**≰**iPhone ∣ iPad ∣ iPod





# User guide





Beltone **Rely** 

# **Hearing aid information**

Left hearing aid				Right hearing aid			
Serial number				Serial number			
Model number				Model number			
Battery type		□ 312 □13					
type ☐ S		sed dome mall ledium arge	Open dome  Small  Medium  Large	Power dome  Small  Medium  Large	_ T	ulip dome	□ RIE earmold
Program Beep		Description					
1	One	beep					
2	Two	beeps					
3	Thre	ee beeps					
1	Fou	r heens					

# 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.



#### 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 vounger 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 vounger than 18.

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# Introduction

Thank you for choosing Beltone 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 Breaker Pro module

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

#### For devices including a dome

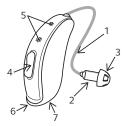
The dome is intended to be connected to a receiver tube on the hearing aid. The dome is intended to ensure that the sound outlet of the hearing aid is placed in the ear canal.

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

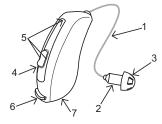
# Zinc-Air battery model (64)

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



# Zinc-Air battery model (63)

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



#### **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.



 $\begin{tabular}{ll} \textbf{NOTE:} Only use domes supplied by Beltone. \end{tabular}$ 

# Preparing your hearing aids for use

## **Battery warnings**



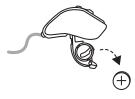
WARNING: Batteries contain dangerous substances and should be disposed of carefully in the interest of vour safety and for the environment. Please note:

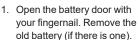
- 1. Keep hearing aid batteries away from pets, children, and people with cognitive, intellectual, or mental health challenges.
- 2. Never put a hearing aid battery in your mouth.
- 3. Never swallow batteries nor place them inside any part of the body, as the battery can cause serious injuries. If a 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.



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

# Inserting the battery into your hearing aid







2. Remove the packaging and protective foil from the new battery. Wait for two minutes while the battery activates



- 3. Insert the new battery, with the plus (+) sign correctly positioned, into the battery compartment door. Do not insert it directly into the hearing aid.
- 4. Close the battery door.



• To save battery power, turn off your hearing aids when they are not in use.

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

## Low battery 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.



NOTE: Keep extra batteries with you.

### 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.

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

Battery level	Signal	Hearing aid	Remote control	Streaming
Fully charged		✓	✓	<b>✓</b>
Low	4 even tones	<b>√</b>	<b>√</b>	х
Depleted	3 even tones and 1 longer tone	<b>√</b>	х	х

These will work again when you insert a new battery.

# Placing your hearing aids in your ears

## How to tell left from right

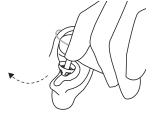
If you have two hearing aids, they may be programmed differently. One for your left ear, the other for your right. Do not swap them. Please pay attention to this when cleaning, storing, and inserting the hearing aids.

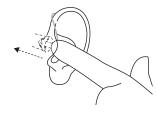
You might want to ask your hearing care professional to mark your hearing aids with a colored Left and Right indication: Left is blue and Right is red.

## 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 vour 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:

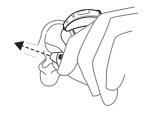
- 1. Insert the hearing aid as usual
- 2. Tuck the sports lock into the bottom part of the indentation above your earlobe.



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 vour ear canal.
- 2. Slide the earmold into your ear with a 3. Place the hearing aid behind gentle, twisting movement. Move the earmold up and down and press gently. Opening and closing your mouth may be helpful.
- vour 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 vourself.

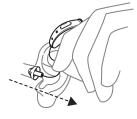
# Removing your hearing aids from your ears

# 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 vour 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.

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





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

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

# **Delayed Activation**

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



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

## The push button/multi-function button

Your hearing aid has either a push button or a multi-function button. These buttons allow you to use a variety of listening programs. Each program is suitable for a different situation.







Push button (63 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.

# 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.



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.



