Genie Medical Fitting Guide

GENIE
MEDICAL

oticon

Ponto, Ponto Pro & Ponto Pro Power

oticon
MEDICAL

Sound Processor Features

Features	Ponto	Ponto Pro	Ponto Pro Power
Sound processing features			
15 sound processing channels	✓	✓	✓
Multiband Adaptive Directionality	Manual	Automatic	Automatic
Tri-state Noise Reduction		✓	✓
Wind Noise Reduction	✓	✓	✓
Dynamic Feedback Cancellation	✓	✓	✓
Output AGC	✓	✓	✓
Speech Guard	✓	✓	✓
Battery management system	✓	✓	✓
Fitting features			
Fitting software, Genie Medical	✓	✓	✓
10-channel frequency response shaping	✓	✓	✓
BC In-situ Audiometry	✓	✓	✓
Feedback Manager	✓	✓	✓
Data Logging		✓	✓
Learning Volume Control		✓	✓
The physical product and operation aspects			
Up to 4 programs	✓	✓	✓
Volume control	✓	✓	✓
Start-up delay	✓	✓	✓
Mute/stand-by function	✓	✓	✓
Low battery warning	✓	✓	✓
Tamper-resistant battery door	✓	✓	✓
Telecoil/DAI/FM input	✓	✓	✓
Nano coating	✓	✓	✓

Contents
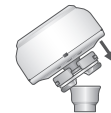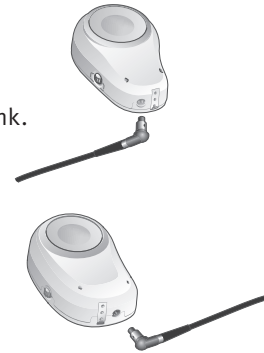
Fitting Guide (1/2)

Selection

Fitting

BC In-situ Audiometry

1. Insert a new battery in the instrument.

2. Connect the instrument to HI-PRO or NOAHLink.

3. Click Detect and Continue.

4. If the instrument is fitted to stimulate the cochlea on the other side, check the box for Single-sided deafness.
   If the instrument is fitted on soft band, head band or test band, check the box for Soft band.

5. Click Fitting step. In the 'Choose setting' dialog, select Genie Medical.

6. Mute the instrument.
   Connect the instrument to the client's abutment.

7. Click to un-mute the instrument.

8. Click BC In-situ Audiometry.

9. Conduct the BC In-situ measurement.

10. Click Feedback Manager in case of feedback.
    For Ponto Pro Power: Always measure the individual feedback limit.

Fitting Guide (2/2)

Feedback Manager

11. Click Start to measure the individual feedback limit.

12. Click Controls.
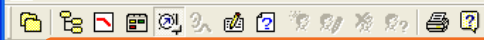
Fitting

Evaluate the setting and, if necessary, adjust the controls.

13. Click End Fitting step.

End Fitting

14. Click Save, Program and Exit.

File   Genie Medical   Edit   Instrument   Preferences   Tools   Window   Help

① SELECTION ▶ FITTING ▶ END FITTING

PONTO PRO

PONTO PRO POWER

oticon
MEDICAL

④

⑤

⑤

CONTROLS

FITTING

P1   ◯◯   P2   **②**

③

- ⫸ Controls
- ⊚ Program Manager

MORE TOOLS   ⊗

- ⫿ BC In-situ Audiometry
- ⫿ Feedback Manager
- ⊕ Automatics
- ⊚ Analyzer

P1: GEN., NAL-NL1

dBNHPa
80
Gain, Head - Target and simulated

Pure/Warble Tone

60

40

20

0
65
Default Feedback Limit
Target 65

125 250 500 1k 2k 4k 8k Hz

P1: GEN., NAL-NL1

dBNHPa
80
Gain, Head - Target and simulated

Pure/Warble Tone

60

40

20

0
65
Default Feedback Limit
Target 65

125 250 500 1k 2k 4k 8k Hz
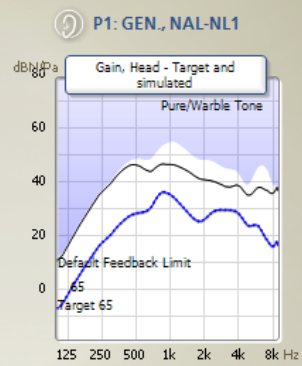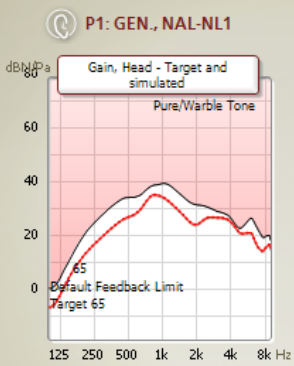
LOUDNESS   -2 -1 **0** 1 2

LOUDNESS   -2 -1 **0** 1 2

All	LF	675 MF	1875 HF
Loud	0	-1	4
Moderate	1	6	10
Soft	1	13	15

All	LF	675 MF	1875 HF
Loud	0	-1	8
Moderate	1	6	12
Soft	1	13	17

Introduction to the Genie Medical screen

The elements on the screen

❶ The Organizer steps will guide you through the fitting process
❷ Program selection
❸ The task pane gives access to tools and links related to where you are in the fitting process
❹ Toolbar
❺ Connection status

Connection status

Green: The instrument is connected, and has the setting shown on the screen; the setting is saved in the instrument.

Yellow: The instrument is connected, and has the setting shown on the screen, but the setting is not saved.

Gray: The instrument is not connected.

The steps in the fitting process

Selection

• Select instrument and type of fitting:
  - Single-sided deafness or not
  - Fitted on soft band or not

Fitting

• Conduct BC In-situ Audiometry
• Measure individual feedback limit
• Add or change programs
• Verify the instrument setting; fine tune if needed

End Fitting

• Specify the client's operation of the instrument (e.g. turn off VC)
• Save the settings to the instrument and Genie Medical

Pre-operative Evaluation

We recommend:

- Fitting the instrument individually to the client, also for the pre-operative demonstration.
- Activating the Soft band box whenever the instrument is fitted on soft band, head band or test band.
- Conducting BC In-situ. See page 19.

