

livioEdge<sup>AI</sup>

## Hearing Technology's Leading Edge

Starkey Education & Training

 @StarkeyHearing

## CAN YOU HEAR ME?

If you have any technical problems, please stay logged  
on and call Audiology Online at  
1-800-753-2160


This session is  
available for  
1/.1 CEU

Must stay  
logged on for  
the full session

Must  
successfully  
complete a  
short quiz

## Course Objectives

- Attendees will know what healthable features are available
- Attendees will know what technology levels and styles are available for Livio Edge AI, Livio AI and Livio devices
- Attendees will know what mobile apps and 2.4 GHz wireless accessories are available for the current Starkey product line



livio<sup>AI</sup>

## The Hearing Aid Reinvented

“We **continue to evolve** our products from traditional hearing aids to smart devices that augment human senses, enhance health and wellness, amplify human intelligence, and enable superhuman abilities.”

**Achin Bhowmik, Ph.D.**  
*Chief Technology Officer and  
 Executive Vice President of Engineering*

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## Healthable<sup>™</sup> Hearing Platform

**Thrive** — A Gateway to Better  
Hearing, Health and Wellness

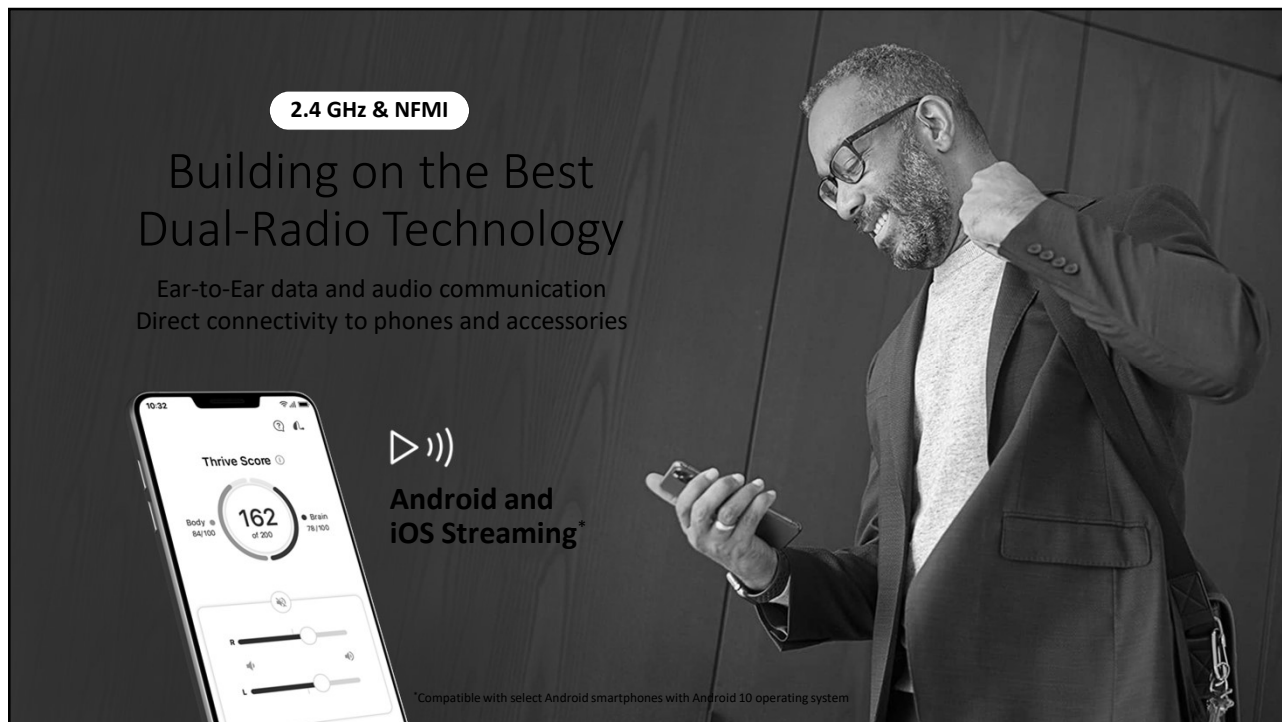
- Dual-Radio (2.4 GHz + NFMI)
- Multi-Core Twin Compressors
- Inertial Sensors
- Artificial Intelligence



**2.4 GHz & NFMI**


## Building on the Best Dual-Radio Technology

Ear-to-Ear data and audio communication  
Direct connectivity to phones and accessories



**Android and iOS Streaming\***

\*Compatible with select Android smartphones with Android 10 operating system



## livio<sup>AI</sup>

### Microelectromechanical System (MEMS) Embedded Sensor Technology



**Accelerometer**  
*Detects axis orientation*



**Gyroscope**  
*Detects angular orientation*

# Artificial Intelligence

Makes it possible for hearing aids to do things that would normally require human intelligence



Classifying the acoustic environment



Detecting a fall



Tracking activities



Translating languages



## livio<sup>AI</sup>







Livio Edge AI  
Video #1


## Livio Edge AI Three Pillars


### Video #2




**Hearing Reality Pro**

Advanced technology for **superior** sound quality and comfortable listening in every environment



