

ReSound LiNX Quattro™

# User guide

ReSound Receiver-In-Ear hearing aids

# **Hearing aid information**

Left hearing aid		Right hearing aid					
Serial number			Serial number				
Model number			Model nur	nber			
Battery type	□ 312 □13						
Dome/mold type	Open dome  ☐ Small ☐ Medium ☐ Large	Power do ☐ Small ☐ Medium ☐ Large		□ Tulip		□ RIE mold	
Program	Веер	Descripti	on				
1	One beep						
2	Two beeps						
3	Three beeps						
4	Equr boons						

# 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.

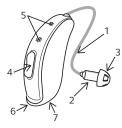
#### For devices including a Tinnitus Sound Generator module

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. The target population is primarily the adult population over 18 years of age. This product may also be used for children 12 years of age or older.

# Your hearing aid

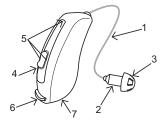
### 62 model

- 1. Receiver wire
- 2. Receiver
- 3. Dome (an open dome is shown)
- 4. Multi-function button
- 5. Microphone inlets
- 6. Battery compartment
- 7. Model and serial number (in the battery compartment)



### 61 model

- 1. Receiver wire
- 2. Receiver
- 3. Dome (an open dome is shown)
- 4. Push button
- 5. Microphone inlets
- 6. Battery compartment
- 7. Model and serial number (in the battery compartment)



### **Domes and earmolds**







Power dome

Tulip dome

Custom earmold

## Sports lock

The sports lock has been created to help keep the hearing aids in place for people with an active lifestyle.



# 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:

- Keep hearing aid batteries away from pets, children, and people with cognitive, intellectual, or mental health challenges.
- 2. Never put a hearing aid battery in your mouth.
- Never swallow batteries nor place them inside any part of the body, as the battery can cause serious injuries. If a battery has been swallowed or placed inside any part of the body, seek immediate medical attention.
- 4. Do not recharge zinc-air batteries. They may leak or explode.
- 5. Do not attempt to dispose of batteries by burning them.
- 6. Used batteries are harmful to the environment. Please dispose of them according to local regulations or return them to your hearing care professional.
- 7. Batteries may leak. Remove the battery if you leave the hearing aids unused for longer periods.
- 8. 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.

## How to insert the battery in your hearing aid

- Open the battery door completely by using your fingernail. Remove the used battery if present
- Prepare the new battery.
   Remove the protective foil to activate the battery. Wait for two minutes before inserting the battery into the hearing aid.
- Insert the new battery with the positive side in the correct position. Always insert the battery in the battery compartment door, never directly into the hearing aid. Close the battery door.









**NOTE:** Whenever the hearing aids are not in use, remember to turn them off to avoid unnecessary battery consumption.

At night, switch off the hearing aids and open the battery doors completely to allow moisture to evaporate and prolong the hearing aids' lifespan.

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.

## 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 completely drained and turn off.

# Low battery indicator when paired with wireless accessories (optional)

The batteries drain faster when you use wireless functionalities like direct streaming from your smartphone or streaming sound from your TV with our TV Streamer. When the batteries deplete, the support of some wireless accessories shuts down. Full functionality returns when you insert a new battery. The table below shows how the functionality changes with the battery level.

Battery level	Signal	Hearing aid	Remote control	Streaming
Fully charged		✓	✓	✓
Low	111	<b>√</b>	<b>√</b>	х
Depleted (change battery)	JJ.,	<b>√</b>	х	х

# 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 professional to mark your hearing aids with a colored Left and Right indication: Left is blue and Right is red.

## How to insert a receiver dome in your ear

- Hang the hearing aid over the top of the ear
- Hold the receiver tube where it bends and gently place/push the receiver dome into the ear canal
  - V....
- 3. Push the dome far enough into the ear canal so that the thin tube lies flush with the head (check with a mirror)





**NOTE:** If the hearing care professional has provided you with a sports lock on the receiver tube, make sure to position it into the indentation above the earlobe.

To avoid whistling, it is important that the tube and the dome fit correctly into your ear. For other possible reasons, check with the Troubleshooting guide.



