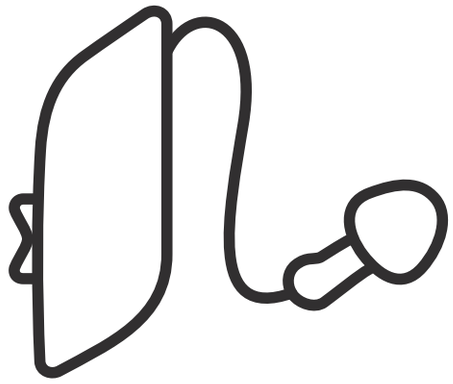


Receiver-in-Ear hearing aids

Beltone Envision

Beltone Commence

User guide

Made for iPhone | iPad | iPod

Works with Android

Hearing aid information

Left hearing aid		Right hearing aid	
Serial number		Serial number	
Model number		Model number	
Battery type	☐ Zinc-Air 312 ☐ Zinc-Air 13		

Dome/ earmould type	Closed dome ☐ Small ☐ Medium ☐Large	Open dome ☐ Small ☐ Medium ☐Large	Power dome ☐ Small ☐ Medium ☐ Large	☐ Tulip dome	☐ Earmould

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

Table of Contents

Hearing aid information 2
Introduction 4
Getting to know your hearing aid 7
Preparing your hearing aids for use 11
Placing your hearing aids in your ears 15
Removing your hearing aids from your ears 19
Using your hearing aids 21
Care and maintenance 32
Advanced options 45
Wireless accessories 49
Tinnitus management 51
General warnings and cautions 60
Cyber security 64
Troubleshooting 65
Regulatory information 67
Technical specifications 73
Additional information 76

Introduction

We recommend that you use your hearing aids every day to fully benefit from them.

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.

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 a hearing care professional or a physician. Possible side effects from wearing a hearing aid may be:

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

Symbols

The symbols below are used in this user guide, on the device, or on the packaging.



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



Date of manufacture.



Regulatory compliance mark for EU with notified body number.



Unique Device Identification.



Serial number.



Regulatory compliance mark for Australia and New Zealand.



Regulatory compliance mark for Japan.



Follow local regulations when disposing of electronic devices.



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



Legal manufacturer.



Follow instructions for use. (Logo in blue)



Medical device.



REF Catalogue number.



Product is a Type B applied part.



IMDA label for Singapore.

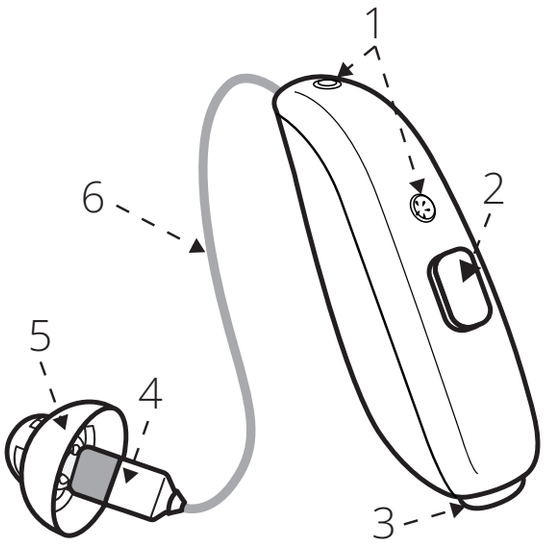


Equipment includes an RF transmitter.

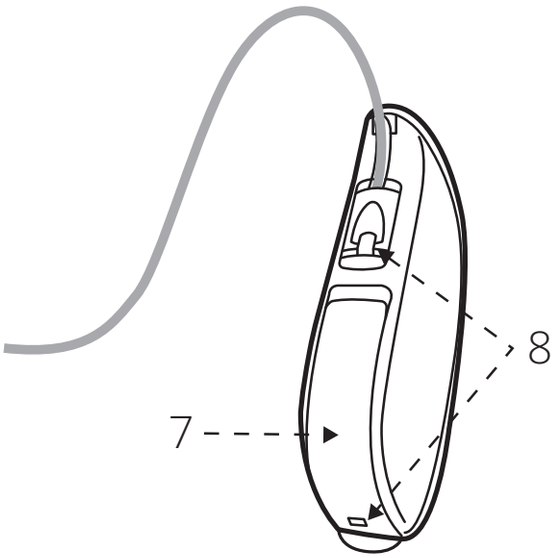
Getting to know your hearing aid

Type CAR12A

Front view



Rear view

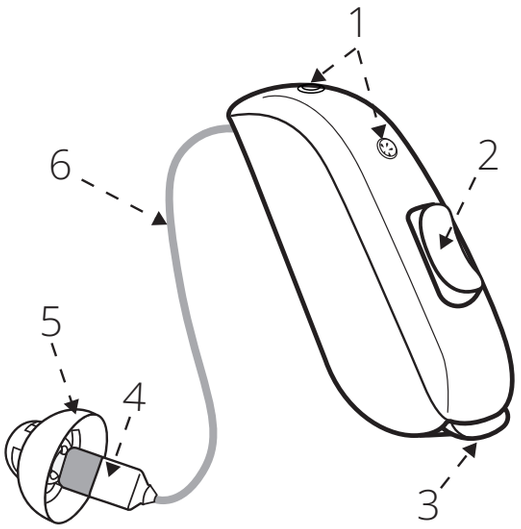


1. Microphone inlets
2. Push button
3. Battery compartment
4. Receiver with colour marking
   Left = blue. Right = red.
5. Dome*
6. Receiver wire
7. Model and serial number**
8. Colour marking
   Left = blue. Right = red.

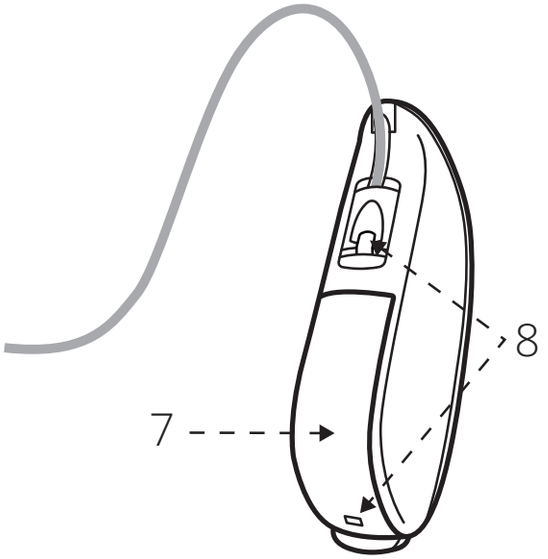
*Open dome is shown. Yours may look different.
**Inside the battery compartment.

Type CAR13A

Front view



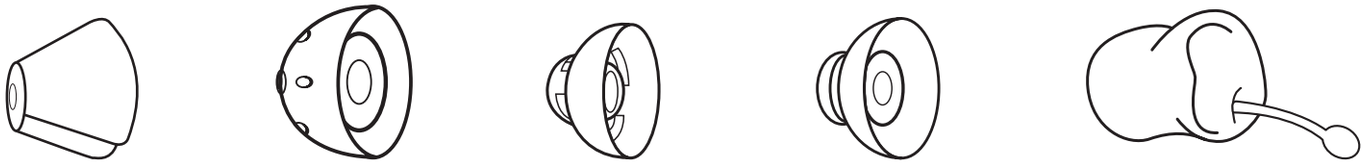
Rear view



1. Microphone inlets
2. Multi-function button
3. Battery compartment
4. Receiver with colour marking
   Left = blue. Right = red.
5. Dome*
6. Receiver wire
7. Model and serial number**
8. Colour marking
   Left = blue. Right = red.

*Open dome is shown. Yours may look different.
**Inside the battery compartment.

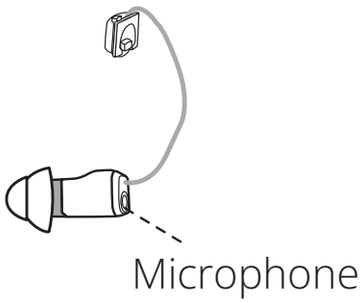
Domes and earmoulds



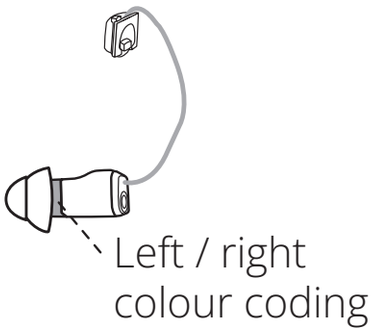
Tulip dome | Closed dome | Open dome | Power dome | Custom earmould

Domes are all light grey.

Receivers



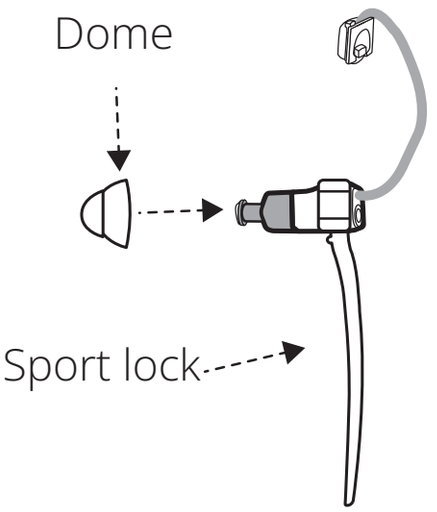
Your receiver may have a microphone as shown here.



Your hearing aids are colour coded.
Left = blue. Right = red.

Sport lock (optional)

The sport lock helps keep your hearing aids in place when you are physically active.



