



Phonak Sky™ Marvel

Love at first sound

A Sonova brand

PHONAK
life is on



Close relationships are essential for children's social, emotional and cognitive development

Children experience the world through relationships. The quality and stability of these relationships lay the foundation for a wide range of developmental outcomes, including self-confidence, a sense of well-being, motivation to learn and achievement in school and later life.¹

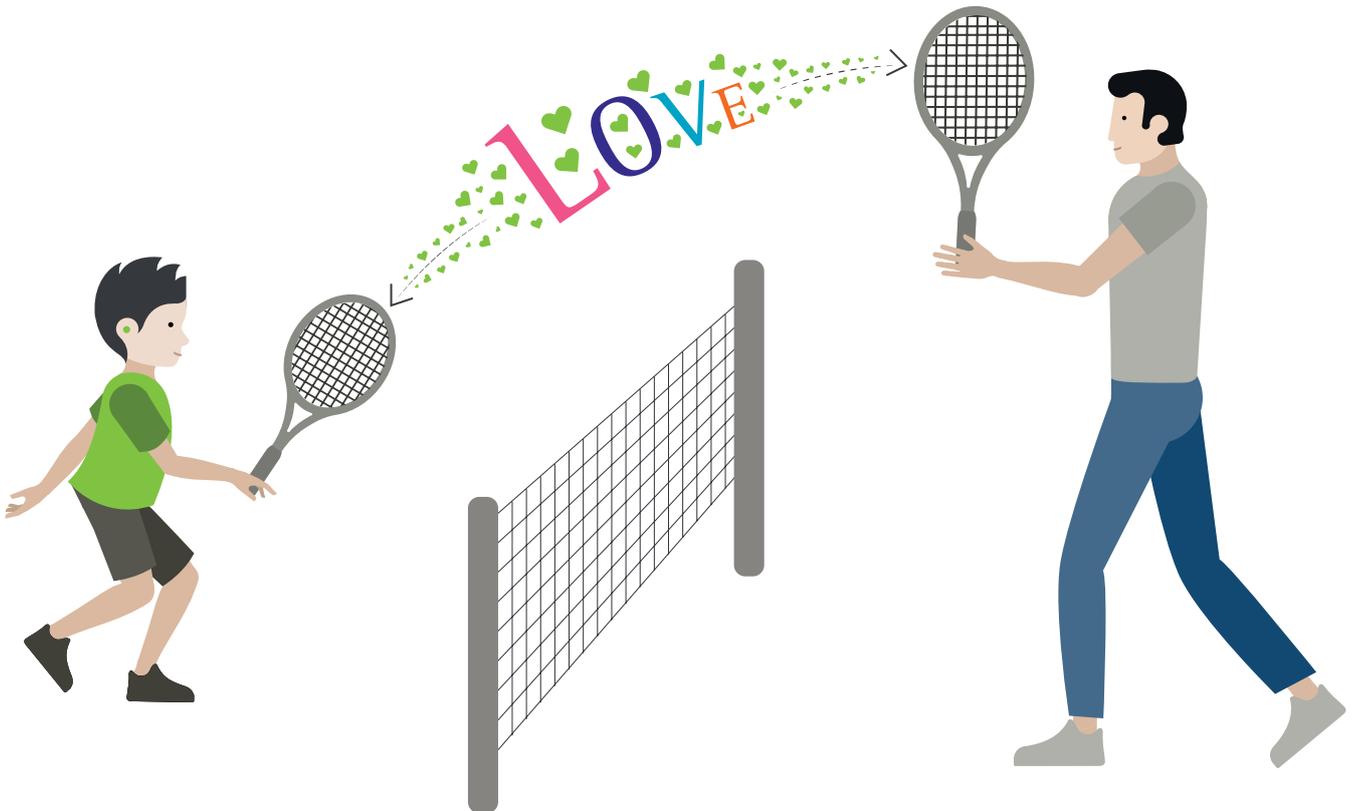
Research shows that back-and-forth interactions and turn-taking conversations are critical for building important bonds.² Phonak Sky™ Marvel acts as a facilitator, enabling children to engage in conversations and build close, loving relationships that lead to better developmental outcomes.

The power of 'serve and return'

Back-and-forth interactions between children and others are often referred to as 'serve and return.' Early in a child's life, these interactions will primarily be shared with parents, caregivers and older siblings, but will include other adults and children as they grow.

The 'serve' includes all communication attempts, such as a young baby's wiggle or 'coo', a toddler's pointing and an older child asking "why?". The 'return' is any appropriate response, whether it's a smile, a facial expression or words.

