ReSound Key™

User guide

ReSound Behind-The-Ear hearing aids

GN Making Life Sound Better

resound.com

Hearing aid information

Left hearing aid		Right hearing aid	
Serial number		Serial number	
Model number		Model number	
Battery type	☐ Mini BTE Size 312 ☐ Standard BTE Size 13		

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

Table of Contents

Introduction

Thank you for choosing our hearing aids. We recommend that you use your hearing aids every day. This way you will fully benefit from them.

NOTE: Read this booklet carefully before you start using your hearing aids.

Intended use

Generic air-conduction hearing aids are wearable sound-amplifying devices intended to compensate for impaired hearing. The fundamental operating principle of hearing aids is to receive, amplify, and transfer sound to the eardrum of a hearing impaired person.

For devices including a Tinnitus Sound Generator module

The Tinnitus Sound Generator module is a tool to generate sounds to be used in a Tinnitus Management Program to temporarily relieve patients suffering from Tinnitus.

For devices including a dome

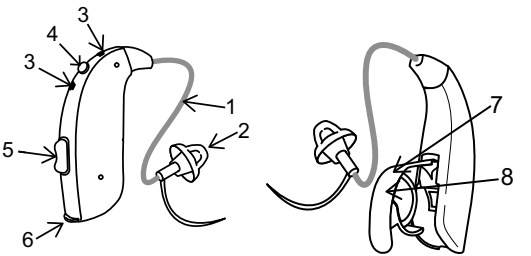
The dome is intended to be connected to a thin tube on the hearing aid. The dome is intended to ensure that the sound outlet of the hearing aid is placed in the ear canal.

This accessory is intended to be used by the same age group as the hearing aid. The accessory is intended to be used by lay persons.

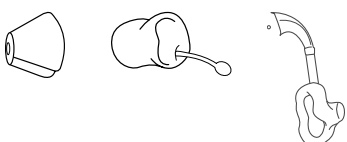
Your hearing aid

77 model

1. Thin tube
2. Open dome
3. Microphone inlets
4. Push button
5. Volume control
6. Battery compartment
7. Direct Audio Input
8. Battery door lock (optional)



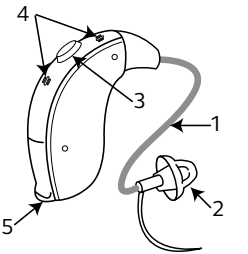
The hearing aids in the illustrations are shown with a thin tube and an open dome, but they can also be fitted with other types of domes/earmoulds:



Use only original consumables from ReSound, e.g. tubes and domes.

67 model

1. Thin tube
2. Open dome
3. Push button
4. Microphone inlets
5. Battery compartment



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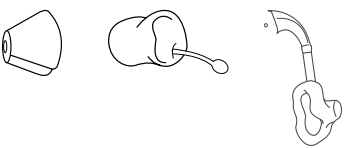


Use only original consumables from ReSound, e.g. tubes and domes.

How to get your hearing aid ready for use

Battery warnings

⚠ **WARNING:** Batteries contain dangerous substances and should be disposed of carefully in the interest of your safety and for the environment. Please note:

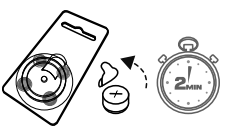
1. Keep batteries away from children, mentally disabled persons, and pets.
2. Do not place batteries in your mouth. Consult a physician immediately if a battery has been swallowed, as they can be harmful to your health.
3. Do not recharge zinc-air batteries – they may leak or explode.
4. Do not attempt to dispose of batteries by burning them.
5. Used batteries are harmful to the environment. Please dispose of them according to local regulations or return them to your hearing care professional.
6. Batteries may leak. Remove the battery if you leave the hearing aids unused for longer periods.
7. If the batteries are not inserted correctly, the device will not work and the batteries may build up heat. If this happens, please remove the batteries.