**CAUTION:** Never attempt to bend or modify the shape of the thin tube.

#### How to insert the earmold

- Hold the earmold between your 2.
   thumb and index finger and
   position its sound outlet in your
   ear canal
- Slide the earmold all the way into your ear with a gentle, twisting movement. Move the earmold up and down and gently press to place it correctly in the ear. Opening and closing your mouth can ease insertion
- Place the hearing aid behind your ear and make sure it sits firmly behind the ear. By experimenting, you may discover an easier method. With proper insertion, hearing aids should fit snugly but comfortably









**NOTE:** It may be helpful to pull your ear up and outward with your opposite hand during insertion.



CAUTION: Never attempt to modify the shape of the hearing aids, earmolds, or receiver wires 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 in the bottom of the concha.



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

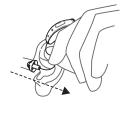
# How to remove the hearing aids from your ears

## How to remove the receiver dome from your ear

1. Lift the hearing aid off your ear



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



### How to remove the earmold from your ear

- For a moment, let it hang beside your ear
- 1. Lift the hearing aid from behind the ear. 2. Using your thumb and index finger, gently pull the earmold (not the hearing aid or the tubing) loose from the ear. If your earmold has a removal cord, use it. Remove the earmold completely by gently twisting it





# How to use your hearing aids

# Turn your hearing aids on and off

Once you have placed the hearing aids on your ears, you can turn them on. The hearing aid always starts in Program 1, with the preset volume.

Close the battery door to turn the hearing aid on in Open the battery door to turn off the hearing aid. Use Program 1. your fingernail to pull it open.





### **Smart Start**

Smart Start delays the time before the hearing aids turns on after closing the battery doors. With this function you will hear a beep for each second of the delay period (5 or 10 seconds delay).

If you do not want to turn on the hearing aids prior to placing them on your ear, ask your hearing care professional to deactivate this function.

### The push button/multi-function button

If you have hearing aids with a push button or multi-function button, this will allow you to use up to four different listening programs, each of them suitable for certain situations.







Push button (61 models only)

- 1. Push the program button to switch between programs
- 2. You will then hear one or more beeps. The number of beeps indicates which program you have selected
- 3. When you turn the hearing aids off and then back on, they always return to the default setting (program one and preset volume).

It should not be necessary to control the volume manually. However, in addition to controlling listening programs, the multi-function/push button provides you with the ability to adjust the amplification to your liking.

The multi-function/push button is designed to change the volume or listening programs of the hearing aid, based on different ways it is pressed.

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

Button action	Default setting	New setting
Short press up	Increases volume	
Short press down	Decreases volume	
Long press up (3 seconds)	Changes program	
Long press down (3 seconds)	Activates streaming	



**NOTE:** If you have two hearing aids with the Synchronized Button feature enabled, program changes to one hearing aid automatically repeat in the second hearing aid. When you change a program in one hearing aid, it responds with one or more beeps. The same number of confirmation beeps will follow in the second hearing aid. This function can also be configured to allow one side to control volume increase and the other side to control volume decrease. The volume changes to one hearing aid are repeated on the other side to keep the levels the same.

#### Telecoil

### (Optional for 62-DRWT models only)

Your hearing aid may have a telecoil. The Telecoil function may help to improve understanding of speech with Hearing Aid Compatible (HAC) telephones and in theaters, cinemas, houses of worship, etc. that have a hearing loop installed.

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



#### NOTE

- The telecoil does not work without a hearing loop (that is, an induction loop), or a 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 hearing loop system with an active Telecoil function, the hearing loop system may not be turned on or may not be operating correctly.
- The sound from the hearing loop and the hearing aids' microphones can be mixed according to your preference. Ask your hearing care professional for more details.

# **Direct Audio Input**

# (Optional for 62-DRWT models only)

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.

### How to connect a DAI adapter



with the groove on top of the battery door.



1. Align the tip of your DAI adapter 2. Move the adapter towards the battery door.



3. Click the adapter onto the hearing aid.

# How to disconnect 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 receiver.
- Do not use an FM transmitter in locations where it is forbidden to use electronic devices, for instance in airplanes.
- 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 authorized service center.

