Smartphone-Compatible and Universal Connectivity

# Standard Products

# OPERATIONS MANUAL

**BTE** (Behind-The-Ear)

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### Features, Controls, and Identification

- 1. Hearing aid
- 2. Earhook
- 3. Microphone
- 4. Rocker switch (user control)
- 5. Battery compartment (on/off control)
- 6. Location of left/right side hearing aid indicator **RED** is for **right ear**, **BLUE** is for **left ear**
- 7. Location of serial number
- 8. Location of manufacturer's name and model name
- 9. Custom earmold with tubing
- 10. Thin tube with comfort earbud
- 11. Thin tube with custom earmold









## **Batteries**

Your hearing aid uses a battery as its power source. The battery size can be identified by the orange (13) color code on the packaging.

To insert or replace the battery:

- 1. Use the finger pick on the battery door.
- 2. Open the battery door gently and remove the old battery.
- Remove the colored tab from the new battery. For best results, wait 3–5 minutes after removing the tab before inserting the battery.
- 4. Insert into the battery door, "+" side up.
- 5. Close the battery door.

# **Battery Indicators**

An indicator will sound when the battery voltage is low. You then have approximately 30 minutes\* to replace the battery. An indicator may also sound just before the battery stops working.



#### **Helpful Hints**

- NEVER FORCE THE BATTERY DOOR SHUT; this could result in serious damage. If the door will not close securely, ensure the battery is inserted correctly.
- Do not open the battery door too far or damage is likely to occur.
- Dispose of used batteries immediately in the proper waste or recycling container.
- Batteries vary in size and performance. Your hearing professional is your best source for lifespan estimates and verification that you are using the proper size and type.

#### **WARNINGS**

Batteries are dangerous if swallowed. To help prevent the accidental ingestion of batteries:

- Keep out of reach of children and pets.
- Check your medications before taking them batteries have been mistaken for pills.
- Never put batteries in your mouth, as they can easily be swallowed.

### NATIONAL BUTTON BATTERY INGESTION HOTLINE: 202-625-3333

# **Insertion and Removal**

#### To insert the custom earmold and hearing aid:

- 1. Hold the custom earmold with your thumb and forefinger on the outer side near the tubing.
- 2. Tilt your hand slightly forward and gently insert the canal tip of the custom earmold into your ear canal.
- 3. Rotate the custom earmold backward.
- 4. Softly press the custom earmold into place with your fingertip.
- 5. Carefully place the BTE behind your ear wrapping the earhook over the top of your ear.

#### To remove the hearing aid and custom earmold:

Take the hearing aid from behind your ear and gently pull the custom earmold outward. Pulling lightly down on the earlobe may help loosen the custom earmold as it is removed.













#### To insert the comfort earbud:

- 1. Insert the comfort earbud into your ear canal.
- 2. Gently wrap the BTE over your ear until it rests securely behind your ear.
- 3. Place the lock in the concha bowl of your ear.

# To remove the hearing aid and comfort earbud:

- Remove the lock from the concha bowl of your ear.
- Remove the hearing aid from behind your ear.
- Gently grasp the tubing at the opening of the ear canal and pull outward.





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### Helpful Hints

- Minor irritation and inflammation may occur as your ear becomes accustomed to having an object in it; if so, please contact your hearing professional. There are several different sizes of earbuds and custom earmolds that may be more comfortable.
- If an actual allergic reaction occurs, alternative earmold materials are available; contact your hearing professional.
- Severe swelling, discharge from the ear, excessive wax or other unusual conditions warrant immediate consultation with a physician.

# Power On & Off

#### To turn ON:

Insert a battery and completely close the battery door. Your hearing aid has a power-on delay that may require a few seconds. You may hear a tone indicating that your hearing aid is powered on.

#### To turn OFF:

Open the battery door until the battery is no longer touching the battery contacts.

# Auto On/Off

Your hearing aid may support the ability to automatically go into a low-powered state to conserve battery. This control can be configured by your hearing professional or via the Thrive Hearing Control app. Place your hearing aid on a flat, stable surface (e.g., a table) with your earmold or earbud facing upwards and it will go into a low-powered state after about 15 minutes. To resume normal hearing aid function, pick up your hearing aid and place it in your ear. Your hearing aid will detect this motion and switch back on again. You may hear a tone indicating that your hearing aid is powered on.