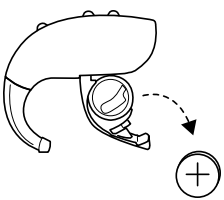
NOTE:

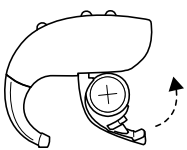
- Always use new zinc-air batteries that have a minimum remaining shelf life of one year.
- To save battery power, turn off your hearing aids when they are not in use.

How to change the battery

1. Prepare the new battery. Remove the protective foil to activate the battery - wait for **two minutes** before inserting the battery into the hearing aid.
2. Open the battery door completely using your fingernail.
3. Remove the used battery.
4. Insert the new battery with the positive side (+) facing upwards. Always insert the battery in the door, never directly into the hearing aid.
5. Close the battery door.







Please observe the following:

1. To save battery power, turn off your hearing aids when they are not in use.
2. At night, switch off the hearing aid and open the battery door completely to allow moisture to evaporate. This prolongs the hearing aid's lifespan.
3. If the hearing aid frequently loses connection with wireless accessories, contact your hearing care professional for a list of appropriate batteries.

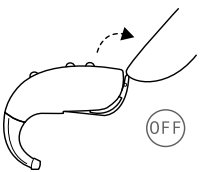
Battery door lock

If the hearing aid is going to be used by a child or a mentally disabled person, you can ask your hearing care professional to make a battery door lock available for you. You can turn the hearing aid on and off as you usually do, but you will have to unlock the battery door every time you need to change the battery.

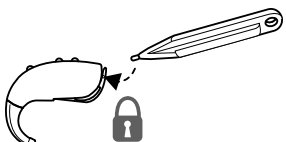
How to use the battery door lock

To lock the battery door:

1. Open the battery door to the OFF position.



2. Use the tool provided with your battery door lock to push the slider from the left side to the right side.



To unlock the battery door simply repeat the same procedure but pushing the slider to the right instead. You can now change the battery as described in How to change the battery.

NOTE: The battery lock is not available for 67 models.

Low battery warning

When the batteries are low on power, your hearing aids reduce the volume, and play a melody every 15 minutes, until they are empty and turn off.

NOTE: Keep spare batteries on hand.

Low battery warning when paired with wireless accessories (optional)

NOTE: The batteries drain faster when you use wireless functionalities like streaming from your smartphone or from your TV via our TV streamer. As the battery power goes down, the wireless functions stop working. A short melody every five minutes indicates that battery power is too low. The table below shows how the hearing aid functions are affected as the power level declines.

If the hearing aids are experiencing frequent loss of connection to wireless accessories, contact your hearing care professional for a list of low impedance batteries.

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

These will work again when you insert a new battery.

How to place the hearing aids in your ears

How to tell left from right

If you have two hearing aids, they may be programmed differently. One for your left ear, the other for your right. Do not swap them. Please pay attention to this when cleaning, storing and inserting the hearing aids.

You might want to ask your hearing care practitioner to mark your hearing aids with a coloured Left and Right indication: Left is blue and Right is red.

How to insert the earmould in your ear

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.

How to remove the hearing aids from your ears

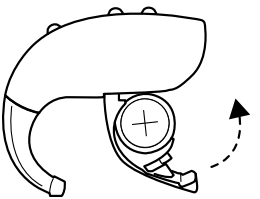
1. Lift the hearing aid from behind the ear. Let it hang momentarily beside your ear
2. Using your thumb and index finger, take hold of the earmould (not the hearing aid or the tubing)
3. Gently twist and pull the earmould to remove it from the ear

How to use your hearing aids

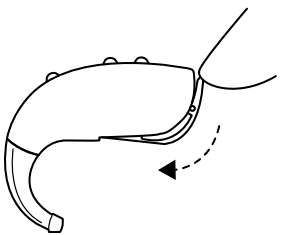
Turning your hearing aids on and off

Once you have placed the hearing aids on your ears, you can turn them on.

