livio® AI

The world's first
Healthable™ technology.
A life-changing hearing aid.

Starkey®

DISCOVER

livio® AI

The first-ever hearing aids to include embedded sensors and artificial intelligence.

Our best sounding hearing aid just got better

Using artificial intelligence enables hearing aids to perform tasks that normally require human intelligence. Now, we've added new features and capabilities so you can optimize the patient experience with:

- Body and brain tracking
- NEW: Fall detection and alerts
- NEW: Thrive™ Assistant
- NEW: Rechargeable option
- NEW: Voice-to-text transcription
- NEW: Self check for hearing aid performance
- Language translation
- Natural user interface with tap control

Coming Soon

- Heart rate measurements

A gateway to better health and wellness

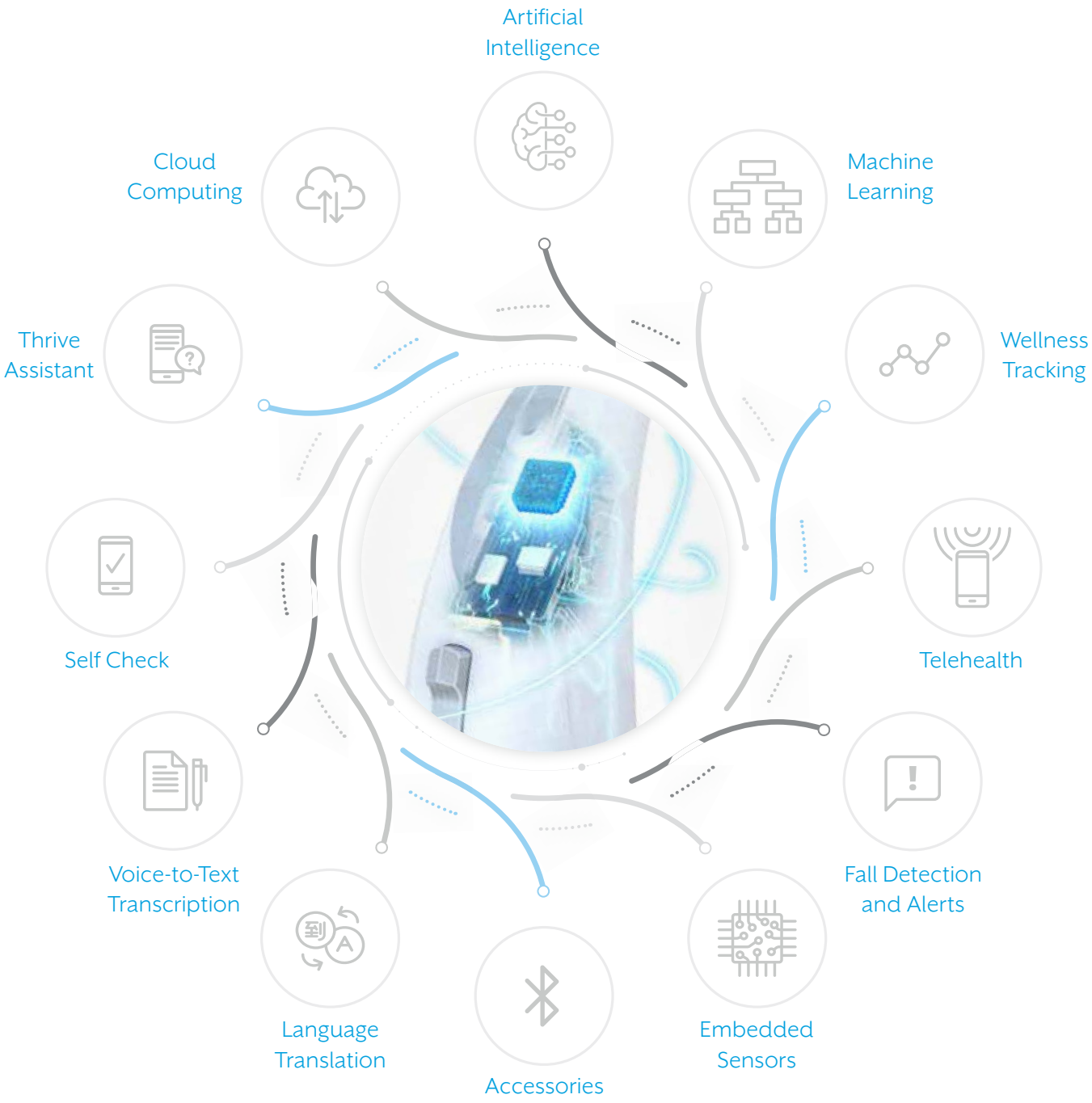
What making better connections sounds like

The Livio® AI ecosystem of innovative products and features continues to expand. The **Thrive™ Hearing Control app** now lets users send fall alerts to selected contacts thanks to hearing aids with integrated, in-ear sensors. They can also check their hearing aid performance anytime and have conversations transcribed.

That's all in addition to universal Bluetooth® connectivity, Hearing Care Anywhere,™ brain and body activity tracking, and the array of other features and technologies that enable hearing professionals to provide patients with added conveniences and exceptional service.

LIVIO AI ECOSYSTEM

This ecosystem is unlike any available to hearing aid wearers and works seamlessly to help patients proactively manage their wellness, enhance their listening experience and share important health data with their hearing professionals.



A gateway to information

Reimagining what a hearing aid can do

With technologies quickly advancing, the hearing aid has evolved into a multi-purpose device. In addition to providing supreme sound quality for users, Livio AI opens gateways to information and new services such as Thrive Assistant, Translate, Transcribe and Self Check.

Combining sensors and artificial intelligence with a powerful, easy-to-use app puts a world of information at users' fingertips.

Thrive Assistant

- Users can conveniently troubleshoot hearing aid and accessory issues and ask questions like, "How do I customize my hearing aid settings?" and "What's today's forecast?"

Translate

- Translates up to 27 languages
- User's speech is translated and displayed on their phone screen via the Thrive app
- The other speaker's speech is translated both on screen and streamed to user's hearing aids

Transcribe

- Closed captioning for real-world situations
- Transcribes conversations that the user can see on their smartphone screen
- Provides option to save, message, copy or email the transcribed text

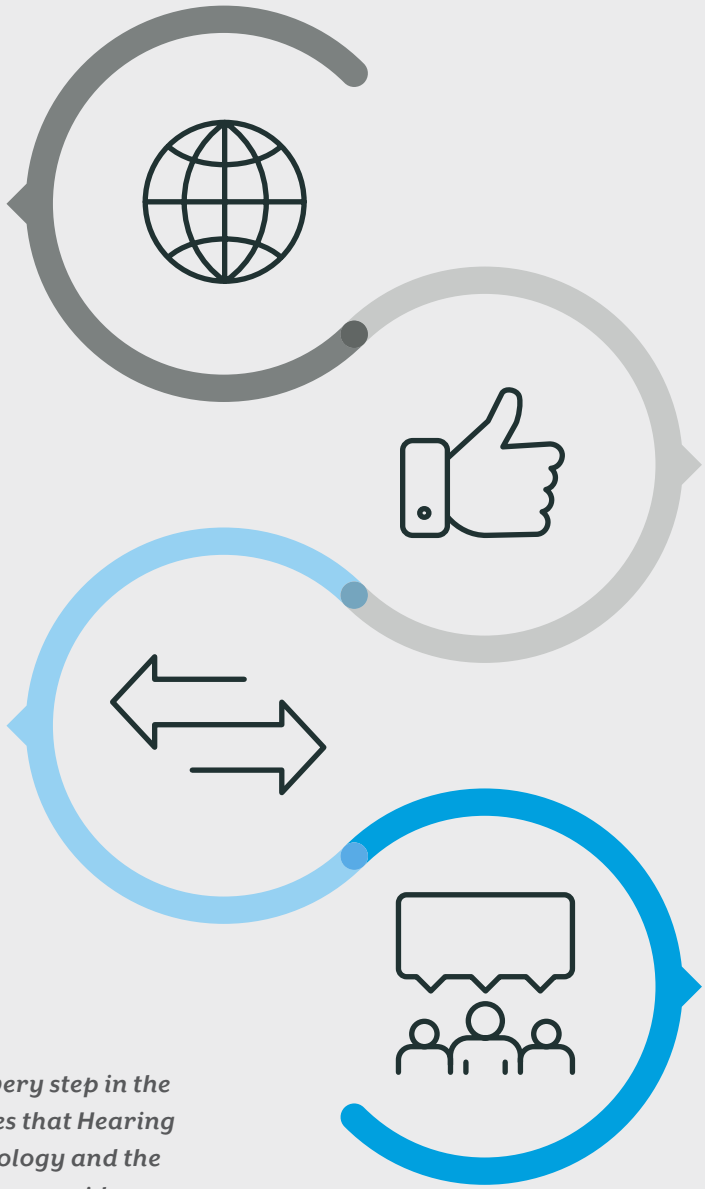
Self Check

- Provides a quick, convenient way for patients to analyze their hearing aid system's performance
- Patient-initiated diagnostic ensures optimal performance of system components, including microphones, receiver, circuit and sensors
- Adjustment request lets hearing professional determine if device has a functional issue

Hearing Reality

The world of sound is complex. Within any given environment, not only are there many sound sources, but their importance, level, annoyance and spatial location can vary by moment. With **three times more digital signal processing (DSP), the industry's only multi-core twin compressor and our dual radio system**, the Thrive platform that is driving Livio AI and Livio, has been engineered to handle even the most complex situations.

1. Categorize the world



2. Eliminate annoyance. Enhance speech. Enjoy epic sound quality.

3. Immediate and seamless transitions

4. Personalized for every preference

Focusing on every step in the process ensures that Hearing Reality™ technology and the Thrive platform provide an exceptional listening experience.

Our best sound quality delivered through the power of artificial intelligence

Livio AI and Livio are our best sounding hearing aids. Not surprising given the precision and science behind the final product. We put a lens on every step of the process.

1. Categorize the world

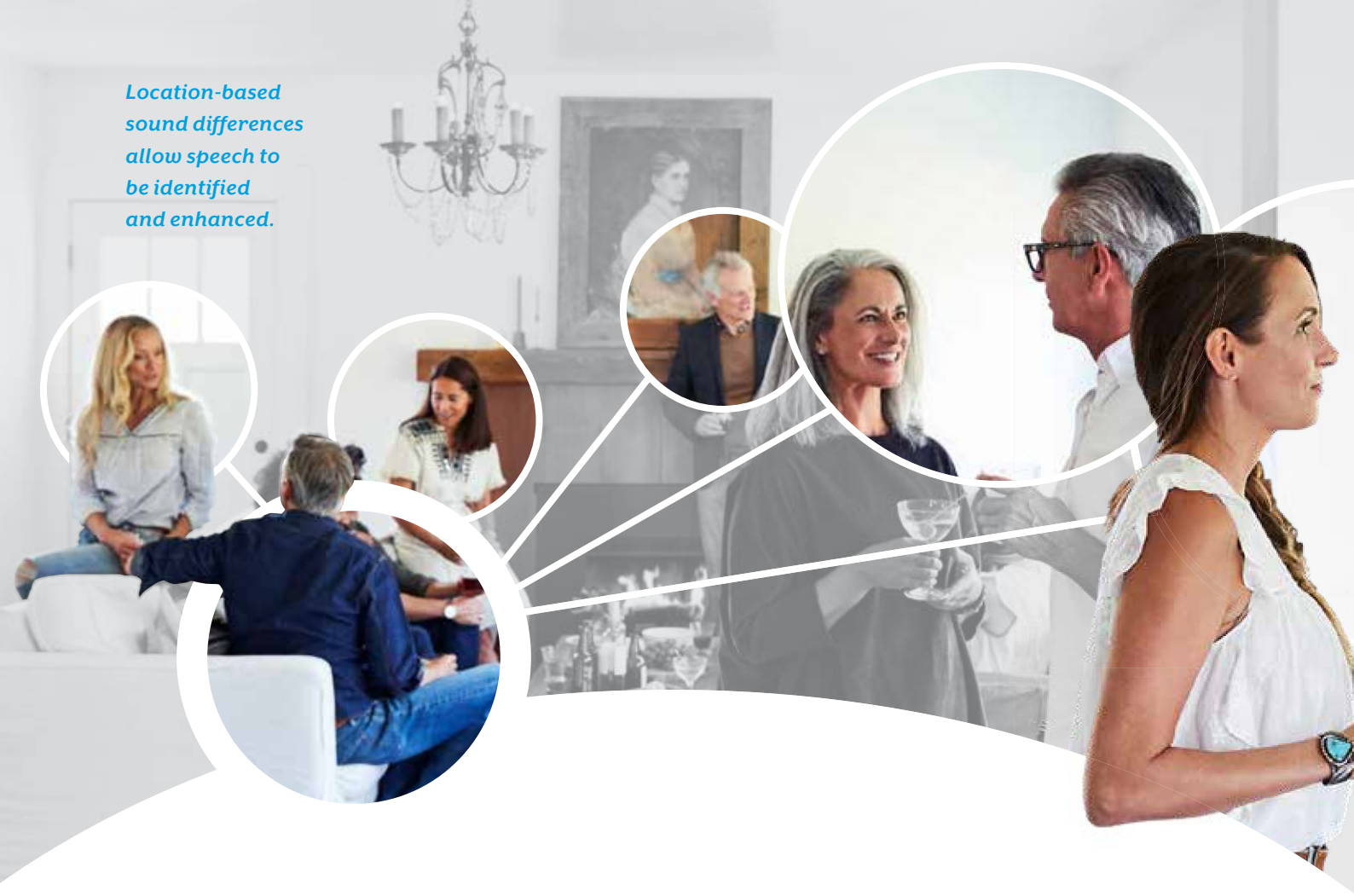
Artificial intelligence and machine learning drive the Thrive platform to analyze and adapt to multiple environments and inputs simultaneously to provide patients with an effortless listening experience. Not only is the system capable of environment detection for seven varied sound classes (speech, speech in noise, music, machine noise, wind, noise and quiet), it can also detect the level of competing noise in any environment with speech. This signal-to-noise level analysis occurs within each individual channel identifying the nuances of the acoustic environment.

