

Phonak pediatric solutions

Because a child is not a small adult







For over 40 years Phonak has worked in close collaboration with leading pediatric specialists, hearing care professionals and teachers to create innovative solutions for our future generations.

Children are busy and their listening needs change throughout their day. Providing the necessary solutions from an early age is essential for speech, language, communication and social development skills. With the launch of Sky V, Phonak provides hearing care professionals with the finest products currently available for children of all ages. Parents and caregivers can be confident that their kids and teens have access to more of life's soundscapes, while exploring the world with confidence.



Phonak Sky[™] V

Phonak Sky V is the latest addition to the Phonak pediatric portfolio. On the proven performance of our signature Venture platform, Sky V introduces ground-breaking features and technologies, specifically optimized to address kids' and teens' diverse communication needs.

Sky V highlights

Comprehensive portfolio

• 4 performance levels; V90, V70, V50, V30* and 5 models including a RIC

Optimized hearing performance

- SoundRecover2 a brand new algorithm, takes frequency lowering to a new level and makes high frequencies audible for an enhanced listening experience
- AutoSense Sky OS specifically optimized for kids and teens to enjoy a seamless listening experience when exploring different environments
- Roger and directional setting an industry first, Phonak now offers the benefits of directional microphones at the same time as using Roger
- A new xUP receiver for Sky V-RIC offers 5 to 6 dB more low-frequency gain – without increased battery consumption

Ease of use

- New indicator light clearly shows the status of the hearing aid
- RogerReady no additional programming required when adding a Roger receiver

Look and feel

- Mix & Match 16 housing colors and 7 ear hook colors to choose from
- Tamperproof increased safety for our youngest users
- 5 water resistant and dust tight form factors with IP rating 68**
- New lightweight composite materials make Sky V housings significantly more robust
- New Power SlimTube II offered with the Sky V-SP and UP has been further optimized for comfort and esthetic appeal

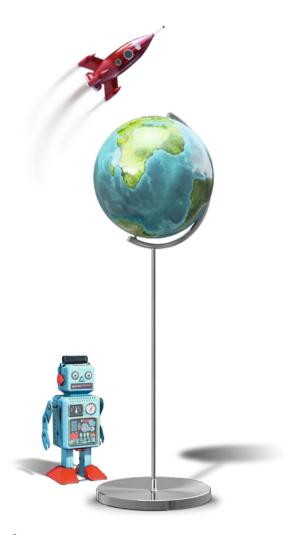
^{*} Only available in specific countries

^{**} IP68 indicates that the hearing aid is water resistant and dust tight. It survived continuous immersion in 1 m of water for 60 minutes and 8 hours in a dust chamber as per the IEC60529 standard, no traces of dust were evident within the housing.



Technology that meets the needs of every child

Hearing well in a multitude of situations can be particularly challenging for young kids and teens with hearing loss. Having a hearing aid which allows them to fully participate and is capable of keeping up with their active lives, is essential to their overall sense of well-being.



Indicator light

A clear visible signal

The new and easy to understand indicator light featured on all 4 Sky V BTE models provides parents and caregivers with a clear status notification of a child's hearing aid. The indicator light visibly confirms that the hearing aid is powered on, the Roger program is active and also warns of a low battery. Activated and programmed using Target 4.3 or higher, parents and caregivers can now have peace of mind, knowing that a child's hearing aid is functioning accordingly.

In an external usability study, 100% of parents were easily able to confirm the hearing aid was powered on.¹

AutoSense Sky OS

Listening made easy

AutoSense Sky OS has been specifically designed to ensure that kids and teens have the optimal listening experience in the classroom, on the playground, when listening to music or with their family.

By accurately capturing and analyzing a listening environment in real time, AutoSense Sky OS always selects the best settings.

With no manual interaction required, kids and teens can focus on more of life's great adventures and let their hearing aids do the work.

The new automatic program and feature selector in AutoSense Sky OS is up to 30% more precise for noisier classrooms and 39% more accurate in recognizing yelling and shouting as unwanted noise compared to the adult system.²

Roger and directional setting

Near and far field clarity

The Roger and directional setting allows children and teens to simultaneously hear a teacher at a distance and peers in close proximity. Exclusive to Phonak, Roger and directional provides improved access to conversation with peers by 26% over Roger and omnidirectional through its ability to adaptively activate directional mics on the hearing aids based on the noise level.⁴

In Phonak Target 4.3 and above, the program 'Roger + Mic' now offers a choice of three microphone modes customizable by the fitter – omnidirectional, Real Ear Sound or an automatically activated fixed directional.

