

# Roger Focus

Because every child deserves the chance to focus

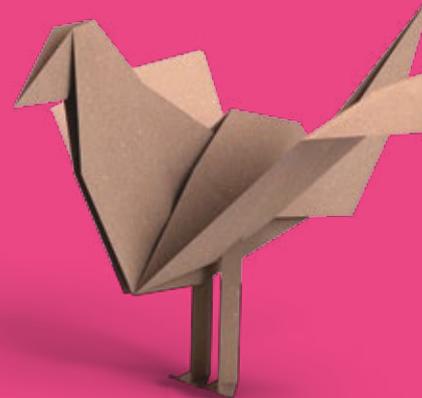


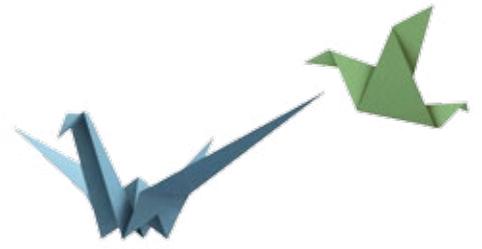
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**PHONAK**  
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“Do you have young clients with unilateral hearing loss, autism or auditory processing disorder who have difficulty paying attention? Why not try an approach that is proven to help?”





# Because every child deserves the chance to focus

A child's ability to clearly hear the voices of parents, teachers and other caregivers is a key component of his or her learning and development.

Take school for example. The capacity of a young learner to focus on auditory stimuli such as the teacher's voice is proven to be the most significant predictor of educational performance.<sup>1</sup>

But this focusing isn't always easy, especially for children affected by autism spectrum disorder (ASD), auditory processing disorder (APD) or unilateral hearing loss (UHL). For these kids, paying attention can be a real challenge, especially when noise levels increase.<sup>2</sup>

Fortunately one type of technology has been proven to help. Roger Focus.

Wireless microphone and receiver systems such as Roger Focus cut through distracting background noise to bring the speaker's words directly into a child's ears. The result? Children with attention-related issues are able to hear and understand more, allowing them to engage more fully with learning and with life.

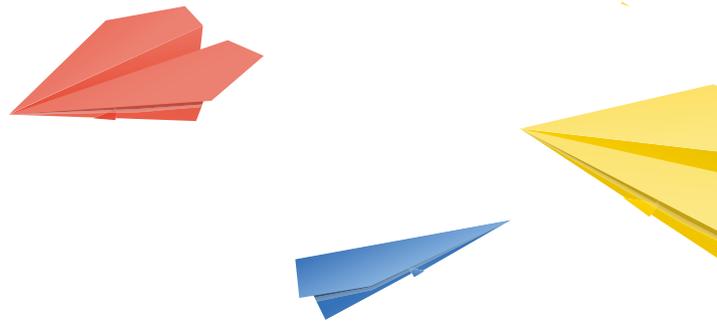
## What is Roger?

Roger by Phonak is the new digital standard that bridges the understanding gap in noise and over distance, surpassing the performance of today's existing FM and digital systems. It uses cutting-edge wireless microphones to pick up the voice of the speaker and transmit this wirelessly over 2.4 GHz to miniature ear-level receivers. Roger offers the industry's best ever speech-in-noise performance, with proven improvements of up to 54%<sup>3</sup> over other FM and digital systems, and 35%<sup>3</sup> over Dynamic FM technology.



# Focus on helping children to concentrate

As hearing care professionals, you know that wireless technology can improve the speech understanding of children with hearing loss who wear hearing aids or cochlear implants. However, you may not be aware that such systems can also benefit youngsters with otherwise normal hearing who find it difficult to follow a speaker's words.



## Children with ASD

Children with autism spectrum disorder (ASD) often experience problems processing sound,<sup>4-6</sup> which can in turn exacerbate their social difficulties. However, several studies have proved that wireless listening technology, such as Roger Focus, can help autistic children to hear better and to act upon the words they hear.

A recent study<sup>7</sup> explored the sustained use of wireless listening technology in mainstream classroom environments and found that such technology can help children with ASD "understand more speech in class, aid in their social interaction and improve educational outcomes."

A second study<sup>8</sup> added, "improving the classroom signal-to-noise ratio can significantly enhance listening, attention, and communicative behavior in children with autism spectrum disorders."

**"In our six-week study of school-aged children with ASD, FM systems provided significant listening-in-noise, communication and educational benefits. Children could hear the teacher's words better, communicate with fellow students better and were generally more engaged in classroom activities than without the FM."**

Gary Rance (PhD), Associate Professor, Department of Audiology & Speech Pathology, The University of Melbourne



### Children with APD

Children diagnosed with auditory processing disorder (APD) experience significant listening difficulties<sup>9</sup> in noisy environments such as classrooms.

However a 2009 study<sup>10</sup> found that children with APD showed "greater speech-perception advantage" when using wireless microphones and receiver systems. Not only that, but after prolonged use, unaided (i.e. no FM) speech-perception performance also improved, suggesting what the authors described as "the possibility of a fundamentally enhanced auditory system."

### Children with UHL

Although speech is audible for children with unilateral hearing loss (UHL), it is not always understandable.

Researchers have found that up to 40% of children with unilateral hearing loss (UHL) fail one or more grades and/or require additional assistance in the classroom, despite them having normal cognitive abilities.<sup>11</sup> And since children with UHL have to make a constant effort to listen and cannot always hear what's being said, they can also become withdrawn, putting them at greater risk of social-emotional difficulties than their normal-hearing peers.<sup>12</sup>

Several studies<sup>13</sup> have confirmed that increasing the signal-to-noise ratio by way of a wireless microphone and receiver system helps to boost the speech understanding of children with one-sided hearing.



