Made for iPhone | iPad | iPod

Works with android

# User guide

Beltone Behind-The-Ear power hearing aids, Rechargeable

Beltone Imagine™

Beltone

# Hearing aid information

| Left hearing aid | | Right hearing aid | |
|---|---|---|---|
| Serial number | | Serial number | |
| Model number | | Model number | |
| Battery type | ☐ Rechargeable | | |

| Program | Beep | Description |
|---|---|---|
| 1 | One beep | |
| 2 | Two beeps | |
| 3 | Three beeps | |
| 4 | Four beeps | |

# Table of Contents

# Introduction

Thank you for choosing Beltone hearing aids. We recommend that you use your hearing aids every day.

 **NOTE:** Read this booklet carefully BEFORE using your hearing aids.

## Intended purpose

- The hearing aid is intended to compensate for hearing impairment by amplifying and transmitting sound to the ear.

### Target group/User profile

- The hearing aid is intended to be used by adults and children 12 years of age or older.
- The hearing aid is intended to be used by lay persons.
- The hearing aid is intended to be fitted by qualified hearing care professionals.

### Therapeutic indications

- Sensorineural, conductive or mixed hearing loss.

### Contra-indications

A hearing care professional should advise a prospective hearing aid user to consult promptly with a licensed physician (preferably an ear specialist) before dispensing a hearing aid, if the hearing aid dispenser determines through inquiry, actual observation, or review of any other available information concerning the prospective user, that the prospective user has any of the following conditions:

- Visible congenital or traumatic deformity of the ear.

- History of active drainage from the ear within the previous 90 days.
- History of sudden or rapidly progressive hearing loss within the previous 90 days.
- Acute or chronic dizziness.
- Unilateral hearing loss of sudden or recent onset within the previous 90 days.
- Audiometric air-bone gap equal to or greater than 15 dB at 500 Hertz (Hz), 1000 Hz, and 2000 Hz.
- Visible evidence of significant cerumen accumulation or a foreign body in the ear canal.
- Pain or discomfort in the ear.

## Side effects

If you experience side effects, contact your hearing care professional. Possible side effects from wearing a hearing aid may be:

- Dizziness
- Tinnitus
- Perceived worsening of hearing loss
- Nausea
- Skin reaction
- Ear wax accumulation

## Symbols

**WARNING:** Points out a situation that could lead to serious injuries.

**CAUTION:** Indicates a situation that could lead to minor and moderate injuries.

**NOTE:** Advice and tips on how to handle your hearing aid better.

Follow instructions for use.

Equipment includes an RF transmitter.

Product is a Type B applied part.

Date of manufacture.

Do not dispose of your hearing aids and batteries with ordinary household waste. Your hearing aids and batteries should be disposed of at sites intended for electronic waste or returned to your hearing care professional for safe disposal.
Please ask your local hearing care professional concerning disposal of your hearing aid.
NOTE: There may be specific regulations in your country.

Legal manufacturer.

MD — Medical Device.

℞ ONLY — By prescription only (US).

Complies with ACMA requirements.

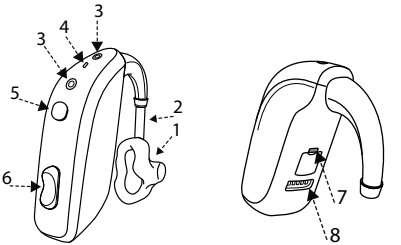
Complies with IMDA Standards DA105282 — Complies with IMDA requirements.

UDI — Unique Device Identification.

# Getting to know your hearing aid

## Model 86

1. Earmould
2. Tube
3. Microphone inlets
4. LED green indicator light
   (See page 14)
5. Program button
6. Volume control
7. Left/Right identification
   Left = blue. Right = red.
8. DAI (Direct Audio Input) connector




**NOTE:** Use only original consumables from Beltone, e.g. tubes.

# Charging your hearing aids

We recommend that you fully charge your hearing aids before using them. This is just a precaution to make sure that you don't run out of power unexpectedly. To learn how to charge your hearing aids, please consult the user guide for your hearing aid charger.

## Battery warnings

**WARNING:**

- Rechargeable hearing aids contain Li-Ion batteries. Exposure or ingestion can be seriously harmful.
- Never put your rechargeable hearing aid in your mouth. Keep your rechargeable hearing aid away from pets, children and people with cognitive, intellectual or mental health challenges.
- If a Li-Ion battery or a rechargeable hearing aid is swallowed, seek immediate medical attention.
- If the outer casing of your rechargeable hearing aid is broken, the rechargeable batteries inside may leak. In this case, do not attempt to use the hearing aid – contact your hearing care professional.
- Battery leakage can cause chemical burns. If you get exposed to battery leakage material, rinse immediately with warm water. If you get chemical burns, redness or skin irritation from battery leakage, seek medical attention.
- Batteries are harmful for the environment. Therefore, never try to burn them – dispose of your used rechargeable hearing aids according to your country’s regulations or return them to your hearing care professional.

- For safety reasons, use only the charger provided with your hearing aid.
- When traveling, consult your airline about any rules for transportation of your hearing aid and charger.

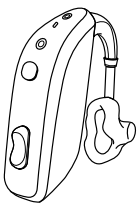
## Low battery alert

When the batteries are low on power, the volume in your hearing aids will momentarily reduce and a melody will play every 15 minutes until there is no more power - then your hearing aids will turn off.

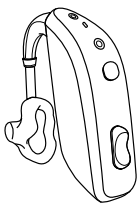
# Placing your hearing aids in your ears

## How to tell left from right

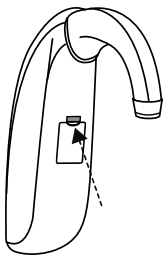
**Left hearing aid (blue marking)**



**Right hearing aid (red marking)**



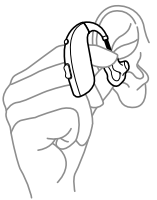
**Colour marking shown here**

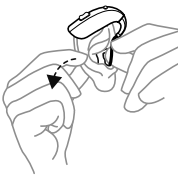


⚠ **CAUTION:** If you have two hearing aids, they may be programmed differently. Do not swap them as this could damage your hearing.
Your hearing aids are colour-coded. Left = blue. Right = red.
If your hearing aids are not colour coded, ask your hearing care professional to add colour coding.

## Inserting earmoulds into your ears

1. Hold the earmould between your thumb and index finger and position its sound outlet in your ear canal.
2. Slide the earmould all the way into your ear with a gentle, twisting movement.
3. Turn the top part of the earmould gently backwards and forwards so it tucks behind the fold of skin above your ear canal. Move the earmould up and down and gently press it to place it correctly in the ear.
4. Place the hearing aid firmly behind the ear and make sure it sits securely. When properly inserted, your hearing aids should fit snugly and comfortably.

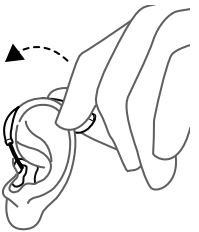




**NOTE:** It may be helpful to pull your ear up and outward with your opposite hand during insertion. By experimenting, you may discover an easier method.

