

The Direct Link between Teacher



The teacher carries a small FM transmitter and a microphone.

The ultra lightweight MicroBoom has an ingenious design and offers optimum wearer comfort and best Signal-to-Noise Ratio.

Operating Guide

Switching on/off

The EduLink is switched on and off via the volume control.

To economize on battery usage, the EduLink automatically enters a sleep mode when the transmitter is switched off. Switching the transmitter on again reactivates the EduLink automatically.

Volume control setting

The pre-programmed volume control setting has been optimized for children with normal hearing acuity. Personalization of the volume control setting over a distance, similar to the typical “listening” distance, allows for maximum intelligibility and loudness comfort of the speaker’s voice, transmitted by the FM transmitter.

The EduLink volume control is programmable and has an adjustment range of 14 dB.

Tamper-Proofing

Like all Phonak products, the EduLink can be fitted with a tamperproof battery door. Exchange the standard battery door for a tamperproof one. Then simply tighten the screws, and it is no longer possible to open the battery compartment. The screws must be undone also to replace the battery.

Battery

The EduLink uses a size 312 battery.

Cleaning

The titanium tip incorporates a waxguard which will need to be replaced when it becomes clogged. Use the special replacement tool provided.

Phonak FM transmitters

All Phonak FM transmitters are compatible with EduLink.

For school use, Phonak recommends the Campus SX.

EduLink

- Miniaturization and open fitting to address stigma, practicality and acceptance.
- FM as part of a comprehensive approach – EduLink as a support tool, NOT as a substitute for therapy.
- Provides children with an upfront and highly qualitative access to the teacher’s voice.
- This results in better speech comprehension in complex listening situations and easier learning.



The
Link
to
Learn

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EduLink™

Helping Children Understand

- Children with unilateral hearing loss do not have the advantages of binaural hearing and have therefore difficulties understanding in background noise.
- This endangers classroom learning and can put the child at risk for academic, speech-language, social, and emotional problems.
- An enhancement of the Signal to Noise Ratio by 15 to 20dB as a part of a comprehensive management solution will provide the child with unilateral hearing loss optimum access to the primary signal.
- EduLink represents the most effective way of increasing speech understanding in background noise and over distance.

More information about EduLink is available on the internet: www.phonak.com/EduLink
and on www.eSchoolDesk.com

Phonak publishes information sheets for many different countries, along with local contact addresses.

The Phonak Group specializes in the design, development, production and worldwide distribution of technologically advanced hearing systems. The combination of expertise in hearing technology and a strong distribution network allows Phonak, along with its customers and business partners, to make a substantial improvement in the quality of the individuals with hearing impairment.

With a market share of 88% worldwide, the Phonak Group is the major player for wireless communication in the hearing healthcare market.

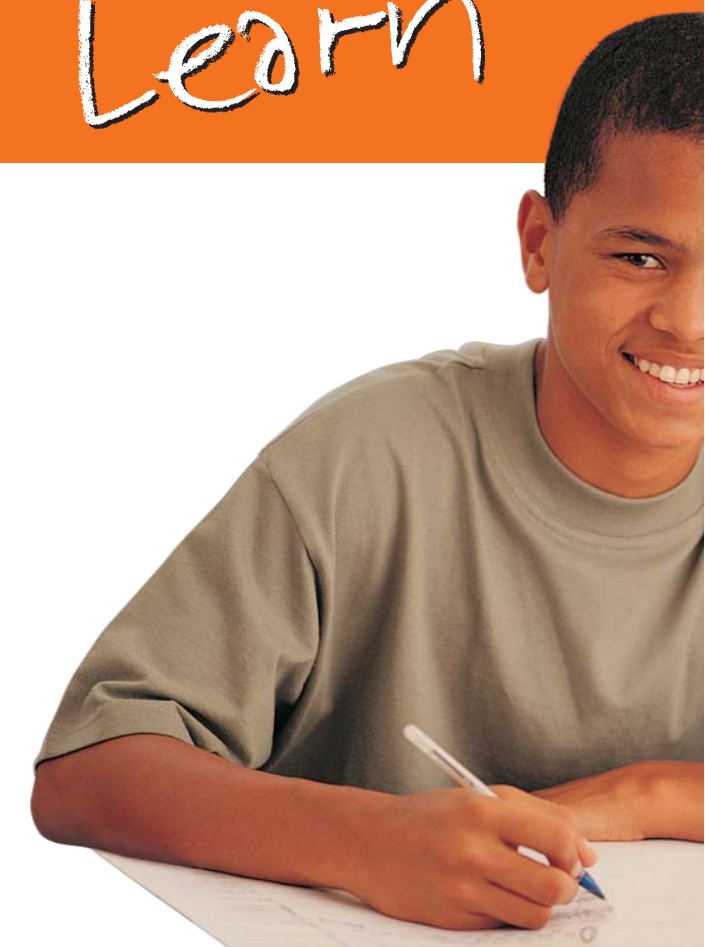
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hearing systems

