

Listening equipment

We have lots of information on deafness, hearing loss and tinnitus.

Go to

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Three facts

RNID • 

Changing the world for deaf
and hard of hearing people

Listening equipment

This factsheet is part of RNID's **equipment** range. It is written for people who are deaf or hard of hearing. We use the term 'deaf' throughout to refer to all types of deafness and hearing loss.

Read this factsheet to find out:

- What does listening equipment do?
- What are the different levels of hearing loss?
- What does listening equipment look like?
- What type of headphones can I get for listening equipment?
- What can I use to hear conversations, the TV or stereo equipment?
- Can I get cordless and infrared listening equipment?
- Can I use listening equipment to listen to a loop system?
- What kind of listening equipment is suitable for education and work?
- Can I get equipment for telephone or mobile phone conversations?
- Can I get equipment to help me hear conversations or the radio in the car?
- Can I get help with paying for equipment?
- Where can I get further information?

Manufacturers may use other names for listening equipment, such as:

- personal listeners
- personal listening aids
- conversation aids
- assistive listening devices.

Important safety information

Listening equipment can be very loud. When switching any listening equipment on, always start at a low volume and gradually increase it. Avoid having it louder than you really need. If you are concerned about your hearing, talk to your GP or audiologist.

What does listening equipment do?

Listening equipment 'amplifies' sound (makes it louder) so you can hear conversations:

- at home or in your car
- on your phone or mobile phone
- at meetings and lectures
- on the television, radio or hi-fi.

You can usually get listening equipment with accessories such as:

- headphones
- stetoclip headsets

- neckloops
- ear hooks
- extension microphones.

You can use listening equipment whether or not you wear hearing aids. The type of equipment and the accessory you choose will depend on the level of your hearing loss.

What are the different levels of hearing loss?

When we refer to different levels of hearing loss in the factsheet, this is what we mean:

- Mild deafness – you have some difficulty following speech, mainly in noisy situations.
- Moderate deafness – you have difficulty following speech without hearing aids.
- Severe deafness – you may rely on lipreading, even with hearing aids. British Sign Language (BSL) may be your first or preferred language.
- Profound deafness – you are likely to rely on lipreading. BSL may be your first or preferred language.

What does listening equipment look like?

A basic model is a box containing:

- an amplifier
- a built-in microphone to pick up sound
- a dial or push-button volume control to make sound louder or quieter.

Some models have additional features, such as:

- automatic gain control (AGC), which automatically reduces the amplification on very loud sounds
- a tone control, which lets you change treble tones that can help make speech clearer by boosting the higher frequency sounds. This can help to make 'F' and 'S' type sounds clearer. On some models, you may also be able to reduce low-frequency (bass tone) background sounds
- a socket to plug in an extension microphone, which lets you listen to conversation, the TV, radio or stereo system from across the other side of the room. See page 5, *What can I use to hear conversations, the TV or stereo equipment?*
- a connection lead that plugs directly into your TV (scart or phono socket) or stereo system. This may give better sound quality than an extension microphone
- a 'T' setting to listen to a loop system (see page 7, *Can I use listening equipment to listen to a loop system?*).

What type of headphones can I get for listening equipment?

Choose what you need depending on the level of your hearing loss and whether you wear hearing aids. In this section we look at:

- over-the-ear and in-the-ear headphones
- stetoclip headsets

- neckloops and ear hooks (only for people with hearing aids)
- ‘silent’ headphones – headphones with a magnetic (inductive) signal (only for people with hearing aids)
- noise-cancelling headphones
- headphones with inductive output.

Over-the-ear (OTE) and in-the-ear (ITE) headphones, and stetoclip headsets

Most listening equipment comes with OTE, ITE (button style) headphones or stetoclip headsets.

ITE headphones help to stop sound from leaking out too much, which means that other people around you cannot hear what you are listening to. ITE headphones may be louder than OTE ones because they fit into the ear. OTE and ITE headphones are suitable for people with normal hearing but you may also find them useful if you have mild to moderate hearing loss.

Stetoclip headsets

These are similar to headphones but tend to produce a louder sound, so you may find them useful if you have moderate hearing loss. The frequency range of stetoclip headsets is not usually as wide as OTE or ITE headphones, so their sound quality may not be as good. Take extra care when you use them, because they are very loud.

Price: From £10

Neckloops

If you wear hearing aids, a neckloop may suit you better than headphones. A neckloop is a loop of wire that goes around your neck. It plugs into the headphone socket on most listening equipment. You need to change your hearing aids to the ‘T’ setting to pick up sound through the loop.

If you are using a neckloop with stereo equipment, such as a radio or mp3 player, be aware that the neckloop will give mono sound. If you have two hearing aids and want to listen in stereo, you may prefer to use a ‘dual’ ear hook – see below.