Soft band fitting mode
Sound (vibration) is damped when passing through skin and tissue. This transcutaneous attenuation varies from person to person, but occurs mainly in the high-frequency area.

Activating the Soft band box ensures that:

- The hearing threshold measured with BC In-situ tool with the instrument on soft band will not be 'reused' when the instrument is fitted on the abutment, as the threshold differs for the two measurement conditions.
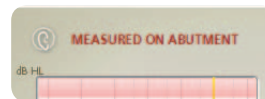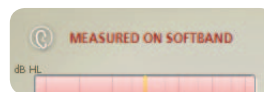
- The attenuation via skin and tissue is compensated for when the hearing threshold is not measured with the BC In-situ tool.

Time set aside for the pre-operative fitting is often limited; in such cases the instrument can be used in Factory Settings without connecting it to Genie Medical. See page 35.

Note: An instrument demonstrated on a head band will not sound the same as when worn on an abutment.
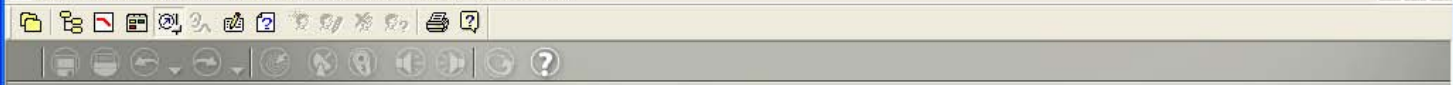
File   Genie Medical   Edit   Instrument   Preferences   Tools   Window   Help

PONTO PRO POWER

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SELECTION ▸ FITTING ▸ END FITTING

SELECTION

- Select Instruments
- Program Manager

LINKS

- Color Overview
- Cable Overview
- Accessories

SELECTION
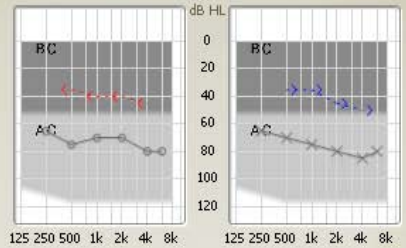
dB HL

BC

0
20
40
60
80
100
120

AC

125 250 500 1k 2k 4k 8k

BC

AC

125 250 500 1k 2k 4k 8k

DETECT

STYLE	FEATURES		STYLE	FEATURES
None	Volume Control ☑		None	Volume Control ☑
Ponto	Wind Noise ☑		Ponto	Wind Noise ☑
Ponto Pro	Directionality ☑		Ponto Pro	Directionality ☑
Ponto Pro Power	Noise Reduction ☑		**Ponto Pro Power**	Noise Reduction ☑
	Logging ☑			Logging ☑
	VC Learning ☑			VC Learning ☑
	Battery 675			Battery 675

☐ Single-sided deafness
☐ Soft band

Single-sided deafness ☐
Soft band ☐

Client Name: Johnson, John   Session Date: Today's Date: 31-03-2011   User ID: ABC

Selection and Getting Started

Genie Medical can run under NOAH or alone with its own database. Select Genie Medical in the NOAH module selection.
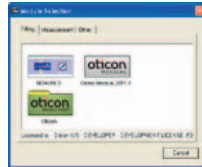
Cables
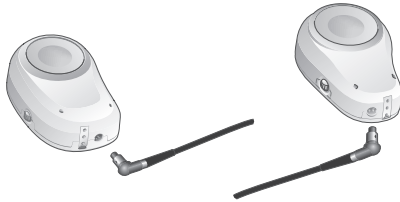
HI-PRO uses Oticon #3 (2 m).
NOAHLink uses NOAHLink #2 (50 cm).
The cord should always point away from the three-pin DAI plug.

> If you use the Detect function, the instrument will automatically be connected upon entering the Fitting step.

Single-sided Deafness fitting

- Select the instrument on the side with the implant and enter a check in the Single-sided deafness box.

- In Single-sided deafness fittings, the graph is displayed for the side where the client hears the sound.
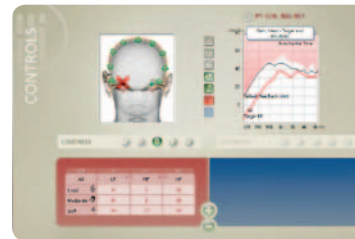
Pre-operative demonstration or fitting on soft band

Check the Soft band box if an instrument is fitted on soft band, head band or test band. See page 9.

Programs

Up to 4 programs can be defined. Select among:
- General (microphone)
- T/DAI/FM
- T/DAI/FM+M

Programs in an individual fitting

Ponto Pro and Ponto Pro Power have, by default, 1 program:
- P1: General microphone with Automatic Directionality and Tri-state Noise Reduction

Ponto has, by default, 2 programs:
- P1: General, omni
- P2: General, Full directionality

Factory Settings include a T/DAI/FM program; see Factory Settings, page 35.
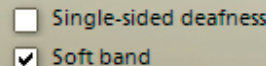
General microphone programs can be defined for special purposes.
To change Directionality and Noise Reduction, go to Automatics in the Fitting step.

While the instrument is connected to Genie Medical, the pushbutton and volume control are deactivated.

Telecoil, FM signals and other direct audio inputs can be heard only in the programs T/DAI/FM(+M).

Selection

File   Genie Medical   Edit   Instrument   Preferences   Tools   Window   Help

Calculate Prescribed Settings
Program Instruments
Connect Instruments

Mute   ▶
Upgrade Instrument Firmware

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SELECTION   FITTING   END FITTING

SELECTION

⊙ Select Instruments
⊙ Program Manager

LINKS   ⊗

⊡ Color Overview
⊡ Cable Overview
⊡ Accessories

dB HL

0
BC   BC   20
                                  40

UPGRADE INSTRUMENT FIRMWARE   ✕

PONTO PRO   PONTO PRO POWER

ⓘ   ✔

UPGRADE AVAILABLE   INSTRUMENT HAS NEWEST FIRMWARE

Individual control settings will be retained and
memory will be cleared

UPGRADE...

