



PARTNERSHIP

ReSound Aventa® 3

Aventa 3 User Guide

GUIDE FOR PROFESSIONALS

ReSound

rediscover hearing

resoundpro.com

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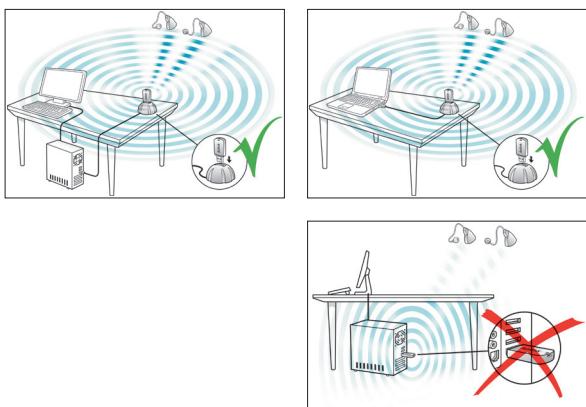
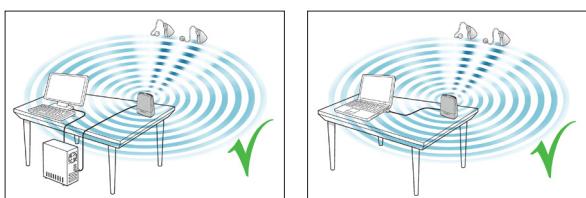
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Every time you fit a client, it's an opportunity to build your reputation. When you choose ReSound, we understand the trust you've placed in us. We strive to provide you with flexible, simple-to-fit software so you can make a real difference in the lives of people with hearing loss.

Airlink



ReSound Aventa 3 supports two generations of Airlink; the Airlink dongle and the latest Airlink 2.

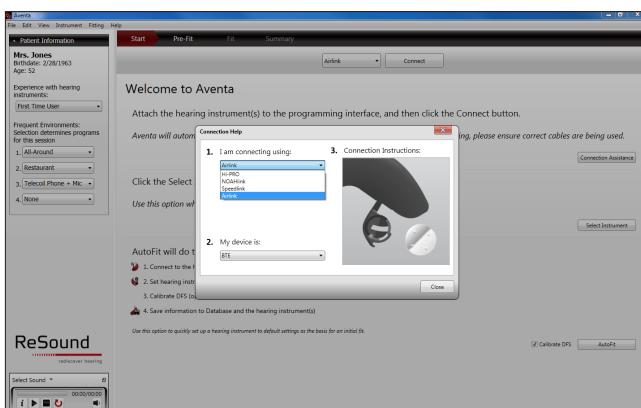
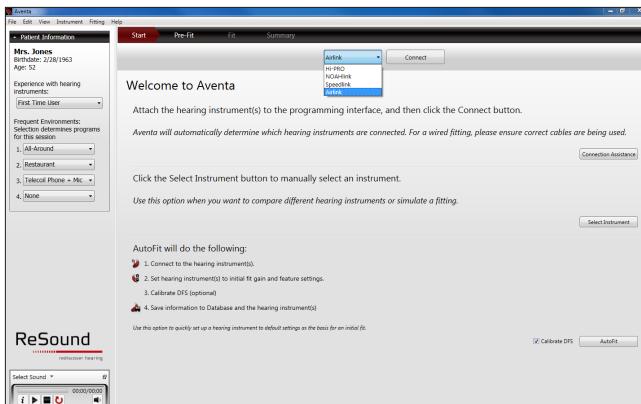
Both generations offer the great client experience of wireless fitting and the comfort it brings.

Being the latest generation, Airlink 2 is the recommended option of the two. It's designed to ensure optimal usage and better usability.

- Place Airlink 2 on the table with a clear line-of-sight to the hearing instruments, which should be within a range of 10 feet (3 metres).
- Avoid placing the Airlink 2 in a USB hub with other USB devices (e.g. Bluetooth dongle), as this can decrease the efficiency of the Airlink 2.
- When fitting hearing instruments inside a sound booth place the Airlink 2 inside or close to the booth.
- It is recommended not to use USB cables between the Airlink 2 and the PC exceeding a length of 10 feet (3 metres).

Note: If using the Airlink dongle it's recommended to use a USB hub that places the Airlink in an upright/vertical position as this provides for a better signal broadcast.
Refer to the pictures to the left for more guidance.