# **User Controls**

Your hearing aid's user control may have been customized by your hearing professional. Ask your hearing professional how the user control on your hearing aid is set.

#### Available User Control Functionality

The user control on your hearing aid can respond differently depending on how long you activate (press) the button. Your hearing aid is capable of having one function assigned to a short press (press and release) and one function assigned to a long press (press and hold).



The options selected below indicate how your user controls are configured.

### Tap Gesture

Your hearing aid may support an additional user control. This control can be configured by your hearing professional to start/stop streamed audio from a 2.4 GHz accessory by tapping your ear twice.



# Edge Mode

Edge Mode works to identify and create a temporary, real-time adjustment tailored for challenging environments. Upon activation, your devices use an environmental scan to bring comfort and clarity. Ask your hearing professional for more information.

### Assigned User Control Settings

	Short Press (Press & Release)	Long Press (Press & Hold)	Tap Gesture*
Volume Control			
Memory Change			
Mute			
Multiflex Tinnitus Level			
Start/Stop Accessory Streaming			
Balance Control			
Accessory Volume			
Manual Alert			
Edge Mode			
Thrive Assistant			

\*Hearing aid may support

# **Volume Control**

#### Power On Volume Level

Your hearing aid has been set to a specific volume level. If sounds are generally too loud or too soft, please contact your hearing professional for advice and adjustment.

# **Rocker Switch Volume Control**

If your rocker switch is configured to control volume, pressing the top part of the switch increases the volume while pressing the lower portion of the switch decreases volume.

# **Volume Control Indicators**

Your hearing professional may enable audible indicators, which highlight the current volume position.

Volume Level	Tone
Volume Max	5 Beeps ••••
Volume Step(s)	Short Tone –
Volume Home (Power-on volume level)	3 Beeps •••
Volume Step(s)	Short Tone –
Volume Min	Single Beep •

#### My hearing aid is configured with the following control:

□ Press and Release Volume Control

Press and Hold Volume Control

# Memory Change

Your hearing professional may create multiple memories within your hearing aid. These additional memories can be accessed by activating the user control on your hearing aid.

If your user control is configured for memory changes, each time you activate the user control, the memory of your hearing aid will increment through the available memories.

#### **Memory Indicators**

Your hearing professional may enable an audible indicator, which is presented while making a memory change. The indicator defaults to a voice identifying the memory.

### Mute

If your hearing aid is configured with mute functionality, a long press and hold of the user control will mute your hearing aid. If enabled by your hearing professional, you may hear an indicator prior to the hearing aid muting. To unmute your hearing aid, press the button again and audio will be restored.

# **Multiflex Tinnitus Level Control**

Your user control can also adjust the level of your Multiflex Tinnitus stimulus. Please refer to the section labeled Multiflex Tinnitus Technology (on page 24) for further information.

# Wellness Score

Your hearing aid may support a sensor that is capable of tracking activity and engagement and reporting it to the Thrive app. You can easily view and manage your health information and receive daily feedback on your progress by viewing your Thrive Wellness Score.

# **Directional Settings**

Your hearing aid has directional microphones to help improve speech understanding in noisy situations. Ask your hearing professional about your particular directional settings.

# **Telephone Use**

Your hearing aids can be customized with features to help you effectively communicate on the telephone. Ask your hearing professional about your telephone solution.

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#### My hearing aids have the following telephone $\mathsf{setting}(\mathsf{s})$ :

- Automatic Telephone Memory and Automatic Telecoil.
  See below
- Manual Telephone Memory and Manual Telecoil.
  See next page (Memory # \_\_\_\_\_\_)

None

#### Automatic Telephone Memory and Automatic Telecoil

These options activate the telephone memory automatically when used with a hearing aid compatible telephone. To use, place the telephone receiver on your ear as you normally would and the hearing aid will automatically select the telephone memory. It might be necessary to move the telephone receiver slightly to find the best reception. Once the telephone is removed from the ear, the hearing aid will switch back to the last used memory.

