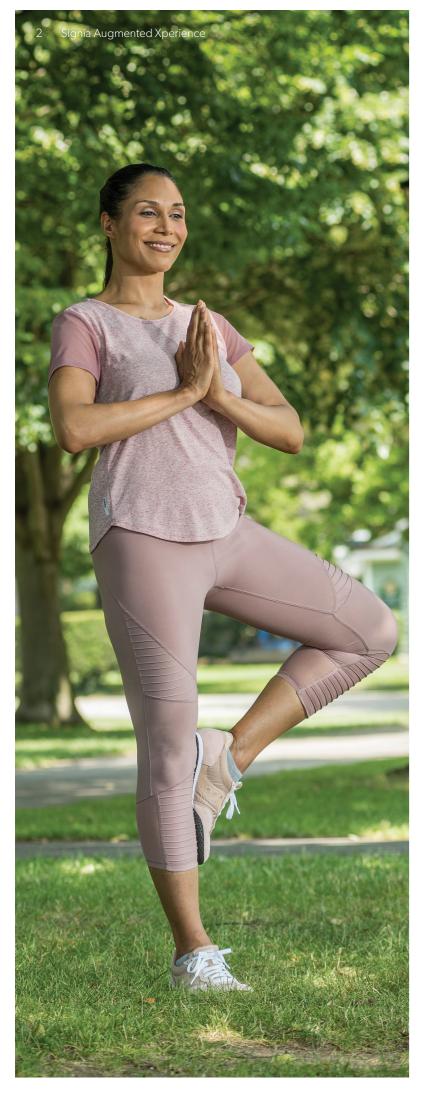
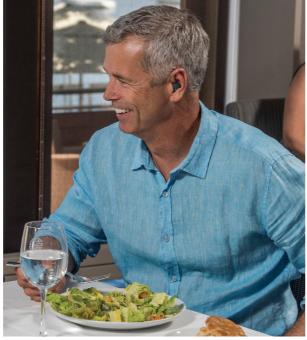
# About Signia Signia hearing aids enhance human performance by giving your patients the ability to hear what matters most in every situation, no matter their level of hearing loss. In short, it helps them better connect, even reconnect, with the world around them. Find out more at signia-pro.com Or ask your hearing care professional for more information on Signia hearing aids, useful accessories and the Signia app. Google Play Compatible with Android and iOS. The app is free of charge. The information in this document contains general descriptions of the technical options available, which do not always have to be present in individual cases and are subject to change without prior notice. The Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by WSAUD A/S is under license. Other trademarks and trade names are those of their respective owners. Find us on: signia-pro.com **f** facebook.com/signiahearing (D) youtube.com/signiahearing Signia is a registered trademark of WSAUD A/S. Brilliant" (a) instagram.com/signiahearing SH202152 8/21 SIV-11168-21











# **Our Mission:**

# Enhancing Human Performance

We put hearing aid wearers first, with products that fit their wants, needs and style. The wearer is at the center of our universe and their needs are woven into our DNA.

For us, this is not about correcting a loss, it's about gaining an edge. Not just performing, but performing at their best.

# A True Partnership

Your success means our success. So we share your goal of delivering the best patient outcomes. And we support your expertise with innovations that enhance patients' lives. Because only Signia combines world-class audiology with cutting-edge technology to deliver iconic innovations in hearing.

Beyond the world-class audiology and cutting-edge technology, Signia offers business support and partnership opportunities to ensure long-term success for you, your practice and your patients. From expert audiological training courses to highly specialized support teams, Signia provides the knowledge and expertise to help you get the most from our technology today and always.

Join the breakthrough in hearing aid technology.

Signia Augmented Xperience Signia Augmented Xperience

# Signia AX

# Speech clarity without compromise

Hearing aids don't always make hearing easy. Background noise can make it difficult to focus on conversation, and conversation can distract you from the rest of your surroundings. When these sounds blend together, it's nearly impossible to focus on what you want to hear. Augmented Xperience has changed all that, and it's only available from Signia.

Augmented Xperience changes the way your patients hear the world. Instead of them having to strain to discern speech from background noise, our new platform uses proprietary Augmented Focus™ technology to process the two separately and create a clear contrast. The sounds are then recombined to deliver outstanding speech clarity in a fully immersive soundscape.

Traditionally, hearing aids have processed all sounds under one set of rules, resulting in signals competing against each other. If you prioritize one part, another is neglected. With Augmented Xperience, **two dedicated processors** can fully optimize different sounds without compromising one or the other. This new platform empowers your patients to better focus on the conversations they want to hear, while still engaging with the sounds around them.