Other programming interfaces



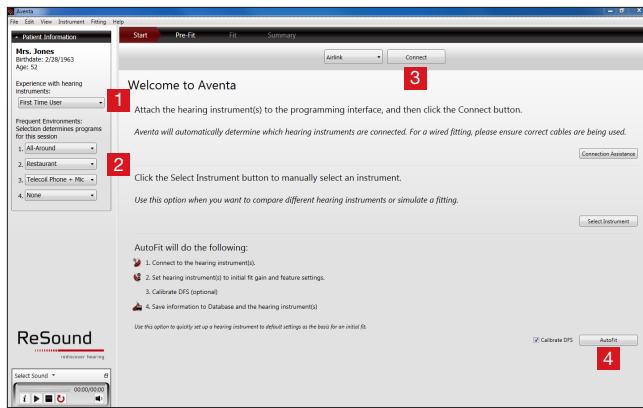
Aventa 3 works with:

- Airlink 2
- Airlink dongle
- Speedlink
- Hi-PRO
- NOAHlink

You can select programming interface on top of the Start Screen.

Note: Animations in Connection Assistance will show you how to connect specific models of hearing aids with the selected programming interface.

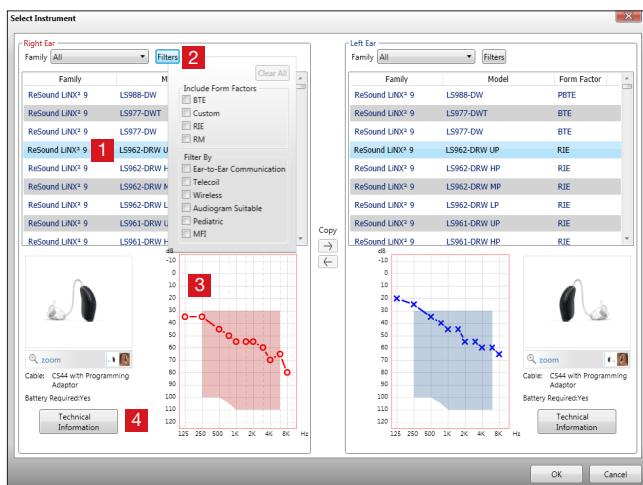
Start screen



After launching the Aventa software you will see the Start screen.

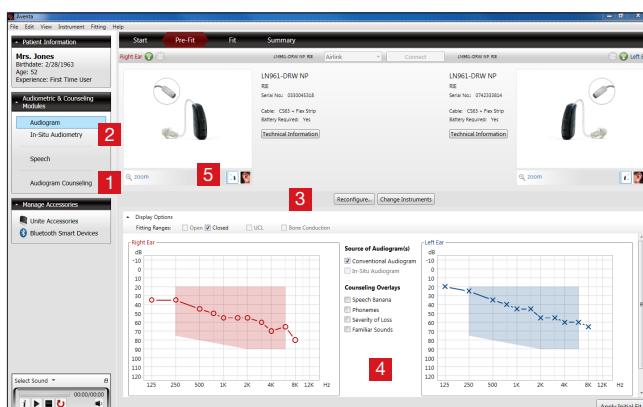
- 1 Select the patient's experience with hearing aids for an optimized gain prescription.
- 2 Let Aventa recommend the program defaults or select them based on your patient interview.
- 3 Connect to the hearing aids chosen for this fitting.
- 4 Use AutoFit as the easiest most direct path to a fitting.

Product selection



- 1 Product family selection - here you can view all available products per family.
- 2 Use filters to help you easily find the most relevant products. For example, "Audiogram Suitable" is a filter that shows only products with fitting ranges that cover your patient's individual audiogram.
- 3 Fitting range and patient audiogram.
- 4 Technical Information on the selected hearing aid.

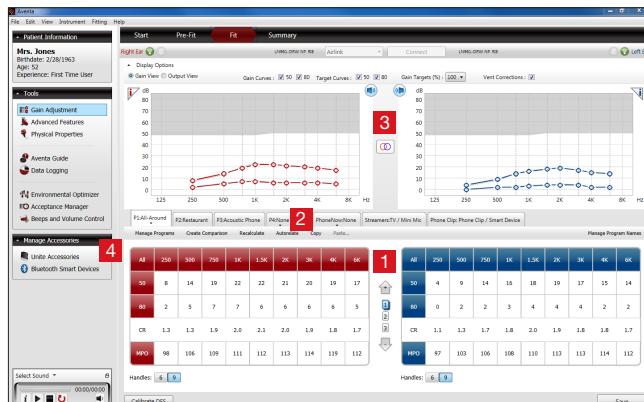
Pre-Fit screen



- 1 Counsel on the audiogram using the hearing loss simulator for a 3rd party present during the fitting session.
- 2 Perform an in-situ audiogram by presenting the pure tones from the hearing aids.
- 3 Reconfigure the hearing aid software to match the actual hardware.
- 4 Display audiogram overlays such as the speech banana and familiar sounds.
- 5 Have a closer look at how the hearing aids looks and how it sits on the ear.

