

Our friendly helpline team is waiting  
to answer your call or email.

---

Telephone 0808 808 0123  
Textphone 0808 808 9000  
Email [information@hearingloss.org.uk](mailto:information@hearingloss.org.uk)

---

[www.actiononhearingloss.org.uk](http://www.actiononhearingloss.org.uk)

**ACTION ON**  
**HEARING**  
**LOSS**

# Hearing loop and infrared systems for people with hearing loss

# THE FACTS

---

# Hearing loop and infrared systems for people with hearing loss

This factsheet is part of our **Equipment** range. You will find it useful if you have hearing loss and want to find out about using a hearing loop or infrared system at home and in public places. When we say 'people with hearing loss', we are referring to people with all levels of hearing loss, including people who are profoundly deaf.

Read this factsheet to find out:

- How do hearing loop and infrared systems help?
- How does a hearing loop system work?
- How do I set up a hearing loop system in my home?
- Can a hearing loop system be installed in my car?
- What is an infrared system?
- How do I use an infrared system?
- How do I set up an infrared system in my home?
- How much do these systems for the home cost?
- Can I get a free hearing loop or infrared system?
- How do I use hearing loop and infrared systems in public places?
- How will I know what kind of system has been installed?
- What should I do if I'm not happy with the service I receive?
- Where can I buy products that may help?
- Where can I get further information?

If you would like this factsheet in Braille, large print or audio format, please contact our helpline – see front page for contact details.

## How do hearing loop and infrared systems help?

Hearing loop and infrared systems help people with hearing loss hear more clearly by reducing the effect of background noise. These systems are often available in cinemas, theatres, bank and post office counters, shops, transport ticket offices, places of worship and crematoriums.

The systems can also be used at home, and you can use a hearing loop system in your car to help you hear CDs or the radio. You can also set up a personal loop with a microphone to help you hear conversations in noisy places. A hearing loop cannot give stereo sound. If this is important, you could consider using a wireless listening system (see our factsheet *Listening equipment*).

## How does a hearing loop system work?

A hearing loop converts sound (speech or music picked up by a microphone or direct connection) into a magnetic field, which is then picked up by hearing aids that have a T (telecoil) programme – this is now commonly known as the hearing loop setting. The hearing aid converts the magnetic field back to the original sound and amplifies it (makes it louder). If you don't use a hearing aid, you can still listen to a hearing loop system by using a loop listener, a portable listening device that has earphones or headphones.

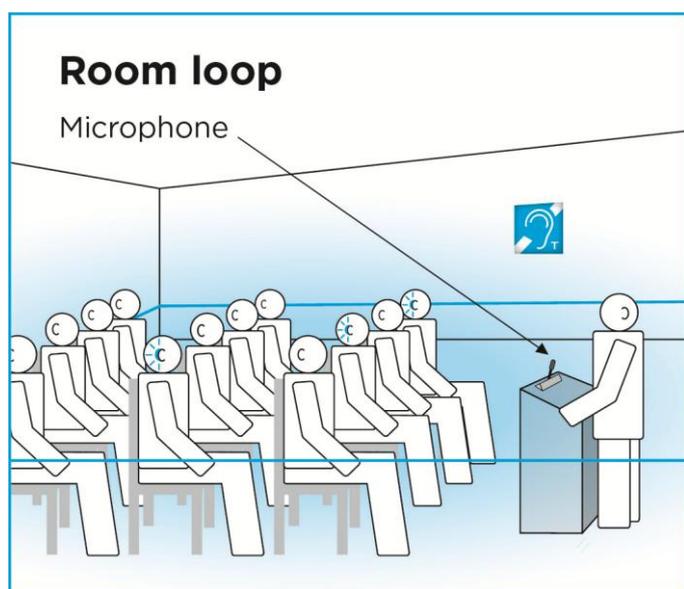
Hearing loops are often called 'loops' or 'induction loops'. You may sometimes see the longer technical term 'audio-frequency induction-loop system' (AFILS).