# More contrast. Less distractions.

With a processor dedicated to speech and a processor dedicated to environmental noise, the wearer can better focus on what's important while being more spatially aware.



# Signia AX

# Revolutionary split processing

Augmented Focus uses two separate processors that work together to deliver outstanding speech clarity.

# Speech Understanding

In conversations, every small detail matters. Augmented Focus processes speech in a highly linear, uncompressed way with emphasis on clarity and detail. This brings speech closer to the wearer for enhanced, easier focus.

More than 25% better speech understanding in noise compared to own hearing aids\*

### **Environmental Noise**

Our surroundings are full of sounds outside of speech, which help the wearer connect to their environment. Augmented Focus processes these sounds, like piano music or laughter in a cafe, with higher spatial resolution and more compression to keep them at a distance. Additionally, sudden loud sounds are processed more quickly than ever to prevent them from hindering speech understanding.

95% of participants reported exceptional speech understanding in their home environment\*\*

# Creating a more immersive hearing experience.

Two separate processors allow wearers to fully capture speech and environmental noise independently. Augmented Focus then combines the two to bring speech closer for better understanding and keep environmental sounds at bay for a more realistic hearing experience.

# Conventional Processing

Flat & Unvaried



# **Augmented Focus**

Dimensional & Engaging



- Signia White Paper. Based on transformation of the 1.8 dB SNR improvement using a value of the slope of the psychometric function (Wagener & Brand, 2005)
- \*\* Signia White Paper. 18/19 participants had a mean rating of speech intelligibility-related questions of more than 8.0 and 9.0, respectively

# Signia AX

# The Augmented Xperience platform at a glance



Audiological core processors

Increased binaural audio transfer rate

110% 60% 27% 22%

Reduced binaural latency

More electric

circuits

Longer battery runtime

# **New Audiological Features**



# e2e wireless 4.0: A great leap for true binaural hearing

e2e 4.0 significantly boosts the speed of data transmission and a 60% reduction in latency provides inaudible shifts between environments. The synchronization of more binaural audio data than ever before ensures clearer speech processing with highprecision directional awareness.



# Increased input dynamic range

The microphones and the state-of-the-art analogue input stage can handle signals up to 117dB with great sound quality. That's very close to the full capacity of human ears and ensures a clean, crisp signal for scenarios like concerts.



### TruEar 360

The powerful processing engine allows for an exceptional TruEar 360 mic mode that reproduces and emphasizes the capabilities of the natural pinna-effect better than ever. TruEar 360 highlights the difference between front and back sources of sound to make localization of sound sources easier.





# Enhanced feedback cancellation

e2e 4.0 also synchronizes feedback cancellation between the ears in the same phase, removing more artifacts for a smoother overall sound experience.

# **Enhanced Audiological Features**



# Direct streaming for iOS and Android

Augmented Xperience offers direct streaming for both iOS and ASHA-compatible Android smartphones. It handles the signal of a streaming input independently from other signals, ensuring that the sound is even clearer and easier to optimize.



# **Automatic Situation Detection**

Provides detailed information about the wearer's movement and environment. Analyzing and adapting to the acoustic and motion changes, these sensors deliver a clear understanding of speech from any direction and maximizing audibility as you move throughout the day.



# Own Voice Processing (OVP™)

Can separate the wearer's own voice from other speech and noise for a natural sound, increasing first-fit acceptance to 80% and keeping patients engaged in conversations.<sup>1</sup> \*Excluding Insio Charge&Go











Integrated Telecoil

# Signia AX

# Pure Charge&Go T AX, AX, and CROS AX

The new Pure Charge&Go T AX is Signia's smallest rechargeable RIC with telecoil and delivers a slimmer, sleek design

The first hearing aid on our revolutionary Signia AX platform, the Pure Charge&Go T AX is the new standard as it delivers 36 hours of wear-time, including 5 hours of streaming – 12 hours more wear-time than the standard Pure Charge&Go AX.

