

CONNEXX 9 FITTING GUIDE

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Software Updates

Programming incompatible devices

This new feature allows you to work with two different instruments on the same screen in a single session.

NOTE, the hearing instruments will not communicate with one another.

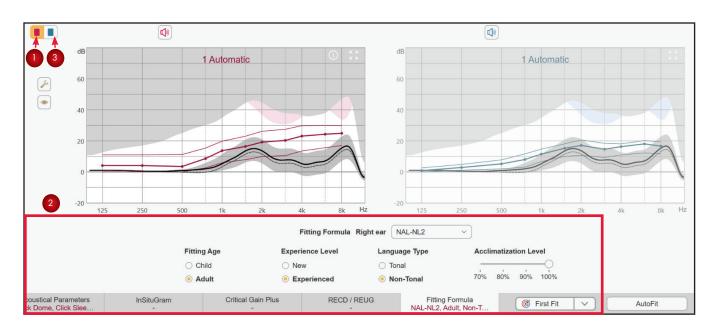
Upon detection, Connexx will ask you how to proceed:

- New Fitting
- Read Out
- Mimic Fit

You can select a different option for each side. Once in the session, you must apply all desired changes to each hearing aid individually, including First Fit.

- 1. Select the side you want to work with
- 2. Apply all desired changes (including First Fit, if applicable)
 - -The inactive side will be grayed out
- 3. Switch to the opposite side and apply desired changes

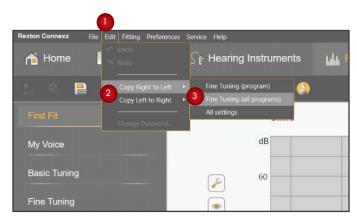




Copying Settings and Extending Monaural Session

Copy any settings from one side to the other

- 1. Click Edit in the Main Menu
- 2. Select the side you are going to copy from
- 3. Select which setting shall be copied:
 - a. Fine Tuning (program): copy fine tuning settings of current program
 - b. Fine Tuning (all programs): copy fine tuning settings of all programs
 - All settings: copy Fine Tuning, programs and configuration

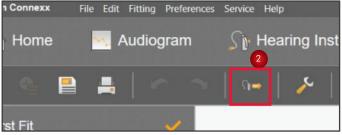


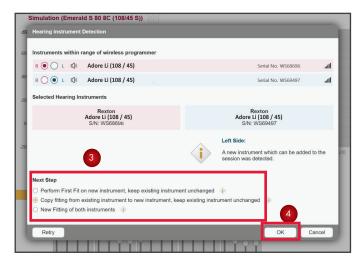
Extend monaural session to binaural

Preconditions:

- Existing monaural session
- Binaural audiogram
- The new device must be the same model and platform as the one existing in the session
- 1. Open existing monaural session
- Detect the existing device and the new device together
- 3. Select an option for Next Step:
 - Perform First Fit on new instrument, keep existing instrument unchanged
 - Copy fitting from existing instrument to new instrument, keep existing instrument unchanged
 - New Fitting on both instruments
- 4. Click OK





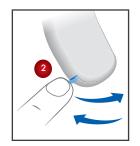


First Fit

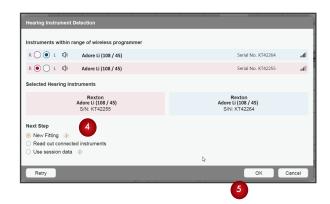
First Fit

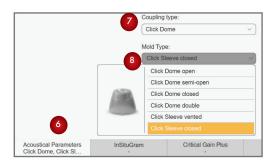
- 1. Click on Programmer Selection
 - NoahLink Wireless only: Li RIC, Li BTE, StyleLine
 - NoahLink Wireless or HiPro 2: MB/PB BTE, ITE/ITC
 - ConnexxAir or HiPro 2: iX, CIC
 - ConnexxAir: IIC
- 2. Activate Detection Mode if using Noahlink Wireless
 - Rechargeable: Remove from charger or press and hold push button on each hearing aid to turn off then press and hold again to turn on
 - Adore MB/PB Adore ITE/ITC: Open and close each hearing aid battery door
 - Confirm each hearing aid has completed powering on
- 3. Click Detect Hearing Instruments
- 4. Click New Fitting
- 5. Click **OK** to begin First Fit
- 6. Click Acoustical Parameters tab
- 7. Select Coupling Type
 - Select Click Dome or Click Mold
- 8. Select Mold Type
 - Important: Select type of dome or vent size of mold being fit
- 9. Click Fitting Formula tab
- 10. Select Fitting Formula
 - Default is NAL/NL2
- 11. Select Experience Level
- 12. Select Acclimatization Level
- 13. Click First Fit













My Voice

Activating My Voice

After First Fit has been performed, proceed to optimize member's voice perception.

