

HANSATON scout

Instruction guide

Version 5.0

Version 5.0 supports the following product families;

- sound ST
- jazz XC Pro
- jam XC Pro
- AQ jam XC Pro
- AQ sound XC Pro
- sound XC Pro
- AQ jam XC
- AQ sound XC
- sound XC
- AQ sound SHD
- AQ jam SHD
- sound SHD
- jam SHD
- beat SHD
- AQ HD
- soundHD
- jamHD
- sound
- jam
- beat
- flow+
- flow

Contents

NOAH and standalone versions	5
Programming information	5
iCube II	5
NOAHlink / HI-PRO.....	5
Noahlink Wireless	6
Tool bar icons.....	6
Quick View Pane.....	6
Client tab	6
Connection tab	6
Alerts tab	7
Patient view tab.....	7
Located beside Quick View pane area	7
Calculate.....	7
Mute / unmute.....	7
Fitting Mode.....	7
Workflow selection	8
FocussedFit workflow:	8
Classic workflow:.....	8
FocussedFit workflow	9
Client Menu.....	9
Detect Menu	10
Tuning Menu	11
Configuration Menu.....	12
Finish Menu	13
Classic Workflow	14
Client Menu	14
Information.....	14
NOAH version	14
Standalone version.....	14
Experience Level.....	15
Audiogram	15
NOAH version	15
Standalone version.....	15
RECD	16
REUG	16
Importing RECD or REUG from NOAH	16
Instruments menu	17
Selection.....	17
Technology Change (myChoice).....	18
Acoustics	19
BTE and RIC instruments	19
Custom instruments.....	19
Accessories	19
Remote Control (RCV1) / Remote Control 2 (RCV2)	19
PartnerMic.....	20
uDirect 2 / uDirect 3.....	20
uStream.....	21
remoteHD app	23
stream remote app.....	23

Pre-Fitting	23
Fitting Formula.....	23
Processing Strategy	23
Tinnitus Manager Strategy	23
InSituGram	24
Fitting menu	25
Personal Tuning.....	25
Loudness.....	25
Tonal and Speech perception.....	25
Acclimatization	25
Tuning.....	25
AcclimatizationManager (SHD and older products).....	26
Intelligent Acclimatization (XC and XC Pro products).....	27
Intelligent Acclimatization (STRATOS products).....	28
Occlusion Manager	29
BassBooster.....	29
Soft / Mod / Loud Controls	29
MPO / Gain / CR Controls	30
App Equalizer	31
SoundRestore (Frequency Compression).....	31
SoundRestore Power / SoundRestore XC (Frequency Compression)	32
Fitting Advice	32
TinnitusManager	33
Configure Features	34
FeedbackManager.....	34
Sound Impulse Manager.....	34
SurroundOptimizer / SurroundOptimizer+	34
SurroundOptimzer (HD/SHD/XC)	34
Active Wind Block	34
Input.....	35
AutoSurround options	35
BiPhone.....	35
Car with Speech Direction	36
MusicSelect	36
Configure Features (STRATOS products).....	36
Program Manager.....	41
Feedback Optimization	42
Automatic REM	42
End Fitting menu.....	43
HI Setup.....	43
Push Button	43
Rocker Switch (Multi-function button).....	44
Tap functions (STRATOS products only).....	45
Push button/ rotary dial.....	45
Leverdial.....	46
IIC remote	46
TV Connector	47
Volume Settings	47
Start up Settings.....	47
Program Toggle Exceptions	48

Beeps.....	48
Beep Setup.....	48
Beep Enabling.....	48
Trial Duration.....	49
Fitting Summary.....	49
DataLogging menu.....	50
Overview.....	50
DataLogging.....	50
Lifestyle Analyzer.....	51
Curve display options.....	51
Main Menu.....	52
File.....	52
Hearing Instrument.....	52
Options.....	53
Preferences.....	53
General.....	53
Fitting Session.....	53
Reports.....	53
Fitting Device.....	54
Sound System.....	54
iCube II Configuration:.....	54
Accessory Firmware Update:.....	54
Change uDirect 2 Language Pack:.....	54
Help.....	54
Support.....	55

NOAH and standalone versions

HANSATON scout fitting software is available both as a NOAH module and as standalone software. The only difference with these versions is the client information storage. For the NOAH version, the fitting software relies on NOAH's database to save client specific information including audiogram. The standalone version does not use NOAH and contains its own client database.

Programming information

Prior to detecting the hearing instrument(s), choose your desired programming interface. Note: During programming hearing instrument controls, automatic program, accessories, PhoneConnect, easy-DAI, audio streaming, **Bluetooth®** connectivity and automatic microphone options are deactivated.

iCube II

If using iCube II for the first time, you will need to configure the fitting device. From the top menu select *Options > iCube Configuration* and follow the on-screen instructions.

If using iCube II, insert batteries into the hearing instruments and close the battery door. Place hearing instruments on your client's ears and place the iCube II around your client's neck or place the hearing instruments inside the iCube II neck loop.

NOAHlink / HI-PRO

- If using NOAHlink or HI-PRO with BTE or RIC hearing instruments, open the battery door and insert the programming cable into the programming port. Connect the other end of the cable to the NOAHlink or HI-PRO.
- If using NOAHlink or HI-PRO with ITE hearing instruments, remove the battery door and insert the programming cable. Connect the other end of the cable to the NOAHlink or HI-PRO.

Note: BTE and RIC hearing instruments are initially quick fit to a 40 dB HL flat hearing loss configured for the left ear upon shipping. ITE hearing instruments are quick fit to the client's audiogram if supplied; otherwise, the devices are quick fit to a 40 dB HL flat hearing loss.

Note: flow hearing instruments or other ITE instruments that are non-wireless and can be only programmed with NOAHlink or HI-PRO.

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Noahlink Wireless

- If using Noahlink Wireless, insert batteries into the hearing instruments and close the battery doors.
- If using Noahlink Wireless to connect to hearing instruments that are not saved in the current session, the hearing instruments must be in pairing mode. To put the hearing instruments into pairing mode, open and then close the battery doors of the instruments. Pairing mode lasts for 3 minutes.
- If using Noahlink Wireless to connect to hearing instruments that are already saved in the current session, the hearing instruments do not have to be in pairing mode.

Note: All Bluetooth® instruments are wireless and can only be programmed using the Noahlink Wireless

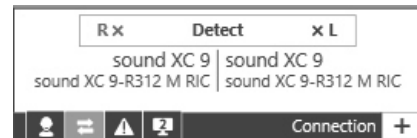
Tool bar icons

There are tool bar icons available at the top right hand corner of each screen.

-  **Print icon:** opens a window that shows the documents available such as the Fitting Reports and the Getting Started Guides (hearing instruments and accessories, if applicable). The client's language for the Getting Started Guides can be selected. The selected documents can be previewed, printed or saved from this window.
-  **Save icon:** saves the current fitting information. Choose from Save to hearing instrument, Save to database, Save to accessories (if accessory added to fitting).
-  **Undo/Redo:** removes or repeats an action that was made in the fitting software. Hover over the icon to see which action will be affected by clicking. Undo/Redo is available within some tasks but the list of items to be undone will not carry over across tasks.
-  **Updates available:** this icon appears if there are software updates available. Click on this icon to open the Software Updates tab.


Quick View Pane

The Quick View Pane is a multi-tab panel, located in the upper right of the HANSATON scout screen, that provides useful information on the current status of the hearing instrument fitting. Each tab can be expanded by clicking on the plus sign to view additional details relating to that section. Located above the Quick View Pane are additional fitting tools.




Each tab serves a different purpose:

Client tab


 Provides the client's name, number, last audiogram date, hearing instrument type and accessories. Clicking on the plus sign provides access to more information on the hearing instruments, date of birth, and an area for note entry.

Connection tab


 Lists current hearing instrument(s) along with the current connection status for each ear. An X icon next to the associated side (R or L) indicates the device is not connected, while a checkmark indicates the device is connected. If the connection is lost at any point, click the Detect bar on the Connection tab to reconnect. Click the plus sign to expand the Connection tab where you can see at a glance information related to the hearing instruments and the fitting device.

Note: HI-PRO refers to the original HI-PRO, USB HI-PRO and HI-PRO 2. The HI-PRO that is actually used is configured using the HI-PRO configuration tool.

Alerts tab


 Provides fitting help and alert messages during the fitting. A yellow-highlighted alerts tab appears momentarily to inform you of items that could impact your fitting should an action result in the need to modify the hearing instrument (e.g., recalculate) or affect another software screen (e.g., program removal changes program toggle on remote control). Clicking the plus sign provides a list of all help and alert messages that have occurred during the current fitting. The alert messages are automatically removed after being addressed during the fitting, after closing a session or via the remove icon on the alert tab.

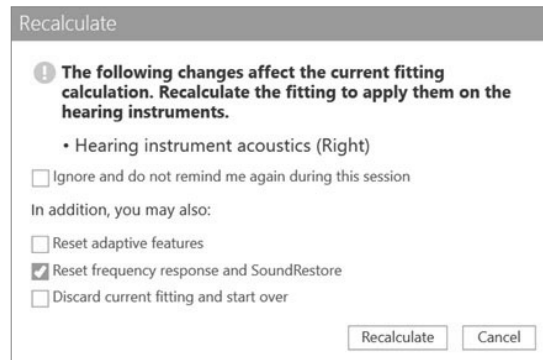
Patient view tab

 Allows you to display patient oriented screens on a second monitor while using HANSATON scout software. The patient screens may change depending on the task being performed by you. For example, screens were created for the feedback test to remind the patient to remain quiet. Using checkboxes, you can select a screensaver, patient view, or none. The screen selected for the second monitor is displayed within the quick view pane area. Clicking the plus sign provides you with available screen options. There may be secondary screens for you to choose to display.

Located beside Quick View pane area

Calculate

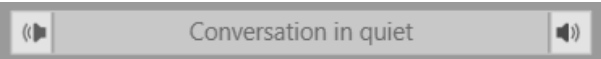
 Recalculates the fitting based on the current audiogram, fitting formula, hearing instrument acoustics, etc.
 Click the Calculate button to see all the pending changes and the recalculation options.




The pre-selected recalculation options vary depending on the pending changes.

Note: The Calculate button will be highlighted in yellow when a recalculation is recommended during fitting. When you enter the Fitting section with pending changes, for example, hearing instrument acoustics, the Recalculate dialog will appear to remind you that a recalculation is recommended before further fine tuning is performed. You can select to ignore the recalculate dialog which will prevent it from appearing again during the current active session. However, the Recalculate button will remain highlighted in orange as a persistent reminder that a recalculate is recommended.

Mute / unmute

 Indicates the current state of the hearing instrument(s): muted or unmuted. Mute/unmute can be selected individually for each device or binaurally by clicking the centre of the button. The centre of the button also lists the currently active environment for the hearing instrument(s).

Fitting Mode

 Fitting mode is designed to efficiently provide age-appropriate hearing aid settings based on the unique fitting needs of children versus adults. When client information is entered and the age is 18 years or less, HANSATON scout will automatically prompt you to select

the appropriate fitting mode option via a pop-up window. The fitting mode can be changed by clicking on the button and selecting the desired setting from the drop-down box.

Note: Fitting mode defaults can be edited under *Options > Preferences > Fitting Session > Pediatric Modes table*.

Workflow selection

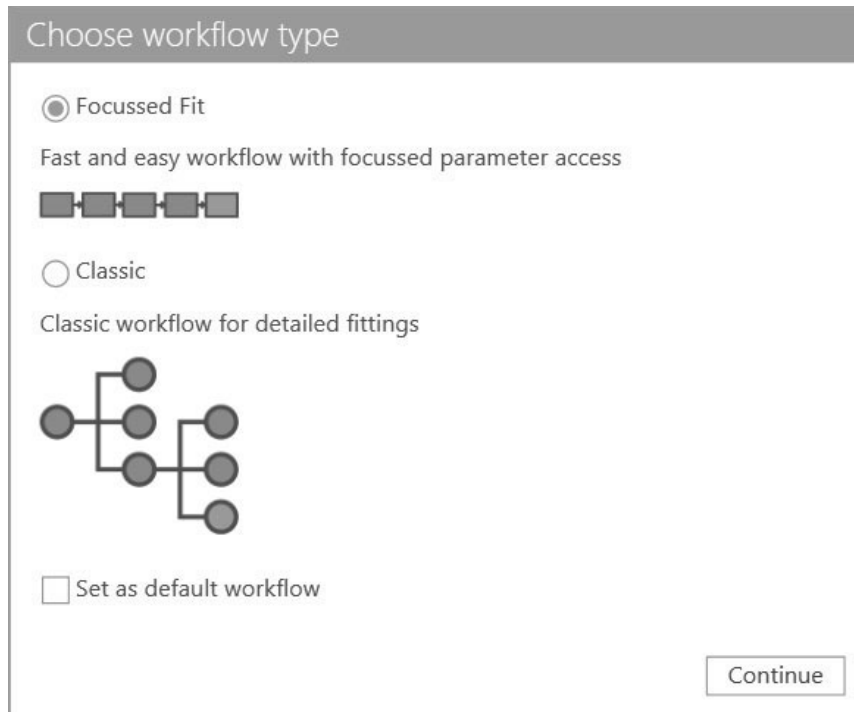
HANSATON scout 4.1 offers the possibility to choose from two workflow types.

FocussedFit workflow:

A fast and easy guided workflow with focussed parameter access. The new workflow “FocussedFit”, that is introduced with scout 4.0, is an alternative and optional workflow. This new workflow will guide you through the important steps of an initial fitting session.

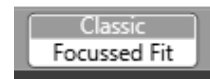
Classic workflow:

The classic workflow for advanced fittings with detailed access to all the parameters.



Note: The selection dialog comes up on startup and you could choose your desired workflow. This dialog comes up every time unless you set a workflow as a default.

It is possible to switch between the two workflow types at any time by using the button in the upper left corner of the menu.