Preparing your hearing aids for use

Battery warnings



WARNING:

- Batteries may leak. If you are not going to use your hearing aids for a few days, you must remove the batteries.
- 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.
- Never swallow batteries nor place them inside any part of the body, as the battery can cause serious injuries. If a hearing aid or battery has been swallowed or placed inside any part of the body, seek immediate medical attention.
- Batteries are harmful to the environment. Therefore, never try to burn them. Dispose of your used batteries according to your country's regulations or return them to a hearing care professional.

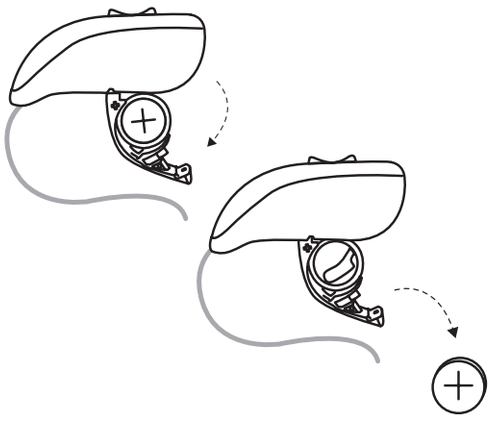


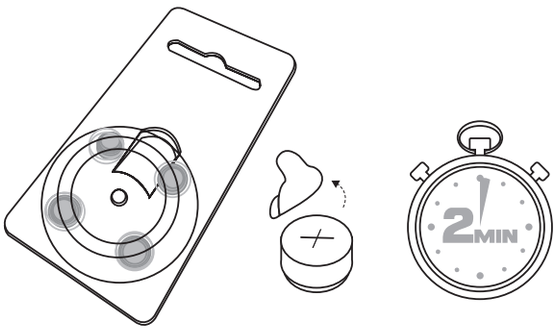
CAUTION: Never try to charge hearing aids with zinc-air batteries as this can cause leakage or a small explosion.

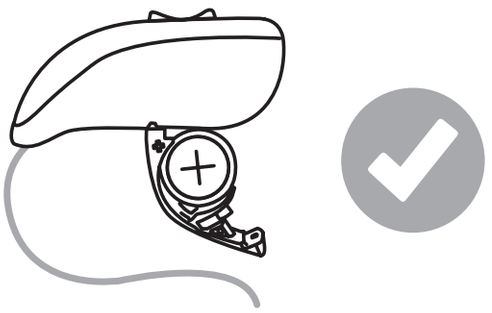
NOTE:

- Always use zinc-air batteries with at least one year left before they expire.
- Keep spare batteries on hand.
- To save battery power, turn off your hearing aids when they are not in use.

Inserting the battery into your hearing aid







1. Open the battery door with your fingernail. Remove the old battery (if there is one).
2. Remove the packaging and protective foil from the new battery. Wait for **two minutes** while the battery activates.
3. Insert the new battery, with the plus (+) sign correctly positioned, into the battery compartment door. **Do not** insert it directly into the hearing aid.
4. Close the battery door.

NOTE: At night, turn off the hearing aids. Open the battery door completely to allow moisture to evaporate and prolong the hearing aids' life span.

Low battery alert

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

Low battery alert when paired with wireless accessories

The battery will drain faster when you use wireless functions like streaming from your smart device or 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 levels.

Battery level	Signal	Hearing aid	Remote control	Streaming
New battery		✓	✓	✓
Low	 4 even tones	✓	✓	x
Depleted	 3 even tones and 1 longer tone	✓	x	x

These will work again when you insert a new battery.

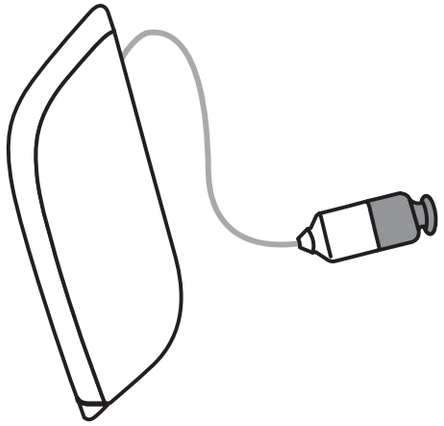
Placing your hearing aids in your ears

How to tell left from right

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.

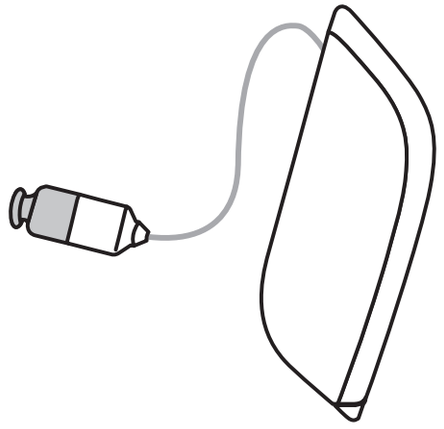
Left hearing aid

(blue marking on the receiver)



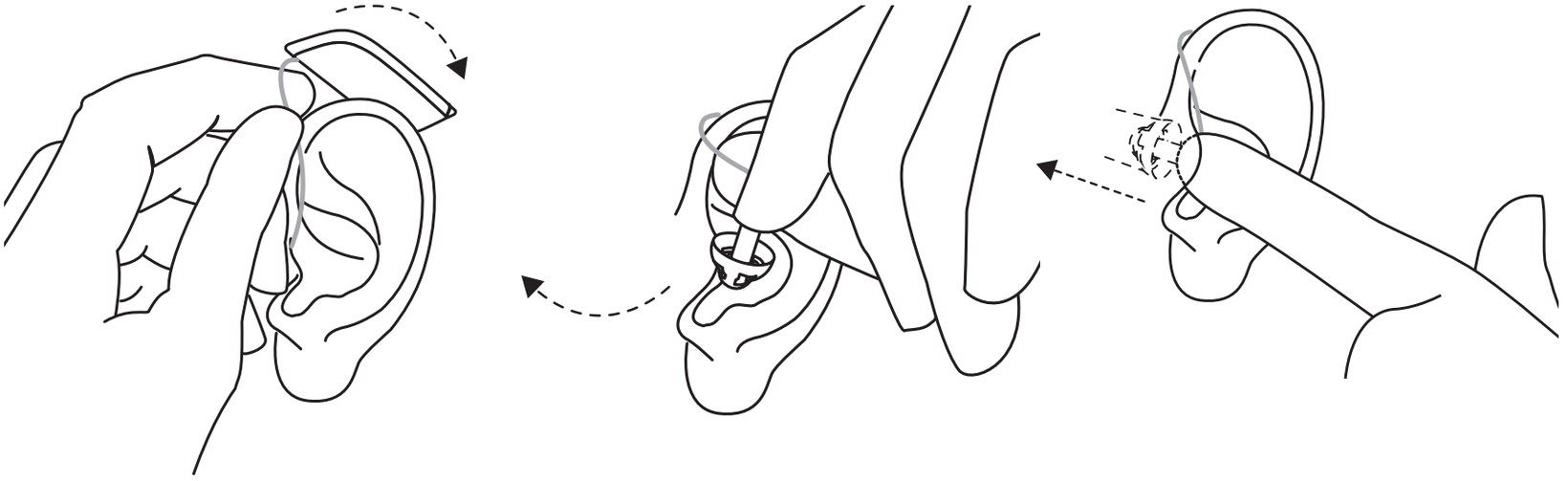
Right hearing aid

(red marking on the receiver)



Inserting the receiver dome into your ear

If your hearing aids have domes, follow these instructions:



1. Hang the hearing aid over the top of your ear.
2. Hold the receiver wire where it bends and gently place/push the receiver dome into your ear canal.
3. Push the dome far enough into your ear canal so that the receiver wire rests against your head. You can check in a mirror.

NOTE:

- To avoid whistling, ensure that the receiver wire and dome fit correctly into your ear. If you continue to experience whistling, check the troubleshooting guide for other possible reasons and solutions.

Sport lock

If you are very active, your hearing aids may move from the correct position. To avoid this situation, your hearing care professional can attach and adjust a sport lock to the receiver.

To insert a hearing aid with a sport lock:

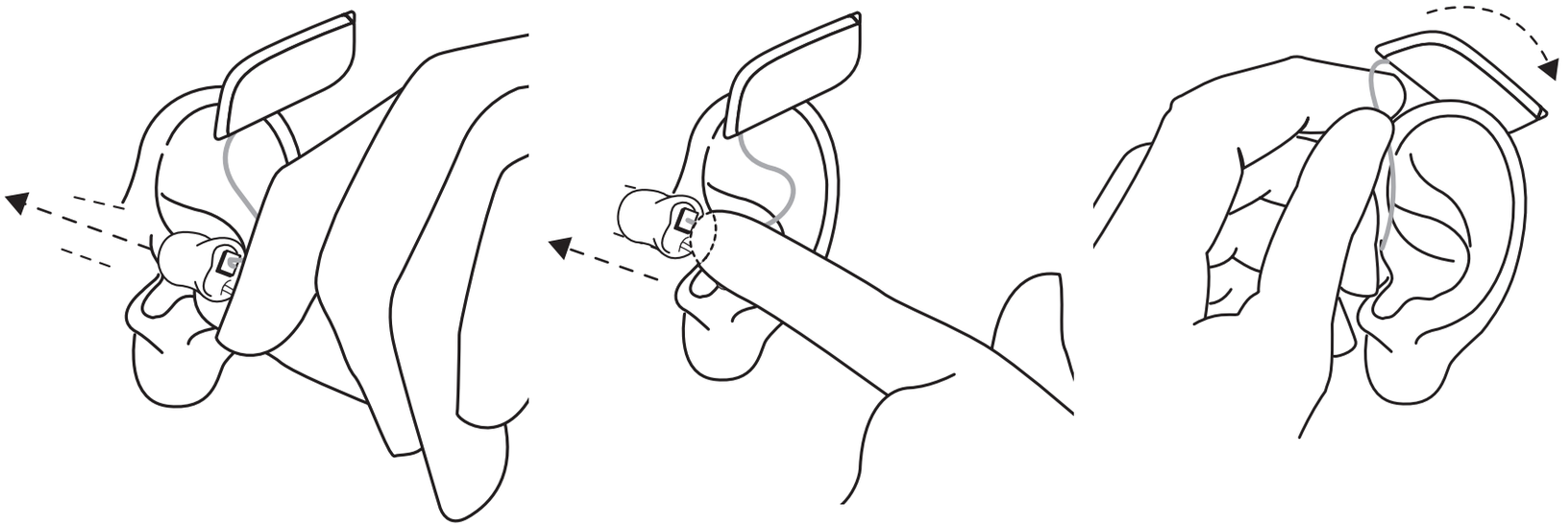
1. Insert the hearing aid as usual.
2. Tuck the sport lock into the bottom of the concha (the part of your ear just outside the ear canal).