  
**Hearing Reality Pro**  
Next-generation sound  
*never before possible*

TRANSIENTS  
SPEECH IN LOUD NOISE  
MACHINE  
QUIET  
SPEECH IN NOISE  
WIND  
MUSIC




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**Edge Mode**

**Instant Optimized Adjustments**

Giving patients more control in  
challenging listening environments







## Edge Mode

Ongoing analysis of the environment to provide an advanced level of comfort and clarity whenever and wherever the user needs it



## Patient Benefits

Real-time adjustments made for the listener

Takes the guess work out of customizing memories

More adjustment than can be achieved though the Thrive App

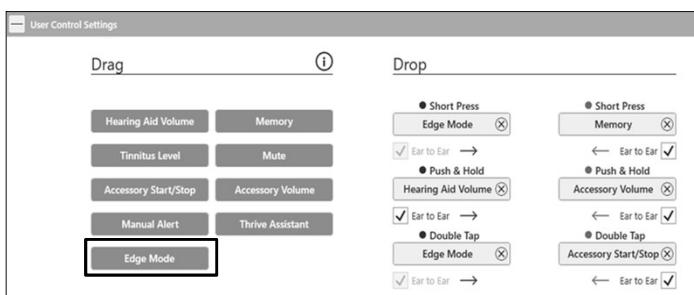
"It's much easier than going into my phone and putting in the different settings... it would be nice to use that feature and be able to say, "Oh, this would work great."

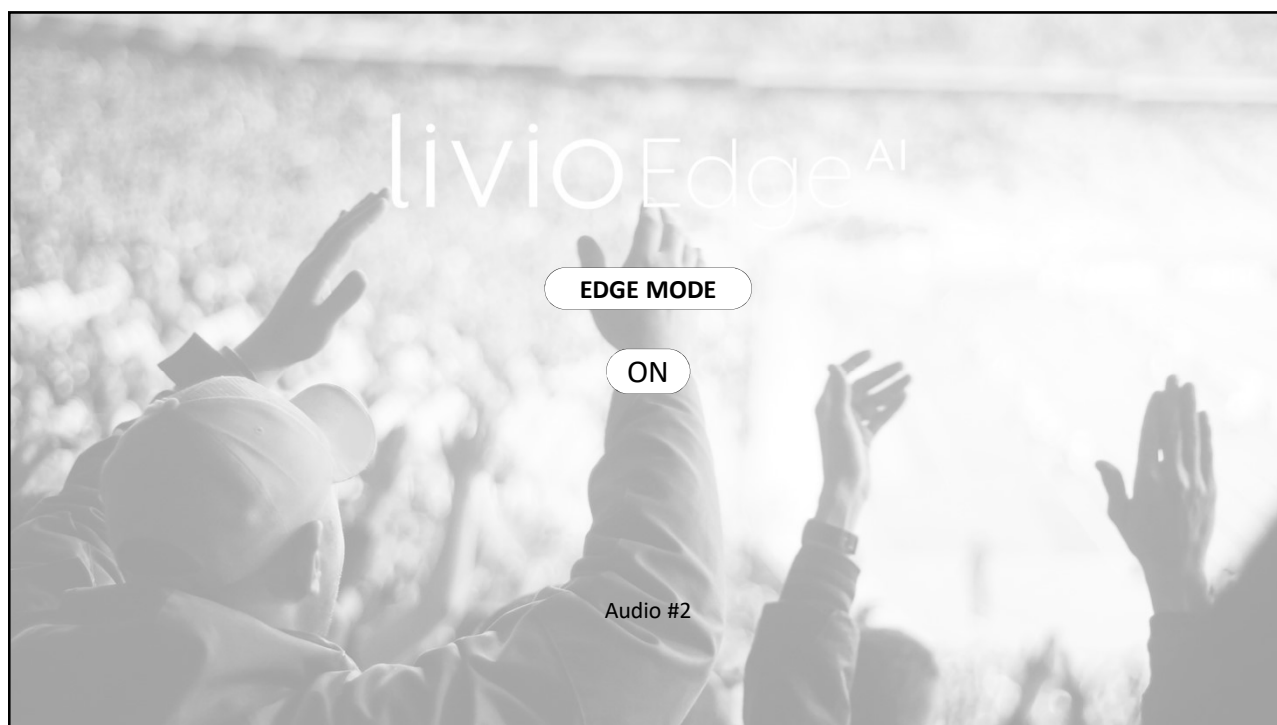
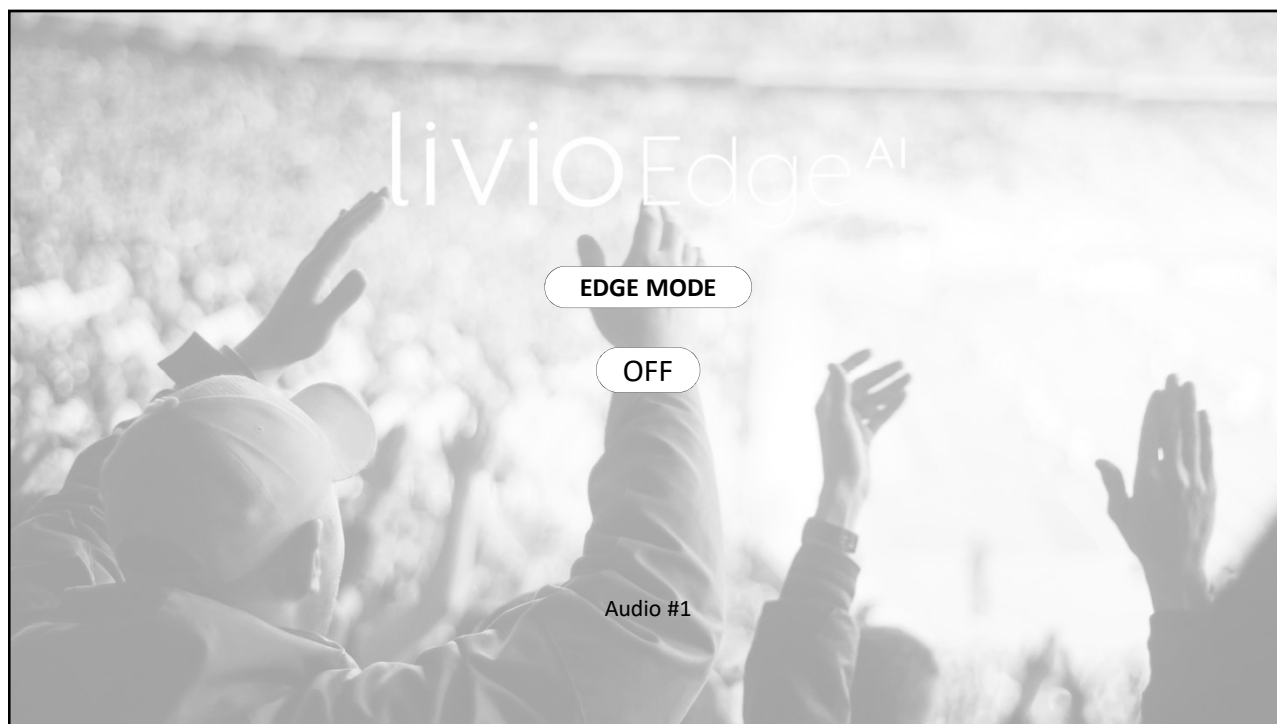
Focus Group Participant