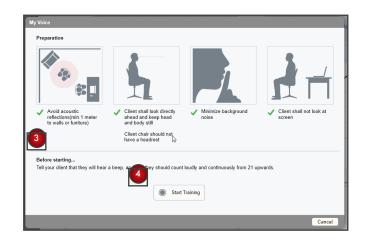
- 1. Click My Voice tab
- 2. Click Prepare Training
- 3. Instruct wearer to wait until they hear a beep in each ear and then count upward from 21 loudly.
- 4. Click Start Training to begin

5. Click **OK** when Test is complete

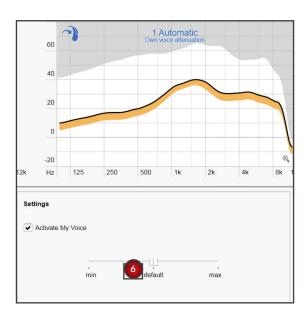
- 6. My Voice will activate at the default setting. Adjust if necessary.
 - If member's voice is too loud: increase setting to Max
 - If member's voice is too soft: decrease setting to **Min**

NOTE: My Voice requires a binaural fit and is not available for ITE/ITC/CIC/IIC





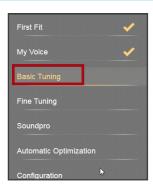




Basic Tuning

Basic Tuning

Use the Basic Tuning tab to adjust for gain, loudness and comfort issues after First Fit.



Basic Tab

Master Gain

 Adjusts overall gain for all frequencies and input levels.

Note: the number indicates an average of gain across all channels

Loudness

Adjusts gain and compression based on input levels.

- Soft Sounds 50-55 dB input
- Medium Sounds: 65 dB input
- Loud Sounds 75-80 dB input
- Speech increases/decreases gain for speech intelligibility

Sound Quality

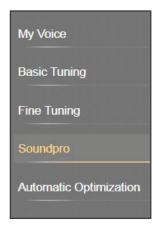
- Too Sharp increases lows and mids and decreases high frequencies.
- Too Muffled decreases lows and mids and increases high frequencies



Soundpro - Personalizing the Automatic Program

Soundpro with Virtual Intelligence

- Soundpro utilizes Virtual Intelligence to accurately and seamlessly analyze and adapt to countless acoustic environments allowing the hearing aids to adjust to the wearer's dynamic world.
- This reduces or eliminates the need to add dedicated programs for difficult environments.
- Soundpro allows you to tailor the Automatic program and personalize it for the listening needs of the wearer.



Customizing Soundpro

There are two ways to customize Soundpro:

Option 1

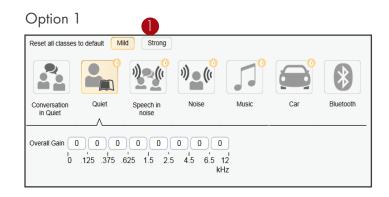
1. Click **Strong** to quickly maximize the hearing aid algorithms for all hearing environments.

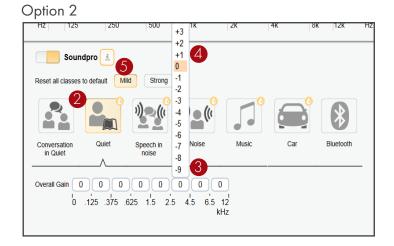
Option 2

- 2. Click on the Acoustic Environment to be adjusted (Quiet, Speech in Noise, Music, Noise, Car or Bluetooth)
- 3. Click the **Overall Gain** value in the frequency range to be changed:
 - 0 .625 kHz: range where most noise is present
 - .625 4.5 kHz: range where most speech is present
 - 4.5 12 kHz: range where most high frequency noise may be found
- 4. **Select a new value** to change the response as needed.

Select Mild to reset the offset values

NOTE: adjustments for Bluetooth streaming can be made in Soundpro.





Fine Tuning: Amplification

Fine Tuning

Use this tab to make detailed adjustments to various hearing aid functions.

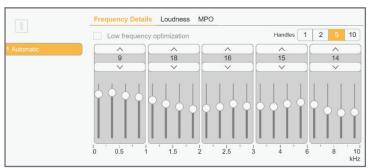


Frequency Details

- You may use Frequency Details to adjust the gain for multiple channels at a time.
- Use the arrows to adjust multiple channels simultaneously.
- You may change the number of handles from 1 to 10.

Note: the number between the up and down arrows indicates an average of gain across those channels

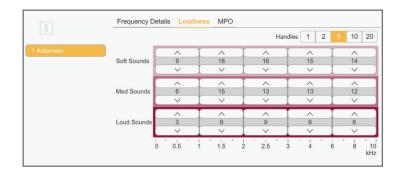
• Use the sliders to make precise adjustments to the channels.