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for Children
Unilateral Hearing Loss



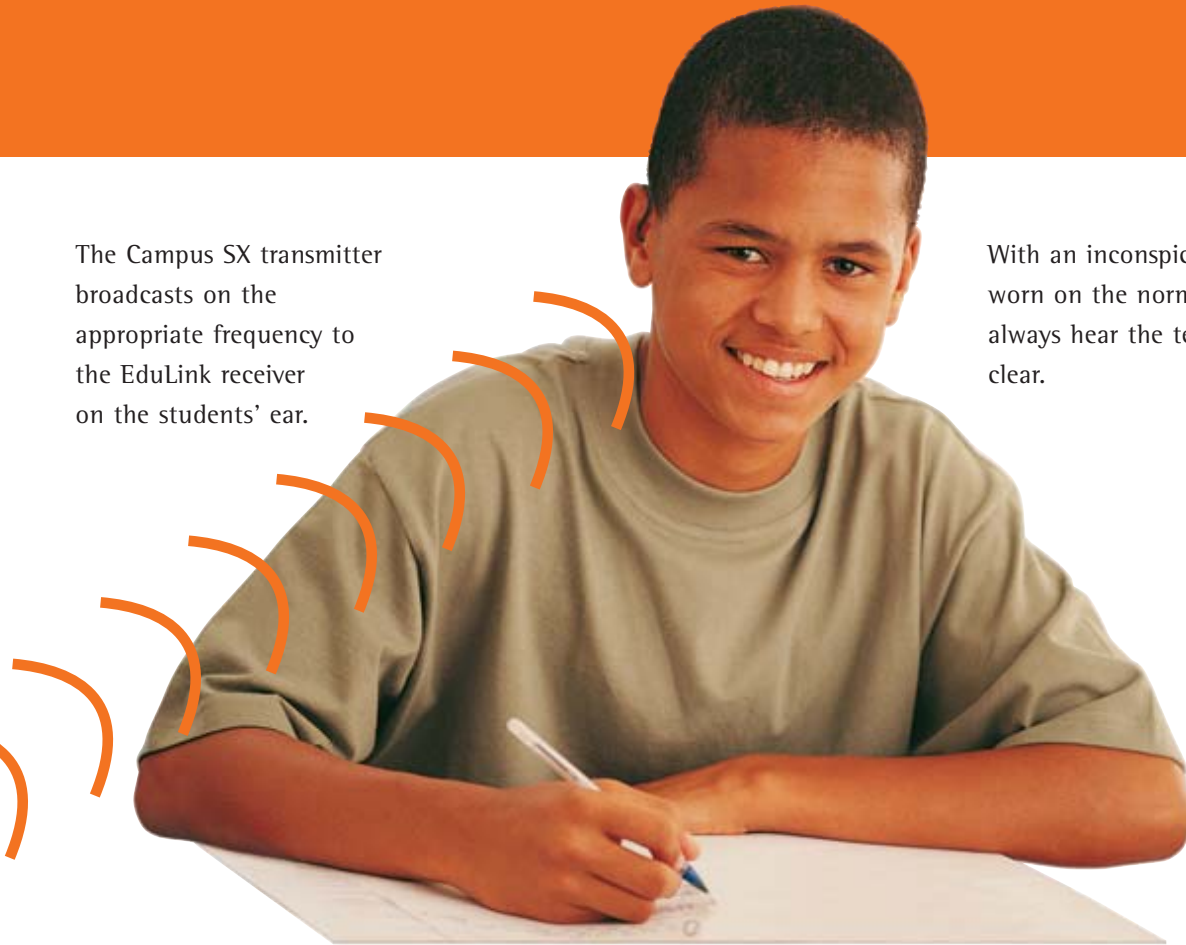
The Link
with



and Student

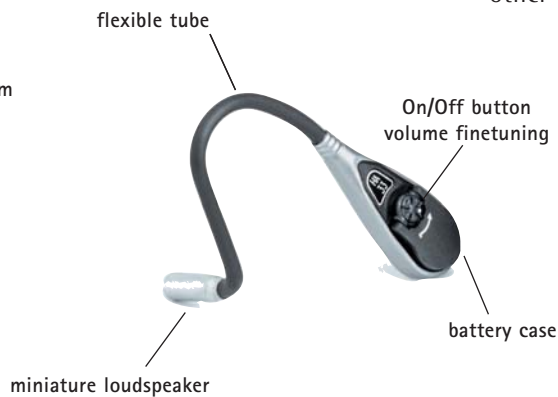
The Campus SX transmitter broadcasts on the appropriate frequency to the EduLink receiver on the students' ear.

With an inconspicuous EduLink receiver worn on the normal hearing ear, a child can always hear the teacher's voice loud and clear.



The Campus SX transmitter offers practicality and flexibility, allowing teachers to pay full attention to their students.

The EduLink features a contemporary design, similar to the latest cell phone headsets. This guarantees acceptance by the wearer and other children in the class.





Classroom Learning and Hearing

In mainstreamed classrooms, hearing and listening are the cornerstones of learning. If a child cannot clearly hear the teacher, this will automatically influence this child's learning and academic success. There is a big difference between an "audible" and an "intelligible" signal.

Classrooms are known to be noisy environments. Noise is, by definition, unwanted sound. Noise may interfere with a broad range of activities and may smear the teacher's voice even more. His voice, although still audible, will no longer be intelligible.





Children are more at risk than adults. They bring a different listening to a communicative and learning situation, in two ways. On the one hand, children do not have a complete neurological system to benefit from. Their auditory processes are not fully developed until they are in their mid-teens (bottom-up). On the other hand, children do not have the years of language and life experiences that enable adults to fill in the gaps (top-down). As speech understanding requires both processing of acoustic and linguistic information, children will definitely benefit from having access to a clear auditory signal.

Studies show that even children with normal hearing benefit from a higher Signal-to-Noise Ratio (SNR) in challenging listening situations, such as the classroom.

As all children spend much of their day engaged in listening activities, it is obvious that **they need clear and consistent access to spoken instruction.** This will provide the best opportunities for learning.

