Beltone Boost Max
Fitting guide
A guide for professionals
First fitting with Beltone Solus Max 1.1

This fitting guide gives an overview of how to fit Beltone Boost Max wireless hearing instruments with Beltone Solus Max 1.1. A Beltone Boost Max 17-DW 95 wireless binaural fitting is depicted. Not all features described in this fitting guide are applicable for Beltone Boost Max 9 fittings.

Beltone Solus Max 1.1 fitting software supports the new hearing instruments Beltone Boost Max and Beltone Trust, as well as Beltone legacy hearing instruments via the Launcher.

Prior to connecting to Beltone Solus Max

Beltone hearing instruments require a fresh battery when fitting. Remove the stickers from the batteries to activate them. Wait for 2 minutes for best results.

• Wireless fittings: Insert Noahlink Wireless in a USB slot on the fitting PC and wait for the message that new hardware has been found. Then open Beltone Solus Max.

• Wired fittings: Ensure that the programming interface (Speedlink, Hi-PRO USB or NOAHlink) is connected to the PC before launching Beltone Solus Max.

Launch Beltone Solus Max. For new fittings, Beltone Solus Max begins in the Launcher.
Launcher

Both Beltone Solus Pro 1.12 and Beltone Solus Max 1.1 are contained within one software installation. The Launcher will detect both Beltone Boost Max and legacy instruments, and then retrieve the software appropriate for the connected device.

1. Insert the battery and close the battery door of each hearing instrument to be programmed.
2. Click ‘Connect’ in the upper right of the Launcher screen.

Select instruments

The hearing instruments will appear in the ‘Select instruments’ section.
1. When the hearing instruments to be programmed have been identified, select them by checking the box on the left.
2. Assign the hearing instruments to the right and left ears by choosing the appropriate radio button for the right and left sides. It is recommended to beep the instrument for confirmation that the instrument selected in the software is in fact the instrument being used in the fitting and on the correct side.
3. Continue in the lower right of the screen once the hearing instruments are selected and assigned.
Connection flow

Once the hearing instruments have been selected the connection process will begin.

1. Select the Physical Properties of the Then click ‘Continue’.

2. Calibrate instruments to activate Feedback Eraser.
3. Verify connected hearing instruments. Click ‘Continue’ to proceed to the Patient Profile screen or pair accessories by clicking ‘Accessories’.

**Pairing wireless accessories**

1. Click ‘Add’ beneath the accessory you wish to pair.

2. Once the searching pop-up appears, press the pairing button on the accessory with a small pointed objects such as the accessory tool, a pen tip or paper clip. Follow the pairing instruction displayed.
3. When the accessory is successfully paired, the accessory image will appear in color with a remove button below. Click ‘Done’.

Patient profile screen
1. Select the Patient Experience Level based on the amplification history.
2. Set programs for initial fit.
3. Click ‘Fit Patient’ button in the lower right corner to move to Fitting Screen.

Note: The Beltone Remote Care feature tab is in the lower level navigation under the blue upper navigation, where you can activate online remote services if desired.
Fitting screen

In the Fitting screen, you can adjust the Gains, Advanced Features, Smart Gain Pro and Device Controls.

1. Access to instrument controls is found on the Fitting screen. The tabs below the blue navigation bar will provide access to these tools.

2. Additional tools and features can be found in the upper right menu (see inset for details).

3. Programs are listed in the program tabs. To select a different program, select the arrow in the tab to view program options. Select the ‘+’ to add additional programs. Program tools, allowing you to “Reorder” the programs or “AutoRelate” them to each other, appear on the right side of the program bar.

4. Click the ‘Save’ button to save the fitting to the hearing instruments and database.

5. Wireless accessories can be paired both outside and inside the software. To pair inside the software select ‘Pair Accessories’. Be sure that the accessory is charged or plugged in, and turned on during the pairing process.
Advanced features

Advanced features are prescribed per program, and can be modified from their default settings selecting from the drop down box or by moving the slider to the desired value. The defaults are set based on the program environment, which is selected in the program tab.