Price: £10-£20

Ear hook

An ear hook works in a similar way to a neckloop but it hooks over your ear next to your hearing aid. To pick up the sound signal from the ear hook, change your hearing aid settings to ‘T’. You can use an ear hook on either your left or right ear, depending on which side you use your hearing aid. You can also get a ‘dual’ ear hook, for both ears. You can use these to listen to your personal stereo if you use hearing aids in both ears.

Price: £15-£25

‘Silent’ headphones – headphones with a magnetic signal

If you prefer not to use neckloops or ear hooks, you may find a pair of ‘silent’ headphones useful. They look like headphones, but produce a magnetic signal like a neckloop or ear hook. You’ll need to set your hearing aids to ‘T’ to use them. You can get different versions of ‘silent’ headphones. Some

have sound on one side and a magnetic signal on the other. Some have a magnetic output on both sides for stereo listening.

You can use silent headphones with most personal stereos and you can also use them with your TV and stereo equipment if you have an extension lead.

Price: £15-£25

Noise-cancelling headphones

These will suit you if you have mild to moderate hearing loss and you do not wear hearing aids. Noise-cancelling headphones reduce background noise, helping you to focus on the sound you are trying to listen to. They can be useful in very noisy environments, such as on an aeroplane.

Price: From £50

Headphones with inductive output

Some over-ear headphones naturally produce a magnetic signal that your hearing aids may be able to pick up when set to 'T'. You may find that you need to turn up the volume control on your equipment and/ or your hearing aids to get a loud enough sound. People around you may be able to hear the sounds coming out from the headphones and this may annoy them if you turn the volume up very high.

Price: From £15

What can I use to hear conversations, the TV or stereo equipment?

If you have mild to moderate hearing loss, you can use listening equipment with a built-in microphone. This can help you hear conversation when talking to someone who is less than two metres away from you. You cannot plug an extension microphone into this type of model, or use it with a direct connection lead for your TV or stereo equipment.

Price: £20-£70

Listening equipment with an extension microphone

If you want to hear a conversation from across a room or listen to your TV or stereo system, you can use listening equipment that has a socket for an extension microphone. A microphone with a long lead is normally supplied with this kind of equipment. If you want to listen to your TV or stereo system, plug the microphone into your listening equipment and put the microphone as close as you can to your TV or stereo loudspeaker.

Some types of listening equipment can be plugged into the scart or phono socket on your TV or stereo system using a direct connection lead rather than an extension microphone. This gives the best possible sound quality.

However, plugging in headphones to a TV may cut out the sound from the TV's loudspeaker which may not suit everyone – especially mixed households.

Price: £35-£75

Can I get cordless and infrared listening equipment?

Cordless listening equipment

You may find cordless listening equipment useful if you do not like wearing equipment with wires, or you want to be able to move around a room easily. Cordless listening equipment includes:

- cordless infrared headphones
- cordless FM headphones
- radio and infrared listening equipment.

You can use cordless listening equipment in a range of situations, such as at home, during conversations, or watching TV.

Cordless infrared headphones

You can get these from high street stores but they are not specifically designed for people with hearing loss. However, they can be useful if you have mild to moderate hearing loss.

Cordless infrared headphones have two parts – an infrared transmitter and cordless infrared headphones. The infrared transmitter plugs into the scart or phono socket on your TV or stereo system and you wear the cordless headphones. Most cordless infrared headphones have a volume control and are powered by rechargeable batteries. This may make them bulky and heavy to wear. You have to use the headphones in the same room as the transmitter because infrared signals cannot go through walls.

Price: From £25

Cordless FM headphones

You can also get cordless FM (frequency modulation) headphones from high street stores, but they are not designed specifically for people with hearing loss. However, like cordless infrared headphones, they can be useful if you have mild to moderate hearing loss.

Cordless FM headphones look and work like infrared cordless headphones, but instead of using infrared signals between the transmitter and headphone they use radio signals. The main advantage of cordless FM headphones is that they can pick up the signal from the transmitter anywhere in the home, depending on the range.

Price: From £20

Radio and infra-red equipment

There are two types: one is for people with hearing aids and the other is for people who do not use hearing aids.

For people with hearing aids

Radio and infrared listening equipment for people with hearing aids has a neckloop receiver that you use by setting your hearing to 'T'. The neckloop is part of the receiver.

You can also plug an extension microphone into the infrared transmitter. When you are listening to your TV, radio or stereo system, you can put the microphone near the loudspeaker with the transmitter close by. For the best possible sound quality, you can plug the infrared transmitter directly into the scart or phono socket on your TV or stereo system.

For people who do not use hearing aids

You can use some radio and infrared equipment if you do not wear hearing aids. These have a headset receiver. With infrared systems, the receiver needs to be in the same room as the transmitter because infrared signals cannot go through walls.

Price: £60-£300

Can I use listening equipment to listen to a loop system?

Yes. If you wear hearing aids you can listen to sound through a loop system by changing your hearing aids setting to 'T'. If you don't wear hearing aids, you can still listen to sound through a loop system, as long as the listening equipment you are using has a 'loop listening' option. You often find loop systems in meeting rooms, cinemas, theatres, and banks. A loop system cuts down background noise and makes the sound clearer.

