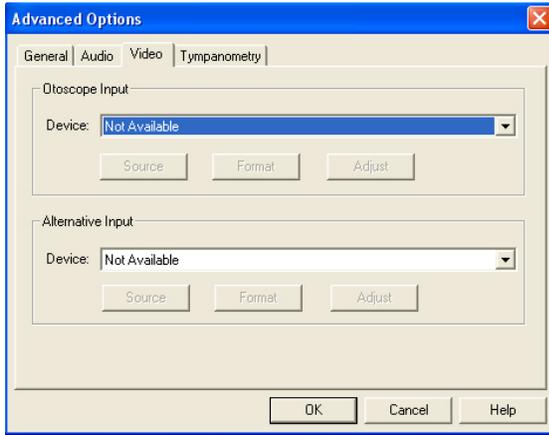
If your system has a **Video Otoscope**, the Video Tab allows you to select the appropriate input device.
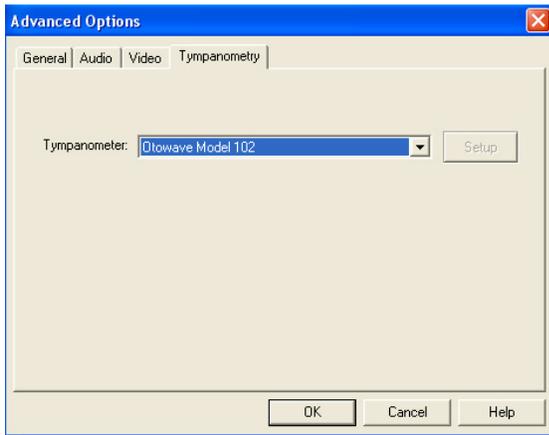
If your system has a **Tympanometer** connected, use this tab to configure the equipment according to the manufacturer's instructions.

Preparing for Testing

Connecting the Speaker

1. Plug speaker wire in. The speaker may be battery powered or plugged into the plug-in power supply that is included.

2. Connect the speaker to the AVANT REMsp main unit as shown above. DO NOT force the connector on. Turn on the speaker and hold down the (+) button to set the maximum volume.

Calibrating the Probe Tube

For reasons of infection control and reliability of results, MedRx recommends that a new probe tube be used with each patient. **To ensure accurate measurements, it is necessary to calibrate the probe tube <u>each time it is replaced.</u>**

1. Place a new probe tube on the probe microphone port as shown.

2. Place the probe tube between the calibration nibs as shown. Be sure that the opening of the probe tube is centered on the opening of the reference microphone.
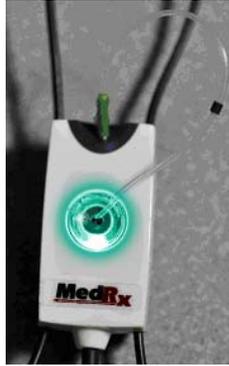
In the Avant REMsp software, do one of the following:

- Click the **Probe Tube Calibration** Icon.

- Click **Tools.**
- Click **Calibrate Probe Tube.**

Position probe microphone between 19 and 39 inches from the loudspeaker and click Start. The signal must be at least 70 dB to complete a valid calibration. If the screen prompt indicates the signal is too low, increase the volume on the loudspeaker or move the probe microphone assembly closer and restart the calibration.

Valid calibrations have the same approximate shape as shown here. If the measured calibration curve differs greatly in shape or amplitude from the target curve, replace the probe tube and re-calibrate. If this does not correct the problem, contact MedRx technical support at (888) 392-1234.
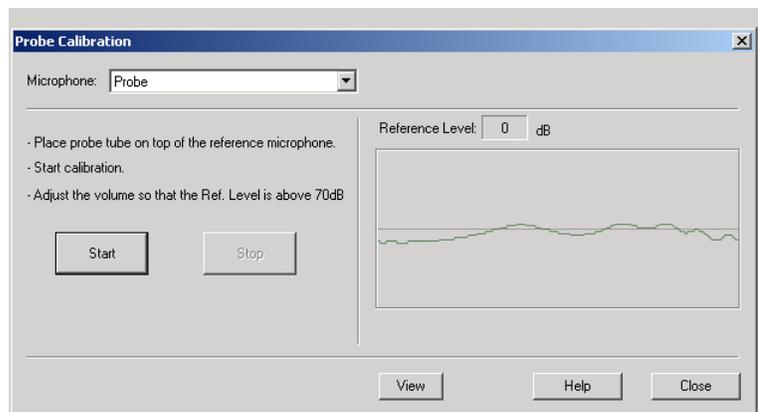
Positioning the Speakers

Proper positioning of the loudspeakers relative to the patient's hearing aids is critical for making accurate and repeatable measurements. Seat the patient so their ear is between 19 and 39 inches from the loudspeaker.

19 " - 39 "
(48 - 100 cm)
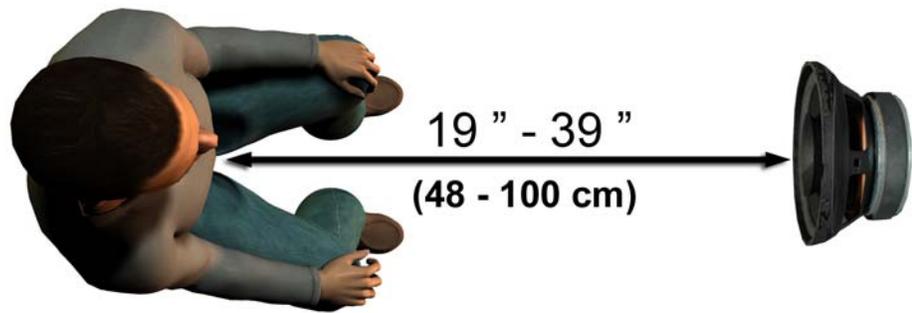
Make sure the grill of the loudspeaker is level with and directly in front of the patient's head.