Serve and returns are filled with developmental benefits. They stimulate neural connections, shape brain architecture and support the development of communication and social skills.³ These interactions encourage children's curiosity and help them to understand their world.



Both quantity and quality matter

The quantity of words and the number of turns a child is exposed to influences brain activation and helps with developing vocabulary, processing efficiency and academic outcomes.^{4,5} In fact, Massachusetts Institute of Technology's cognitive scientists have found that the number of conversational turns between an adult and a child is even more critical to language development and has a stronger impact on brain activation, than the number of words heard.⁶

The quality of a conversational serve and return can refer to the language used (e.g. complexity), as well as how well the child can hear it.⁷ Better audibility is associated with faster rates of language growth in the preschool years;⁸ and the quality of adult talk (e.g. responsive and child-directed) is known to impact their language development, academic success and cognitive skills later in life.⁹



Every conversation counts

Compared to those with normal hearing, children with hearing loss have significantly less auditory access to sound from before birth and every day thereafter.

A head start already at birth

The auditory system is fully developed at 23 weeks after conception. As a result, children with normal hearing have a head start from day one because they have four months of auditory stimulation *in utero*.¹⁰

Important first months

The early months of life are critical for access to sound and language. Even under the best circumstances, a child with hearing loss may go for months without amplification. The Joint Committee on Infant Hearing recommends fitting hearing technology by the age of six months in order to minimise further delay in accessing speech and language.¹¹

More auditory input every waking hour

A child with normal hearing has full access to sound 24 hours a day. In contrast, the Outcomes of Children with Hearing Loss study found that children with hearing loss have significantly less access as amplification is only worn on average eight hours a day.¹² Less access means reduced quantity and quality of words and conversations.

Catching up is possible

Hearing aids fit as quickly as possible and worn every waking hour in language-rich environments are key ingredients to help children with hearing loss catch up.



What children with hearing loss really need

Clarity and richness of sound

Children with hearing loss need hearing aids that can adapt and provide amplification in a variety of listening situations. The amplification must give them clarity of speech and an understanding of their environment to help maximise the serve and return available to them.

Access to more words and more conversations

Research has shown that a child needs to be exposed to approximately 45 million words to be ready for school⁴ and that one of the most essential experiences in shaping a child's language development is their conversations with significant others.⁶ These exchanges occur in different scenarios, whether it's at the dinner table, while reading a book together, or sitting around a campfire. Building a language-rich environment is about taking advantage of every opportunity to use words and conversations to interact, to talk and to bond.

All-day, everyday hearing aids

Children need hearing aids that are designed to be worn all day. They must be comfortable, reliable and safe to wear. This will give children the confidence to fully participate, regardless of the listening situation.

Phonak Sky Marvel

Building strong relationships, one conversation at a time.

Phonak is committed to offering every child with hearing loss the best possible start in life. Enabling children to communicate more effectively allows them to establish important relationships from the very first moment. This is the foundation for building strong bonds with family, friends, in school and socially.

With the new Sky Marvel portfolio, we introduce a unique combination of world's first technological innovations and essential child-specific features. We strive to give children only the best solutions for speech and language development, speech intelligibility and ease of use. Developed to maximise both quantity and quality of audible input, Sky Marvel supports a child's social, emotional and cognitive development with love from the very first sound.



Sky M-M

Sky M-PR

Sky M-SP

The Sky Marvel portfolio comprises three stylish BTE models including a rechargeable option; and they are offered in three performance levels (M90, M70, M50).

Sky Marvel offers:



Clear, rich sound



Connects to smartphones,
Roger™ mics and more



Rechargeable



Child-specific design



Clear, rich sound



Sky Marvel incorporates state-of-the-art technology for optimal sound performance.

The world's first operating system designed specifically for children

With Sky Marvel we introduce AutoSense Sky OS 3.0 which now also classifies streamed signals. Thanks to this, children receive clear, rich sound when streaming speech and optimised sound quality when streaming music.

Real school and classroom recordings were used to train AutoSense Sky OS to better recognise the challenging listening situations that children experience each day. Accurate classification of both speech and noise means Sky Marvel is designed to provide the right combination of adaptive noise management for greater comfort and reduced listening fatigue.¹³

24% better speech understanding in noise¹⁴

The unique blend of adaptive noise management technologies as offered in AutoSense Sky OS, not only provides significant improvement in speech understanding* but is also preferred by children, even when speech comes from behind.¹⁴ Giving children clear, rich sound in complex listening environments gives them the best opportunity for speech and language development and, ultimately, learning and academic achievement.