50% reduction in non-static noise

Layered into the core processing of Thrive is the dual radio system comprised of the 2.4 GHz radio, which creates a robust connection to accessories and phones, as well as a Near-Field Magnetic Induction (NFMI) radio,* which is uniquely capable of passing critical information between binaural devices. Input received from the 2.4 GHz radio can be identified so the Thrive platform can succinctly process it resulting in our best streaming sound quality.

The NFMI radio enables us to take environmental imaging to the next level. Complete streamed signals are passed between ears to allow for a coherence-based analysis in complex listening situations. This allows for identification of dynamic sound sources coming from all angles, which drives our Binaural Noise Management algorithms. The result is a **50% reduction in non-static noise** relative to previous noise management algorithms.

*Excludes micro RIC 312

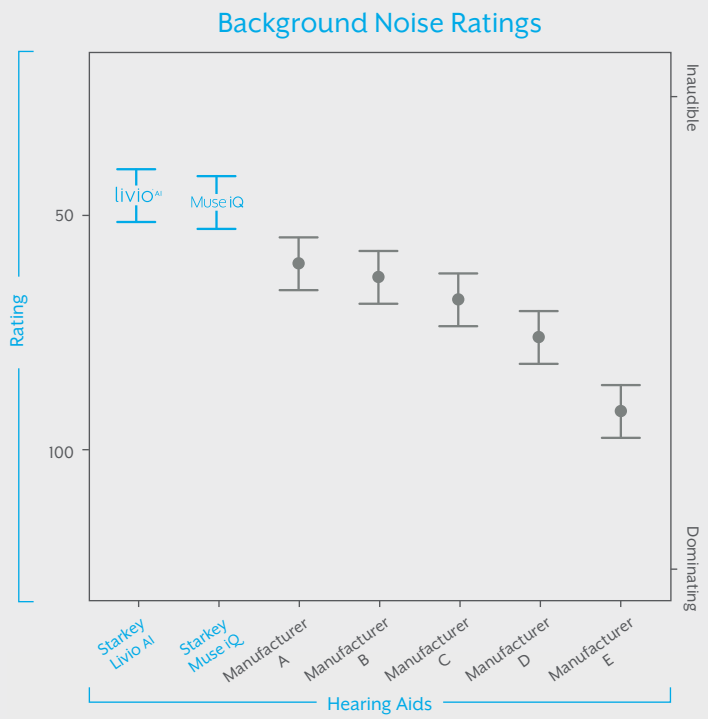


2. Eliminate annoyance. Enhance speech. Enjoy epic sound quality.

Annoyance comes from many sources, especially extremes like loud, transient sounds, or sounds that should normally be quiet and fade into the background. The Thrive platform is able to handle even these seemingly opposite conditions. If sounds are annoying or strident, hearing aids will end up in the user's drawer. But our Transient Noise Reduction system gives Thrive extremely fast processing capabilities, which eliminates or significantly reduces sharp impulse sounds. Our hearing aids are designed to perform well in quiet environments, too. Hearing Reality helps ensure that unwanted soft sounds can fade into the background where they belong.

With annoying sounds addressed, Hearing Reality can focus on enhancing and optimizing speech with Spatial Speech Enhancement. Livio AI and Livio hearing aids sample the environment **up to 167 times per second.** They are constantly analyzing level, environment class and presence of speech, while optimizing amplification to provide the best speech audibility and a significant reduction in listening effort. In fact, a recent independent study gave Livio AI hearing aids the **top rating compared to other manufacturers' premium devices for reducing background noise in noisy listening environments**.[1] Reducing noise lets listeners focus on what they want to hear.

Effortless and enjoyable listening



Hearing Reality doesn't just ensure the right sounds are amplified appropriately, it's designed to make the listening experience effortless and enjoyable. This new technology recently earned a **98% satisfaction rating**[2] **for sound quality** from both patients and professionals. That comes from utilizing the industry's only multi-core twin compression system to ensure the ideal processing is applied to every input: speech, music and streaming. Hearing Reality is designed to make sure that streamed signals sound as natural as they would if they were traveling directly to the patient's ear.

98% satisfaction rating[2] for sound quality.

[1] FORCE Technology, Senselab. (2018, November). Benchmark evaluation of spatial noise management in hearing aids. FORCE Technology Venlighedsvej 4 2970 Hørsholm, Denmark.

[2] Starkey Hearing Technologies CSAT Survey.

3. Immediate and seamless transitions

The world is constantly changing. Detecting shifts in the environment and reacting quickly is not enough to make the changes transparent to the user. Hearing Reality seamlessly adapts to environmental changes within each channel, so the user is not distracted by large variations in amplification. Livio AI and Livio hearing aids **switch between the omnidirectional and directional settings on an individual-channel basis, and have independent adaptation within every channel.** This is not just for directionality but for different situational sound interferers such as wind and machine noise. Because Livio AI and Livio hearing aids share information with each other, settings are coordinated when they should be, but left independent when it is best for the listener. Thanks to Hearing Reality, rapid fluctuations and abrupt transitions in overall gain are a thing of the past.

Hearing Reality seamlessly adapts to environmental changes within each channel.

4. Personalized for every preference

Our scientists and engineers behind the Thrive platform focus on serving our patients first, which means empowering professionals to meet the varied and unique needs of each patient. That's why, out of the box, our hearing aids can be easily set to the best fit default behind Livio's high satisfaction rating. They can also be personalized quickly and easily as needed. Beyond being able to precisely program gain for low, mid and high inputs within every channel for the perfect frequency response, our Inspire® X fitting software allows for quick adjustments to noise management and user experience settings such as microphone offset during streaming.

Focusing on every step in the process ensures that Hearing Reality provides next level listening.

Comfort and personalization redefined

Livio AI and Livio hearing aids take patient comfort and personalization to a new level with our most advanced features and technology ever.

Comfort features ensure patients enjoy wearing their hearing aids

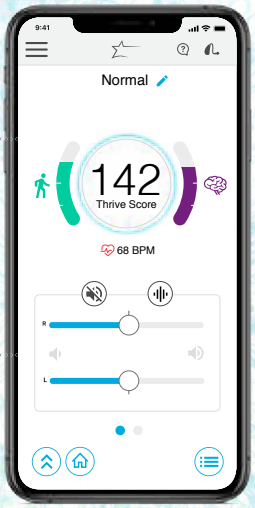
Feedback Control	Best-in-class comprehensive feedback management system.
Speech Optimization	Our proprietary multi-segment compression architecture combines speech audibility and overall comfort.
Quiet	Reduces circuit noise over a wider range of input levels providing a high-fidelity listening experience regardless of the level of background noise.
Wind	Noise reduction algorithm designed to provide supreme comfort for wind noise.
Surface NanoShield	Coated on components, cases and Hear Clear™ wax traps, Surface™ NanoShield gives patients next-generation moisture and wax repellent to ensure reliability and durability.
CROS Technology*	A solution for single-sided hearing loss that enables streaming between your hearing aids to deliver exceptional sound quality.

Personalization features ensure professionals are able to provide the best care to their patients

Speech Indicators for Memory	For each memory programmed, an extensive list of descriptive words is available, allowing professionals to choose the most meaningful indicators for their patient.
Smart VC	Allows for the gain to increase in all the channels not already at maximum, giving a desired and needed increase in loudness.
Frequency Lowering	Enhances real-time audibility by identifying high-frequency speech cues and replicating them in lower frequencies.
Music Enhancement	The dedicated music compressor is designed for a more dynamic input and a broader frequency response. Inspire X software includes music adjustment controls so professionals can quickly and easily match the subjective tastes of their patients.
Tinnitus Technology	Our patent-pending tinnitus solution is designed with personalization and flexibility in mind.

*Excludes micro RIC 312

livio® AI



The ear is the best place for accurate fitness tracking

Most fitness tracking devices use the wrist, but the ear provides far more accurate data[1] – in fact, it's the sweet spot for reliable tracking, and Livio AI is the first-ever Healthable device to take advantage of this.

By capturing more accurate health data, Livio AI gives users more reliable information about their heart rate,* and their brain and body activities. **A hearing aid that provides accurate, useful health reporting? That's a Healthable hearing aid.**

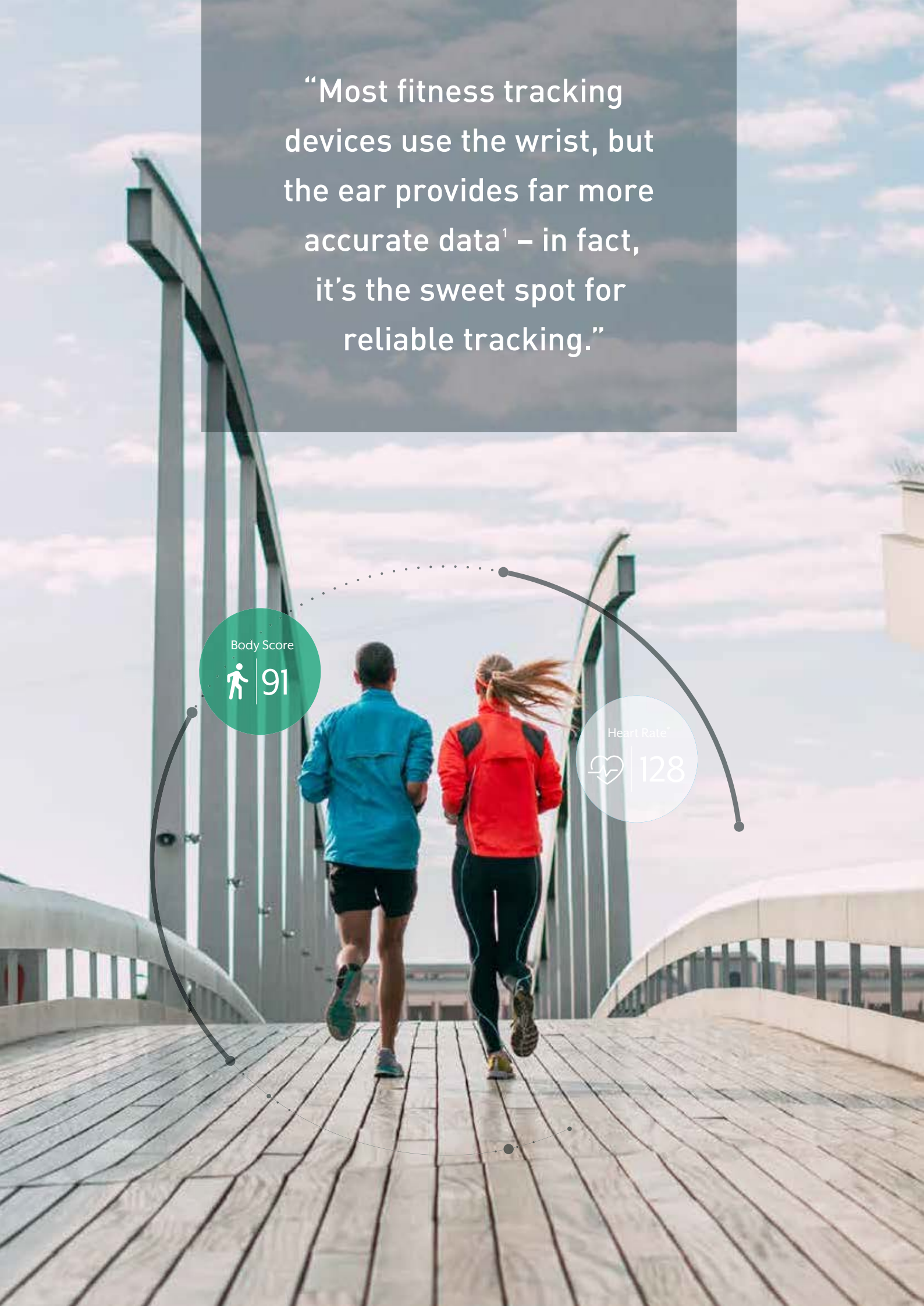
Livio AI ear-worn devices with embedded sensors achieved higher accuracy and significantly lower variability compared to the wrist-worn Fitbit Charge HR™[2]

Livio AI is a revolutionary, multi-purpose hearing aid that continues to evolve. It provides superior sound quality, health tracking and now heart rate* information, too. This **Healthable** device lets users take a proactive approach to their hearing and overall wellness.