# Enabling Edge Mode

Assign Edge Mode to Short Press or Double Tap

INSPIRE 2020.0







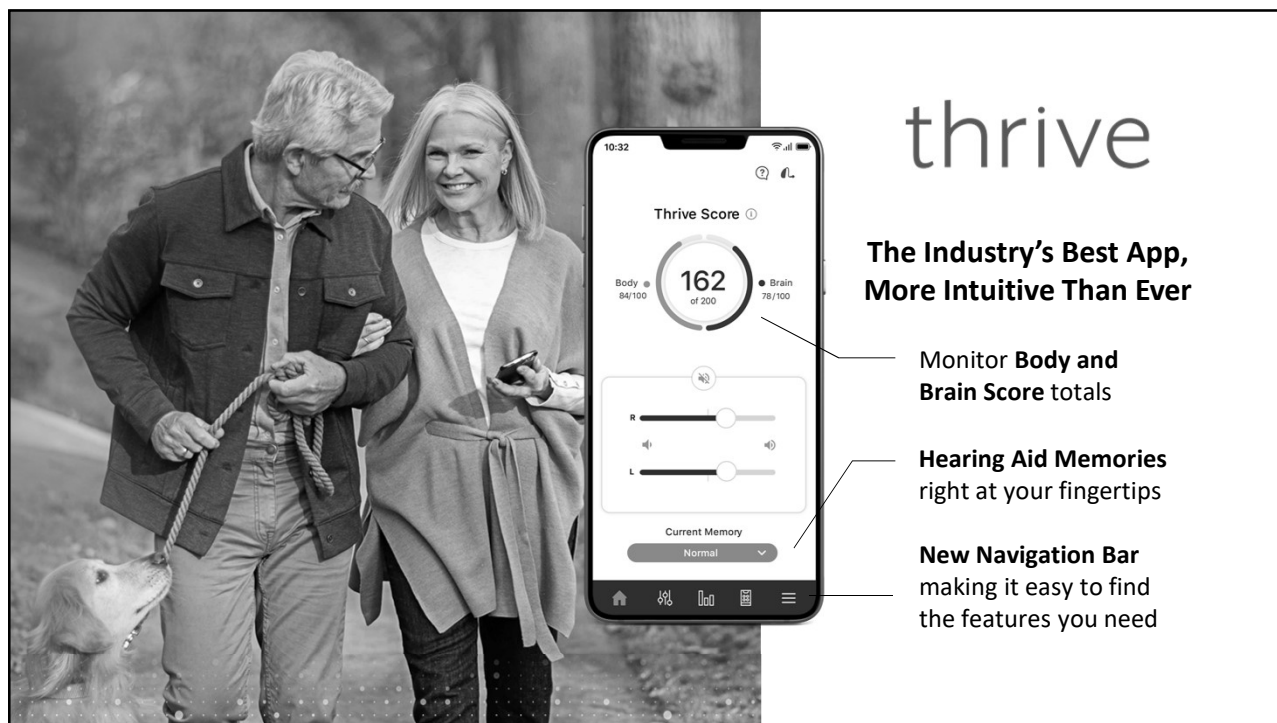
10:32

thrive

The Industry's Best App,  
Now Even More Intuitive

94  
Body Score

78  
Brain Score



thrive

The Industry's Best App,  
More Intuitive Than Ever

Monitor **Body and Brain Score** totals

Hearing Aid Memories right at your fingertips

New Navigation Bar making it easy to find the features you need

10:32

Thrive Score ⓘ

Body 84/100

162 of 200

Brain 78/100

R

L

Current Memory

Normal

Home, Settings, Memories, Reports, Menu icons



## Giving Patients More Control

*Increasing accessibility and enhancing lives*


By 2040,  
**~34.6 million**  
adults will report  
**arthritis-attributable  
activity limitations**


Source: Centers for Disease  
Control and Prevention

**40%**  
adults age 65+  
have age-associated  
**memory impairment**


Source: International Psychogeriatrics (1994)

**Inhibit successful  
hearing aid use:**

 Visual acuity

 Manual dexterity

 Fingertip sensation

 Cognitive ability

Source: [www.hearsogood.com](http://www.hearsogood.com);  
