



*Flyte*<sup>™</sup>

User Guide *Flyte* BTE



Hearing instrument type designations for models included in this user guide are: **BE70**, FCC ID: X26BE70, IC 6941C-BE70; **LO85**, FCC ID: X26LO85, IC: 6941C-LO85. Please see page 10 for a list of models referring to these types.

## Statement:

This device complies with part 15 of the FCC rules and ICES-003 of the ISED rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference
2. This device must accept any interference received, including interference that may cause undesired operation



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules and ICES-003 of the ISED rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from the one in which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- Changes or modifications can void the user's authority to operate the equipment

The products are in compliance with the following regulatory requirements:

- In EU: the device conforms to the Essential Requirements according to Annex I of Council Directive 93/42/EEC for medical devices (MDD).
- GN Hearing A/S declares that the radio equipment type(s) LO85 and LO90 is/are in compliance with Directive 2014/53/EU (RED).
- The declaration of conformity may be consulted at [www.declarations.resound.com/](http://www.declarations.resound.com/)
- In US: FCC CFR 47 Part 15, subpart C.
- Other identified applicable international regulatory requirements in countries outside the EU and US. Please refer to local country requirements for these areas.
- In Canada: these hearing aids are certified under the rules of ISED.
- Japanese Radio Law and Japanese Telecommunications Business Law Compliance. This device is granted pursuant to the Japanese Radio Law (電波法) and the Japanese telecommunications Business Law (電気通信事業法) This device should not be modified (otherwise the granted designation number will become invalid

This device operates in the frequency range of 2.4 GHz - 2.48 GHz.

This device includes an RF transmitter that operates in the range of 2.4 GHz - 2.48 GHz.

Maximum RF output power transmitted is up to 0 dBm.

## Intended use

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

*ReSound is a registered trade mark of GN ReSound A/S*



## **Prescription use of a Tinnitus Sound Generator (TSG) hearing instrument**

The TSG module should be used as prescribed by your doctor, audiologist or hearing healthcare professional.

In order to avoid permanent hearing damages, the maximum daily usage depends on the level of the generated sound. 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.

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. However, children and physically or mentally challenged users will require training by a doctor, audiologist, hearing healthcare professional or the guardian for the insertion and removal of the hearing instrument containing the TSG module.

### **Important notice for prospective sound generator users**

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

Good health practice requires that a person with a tinnitus condition have a medical evaluation by a licensed physician (preferably a physician who specializes in diseases of the ear) before using a sound generator.

Licensed physicians who specialize in diseases of the ear are often referred to as otolaryngologists, otologists or otorhinolaryngologists.





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

The sound generator instrument is a tool to generate sounds to be used with appropriate counselling and or in a tinnitus management programme to relieve patients suffering from tinnitus.



## **Introduction**

Congratulations on the purchase of your new hearing instruments. The innovative sound technology and design, combined with the customized programming selected by your hearing care professional, will make hearing a more enjoyable experience. Hearing instruments will enable you to hear sounds that you may not have heard in years because of your hearing loss. Practice and a positive attitude are important in learning to use hearing instruments. Your hearing instruments have been adjusted according to your individual hearing loss and needs. Some people adjust quickly to wearing hearing instruments in their ears and hearing new sounds; other people may need more time.

Please read this manual carefully in order to wholly benefit from the use of your hearing instruments. With proper care, maintenance, and usage, your hearing instruments will aid you in better communication for many years. Ask your hearing care professional if you have any questions.



Hearing instrument model: \_\_\_\_\_

Model 77: Battery size 13

Model 88: Battery size 13

Tube type: \_\_\_\_\_

Dome size: \_\_\_\_\_

Left serial number: \_\_\_\_\_

Right serial number: \_\_\_\_\_

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Behind-the-ear **(BTE)** hearing instruments of type **BE70** with FCC ID X26BE70, IC number 6941C-BE70 and size **13** battery are available in the following variants:

**FL977-DW, FL777-DW**

**FP977-DW, FP777-DW**

Behind-The-Ear (BTE) hearing instruments type **LO85** with FCC ID X26LO85, IC number 6941C-LO85 and size 13 battery are available in following variants:

**FL988-DW, FL788-DW**

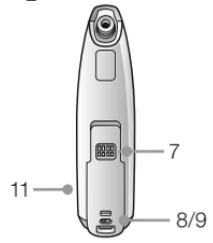
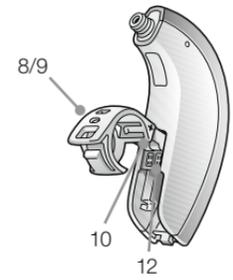
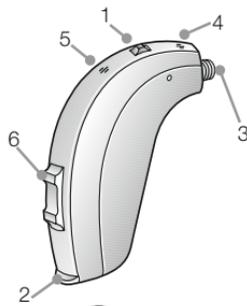
**FP988-DW, FP988-DWH, FP788-DW**



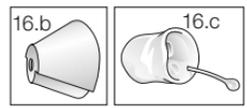
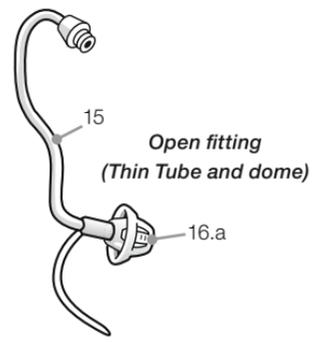
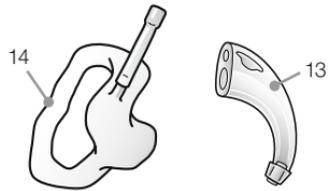
The identification number for the BE70 and LO85 device models can be found at location “10” as indicated in the illustrations on the next page.