SoundRecover2

Access to even more sounds

The next generation of SoundRecover further improves speech audibility and utilizes an adaptive frequency lowering algorithm. Sound quality of mid and low frequencies is maintained while high-frequency sounds are made audible. By creating an optimal listening experience, SoundRecover2 enables more children than ever before to hear and communicate with confidence.

Phonak's SoundRecover2 provides improved audibility of high-frequency information compared with the original SoundRecover while also maintaining the low and mid-frequency sounds, giving children access to a broader range of sounds essential for speech and language development.³

RogerReady

Ready to go

Adding a Roger receiver is easier than ever before. No additional programming of the hearing aids is required. Sky V devices with direct audio input automatically detect the signal from a Roger microphone and activate the Roger + Mic program.

- 2 Automatic and directional for kids. Phonak Insight (2016).
- 3 SoundRecover2 for Pediatrics: Improving audibility where it matters most. Phonak Field Study News (2016).
- 4 A Powerful Noise-Fighting Duo: Roger and Phonak Directionality. Phonak Field Study News (2016).



Phonak proven performance

Sky V delivers the proven performance of Binaural VoiceStream Technology™. This allows Sky V aids to stream the full audio bandwidth in real-time and bi-directionally, for improved sound quality and unmatched speech understanding. This unique technology enables programs and features such as Speech in Wind and DuoPhone.



Speech in Wind

Detects and reduces wind noise and streams speech to the side most affected by wind, making voices clearer while improving comfort thereby improving the speech intelligibility by up to 28%.⁵

DuoPhone

By streaming the signal in real-time to both ears the caller's voice can be heard binaurally and results in an improvement of 30% in comparison to listening with one ear in both quiet and noisy environments. 6

CROS II

For children with a bilateral hearing loss with one unaidable ear (hearing loss in the better ear), Phonak now offers a new discreet CROS transmitter, Phonak CROS II. Featuring the unique Phonak Binaural VoiceStream Technology, it wirelessly transmits the sound from the unaidable ear to a Sky V hearing aid on the better hearing ear resulting in improved speech understanding in both quiet and noisy environments.⁷



- 5 Latzel, M and Appleton, J (2013). Evaluation of a Binaural Speech in Wind Feature, Part 2: Validation and Real-life Benefit. Hearing Review 20; August 27.
- 6 Dr. Wolfe, Jace et al., (2015) Evaluation of the Benefits of Binaural Hearing on the Telephone for Children with Hearing Loss. Am Acad Audiol Volume 26: Pages 93 - 100.
- 7 Phonak CROS II Improved speech understanding thanks to binaural beamforming. Phonak Field Study News (2015).

The color of sound

The color of sound has never been so attractive. Available in 4 performance levels* and 5 models, Sky V comes in 16 colors. With an exclusive Mix & Match** concept incorporating 7 colored ear hooks and 16 Roger receivers, kids and teens can select the perfect color combination to complement their personalities.

Get personal

In addition to many different housing, ear hook and Roger receiver color combinations, Phonak together with Skinit offers kids countless options to decorate their devices with custom made stickers.

www.phonak.skinit.com

Show and tell

With the Virtual Mirror App you can use an iPad to show children and parents what a Sky V in any color will look like on their ears. Download the Virtual Mirror App for free from the App Store: www.phonakpro.com/virtualmirror



 $^{^{\}star}$ In some markets, only 3 performance levels are available



Solutions for UHL

Phonak offers a range of solutions to help children with unilateral hearing loss hear confidently in all situations.