Success with Hearing Aids:  
Vision and Dexterity




## Giving Patients More Control

*Increasing accessibility and enhancing lives*

 Tap Control

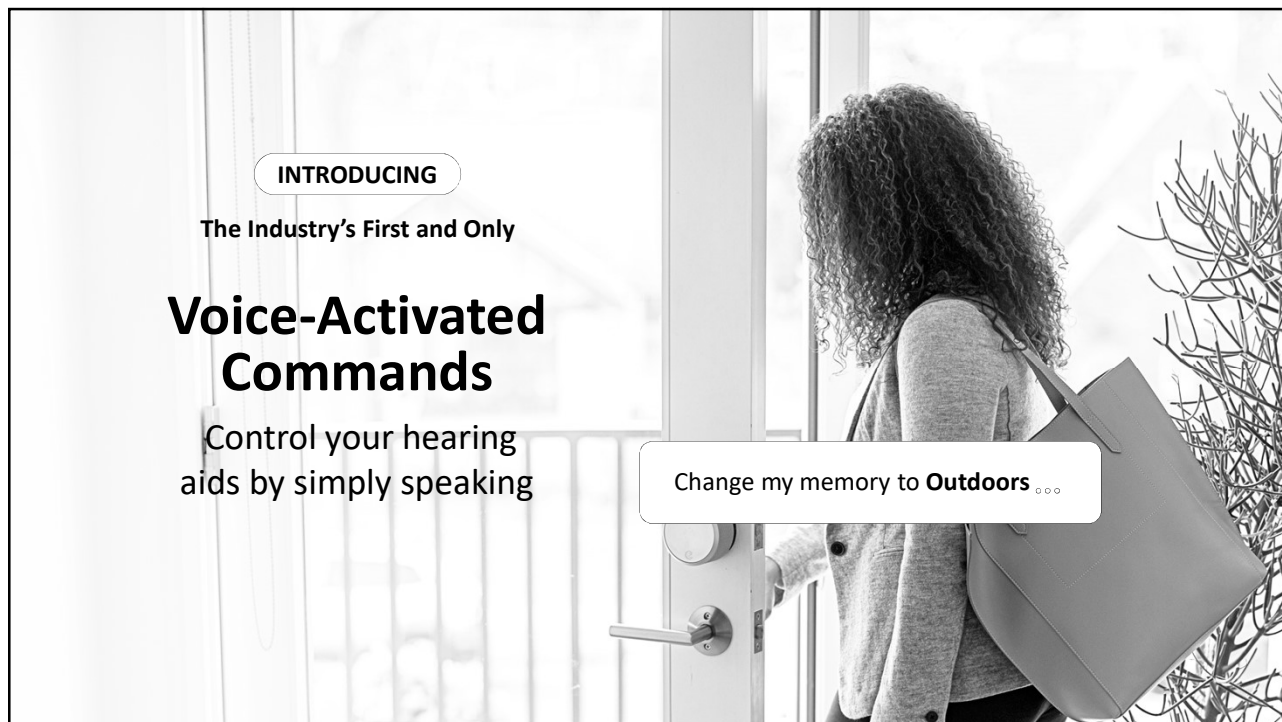
 Translate

 Auto On/Off

 Thrive™ Assistant

 Transcribe

 Reminders



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## Voice-Activated Commands

Control your hearing aids by simply speaking

Change my memory to **Outdoors** ...



## Voice-Activated Commands

### Control Your Hearing Aids

- Increase Volume
- Decrease Volume
- Mute
- Change Memories

### Set a Reminder

# Health Apps

*that Enhance Lives*

thrive

94  
Body Score

78  
Brain Score



## 65+

expected to **double**  
to **70 million**  
people by 2030

## 90%

of seniors want to **stay in**  
**their own home** as they  
age even if they need  
day-to-day assistance

## 87%

of older Americans  
have a **family member**  
as their caregiver

Source: <sup>2</sup> Family Caregiver Alliance, *Family Caregiving and Long-Term Care: A Crucial Issue for America's Families*, Policy Brief. San Francisco, CA: June 2004.