Some listening equipment can only be used to listen to loop systems. This kind of listening equipment does not have a microphone and may be called a 'loop listener'. For more information, see our factsheet, **Induction loops and infrared systems – a guide for deaf and hard of hearing people**.

What kind of listening equipment is suitable for education and work?

You can get a range of equipment to use during lectures, meetings and interviews. In this section we look at:

- conference folders
- digital recorders
- portable induction loop systems
- radio aid systems.

Conference folder

You can use a conference folder in meetings and small groups to help you hear what people are saying. It is battery-operated and has a built-in induction loop and two microphones. You can plug in an extension microphone and neckloop or headphones. You can also plug a tape recorder or a digital recorder into a conference folder to record the conversation.

Price: £300

Digital recorder

A digital recorder can record memos, messages and dictation. It has a built-in microphone and is battery-powered. Most digital recorders are supplied with headphones, but if you prefer, you may be able to plug in a neckloop or ear hook instead.

Price: From £20

Portable induction loop systems

You can use hearing aids set to 'T', a loop listener, or any listening equipment that has a loop listening option with a portable loop system. If you have mild to moderate hearing loss, you can use headphones with listening equipment that has a loop listening option. For more information, see our factsheet, **Loop and infrared systems for people who are deaf**.

Radio microphone systems

These systems are designed for use in classrooms or lecture halls and other similar settings. Radio microphone systems work with hearing aids and some work with cochlear implants. They can help students hear the teacher, lecturer, or other students. The radio receiver can also be used with headphones or a neckloop.

Generally, these systems need to be professionally installed. However, the 'Conversor radio microphone system' doesn't have to be professionally installed. It is portable and you can use it in the classroom or the home. It has a hand-held wireless microphone and body-worn neck loop receiver.

Price: £250-£1000

For more information about equipment used in educational settings, see our factsheet, **Equipment to for deaf learners**.

Can I get equipment for telephone or mobile phone conversations?

Yes, there's a range of equipment to make it easier for you to hear incoming calls on your phone or mobile phone. For more information, see our factsheets, **Telephones and voice communications** and **Mobile phones**.

Can I get equipment to help me hear conversations or the radio in the car?

Fitting loop systems in vehicles

If you wear hearing aids, you may find it difficult to hear conversations or the radio when you are travelling in a vehicle because of traffic and road noise, and the noise of the engine itself.

You might want to install a loop system so you can listen to your car radio as well as conversations. However, the car ignition system and electrical wiring may cause interference that can be picked up by hearing aids set to 'T'. Before installing a loop system, check for any interference by setting your hearing aids to 'T' while the engine is running. Reducing interference can be difficult, but your local garage may be able to help you.

Price: £100-£150- you may also need to pay someone to install it for you.

Intercom

An intercom can help you and your passengers to chat while in the car. A simple system includes a personal listener and a microphone. You listen to sound using headphones or earphones, or you can also use a neck or ear hook. Remember to check the level of interference in your vehicle by changing your hearing aids to the 'T' setting before you buy any equipment. It is not safe to try to set up the intercom system while driving.

Price: £50 or more plus installation

Do you find it hard to use small, awkward or heavy equipment?

Nowadays a lot of equipment has tiny and often quite fiddly buttons and other controls. Sometimes equipment will just be an awkward shape or maybe it is too heavy for you to use. If you have these sorts of difficulties, it is particularly important to try out equipment before you buy. Check:

- Are the buttons easy for you to press?
- Can you use the other controls easily?
- Is the labelling on the controls easy to read?
- Can you hold the equipment comfortably?
- Is the equipment too heavy for you?

Can I get help with paying for equipment?

Contact the RNID Information Line for information about the following:

- Social services may help to pay for or provide equipment. Contact your Social Worker with People who are Deaf, or your local social services department. For more information, see our factsheet, **Social services for adults who are deaf**.
- The Government's Access to Work scheme may help to pay for equipment you need at work, or, if you are unemployed, for interviews. See our leaflet, **Benefits and services**.
- The Disability Discrimination Act 1995 (DDA) may require service providers, such as hospitals and GP surgeries, to provide equipment. See our factsheet, **The DDA) – what is meant by disability?**
- If you are a student, you may be able to get help to pay for equipment or your education provider may have to provide it under the DDA.

Where can I get further information?

Our Information Line offers a wide range of information on many aspects of deafness and hearing loss. Contact us for further copies of this factsheet and our full range of information factsheets and leaflets. You can also contact us if you would like information in Braille, on audiotape or large print.

RNID Information Line

Telephone 0808 808 0123 Textphone 0808 808 9000 Fax 020 7296 8199

informationline@rnid.org.uk

Buying equipment from RNID

Visit www.rnid.org.uk/shop or contact the RNID Information Line for a copy of *Solutions*, our catalogue of products for people who are deaf or hard of hearing.

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