When using Live Speech inputs, position the patient so the mouth of the person speaking is in the same position as the loudspeaker shown here.

Live Speech Mapping

Step-by-Step Guide to Live Speech Mapping

Ensure the Audiogram is Entered

Before making Live Speech Mapping measurements, the patient's pure tone audiogram must be available to the software. This can occur several ways:

1.   The audiogram was automatically entered by MedRx AVANT, AVANT Audiometer or AVANT A^{2}D software when testing. Then saving the NOAH session.
2.   The audiogram was manually entered into the NOAHaud 3 software and saved.
3.   The audiogram was entered using another manufacturer's audiogram module.

If none of these have occurred, you may manually enter the audiometric data into the AVANT REMsp software as follows:
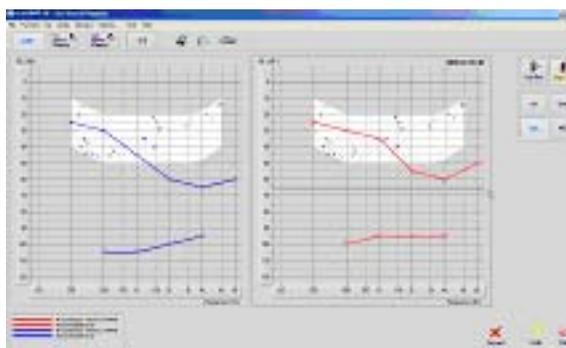
1.   Launch the audiometric module by clicking on the **Audio** button on the right side of the AVANT REMsp main window.

2.   Using your mouse, select the test ear.
3.   Select the test type **Air.**
4.   Enter thresholds by clicking the intersection points with the mouse. (You may also enter the audiogram by selecting the audio tab in either the LSM or HLS/MHA screens).
5.   Repeat for UCL (Bone and MCL optional).
6.   Repeat steps 3-5 for the other ear.

After the audiogram is entered, click the **Back** button to return to the AVANT REMsp Main screen.

1.   From the AVANT REMsp Main screen, click **LSM.**

2.   In the next Window. Click **LSM** again.

Speech Mapping with Live Voice Inputs
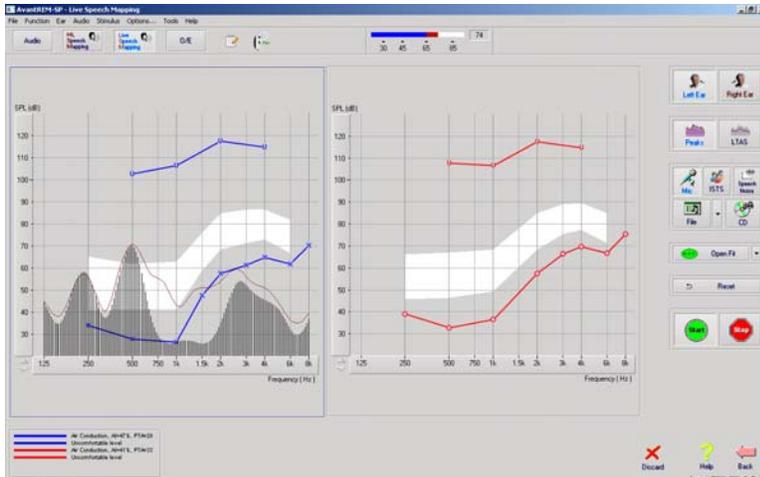
The screenshot on the left shows the Live Speech Mapping (LSM) window. The system was designed to capture and display the human voice in the ear canal, so we recommend using the microphone input and the peaks measurement.

Using the microphone allows measurement of both the professional's voice and that of the patient's significant others.

To improve repeatability of measurements, it is recommended that the speaker read a standard passage such as the "Rainbow Passage" which is provided on pg. 24.

NOTE: The screen shot above shows the MedRx Modified Speech Spectrum (Canoe). It is also possible to underlay **DSL i/0** or **NAL-NL2** targets on this screen. Click **Options** in the text menu bar on the top of the screen to select and configure these underlays to meet the needs of your practice.

Speech Mapping with Recorded Inputs
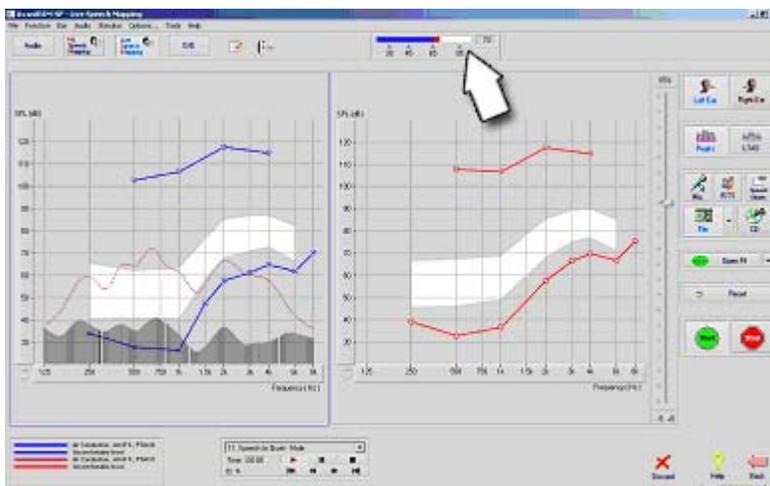
For those who prefer a standard, repeatable stimulus for Speech Mapping, the software provides several digital audio files.These are accessed by clicking the **File** button on the right and then selecting the desired track from the pull-down menu in the audio player.

