

ReSound Key

User guide

ReSound Receiver-In-The-Ear hearing aids, Rechargeable

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	☐ Rechargeable		

Dome/ earmold type	Closed dome ☐ Small ☐ Medium ☐ Large	Open dome ☐ Small ☐ Medium ☐ Large	Power dome ☐ Small ☐ Medium ☐ Large	☐ Tulip dome	☐ RIE earmold

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

FDA warnings and cautions (US only)

WARNING: People younger than 18 should go to a doctor before using this
People younger than 18 years old need specialized care, and using this without a medical evaluation may worsen impairment or disability. A hearing aid user who is younger than 18 should have a recent medical evaluation from a doctor, preferably an ear-nose-throat doctor (an ENT). Before using this, a doctor should determine that the use of a hearing aid is appropriate.

WARNINGS to Hearing Aid Dispensers
You should advise a prospective hearing aid user to consult promptly with a doctor, preferably an ear specialist such as an ENT, before dispensing a hearing aid if you determine 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 deformity of the ear, either congenital or traumatic
- Fluid, pus, or blood coming out of the ear within the previous 6 months
- Pain or discomfort in the ear
- History of excessive ear wax or suspicion that something is in the ear canal
- Dizziness, either recent or long-standing
- Sudden, quickly worsening, or fluctuating hearing loss within the previous 6 months

- Hearing loss or ringing (tinnitus) only in one ear or noticeable difference in hearing between ears
- Audiometric air-bone gap equal to or greater than 15 dB at 500 Hz, 1000 Hz, and 2000 Hz.

Outputs over 132 dB SPL:
You should exercise special care in selecting and fitting a hearing aid with a maximum output that exceeds 132 dB SPL because it may impair the remaining hearing of the hearing aid user.

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

⚠ **CAUTION:**

This is not hearing protection
You should remove this device if you experience overly loud sounds, whether short or long-lasting. If you're in a loud place, you should use the right kind of hearing protection instead of wearing this device. In general, if you would use ear plugs in a loud place, you should remove this device and use ear plugs.

The sound output should not be uncomfortable or painful
You should turn down the volume or remove the device if the sound output is uncomfortably loud or painful. If you consistently need to turn the volume down, you may need to further adjust your device.

You might need medical help if a piece gets stuck in your ear
If any part of your hearing aid, like the eartip (dome), gets stuck in your ear, and you can't easily remove it with your fingers, get medical help as soon as you can. You should not try to use tweezers or cotton swabs because they can push the part further into your ear, injuring your eardrum or ear canal, possibly seriously.

NOTE:

What you might expect when you start using your hearing aid

- A hearing aid can benefit many people with hearing loss. However, you should know it will not restore normal hearing, and you may still have some difficulty hearing over noise. Further, a hearing aid will not prevent or improve a medical condition that causes hearing loss.
- People who start using hearing aids sometimes need a few weeks to get used to them. Similarly, many people find that training or counseling can help them get more out of their devices.
- If you have hearing loss in both ears, you might get more out of using hearing aids in both, especially in situations that make you tired from listening – for example, noisy environments.

Tell FDA about injuries, malfunctions, or other adverse events

- To report a problem involving your hearing aid, you should submit information to FDA as soon as possible after the problem. FDA calls them "adverse events", and they might include: skin irritation in your ear, injury from the device (like cuts or scratches, or burns from an overheated battery), pieces of the device getting stuck in your ear, suddenly worsening hearing loss from using the device, etc. Instructions for reporting are available at https://www.fda.gov/Safety/MedWatch, or call 1-800-FDA-1088. You can also download a form to mail to FDA.

Hearing loss in people younger than 18

- People younger than 18 should see a doctor first, preferably an ear-nose-throat doctor (an ENT), because they may have different needs than adults.
- The doctor will identify and treat medical conditions as appropriate.
- The doctor may refer the person to an audiologist for a separate test, a hearing aid evaluation.
- The hearing aid evaluation will help the audiologist select and fit the appropriate hearing aid.

A person who is younger than 18 years old with hearing loss should have a medical evaluation by a doctor, preferably an ENT, before buying a hearing aid. The purpose of a medical evaluation is to identify and treat medical conditions that may affect hearing but that a hearing aid won't treat on its own.

Following the medical evaluation and if appropriate, the doctor will provide a written statement that the hearing loss has been medically evaluated and the person is a candidate for a hearing aid. The doctor may refer the person to an audiologist for a hearing aid evaluation, which is different from the medical evaluation and is intended to identify the appropriate hearing aid.

