

Phonak Insight

Phonak Target™ Fitting that fits you

Introduction

The Phonak Spice Generation introduces not only a new generation of hearing products but also a new fitting software to ensure that the Hearing Care Professional (HCP) can easily take full advantage of all the new features and functionalities the products have to offer. Phonak Target™ includes not only the functionalities you expect, but also new fitting tools that will simplify a fitting, allowing for more time to focus on the client's needs.

Development from the ground up

The Spice Generation of hearing products heralds a fresh, new approach to fitting software. Phonak Target™ is the culmination of more than 15 years experience in designing fitting software plus years of gathering input from the hearing healthcare community. It is an innovative fitting software that fulfills the user-requirements of HCPs.

Phonak Target™ complements the brand new look and feel of the Phonak Spice Generation platform. It is forward-looking and capable of adapting to upcoming advances in fitting hearing instruments and accessories.

One of its multifunctional capabilities is the possibility of bridging CORE instruments with the Phonak Spice Generation and also integrating products Phonak will develop in the future. HCPs do not have to worry about the future with Phonak Target™ software.

Phonak Target™ Goals

During the design and development phase, feedback was gathered from all communication channels like audiology clinics, educational seminars plus the sales and support teams. Their inputs were used to define what the important goals Phonak Target™ would have to meet in order to fulfill the fitter's experience.

- User-centered design was a key goal in the development of Phonak Target™. It was vital to take all the aspects required in a fitting process and apply the desired features in an uncomplicated manner in the software.
- An easy and open workflow for all individual fitting strategies creating the best possible fitting is important, taking into account different clients' needs as well as the amount of time required to fit each individual.

- We also recognized that one of the most desired needs of the HCPs was transparency in the fitting software. It is important to see, at a glance, how an adjustment affects other settings.

Phonak Target™ highlights at a glance

User centered design

Phonak Target™ offers a fitting software with a simplified structure that supports the individual methods and workflows of different HCPs. The software provides quick and easy access to all hearing instrument and accessory features. This transparency provides a clear insight into the instrument settings so HCPs can focus more fully on their client's needs during the fitting process.



Fig. 1: The newly designed fitting screen shows the simplified areas, which include information on the client, their instrument(s), and the fitting.

In the main screen, the HCP can access the 'News Area' for information about the latest products and features from Phonak. The online upgrade service for Phonak Target™ can be easily accessed with an internet connection directly from the main screen. Phonak Target™ upgrades can be processed in the background even during fitting sessions.



Fig. 2: In the main screen, HCPs have direct access to client data, session information, media content, news, product tools, software update, as well as the software setup.

Diagnostic data history

A unique feature of Phonak Target™ is how it displays the audiogram, Real Ear to Coupler Difference and Real Ear Unaided Response measurements. It is now very easy to select and compare diagnostic data obtained in different sessions without having to exit the software. An additional benefit is the ability to view the progression of hearing loss over time, a tool that is extremely valuable in the counseling process.

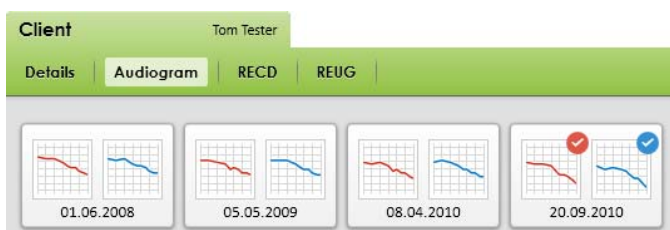


Fig. 3: Display of available audiograms in the Client screen.

Real Ear Calibration

For precise results and a better first fit, individual data beyond the audiogram and the selected acoustic coupling is essential. It is now possible to test and evaluate Phonak Spice Generation hearing instruments directly in the client's ear. Real Ear Calibration combines the individual feedback threshold, RECD data, and acoustic parameter settings to create a more accurate fitting calculation. This is true personalization. Additional test equipment is not required.

Direct Sound Compensation

The combination of gain provided by the hearing instrument and un-amplified environmental sounds that enter directly through the ear canal can lead to undesired effects particularly in open canal fittings. To overcome this phenomenon and achieve the best possible sound quality, Phonak Target™ developed Direct Sound Compensation to supplement the pre-calculation. This unique algorithm automatically ensures that amplification is not applied for frequencies that are already audible directly through the vent. This dynamic process insures that both direct and amplified sounds combine optimally for a more natural sound quality.

