

# Phonak

We believe we can do more, do better for everyone who can benefit from improved hearing. In fact, we are committed to making hearing solutions that break the boundaries in terms of acceptance, ease of use and performance, so people can thrive socially and emotionally.



Phonak Sky™ V embodies 40 years of innovative pediatric solutions which change children's lives.

At Phonak, innovation is a cycle: as we roll out successive technology platforms and product families, we also gather critical information from our customers and consumers by analyzing the results from more than 10,000 interviews each year. This deep engagement with the daily real-world use of our products, combined with our constant advances in audiological research, gives us the knowledge we need to push the limits of current technology, delivering innovative solutions across the broadest portfolio in the industry.

So what do consumers really want? It comes down to three key areas: hearing performance, ease of use, and product aesthetics. “How well will I hear and understand?” “How easily will I get the best out of my hearing aids?” “How will they look when I wear them?” These are the questions we encounter every day, for which we aim to provide ever better answers.

## Hearing performance

A recent Phonak consumer study confirms that “best hearing performance” is the top criterion when choosing a hearing instrument. What “performance” means, however, is a combination of several things. In the top twenty hearing needs listed in our worldwide consumer survey are terms like “clarity of tone and sound,” “natural sound quality,” “communicate easily,” “detect and recognize sounds in different environments.” So “performance,” for consumers, really involves intelligent sound processing: the ability to analyze sound environments and optimize hearing aid settings so that speech is always clear and hearing feels natural. That is what we work hardest to provide.

## Ease of use

The same studies reveal that consumers greatly value ease of use, by which they mean two different, important things. The first is self-explanatory: setting up, adjusting, and maintaining a hearing instrument should be simple and quick. The other is that it should be automatic wherever possible. People do not want to spend their time interacting with their hearing instrument; they want to be interacting with other people – and forgetting that they are using an instrument. So we strive to deliver advanced performance through intuitive, self-regulating features.

### Product aesthetics

A hearing aid is a miniaturized powerful computing device, crafted from carefully selected materials into an appealing, unobtrusive shape. It is there, working in the background, all day every day. It has to fit comfortably; it has to be inconspicuous but attractive. Contours, texture, and color are important. Some people like to make a statement with their choice of hearing aid; others are looking for maximum concealment. Both preferences demand that our product's look and feel embody the same high level of innovation that we bring to the technology.

### Audiological excellence

For Phonak, every product advancement is firmly rooted in hearing research. AutoSense OS™, the “central brain” of our hearing aids, is a case in point: years of audiology research and development have paid off in the most sophisticated and advanced processing system ever applied to hearing care. Continuously analyzing the hearing environment, AutoSense OS automatically optimizes over 200 settings, blending programs to match the situation at each moment – all without requiring any manual adjustment.

Research under laboratory and real-life conditions confirms that AutoSense OS delivers significantly improved speech understanding – 20% better than our previous technology platform<sup>1</sup> – particularly in difficult hearing environments, such as noisy rooms and cars. It is also shown to be better than a human at selecting the right settings for each environment, so we have developed a further customized version of AutoSense OS for children's unique hearing needs and environments: now, they too can forget about their hearing aids and enjoy interacting with friends.

### Product innovation

#### Phonak Virto™ V

In the 2015/16 financial year Phonak rounded out its offering based on the powerful Venture product platform. With the launch of Virto V, we brought the performance and features of Venture to the world of custom products, packing great performance into a tiny package. Unique antenna technology lets us offer advanced wireless functionality and AutoSense OS processing in an instrument only three-quarters the size of our previous-generation models. Virto V is far less visible than competing products, yet it delivers up to 33% better speech intelligibility in noise.<sup>2</sup>

Performance and aesthetic appeal are matched by ease of use: newly designed controls make Virto V's features simple to access, while its low power consumption extends the instrument's battery life by up to two days. No other hearing instrument this small delivers all these benefits.

#### Phonak Naída™ V

We are particularly delighted to introduce Venture's revolutionary capabilities to a market segment where Phonak has always had a high reputation: Power hearing solutions for people with severe-to-profound hearing loss. Featuring a glass-fiber reinforced shell that is 60% more robust yet up to 25% thinner than its predecessor, the Naída V power instrument provides even more audibility of high-frequency sounds, while maintaining sound quality<sup>3</sup>.

#### Phonak Sky™ V

Phonak has always insisted that a child is not a small adult; we are proud of our track record in creating solutions specifically designed for the needs and environments of children, from infants to teens. This year, we have significantly boosted our integrated pediatric product portfolio with the launch of the Venture-based Sky V hearing aid, along with the new Roger™ Touchscreen Mic and wireless accessories.

Anyone who has been in a classroom or playground knows that these are unique sound environments. Thanks to its customized version of AutoSense OS, Sky V helps users develop their speech, language, communication, and social skills without the need for manual adjustments. Available in 16 mix-and-match colors, all Sky V devices are “RogerReady”: that is, they will link automatically to the Roger family of wireless accessories. The result is a seamless web of hearing solutions, linking speakers and listeners across the noisiest environments – giving children the freedom to learn, interact, and have fun without limitations.