# **Auto-Phone (optional)**

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



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



# Auto-Phone 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 Auto-Phone magnet may affect sensitive medical devices/electronic systems. Seek advice from the manufacturers regarding appropriate safety measures when using the Auto-Phone solution near the sensitive device/equipment (pacemakers and defibrillators) in question. If the manufacturer cannot issue a statement, we recommend keeping the magnet or a telephone equipped with the magnet 30 cm (12") away from magnetically sensitive devices (e.g., pacemakers).



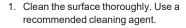
# Auto-Phone precautions

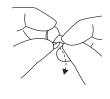
- If you experience frequent signal loss or noise during calls, move the magnet to another place on the telephone receiver.
- Only use magnets supplied by Beltone.

#### Placing the Auto-Phone magnet

Place the magnet on your telephone receiver as follows:







2 Remove the foil from the magnet.



3. Place the magnet on the phone.



# CAUTION:

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

#### How to use Auto-Phone

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



- You may need to move the telephone receiver slightly to find the best position for reliable Auto-Phone activation and a good hearing experience on the telephone.
- If your hearing aids have the Asymmetric Phone Handling 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

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

#### **Beltone Remote Care**

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

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

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

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

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



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

#### Beltone Remote Care Live

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





## 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 Beltone hearing aids for which they are intended, and Beltone 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 Beltone Direct Phone Link 2 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. Open and close the battery door on each hearing aid three times within 10 seconds.
- 2. A 10-second double tone ( ) means the hearing aid is now in Flight Mode.



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

### Activating wireless communication (exit Flight Mode)

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



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

# Wireless accessories

Beltone'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:

- Beltone Direct TV Link 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.
- **Beltone Remote Control** allows you to adjust the volume, mute your hearing aids, and change programs.
- Beltone Direct 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.
- Beltone Direct Phone Link 2 streams phone conversations and stereo sound directly to both hearing aids. and it doubles as a simple remote control.
- Beltone Direct myPAL Micro is a body worn microphone for your friend or colleague. It significantly improves speech understanding in noisy situations.
- Beltone Direct mvPAL Pro works like the Beltone Direct mvPAL Micro 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 Beltone wireless accessories.
- For use of wireless functionality only use Beltone wireless accessories. For further guidance, please refer to the user's guide of the relevant Beltone 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. 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, intense 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.

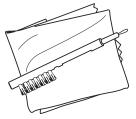


WARNING: Always turn your hearing aids off while cleaning and maintaining them.



#### 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.
- 4. Magnet. Use the magnet to lift and replace the battery.



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





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



CAUTION: Do not use alcohol or other solvents to clean your hearing aid 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.

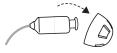


### CAUTION:

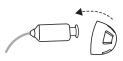
- If you suspect that you have a dome stuck in your ear, consult your hearing care professional.
- Only use original Beltone consumables (e.g., domes and wax filters).

### 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.



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



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



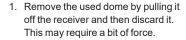


**NOTE:** Change the dome at least every three months. Ask your hearing care professional for advice.

### Tulip domes

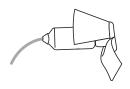
To change a tulip dome, follow these instructions:







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







mounted by verifying that the collar completely covers the ribbed end of the receiver

3. Check that the tulip dome is securely 4. Push the larger petal toward the receiver

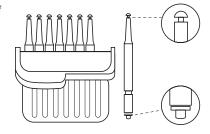
This illustration shows a correctly mounted tulip dome. Ensure the large petal is outside the small petal.

### Changing the wax filter

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

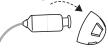
The wax filter helps keep earwax away from the components of the hearing aid. You must replace it on a regular basis. Consult your hearing care professional for advice on how often you need to change them. It will depend on how much wax your ears produce.