DETAILS   HELP   CLOSE

STYLE

None   ☑
Ponto   ☑
Ponto   ☑
Ponto   ☑

Noise Reduction   ☑   Noise Reduction   ☑
Logging   ☑   Logging   ☑
VC Learning   ☑   VC Learning   ☑
Battery   13   ◀▶   Battery   675

☐ Single-sided deafness   Single-sided deafness ☐
☐ Soft band   Soft band ☐

Client Name: Johnson, John   Session Date: Today's Date: 04-04-2011   User ID: ABC

Firmware Upgrade

Open the Upgrade Instrument Firmware tool in the Selection step from the Instrument menu.

Upgrade Instrument Firmware

The Upgrade Instrument Firmware tool lets you upgrade instruments with new features and functionality when new instrument firmware (software) is available. The firmware in Ponto and Ponto Pro instruments can be upgraded to include:
• Speech Guard
• DFC
And you also get access to the Genie Medical tools:
• BC In-situ Audiometry
• Feedback Manager

The client's individual setting in the instrument is retained when the firmware is upgraded, but Activity Analyzer/Memory and learned setting will be cleared.

How to see whether an instrument can be upgraded?

Attach the programming cable to the instrument and open the tool. Automatically the instrument is detected and the tool informs you whether the instrument's firmware is the newest or an upgrade is available.
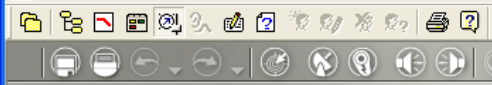
When to upgrade?

Ponto and Ponto Pro should be upgraded in case of problems with feedback or if there is a need for fine tuning.

Always insert a fresh battery in the instrument before running the Upgrade Instrument Firmware tool.
Place the instrument on the table – not on the client's abutment while the instrument is upgraded.

Selection

File   Genie Medical   Edit   Instrument   Preferences   Tools   Window   Help

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PONTO PRO

PONTO PRO POWER

SELECTION   FITTING   END FITTING

FITTING

P1   ∞   P2

- Controls
- Program Manager

MORE TOOLS

- BC In-situ Audiometry
- Feedback Manager
- Automatics
- Analyzer

CONTROLS
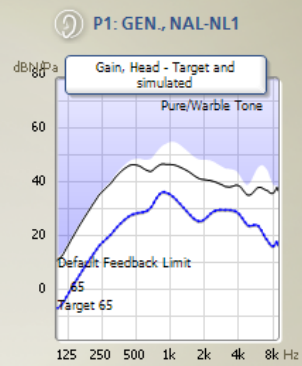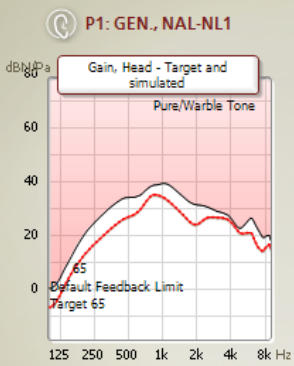
P1: GEN., NAL-NL1

dBNUPa
80

Gain, Head - Target and simulated

Pure/Warble Tone

60

40

20

65

0   Default Feedback Limit
Target 65

125 250 500 1k 2k 4k 8k Hz

P1: GEN., NAL-NL1

dBNUPa
80

Gain, Head - Target and simulated

Pure/Warble Tone

60

40

20

Default Feedback Limit
65

0   Target 65

125 250 500 1k 2k 4k 8k Hz

LOUDNESS   -2 -1 0 1 2

LOUDNESS   -2 -1 0 1 2

All	LF	675	MF	1875	HF
Loud	0		-1		4
Moderate	1		6		10
Soft	1		13		15

All	LF	675	MF	1875	HF
Loud	0		-1		8
Moderate	1		6		12
Soft	1		13		17

Client Name: Johnson, John   Session Date: Today's Date: 31-03-2011   User ID: ABC

Controls

Graph types

- Head: Simulates gain/output for the instrument as it would be on an abutment on the head.
- Skull: Simulates gain/output for the instrument measured on a skull simulator.

Feedback limit

Click the Feedback Limits icon between the graphs to display the feedback limit in the instrument.

Controls

Click ◀ ▶ to expand the controls to 10 bands.

M relative to T/DAI/FM signal can be adjusted in a T/DAI/FM+M program.

M RELATIVE TO T/DAI/FM
| 0 | -3 | -6 | -9 | dB |

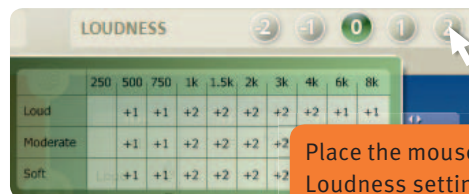Click Connect Instruments in the toolbar to manually connect the instrument.

Loudness control

Use the Loudness control to manage the client's initial reactions. The control is by default set to '0' in new fittings.
Decrease the setting if the client finds the sound too loud, or own voice too boomy/loud; primarily the LF gain is reduced.
Increase the setting if the client finds the instrument too soft; primarily the HF gain is increased.

| LOUDNESS | | 2 | 1 | 0 | 1 | |

	250	500	750	1k	1.5k	2k	3k	4k	6k	8k
Loud	+1	+1	+2	+2	+2	+2	+2	+1	+1	
Moderate	+1	+1	+2	+2	+2	+2				
Soft	+1	+1	+2	+2	+2	+2				

Place the mouse over the Loudness setting to display the control adjustments.

Use the Calculate Prescribed Settings tool in the toolbar to reset the instrument setting to target.

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BC In-situ Audiometry

Use the BC In-situ Audiometry tool to measure the BC hearing threshold via the Ponto sound processors.