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



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



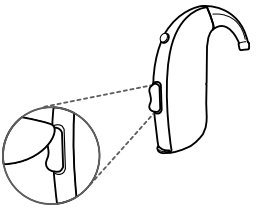
To turn the hearing aid off, open the battery door (with your fingernail).

How to adjust 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.

1. To increase the volume, press the top part of the volume control
2. To decrease the volume, press the bottom part of the volume control



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.

NOTE: Not available for models 67.

You can also adjust the volume by means of your ReSound Remote Control 2 or the ReSound Smart 3D™ app.

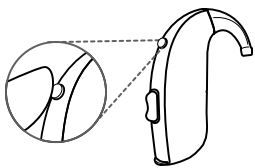
NOTE: If you have two hearing aids with the Synchronised Volume Control function enabled, volume control adjustments to one hearing aid automatically repeat in the second hearing aid. When you change the volume in one of the hearing aids, it responds with one or more beeps. A beep in the second hearing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

NOTE: Your hearing care professional can disable the volume control or replace it with a non-functional cover.

How to change 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 one, two beeps = program two and so on).



You can also change programs using a ReSound Remote Control 2 or the ReSound Smart 3D™ app.

NOTE: If your hearing aids have Synchronised Push Button enabled, changing program on one hearing aid automatically repeats in the second hearing aid. A beep in both hearing aids will follow each adjustment.

NOTE: When you turn the hearing aids off and on again, they always start up in program one and your pre-set volume level.

Telecoil

Not available for model KE177-DW.

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.

When you select the Telecoil program, your hearing aid picks up signals from the teleloop or 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 you 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 aids' microphones can be mixed according to your preference. Ask your hearing care professional for more details.

Teleloop systems

To use teleloop systems, follow these steps:

1. Switch your hearing aid to the telecoil program.
2. Find a good spot. Reception is not clear in all locations, it depends on the induction loop. Look for signs or find another spot .
3. If needed, adjust the volume.
4. When you leave, switch to program 1.

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 HAC phone's signal and converts it to sound.

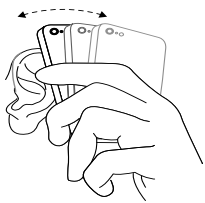
To use a HAC phone, follow these steps:

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 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:

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: 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 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.

Phone Now (optional)

By placing a magnet on the telephone receiver, your hearing aids 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 Phone Now as one of your programmes.

Phone Now warnings

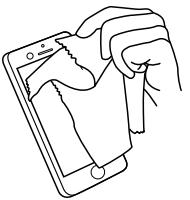
- If a magnet is swallowed, seek immediate advice from a medical practitioner.
- Keep magnets out of reach of pets, children and mentally disabled persons.
- The Phone Now magnet may affect sensitive medical devices/electronic systems. Seek advice from the manufacturers regarding appropriate safety measures when using the Phone Now 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).

Phone Now precautions

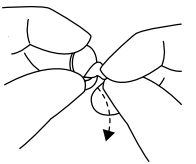
- If you experience frequent signal loss or noise during calls, move the magnet to another place on the telephone receiver.
- Only use magnets supplied by ReSound.

Placing the Phone Now magnet

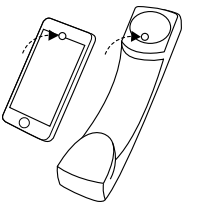
Place the magnet on your telephone receiver as follows:



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 Phone Now magnet to another place on the telephone receiver.
- Only use magnets supplied by ReSound.

How to use Phone Now

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 Phone Now activation and a good hearing experience on the telephone.
- If your hearing aids have enabled the Comfort Phone 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.
- Use a recommended cleaning agent.

Direct Audio Input

(Optional for model 77)

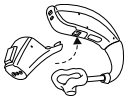
Not available for model KE177-DW.

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.

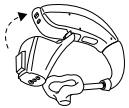
NOTE: Your hearing aid's battery will drain faster if you use the DAI functionality.