**CAUTION:** Never attempt to modify the shape of the hearing aid, earmoulds or tubing yourself.

# Removing your hearing aids from your ears



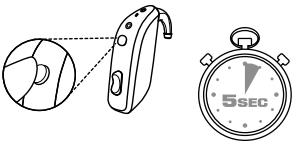
1. Lift the hearing aid from behind your ear. Let it hang beside your ear momentarily.

2. Using your thumb and index finger, gently pull the earmould (not the hearing aid or the tube) loose from your ear. Remove the earmould completely by twisting it gently.

# Using your hearing aids

## Turning your hearing aids on and off

To turn your hearing aids on or off, press the push button for **5 seconds**.




Pressing the button for other lengths of time enables other functions such as flight mode and streaming. These are described elsewhere in this manual.

Your hearing aids will automatically go into sleep mode when you place them in the turned-on charger, and they will automatically reactivate when you remove them from the turned-on charger.

Your hearing aids always start in program 1 at the pre-set volume.

**NOTE:** If the charger is disconnected during use, the hearing aids in the charger will turn off.

**Explanation of indicator lights on the hearing aid:**

- One 2-second green blink: The hearing aid turns on and is in operating mode.
- Three 1-second green blinks: The hearing aid turns off.
- When the hearing aid is present in the charger, green indicator lights pulsate: The hearing aid is recharging.
- When the hearing aid is present in the charger, green indicator lights are steadily on: The hearing aid is fully charged.

## Delayed Activation

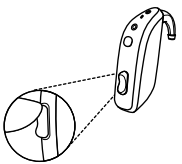
Delayed Activation delays the time before your hearing aid turns on after you remove the hearing aid from the charger. With this function activated, you will hear a beep for each second of the delay period (either 5 or 10 seconds).

**NOTE:** If you do not want to use this function, ask your hearing care professional to deactivate it.

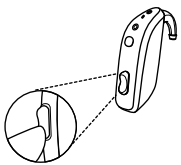
## Adjusting the volume

Your hearing aid automatically adjusts the volume depending on your listening situation.

However, if your hearing aid has a volume control, you can adjust the volume according to your preferences.



To increase the volume, briefly press the **top** part of the volume control button.



To reduce the volume, briefly press the **bottom** part of the button.

You can also adjust the volume by means of a Beltone remote control or the Beltone HearMax™ app.

When you change the volume, the hearing aid responds with a beep. When you reach the upper or lower limits, the hearing aid responds with a low-pitched beep.

Your hearing aid can be programmed with an additional function for the volume control: "Long press on the **bottom** part of the button". The available functions are:

- Minimum volume: volume will immediately reduce to lowest setting, or
- Mute: the hearing aid will be muted.

To resume normal volume, repeat the long press on the bottom part of the button.

**NOTE:**

- If you have two hearing aids with the Synchronised Volume Control function enabled, volume control adjustments to one hearing aid automatically repeat in the second hearing aid. When you change the volume in one of the hearing aids, it responds with one or more beeps. A beep in the second hearing aid follows.
- Your hearing care professional can disable the volume control.

## Listening programs

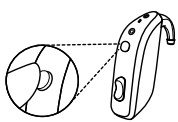
Your hearing care professional can activate one or more listening programs in your hearing aids. These programs can help you in specific situations. Ask your hearing care professional about which programs could be useful for you.

| Programs | Use |
|---|---|
| All-Around | The best option if you want only one program. |
| Restaurant | For use in noisy places such as restaurants and social gatherings. |
| Music | For listening to music. |
| Acoustic phone | A special program for phone conversations. |
| Outdoor | For outdoor use. |
| Telecoil phone + Mic | For use if you have a phone with a telecoil. |
| Telecoil loop + Mic | For use in places that have a teleloop system such as theatres and places of worship. |
| Ultra-Focus | For use only in very noisy places (more focused than the Restaurant program). |

## Changing program

Your hearing aid has a push button which allows you to select from several listening programs.

Push the button to change program. You will then hear one or more beeps. The number of beeps indicates which program you have selected (one beep = program 1, two beeps = program 2 and so on).



You can also change programs using a Beltone remote control or the Beltone HearMax™ app.

**NOTE:**

- If you have two hearing aids with synchronisation enabled, a change of program on one hearing aid automatically applies to the second hearing aid as well. The same number of beeps will then sound in the second hearing aid.
- When you turn the hearing aids off and on again, they always start up in program 1 and your pre-set volume level.

## Using teleloop systems with your hearing aid

**Telecoil (Optional)**
The Telecoil function may help to improve understanding of speech with Hearing Aid Compatible (HAC)[1] telephones and in theatres, cinemas, houses of worship, etc. that have a teleloop installed.

When you select the Telecoil function, your hearing aid picks up signals from the teleloop or your HAC telephone. Your hearing care professional can activate the Telecoil program.

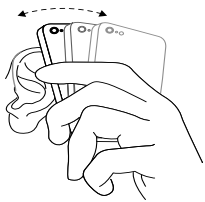
**NOTE:**

- The telecoil does not work without a teleloop (that is, an induction loop) or an HAC telephone.
- If you are having trouble hearing with the telecoil, ask your hearing care professional to modify the function.

[1]Some smartphones are hearing aid compatible (HAC).The HAC phone establishes a small hearing loop that your hearing aids can connect to.The telecoil picks up the HAC phone's signal and converts it to sound.

- If there is no sound from your hearing aids in a teleloop system with an active Telecoil function, the teleloop system may not be turned on or may not be operating correctly.
- The sound from the teleloop and the hearing aid microphones can be mixed according to your preference. Ask your hearing care professional for more details.
- When you want to stop the telecoil function, change to another listening program.

## Using a telephone



Your hearing aid allows you to use your telephone as you normally do. Finding the optimal position for holding the phone may require practice.

The following suggestions may be helpful:

1. Hold the telephone up to your ear canal or hold it close to the hearing aid microphones as illustrated.
2. If you hear whistling, try holding the telephone in the same position for a few seconds. The hearing aid may be able to cancel the whistling.
3. You can also try holding the telephone slightly away from the ear.

**NOTE:**

- If you find it difficult to get a good result while using your mobile phone, your hearing care professional can give you advice on available wireless accessories to enhance listening capabilities.
- Depending on your needs, your hearing care professional may activate a function specifically for telephone use.

- If you have a mobile device, you can pair it to connect directly to your hearing aids. See "Advanced options", page 26.

### Mobile phones

Your hearing aids comply with the most stringent Standards of International Electromagnetic Compatibility. Any degree of disturbance can be due to the nature of your particular mobile phone or of your wireless telephone service provider.

## Auto-Phone (optional)

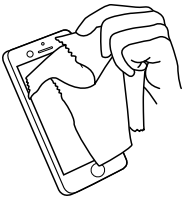
If you place a magnet on the telephone receiver, your hearing aids will automatically switch the telephone program on when the receiver is close to your ear.

When you remove the receiver from your ear, the hearing aids automatically return to the previous listening program.

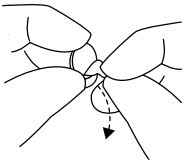
**NOTE:** Ask your hearing care professional to enable Auto-Phone in your hearing aids.