The audiologist will conduct a hearing aid evaluation to assess the person's ability to hear with and without a hearing aid. This will enable the audiologist to select and fit a hearing aid for the person's individual needs. An audiologist can also provide evaluation and rehabilitation since, for people younger than 18, hearing loss may cause problems in language development and educational and social growth. An audiologist is qualified by training and experience to assist in the evaluation and rehabilitation of hearing loss in people younger than 18.

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Introduction

Thank you for choosing ReSound 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

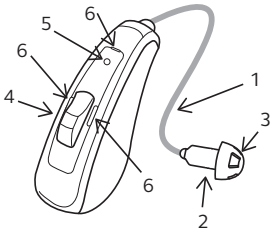
Generic air-conduction hearing aids are wearable sound-amplifying devices intended to compensate for impaired hearing. The fundamental operating principle of hearing aids is to receive, amplify, and transfer sound to the eardrum of a hearing impaired person.

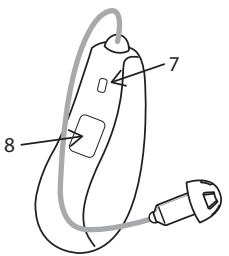
For devices including a Tinnitus Sound Generator module
The Tinnitus Sound Generator module is a tool to generate sounds to be used in a Tinnitus Management Program to temporarily relieve patients suffering from Tinnitus.

For devices including a dome
The dome is intended to be connected to a receiver 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

1. Receiver wire
2. Receiver
3. Dome (an open dome is shown)
4. Push button
5. LED (green light)
6. Microphone inlets
7. Left/right indicator
8. Serial number and model





Domes and earmolds



Tulip dome



Closed dome



Open dome



Power dome



Custom earmold

The closed, open, and power domes are available in different sizes. Tulip domes are one size. Domes are all light grey.

NOTE: Only use domes supplied by ReSound.

Preparing your hearing aids for use

Charging the hearing aids

NOTE: We recommend that you charge your hearing aids fully before using them.

WARNING: Refer to the user's guide for your hearing aid charger for a full instruction on how to use it.

Battery warnings

- Do not attempt to open the product or replace the battery. This will terminate the warranty.
- Rechargeable hearing aids are supported by a non-removable rechargeable lithium-ion battery cell. Exposure or ingestion can be seriously harmful.
- Never put your rechargeable hearing aid in your mouth.
- Keep your rechargeable hearing aid away from pets, children, and people with cognitive, intellectual, or mental health challenges.
- Never swallow lithium-ion batteries nor place them inside any part of the body, as this may lead to fatal injuries in two hours or less. If a lithium-ion battery is swallowed or placed inside any part of the body, or if a rechargeable hearing aid is swallowed, seek immediate medical attention.
- If the outer casing of your rechargeable hearing aid is broken, the rechargeable batteries inside may leak. In this case, do not attempt to use the hearing aid and contact your hearing care professional.

- Battery leakage can cause chemical burns. If you get exposed to battery leakage material, rinse immediately with warm water. If you get chemical burns, redness, or skin irritation from battery leakage, seek medical attention.
- Batteries are harmful for the environment. Therefore, never try to burn them. Dispose of your used batteries according to your country's regulations or return them to your hearing care professional.
- When traveling, consult your airline about any rules for transportation of your hearing aid and charger.

NOTE:

- For safety reasons, use only the charger supplied by ReSound.
- Use of other chargers may invalidate any approval or warranty.
- To save battery power, turn off your hearing aids when they are not in use.

Low battery warning

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

Low battery alert when paired with wireless accessories (optional)

NOTE:

Your batteries will run out 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 charge levels.

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

Placing your 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.



Left hearing aid

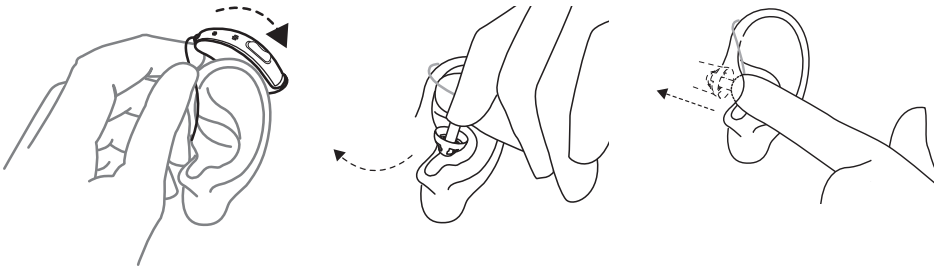


Right hearing aid

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

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 wire rests against your head. You can check in a mirror.

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

CAUTION: Never attempt to modify the shape of the receiver wire yourself.

Sport lock

If you lead an active life, your hearing aids may come loose. To avoid this situation, your hearing care professional can attach and adjust a sports lock to the receiver.