[1] Shcherbina, A., Mattsson, C. M., Waggott, D., Salisbury, H., Christle, J., Hastie, T., ... Ashley, E. A. (2017). Accuracy in wrist-worn, sensor-based measurements of heart rate and energy expenditure in a diverse cohort. *Journal of Personalized Medicine, 7*(2) 3.

[2] Acker, K. (2018). The ear is the new wrist: Livio AI's sensors lead in step accuracy. White paper. Data on file.

*Coming soon.


"Most fitness tracking devices use the wrist, but the ear provides far more accurate data[1] – in fact, it's the sweet spot for reliable tracking."
Body Score
91
Heart Rate*
128

Rechargeable: smart, convenient, reliable

Livio AI rechargeable hearing aids are the most capable, full-featured hearing aids enhanced with integrated sensors.

Rechargeable technology you can trust

Longest-lasting Healthable rechargeable hearing aid	Smallest 2.4 GHz rechargeable RIC with integrated sensors	24-hour use on a single charge

All-in-one charger

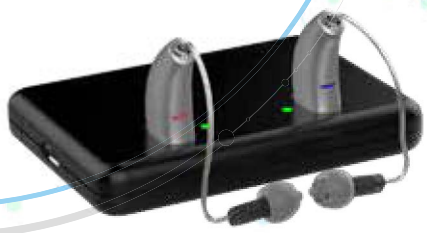
Included with RIC rechargeable hearing aids is the **Starkey® Hearing Technologies Charger**. It holds enough charge to provide portable charging three times. LED indicators let patients know when their hearing aids are fully charged, and hearing aids turn on automatically when removed from the charger.

Added portability

Livio AI and Livio rechargeable hearing aids also work with the **Starkey® Hearing Technologies Mini Turbo Charger**, our new pocket-size, lithium-ion charging option:

3.5-hour charge in just 7 minutes

A fully charged Mini Turbo Charger can **completely charge a pair of hearing aids four times**.



The world's first and only hearing aid with fall detection and alerts

Thanks to integrated sensors, Livio AI can detect when a hearing aid wearer falls and send alert messages to selected contacts. Fall Alert helps patients maintain their independence and feel more secure, while providing caregivers with welcome peace of mind.

Fall Alert gives patients control

- They preselect which contacts will receive alerts.
- They can choose between manual or auto alerts.

Fall Alert gives caregivers peace of mind

- They know they'll be notified if the hearing aid wearer falls.
- Easy, opt-in to get started.

The Facts on Falling

Falls are a major public health problem in the US and worldwide. They can cause injuries, sometimes serious, and can negatively impact quality of life for the person who falls and their family members.

Every **11** seconds,

an older adult is seen in an emergency department for a **fall-related injury**.[1]

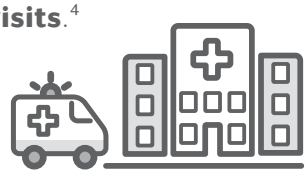
About **1/3** of all seniors **fall each year**.[2]

1 in 4 older adults falls each year, but **less than 50% tell their doctor**.[2]

An older adult **falls every second of every day**.[2]

Falls are the **leading cause of hip fractures**.[3]

Falls lead to **20-30%** of mild to severe injuries and are the **underlying cause of 10-15% of all emergency department visits**.[4]



Research identified a **1.4-fold increase** in incidence of falls for **every 10 dB of measured hearing loss**.[5]

People with mild hearing loss are **3x more likely to have a history of falling**.[5]

[1] National Council on Aging. (n.d.) Fall prevention facts. Retrieved from: http://www.ncoa.org/news/resources-for-reporters/get-the-facts/falls-prevention-facts/

[2] Centers for Disease Control and Prevention (2014). Stay independent: prevent falls. Retrieved from: https://www.cdc.gov/steadi/pdf/STEADI_OlderAdultfactSheet-a.pdf

[3] Centers for Disease Control and Prevention Important Facts about Falls. Retrieved from: https://www.cdc.gov/homeandrecreationalsafety/falls/adultfalls.html

[4] 2007 World Health Organization. WHO Global Report on Falls Prevention in Older age. Retrieved from: https://www.who.int/ageing/publications/Falls_prevention7March.pdf

[5] Johns Hopkins Medicine. (2012). Hearing Loss Linked to Three-Fold Risk of Falling. Retrieved from: https://www.hopkinsmedicine.org/news/media/releases/hearing_loss_linked_to_three_fold_risk_of_falling

Enhancing the overall health and wellness of your patients with the Thrive app

Only Livio AI lets you help patients of all ages take a proactive approach to their overall wellness. Sensors that detect heart rate,* motion, activity and gestures are integrated into each hearing aid to compile useful health information.

Users can view and manage their health information with the Thrive app and receive daily feedback on their progress by viewing their **Thrive Wellness Score**. This full-featured, user-friendly app allows patients to view their heart rate* as well as monitor their body and brain activities.

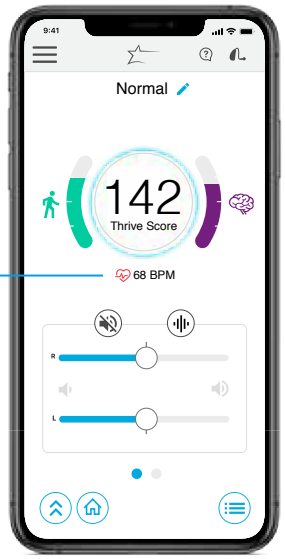
*Coming soon.

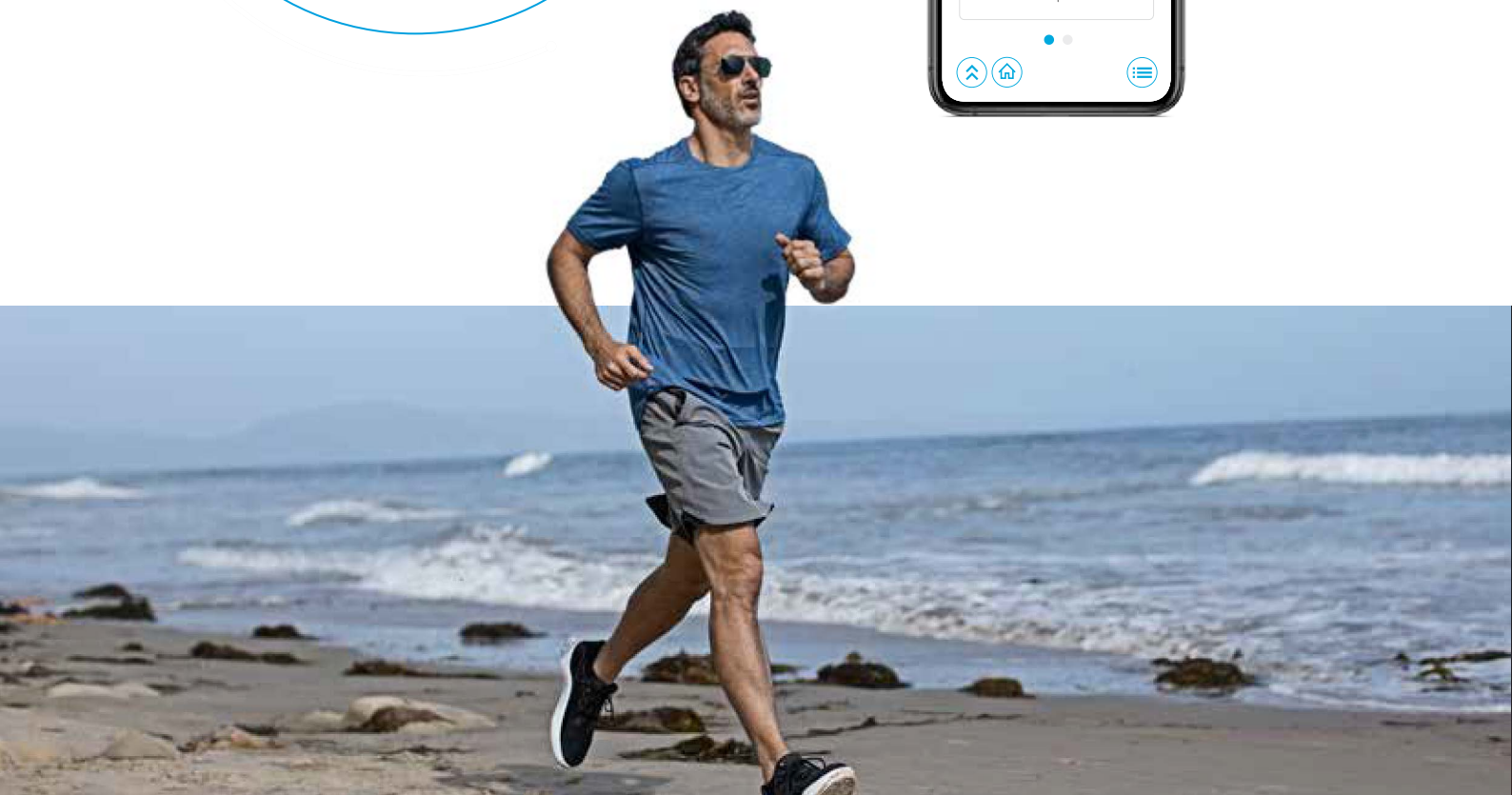
— Coming Soon —

Heart Rate*

Patients can use the Thrive app to view their heart rate and their heart rate recovery.

*Available for Livio AI Rechargeable hearing aids with a Custom Healthable Receiver.





Body Score

(100 points possible)

Walking at least 30 minutes a day can dramatically improve overall fitness and even reduce the risk of some serious medical conditions.

- Tracks your daily steps
- Monitors more vigorous activity
- Measures specific movement to encourage activity

+

Brain Score

(100 points possible)

Get the brain benefits of wearing hearing aids by tracking hours of daily use, social engagement and active listening.

- Tracks how long you wear your hearing aids every day
- Measures time spent in conversation and audio streaming
- Monitors hearing aid usage in a variety of environments such as home, restaurant, outdoors or listening to music

=

Thrive Wellness Score

(200 points possible)

The combination of your body score and your brain score gives you a good indicator of your overall wellness.

200
Thrive Score

thrive™

More Thrive features that give patients control

Thrive offers additional features designed to enhance patients' listening experiences and gain more control of their hearing aids.

Hearing Care Anywhere

Patients can request adjustments using the Thrive app, which you can do remotely to help fine tune their hearing experience.

Personalized Control

Provides a way for patients to make minor adjustments to suit their preferences in different listening situations.

Find My Hearing Aids

Patients can easily locate lost hearing aids using the Find My Hearing Aids feature, with both a location and timestamp. A signal detector sends a stronger or weaker signal based on how close a patient is to locating their hearing aids.

Phone Calls

Patients can answer calls with the touch of a button and hear an entire conversation streaming directly to their Livio AI hearing aids.*

Remote Control

Using the remote control feature in the Thrive app, patients can change volume and switch memories.

Personalized Memories

Patients can create multiple custom memories in the Thrive app by using any of the Customize options. They can even geotag memories. A geotagged memory will use GPS and cellular towers to recognize where they are and automatically adjust their hearing aids when they enter that space. For instance, a geotagged "coffee shop" memory will automatically activate when they walk into their favorite coffee shop.

Adaptive Car Mode

With Adaptive Car Mode, Livio AI and Livio hearing aids will automatically change to a setting designed to reduce the annoying sounds of driving and enhance a patient's overall driving experience.

Accessory Control

Easy control of hearing aid accessories via the Thrive app.

Healthable Technology

Empowers patients to engage in their fitness with health tracking and also detects falls and sends alerts to selected contacts* **(NEW)**.

Information Assistance

Patients can ask questions and get answers **(NEW)**, translate languages,* transcribe conversations* **(NEW)** and run convenient diagnostic tests on their hearing aids **(NEW)**.

*Requires an internet connection and Livio AI hearing aids.

Universal Bluetooth connectivity with patient-focused accessories

As part of our commitment to continuously improving the patient experience, we've added the new Mini Remote Microphone to our accessory line to assist patients with conversations in noisy environments.

Like all our patient-focused accessories, Mini Remote Microphone connects easily with Livio AI hearing aids thanks to universal Bluetooth® connectivity. All our accessories are easy to pair and use, and provide supreme sound quality.