### Who is a Caregiver?

**50**  
Years Old

**60%**  
Employed

**60%**  
Female

More than  
**33%**  
have children  
or grandchildren  
living with them

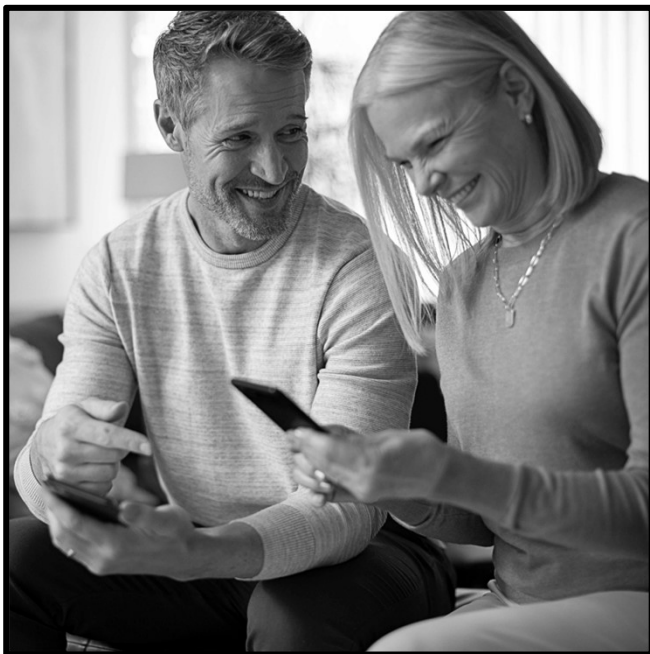
### Caregiver Role

**15%**  
of caregivers  
are long-distance

Most are  
**Family  
members**

**24.4**  
Hours

spent  
caregiving  
per week



### Emotional Impact

**Reduced**  
positive activities

Almost half experience  
**emotional stress  
and physical strain**


Over  
**50%**  
Felt they had  
no choice in  
being a caretaker

### Top Concerns

Keeping a parent  
or loved one  
**safe at home**

**Managing  
medical care**  
and end-of-life decisions



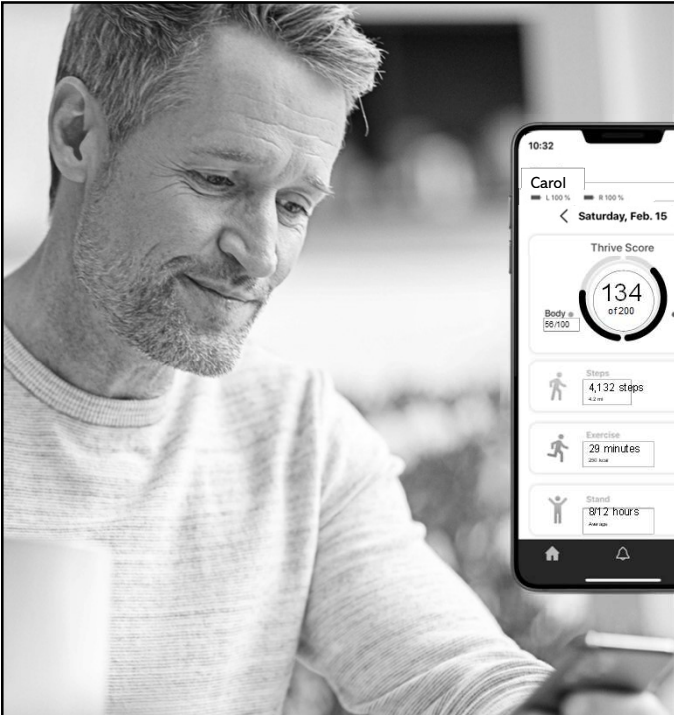


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# thriveCare

Stay informed about your loved one's health and well-being; anywhere, anytime




**Know they are healthy and safe**

**Get alerts if they fall or need help**

**Help them hear better and live better**

The app interface shows the following data for Carol on Saturday, Feb. 15:

- Thrive Score:** 134 of 200 (Body: 55/100, Brain: 78/100)
- Steps:** 4,132 steps
- Exercise:** 29 minutes
- Sleep:** 8 1/2 hours




**thriveCare**

Compatible Exclusively with Livio Edge AI

Apple and Android Versions Available

The smartphone screen displays the thriveCare app interface for Friday, Jan. 10. It features a 'Thrive Score' of 134 out of 200, with a 'Body' score of 56/100 and a 'Brain' score of 78/100. Below the score, there are three sections: 'Steps' (4,132 steps, 4.2 mi), 'Exercise' (29 minutes, 200 kcal), and 'Stand' (8 1/2 hours, 800 kcal). A small white device is shown next to the phone.