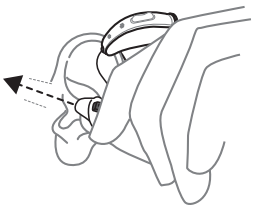
To insert a hearing aid with a sports lock:

1. Insert the hearing aid as usual
2. Tuck the sports lock into the bottom part of the indentation above your earlobe.

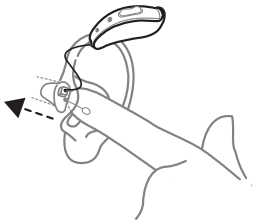
NOTE: Sport locks may become stiff, brittle, or discolored over time. Contact your hearing care professional for a replacement.

Inserting earmolds into your ears

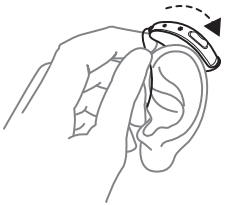
If your hearing aids have earmolds, follow these instructions:



1. Hold the earmold between your thumb and index finger and position the sound outlet into your ear canal.



2. Slide the earmold into your ear with a gentle, twisting movement. Move the earmold up and down and press gently. Opening and closing your mouth may be helpful.



3. Place the hearing aid behind your ear and ensure it is secure. When properly inserted, your hearing aids should fit snugly and comfortably.

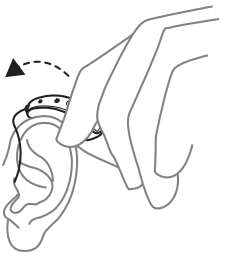
NOTE: When inserting an earmold, it may help to pull your ear up and back with the opposite hand.

CAUTION: Never attempt to modify the shape of the hearing aids, earmolds, domes, or receiver wires yourself.

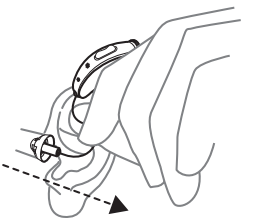
Removing your hearing aids from your ears

Removing receiver domes from your ears

If your hearing aids have domes, follow these instructions:



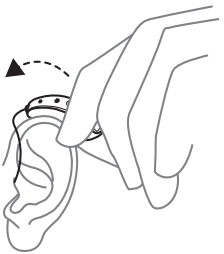
1. Lift the hearing aid off your ear.



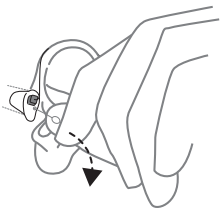
2. Hold the receiver wire with your thumb and forefinger where it bends and pull the dome out of your ear canal.

Removing earmolds from your ears

If your hearing aids have earmolds, 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 earmold (not the hearing aid or the wire) loose from your ear. If your earmold has a removal cord, pull it gently to assist. The removal cord is a separate line that is additionally attached to the earmold if requested. Remove the earmold completely by twisting it gently.

Using 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.

1. To turn on: Press and hold the button for 5 seconds
2. To turn off: Press and hold the button for 5 seconds

When the hearing aid turns on, the green LED lights up. When the hearing aid turns off, the green LED flashes 3 times.

Your hearing aids also turn off automatically when you place them in the charger (while it is active), and they turn on automatically when you remove them from the charger.

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

Smart Start

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

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

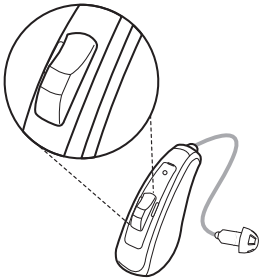
The push button

The button gives access to the features that your hearing care professional and you decide to apply to your hearing aids. By default, the button allows you to use up to four different listening programs, and three wireless

accessory programs.

- Short press the button (beep) to switch between programs. You will then hear one or more beeps. The number of beeps indicates which program you have selected.
- Press and hold for 1 second (short melody) until streaming begins. If your hearing aids have been paired with more than one wireless device, pressing for one more second will switch to the next device. A short press will end streaming and start the program you left.
- Press and hold for 5 seconds to turn your hearing aid ON or OFF.

When you turn the hearing aids off and then back on, they always return to the default setting (program one and preset volume).



Your hearing care professional can configure your push button so that you can also use it to control the volume and switch between listening programs.

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

Action	Default setting	New setting	New setting
Short press	Change program		
1 sec press	Activates streaming		

NOTE:

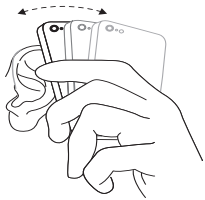
- Some features are configurable during your fitting session. Ask your hearing care professional about the best settings for you.
- For convenience, you may control your hearing aids from the ReSound Smart 3D™ app or the ReSound Remote Control 2.