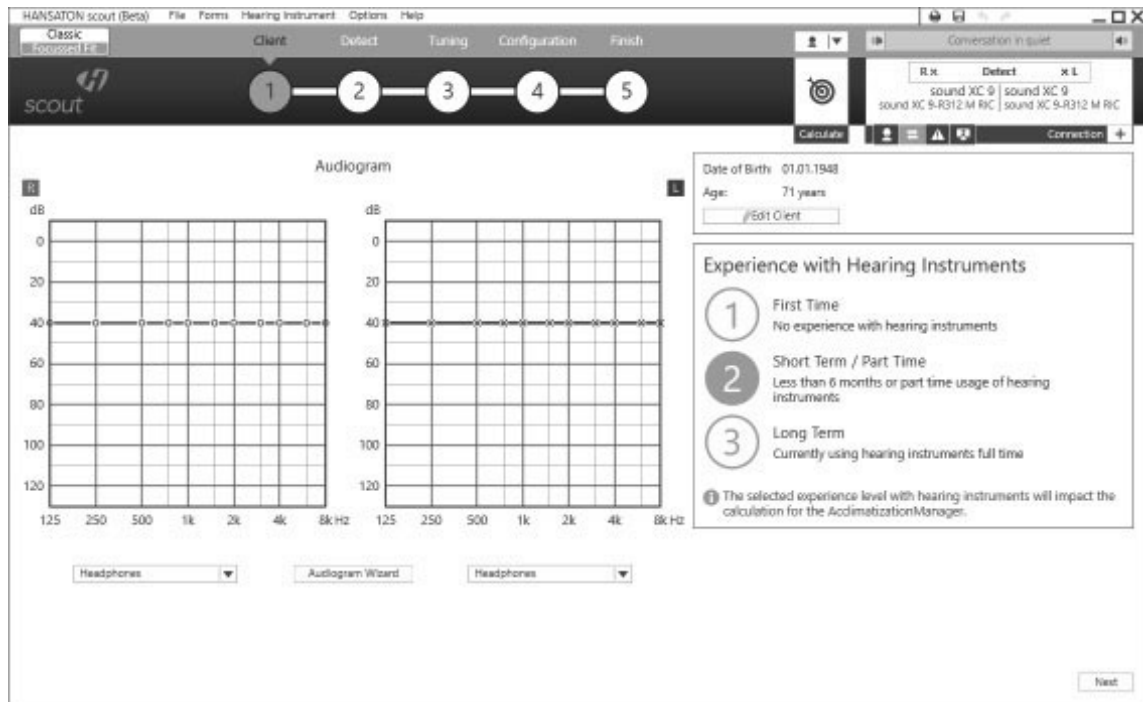
FocussedFit workflow

Within the FocussedFit workflow you can navigate through the steps by using the “Back” and “Next” buttons on the bottom of the screens.

Client Menu

In the 1. step you can edit the Client Information such as Audiogram, Client Age and Experience level.

- To enter or change the Audiogram click on the “Audiogram Wizard” button.
- To edit the client age click in the “Edit Client” button.
- To select the Experience level click on the desired level.

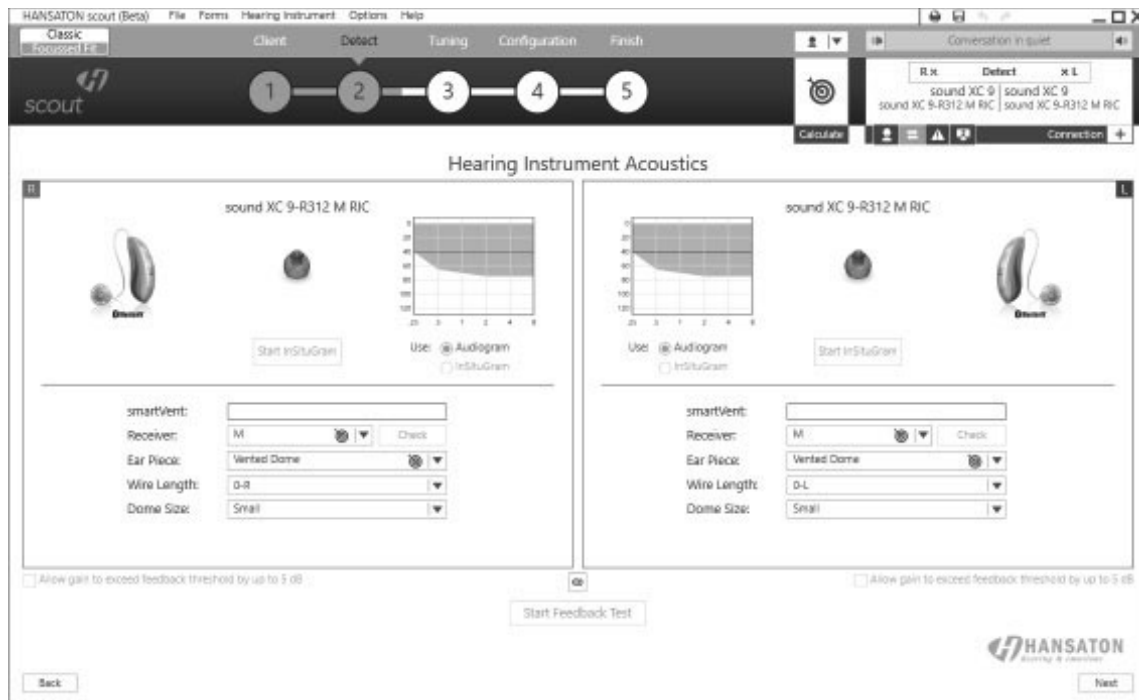


Detect Menu

In the 2. step you can detect the hearing instruments.

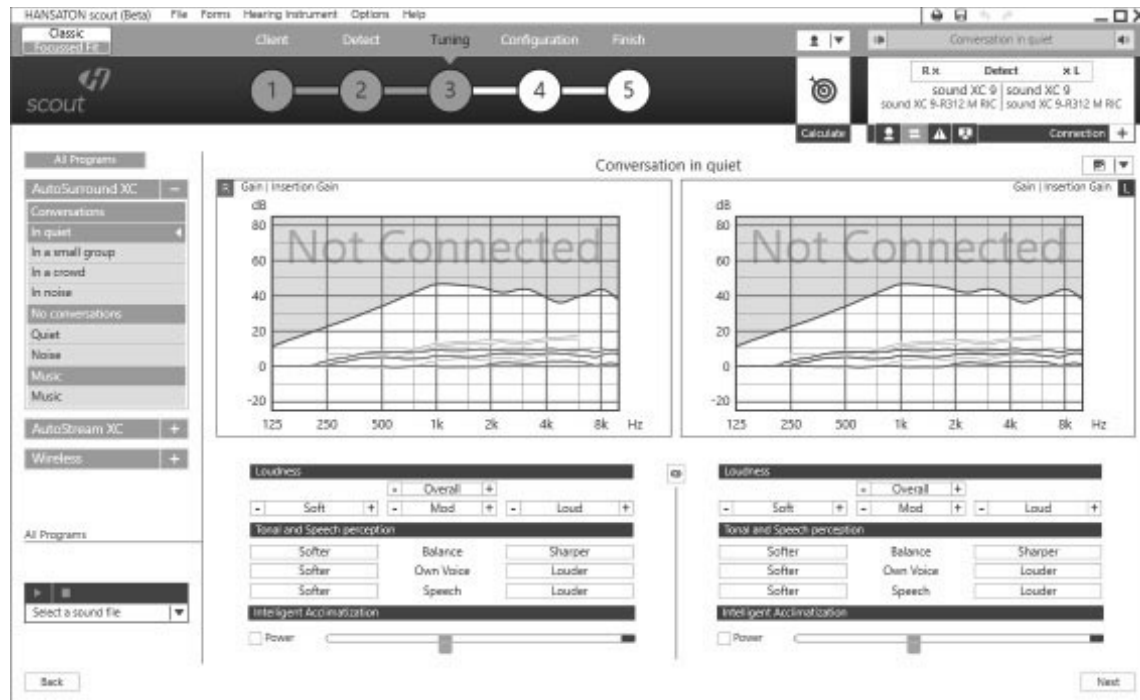


After the hearing instruments are detected click on “Next” and select/confirm the acoustic settings on the next screen.



Tuning Menu

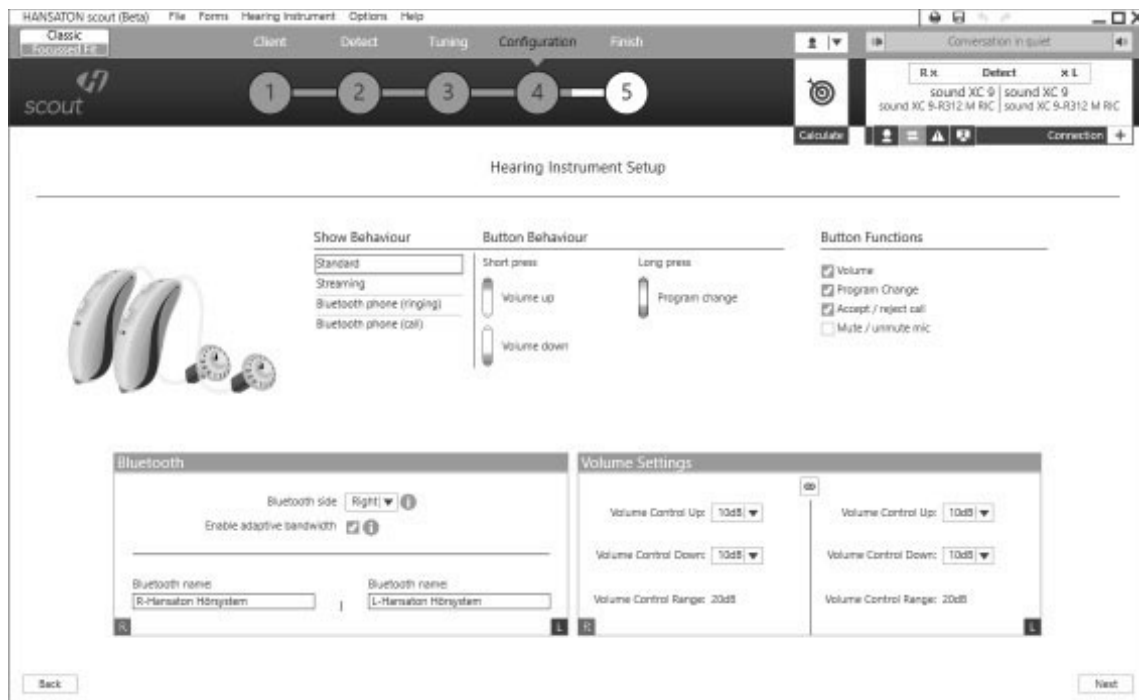
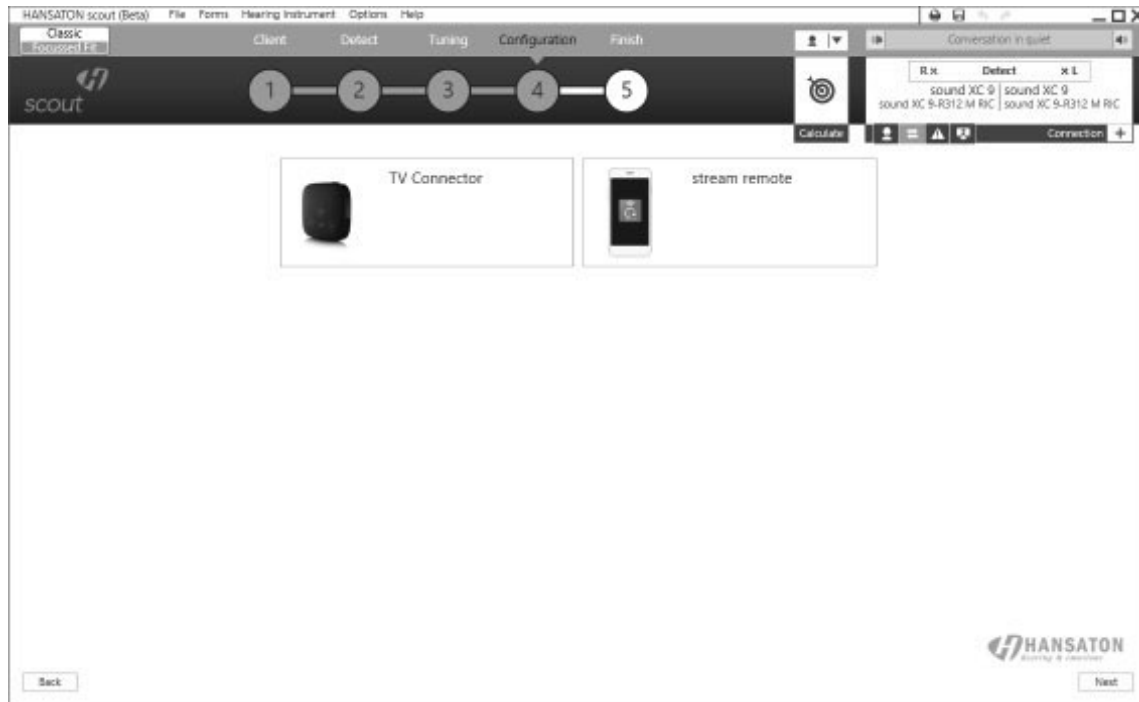
In the 3. step you can modify the frequency response using the Loudness, Tonal and Speech perception and Acclimatization controls.



Note: If you want to have more detailed controls you can switch to the Classic workflow. Note: If you want to add additional manual programs you can switch to the Classic workflow.

Configuration Menu

In the 4. step you can add additional accessories, configure the instruments user controls, VC range, Bluetooth settings and the beeps.





Finish Menu

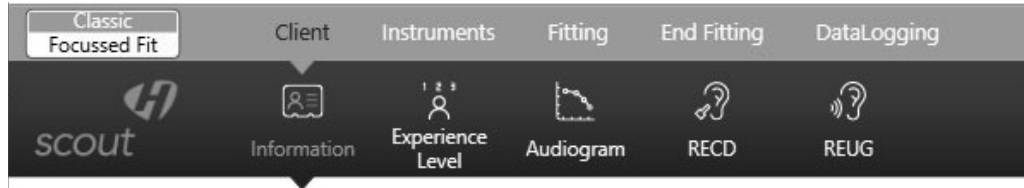
In the 5. and last step you see a summary of the hearing instrument configuration. This screen provides quick links to:

- Print -> Opens the Print menu
- Save -> Opens the save session dialog
- Tuning -> Switches to the Tuning menu within the Classic workflow



Classic Workflow

Client Menu



Information

NOAH version

When running HANSATON scout under NOAH, the information screen is primarily for reference purposes.

Standalone version

When running the HANSATON scout standalone version, the Client > Information screen is the interface with the client database.

To enter a new client in standalone:

1. Click on the New Client button.
2. Enter the client information in the appropriate fields. The minimum required information is indicated with an asterisk (*).
Note: The client's gender will impact the targets generated by NAL-NL2 & BalanceFit; client's date of birth will impact the Acclimatization setting, the recommended fitting mode, and the default values assumed for acoustic transforms (e.g., RECDs).
3. Click Save. A Client Summary table at the bottom of the screen will be populated with the client information and the client will be visible in the Clients and Sessions table.