NOTE: Sport locks may become stiff, brittle, or discoloured over time. Contact your hearing care professional for a replacement. Your hearing care professional will help you replace it.

Inserting earmoulds into your ears

If your hearing aids have earmoulds, follow these instructions:



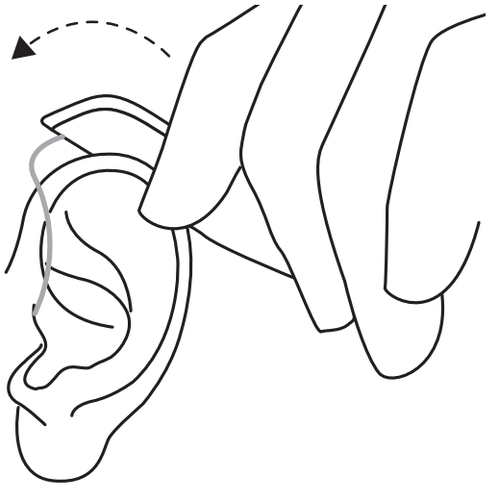
1. Hold the earmould between your thumb and index finger and position the sound outlet into your ear canal.
2. Slide the earmould into your ear with a gentle, twisting movement. Move the earmould up and down and press gently. Opening and closing your mouth may assist.
3. Place the hearing aid behind your ear and ensure it is secure. When properly inserted, your hearing aids should fit snugly and comfortably.

NOTE: When inserting an earmould, it may help to pull your ear up and back with the opposite hand.

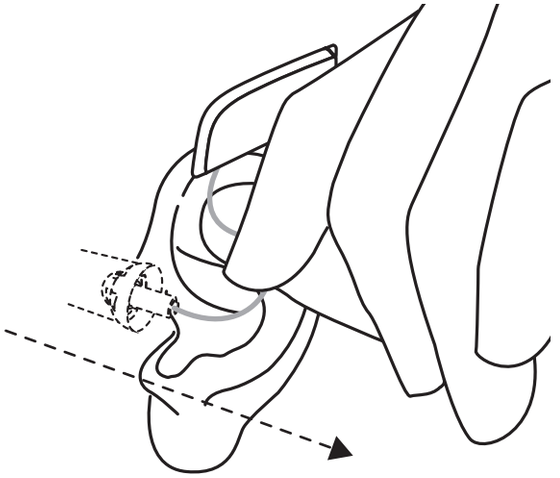
Removing your hearing aids from your ears

Removing receiver domes from your ears

If your hearing aids have domes, follow these instructions:



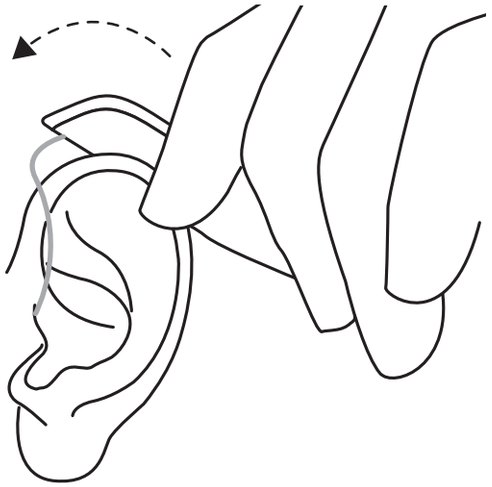
1. Lift the hearing aid off your ear.

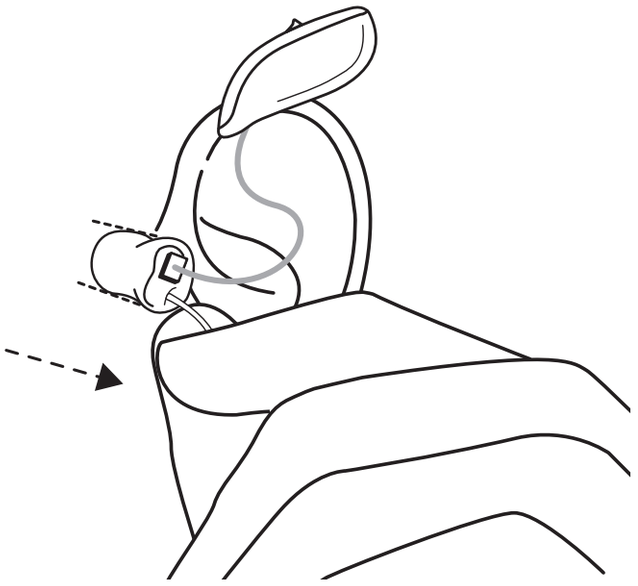


2. Hold the receiver wire with your thumb and index finger where it bends and pull the dome out of your ear canal.

Removing earmoulds from your ears

If your hearing aids have earmoulds, follow these instructions:

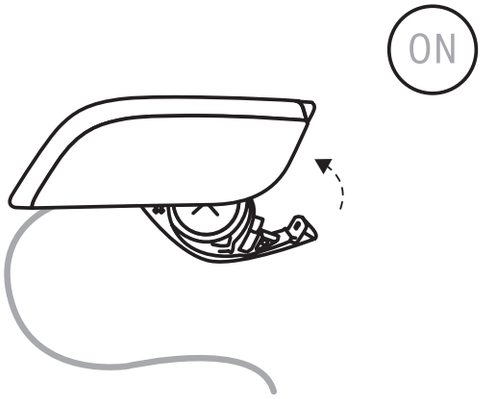




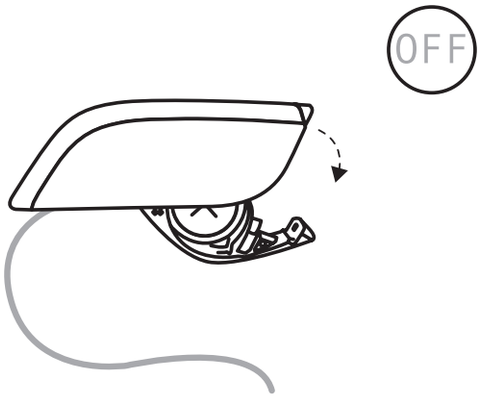
1. Lift the hearing aid from behind your ear. Let it hang beside your ear momentarily.
2. Using your thumb and index finger, gently pull the earmould (not the hearing aid or the wire) loose from your ear. If your earmould has a removal cord, pull it gently to assist. The removal cord is a separate line that is additionally attached to the earmould if requested. Remove the earmould completely by twisting it gently.

Using your hearing aids

Turning your hearing aids on and off



To turn your hearing aid on, close the battery door.



To turn the hearing aid off, open the battery door (with your fingernail).

Delayed Activation

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

Delayed Activation delays when sound comes through your hearing aid. It gives you time to put on the hearing aid without whistling or other issues.

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

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	Dynamic adaptation - the best option if you want only one program.
Hear in Noise	Dedicated program for hearing speech in very noisy places such as restaurants or social gatherings.
Music	For listening to music.
Acoustic phone	A special program for phone conversations.
Outdoor	For outdoor use (to reduce wind noise).
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.

Apps

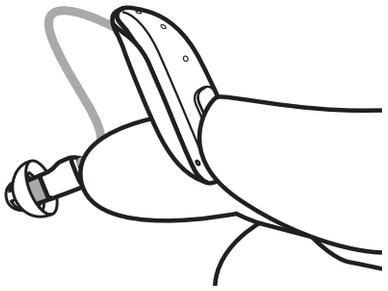
We have an app that you can use to control your hearing aids. You can use the app to adjust the volume, change programs and stream from another device. See "Advanced options", page 45.

Using the push button

Type CAR12A hearing aids have a push button.

This section describes the default settings of the push button. If necessary, your hearing care professional can change the default settings to suit your needs.

How the push button works depends on whether you have one or two hearing aids.



Changing programs

Press the button on you hearing aid to change to another listening program. Your hearing aids will beep to confirm the change. Continue pressing it to scroll through the programs available to you. The number of beeps indicates which program you have selected.

- If you have one hearing aid, press the button for less than 1 second.
- If you have two hearing aids, press the button on your right hearing aid for 2 to 3 seconds.

To get back to the default listening program, keep scrolling, or turn your hearing aids off and on again.

NOTE: If you have two hearing aids with synchronisation enabled, changing the program on one hearing aid automatically applies the change to the second hearing aid as well.

Controlling the volume

If you only have one hearing aid, you can adjust the volume only by using our app or our remote control.

If you have two hearing aids, you can turn the volume up and down by pressing the button on each hearing aid, or you can use our app or our remote control.

- To turn the volume up, press the button on the right hearing aid for less than 1 second.
- To turn the volume down, press the button on the left hearing aid for less than 1 second.