Any type and degree of hearing loss presents the child with an additional barrier to receive information from its environment.

It imposes an invisible acoustic filter that will distort, smear or eliminate incoming sounds, especially sounds from a distance – even a short distance. This can interfere with the development of a child's spoken language, reading and writing skills and – finally – academic skills.



Unilateral Sensorineural Hearing Loss

Children with a unilateral sensorineural hearing loss (UHL) have a much higher risk of academic problems. At least 35% of all children with a unilateral hearing loss fail one grade or more. Due to the lack of binaural hearing, children with a UHL have only limited auditory skills (understanding speech in noise, localizing sound sources), which is a clear disadvantage when it comes to learning in classrooms. Evidence shows that even when speech is directed to the good ear, children with a unilateral hearing loss have more difficulty understanding the message than children without hearing loss.



A child is diagnosed with a UHL when he or she has normal hearing sensitivity in one ear – with average thresholds ranging between -10 and +15dB nHL – and at least a mild permanent hearing loss in the other ear. The degree of hearing loss in the affected ear can range from a mild to a profound hearing loss.



Potential effects of a unilateral sensorineural hearing loss

In general, a child with a unilateral sensorineural hearing loss will have difficulties:

- hearing faint or distant speech;
- detecting subtle conversational cues;
- keeping up with fast-paced communication interactions;
- distinguishing high-frequency, low energy consonants that are known to bring meaning or morphological markers for place, tense, plurality, possessiveness, and so on.

The effect is higher for children with a unilateral hearing loss in the right ear than for children with the loss in the left ear. The right ear is predominantly connected to the left hemisphere of the brain, where normally most of the speech and language functions are located.