Maximum access to all speech sounds

SoundRecover2 gives children access to a broader range of sounds essential for speech and language development.^{15,16} It improves high-frequency speech audibility by utilising an adaptive frequency-lowering algorithm that is only applied when the level of hearing loss requires it. The sound quality of low and mid-frequencies is maintained while high-frequency sounds are made audible. Audibility of the full spectrum of sounds is fundamental to ensuring a child makes the most of every back-and-forth interaction.

* Compared to no adaptive noise management

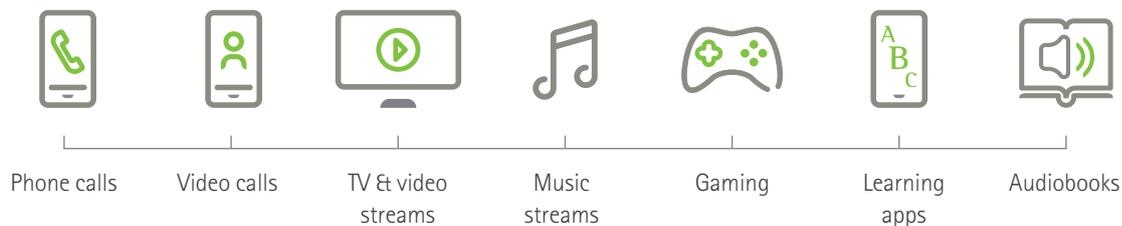
Connects to smartphones, Roger mics and more



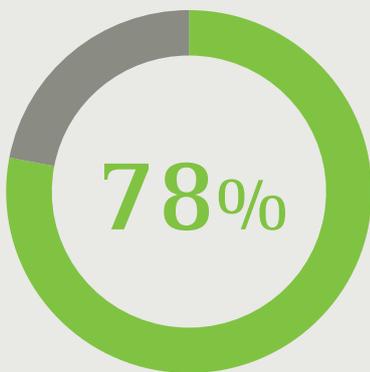
Sky Marvel offers innovative, world's first connectivity solutions with more communication power than ever before.

Directly streams from both iOS® and Android™

Unlike any other paediatric hearing aid, Sky Marvel connects directly to just about every smartphone and Bluetooth® enabled device. It supports dual pairings and streams audio to both ears. In a world where modern devices are a central part of a child's social life and education, Sky Marvel enables intuitive access and stereo sound quality streaming for speech, apps, music, e-books and much more.



Use of smart devices by young children at home and in school is widespread.¹⁸



of primary school students report that they regularly use a tablet



of primary school students regularly use smartphones



of surveyed schools reported use of tablets in school

* Compared to wearing hearing aids alone



Directly streams from Roger microphones

With RogerDirect™, children can now access Roger technology without the need to attach an external receiver. Roger receivers can be wirelessly installed into Sky Marvel hearing aids, removing all the complexity of receiver compatibility. This unbeatable combination is now offered in the smallest package ever, giving children easier access to more words and more conversations*.¹⁷

Direct streaming of multimedia with the TV Connector

Children can now enjoy their favourite TV programs and movies with a simple plug and play solution that provides optimal sound quality for both speech and music.

Rechargeable



Sky M-PR – the new, powerful rechargeable hearing aid that lasts all day.

Super quick charging

Fully charged in only three hours, Sky M-PR can keep up with the busy life of young listeners.

Full day of hearing

Sky M-PR provides a full day of hearing including 10 hours of Roger or streaming media. Parents, caregivers, teachers and children can enjoy peace of mind knowing the hearing aids will stay powered on.

Direct streaming of Roger

Sky M-PR lets parents and children break free from the hassles of disposable batteries without compromising connectivity. RogerDirect brings the proven performance of Roger¹⁹ and the benefits of rechargeable together for the first time.



Child-specific design



Ensuring comfort, safety and robustness in all aspects of a child's life.

Smaller and lighter

Sky Marvel is designed to fit and stay on comfortably all day, every day. Thanks to RogerDirect, Sky with Roger is now 42% smaller* and 32% lighter* than the previous generation*.

Tamperproof features

Young listeners are safeguarded thanks to the tamperproof earhook and new tamperproof battery door – safely keeping batteries in the hearing aid and out of small hands and mouths. With the Sky M-PR, the built-in lithium-ion rechargeable battery cannot be removed and swallowed.