# **Advanced options**

## Using a telephone

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

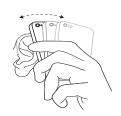
The following suggestions may be helpful:

- Hold the telephone up to your ear canal or hold it close to the hearing aid microphones as illustrated.
- If you hear whistling, try holding the telephone in the same position for a few seconds. The hearing aid may be able to cancel the whistling.
- 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.

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

Your hearing aids are Made for iPhone®, iPad®, and iPod touch®, which allow for direct audio streaming and control from these devices.

### Streaming from an Android smartphone (optional)

Some Android<sup>TM</sup> smartphones can stream audio directly to your hearing aids. Your device must be running on Android 10 or newer and it needs to 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's guide, please go to our website at resound.com
  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+.

### ReSound Assist (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.

All you need is a compatible mobile device with internet enabled. This allows you to experience unprecedented freedom and flexibility:

- 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  $3D^{TM}$  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.





### 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.



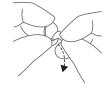
**NOTE:** Ask your hearing care professional to enable Phone Now as one of your programs.

## Place the Phone Now magnet

Place the magnet on your telephone receiver to allow operation of the Phone Now function. In order to place the magnet properly:

- 1. Clean the telephone thoroughly 2. Remove foil from magnet
- 3. Place the magnet









NOTE: If you are not satisfied with the strength of Phone Now, you can reposition the magnet or add additional magnets.

Prior to placing the magnet on the telephone or cell phone, use a recommended cleaning agent to clean the telephone.

### 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 turns down the volume.

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

Do not cover the loudspeaker opening with the magnet.

If the program does not work to your satisfaction, moving the magnet to another position may improve ease of use and comfort while speaking.

If the hearing aids do not switch to the telephone program every time, you can reposition the magnet or add additional magnets.

Use a recommended cleaning agent.



# 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 magnet may affect some medical devices or electronic systems. The manufacturer of any magnetically sensitive devices (e.g., pacemakers) should advise you regarding appropriate safety precautions when using your hearing aid and magnet in close proximity to the medical device or electronic system 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.

# Flight Mode (optional)

Your hearing aid allows you to control it from your smartphone or Remote Control. 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.

### Follow these steps to turn off wireless mode:

- For each hearing aid, open and close (open-close, open-close, open-close) the battery door three times within a 10-second period.



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

### Follow these steps to activate wireless mode:

- 1. For each hearing aid, open and close the battery door once.
- 2. Your hearing aids are in wireless mode after 10 seconds.

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.

# 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 discolor 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 direct sunlight. direct sunlight. The heat may deform the shell, damage the electronics, and deteriorate the surface.
- 7. 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.

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

### Cleaning the earmold

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

## Cleaning the receiver wire and dome

The receiver wire and the receiver dome should be cleaned regularly.

Use a damp cloth to clean the receiver wire and receiver dome on the outside.



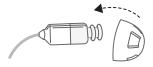
**NOTE:** Do not use water when you are cleaning the receiver wires or the receiver domes.

Receiver wires may become stiff, brittle, or discolored over time. Contact your hearing care professional regarding receiver changes.

### How to change domes

Follow these steps to mount domes. This procedure shows an open dome, but you can follow the exact same procedure if you have a tulip or power dome.

- 1. Push the new dome over the ribbed flange on the receiver.
- 2. Make sure that the new dome is 3. properly and securely mounted.
- To see if the dome is securely mounted, lift the dome as shown and check that both flanges are covered by the dome's collar.

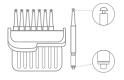


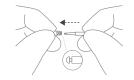


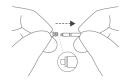


### How to change the wax guard

If you wear a dome, remove it before performing this procedure. To replace the wax guards:





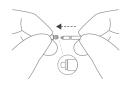


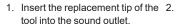
Slowly pull the wax guard

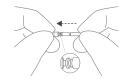
- Carrying box with eight wax guard tools.
- Insert the removal tip into the used wax 3. guard until the shaft touches the rim of the wax guard.
  - ax guard, and a replacement tip with a

straight out.