Approximately 1 out of every 300 children shows a unilateral sensorineural hearing loss. He or she can be at risk for academic, speech-language, social and emotional problems and often requires additional support to address their needs.





Enhancing the Future

In the distant past, audiologists and otolaryngologists were hardly concerned over a child's unilateral sensorineural hearing loss and usually told its parents not to worry.

Today, children with a unilateral sensorineural hearing loss are monitored closely. They are seen regularly for audiological evaluation to monitor both the good ear and also the worse ear. Comprehensive management includes direct remediation techniques, compensatory strategies training and – with average classrooms showing SNR values of about 4dB or worse – environmental modifications such as the improvement of classroom acoustics and the use of a personal FM system. As children with a unilateral hearing loss need an SNR of +15 to +20dB in the classroom, preferential seating or using a loud voice for acoustic advantage will be ineffective.

Only a personal FM system will provide a positive SNR of +20 dB. Therefore, only FM systems remain the effective way of increasing speech understanding in background noise and over distance. The use of the FM system will facilitate the reception of the primary speech signal. When children can detect word-sound differences clearly, they will have an opportunity to develop and improve their language skills and to acquire knowledge of the world. This, in turn, will optimize learning and enhance therapy outcomes. The child has access to a brighter future. The FM system is fit on the good ear.

Studies show that an FM system remains the only audiological recommendation to produce the highest speech understanding scores in both quiet and noise.

It is clear that a child with a UHL will benefit greatly from the use of an FM system in the learning environment where noise may interfere with learning. This environment may be the school, home, car, or even the zoo.



EduLink™ – the Link to Learn

EduLink is a miniaturized FM receiver that Phonak has developed specifically for children with normal hearing thresholds and a normal dynamic range who have difficulties understanding language and learning in background noise and over distance.

EduLink is used to complement existing therapy and ensures that important information reaches the ear as a priority – up to 20 dB louder than the environmental noise.

EduLink enables the child to hear the teacher's voice at any time without difficulty – even in the most challenging listening situations.

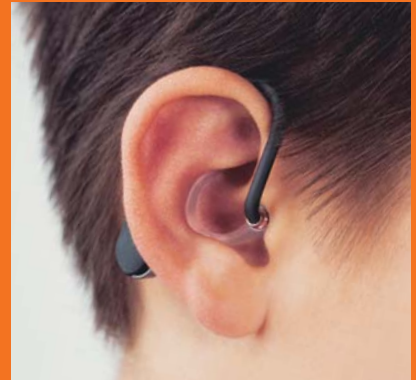
EduLink is typically fit on children age 5 and older and can be combined with every Phonak transmitter. The Campus SX is the recommended transmitter to be used in schools.

EduLink is fit on the good ear.

Results from daily experiences and scientific studies show that by using the EduLink system in class, children significantly enhance their chances in overcoming their learning difficulties.



EduLink arrives straight so it can be customized/bent for each individual wearer.



A short videoclip demonstrating the use of the bending tool can be found at www.phonak.com/EduLink

Desktop Fitting Guide



The EduLink is fit on the client's good ear. First, determine where to make the bend. Hold the EduLink to the client's ear. The earpiece should be positioned in the upper part of the auditory canal, without touching the auditory canal wall.

The point of bending corresponds with the base of the outer ear (see arrow). Hold the EduLink at this position between your thumb and forefinger, and remove it from the ear.

Then take the desktop fitting tool and insert the earpiece through one of the holes to the end of the titanium tip, so that the point of bending previously marked with thumb and forefinger, meets the black line.

Bend the EduLink into shape.

Important: the EduLink needs to be slightly over-bent because its elasticity makes it spring back somewhat.

Remove EduLink from the fitting tool and pull the earpiece and receiver a little apart in opposite directions.

For optimum fit and safety, Phonak recommends fitting EduLink with the supplied retention lock. It twists-on to the earpiece as shown in the picture and rests in the base of the concha.

The EduLink is now ready for use. The easiest insertion method is to first position the unit behind the ear, and then guide it into the auditory canal.

Check how the EduLink rests over the client's ear. The ideal fitting shape follows the profile of the ear with the titanium tip resting slightly in the ear canal without causing pressure.

If the auditory canal is sharply curved, bend the earpiece in the appropriate direction.