# Focus on performance

Roger Focus is a discreet and highly comfortable behind-the-ear Roger receiver. It features a SlimTube, a volume control, and uses a 312 battery. The perfect companion for active explorers, it is also resistant to water, sweat and dust.



- Highly discreet
- Extremely light
- Usable out of the box (no programming)
- One-click microphone connection
- Volume control
- Water, sweat and dust resistant (IP57\*)
- 17 color options
- Customizable with 4 SlimTubes and 3 sizes of open domes

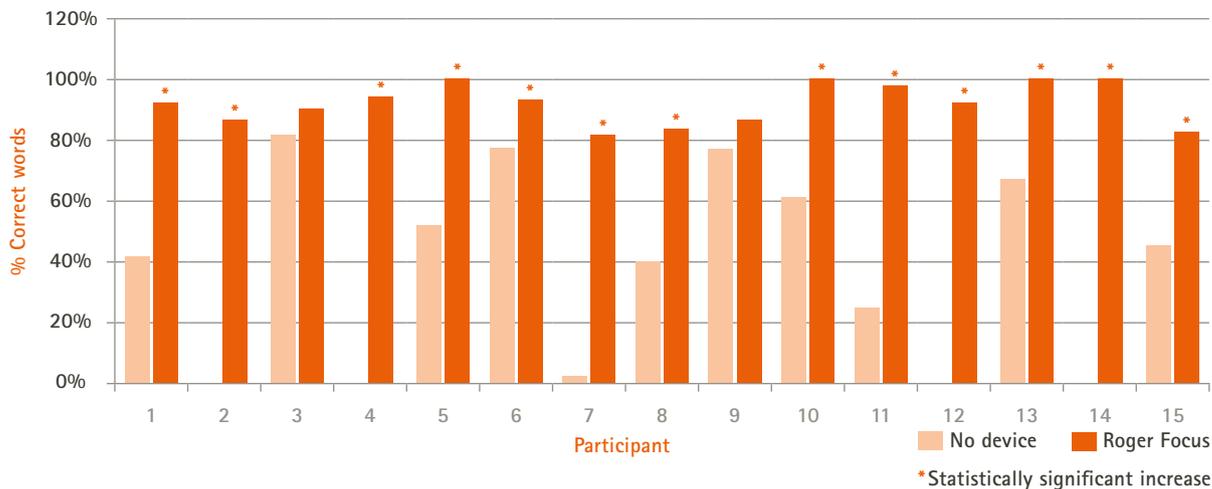
\* IP57 indicates that the device is water resistant and dust protected. It survived immersion in 1 m of water for 30 minutes and 8 hours in a dust chamber as per the IEC60529 standard.



Roger digital technology surpasses all of today's existing FM and digital systems, offering a breakthrough in signal-to-noise ratio and eliminating technical complexity once and for all.

### Maximum performance

Speech-in-noise testing revealed an average improvement of 53% with Roger Focus compared to using no device (see graph), using BKB-SIN word lists, with speech presented at 60 dB SPL and noise at 65 dB SPL.<sup>15</sup> Note that participants 2, 4, 12 and 14 achieved almost perfect scores when Roger Focus was introduced versus 0% with "no device".



Speech-in-noise results for 15 children using Roger Focus vs no device

### Zero hassle

Nothing is easier to use than Roger. There are no frequencies to program and manage, and devices are connected with a single click.

### Full compatibility

Roger Focus can easily be used alongside other types of classroom technology. It has been designed such that it will not interfere with any systems running on 2.4 GHz. It is also fully compatible with the Roger inspiro teacher microphone, meaning a teacher can use Roger inspiro to transmit speech simultaneously to all Roger, FM and soundfield listeners.

### Wearable comfort

Even the best hearing technology is useless if a child does not wear it. Roger Focus is light and comfortable. Plus with four SlimTubes and three dome options available, you can customize this solution to suit every young listener.





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# Focus on flexibility

Whatever a child's particular lifestyle needs, there is a Roger wireless microphone to match. Users don't need to be technology experts either, since every Roger microphone is simple to connect and use. The result is a family of technologies that children, parents, teachers, and hearing care professionals can trust.



## Roger inspiro

Roger inspiro is a durable teacher microphone that is already used in tens of thousands of classrooms around the world. It offers one-click connection of receivers, simplified menus, and programmable shortcut keys.

Used by: teachers, parents of young children.



## Roger Pen

The inconspicuous Roger Pen enables young listeners to hear and understand in loud noise and over distance. It features fully automated microphone settings and can be used alone or alongside other Roger Clip-On Mics and Roger Pens for communication between multiple speakers. It also features wideband audio Bluetooth for cell phone calling, an audio input for listening to multimedia, and TV connectivity.

Used by: children, teenagers, and young adults who use Bluetooth devices.



## Roger Clip-On Mic

The Roger Clip-On Mic packs industry-leading Roger speech-in-noise performance into a discreet shirt-worn device. It can be used alone or alongside other Roger Clip-On Mics and Roger Pens. It also includes an audio input for listening to multimedia and TV connectivity.

Used by: parents, family, friends (not recommended for classroom use).

# Focus on fun

When it comes to bringing a smile to a child's face, there's nothing quite like color. It's with this in mind that Roger Focus is offered in no less than 17 colors.



## Meet Leo

Introducing Leo the lion, our friendly new pediatric mascot. This adorable lion cub is the perfect way to introduce hearing solutions to children. Learn more at [www.phonakpro.com/leo](http://www.phonakpro.com/leo)

# Focus on evidence



## Your full guide to the evidence referenced in this brochure

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Read more at [www.phonakpro.com/evidence](http://www.phonakpro.com/evidence)

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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.

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