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



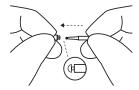
Box of 8 wax filter tools The wax filter tool has two functions: a

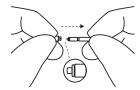
#### Removing the old wax filter





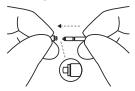
- 1 Remove the dome from the receiver
- 2. Open the wax filter case and take out one of the tools. Each tool has a small hook (removal tip) in one end and a new wax filter in the other



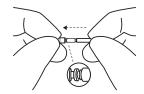


3. Insert the removal tip into the used wax filter and then pull the tool straight out. It is important to pull it straight and not on an angle.

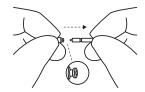
#### Inserting the new wax filter



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 Beltone consumables (e.g., domes and wax filters).

# General warnings and precautions



# General warnings

- 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.
- 6. Hearing aids should be used only as prescribed by your hearing care professional. Incorrect use may result in sudden and permanent hearing loss.
- 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 (wired connection, for example HI-PRO. SpeedLink).



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 gualified 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 there a battery in the hearing aid?	Insert a new battery.
	Is the battery still good?	Replace with a new battery.
	Is the receiver wire broken or the earmold clogged?	Visit your hearing care professional.
	Is your ear full of wax?	Visit your doctor.

Issue	Potential cause	Potential solution
Sound is distorted,	Is the battery dead?	Replace with a new battery.
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.
	Is there moisture in your hearing aid?	Use a desiccant (drying kit).
Battery drains very quickly.	Did you leave your hearing aid on for long periods of time?	Always turn off your hearing aid when you are not using it (e.g., at night).
		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 battery old?	Check the battery packaging.

# **Tinnitus Management**

#### Tinnitus Breaker Pro module

Your Beltone hearing aids include the Tinnitus Breaker Pro (TBP) module. The Tinnitus Breaker Pro (TBP) Module is a software tool that generates sounds to be used in tinnitus management programs to relieve suffering from tinnitus. The TBP 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 TBP module - (US only)

The Tinnitus Breaker Pro module is a tool to generate sounds to be used in a Tinnitus Management Program to temporarily relieve patients suffering from Tinnitus. The target population is primarily the adult population over 18 years of age. This product may also be used with children 5 years of age or older.

The Tinnitus Breaker Pro Module is targeted for healthcare professionals, which are treating patients suffering from Tinnitus, as well as conventional hearing disorders. The fitting of the Tinnitus Breaker Pro 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 Breaker Pro module may be performed remotely and in real time while having live communication via live audio, video, and chat on the user's dedicated app.

#### User instructions for the TBP module

### Description of the device

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

### Explanation of how the device works

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

Your doctor, audiologist, or hearing care professional can modulate the generated noise 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 Breaker Pro 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 TBP 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 TBP noise level is automatically adjusted simultaneously in both hearing aids dependent on the background sound level. Additionally, since the hearing aid has a volume control, the background noise level monitored by the hearing aid and the volume control can be used simultaneously to adjust the generated noise level in both hearing aids.

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

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

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

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

#### TBP volume control

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

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

### Using TBP with smartphone apps

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



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

### **TBP - Technical specifications**

Audio signal technology: Digital.

#### Available sounds

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

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

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



# Prescription use of a Tinnitus Breaker Pro hearing aid

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

To adjust TBP, please consult your hearing 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 TBP module.

#### Important notice for prospective sound generator users

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

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

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

The sound generator instrument is a tool to generate sounds to be used with appropriate 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 TBP hearing aid.



## Tinnitus Breaker Pro warning to hearing care professionals

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

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



CAUTION: The maximum output of the sound generator falls into the range that can cause hearing loss according to OSHA regulations. In 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 Breaker Pro 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.
- 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 Breaker Pro.
- 4. The volume control is a feature in the TBP 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 TBP hearing aid.