The LED light indicator

Your hearing aid communicates with both sound and light whenever you change program or turn it on or off.

Action	**Light**
Turn on: Press and hold the button for 5 seconds	Green flash
Turn off: Press and hold the button for 5 seconds	Flashes green three times
Enter flight mode (optional): Press and hold the button for 9 seconds	Four times green double flashes

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)

If you place a magnet on the telephone receiver, your hearing aids will automatically switch the telephone program on when the receiver is close to your ear. When you remove the receiver from your ear, the hearing aids automatically return to the previous listening program.

NOTE: Ask your hearing care professional to enable Phone Now as one of your programs.

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

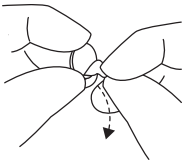
- If you experience frequent signal loss or noise during calls, move the magnet to another place on the telephone receiver.
- Only use magnets supplied by ReSound.

Placing the Phone Now magnet

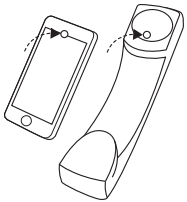
Place the magnet on your telephone receiver as follows:



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 reliable Phone Now activation and a good hearing experience on the telephone.
- If your hearing aids have the Comfort Phone functionality enabled, 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.

Advanced options

ReSound Assist and ReSound Assist Live (optional)

ReSound Assist
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.

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 ReSound Smart 3D™ app.

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.

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

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





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

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)

The smartphone apps send and receive signals to and from the hearing aids via smartphones.

- Do not disable app notifications.
- Install updates to keep the app working correctly.
- The app must only be used with ReSound hearing aids for which they are intended, and ReSound takes no responsibility if the app is used with other hearing aids.
- If you want a printed version of the user's guide for the smartphone app, please go to our website (see the back page of this user's guide) or contact customer service.

NOTE:

- For assistance with pairing and using these products with your hearing aids, contact your hearing care professional or visit our support site.
- If your Bluetooth® enabled Android smartphone does not stream directly to your hearing aids, you can use our ReSound Phone Clip+ for streaming capabilities.

Flight Mode (optional)

Your hearing aids can be controlled from your smartphone or Remote Control, an option that 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. Turn off your hearing aid.
2. Press the button for 9 seconds.
3. Your hearing aid will double-flash four times. If you are wearing your hearing aids at the time, you will hear double tones (♫♫) for about 10 seconds, meaning the hearing aid is now in Flight Mode.

Activating wireless communication (exit Flight Mode)

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

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.

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's guide of the relevant ReSound wireless accessory.

Cleaning and caring for 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. Wipe the hearing aids with a soft cloth after use to remove grease or moisture.
3. Do not wear your hearing aids when putting on cosmetics, perfume, aftershave, hairspray, suntan lotion, etc. These might discolor the hearing aid or get into the hearing aid causing damage.
4. Do not immerse your hearing aid in any liquid.
5. Keep your hearing aids away from excessive heat and direct sunlight. intense direct sunlight. The heat may deform the shell, damage the electronics, and deteriorate the surface.
6. Do not swim, shower, or take steam baths while wearing your hearing aids.

Daily maintenance

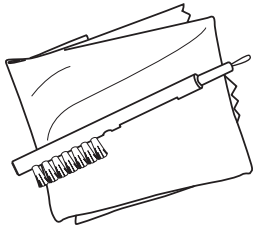
It is important to keep your hearing aid clean and dry. On a daily basis, clean the hearing aids using a soft cloth or tissue. In order to avoid damage due to humidity or excessive perspiration, the use of a drying kit is recommended.



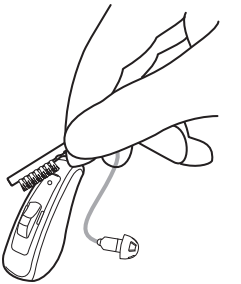
⚠ **WARNING:** Always turn your hearing aids off while cleaning and maintaining them.

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 earmold.



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 or 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 earmolds.

Changing your hearing aid domes

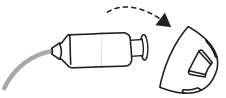
We recommend that your hearing care professional shows you how to change domes. You should change your domes every 3 months or more often according to the advice of your hearing care professional. Incorrect dome replacement can result in a dome being left in your ear when you remove your hearing aid.

CAUTION:

- If you suspect that you have a dome stuck in your ear, consult your hearing care professional.
- Only use original ReSound consumables (e.g., domes and wax filters).