## Where can I find hearing loops in public places?

There are three main types of hearing loop system in public places; a venue may have one or more of these types.

### Room loops

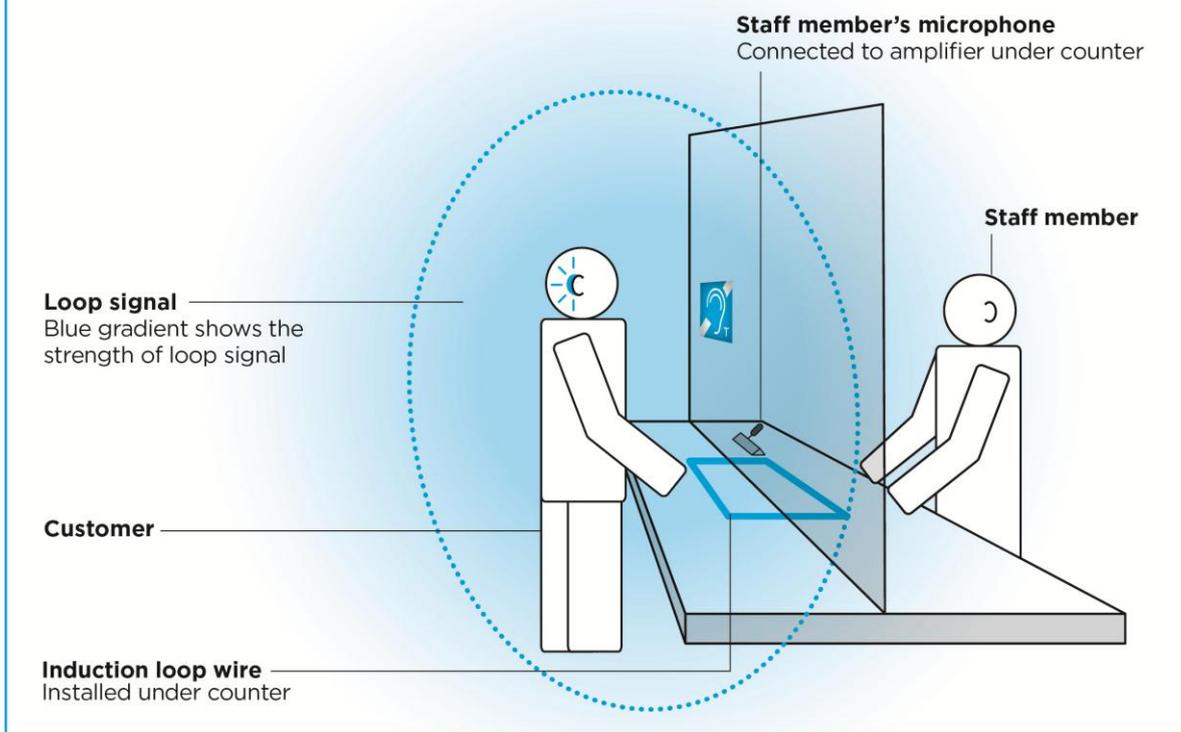
These are designed to provide hearing loop facilities over a wide area; for example, large meeting rooms, auditoriums, lecture halls, places of worship and audience seating at entertainment venues. Room loops are often used in conjunction with loudspeaker systems.



### Counter loops

These are specifically designed to provide hearing loop facilities at retail premises including shops, bank and post office counters, and transport and entertainment ticket booking offices.

## A typical counter loop



## Portable loop

Portable hearing loops provide limited coverage and are designed for one-to-one conversation for people with hearing aids. They are useful if the venue can't provide a permanent system or if you need to use the loop in different rooms. A portable loop may, for example, be used in a GP or hospital consultation room.



## How do I set up a hearing loop system in my home?

There are hearing loop systems for home use. You can install these yourself or ask someone who is good at DIY to do it for you. Full instructions for installation should be included with the equipment.