When to use?
We recommend using BC In-situ at the start of all fittings.

Presenting the stimulus
You can use the mouse or keyboard to present the stimulus:
- Use the arrow keys to change the presentation level and frequency.
- Press the space bar (or PLAY TONE) as long as you want to present the stimulus.

Store value: The last tone you play at each frequency is the value that is stored.

Don't let the client see the flashing lamps on HI-PRO or NOAHLink, because they reveal when the stimulus is presented.

> Bilateral fittings: Both instruments need to be connected to conduct BC In-situ.

Talk Over
When you open the tool, the instrument's microphones are automatically muted to avoid interference from the surroundings; press the Talk Over button to talk to the client.

If the fitting is changed from a soft band/head band to an abutment, then you must again measure the hearing threshold with the BC In-situ tool, as the result will be different.

> If you cannot open the BC In-situ tool, then the instrument's firmware needs to be upgraded. See page 15.

File Genie Medical Edit Instrument Preferences Tools Window Help
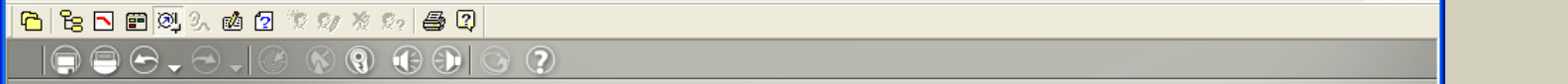
PONTO PRO

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SELECTION   FITTING   END FITTING
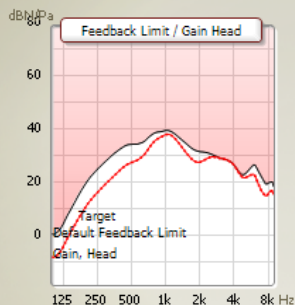
PONTO PRO POWER

FITTING

P1 ∞ P2

🎛 Controls
⊕ Program Manager

MORE TOOLS ⌃

〰 BC In-situ Audiometry
⊙ Feedback Manager
⬤ Automatics
◎ Analyzer

FEEDBACK MANAGER

P1: GEN., NAL-NL1

dBNdPa 80

Feedback Limit / Gain Head

60

40

20

0   Target
    Default Feedback Limit
    Gain, Head

125 250 500 1k 2k 4k 8k Hz

P1: GEN., NAL-NL1

dBNdPa 80

Feedback Limit / Gain Head

60

40

20

0   Measured Feedback Limit
    Target
    Gain, Head

125 250 500 1k 2k 4k 8k Hz
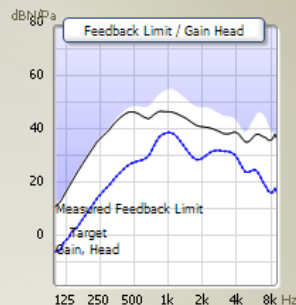
FEEDBACK MEASUREMENT

START   RESET

🅒 🅒 🅒

Reduce background noise as much as possible while
measuring feedback.

FEEDBACK LIMIT

⬇ ⬆

DFC

🅒   🅒
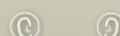
P1 ☑   ☑ P1
P2 ☑   ☑ P2

Feedback Manager

The Feedback Management system consists of Feedback Manager and Dynamic Feedback Cancellation.

The Feedback Manager automatically measures individual feedback limit and adjusts the gain curve to the individual characteristics of the client. The individual measured feedback limit is also used to optimize the volume control functionality.

The Dynamic Feedback Cancellation (DFC) system removes feedback through out-of-phase cancellation.

When to conduct the Feedback Measurement?
- Whenever feedback is present
- For Ponto Pro Power: Measure the feedback limits for every client.

You can open the Feedback Manager from P1. Measured feedback limits are applied to all programs in the instrument.

Default feedback limit
The default feedback limit in Ponto Pro Power is below max gain to minimize the risk of feedback just when the instrument is placed on the client. Click Start in Feedback Manager and the individual feedback limits will automatically be measured.

Optimized volume control usage
Once the feedback limit is measured for the individual client, then the volume control functionality is optimized to utilize all the gain below the limit, minimizing the risk of feedback when the volume control is turned up.

Dynamic Feedback Cancellation (DFC)
By default, DFC is on for mixed hearing losses and clients with Single-sided deafness; the DFC On/Off prescription is determined by gain prescribed in HF.

Automatics

Multiband Adaptive Directionality
Select among the following settings:

Ponto Pro and Ponto Pro Power	Ponto
Auto (tri-mode) Default in P1	
Auto (dual-mode)	
Surround (omni)	Surround (omni) Default in P1
Split directionality	Split directionality
Full directionality	Full directionality Default in P2

Wind Noise Reduction
Depending on the wind noise level, sounds will be attenuated. The more wind, the more attenuation. In Ponto Pro and Ponto Pro Power the Wind Noise Reduction system will – in addition – force the instrument into Surround mode.

Tri-state Noise Reduction
The Tri-state Noise Reduction system in Ponto Pro and Ponto Pro Power utilizes 15 bands.
Different noise reduction schemes are automatically applied for speech in noise and noise-only situations.

Automatic Directionality (tri-mode)
Ponto Pro and Ponto Pro Power automatically select among three modes (Surround, Split or Full directionality) based on the mode that provides the best Signal-to-Noise Ratio.