**NOTE:** Consult with your hearing professional if your hearing aid does not switch to the telephone memory automatically, if it is enabled.

#### Manual Telephone Memory and Manual Telecoil

Manual access allows you to switch the hearing aids into a telephone or telecoil memory, as needed. Ask your hearing professional which memory you should access for manual telephone use.

#### **General Telephone Use**

Some hearing aids work best by holding the phone close to, but not fully covering vour ear. In some instances, if you encounter whistling (feedback), tilt the receiver at an angle until the whistling stops. Additionally, the hearing aid in the non-phone ear (ear opposite the phone) may switch to a telephone setting to reduce background sounds. Your hearing professional can provide instructions and techniques for your specific needs.





The telephone memory in your hearing aid may be equipped with an ear-to-ear phone streaming option. When you enter your telephone memory, the audio from your telephone will be streamed from the phone ear's hearing aid to the opposite ear's hearing aid. This allows you to hear the telephone conversation in both ears. Ask your hearing professional about your particular telephone settings.

## Introduction

A Contralateral Routing of Signals (CROS) hearing system is a type of hearing aid that is used to treat unilateral hearing loss. It takes sound from the ear with poorer hearing and transmits it to the ear with better hearing. CROS only picks up sound from the unaidable ear, while BiCROS picks up sound from both ears.

## **Balance Control**

Your hearing system uses the button to adjust the balance between the hearing aid and the transmitter. This control adjusts the level of sound coming from the transmitter. Press and release the switch until the desired level is reached. Each press and release changes the balance level one increment.

**NOTE:** Balance Control is only applicable for BiCROS memories.

### **CROS Streaming**

Your hearing system is equipped with a CROS transmitter. When you enter a memory with either CROS or BiCROS streaming enabled, audio from the transmitter is streamed to your hearing aid. When CROS streaming begins, you may hear an alert tone. If for any reason the CROS stream is unexpectedly interrupted you may also hear an alert tone. Please ask your hearing professional about your particular settings.

### Introduction

Multiflex Tinnitus Technology can be used as part of a tinnitus treatment program. Multiflex Tinnitus Technology plays a tinnitus stimulus through the hearing aid. The tinnitus stimulus is programmed according to your hearing loss, and your hearing professional can adjust the settings of the tinnitus stimulus to meet your needs.

#### **Rocker Switch Tinnitus Stimulus Control**

If your rocker switch is configured for Tinnitus Stimulus Control, pressing the top part of the switch increases the stimulus level while pressing the bottom part of the switch decreases the stimulus level.

#### My hearing aid is configured with the following control:

Press and Release Tinnitus Stimulus Control

Press and Hold Tinnitus Stimulus Control

## Introduction

Fall Alert can be used to notify others should you fall or experience a non-fall-related event. This feature can be configured to send an SMS text message to predefined contacts. Fall Alert can be configured to send automated and/or manually initiated alerts.

### **Auto Alert**

If Auto Alert has been activated in the Thrive app on your smartphone, the sensors in your hearing aid(s) will monitor your head movement to detect a fall automatically. When a fall is detected, a text message will be initiated by the Thrive app on your smartphone. An SMS text message will be sent to a maximum of three predefined contacts, notifying them of the detected fall event. The SMS text message will contain a link from which each contact can confirm receipt of the message and view a map, indicating your location.

**WARNING:** Auto Alert may not detect 100 percent of falls.

## **Manual Alert**

If the user control on your hearing aid(s) has been configured for Manual Alert by your hearing professional, and there is a confirmed contact in the Thrive app, a long "press and hold" of the user control will initiate an alert text message by the Thrive app on your smartphone. An SMS text message will be sent to a maximum of three predefined contacts, notifying them of the alert. The SMS text message will contain a link from which each contact can confirm receipt of the message and view a map, indicating your location.

## **Alert Cancellation**

An Auto Alert or Manual Alert can be cancelled from either your hearing aid(s) or your smartphone. To cancel an SMS alert text message from your hearing aid(s), press the user control on either hearing aid. Fall Alert messages can be cancelled within the 60- or 90-second preselected cancellation time following alert initiation. It may take up to 20 seconds for a fall alert to be automatically initiated.