To edit client information in the future, click on the Edit Client button in the summary area, or click on the edit icon in the Clients and Sessions table.

To find client information in the database:

1. Type the client name and/or session information into the search field.
2. Click the Search icon. A list of client records matching the search criteria is displayed in the table. The list may be sorted by clicking the column headings.

To create a fresh session for the client containing no previous audiometric or fitting information, click on the Blank Session icon. In the Clients and Sessions table:

- Double clicking on a client will open the last session for that client or if the client does not have any sessions it will open a blank session.
- You can delete a specific client by clicking on the client and then clicking the Delete Client icon.
- For each client you can view all of their session information by clicking on the plus sign to the left of the client number.
- You can open a specific session by clicking on that session and then clicking the Open Session button or icon.
- You can delete a specific session by clicking on the session and then clicking the Delete Session icon.
- You can create a blank session by clicking on the client information and then clicking Blank Session icon.

Experience Level

The selected experience level with hearing instrument will impact the initial Acclimatization default setting after a Quick Fit is performed. Choose from:

- First Time – No experience with hearing instruments
- Short Term / Part Time – Less than 6 months or part time usage of hearing instruments
- Long Term – Currently using hearing instruments full time

Note: If you change the Experience Level after selecting a hearing instrument, then you need to select the drop-down menu of the Quick Fit button, select Discard current fitting and start over, and then click Quick Fit.

Audiogram

NOAH version

When running HANSATON scout under NOAH, the audiogram screen is primarily for reference. The transducer used for audiometry and the tinnitus match sections are used as described below. To enter or change all other audiometric information, use the NOAH audiogram module.

Standalone version

When running the HANSATON scout standalone version, the audiogram screen provides the ability to enter the client's audiometric test results.

Select the transducer used for audiometry from the dropdown menu.

Note: ABR eHL and ABR nHL data is only used with the DSL v5 fitting formula.

To complete the audiogram, enter the data for the appropriate ear by clicking on the graph. Right clicking the graph provides the option to: *Set point, Remove point, Remove all points or Copy (all curves) or Copy selected curve* to the other ear. In addition, right clicking provides the option of specifying the measurement type for each data point; choose from: *Unmasked, No response, Unmeasurable, Masked, Masked and no response or Masked and unmeasurable*.

To enter air conduction data, click on the *AC* button.

To enter bone conduction data, click on the *BC* button.

To enter uncomfortable loudness level data, click on the *UCL* button.

Note: NAL-NL1 and NAL-NL2 do not use UCL data for target generation.

To copy the entered curve from one ear to the next, click on the arrow icons above the graph for the respective ear.

To delete all of the curves on the audiogram, click on the *Remove (Delete)* icon.

Click on *Use Audiogram* to use the Audiogram for fitting formula targets.

Click on *Use In Situ* to use the measured In Situ data for fitting formula targets.

Note: In cases where an In Situ measurement was previously conducted, you will see this information faded in the background behind the standard audiogram data when Use Audiogram is selected.

If desired, speech sounds and common sound icons can be displayed on the audiogram for counselling purposes by selecting the check box for the desired information.

Measured Tinnitus Match information can be entered at the bottom of the Audiogram screen.

To enter tinnitus pitch match frequency, type in the value directly or choose a desired frequency via the dropdown box. The entered frequency must be between 125 Hz and 16000 Hz.

To enter the corresponding tinnitus loudness level, type in the value directly or choose a desired dB SL value via the dropdown box. The entered value must be between 0 and 45 dB SL.

Note: Tinnitus match information is only used in the pre-calculation of the tinnitus masker noise.

RECD

This screen provides the option to enter real-ear- to-coupler difference (RECD) values or import them if they already exist in NOAH. (See Importing RECD or REUG from NOAH). If RECD values have not been measured, age-appropriate average values generated by the selected fitting formula will be used for the quick fit calculation.

To complete the RECD screen, click the Enter RECD button to launch a wizard that will ensure you enter all of the mandatory data. Right clicking on the graph provides the option to: *Set point, Remove point or Remove all points.*

Select the values for 'Earpiece used for measurement' and the 'Coupler used for reference measurement' from the drop down menus and select the date that the RECD measurement was taken. If the BTE Coupler is selected you will additionally be required to make a selection from the Measurement Equipment drop down.

Once all of the mandatory data selections have been made, the OK button will become active allowing you to add the RECD measurement data to the fitting. The entered curve can also be copied to the other ear by clicking on the arrow icons located between the graphs.

Click on *Use Entered RECD* to use the RECD data entered into the graph as the basis of fitting formula targets. Deselect *Use entered RECD* to use age appropriate average RECD values as the basis of fitting formula targets.

Note: If a hearing instrument is already selected a grey curve will appear on the RECD graph. This grey curve represents the average data for the client's age and earpiece condition.

REUG

This screen provides the option to enter real-ear unaided gain (REUG) values or import them if they already exist in NOAH. (See Importing RECD or REUG from NOAH). If REUG values have not been measured, age-appropriate average values generated by the selected fitting formula will be used for the quick fit calculation.

To complete the REUG screen, enter the data for the appropriate ear by clicking on the graph. Right clicking on the graph also provides the option to: *Set Point, Remove Point, Remove all points or Copy to the other ear.* The entered curve can also be copied to the other ear by clicking on the arrow icons located between the graphs.

Select the sound field speaker location used during the measurement from the dropdown menu, choose from: *0 degrees, 45 degrees or 90 degrees azimuth.*

Click on *Use Entered* to use the REUG data entered into the graph as the basis of fitting formula targets. Click on *Use Average* to use age appropriate average REUG values as the basis of fitting formula targets.

Note: If a hearing instrument is already selected a grey curve will appear on the REUG graph. This grey curve represents the average data for the client's age and speaker location.

Importing RECD or REUG from NOAH

If there is RECD and / or REUG data stored in NOAH for the current patient, then on the RECD and / or REUG screen there will be a button that asks if you would like to import this data. Importing the data from NOAH will overwrite data that you had manually entered in HANSATON scout.

If the imported RECD contains values for all of the mandatory fields, then the RECD settings will automatically be added to HANSATON scout. If however, the data imported from NOAH does not contain values for all of the mandatory fields, the wizard will be shown and the user will need to manually add the missing content before being allowed to select 'OK' and add the RECD to HANSATON scout.

Instruments menu



Selection

The Selection screen provides the option to detect or simulate a hearing instrument. **Detect hearing instrument(s)**

1. Choose the desired programming interface from the drop-down menu. Choose Noahlink Wireless, iCube II /iCube, NOAHlink or HI-PRO.
Note: HI-PRO refers to the original HIPRO, USB HI-PRO and HI-PRO 2. The HIPRO that is actually used is configured using the HI-PRO configuration tool.
2. Click the Detect button to perform a detection.
Note: BTE and RIC fittings using iCube II/ iCube may need to be assigned to a side (right or left). Select the Play beep button in the Detection dialog window to confirm the side assigned to each instrument.
Note: If using Noahlink Wireless, put hearing instruments in pairing mode. For units that have no battery door, press and hold the lower part of the button on each of the hearing instruments for 3 seconds until the indicator light changes temporarily to solid green. For units with a battery door, the units can be put in pairing mode by opening and closing the battery door. Pairing mode lasts for 3 minutes. To identify hearing instruments, use Play beep button or press the push button (if applicable) on the hearing instruments to highlight corresponding instrument on screen.
3. In cases where the data in the hearing instrument differs from that stored in the software:
 - Click *Use fitting from hearing instrument* to use data stored in the hearing instrument (including any data logging / learning information).
 - Click *Use fitting from this session* to use data stored in the software.
 - Click *Create new fitting* to setup the hearing instrument using software defaults.

The hearing instrument model, style, matrix and serial number are displayed after detection along with the audiogram and fitting range for each side. In addition, the communication status is updated on the Connection tab of the Quick View Pane (upper right corner of screen). For most product styles, you will also have a couple of acoustic options that you can select here or you can go to the full list under *Instruments > Acoustics*. Any changes made here will also be updated on the *Instruments > Acoustics* screen. The guided fitting option will open automatically for hearing instruments without a previously stored fitting.

Simulate hearing instrument(s)

1. Click the button for your desired product line in the hearing instrument simulation section on the left hand side of the screen. If you know what technology level you want, you can also click directly on the technology level button within the product line button to skip step 2.
2. Click on the desired technology level. To see more information about the different technology levels, click on the + sign beside the Technology Level title to view a feature comparison.
3. Select the desired style for that product line and technology level. To see more information about each style, click on the + sign beside the Styles title. When selecting a product style for simulation, clicking the centre of the button performs a binaural selection, while clicking the R or L buttons performs a monaural selection. At the top of the screen, under Current Product in this Session, you can see a summary of the products you have selected. For most product styles, you will also have a couple of acoustic options that you can select here or you can go to the full list under *Instruments > Acoustics*. Any changes made here will also be updated on the *Instruments > Acoustics* screen. Furthermore, if you wish to detect a product while on the simulation screen, select the desired programming interface from the drop-down menu in the upper left column of the screen, and then click *Detect*. The process will follow the steps outlined above in the Detect hearing instruments section of this guide.

Technology Change (myChoice)

Select the Technology Change screen to access myChoice functionality. With myChoice devices, you can select from one of the displayed technology levels. Clicking on one of the technology level buttons will launch the Change Technology Level wizard. Follow the on-screen instructions to change the technology level of the connected myChoice hearing instruments. The wizard will provide the following options: *Transfer fitting*, *Create new fitting*.

If you select *Transfer fitting*, then the program structure, frequency response, acoustics, Acclimatization status and accessories in the current client session will be transferred to the hearing instruments after the technology level change is complete.

If you select *Create new fitting*, then after the technology level change is completed, the hearing instruments will be set to the recommended defaults. Select your desired option and continue through the steps in the wizard.

Following completion of the technology change, proceed to *End Fitting > Beeps > Trial Duration* to configure the duration of the client's trial period with the hearing instruments. When the trial period expires, the 'End of trial.' beeps will play. See the *End Fitting* menu section for more details.

Note: The transfer fitting process will reset all adaptive features to the recommended defaults for the new technology level.

Note: Create new fitting will reset all hearing instrument settings including the acoustic options. You should confirm that the hearing instrument parameters are set as desired following this process.

Note: The data logging in the hearing instrument will be lost during this process.

Note: The current technology level contained within the hearing instrument is indicated by the shaded blue button and also is displayed in the Quick View Pane connection tab.

Note: myChoice is available for AQ sound XC Pro R, AQ sound XC Pro RT, sound XC Pro R, AQ jam XC Pro R, AQ sound XC, sound XC, AQ jam SHD, jam SHD BTE and AQ sound SHD, sound SHD RIC (except sound SHD 10) products. For sound SHD 10 products, you can use a sound SHD S312 or sound SHD S13 device and then transfer the settings to a sound SHD 10 device after the trial.

Acoustics

Select the Acoustics screen to configure items such as: coupling, venting, earhook, tubing, earpiece, receiver unit, and Peak Resonance.

BTE and RIC instruments

If you have ordered your earmold, cShell, or sleeve molds with SmartVent, enter the code and the software will automatically use the optimal venting.

- For BTEs select Regular Tube, Slim Tube or Power Slim Tube (beat only).
- For BTEs with an earhook, select Vent size, Earhook type and Tubing type. (Note: with Discover, Earhook and Tubing settings will default to values of 'Filtered' and 'Standard' respectively. No drop downs will be displayed).
- For BTEs with Slim Tube, select your Ear Piece, Vent and Tubing Length (optional).
- For beat BTEs with Power Slim Tube, select your Ear Piece, Vent and Tubing Length.

Note: The tubing length parameter is for record keeping with slim tubes and has no impact on the output of the system. In contrast, tubing length will impact beat products with power slim tubes and should be set appropriately as this parameter will influence the quick fit.

For RICs, select your Receiver, Ear Piece, Wire Length (optional), and Dome Size (optional).

Note: The wire length and dome size parameters are for record keeping only and have no impact on the output of the system.

Note: Click on the Quick Fit button after configuring the acoustic parameters to ensure the product fitting considers these aspects.

Custom instruments

For custom instruments, you can configure the vent. If you have ordered the custom products with SmartVent, the software will automatically read the code and use the optimal venting.

Note: With simulated fittings, you can also select the shell and receiver type using the provided drop-down menus on the Acoustics screen (if applicable). In contrast, these parameters are read from the detected hearing instrument and cannot be changed through the software.

Accessories

The accessory screen will show those accessories which are compatible with the hearing aid(s) selected or detected. By clicking on the accessory, you can activate or simulate an accessory for configuration purposes.

If an accessory button has a check mark in the corner, then at least one of these accessories has been added to the fitting. You will also see the serial number of an activated accessory or the word Simulated if the accessory has just been simulated.

Remote Control (RCV1) / Remote Control 2 (RCV2)

To pair a remote control:

1. Click the Remote Control button.
2. Click the Activate button.
3. A Detect new accessories pairing wizard appears. Connect a USB cable to the remote control and your computer, and follow the on-screen instructions.
4. After pairing, the serial number of the paired remote control is automatically shown in the serial number box. Various check boxes and a drop-down menu appear to configure the remote control.

To simulate a remote control:

1. Click the Remote Control button.
2. Click the Simulate button.
3. The serial number box will say Simulated Remote Control and a graphic with various configuration options appears.

Note: You can select the Delete icon to remove any paired / simulated accessory from the fitting. You can add up to 4 remote controls to the hearing instrument fitting. Any simulated remote control can be added later to the fitting by clicking the Activate button beside the row assigned to the simulated accessory. To modify the configuration of a paired remote control, click on the serial number of the device you would like to modify.

With XC Pro and STRATOS devices, you can add a Remote Control device but there are no configurable elements, merely the option to “Include in fitting” and “Remove from fitting” allowing you to track if your client has one of those devices.

PartnerMic

With XC Pro and STRATOS devices you can add a PartnerMic but there are no configurable elements, merely the option to “Include in fitting” and “Remove from fitting” allowing you to track if your client has one of those devices. If a PartnerMic is included, an explanatory section of text will be added to the Getting Started Guide confirming the selected activation behavior.

uDirect 2 / uDirect 3

To pair uDirect 2 / 3:

1. Click the uDirect 2 / 3 button.
2. Click the Activate button.
3. Detect new accessories pairing wizard appears. Connect a USB cable to the uDirect 2 / 3 and your computer, and follow the on-screen instructions.
4. After pairing, the serial number of the paired uDirect 2 / 3 is automatically shown in the serial number box. Various check boxes and a drop-down menu appear to configure uDirect 2 / 3.