NOTE: Your hearing aid automatically adjusts the volume depending on your listening situation. This means that you normally won't have to adjust the volume manually.

Streaming sound to your hearing aids

- If you have one hearing aid, press the push button for 2 to 3 seconds.
- If you have two hearing aids, press the push button on your left hearing aid for 2 to 3 seconds.

Your hearing aids will start streaming from the audio device you have chosen.

NOTE: Before you can stream to your hearing aids, you must pair them with your audio device. For more information on how to do this, consult the user instructions for your audio device.

Overview of push button functionality

If necessary, your hearing care professional can change the default settings for the push button and fill in the table below with the new settings:

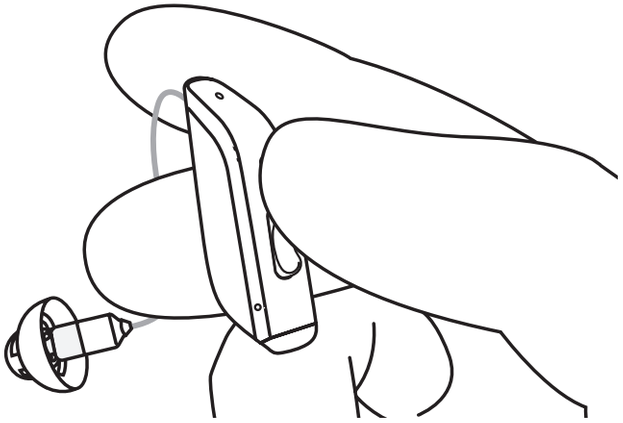
Button press	One hearing aid	Two hearing aids		New setting	
		Left	Right	Left	Right
Up to 1 second	Change program	Volume down	Volume up		
2 to 3 seconds	Activate streaming	Activate streaming	Change program		
5 seconds	Turn hearing aid on or off				

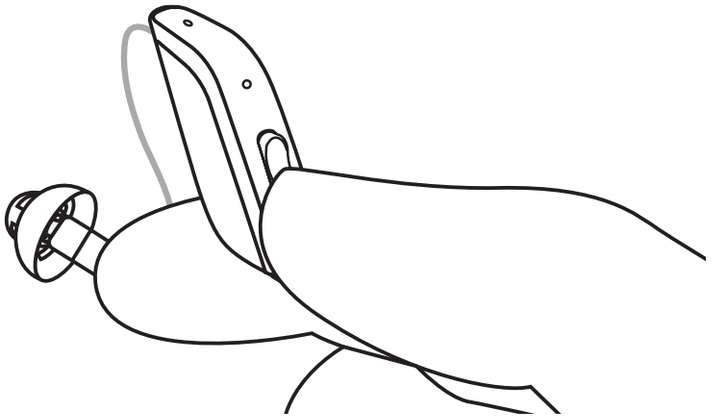
Using the multi-function button 

Type CAR13A hearing aids have a multi-function button.

The multi-function button has a bottom part and an top part.

This section describes the default settings of the push button. If necessary, your hearing care professional can change the default settings to suit your needs.





Changing programs

- To change the program, press the top of the multi-function button for 2 to 3 seconds. Your hearing aids will beep to confirm the change. The number of beeps indicates which program you have selected.
- Continue pressing it to scroll through the programs available to you.
- To get back to the default listening program, keep scrolling, or turn your hearing aids off and on again.

Controlling the volume

If your hearing care professional has activated your volume control, follow these instructions:

- To turn the volume up, press the top part of the button for less than 1 second.
- To turn the volume down, press the bottom part of the button for less than 1 second.

NOTE: Your hearing aid automatically adjusts the volume depending on your listening situation. This means that you normally won't have to adjust the volume manually.

Streaming sound to your hearing aids

Press the bottom part of the button and keep it pressed for 2 to 3 seconds. Your hearing aids will start streaming from the audio device you have chosen.

NOTE: Before you can stream to your hearing aids, you must pair them with your audio device. For more information on how to do this, consult the user instructions for your audio device.

Overview of push button functionality

Your hearing care professional can change the default settings and fill in the table below to record the new settings:

Button press	Top part	New settings
Max 1 second up	Increase volume	
Max 1 second down	Decrease volume	
2 to 3 seconds up	Change program	
2 to 3 seconds down	Activate streaming	

NOTE: If you have two hearing aids with synchronisation enabled, changing the program on one hearing aid automatically applies the change to the second hearing aid as well.

This feature can also be configured to allow you to use one hearing aid to increase volume and the other to decrease volume. Any increase or decrease made on one hearing aid will also apply to the other to ensure the volume is the same in both hearing aids.

Controlling the volume

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

However, you can also adjust the volume manually by using the Beltone HearMax™ app or our remote control. Depending on your hearing aid, you may also be able to adjust the volume by using the push button or the multi-function button. See "Using the push button ", page 23 or "Using the multi-function button ", page 25.

Telecoil

Optional for type CAR13A hearing aids only.

Your hearing aid may have a telecoil. The Telecoil function may help to improve understanding of speech with Hearing Aid Compatible (HAC) telephones and in theatres, cinemas, houses of worship, etc. that have a teleloop installed. See "HAC telephone", page 29

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

NOTE:

- The telecoil only works with a teleloop (an induction loop) or a HAC telephone.
- If you are having trouble hearing with the telecoil, ask your hearing care professional to adjust the program.

- 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.

HAC telephone

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 signal from the HAC phone and converts it to sound.

To use a HAC phone, follow these steps:

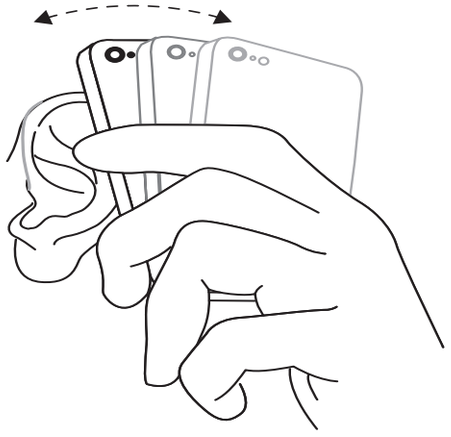
1. Switch your hearing aid to the Telecoil program.
2. Pick up the phone and make a call or answer a call.
3. Hold the phone close to the hearing aid and tilt it slightly outwards.
4. Listen to the dial tone and move the telephone to get the best reception.
5. If needed, adjust the volume.
6. When you hang up, switch back to your preferred program.

NOTE:

- If the phone has a poor telecoil signal, use the microphone program. To avoid whistling, do not hold the handset too tightly against your ear.
- Ask your hearing care professional to enable the Telecoil programme in your hearing aids.
- If you see a “M3”, “M4”, “T3”, or “T4” on the smartphone box, then the smartphone is HAC compliant. If you find it difficult to obtain a good result while using your smartphone, your hearing care professional will be able to give you advice on available wireless accessories to enhance listening capabilities. Ask your hearing care professional for advice regarding HAC smartphones.

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:

- Hold the telephone up to your ear canal or hold it close to the hearing aid microphones as illustrated.
- 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.
- You can also try holding the telephone slightly away from the ear.

NOTE: Depending on your needs, your hearing care professional may activate a function specifically for telephone use.

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.

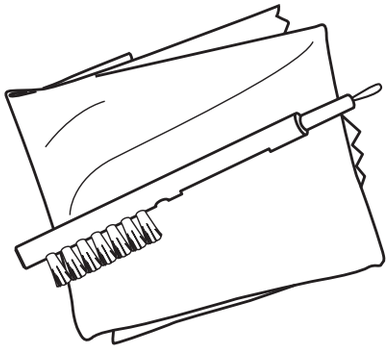
NOTE:

- If you have a mobile device, you can pair it to connect directly to your hearing aids. See "Advanced options", page 45.
- 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. See also "Wireless accessories", page 49.

Care and maintenance

Cleaning tools

These cleaning tools come with your hearing aids:



- Soft cloth.
- A brush with a battery magnet.

General instructions for care and maintenance

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.

To maintain your hearing aids, clean and disassemble them one at a time to prevent mixing them up.

Follow these steps:

1. When you remove your hearing aids, turn them off by opening the battery doors completely. This helps to dry them out.
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.

NOTE:

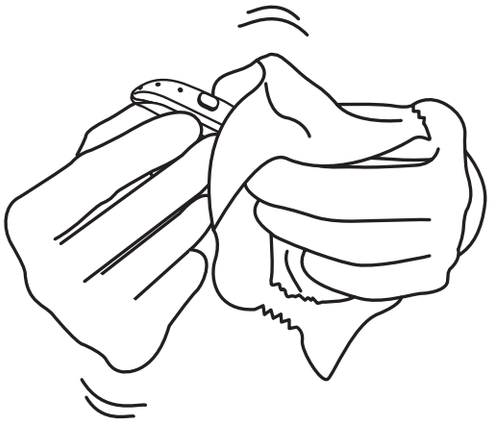
- Never immerse your hearing aids in liquid.
- Keep your hearing aids away from excessive heat and direct sunlight.
- The hearing aid is dust, splash, and water resistant:
  - The hearing aid has IP6X dust resistance. Avoid exposure to extensive dust.
  - The hearing aid has IPX8 water resistance. Avoid exposure to liquids, and do not swim, shower or sauna while wearing the hearing aid.