## Placing the Auto-Phone magnet

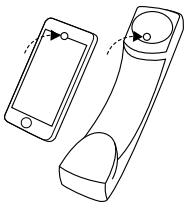
Place the magnet on your telephone receiver as follows:



1. Clean the surface thoroughly. Use a recommended cleaning agent.



2. Remove the foil from the magnet.



3. Place the magnet on the phone.

**CAUTION:**

- If you experience frequent signal loss or noise during calls, move the Auto-Phone magnet to another place on the telephone receiver.
- Only use magnets supplied by Beltone.

## How to use Auto-Phone

1. Lift the telephone to your ear.
2. When you hear a short melody, the phone program is active.

**NOTE:**

- You may need to move the telephone receiver slightly to find the best position for a reliable Auto-Phone activation and a good hearing experience on the telephone.
- If your hearing aids have enabled the Asymmetric Phone Handling functionality, the hearing aid on the non-phone ear automatically attenuates.
- Do not cover the phone loudspeaker opening with the magnet.
- If the function does not work to your satisfaction, moving the magnet to another position may improve ease of use and comfort.
- If your hearing aids do not switch to the telephone program consistently, try repositioning the magnet or adding additional magnets.

## Auto-Phone warnings

**WARNING:**

- Swallowing a magnet can be harmful to your health. If a magnet is swallowed, seek immediate medical attention.
- Keep magnets out of reach of pets, children and people with cognitive, intellectual or mental health challenges.
- The Auto-Phone magnet may affect sensitive medical devices/electronic systems. Seek advice from the manufacturers regarding appropriate safety measures when using the Auto-Phone solution near the sensitive device/equipment (pacemakers and defibrillators) in question. If the manufacturer cannot

issue a statement, we recommend keeping the magnet or a telephone equipped with the magnet 30 cm (12”) away from magnetically sensitive devices (e.g. pacemakers).

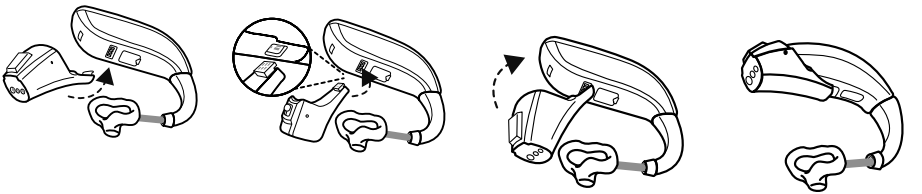
## Direct Audio Input

You can connect a DAI (Direct Audio Input) adapter to the bottom of your hearing aid. Once connected, the hearing aid automatically switches to DAI. The sound is then sent directly to your hearing aid using a cable or a wireless FM system.

If you want to be able to hear what happens around you, you can combine the DAI input with the sounds picked up by your hearing aid's microphones.

**NOTE:** Your hearing aid's battery will drain faster if you use the DAI functionality.

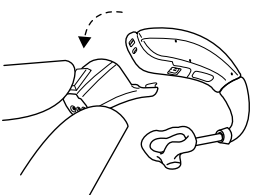
## Connecting a DAI adapter



1. Align the tip of your DAI adapter with the groove on the "stomach" of the hearing aid.
2. Move the adapter towards the bottom of the hearing aid.
3. Click the adapter onto the hearing aid.

## Disconnecting a DAI adapter

- Remove the adapter from the hearing aid by pressing the release button.



## ⚠ Important points for FM

- Do not use two transmitters on the same FM channel.
- Do not use water or fluids for cleaning the FM click-on (DAI) receiver.
- Do not use an FM transmitter in locations where it is forbidden to use electronic devices, for instance in airplanes /oil rigs.
- Be aware that FM signals might also be picked up and overheard by other receivers.
- Before using the system in another country, contact your hearing care professional to make sure your radio channel is permitted in that country.
- Your FM boot and transmitter may only be repaired by an authorised service centre.

# Advanced options

## Using your hearing aids with iPhone, iPad and iPod touch (optional)

Your hearing aids are Made for iPhone, iPad and iPod touch, which allow for direct audio streaming, including hands-free phone calls*, and control from these mobile devices.

*) See beltone.com/compatibility.

## Streaming from an Android™ smartphone

Some Android smartphones can stream audio, including phone calls, directly to your hearing aids. Your device must be running Android 10 or newer and it must have the Android Streaming for Hearing Aids feature as well.

**NOTE:** For assistance with pairing and using these products with your hearing aids, contact your hearing care professional or visit our support site. See the back page of this user guide.

## Controlling your hearing aid with the mobile device app (optional)

The Beltone HearMax™ app uses the above-mentioned advanced technologies to send and receive signals between the hearing aids and mobile devices. You can use the Beltone HearMax™ app designed for your hearing aids to obtain updates to your hearing aids, find your hearing aids, check their battery status, or as a remote control to change programs or adjust the volume.

**CAUTION:**

- Only connect your hearing aid to the official Beltone mobile device app.
- The app must only be used with Beltone hearing aids for which they are intended, and Beltone takes no responsibility if the app is used with other hearing aids.
- Do not disable app notifications.
- Install updates to keep the app working correctly.

**NOTE:**

- If you want a printed version of the user guide for the app, please go to our website (see the back page of this user guide) or consult customer support.
- For assistance with pairing and using these products with your hearing aids, contact your hearing care professional or visit our support site.
- If your Bluetooth® enabled Android mobile device does not stream directly to your hearing aids, you can use our Beltone Direct Phone Link 2 for streaming capabilities and for handsfree conversations.


## Beltone Remote Care and Beltone Remote Care Live (optional)

**Beltone Remote Care**
If you have signed up to use Beltone Remote Care available with your hearing aids, you can allow your hearing aids to be adjusted remotely without having to visit your hearing care professional.

All you need is a compatible mobile device with internet enabled. This allows you to:

- Request assistance remotely to adjust your hearing aids to be a better fit for you.
- Keep your hearing aids up to date with the latest software to ensure the best performance possible.

This service only works if your mobile device is connected to the internet. Your hearing care professional will provide information regarding this option, and how it works with the Beltone HearMax™ app.

For optimum performance, make sure the hearing aids are connected to the Beltone HearMax™ app and placed close to the iPhone, iPad, iPod touch or the Android smartphone before applying the changes.

**NOTE:** Your hearing aids shut down during the installation and update process.

**Beltone Remote Care Live**
This service also includes Beltone Remote Care Live. With this service you can get face-to-face assistance from your hearing care professional from home.

# Wireless accessories

Our wireless eco-system features a comprehensive range of seamlessly integrated wireless accessories. These let you stream high quality stereo sound and speech directly to your hearing aids.

**Available wireless accessories and their features**

- **A TV streamer** streams audio from a TV and most other audio sources to your hearing aids at a volume that suits you.
- **A basic remote control** adjusts volume, mutes your hearing aids and changes programs.
- **An advanced remote control** adjusts volume, mutes your hearing aids, changes programs and displays your settings.
- **A phone clip** streams phone conversations and stereo sound to both hearing aids and doubles as a remote control.
- **A body-worn microphone** is a microphone that can be worn by others. It improves speech comprehension in noisy situations.
- **A wireless microphone** works like the **body-worn microphone**, but doubles as a table microphone. Further, it has a built-in telecoil that allows it to connect with a teleloop system, a connector for a FM receiver, and a mini-jack input for wired streaming of audio from a computer or music player.
- **An app** which you can install on your mobile device to enable streaming and control directly from your mobile device. See "Advanced options", page 26.