1. Program button
2. Battery compartment & On/Off switch
3. Sound outlet
4. Front microphone inlet
5. Back microphone inlet
6. Volume control
7. Direct audio input
8. Left/Right indicator (Left=Blue/Right=Red)
9. Battery lock (optional)
10. Model (in battery chamber)
11. Manufacturer
12. Serial number (in battery chamber)
13. Earhook
14. Earmold and tubing
15. Thin Tube
16. Domes/earmold
  - a. Open dome
  - b. Tulip-Dome
  - c. Custom earmold



**Traditional fitting  
(earmold and tube)**



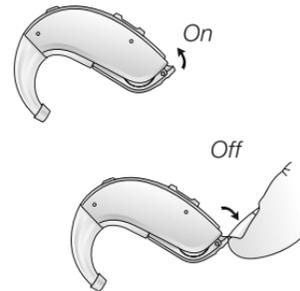
## Getting started

### *On/Off function*

1. When the battery door is closed, the hearing instrument turns on, and the default program will be activated.
2. To turn off the hearing instrument, open the battery door. Many individuals can use their fingernail to pull it open.

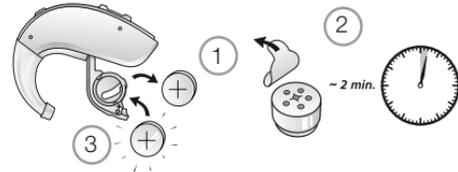
### **SmartStart**

Hearing instruments can be turned on once you have placed them on your ears. If you prefer to turn them on just prior to placing them on your ear, your hearing care professional can activate a function called SmartStart. This function will delay the time in which the hearing instruments turn on after the battery compartment is closed. With SmartStart, a beep will be heard for each second of the delay period.



## Inserting/Replacing the battery

1. Open the battery door completely by using your fingernail. Remove the used battery if present.
2. Prepare the new battery (please refer to page 5 for information on appropriate battery type/size for your hearing instrument). Remove the protective foil and wait 2 minutes before inserting the battery into the hearing instrument to allow activation of the battery.
3. Insert the new battery with the positive side in the correct position.
4. Gently close the battery door.



Tip:

1. Always use new Zinc-Air batteries that have a minimum remaining shelf life of 1 year.
2. To save battery, turn off your hearing aids when they are not in use.
3. Remove the sticker from the battery and let it air for 2 minutes before you insert it.
4. If hearing instrument is experiencing frequent loss of connection to GN Hearing accessories, contact your hearing care professional for a list of low impedance batteries.

## Low battery indicator

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



NOTE: Keep spare batteries on hand.

## Low battery indicator when paired with wireless accessories only

The batteries drain faster when you use wireless functionalities like streaming from your smart phone or from your TV via TV Streamer.

As the battery power goes down, the wireless functions stop working. A short melody every five minutes indicates that battery power is too low.

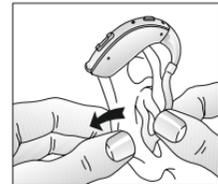
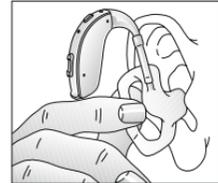
The table below shows how the functionality shifts with the power level of the battery.

Battery level	Signal	Hearing aid	Remote Control	Streaming
Fully charged		✓	✓	✓
Low	A musical note icon consisting of a single eighth note with a stem and a flag.	✓	✓	✗
Depleted (change battery)	A musical note icon consisting of a quarter note with a stem and a flag.	✓	✗	✗

## Inserting/Removing hearing instruments

### *Insertion (custom earmolds)*

1. Hold the earmold between your thumb and index finger and position its sound outlet in your ear canal.
2. Slide the earmold all the way into your ear with a gentle, twisting movement.
3. Turn the top part of the earmold gently backwards and forwards so that it tucks behind the fold of skin above your ear canal.
4. Move the earmold up and down and gently press to ensure it is positioned correctly in the ear. Opening and closing your mouth can ease insertion.
5. Make sure the hearing instrument is seated behind the ear.



By experimenting, an easier method may be discovered. With proper insertion, hearing instruments should fit snugly but comfortably. If the hearing instruments cause irritation of the ears, contact your hearing care professional.



Note: Never attempt to modify the shape of the hearing instrument, earmolds, or tubing yourself.



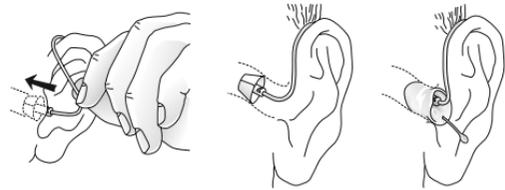
Tip: It may be helpful to pull your ear up and outward with your opposite hand during insertion.

#### *Removal (custom earmolds)*

1. Hold a portion of your earmold towards the back of the ear.
2. Pull the earmold outward and simultaneously rotate the earmold forward.
3. Consult your hearing care professional if you have difficulties removing the hearing instrument.