Livio AI offers Amazon™ Alexa connectivity

STARKEY HEARING TECHNOLOGIES ACCESSORIES

TV

Stream audio from a TV or other electronic audio source directly to Livio AI and Livio hearing aids. It offers excellent sound quality, is easy to use, and supports both analog and digital input sources.

Remote Microphone +

Easily stream from a variety of audio sources including most Android™ phones. And thanks to Remote Microphone +, Livio AI and Livio are the first hearing aids to feature Amazon Alexa connectivity.

Mini Remote Microphone

NEW

Enjoy one-on-one conversations in noisy environments with the small, easy-to-use Mini Remote Microphone. Clip it onto the clothing of the person you're talking to or use it as a TV streamer by placing it near the speaker.

Remote

Our remote includes updated features so patients can control memory and volume, mute their hearing aids and turn other special features on and off.

Hearing Care Anywhere remote programming means added convenience for you and your patients

What exceptional service sounds like

Meet the needs of today's busy and time-strapped consumers with Starkey's telehealth system Hearing Care Anywhere, which features remote programming capabilities.

This allows you to troubleshoot and improve the patient experience by delivering programming adjustments directly to a patient's smartphone and hearing aids with no need for them to stop in. **Patients can rate adjustments, which provides you with both real-time feedback and the opportunity to improve adjustments as needed.**

Remote Programming enables you to provide your patients with service on the go. With remote programming, hearing professionals can make adjustments remotely, meeting the demands of today's new consumers.

Deliver programming adjustments directly to a patient's smartphone and hearing aids.

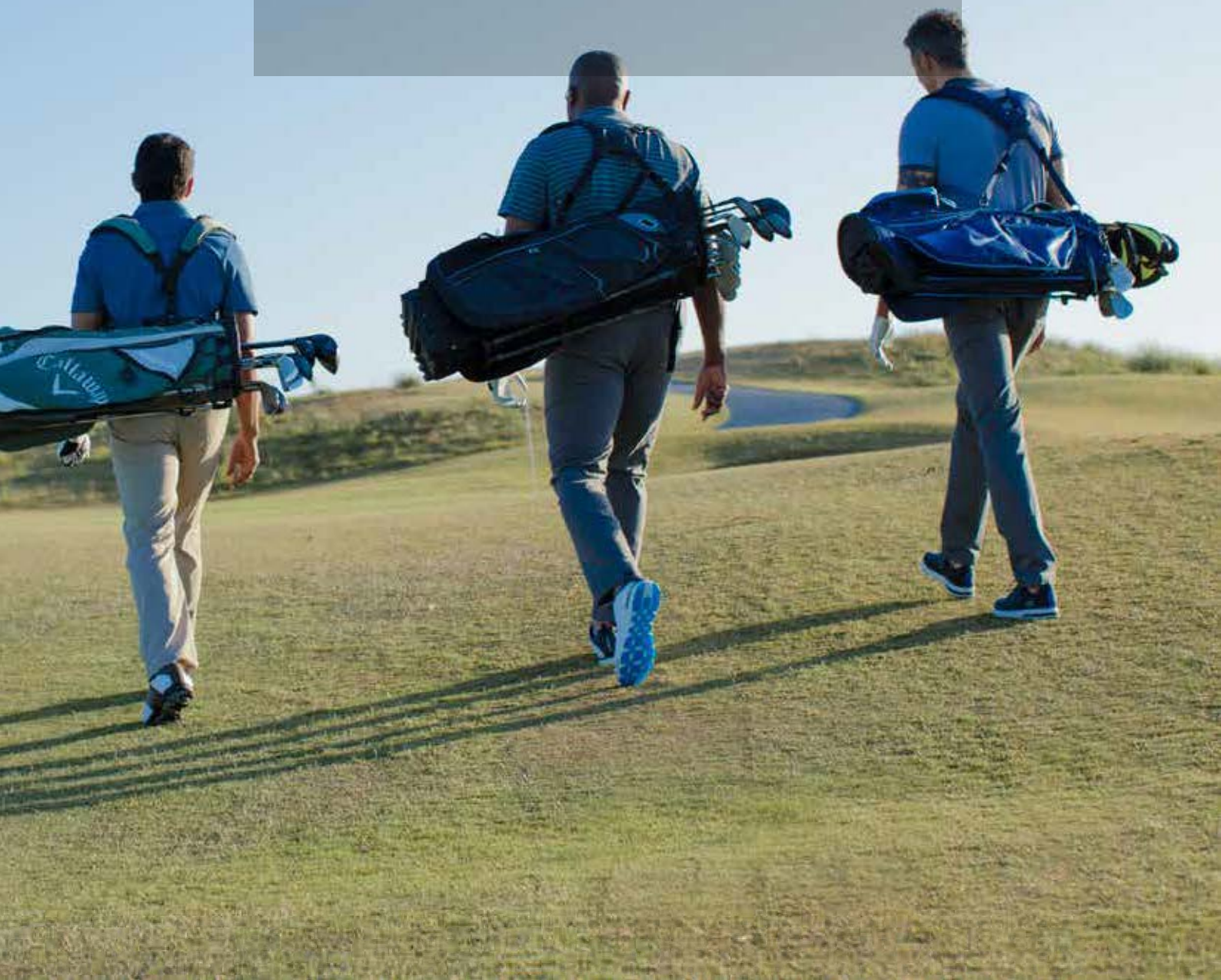
"We are revolutionizing the hearing aid with embedded sensors and artificial intelligence, turning it into a multi-purpose device with unprecedented sound quality that also tracks your body and brain health!

Livio AI is the world's first hearing aid that tracks physical and cognitive activities, and detects and sends alert messages if you fall.

It also translates foreign languages and serves as an interactive digital assistant in your ear, thereby providing a gateway to the world of information.

Moreover, this rechargeable device is our best sounding hearing aid ever!"

Achin Bhowmik
Chief Technology Officer and Executive
Vice President of Engineering



Helping your patients like never before

livio® AI

What continuous innovation sounds like

Through rigorous and ongoing innovation, and by harnessing today's fast-changing technologies, we can continuously deliver new and better hearing solutions. With Livio AI, and our new Healthable hearing technology, we've reinvented the hearing aid, making it a multi-purpose device that provides superior sound quality, as well as a more accurate way for users to monitor their health information.

From our lab technicians to our scientists, and every employee at every level, we constantly seek ways to better understand the science of hearing loss and its impact on peoples' lives. By continuously pushing the boundaries, we can not only transform what is possible in hearing technology, but ensure that your patients also live healthier and more vibrant lives.

> ***With Livio AI, we've reinvented the hearing aid***

Hear better. Live better.

Expanding and improving Healthable technology to enhance patients' lives

Now that we know hearing loss is linked to several chronic disabling conditions such as cognitive decline, diabetes, heart disease, dementia, risk of falling and more, Starkey is committed to continually adding new Healthable features that will help patients live healthier lives.

What started with brain and body activity tracking now includes fall detection and alerts. As we noted earlier, falls are a major concern and a growing challenge globally. Thanks to advances in sensor technology, we can offer this first-ever feature to hearing aid users and their caregivers.

Sensors and artificial intelligence technologies have also paved the way for in-ear receivers that provide accurate heart rate and heart rate recovery information.* This further empowers patients to engage proactively in their own fitness efforts and improve their overall health.

Sound quality, healthy hearing and healthy living

We also know that treating hearing loss can help limit the risk of some serious chronic conditions, and that treating hearing loss is the single greatest change a person can make to lower their risk of dementia.[1]

By continuously improving the sound quality of our hearing aids, we give patients products they benefit from and want to use. When patients use their hearing aids regularly, they not only enjoy a better overall listening experience, they also benefit from improvements to cognitive functions such as attention, communication and memory.[2]

With Healthable technology, patients get a hearing aid that provides superior sound plus health tracking, fall detection, heart rate* data and more.

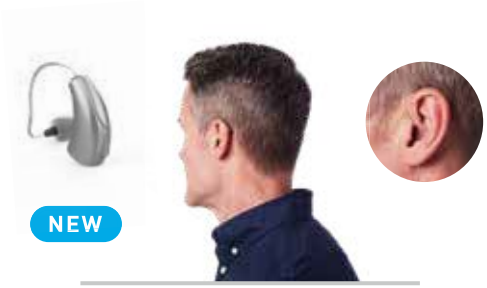
[1] Lancet International Commission on Dementia Care Report (2017).
[2] Wallace, 1994; Thompson et al., 2001; Thompson et al., 2005; Schellenberg et al., 2007.
* Coming soon.

livio® AI & livio®

As the first-ever hearing aid to feature integrated sensors and artificial intelligence, **Livio AI** is a multi-purpose device that redefines what a hearing aid can do. Along with superior sound quality, Livio AI opens new gateways to better health and the world of information.

Livio hearing aids are a great option for patients who aren't looking for health information but still want superior sound quality, personalized control, remote programming, self check and memory management.

RIC R
Receiver-In-Canal
Rechargeable



Micro RIC 312
Receiver-In-Canal

RIC 312
Receiver-In-Canal

BTE 13
Behind-The-Ear

Colors

Thrive 2.4 GHz + NFMI® TECHNOLOGY

HEARING REALITY

Feature	AI Premium 2400 Healthable Technology	Premium 2400	Advanced 2000	Select 1600	Low 1200	Basic 1000
Platform: **Thrive**	●	●	●	●	●	●
App: **Thrive Hearing Control**	●	●	●	●	●	●
Healthable Technology: **Brain and Body Tracking** **Fall Alert** **Heart Rate****	●					
Information Assistance:						
Thrive Assistant	●	●				
Translate	●					
Transcribe	●					
Self Check	●	●	●	●	●	●
Tap Control	●					
Telehealth Service: **Hearing Care Anywhere**	●	●	●	●	●	●
Sound Imaging: **Channels | Bands**	24	24	20	16	12	10
Bandwidth	10 KHz	10 KHz	10 KHz	10 KHz	8 KHz	8 KHz
Speech Optimization	●	●	◗	◣	▸	
Music Optimization	●	●	●	●		
Music Adaptation	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
E2E Music Adaptation	●	●	◗	◣		
Ear-to-Ear Technology	●	●	◕	◣		
E2E Wind Noise Management	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
E2E Machine Noise Adaptation	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
E2E Directionality	●	●	●	●		
*E2E Phone Streaming**	●	●	●	●		
Sound Manager	●	●	●	●	●	●
Music	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speech	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Speech and Noise	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Machine Noise	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Wind	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Noise	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Quiet	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Directional Processing	●	●	◕	◗	◗	◣
Channels	24	24	20	16	12	10
Immersion	●	●	●	●	●	
Adaptive	●	●	◕	◗	◗	
Dynamic	●	●	◕	◗	◗	◣
Directional	●	●	◕	◗	◗	◣
Noise Control	●	●	◕	◗	◗	◗
Noise Reduction Strength	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Spatial Speech Enhancement	●	●	●	●		
Transient Noise Reduction	●	●	●	●	●	●
Feedback Management	●	●	●	●	●	●
Frequency Lowering	●	●	●	●	◕	◕
CROS System	●	●	●	●		
Tinnitus Technology: **Multiflex Tinnitus Technology**	●	●	●	●		
Compatibility: **Starkey Hearing Technologies Accessories**	●	●	●	●	●	●

*Excludes micro RIC 312 **Coming soon for Livio AI Rechargeable hearing aids with a Custom Healthable Receiver

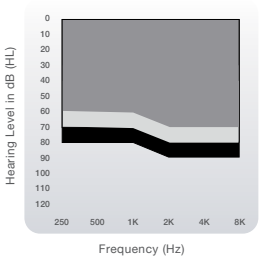
RIC R

RECEIVER-IN-CANAL RECHARGEABLE

Livio AI 2400
Livio 2400 | 2000 | 1600

Fitting Range

RIC R 40
RIC R 50
RIC R 60



Color Guide

Standard Colors

Bright White with Sterling | Black | Slate | Sterling | Espresso | Bronze | Champagne

Accessory Compatibility

- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

Patient Features

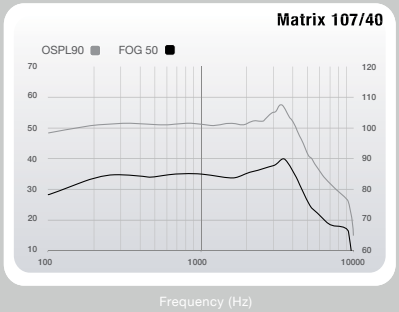
- Tinnitus Technology
- Wireless Connectivity
- Telecoil
- CROS System
- Rechargeable