**Accessing wireless accessories**

To access a wireless device that has already been paired with your hearing aids, press the push button for maximum 2 seconds. The hearing aid will emit a sound to confirm the connection.


For information about how to pair your hearing aids with a wireless accessory, see the user guide for the relevant wireless accessory.

**NOTE:**

- Please contact your hearing care professional for an overview of compatible wireless accessories that are approved by Beltone A/S.
- You should only use Beltone wireless accessories with your wireless hearing aids.

## Low battery alert when paired with wireless accessories

**NOTE:**

Your batteries will drain faster when you use wireless functions like streaming from your TV with our TV streamer. As the battery power declines, the wireless functions stop working. A short melody will play every five minutes to let you know that the battery power is low. The table below shows the functionality with different battery charge levels.

| Battery level | Signal | Hearing aid | Remote control | Streaming |
|---|---|---|---|---|
| Fully charged | | ✓ | ✓ | ✓ |
| Low |  4 even tones | ✓ | ✓ | x |
| Depleted |  3 even tones and 1 longer tone | ✓ | x | x |

You can check the battery status in the Beltone HearMax™ app.

## Flight Mode / Wireless Communication Off Mode

Your hearing aids can receive wireless signals. For example, they can be controlled from your mobile device or remote control. Information transmission can also take place between your hearing aids. However, in some areas you are requested to turn off wireless communication.

**CAUTION:**

- This hearing aid contains a radio frequency transmitter. When boarding a flight, follow airline instructions and turn off hearing aid wireless functionality when and as directed.
- Turn off hearing aid wireless functionality when this is required.

**NOTE:** You must follow the processes below for both hearing aids, even if synchronisation is enabled.

## Turning off wireless communication (activating Flight Mode)

1. Turn off your hearing aid.
2. Press the button for 9 seconds.
3. Your hearing aid will double-flash four times. If you are wearing your hearing aids at the time, you will hear double tones (♫♫) for about 10 seconds, meaning the hearing aid is now in Flight Mode.

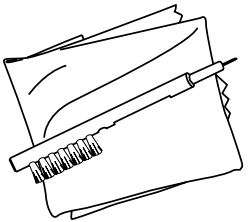
## Activating wireless communication (turning off Flight Mode)

1. Turn your hearing aid off and then on.
2. Wireless communication will be activated after 10 seconds.

# Cleaning and caring for your hearing aids

## Cleaning tools

These cleaning tools come with your hearing aids:



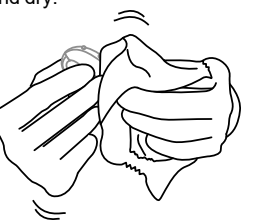
1. Soft cloth.
2. A brush with a battery magnet.

## General instructions for care and maintenance

**NOTE:** To ensure you get the highest quality experience and longest useful lifetime out of your hearing aids, it is important to clean and care for them.

Keeping your hearing aids in perfect working order is easily done – just follow these steps:

1. When you remove your hearing aids, turn them off.
2. After removing your hearing aids, wipe them with a soft cloth to keep them clean and dry.
3. If you use a drying agent, only use recommended products.
4. Apply cosmetics, perfume, after-shave, hairspray, lotions etc. BEFORE putting on your hearing aids. These products can damage or discolour your hearing aids.
5. Never immerse your hearing aids in liquid.
6. Keep your hearing aids away from excessive heat and direct sunlight.
7. The device is certified to IP68 for water and dust resistance:
   - The device has IP**6**X protection against ingress of dust. Avoid the device getting exposed to extensive dust.
   - The device has IPX**8** protection against ingress of water. Avoid the device getting exposed to water, and do not swim, shower or sauna while wearing the device.



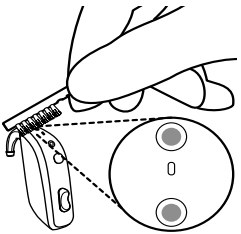
**CAUTION:**

- Never use alcohol or other cleaning solutions to clean your hearing aids. This can damage your hearing aids and may cause a skin reaction.
- Ear wax or other residue on your hearing aids can cause an infection. To avoid this, clean your hearing aids as instructed.

## Daily care and maintenance

It is important to keep your hearing aids clean and dry on a daily basis. Use the supplied cleaning tools.

1. Wipe your hearing aids with the cloth.



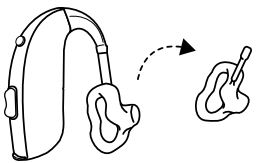
2. Swipe the small brush across the microphones.

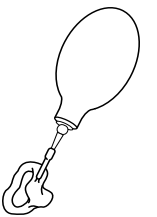
**NOTE:**

- Never try to put the bristles of the small brush or the cleaning wire into the microphone inlets. This can damage your hearing aids.
- Use a soft, dry cloth to wipe your earmoulds clean.

## The earmould

1. Remove the earmould and tubing from the hearing aids prior to cleaning.
2. Clean the earmould using a mild soap, and rinse with lukewarm water.
3. After cleaning, dry the earmoulds thoroughly and remove any residual water and debris from the tubing utilising a small blower and wire loop.





**NOTE:** Your earmould tubing may become stiff, brittle or discoloured over time. Contact your hearing care professional regarding tube changes.

## Changing the microphone filter

The two microphones on the back of your hearing aid are protected by a microphone filter. If you experience sound deterioration or increased difficulty identifying where the sounds come from, changing the filters may help.

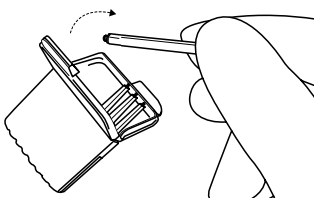
You will need a box of microphone filters. Contact your hearing care professional.

The microphone filter tool has two functions: a removal tip to collect the used filter, and a replacement tip with a new filter.

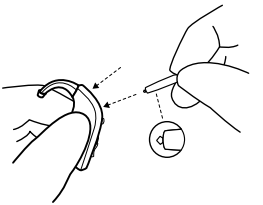

Box of 8 microphone filter tools.

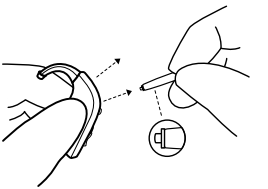
**Removing the old microphone filter**

1. Open the filter case and take out one of the tools. Each tool has a small hook (removal tip) in one end and a new microphone filter in the other.

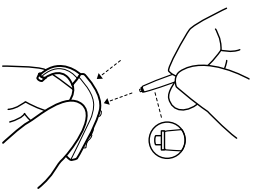


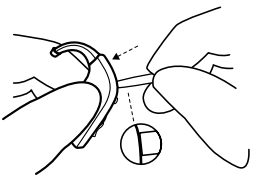
2. Insert the removal tip into the used microphone filter and then pull the tool straight out. It is important to pull it straight and not on an angle.

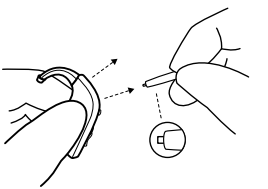




**Inserting the new microphone filter**







1. Insert the other end of the tool (the end with the replacement filter) into the microphone opening.
2. Gently press the replacement filter straight into the microphone opening until the outer ring is flush with the back of the hearing aid.
3. Pull the tool straight out – your new microphone filter should remain in place.