Unilateral Hearing Loss (UHL) affects 3 out of 100 school-aged children.⁸ Researchers have also found that up to 40% of children with UHL fail one or more grades and/or require additional assistance in the classroom, despite having normal cognitive abilities.⁹

UHL is defined as normal hearing in one ear and a hearing loss in the other, which can range from mild to profound. Meanwhile Single Sided Deafness (SSD), a subset of UHL, is defined as a condition where a child has unaidable hearing in one ear and receives no clinical benefit from amplification in that ear, and normal hearing in the other ear.⁸







Hearing aid technology solutions

According to the American Academy of Audiology's (AAA) Clinical Practice Guidelines on Pediatric Amplification, ¹⁰ "children with aidable unilateral hearing loss should be considered candidates for hearing aid amplification in the impaired ear due to evidence for potential developmental and academic delays."

Phonak solution: Sky V

CROS solutions

For children with severe to profound UHL or SSD, the AAA guidelines recommend the use of Contralateral Routing of Signal (CROS) or bone conduction devices, "depending on the child's age and ability to control their environment."

Phonak solution: CROS II available in two models – a smaller size 312 model and a size 13 model which offers an extended battery life and a volume control button.

Roger technology

The AAA guidelines suggest a wireless microphone system such as Roger or FM technology, where the wireless remote microphone's receiver (e.g. Roger Focus) is worn on the good ear, "may be preferable in classroom situations to the CROS arrangement." This solution can provide children with any degree of UHL even more benefit than CROS in classroom situations where an increased signal-to-noise ratio is required.

Phonak solution: Roger Focus receiver paired with any Roger microphone.

⁸ Bess, F. H., Dodd-Murphy, J. D., & Parker, R. A. (1998). Children with minimal sensorineural hearing loss: Prevalence, educational performance, and functional health status. Ear and Hearing, 17, 1–11.

⁹ Bess, F. H. & Tharpe, A. M. (1984). Unilateral hearing impairment in children. Pediatrics, Vol 74 (2), 206-216.

¹⁰ American Academy of Audiology (2013). Clinical Practice Guidelines, Pediatric Amplification.

Stylish and discreet

For style-conscious, active teens who prefer a more discreet solution, Phonak RICs are the perfect confidence booster. It packs big performance into a small package and provides the exceptional Phonak Venture hearing experience to teens with hearing loss.

Highlights:

- In addition to the Sky V-RIC, Audéo V comes in 3 additional models
- Wide choice of colors, ranging from subtle to vibrant
- Light-weight and slim housing, reinforced with high-tech composite materials, for more durability



Bring sound to life

Because a teenager's world is unique, Phonak developed a dedicated website tailored to the needs of teens with hearing loss. Through teen-specific topics such as music and social life, the site offers them all they want to know about hearing technology including Sky V and Roger – and more importantly, what they can do to live a life without compromise.

www.bringsoundtolife.com

Solutions for teens



Always on Target

With hearing aids becoming more advanced, keeping current with the latest pediatric software fitting recommendations for different ages can be a challenge. We understand that and therefore collaborate with the international Phonak Pediatric Advisory Board to determine the default fitting recommendations for the Phonak Target Junior mode. Phonak Target offers evidenced based defaults and feature recommendations for specific age groups for both DSL and NAL. By entering the child's age in NOAH or Phonak Target, you can be assured the child is fit with the most up-to-date settings right from the start.





Confidence is key

In certain cases, even the best hearing aids require a boost. With Roger and the Phonak Wireless Communication Portfolio, we ensure that kids and teens have the confidence to hear well in their constantly changing, interactive and often noisy world.

Roger is the adaptive 2.4 GHz digital wireless standard with state-of-the-art technology aimed at providing outstanding performance in noise and over distance. Roger offers the industry's best ever speech-in-noise performance, providing improvements of up to 35% over Dynamic FM technology and 54% over other FM and digital systems. 11 Whether at home, in class, or in a social setting the Roger portfolio offers multiple microphones and accompanying receivers to suit listeners of every age.

Roger microphones



Roger Touchscreen Mic features a new user-friendly interface for use in the classroom. With an automatic microphone function, it conveniently switches from an individual talker to a small group interaction mode, depending on its placement.



Roger Touchscreen Mic Roger Pass-around

The Roger Pass-around microphone is designed to enhance classroom discussions so that not only teachers, but all students are heard clearly. With an appealing design it is the optimal size for kids and teens to hold and fully control.



Roger Multimedia Hub

This versatile transmitter used in a Roger network features audio mixing which allows a teacher's voice to be heard simultaneously with an audio signal. Used as a stand-alone device, it can be connected to an audiobook or tablet for individual listening.