Connecting a DAI adapter



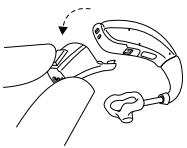
1. Align the tip of your DAI adapter with the groove on top of the battery door

2. Move the adapter towards the battery door



3. Click the adapter onto the hearing aid

Disconnecting a DAI adapter



- Remove the adapter from the hearing aid and press the small latch downwards.

⚠ 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

ReSound Assist and ReSound Assist Live (optional)

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

This service also includes ReSound Assist Live. With this service you can get face-to-face assistance from your hearing care professional from home.

All you need is a smart device with Internet enabled. This allows you to:

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

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

For optimum performance, make sure the hearing aids are connected to the ReSound Smart 3D™ app and placed close to the iPhone, iPad, iPod touch or the Android™ smartphone before applying the changes.

This service only works if your smart device is connected to the Internet. Your hearing care professional will provide information regarding this option, and how it works with the ReSound Smart 3D™ app.

Using your hearing aids with iPhone, iPad and iPod touch

The advanced models of our hearing aids are Made for iPhone, iPad and iPod touch, which allow for direct audio streaming and control from these devices.

Streaming from an Android™ smartphone

Some Android smartphones can stream audio directly to the advanced models of our 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.

Using your hearing aid with smartphone apps (optional)

Our smartphone apps are intended to be used with our wireless hearing aids. The smartphone apps send and receive signals from the hearing aids via smartphones.

- Do not disable app notifications
- Install updates to keep the app working correctly
- Only use the app with hearing aids from the same manufacturer. We take no responsibility if the app is used with other hearing aids
- If you want a printed version of the smartphone app user guide, please go to our website or consult customer support

NOTE: For assistance with pairing and using these products with your hearing aids, please contact your hearing care professional or visit our support site.

NOTE: If your Bluetooth® enabled Android smartphone does not stream directly to your hearing aids, you are able to answer the telephone if you use ReSound Phone Clip+.

Flight Mode (optional)

Your hearing aids can be controlled from your smartphone or Remote Control – this option can be added by your hearing care professional. However, in some areas you are requested to turn off wireless communication.

CAUTION: When boarding a flight or entering an area where RF transmitters are prohibited, wireless functionality must be deactivated.

Turning off wireless communication (enter 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.

NOTE: Both hearing aids must be set in Flight mode - even with synchronisation enabled.

Activating wireless communication (exit Flight Mode)

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

NOTE: It is important to wait an additional 15 seconds after wireless function resumes before opening and closing the battery compartment again for any reason. Flight mode will resume if you open and close the battery compartment during this 15 second window.

Wireless accessories

ReSound's wireless eco-system features a comprehensive range of seamlessly integrated wireless accessories. This allows you to control and stream high quality stereo sound and speech directly to your hearing aids.

Please find the list of available wireless accessories below:

- **ReSound TV Streamer 2*** allows you to stream the audio from TV sets and virtually any other audio source to your hearing aids at a volume level that suits you.
- **ReSound Remote Control** allows you to adjust the volume, mute your hearing aids and change programs.

- **ReSound Remote Control 2** allows you to adjust the volume or mute your hearing aids, change programs, and see settings at a glance on its display.
- **ReSound Phone Clip+*** streams phone conversations and stereo sound directly to both hearing aids, and it doubles as a simple remote control.
- **ReSound Micro Mic*** is a body worn microphone for your friend or colleague. It significantly improves speech understanding in noisy situations.
- **ReSound Multi Mic*** works like the **ReSound Micro Mic** but doubles as a table microphone, connects with loop and FM systems , and has a mini-jack input for streaming audio from a computer or music player.

*) Not available for model KE177-DW.

NOTE:

- Ask your hearing care professional for more information on the range of ReSound wireless accessories.
- For use of wireless functionality only use ReSound wireless accessories. For further guidance, please refer to the user guide of the relevant ReSound wireless accessory.