Open, closed, and power domes

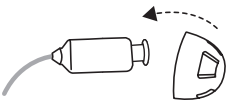
The illustrations show an open dome, but the procedure is the same for all other domes. Follow these instructions to replace your domes.



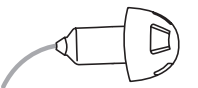
1. Remove the used dome by pulling it off the receiver and then discard it. This may require a bit of force.



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.



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

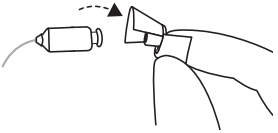


4. OK.

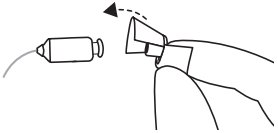
NOTE: Change the dome at least every three months. Ask your hearing care professional for advice.

Tulip domes

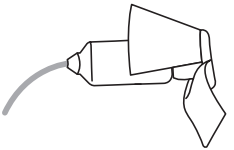
To change a tulip dome, follow these instructions:



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



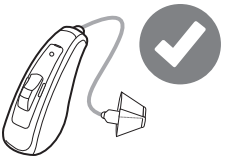
2. Push the largest petal back, then press the tulip dome over the ribbed end of the receiver.



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.



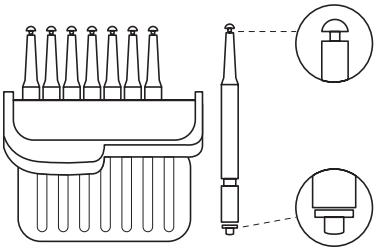
This illustration shows a correctly mounted tulip dome. Ensure the large petal is outside the small petal.

Changing the wax filter

The wax filter is located at the inward end of the receiver or custom earmold.

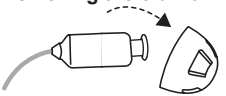
The wax filter helps keep earwax away from the components of the hearing aid. You must replace it on a regular basis. Consult your hearing care professional for advice on how often you need to change them. It will depend on how much wax your ears produce.

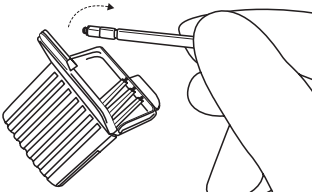
If you wear a dome, remove it before following this process for replacing the wax filter. You will need your box of wax filter tools.



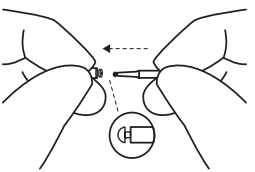
Box of 8 wax filter tools.
The wax filter tool has two functions: a removal tip to collect the used filter, and a replacement tip with a white filter.

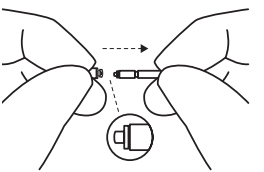
Removing the old wax filter





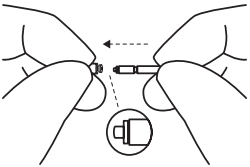
1. Remove the dome from the receiver.
2. Open the wax filter case and take out one of the tools. Each tool has a small hook (removal tip) in one end and a new wax filter in the other.



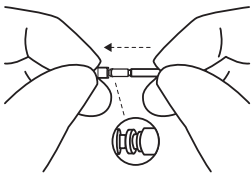


3. Insert the removal tip into the used wax filter and then pull the tool straight out. It is important to pull it straight and not on an angle.

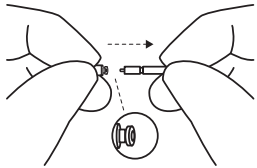
Inserting the new wax filter



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



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



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

CAUTION: Only use original ReSound consumables (e.g., domes and wax filters).

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, for example, 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, and 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 careful 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. Turn off your wireless functionality by using the flight mode in areas where radio frequency emission is prohibited.
8. If a hearing aid is broken, do not use it.

9. A power hearing aid can produce very loud sound to compensate for a severe or profound hearing loss. Therefore, there is risk of further impairing the remaining hearing.
10. 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.

NOTE:

For use of wireless functionality, only use supported wireless accessories. For further guidance regarding pairing etc., please refer to the user's guide for 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 parts from the manufacturer (e.g., wax guards).
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 will not allow you to get its full benefits.
- 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 or "whistling"	Is your earmold or dome inserted correctly in your ear?	Put it back in.
	Is the volume very loud?	Reduce the volume.
	Is the receiver wire broken or the earmold 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 doctor.
No sound	Is the hearing aid turned on?	Turn it on.
	Is the hearing aid charged?	Charge the hearing aid. (See the user manual for your charger.)
	Is the receiver wire broken or the earmold clogged?	Visit your hearing care professional.
	Is your ear full of wax?	Visit your doctor.
Sound is distorted, spluttering, or weak?	Is the receiver wire broken or the earmold clogged?	Consult your hearing care professional.

