

# Promoting listening in children with Autism Spectrum Disorder

Learning and engaging depends on a child's ability to listen to the voices of parents, teachers and peers.



Auditory issues have been reported in as many as 50% of children with **Autism Spectrum Disorder (ASD)**.<sup>1</sup>

## These children have:

- difficulty understanding speech-in-noise<sup>2</sup>
- increased listening stress<sup>2</sup>
- greater risk for academic underachievement<sup>3</sup>

Listening issues can be caused by multiple factors<sup>4</sup>

Challenge



Listening difficulties



## Using remote microphone technology devices in children with ASD can:

- improve speech understanding in noise<sup>2, 5-7</sup>
- reduce listening stress<sup>2</sup>
- increase acceptance of noise<sup>6</sup> and improve listening behavior<sup>6-7</sup> and attentiveness<sup>7</sup>

Solution

### What is Roger?

Roger by Phonak is the revolutionary digital standard that bridges the listening gap in noise and over distance.



Roger Focus II

More information on Roger Focus II:  
[phonakpro.com/rogerfocus](https://phonakpro.com/rogerfocus)

<sup>1</sup> Tomchek, S. D., & Dunn, W. (2007). Sensory processing in children with and without autism: a comparative study using the short sensory profile. *American Journal of occupational therapy*, 61(2), 190-200.

<sup>2</sup> Rance, G., Chisari, D., Saunders, K., & Rault, J. L. (2017). Reducing listening-related stress in school-aged children with autism spectrum disorder. *Journal of autism and developmental disorders*, 47(7), 2010-2022.

<sup>3</sup> Ashburner, J., Ziviani, J., & Rodger, S. (2008). Sensory processing and classroom emotional, behavioral, and educational outcomes in children with autism spectrum disorder. *American journal of occupational therapy*, 62(5), 564-573.

<sup>4</sup> Dillon, H., & Cameron, S. (2021). Separating the causes of listening difficulties in children. *Ear and Hearing*. Advance online publication.

[https://journals.lww.com/ear-hearing/Abstract/9000/Separating\\_the\\_Causes\\_of\\_Listening\\_Difficulties\\_in.98483.aspx](https://journals.lww.com/ear-hearing/Abstract/9000/Separating_the_Causes_of_Listening_Difficulties_in.98483.aspx)

<sup>5</sup> Feldman, J.I., Thompson, E., Davis, H., Keceli-Kaysili, B., Dunham, K., Woynarowski, T., Tharpe, A.M., Picou, E. (Accepted). Remote microphone systems can improve listening-in-noise accuracy and listening effort for youth with Autism. *Ear Hear*.

<sup>6</sup> Schafer, E. C., Wright, S., Anderson, C., Jones, J., Pitts, K., Bryant, D., ... & Reed, M. P. (2016). Assistive technology evaluations: Remote-microphone technology for children with Autism Spectrum Disorder. *Journal of communication disorders*, 64, 1-17.

<sup>7</sup> Rance, G., Saunders, K., Carew, P., Johansson, M., & Tan, J. (2014). The use of listening devices to ameliorate auditory deficit in children with autism. *The Journal of pediatrics*, 164(2), 352-357.