These controls include:

• Notification Options

There are three levels of notification.

1. Warnings only – low uDirect 2 / 3 battery; Bluetooth pairing process.
2. Standard – Warnings only notifications plus uDirect 2 / 3 on/off; starting/ ending charging during streaming; input channel confirmation; FM announcements; plus for uDirect 3 transfer call and hold call.
3. Detailed – Standard notifications plus starting/ending charging without active streaming; external microphone connection; Bluetooth device connect/disconnect; transfer call; hold call.

In addition, you can select whether the notifications above are provided via ‘Beeps’ or ‘Spoken’ words. Should you select ‘Spoken’, you have the option of selecting the language used for the notifications, selected via the provided drop-down menu.

- Enable Caller ID – select to enable / disable the use of spoken caller ID notification for incoming call on phones supporting this feature.

• Phone Streaming Functions

Access button options:

1. Redial – select to enable redialing of the last number called on phones supporting this feature.
2. Transfer call back to phone – select to enable the client to transfer a streamed phone call back to their paired phone.

Connect button options:

1. Voice dial – select to enable voice dialing for phones supporting this feature.
2. Hold – select to enable access to the functionality to put a phone call on hold.
3. Hear own voice during call – select to allow user to hear their own voice during a call which is more natural sounding, especially for closed fittings. Select the desired attenuation for the client's own voice.

• Remote Control Functions:

Check this to allow the uDirect 2 / 3 to function as a remote control when the hearing instrument is not in streaming mode. Configure the 'Plus/Minus' buttons. Enabling Remote Control Functions also makes it possible for the hearing instrument state information to be passed to the remoteHD app.

To simulate uDirect 2 / 3:

1. Click the uDirect 2 / 3 button.
2. Click the Simulate button.
3. The serial number box will say Simulated uDirect 2 / 3 and a graphic with various configuration options appears.

Note: You can select the Delete icon to remove any paired / simulated accessory from the fitting. You can add up to 4 uDirect 2 / 3 to the hearing instrument fitting. Any simulated uDirect 2 / 3 can be added later to the fitting by clicking the Activate button beside the row assigned to the simulated accessory.

Note: To perform remote control functions, the uDirect 2 / 3 must be paired to the hearing instrument. You can use the uDirect 2 / 3 without pairing it with the hearing instruments, but for streaming only.

Note: Allow uDirect 2 / 3 streaming to other wireless Hansaton hearing instruments: Uncheck to prevent uDirect 2 / 3 from working with Hansaton devices it has not been paired with.

Note: To modify the configuration of a paired uDirect 2 / 3, click on the serial number of the device you would like to modify.

Note: The input volume correction is not required with this accessory given the user can configure the volume level of streamed signals via the +/- buttons on the front of uDirect 2 / 3 and the accessory will maintain the user's adjustments for future streamed signals.

uStream

To pair uStream:

1. Click the uStream button.
2. Click the Activate button.
3. Detect new accessories pairing wizard appears. Connect a USB cable to the uStream and your computer, and follow the on-screen instructions.

4. After pairing, the serial number of the paired uStream is automatically shown in the serial number box. Various check boxes and a drop-down menu appear to configure uStream. These controls include:

- **Notification Options**

There are three levels of notification:

1. Warnings only – low uStream battery; Bluetooth pairing process.
2. Standard – Warnings only notifications plus uStream on/off; starting/ending charging during streaming; input channel confirmation; transfer call; hold call.
3. Detailed – Standard notifications plus starting/ending charging without active streaming; external microphone connection; Bluetooth device connect/disconnect.

In addition, you can select whether the notifications above are provided via ‘Beeps’ or ‘Spoken’ words. Should you select ‘Spoken’, you have the option of selecting the language used for the notifications, selected via the provided drop-down menu.

- Enable Caller ID – select to enable / disable the use of spoken caller ID notification for incoming call on phones supporting this feature.

- **Phone Streaming Functions**

Access button options:

Redial – select to enable redialing of the last number called on phones supporting this feature.

Connect button options:

Hear own voice during call – select to allow user to hear their own voice during a call which is more natural sounding, especially for closed fittings. Select the desired attenuation for the client’s own voice.

- **Remote Control Functions**

Check this to allow the uStream to function as a remote control when the hearing instrument is not in streaming mode.

Note: Allow uStream to stream to other wireless Hansaton hearing instruments: Uncheck to prevent uStream from working with HANSATON devices it has not been paired with.

Note: To perform remote control functions, the uStream must be paired to the hearing instrument. For streaming only you are able to use the uStream without pairing it to the hearing instruments.

Note: You can select the Delete icon to remove any paired accessory from the fitting. You can add up to 4 uStreams to the hearing instrument fitting.

Note: To modify the configuration of a paired uStream, click on the serial number of the device you would like to modify.

Note: The input volume correction is not required with this accessory given the user can configure the volume level of streamed signals via the +/- buttons on the front of uStream and the accessory will maintain the user’s adjustments for future streamed signals.

To simulate uStream:

1. Click the uStream button.
2. Click the Simulate button.
3. The serial number box will say Simulated uStream and a graphic with various configuration options appears.

Note: You can select the Delete icon to remove any simulated accessory from the fitting. You can add up to 4 uStreams to the hearing instrument fitting. Any simulated uStream can be added later to the fitting by clicking the Activate button beside the row assigned to the simulated accessory.

remoteHD app

Note: This app has been disabled for new fittings. The remoteHD app button is disabled until you include a uDirect 3 or uStream in the fitting. The remoteHD app does not need to be included in a fitting in order to use the app.

stream remote app

The stream remote app is only available for Bluetooth enabled hearing instruments. The app does not need to be included in the fitting in order to use it.

Pre-Fitting

Use the Pre-Fitting screen to change the fitting formula, processing strategy, and tinnitus masker strategy (when available).

Fitting Formula

1. Click the Fitting Formula task at the bottom of the screen.
2. Select your desired fitting formula from the provided drop-down menu: DSL v5 Adult, DSL v5 Pediatric, NAL-NL1, NAL-NL2, and NAL-NL2 Tonal Language, BalanceFit

Processing Strategy

1. Click the Processing Strategy task at the bottom of the screen.
2. With DSLv5 adult or DSLv5 pediatric, select your desired processing strategy from the drop-down menu: WDRC or Linear.
3. With BalanceFit, select your desired processing strategy Clear Speech Comprehension (CSC) by activating the checkbox.

Note: Selecting NAL-NL2 or NAL-NL1 provides a WDRC processing option only.

Tinnitus Manager Strategy

1. Click the Tinnitus Manager Strategy task at the bottom of the screen.
2. Select your desired tinnitus masker signal strategy from the drop-down menu: Audiogram-based, White Noise, or Pink Noise.

Note: The Tinnitus Manager Strategy task box will only be visible with products supporting this feature.

Note: The tinnitus masker strategy impacts the quick fit calculation for the frequency shape of the tinnitus masker noise. The tinnitus masker noise can be viewed and fine tuned in the *Fitting > Tuning > Tinnitus Manager* task box.

InSituGram

Use the InSituGram screen to assess hearing sensitivity and uncomfortable loudness levels via signals generated by the hearing instruments. The InSituGram measurement results can be used to define the fitting formula targets.

1. Click on the *Start InSituGram* button for the device / ear you would like to assess.
2. An InSituGram wizard will appear. Preparation information is provided to assist with the test.
3. Select the coupling option to be used for the InSituGram test. The options available will depend on the form factor being fitted and can include:
 - a. Vented (current vent value). Note: Ensure the product venting is configured correctly in the acoustics screen as it will impact the signal level generated by the device.
 - b. Temporarily occluded earpiece.
4. After the coupling option is selected, click Continue to get to the InSituGram measurement step.
5. Select the desired measurement type (AC: air conduction or UCL: uncomfortable loudness level) via the appropriate button.
6. Select the desired frequency /presentation level by clicking on the graph.
7. Present the tone by using the space bar or by clicking the Present Tone button.
8. To present tones automatically when you click on the graph, select the Enable Autoplay option.
9. If you desire to present tones at a loudness level beyond the safety limit of 100 dB HL, select the *Enable HL > 100 dB HL* option.
10. To speak with the client during the test, the hearing instrument microphones must be enabled by clicking on the Talk to Client button. The volume level of the device can be adjusted as required using the up/down volume arrow keys.

If you would like to use the InSituGram data as the basis for the hearing instrument quick fit, check the Use InSituGram data to recalculate hearing instrument settings check box. Following completion of the test, the InSituGram data will be displayed on the graph, along with any previous standard audiometric data if it is available.

Note: If a previously entered audiogram is available in the session, it will be shown faded into the background for reference purposes on the In Situ and Audiogram screens.

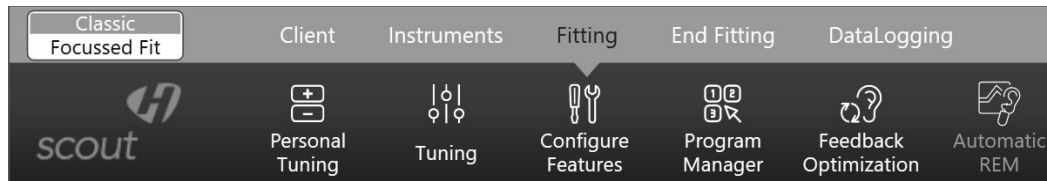
Click on *Use Audiogram* to use the entered standard audiometric data for fitting formula targets.

Click on *Use InSituGram* to use the measured In Situ data for fitting formula targets.

Note: The InSituGram data can be deleted using the Remove (Delete) icon above the graph.

If desired, speech sounds and common sound icons can be displayed on the audiogram for counselling purposes by selecting the check box for the desired information.

Fitting menu



Personal Tuning

The Personal Tuning user interface bundles access options for key parameters. All relevant parameters can be specified in all three areas (amplification, sound and acclimatization) without negatively affecting quality.

Loudness

Adjust overall loudness or soft/mod/loud sounds. Each step will increase or decrease the gain setting by 3 dB

Tonal and Speech perception

Adjust the tone balance or gain for speech signals and own voice.

Acclimatization

Adjust the start and/or end point of the Acclimatization.

Note: Actual values are displayed as tooltips when you hover over a control.

Tuning

Select the Tuning screen to adjust Acclimatization, Occlusion Manager, BassBoost (some products only), Soft/Mod/Loud Controls, MPO/Gain/CR Controls, App Equalizer, Frequency Compression (select products), Fitting Advice, and TinnitusManager (select products). The settings for each program automatically default to suggested values. Prior to adjusting any of the parameters listed above, select the program you would like to tune from the program selector list on the left side of the screen. The active program is highlighted and its name is listed above the graphs and in between the mute buttons.

Note: All Programs is selected by default in the Tuning section. This ensures that the relative differences across all programs are maintained when making changes and helps to maintain seamless transitions in the Automatic Program / AutoSurround.

To fine tune the hearing instrument:

1. Select the desired program from the program selector list on the left side of the screen.
 - To select all programs for modification, click the All Programs button at the top of the program selector list.
 - To select all automatic programs, click the Automatic / AutoSurround program header.
 - To select all manual programs, click the Manual program header.
 - To select all wireless programs, click the Wireless program header.
 - To select all optional app programs, click the Optional App program header.
 - To select an individual program or environment, click the program name or environment in the program selector list.

Note: To simplify the view, you can click the plus / minus sign beside the program header to collapse or expand the program list for that category.

AcclimatizationManager (SHD and older products)

1. Click on the Acclimatization task item at the bottom of the screen.
2. Select the Automatic check box to activate the Acclimatization. With beat products, select the Automatic / Power check box to activate the Acclimatization or the Acclimatization UP. The software will use a proprietary calculation that considers the client's hearing loss, age, and hearing instrument experience level (as indicated on the Client / Experience Level screen) to determine the starting Acclimatization setting and the adaptation rate for the fitting.
3. If desired, select the speed of adaptation for the current fitting using the provided dropdown box. Choose from the following adaptation rates (the number of weeks /months changes depending on the difference between the Current Value and End Value):
 - TrainingFit 5% per 2 days (~ 2 weeks)
 - 5% per week (~ 6 weeks)
 - 5% per 2 weeks (~ 3 months)
 - 5% per 3 weeks (~ 5 months)
 - 5% per 1 month (~ 6 months)
 - 5% per 2 months (~ 12 months)
 - 5% per 3 months (~ 18 months)
 - 5% per 4 months (~ 24 months)
 - 5% per 5 months (~ 30 months)
 - 5% per 6 months (~ 36 months)

Note: For beat, when the Current value is above the End Value, the above choices represent the approximate time for a 5% decrease in the current value.

Note: For calculation purposes, the adaptation rate assumes one week of use = 70 hours (i.e., 10 hours / day). Thus at the follow-up appointment, the Current position may differ from what is expected based on calendar days depending on the client's actual usage time per week.

4. If desired, you can adjust the Current position (% of target) and the desired End Value (% of target) for the chosen fitting formula using the provided sliders. If this is a follow-up fitting and the Acclimatization is enabled, then you will see a grey bar representing the adaptation progress that has been made so far.

Note: The predicted Time remaining to reach the end value will be updated automatically depending on the relative position of the Current and End Value sliders.

Note: If desired, the Acclimatization can be disabled by de-selecting the Automatic check box. You can then select their desired Acclimatization setting using the Current slider.

Note: This feature is global and will impact all programs.

Note: For beat products, Acclimatization settings above 100% affect both the '% of target gain' provided and the MPO setting of the hearing instrument. Acclimatization settings below 100% impact only % of target gain.

Intelligent Acclimatization (XC and XC Pro products)

There have been some updates to the Acclimatization feature which are applicable to EXCITE products only. In essence the controls within HANSATON scout for adjusting the current value are similar to what we had prior to EXCITE with some key differences which we will cover here.

1. Click on the Intelligent Acclimatization task item at the bottom of the screen.
2. Select the Automatic check box to activate the Acclimatization (AAM). Select the Power check box to activate the Power Acclimatization (PAM). The software will use a proprietary calculation that considers the client's hearing loss, age, and hearing instrument experience level (selected during the Initial Configuration workflow) to determine the starting setting and the adaptation rate for the fitting.
3. If desired, change the speed of adaptation for the current fitting using the provided Adaptation Speed dropdown box. Choose from the following Adaptation Speed rates (Slowest, Slow, Moderate Fast, Fastest) which equates to an approximate number of weeks that it will take to move to the target value.

