

Radio Aids

Many deaf children (and adults) find radio aids useful, especially at school, college, or at home. They can help reduce the background noise in, for example, a school classroom, and help a child to concentrate on one person's voice, often their teacher. The majority of radio aids are provided by the local education services and the provision of a radio aid may be included in a child's statement of special educational needs (England, Wales & Northern Ireland) or record of needs (Scotland).

Most radio aids are of a type known as 'personal systems'. These are used together with the child's hearing aids or cochlear implants. (There is one make of radio aid that has a hearing aid built into it. It uses special earpieces with ear moulds. The child does not need an ordinary hearing aid when using this radio hearing aid.)

All radio aids have two main parts: the transmitter and the receiver. The person talking wears the transmitter. A microphone picks up the speaker's voice. The sounds are then transmitted by radio waves to the receiver. The deaf child wears the receiver. This picks up the radio signal from the transmitter and converts it back to sound, which is amplified by the child's hearing aids or implant.

Radio aids work on different frequencies, like tuning into different radio stations. For example, each school class might have its own frequency so

We use the term 'deaf' to mean all types of deafness, including temporary deafness such as glue ear.

that it does not interfere with the class next door. The frequency can usually be altered quite easily, either with a control on the aid or by replacing a plug-in module. A colour, letter or number code is used to show which frequency the radio aid is working on. The transmitter and receiver must have the same code if they are to work together.

The user can receive the sound in two ways: through a neck loop or by 'direct connection' to the child's hearing aids. A **neck loop** can be worn over or under the clothes. This loop is connected to the radio aid receiver by a thin lead. The child's hearing aid must be switched to the 'T' setting. This system only picks up sound from the transmitter so background noises near the child will be reduced. Most personal systems have a built in microphone that can be switched on to pick up nearby sounds and the child's own voice. Using a neck loop can cause difficulties. Interference can be a problem and the quality of sound can vary.

Most children use '**direct connection**'. The radio aid receiver is linked to the child's post-aural hearing aid directly by a lead. The lead is attached to the hearing aid with a 'shoe'. A double, Y-shaped lead can be used if the child wears two hearing aids. A small number of in the ear hearing aids also have a direct input facility. Using direct input means that both nearby sounds and the child's own voice will be picked up. This type of radio aid can be worn either on the chest or on a waist belt. Behind the ear radio aid receivers are housed entirely within a 'shoe'. This means there is no body-worn receiver and no wires.

For more information or for a copy of *Radio Aids – An introductory guide for parents and teachers*, or to find out about the Blue Peter Loan Service, please contact the NDCS Technology Team via the NDCS Freephone helpline on 0808 800 8880 (voice & text). You can also view items available for loan on our website: www.ndcs.org.uk

This information is available in large print, in Braille and on audio tape.

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