*Insertion (domes/custom earmolds with thin tubes)*

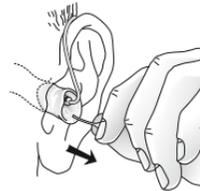
1. Place the hearing instrument on the ear.
2. Hold the thin tube where it bends, and gently place the dome into the ear canal. Push the dome far enough into the ear canal so that the thin tube lies flush with the head.
3. It is important that the tube and the dome fit correctly into your ear.
4. When the dome is placed correctly, you should not be able to see the thin tube sticking out when facing a mirror.



Note: You should never attempt to bend or modify the shape of the thin tube.

*Removal (domes/custom earmolds with thin tubes)*

1. Hold the thin tube with your thumb and forefinger and remove the tube.
2. For thin tube custom earmolds, grasp the removal string and pull the earmold outward.
3. Consult your hearing care professional if you have difficulties removing the hearing instrument.



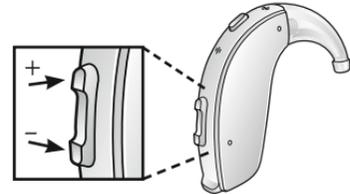
## Operation of the hearing instrument

### *Volume control (optional)*

The volume control will allow the volume of hearing instruments to be increased or decreased.

1. To increase the volume, push the volume control up.
2. To decrease the volume, push the volume control down.

When volume is increased or decreased, a beep signal will be heard for each incremental change. When the upper or lower limits of the volume range are reached, a beep signal with a lower pitch will be heard.

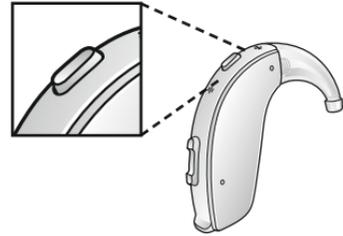


If you have two hearing instruments with the synchronization function enabled, volume control adjustments to one instrument will automatically repeat in the second instrument. When a volume control adjustment is made in one instrument, you will hear a confirmation beep. A beep in the second instrument will follow.

Your hearing care professional can disable the volume control function if it is not desired. The volume control can also be replaced with a non-functional cover.

### *Program button*

Depending on your experience level with hearing instruments, individual hearing needs, and the type of listening environments you experience, your hearing care professional may activate additional programs. If additional programs have been activated, the following list explains how they work.



Program	Description of when to use
1	
2	
3	
4	

1. You can switch between programs by pushing the push button once.
2. You will then hear one or more beeps. The number of beeps indicates which program you have selected (one beep = program one, two beeps = program two, etc.).
3. When the hearing instruments are turned off and then back on, the hearing instrument always returns to the default setting (program one).



If you have two hearing instruments with the synchronization function enabled, program changes to one instrument will automatically repeat in the second instrument. When a program change is made in one instrument, you will hear the same amount of confirmation beeps in the second instrument.



## **Flight mode**

When boarding a flight **or entering an area where RF transmitters are prohibited**, wireless functionality must be deactivated, as it is not allowed to radiate radio signals during flights or in otherwise restricted areas.

### **For TruHearing Flyte wireless hearing instruments follow the following instructions to enter and leave flight mode:**

It is possible to disable wireless operation by opening and closing the battery compartment three times within a ten second period (open-close, open-close, open-close). Your instruments will now be in flight mode.

If the hearing instrument is in flight mode, the hearing instrument must have been operating in flight mode for at least 10 seconds before attempting to enable wireless again. It is possible to re-enable wireless operation by opening and closing the battery door once. 10 seconds after this operation is completed, wireless operation will begin again.



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. If the battery compartment is opened and closed during this 15 second window, flight mode will resume.

## Telephone use

Finding the optimal position for holding a telephone may require practice for some individuals, and one or more of the following suggestions may be helpful.

1. Hold the telephone as you would normally.
2. Hold the telephone towards the top of the ear (closer to where the microphones are).
3. If whistling occurs, it may take a few seconds of holding the telephone in the same position before the hearing instrument eliminates the feedback.
4. Any whistling may also be decreased by holding the telephone slightly away from the ear.
5. Depending on your individual needs, your hearing care professional may activate a program specifically for telephone use.



## Listen to radio or TV

When listening to the TV or the radio, start out by listening to news commentators since they usually speak clearly, then try other programs. If you find it difficult to listen to TV or radio, your hearing care professional will be able to give you advice on available wireless accessories to enhance your listening capabilities for TV and radio.

## Using GN Hearing hearing instruments with iPhone®, iPad®, and iPod touch® (TruHearing Flyte)

TruHearing Flyte is a Made for iPhone instrument and allows for direct communication and control with an iPhone, iPad, or iPod touch. For assistance in pairing and using these products with your device, please contact your hearing care professional or visit [www.userguides.gnhearing.com](http://www.userguides.gnhearing.com).

### Cellular phones

Your hearing instrument is designed to comply with the most stringent Standards of International Electro-magnetic Compatibility. However, not all cell phones are hearing instrument compatible. The varying degree of disturbance can be due to the nature of your particular cellular phone or of your wireless telephone service provider.

If you find it difficult to obtain a good result while using your cellular phone, your hearing care professional will be able to give you advice on available wireless accessories to enhance listening capabilities.



### PhoneNow

The PhoneNow function allows your hearing instrument to automatically switch to your telephone program when a telephone receiver is raised to the ear. When the telephone receiver is removed from the ear, the hearing instrument automatically returns to the previous listening program.