Recommended starting value

The Intelligent Acclimatization will recommend a starting value based on the client's age, experience level with hearing instruments and their audiogram. If the client is a first-time user of hearing instruments, the recommended starting value will be less than 100%, where as if the client is a long-term user of hearing instruments, the recommendation will be the target fitting value, i.e. 100%.

You can always change the starting value to be either below the recommended value, or above the recommended value. In addition if you want to set the starting value to be above the target value, you can select the Power button which alters the scale to allow you to set a value above target with a maximum setting of 120%.

Recommended starting value markers

New for EXCITE in HANSATON scout is the addition of two persistent dark green markers to show the recommended starting percentage for a first time user as well as the target value of 100%. If you choose to alter the value, this means you will always have a visual indication as to the Hansaton recommended values.

Note: If the current value is equal to one of these defaults, you will only see the light green marker.

Automatic acclimatization

'Automatic' acclimatization is enabled by default. This provides an automated approach to acclimatization based on the selection of an Adaptation Speed. The selected Adaptation Speed is used in a formula which, when applied to the client's starting value provides an estimated time to reach full target.

Each pre-defined Adaptation Speed equates to taking x number of days to increase the current setting by 5% (see table below). A calculation is made taking the client's remaining percent value required to reach target, dividing that by 5 (to give the number of 5% increments) and multiplying that by x (the multiplier to be applied for the selected Adaptation Speed) to provide the approximate number of days to full acclimatization.

Note: If Power is selected, the formula works in exactly the same way only it reduces by 5% increments until it reaches the 100% target.

SPEED	DAYS FOR 5% CHANGE
FASTEST	2
FAST	4.3
MODERATE	5.8
SLOW	7.2
SLOWEST	9

Intelligent Acclimatization (STRATOS products)

The Adaptation Manager controls for STRATOS products are similar to XC and XC Pro with the following differences:

- The Power check box is no longer available, but you can select a starting point up to 110% of the target value
- The target percentage will always default to 100%, but this value can be changed, if required
- The starting value will be automatically calculated, but this value can be changed, if required
- The time for acclimatization will be automatically calculated, but can be manually changed to any value from 1 to 100 days
- The recommended starting percentage and target (100%) will be shown by two persistent black markers

Occlusion Manager

1. Click the Occlusion Manager task item at the bottom of the screen.
2. Select your desired occlusion manager setting using the provided options to address any occlusion related complaints.

Note: This feature impacts all programs by default but there is an option to exclude the music program.

BassBooster

1. Click the BassBooster task item at the bottom of the screen.
2. Select your desired bass enhancer setting using the provided slider to increase low frequency gain and MPO (emphasis below ~ 1 kHz).

Note: This option is available with beat products. The feature is global and will impact all programs.

Soft / Mod / Loud Controls

1. Click the Soft / Mod / Loud Controls task item at the bottom of the screen.
2. Select the program(s) you wish to modify using the program selector list as described above.
3. Select the frequency resolution using the provided buttons.

Note: The frequency resolution depends on the technology level of the product you are fitting.

4. Select the frequency region(s) and input level(s) to be modified in the provided table:
 - To select an individual frequency region, select the desired value in the table.
 - A range of fitting values can be selected by either choosing a specific input label (loud, mod, soft), channel grouping label (low, mid, high or specific frequency columns) or the All table label. The selected frequency region(s) are highlighted in the table and shaded in the fitting graph.
 - To select multiple frequency regions for adjustment, you can also click and drag across the table. The slider bar along the bottom of the table allows you to view frequency regions that are outside the visible table area.
 - To view all frequency regions for a particular ear, and/or increase the size of the selectable boxes in the table, click on the View right ear only or View left ear only text as appropriate. To change the table view back to a binaural view, click on the text View both ears.
 Note: when viewing the values for one ear only, if the view is coupled, then any +/-changes will be reflected in updates to the graphs for both the left and right ears. But the specific values displayed in the table will reflect the values for currently selected ear only. You can toggle between viewing the values for the left ear or right ear, or if you want to view the different values for both ears at the same time, you can show a binaural view of the values by clicking View both ears.

- Once you have selected your desired region for adjustment, click the dB drop-down menu to alter the step size of any change. Choose from 1, 2 or 3 dB.
- Click the + or – buttons to apply the desired change.

Note: When a fitting handle has reached its maximum setting, the + button will grey out (disable). Conversely, if a fitting handle is at its minimum setting, the – button will grey out (disable).

Note: The table will also display the calculated compression ratios. The compression ratios are calculated based on the slope of the I/O curve between the TK soft and TK loud inputs.

MPO / Gain / CR Controls

1. Click the MPO / Gain / CR Controls task item at the bottom of the screen.
2. Select the program(s) you wish to modify using the program selector list as described above.
3. Select the frequency resolution you require for your modification using the provided tabs.

Note: TK soft speech control will be shown if selected within preferences.

4. Select the frequency region(s) and parameter type (MPO, Gain , CR or TK) to be modified.
 - To select an individual frequency region, select the desired value in the table.
 - A range of fitting values can be selected by choosing a specific parameter label (MPO, Gain, CR or TK). The selected frequency region(s) is highlighted in the table and shaded in the fitting graph.
 - TK soft speech can be used to adjust the gain for low level sounds. Impact of the adjustments is opposite to the other controls: increasing TK soft speech will decrease gain for low level sounds and vice versa.
 - To select multiple frequency regions for adjustment, you can also click and drag across the table. The slider bar along the bottom of the table allows you to view frequency regions that are outside the visible table area.
 - To view all frequency regions for a particular ear, and/or increase the size of the selectable boxes in the table, click on the View right ear only or View left ear only text as appropriate. To change the table view back to a binaural view, click on the text View both ears. Note: when viewing the values for one ear only, if the view is coupled, then any +/-changes will be reflected in updates to the graphs for both the left and right ears. But the specific values displayed in the table will reflect the values for currently selected ear only. You can toggle between viewing the values for the left ear or right ear, or if you want to view the different values for both ears at the same time, you can show a binaural view of the values by clicking View both ears.
 - Once you have selected your desired region and parameter type for adjustment, click the dB drop-down menu to alter the step size of any change. Choose from 1, 2 or 3 dB.
 - Click the + or – buttons to apply the desired change.

Note: When a fitting handle has reached its maximum setting, the + button will grey out (disable). Conversely, if a fitting handle is at its minimum setting, the – button will grey out (disable).

Note: The compression ratios are calculated based on the slope of the I/O curve between the TK soft and TK loud inputs.

App Equalizer

Note: This option is only available with wireless XC Pro and STRATOS products.

On follow up fittings, after you detect the devices, Hansaton scout will default to show the Overview screen. This screen will highlight any changes your client has made to the App Equalizer or the automatic program via an alert in the Quick View Pane, and a yellow 'i' info icon on the quick link to the App Equalizer tool box.

Open the Tool Box to see the App Equalizer settings that the client has set via their stream remote App for the currently selected program.

Selecting a program will show the settings the client has applied to that program. If the client has not made any changes via the stream remote App, all sliders will be set to zero. Note: All environments within the automatic program share the same settings, and you cannot view settings for the AutoStream, Bluetooth Phone or RogerDirect programs.

Select Bass, Mid or Treble to see the frequency groupings on the graphs.

Click on a slider and drag it up or down to increase/decrease gain and see the impact reflected on the graphs. Note: The gain change that the equalizer applies varies a) depending upon the direction of change (up or down) and b) as a function of the signal level. The max increase or decrease that will ever be applied is 10 dB.

Any changes made to the sliders will be applied to the hearing instruments in real time.

Click Reset to return all three slider values to zero.

If you change any of the sliders from their initial values, an indicator will mark the value of the original setting. Note: Changing program selection will delete the initial values of the previously selected program.

SoundRestore (Frequency Compression)

Note: This option is available with select products.

1. Click the SoundRestore task item at the bottom of the screen.
2. Select the program you wish to modify using the program selector list described above.
3. Click the Enable SoundRestore check box to activate / deactivate this feature.
4. Adjust the Frequency Compression to the desired setting using the More or Less buttons. Adjusting the frequency compression impacts:
 - The frequency at which the compression will begin. Below this specified cutoff, no frequency compression will be applied.
 - The compression ratio or the amount of compression that will be applied in the frequency domain above the cut-off frequency.

Note: The software will automatically calculate the starting default position of the frequency compression based on the client's better ear audiogram and the fitting formula. With the DSL v5 pediatric fitting formula, frequency compression default settings are more aggressive (i.e. lower cut-off frequency, higher compression ratio) to emphasize audibility of high frequency speech cues for children.

Note: For clients with asymmetrical hearing loss, the frequency compression settings will be based on the audiometric thresholds from the better ear and applied to both devices in binaural fittings.

Note: The shaded region on the slider reflects the frequency compression region which is also displayed on the frequency response graphs.

SoundRestore Power / SoundRestore XC (Frequency Compression)

Note: This option is available with select products.

1. Click the SoundRestore task item at the bottom of the screen.
2. Select the program you wish to modify using the program selector list described above.
3. Click the Enable SoundRestore check box to activate / deactivate this feature.
4. Adjust SoundRestore to the desired setting using the Audibility/ Distinction and Consonant Clarity/Vowel Quality sliders. The sliders have the following impact:
 - Audibility/distinction: This slider adjusts both cut-off frequencies and the compression ratio. The default predicts the lowest possible setting required to provide audibility.
 - Audibility: improves audibility of high frequency sounds by lowering them into a useable/ audible range (more frequency compression)
 - Distinction: improves distinction of high frequency sounds like 's' and 'sh' due to greater separation (less frequency compression)
 - Consonant clarity/vowel quality: This slider is dependent on the top slider and is automatically optimized for clarity but can be adjusted for sound quality.
 - Consonant clarity: increases the compressed range for high frequency sounds (consonants)
 - Vowel quality: decreases the compressed range for low frequency sounds (vowels).

Note: The software will automatically calculate the starting default settings for SoundRestore based on the client's better ear audiogram and the fitting formula. To calculate each side independently go to Pre-Fitting > SoundRestore Strategy.

Note: With the DSL v5 pediatric fitting formula, SoundRestore default settings are more aggressive (i.e. lower cut-off frequency, higher compression ratio) to emphasize audibility of high frequency speech cues for children.

Note: For clients with asymmetrical hearing loss, the SoundRestore settings will be based on the audiometric thresholds from the better ear and applied to both devices in binaural fittings. To calculate each side independently go to Pre-Fitting > SoundRestore Strategy.

Note: The shaded region on the frequency response graphs reflects the SoundRestore region. The solid line at the beginning of the shaded region shows the cut-off frequency for high frequency dominated signals. The dashed line within the shaded region shows the cut-off frequency for low frequency dominated signals.

Fitting Advice

1. Click the Fitting Advice task item at the bottom of the screen.
2. Select the program(s) you wish to modify using the program selector list as described above.
3. Select the situation (type of sound environment) that is problematic for the client using the Select Situation dropdown box. Note: if the Difficult Situation Predictions feature is available the dialog will default to showing the top three predictions. However you can toggle between this view and the standard Fitting Advice view (to view the full list of Situation 'Categories' and 'Sound Types') by clicking on 'Show Full List' or 'Show Predictions'.
4. Select the concern that best describes the client's complaints for that sound type using the Select Concern dropdown box.

5. A description of the proposed change appears on the screen and an associated sound file is automatically selected by the media player.
6. If desired, play the associated sound file and/or apply the suggested change using the Apply button. Any previously applied undesirable changes can be removed using the Undo button.

TinnitusManager

This option is available when the product supports this feature. The tinnitus manager noise is disabled by default. When it is enabled, the quick fit level should be at a soft but audible level. The calculated masker noise level with the current settings will be displayed in dB(A) in the task box.

1. Click the Tinnitusmanager task item at the bottom of the screen.

Note: The graph view will automatically change to 'output' upon selection of the tinnitus masker task box to allow you to view the tinnitus manager output level relative to the hearing aid output settings.

2. Click the Enable TinnitusManager check box to activate the masker noise.
3. Click the checkbox beside Use client control to adjust noise level to allow patient to adjust the noise level using any volume control on the hearing instruments or accessories. Selecting this option will prevent the client from adjusting the gain setting for this program.

Note: This setting is binaural and cannot differ across hearing instruments in the same fitting, even if the tinnitus manager is disabled or not available in one hearing instrument.

4. Select the frequency resolution you require for your modification using the provided tabs.

Note: The frequency resolution depends on the technology level of the product you are fitting.

5. Select the frequency region(s) to be modified in the table.
 - To select an individual frequency region, select the desired value in the table.
 - An entire frequency range of fitting values can be selected by choosing the 'Noise' label.
 - To select multiple frequency regions for adjustment, you can also click and drag across the table. The slider bar along the bottom of the table allows you to view frequency regions that are outside the visible table area.
 - To view all frequency regions for a particular ear, and/or increase the size of the selectable boxes in the table, click on the View right ear only or View left ear only text as appropriate. To change the table view back to a binaural view, click on the text View both ears.
 - Once you have selected your desired frequency region for adjustment, click the dB drop-down menu to alter the step size of any change. Choose from 1, 2 or 3 dB.
 - Click the + or - buttons to apply the desired change.

Note: When a fitting handle has reached its maximum setting, the + button will grey out (disable). Conversely, if a fitting handle is at its minimum setting, the - button will grey out (disable).

Note: The alerts tab will highlight once the generated masker noise setting reaches a value of 80 dB(A) or greater to indicate that care should be taken when exposing the client to continued noise at this level to avoid an adverse impact on hearing. A recommended daily usage time based on NIOSH standards (<http://www.cdc.gov/niosh/docs/98-126/>) will also be indicated considering the

current masker noise level and updated as the noise level is adjusted. The noise level settings will be limited such that the generated noise never exceeds a level of 85 dB(A), assuming at least 8 hours of use / day to address concerns regarding the impact of continued noise exposure on hearing sensitivity from NIOSH guidelines.

Note: The TinnitusManager settings are global for the Automatic Program / AutoSurround, so they will be the same in all Automatic Program / AutoSurround environments, but the settings can vary across manual programs.

Configure Features (XC Pro and earlier products)

Select the Configure Features screen to adjust various adaptive parameters in the hearing instrument by clicking the desired task item.

Note: Within the configuration boxes for the various adaptive features, both ears are linked by default. To unlink, click the link / unlink icon within each feature's task box.

FeedbackManager

Select your desired Feedback canceller strength from the provided options.