¹¹ Professor Thibodeau, Linda, PhD (2013), Comparison of speech recognition with adaptive digital and FM wireless technology by listeners who use hearing aids, University of Texas, Dallas, USA, International Journal of Audiology.



Roger Pen

The Roger Pen offers state-of-the-art wireless technology with superior speech-in-noise and over distance performance. Packed in a discreet design, its features include fully automated or manual microphone settings and Bluetooth connectivity, providing an all-inclusive listening experience.

Roger Clip-On Mic

The Roger Clip-On Mic, worn on a shirt, is a small and lightweight microphone. Perfect for parents and family members, multiple Roger Clip-On Mics can be used together, allowing a child to hear everyone.

Roger receivers

With several styles of Roger receivers available, there is a solution for every child, regardless of the hearing technology they are currently using.



Roger X

The miniature universal Roger receiver with 3-pin Euro plug is compatible with virtually all BTE hearing aids, cochlear implant speech processors and streaming devices.



Roger MyLink

An easy-to-use universal Roger receiver worn around the neck and compatible with any hearing aid or cochlear implant with T-coil.



Roger designintegrated receivers

These discreet Roger receivers perfectly complement the sleek contours of a Phonak hearing aid and are available in matching colors and tamperproof versions. There are also Roger design-integrated receivers compatible with selected cochlear implants (CIs) from Cochlear and Advanced Bionics.



Roger Focus

A discreet behind-the-ear receiver that cuts through distracting background noise to bring a speaker's words directly into a child's ears. These devices enable children with unilateral hearing loss and normal hearing children with Auditory Processing Disorder (APD), and Autism Spectrum Disorder (ASD) to hear speech in noise better.







Keeping kids connected

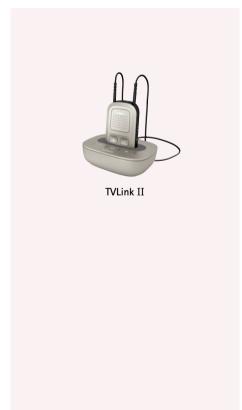
The Phonak Wireless Communication Portfolio offers opportunities for kids to connect and communicate in any situation.

With an array of easy-to-use products, young kids and teens can make and receive phone calls at home or on the go, enjoy TV, listen to music and stream movies on a laptop or a tablet.

Phone



TV and music



Personal control



All the information you need

Phonak understands that even with the best solutions available today, we need to provide parents, kids and caregivers with material and resources to ensure they get the most out of their hearing solutions.

Pediatric solutions on the web

Hearing care professionals

For the very latest information on our pediatric solutions and how to use them, including Roger and other wireless accessories, visit:

www.phonakpro.com/pediatric

Simply choose the pediatric category you require and find detailed recommendations for infants and toddlers, school-aged children, teenagers and solutions for classrooms.

The Listening Room™

Play + Learn

Phonak has teamed up with Advanced Bionics to bring you The Listening Room™ – a host of free fun activities and resources to support the development of speech, language, and listening skills in children of all ages with a hearing loss. www.thelisteningroom.com

Phonak Support App

Parents and caregivers

When the child and family leave your office you want to make sure they continue to successfully use and maintain their hearing aids. The intuitive Phonak Support App¹² can be used on the go and helps new users get the most from their Phonak hearing aids.



¹² Caposecco, A., Timmer, B., Hickson, L., (2014). Validation of the Phonak support app for hearing aid management and troubleshooting. University of Queensland internal publication.

Paving the way for young listeners



This comprehensive portfolio of pediatric solutions embodies our commitment to do more and do better, as we continue to pave the way for young listeners. Phonak's dedication has resulted in the development of innovative solutions that support a holistic approach towards meeting the specific needs of all kids and teens wishing to connect to the beauty of sound. We are driven by a deep understanding of the importance of hearing well, and through our products, strive for even the youngest listeners to be free to explore the world with confidence.



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Life is on

We are sensitive to the needs of everyone who depends on our knowledge, ideas and care. And by creatively challenging the limits of technology, we develop innovations that help people hear, understand and experience more of life's rich soundscapes.

Interact freely. Communicate with confidence. Live without limit. Life is on.

www.phonakpro.com/pediatric