**CAUTION:** Use only accessories intended for use with your hearing aids. Consult your hearing aid professional for more information.

## Storing your rechargeable hearing aids

When not in use, place your hearing aids in the plugged-in charger and charge them, so they are ready for use when you need them.

If the hearing aids are not to be used for some time, place them in the charger while it is plugged into a power outlet. Then remove the charger from the power outlet. Both the charger and the hearing aids will turn off.

If you don't want to store the hearing aids in the charger, you can also just turn them off manually.

# Tinnitus Management

℞ ONLY (US)

## Tinnitus Breaker Pro module

Your Beltone hearing aid includes the Tinnitus Breaker Pro (TBP) module, a tool for generating sounds to be used in tinnitus management programs to temporarily relieve suffering from tinnitus. The TBP can generate sounds adjusted to the specific therapeutic needs and your personal preference as determined by your doctor, audiologist, or hearing care professional. Depending on the selected hearing aid program and the environment you are in, you will sometimes hear the therapeutic sound resembling a continuous or fluctuating noise.

## Indications for use of the TBP module

The Tinnitus Breaker Pro module is a tool to generate sounds to be used in a Tinnitus Management Program to temporarily relieve patients suffering from Tinnitus. The target population is primarily the adult population over 18 years of age. This product may also be used with children 12 years of age or older. However, children and physically or mentally disabled users will require training by a doctor, audiologist, hearing care professional or the guardian for the insertion and removal of the hearing aid containing the TBP module.

## For healthcare professionals

The Tinnitus Breaker Pro module is targeted for healthcare professionals who are treating patients suffering from Tinnitus, as well as conventional hearing disorders. The initial fitting of the Tinnitus Breaker Pro module must be done during an in-office visit by a hearing professional participating in a Tinnitus Management Program. If deemed feasible by the hearing professional, subsequent fittings of the Tinnitus Breaker Pro module may be performed remotely and in real time while having live communication via live audio, video and chat on the user's dedicated app.

# User instructions for the TBP module

## Description of the device

The Tinnitus Breaker Pro (TBP) Module is a software tool that generates sounds to be used in tinnitus management programs to temporarily relieve suffering from tinnitus.

## Explanation of how the device functions

The TBP module is a frequency and amplitude shaped white-noise generator. The noise signal level and frequency characteristics can be adjusted to the specific therapeutic needs as determined by your doctor, audiologist or hearing care professional.

Your doctor, audiologist or hearing care professional can modulate the generated noise with the purpose of making it more pleasant. The noise can then resemble, for example, breaking waves on a shore.
Modulation level and speed can also be configured to your likes and needs. An additional feature can be enabled by your hearing care professional that allows you to select predefined sounds that simulate sounds from nature, such as breaking waves or running water.

If you have two wireless hearing aids that support ear-to-ear synchronisation, this functionality can be enabled by your hearing care professional. This will cause the Tinnitus Breaker Pro to synchronise the sound in both hearing aids.

If your tinnitus troubles you only in quiet environments, your doctor, audiologist or hearing care professional can set the TBP Module so that it becomes audible exclusively in such surroundings. The overall sound level can be adjusted via an optional volume control. Your doctor, audiologist or hearing care professional will review with you the need for having such a control.

For hearing aids where ear-to-ear synchronisation is enabled, your hearing care professional can also enable environmental monitoring synchronisation so that the TBP noise level is automatically adjusted simultaneously in both hearing aids dependent on the background sound level. Additionally, since the hearing aid has a volume control, the background noise level monitored by the hearing aid and the volume control can be used simultaneously to adjust the generated noise level in both hearing aids.

## The scientific concepts that form the basis for the device

The TBP module provides sound enrichment with the aim of surrounding the tinnitus sound with a neutral sound which is easily ignored. Sound enrichment is an important component of most approaches to tinnitus management, such as Tinnitus Retraining Therapy (TRT).

To assist habituation to tinnitus, this needs to be audible. The ideal level of the TBP module, therefore, should be set so that it starts to blend with the tinnitus, and so that you can hear both your tinnitus as well as the sound used.

In a majority of instances, the TBP module can also be set to mask the tinnitus sound, so to provide temporary relief by introducing a more pleasant and controllable sound source.

## TBP volume control

The sound generator is set to a specific loudness level by the hearing care professional. When switching the sound generator on, the volume will have this optimal setting. Therefore, it might not be necessary to control the volume (loudness) manually. However, the volume control provides the ability to adjust the volume, or amount of stimulus, to the liking of the user. The tinnitus sound generator volume can only be adjusted within the range set by the hearing care professional.

The volume control is an optional feature in the TBP module used for adjusting the sound generator output level.

### Using TBP with smartphone apps

The tinnitus sound generator control via hearing aid push buttons can be enhanced with wireless control from a TBP control app on a smartphone or mobile device. This functionality is available in supported hearing aids when a hearing care professional has enabled the TBP functionality during fitting of the hearing aid.

**NOTE:** To use smartphone apps, the hearing aid must be connected with the smartphone or mobile device.

## TBP - Technical specifications

Audio signal technology: Digital.

### Available sounds

White noise signal which can be shaped with the following configurations:

| High-pass filter | Low-pass filter |
|---|---|
| 500 Hz | 2000 Hz |
| 750 Hz | 3000 Hz |
| 1000 Hz | 4000 Hz |
| 1500 Hz | 5000 Hz |
| 2000 Hz | 6000 Hz |
| - | 8000 Hz |

The white noise signal can be modulated in amplitude with an attenuation depth of up to 14 dB.

## ⚠ Prescription use of this device

The TBP module should be used as prescribed by your doctor, audiologist or hearing healthcare professional. In order to avoid permanent hearing damage, the maximum daily usage depends on the level of the generated sound.

To adjust TBP, please consult your hearing healthcare professional.

Should you develop any side effects from using the sound generator, such as dizziness, nausea, headaches, perceived decrease in auditory function or increase in tinnitus perception, you should discontinue use of the sound generator and seek medical evaluation.

**Target population**
The target population is primarily the adult population over 18 years of age. This product may also be used with children 12 years of age or older. However, children and physically or mentally disabled users will require training by a doctor, audiologist, hearing care professional or the guardian for the insertion and removal of the hearing aid containing the TBP module.

## Important notice for prospective sound generator users

A tinnitus masker is an electronic device intended to generate noise of sufficient intensity and bandwidth to mask internal noises. It is also used as an aid in hearing external noises and speech.

Good health practice requires that a person with a tinnitus condition have a medical evaluation by a licensed physician (preferably a physician who specializes in diseases of the ear) before using a sound generator. Licensed physicians who specialize in diseases of the ear are often referred to as otolaryngologists, otologists or otorhinolaryngologists.

The purpose of medical evaluation is to assure that all medically treatable conditions that may affect tinnitus are identified and treated before the sound generator instrument is used.

The sound generator instrument is a tool to generate sounds to be used with appropriate counselling and/or in a tinnitus management program to relieve patients suffering from tinnitus.

## Warning information

**WARNING:**

- Sound generators can be dangerous if improperly used.
- Sound generators should be used only as advised by your doctor, audiologist, or hearing care professional.
- Sound generators are not toys and should be kept out of reach of anyone who might cause themselves injury (especially children and pets).