**thrive**  
PATIENT



**thriveCare**  
CAREGIVER

The left smartphone displays the thrive logo on a background of a brain scan. The right smartphone displays the thriveCare app interface for a caregiver, showing the same 'Thrive Score' of 134 out of 200, with 'Body' and 'Brain' scores, and sections for 'Steps', 'Exercise', and 'Stand'. A small white device is shown next to the phone.

**PATIENT**

Continued independence  
Support as needed or desired

**CAREGIVER**

Peace of mind  
Awareness

**PROVIDER**

Helps keep hearing aids on ears

livio WITH Edge<sup>AI</sup>



# livio Edge<sup>AI</sup> livio<sup>AI</sup>

Premium

2400

For All

2000 | 1600 | 1200 | 1000

## livio<sup>AI</sup>

### 2000

Transcribe  
Brain and Body Tracking  
CROS System  
Tap Control  
Reminders  
Self Check  
Hearing Care Anywhere  
Auto On/Off

### 1600

Brain and Body Tracking  
CROS System  
Tap Control  
Reminders  
Self Check  
Hearing Care Anywhere  
Auto On/Off

### 1200

Brain and Body Tracking  
CROS System  
Tap Control  
Self Check  
Hearing Care Anywhere  
Auto On/Off

### 1000

Body Tracking  
Tap Control  
Self Check  
Hearing Care Anywhere  
Auto On/Off

Personalized Performance


Personalized Power

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## **2.4 GHz Custom Li-Ion Rechargeable**

Custom Rechargeable  
Video #3



## Personalized Power

**23 Hours** of superior hearing including  
**4 Hours** of streaming

**3.5 Hours** Charge Time

**2.4 GHz Wireless Technology**

Stream from 2.4 GHz Accessories,  
iOS and select Android Devices



## Delivering Everything Patients Want

**Custom, Convenient, Comfortable**

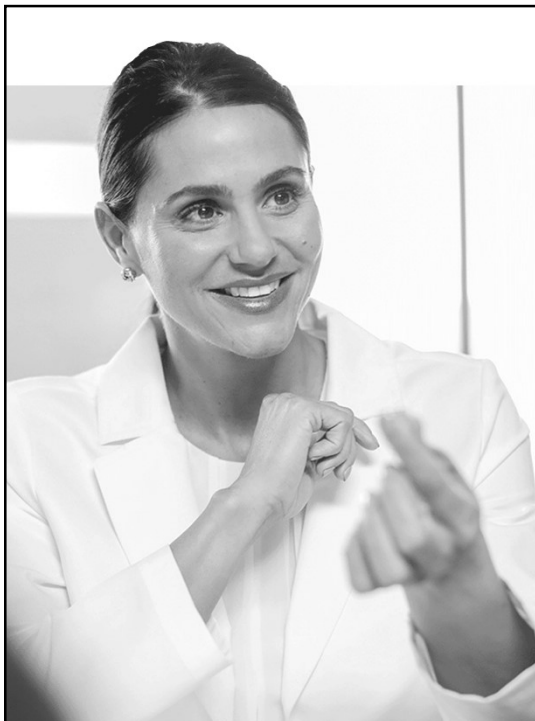
Thrive Platform	Push button, Rotary VC, or Dual User Controls
Artificial Intelligence and Embedded Sensor Technology	Up to 130/70 matrix
Compatible with Starkey 2.4 GHz Accessories	Telecoil (ITE only)
Available in ITE, HS, and ITC	Available in all product tiers: Livio Edge AI, Livio AI, and Livio

Faceplate Colors



Shell Colors





## Wireless Programming

2.4 GHz Custom Rechargeables are Wireless only  
and can be programmed using either:



Starkey Hearing Technologies  
2.4 GHz Programmer  
*Formerly known as Trulink programmer*



Universal 2.4 GHz  
NoahLink Programmer

### User Control Configurations

No user control  
Digital rotary VC only  
Push button only  
Digital rotary VC  
and push button  
(eStore Default)





## Power ON/OFF

**Power Off** is default for Push & Hold gesture

Push & Hold user control must be programmed for each hearing aid individually

*(same behavior that the RIC R currently utilizes, ear-to-ear functionality is unavailable)*

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User Control Settings

Drag	Drop
Hearing Aid Volume	● Short Press Memory
Tinnitus Level	✓ Ear to Ear → ● Push & Hold Power Off
Accessory Start/Stop	□ Ear to Ear ● Double Tap Accessory Start/Stop
Manual Alert	✓ Ear to Ear →
Thrive Assistant	Memory
Edge Mode	← Ear to Ear ✓ ● Push & Hold Power Off
	□ Ear to Ear ● Double Tap Edge Mode
	✓ Ear to Ear →
	← Ear to Ear ✓
	Ear to Ear for Autophone Memories Controlled by Memory Ear to Ear Feature

## Auto ON/OFF

Available in Edge AI and Livio AI

Defaults **Off** in Fitting Summary

INSPIRE 2020.0

### Status

Feedback Cancellor	▶ Not Initialized
Experience Level	▶ 3
Power-On Delay	Short ▼
Auto On/Off	Off ▼
Self Check	▶ Off
Remote Programming	▶ Disabled
Auto Fall Alert	▶ Enabled