CAUTION:

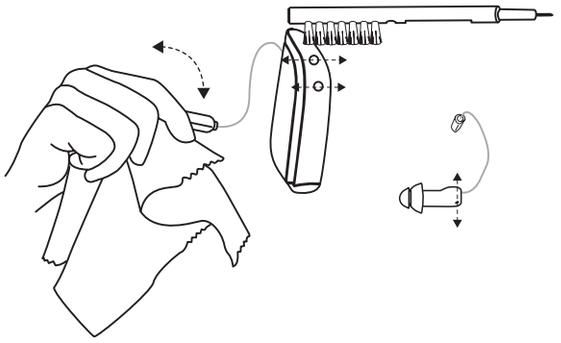
- Only use recommended drying agents.
- Never use alcohol or other cleaning solutions to clean your hearing aids. This can damage your hearing aids and may cause a skin reaction.
- Ear wax or other residue on your hearing aids can cause an infection or allergy. To avoid this, clean your hearing aids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

Daily care and maintenance

It is important to keep your hearing aids clean and dry on a daily basis. Use a cloth and brush to clean the hearing aids.



1. Wipe your hearing aids with a cloth.



2. Swipe a small brush across the microphones. If your receiver has a microphone, remember to brush that one as well.

NOTE:

- Never try to put the brush bristles or the cleaning wire into the microphone inlets. This can damage your hearing aids.
- Do not use water to clean your receiver wires and domes or earmoulds.
- Use a soft, dry cloth to wipe your receivers and earmoulds clean.

Cleaning the earmould

Use a soft, dry cloth to wipe the earmould clean.

NOTE: If the receiver wire for your earmould gets stiff, brittle or discoloured, it needs to be replaced. Consult your hearing care professional.

Changing your hearing aid domes

We recommend that your hearing care professional shows you how to change domes. You should change your domes every 3 months or more often according to the advice of your hearing care professional.

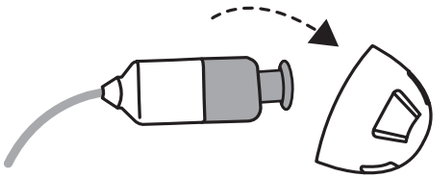
NOTE:

- Incorrect dome replacement can result in a dome being left in your ear when you remove your hearing aid.

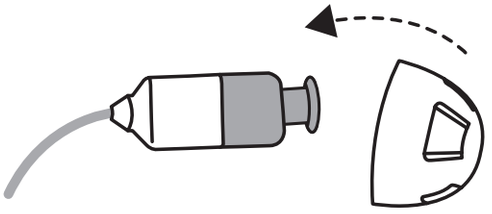
Standard domes

The illustrations show an open dome, but the procedure is the same for closed domes. Follow these instructions to replace your domes.

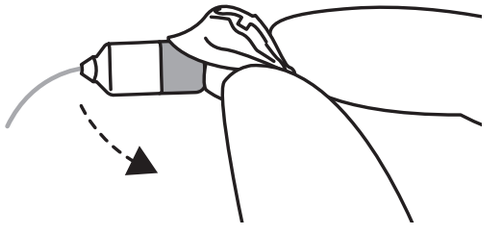
1. Remove the used dome by pulling it off the receiver and then discard it. This may require a bit of force.



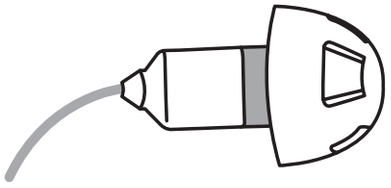
2. Push the new dome over the ribbed end of the receiver.



3. Check that the dome is securely mounted by carefully lifting the lower part of the dome and verifying that the collar completely covers the ribbed end of the receiver.



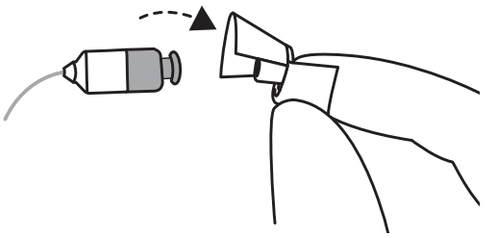
4. When placed correctly, the dome will appear slightly angled.



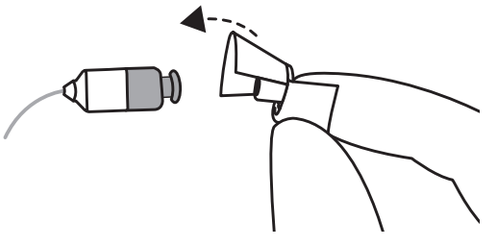
Tulip domes

To change a tulip dome, follow these instructions:

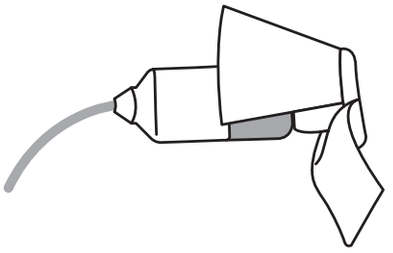
1. Remove the used dome by pulling it off the receiver and discard. This may require a bit of force.



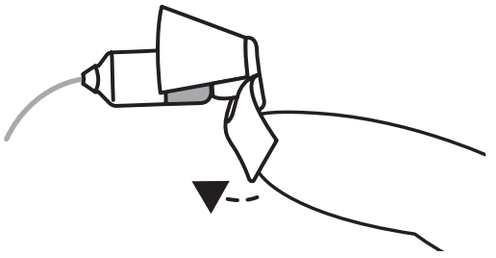
2. Push the largest petal back, then press the tulip dome over the ribbed end of the receiver.



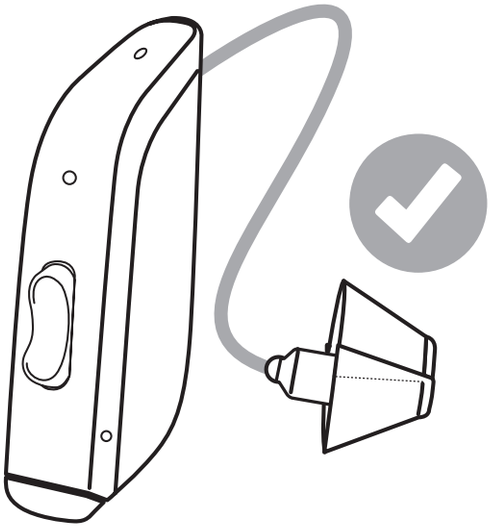
3. Check that the tulip dome is securely mounted by verifying that the collar completely covers the ribbed end of the receiver.



4. Push the larger petal toward the receiver.



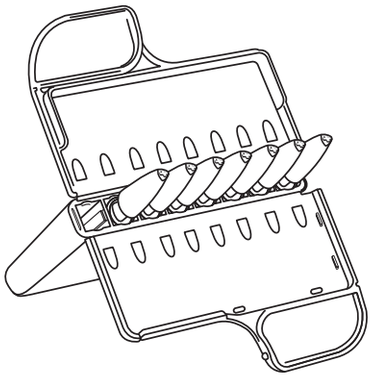
This illustration shows a correctly mounted tulip dome. Ensure the large petal is outside the small petal.

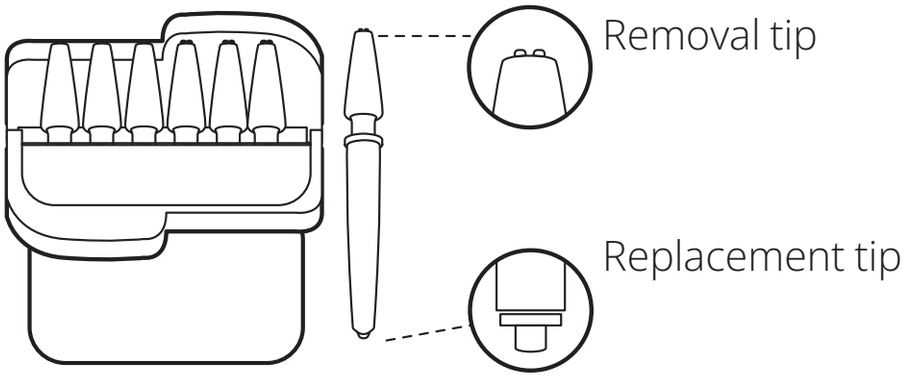


Changing filters

The filters for your hearing aid come in cases with 8 filters in each. The case with wax filters is marked "WAX FILTER" followed by a part number. The case with microphone filters is marked "MIC. FILTER" followed by a part number. Your hearing care professional can use the part numbers for ordering more filters.

Each tool has a small hook in one end (removal tip) and a new filter in the other (replacement tip).





NOTE: The shape of the filter tool and the case may vary. Yours may look different.

If you don't feel comfortable changing the filters, ask your hearing care professional to do it for you.

Changing the wax filter

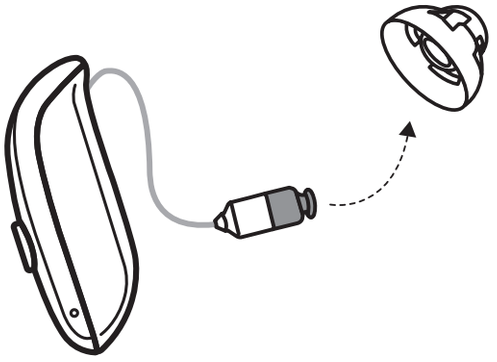
To change a wax filter, you will need your case of wax filter tools.

The wax filter is located at the inward end of the receiver. The wax filter helps keep earwax away from the components of your hearing aid. You must replace it on a regular basis. Consult your hearing care professional for advice on how often you need to replace it. It will depend on how much wax your ear produces.