Industry-leading robustness

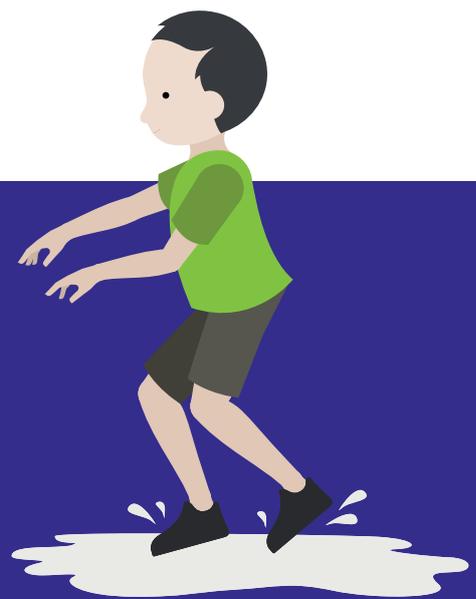
With Sky Marvel, children have the freedom to explore and play, even when life gets a little wet. Marvel hearing aids are built with robust housings, making them water resistant and dust tight (IP68 rating**).

New indicator light

Sky Marvel offers a newly designed indicator light which is intuitive, discreet and clearly confirms the status of the hearing aid. The visual alerts are programmable and offer parents with young children the reassurance that the hearing aids are powered on and receiving a Roger signal.

A field study investigation into the real-world use of hearing aids showed that wearing Phonak Sky two to three times a week during water-based activities (where hearing aids are not totally submerged) **did not result in any damage to the hearing aids.**²⁰

Parents of kids who were part of this trial reported **new confidence** in letting their children participate in water-based activities. The children involved showed **greater responsiveness and participation**, thanks to full understanding while engaged in activities.²⁰



* Comparing Sky M-M vs Sky B-P + Roger 18 (Design-integrated receiver)

** IP68 indicates that the hearing aid is water resistant and dust tight. It survived continuously in 1 metre of water for 60 minutes and 8 hours in a dust chamber as per the IEC 60529 standard.

Sky Marvel and Roger

The world's first paediatric hearing aids that stream directly from Roger microphones

Roger for young children

A recent study conducted at Vanderbilt University showed that with Roger use at home, preschool children had access to approximately 5,300 more words in an eight-hour day.¹⁷ Children also had access to 12% more child-directed speech per day with remote microphone use, compared to using hearing aids alone.⁹ Increasing the quantity of words a small child hears is vital; however, increasing access to quality interactions has an even greater impact on their development.

Additionally, the Outcomes of Children with Hearing Loss study found that children who received a remote microphone system, like Roger, for home use had improved language outcomes compared to those that did not. They scored significantly better on high-order language skills such as receptive discourse ability.²¹

With RogerDirect, Roger receivers can be wirelessly installed into Sky Marvel hearing aids. As soon as a connected Roger microphone is switched on, children can take advantage of the proven performance of Roger¹⁹ in noise and over distance. Roger technology in a smaller package ensures easier access to more words and more conversations¹⁷, helping to build strong relationships.¹

Roger for school-age children and teens

The benefits of Roger for school-age children and teens are well established, providing unparalleled performance with 54% improvement in speech understanding compared to other remote microphone technologies.¹⁹ With RogerDirect, older children and teens can now enjoy these proven benefits without the need to wear additional equipment.



Roger portfolio



Roger Touchscreen Mic



Roger Pass-around



Roger Multimedia Hub



Roger Select



Roger Pen



Roger Clip-On Mic



Roger X



Roger MyLink

Roger for the classroom

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

Roger Multimedia Hub 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.

Roger for home and social situations

Roger Select™ uses MultiBeam Technology and gives older children and teens discreet control in large, noisy conversations. When placed on a table, it can automatically detect who is talking. The user can also manually select, with a tap of the microphone, who they want to listen to when multiple conversations are happening at the same time.

Roger Pen offers a unique design and features fully automated or manual microphone settings and Bluetooth connectivity, providing an all-inclusive listening experience.

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

Roger receivers

Roger X is the miniature universal Roger receiver which is compatible with all Roger microphones and can be wirelessly installed* into any Sky Marvel hearing aid.

