

# **REPLICATING NATURE.**

Signia Nx with OVP™ for the most natural own voice and highest acceptance.



## THE OWN VOICE ISSUE, AN UNNATURAL SOUND.

## SIGNIA Nx WITH OVP™ FOR THE MOST NATURAL OWN VOICE AND HIGHEST ACCEPTANCE.

As hearing care professionals, we strive to provide hearing aid users with sound quality that replicates what nature intended. Overall audibility and a natural sounding own voice are essential for first fit acceptance. Yet many hearing aid wearers do not like the sound of their own voice.

Every hearing aid wearer experiences a change in the sound of their own voice. Especially first time users and wearers with a mild or moderate hearing loss struggle with this perceived occlusion effect. Any such negative perception heavily affects acceptance and often leads to the rejection of hearing aids.

In an attempt to resolve the own voice issue, hearing care professionals can reduce gain and open the venting, reducing audibility and speech understanding in noise. Whatever they do, the result is a compromise between sound quality and overall audibility.

Until today, this widely acknowledged problem has been considered unresolvable.





Signia Nx, the world's most advanced hearing aid platform, provides the first genuine solution to the own voice issue. It delivers unsurpassed first fit acceptance by combining uncompromised audibility with a natural sounding own voice.

The world's first Own Voice Processing (OVP™) improves spontaneous acceptance of own voice by 80% of dissatisfied hearing aid wearers.\*

The revolutionary natural sounding own voice provided by Signia Nx is based on its **leading Ultra HD e2e binaural link**. Its continuous full-bandwidth audio exchange enables dynamic scanning and processing of the wearer's own voice completely independently from all other sounds, including all other voices.

This allows hearing care professionals to fine-tune the hearing aids for optimal audibility of the entire acoustic environment without having to compromise this audibility to improve the sound quality of the wearer's own voice.

In this way, Signia Nx with OVP™ benefits all hearing aid wearers. It replicates the natural hearing experience to deliver the highest sound quality and releases the hearing aid's full potential for best hearing performance in any situation, even in very noisy environments.

\* See legal note on final page of this document.

### THE WORLD'S FIRST NATURAL OWN VOICE, BASED ON THE LEADING BINAURAL LINK.

CONTINUOUS **BINAURAL LINK** 

For the most natural experience, our Ultra HD e2e always-on ear-to-ear (e2e) link now also harnesses binaural beam-forming technology to scan precisely for the wearer's own voice.

he revolutionary natural experience of Signia Nx is only possible by processing the sound of the hearing aid wearer's own voice completely independently from all other voices and sounds.

The key to OVP<sup>™</sup> is our upgraded **continuous full-bandwidth binaural** link, Ultra HD e2e. It now also powers beam-forming technology to create a precise scanning beam that identifies the individual sound path of the wearer's voice as it travels to the hearing aids. This level of precision is only possible with the **new fully integrated silicone** microphone network.

Ultra HD e2e enables instantaneous and continuous dynamic own voice detection and patented dual processing of the own voice and the remaining soundscape.

Signia Nx thereby provides the most natural own voice as well as the best speech understanding in noise.



### **FIRST EVER OWN VOICE DETECTION**

The highly precise new microphone network identifies the wearer's own voice reliably due to its unique spatial sound path. The continuous binaural link ensures dynamic detection in all situations.



### REVOLUTIONARY **DUAL PROCESSING**

Signia Nx is the first platform to process the own voice instantly and completely independently from all other voices and sounds, combining a **natural sounding own** voice with uncompromised audibility for a natural overall experience.

### **PROCESSING IN THE INDUSTRY**, THE MOST ADVANCED SOUNDSCAPE SUPERIOR SPEECH UNDERSTANDING IN NOISE.

B eyond the wearer's experience of a natural own voice, **Ultra HD e2e** also powers binaural beam-forming technology to provide clear speech understanding and a natural experience in all situations, even the loudest.

New algorithms enable the **most precise spatial awareness**. Hearing aid wearers can now get an uncompromised spatially open experience with all the benefits of **directionality**.

For crystal clear sound, our **extended dynamic range** with an incredible 113 dB maximum input delivers excellent signal quality in loud environments. And the powerful new feedback canceller provides the highest stable gain to protect signal quality artifact-free.

The whole system is steered by Signia's unique classifier which ensures OVP<sup>™</sup> and soundscape processing work in perfect harmony to replicate the experience of natural hearing.

### UNRIVALED SPATIAL **AWARENESS**

A breakthrough in sound quality, our **new** HD Spatial algorithms replicate the natural way we localize sound. This applies to all environments, even very noisy ones in which users enjoy "better than normal hearing".\*\*

\*\* See legal note on final page of this document.