How to clean and maintain your hearing aids

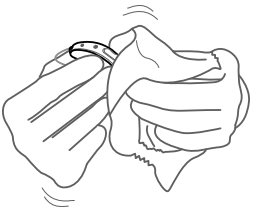
Care and maintenance

Please follow the advice below to have the best user experience and to prolong the life of your hearing aids.

1. Keep your hearing aids dry and clean.
2. Open the battery door to dry your hearing aids when you are not wearing them.
3. Wipe the hearing aids with a soft cloth after use to remove grease or moisture.
4. Do not wear your hearing aids when putting on cosmetics, perfume, aftershave, hairspray, suntan lotion, etc. These might discolour the hearing aid or get into the hearing aid causing damage.
5. Do not immerse your hearing aid in any liquid.
6. Keep your hearing aids away from excessive heat and intense direct sunlight. The heat may deform the shell, damage the electronics and deteriorate the surface.
7. Do not swim, shower or steam bathe while wearing your hearing aids.

Daily maintenance

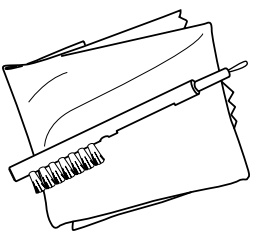
It is important to keep your hearing aid clean and dry. On a daily basis, clean the hearing aids using a soft cloth or tissue. In order to avoid damage due to humidity or excessive perspiration, the use of a drying kit is recommended.



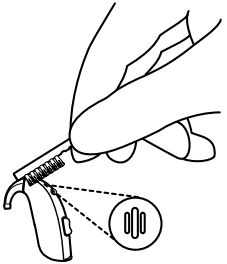
⚠ **WARNING:** Always turn your hearing aids off while cleaning and maintaining them.

Cleaning tools

1. Soft cloth.
2. Brush for cleaning. Use the brush on all surfaces and orifices. Also use your brush for daily cleaning and battery handling.
3. Wire loop. Use the wire loop to clean the earmould.
4. Magnet. Use the magnet to lift and replace the battery.



If the microphone inlets are clogged, gently brush across the microphone inlets with the brush.



⚠ **WARNING:** Do not use force to press the bristles on the small brush into the inlets because the microphones may be damaged.

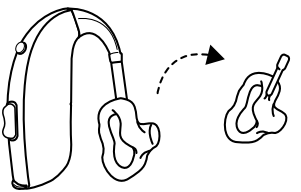
⚠ **CAUTION:** Do not use alcohol or other solvents to clean your hearing aid, the protective coating will be damaged.

NOTE: Do not use the wire loop to clean the microphone inlets. If the microphone inlets remain clogged after brushing the exterior, ask your hearing care professional to help you clean them.

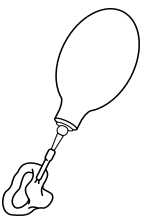
NOTE: The wire loop is only intended for earmoulds.

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



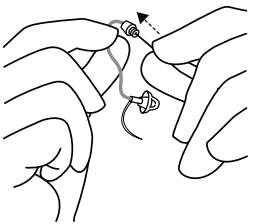
3. After cleaning, dry earmoulds thoroughly and remove any residual water and debris from the tubing utilising a small blower and wire loop



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

Thin tubes and domes

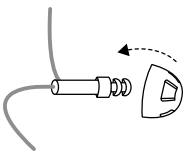
1. Remove thin tubes from the hearing aids by unscrewing them counterclockwise.
2. Wipe down thin tubes and domes with a damp cloth.
3. In order to clear the thin tube of moisture and debris, push the black cleaning thread through the thin tube, beginning at the end opposite the dome.

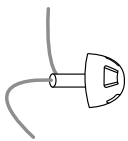


NOTE: We recommend that you change the thin tube and dome systems every three months. If the components get stiff or brittle, change them sooner.