Sound Impulse Manager

1. Click Sound Impulse Manager
2. Select your desired Sound Impulse Manager strength from the provided options.

SurroundOptimizer / SurroundOptimizer+

This feature is available for products prior to the easeHD and SphereHD platforms.

1. Click the Configuration task item at the bottom of the screen.
2. Select your desired position using the provided slider. Note: If desired, click on the icon to view the frequency response.

SurroundOptimizer (HD/SHD/XC)

This feature is available for products on the easeHD, SphereHD, EXCITE and EXCITE Pro platforms.

Depending on selected environment / manual program, adjustments to this feature can impact underlying ConversationLift+/SpeechLift (speech enhancement), noise reduction, and/or directional strength. Please see feature diagram in software for more information.

1. Select your desired position using the provided slider.
2. The selected number for SurroundOptimizer will provide different strengths of underlying parameters depending on the environment.
3. A specific setting, such as "3" for SurroundOptimizer within environments under Conversations and No Conversations will have different underlying feature strengths.

Note: On initial arrival at the screen, all values will be set to the default values defined as per the fitting. If only the green bar indicator shows this means that the current value is also the default value. If you change the value, the green bar still shows the current value, but a new grey marker appears, providing a visual reference to the default value.

Active Wind Block

1. Click the Active Wind Block.
2. Select your desired wind noise manager strength from the provided options.

Input

1. Click Input.
2. The available microphone input options depend on the product and program being adjusted.

Note: For environments that offer mixed inputs (e.g., Telecoil + Microphone, Audio Streaming + Mic, Direct Audio Input + Mic), the microphone level can be adjusted using the mic attenuation slider from 0 to -30 dB with the exception of easy-DAI.

Note: When BiPhone is activated, the input selection task box offers the ability to configure phone ear inputs (Telecoil + Microphone with 0 to -30 dB mic attenuation; or Omni) and non-phone ear inputs (Audio Streaming + Mic with optional 6 dB mic attenuation or a mic attenuation slider from 0 to -30 dB available with some products).

Note: For XC Pro products, the Activation Behaviour for the PartnerMic and RogerDirect programs can be configured here. It is assumed all clients will want this set to Automatic. See TV Connector section for details on the 3 available options of Automatic, Manual or Manual (with beep).

RogerDirect has an additional configuration option Adaptive Microphone Behaviour. Hover over the options to see popups explaining the different settings

AutoSurround options

Note: This option is available when the automatic program or one of its environments are selected.

1. Click the AutoSurround options.
2. If available, select the client's Highest Priority and Lowest Priority environments from the provided drop-down menus (these setting are available with some ease products).
3. If desired, adjust the Sensitivity control using the provided drop down menu to impact how quickly the Automatic Program / AutoSurround responds to changes in the environment.

Note: The automatic controls should be left in their default positions for the initial fitting and reviewed later if the client has concerns regarding the instruments' switching behavior.

Note: This feature is global for all environments.

BiPhone

Note: This feature is available when a telephone program is selected in a binaural fitting for select wireless products.

1. Click BiPhone.
2. Click the Enable BiPhone check box to activate this feature.
3. Select the client's Preferred phone ear when selected using remote from the provided drop-down menu. This choice impacts the streaming direction when BiPhone is activated using the remote control.
4. Click the HI push button selects phone ear check box to have the system stream the phone signal in either direction based on which push button was used to toggle into the Binaural Phone program. That is, the phone ear is identified as the side which had its push button activated.

Note: When accessing BiPhone streaming using PhoneConnect, the phone ear is automatically identified as the side that triggered PhoneConnect (ie., the ear where the phone receiver is located).

Note: When BiPhone is activated, the input selection task box offers the ability to configure phone ear and non-phone ear inputs (mic attenuation).

Note: EXCITE introduced the ability to demonstrate the binaural phone feature within the Acoustic Telephone manual program during a client fitting. On selecting to Enable BiPhone and then activating the Acoustic Telephone phone program, you are now prompted to activate the binaural voice streaming functionality during the fitting. If you choose to activate it, the fitting will be saved to the hearing instruments which will then be rebooted and reconnected. Binaural voice streaming will be active until you change programs or disconnect the hearing instruments from the fitting software

Car with Speech Direction

This program is not available with all models.

1. Click Speech Direction.
2. Use the drop-down menu to change the direction of the speech based on hearing needs.

MusicSelect

MusicSelect is available when a music environment or program is selected.

1. Click MusicSelect.
2. Choose one of the default offsets from the provided drop-down menu.

With EXCITE, you can also configure MusicSelect specifically for the AutoStream XC music environment. This works the same way as MusicSelect does for the Music program but in this case it is for streamed music.

Configure Features (STRATOS products)

Select the Configure Features screen to adjust various adaptive parameters in the hearing instruments. Select the program(s) in the left hand pane and view/alter the values of the adaptive parameters in the right hand pane.

For adaptive parameters that can be configured monaurally, both ears are linked by default. To unlink, click the link/unlink icon.

The adaptive parameters are grouped into three sections:

1. Binaural adjustments only
 - DynamicSpeechBeam / SpeechBeam
 - Intelligent NoiseReduction
 - Microphone Mode
 - ConversationLift
 - NoiseReduction
2. Binaural or monaural
 - Active Wind Block
 - Sound Impulse Manager
 - FeedbackManager
3. Program specific parameters
 - Additional parameters that are less frequently changes (outlined below)

For adaptive parameters using sliders, all values will initially be set to the default values defined as per the fitting. If you change the value, the marker var still shows the current value, but a grey marker provides a visual reference to the default value.

Slider Controls

Slider behaviour differs based on the selected program type.

- Intelligent AutoSurround automatic program - the single controls globally impact all of the potential blendings of the underlying environments
- AutoStream program - the single controls apply to one or both of the SpeechStream and MediaStream programs
- Manual, Wireless and Optional App Programs - the sliders apply to the individual program only

Section 1 - Binaural adjustments only

Microphone Mode

The Microphone Mode slider is used to set the directional strength which increases as you move the slider from left to right. The system will automatically select an initial microphone mode based on the fitting. The value of the selected microphone mode will change on moving the slider and the vertical markers on the slider show the points of the other available microphone modes. Similar to previous platforms, the selectable values are Omni, Pinna Effect, SphereSound, Fixed Wide Directional, Fixed Wide, and Adaptive Directional. However, different to previous platforms, each value on the slider represents a specific strength, i.e. the slider is a continuous scale, so that any position in between the two markers represents a continuous change in the directional strength.

A visual polar plot is displayed at the right of the slider providing an approximate visual view of the directional strength for each setting.

When selecting the Intelligent AutoSurround program, the label of the slider will change to be 'Max Microphone Mode' and you can change the value of the slider to select the maximum directional strength that will be applied across any of the potential blendings of the underlying environments, i.e. Fixed Wide Directional, Fixed Wide and Adaptive Directional.

For all other Manual or Optional App programs that support the microphone mode, the selected slider value represents the fixed value of microphone mode for that specific program.

For programs that offer mixed inputs (e.g., Telecoil + Microphone, Audio Streaming + Mic), the Microphone Mode slider will be hidden. See section 'Mic Enablement and Attenuation' in Section 3 below for details on mic configuration options for these programs.

Dynamic SpeechBeam, SpeechBeam and Intelligent NoiseReduction

SpeechBeam is available with performance level 7 products, Dynamic SpeechBeam is available with performance level 9 products and the default value is always 'enabled'.

Note: these controls are only available in binaural fittings

The controls for Intelligent NoiseReduction and Microphone Mode are mutually exclusive and only one will ever be enabled at any given time.

Dynamic SpeechBeam / SpeechBeam = 'On'

- Intelligent NoiseReduction slider is enabled
- Microphone Mode slider is disabled

Dynamic SpeechBeam / SpeechBeam = 'Off'

- Intelligent NoiseReduction slider is disabled
- Microphone Mode slider is enabled

If Dynamic SpeechBeam / SpeechBeam is enabled, in quieter listening environments, the microphone mode will be set to SphereSound, but in complex listening environments the system will take over steering of the directional beamformer, determine the direction from which the speech is coming and focus accordingly.

In complex listening environments where speech is from the front, the Intelligent NoiseReduction slider can be used to adjust the amount of spatial cancellation being applied to minimize noise from the rear to improve the overall SNR.

The Dynamic SpeechBeam / SpeechBeam control is read only for Manual or Optional App programs.

ConversationLift slider

The ConversationLift slider will automatically select an initial recommended level based on the fitting and allows you to set the maximum level of speech enhancement that can be applied in each program up to a maximum of 6 dB. The scale always shows a maximum of 6 dB, but the maximum selectable value differs per technology level, and for lower technology levels the upper range of the slider will be greyed out as appropriate.

- Intelligent AutoSurround - the selected value will be the maximum applied across any of the potential blendings of the underlying environments
- AutoStream - the selected value will be the maximum applied across both media environments, i.e. SpeechStream and MusicStream
- Manual, Wireless or Optional App programs - the selected value represents the maximum that can be applied for that specific program
- Car with Speech - has an asymmetrical configuration applied to a binaural set of hearing instruments. The ConversationLift will be configureable for the 'listening side' ear (i.e. the ear facing the driver or the passenger) but will always be set to zero for the 'non-listening ear' (i.e. the ear facing the window).
- If ConversationLift is not supported for a program, the slider will not be shown, i.e. for any manual variant of Noise or Quiet programs.

NoiseReduction slider

The NoiseReduction slider will automatically select an initial recommended level based on the fitting and allows you to set the maximum level of reduction that can be applied in each program up to a maximum of 10 dB. The scale always shows a maximum of 10 dB, but the upper selectable value differs per performance level, and for lower performance levels the upper range of the slider will be greyed out, as appropriate.

- Intelligent AutoSurround - the selected value will be the maximum applied across any of the potential blendings of the underlying environments
- AutoStream - the selected value will be the maximum applied across both media environments, i.e. SpeechStream and MusicStream
- Manual, Wireless or Optional App programs - the selected value represents the maximum that can be applied for that specific program
- If NoiseReduction is not supported for a program, the slider will not be shown, i.e. for any manual variant of the Music program.

Shared controls

If the client uses the stream remote App, they will have the ability to make persistent changes in any Manual program you have added to the fitting, or any Optional App programs that they may have added themselves via the app. In a follow up fitting any changes made by the client will be reflected in scout and you will be able to alter these as required. The client can alter the following parameters:

- Microphone Mode - the client will only ever see one slider in the app, which will correspond to either the Microphone Mode control or the Intelligent NoiseReduction control
- ConversationLift
- NoiseReduction

The client does not have the ability to make any persistent changes to these parameters in the Intelligent AutoSurround program.

Section 2 - Binaural or monaural

Active Wind Block, Sound Impulse Manager, FeedbackManager

For each of these controls, the slider is used to set the value, the strength of which increase as you move the slider from left to right. The system will automatically select an initial value based on the fitting. The value will update on moving the slider and the vertical markers on the slider show the points of the other available values.

Similar to previous platforms, the markers are Off, Mild, Mod, and Max. Different to previous platforms, each value on the slider represents a specific strength, i.e. the slider is a continuous scale, so that any position in between the markers represents a change in the strength of the control.

Section 3 - Program specific parameters

Any adaptive parameters which are not applicable to ALL programs are listed in this section, including the programs where they apply. The controls will be displayed when applicable and configurable for the selected program.

ConversationBoost

ConversationBoost is enabled by default. The control to enable / disable ConversationBoost is hidden by default. To change the value, you will first need to show the control via the Options > Preferences > Fitting Session > Fitting screen. ConversationBoost is available for the following programs:

- Intelligent AutoSurround
- Conversation in quiet
- Quiet
- Place of Worship
- Quiet Restaurant
- Outdoors

Input source and Attenuation

For audio streaming programs that offer mixed inputs (e.g., Telecoil + Mic, Audio Streaming + Mic), the input source can be limited to either the audio stream only or the audio stream plus the mic. If the input source includes the mic, you can also adjust the mic attenuation. These controls are available for the following programs:

- AutoStream
- PartnerMic
- Bluetooth Phone
- RogerDirect
- Loop System
- Acoustic Telephone
- Telephone

Activation Behaviour

See the TV Connector section in this guide for details on the three available options of Automatic, Manual or Manual (with beep). The Activation Behaviour can be set here for the following programs:

- PartnerMic
- RogerDirect

Sensitivity

If desired, adjust the Sensitivity control using the provided drop down menu to impact how quickly the Intelligent AutoSurround program responds to changes in the environment. This is only applicable to the Intelligent AutoSurround program.

Adaptive Microphone Behaviour

This is a configuration option specifically for the RogerDirect program. Hover over the options to see popups explaining the different parameters.

Speech Direction

This configuration option applies to the Car with Speech program only.

Use the Speech Direction control to select if the user's preferred role is that of a driver or a passenger. Speech direction can be either 'Speech from Right' or 'Speech From Left' based on whether the client is the driver or a passenger. In either case, the direction of speech always comes from the interior side of the vehicle as opposed to the external (window) side of the vehicle. The speech direction for the driver will always be opposite the setting for the passenger, i.e. if driver is 'Speech From Right', passenger will be 'Speech From Left', and vice versa.

The assignment of speech direction side is derived from the side of the road that cars drive on in the country selected at time of Unitron TrueFit installation. For example the speech direction options will be as follows:

If driving on the left side of the road (e.g. selected United Kingdom on installation)

- Driver (Speech From Left)
- Passenger (Speech From Right)

If driving on the right side of the road (e.g. selected United States (USA) on installation)

- Driver (Speech From Right)
- Passenger (Speech From Left)

The microphone mode parameters for the Car with Speech program are fixed as follows:

- Ear focusing on speech – Omni
- Ear not focusing on speech – Adaptive Directional

BiPhone

These configuration options are specifically for the Acoustic Telephone program.

Enable BiPhone - select to enable

HI Push button selects phone ear - select to allow the clients to dynamically select the primary ear for a phone call by pressing the left or the right hearing instrument push button to toggle in to the BiPhone program. The phone signal is then streamed to the opposite ear.

Preferred Phone Ear - select the client's preferred phone ear to use when:

- Selected using the phone button on the remote control
- Selected via the hearing instrument push button (if the HI Push button selects phone ear' option is not selected)

Mic Attenuation - when BiPhone is enabled, available for the non-phone ear only.