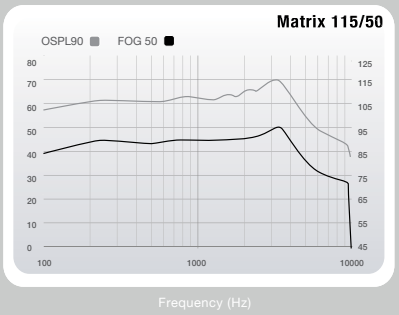
Livio AI Technology

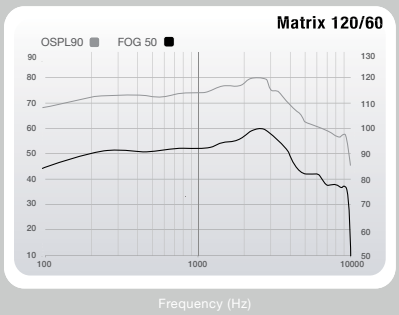
- Healthable hearing technology with embedded sensors and artificial intelligence
- Heart Rate with Custom Healthable Receiver coming soon

Measurement	40 Gain Data		50 Gain Data		60 Gain Data	
	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler
Peak OSPL90 (dB SPL)	107	120	115	127	120	131
HFA OSPL90 (dB SPL)	102	N/A	109	N/A	117	N/A
RTF OSPL90 (dB SPL)	N/A	112	N/A	119	N/A	127
Peak Gain (dB)	40	52	50	63	60	71
HFA Full-On Gain (dB)	35	N/A	45	N/A	56	N/A
RTF Full-On Gain (dB)	N/A	43	N/A	55	N/A	65
Frequency Range (Hz)	<100-9400	<100-9400	<100-9600	<100-9600	<100-9200	<100-9600
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	25	36	32	44	40	52
Equivalent Input Noise (dB)	26	26	26	26	26	26
Harmonic Distortion						
500 Hz (%)	<3	<3	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3	<3	<3
Induction Coil Sensitivity						
HFA SPLITS (ANSI) (dB SPL)	83	N/A	89	N/A	97	N/A
MASL (IEC) (dB SPL)	64	N/A	75	N/A	84	N/A
Estimated Lithium ION Battery Life						
Li-Ion Rechargeable Battery (hrs)	24*	24*	24*	24*	24*	24*
Tinnitus Therapy Stimulus						
Max RMS Output (dB SPL)	87		87		87	
Weighted RMS Output Level (dB SPL)	87		87		87	
Max 1/3 Octave Output (dB SPL)	87		87		87	

Matrices: 107/40, 115/50, 120/60







*Results will vary based on wireless and feature usage.

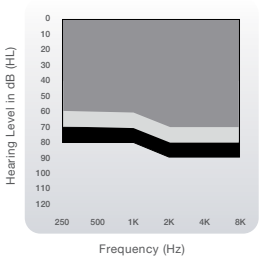
RIC R

RECEIVER-IN-CANAL RECHARGEABLE

Livio 1200 | 1000

Fitting Range

- RIC R 40
- RIC R 50
- RIC R 60



Color Guide

Standard Colors

Accessory Compatibility

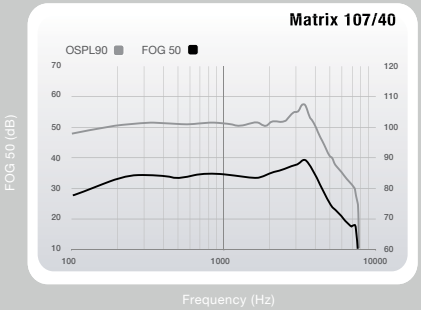
- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

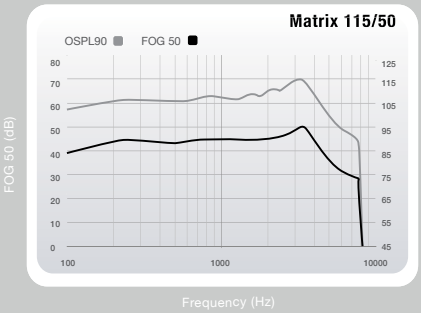
Patient Features

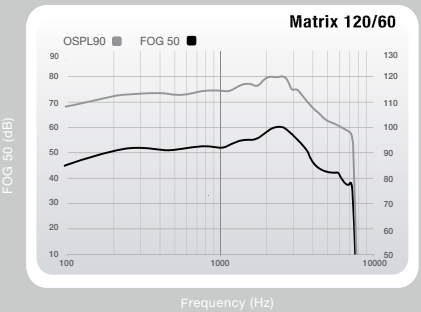
- Tinnitus Technology
- Wireless Connectivity
- Telecoil
- Rechargeable

Measurement	40 Gain Data		50 Gain Data		60 Gain Data	
	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler
Peak OSPL90 (dB SPL)	107	120	115	127	120	131
HFA OSPL90 (dB SPL)	102	N/A	109	N/A	117	N/A
RTF OSPL90 (dB SPL)	N/A	112	N/A	119	N/A	127
Peak Gain (dB)	40	52	50	63	60	71
HFA Full-On Gain (dB)	35	N/A	45	N/A	56	N/A
RTF Full-On Gain (dB)	N/A	43	N/A	55	N/A	65
Frequency Range (Hz)	<100-7700	<100-7700	<100-7700	<100-7800	<100-7700	<100-7800
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0, 1.6, 2.5	N/A	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	25	36	32	44	40	52
Equivalent Input Noise (dB)	26	26	26	26	26	26
Harmonic Distortion						
500 Hz (%)	<3	<3	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3	<3	<3
Induction Coil Sensitivity						
HFA SPLITS (ANSI) (dB SPL)	83	N/A	89	N/A	97	N/A
MASL (IEC) (dB SPL)	64	N/A	75	N/A	84	N/A
Estimated Lithium ION Battery Life						
Li-Ion Rechargeable Battery (hrs)	24*	24*	24*	24*	24*	24*
Tinnitus Therapy Stimulus						
Max RMS Output (dB SPL)	87		87		87	
Weighted RMS Output Level (dB SPL)	87		87		87	
Max 1/3 Octave Output (dB SPL)	87		87		87	

Matrices: 107/40, 115/50, 120/60







*Results will vary based on wireless and feature usage.

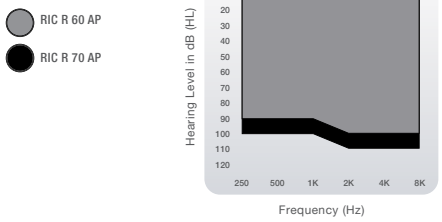
RIC R AP

RECEIVER-IN-CANAL RECHARGEABLE

ABSOLUTE POWER

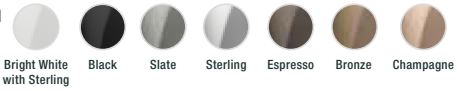
Livio AI 2400
Livio 2400 | 2000 | 1600

Fitting Range



Color Guide

Standard Colors



Accessory Compatibility

- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

Patient Features

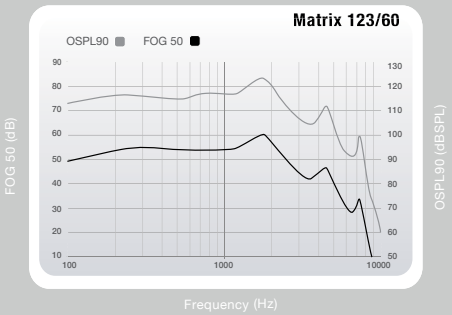
- Tinnitus Technology
- Wireless Connectivity
- Telecoil
- CROS System
- Rechargeable

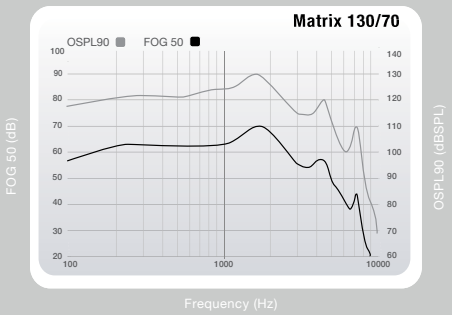
Livio AI Technology

- Healthable hearing technology with embedded sensors and artificial intelligence
- Heart Rate with Custom Healthable Receiver coming soon

Measurement	60 Gain Data ANSI/IEC 2cc Coupler	60 Gain Data IEC OES Coupler	70 Gain Data ANSI/IEC 2cc Coupler	70 Gain Data IEC OES Coupler
Peak OSPL90 (dB SPL)	123	133	130	140
HFA OSPL90 (dB SPL)	117	N/A	124	N/A
RTF OSPL90 (dB SPL)	N/A	130	N/A	139
Peak Gain (dB)	60	70	70	81
HFA Full-On Gain (dB)	54	N/A	65	N/A
RTF Full-On Gain (dB)	N/A	66	N/A	78
Frequency Range (Hz)	<100-5500	<100-5700	<100-5800	<100-5700
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	40	55	47	64
Equivalent Input Noise (dB)	26	26	26	26
Harmonic Distortion				
500 Hz (%)	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3
Induction Coil Sensitivity				
HFA SPLITS (ANSI) (dB SPL)	97	N/A	103	N/A
MASL (IEC) (dB SPL)	83	N/A	93	N/A
Estimated Lithium ION Battery Life				
Li-Ion Rechargeable Battery (hrs)	24*	24*	24*	24*
Tinnitus Therapy Stimulus				
Max RMS Output (dB SPL)	87		87	
Weighted RMS Output Level (dB SPL)	87		87	
Max 1/3 Octave Output (dB SPL)	87		87	

Matrices: 123/60, 130/70





*Results will vary based on wireless and feature usage.

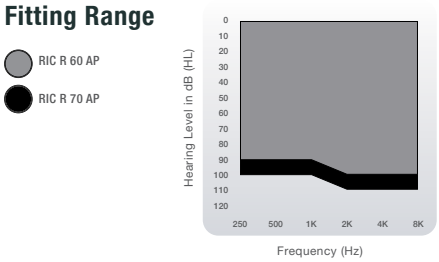
RIC R AP

RECEIVER-IN-CANAL RECHARGEABLE

ABSOLUTE POWER

Livio 1200 | 1000

Fitting Range



Color Guide

Standard Colors

Accessory Compatibility

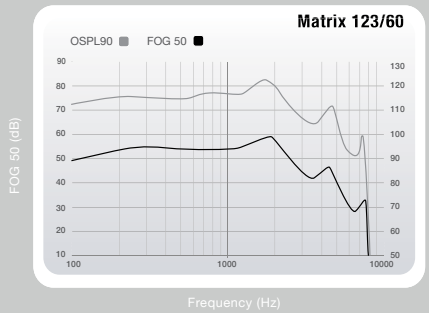
- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

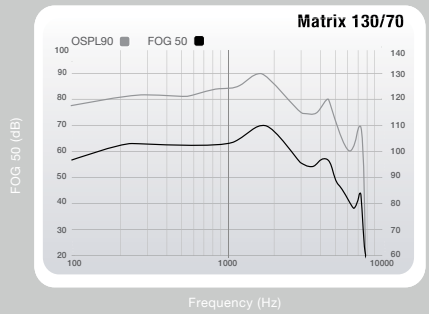
Patient Features

- Tinnitus Technology
- Wireless Connectivity
- Telecoil
- Rechargeable

Measurement	60 Gain Data		70 Gain Data	
	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler
Peak OSPL90 (dB SPL)	123	133	130	140
HFA OSPL90 (dB SPL)	117	N/A	124	N/A
RTF OSPL90 (dB SPL)	N/A	130	N/A	139
Peak Gain (dB)	60	70	70	81
HFA Full-On Gain (dB)	54	N/A	65	N/A
RTF Full-On Gain (dB)	N/A	66	N/A	78
Frequency Range (Hz)	<100-5500	<100-5700	<100-5800	<100-5700
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	40	55	47	64
Equivalent Input Noise (dB)	26	26	26	26
Harmonic Distortion				
500 Hz (%)	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3
Induction Coil Sensitivity				
HFA SPLITS (ANSI) (dB SPL)	97	N/A	103	N/A
MASL (IEC) (dB SPL)	83	N/A	93	N/A
Estimated Lithium ION Battery Life				
Li-Ion Rechargeable Battery (hrs)	24*	24*	24*	24*
Tinnitus Therapy Stimulus				
Max RMS Output (dB SPL)	87		87	
Weighted RMS Output Level (dB SPL)	87		87	
Max 1/3 Octave Output (dB SPL)	87		87	

Matrices: 123/60, 130/70





*Results will vary based on wireless and feature usage.