For Ponto Pro and Ponto Pro Power, consult the Analyzer/Memory to see how often automatic tri-mode directionality has been in Surround, Split and Full directional modes.
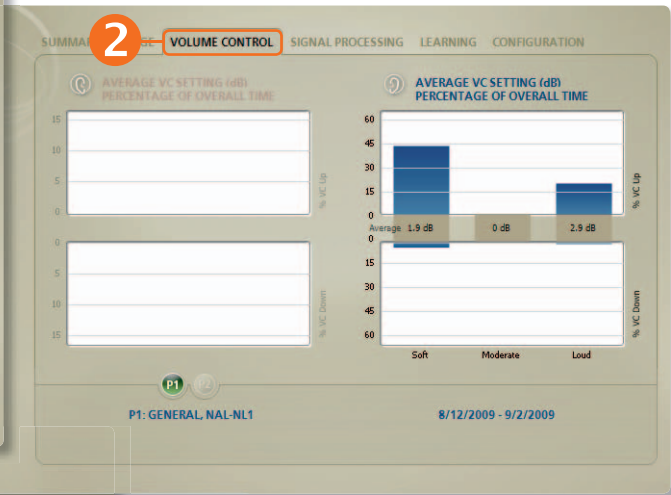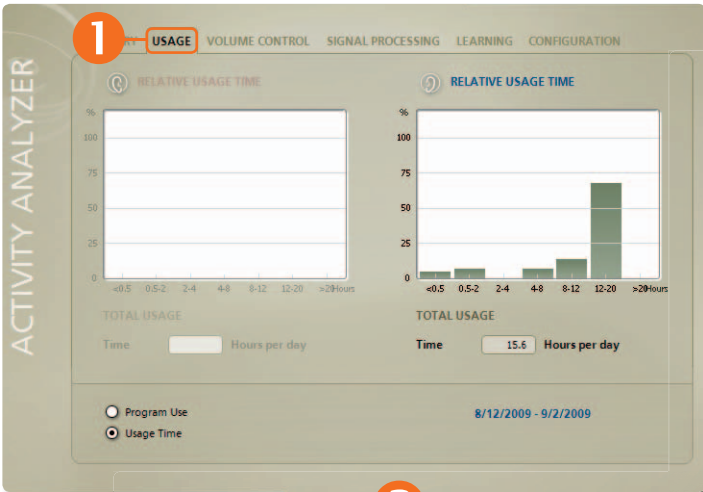
Surround (omni) setting
The non-ideal microphone placement behind the ear impairs the ear's natural directionality. A small amount of direction-ality is always applied to restore the natural sensitivity to sounds coming from the front.

Microphones

ACTIVITY ANALYZER

① USAGE VOLUME CONTROL SIGNAL PROCESSING LEARNING CONFIGURATION

RELATIVE USAGE TIME

%
100
75
50
25
0
<0.5 0.5-2 2-4 4-8 8-12 12-20 >20 Hours

RELATIVE USAGE TIME

%
100
75
50
25
0
<0.5 0.5-2 2-4 4-8 8-12 12-20 >20 Hours

TOTAL USAGE

Time _____ Hours per day

TOTAL USAGE

Time [15.6] Hours per day

○ Program Use
● Usage Time

8/12/2009 - 9/2/2009

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② VOLUME CONTROL

SUMMARY VOLUME CONTROL SIGNAL PROCESSING LEARNING CONFIGURATION

AVERAGE VC SETTING (dB)
PERCENTAGE OF OVERALL TIME

15
10
5
0

0
5
10
15

AVERAGE VC SETTING (dB)
PERCENTAGE OF OVERALL TIME

60
45
30
15
0   % VC Up

Average 1.9 dB   0 dB   2.9 dB

0
15
30
45
60   % VC Down

Soft   Moderate   Loud

P1
P1: GENERAL, NAL-NL1

8/12/2009 - 9/2/2009

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③ SIGNAL PROCESSING

SUMMARY USAGE VOLUM... **SIGNAL PROCESSING** LEARNING CO...

ACTIVITY ANALYZER

MULTIBAND ADAPTIVE DIRECTIONALITY

%
40
30
20
10
0
<40 40-50 50-60 60-70 70-80 80-90 >90   dB SPL

Environment ⌄
Tri-state Noise Management ⌄

Multiband Adaptive Directionality

Surround   Split Dir   Full Dir
79 %   15 %   6 %

P1
P1: GENERAL, NAL-NL1

8/12/2009 - 9/2/2009

Analyzer/Memory (1/3)

The Analyzer/Memory tool

The tool reveals the client's usage of the instrument, the type of environments the client has been exposed to, and how often the advanced automatic features have been active.
The tool is available only in Ponto Pro and Ponto Pro Power.

Summary tab

Provides an overview of how many hours the client has used the instrument, and at which sound levels (Envirogram).

❶ Usage tab

Displays how long the instrument has been turned on each time it has been used.
It also reveals the percentage of time each program has been used.

❷ Volume Control tab

The VC usage is shown for soft, moderate and loud environments.
Within each environment, the percentage of time the VC has been turned up or down is displayed. The average deviation from the last programmed setting is given in dB.

❸ Signal Processing tab

Tri-state Noise Management shows how long the client has been in quiet, speech only, speech in noise and noise-only environments.
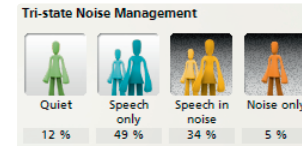
Multiband Adaptive Directionality shows how long the instrument has been in Surround, Split and Full directional modes.

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Panel 1 (upper left):

ACTIVITY ANALYZER

SUMMARY   USAGE   VOLUME CONTROL   SIGNAL PROCESSING   **LEARNING**   CONFIGURATION
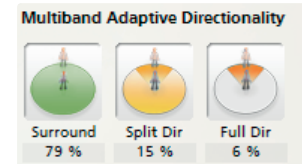
CURRENT

	Soft	Moderate	Loud
Speech Only			
Speech in Noise			
Noise Only			

1 Current
Volume Control

History

P1: GENERAL, NAL-NL1

Panel 2 (lower right):

ACTIVITY ANALYZER

SUMMARY   USAGE   VOLUME CONTROL   SIGNAL PROCESSING   **LEARNING**   CONFIGURATION

HISTORY

10

0

-10

Current   Weeks
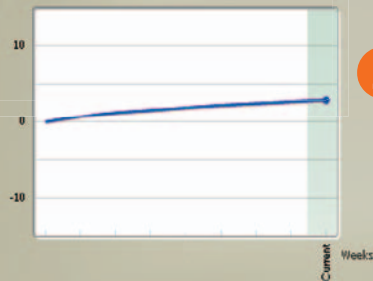
Current

2 History
Volume Control

Click RESET to remove changes derived from Learning.