Once the desired track is selected, click the **Start** button to begin measuring. When enough data is collected, click the **Stop** button to stop the recording and measurement.

It is also possible to use an audio CD, such as the patient's favorite music to perform Speech Mapping. Simply click the **CD** button and then select a track as above. Use the sound level meter on screen to check the proper level. Adjust the output of the speaker to desired level using the sound level meter. (Remember conversational speech is 65 dB at 1 meter).

NOTE: The screen shot above shows the MedRx Modified Speech Spectrum (Canoe). It is also possible to underlay **DSL i/0** or **NAL-NL2** targets on this screen. Click **Options** in the text menu bar on the top of the screen to select and configure these underlays to meet the needs of your practice.

The screen shot below provides an overview of all the tools and controls on the Live Speech Mapping screen. For more information on these features, please consult the Interactive Help system by pressing the F1 key or clicking the Help icon.

1. Reference Microphone Level
2. Ear selection
3. Measurement type
   a. Peaks
   b. LTAS
4. Input Selector

5. Open Fit Function
6. Reset Button
7. Test Interrupter
8. Discard, Help and Back buttons
9. Legend
10. Target area – can be any of the following:
   - MedRx Modified Speech Spectrum
   - DSL i/o
   - NAL-NL2
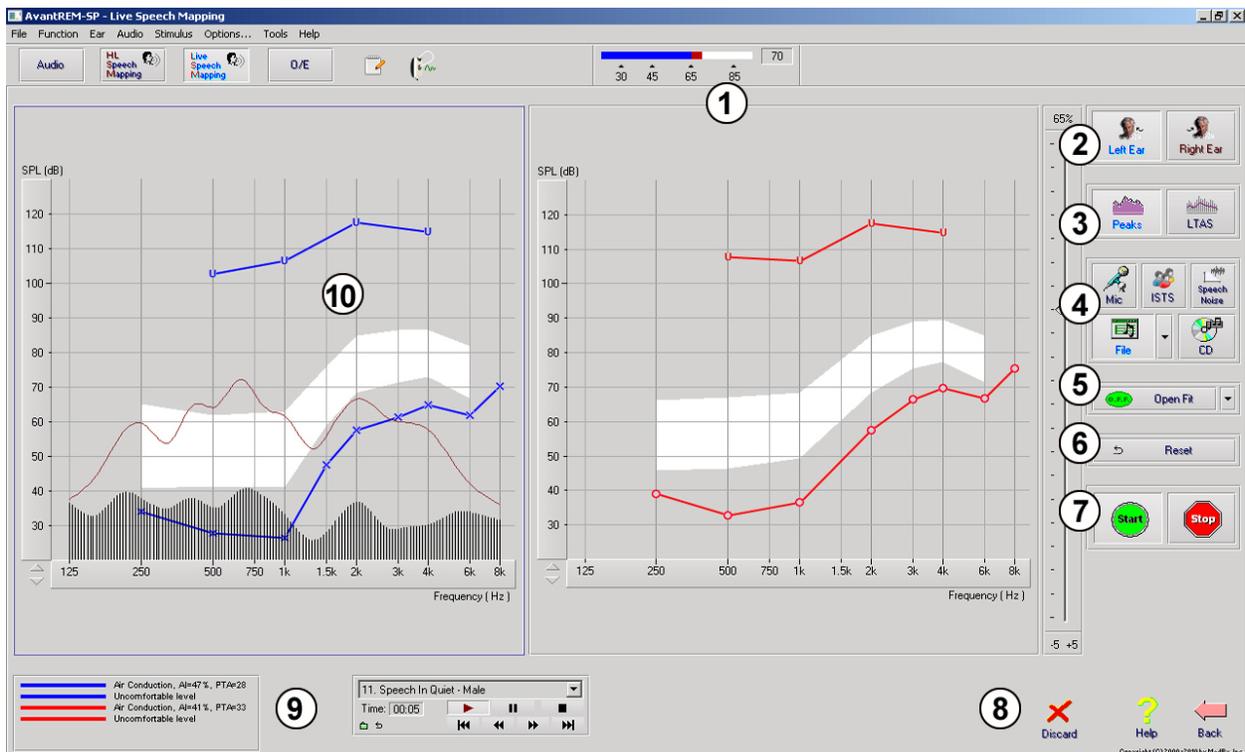
Running Speech Mapping "On-Top" within NOAH