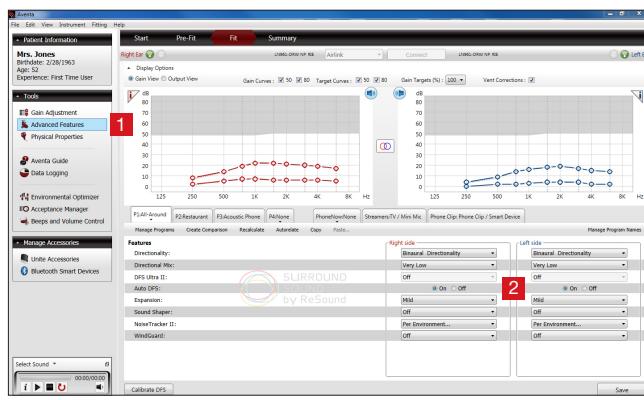
Fit screen

Gain Adjustment



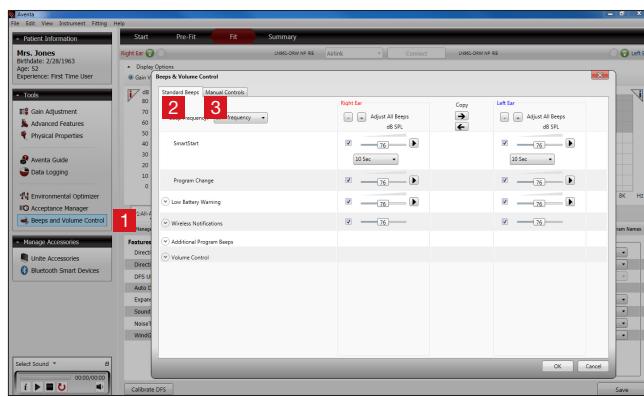
- 1 Adjust gain changes in increments of 1 dB, 2 dB or 3 dB.
- 2 Choose and fine-tune environmental programs and Wireless program.
- 3 Muting and linking the hearing aids.
- 4 Pair the hearing instruments with wireless accessories.

Advanced Features



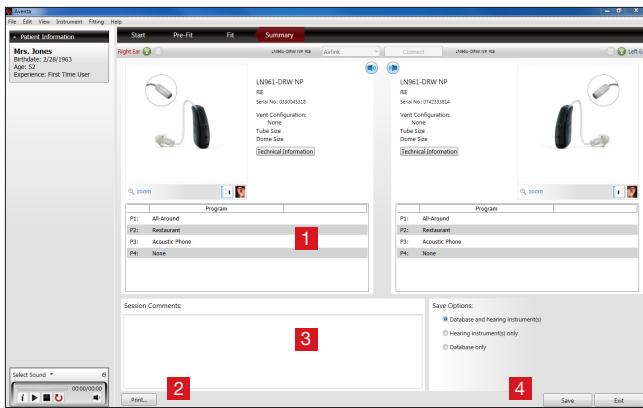
- 1 Feature settings are accessed by clicking “Advanced Features” in the “tools” section. These feature settings apply to the currently selected program.
- 2 Adjust the features of the hearing aids as needed.

Beeps and Volume Control



- 1 Click here to adjust beeps and volume settings.
- 2 In the “Standard Beeps” tab, all the acoustic indicators can be demonstrated, changed, added and removed as needed. Low or high frequency beeps can also be selected.
- 3 “Manual Controls” tab contains options such as customizing push button function, enabling and disabling the program button and adjusting the volume control range.

Summary screen



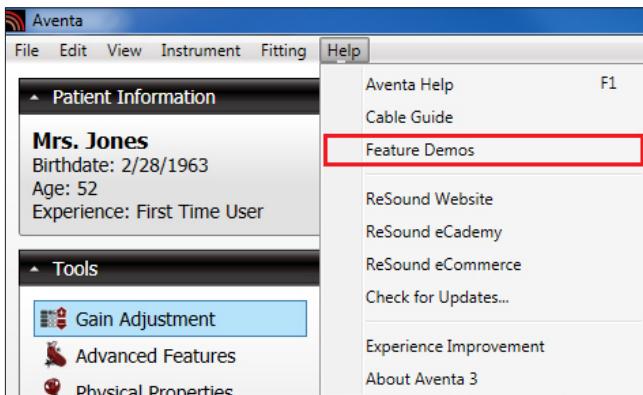
1 Confirm number of programs.