Loudness

- You may use Loudness to adjust the gain for soft, medium (speech) and loud sounds.
 - Soft Sounds: 50 55 dB
 - Med Sounds: 65 dB
 - Loud Sounds: 75 80 dB
- Use the arrows on the handles to adjust multiple channels simultaneously.
- You may change the number of handles from 1 to 20.

Note: the number between the up and down arrows indicates an average of gain across all channels for that loudness level.

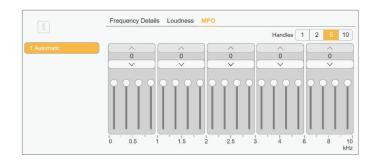


Fine Tuning: Amplification (Continued)

MPO

You may use MPO to adjust the Maximum Power Output for multiple channels at a time.

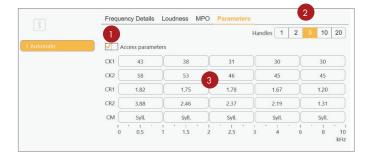
- Use the arrows on the handles to adjust multiple channels simultaneously.
- You may change the number of handles from 1 to 10
- Use the sliders for fine-tuned changes on specific channels.



Parameters

Use **Parameters** to adjust compression in all channels.

- This tab is only available when using the NAL/NL2 fitting formula.
- Rexton uses dual kneepoint compression ratios to create a very precise response curve.
- 1. Click on Access parameters to change compression values
- 2. Select a number of handles
- 3. Click on a number and select a new value.
 - CK1: Compression Kneepoint 1
 - CK2: Compression Kneepoint 2
 - CR1: Compression Ratio 1
 - CR2: Compression Ratio 2
 - CM: Time Constants



Fine Tuning: Noise Reduction/Microphone

Overview Tab

This tab displays the noise reduction, microphone and Intelligent Feedback Preventer settings for any given program.

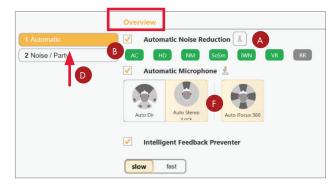
A. The green boxes show the active features in the current program.

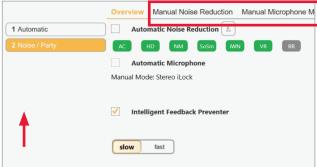
To change noise reduction level:

- B. Uncheck Automatic Noise Reduction
- C. Make desired changes in the Manual Noise Reduction tab (see below)

To change microphone mode:

- D. Uncheck Automatic Microphone
- E. Make desired changes in the Manual Microphone Mode tab (see below)
- F. In Overview, you may click on the different Microphone settings icons to turn them off or on.





Manual Noise Reduction Tab

Use this tab to adjust:

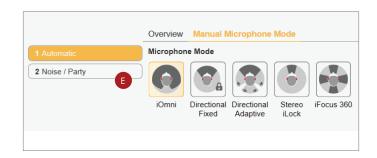
- HD Directionality for speech noise
- Noise Management for steady state noise
- Wind Noise Cancellation
- Sound Smoothing for sudden noises

Overview Manual Noise Reduction Manual Microphone Mode 1 Automatic HD Directionality Noise Management Wind Noise Cancellation Wind Noise Cancellation Mind Manual Microphone Mode to Manual Microphone Mode HD Directionality Wind Noise Cancellation Mind Manual Microphone Mode

Manual Microphone Mode Tab

You may use this tab to change the microphone mode.

- iOmni: electronic pinna effect (RIC & BTE only)
- Directional Fixed
- Directional Adaptive
- Stereo iLock: narrow directionality to the front
- iFocus 360: true directionality to the front, sides or rear of the wearer



Intelligent Feedback Preventer

Feedback Reduction Strategies

If feedback conditions exist, you may use one of the following strategies to make adjustments.

Strategy 1

Change the level of the Intelligent Feedback Preventer from **slow** to **fast**

- 1. Click on Fine Tuning
- 2. Click on Noise Reduction/Microphone
- 3. Change to Fast





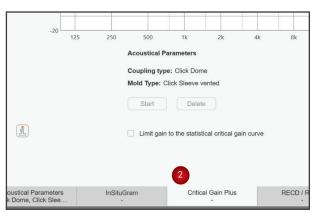
Strategy 2

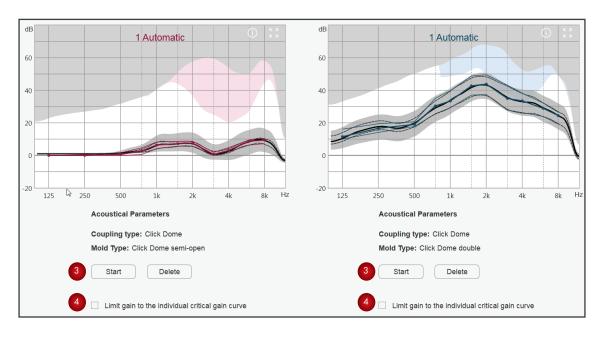
Using Individual Critical Gain Curves

Insert hearing aids on the wearer

- 1. Click on First Fit tab
- 2. Click on Critical Gain Plus tab
- 3. Click on **Start** to measure the actual critical gain of the wearer for each ear
- 4. Check Limit gain to the individual critical gain curve only if the target gain rises into the red and blue area