**CAUTION:**

- Should the user develop any side effects from using the sound generator, such as dizziness, nausea, headaches, perceived decrease in auditory function or increase in tinnitus perception, the user should discontinue use of the sound generator and seek medical evaluation.

- Discontinue use of the sound generator and consult promptly with a licensed physician if you experience any of the following conditions:
    1. Visible congenital or traumatic deformity of the ear.
    2. History of active drainage from the ear within the previous 90 days.
    3. History of sudden or rapidly progressive hearing loss within the previous 90 days.
    4. Acute or chronic dizziness.
    5. Unilateral hearing loss of sudden or recent onset within the previous 90 days.
    6. Audiometric air-bone gap equal to or greater than 15 dB at 500 Hertz (Hz), 1000 Hz, and 2000 Hz.
    7. Visible evidence of significant cerumen accumulation or a foreign body in the ear canal.
    8. Pain or discomfort in the ear.
- Discontinue use of the sound generator and consult promptly with your hearing care professional if you experience changes in the tinnitus perception, discomfort or interrupted speech perception, while using the tinnitus sound generator.
- The volume control is a feature in the TBP module used for adjusting the sound generator output level. To prevent unintended usage by paediatric or physically or mentally disabled users, the volume control must, if enabled, be configured to only provide a decrease of the sound generator output level.
- Children and physically or mentally disabled users will require guardian supervision while wearing the TBP hearing aid.
- Adjustment of the tinnitus sound generator settings, using a smartphone app, should only be performed by the parent or legal guardian in cases where the user is a minor.

- Use of the Beltone Remote Care for remote settings of the tinnitus sound generator should only be performed by the parent or legal guardian in cases where the user is a minor.

## ⚠ Tinnitus Breaker Pro warning to hearing care professionals

A hearing care professional should advise a prospective sound generator user to consult promptly with a licensed physician (preferably an ear specialist) before getting a sound generator, if the hearing care professional determines through inquiry, actual observation, or review of any other available information concerning the prospective user that the prospective user has any of the following conditions:

1. Visible congenital or traumatic deformity of the ear.
2. History of active drainage from the ear within the previous 90 days.
3. History of sudden or rapidly progressive hearing loss within the previous 90 days.
4. Acute or chronic dizziness.
5. Unilateral hearing loss of sudden or recent onset within the previous 90 days.
6. Audiometric air-bone gap equal to or greater than 15 dB at 500 Hertz (Hz), 1000 Hz, and 2000 Hz.
7. Visible evidence of significant cerumen accumulation or a foreign body in the ear canal.
8. Pain or discomfort in the ear.

**CAUTION:** The maximum output of the sound generator falls into the range that can cause hearing loss according to OSHA regulations. In accordance with NIOSH recommendations, the user should not use the sound generator for more than eight (8) hours a day when this is set to a level of 85 dB SPL or above. When the sound generator is set to levels of 90 dB SPL or above the user should not use the sound generator for more than two (2) hours per day. In no case should the sound generator be worn at uncomfortable levels.

# General warnings and cautions

**WARNING:**

- Keep hearing aids away from pets, children and people with cognitive, intellectual or mental health challenges.
- Never leave children or people with cognitive, intellectual or mental health challenges unsupervised while using their hearing aids. Hearing aids contain small pieces that can be dangerous if swallowed.
- Swallowing a hearing aid can result in choking and can be harmful to your health.
- If any part of a hearing aid is swallowed, seek immediate medical attention.
- Consult a hearing care professional:
  - If you think there may be a foreign object in your ear canal
  - If you experience skin irritation
  - If excessive ear wax accumulates with the use of the hearing aid
- See also "Contra-indications", page 5
- For safety reasons, use only the charger supplied by Beltone.
- Do not wear your hearing aids while being exposed to radiation. Some types of radiation, e.g. from MRI or CT scanners, can affect the settings in your hearing aids, causing malfunction and potentially damage to your hearing.
- Other types of radiation, such as burglar alarms, room surveillance systems, mobile phones, metal detectors and radio equipment will not damage your hearing aids. They may, however, briefly affect the sound quality in your hearing aids and may create undesired sounds.

- Never use your hearing aids in places with explosive gases such as mines, oil fields or similar unless these areas are certified for hearing aid use. Using your hearing aids in places that are not certified for hearing aid use can be dangerous.
- Do not attempt to dry your hearing aids in an oven, microwave oven or other heating equipment. This will cause them to melt and may cause burns to your skin.
- External devices connected to the electrical input must be safe according to the requirements of IEC 60601-1, IEC 60065, EN/IEC 62368-1, or IEC 60950-1, as appropriate.
- No modification of this device is allowed.

**Warnings related to power hearing aids**

- A power hearing aid can produce very loud sound to compensate for a severe or profound hearing loss. There is therefore a risk of further impairing the remaining hearing.
- Your hearing aids have been customised to amplify soft and loud sounds according to your particular needs. If the amplification seems too loud or you suspect the hearing aid is malfunctioning (e.g. you hear distorted or unusual sound), contact your hearing care professional. A malfunctioning hearing aid can damage your hearing.
- In general, exposure to loud sounds can damage your hearing. This could be loud music or loud environments. You can best protect your hearing by reducing exposure to loud sound and environments or by using hearing protection.
- Warning to hearing care professionals: Special care should be exercised in selecting and fitting hearing aids with a maximum sound pressure level that exceeds 132 dB SPL, measured in a 2 cc acoustic coupler in accordance with IEC 60318-5:2006. The remaining hearing may risk further impairment.

**CAUTION:**

- Use your hearing aids as your hearing care professional recommends. Incorrect use may damage your hearing.
- Do not use a broken hearing aid. It may not work properly and may be harmful to your hearing. It may also cause scratches or sores due to sharp edges.
- Use only original tubes from the manufacturer with your hearing aids.
- Use only accessories intended for use with your hearing aids. Consult your hearing aid professional for more information.
- Do not try to modify the shape of your hearing aid or accessories. This can cause skin reactions or sharp edges leading to scratches or sores.
- If you have two hearing aids, they may be programmed differently. Do not swap them as this could damage your hearing. Your hearing aids are colour-coded. Left = blue. Right = red.
  If your hearing aids are not colour coded, ask your hearing care professional to add colour coding.
- If you experience side effects, contact your hearing care professional. Possible side effects from wearing a hearing aid may be:
  - Dizziness
  - Tinnitus
  - Perceived worsening of hearing loss
  - Nausea
  - Headache
  - Skin reaction
  - Ear wax accumulation

- If you suspect that you have a foreign object in your ear canal, consult your hearing care professional. These objects can be harmful and can cause an infection in your ear.
- If you have a sore or injury where your hearing aid touches your ear or head, continued use of the hearing aid may cause it to worsen or prevent it from healing. Consult your hearing care professional for assistance.
- Your hearing aids are tuned to your hearing. Do not allow others to use your hearing aids as this can damage their hearing.
- When using wireless functions, your hearing aid uses low-powered digitally coded transmissions to communicate with other wireless devices. It is possible, but not likely, that other electronic devices will be affected. If this happens, move the hearing aid away from the affected electronic device.
- Turn off hearing aid wireless functionality when this is required.