## Contacts

You can identify up to three contacts to whom you would like alert text messages sent. You must enter the name and smartphone number for each contact into the Thrive app on your smartphone. Each of your contacts will receive an SMS text message prompting them to confirm participation in your Fall Alert system.

# **Auto Alert Sensitivity**

You can adjust your Auto Alert Sensitivity in the Thrive app. Increasing the sensitivity may increase the likelihood of detecting a fall. Decreasing the sensitivity may help reduce the probability of false alerts.

**WARNING:** Decreasing the Auto Alert Sensitivity may prevent some falls from being detected by your Fall Alert system.

For example, Auto Alert may not detect a fall if:

- The Sensitivity setting is not appropriate for the user.
- The fall is very slow, or you slide down gradually.
- You get up and begin walking immediately after a fall.

As a reminder, you can initiate a Manual Alert if Auto Alert does not detect a fall. Manual Alert must be configured by your hearing professional before it can be used.

▲ WARNING: Auto Alert may initiate false alerts. To prevent false-alert text messages from being sent to your Contact(s), you may cancel the alert from either your smartphone or by pressing the user control on either hearing aid.

## Indicators

Speech indicators will play through your hearing aid(s) when:

- You have successfully initiated a Manual Alert.
- A fall has been automatically detected.
- At least one contact has confirmed receipt of the alert text message.
- You have successfully cancelled an alert via the user control on the hearing aid.

A tonal indicator will play through your hearing aid(s) when:

- There has been a communication failure during the transmission of an alert text message.
- There has been a communication failure during the cancellation of an alert text message.

**WARNING:** To reduce Fall Alert communication failures:

- Your hearing aid(s) need to be powered on, paired and connected with your smartphone using Bluetooth<sup>®</sup> technology.
- The mobile device must be powered on, with the Thrive app open (in the foreground or background).

The mobile device must have a connection to the internet (via a cellular network or WiFi).

# **Mobile Phone Use**

Your hearing aid is designed to work with a smartphone. When the hearing aid is paired and powered on, incoming phone calls will route automatically to your hearing aid. When your hearing aid is not powered on, incoming calls route only to your smartphone.

iOS allows you to select a preference for how audio (call audio and media audio) is routed from your smartphone to your hearing aids.

## Pairing Your Hearing Aid with an iOS Device

To adjust your hearing aid with your iOS device, you must pair the two together so they can communicate. Please follow the instructions to pair your iOS device and your hearing aid.

- Ensure Bluetooth is enabled on your iOS device. Within the Settings menu, go to Bluetooth and toggle to On.
- 2. Turn your hearing aids off and back on. This puts the hearing aids in pairing mode.
- 3. Within the Settings menu go to Accessibility > Hearing Devices.
  - You will see your hearing aid name (e.g., "Chris Hearing Aids") when the iOS device first discovers your hearing aids.
  - If your name does not appear in the "Devices" list within 5–7 seconds, tap Accessibility in the upper left corner, then tap *Hearing Devices*.
- 4. Tap on the hearing aid name to connect your hearing aids to the iOS device.
- 5. You will see two pairing requests (one for each hearing aid). Select *Pair* for each request. These requests may be several seconds apart.
- 6. When pairing is complete, your hearing aid name will change from black to blue.

You are now ready to use your iOS device to adjust your hearing aid. You can adjust either with the native iOS controls or with the Thrive app.

To access the native iOS hearing aid controls, tripleclick the **Home button** (iPhone 8 or earlier) or the side button (iPhone X and newer) on your iOS device. For additional configuration options, please consult Apple support. From this screen you can adjust the volume, select memory or use your iOS device as a remote microphone.

Select **Start Live Listen** to stream the iOS device microphone input directly into your hearing aid. Point the iOS device microphone toward the audio source.

To minimize background noise and provide the best signal, place the iOS device as close to the source as possible.

**Right Volume/Left Volume** allows you to increase and decrease volume for each hearing aid individually.

Turn off **Adjust Independently** to make changes to both hearing aids simultaneously.