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 aids when you are not using them, or place them in the charger for charging . Your batteries will run out faster when you use wireless functions like streaming from your smart device or from your TV with our TV streamer.
	Is the hearing aid 3-4 years old?	Visit your hearing care professional.
Hearing aid is not charging	Is the hearing aid correctly inserted in the charger?	Put the hearing aid back in the charger. (See the user's guide for your charger.)
	Is the hearing aid charger plugged into a power source?	Plug the charger into a power source. (See the user's guide for your charger.)

FAQ on rechargeable batteries

Question	Answer
How should I prepare a new battery?	No preparation is required in a normal use situation. Simply charge your hearing aids as described in this user's guide
Can I damage a battery by incorrect use?	Only if you expose it to extreme temperatures or excessive physical force

Question	Answer
Is it required to remove the hearing aids when fully charged?	No
Can I interrupt the charging of the hearing aids?	Yes
Should I use up all battery power before charging again?	No
Why do my hearing aids not turn on automatically, even though they have been in the charger for an extended period of time?	If you leave your hearing aids in the charger for more than 24 hours, the charger will go into standby mode and turn off the hearing aids' power. When you remove the hearing aids from the charger, they will not turn on automatically as normally. Press the button for 5 seconds to turn the hearing aids on manually.
Does the battery heat up when charging?	There is a slight temperature increase at the end of the charging process
Can I charge at low temperatures?	If the hearing aid temperature is below 0 °C (32 °F), it will not charge immediately. Charging must take place between 0 °C (32 °F) and 40 °C (104 °F)
Can I charge at high temperatures?	The operating temperature range for the charger and the hearing aids is 0 °C (+32 °F) to +40 °C (+104 °F)

⚠ Warning to Hearing Aid Dispensers (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 aid dispenser determines through inquiry, actual observation, or review of any other available information concerning the prospective user, that the prospective user has any of the following conditions:

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

Important notice for prospective hearing aid users

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

Following the medical evaluation, the physician will give you a written statement that states that your hearing loss has been medically evaluated and that you may be considered a candidate for a hearing aid. The physician will refer you to an audiologist or a hearing 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 child's educational and social growth. 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

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 temporarily relieve suffering from tinnitus.

Explanation of how the device works

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

Your doctor, audiologist, or hearing care professional can modulate the generated noise in order 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 synchronization, this functionality can be enabled by your hearing care professional. This will cause the Tinnitus Sound Generator to synchronize the sound in both hearing aids.

If your tinnitus only troubles you 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 using 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 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 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 the sound generator and seek medical evaluation.

Children and physically or mentally challenged users will require training by a doctor, audiologist, hearing care professional, or guardian in 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 counseling 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, a perceived decrease in auditory function or an increase in tinnitus perception, the user should discontinue use of the sound generator and seek medical evaluation.
- To prevent unintended usage by pediatric, 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.

⚠ 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), 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 compliance with NIOSH recommendations, the user should not use the sound generator for more than eight (8) hours a day when it 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 it 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 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.
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 pediatric, 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.

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).

Non-clinical testing (US only)

The devices covered within this user guide have undergone tests for the relevant non-clinical performance testing and biological endpoints in accordance with standards identified below:

- Electrical safety testing is performed according to IEC 60601-1:2005 + A1:2012+A2:2020, IEC 60601-2-66:2019, IEC 60601-1-11 Edition 2.0 2015-1, IEC 62133-2 Edition 1.0 2017- 02 and IEC 62368-1:2018/COR1:2020.
- Electromagnetic compatibility (EMC) testing is performed according to IEC 62479:2010, ANSI IEEE C63.19-2019 and IEC 60601-1-2:2014+A1:2020.
- Radio and Telecommunication testing is performed to be in compliance with applicable parts of the FCC rules in title 47 of the CFR.
- Electroacoustic testing is performed according to ANSI/ASA S3.22-2014 and ANSI/CTA 2051:2017
- Usability Engineering was performed in compliance with IEC 62366-1:2015

The devices covered in this user guide passed all tests for the relevant non-clinical performance testing and biological endpoints, namely cytotoxicity (ISO 10993-05:2009), sensitization, and intracutaneous reactivity (ISO 10993-10:2010).

Similarly, usability testing and software verification and validation demonstrated mitigation of risks to an acceptable level as well as reasonable assurance of safe and effective device performance.