How to change domes

1. Remove the used dome by pulling it off the ribbed flange and discard. This may require a bit of force.
2. Push the new dome over the ribbed flange on the thin tube
3. Make sure that the new dome is properly and securely mounted
4. Check that the dome is securely mounted: Carefully lift the lower part of the dome and verify that the collar completely covers the ribbed flange on the tube.





NOTE: This procedure shows an open dome but it is also applicable if your hearing aid has another type of dome.

⚠ **CAUTION:** Use only original consumables from ReSound, e.g. tubes and domes.

General warnings and precautions

⚠ General warnings

1. Consult a hearing care professional if you think there may be a foreign object in your ear canal, if you experience skin irritation, or if excessive earwax accumulates with the use of the hearing aid.
2. Different types of radiation, from e.g. NMR, MRI, or CT scanners, may damage hearing aids. It is recommended not to wear hearing aids during these or other similar procedures. Other types of radiation, such as burglar alarms, room surveillance systems, radio equipment, mobile telephones, contain less energy and will not damage hearing aids. However, they have the potential to momentarily affect the sound quality or temporarily create undesired sounds from the hearing aids.
3. Do not wear hearing aids in mines, oil fields, or other explosive areas unless those areas are certified for hearing aid use.
4. Do not allow others to use your hearing aids.
5. Hearing aid usage by children or mentally disabled persons should be supervised at all times to ensure their safety. The hearing aid contains small parts that could be swallowed by children. Please be mindful not to leave children unsupervised with this hearing aid.

6. Hearing aids should be used only as prescribed by your hearing care professional. Incorrect use may result in sudden and permanent hearing loss.
7. Warning to hearing care professionals: Special care should be exercised in selecting and fitting hearing aids with maximum sound pressure level that exceeds 132dB SPL with an IEC 60711:1981 occluded ear simulator. There may be a risk of impairment of the remaining hearing.
8. Turn off your wireless functionality by using the flight mode in areas where radio frequency emission is prohibited.
9. If a hearing aid is broken, do not use it.
10. 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.
11. 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 (wired connection, for example HI-PRO, SpeedLink).

NOTE: For use of wireless functionality, only use supported wireless accessories. For further guidance regarding e.g. pairing, please refer to the user guide of the relevant wireless accessory.

⚠ General precautions

1. When wireless function is activated, the device uses low-powered digitally coded transmissions in order to communicate with other wireless devices. Although unlikely, nearby electronic devices may be affected. In that case, move the hearing aid away from the affected electronic device
2. Use only original consumables from ReSound, e.g. tubes and domes.
3. Only connect your hearing aids to accessories intended and qualified to be used with your hearing aids.

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.

Troubleshooting

Issue	Potential cause	Potential solution
Feedback, "whistling"	Is your earmould or dome inserted correctly?	Re-insert it
	Is the volume very loud?	Reduce the volume
	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 physician

Issue	Potential cause	Potential solution
No sound	Is the hearing aid turned on?	Turn it on
	Is the hearing aid in telecoil mode?	Switch to the microphone program
	Is there a battery in the hearing aid?	Insert a new battery
	Is the battery still good?	Replace with a new battery
	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, spluttering or weak	The battery is dead	Replace it with a new one
	Is the battery dirty?	Clean it or replace it with a new one
	Is the plastic tube or earmould clogged or broken?	Consult your hearing care professional
	Did your hearing aid get moist?	Use a desiccant

Issue	Potential cause	Potential solution
Battery drains very quickly	Did you leave your hearing aid on for long periods of time?	Always turn off your hearing aid when you are not using it
	Is the battery old?	Check the date on the battery package

⚠ Warnings to hearing care professionals (US only)

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 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 decibels at 500 Hertz (Hz), 1,000 Hz, and 2,000 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 care professional, as appropriate, for a hearing aid evaluation.

The audiologist or hearing care professional 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 care professional 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 care professionals 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.

Tinnitus Management

Tinnitus Sound Generator module

Not available for model KE177-DW.