2 Customize the Clinician report and the Patient handout, which provides the patient with useful information.

3 Type in notes and they will be printed on patient's handout.

4 Save options let you select whether to save data in both the hearing aids and database, only in one place, or not at all.

Feature Demo Animations



Demo animations illustrate the features available in the hearing aids. You can find the animations in Help menu.



General Precautions

- This Aventa fitting software will apply recommended amplification settings based on available audiomетrical information. Settings will be specific to each fitting.
- Manual modification of the fitting parameters will impact and change the amplification level prescribed. This change will be audible to the patient when the instruments are connected.
- Caution should be exercised with patients sensitive to sounds, for example suffering from tinnitus or hyperacusis.
- Hearing device performance may drift and decline over time, please ensure devices are performing within specifications prior to performing in situ threshold testing.
- Feature accuracy is reliant on ear canal being completely occluded.

General Warnings

- When connected, the Aventa Fitting Software controls the acoustic amplification levels in a hearing instrument. In some acoustic environments, over amplification can cause discomfort and damage to the patients hearing.
- The Fitting System provides initial default amplification settings based on hearing threshold levels. These default settings could be higher than stable levels and cause feedback when amplification is first applied.
- The Fitting System initiates the feedback calibration procedure. Feedback calibration uses broadband noise to measure the amount of sound leaking from the hearing instrument. The output level is designed to be on the border of “uncomfortable” level based on hearing threshold level at a specific frequency. The sound will be ramped up in volume and cease when the calibration data is received. It is possible for the level to exceed a patient's comfort level, but it needs to be determined if it can obtain hazardous risk levels.
- The Fitting System initiates feedback calibration to measure the receiver to microphone transfer function. This is used primarily by the hearing instrument to manage feedback suppression but it is also used to display the limits of stable gain.
- The maximum stable gain estimates are based on feedback calibration data, the presence of active feedback suppression, and a headroom estimate. The headroom value is meant to be conservative however the presence of directionality has shown to give inaccurate estimates of max. stable gain. The risk is that, under some situations, the Fitting System could show that the hearing instrument is stable when it is actually close to unstable and in risk of feedback.
- If feedback calibration has not been performed during fitting the Max Stable Gain is not known and the device could cause feedback without warning.
- The Fitting System uses the Audiogram+ algorithm to interpret audio gram data for determining optimal gain settings. The parameter used is “first time user”. This may give a less than optimal initial fitting but should not pose a safety risk. The algorithm has been independently validated with the specification and verified to be consistent with Fitting Software.
- The Fitting System uses feedback calibration measurements to compute Max Stable Gain values. These values are an estimate of the amount of gain that can be safely applied to a hearing instrument before it begins to cause feedback. There is a warning when this gain is reached, and the over gain values are highlighted with bold, red text. The safety margins give a “close” approximation of the actual feedback border. However, it's an estimation and feedback can occur before the warning is given. Sustained feedback on high power devices can damage residual hearing.
- Warning to hearing care practitioners: Special care should be exercised in selecting and fitting hearing instrument(s) whose maximum sound pressure level exceeds 132 dB SPL with an IEC 60711: 1981 occluded ear simulator, because there may be a risk of impairing the remaining hearing of the hearing instrument user.
- Warning to hearing care practitioners: Special care should be exercised in selecting and fitting hearing instrument(s) utilizing Tinnitus Sound Generator. The maximum output of the tinnitus sound generator feature falls into the range that can cause hearing loss according to OSHA regulations. For further details please consult the user guide of the relevant hearing instrument that includes the Tinnitus Sound Generator feature. In accordance with NIOSH recommendations the user should not use the sound generator for more than eight (8) hours a day when this is set to a level of 85db SPL or above. When the sound generator is set to levels of 90db SPL or above the user should not use the sound generator for more than two (2) hours per day. In no case should the sound generator be worn at uncomfortable levels.
- Children and physically or mentally challenged users will require guardian supervision while wearing the device.



WARNING points out a situation that could lead to serious injuries, CAUTION indicates a situation that could lead to minor and moderate injuries.



0297 Any issues relating to the EU Medical Device Directive 93/42/EEC should be directed to ReSound A/S.

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