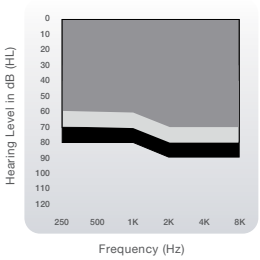
mRIC 312

RECEIVER-IN-CANAL

Livio AI 2400
Livio 2400 | 2000 | 1600

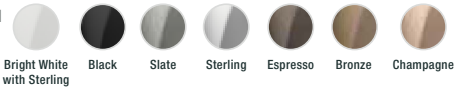
Fitting Range

- mRIC 312 40
- mRIC 312 50
- mRIC 312 60



Color Guide

Standard Colors



Accessory Compatibility

- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

Patient Features

- Tinnitus Technology
- Wireless Connectivity

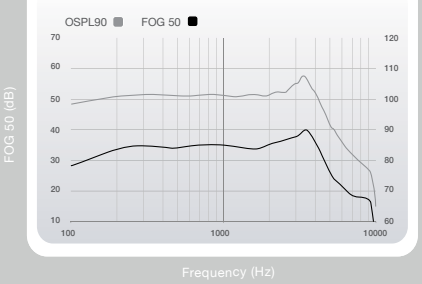
Livio AI Technology

- Healthable hearing technology with embedded sensors and artificial intelligence

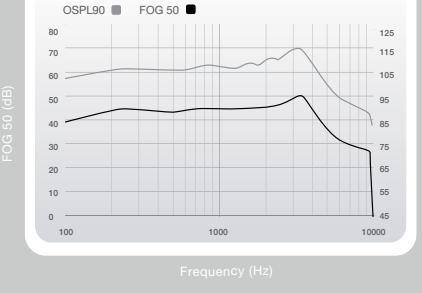
Measurement	40 Gain Data		50 Gain Data		60 Gain Data	
	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler
Peak OSPL90 (dB SPL)	107	120	115	127	120	131
HFA OSPL90 (dB SPL)	102	N/A	109	N/A	117	N/A
RTF OSPL90 (dB SPL)	N/A	112	N/A	119	N/A	127
Peak Gain (dB)	40	52	50	63	60	71
HFA Full-On Gain (dB)	35	N/A	45	N/A	56	N/A
RTF Full-On Gain (dB)	N/A	43	N/A	55	N/A	65
Frequency Range (Hz)	<100-9400	<100-9400	<100-9600	<100-9600	<100-9200	<100-9600
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	25	36	32	44	40	52
Equivalent Input Noise (dB)	26	26	26	26	26	26
Harmonic Distortion						
500 Hz (%)	<3	<3	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3	<3	<3
Induction Coil Sensitivity						
HFA SPLITS (ANSI) (dB SPL)	N/A	N/A	N/A	N/A	N/A	N/A
MASL (IEC) (dB SPL)	N/A	N/A	N/A	N/A	N/A	N/A
ANSI/IEC Battery Current (mA)	1.8*	1.7*	1.9*	1.8*	2.1*	2.0*
Idle Current (mA)	1.7*	1.7*	1.7*	1.7*	1.8*	1.9*
Estimated Battery Life for 16-Hour Day						
312 Zinc Air (days)	4-7*	4-7*	4-7*	4-7*	4-7*	4-7*
Tinnitus Therapy Stimulus						
Max RMS Output (dB SPL)	87		87		87	
Weighted RMS Output Level (dB SPL)	87		87		87	
Max 1/3 Octave Output (dB SPL)	87		87		87	

Matrices: 107/40, 115/50, 120/60 | Battery Size: 312

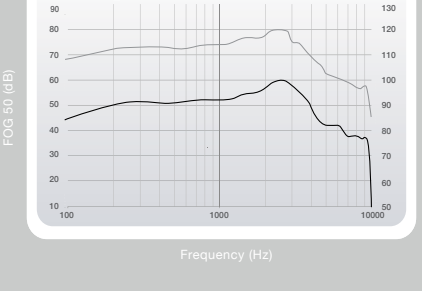
Matrix 107/40



Matrix 115/50



Matrix 120/60



*Results will vary based on wireless usage.

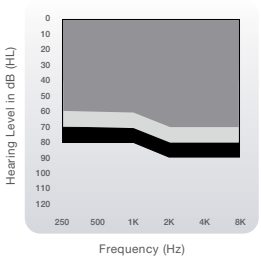
mRIC 312

RECEIVER-IN-CANAL

Livio 1200 | 1000

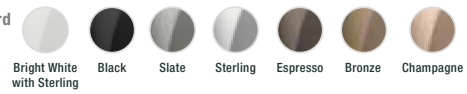
Fitting Range

- mRIC 312 40
- mRIC 312 50
- mRIC 312 60



Color Guide

Standard Colors



Accessory Compatibility

- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

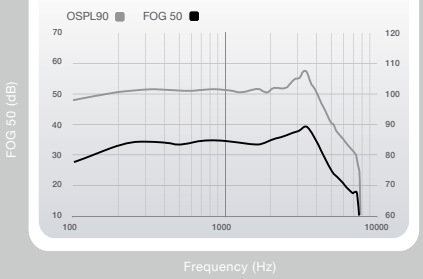
Patient Features

- Tinnitus Technology
- Wireless Connectivity

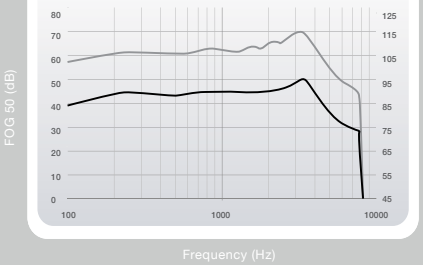
Measurement	40 Gain Data		50 Gain Data		60 Gain Data	
	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler
Peak OSPL90 (dB SPL)	107	120	115	127	120	131
HFA OSPL90 (dB SPL)	102	N/A	109	N/A	117	N/A
RTF OSPL90 (dB SPL)	N/A	112	N/A	119	N/A	127
Peak Gain (dB)	40	52	50	63	60	71
HFA Full-On Gain (dB)	35	N/A	45	N/A	56	N/A
RTF Full-On Gain (dB)	N/A	43	N/A	55	N/A	65
Frequency Range (Hz)	<100-7700	<100-7700	<100-7700	<100-7800	<100-7700	<100-7800
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0, 1.6, 2.5	N/A	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	25	36	32	44	40	52
Equivalent Input Noise (dB)	26	26	26	26	26	26
Harmonic Distortion						
500 Hz (%)	<3	<3	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3	<3	<3
Induction Coil Sensitivity						
HFA SPLITS (ANSI) (dB SPL)	N/A	N/A	N/A	N/A	N/A	N/A
MASL (IEC) (dB SPL)	N/A	N/A	N/A	N/A	N/A	N/A
ANSI/IEC Battery Current (mA)	1.8*	1.7*	1.9*	1.8*	2.1*	2.0*
Idle Current (mA)	1.7*	1.7*	1.7*	1.7*	1.8*	1.9*
Estimated Battery Life for 16-Hour Day						
312 Zinc Air (days)	4-7*	4-7*	4-7*	4-7*	4-7*	4-7*
Tinnitus Therapy Stimulus						
Max RMS Output (dB SPL)	87		87		87	
Weighted RMS Output Level (dB SPL)	87		87		87	
Max 1/3 Octave Output (dB SPL)	87		87		87	

Matrices: 107/40, 115/50, 120/60 | Battery Size: 312

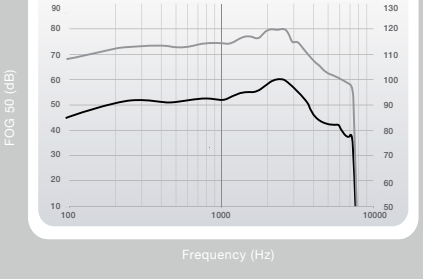
Matrix 107/40



Matrix 115/50



Matrix 120/60



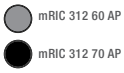
*Results will vary based on wireless usage.

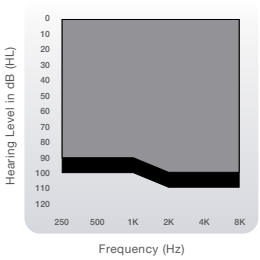
mRIC 312 AP

RECEIVER-IN-CANAL ABSOLUTE POWER

Livio AI 2400
Livio 2400 | 2000 | 1600

Fitting Range





Color Guide

Standard Colors

Accessory Compatibility

- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

Patient Features

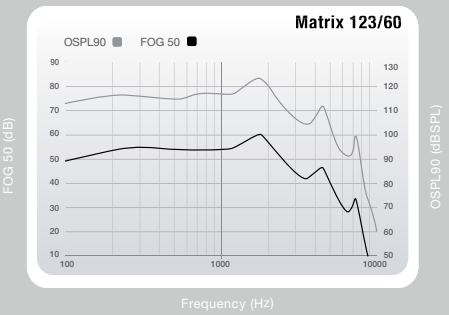
- Tinnitus Technology
- Wireless Connectivity

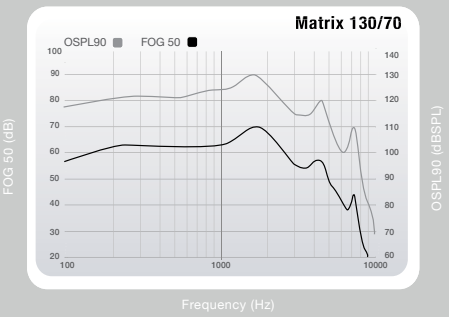
Livio AI Technology

- Healthable hearing technology with embedded sensors and artificial intelligence

Measurement	60 Gain Data ANSI/IEC 2cc Coupler	60 Gain Data IEC OES Coupler	70 Gain Data ANSI/IEC 2cc Coupler	70 Gain Data IEC OES Coupler
Peak OSPL90 (dB SPL)	123	133	130	140
HFA OSPL90 (dB SPL)	117	N/A	124	N/A
RTF OSPL90 (dB SPL)	N/A	130	N/A	139
Peak Gain (dB)	60	70	70	81
HFA Full-On Gain (dB)	54	N/A	65	N/A
RTF Full-On Gain (dB)	N/A	66	N/A	78
Frequency Range (Hz)	<100-5500	<100-5700	<100-5800	<100-5700
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	40	55	47	64
Equivalent Input Noise (dB)	26	26	26	26
Harmonic Distortion				
500 Hz (%)	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3
Induction Coil Sensitivity				
HFA SPLITS (ANSI) (dB SPL)	N/A	N/A	N/A	N/A
MASL (IEC) (dB SPL)	N/A	N/A	N/A	N/A
ANSI/IEC Battery Current (mA)	1.7*	1.7*	1.9*	1.8*
Idle Current (mA)	1.7*	1.7*	1.7*	1.7*
Estimated Battery Life for 16-Hour Day				
312 Zinc Air (days)	4-7*	4-7*	4-7*	4-7*
Tinnitus Therapy Stimulus				
Max RMS Output (dB SPL)	87		87	
Weighted RMS Output Level (dB SPL)	87		87	
Max 1/3 Octave Output (dB SPL)	87		87	

Matrices: 123/60, 130/70 **Battery Size: 312**





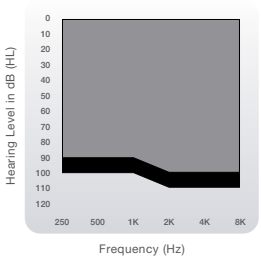
*Results will vary based on wireless usage.

mRIC 312 AP

RECEIVER-IN-CANAL ABSOLUTE POWER

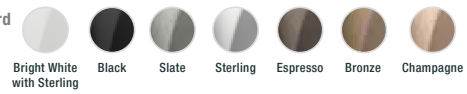
Livio 1200 | 1000

Fitting Range



Color Guide

Standard Colors



Accessory Compatibility

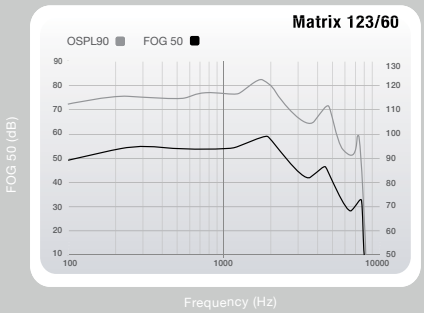
- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

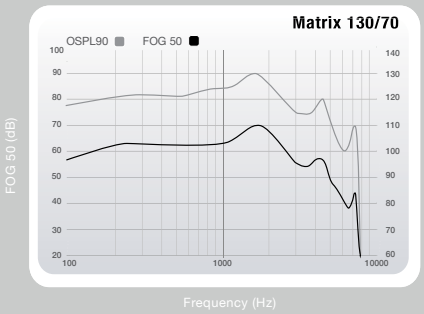
Patient Features

- Tinnitus Technology
- Wireless Connectivity

Measurement	60 Gain Data ANSI/IEC 2cc Coupler	60 Gain Data IEC OES Coupler	70 Gain Data ANSI/IEC 2cc Coupler	70 Gain Data IEC OES Coupler
Peak OSPL90 (dB SPL)	123	133	130	140
HFA OSPL90 (dB SPL)	117	N/A	124	N/A
RTF OSPL90 (dB SPL)	N/A	130	N/A	139
Peak Gain (dB)	60	70	70	81
HFA Full-On Gain (dB)	54	N/A	65	N/A
RTF Full-On Gain (dB)	N/A	66	N/A	78
Frequency Range (Hz)	<100-5500	<100-5700	<100-5800	<100-5700
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	40	55	47	64
Equivalent Input Noise (dB)	26	26	26	26
Harmonic Distortion				
500 Hz (%)	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3
Induction Coil Sensitivity				
HFA SPLITS (ANSI) (dB SPL)	N/A	N/A	N/A	N/A
MASL (IEC) (dB SPL)	N/A	N/A	N/A	N/A
ANSI/IEC Battery Current (mA)	1.7*	1.7*	1.9*	1.8*
Idle Current (mA)	1.7*	1.7*	1.7*	1.7*
Estimated Battery Life for 16-Hour Day				
312 Zinc Air (days)	4-7*	4-7*	4-7*	4-7*
Tinnitus Therapy Stimulus				
Max RMS Output (dB SPL)	87		87	
Weighted RMS Output Level (dB SPL)	87		87	
Max 1/3 Octave Output (dB SPL)	87		87	

Matrices: 123/60, 130/70 | Battery Size: 312





*Results will vary based on wireless usage.