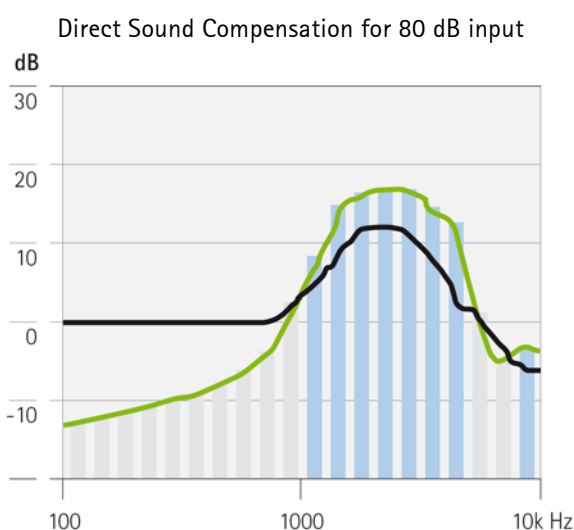
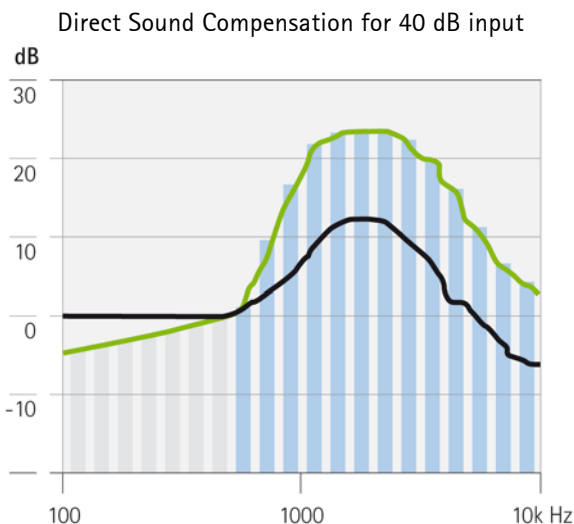


Fig. 4 and 5: Real Ear Occluded Gain (black lines) and the Real Ear Aided Gain (green lines) for soft (40 dB) and loud (80 dB) input levels for a mild hearing loss. No gain is applied where direct sound is already at or above the target gain. This dynamic process varies depending on the input level.

The diagrams above show the Real Ear Occluded Gain (black line) and the Real Ear Aided Gain for 40 and 80 dB input levels (green lines) for a mild hearing loss. The bars highlight the range where Direct Sound Compensation is dynamically applied. This hearing loss requires little gain in the low to mid frequencies. Therefore, Direct Sound Compensation is dynamically active for all input levels. In the high frequencies, soft (G40) as well as moderate sounds, require more amplification than loud sounds (G80). Less amplification is applied to loud sounds due to the direct natural sound being sufficiently audible. Because of this, loud sounds in the high frequencies are more affected by Direct Sound Compensation.

Audibility Fine Tuning

This unique feature gives the HCP the possibility to adjust the hearing instrument response for more difficult listening situations. For example, increasing the clarity for sounds such as "s", "sh", "f," which are crucial for speech recognition and intelligibility. These individual phonemes are spectrally calibrated and can be selected and presented as sound samples to the client. Depending on the outcome desired, only the appropriate adjustment tools will be made available and the curve displays will reflect how these sounds are amplified in comparison to the client's hearing threshold. During the Phonak Target™ market trials, the Audibility Fine Tuning feature was evaluated and determined to be a valuable and purposeful tool.

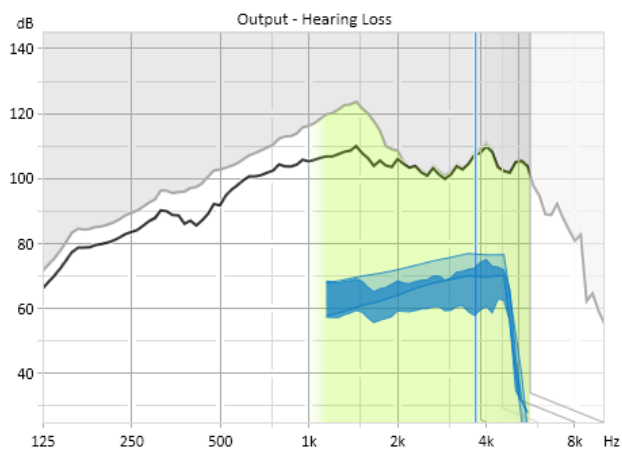


Fig. 6: Direct Sound Compensation curves. The dark blue range represents the current setting for the selected sound. The transparent blue range represents the fitting target depending on the input level of the sound.