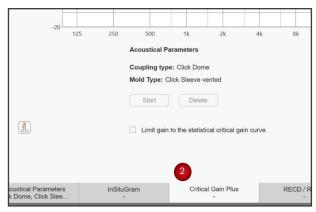
Intelligent Feedback Preventer

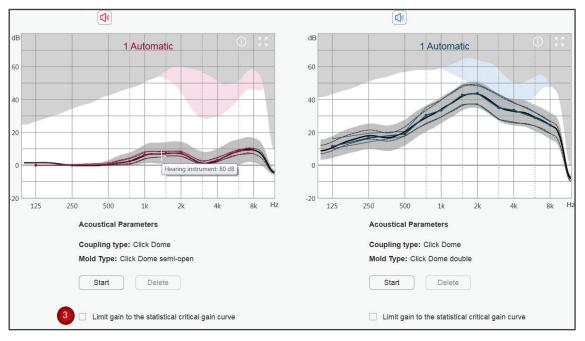
Strategy 3

Using Statistical Curves

- 1. Click on First Fit tab
- 2. Click on Critical Gain Plus tab
- Check Limit gain to the statistical critical gain curve only if the target gain rises into the red and blue area







NOTE:

If using statistical critical gain curves reduces the hearing aid response significantly below the target gain it is advisable to run the individual critical gain curve to see if the ear canal response is more stable than the statistical model

If using individual critical gain curves reduces the hearing aid response significantly below the target gain it is advisable to change the acoustic parameters (change both the style of dome, sleeve or earmold venting on the ear and in the software) and then Delete and Start another individual measurement.

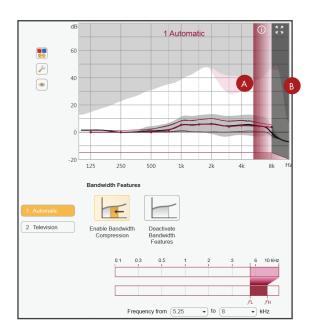
Fine Tuning - Bandwidth Features

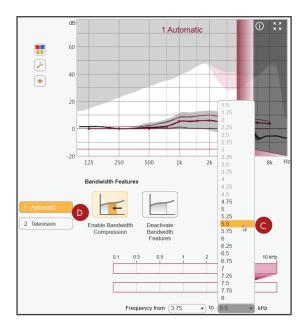
Bandwidth Compression

Bandwidth Compression is activated automatically when audiometric criteria are met suggesting the feature may be beneficial.

- A. The graphs will illustrate the compressed region with a vertical red or blue shaded area.
- B. The dark grey area indicates the area without amplification.
- C. The lower frequency boundary and higher frequency cut-off can be adjusted by selecting a value from the drop-down options.
- D. The feature may be turned on or off in different programs.







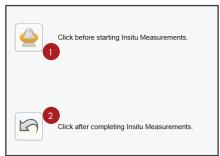
Fine Tuning - Precision REM & Fitting Assistant

Precision REM

This deactivates all adaptive features in the hearing aids for **Real Ear Measurements**.

- Click the icon to deactivate all features before starting REM
- Click the icon with the arrow after completing REM to re-activate all adaptive features in the hearing aids.





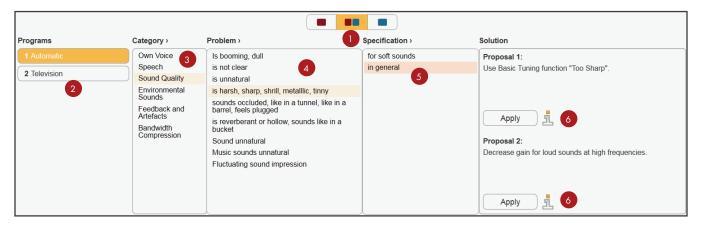
Fitting Assistant

You may use the Fitting Assistant to address common wearer complaints.

- 1. Select the ear affected: right, left or both
- 2. Select a Program
- 3. Select a Category
- 4. Select a Problem
- 5. Select a Specification
- 6. Click the **Apply** button for the proposal that you determine will best serve the wearer. You may click this button more than once to achieve the desired effect.