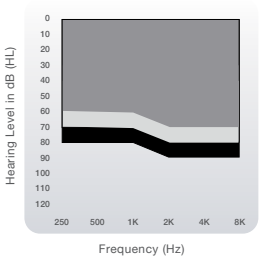
RIC 312

RECEIVER-IN-CANAL

Livio AI 2400
Livio 2400 | 2000 | 1600

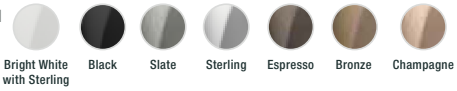
Fitting Range

- RIC 312 40
- RIC 312 50
- RIC 312 60



Color Guide

Standard Colors



Accessory Compatibility

- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

Patient Features

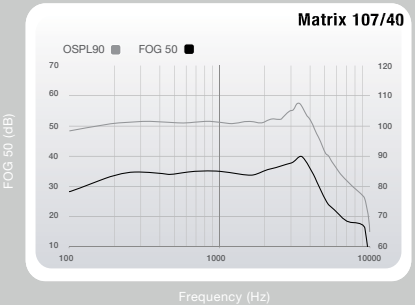
- Tinnitus Technology
- Wireless Connectivity
- CROS System

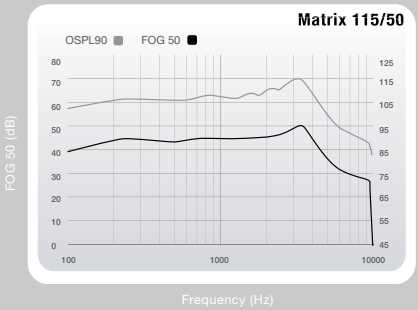
Livio AI Technology

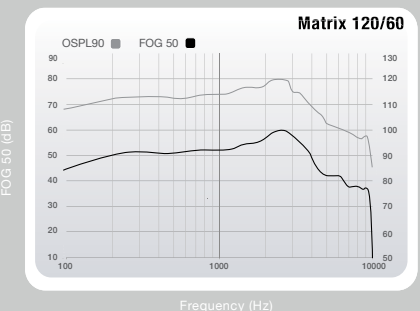
- Healthable hearing technology with embedded sensors and artificial intelligence

Measurement	40 Gain Data		50 Gain Data		60 Gain Data	
	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler
Peak OSPL90 (dB SPL)	107	120	115	127	120	131
HFA OSPL90 (dB SPL)	102	N/A	109	N/A	117	N/A
RTF OSPL90 (dB SPL)	N/A	112	N/A	119	N/A	127
Peak Gain (dB)	40	52	50	63	60	71
HFA Full-On Gain (dB)	35	N/A	45	N/A	56	N/A
RTF Full-On Gain (dB)	N/A	43	N/A	55	N/A	65
Frequency Range (Hz)	<100-9400	<100-6900	<100-9600	<100-9600	<100-9200	<100-9600
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	25	36	32	44	40	52
Equivalent Input Noise (dB)	26	26	26	26	26	26
Harmonic Distortion						
500 Hz (%)	<3	<3	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3	<3	<3
Induction Coil Sensitivity						
HFA SPLITS (ANSI) (dB SPL)	N/A	N/A	N/A	N/A	N/A	N/A
MASL (IEC) (dB SPL)	N/A	N/A	N/A	N/A	N/A	N/A
ANSI/IEC Battery Current (mA)	1.8*	1.7*	1.9*	1.8*	2.1*	2.0*
Idle Current (mA)	1.7*	1.7*	1.7*	1.7*	1.8*	1.9*
Estimated Battery Life for 16-Hour Day						
312 Zinc Air (days)	4-7*	4-7*	4-7*	4-7*	4-7*	4-7*
Tinnitus Therapy Stimulus						
Max RMS Output (dB SPL)	87		87		87	
Weighted RMS Output Level (dB SPL)	87		87		87	
Max 1/3 Octave Output (dB SPL)	87		87		87	

Matrices: 107/40, 115/50, 120/60 | Battery Size: 312







*Results will vary based on wireless usage.

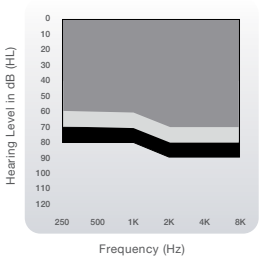
RIC 312

RECEIVER-IN-CANAL

Livio 1200 | 1000

Fitting Range

- RIC 312 40
- RIC 312 50
- RIC 312 60



Color Guide

Standard Colors

Accessory Compatibility

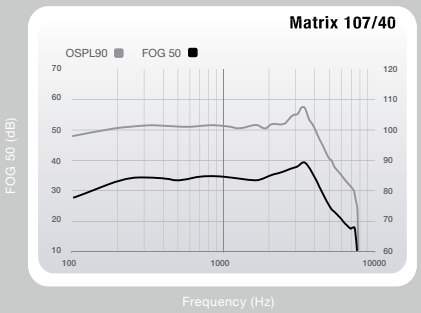
- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

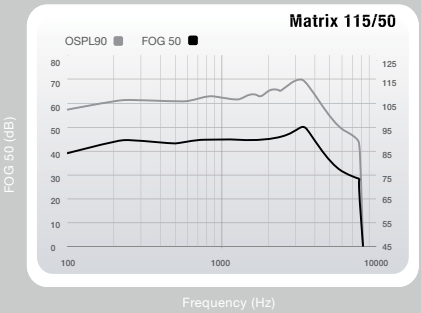
Patient Features

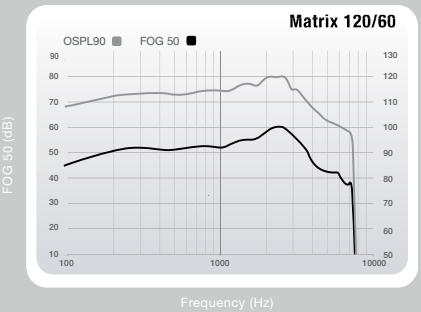
- Tinnitus Technology
- Wireless Connectivity

Measurement	40 Gain Data		50 Gain Data		60 Gain Data	
	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler	ANSI/IEC 2cc Coupler	IEC OES Coupler
Peak OSPL90 (dB SPL)	107	120	115	127	120	131
HFA OSPL90 (dB SPL)	102	N/A	109	N/A	117	N/A
RTF OSPL90 (dB SPL)	N/A	112	N/A	119	N/A	127
Peak Gain (dB)	40	52	50	63	60	71
HFA Full-On Gain (dB)	35	N/A	45	N/A	56	N/A
RTF Full-On Gain (dB)	N/A	43	N/A	55	N/A	65
Frequency Range (Hz)	<100-7700	<100-6900	<100-7700	<100-7800	<100-7700	<100-7800
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0, 1.6, 2.5	N/A	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	25	36	32	44	40	52
Equivalent Input Noise (dB)	26	26	26	26	26	26
Harmonic Distortion						
500 Hz (%)	<3	<3	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3	<3	<3
Induction Coil Sensitivity						
HFA SPLITS (ANSI) (dB SPL)	N/A	N/A	N/A	N/A	N/A	N/A
MASL (IEC) (dB SPL)	N/A	N/A	N/A	N/A	N/A	N/A
ANSI/IEC Battery Current (mA)	1.8*	1.7*	1.9*	1.8*	2.1*	2.0*
Idle Current (mA)	1.7*	1.7*	1.7*	1.7*	1.8*	1.9*
Estimated Battery Life for 16-Hour Day						
312 Zinc Air (days)	4-7*	4-7*	4-7*	4-7*	4-7*	4-7*
Tinnitus Therapy Stimulus						
Max RMS Output (dB SPL)	87		87		87	
Weighted RMS Output Level (dB SPL)	87		87		87	
Max 1/3 Octave Output (dB SPL)	87		87		87	

Matrices: 107/40, 115/50, 120/60 | Battery Size: 312







*Results will vary based on wireless usage.

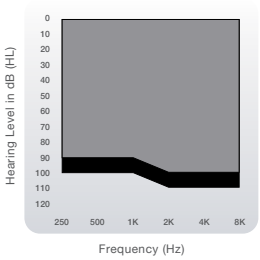
RIC 312 AP

RECEIVER-IN-CANAL ABSOLUTE POWER

Livio AI 2400
Livio 2400 | 2000 | 1600

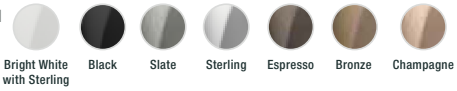
Fitting Range

- RIC 312 60 AP
- RIC 312 70 AP



Color Guide

Standard Colors



Accessory Compatibility

- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

Patient Features

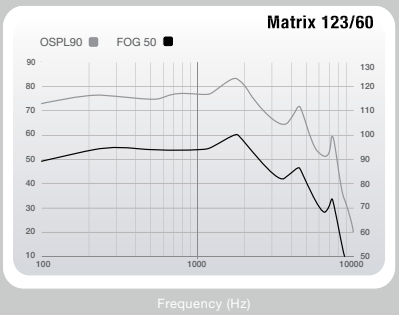
- Tinnitus Technology
- Wireless Connectivity
- CROS System

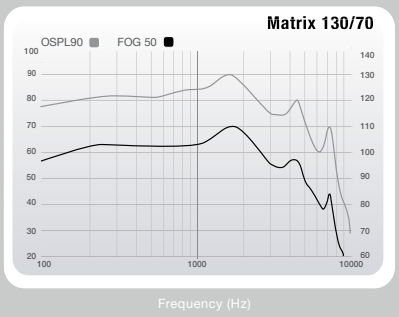
Livio AI Technology

- Healthable hearing technology with embedded sensors and artificial intelligence

Measurement	60 Gain Data ANSI/IEC 2cc Coupler	60 Gain Data IEC OES Coupler	70 Gain Data ANSI/IEC 2cc Coupler	70 Gain Data IEC OES Coupler
Peak OSPL90 (dB SPL)	123	133	130	140
HFA OSPL90 (dB SPL)	117	N/A	124	N/A
RTF OSPL90 (dB SPL)	N/A	130	N/A	139
Peak Gain (dB)	60	70	70	81
HFA Full-On Gain (dB)	54	N/A	65	N/A
RTF Full-On Gain (dB)	N/A	66	N/A	78
Frequency Range (Hz)	<100-5500	<100-5700	<100-5800	<100-5700
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	40	55	47	64
Equivalent Input Noise (dB)	26	26	26	26
Harmonic Distortion				
500 Hz (%)	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3
Induction Coil Sensitivity				
HFA SPLITS (ANSI) (dB SPL)	N/A	N/A	N/A	N/A
MASL (IEC) (dB SPL)	N/A	N/A	N/A	N/A
ANSI/IEC Battery Current (mA)	1.7*	1.7*	1.9*	1.8*
Idle Current (mA)	1.7*	1.7*	1.7*	1.7*
Estimated Battery Life for 16-Hour Day				
312 Zinc Air (days)	4-7*	4-7*	4-7*	4-7*
Tinnitus Therapy Stimulus				
Max RMS Output (dB SPL)	87		87	
Weighted RMS Output Level (dB SPL)	87		87	
Max 1/3 Octave Output (dB SPL)	87		87	

Matrices: 123/60, 130/70 | Battery Size: 312





*Results will vary based on wireless usage.