Clinical data (US only)

Devices have been evaluated clinically through equivalence to equivalent devices and similar devices on the market with similar intended purpose, e.g., to compensate for hearing impairment by amplifying and transmitting sound to the ear.

Based on technical and clinical data presented for the device in question, the equivalent predecessor, and generally similar devices, it is concluded to support the clinical performance expressed in user needs and claims.

The clinical data leaves no questions open regarding clinical performance and is for this reason deemed sufficient.

Statement

This device complies with part 15 of the FCC rules and ISED rules. Its 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 according to 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:

- Redirect or relocate the receiving antenna.
- Increase the separation between the equipment and the 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 Essential Requirements according to Annex I of Council Directive 93/42/EEC for medical devices (MDD).
- GN ReSound A/S hereby declares that the radio equipment types LXR45 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 the 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 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).

Type designations

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

LXR45, FCC ID: X26LXR45, IC: 6941C-LXR45.

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

Hearing aid variants

Mini Receiver In-the-Ear (RIE) hearing aids of type LXR45 with FCC ID X26LXR45, IC number 6941C-LXR45, are available in the following variants:

*KE461-DRWC, KE361-DRWC

Nominal RF output power transmitted is: +0.82 dBm

*) Key 4 variants are not available in Canada.

Symbols

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

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

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

Follow instructions for use.

Equipment includes an RF transmitter.

Product is a Type B applied part.

Date of manufacture.

Do not dispose of your hearing aids and batteries with ordinary household garbage. 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 about the disposal of your hearing aid.
NOTE: There may be specific regulations in your country.

Legal manufacturer.

By prescription only (US).

Complies with ACMA requirements.

Complies with IMDA requirements.

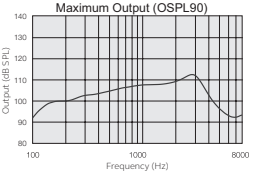
Unique Device Identification.

Technical specifications

RIE - LP receiver

Models: KE461-DRWC, KE361-DRWC

Reference test gain (60 dB SPL input)	HFA	32	dB
Full-on gain (50 dB SPL input)	Max. HFA	52 46	dB
Maximum output (90 dB SPL input)	Max. HFA	113 109	dB SPL
Total harmonic distortion	500 Hz 800 Hz 1600 Hz	0.5 0.8 0.5	%
Equivalent input noise, w/o noise reduction		21	dB SPL
1/3 Octave Equivalent input noise, w/o noise reduction	1600 Hz	9	dB SPL
Frequency range IEC 60118-0: 2015		100-8000	Hz
Expected operating time		30	Hours



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

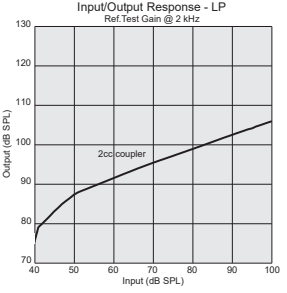
*The expected operating time of the rechargeable battery depends on active features, the use of wireless accessories, hearing loss, battery age and sound environment.

RIE — LP receiver (US only)

Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
Battery current drain, LP (Battery type Rechargeable)	0.5	mA
Attack/release time (2 kHz syllabic)	12 / 70	ms

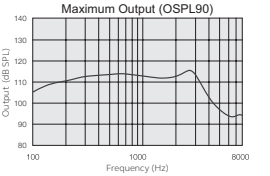
Input/Output response, measured in a 2cc coupler at the reference test gain @ 2 KHz

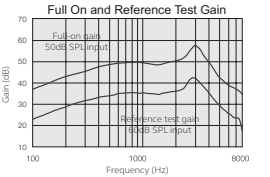


RIE - MP receiver

Models: KE461-DRWC, KE361-DRWC

Reference test gain (60 dB SPL input)	HFA	36	dB
Full-on gain (50 dB SPL input)	Max. HFA	58 50	dB
Maximum output (90 dB SPL input)	Max. HFA	116 113	dB SPL
Total harmonic distortion	500 Hz 800 Hz 1600 Hz	0.3 0.4 0.7	%
Equivalent input noise, w/o noise reduction		24	dB SPL
1/3 Octave Equivalent input noise, w/o Noise reduction	1600 Hz	11	dB SPL
Frequency range IEC 60118-0: 2015		100-8060	Hz
Expected operating time		30	Hours





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

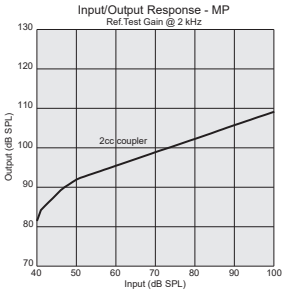
*The expected operating time of the rechargeable battery depends on active features, the use of wireless accessories, hearing loss, battery age and sound environment.