NOTE: you may have one or two proposals

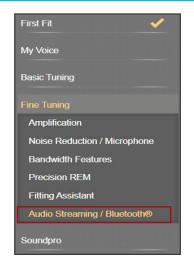
If the selected proposal does not solve the issue, click the **Undo** button in the tool bar and select a different proposal or redefine the problem



Fine Tuning - Audio Streaming

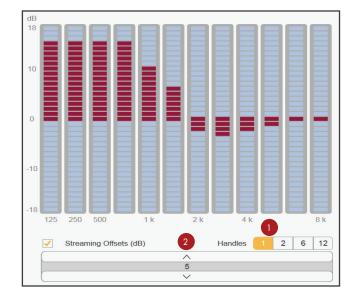
Adjusts the sound quality and level of the audio being heard when direct streaming from iPhone, Smart Transmitter 2.4 or Smart Mic.

No dedicated programs are required for direct streaming.



Overall Volume

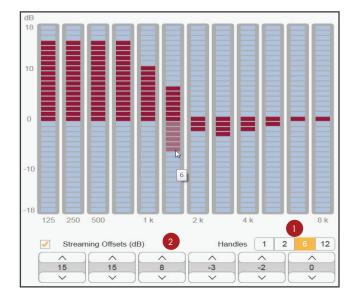
- 1. Change Handles to 1
- Click up or down arrow to increase/decrease overall volume of the streaming signal.



Sound Preference

- 1. Change Handles to 2, 6 or 12
- 2. Click the **up** or **down arrow** to adjust the frequency range desired

Alternatively, any of the individual bars can be clicked to make specific changes to the response.



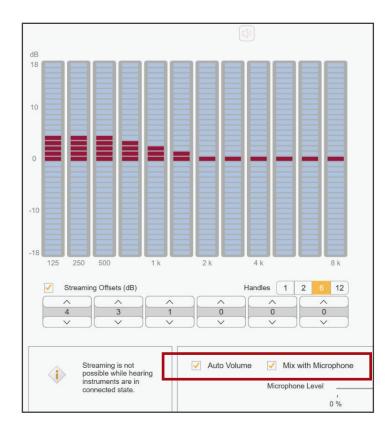
Adjusting Audio Streaming (Continued)

Auto Volume

- The streaming level is automatically raised when the ambient noise level increases.
- This is the default setting and allows the wearer to hear the streamed signal better in difficult environments.

Mix with Microphone

 The hearing aid microphones are active at a reduced level during streaming and phone calls so the wearer can hear their surrounding environment.



Microphone Level

This changes the volume level of the hearing aid microphone in relation to the streamed signal.

- 0% Hearing aids amplify the streamed signal only and the hearing aids' microphones are turned off.
- 100% Hearing aids amplify the streamed signal and the surrounding environmental sounds equally.

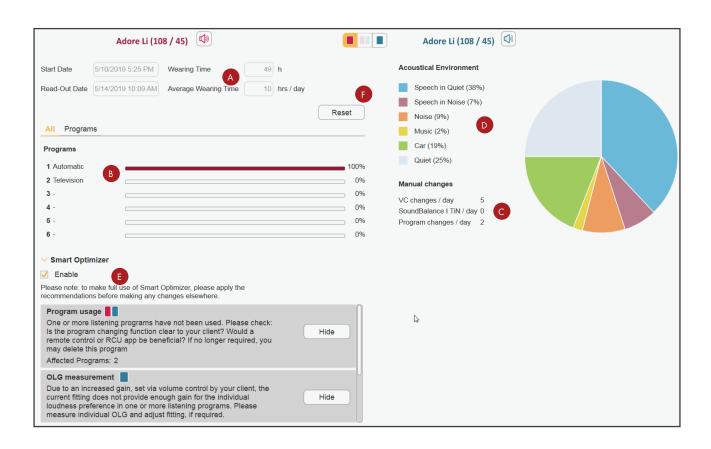


Automatic Optimization - Datalogging

Datalogging

- A. Displays hearing instrument usage
 - Total wear time since Datalogging started running
 - Average wearing time daily
- B. Display the time spent in each program as a percentage
- C. Display the number of daily changes to:
 - Volume
 - Sound balance
 - Program
- D. Displays the Acoustic Environments the wearer has been exposed to and percentage of time spent in them
- E. Smart Optimizer allows you to make counseling recommendations and hearing instrument changes based on logged data
- F. Click the Reset button to erase all data and start over





Automatic Optimization - Automatic Acclimatization

Activating Automatic Acclimatization

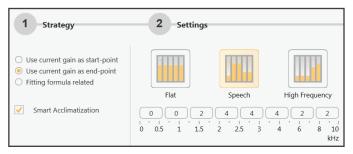
Fit new hearing aids for wearer comfort and then activate Automatic Acclimatization to gradually increase gain over time to comfortably achieve the prescribed audibility target.