Directionality

CrossLink Directionality 2: Uses Beltone 2.4 GHz wireless technology to allow the hearing instruments to work together, dynamically selecting the best microphone response for the listening environment. Possible configurations are bilateral omnidirectional, bilateral directional or an asymmetric omnidirectional and directional response, depending on the analysis of speech and noise detectors from both hearing instruments. This provides the optimal combination of speech understanding in noise plus a more natural sense of surroundings.

Spatial Directionality: The Focus (directional) ear and Monitor (omnidirectional) ear are prescribed based on the audiogram and any speech audiometry data that may be available.

Personal Sound ID: An omnidirectional microphone response, which mimics the human ear’s natural response to sound, preserves spatial cues and helps with the localization of sound sources.

Speech Spotter: Seamlessly enables and disables Adaptive Directionality depending on the listening environment. The response can be either omnidirectional or directional, based on whether noise is present and the direction of speech in the listening situation. In 17 and 9 level devices, the settings are synchronized for binaural fittings.

Smart Beam Adaptive Directionality: Enables the beam width to automatically widen or narrow depending on the acoustic surroundings, and directs the null of the response towards the noise for better SNR benefit.

Mixing Point Frequency

All directional microphone modes have both omnidirectional and directional processing through the frequency spectrum. The setting determines the degree of directionality in the output of the hearing instrument(s). Mixing Point Frequency applies omnidirectional processing below a crossover frequency and directional processing above that frequency. The default setting is prescribed depending on the hearing instrument model selected and the degree of low-frequency hearing loss. If the patient is still experiencing difficulty hearing in noise, decreasing the Mixing Point Frequency may help.

Time Constants

This feature adjusts the attack and release times of the compressor. The default setting, “Syllabic,” applies fast time constants, and the “AVC” setting applies slow time constants. It is recommended not to adjust these time constants unless the patient has prior experience with amplification using slow time constants, or is not doing well with speech perception with fast time constants.
Feedback Eraser with WhistleStop
This is the feedback control. It is activated when the devices have been calibrated for Feedback Eraser. The default setting is Mild. Adjust the setting to a stronger level (Moderate or Strong) if concerns for feedback arise. The Music Mode setting is a Mild setting, typically used for music programs or if the patient experiences feedback only when tonal sounds occur (for example, from a musical instrument).

Safeguard Feedback Control
This is a feedback control setting that is activated automatically before the hearing instrument has been calibrated for Feedback Eraser. Safeguard Feedback Control is designed for use when a patient is unable to return to the clinic for the fitting, and the hearing instrument is instead shipped to the patient from the fitter. It applies a mild level of feedback cancellation, but as it has not been calibrated for the patient’s ear, it may not be as effective at controlling feedback as a “Mild” setting of Feedback Eraser.

Sound Cleaner Pro
Sound Cleaner Pro noise reduction uses spectral subtraction to reduce noise between words and syllables in many real-world noisy environments. The Per Environment setting allows for personalized noise reduction settings in 7 environments. The environments include Quiet, Soft Speech, Loud Speech, Moderate Speech in Noise, Loud Speech in Noise, Moderate Noise and Loud Noise, and classification is performed on a continuum if the listening situation has characteristics of more than one listening environment. If a patient is reporting specific issues such as hearing conversation in restaurants, for example, the fitter can precisely increase the Sound Cleaner Pro setting only for restaurant-like environments, including Moderate Speech in Noise or Loud Speech in Noise. This maintains the setting for other environments, permitting a great amount of fitting precision and personalization. Alternately, the Mild, Moderate and Strong settings of Sound Cleaner Pro apply the same level of noise reduction for all listening environments, when noise is present.
Wind Noise Reduction
Wind noise reduction applies noise reduction specifically for windy situations. The default setting is Off. If a patient is experiencing too much wind noise, increase the setting to a stronger level. If the patient experiences the hearing aid becoming quiet occasionally in outdoor situations, reduce the setting to a milder level.