- Our smallest RIC with a telecoil, negligibly longer than the standard version a difference less than the thickness of a dime
- Pure Charge&Go AX delivers up to 24 hours of use on a single charge, including 5 hours of streaming for complete flexibility on the move
- Both models come with a compact charger with the option to upgrade to a portable or Dry&Clean Charger
- Direct streaming to Android (ASHA) and iPhone addresses a broader range of patients
- Available as a CROS device
- New earwear 3.0 for proven higher fit rate, sleek design and increased patient satisfaction
- Signia app and the Signia Assistant for the most personalized augmented hearing experience



















Fine Gold



Deep



Sandy



Rose gold











Soundscape



Android & iPhone Connectivity



on-the-go











Insio Charge&Go AX

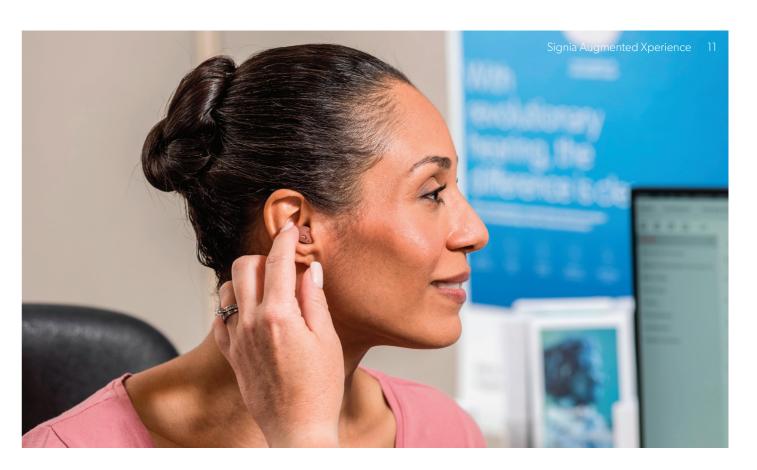
# Signia AX

# Insio Charge&Go AX

# The world's first rechargeable custom hearing aids with contactless charging and Bluetooth® connectivity

Our new rechargeable Insio Charge&Go AX ITC and ITE models redefine what custom hearing aids can offer wearers.

- Tailored to wearer's individual ear anatomy and a slightly smaller design for all-day comfort and increased wearer satisfaction
- Easy insertion and removal to address challenges with dexterity
- Contactless charging for easy operation provides up to 24 hours of use on a single charge
- Direct streaming to Android and iPhones addresses a broader range of patients
- Signia app and the Signia Assistant for the most personalized augmented hearing experience







Dark Brown









Tan

Beig



Insio Charge&Go AX with compact charger







Connectivity



Charging





Assistant





Automatic Situation Detection



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# **Pure Chargers**

# A world of charging possibilities

You can offer Signia AX hearing aid wearers the choice of three different chargers to power their hearing aids, depending on their preferences and lifestyle.



# **Pure Charger**

This small and highly reliable desktop charger addresses basic needs when it comes to providing power. The Pure Charger uses a USB power adapter. In addition, this standard charger is easy to use for those with dexterity issues.



# Pure Portable Charger

This sophisticated charger offers comfort and charging on the go. Its power bank holds up to 3 full charges for a pair of hearing aids. A protective lid prevents dust accumulation. The Pure Portable Charger is powered via USB-C.



# Pure Dry&Clean Charger

Upgrade Option for Level 3, 5 and 7 Hearing Aids

Using the ultimate in state-of-the-art charging technology, the Pure Dry&Clean Charger not only charges the hearing aids but also offers UVC cleaning and drying technology to keep them in peak condition. The UVC cleaning starts automatically when the hearing aids are placed inside and is completed in just 15 minutes.

The Pure Dry&Clean Charger also has a lid to ensure optimal hearing aid cleaning and storage and is powered via USB-C.

# EarWear 3.0

# Hearing aids that fit better and look better

Our EarWear 3.0 offers proven higher fit rate, a sleek design and increased patient satisfaction.

EarWear 3.0 is a comprehensive solution that supports a broad range of fitting and cosmetic needs. Your patients can now enjoy a more comfortable fit, more stylish look and consistently reliable performance.

Eartips are available in a variety of sizes with both closed- and open-build versions that fit most ear anatomies. This means fitting more patients is easier than ever before.



miniReceiver 3.0

# EarWear 3.0 advantages at a glance:

# Higher physical fit rate

Soft eartips and improved receiver sizes enable a secure, snug fit that's comfortable for even the smallest ear canals.

## Appealing design

Updated form and in-ear position provides a closer fit and less visibility.

### More secure fit

Built to securely lock into the ear canal, with minimal movement and no need for an anchor.

### **Eartips**

Compatible with miniReceiver 3.0 and easier for your patients to switch out, compared to click domes.

# Smaller hearing aids

The introduction of a substantially smaller plug allows for smaller RIC designs overall.