### **CLEAR SOUND** WITHOUT DISTORTION

Our extended dynamic range is now available universally across all programs. In loud situations, the full range of analog soundwaves are smoothly converted into digital signals for a natural experience.

Highest feedback stability provides outstanding flexibility when fitting the hearing aids. With no artifacts, the feedback canceller maintains optimal signal quality for a comfortable, natural experience.

### UNIQUE CLASSIFICATION

Wearers' needs change depending on their environment, whether they are moving or stationary, and whether they are speaking or listening. Signia Nx is the only system that uses acoustic, motion and voice detection to automatically orchestrate all hearing aid features to replicate the wearer's natural hearing behavior.

### **ADVANCED FEEDBACK** CANCELLATION

## **SUPERIOR HEARING PLUS BLU** A UNIQUE COMBINATION IN THE INDUSTRY.

# BLUETOOTH,

oday's hearing aid wearers expect the highest hearing performance and seamless connectivity to help them hear in a modern world.

Only Signia hearing aids combine the most advanced connectivity technologies to deliver a natural sounding own voice and uncompromised audibility with direct streaming.

Signia Nx offers **the only wireless system combining Bluetooth and Ultra HD e2e** thanks to its high energy efficiency.

Ultra HD e2e enables multiple unique audiological features. It is the **continuous full-bandwidth binaural link** that delivers the most natural hearing experience and sets Signia Nx apart from other manufacturers' basic e2e wireless systems. Only Ultra HD e2e allows us to deliver our patented OVP<sup>TM</sup> and "better than normal hearing".\*\*

Our 2.4 GHz Bluetooth technology delivers the highest quality audio streaming from smartphones and TV. And our advanced **laser edge antenna** enables the smallest sized hearing aid with this special combination of wireless technologies.

\*\* See legal note on final page of this document.

### ULTRA HD e2e BINAURAL LINK

Continuous audio processing and data exchange between the hearing aids enables unrivaled performance with OVP™ and "better than normal hearing".\*\*

### 2.4 GHz BLUETOOTH FOR BEST AUDIO STREAMING

Direct streaming of phone calls and music from iPhone plus audio streaming from all other Bluetooth smartphones and TV via StreamLine Mic and StreamLine TV.

### THE UNIQUE SIGNIA TELELINK

acoustic connectivity system allows users to benefit from the myControl App when other wireless systems cannot be used e.g. during airplane mode. It also provides remote control with our discreet miniPocket<sup>™</sup> accessory.



### Advanced remote control app

myControl App is the only app offering true 360° microphone steering. The data connection for remote control works directly from iOS and Android smartphones.

INFEE

## SIGNIA TELECARE, **REVOLUTIONARY REMOTE HEARING CARE.**

earing care professionals strive to find the best fitting and fine-tuning for their patients. Finding the optimal settings in the controlled environment of a practice is one thing - but how to ensure that patients benefit from the most natural hearing experience in their daily lives?

Signia TeleCare keeps hearing aid trials on track and drives the conversion of patients with hearing loss to satisfied customers.

The new TeleCare 3.0 introduces full live remote tuning so professionals can fine-tune patients' hearing aids in the real-life situations for which they are intended. They thus benefit from instant feedback to improve the fitting on the spot, much like a **virtual home visit**.

In combination with its unique guided assistance and communication via CareChat, TeleCare 3.0 saves time for hearing care professionals and their patients and raises the quality of care.

### **REMOTE FITTING IN NATURAL SITUATIONS**

TeleCare 3.0 enables use of the most powerful fitting software, Connexx<sup>™</sup>, fully remotely from a PC or laptop. Offering full live remote tuning and video call, Connexx is synchronized with the TeleCare portal for support in patients' natural surroundings.

### INTRODUCING THE VIRTUAL HOME VISIT

After the personal first fitting at the practice, follow-up appointments can be held online via video call. This allows professionals to adjust the hearing aids for the most natural individual sound quality in real time and at the patient's convenience to keep the trial on track.



### THE SMARTEST PATIENT CARE APP

The virtual home visit is available for all patients with an iOS or Android device via the myHearing App. In addition to guiding them through the trial process, the award-winning app\* now serves as the hearing care professional in their pocket, with them every step of the way.

# SIGNIA Nx PRODUCT PORTFOLIO.

### PURE Charge&Go Nx

### The most natural own voice with convenient wireless rechargeability.

The new Pure™ Charge&Go Nx combines all the advantages of Signia Nx with convenient wireless rechargeability. It is intuitive to handle because we integrated wireless charging into its design.

Wearers no longer worry that they might break a moving part or struggle to change disposable batteries. Only this contactless charging system gives wearers complete convenience, knowing that the hearing aids charge as they should every time.