RESET

P1: GENERAL, NAL-NL1   8/12/2009 - 9/2/2009

Analyzer/Memory

Learning based on the client's use of the volume control

The client's VC adjustments are logged in 9 different environments. The 9 environments are characterized by the sound level (soft, moderate and loud) and type (speech only, speech in noise and noise only).
Learning (adjustment of gain) takes place individually for each of the 9 environments and reflects the client's use of the VC in these environments.

❶ Current view of VC Learning

Changes from the initial setting are shown by vertical white bars; place the mouse over the bars to see how much the gain has changed within each environment.
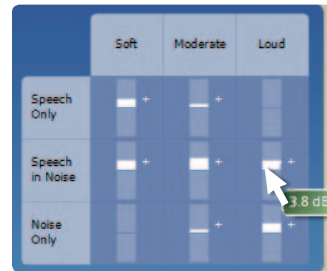
❷ History view of VC Learning

The screen shows the development over time for VC Learning. VC learning is converted into a single number.

Click Reset to delete changes derived from Learning.

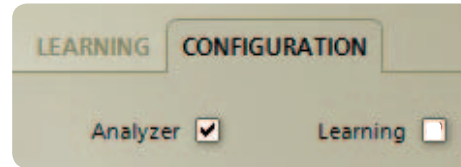# Analyzer/Memory

Configuration tab

Logging is active and VC Learning is deactive by default. In this tab you can deactivate/activate them. Load logged data from older sessions, to see possible changes in the client's usage pattern, volume control or program operation.

Click the Delete all Analyzer/Memory data icon to clear the data logged in the instrument.

Logging is active and VC Learning is deactive by default. You can change the default to set-up in Preferences/Specific Preferences/Fitting Step.

Fitting

File   Genie Medical   Edit   Instrument   Preferences   Tools   Window   Help

PONTO PRO POWER

PONTO PRO POWER

SELECTION   FITTING   END FITTING

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END FITTING

Save and Exit

Buttons and Beeps

LINKS

Accessories

SAVE AND EXIT

PONTO PRO POWER

Serial: 12196173
Logging: On
Learning: Off
Volume Control: On
Mute: On
Battery Life: Typically 80-160 hours
P1: Gen., NAL-NL1, Auto (tri-mode)
P2: Gen., NAL-NL1, Full directionality
P3: T/DAI/FM+M

PONTO PRO POWER

Serial: 14371371
Logging: On
Learning: Off
Volume Control: On
Mute: On
Battery Life: Typically 80-160 hours
P1: Gen., NAL-NL1, Auto (tri-mode)
P2: Gen., NAL-NL1, Full directionality
P3: T/DAI/FM+M

SAVE, PROGRAM AND EXIT

Client Name: Johnson, John   Session Date: Today's Date: 31-03-2011   User ID: ABC

Save and Exit

Gives an overview of the fitting and displays:
- the serial number of the instrument(s)
- the programs the client can select when the instrument is programmed and disconnected
- the directional setting in the programs.

Click Save, Program and Exit to store the setting in the instrument and in NOAH or stand-alone database.

Show how to connect/disconnect the instrument.

Connection   *Disconnection*
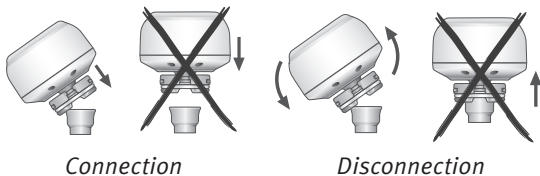
Instruct the client in the use of the instrument

Change program
Briefly press and release the pushbutton. Beeps played after the release indicate the program number.

Mute/stand-by
To mute or put the instrument on stand-by, press and hold the pushbutton until it emits 2 beeps. Release the button; the instrument is muted. Press briefly to un-mute the instrument.
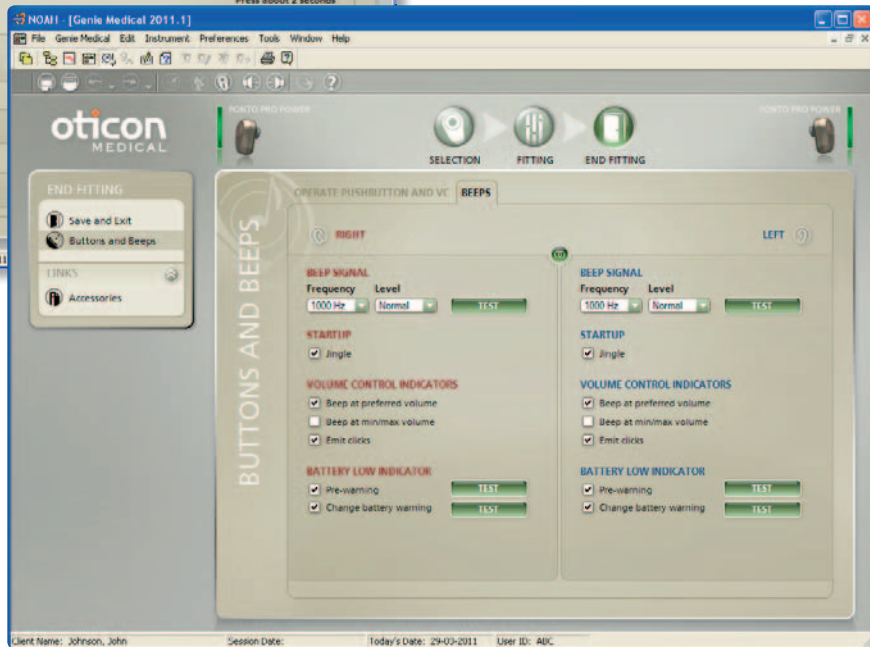
Start-up level
The instrument starts up at a gain level that matches the individual setting in the instrument.
If VC learning is active, the start-up level will adapt to the client's preferred VC setting.