Your ReSound hearing aids include the Tinnitus Sound Generator (TSG) module. The Tinnitus Sound Generator (TSG) Module is a software tool that generates sounds to be used in tinnitus management programs to relieve suffering from tinnitus. The TSG can generate sounds adjusted to your personal preference and your specific therapeutic needs as determined by your doctor, audiologist or hearing care professional. Depending on the selected hearing aid program and the environment you are in, you may hear the therapeutic sound of a continuous or fluctuating noise.

Indications for use of the TSG module - (US only)

The Tinnitus Sound Generator 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 5 years of age or older.

TheTinnitus Sound Generator Module is targeted for healthcare professionals, which are treating patients suffering from Tinnitus, as well as conventional hearing disorders. The fitting of the Tinnitus

Sound Generator Module must be done by a hearing professional participating in a Tinnitus Management Program.

If deemed feasible by the hearing professional, subsequent fittings of the Tinnitus Sound Generator 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 TSG module

Description of the device

The Tinnitus Sound Generator (TSG) Module is a software tool that generates sounds to be used in tinnitus management programs to relieve suffering from tinnitus.

Explanation of how the device works

The TSG 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 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 Sound Generator 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 TSG 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 synchronization is enabled, your hearing care professional can also enable environmental monitoring synchronization so that the TSG 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 TSG 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 TSG 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 TSG module can also be set to mask the tinnitus sound, so to provide temporary relief by introducing a more pleasant and controllable sound source.

TSG 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 TSG module used for adjusting the sound generator output level.

Using TSG with smartphone apps

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

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

TSG - 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 a Tinnitus Sound Generator hearing aid

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

To adjust TSG, please consult your hearing care 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 sound generator and seek medical evaluation.

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 TSG 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 programme 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.
- 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 TSG hearing aid.

WARNING TO THE HEARING CARE PROFESSIONAL:

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.

Tinnitus Sound Generator precautions

1. 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.
2. Discontinue use of the sound generator and consult promptly with a licensed physician if you experience one 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.

3. 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.
4. The volume control is a feature in the TSG 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.
5. Children and physically or mentally disabled users will require guardian supervision while wearing the TSG hearing aid.
6. 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 minor. Use of the ReSound Assist for remote settings of the tinnitus sound generator, should only be performed by the parent or legal guardian in cases where the user is minor.

⚠ Tinnitus Sound Generator 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), 1,000 Hz, and 2,000 Hz.
7. Visible evidence of significant cerumen accumulation or a foreign body in the ear canal.
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⚠ **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.

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 0 °C (+32 °F) to +45° C (+113 °F), at a relative humidity of 90% , non-condensing. An atmospheric pressure between 500 hPa and 1100 hPa is appropriate.

During transport or storage, the temperature should not exceed the limit values of -20 °C (-4 °F) to +60° C (+140 °F) at a relative humidity of 90% RH, non-condensing (for a limited time).

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 Essential Requirements according to Annex I of Council Directive 93/42/EEC for medical devices (MDD).
- Hereby, GN ReSound A/S declares that the radio equipment types BEB60 and BEB70 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.declarations.resound.com.
- In US: FCC CFR 47 Part 15, subpart C
- Other identified applicable international regulatory requirements in countries outside the EU and US. Please refer to local country requirements for these areas.
- 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:

BEB60, FCC ID: X26BEB60, IC: 6941C-BEB60; **BEB70**, FCC ID: X26BEB70, IC: 6941C-BEB70.

This device includes an RF transmitter which operates in the frequency band of 2.4 GHz – 2.48 GHz.

Hearing aid variants

Mini Behind-the-ear (BTE) hearing aids of type **BEB60** with FCC ID X26BEB60, IC number 6941C-BEB60 and size 312 battery are available in the following variants:

KE467-DW, KE367-DW, KE267-DW

Nominal RF output power transmitted is: -1 dBm.