**For hearing care professionals**

**WARNING:** The developed sound pressure level in the ears of children can be substantially higher than in average adults. It is recommended to perform an RECD measurement in order to ensure the correct target for the fitted OSPL90.

**CAUTION:** Do not change the outer casing or any parts of a hearing aid unless appropriately protected against ESD.

# Cyber security warnings

Failing to follow these cautions can compromise the information security of your hearing aid and potentially cause hearing loss or tinnitus.

**CAUTION:**

- Only connect your hearing aid to a trusted computer or mobile device, or one used by your hearing care professional.
- For 3 minutes after turning on, your hearing aid is open to connections. Do not restart your hearing aid if requested by someone you don't trust as this may compromise the safety of your device.
- If your device plays the pairing sound at an unexpected time, this could indicate someone has gained access to your device.
- Only connect your hearing aid to the official Beltone mobile device app.
- Only apply remote fine tuning updates that you are expecting.
- Always use the newest software update available for your hearing aid.
- Only accept live assistance calls from the hearing care professional that you are expecting.

# Troubleshooting

| Issue | Potential cause | Potential solution |
|---|---|---|
| Feedback, "whistling" | Is your earmould inserted correctly in the ear? | Re-insert it. |
| | Is the volume very loud? | If you have increased the volume, try reducing it. |
| | Are you holding an object (e.g. a hat or a phone) close to a hearing aid? | Move your hand away to create more space between the hearing aid and the object. |
| | Is your ear full of wax? | Visit your hearing care professional or physician to have your ears checked for wax. Some people experience more wax after being fitted with hearing aids. |

| Issue | Potential cause | Potential solution |
|---|---|---|
| No sound | Is the hearing aid turned off? | Turn it on. |
| | Is the hearing aid in telecoil mode? | Switch to the microphone program. |
| | Is the hearing aid charged? | Place the hearing aid in the charger for charging. |
| | Is the plastic tube or earmould clogged or broken? | Consult your hearing care professional. |
| | Is your ear full of wax? | Visit your physician. |
| Sound is distorted or weak | Is the plastic tube or earmould clogged or broken? | Consult your hearing care professional. |
| | Did your hearing aid get moist? | Use a desiccant (drying kit). |
| Battery drains very quickly | Did you leave your hearing aid turned on for long periods of time? | Always place your hearing aids in the charger for recharging when you are not using them, e.g. during the night, or switch them off. |
| | Is the hearing aid old? | Visit your hearing care professional. |

| Issue | Potential cause | Potential solution |
|---|---|---|
| Hearing aid is not charging | Does the hearing aid sit correctly in the charger? | Reinsert the hearing aid in the charger. |
| | Is the hearing aid charger plugged into a power source? | Plug the charger into a power source. (See the user guide for your charger.) |
| Still having an unresolved issue? | | Consult your hearing care professional. |

# ⚠ Warnings to hearing care professionals (US only)

## Hearing aid expectations

- A hearing aid will not restore normal hearing and will not prevent or improve a hearing impairment resulting from organic conditions.
- Consistent use of the hearing aid is recommended. In most cases, infrequent use does not permit you to get full benefit from it.
- The use of a hearing aid is only part of hearing rehabilitation and may need to be supplemented by auditory training and instructions in lip-reading.

## ⚠ Warning to Hearing Aid Dispensers

A hearing aid dispenser should advise a prospective hearing aid user to consult promptly with a licensed physician (preferably an ear specialist) before dispensing a hearing aid, if the hearing aid dispenser determines through inquiry, actual observation, or review of any other available information concerning the prospective user, that the prospective user has any of the following conditions:

1. Visible congenital or traumatic deformity of the ear.
2. History of active drainage from the ear within the previous 90 days.
3. History of sudden or rapidly progressive hearing loss within the previous 90 days.
4. Acute or chronic dizziness.
5. Unilateral hearing loss of sudden or recent onset within the previous 90 days.
6. Audiometric air-bone gap equal to or greater than 15 dB at 500 Hertz (Hz), 1000 Hz, and 2000 Hz.

7. Visible evidence of significant cerumen accumulation or a foreign body in the ear canal.
8. Pain or discomfort in the ear.

## Important notice for prospective hearing aid users

Good health practice requires that a person with a hearing loss have a medical evaluation by a licensed physician (preferably a physician who specializes in diseases of the ear) before purchasing a hearing aid. Licensed physicians who specialize in diseases of the ear are often referred to as otolaryngologists, otologists or otorhinolaryngologists. The purpose of medical evaluation is to assure that all medically treatable conditions that may affect hearing are identified and treated before the hearing aid is purchased.

Following the medical evaluation, the physician will give you a written statement that states that your hearing loss has been medically evaluated and that you may be considered a candidate for a hearing aid. The physician will refer you to an audiologist or a hearing aid dispenser, as appropriate, for a hearing aid evaluation.

The audiologist or hearing aid dispenser will conduct a hearing aid evaluation to assess your ability to hear with and without a hearing aid. The hearing aid evaluation will enable the audiologist or hearing aid dispenser to select and fit a hearing aid to your individual needs.

If you have reservations about your ability to adapt to amplification, you should inquire about the availability of a trial-rental or purchase-option program. Many hearing aid dispensers now offer programs that permit you to wear a hearing aid for a period of time for a nominal fee after which you may decide if you want to purchase the hearing aid.

Federal law restricts the sale of hearing aids to those individuals who have obtained a medical evaluation from a licensed physician. Federal law permits a fully informed adult to sign a waiver statement declining the medical

evaluation for religious or personal beliefs that preclude consultation with a physician. The exercise of such a waiver is not in your best health interest and its use is strongly discouraged.

## Children with hearing loss

In addition to seeing a physician for a medical evaluation, a child with a hearing loss should be directed to an audiologist for evaluation and rehabilitation because hearing loss may cause problems in language development and the educational and social growth of a child. An audiologist is qualified by training and experience to assist in the evaluation and rehabilitation of a child with hearing loss.

# Regulatory information

## Warranties and repairs

The manufacturer provides a warranty on hearing aids in the event of defects in workmanship or materials, as described in applicable warranty documentation. In its service policy, the manufacturer pledges to secure functionality at least equivalent to the original hearing aid. As a signatory to the United Nations Global Compact initiative, the manufacturer is committed to doing this in line with environment-friendly best practices. Hearing aids therefore, at the manufacturer's discretion, may be replaced by new products or products manufactured from new or serviceable used parts, or repaired using new or refurbished replacement parts. The warranty period of hearing aids is designated on your warranty card, which is provided by your hearing care professional.

For hearing aids that require service, please contact your hearing care professional for assistance.

Hearing aids that malfunction must be repaired by a qualified technician. Do not attempt to open the case of hearing aids, as this will invalidate the warranty.

## Temperature test, transport and storage information

Our hearing aids are subjected to various tests in temperature and damp heating cycling between -25 °C (-13 °F) and +70 °C (+158 °F) according to internal and industry standards.

During normal operation the temperature should not exceed the limit values of +5 °C (+41 °F) to +40 °C (104 °F) at a relative humidity range of 15% to 90%, non-condensing, but not requiring a water vapour partial pressure greater than 50 hPA. An atmospheric pressure between 700 hPa and 1060 hPa is appropriate.