It is well established that verifying the output of hearing instruments in the patient's ear will improve the accuracy of the fitting. In the past, it has been difficult to verify these fittings since many real ear systems have been disconnected from the fitting system. The AVANT REMsp system is tightly integrated with NOAH, the industry standard for audiometric and fitting data storage and retrieval. The "on-top" mode of the REMsp software allows you to effortlessly alternate between measurement and fitting adjustments.
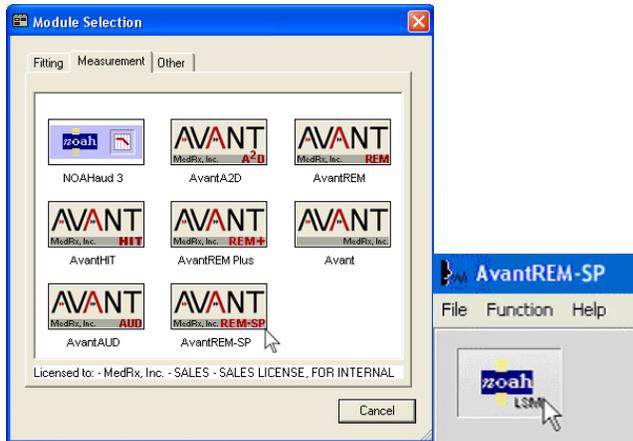
Begin by opening the Avant REMsp software from the NOAH measurement module selection screen.

From the Avant REMsp main screen, click the **NOAH LSM** button. The REMsp window will reduce in size and "float" on top of the NOAH screen.
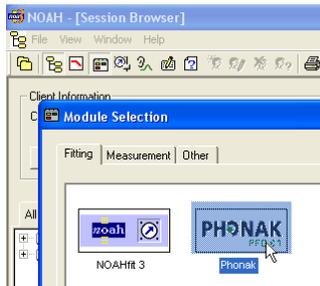
Open the fitting module from the NOAH Module Selection Screen.
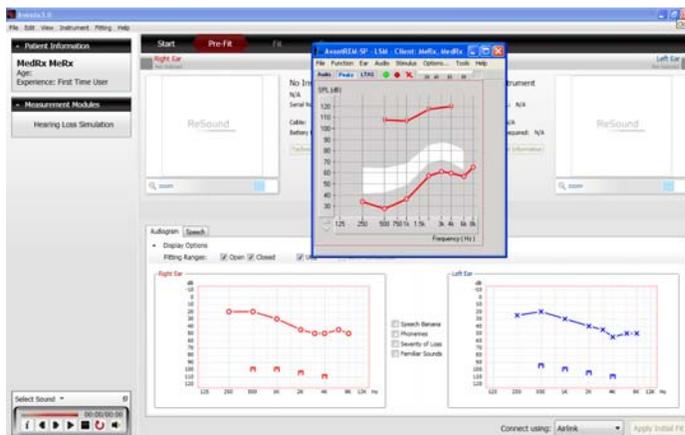
Use the text menus and green and red buttons in the floating LSM window to make Speech Mapping measurements. Make necessary changes to the instrument based on these measurements. To make adjustments to the hearing instrument, click on the fitting module window and modify the settings according to the manufacturer's instructions, being sure to activate, apply or save the settings to the instrument.

Repeat this measure/adjust/measure cycle until the fitting is optimized.

Completing the On-Top Mode Process

Close the REM module by clicking the **X** button or go up to the **File menu** and down to **Exit**. Save the NOAH session when prompted.

Note: It is also possible to run the REM module in "disconnected" mode. In disconnected mode, the closing of the module is different. Check the advanced options, read "Fitting with NOAH" topic in the integrated Help System to learn more about the disconnected mode.

MedRx Live Speech Mapping Protocol

Unlike other products, the AVANT REMsp system places full control over the measurement environment firmly in the hands of the hearing care professional. The system is powerful, yet extremely flexible, allowing each provider to use Live Speech Mapping in a way that compliments their practice style rather than compromising it.

In order to get you "up and running" with the AVANT REMsp system, MedRx has developed the following protocol. This simple procedure has been found to be effective with both audiologists and hearing instrument specialists. After mastering the basic operation of the system utilized in this protocol, you are encouraged to further expand your use of Live Speech Mapping in your practice. Feature-specific help is available by simply pressing the **F1** key or clicking on the **Help** icon or text menu.

1. Complete a careful otoscopic examination as instructed by the manufacturer of your otoscope.
    a. For MedRx Video Otoscopes, refer to the Help system within the software by pressing the **F1** key or clicking the **Help** icon or text menu.

2. Basic Diagnostics.
    a. Using your audiometer and NOAH, measure and record the following values:
    b. Pure Tone Air and Bone conduction thresholds
    c. Narrow Band Noise or Pure Tone UCL at 500, 2000 and 3000 Hz
    d. Other tests if needed in your practice or jurisdiction

3. Position patient as described earlier in this manual.

4. Calibrate Probe Tube as described above.
5. Measure and place the probe tube in the ear canal. (Use chart to the right).
6. Complete a Live Speech Mapping measurement **UNAIDED.**
    a. Microphone input
    b. Peak Measures
    c. 1/3 Octave resolution

7. Carefully place the hearing instrument in the ear without disturbing the probe tube.

8. Complete a Live Speech Mapping measurement **AIDED**.

9. Using the On Top Mode, make any adjustments needed to the hearing instrument so that:
    a. The LSM curve for Quiet Speech (50 dB) is at the bottom of the white modified speech spectrum (canoe).
    b. The LSM curve for Conversational Speech (65 dB) should be at the top of the white modified speech spectrum.
    c. The LSM curve for loud sounds (85 dB) (very loud speech, clapping hands, etc.) is approximately 10 dB below the UCL curve.