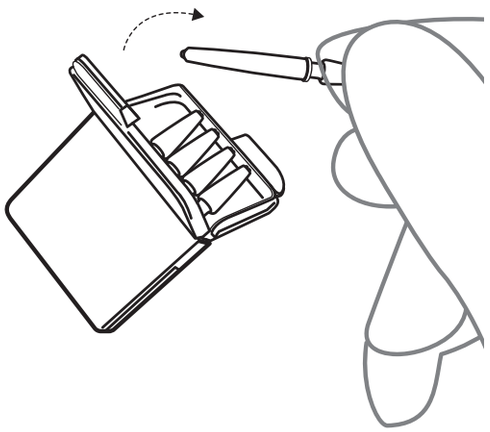
If you wear a dome, remove it before following this process for replacing the wax filter. See "Changing your hearing aid domes", page 35.

Removing the old filter

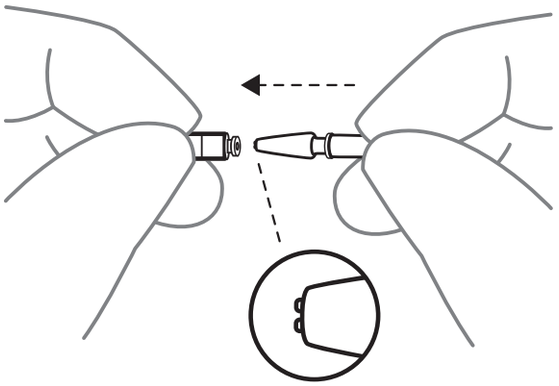
1. Remove the dome from the receiver.



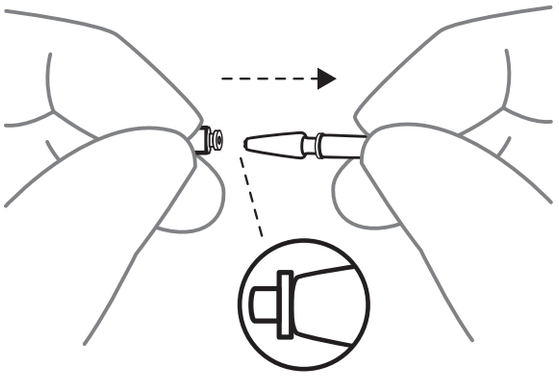
2. Open the filter case and take out one of the filter tools.



3. Insert the removal tip into the used filter.

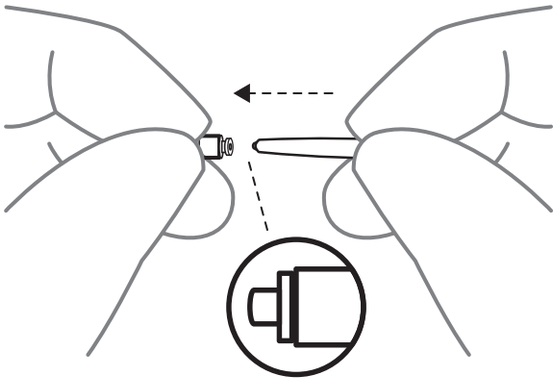


4. Pull the filter tool straight out. It is important to pull straight and not in an angle.

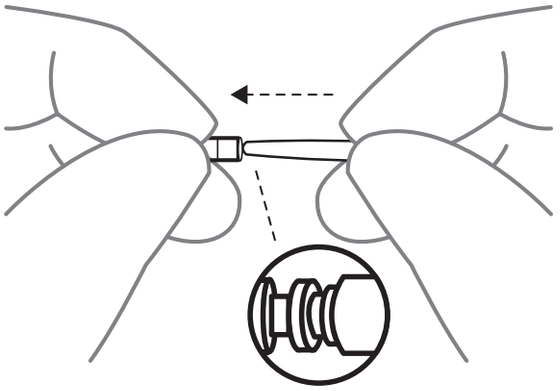


Inserting the new filter

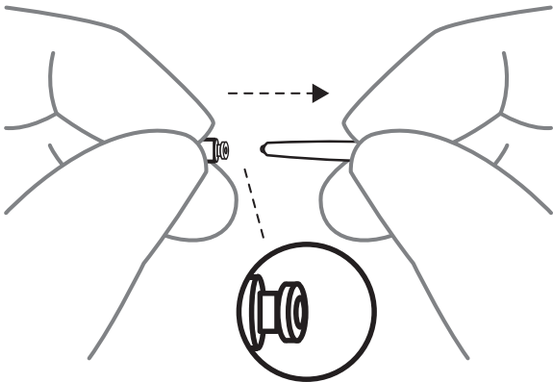
1. Insert the other end of the filter tool (the end with the new filter) into the sound outlet.



2. Gently press the new filter straight into the sound outlet until the outer ring is touching the sound outlet.



3. Pull the filter tool straight out. Your new filter will remain in place. Re-attach your dome or a replacement dome.



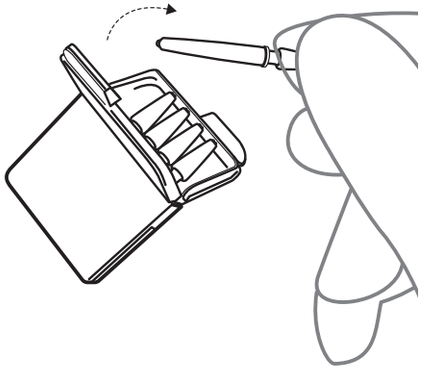
Changing the microphone filters

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

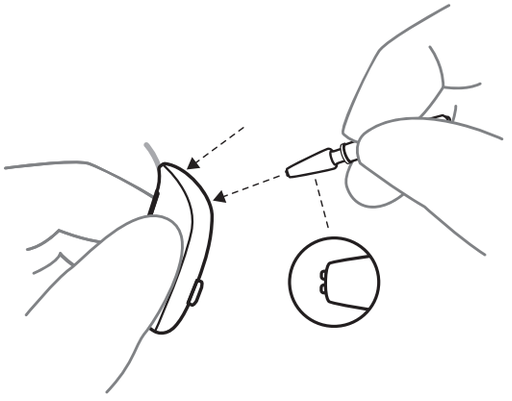
To change a microphone filter, you will need your case of microphone filter tools.

Removing the old filter

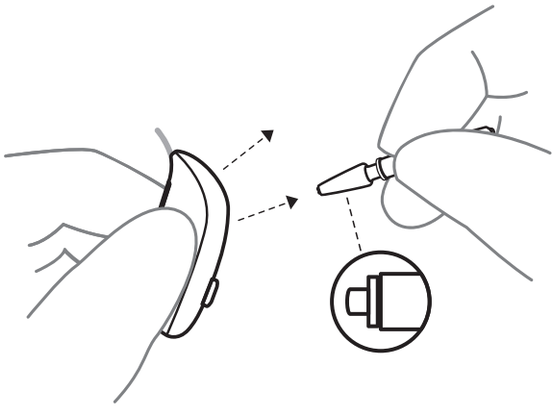
1. Open the filter case and take out one of the filter tools.



2. Insert the removal tip into the used filter.

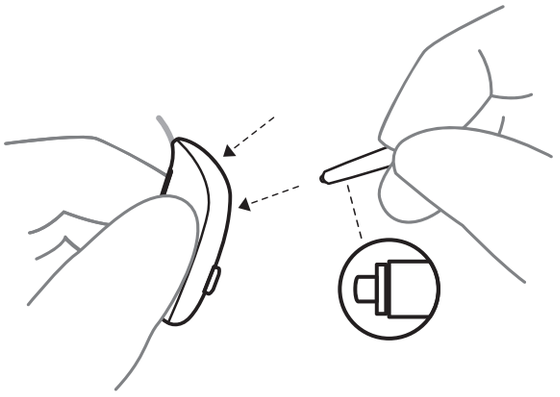


3. Pull the filter tool straight out. It is important to pull straight and not in an angle.

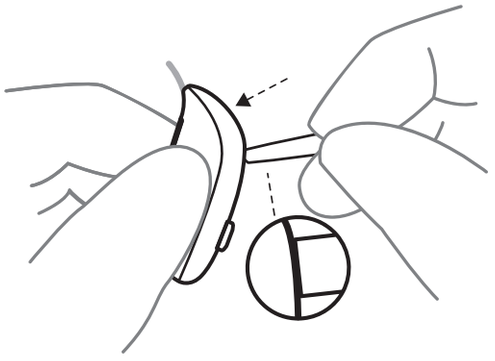


Inserting the new filter

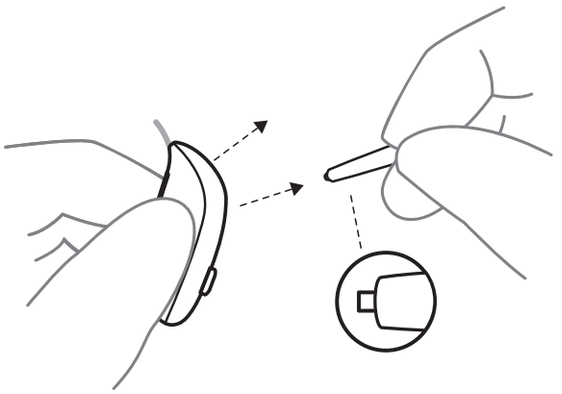
1. Insert the other end of the filter tool (the end with the new filter) into the microphone opening.



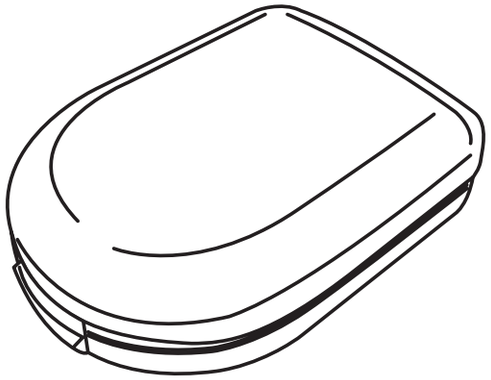
2. Gently press the new filter straight into the microphone opening until the outer ring is flush with the back of the hearing aid.