### *Placement of PhoneNow magnets*

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

1. Clean the telephone receiver thoroughly.
2. Hold the telephone vertically, in a position similar to when making a telephone call.
3. Place the magnets just below the telephone receiver. Make sure not to cover the microphone openings. If necessary, move the magnet to another position to improve ease of use and comfort while speaking.
4. If you are not satisfied with the strength of PhoneNow, you can reposition the PhoneNow magnet or add additional PhoneNow magnets.

### *PhoneNow usage*

Telephones can be used in a normal manner. A short melody will indicate that the PhoneNow feature has automatically switched the hearing instrument to your telephone program. Initially, you may need to move the telephone receiver slightly to find the best position for reliable PhoneNow activation and good hearing on the telephone.

If you have two hearing instruments with the synchronization function enabled, the volume of hearing instrument on the non-phone ear will be turned down.



Only use recommended cleaning agent to clean the telephone prior to placing the magnet on the phone in order to obtain best possible adherence.



### *PhoneNow warnings*

1. Keep magnets out of reach of pets, children and people with mental disabilities. If a magnet is swallowed, please seek advice from a medical practitioner.
2. 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 instrument 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).



### *PhoneNow precautions*

1. High distortion during dialing or phoning may mean that the magnet is not in the optimal position relative to the telephone receiver. To avoid the issue, please move the magnet to another place on the telephone receiver.
2. Only use magnets supplied by GN Hearing.

## **Telecoil (optional)**

A telecoil can be activated by your hearing care professional and accessed through one of the additional programs. A telecoil picks up a telephone's magnetic signal and converts it to sound. An optional telephone program may help to improve speech understanding on the telephone. When using a telecoil program, the receiver of the telephone may need to be held closer to the hearing instrument. The handset of the telephone may need to be moved to slightly different positions in order to find the best reception.

## **Tele-loop systems**

Many places, such as theaters, houses of worship, and schools are equipped with tele-loop systems. When using a telecoil program with tele-loop systems, sound is picked up directly and may improve speech understanding. If there is no sound from the hearing instruments in a tele-loop system and with a telecoil program activated, the tele-loop system may not be turned on or is not operating correctly. If a facility is not equipped with a tele-loop system, sitting as close as possible to the front may be helpful.

## **FM and Direct audio input (optional)**

An FM system can greatly improve speech understanding in many situations such as when a speaker is a long distance away or a room is noisy or reverberant. The direct audio input (DAI) can be used with a universal FM receiver or together with a cable to connect to a radio, computer or television. The sound source is connected to the hearing instruments by a cable or a wireless FM system to the audio boot. This accessory connects to the bottom of the hearing instruments, and once properly clicked into place, the hearing instruments switches to DAI automatically.

## Connecting/Disconnecting direct audio boot or integrated FM

### *Connecting audio boot and integrated FM*

1. Align the tip of the audio boot or integrated FM boot with the groove just above the battery compartment and below the model number.
2. Once in place, move the boot in the direction of the battery compartment.
3. Gently click the boot onto the hearing instrument.

### *Disconnecting audio boot and integrated FM*

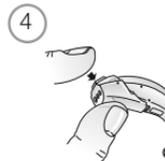
4. Press and hold the button on the front side of the audio boot. For an FM boot, slide the latch downward with your finger nail.
5. Gently remove the boot from the hearing instrument.



Direct audio



Integrated FM





## **Important points for FM**

- Do not use two transmitters on the same FM channel.
- Do not use water or fluids for cleaning FM boot.
- 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.

## Battery door lock (optional)

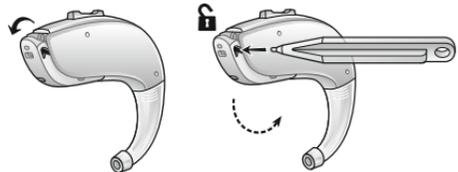
Your hearing instrument can be equipped with a lock to prevent children or mentally challenged persons from accidentally ingesting the battery. Ask your hearing care professional to demonstrate the locking system on your hearing instruments.

### *Standard battery door lock*

Your hearing care professional can install a battery door lock. Once the battery door has been locked, the hearing instrument can be turned on and off, but the battery cannot be changed unless the battery door is unlocked again.

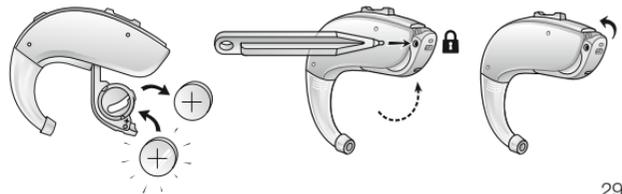
To unlock the battery door:

1. With the battery door in its off position, slide the battery lock slider to the right by pressing from the left side of the battery door (see illustration)



To lock the battery door:

2. Open the battery door to its off position.
3. With the battery door in its off position, slide the battery lock slider to the left by pressing from the right side of the battery door (see illustration)



 **Care and maintenance**

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

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

## **i** Daily maintenance

It is important to keep your hearing instrument clean and dry. On a daily basis, clean the hearing instruments 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.



## **i** Cleaning earmolds

1. Detach the earmold and tubing from the hearing aid before cleaning.
2. Use a mild soap to clean the earmold and rinse with lukewarm water.
3. Dry the earmold thoroughly. Use the airbulb and cleaning wire to remove residual water and debris from the tubing.