See the User Manual for more information.

End Fitting

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Buttons and Beeps

Pushbutton

The pushbutton is used to operate the programs and mute the instrument.
- The pushbutton's program functionality is, by default, active when multiple programs are defined in the instrument.
- The mute/stand-by functionality is, by default, active.

Volume control
- Is by default active; you can deactivate it here.

One program by default

If you want the client to have only one program, which is not P1, you can define it here.

Example: To specify only a T/DAI/FM+M program:
1) Program Manager: Add the program
   (in this example it is P2)
2) Buttons and Beeps: Click Select default program, and P2.
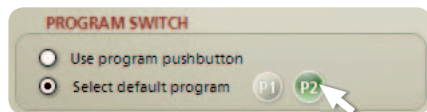
Beeps

Go to the Beeps tab to select the beep function or change frequency and beep level.

By default, the following are active:
- Start-up jingle
- Beep at preferred VC volume
- Clicks indicating the VC step when volume is changed
- Battery low pre-warning
- Change battery warning

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File Genie Medical Edit Instrument Preferences Tools Window Help

Reset to Factory Settings...

RESET TO FACTORY SETTINGS

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MEDICAL

END FITTING

- Save and Exit
- Buttons and Beeps

LINKS

- Accessories

SAVE AND EXIT

FACTORY SETTINGS

USER SETTINGS

dBHLIPa
80

Gain, Head - Target and simulated
Pure/Warble Tone

60

40

20

0   65
Target 65

-20
125   250   500   1k   2k   4k   8k   Hz

PONTO PRO POWER

dBHLIPa
80

Gain, Head - Target and simulated
Pure/Warble Tone

60

40

20

0   65
Target 65

-20
125   250   500   1k   2k   4k   8k   Hz

PONTO PRO POWER

User settings
Factory settings

Click Program to replace User settings with Factory settings
and delete the logged and learned data in the instrument. The
instrument will then be disconnected. The client's individual
settings and Activity Analyzer data are stored in Genie
Medical.

PROGRAM

User settings
Factory settings

User settings are stored in the instrument.
To replace them with factory settings, select Factory Settings
and click Program.

PROGRAM

HELP   CLOSE

SAVE, PROGRAM AND EXIT

Client Name: Johnson, John   Session Date: Today's Date: 29-03-2011   User ID: ABC

Factory Settings

Open the Reset to Factory Settings tool in the End Fitting step from the Tools menu.

Reset to Factory Settings
Use this tool to reset the instrument to its factory settings. For various reasons, you may wish to use the factory settings in the pre-operative evaluation.

1. Select Factory Settings
2. Click Program
   The logged data is now cleared from the instrument and the settings are reset. The instrument is automatically disconnected from Genie Medical.
3. Click Close
   The client data will be saved when you close Genie Medical.

> You can always read the logged data from an instrument, including an instrument with factory settings. This is useful if you want to see how much the instrument has been used on a test band.

Factory Settings
The instruments are delivered with the following programs and settings:

Ponto Pro and Ponto Pro Power
P1: General mic. (Wideband amplification, Automatic directionality, Noise Reduction)
P2: General mic. (High-frequency emphasis, Automatic directionality, Noise Reduction)
P3: T/DAI/FM, microphone Off

Ponto
P1: General mic. (Wideband amplification, omni directionality)
P2: General mic. (High-frequency emphasis due to Full directionality)
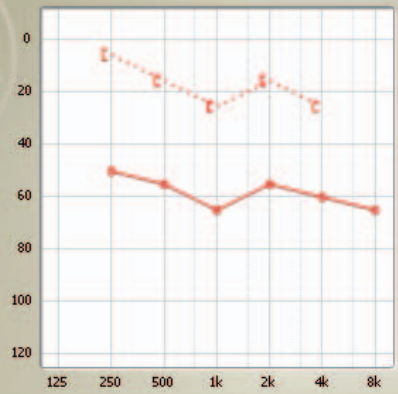P3: T/DAI/FM, microphone Off

End Fitting

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File   Genie Medical   Edit   Instrument   Preferences   Tools   Help

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CLIENT   SELECTION   FITTING   END FITTING

AUDIOGRAM

CLIENT

Select Client
Client Details
Audiogram
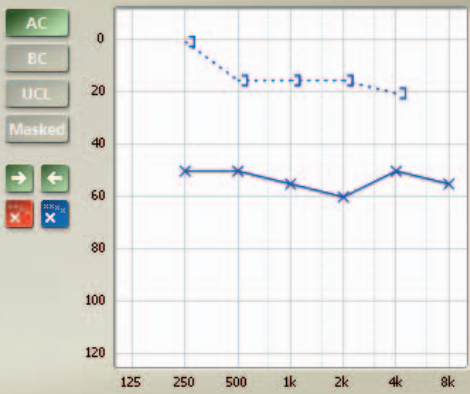
AC
BC
UCL
Masked

	125	250	500	750	1k	1.5k	2k	3k	4k	6k	8k
o●		50	55		65		55		60		65
⟨[		5	15		25		15		25		
m											

AC
BC
UCL

	125	250	500	750	1k	1.5k	2k	3k	4k	6k	8k
××		50	50		55		60		50		55
⟩]		0	15		15		15		20		
m											

Client (stand-alone database)

Genie Medical can run stand-alone with its own data-base, in which client data and instrument settings are stored.

Select Client
1. Click New to start entering a new client
2. Fill in the client data
3. Click Save
4. Go to Audiogram to enter BC and AC thresholds

Audiogram
Enter the BC and AC values either in the audiogram or in the table below. Right click in the graph to delete a tag or to indicate that it is unmeasurable.

> BC unmasked symbol
> In the menu Preferences/Specific Preferences/Graph Format you can choose the symbol for unmasked BC: Either ‹ › (default) or [ ].