Microphone mode - BiPhone is enabled, setting is static for each ear as follows:

- Phone ear - Omni
- Non-phone ear - AudioStreaming + Mic

Microphone mode - BiPhone is disabled, you can select from two microphone mode options of mono or mute

Demonstrate BiPhone - on selecting to Enable BiPhone and then activating the Acousti Telephone phone program, you are now prompted to activate the binaural voice streaming functionality during the fitting. If you choose to activate it, the fitting will be saved to the hearing instruments, which will then be rebooted and reconnected. Binaural voice streaming will be active until you change programs or disconnect the hearing instruments from the fitting software.

FeedbackManager for Music

As already stated, the setting of the FeedbackManager slider is global across all environments of the Intelligent AutoSurround program. This control allows you to disable the FeedbackCanceller specifically for the Music environment of the Intelligent AutoSurround program.

Program Manager

Select the Program Manager screen to add or remove additional manual programs, copy programs, rename programs, change program order, and assign PhoneConnect / easy-DAI access (when applicable).

To add programs to the manual program list:

1. Select the program name under the Available Programs list or click the arrow next to the program name OR
2. Click the Copy icon beside the program that you would like to copy from the Selected Programs list.

To remove manual programs:

- Click on the Delete icon next to the program in question.

To rename programs:

- Click the program name under the Selected Programs header.

To assign PhoneConnect to a program in devices supporting this feature:

- Add a telephone program that has PhoneConnect capability and select the PhoneConnect check box beside that program in the column list.

Note: PhoneConnect can only be assigned to one telephone program. To

assign easy-DAI to a program in devices supporting this feature:

- Add a DAI program and select the easy-DAI check box beside that program in the column list.

Note: Easy-DAI can only be assigned to one DAI program.

To reorder manual programs:

- Click on the Move Program Up or Move Program Down icon next to the program in question.

Note: To select which program is the start-up program, go to the *End Fitting > HI Setup > Startup Settings* task box. By default, the Automatic Program / AutoSurround is the start-up program when it is included in the program toggle sequence. To remove the Automatic Program / AutoSurround, PhoneConnect and/or easy-DAI from the program toggle sequence, go to *End Fitting > HI Setup > Program Toggle Exceptions* task box.

Note: Mute program is only available for some products. If the mute program is not available, then create a Quiet program and then change the Input strategy under *Fitting > Configure Features* to Mute.

Feedback Optimization

Select the Feedback Optimization screen to run the feedback test.

1. Click the Start Feedback Test button on the bottom of the screen
2. Follow the on-screen instructions to perform feedback optimization. The status of the test appears above the graph (complete, incomplete, not run). In cases where the environment may have impacted the test (e.g., excess noise present), the final results include a combination of measured values and predicted feedback threshold values. The status then indicates Incomplete. Repeating the test will replace any predicted values with measured values if they can be reliably obtained in the current test environment.

Once the feedback test is completed, the hearing instrument's gain is limited as shown on the graph where:

- Black line = feedback threshold
- Grey line = hearing instrument gain limit
- Green line = target gain for 50 dB pure tone input
- Red or Blue line = aided gain for 50 dB pure tone input

Note: If desired, the feedback test can be deleted using the Delete icon above the graph for the device / ear in question.

Note: The Feedback canceller is enabled prior to running the feedback optimization test and the calculation will be limited to the predicted maximum stable gain. Following the feedback test, the device is automatically calculated up to the desired Acclimatization level setting, but not beyond the measured maximum stable gain curve.

Note: For some products, after running the feedback optimization test the gain limit of the hearing instrument can be increased by up to 5 dB by clicking the checkbox under the graph for that instrument.

Automatic REM

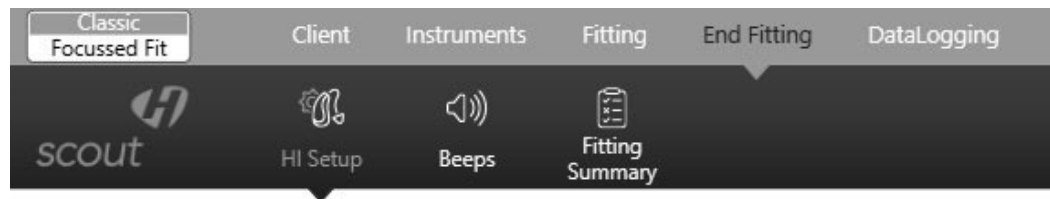
Automatic REM (introduced with the launch of XC Pro) integrates an automated workflow for REM with the Otometrics Aurical FreeFit solution, providing users with a seamless, step by step workflow that takes advantage of the features of the Aurical FreeFit solution whilst allowing the real ear activities to be performed from within the TrueFit application. This creates an easy and effective way of incorporating REM into the fitting process.

In summary, the TrueFit integration will guide the HCP through the process of:

- Probe tube calibration
- Performing:
 - Real Ear Unaided Gain (REUG)
 - Real Ear Occluded Gain (REOG)
 - Acoustic Coupling (Ear-to-Coupler Level Difference ECLD)
 - Real Ear Aided Gain (REAG)
 - Microphone Location Effect (MLE)
- Automatic target matching

Automatic REM can be run on SHD products onwards.

End Fitting menu



HI Setup

Select the HI Setup screen to configure the function of the user controls on the hearing instrument (e.g., push button, multi-function button, push button/rotary wheel and lever/dial) along with the activation of BiLink (binaural wireless coordination) for each of these controls. In addition, HI setup allows you to adjust other hearing instrument parameters by clicking on the desired task item at the bottom of the screen. These options include volume settings, start up settings, DataLogging, Bluetooth & streaming and program toggle exceptions.

Push Button

To configure the functionality of the push button (when available), select the desired item from the drop-down menu

- No function: the push button is disabled on the hearing instruments.
- Program change: press the push button to toggle through the various listening programs.
- Volume up: pressing the push button increases the volume in steps. Once the hearing instrument reaches the maximum volume, the next step will bring it back to the default volume level.
- Volume down: pressing the push button decreases the volume in steps. Once the hearing instrument reaches the minimum volume, the next step will bring it back to the default volume level.
- Right louder / left softer: pressing the push button on the right device increases the volume for both hearing instruments. Pressing the push button on the left device decreases the volume for both hearing instruments.

Note: BiLink must be on for this setting to function.

- Volume up / Program change: pressing the push button on the right increases the volume in steps; once the hearing instrument reaches the maximum volume, the next step will bring it back to the default volume level. Pressing the push button on the left changes the program.

Note: BiLink must be on for this setting to function.

- Program change / Volume down: pressing the push button on the right changes the program. Pressing the push button on the left decreases the volume in steps; once the hearing instrument reaches the minimum volume, the next step will bring it back to the default volume level.

Note: BiLink must be on for this setting to function.

Note: The program toggle on the remote is not impacted by the setting of this control.

Note: Some hearing instruments support a short press and a long press. You can configure them separately on this screen.

Rocker Switch (Multi-function button)

To configure the functionality of the Rocker Switch multi-function button (if available):

With the multi-function button on EXCITE, EXCITE Pro and STRATOS hearing instruments, you simply check or uncheck the different button functions and HANSATON scout applies pre-defined rules to assign functions against the button behaviours. In addition, there is the possibility to add Mute which has its own dedicated function.

Note: there is no ability to split functions between the ears , i.e. the defined button behaviour is the same whether pressing the buttons on the left or the right hearing instrument.

Show Behaviour

There are five defined behaviour options for the hearing instruments where settings can be assigned, i.e. Standard, Streaming (during notification), Streaming, Bluetooth phone (ringing) and Bluetooth phone (call). Selecting one of the five options updates the Button Behaviour display to show the current functions assigned to each of the Up/Down presses for both the Long Press and Short Press options for the selected behaviour.

Button Behaviour

Shows the associated settings for the selected behaviour indicating whether the behaviour is associated with an Up press, a Down press or both.

Button Functions

You can select which button functions are to be enabled on the hearing instruments, choosing from the four available options of Volume, Program Change, Accept/reject call or Mute/unmute mic.

The following matrix shows which Button Functions can be activated with each of the hearing instrument behaviours.

	Volume	Program change	Accept/reject call	Mute/unmute mic
Standard	Y	Y	N	Y
Streaming (during notification)	N	Y	Y	Y
Streaming	Y	Y	N	Y
Bluetooth phone (ringing)	N	N	Y	N
Bluetooth phone (call)	Y	N	Y	N

Button function priorities

Button functions have a defined priority ranking and the function with the highest priority ranking is always allocated to the Short press button options.

The following matrix shows the Button Function priorities applicable for the Standard and Streaming behaviours:

	Selected	Button press	Selected	Button press	Selected	Button press
Volume (1)	Y	Short	N	- N		-
Program Change (2)	Y	Long	Y	Short	N	-
Mute/unmute mic (3)	Y	Long	Y	Long	Y	Short

The following matrix shows the Button Function priorities for the Bluetooth Phone (call) behaviour. If volume is selected, it is assigned to Short press and End Call is assigned to Long press. If only Accept/Reject call function is selected, End Call is assigned to both Short and Long press

	Selected	Button press	Selected	Button press
Volume (1)	Y	Short	N	-
Accept/reject call (2)	Y	Long	Y	Short & Long

Tap functions (STRATOS products only)

Tap control can be configured to:

- Accept / end phone call - double tap on either ear
- Pause / resume streaming - configure for left ear only, right ear only, or both ears. If you select 'both ears', the control for Start / stop voice assistant is disabled
- Start / stop voice assistant - configure for left ear only, right ear only, or both ears. If you select 'both ears', the control for Pause / resume streaming is disabled.

Click Tap control training to allow the client to try out the double tap gesture.

Note: tap functions are only available on STRATOS rechargeable hearing instruments.

For Bluetooth Phone (ringing), the only available function is Accept/Reject call. If selected, Short press is assigned to Accept Call and Long press is assigned to Reject Call.

Note: the "mute" function is only available for Streaming and Standard behaviors as it serves the purpose of blocking the environment by muting the hearing aid microphone. It is not available during a phone call as if you cut access to the hearing aid microphone you deactivate own voice pick up.

Push Button / Rotary Dial

To configure the functionality of the push button / rotary dial (if available):

With the push button and rotary dial on Bluetooth® wireless ITE hearing instruments, you simply check or uncheck the different button or dial functions and scout applies pre-defined rules to assign functions against the button or dial behaviours. In addition, there is the possibility to add Mute which has its own dedicated function.

Note: there is no ability to split functions between the ears, i.e. the defined button behaviour is the same whether pressing the buttons on the left or the right hearing instrument.

Show Behaviour

There are five defined behaviour options for the hearing instruments where settings can be assigned, i.e. Standard, Streaming (during notification), Streaming, Bluetooth® phone (ringing) and Bluetooth® phone (call). Selecting one of the five options updates the Button Behaviour display to show the current functions assigned to each of the short press, long press, or rotary dial options for the selected behaviour.

Button Behaviour

Shows the associated settings for the selected behaviour indicating whether the behaviour is associated with a short press, long press or a turn of the rotary dial.

Button Functions

You can select which button functions are to be enabled on the hearing instruments, choosing from the four available options of Volume, Program Change, Accept/reject call or Mute/unmute mic.

Dial Function

If the hearing instrument configuration includes a rotary dial, this is the only way to control the volume on the HI, i.e. the volume function cannot be applied to either a short or long press of the push button.

Lever / dial

To configure the function of the lever / dial on the hearing instrument(s) (if available):

1. Click the drop-down menu under the lever / dial label on the primary screen. Choose from:
 - Volume Control: the lever / dial adjusts the volume level of the hearing instruments. Note: BiLink is disabled by default to allow independent adjustment of this control on each ear.
 - No function: the lever / dial is disabled on the hearing instrument. Note: The + / - buttons on the remote are not impacted by the setting of this control.

IIC remote

To configure the function of the IIC remote (if available):

1. Click the drop-down menu under the IIC remote function label on the primary screen. Choose from:
 - No function: the IIC remote is disabled.
 - Program change: bring the remote up to each hearing instrument to toggle through the various listening programs.
 - Volume up: bring the remote up to each hearing instrument to increase the volume in steps. Once the hearing instrument reaches the maximum volume, the next step will bring it back to the default volume level.
2. Volume down: bring the remote up to each hearing instrument to decrease the volume in steps. Once the hearing instrument reaches the minimum volume, the next step will bring it back to the default volume level.

Bluetooth®

Bluetooth® name: the name of the hearing instrument as seen by other Bluetooth® devices. If no name is set a default value is used.

Phone ear: configure the hearing instrument that will be used to handle phone calls. If this value is changed, the newly selected hearing instrument will need to be paired to the user's phone after the fitting session has been closed.

Enable adaptive bandwidth: for EXCITE only, when conducting a Bluetooth® phone call, some phone models result in a user experience where the call recipient hears either garbled or no audio. Disable this feature to resolve the issue.

Note: The Bluetooth® name is visible to any Bluetooth® device. Be mindful of sensitive information such as client names or personal information when naming the device.

TV Connector

Direct connectivity hearing instruments can connect directly to the TV Connector accessory and you can configure how the devices will behave when they come into range of a TV Connector.

When a TV Connector stream is detected, the associated activation behavior for each option is as follows:

- Automatic - the TV Connector stream is activated automatically
- Manual - the TV Connector stream is added as the last manual program. (Note: the 'Manual' feature is not available for sound SHD stream.)
- Manual (with beep) – a beep is heard and the TV Connector stream is added as the last manual program. Additionally with this option, a short press within 15 seconds after the beep will skip all programs and jump directly to the stream.

Note: Default behavior is 'Automatic', and you can hover over the text to see a popup explaining the behaviour.

Volume Settings

1. Click the Volume Settings task item at the bottom of the screen.
2. Select the desired amount of increase in volume using the Volume Control Up drop-down menu.
3. Select the desired amount of decrease in volume using the Volume Control Down drop-down menu.

Note: The value selected in the volume control up and down boxes determines the volume control range provided to the client (as displayed in the volume settings task box). Each adjustment of the volume control using a remote or on the hearing instruments is 2 dB.

Start up Settings

1. Click the Start up Settings task item at the bottom of the screen.
2. Select the desired Start up Program from the drop-down menu.
3. Select the desired Start up Delay from the drop-down menu.

Program Toggle Exceptions

1. Click the Program Toggle Exceptions task item at the bottom of the screen.
2. Uncheck the boxes to indicate which of the following you would like to exclude from the program toggle sequence:
 - The Automatic Program / AutoSurround
 - The PhoneConnect program (if applicable to the product being fitted)
 - The easy-DAI program (if applicable to the product being fitted)

Beeps

Select the Beeps screen to demonstrate and configure the various user notification beeps in the hearing instrument. These options include beep setup, beep enabling, and trial duration (myChoice devices only).