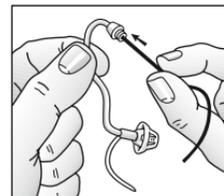


**i** Note: Earmold tubing may become stiff, brittle, or discoloured over time. Contact your hearing care professional regarding tube changes.



## **i** Cleaning thin tubes and domes

1. Unscrew the thin tubes from the HA counter clockwise before cleaning them.
2. Use a damp cloth to wipe down thin tubes, domes and hearing aid.
3. Push the black cleaning wire through the thin tube to clear out moisture and debris. Insert the cleaning wire opposite the dome.



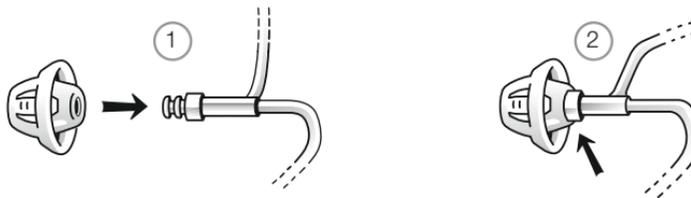
Note: We recommend that you change the thin tube and the dome system every three months. If the parts get stiff or brittle, change them sooner..

## How to apply domes

It is recommended that your hearing care professional change domes, as incorrect dome replacement could result in the dome falling out in the ear.

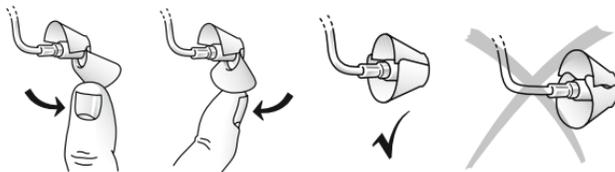
### *Standard domes*

1. Push the new dome over the ribs on the thin tube.
2. Make sure that the new dome is properly and securely mounted.



### *Tulip domes*

Tulip domes are mounted in a similar manner to standard domes, but a few extra steps are required. Tulip domes consist of two “petals”. It is important to note that the largest petal is the outermost petal. To ensure this:



1. Push the largest petal away from the thin tube using a finger. This bends the petal forward.
2. Then push the largest petal back, and it will be placed on top of the smaller petal.

## Using GN Hearing hearing instruments with smart phone apps



Intended use of smart phone apps:

GN Hearing smart phone apps are intended to be used with GN Hearing wireless hearing aids. GN Hearing smart phone apps send and receive signals from the GN Hearing wireless hearing aids via smart phones for which the apps have been developed.

*Use with smart phone apps:*

- Notifications of app updates should not be disabled, and it is recommended that the user installs all updates to ensure that the app will function correctly and will be kept up to date.
- The app must only be used with GN Hearing devices for which it is intended, and GN Hearing takes no responsibility if the app is used with other devices.
- If you would like a printed version of the user guide for a smart phone app please consult customer support.



## **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 instrument away from the affected electronic device.
2. When using wireless functionality and the devices are affected by electromagnetic interference, move away from the source.
3. Use only original GN Hearing consumables e.g. tubes and domes.
4. Never attempt to modify the shape of the hearing instrument, earmolds, or tubing yourself.
5. Only connect GN Hearing hearing instruments to GN Hearing accessories intended and qualified to be used with GN Hearing hearing instruments.



## General warnings

1. If a hearing aid is broken, do not use it
2. 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
3. Different types of radiation, e.g. from NMR, MRI or CT scanners, may damage hearing aids. It is recommended not to wear hearing aids during these or other similar procedures. Other types of radiation, such as burglar alarms, room surveillance systems, radio equipment, mobile telephones, contain less energy and will not damage hearing aids. However, they have the potential to momentarily affect the sound quality or temporarily create undesired sounds from hearing aids
4. Do not wear hearing aids in mines, oil fields, or other explosive areas unless those areas are certified for hearing aid use
5. Do not allow others to use your hearing aids. This may cause damage to the hearing of the other individual or to the hearing aids
6. Hearing aid usage by children or mentally disabled persons should be supervised at all times to ensure their safety. The hearing aid contains small parts that could be swallowed by children. Please be mindful not to leave children unsupervised with this hearing aid
7. Hearing aids should be used only as prescribed by your hearing care professional. Incorrect use may result in sudden and permanent hearing loss
8. Warning to hearing care professionals: Special care should be exercised in selecting and fitting hearing aids with maximum sound pressure level that exceeds 132dB SPL with an IEC 60711:1981 occluded ear simulator. The remaining hearing may risk further impairment.
9. When boarding a flight or entering an area where RF transmitters are prohibited, deactivate wireless functionality. Turn off your wireless functionality by using the flight mode in areas where radio frequency emission is prohibited

10. External devices connected to the electrical input must be safe according to the requirements of IEC 60601-1-1, IEC 60065, or IEC 60950-1, as appropriate (wired connection, for example HIPRO, SpeedLink).



Note:

- \* GN Hearing wireless devices operate in the frequency range of 2.4 GHz - 2.48 GHz.
- \* GN Hearing wireless devices include a RF transmitter that operates in the range of 2.4 GHz - 2.48 GHz.
- \* For use of wireless functionality only use GN Hearing accessories. For further guidance regarding e.g. pairing, please refer to the user guide of the relevant GN Hearing accessory.