**Normal** indicates the name of a memory setting in the hearing aid. You can select from any memories shown in the list to change the hearing aid to that memory setting.

# Pairing Your Hearing Aid with an Android Device

To adjust your hearing aid with your Android device, you must pair the two together so they can communicate. Please follow the instructions to pair your device and your hearing aid.

- 1. Tap the Settings icon on your device.
- 2. Ensure Bluetooth is On.
- Turn your hearing aids off and back on. This puts the hearing aids in pairing mode.
- When the hearing aids are discovered, you will see your first name followed by Hearing Aid ("Michelle's Hearing Aid") under Available Devices. You will see this for each device.
- 5. Tap the hearing aid name to connect each hearing aid to the device.

## Accessories

There are several accessories that allow you to control and maximize the full potential of your hearing aids. Available functionality includes:

- Ability to adjust your hearing aids using a remote control
- Ability to transmit television audio directly to your hearing aids
- Ability to transmit remote microphone audio directly to your hearing aids

Consult with your hearing professional to determine which accessories may be best for you.

# **Hearing Aid Care**

Keep your hearing aids clean. Heat, moisture and foreign substances can result in poor performance.

- Use a cleaning brush or soft cloth to clean debris from around the user control, microphone and battery compartment; inspect the earbud regularly.
- Never use water, solvents, cleaning fluids or oil to clean your hearing aids.

Your hearing professional can provide further information on additional maintenance procedures for your hearing aids, if needed.

# **Standard Tubing**

- Separate the custom earmold from the BTE by gently pulling the tubing away from the earhook.
  - Use a soft, damp cloth or a cleaning brush to clean debris from the custom earmold
  - Wash the custom earmold with warm soapy water
  - Never use solvents
- Slide the custom earmold tubing onto the BTE earhook when completely dry.

Your hearing professional can provide further information on additional maintenance procedures for your hearing aid, if needed.



# Thin Tubing

- Unscrew the tubing from the tip of the hearing aid.
- Thread the cleaner through the tubing, starting at the end just removed from the hearing aid, until it extends from the other end of the tubing.



- 3. Brush the debris off prior to removing the cleaner.
- 4. Clean the earbud with a dry cloth or brush.
- If necessary, the earbud may be washed in warm, soapy water. Remove the earbud from the tubing prior to washing. Allow to dry overnight.

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#### **Helpful Hints**

- Make sure the custom earmold or earbud and tubing are completely dry before reconnecting to your hearing aid earhook.
- When not wearing your hearing aids, open the battery door to allow any moisture to evaporate.
- Do not take apart your hearing aids or insert the cleaning tools inside them.
- When not in use, remove the batteries completely; place your hearing aids in the storage container and store:
  - In a dry, safe place
  - Away from direct sunlight or heat to avoid extreme temperatures
  - Where you can easily find them
  - Safely out of reach of children and pets

## Service and Repair

If, for any reason, your hearing aid does not operate properly, do NOT attempt to fix it yourself. Not only are you likely to violate any applicable warranties or insurance, you could easily cause further damage.

Should your hearing aid fail or perform poorly, check the guide on the next page for possible solutions. If problems continue, contact your hearing professional for advice and assistance. Many common problems may be solved right in your hearing professional's office or clinic.

# **Troubleshooting Guide**

SYMPTOM	POSSIBLE CAUSES	SOLUTIONS	
Not Loud Enough	Low battery	Replace battery	
	Blocked earmold/ tubing/earbud	Clean earmold and tubing	
	Hearing change	Contact your hearing professional	
	Debris buildup	Clean microphone and earmold with brush	
Inconsistent Performance	Low battery	Replace battery	
	Blocked earmold/ tubing/earbud	Clean earmold and tubing	
Unclear, Distorted Performance	Low battery	Replace battery	
	Blocked earmold/ tubing/earbud	Clean earmold and tubing	
	Hearing aid needs repair/maintenance	Contact your hearing professional	
Dead	Low battery	Replace battery	
	Blocked earmold/ tubing	Clean earmold and tubing	
	Crimped tubing	Contact your hearing professional	

Your hearing professional will recommend an appropriate schedule to help you adapt to your new hearing aid. It will take practice, time and patience for your brain to adapt to the new sounds that your hearing aid provides. Hearing is only part of how we share thoughts, ideas and feelings. Reading lips, facial expressions and gestures can help the learning process and add to what amplification alone may miss.