3. Pull the filter tool straight out. Your new filter will remain in place.



Storing your hearing aids



1. The best storage for your hearing aids is the case they came in.

2. When they are not being worn, keep your hearing aids dry by leaving the battery doors open.



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 from the latest iPhone and iPad models[1], and control from these mobile devices.

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 13 or newer.

Controlling your hearing aids with the mobile device app (optional)

The Beltone HearMax™ app enables you to control your hearing aids from mobile devices. You can use the app 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.

[1]Hands-free calls are compatible with iPhone 11 or later, iPad Pro 12.9-inch (5th generation), iPad Pro 11-inch (3rd generation), iPad Air (4th generation), iPad mini (6th generation), iPad (10th generation) or later, with software updates iOS 15.3 and iPadOS 15.3 or later.

NOTE:

- The app must only be used with the Beltone hearing aids for which they are intended, and the manufacturer 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.
- 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.





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.

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 (RF) transmitter. When boarding a flight, follow airline instructions and turn off the 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. Open and close the battery door on each hearing aid three times within 10 seconds.
2. A 10-second double tone (♫♫) means the hearing aid is now in Flight Mode.

It is important to wait an additional 15 seconds after you activate Flight Mode before opening and closing the battery door again for any reason. If you open and close the battery door during this 15 second window, wireless communication will reactivate.

Activating wireless communication (turning off Flight Mode)

1. Open and close the battery door on each hearing aid once.
2. Wireless communication will be activated after 10 seconds.

Wireless accessories

A variety of wireless accessories is available as an enhancement to your hearing aids. These accessories enable direct streaming of sound and speech to your hearing aids, enhancing your ability to hear and communicate in various everyday situations.

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.
- **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. Furthermore, 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 45.

Accessing wireless accessories

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



NOTE:

- Please contact your hearing care professional for an overview of compatible wireless accessories that are approved by GN Hearing A/S.
- You should only use GN Hearing wireless accessories with your wireless hearing aids. For information about how to pair your hearing aids with a wireless accessory, see the user guide for the relevant wireless accessory.

Tinnitus management

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 challenged users will require training by a doctor, audiologist, hearing healthcare professional or the guardian for the insertion and removal of the hearing aids containing the TBP module.

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.

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. 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 to make 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 a 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 is 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 intending to surround 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 most instances, the TBP module can also be set to mask the tinnitus sound, 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 the 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.

 WARNING:

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 the 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 challenged 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 ensure 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:
    a. Visible, congenital or traumatic deformity of the ear.
    b. History of active drainage from the ear within the previous 90 days.
    c. History of sudden or rapidly progressive hearing loss within the previous 90 days.
    d. Acute or chronic dizziness.
    e. Unilateral hearing loss of sudden or recent onset within the previous 90 days.
    f. Visible evidence of significant cerumen accumulation or a foreign body in the ear canal.
    g. 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 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:

a. Visible, congenital or traumatic deformity of the ear.

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

- Consult a hearing care professional or a physician:
  - 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 4

- Seek immediate medical help if a hearing aid, any of its parts, a battery, or a magnet is swallowed, as it can cause choking and harm your health.
- Keep hearing aids, their parts, batteries, and magnets away from pets, children, and people with cognitive, intellectual, or mental health challenges.
- Always supervise children or individuals with cognitive, intellectual, or mental health challenges when they are using their hearing aids. Hearing aids contain small pieces that can be dangerous if swallowed.
- Do not wear your hearing aids while exposed to radiation. Some types of radiation, including MRI or CT scanners, can affect the settings in your hearing aids. This may cause malfunction and potentially damage 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. However, they may 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 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.
- 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 sounds and environments or by using hearing protection.
- External devices connected to the electrical input must be safe according to the requirements of IEC 60601-1:2005+AMD1:2012+AMD2:2020, IEC 60065, or IEC 60950-1, IEC 62368-1 as appropriate.
- Your hearing aids have been fitted to amplify soft and loud sounds according to your 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.
- Only use original consumables with your hearing aids (e.g. wax filters). Consult your hearing aid professional for more information.
- No modification of this hearing aid is allowed.

Warning related to power hearing aids

- A power hearing aid can produce very loud sound to compensate for severe or profound hearing loss. There is a risk that the loud sound can further impair the user's hearing.

CAUTION:

- Use your hearing aids as your hearing care professional recommends. Incorrect use may damage your hearing.
- Do not use a broken or modified 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.
- Do not modify the shape of your hearing aid or its accessories. This can cause skin reactions or sharp edges leading to scratches or sores.
- If you suspect that you have a dome, wax filter, or other object in your ear canal, consult a hearing care professional or a physician. 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 a 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.

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 to ensure the correct target for the fitted OSPL90.
- Special care should be exercised in selecting and fitting hearing aids with a maximum sound pressure level (maximum OSPL90) of 132 dB SPL or higher (IEC 60318-5:2006) as there may be a risk of further impairing the remaining hearing of the hearing aid user.

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

Cyber security

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 a 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 latest available software update for your hearing aid.
- Only accept live assistance calls from a hearing care professional that you are expecting.

Troubleshooting

Issue	Potential cause	Potential solution
Feedback or "whistling"	Is your earmould or dome inserted correctly in your ear?	Re-insert it.
	Is the volume very loud?	Reduce the volume.
	Is the receiver wire broken or the earmould clogged?	Visit your hearing care professional.
	Are you holding an object (e.g. a hat or a telephone mouthpiece) close to the 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 physician.
No sound	Is the hearing aid turned off?	Turn it on.
	Is there a battery in the hearing aid?	Insert a new battery.
	Is the battery still good?	Replace with a new battery.
	Is the receiver wire broken or the earmould clogged?	Visit your hearing care professional.
	Is your ear full of wax?	Visit your physician.

Issue	Potential cause	Potential solution
Sound is distorted, spluttering or weak?	Is the battery dead?	Replace with a new battery.
	Is the battery dirty?	Clean it or replace it with a new one.
	Is the receiver wire broken or the earmould clogged?	Consult your hearing care professional.
	Is there moisture in your hearing aid?	Use a desiccant (drying kit).
Battery drains very quickly.	Did you leave your hearing aid switched on for long periods of time?	The battery will drain faster when you use wireless functions like streaming from your smart device or from your TV with our TV streamer.
	Is the battery old?	Check the battery packaging.

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.

Ambient conditions

Temperature test

Beltone 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 use

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.



CAUTION: During use, your hearing aids may reach temperatures up to 43 °C (109 °F).

During transport or storage

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
Dome	3 months
Receivers	2 years
Electronic accessories (e.g., wireless accessories)	5 years

Statement

This device complies with part 15 of the FCC 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. 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 following 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 receiver
- Connect the equipment to an outlet or a circuit that is 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 the 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, GN Hearing A/S declares that the radio equipment types CAR12A and CAR13A are in compliance with Directive 2014/53/EU.
- The full text of the EU declaration of conformity is available at the following internet address:
  www.beltone.com/en/declarations.
- In the US: FCC CFR 47 Part 15, subpart C.
- In Canada: these hearing aids are certified under the rules of ISED.
- Japanese Radio Law and Japanese Telecommunications Business Law Compliance: This device has been certified 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).

- For other international regulatory requirements, please refer to the regulatory requirements of the specific country.

Type designations

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

CAR12A, FCC ID: X26CAR12A, IC: 6941C-CAR12A
CAR13A, FCC ID: X26CAR13A, IC: 6941C-CAR13A

Hearing aid variants

Availability of models may vary by country.

Mini Receiver-in-ear hearing aids of type **CAR12A** with FCC ID X26CAR12A, IC number 6941C-CAR12A and size 312 Zinc-air battery are available in the following variants:

ENV1763-DRW, ENV963-DRW, ENV663-DRW, ENV463-DRW, ENVX63-DRW.

COM463-DRW, COM363-DRW, COM263-DRW, COMX63-DRW.

Receiver-in-the-ear (RIE) hearing aids of type **CAR13A** with FCC ID X26CAR13A, IC number 6941C-CAR13A and size 13 Zinc-air battery are available in the following variants:

ENV1764-DRW, ENV964-DRW, ENV664-DRW, ENV464-DRW, ENVX64-DRW.

COM464-DRW, COM364-DRW, COM264-DRW, COMX64-DRW.

The nominal RF output power transmitted is -7.1 dBm.

The hearing aid transmits and receives RF signals in the frequency range of 2.4 GHz - 2.48 GHz.

All above-mentioned hearing aids contain 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.

Technical specifications

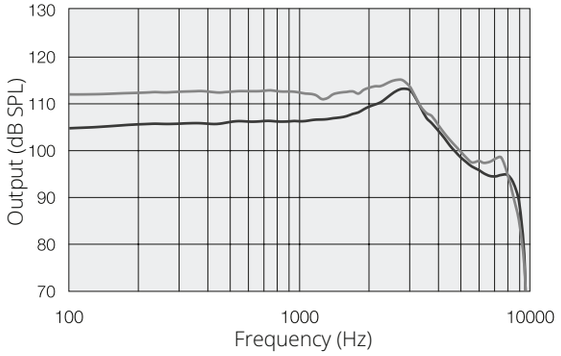
RIE — LP/MP receiver

Models: ENV1763-DRW, ENV963-DRW, ENV663-DRW, ENV463-DRW, ENVX63-DRW, ENV1764-DRW, ENV964-DRW, ENV664-DRW, ENV464-DRW, ENVX64-DRW

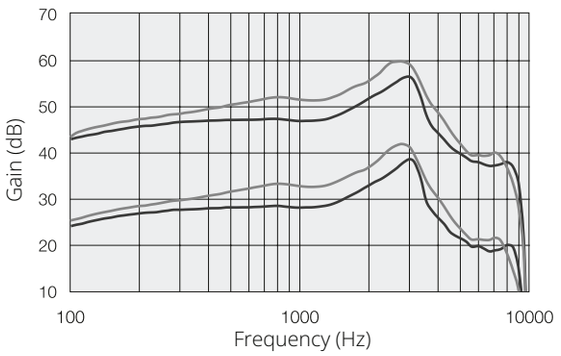
Models: COM463-DRW, COM363-DRW, COM263-DRW, COMX63-DRW, COM464-DRW, COM364-DRW, COM264-DRW, COMX64-DRW.