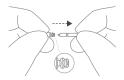
The wax guard tool has two functions: a removal tip to collect the used wax guard, and a replacement tip with a white wax guard. To insert the new wax guards, follow these steps:







 Gently press the replacement tip straight into the sound outlet until the outer ring lies flush with the sound outlet



 Pull the tool straight out. The new wax guard will remain in place. Please remember to reattach dome again, or attach a fresh dome

## 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.

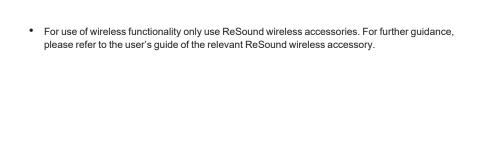
Please find the list of available wireless accessories below:

- 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.



## **Tinnitus Management**

#### **Tinnitus Sound Generator module**

Your hearing aid includes the Tinnitus Sound Generator (TSG) module. The Tinnitus Sound Generator (TSG) Module is a tool that generates sounds to be used in tinnitus management programs to temporarily 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 will sometimes hear the therapeutic sound resembling 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.

The Tinnitus 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.

#### 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.



## Tinnitus Sound Generator warnings

- 1. 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).
- 3. Sound generators can be dangerous if improperly used.



## Tinnitus Sound Generator precautions

- Should the user develop any side effects from using the sound generator, such as dizziness, nausea, headaches, perceived decrease in auditory function, or increase in tinnitus perception, the user should discontinue use of the sound generator and seek medical evaluation.
- Discontinue use of the sound generator and consult promptly with a licensed physician if you experience any of the following conditions:
  - a. Visible congenital or traumatic deformity of the ear.
  - b. History of active drainage from the ear within the previous 90 days.
  - c. History of sudden or rapidly progressive hearing loss within the previous 90 days.
  - d. Acute or chronic dizziness.
  - e. Unilateral hearing loss of sudden or recent onset within the previous 90 days.
  - f. Visible evidence of significant cerumen accumulation or a foreign body in the ear canal.
  - g. Pain or discomfort in the ear.

- Discontinue use of the sound generator and consult promptly with your hearing care professional, if you experience changes in the tinnitus perception, discomfort, or interrupted speech perception, while using the Tinnitus Sound Generator.
- 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.
- 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.

## $\triangle$

## 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. An 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.
- 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.

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- 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.
- 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.
- 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 132 dB 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. 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 pairing, etc., please refer to the user's guide of the relevant wireless accessory.



## **General precautions**

- 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, "whistling"	Is your earmold or dome inserted correctly?	Put it in again.
	Is the volume very loud?	Reduce it.
	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 receiver) 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 doctor.
No sound	Is the hearing aid turned on?	Switch it on.
	Is there a battery in the hearing aid?	Insert a new battery.
	Is the battery still good?	Replace with a new one.
	Is the receiver wire broken or the earmold clogged?	Consult your hearing care professional.
	Is your ear full of wax?	Visit your doctor.

Issue	Potential cause	Potential solution
Sound is distorted,	The battery is dead	Replace it with a new one.
spluttering or weak?	Is the battery dirty?	Clean it or replace it with a new one.
	Is the receiver wire broken or the earmold clogged?	Consult your hearing care professional.
	Did your hearing aid get damp?	Use a desiccant.
Battery drains very quickly.	Did you leave your hearing aid on for long periods of time?	Always switch off your hearing aid when you are not using it, e.g., during the night.
	Is the battery old?	Check the battery packaging.

## **Regulatory information**

## Warranties and repairs

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

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

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

## Temperature test, transport, and storage information

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

During normal operation the temperature should not exceed the limit values of  $0 \, ^{\circ}$ C (+32  $^{\circ}$ F) to +45  $^{\circ}$ C (+113  $^{\circ}$ 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  $^{\circ}$ C (-4  $^{\circ}$ F) to +60  $^{\circ}$ C (+140  $^{\circ}$ F) at a relative humidity of 90% RH, non-condensing (for a limited time). An atmospheric pressure between 500 hPa and 1100 hPa is appropriate.