Please review the following simple communication tips:

## For You

- Move closer to and look at the speaker
- Sit face-to-face in a quiet room
- Try different locations to find the best place to listen
- Minimize distractions
- Background noises may be frustrating at first; remember, you have not heard them for a while
- Let others know what you need; keep in mind that people cannot "see" your hearing loss
- Develop realistic expectations of what your hearing aids can and cannot do
- Better hearing with hearing aids is a learned skill combining desire, practice and patience

# For Your Family and Friends

Your family and friends are also affected by your hearing loss. Request that they:

- Get your full attention before beginning to speak
- Look at you or sit face-to-face in a quiet room
- Speak clearly and at a normal rate and level; shouting can actually make understanding more difficult
- Rephrase rather than repeat the same words; different words may be easier to understand
- Minimize distractions while speaking

# **Safety Information**

**INTENDED USE:** An air conduction hearing aid is a wearable soundamplifying device intended to compensate for impaired hearing. Hearing aids are available in multiple gain/output levels appropriate to treat hearing losses ranging from mild to profound.

Your hearing aids are designed to comply with the most stringent Standards of International Electromagnetic Compatibility. However, it is still possible that you may experience interference caused by power line disturbances, airport metal detectors, electromagnetic fields from other medical devices, radio signals and electrostatic discharges.

If you use other medical devices or wear implantable medical devices such as defibrillators or pacemakers and are concerned that your hearing aids might cause interference with your medical device, please contact your physician or the manufacturer of your medical device for information about the risk of disturbance.

Your hearing aids should not be worn during an MRI procedure or in a hyperbaric chamber. Your hearing aids are not formally certified to operate in explosive atmospheres such as coal mines or certain chemical factories. Your hearing aids are classified as a Type B applied part under the IEC 60601-1 medical device standard.

 $_{10}$   $^{95}$   $_{\rm 40\,c}$  / Your hearing aids should be stored within the temperature andhumidity ranges of -40°C (-40°F) to +60°C (140°F) and 10 to 95 percent relative humidity.

Your hearing aids are designed to operate beyond the range of temperatures comfortable to you, from very cold up to 50oC (122oF).

Any serious incident that has occurred in relation to your Starkey device should be reported to your local Starkey Hearing Technologies representative and the Competent Authority of the Member State in which you are established. A serious incident is defined as any malfunction, deterioration in the characteristics and/ or performance of the device, or inadequacy in the device Operations Manual/ labeling which could lead to the death or serious deterioration in the state of health of the user, OR could do so upon recurrence.

### Use on Aircrafts

The optional wireless capabilities that may be featured in your hearing aids can be used on an aircraft as hearing aids are exempt from the rules applied to other personal electronic instruments on an aircraft.

# International Use

Your hearing aids are approved to operate at a radio frequency that is specific to your country or region and might not be approved for use outside your country or region. Be aware that operation during international travel may cause interference to other electronic hearing instruments, or other electronic instruments may cause interference to your hearing aids.

We are required by regulations to provide the following warnings:

WARNING: Use of wireless hearing aids directly next to other electronic equipment should be avoided because it could result in improper performance. If such use is necessary, note as to whether your hearing aids and the other equipment are operating normally.

WARNING: Use of accessories, components or replacement parts other than those provided by the manufacturer of your hearing aids could result in increased electromagnetic emissions and decreased electromagnetic immunity and could result in degradation of performance.

**WARNING:** If Portable Radio Frequency communications equipment is used closer than 30 cm (12 inches) from your hearing aid, degradation of the performance of your hearing aid could result. If this occurs, move away from the communications equipment.

# **Required Information**

The following additional information is provided in compliance with U.S. Food and Drug Administration (FDA) regulations:

#### A WARNING TO HEARING AID DISPENSERS

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:

- 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.
- Acute or chronic dizziness. iv.
- 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

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 the 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 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.