## **Battery warning information**

Batteries, although very small, contain dangerous substances, and should be disposed of carefully. This is for the safety of you and the environment. Please note:

1. DO NOT RECHARGE ZINK AIR BATTERIES – THEY MAY LEAK OR EXPLODE.
2. DO NOT attempt to dispose of batteries by burning them. Used batteries are harmful to the environment. Please dispose of them according to local regulations or return them to your hearing care practitioner.
3. DO NOT place batteries in your mouth. Consult a physician immediately if a battery has been swallowed, as they can be harmful to your health.
4. Keep batteries away from pets, children and individuals who are mentally challenged.
5. BATTERIES MAY LEAK. REMOVE THE BATTERY IF YOU LEAVE THE HEARING AIDS UNUSED FOR LONGER PERIODS.
6. 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.

## **Tinnitus Sound Generator (TSG) module**

### **Intended use for the TSG module**

Your ReSound hearing instrument includes the Tinnitus Sound Generator function, a tool for generating sounds to be used in tinnitus management programmes to relieve suffering from tinnitus.

The Tinnitus Sound Generator can generate sounds adjusted to the specific therapeutic needs and your personal preference as determined by your doctor, audiologist, or hearing healthcare professional. Depending on the selected hearing instrument programme and the environment you are in, you will sometimes hear the therapeutic sound resembling a continuous or fluctuating humming.

### **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 programmes to relieve suffering from tinnitus.

#### *Explanation of how the device functions*

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

Your doctor, audiologist or hearing healthcare professional can modulate the generated noise with the purpose of making it more pleasant. The noise can then resemble, for example, crashing 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 healthcare professional that allows you to select predefined sounds that simulate sounds from nature, such as breaking waves or running water.

If you have two wireless hearing aids that support ear-to-ear synchronisation this functionality can be enabled by your hearing healthcare professional. This will cause the Tinnitus Sound Generator to synchronise the sound in both hearing aids.

If your tinnitus troubles you only in quiet environments, your doctor, audiologist or hearing healthcare professional can set the TSG Module so that it becomes audible exclusively in such surroundings. The overall sound level can be adjusted via an optional volume control. Your doctor, audiologist or hearing healthcare professional will review with you the need for having such a control.



For hearing aids where ear to ear synchronisation is enabled your hearing healthcare professional can also enable environmental monitoring synchronisation so that the TSG noise level is automatically adjusted simultaneously in both hearing aids dependent on the background sound level. Additionally if the hearing aid has a volume control then 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.



### ***TSG volume control***

The sound generator is set to a specific loudness level by the hearing healthcare 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.



## **Using TSG with smart phone apps**

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

To use smart phone apps the hearing aid must be connected with the smart phone or mobile device.

## **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.



## Technical Specifications

### *Audio signal technology*

Digital

### *Available sounds*

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

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

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



## **TSG warnings**

- Sound generators can be dangerous if improperly used.
- Sound generators should be used only as advised by your doctor, audiologist, or hearing healthcare professional.
- Sound generators are not toys and should be kept out of reach of anyone who might cause themselves injury (especially children and pets).



## **TSG 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.
- Children and physically or mentally challenged users will require guardian supervision while wearing the TSG hearing instrument.
- The volume control is an optional feature in the TSG module used for adjusting the sound generator output level. To prevent unintended usage by pediatric or physically or mentally challenged users, the volume control must, if enabled, be configured to only provide a decrease of the sound generator output level.



## **TSG warning to hearing healthcare professionals**

A hearing healthcare 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 healthcare 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:

- (i) Visible congenital or traumatic deformity of the ear.
- (ii) History of active drainage from the ear within the previous 90 days.
- (iii) History of sudden or rapidly progressive hearing loss within the previous 90 days.
- (iv) Acute or chronic dizziness.
- (v) Unilateral hearing loss of sudden or recent onset within the previous 90 days.
- (vi) Audiometric air-bone gap equal to or greater than 15dB at 500 hertz (Hz), 1000 Hz, and 2000 Hz.
- (vii) Visible evidence of significant cerumen accumulation or a foreign body in the ear canal.
- (viii) Pain or discomfort in the ear.



**CAUTION:** The maximum output of the sound generator falls into the range that can cause hearing loss according to OSHA regulations. In accordance with NIOSH recommendations the user should not use the sound generator for more than eight (8) hours a day when this is set to a level of 85db SPL or above. When the sound generator is set to levels of 90db SPL or above the user should not use the sound generator for more than two (2) hours per day. In no case should the sound generator be worn at uncomfortable levels.

  
 **Hearing instrument expectations**

A hearing instrument will not restore normal hearing and will not prevent or improve a hearing impairment resulting from organic conditions. Consistent use of the hearing instrument is recommended. In most cases, infrequent use does not permit you to attain full benefit from it.

The use of a hearing instrument is only part of hearing rehabilitation and may need to be supplemented by auditory training and instructions in lip-reading.

 **Warning to hearing aid dispensers (US Only)**

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



- (i) Visible congenital or traumatic deformity of the ear.
- (ii) History of active drainage from the ear within the previous 90 days.
- (iii) History of sudden or rapidly progressive hearing loss within the previous 90 days.
- (iv) Acute or chronic dizziness.
- (v) Unilateral hearing loss of sudden or recent onset within the previous 90 days.
- (vi) Audiometric air-bone gap equal to or greater than 15 decibels at 500 hertz (Hz), 1,000 Hz, and 2,000 Hz.
- (vii) Visible evidence of significant cerumen accumulation or a foreign body in the ear canal.
- (viii) Pain or discomfort in the ear.