## 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.
- 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 BER13 and VER12 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:

**BER13**, FCC ID:X26BER13, IC: 6941C-BER13 and **VER12**, FCC ID: X26VER12, IC: 6941C-VER12.

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

### Hearing aid variants

**Receiver-in-the-ear (RIE)** hearing aids of type **BER13** with FCC ID X26BER13, IC number 6941C-BER13, and size 13 battery are available in the following variants:

RE962-DRW, RE762-DRW, RE562-DRW RE962-DRWT, RE762-DRWT, RE562-DRWT.

Nominal RF output power transmitted is +1.1 dBm

Mini Receiver In-the-Ear (RIE) hearing aids of type VER12 with FCC ID X26VER12, IC number 6941C-VER12, and size 312 battery are available in the following variants:

RE561-DRW, RE761-DRW, RE961-DRW.

Nominal RF output power transmitted is +1 dBm.

### **Symbols**



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



Legal manufacturer.



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

**NOTE:** Advice and tips on how to handle



By prescription only (US).



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Follow instructions for use

your hearing aid better.



Complies with ACMA requirements.



Equipment includes an RF transmitter.



Complies with IMDA requirements.



Product is a Type B applied part.



Unique Device Identification.



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.

## **Technical specifications**

### **RIE - LP receiver**

Models: RE561-DRW, RE761-DRW, RE961-DRW, RE962-DRW, RE562-DRW, RE562-DRWT, RE5

Reference test gain (60 dB SPL input)	HFA	32	dB	Maximum Output (OSPL 90)
Full-on gain (50 dB SPL input)	Max HFA	52 46	dB	130
Maximum output (90 dB SPL input)	Max. HFA	113 109	dB SPL	100 mg/m 110
Total harmonic distortion	500 Hz 800 Hz 1600 Hz	0.5 0.8 0.5	%	80 100 1000 10000 Frequency (Hz)
Telecoil sensitivity (1 mA/m input)* HFA - SPLIV @ 31.6 mA/m (ANSI) Full-on telecoil sensitivity @ 1 mA/m	Max HFA HFA	82 91 76	dB SPL	Full-On and Reference Test Gain  To Full-on anh Soots SR input
Equivalent input noise, w/o noise reduction		21	dB SPL	§ € 40
1/3 Octave Equivalent input noise, w/o noise reduction	1600 Hz	9	dB SPL	30 Reference test gain
Frequency range IEC 60118-0: 2015		100-9060	Hz	10 Budas SPL Input
Current Drain (Quiescent/Operating)		1.13/1.28	mA	100 1000 10000 Frequency (Hz)

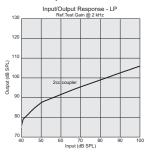
<sup>\*</sup>Telecoil is only for these models: RE962-DRWT, RE762-DRWT, RE562-DRWTVB562-DRWT VB762-DRWT VB962-DRWT. Data in accordance with ANSI S3.22-2014, IEC 60118-0:2015.

## RIE — LP receiver (US only)

#### Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
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: RE561-DRW, RE761-DRW, RE961-DRW, RE962-DRW, RE762-DRW, RE562-DRWT, RE762-DRWT, RE7

Reference test gain (60 dB SPL input)	HFA	36	dB	Maximum Output (OSPL 90)
Full-on gain (50 dB SPL input)	Max. HFA	58 50	dB	120
Maximum output (90 dB SPL input)	Max. HFA	116 113	dB SPL	Fig. 20 (10)
Total harmonic distortion	500 Hz 800 Hz 1600 Hz	0.3 0.4 0.7	%	80 100 1000 10000 Frequency (Hz)
Telecoil sensitivity (1 mA/m input)* HFA - SPLIV @ 31.6 mA/m (ANSI) Full-on telecoil sensitivity @ 1 mA/m	Max. HFA HFA	86 96 81	dB SPL	Full-On and Reference Test Gain  Full-On and Reference Test Gain  Full-On and Reference Test Gain  Full-On and Reference Test Gain
Equivalent input noise, w/o noise reduction		24	dB SPL	[a] € 40
1/3 Octave Equivalent input noise, w/o Noise reduction	1600 Hz	11	dB SPL	30 Reference test quin
Frequency range IEC 60118-0: 2015		100-9000	Hz	20 BldB SPL input
Current Drain (Quiescent/Operating)		1.13/1.19	mA	100 1000 10000 Frequency (Hz)