Behind-the-ear (BTE) hearing aids of type **BEB70** with FCC ID X26BEB70, IC number 6941C-BEB70 and size 13 battery are available in the following variants:

KE477-DW, KE377-DW, KE277-DW, KE177-DW

Nominal RF output power transmitted is: -2 dBm.

Symbols

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

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

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

Equipment includes an RF transmitter.

Follow instructions for use.

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.

Product is a Type B applied part.

Complies with ACMA requirements.

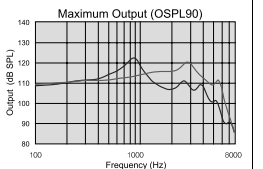
Complies with IMDA standards.

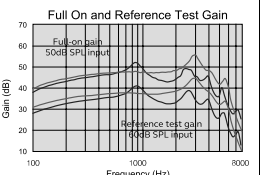
Technical specifications

Mini BTE

Models: KE467-DW, KE367-DW, KE267-DW

		Thin tube	Closed	
Reference test gain (60 dB SPL input)	HFA	36	39	dB
Full-on gain (50 dB SPL input)	Max.	52	56	dB
	HFA	47	49	
Maximum output (90 dB SPL input)	Max.	123	121	dB SPL
	HFA	113	116	
Total harmonic distortion	500 Hz	0.4	0.7	%
	800 Hz	0.1	0.6	
	1600 Hz	0.4	0.6	
	3200 Hz	0.2	0.1	
Telecoil sensitivity (1 mA/m input)	Max.	81	85	dB SPL
HFA - SPLIV @ 31.6 mA/m (ANSI)	HFA	96	99	
Full-on telecoil sensitivity @ 1 mA/m	HFA	77	79	
Equivalent input noise, w/o noise reduction		22	23	dB SPL
1/3 Octave Equivalent input noise, w/o noise reduction		10	10	
Frequency range IEC 60118-0: 2015		100-7680	100-6800	Hz
Current Drain (Quiescent/Operating)		1.17/1.22	1.18/1.34	mA





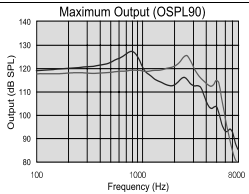
Blackcurve: Thin tube;
Greycurve: Closed dome.

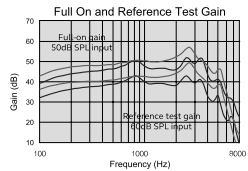
Data in accordance with ANSI S3.22-2014, IEC 60118-0:2015. Measured in a 2cc coupler.

BTE

Models: KE477-DW, KE377-DW, KE277-DW, KE177-DW

		Thin tube	Closed	
Reference test gain (60 dB SPL input)	HFA	40	45	dB
Full-on gain (50 dB SPL input)	Max.	52	57	dB
	HFA	49	52	
Maximum output (90 dB SPL input)	Max.	128	126	dB SPL
	HFA	117	122	
Total harmonic distortion	500 Hz	0.5	0.7	%
	800 Hz	0.1	0.9	
	1600 Hz	0.6	0.6	
	3200 Hz	0.2	0.2	
Telecoil sensitivity (1 mA/m input)	Max.	83	88	dB SPL
HFA - SPLIV @ 31.6 mA/m (ANSI)	HFA	101	105	
Full-on telecoil sensitivity @ 1 mA/m	HFA	79	83	
Equivalent input noise, w/o noise reduction		22	22	dB SPL
1/3 Octave Equivalent input noise, w/o noise reduction		10	11	
Frequency range IEC 60118-0: 2015		100-7130	100-6170	Hz
Current Drain (Quiescent/Operating)		1.18/1.2	1.2/1.29	mA





Black curve: Thin tube;
Grey curve: Closed dome.

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

Additional information

Acknowledgments

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93/42/EEC:

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Any issues relating to the EU Medical Device Directive 93/42/EEC or EU Radio Equipment Directive 2014/53/EU should be directed to GN ReSound A/S.

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