- 1. Click on Automatic Optimization
- 2. Click on Automatic Acclimatization
- 3. Select a Strategy
 - a. Use current gain as start-point
 - Start at current settings and increase to final target
 - b. Use current gain as end-point
 - Fit to target.
 - Reduce gain for comfort.
 - When you click start gain will slowly increase to match target
 - c. Fitting formula related
 - Fit to a lower acclimatization or experience level within the fitting formula and increase to a higher level of the fitting formula



- 4. **Smart Acclimatization**: activate to adjust duration time based on wearer's volume usage.
- 5. Select the target acclimatization level
- Select the **Duration** period for the acclimatization process
- Click the Start button to initiate the acclimatization process





 Option with Use Current Gain as End Point selected.

Configuration - User Controls

Here you may change the functionality of the user controls.

To change the functionality:

- 1. Click on Configuration
- 2. Click on Instrument

User Control

- 3. Select the functionality desired for Rocker Switch or Push Button
- Functionality is dependent on user control type
- Short and Medium Press:
 - Program Up
 - Volume Up
 - Volume Down
 - TV Stream
- Long Press:
 - No function
 - Power On/Off
 - Flight Mode

Volume Control

You may change the volume control range to accommodate the preferences of the wearer. It defaults to 16 dB.

Range:

- 8 dB: 1/2 dB per press of the rocker switch
- 16 dB: 1 dB per press
- 24 dB: 1 1/2 dB per press
- 32 dB: 2 dB per press

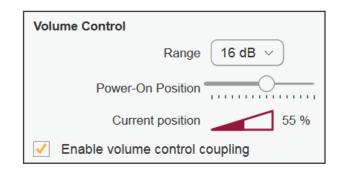
Sound Balance

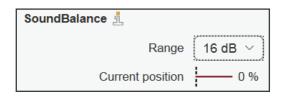
Change the treble range

SoundBalance is accessible via the Smart Direct and Smart Remote apps.









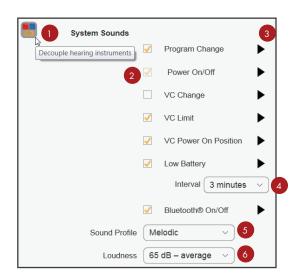
Configuration - System Sounds

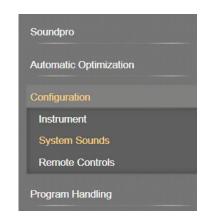
System Sounds

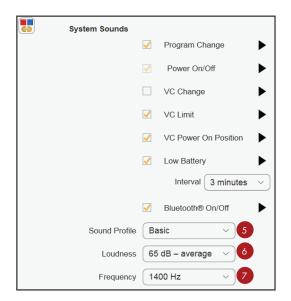
You may activate or deactivate beeps or melodies to alert the wearer when different functions of the hearing aids are engaged.

- 1. Decouple allows you to make different selections for each hearing instrument
- 2. Click the box for the sound you want to enable or disable
- Demonstrate the sound to the wearer by clicking the arrow to the right of the legend
- 4. Adjust the interval at which the Low Battery sound will be repeated
- 5. You may change between Melodic and Basic depending on wearer's preferences.
- 6. Adjust the Loudness of the selected system sounds
- Adjust the Frequency of the beep if Basic has been selected

NOTE: many system sounds can be adjusted in the Smart Direct app.





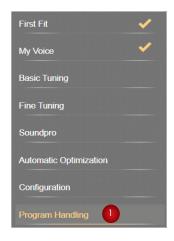


Program Handling

After First Fit, additional listening programs can be added in the Program Handling tab.

Adding Programs

- 1. Click Program Handling
- 2. Select the program desired





Music Enhancer Program

In the Automatic program, the Auto Classifier will recognize music and change the hearing aid response automatically for an enjoyable listening experience. For discriminating music needs, the Music Enhancer offers 3 additional options:

- Listening with speakers
- Listening at a live venue
- Playing an instrument

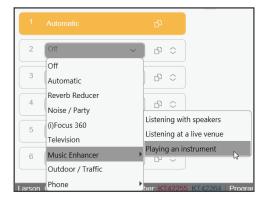
Reverb Reducer Program

Wearers who have difficulty hearing in reverberant environments will find it easier to follow conversations with this program.

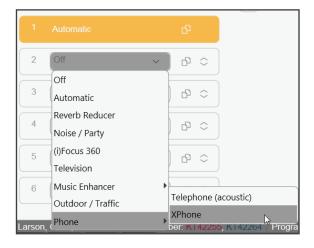
XPhone Program

XPhone is an acoustic telephone program that uses Wireless Sync to transfer the phone signal from the hearing aid of the phone ear to the other ear for binaural listening of the phone conversation.

This feature works with all phones.