### Patient-Focused 2.4 GHz Accessories

Connect simply and easily to smartphones,  
TVs, or media devices



## Introducing Table Mic Video #4



INTRODUCING

### Table Microphone

Enhance communication in  
quiet or noisy environments





**Eight directional microphones**  
and **beam-forming** technology  
enhances listening in  
challenging environments

## Table Microphone

### Primary Use Case(s)

#### Automatic Mode

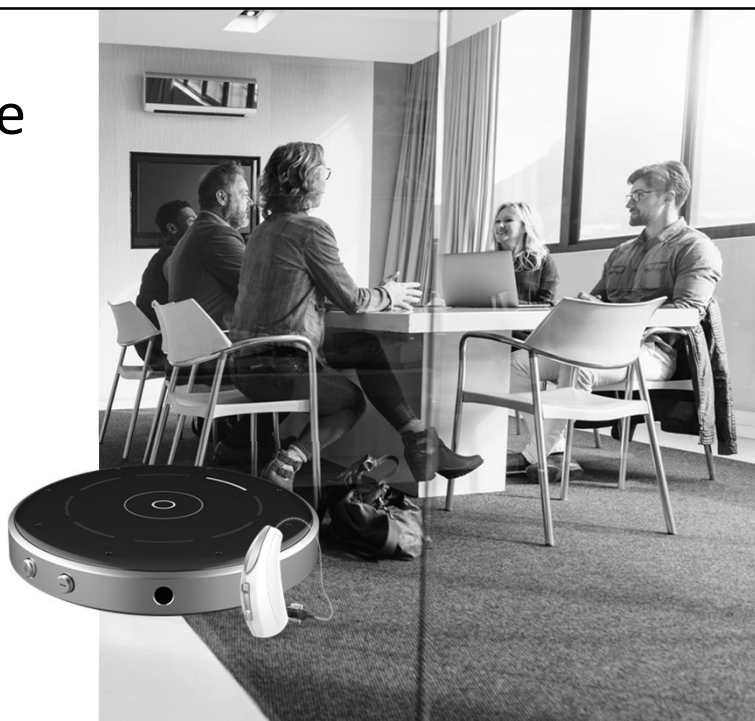
Determines and follows the primary speaker in quiet or noisy backgrounds

#### Manual Mode

Focus on up to 2 speakers via a tap to a particular segment(s)

#### Surround Mode

Listen to multiple speakers in a quiet environment



## Table Microphone

### Secondary Use Case(s)



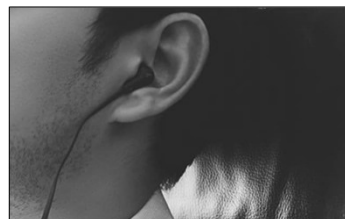
#### Remote Microphone

Stream voice of the person wearing the Table Microphone directly to the hearing aids



#### Audio Streamer

Stream audio from any device that uses a 3.5 mm audio out jack such as TV, MP3, and more



#### Wired Headphones

Benefit for non-hearing aid wearers and normal hearing individuals who desire more effortless listening in quiet or noise



▶))) Streaming Time  
**Up to 12 hours**

⚡ Battery Recharge  
**2 hours**

↔ Operating Range  
**up to 50 feet  
(15 meters)\***

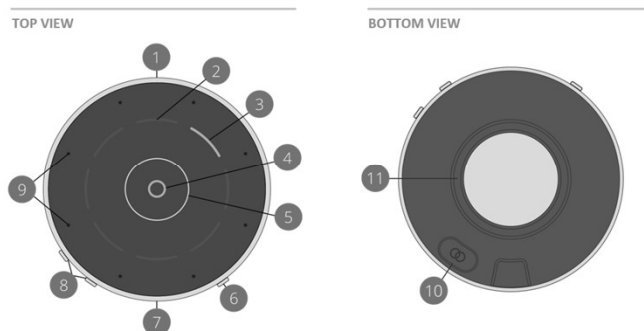
\*Range presumes line of sight and no interference. No hard or soft partitions between hearing aids and the Table Microphone. Wireless range will vary significantly in the presence of interference.



## TABLE MICROPHONE

## Anatomy

1. Micro USB jack
2. Directional touch keys
3. Segments
4. Automatic mode indicator
5. Mode switching button
6. Power button
7. 3.5mm audio input jack
8. Volume +/- buttons
9. Microphones
10. Hearing aid pairing button
11. Magnetic interface for lanyard

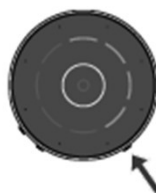


## TABLE MICROPHONE

## Powering On/Off

**POWER ON**

Press power button for 1 second and release.

**POWER OFF**

Press power button for 1 second. Green indicators will display battery level and device will power off.