Silencer
This is expansion, which reduces amplification for low-level sounds, such as fans and refrigerator motor noise.

Low Frequency Boost
Low frequency boost is a quick way to increase the low frequency gain from 250 – 1000 Hz.

Sound Shifter
Sound Shifter applies proportional frequency compression to the fitting. Higher frequencies are lowered to a more usable or audible range for the patient. As patient candidacy criteria for the use of frequency lowering is based on many factors, the default setting is Off. However, if the fitter perceives the patient could benefit from frequency lowering, in the case of continued difficulties with speech recognition or previous success with frequency lowering features, Sound Shifter can be activated.

Smart Gain Pro
Smart Gain Pro allows specific gain and Sound Cleaner Pro adjustments for seven different environments, ensuring the user receives optimal gain and noise reduction settings as the acoustic environment changes. Classification is performed on a continuum if the listening situation has characteristics of more than one listening environment. With binaurally fit wireless devices, the hearing instruments will optimize and synchronize the Smart Gain Pro settings for a binaural fitting. If a patient experiences difficulty in a particular listening environment, adjust the sliders to assign environment-specific gains and noise reduction settings without requiring a manual program change or altering overall program settings.
Device Controls
This screen allows you to view, alter and demonstrate the settings of the program button and other controls to your patient. It also allows you to program and demonstrate beeps in the hearing instruments, such as “Low Battery Warning Level” and “Smart Start.”

Summary Screen
This screen allows you to view information about the fitting. Program settings, the operations of the program button, trial period end dates and session notes can be viewed or entered on this screen. There is also the option to save the fitting to the database and hearing instruments, or to the database or hearing instruments alone.
Completing a follow-up fit with Beltone Solus Max 1.1

Following the same connection tips as in the beginning of this document, launch Beltone Solus Max. For follow-up visits, the software that was used in the previous fitting will launch.
Upgrading a patient from legacy hearing instruments to Beltone Boost Max

**Beltone Solus Pro 1.12**

If the patient has an existing hearing instrument fit in Beltone Solus Pro, Beltone Solus Pro 1.12 will open when you begin a new fitting.

1. Click the ‘Go to Solus Max’ button at the bottom left of the screen to close Beltone Solus Pro and arrive at the Solus Max Launcher.

2. Follow steps in the ‘First Fitting’ section of this guide.

Note: To transfer settings from a legacy fitting to Beltone Boost Max, select ‘use session’ in the fitting data mismatch screen of the connection flow. To start a fresh fitting choose ‘reset to initial fit’.
Replacing one hearing instrument of a pair

Connecting during a follow-up
When returning for a follow-up visit, the software will open to the last saved session. Depending on the saved preferences, the session will open to either the Patient Profile screen or the Fitting screen.

1. Insert the battery and close the battery door of each hearing instrument to be programmed.
2. Select the desired interface and click ‘Connect’ in the collapsible side bar panel.
3. The hearing instruments will appear in the ‘Select Instruments’ section. When the hearing instrument to be programmed has been identified, select it by checking the left box.
4. The hearing instrument that has already been programmed for this patient will already be assigned to the right or left side. When the other instrument is selected, it will automatically be assigned to the opposite side. It is recommended to beep the instrument for confirmation that the instrument selected in the software is in fact the instrument being used in the fitting and on the correct side.
5. Continue in the lower right of the screen once the instruments are selected and assigned.
6. Continue to the connection flow and follow steps in the ‘First Fitting’ section of this guide.

Note: To transfer setting from session to replaced instrument, select ‘use session’ in the fitting data mismatch screen of the connection flow. To start a fresh fitting choose ‘reset to initial fit’.
Beltone. Helping the world hear better

Beltone was founded on the act of helping a friend to enjoy life more. Since 1940, we have provided knowledge, tools, service and training to the professionals servicing the hearing impaired. Beltone makes quality hearing care available to more people. To do so, we develop technically optimal hearing solutions without ever losing focus on the individual’s needs. It is our belief that no individual should be denied the possibility of an improved life with better hearing.