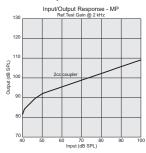
<sup>\*</sup>Telecoil is only for these models: RE962-DRWT, RE762-DRWT, RE562-DRWTVB562-DRWT VB762-DRWT VB962-DRWT. Data in accordance with ANSI S3.22-2014, IEC 60118-0:2015.

## RIE — MP receiver (US only)

#### Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
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: RE561-DRW, RE761-DRW, RE961-DRW, RE962-DRW, RE762-DRW, RE562-DRWT, RE762-DRWT, RE7

Reference test gain (60 dB SPL input)	HFA	40	dB	Maximum Output (OSPL 90)
Full-on gain (50 dB SPL input)	Max. HFA	65 57	dB	130
Maximum output (90 dB SPL input)	Max. HFA	120 117	dB SPL	Original (a) Sept.
Total harmonic distortion	500 Hz 800 Hz 1600 Hz	0.3 0.7 0.5	%	100 1000 10000 Frequency (Hz)
Telecoil sensitivity (1 mA/m input)* HFA - SPLIV @ 31.6 mA/m (ANSI) Full-on telecoil sensitivity @ 1 mA/m	Max. HFA HFA	95 100 89	dB SPL	Full-On and Reference Test Gain  Full-or con  SOUB SE I HAVE
Equivalent input noise, w/o noise reduction		22	dB SPL	S (SB)
1/3 Octave Equivalent input noise, w/o noise reduction	1600 Hz	10	dB SPL	60 Reference text gain doctors in the second
Frequency range IEC 60118-0: 2015		100-6750	Hz	1000
Current Drain (Quiescent/Operating)		1.13/1.18	mA	Frequency (Hz)

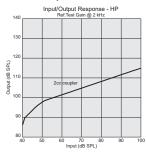
<sup>\*</sup>Telecoil is only for these models: RE962-DRWT, RE762-DRWT, RE562-DRWTVB562-DRWT VB762-DRWT VB962-DRWT. Data in accordance with ANSI S3.22-2014, IEC 60118-0:2015.

## RIE — HP receiver (US only)

#### Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
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: RE561-DRW, RE761-DRW, RE961-DRW, RE962-DRW, RE762-DRW, RE562-DRWT, RE762-DRWT, RE7

Reference test gain (60 dB SPL input)	HFA	47	dB	Maximum Output (OSPL 90)
Full-on gain (50 dB SPL input)	Max.	75	dB	130
	HFA	65		¥3 120
Maximum output (90 dB SPL input)	Max. HFA	128 124	dB SPL	4 2 8 100 100 100 100 100 100 100 100 100 1
Total harmonic distortion	500 Hz 800 Hz	1.0 1.6	%	100 1000
	1600 Hz	0.1		Frequency (Hz)
Telecoil sensitivity (1 mA/m input)* HFA - SPLIV @ 31.6 mA/m (ANSI) Full-on telecoil sensitivity @ 1 mA/m	Max. HFA HFA	105 108 96	dB SPL	Full-On and Reference Test Gain  Full-On and Reference Test Gain  Full-Order test Gain
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	80 Reference test gain
Frequency range IEC 60118-0: 2015		130-4920	Hz	30
Current Drain (Quiescent/Operating)		1.14/1.21	mA	100 1000 10000 Frequency (Hz)

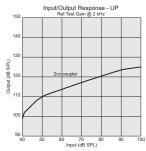
<sup>\*</sup> Telecoil is only for these models: RE962-DRWT, RE762-DRWT, RE562-DRWTVB562-DRWT VB762-DRWT VB962-DRWT. Data in accordance with ANSI S3.22-2014, IEC 60118-0:2015.

## RIE — UP receiver (US only)

#### Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
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

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

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## **Notes**



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

Manufacturer according to FDA:

Manufacturer according to Health Canada:

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