RIE — MP receiver (US only)

Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
Battery current drain, MP (Battery type Rechargeable)	0.5	mA
Attack/release time (2 kHz syllabic)	12 / 70	ms

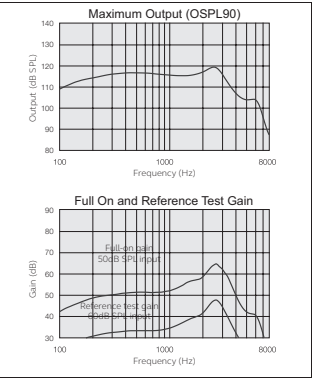
Input/Output response, measured in a 2cc coupler at the reference test gain @ 2 KHz



RIE - HP receiver

Models: KE461-DRWC, KE361-DRWC

Reference test gain (60 dB SPL input)	HFA	40	dB
Full-on gain (50 dB SPL input)	Max. HFA	65 57	dB
Maximum output (90 dB SPL input)	Max. HFA	120 117	dB SPL
Total harmonic distortion	500 Hz 800 Hz 1600 Hz	0.3 0.7 0.5	%
Equivalent input noise, w/o noise reduction		22	dB SPL
1/3 Octave Equivalent input noise, w/o noise reduction	1600 Hz	10	dB SPL
Frequency range IEC 60118-0: 2015		100-6750	Hz
Expected operating time		30	Hours



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

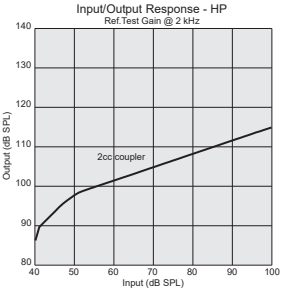
*The expected operating time of the rechargeable battery depends on active features, the use of wireless accessories, hearing loss, battery age and sound environment.

RIE — HP receiver (US only)

Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
Battery current drain, HP (Battery type Rechargeable)	0.5	mA
Attack/release time (2 kHz syllabic)	12 / 70	ms

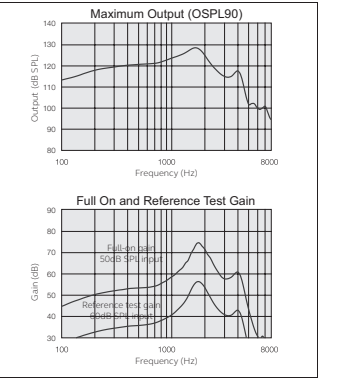
Input/Output response, measured in a 2cc coupler at the reference test gain @ 2 KHz



RIE - UP receiver

Models: KE461-DRWC, KE361-DRWC

Reference test gain (60 dB SPL input)	HFA	47	dB
Full-on gain (50 dB SPL input)	Max. HFA	75 65	dB
Maximum output (90 dB SPL input)	Max. HFA	128 124	dB SPL
Total harmonic distortion	500 Hz 800 Hz 1600 Hz	1.0 1.6 0.1	%
Equivalent input noise, w/o noise reduction		23	dB SPL
1/3 Octave Equivalent input noise, w/o noise reduction	1600 Hz	9	dB SPL
Frequency range IEC 60118-0: 2015		130-4920	Hz
Expected operating time		30	Hours



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

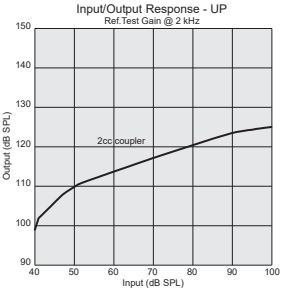
* The expected operating time of the rechargeable battery depends on active features, the use of wireless accessories, hearing loss, battery age and sound environment.

RIE — UP receiver (US only)

Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
Battery current drain, UP (Battery type Rechargeable)	0.5	mA
Attack/release time (2 kHz syllabic)	12 / 70	ms

Input/Output response, measured in a 2cc coupler at the reference test gain @ 2 KHz



Additional information

Acknowledgements

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Manufacturer according to EU Medical Device Directive 93/42/EEC:

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DK-2750 Ballerup
Denmark
resound.com

Manufacturer according to FDA:

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8001 E Bloomington Freeway
Bloomington, MN 55420
USA
1-888-735-4327
resound.com

ReSound Government Services
8001 E Bloomington Freeway
Bloomington, MN 55420
USA
1-800-392-9932
resound.com/veterans

Manufacturer according to Health Canada:

ReSound Canada
2 East Beaver Creek Road, Building 3
Richmond Hill, ON L4B 2N3
Canada
1-888-737-6863
resound.com

CE
0297

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

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