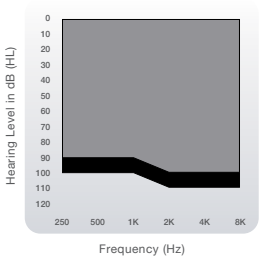
RIC 312 AP

RECEIVER-IN-CANAL ABSOLUTE POWER

Livio 1200 | 1000

Fitting Range

- RIC 312 60 AP
- RIC 312 70 AP



Color Guide

Standard Colors

Bright White with Sterling | Black | Slate | Sterling | Espresso | Bronze | Champagne

Accessory Compatibility

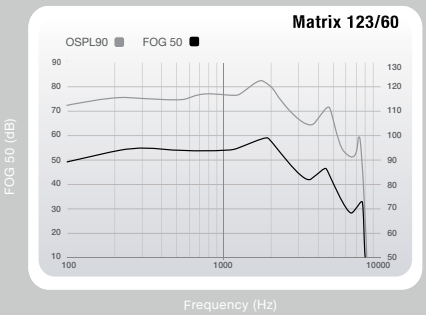
- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

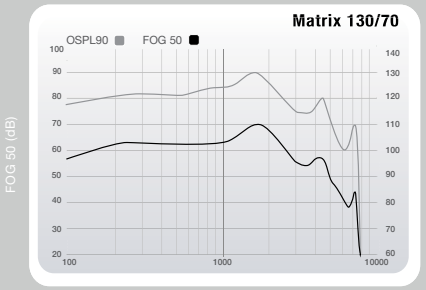
Patient Features

- Tinnitus Technology
- Wireless Connectivity

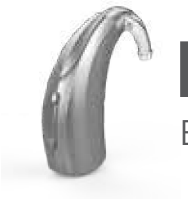
Measurement	60 Gain Data ANSI/IEC 2cc Coupler	60 Gain Data IEC OES Coupler	70 Gain Data ANSI/IEC 2cc Coupler	70 Gain Data IEC OES Coupler
Peak OSPL90 (dB SPL)	123	133	130	140
HFA OSPL90 (dB SPL)	117	N/A	124	N/A
RTF OSPL90 (dB SPL)	N/A	130	N/A	139
Peak Gain (dB)	60	70	70	81
HFA Full-On Gain (dB)	54	N/A	65	N/A
RTF Full-On Gain (dB)	N/A	66	N/A	78
Frequency Range (Hz)	<100-5500	<100-5700	<100-5800	<100-5700
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	40	55	47	64
Equivalent Input Noise (dB)	26	26	26	26
Harmonic Distortion				
500 Hz (%)	<3	<3	<3	<3
800 Hz (%)	<3	<3	<3	<3
1600 Hz (%)	<3	<3	<3	<3
Induction Coil Sensitivity				
HFA SPLITS (ANSI) (dB SPL)	N/A	N/A	N/A	N/A
MASL (IEC) (dB SPL)	N/A	N/A	N/A	N/A
ANSI/IEC Battery Current (mA)	1.7*	1.7*	1.9*	1.8*
Idle Current (mA)	1.7*	1.7*	1.7*	1.7*
Estimated Battery Life for 16-Hour Day				
312 Zinc Air (days)	4-7*	4-7*	4-7*	4-7*
Tinnitus Therapy Stimulus				
Max RMS Output (dB SPL)	87		87	
Weighted RMS Output Level (dB SPL)	87		87	
Max 1/3 Octave Output (dB SPL)	87		87	

Matrices: 123/60, 130/70 | Battery Size: 312





*Results will vary based on wireless usage.

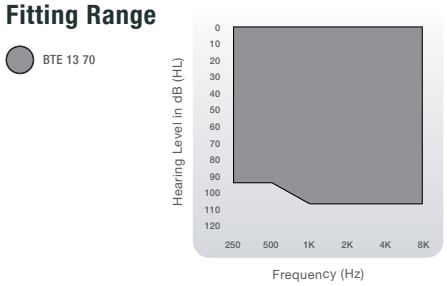


BTE 13

BEHIND-THE-EAR

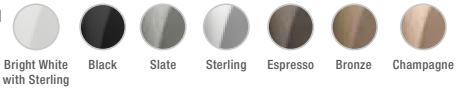
Livio AI 2400
Livio 2400 | 2000 | 1600

Fitting Range



Color Guide

Standard Colors



Accessory Compatibility

- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

Patient Features

- Tinnitus Technology
- Telecoil
- Wireless Connectivity
- CROS System

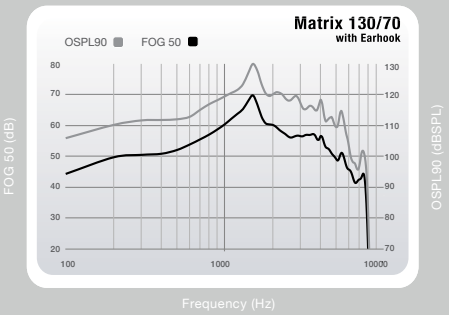
Livio AI Technology

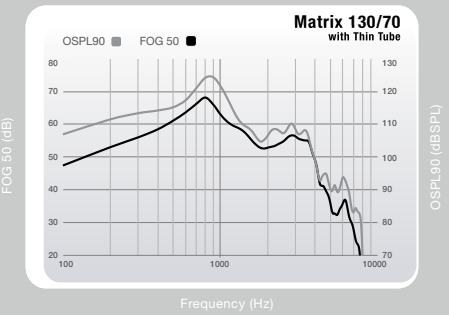
- Healthable hearing technology with embedded sensors and artificial intelligence

Measurement	Earhook ANSI/IEC 2cc Coupler	Earhook IEC OES Coupler	Size 3, Occluded Thin Tube ANSI/IEC 2cc Coupler	Size 3, Occluded Thin Tube IEC OES Coupler
Peak OSPL90 (dB SPL)	130	136	124	129
HFA OSPL90 (dB SPL)	122	N/A	112	N/A
RTF OSPL90 (dB SPL)	N/A	134	N/A	114
Peak Gain (dB)	70	76	68	73
HFA Full-On Gain (dB)	62	N/A	57	N/A
RTF Full-On Gain (dB)	N/A	73	N/A	61
Frequency Range (Hz)	<100-7600	<100-7800	<100-4600	<100-6800
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	45	59	35	39
Equivalent Input Noise (dB)	24	18	29	29
Harmonic Distortion				
500 Hz (%)	<3	<3	<3	<3
800 Hz (%)	<5	<5	<3	<3
1600 Hz (%)	<3	<3	<3	<3
Induction Coil Sensitivity				
HFA SPLITS (ANSI) (dB SPL)	101	N/A	91	N/A
MASL (IEC) (dB SPL)	92	N/A	88	N/A
ANSI/IEC Battery Current (mA)	1.9*	1.8*	1.9*	1.8*
Idle Current (mA)	1.7*	1.7*	1.7*	1.7*
Estimated Battery Life for 16-Hour Day				
13 Zinc Air (days)	7-11*	7-11*	7-11*	7-11*
Tinnitus Therapy Stimulus				
Max RMS Output (dB SPL)	87		87	
Weighted RMS Output Level (dB SPL)	87		87	
Max 1/3 Octave Output (dB SPL)	87		87	

*Results will vary based on wireless usage.

Matrix: 130/70 **Battery Size: 13**





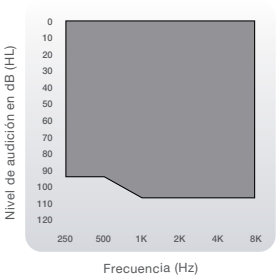
BTE 13

BEHIND-THE-EAR

Livio 1200 | 1000

Fitting Range

BTE 13 70



Color Guide

Standard Colors

Bright White with Sterling | Black | Slate | Sterling | Espresso | Bronze | Champagne

Accessory Compatibility

- TV
- Remote Microphone +
- Remote
- Mini Remote Microphone
- 2.4 GHz Programmer

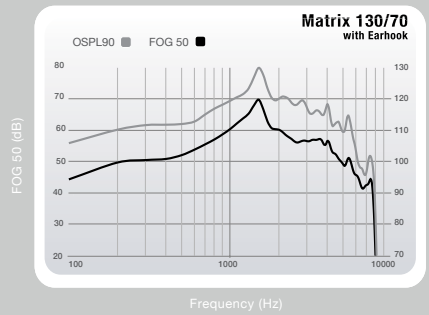
Patient Features

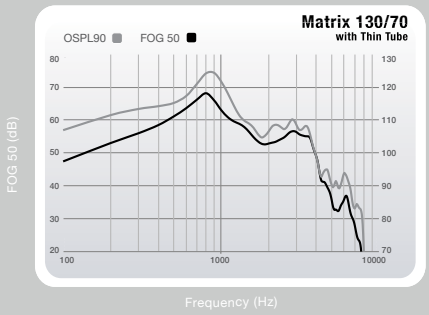
- Tinnitus Technology
- Telecoil
- Wireless Connectivity

Measurement	Earhook ANSI/IEC 2cc Coupler	Earhook IEC OES Coupler	Size 3, Occluded Thin Tube ANSI/IEC 2cc Coupler	Size 3, Occluded Thin Tube IEC OES Coupler
Peak OSPL90 (dB SPL)	130	136	124	129
HFA OSPL90 (dB SPL)	122	N/A	112	N/A
RTF OSPL90 (dB SPL)	N/A	134	N/A	114
Peak Gain (dB)	70	76	68	73
HFA Full-On Gain (dB)	62	N/A	57	N/A
RTF Full-On Gain (dB)	N/A	73	N/A	61
Frequency Range (Hz)	<100-7600	<100-7600	<100-4600	<100-6800
Reference Test Freq. (kHz)	N/A	1.6	N/A	1.6
HFA Frequencies (kHz)	1.0,1.6,2.5	N/A	1.0,1.6,2.5	N/A
Reference Test Gain (dB)	45	59	35	39
Equivalent Input Noise (dB)	24	18	29	29
Harmonic Distortion				
500 Hz (%)	<3	<3	<3	<3
800 Hz (%)	<5	<5	<3	<3
1600 Hz (%)	<3	<3	<3	<3
Induction Coil Sensitivity				
HFA SPLITS (ANSI) (dB SPL)	101	N/A	91	N/A
MASL (IEC) (dB SPL)	92	N/A	88	N/A
ANSI/IEC Battery Current (mA)	1.9*	1.8*	1.9*	1.8*
Idle Current (mA)	1.7*	1.7*	1.7*	1.7*
Estimated Battery Life for 16-Hour Day				
13 Zinc Air (days)	7-11*	7-11*	7-11*	7-11*
Tinnitus Therapy Stimulus				
Max RMS Output (dB SPL)	87		87	
Weighted RMS Output Level (dB SPL)	87		87	
Max 1/3 Octave Output (dB SPL)	87		87	

*Results will vary based on wireless usage.

Matrix: 130/70 | **Battery Size: 13**





CROS SYSTEM

RIC R, RIC 312 & BTE 13

Livio AI 2400
Livio 2400 | 2000 | 1600

The Starkey CROS System includes products specifically designed for patients who need sound routed to a better hearing ear. Starkey's CROS solution transmits sound wirelessly from a microphone placed on a patient's non-functional ear to a receiver fitted on a patient's better hearing ear. Devices can also be configured as a BiCROS solution for a patient who needs amplification in his or her better hearing ear.

Special Features

- Clear and consistent wireless streaming using 2.4 GHz + NFMI technology
- Acuity OS 2 brings audibility and speech understanding to patients in any environment
- Full Acuity™ Immersion Directionality on the CROS transmitter
- Telecoil available in Livio AI and Livio CROS receivers
- Compatible with Starkey® Hearing Technologies accessories

Battery Information

Model	Battery size	IEC code	ANSI code
Livio AI/Livio RIC R CROS	N/A	N/A	N/A
Livio AI/Livio RIC 312 CROS	312	PR41	7002ZD
Livio AI/Livio BTE 13 CROS	13	PR48	7000ZD

Audio Information

Audio Quality:	20 kHz sampling frequency

Radio Information

Antenna type:	Coil wrapped on ferrite core
Operation frequency:	10.281 MHz NFMI
Occupied bandwidth (99% BW):	400 KHz
Modulation:	8 DPSK
Operating range:	30 cm
Wearing options:	Receiver-In-Canal and Behind-The-Ear
Use case:	Streaming of audio signal to receiving hearing aid on the other ear

Compatibility

Livio AI/Livio RIC R CROS is compatible with Livio AI/Livio RIC R
Livio AI/Livio RIC 312 CROS is compatible with Livio AI/Livio RIC 312
Livio AI/Livio BTE 13 CROS is compatible with Livio AI/Livio BTE 13

USA	CANADA
RIC 312 FCC ID: EOA-24LIVIOR312	RIC 312: IC: 6903A-24LIVIOR312
RIC R FCC ID: EOA-24LIVIORCHG	RIC R IC: 6903A-24LIVIORCHG
BTE 13 FCC ID: EOA-24LIVIOB13	BTE 13 IC: 6903A-24LIVIOB13

General Information

Transportation and storage conditions for Zinc Air Products:
-40°C (-40°F) to +60°C (140°F) and 10%-95% rH. Your hearing aids are designed to operate beyond the range of temperatures comfortable to you, from very cold up to 50°C (122°F).

Transportation and storage conditions for the RIC R:
Your hearing aids and charger should be stored within the temperature and humidity ranges of -10°C (14°F) to +45°C (113°F) and 10%-95% rH. The charging temperature range is between 0°C (32°F) and 40°C (104°F). Your hearing aids are designed to operate beyond the range of temperatures comfortable to you, from very cold up to 40°C (104°F).

Safety Standards:
Meets IEC 60601-2-66 safety standard and IEC 60601-1-2 EMC standard.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Live better.™

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