Probe Tube Insertion Guide
for Live Speech Mapping and Conventional REM
(re: Pomford, J & Sinclair, S. Real-Ear Measurement: Basic Terminology and Procedures. Audiology OnLine.com)

Adult Male (30mm)

Adult Female (28mm)

Child (20-25mm)
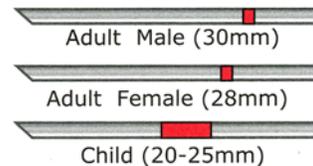
1. Perform Otoscopic Examination
2. Align end of Probe Tube with the left end of the age-appropriate guide
3. Align tube marker with the blue marker above
4. Place Probe Tube in ear canal
5. Confirm placement with Otoscope
6. Perform Live Speech Mapping & REM

Real Ear Measurements

In addition to Live Speech Mapping, the Avant REMsp supports all conventional Real Ear Measurements (REM). All these tests are accessed from the main REM screen.

To begin, click the [REM button] button on the right of the Avant REMsp main screen.

In general, REM tasks are performed as follows:

1. Select the REM test you wish to perform from the top row of buttons.
2. Select the test ear.
3. Select the test stimulus.

4. Click **Start.** The test will stop itself after sufficient data has been collected and averaged.
5. If you wish to delete a curve, simply select it with your mouse and then click the **Discard** icon or press the **Delete** key.
6. When all measurements are complete, click the Back arrow to return to the AVANT REMsp Main Screen.

To activate specific REM tests, click the buttons as follows:

Button	Description
Audio	Opens the audiometry data entry screen. Use this if audiometry has not been previously measured and entered into NOAH.
FittingRx	Allows the selection of fitting rules to generate insertion gain targets. The following rules are supported: ½ Gain, POGO I, POGO II, Berger, 1/3 Gain, NAL-RP, FIG6, DSL, NAL-NL1, NAL-NL2.
REUR	Real Ear Unaided Response - Measures the additive effect of the ear canal's resonance to a stimulus. Reported as dB SPL of output.
REUG	Real Ear Unaided Gain - Measures the additive effect of the ear canal's resonance to a stimulus. Reported as dB SPL of gain. If a real ear unaided response (REUR) curve has been measured, the corresponding real ear unaided gain curve is automatically plotted to the REUG screen.
REIG	The difference between the REUG and the REAG is called the Real Ear Insertion Gain (REIG). This Insertion Gain information is used to compare to the target gain curve selected for the client.
REAR	The Real Ear Aided Response (REAR) is the sound pressure level in the ear canal measured with the probe microphone close to the eardrum and the operating hearing instrument inserted in the ear and turned on. ANSI defines REAR as the SPL, as a function of frequency, at a specified measurement point in the ear canal for a specified sound field, with the hearing aid in place and turned on.

REAG	The REAG is simply the REAR expressed as gain rather than SPL. Selecting REAG allows you to see the gain at each frequency for each of the REAR curves measured.
REOR	REOR measures the effect on the natural external ear effects resulting from inserting an ear mold or a hearing instrument, before it is turned on, into the ear canal. The REOR is also referred to as Insertion Loss. REOR is also useful for validating the effectiveness of venting or canal length changes to the mold.
REOG	The Real Ear Occluded Gain (REOG) is the difference in decibels, as a function of frequency, between SPL in the ear canal and SPL at the reference microphone at the entrance of the ear canal with the hearing aid in the ear and turned off. For each REOR measurement curve, the corresponding REOG curve is calculated and automatically plotted to the REOG screen. The REOG function is useful in determining the acoustic seal of a hearing aid, relative to a sound field outside the ear.
O/E	Some clients report they seem like they are "speaking in a barrel" or "feel blocked up". These are signs of a build up of self generated low frequency energy in the ear canal. This excessive occlusion can be measured objectively in the Occlusion Effect task.
RECD	The Real Ear to Coupler Difference (RECD) is used to simulate real ear measurements by coupler measurements and is useful when fitting children or "difficult" to fit patients. See the section on RECD later in this manual for more detail.

Sample REM Screens

The Avant REMsp system supports all current ANSI and IEC Real Ear Measurements. The screenshots below were made using the software defaults. These defaults set the test parameters for each test according to these standards, however the test environment is fully configurable to meet individual professional's needs.
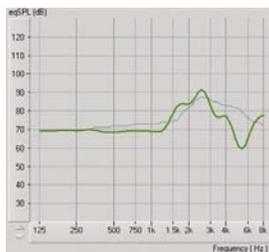
REUR
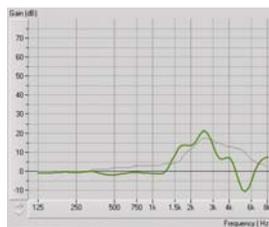
REUG

REIG
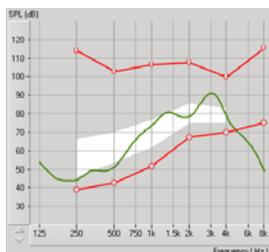
REAR
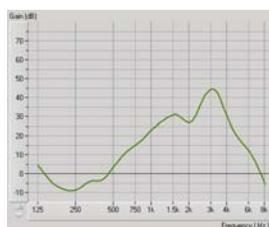
REAG
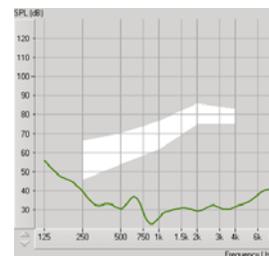
REOR
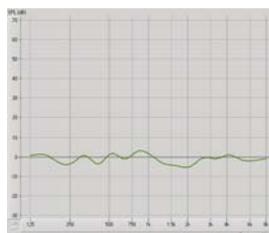
Occlusion Effect