The loop wire is placed round the edge of the room, usually at skirting board level. Cable clips are normally supplied. Take care to install the wire securely; you may also route it over doors and window frames, but always follow the manufacturer's instructions.

The loop amplifier is normally placed near the TV and connected directly to the TV's audio output socket (usually at the back of the set) using a plug-in lead. If your set doesn't have an audio output socket, you may use the SCART connection instead. Most home loop systems are supplied with a SCART adapter.

If you can't connect your hearing loop system directly to your TV using a plug-in lead or SCART, you can use a microphone (which is normally supplied with the loop) to pick up sound from the TV loudspeaker. You need to position the microphone as close as possible to the loudspeaker to get the best sound.

It's increasingly common for new TV's (and some set-top boxes and recorders) to have a Digital Optical Audio Output. To use this connection with your home loop system, you'll need an Optical Digital to Analogue Converter. The convertor is connected to the Digital Optical Audio Output on the TV (using a suitable optical lead that may be supplied with the convertor) and the audio / line / auxiliary input on the loop system. If both your TV and set-top box or recorder has a Digital Optical Output, you should only use the one on your TV with your loop system.

Using a hearing loop with a television or hi-fi means that if you're with a person who is hearing, they can continue to listen through the TV loudspeakers at a volume level that is comfortable for them, while you listen through the hearing loop system via your hearing aid(s), or through a listening device that has a loop-listening facility.

On some loop systems, you can use an extra microphone to pick up the sound of your telephone or doorbell ringing, so you don't miss these while watching television.

## Can a hearing loop system be installed in my car?

Yes. A loop system in your car will help you pick up conversations with your passengers or listen to your car stereo system. However, before one is installed, you should check that your vehicle does not produce interference that may be picked up by your hearing aid on the hearing loop setting.

## What is an infrared system?

An infrared system consists of a transmitter and a listening receiver. Sound is fed to the transmitter in the same way as with a hearing loop system – either by microphone or by direct connection. The transmitter converts the sound to infrared light that is transmitted to the receiver.

## How do I use an infrared system?

There are different types of infrared receiver:

- the under-chin 'stetoclip' headset receiver, which is for people who do not have hearing aids
- an infrared neckloop receiver is for use with hearing aids with an activated loop setting
- wireless infrared headphones.

Infrared receivers are battery-operated, which means they are portable, allowing you freedom of movement. Infrared works by 'line of sight' – in other words, solid objects must not block the signal between the transmitter and receiver. So, for example, in a public venue, if someone stands in front of you, they may block the signal. If an infrared system is poorly installed, you may have to hold the receiver above the audience seating in front of you – see what you should do if you are not happy with the service you receive on page 8.

Infrared systems are more limited in their scope because you need an infrared receiver to use them. You will not generally find them in places you just pass through, such as airports and railway stations – they are more likely to have hearing loop systems.

## How do I set up an infrared system in my home?

Infrared systems are fairly easy to set up. They have two parts: a small infrared transmitter that needs to be connected to the sound source, such as your television (there is often an option to use a microphone instead), and an infrared receiver (see the types listed above). For the best results, you should position the transmitter so that nothing gets in the way of the infrared light on its way to your infrared receiver.

## How much do these systems for the home cost?

If you buy privately, you can expect to pay from about £80 for a hearing loop system. Infrared systems tend to be more expensive – from around £100. A car loop system will cost around £100 to £150 and you will also need to pay someone to install it for you. You can buy a wide range of loop and infrared systems for use in the home.

Check that the supplier offers a money-back guarantee so that you have a chance to try out the system at home. If it doesn't suit you, you should be able to return it within the money-back period and get a full refund.

Hearing loop and infrared systems designed for people with hearing loss are normally exempt from VAT. You will need to fill out a VAT exemption certificate, which you can get from the supplier.