## TABLE MICROPHONE

## Battery Charging LED Indicators



### GREEN

Green segments indicate battery charge level

Blinking green segment indicates the current level during charging



### ORANGE

LED will display orange when less than 2 hours of battery life remains



### RED

LED will display red when less than 1 hour of battery life remains

## TABLE MICROPHONE

## Pairing Process



### Compatible with

Livio Edge AI, Livio AI and Livio hearing aids



### Two Ways to Pair

Inside or outside of Inspire



### Pairing CROS

hearing aid should be powered on, transmitter remains powered on



### Pairing Multiple Devices

Livio Edge AI, Livio AI and Livio hearing aids can be paired with up to 5 Starkey streaming accessories

Any combination of Table Microphone, Mini Remote Microphone, TV Streamer, and Remote Microphone +

## Table Mic Pairing Video #5

### TABLE MICROPHONE

## Pairing Status Indicator LED



**Left** Pairing Successful  
**Right** Pairing Successful



**Left** Pairing Unsuccessful  
**Right** Pairing Unsuccessful



**Left** Pairing Successful  
**Right** Unsuccessful



**Left** Unsuccessful  
**Right** Pairing Successful

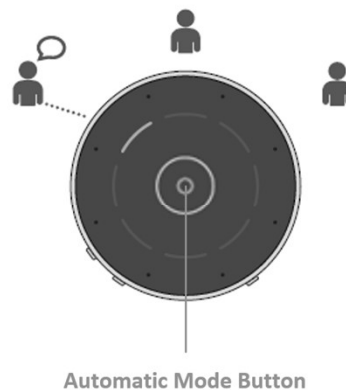


## TABLE MICROPHONE

## Automatic Mode

For best speech understanding, place Table Microphone in the center of a table, as close as possible to the conversation(s) partner

- When the Automatic Mode Indicator (O) is illuminated, the Table Microphone automatically follows the main speaker
- To activate the Automatic Mode (O) press the Automatic Mode button (in the center)



## TABLE MICROPHONE

## Manual Mode

## Single Speaker

For best speech understanding, **place in the center of a table**, as close as possible to the conversation(s) partner.

1

Ensure the Automatic Mode button is off (O is not illuminated)

2

Tap any segment to focus on a specific speaker

3

Tap another segment to switch to a different speaker



## TABLE MICROPHONE

## Manual Mode

## Dual Speaker

For best speech understanding,  
**place in the center of a table,**  
as close as possible to the  
conversation(s) partner.

1

Ensure the Automatic  
Mode button is off  
(O is not illuminated)



2

Tap and hold (1 second) on a second  
segment to focus on an additional speaker

3

Tap a third segment to deselect  
the first two segments

## TABLE MICROPHONE

## Surround Mode

For best speech understanding,  
**place in the center of a table,**  
as close as possible to the  
conversation(s) partner.

1

Tap Automatic/Surround Mode  
Button to listen to multiple  
speakers in a quiet environment.

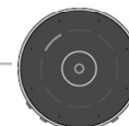
Automatic Mode indicator (O) will  
not be illuminated.



2

Tap Automatic/Surround Mode  
Button to return to Automatic  
Mode.

The Automatic Mode indicator (O)  
will illuminate in blue.



## TABLE MICROPHONE

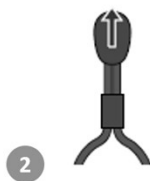
## Remote Mode

The Table Microphone can be worn by a conversation partner for one-on-one conversations.



1 Attach magnetic hanger of the lanyard to back of the Table Microphone.

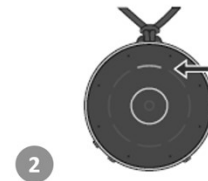
Ensure the hanger is properly inserted and secured.



2 To adjust length, hold the cylinder and pull the closure.



Place within 8 inches (20 cm) of the speaker's mouth.

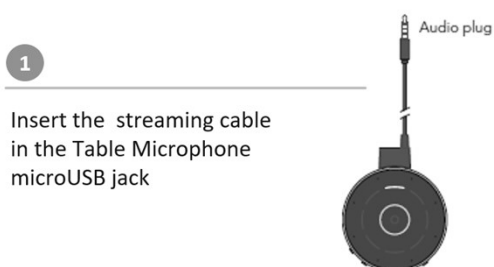


2 When the Table Microphone is worn by the speaker, the top indicator will illuminate for 3 seconds.

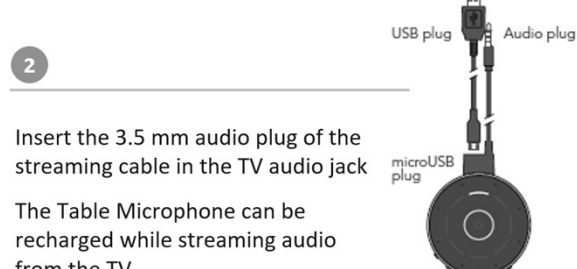
## TABLE MICROPHONE

## Streaming Audio

The Table Microphone can be used to stream audio from any device that uses a 3.5 mm audio out jack such as TV, MP3, and more.



1 Insert the streaming cable in the Table Microphone microUSB jack



2 Insert the 3.5 mm audio plug of the streaming cable in the TV audio jack

The Table Microphone can be recharged while streaming audio from the TV

## TABLE MICROPHONE

# Testimonial

"OMG! Just used the table microphone at dinner. It was amazing! I can't believe what I have been missing forever! Thank you for letting me try this out. Sure wish I had this when I was teaching!"



# Thank You