### Improved usability

The proven design makes eartips much easier for patients to switch out. Compatible with miniReceiver 3.0.







Open EarTips 3.0





Tulip EarTips 3.0





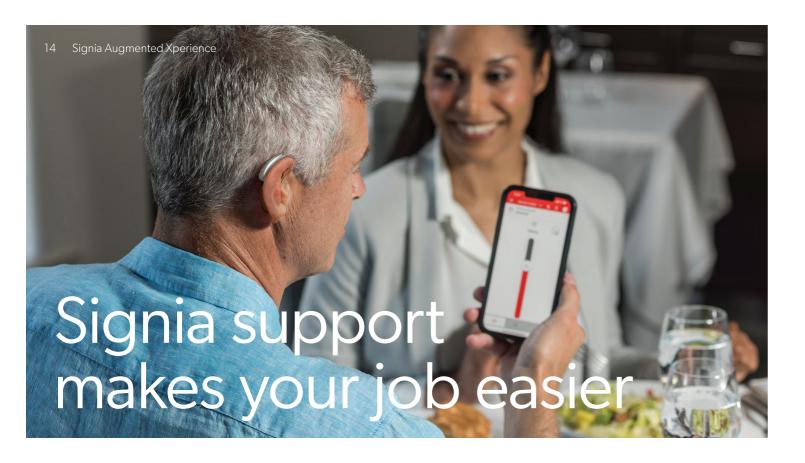




Sleeves 3.0

All three chargers use galvanic charging technology and are compatible with Pure Charge&Go AX, Pure Charge&Go T AX and CROS Pure Charge&Go AX.

Each delivers a full charge in about 4 hours and a 30-minute quick charge for added flexibility on the go.



From our all-in-one Signia app to our Connexx fitting software, Signia supports you and your patients at every step.

The Signia app combines all previous apps into one for an enhanced wearer experience with an adaptive layout that displays features based on the hearing aids it's paired with.

Beyond remote control, streaming capabilities with multiple devices, the app offers two revolutionary solutions that make it easier for you to fit and stay in touch with patients, Signia Assistant and Telecare.



# Signia Assistant

Inspired by the way the human brain's neural network solves challenges, the Signia Assistant uses its Al deep live neural network to offer real-time sound adjustments in response to changing listening needs.

# TeleCare™

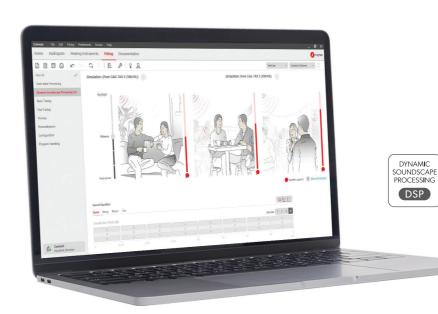
Signia Telecare enables virtual connection to remote care when in-person visits aren't ideal or possible. You can hold virtual appointments via phone or video call and adjust the hearing aid settings remotely in the Connexx fitting software.



Google Play

Download on the App Store





# Connexx with Augmented Xperience

Our Connexx fitting software puts you in the driver's seat with real-world insights to optimally support each individual patient.

First Fit in Connexx configures Signia AX hearing aids to allow the wearer to hear what is important to him or her. The First Fit settings have been carefully optimized to provide a good starting position for each wearer.