## **Important notice for prospective hearing aid users (US Only)**

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

Following the medical evaluation, the physician will give you a written statement that states that your hearing loss has been medically evaluated and that you may be considered a candidate for a hearing aid. The physician will refer you to an audiologist or a hearing aid dispenser, as appropriate, for a hearing aid evaluation. The audiologist or hearing aid dispenser will conduct a hearing aid evaluation to assess your ability to hear with and without a hearing aid. The hearing aid evaluation will enable the audiologist or dispenser to select and fit a hearing aid to your individual needs. If you have reservations about your ability to adapt to amplification, you should inquire about the availability of a trial-rental or purchase-option program. Many hearing aid dispensers now offer programs that permit you to wear a hearing aid for a period of time for a nominal fee after which you may decide if you want to purchase the hearing aid.

Federal law restricts the sale of hearing aids to those individuals who have obtained a medical evaluation from a licensed physician. Federal law permits a fully informed adult to sign a waiver statement declining the medical evaluation for religious or personal beliefs that preclude consultation with a physician. The exercise of such a waiver is not in your best health interest and its use is strongly discouraged.

## **Children with hearing loss (US Only)**

In addition to seeing a physician for a medical evaluation, a child with a hearing loss should be directed to an audiologist for evaluation and rehabilitation since hearing loss may cause problems in language development and the educational and social growth of a child. An audiologist is qualified by training and experience to assist in the evaluation and rehabilitation of a child with a hearing loss.



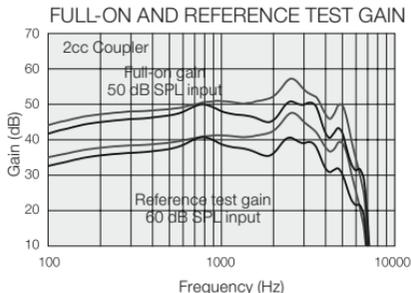
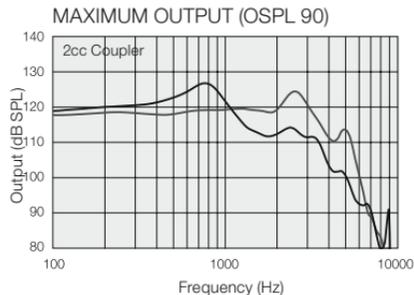
## BTE

Models: FL977-DW, FL777-DW, FP977-DW, FP777-DW

		Open	Closed	
Reference test gain (60 dB SPL input)	HFA	38	43	dB
Full-on gain (50 dB SPL Input)	Max	51	57	dB
	HFA	48	53	dB
Maximum output (90 dB SPL input)	Max	127	124	dB SPL
	HFA	116	121	dB SPL
Total harmonic distortion	500 Hz	0.2	0.4	%
	800 Hz	0.2	0.8	%
	1600 Hz	0.6	0.7	%
Telecoil sensitivity (SPLIV @ 31.6 mA/m)		100	105	dB SPL
Equivalent input noise (w/o noise reduction)		22	20	dB SPL
Frequency range (DIN 45605)		100–6810	100–6140	Hz
Current drain (in test mode)		1.2	1.2	mA

Data in accordance with ANSI S3.22-2009; and IEC 60118-7 ed.2.0  
Supply Voltage 1.3 V, 2cc coupler

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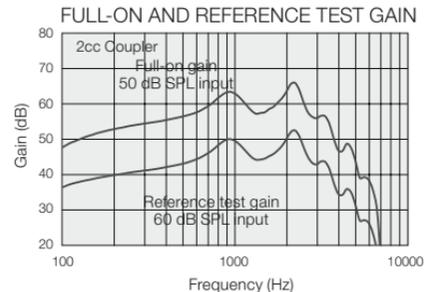
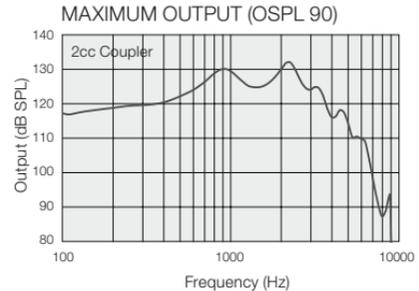
— Open configuration  
— Closed configuration

## POWER BTE

Models: FL988-DW, FL788-DW, FP988-DW, FP788-DW

Reference test gain (60 dB SPL input)	HFA	51	dB
Full-on gain (50 dB SPL Input)	Max	67	dB
	HFA	63	dB
Maximum output (90 dB SPL input)	Max	132	dB SPL
	HFA	128	dB SPL
Total harmonic distortion	500 Hz	0.5	%
	800 Hz	0.5	%
	1600 Hz	0.3	%
Telecoil sensitivity (SPLIV @ 31.6 mA/m)		111	dB SPL
Equivalent input noise (w/o noise reduction)		22	dB SPL
Frequency range (DIN 45605)		100–6020	Hz
Current drain (in test mode)		1.4	mA

Data in accordance with ANSI S3.22-2009; and IEC 60118-7 ed.2.0  
Supply Voltage 1.3 V, 2cc coupler