## Can I get a free hearing loop or infrared system?

You may be able to get a hearing loop or infrared system from your local social services department. Social services vary both in terms of the equipment they supply and whether they charge for it. You may be able to pay for a loop system through a direct payment scheme. These schemes give people who are eligible the money to buy their own services and equipment. For more information, see our factsheet *Social services for adults with hearing loss*.

## How do I use hearing loop and infrared systems in public places?

Using a hearing loop system in a public building should be straightforward as long as your hearing aids have an activated hearing loop setting (formerly known as the T setting) and the loop system is switched on. You may need to adjust your hearing aids for volume.

If a building has been fitted with an infrared system, staff will lend you a receiver – make sure they have tested that it works and that it's fully charged. If you wear a hearing aid, it should be a neck loop receiver; if you don't use a hearing aid, they should give you a headset receiver. You will then be able to sit anywhere in the area covered by the system, but do check with the staff.

Several infrared systems can be used at the same time in rooms next to each other, so they are suitable for confidential meetings.

## How will I know what kind of system has been installed?

When a building has been fitted with a hearing loop or infrared system, you will usually find this mentioned in their adverts, newsletters and at the entrance to the building. Informative signs and symbols should be displayed such as the hearing loop sign below.



Unfortunately, not all service providers remember to use signage to inform hearing aid users that a hearing loop is installed, so it's always worth asking if it's not obvious. There should be at least one member of staff responsible for keeping the system up and running, and for looking after infrared receivers and giving them out.

If you are due to go to a court or tribunal and need to use a hearing loop or infrared system, you should let the court clerk know well in advance of the date you will be attending.

## What possible problems might I have with a public hearing loop system?

Fluorescent lights, dimmer switches or electric cables also create magnetic fields. If your hearing aid picks up this signal, you may hear a buzzing or humming sound (usually this will only happen when the hearing aid is on the loop programme).

Sometimes, the loop signal can 'spill out' and go beyond the area it is intended to cover, so you may find that you can occasionally overhear sounds or conversations in rooms next door or directly above and below the loop.

## What should I do if I'm not happy with the service I receive?

If you experience problems with the hearing loop or infrared system in the building you are visiting, first contact the senior member of staff responsible for the system or the building manager.

Sometimes the loop might not have been switched on or not set correctly, or the staff member might not be speaking into the microphone, so it's always worth pointing this out. If you are not happy with their response and you feel that your needs are not being met, contact our helpline (see front page for details). We would also encourage you to write a letter of complaint to the service, particularly if it's a high street chain.

It is possible that the organisation has breached The Equality Act 2010 by not making sure their hearing loop or infrared system is working properly. See our **Your rights** range of factsheets for more information. We can also send you a campaigner pack, including handy cards that you can hand over to the service when their hearing loop isn't working – please contact our helpline to find out more.

## Where can I buy products that may help?

We sell a range of equipment for people with hearing loss and tinnitus. Visit our shop to buy products online, or you can request a copy of our products catalogue by contacting us directly:

1 Haddonbrook Business Centre, Orton Southgate, Peterborough PE2 6YX

Telephone 01733 361199

Textphone 01733 238020

Fax 01733 361161

[solutions@hearingloss.org.uk](mailto:solutions@hearingloss.org.uk)

[www.actiononhearingloss.org.uk/shop](http://www.actiononhearingloss.org.uk/shop)

## Further information from Action on Hearing Loss

Our helpline offers a wide range of information on many aspects of hearing loss, including equipment that might help. You can contact us for further copies of this factsheet and our full range of factsheets and leaflets – see the cover page for contact details.

## Action on Hearing Loss Information, November 2012

The Royal National Institute for Deaf People. Registered Office: 19-23 Featherstone Street, London EC1Y 8SL.

A company limited by guarantee registered in England and Wales No. 454169, Registered Charity Numbers [207720](#) (England and Wales) and [SC038926](#) (Scotland).