| Features                             | Information  | Performance levels                    |                                       |                                       |
|--------------------------------------|--|---------------------------------------|---------------------------------------|---------------------------------------|
| Data Input &                         |  | 7AX                                   | SAX                                   | ЗАХ                                   |
| Transmission  Augmented Focus™       | Augmented Focus™ can separate the focus sound (speech) from surroundings with split processing to create a contrast between the two, designed to make it easier to follow conversations.   | <b>✓</b>                              | <b>✓</b>                              | <b>✓</b>                              |
| Acoustic Sensors                     | Upgraded to detect even more variables of sound than ever before to provide accurate information about the environment.  |                                       | <b>✓</b>                              | ✓                                     |
| Motion Sensor                        | Integrated in the hearing aids to recognize changes in the wearer's movement.  This motion data complements the acoustic data to optimize Dynamic Soundscape Processing 2.0. <sup>1</sup>  | <b>~</b>                              | <b>✓</b>                              | <b>✓</b>                              |
| e2e wireless 4.0                     | Enhanced speed of data transmission, designed to deliver a smoother sound experience and inaudible shifts between different settings. Enables synchronization, binaural directionality, Spatial Speech Focus, CROS/BiCROS.                               | <b>✓</b>                              | <b>✓</b>                              | <b>✓</b>                              |
| OVP™<br>(Own Voice Processing)¹      | Utilizes real-time recognition of the wearer's voice to deliver a natural own-voice impression. Available for RIC/BTE devices with e2e wireless in binaural fittings.<br>Improves first-fit acceptance up to 80% <sup>2</sup> *Excluding Insio Charge&Go | <b>✓</b>                              | <b>~</b>                              | <b>✓</b>                              |
| Processing &<br>Sound Design         | A unique sound experience by shaping the two processing streams.   |                                       |                                       |                                       |
| Dynamic Soundscape<br>Processing 2.0 | Precise processing for awareness of sounds and enhancement of speech for added contrast. Additional personalization available via Connexx for a customized experience. <sup>3</sup>  | <b>✓</b>                              | <b>✓</b>                              | $\checkmark$                          |
| Signal processing / Gain & MPO       | Signia processing and frequency shaping - Increased channels = increased in precision and processing. Split processing with AX doubles the channels available with a binaural fitting up to 192 channels.  | 96/20<br>Universal<br>48/20<br>Manual | 64/16<br>Universal<br>32/16<br>Manual | 48/12<br>Universal<br>24/12<br>Manual |
| Hearing Programs                     | Number of programs configurable in Connexx.  | 6                                     | 6                                     | 6                                     |
| Extended input range                 | 117 dB 24 bit processing for enhanced digital encoding of soft and loud sounds.  |                                       | <b>_</b>                              | <b>✓</b>                              |
| Speech and noise management          | Reduces listening effort using sophisticated sound processing.   |                                       | <b>_</b>                              | ✓                                     |
| SoundSmoothing™                      | Reduces the annoyance of sudden loud impact sound such as when handling glassware.   |                                       | <b>✓</b>                              | <b>√</b>                              |
| Feedback cancellation                | High speed monitoring and control of feedback in individual processing channels.   | <b>✓</b>                              | <b>✓</b>                              | <b>✓</b>                              |
| eWindScreen                          | Reduces the annoyance of wind noise when outdoors. <sup>4</sup>  |                                       | <b>✓</b>                              | <b></b>                               |
| Extended bandwidth                   | 12 kHz bandwidth for enhanced processing of high-frequency speech and environmental sounds.  |                                       |                                       |                                       |
|                                      |  |                                       |                                       |                                       |

Froehlich M, Branda E, Freels K. (2019) New dimensions in automatic steering for hearing aids: Clinical and real-world findings. Hearing Review. 26(11):32-36.