Transferring of existing fitting data

Existing fitting data from iPFG compatible hearing instruments can be transferred from iPFG 2.5 onwards into Phonak Target™. The individual fine-tuned frequency responses and the customized program structure of the fitting can be easily migrated from iPFG to Phonak Target™, providing an opportunity to upgrade clients to Phonak Spice Generation hearing instruments.

Engage your client

Phonak Target™ offers a resource to facilitate the counseling process for clients and their significant others. Information about hearing, hearing loss and products can be presented on your computer screen or on a second display screen. The Media Player includes a full range of sound samples, as well as the hearing loss simulator. The counseling information is always easily accessible within the client session.

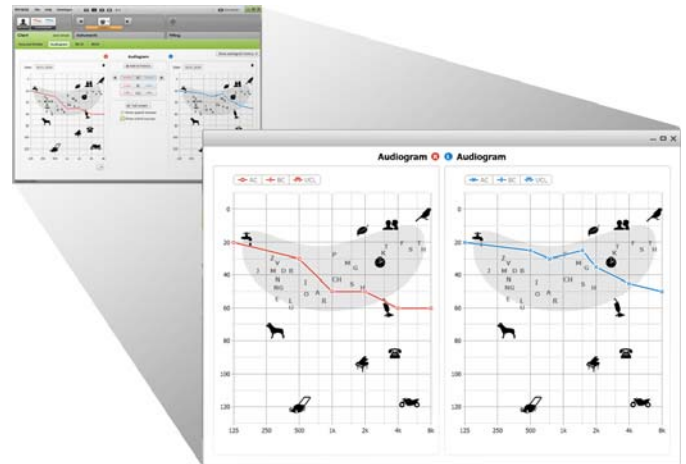


Fig. 7: Phonak Target™ lets you directly compare audiograms and displays the speech spectrum with sound samples.

Successfully tested

Positive market trial feedback has demonstrated that Phonak Target™ fulfils the requests of HCPs, resulting in an easy transition to the new software. Unique features like Real Ear Calibration, Direct Sound Compensation and Audibility Fine Tuning enhance the individual fitting to achieve an improved spontaneous client acceptance.

Phonak Target™ reacts faster, offers new features and guarantees the readiness for the latest Microsoft operating systems as well as current and new NOAH versions. The efficiency of Phonak Target™ is not only due to faster fitting speed and reaction time, but also to the new user-centered design that will undoubtedly ease the transition for HCPs to the software.

Every HCP can now benefit from the state of the art technology within the Spice Generation hearing systems, as well as the new Phonak Target™ fitting software.

Recommended system requirements for Phonak Target 1.0

Processor	Pentium IV, 2 GHz or faster
RAM	2 GB or more
Hard disk space	2 GB or more
Operating system	<ul style="list-style-type: none">▪ MS Windows XP, 32 bit, SP2 and later▪ MS Windows Vista, 32 bit / 64 bit, latest SP▪ MS Windows 7, 32 bit / 64 bit
Screen resolution	1280 x 1024 pixels or more
Graphic card	16 Million (24bit) screen colors or more <ul style="list-style-type: none">▪ DirectX 9 capable▪ Microsoft label: 'Premium Ready PC'
Drive	DVD-Rom or CD-Rom
Serial COM port	One for HI-PRO if used via serial COM port
USB ports	One for each purpose: <ul style="list-style-type: none">▪ Bluetooth adaptor▪ Accessory programming▪ HI-PRO if used via USB port
Programming interfaces	<ul style="list-style-type: none">▪ iCube▪ NOAHlink▪ HI-PRO
NOAHlink driver	NOAHlink properties and NOAHlink kernel: latest version available
Internet connection	Highly recommended
Browser	Internet Browser
Sound card	Surround 5.1 or stereo
Playback system	20 Hz – 14 kHz (+/- 5 dB), 90 dB
NOAH version	NOAH 3.5 or newer

Phonak Target™ can be used as stand-alone software and as NOAH module.

To easily find out if the fitting computer fulfills the recommended system requirements, use System Check, a quick and easy program. It is already available if iPFG 2.5 or iPFG 2.6 is installed, To run the program click [Start] > [Programs] > [Phonak] > [Tools] > [System Check].

For more information www.phonakpro.com