See the Audiological Manual for more information about patient selection, fitting range, instrument data, etc.

See the Product Information for more information about instrument data.

You can download the documents from **www.oticonmedical.com**

# Pediatrics – useful functions in Genie Medical

Soft band fitting mode
We recommend activating the Soft band box in the Selection task when fitting the instrument on a soft band. This will compensate for the damping of the signal via skin and tissue. See also Pre-operative Evaluation, page 9.
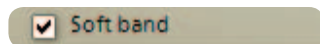
Fitting infants
For infants wearing the instrument on a soft band on the forehead, ensure that the instrument has a fixed omni program:
In Fitting step, Automatics, set Directionality to Surround.
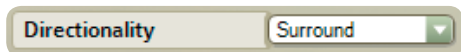
Analyzer/Memory
You can at any time connect Ponto Pro and Ponto Pro Power to Genie Medical and, in Analyzer/Memory, see how long the instrument has been turned on, and in which environments.

Deactivate pushbutton and VC
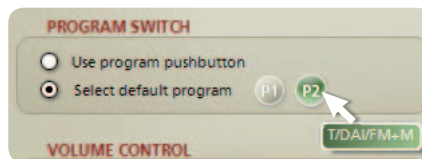Go to End Fitting/Button and Beeps to deactivate:
- Program operation
- Volume control
- Mute/Stand-by
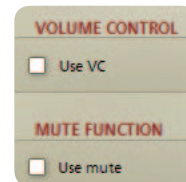
Only a T/DAI/FM+M program
If you want the child to have only a T/DAI/FM+M program, then:
1. In Program Manager, click Add to add a P2.
   Select the T/DAI/FM+M program for P2.
2. In End Fitting step/Buttons and Beeps, choose Select default program, and click P2.


Accessories
Click Accessories in the Selection or End Fitting steps to see which accessories are available (e.g. FM system, soft bands, stickers, etc.).

Fitting strategy and Speech Guard

- **Conductive and mixed losses**
  The prescription of gain for conductive losses is based upon published studies and internal tests. The prescribed gain is linear, as there is no hearing loss in the cochlea. In mixed hearing losses, the sensorineural part of the hearing loss is compensated for according to modified NAL- NL1, so little compression is prescribed.

- **Single-sided deafness**
  Compared to a conductive hearing loss, reduced low-frequency amplification is provided as there is no head shadow effect at low frequencies. The low-frequency reduction lowers interference in the good ear. In addition, more high-frequency amplification is provided to compensate for the transcranial attenuation.

Speech Guard

All Ponto sound processors utilize the Speech Guard signal processing system, which works by maintaining linear processing as much as possible, but at the same time responding instantaneously to rapidly occurring environmental sounds – without the level of distortion experienced with traditional compression systems.
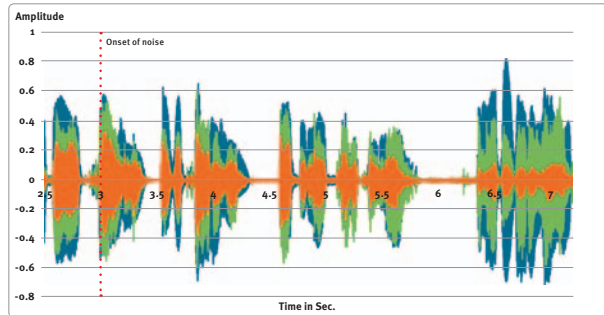
The envelope of the original speech signal (blue), speech processed by Speech Guard amplification system (green), and speech processed by an advanced amplification system without Speech Guard (orange).

- ■ (blue) Original input signal
- ■ (green) Signal processed with Speech Guard
- ■ (orange) Signal processed without Speech Guard

The vertical dotted line indicates the onset of high frequency noise at 3 seconds for the speech signals processed with (green) and without (orange) Speech Guard. The level of both speech and the noise were 70 dB SPL. Note that the speech processed by Speech Guard matches the original speech signal in amplitude variation far better than speech processed by a system without Speech Guard. Speech Guard has the unique ability to better preserve signal integrity even in the presence of noise.

Conventional BC audiometry thresholds

We recommend measuring the hearing threshold with the BC In-situ tool; if this tool is not used and the fitting thus is based upon conventional BC audiometry thresholds, then the gain prescribed for

- conductive and mixed hearing losses is based upon BC thresholds entered for both left and right sides. This takes into account the fact that sounds always cross from one side of the skull to the other in a bone-anchored hearing solution.
  For asymmetrical BC thresholds, gain is prescribed to the cochlea with the lowest gain prescription.

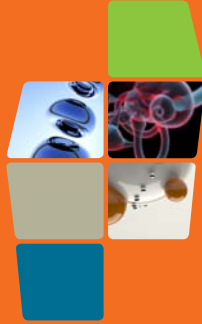- single-sided deafness fittings are based upon the BC threshold for the good ear.

We recommend entering the BC threshold for both sides also when performing a monaural fitting.

BC HTL   BC HTL
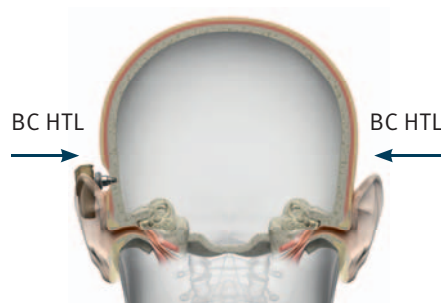
Conductive/mixed HL:
Measure BC on both sides

BC HTL
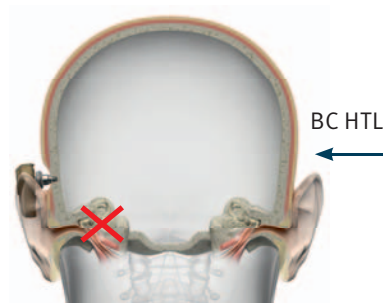
Single-sided deafness:
Measure BC on the good ear side

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M51107 / 04.11

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