A hearing aid will not restore normal hearing and will not prevent or improve a hearing impairment resulting from organic conditions. Use of a hearing aid is only part of hearing habilitation and may need to be supplemented by auditory training and instruction in lip reading. In most cases infrequent use of a hearing aid does not permit a user to attain full benefit from it. Special care should be exercised in selecting and fitting a hearing aid whose maximum sound pressure level exceeds 132 decibels because there may be risk in impairing the remaining hearing of the hearing aid user.

Some hearing aid users have reported a buzzing sound in their hearing aid when they are using mobile phones, indicating that the mobile phone and hearing aid may not be compatible. According to the ANSI C63.19 standard (ANSI C63.19-2007 American National Standard Methods of Measurement of Compatibility Between Wireless Communications Devices and Hearing Aids), the compatibility of a particular hearing aid and mobile phone can be predicted by adding the rating for the hearing aid immunity to the rating for the mobile phone emissions. For example, the sum of a hearing aid rating of 2 (M2/T2) and a telephone rating of 3 (M3/T3) would result in a combined rating that equals at least 5 would provide "normal use"; a combined rating of 6 or greater would indicate "excellent performance". See the Quick Start Guide included with your hearing aid for the exact M/T rating of your hearing aid.

#### CHILDREN WITH HEARING LOSS

In addition to seeing a physician for a medical evaluation, a child with a hearing loss should be directed to an audiologist for evaluation and rehabilitation 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.

# Required Multiflex Tinnitus Information for Hearing Professionals

#### INDICATIONS FOR USE

The Multiflex Tinnitus Technology is a tool to generate sounds to be used in a Tinnitus Management Program to relieve patients suffering from tinnitus. The target population is primarily the adult population over 18 years of age.

The Multiflex Tinnitus Technology is targeted for healthcare professionals, which are treating patients suffering from tinnitus, as well as conventional hearing disorders. The fitting of the Multiflex Tinnitus Technology must be done by a hearing professional participating in a Tinnitus Management Program.

#### **INSTRUMENT DESCRIPTION**

Multiflex Tinnitus Technology is a software function that generates sound which is programmed into a hearing aid. The hearing aid may be used in one of three modes of operation: as a hearing aid, as a tinnitus treatment instrument or as a hearing aid and tinnitus treatment instrument.

When enabled, the Multiflex Tinnitus Technology generates the sound and allows a patient's hearing professional to design and program appropriate settings for an individually prescribed sound treatment plan. The treatment plan should be used in a tinnitus management program for relief of tinnitus.

Multiflex Tinnitus Technology generates a broadband white noise signal that varies in frequency and amplitude. These characteristics are adjustable by the hearing professional and are specific to the prescribed therapy designed by the professional for the patient's needs and comfort.

The patient may have some control of the level or volume of the signal and the patient should discuss this adjustment as well as his or her comfort level and sound of the signal with their hearing professional.

#### **A WARNING TO HEARING CARE PRACTITIONER**

A hearing care practitioner should advise a prospective sound generator user to consult promptly with a licensed physician (preferably an ear specialist) before using a sound generator if the hearing care practitioner determines through inquiry, actual observation or review or 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.
- 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.

▲ **CAUTION:** If set to the maximum output level and worn for periods of time exceeding the recommendations below, the patient's exposure to sound energy has the potential to exceed noise exposure limits. This instrument is intended for use for a maximum of sixteen (16) hours a day when set at the maximum output level.

#### For the Patient

A tinnitus therapy instrument is an electronic instrument intended to generate noise of sufficient intensity and bandwidth to treat ringing in the ears. It can also be used as an aid in hearing external sounds and speech.

Multiflex Tinnitus Technology is a tool to generate sounds. It is recommended that this tool be used with appropriate counseling and/or in a tinnitus management program to relieve patients suffering from tinnitus.

#### TINNITUS THERAPY CONCEPTS AND BENEFITS

Multiflex Tinnitus Technology can be used as a part of a tinnitus treatment program.

Multiflex Tinnitus Technology plays a white noise through the hearing aid.