6. Adjustment of the Tinnitus Breaker Pro 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 Beltone Remote Care for remote settings of the tinnitus sound generator, should only be performed by the parent or legal guardian in cases where the user is 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 IFC 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)

The devices have been evaluated clinically through equivalence, and the devices have been compared 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).
- Beltone A/S hereby declares that the radio equipment types BER13 and VER12 are in compliance with Directive 2014/53/FU
- The full text of the EU declaration of conformity is available at the following internet address: www.beltone.com/declarations
- In the US: FCC CFR 47 Part 15, subpart C.
- 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:

RLY464-DRW, RLY364-DRW, RLY264-DRW

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:

RLY463-DRW. RLY363-DRW. RLY263-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 iniuries.

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



By prescription only (US).



vour hearing aid better. Follow instructions for use



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.

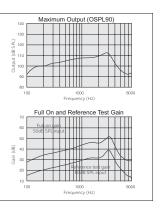
NOTE: There may be specific regulations in your country.

# **Technical specifications**

### **RIE - LP receiver**

Models: RLY464-DRW, RLY364-DRW, RLY264-DRW RLY463-DRW, RLY363-DRW, RLY263-DRW

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	%
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
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
Current Drain (Quiescent/Operating)		1.13/1.28	mA



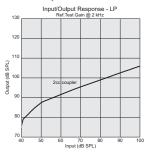
<sup>\*</sup> Telecoil is only for these models: RLY464-DRW, RLY364-DRW, RLY264-DRW. Data in accordance with ANSI S3.22-2014, IEC 60118-0:2015. Measured in a 2cc coupler.

### 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

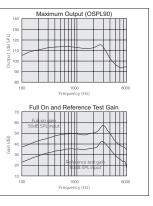
#### Input/Output response, measured in a 2cc coupler at the reference test gain @ 2 KHz



#### **RIE - MP receiver**

Models: RLY464-DRW, RLY364-DRW, RLY264-DRW RLY463-DRW, RLY363-DRW, RLY263-DRW

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	%
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
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
Current Drain (Quiescent/Operating)		1.13/1.19	mA



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

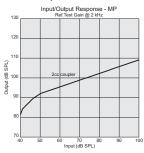
<sup>\*</sup> Telecoil is only for these models: RLY464-DRW, RLY364-DRW, RLY264-DRW.

### RIE — MP receiver (US only)

#### Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
Attack/release time (2 kHz syllabic)		ms

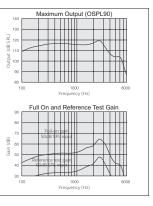
#### Input/Output response, measured in a 2cc coupler at the reference test gain @ 2 KHz



#### RIE - HP receiver

Models: RLY464-DRW, RLY364-DRW, RLY264-DRW RLY463-DRW, RLY363-DRW, RLY263-DRW

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	%
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
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
Current Drain (Quiescent/Operating)		1.13/1.18	mA



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

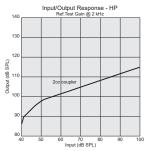
<sup>\*</sup> Telecoil is only for these models: RLY464-DRW, RLY364-DRW, RLY264-DRW.

### RIE — HP receiver (US only)

#### Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
Attack/release time (2 kHz syllabic)		ms

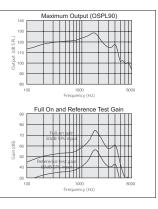
### Input/Output response, measured in a 2cc coupler at the reference test gain @ 2 KHz



### **RIE - UP receiver**

Models: RLY464-DRW, RLY364-DRW, RLY264-DRW RLY463-DRW, RLY363-DRW, RLY263-DRW

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	%
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
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
Current Drain (Quiescent/Operating)		1.14/1.21	mA



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

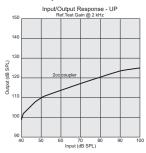
<sup>\*</sup> Telecoil is only for these models: RLY464-DRW, RLY364-DRW, RLY264-DRW.

### RIE — UP receiver (US only)

#### Additional technical data

Latency, mid frequency delay (2 kHz)	5.1	ms
Attack/release time (2 kHz syllabic)		ms

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



## Additional information

### **Acknowledgements**

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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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