During transport or storage, the temperature should not exceed the limit values of:

- -25 °C (-13°F) to +5 °C (41°F)
- +5 °C (41 °F) to +35 °C (95 °F) at a relative humidity up to 90 %, non-condensing
- >+35 °C (95 °F) to +70 °C (158 °F) at a water vapour pressure up to 50 hPa.

Warm-up time: 5 minutes.
Cool-down time: 5 minutes.

## Expected service lifetime

The expected service lifetime for the product when used as intended is:

| **Product** | **Lifetime** |
|---|---|
| Hearing aid | 5 years |
| Built-in rechargeable battery | 5 years |
| Sound tube | 2 years |
| Ear hook | 2 years |
| Earmould, soft (silicone) | 2 years |
| Earmould, hard (acrylic) | 5 years |
| Electronic accessories, e.g. wireless accessories | 5 years |

## Statement

This device complies with part 15 of the FCC rules and ISED rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules and ISED rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment to an outlet or a circuit different from the one to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications can void the user's authority to operate the equipment.

## The products are in compliance with the following regulatory requirements:

- In EU: The device conforms to the General Safety and Performance Requirements according to Annex I of the EU Medical Device Regulation 2017/745 (MDR).
- Hereby, Beltone A/S declares that the radio equipment type CABR80 is in compliance with Radio Equipment Directive 2014/53/EU (RED).
- The full text of the EU declaration of conformity is available at the following internet address: www.beltone.com/declarations.
- In the US: FCC CFR 47 Part 15, subpart C.
- For other international regulatory requirements, please refer to the regulatory requirements of the specific country.
- In Canada: these hearing aids are certified under the rules of ISED.
- Japanese Radio Law and Japanese Telecommunications Business Law Compliance. This device is granted pursuant to the Japanese Radio Law (電波法) and the Japanese telecommunications Business Law (電気通信事業法). This device should not be modified (otherwise the granted designation number will become invalid).

## Type designations

Hearing aid type designations for models included in this user guide are:

**CABR80**, FCC ID: X26CABR80, IC6941C-CABR80.

## Hearing aid variants

**Power Behind-the-Ear (PBTE)** hearing aids of type **CABR80** with FCC ID X26CABR80, IC number 6941C-CABR80 and a rechargeable Li-Ion battery are available in the following variants:

IMG1786-DWC, IMG986-DWC, IMG686-DWC, IMG486-DWC, IMG1786-DWHC, IMG986-DWHC, IMG686-DWHC, IMG486-DWHC

This device transmits and receives RF signals in the frequency range of 2.4 GHz - 2.48 GHz. Nominal RF output power transmitted at 2.4 GHz is: ≦ 4 dBm.

The device contains a magnetic induction radio operating at the 10.66 MHz frequency. The magnetic field strength of the radio is: Max. -24 dBµA/m at a 10 m distance.

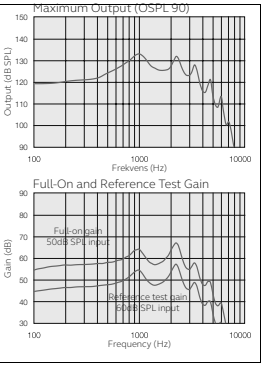
Charging output power at 333 kHz is: 300 mW.

# Technical specifications

## Power BTE

Models:IMG1786-DWC, IMG986-DWC, IMG686-DWC, IMG486-DWC

| | | | |
|---|---|---|---|
| Reference test gain (60 dB SPL input) | HFA | 52 | dB |
| Full-on gain (50 dB SPL input) | Max.<br>HFA | 67<br>61 | dB |
| Maximum output (90 dB SPL input) | Max.<br>HFA | 133<br>129 | dB SPL |
| Total harmonic distortion | 500 Hz<br>800 Hz<br>1600 Hz<br>3200 Hz | 0.7<br>0.6<br>0.3<br>0.1 | % |
| Telecoil sensitivity (1 mA/m input)<br>HFA - SPLIV @ 31.6 mA/m (ANSI)<br>Full-on telecoil sensitivity @ 1 mA/m | Max.<br>HFA<br>HFA | 97<br>112<br>92 | dB SPL |
| Equivalent input noise, w/o noise reduction<br>1/3 Octave Equivalent input noise, w/o noise reduction | | 20<br>10 | dB SPL |
| Frequency range IEC 60118-0: 2015 | | 100-5170 | Hz |
| Battery Lifetime | | 23 | Hours |

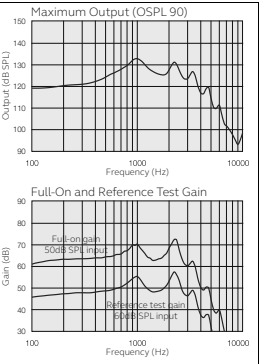



Data in accordance with ANSI S3.22-2014, IEC 60118-0:2015 . Measured in a 2cc coupler.

# High Power BTE

Models: IMG1786-DWHC, IMG986-DWHC, IMG686-DWHC, IMG486-DWHC

| | | | |
|---|---|---|---|
| Reference test gain (60 dB SPL input) | HFA | 52 | dB |
| Full-on gain (50 dB SPL input) | Max.<br>HFA | 73<br>67 | dB |
| Maximum output (90 dB SPL input) | Max.<br>HFA | 133<br>129 | dB SPL |
| Total harmonic distortion | 500 Hz<br>800 Hz<br>1600 Hz<br>3200 Hz | 0.7<br>1.0<br>0.4<br>0.1 | % |
| Telecoil sensitivity (1 mA/m input)<br>HFA - SPLIV @ 31.6 mA/m (ANSI)<br>Full-on telecoil sensitivity @ 1 mA/m | Max.<br>HFA<br>HFA | 102<br>112<br>97 | dB SPL |
| Equivalent input noise, w/o noise reduction<br>1/3 Octave Equivalent input noise, w/o noise reduction | | 20<br>11 | dB SPL |
| Frequency range IEC 60118-0: 2015 | | 100-4970 | Hz |
| Battery Lifetime | | 23 | Hours |




Data in accordance with ANSI S3.22-2014, IEC 60118-0:2015. Measured in a 2cc coupler.

# Additional information

## Acknowledgments

Portions of this software are written by Kenneth MacKay (micro-ecc) and licensed under the following terms and conditions:

Copyright ® 2014, Kenneth MacKay. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS “AS IS” AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY

WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

**NOTE:** Use of the Made for Apple badge means that an accessory has been designed to connect specifically to iPhone, iPad and iPod touch models, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

# Notes

# Notes

# Notes

Manufacturer according to EU Medical Device Regulation 2017/745:

Beltone A/S
Lautrupbjerg 7
DK-2750 Ballerup
Denmark
beltone.com

**Local contacts:**

**India**
GN Hearing India Private Limited
4th Floor, Office No 401-408
NMS Titanium, Plot No. 74, Sector No.15
CBD Belapur, Navi Mumbai
Maharashtra 400614
customercare.india@gnresound.com
gnresound.in

CE 0297

Any serious incident that has occurred in relation to the device should be reported to the Legal manufacturer Beltone A/S and the competent authority of the EU Member State in which the user and/or patient is established.

401772050/IND_GB- 22.02 - Rev. A (Date of issuance: 2022.02.01)