Multiflex Tinnitus Technology is programmed according to your hearing loss and preference, and your hearing professional can adjust the settings of Multiflex Tinnitus Technology to meet your needs.

Multiflex Tinnitus Technology may provide temporary relief of your tinnitus.

#### PRESCRIPTION USE ONLY

▲ **CAUTION:** Federal law restricts this instrument to sale by or on the order of a doctor, audiologist or other hearing care practitioner licensed to dispense hearing aids in your state.

The use of any sound generating tinnitus therapy instrument should be only on the advice and in consultation with your audiologist or hearing care practitioner. Your hearing professional will properly diagnose and fit the instrument to your personal needs and requirements. This should include its use in a prescribed tinnitus treatment program.

Your hearing professional will also be able to offer the appropriate follow-up care. It is important that you follow your hearing professional's advice and direction regarding such care.

▲ WARNING: There are some potential concerns associated with the use of any sound generating tinnitus therapy instrument. Among them are the potential for worsening of tinnitus, a possible change in hearing thresholds, and possible skin irritation at the point of contact with the hearing aid.

Multiflex Tinnitus Technology has been designed to minimize these concerns. However, should you experience or notice any of the above conditions or any dizziness, nausea, headaches or heart palpitations, you should immediately discontinue use of the instrument and seek a consultation with a medical, audiology or other hearing professional.

As with any instrument, misuse of the tinnitus therapy instrument could present some potentially harmful effects. Care should be taken to prevent the unauthorized use and to keep the instrument out of the reach of children and pets.

▲ **CAUTION:** If set to the maximum output level and worn for periods of time exceeding the recommendations below, your exposure to sound energy has the potential to exceed noise exposure limits. You should not use your hearing aid for more than sixteen (16) hours a day if your hearing aid if set at the maximum output level, nor should you use your hearing aid if your hearing professional has set the instrument at levels that exceed your comfort level.

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#### **Important Notice for Prospective** Sound Generator Users

Good health practice requires that a person with tinnitus 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 a 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.

#### TINNITUS TECHNICAL DATA

Multiflex Tinnitus Technology Maximum Output = 87 dB SPL (typical) when measured in a 2cc coupler per ANSI S3.22 or IEC 60118-7.

#### WIRELESS TECHNICAL DESCRIPTION

Your hearing aids contain a radio transceiver utilizing Bluetooth® Low Energy wireless technology operating in the 2.4-2.4835 GHz frequency band with a maximum effective radiated power of -9 dBm using GFSK transmission modulation. The receiver section of the radio has a bandwidth of 1.5 MHz. They also contain a radio transceiver utilizing Near Field Magnetic Induction operating on 10.281 MHz with maximum induced magnetic field strength of -5 dBuA/m at a measurement distance of 10 meters with 8-DPSK transmission modulation. The receiver section of the NFMI radio has a bandwidth of 400 kHz.

This hearing aid model has been tested to, and has passed, the following emissions and immunity tests:

- IEC 60601-1-2 radiated emissions requirements for a Group 1 Class B device as stated in CISPR 11.
- RF radiated immunity at a field level of 10 V/m between 80 MHz and 2.7 GHz as well as higher field levels from communications devices as stated in Table 9 of IEC 60601-1-2.
- Immunity to power frequency magnetic fields at a field level of 30 A/m.
- Immunity to ESD levels of +/- 8 kV conducted discharge and +/- 15 kV air discharge.

#### **REGULATORY NOTICES**

#### **BTF 13**

FCC ID: EOA-24LIVIOB13A

IC: 6903A-24LIVIOB13A

#### FCC NOTICE

This device complies with part 15 of the FCC rules and with ISED Canada's license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Hereby, Starkey Hearing Technologies declares that the products listed above are in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. A copy of the Declaration of Conformity can be obtained from the addresses below or docs.starkeyhearingtechnologies.com.

#### Starkey Hearing Technologies

6700 Washington Ave, South Eden Prairie, MN 55344 USA



#### EC REP

Starkey Laboratories (Germany) GmbH Weg beim Jäger 218-222 22335 Hamburg Germany



Waste from electronic equipment must be handled according to local regulations.



Consult Operations Manual

Keep dry



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