The high-capacity Li-Ion power cell of Pure Charge&Go Nx supports top Bluetooth connectivity, allowing wearers to enjoy long-lasting high guality audio streaming. By charging the power cell while they sleep, they can trust their hearing aids to always deliver the sounds they want to hear. Simply Charge&Go!

- New silicone microphones
- Laser edge antenna





Inductive charger

### **PURE 312 Nx**

### The smallest fully featured hearing aid with direct streaming.

This elegant hearing aid is the ideal solution for wearers who want high performance, full connectivity, and complete discretion. The unique laser edge antenna design delivers the smallest possible size for direct streaming without compromising on the highest hearing performance.

- New silicone microphones
- Laser edge antenna

### PURF 13 Nx

### Superior connectivity combined with the longest streaming time.

The high-performance Pure 13 Nx - now with optional T-Coil - delivers the longest streaming time so wearers do not need to worry about battery life while enjoying the most energy-efficient direct streaming and connectivity.

• New silicone microphones



### myControl App Advanced remote control app.

The myControl App offers full remote control options with 360° microphone steering. Users can adjust program and volume, system sounds, power on delay, low battery interval, and airplane mode. The app also relays smartphone motion sensor data for precision hearing.

### StreamLine Mic

### Effortless connectivity for all smartphones.

The new StreamLine Mic provides full hands-free stereo streaming of phone calls and music with any Bluetooth smartphone. It also works as a remote microphone.









Performance levels: 7Nx





### **MOTION 13 Nx**

Direct streaming with the most versatile fitting options.

The incredibly versatile Motion<sup>™</sup> 13 Nx and Motion 13P Nx are ideal for wearers with individual fitting requirements and moderate to severe or profound hearing loss. They provide full connectivity in a compact form with an optional modular T-Coil integrated in the battery door.

• New silicone microphones



### REPLICATING SIGNIA Nx WITH OVP™ AND HIGHEST

## NATURE, FOR THE MOST NATURAL OWN VOICE ACCEPTANCE.

### NEW

### The most sophisticated chip technology in the industry

- Ultra-small 40 nm technology 40% smaller than industry standard
- 75 million transistors 3.5 x more than predecessor platform primax<sup>™</sup>
- Super-fast 500 MIPS processing power 60% more than primax

### SIGNIA Nx **TECHNOLOGICAL** INNOVATIONS

AUDIOLOGY: The world's first Own Voice Processing (OVP™)

### CONNECTIVITY:

The only combination of Bluetooth and Ultra HD e2e, the leading binaural audio link

### **TELECARE:**

Unprecedented full live remote tuning capabilities

### BENEFITS FOR THE HEARING CARE PROFESSIONAL

#### AUDIOLOGY:

Raise acceptance by providing a natural own voice and "better than normal hearing".\*\*

#### CONNECTIVITY:

Offer the best of both worlds - uncompromised audiology and direct streaming in one device.

#### TELECARE:

Deliver revolutionary customer care by solving issues remotely to keep the trial on track.

### **BENEFITS** FOR THE HEARING AID USER

#### AUDIOLOGY:

Hear the world and your own voice as nature intended.

#### CONNECTIVITY:

Enjoy the most natural hearing experience and Bluetooth streaming of phone calls, music, and TV.

### TELECARE:

Access the best service anywhere with the hearing care professional in your pocket.

### NEW

### Leading technology enabling advanced connectivity

- New age-resistant silicone microphones enable highly precise binaural beam-forming
- Advanced laser edge antenna enables the smallest sized hearing aid with Ultra HD e2e and Bluetooth



Laser edge antenna



## OUR COMPANY, THE FUTURE OF A SOUND LEGACY.



We invent the future of better hearing. This has been our consistent mission for 140 years and counting - the greatest legacy in the industry. As hearing aid pioneers, we have introduced countless world's firsts including completely digital hearing aids with two microphones, wireless synchronization, and now OVP<sup>™</sup>. We employ around 6,000 people and sell to more than 120 countries across the globe, with Signia as our premium brand. Every fourth hearing aid worn around the world is one of ours.

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.

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- \* 2017 "OVP Study" conducted at University of Northern Colorado examining the effect of own voice processing on spontaneous acceptance after first fit of hearing aids. Further details: www.signia-pro.com/ovp-study
- \*\* Two clinical studies have shown that binax provides better than normal hearing in certain demanding environments (University of Northern Colorado, 2014; Oldenburg Hörzentrum, 2013): Speech Reception Thresholds (SRT) in cocktail-party situations improved up to 2.9 dB for wearers with mild to moderate hearing loss using Carat binax<sup>™</sup> or Pure binax<sup>™</sup> hearing aids with narrow directionality, compared to people with normal hearing.

#### Legal Manufacturer

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#### **Local Contact Information**

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