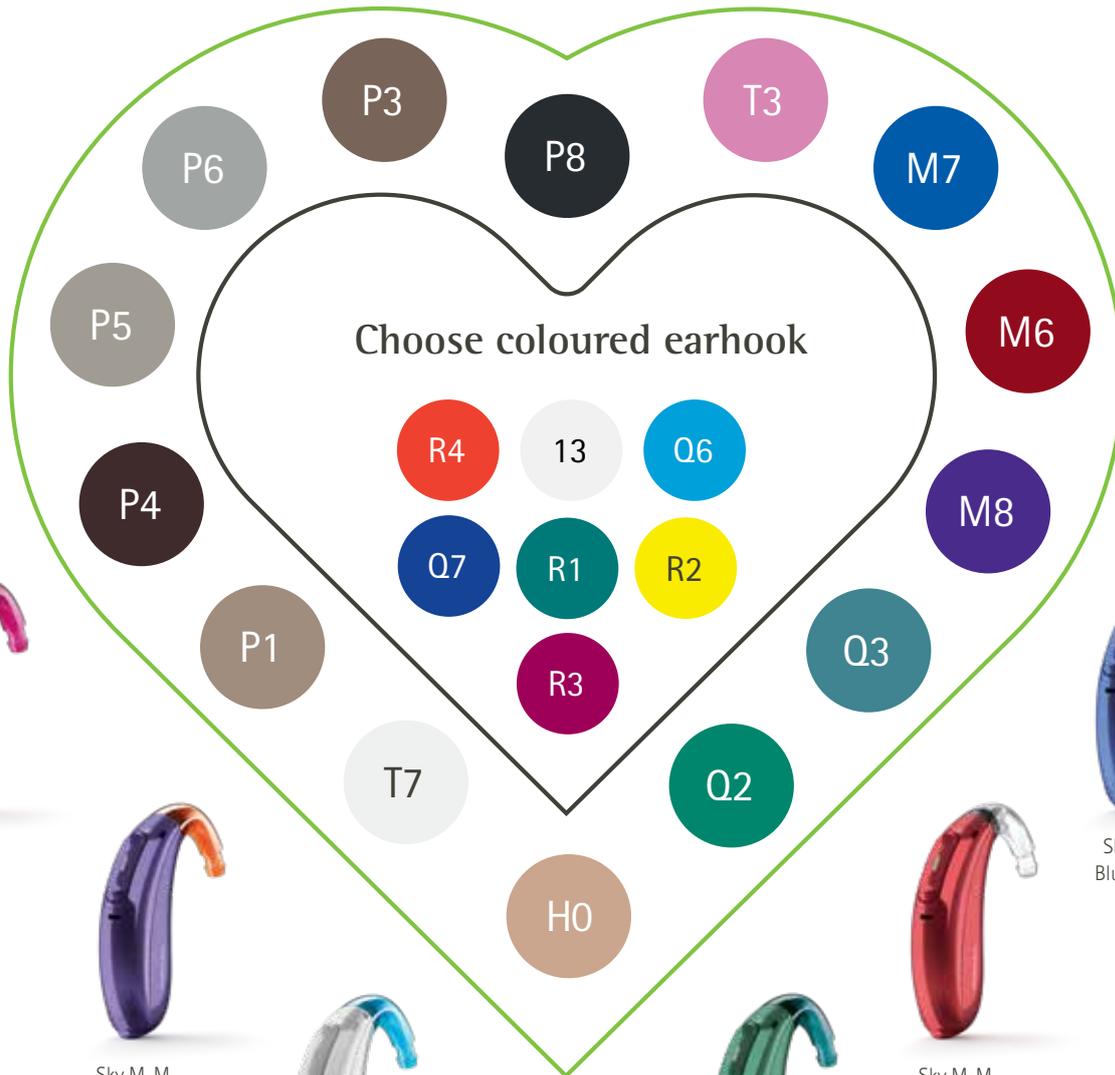
Roger MyLink is an easy to use universal Roger receiver worn around the neck and compatible with Sky M-M and Sky M-SP.

* Only Roger X with serial number with first four digits 1744xxxx and higher

The colour of sound

Marvel is available in a variety of colours ranging from fun and vibrant to discreet skin-tone shades. Children can choose colours that truly match their personality, giving them confidence to embrace and enjoy wearing their hearing aids.

Choose coloured housing



A commitment to building strong relationships

Our dedication to life-changing innovation is unwavering, as we continuously create holistic solutions to meet the ever-changing hearing needs of children with hearing loss. We take pride in the knowledge that our proven paediatric solutions play a pivotal role in developing speech and language while contributing to a wide range of communication and social skills for children with hearing loss.

This dedicated portfolio of hearing solutions delivers clarity and richness of sound, resulting in access to more words for young listeners. Our aim is to support and empower children along their listening journey, ensuring their learning success while building close, loving relationships that will benefit them throughout their lifetime.

Life is on

At Phonak, we believe that hearing well is essential to living life to the fullest. For more than 70 years, we have remained true to our mission by developing pioneering hearing solutions that change people's lives to thrive socially and emotionally. Life is on.

www.phonakpro.com.au