		LP	MP	
Reference test gain (60 dB SPL input) (The 2 lower curves in the Full-On and Ref.Test.Gain chart)	HFA	31	36	dB
Full-on gain (50 dB SPL input) (The 2 upper curves in the Full-On and Ref.Test.Gain chart)	Max. HFA	56 50	60 55	dB
Maximum output (90 dB SPL input)	Max. HFA	113 109	115 113	dB SPL
Total harmonic distortion	500 Hz 800 Hz 1600 Hz 3200 Hz	0.6 0.8 1.4 0.6	0.7 0.9 1.3 0.6	%
Telecoil sensitivity (1 mA/m input)* HFA - SPLIV @ 31.6 mA/m (ANSI) Full-on telecoil sensitivity @ 1 mA/m	Max. HFA HFA	87 92 81	90 97 86	dB SPL
Equivalent input noise, w/o noise reduction 1/3 Octave Equivalent input noise, w/o noise reduction	HFA 1600 Hz	22 8	20 9	dB SPL
Frequency range IEC 60118-0: 2015	HFA	<200 to >8000	<200 to >8000	Hz
Current Drain (Quiescent/Operating)		0.81/1.03	0.81/0.92	mA

Maximum Output (OSPL90)



Full-On and Reference Test Gain



Measured according to ANSI S3.22-2014, IEC 60118-0:2015, JIS C 5512: 2015, 2cc coupler.
* Telecoil is only for these models: . ENV1764-DRW, ENV964-DRW, ENV664-DRW, ENV464-DRW, ENVX64-DRWCOM464-DRW, COM364-DRW, COM264-DRW, COMX64-DRW.

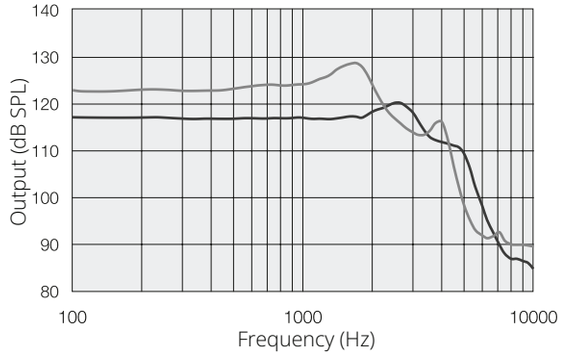
RIE — HP/UP receiver

Models: ENV1763-DRW, ENV963-DRW, ENV663-DRW, ENV463-DRW, ENVX63-DRWENV1764-DRW, ENV964-DRW, ENV664-DRW, ENV464-DRW, ENVX64-DRW

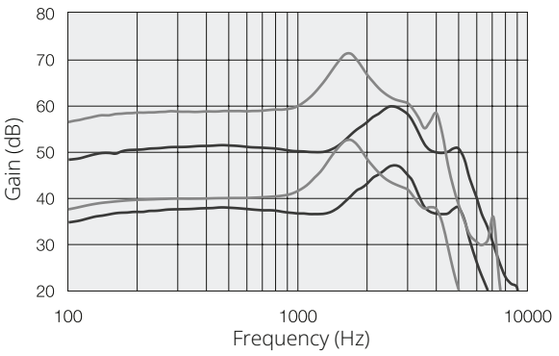
Models: COM463-DRW, COM363-DRW, COM263-DRW, COMX63-DRWCOM464-DRW, COM364-DRW, COM264-DRW, COMX64-DRW.

		HP	UP	
Reference test gain (60 dB SPL input) (The 2 lower curves in the Full-On and Ref.Test.Gain chart)	HFA	41	46	dB
Full-on gain (50 dB SPL input) (The 2 upper curves in the Full-On and Ref.Test.Gain chart)	Max. HFA	60 54	71 65	dB
Maximum output (90 dB SPL input)	Max. HFA	120 118	129 123	dB SPL
Total harmonic distortion	500 Hz 800 Hz 1600 Hz 3200 Hz	0.5 0.8 0.8 0.4	0.5 0.4 0.1 0.1	%
Telecoil sensitivity (1 mA/m input)* HFA - SPLIV @ 31.6 mA/m (ANSI) Full-on telecoil sensitivity @ 1 mA/m	Max. HFA HFA	92 103 86	102 106 95	dB SPL
Equivalent input noise, w/o noise reduction 1/3 Octave Equivalent input noise, w/o noise reduction	HFA 1600 Hz	21 9	20 8	dB SPL
Frequency range IEC 60118-0: 2015	HFA	<200 to 6590	<200 to 4650	Hz
Current Drain (Quiescent/Operating)		0.81/0.94	0.81/0.87	mA

Maximum Output (OSPL90)



Full-On and Reference Test Gain



Measured according to ANSI S3.22-2014, IEC 60118-0:2015, JIS C 5512: 2015, 2cc coupler.

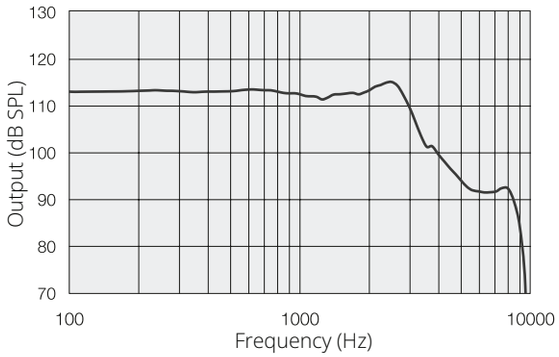
* Telecoil is only for these models: . ENV1764-DRW, ENV964-DRW, ENV664-DRW, ENV464-DRW, ENVX64-DRWCOM464-DRW, COM364-DRW, COM264-DRW, COMX64-DRW.

RIE — MM receiver

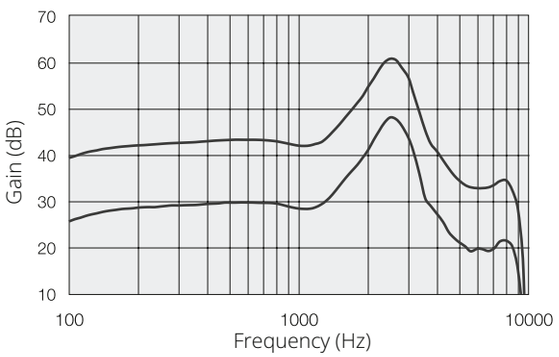
Models: ENV1763-DRW, ENV963-DRW, ENV663-DRW, ENV463-DRW, ENVX63-DRWENV1764-DRW, ENV964-DRW, ENV664-DRW, ENV464-DRW, ENVX64-DRW

		MM	
Reference test gain (60 dB SPL input) (The lower curve in the Full-On and Ref.Test.Gain chart)	HFA	37	dB
Full-on gain (50 dB SPL input) (The upper curve in the Full-On and Ref.Test.Gain chart)	Max. HFA	61 50	dB
Maximum output (90 dB SPL input)	Max. HFA	115 113	dB SPL
Total harmonic distortion	500 Hz 800 Hz 1600 Hz 3200 Hz	0.4 0.6 0.4 0.5	%
Telecoil sensitivity (1 mA/m input)* HFA - SPLIV @ 31.6 mA/m (ANSI) Full-on telecoil sensitivity @ 1 mA/m	Max. HFA HFA	90 97 80	dB SPL
Equivalent input noise, w/o noise reduction 1/3 Octave Equivalent input noise, w/o noise reduction	HFA 1600 Hz	22 9	dB SPL
Frequency range IEC 60118-0: 2015		<200 to >8000	Hz
Current Drain (Quiescent/Operating)(DRW models only)		0.81/0.83	mA

Maximum Output (OSPL90)



Full-On and Reference Test Gain



Measured according to ANSI S3.22-2014, IEC 60118-0:2015, JIS C 5512: 2015, 2cc coupler.
* Telecoil is only for these models: . ENV1764-DRW, ENV964-DRW, ENV664-DRW, ENV464-DRW, ENVX64-DRW

Additional information

Acknowledgements

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.

© 2024 GN Hearing A/S. All rights reserved. Beltone is a trademark of GN Hearing A/S. Apple, the Apple logo, iPhone, iPad, iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc., registered in the US and other countries. Android, Google Play and the Google Play logo are trademarks of Google LLC.

Notes

Notes

Manufacturer according to EU
Medical Device Regulation
2017/745:

GN Hearing A/S
Lautrupbjerg 7
DK-2750 Ballerup
Denmark

Local contacts:

United Kingdom
GN Hearing UK Ltd
Unit 13 Talisman Business Centre
Bicester OX26 6HR
United Kingdom
Tel.: +44 1869 352 800
gnhearing.com

Australia
GN Hearing Australia Pty Ltd
Suite 1001, Level 1
1 Julius Avenue
North Ryde, NSW 2113
Australia
Tel.: (free) 1800 658 955
gnhearing.com

New Zealand
GN Hearing New Zealand Limited
Ground Floor, North Entrance
4 Fred Thomas Drive
Takapuna, Auckland, 0622
Tel.: (free) 0800 900 126
gnhearing.com

40293000GB- 24.12 - Rev. C (Date of issuance: 2024.12.01)

CE 0297

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