#### Roger Touchscreen Mic

Children don't only learn from the teacher at the front of the room; they learn and grow socially through conversation with friends. Part of Phonak's intuitive, easy to use family of wireless devices for education, the Roger Touchscreen Mic can switch from transmitting one person's voice to a small group interaction mode: its microphones automatically select in turn the speech of each person who is talking, transmitting the natural sound of conversation. The result is easy interaction, engaging activity, and social development. Every child we asked in a recent study preferred this way of listening to their peers.

#### Lyric™ 3.1

Performance can always be improved, but when it comes to ease of use and unobtrusive appearance, Phonak has already reached the ultimate goal with Lyric: the world's first and only 100% invisible, 24/7 wearable, for-months-at-a-time hearing aid. Offering clear natural sound quality, Lyric is truly effortless, requiring no user adjustment, and completely unseen, sitting deep in the ear canal. With the introduction of Lyric 3.1, Phonak has set a new standard in natural sound from a hassle-free hearing aid, and has introduced Lyric as an effective solution for the relief of tinnitus.

<sup>1</sup> Phonak Field Study News (2016); Virto V90-10 performance and size benchmark

<sup>2</sup> Hörzentrum Oldenburg (2015); Benchmark of modern custom-made hearing devices

<sup>3</sup> Phonak Insight (2016); Julia Rehmann, Siddhartha Jha, Silvia Allegro Baumann; SoundRecover2 – the first adaptive frequency compression algorithm

### Connecting with the consumer

Phonak completes the circle of innovation by reaching out directly to consumers through digital and social media, building one-to-one relationships that offer support, service, and community. Over the past three years, we have connected with many thousands of people through all the main social channels – including Facebook (165,000 fans), Twitter, Instagram, and YouTube – in multiple languages, generating millions of impressions yearly.

Our blog “Open Ears” is a collection of individual voices, some from inside Phonak, others from the larger hearing community, sharing the personal experiences of people with hearing loss and audiology professionals, as well as news from the hearing aid and audiology industry. “Hearing Like Me” is an online community for people whose lives have been touched by hearing loss, along with their parents, loved ones, and hearing care professionals. Its videos and articles provide education and inspiration, while the forums offer a place for people to connect.



## OLD MASTERS, NEW TECHNOLOGY

The tour begins with a cityscape of Dresden, painted in 1748. The schoolchildren listen attentively – they seem to like the painter Canaletto’s delicate brushstrokes. “It wasn’t always like this,” explains Claudia Schmidt, who is leading the group through the Semper Building. “I really used to have to raise my voice during tours, almost shout – and even then, the audience often didn’t pay attention.”

This changed overnight when the Staatliche Kunstsammlungen, Dresden’s state art collection, decided to install Phonak’s Guide-U system three years ago. Its integrated “Roger” technology enables every listener to enjoy a full and rich hearing experience – even people with hearing loss. Roger Guide-U, which operates without interfering with Wi-Fi, Bluetooth or GSM, is the smallest and

lightest visitor guiding system on the market. “You can even have parallel group tours in the same room,” explains Schmidt.

Today, she is taking a group of fifth-graders from Rostock on a tour through the Old Masters Picture Gallery, one of the world’s major art collections that has found fame through works such as Raphael’s “Sistine Madonna” and Cranach’s “St Catherine Altarpiece.” Even Goethe was amazed when he saw the collection: “My astonishment was beyond all comprehension!”


There are tours in English, Japanese, Russian, Polish and Czech, and half a million people come to visit every year – yet the museum is quiet, even when there are several groups in the same room. The tour guides speak directly into the microphone in hushed tones, but the visitors hear their voices perfectly clearly, with no interference.

Claudia Schmidt has tucked the transmitter into her waistband and the microphone is attached to her scarf. You might think that 16-year-olds wouldn’t

necessarily be very interested in Old Masters, but the class is concentrating hard. Every now and then, one of them walks on a few meters to look at another picture, but even there, they can still hear Claudia Schmidt’s explanations loud and clear over their headsets.

“I felt like I was in my own little bubble and I listened the whole time,” says Max, one of the pupils in the group, at the end of the tour. “A good sound makes a world of difference,” agrees his classmate Sofia, “I wish we had something like that in school as well.” Claudia Schmidt concurs. “I couldn’t do without the audio system now. The range is very good and the visitors are not distracted by background noise, so they can concentrate exclusively on the pictures and their history, thanks to the latest Phonak technology.”



 Claudia Schmidt leads the group on a tour through the Old Masters Picture Gallery in Dresden. Since the gallery decided to install Phonak's Guide-U technology in the Semper Building, she no longer has to raise her voice, even for large groups. Schmidt has become a big fan: "I couldn't do without the audio system now."