Additional Tests & Features

Real Ear to Coupler Difference (RECD)

The Real Ear to Coupler Difference (RECD) is used to simulate real ear measurements by coupler measurements and is useful when fitting children or "difficult" to fit patients. The RECD values are used as a correction to coupler measures for that client's hearing instruments. By performing all subsequent measures in the coupler and applying the RECD corrections to the coupler measures, the "real ear" factors are incorporated into the results. The resulting simulated measurements provide information to select and make adjustments to the hearing instrument and verify adjustments in the hearing instrument test box rather than in the uncooperative client's ear. This is particularly important in the case of children, whose small volume ear canals enhance high frequency amplification more so than in average adults. This is an essential consideration in determining the maximum output of the hearing instrument.

If RECD data is present, the software will display an option to choose between Ear or Coupler measurement on all Real Ear screens where measurements in a coupler are appropriate.

There are two ways to measure the REAR response: using an insert headphone or a hearing instrument.

If a hearing instrument is used, its volume control setting and other parameters should *remain the same* for both REAR and coupler measurements. It is also recommended to set the volume control to moderate, and turn the compression and noise reduction circuits off.

How to perform the RECD task

First, perform the Ear Response task. This can be measured with a hearing instrument or an insert earphone.

Ear Response with a hearing instrument

- Adjust volume of the hearing instrument to comfortable listening level. It is also recommended to turn the compression and noise reduction circuits off.

- Position the client less than one meter from the speaker and facing the speaker.

- Place the hearing instrument and the probe microphone tube as for all REM measurements.

- Select **START** to open the measurement type selection screen.

- Choose the **Ear Response** with a Hearing Aid option.

- Select **OK** to begin the test and wait until it concludes.

Ear Response with an insert headset

- Place the probe microphone tube as for all REM measurements but use the insert headset instead of a hearing instrument. Connect the insert headset into the speaker jack on the REMSp.

- Select *START* to open the measurement type selection screen.

- Choose the *Ear Response* with an Insert Headset option.

- Select *OK* to begin the test and wait until it concludes.

Coupler response

When the Ear Response is complete, you are prompted to perform a coupler response.

- Attach the hearing instrument or the insert headphone (*must* be the same as in the Ear Response test) to the appropriate coupler and place the probe tube inside the coupler.

- If a hearing instrument is used, be sure to perform this measurement at the same volume control setting as the first measurement.

- Select *START* to open the measurement type selection screen.

- Choose the **Coupler Response** option or Use **Stored** to skip the measurement (see note below.)

- Select *OK* and wait until the test completes.

- The calculated RECD curve is automatically displayed on the screen and is stored in memory for correction of subsequent coupler measurements made from the RECD function.

Note: If the REAR and the coupler response were measured with the insert headphone, the program saves the coupler response curve for later use. In this case to obtain another RECD, only Ear Response with insert headphone measurement is necessary. This is possible because the coupler response does not change provided that *neither the coupler nor the insert earphone has changed*.

Note: After measuring RECD, it is possible to perform Live Speech Mapping in the coupler as well. Look for the "Measuring in" option on the LSM screen.

Measuring Acoustic Feedback

Feedback (whistling, howling) is one of the most common complaints of hearing instrument users. Even though many modern hearing instruments have sophisticated feedback management systems, knowing exactly where the feedback is occurring can greatly reduce the time required to resolve the problem. The AVANT REMsp system does an excellent job measuring and displaying acoustic feedback.
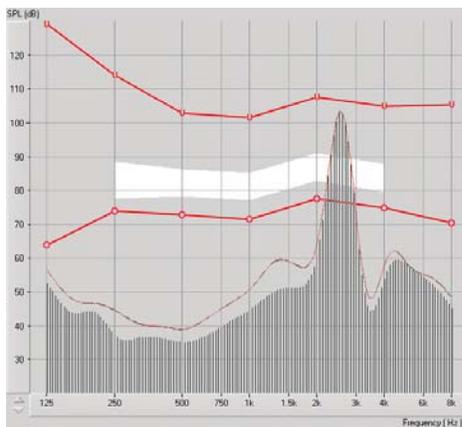
1. Place the calibrated probe tube in the ear canal as instructed previously.
2. Place the hearing instrument in the ear without disturbing the probe tube.
3. Begin a Live Speech Mapping session as instructed previously.
4. When feedback is present, click the **Start button**.
5. Acoustic feedback appears as a large spike in the LSM response.
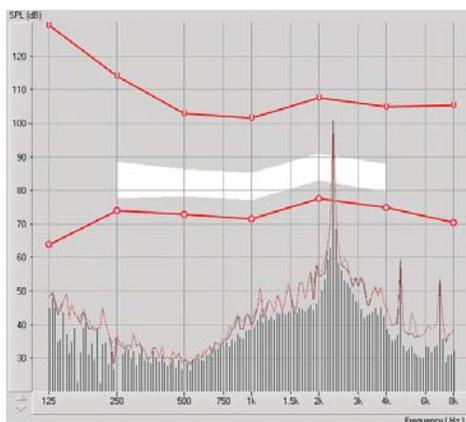
If a more specific frequency analysis of the feedback is desired, change the resolution of the system to 1/24 octave by clicking the **Options** menu item and changing the Analyzer selection using the pull-down menu. This image shows the same feedback as above at 1/24 octave.