| Features                | Information   | Performance levels             |                         |          |
|-------------------------|---|--------------------------------|-------------------------|----------|
|                         |   | 7AX                            | SAX                     | ЗАХ      |
| Speech Quality          |   |                                |                         |          |
| Binaural Directionality | Enhancing speech understanding in challenging and noisy situations via e2e 4.0 processing. Shown to provide a significant benefit compared to other directional processing algorithms, significantly better performance than competitive products, and for individuals with mild-to-moderate hearing losses, significantly better performance than age-matched controls with normal hearing. <sup>3,5</sup> | ✓<br>                          | <b>✓</b>                | <b>✓</b> |
| Wireless CROS/BiCROS    | Compatible with CROS Transmitter.   | $\checkmark$                   | $\checkmark$            | <b>✓</b> |
| Spatial SpeechFocus     | Steers the directional beam to the front, left, right, or behind the wearer, depending on the direction of the dominant speech source. Studies have shown SpeechFocus can provide an average ~5 dB SNR advantage (compared to omnidirectional), which can lead to a 30-50% improvement in speech understanding for speech signals originating from behind the user. 3.6                                     | Front<br>Back<br>Right<br>Left | Front,<br>Back,<br>Omni |          |
| Frequency Compression   | Designed to improve the detection of speech sounds for wearers with reduced high frequency hearing thresholds. Frequency compression is selectively activated based on audiological criteria.   |                                | <b>✓</b>                | <b>✓</b> |
| Personalization         | Activated based on audiological criteria.   |                                |                         |          |
| TwinPhone               | Delivers the phone conversation to both ears, which provides a 3-8 dB improvement in perceived loudness and has been shown to increase speech recognition by $>$ 20% when compared to listening with one ear. Two available for bilateral fittings. <sup>3</sup>  | ✓<br>                          | <b>✓</b>                | <b>✓</b> |
| Tinnitus                | A choice of tinnitus treatments based on the world's first Notch Therapy or traditional sound therapy signals. It is even possible to combine the two approaches.   | <b>✓</b>                       | <b>✓</b>                | <b>✓</b> |
| EchoShield              | Dedicated program for reverberant environments. Provides significantly reduced listening effort in reverberant environments, with the majority of individuals obtaining a 10-20% improvement in speech recognition. <sup>7</sup>  | <b>✓</b>                       |                         |          |
| HD Music                | Preset programs for enhancing enjoyment of non-streamed music   | 3                              | 3                       | 1        |
| Wearer Interaction      |   |                                |                         |          |
| Direct Streaming        | iOS (Apple) and AHSA (Android) compatible. Utilizes Bluetooth low energy-which is designed specifically to deliver optimal sound quality when streamed to hearing aids. AX streaming is processed separately from microphone input to enhanced clarity with a dedicated compression system. <sup>8</sup>  | ✓                              | <b>✓</b>                | <b>✓</b> |
| Streaming Accessories   | Compatible with Streamline Mic and Streamline TV.   |                                | <b>✓</b>                | <b>✓</b> |
| Directional Hearing     | Directional Hearing is part of the Signia App and allows the wearer to adjust the span and directional focus of the microphone beam.  | <b>/</b>                       | <b>✓</b>                |          |
| Signia App              | Connects patients with immediate benefits and support in an intuitive solution.   |                                | <b>✓</b>                | <b>✓</b> |
| Face Mask Mode          | Improves audibility for Signia wearers communicating with someone wearing a face mask-all with the touch of a button in the Signia App. $^{9}$  |                                | <b>/</b>                | <b></b>  |
| Signia Assistant        | 24/7 digital assistant for on-demand AI support for patients for adjustments and questions with all Bluetooth hearing aids.   |                                | <b>✓</b>                | <b>/</b> |
| TeleCare <sup>™</sup>   | Provides remote fine-tuning services including additional tools to follow up with patients. Proven to increase patient satisfaction for new hearing aid fittings more than patients fitted without TeleCare. In addition, the user engagement and autonomy can be increased via the Signia App. <sup>10</sup>   | <b>✓</b>                       | <b>✓</b>                | <b>✓</b> |

 $<sup>^2 \ \, \</sup>text{Høydal, E. H. (2017). A new own voice processing system for optimizing communication. Hearing Review, 24(11), 20-22.} \\ \ \, \text{Further details: www.signia-pro.com/ovp-study.}$ 

<sup>&</sup>lt;sup>3</sup> Froehlich M, Freels K, Powers T. (2015). Speech recognition benefit obtained from binaural beamforming hearing aids: comparison to omnidirectional and individuals with normal hearing AudiologyOnline, Article 14338. Retrieved from http://www.audiologyonline.com

<sup>&</sup>lt;sup>4</sup> Freels K, Pischel C, Wilson C, & Ramirez P. (2015, October). New wireless, binaural processing reduces problems associated with wind noise in hearing aids. AudiologyOnline, Article 15453. Retrieved from http://www.audiologyonline.com.

<sup>&</sup>lt;sup>5</sup> Branda E, Powers TA, Weber J. (2019) Clinical Comparison of Premier Hearing Aids. Canadian Audiologist. 6 (4).

 $<sup>^{6} \ \</sup> Chalupper J, Wu Y, Weber J. (2011) \ New \ algorithm \ automatically \ adjusts \ directional \ system for \ special \ situations. \ Hearing \ Journal. \ 64(1): 26-33.$ 

Meyers C, Branda E (2016) Reducing Reverberation with EchoShield: Clinical Outcomes White Paper https://www.signia-library.com/scientific\_marketing/reducing-reverberation-with-echoshield-clinical-outcomes/

 $<sup>^{8} \ \</sup> Froehlich \, M, Junius \, D, \, Branda \, E. \, (2017) \, A \, Comparison \, of Signal \, Quality \, of Direct \, Streaming \, Hearing \, Aids. \, Canadian \, Audiologist. \, 4 \, (4).$ 

<sup>&</sup>lt;sup>9</sup> Branda, E (2020) Improving Communication with face masks whitepaper  $https://www.signia-library.com/scientific\_marketing/improving-communication-with-face-masks/$ 

<sup>&</sup>lt;sup>10</sup> Froehlich M, Branda E, Apel D. (2018). Signia TeleCare facilitates improvements in hearing aid fitting outcomes. AudiologyOnline, Article 24096. Retrieved from www.audiologyonline.com

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# **NOTES**