To demonstrate beeps:

There are a number of play buttons for various user notifications. Depending on the product being fitted, you have the option of playing beeps associated with:

- Program Change: choose the desired program to demo using the drop-down menu.
- Automatic Events: choose from PhoneConnect, uPhone activation, uAudio Bluetooth activation, uAudio audio jack input activation or uFM activation.
- Warnings / Alerts: choose from low battery and TV Connector available (if applicable).
- Trial Duration: play the 'End of trial period' beeps that will be generated in myChoice devices once the trial period has expired.
- Volume: choose from: volume min/max, volume ideal (default), volume step change.
- Phone Ring Tones: play provided ring tone.
- Startup Sound: play the startup sound.

Note: The phone ring tone notification is generated during uPhone activation with phones supporting this feature.

To play the selected notification through the hearing instrument, click the right or left play buttons beside the chosen drop-down menu.

Beep Setup

1. Click the Beep Setup task item at the bottom of the screen.
2. Select the intensity level from the drop-down menu. Choose from: Very Soft, Soft, Moderate, Loud, or Very Loud.
3. Select the frequency from the drop-down menu. Choose from: Low, Medium or High.

Beep Enabling

1. Click the Beep Enabling task item at the bottom of the screen.
2. Select the beep notification types you would like active for the client. Choose from: Program Change, Start Up Sound (initial sound which occurs upon the powering up of the hearing instruments), Automatic Events (events listed under the demo drop-down menu for this category), VC Min/Max or Volume Control Min/Max (end of range), Volume Control steps (beeps that occur each time these user controls are changed), and Warning / Alerts (events listed under the demo drop-down menu for this category).

Note: The beeps that play at the end of the trial period with myChoice hearing instruments cannot be disabled. When the end of trial period beeps start to sound, you can turn off the repeated beeps by resetting the trial period, i.e. by detecting and then saving to the hearing instruments.

Trial Duration

Note: This option is available with myChoice devices.

1. Click the Trial Duration task item at the bottom of the screen.
2. Select the desired trial duration before the 'End of trial period' beeps are generated in the hearing instruments.

Note: Once the trial duration has been exceeded, repeated beeps (End of trial period beeps) will be generated. Initially, these beeps will occur every hour for ~ 3 days of use, after which the instruments will repeatedly generate the beeps every minute.

Fitting Summary

The Fitting Summary screen provides a succinct overview of primary fitting-related items in an easy-to-read table for each hearing instrument. The table provides an opportunity for a final check of the fitting settings and general status prior to printing, saving and closing the session.

The default table information is dependent on the product being fitted and can include: Program List, Client Controls, General Status, Accessories, and Indicators. If desired, additional details can be viewed by clicking the More Info button which then displays Fitting Settings and Acoustics.

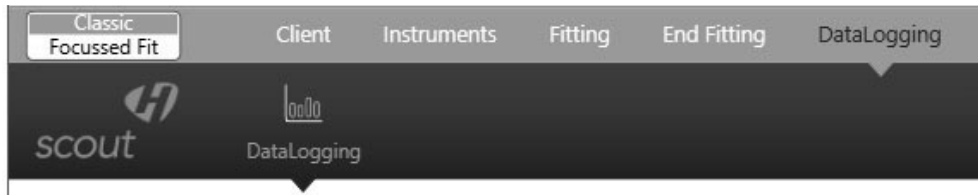
To end the fitting:

1. Select the check boxes for the items you would like to print (e.g., Fitting reports, Getting Started Guides for hearing instruments and accessories, if applicable). The client's language for the Getting Started Guides can be selected. Click Print buttons to provide materials to your patient.
2. Click the Save button. Select the check boxes for the items that you would like to save (e.g., Save to hearing instruments, Save to database, Save to accessories) on the save dialog pop-up window. Click Save and then Close in the save confirmation window.

Note: Clicking the Save icon on the primary tool bar or accessing the Save function in the main menu also provides the ability to save to the hearing instruments, database, and accessories.

3. To close the session, click the Close Session button. If you have not yet saved the fitting, the save dialog pop-up window will appear. When running HANSATON scout under NOAH click the Exit HANSATON scout button.
4. After closing the session:
 - If using iCube II/iCube, restart your hearing instrument(s) by opening and closing the battery door(s).
 - If using NOAHlink or HI-PRO, remove the programming cable, insert the batteries and close the battery door.

DataLogging menu



Overview

The overview screen provides an at a glance view of the clients usage and lifestyle with their hearing instruments.

The left had pane of the screen shots:

History

A drop down of time-stamped dates of previous sets of data.

Quick Links

Buttons linking to commonly used features in follow up fittings.

- Soft / Mod / Loud Controls
- MPO / Gain / CR Controls
- Adaptation Manager
- App Equalizer

DataLogging

Bar chart

The bar chart located in the centre of the screen shows the % of time spent in automatic and manual programs. For products without an automatic program, the bar chart will show the % of time spent within each manual program. Data is averaged across left and right hearing instruments to simplify the information in the table. Ear specific data logging can be found in the badge located immediately below the bar chart.

Table

This table provide information related to average usage and volume control adjustments across all programs. When activated, this table will also provide information related to tinnitus masker adjustments.

In case of logged data, you can selectively apply logged data to the automatic program, manual programs, or wireless programs with the exception of the tinnitus masker. Adjustments to the tinnitus masker can only be made manually under Configure Features.

History

You have the option of viewing data logging history from previous sessions. To do so, select the desired session within the drop box provided.

Usage

The usage summary in the left pane provides an average number of hours each hearing instrument has been worn per day, based on the number of days between sessions.

Lifestyle Analyzer

The Lifestyle Analyzer allows you to view a clients listening environments across all 7 environments regardless of the performance level of the hearing instrument worn.

Bar chart

The bar chart is generated based on the percentage of time the client spent in each type of listening environment.

History

Allows you to view Lifestyle Analyzer history from previous sessions.

Performance Level

Clicking a performance level other than the currently selected level will a) update the bar chart to indicate the listening environments available at that performance level, and b) update the feature list to show the differentiation in features between the current performance level and the selected performance level.

Curve display options

All of the curves displayed from HANSATON scout v3.1 onwards are based on targets that are generated assuming a speech input instead of the pure tone inputs previously used.

On any screen displaying a graph, you can change the items shown by clicking the curve display icon above the upper right graph. Adjustments made here are applied to both the left and right graphs.

Depending on the section of the software, you will have the option of choosing:

- Gain: insertion gain, real-ear, 2cc or ear simulator. Also, option of showing feedback threshold obtained during the feedback test.
- Output: HL real-ear, SPL real-ear, SPL 2cc or SPL ear simulator. Also, option of showing HTL (hearing threshold) and UCL (uncomfortable loudness) data.
- Input / Output: SPL real ear, SPL 2cc or SPL ear simulator, each available at .5, 1, 2, 4, 6, 8 kHz
- Audiogram: displays current audiogram used in software
- Show target: displays the target curve for the current view
- Show calculated response: displays the original quick fitted hearing instrument response for the current view
- Verification graph: (available in Pre-Fitting screen only if selected under *Options > Preferences > Fitting Session > Fitting*) displays hearing instrument response and target curves based on speech inputs at 50 / 65 / 80 dB SPL. You have the option of showing curves in gain (insertion gain; 2cc coupler) or output (SPL real-ear)

Note: When the mouse cursor is positioned over items on the graph, a legend appears providing further details related to that item.

Main Menu

The main menu is available at the top of each screen and consists of these options:

File

Import Client: (standalone only): imports previously exported HANSATON scout client data. After selecting this option, you must select the source file location from the provided window.

Export Client: exports HANSATON scout client data from the software. After selecting this option, you must choose the destination and name of the exported file. Export options include:

- Export all clients: exports all client files from the HANSATON scout database
- Export anonymously: removes client name from the exported file and assigns an 'anonymous' file name identifier.
- Export to NOAH: exports client file in a format that can be imported into NOAH.

Print: opens a window that shows the documents available such as the Fitting Reports and the Getting Started Guides (hearing instruments and accessories, if applicable). The client's language for the Getting Started Guides can be selected. The selected documents can be previewed, printed or saved from this window.

Send Email: opens a window that shows information that can be sent to the client.

Software Updates: opens the Software Updates tab.

Save: saves the current fitting information. Choose from Save to hearing instrument, Save to database, or Save to accessories (if accessory added to fitting).

Close Session: exits the current open session. You will be prompted to save if you haven't done so already.

Close HANSATON scout: exits the software application. You will be prompted to save your fitting information if you have not done so before closing HANSATON scout.

Hearing Instrument

Save: saves the current fitting information. Choose from Save to hearing instrument, Save to database, or Save to accessories (if accessory added to fitting).

Test Mode: sets the hearing instrument into a test mode so you can compare the electroacoustic performance of the device to the published ANSI / IEC specification data sheets.

Verification Mode: Sets the hearing instrument into a verification mode to allow testing without the interference of adaptive features. There are 3 options:

- Adaptive features active: default state.
- Real Ear Verification: all adaptive features are disabled except for DirectSoundManagement and Balance and input selection.
- 2cc Coupler Verification: all adaptive features and input selection are disabled.

HI Update: checks if newer functionality is available for the connected hearing instrument. If an update is available, the instrument maintains its fine tuning and new features become enabled.

HI Repair / Reset: opens a wizard to reset the firmware of a hearing instrument. Only use this when directed by an error message. If this was not successful, please try again before sending the hearing instrument back to your distributor. The client record stored in the database will not be affected.

Transfer Fitting: provides instructions on how to transfer a fitting to or from another hearing instrument.

Delete wireless pairing: Deletes all Bluetooth pairings with phones or TV Connector on the hearing instruments.

Options

Preferences

Generates the user preferences dialog box with the following options:

General

- **Language and Region:** select the preferred language for text and sound files. Driving orientation can be selected for your country.
- **Presentation:** select your preferred level of animations and configure the workflow type.
- **Support:** generate HANSATON scout logging information for support.
- **Email templates:** create your own email template when sending support information to client.

Fitting Session

- **Diagnostics:** choose the preferred bone conduction symbol and view/adjust the DSL v5 ABR nHL to eHL correction values.
- **Fitting:** indicate if the speech verification graph option will be available from the curve display options on the Pre Fitting screen. Under tuning, selecting the check box will display TK for soft speech on tuning screen. Configure Features - allows you to display the option to 'Enable ConversationBoost XC Pro' and set the value to 'on' or 'off'. Choose whether to enable password protection to keep fitting information confidential. Following activation of this option, you can insert their desired password into the software. If the HANSATON scout software version you are using does not have the same password as the one saved to the hearing instrument, you will be required to enter the correct code to proceed with the fitting.
Note: Password protection prevents reading of information from a hearing instrument but does not prevent a clinician from creating a new fitting on that same device.
- **Presentation:** select the preferred tuning values display (absolute or relative); select visibility options for CR values; hide or show preparation instructions for the feedback wizard and the in situ test wizard; select whether or not the pediatric fitting mode recommendation pop-up box is displayed; and choose whether or not to maintain the aspect ratio of graphs.
- **Pediatric Modes:** View and / or edit the fitting mode defaults for various pediatric age ranges using the provided tables. Modify aspects related to fitting formula, global parameters, hearing instrument options, program settings, and program options.
- **Standard Mode:** View and / or edit the fitting mode defaults for standard mode (adults) using the provided tables. Modify aspects related to fitting formula, global parameters, hearing instrument options, program settings, and program options.

Reports

- **Graphs:** select the preferred graph type: Output or Gain for the Fitting Report. For the Output graph type, choose from: HL, SPL Real Ear, SPL 2cc, SPL Ear Simulator. For the Gain graph type, choose from: 2cc, Ear Simulator, Real Ear, Insertion Gain.

Fitting Device

- Communication: fitting device management selects whether the fitting device is accessible by other programs while using HANSATON scout.
- NOAHlink: enable/disable the NOAHlink, perform a system check, configure properties, or start the pairing wizard.
- HI-PRO: enable/disable the HI-PRO, perform a system check or configure.
- iCube II: enable/disable the iCube II, perform a system check via USB or wireless connection, upgrade firmware, or start the pairing wizard.
- Noahlink Wireless: enable/disable the Noahlink Wireless, check connection.

Sound System

- Sound Output: select either stereo speaker or Aurical.
- Calibration: calibrate to ensure media player sound files are presented at the correct level. Manual calibration uses a sound level meter. Play the calibration noise and adjust the HANSATON scout volume slider and/or Windows volume slider until you measure 80 dB (A) at the listening position (where the client will sit). For Automatic calibration start the calibration wizard. This process uses the hearing instrument to measure and adjust the sound level.

iCube II Configuration:

Opens the iCube II configuration section in Preferences. The screen provides ability to enable/disable the iCube II, perform a system check via USB or wireless connection, upgrade firmware or start the pairing wizard (i.e., add an iCube II).

AccessoryFirmwareUpdate:

Opens a dialog box used to update accessories. The accessory must be connected to the computer using an USB cable. After detecting the device, HANSATON scout will offer available firmwareupdates.

Change uDirect 2 Language Pack:

Opens up a wizard that will help you select a language for the speech notifications.

Help

Online Help & Support: links to the online support section of HANSATON scout. Internet connection is required. Support materials include items such as video tutorials, guides, specification sheets, styles and colours.

Instruction Guides: direct links to this instruction guide and any other guides.

Create Training Session: is used to demonstrate the full functionality of each screen as if hearing aids were actually being programmed. It is useful for a better demonstration of such features as the feedback optimization test.

The Training Session cannot be saved.

Contact Us: links to the HANSATON Contact us web page.

Company Website: links to the HANSATON website.

Support

- **Generate Support Package:** produces a .zip file with relevant support information that can be sent to the HANSATON Software Support team, for troubleshooting purposes.
- **Homologation Settings:** sets the hearing instrument into a test mode used for certification of product parameters.
- **Export Client for Support:** exports client data from the software for support/troubleshooting purposes.
- **Register with NOAH:** register HANSATON scout with NOAH so that it will show up as a module within NOAH
- **Unregister from NOAH:** unregister HANSATON scout from NOAH so that it will no longer show up as a module within NOAH
- **TeamViewer:** opens a direct link to TeamViewer.

About DSL v5: generates a dialog box displaying notices related to the DSL v5 formula.

About HANSATON scout: generates a dialog box displaying the software version and copyright notices.



Sonova AG
Laubisrütistrasse 28
CH-8712 Stäfa, Switzerland



Importer for European Union:
Sonova Deutschland GmbH
Max-Eyth-Str. 20
70736 Fellbach-Oeffingen, Germany