Using this information, make any needed adjustments to the hearing instrument to reduce or remove the feedback.

Hearing Loss Simulator

The **H**earing **L**oss **S**imulator demonstrates the effect of the client's hearing loss for the significant third party. The program attenuates an input signal to simulate the audiogram. The third party listens to the free field speakers. The third party can hear how their own voice is distorted by the hearing loss when the Record input option is used.

The Hearing Loss Simulator requires the client's Audiogram data. This data can be manually entered in the Audio screen of this or any other task.

How to perform the Hearing Loss Simulator task
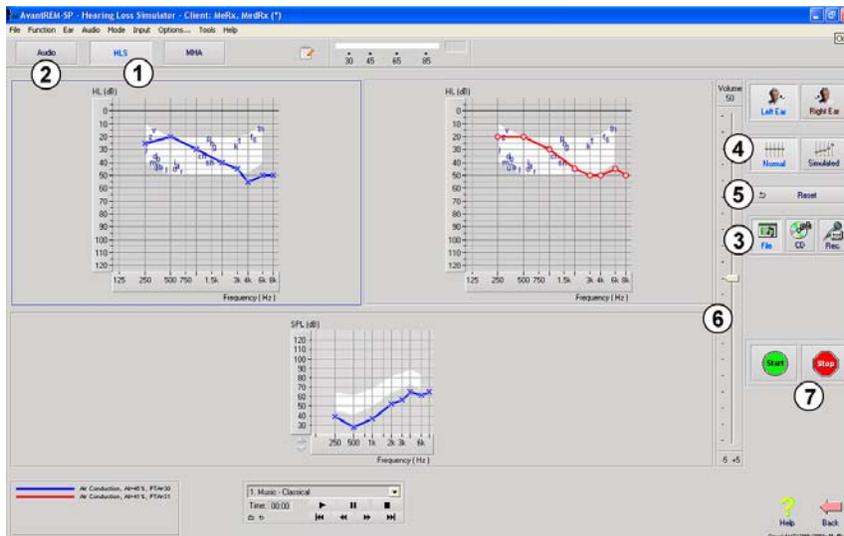
1. Select the **Hearing Loss Simulator** tab on the toolbar.

2. Enter the Audiogram values manually if the data is not automatically imported to this screen.

3. Select the input signal type: *Mic, File* or *Record.* Select the track and the *Play* button on the control panel. See below for instructions on how to use the Record option. The HLS output is directed to the free field loudspeakers.

4. Select *Normal* to play the input signal as a person with normal hearing would perceive it. Select *Simulated* to turn on the simulation of the client's hearing loss. Toggle between these selections as necessary.

5. The **Reset** option restores the audiogram to the original state. Use this option if you have modified the audiogram while in the simulate mode but want to undo the changes. The changes to the Audiogram that are made on the HLS screen are temporary and will not affect the client's original audiometry record.

6. A volume control adjustment bar allows for manual adjustment of the output level of the freefield speakers.

7. To stop the playback, select the *Stop* button on the player.

Note: It is recommended you use a variety of tracks from the list to demonstrate the hearing loss.

Record Input Option

This option allows recording and playing back of the voice of the third party.

Note: The LSM option appears on the bottom half of the display. This is so the unaided and aided results can be displayed simultaneously for the patient and significant third party.

Master Hearing Aid

Master **H**earing **A**id is an alternative to using a stock hearing aid to demonstrate the benefits of amplification to an inexperienced user. The system applies the fitting rules by default to the patient's audiogram and simulates a hearing aid. The patient listens to this signal through the headphones. Options for editing the gain applied to the audiogram are provided.

About the Master Hearing Aid Display

The Master Hearing Aid screen displays a graph with dB Gain on the vertical axis and Frequency in Hz on the horizontal axis. The plot on the graph represents the gain applied to the patient's Audiogram. The NAL-RP is applied by default. A new rule can be selected from the list on the right side of the display. A

volume adjustment bar allows for manual adjustment of the output level. The control panel on the right of the display provides options for input signal source and the task icons for Normal and Simulate.

The Master Hearing Aid applies gain separately for each ear. If audiogram values are entered for the left and right ear, the selected fitting rules will be applied to each ear separately. Different rules may be entered for different ears (i.e. NAL-RP for left ear and BERGER for right ear). If an audiogram is entered only for one ear, the gain will not be adjusted for the opposite ear and the sound for that ear will be normal.

If **Binaural** mode is selected, the sound will be heard from both channels (left and right). If **Monaural** mode is selected, the sound will be heard only from the channel corresponding to the active ear when the channel for the opposite ear will be muted.

Input signal

Live voice (microphone) allows you to use the right probe mic for live speech input to the headphones. The clinician or significant third party can speak into the microphone for this activity. Note: there is a processing delay between the input and playback. Make sure that the client cannot hear the voice directly but only through the headset. If this is not possible, use the Recorder (describer below) to simulate speech input.

File allows the user to play sound files. The program supports MP3 and WAV files and comes with a preset MedRx Sounds Sensations set of files. After the option is activated, use the player panel to control the playback.

CD allows the user to play music CDs. After the option is activated, use the player panel to control the playback.