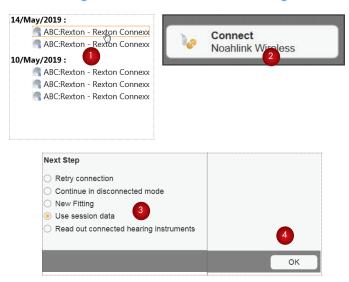


Loading Demo & Previous Settings

Loading Previous or Demo Settings into Both Hearing Aids of a Binaural Fitting

Connect both hearing aids to programming device.

- Open Noah session desired Connexx will open in simulation mode
- 2. Click Connect icon to program hearing aids
- 3. Select Use session data
- 4. Click on OK



Mimic Fit

Quickly transfer fittings from previously saved sessions into hearing aids that are different from those stored in the session.

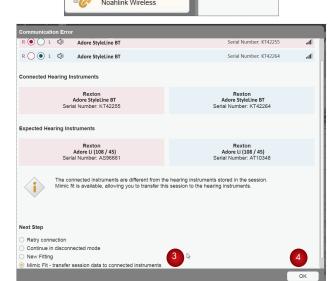
You may use this feature to:

- Transfer settings from any platform, starting with TwinCore into hearing aids of a newer platform.
- Change receiver power on RIC hearing aids without having to perform a new first fit.
- 1. Open session from the Noah Session List
- 2. Click Connect icon
- 3. Select Mimic Fit to transfer data
- 4. Click **OK**

Successful transfer will be confirmed



1 Automatic

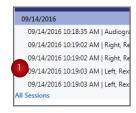


Service Tab

Loading Previous Settings into One Hearing Aid of a Binaural Fitting

Connect one hearing aid to programming device

- 1. Open Sycle Noah session desired
 - Connexx will open in simulation mode





- 2. Click on Service in the tool bar area
- 3. Select Program left hearing instrument or Program right hearing instrument
- 4. Select **OK** in the Service Programming window

Successful completion will be noted.

The session will remain in simulation mode, but the hearing aids have been reprogrammed and the settings have been saved in the hearing aids.



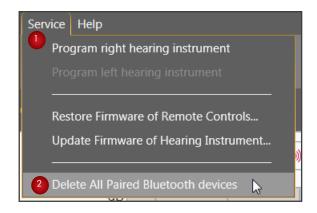
Delete All Paired Bluetooth Devices

All paired Bluetooth devices will stay in the hearing aid memory indefinitely (phones, Smart Mic, etc.). Deleting and repairing these items may be beneficial for the following:

- When experiencing intermittent issues with connectivity
- When operating system updates and firmware updates interfere with connectivity

To permanently remove these items:

- 1. Click on Service
- 2. Click on Delete All Paired Bluetooth Devices
- 3. Click Ok to delete





Update Firmware of Hearing Instruments

Update and/or Check Firmware of Hearing Instruments

To update the hearing instrument's firmware from the Service Tab, follow these steps:

- 1. Click on Service
- 2. Click Update Firmware of Hearing Instruments"
- 3. Click Install update if available

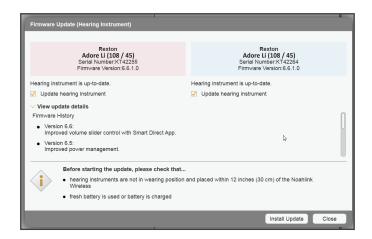




To update the hearing instrument's firmware from the Main Screen, when a Firmware Update is available, follow these steps:

- The firmware icon will turn yellow and the update message will appear when the hearing aids are first detected
- 2. Click Install to begin update
- 3. Click Update Firmware of Hearing Instruments





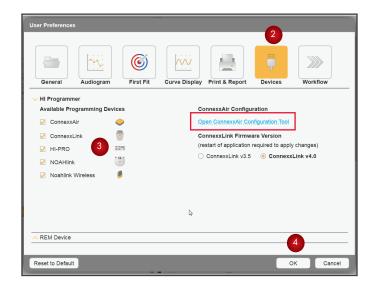
Managing Programming Devices

Adding Programming Devices to Connexx

If your programming device is not visible in the Programmer Selection from the main programming page you may add them by:

- 1. Click on User Preferences icon (Wrench)
- 2. Click on Devices
- 3. Select a Programming Device
- 4. Click OK





Updating Firmware for ConnexxAir

- Click on User Preferences icon (Wrench) (picture above)
- 2. Click on Devices (picture above)
- 3. Click on Open ConnexxAir Configuration Tool (blue font in red rectangle, picture above)
- 4. Click on Check for firmware update
- Connect ConnexxAir necklace to computer USB port with a USB to Micro USB cord
- 6. Click Install Update
- 7. Click Ok when complete