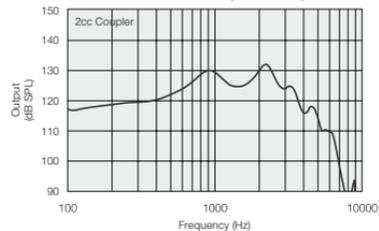
# POWER BTE

Model: FP988-DWH

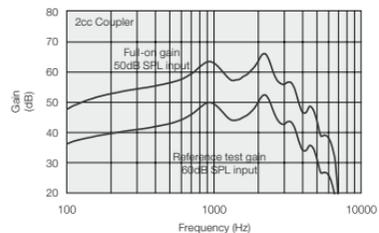
Reference test gain (60 dB SPL input)	1600 Hz/HFA	52	dB
Full-on gain (50 dB SPL input)	Max.	73	dB
	1600 Hz/HFA	68	
Maximum output (90 dB SPL input)	Max.	132	dB SPL
	1600 Hz/HFA	129	
Total harmonic distortion	500 Hz	0.8	%
	800 Hz	0.6	
	1600 Hz	0.4	
Telecoil sensitivity (1 mA/m input)	Max.		dB SPL
HFA - SPLIV @ 31.6 mA/m (ANSI)	HFA	112	
Full-on telecoil sensitivity @ 1mA/m	1600 Hz/HFA	96	
Equivalent input noise, w/o Noise reduction		23	dB SPL
1/3 Octave Equivalent input noise, w/o Noise reduction			
Frequency range (DIN 45605/ANSI)		100-4740	Hz
Current drain		1.2/1.4	mA

Data in accordance with IEC 60118-0, IEC 60118-7;  
Supply Voltage 1.3 V.

MAXIMUM OUTPUT (OSPL 90)



FULL-ON AND REFERENCE TEST GAIN





## Troubleshooting Guide

SYMPTOM	CAUSE
No sound	Not turned on
	Dead battery
	Battery door will not close
	Blocked earmold or tube
	Blocked wax filter
Not loud enough	Incorrect earmold placement
	Blocked earmold or dome
	Blocked sound outlet filter
	Change in hearing sensitivity
	Excessive ear wax
	Volume set too low

## POSSIBLE REMEDY

Turn on by closing the battery door

Replace battery

Insert battery properly

Clean earmold or tube

Replace wax filter or consult your hearing care professional

Reinsert earmold

Clean earmold, replace dome, replace filter

Change filter or consult your hearing care professional

Consult your hearing care professional

Consult your physician

Increase the volume control if available or consult your hearing care professional

*If there are any other problems not mentioned in this guide, please contact your hearing care professional.*

## Troubleshooting Guide

SYMPTOM	CAUSE
Excessive whistling / feedback	Incorrect earmold placement
	Incorrect dome placement
	Excessive ear wax
	Feedback control may need adjustment
	Earmold tubing worn or damaged
	Thin tube connection loose
	Hearing instrument settings not optimal
Sound distorted / not clear	Weak battery
	Improper earmold or dome fit
	Hearing instrument damaged
	Hearing instrument settings not optimal
Wireless does not work	Possible Root Cause - Device is in flight mode

## POSSIBLE REMEDY

Re-insert earmold carefully

Re-insert dome

Consult your hearing care professional

Consult your hearing care professional

Consult your hearing care professional

Change thin tube or consult your hearing care professional

Consult your hearing care professional

Replace battery

Consult your hearing care professional

Consult your hearing care professional

Consult your hearing care professional

Open and close the battery compartment once. Wireless will reactivate 10 seconds later. (If Root Cause is device in flight mode)



## **Warranty and repairs**

GN Hearing provides a warranty on hearing instruments in the event of defects in workmanship or materials, as described in applicable warranty documentation. In its service policy, GN Hearing pledges to secure functionality at least equivalent to the original hearing instrument. As a signatory to the United Nations Global Compact initiative, GN Hearing is committed to doing this in line with environment-friendly best practices. Hearing instruments therefore, at GN Hearing'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 instruments is designated on your warranty card, which is provided by your hearing care professional.

For hearing instruments that require service, please contact your hearing care professional for assistance. GN Hearing hearing instruments that malfunction must be repaired by a qualified technician. Do not attempt to open the case of hearing instruments, as this will invalidate the warranty.

## **Temperature test, transport and storage information**

GN Hearing instruments 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 transport or storage, the temperature should not exceed the limit values of -20°C (-4°F) to +60°C (+140°F) and relative humidity of 90% RH, non-condensing (for limited time). The air pressure between 500 hPa and 1,100 hPa is appropriate.



Be aware of information marked with the warning symbol



**WARNING** points out a situation that could lead to serious injuries,  
**CAUTION** indicates a situation that could lead to minor and moderate injuries



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



Equipment includes RF transmitter

TruHearing Flyte is compatible with iPhone 7 Plus, iPhone 7, iPhone 6s Plus, iPhone 6s, iPhone 6 Plus, iPhone 6, iPhone SE, iPhone 5s, iPhone 5c, iPhone 5, iPad Pro (12.9-inch), iPad Pro (9.7-inch), iPad Air 2, iPad Air, iPad mini 4, iPad mini 3, iPad mini 2, iPad mini, iPad (4th generation), iPod touch (6th generation) and iPod touch (5th generation) using iOS 8.X or later. Apple, the Apple logo, iPhone, iPad Pro, iPad Air, iPad mini, iPad and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

Android is a trademark of Google Inc.



“Made for iPhone” means that an electronic accessory has been designed to connect specifically to iPhone and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPhone may affect wireless performance.

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Please ask your local hearing care professional concerning disposal of your hearing instrument

# TruHearing™

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