Record input mode allows the clinician or third party to record a sample of their speech which can then be replayed for repeat comparisons under different amplification conditions for the patient. Refer to the interactive Help system by pressing **F1** or clicking the **Help** icon to learn more about the recorder.

How to use the Master Hearing Aid:
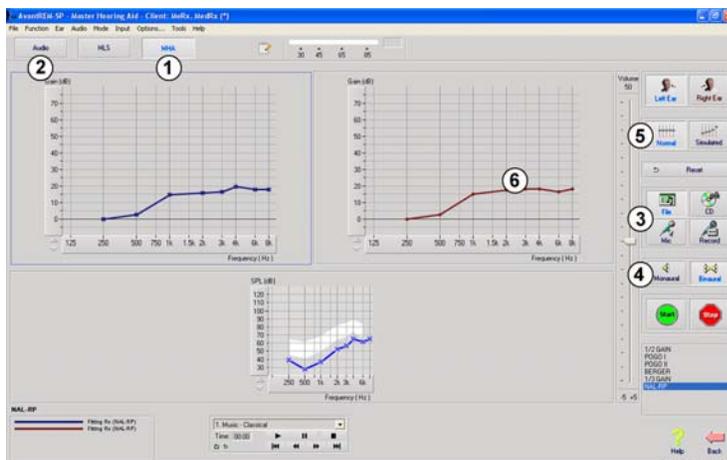
1. Select the *Master Hearing Aid (MHA)* icon from the main screen.

2. Enter the Audiogram values manually if the data is not automatically imported to this screen.

3. Select the input signal type: *File, CD, Mic,* or *Record.*

4. Select *Monaural* or *Binaural*

5. Select the *Normal* icon, which will send the input signal through to the inserts without modification. The patient is listening to the signal without any amplification benefit. Select the *Simulate* icon to modify the input signal according to the selected rule. This selection allows the patient to hear the benefits of amplification. Toggle between these two selections as necessary.

6. If the simulated frequency response needs to be adjusted, based on feedback from the patient, manually edit the response by clicking on the gain curve at the desired frequency and new gain level.

The gain curve of the selected test ear on the control panel can be edited. To edit the other ear, click the appropriate test ear icon on the control panel first.
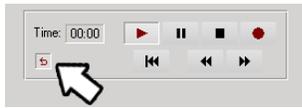

Hint: Use the **track return** icon on the player control panel to replay one track continuously.

The **Reset** option restores the rule to the original state. Use this option if you have modified the rule but want to undo the changes.

Printing

Printing within the Avant REMsp software is very simple.
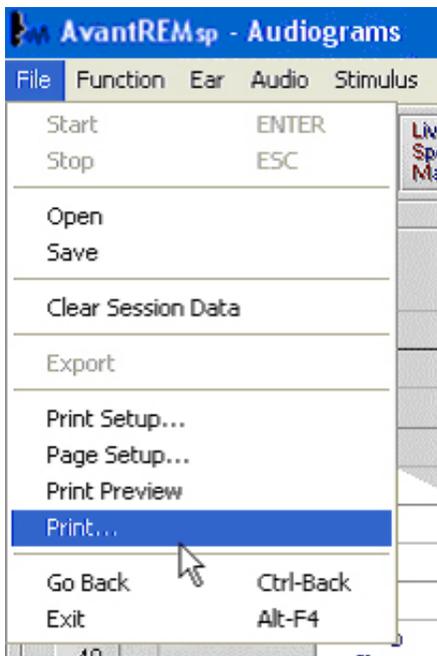
From the File menu, click one of the following options:

Print Setup – selects the printer you want the report to be sent to. Avant REMsp prints to any installed Windows printer.
Page Setup – Allows you to set margin sizes and the default text header for your reports.

Print Preview – Shows you what your report will look like before you print it.

Print – Sends the report to the printer.

Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow.

Limited Warranty

MedRx, Inc warrants the AVANT REMsp System to be free from defects in material and workmanship for one year from the time of purchase. If this system fails to perform as specified during this period, the purchaser is responsible for calling MedRx at (888) 392-1234. The company's representative will advise the owner to either return specific components or the entire system to:

MedRx, Inc.

1200 Starkey Road #105

Largo, FL 33771

MedRx will repair or replace any defective parts, fully test the system and/or components and ship the system promptly back to the owner. There is no cost for this warranty service, provided the system is one year old or less and has not been misused, abused or damaged. Such damage includes, but is not limited to, dropping, exposure to excessive heat greater than 100⁰F and water/liquid damage.

Repair or replacement of the system as provided under this warranty is the sole and exclusive remedy of the purchaser. MedRx shall not be liable for any consequential or incidental damages, or for breach of any express or implied warranty. Except to the extent of applicable law, any implied warranty, merchantability or fitness of this product is limited to the duration of this warranty.

MedRx will, at its discretion, service and repair out of warranty components at the purchaser's request, charging for parts and labor as necessary.

The limited warranty is deemed void if software or hardware is installed on the AVANT REMsp which is not pre-approved by MedRx, Inc. Approved software includes NOAH™ and HIMSA approved hearing aid manufacturer programming modules for fitting hearing aids.

MedRx, Inc. is not responsible for problems resulting from installation of unapproved software or hardware. In the event of unapproved software or hardware installed on the system causing a conflict with the AVANT REMsp functions, MedRx will service the problem for a fee to be determined at the time of service.

Consult your MedRx Technical support member for other alternatives for back up.

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