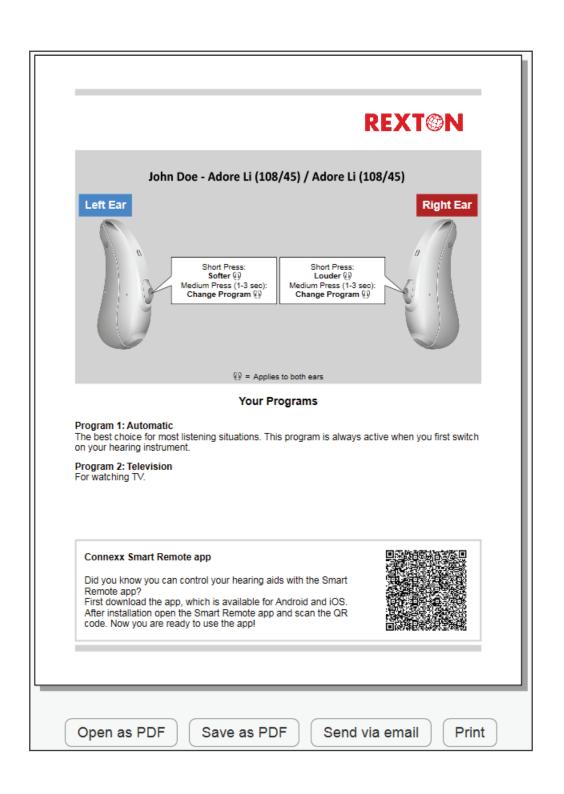
Documentation Tab

Documentation Tab

The Documentation tab creates a personalized instruction sheet with information for:

- User Control Configuration
- User Programs
- Smart Remote QR Code for easy pairing





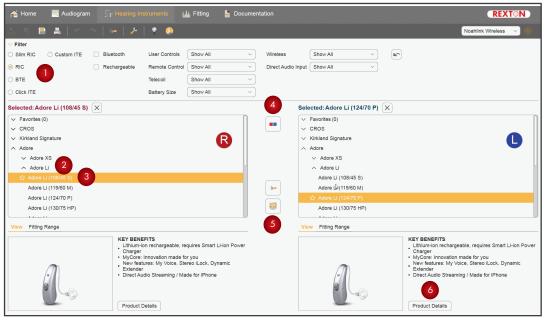
Hearing Instruments Tab

Selecting Hearing Aids

- 1. Click on the Filters to see the products desired
- 2. Click on the Product Name
- Click on the Product power level to see if the
 Fitting Range is appropriate for the hearing loss
 Try to keep the loss toward the center of the
 range if possible
- 4. If you wish to select different power levels for each ear, click on the Decouple/Couple icon
- 5. Click the **Simulate icon** to perform a fitting without connecting hearing aids

If you which to view the product specifications:

- 6. Click on Product Details
- 7. Click on Open data sheet

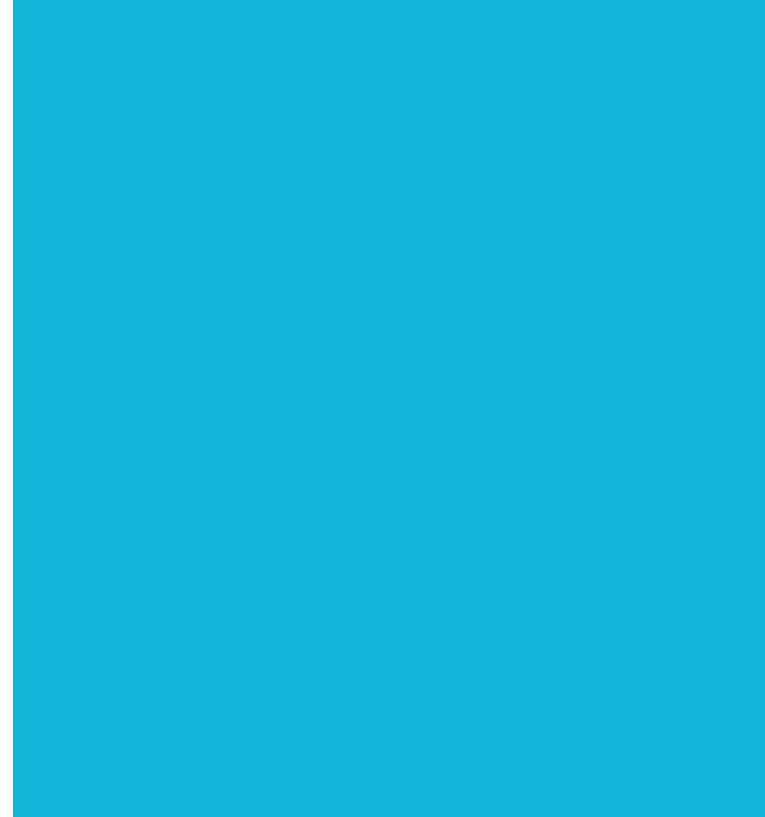




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Manufacturer and Local Contact

Rexton A Division of Sivantos, Inc. P.O. Box 59008 Minneapolis, MN 55459

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