

# Telecoils and loop systems

## What is a telecoil?

The telecoil is a different function of the hearing aid. Instead of picking up sound through its microphone, the hearing aid, when set on telecoil (either by switching to 'T' or selecting the telecoil programme) is able to pick up sound from loop systems by a process called magnetic induction. A telecoil is standard with most behind the ear (BTE) hearing aids and can be chosen as an option for many in the ear (ITE) hearing aids.

## How do loop systems work?

A sound signal (such as a speaker's voice into a microphone) is converted by a special amplifier into a magnetic signal. This magnetic signal is then transmitted by a wire aerial which is 'looped' around a room (or desk, or person's neck). A hearing aid on its telecoil setting picks up this magnetic signal and converts it back into a sound signal directly into the ear. You need to be within the loop.

## Why use loop systems?

There are two main advantages of loop systems. The first is that you can hear sound better at a distance. The second, and most important, is that you can hear sound with much reduced competing noise. A microphone picks up all the surrounding sound, but a loop system only picks up the sound put directly into it.

## Where are Loop Systems?

Some churches, meeting rooms and public places have loop systems. Also, counter loops are found in some reception areas. The presence of a loop system is usually indicated by a sign showing the international symbol for the deaf and hearing impaired (see following page).

## **HEARING ASSOCIATION NELSON**

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## **Telephones**

Many telephones are 'hearing aid compatible', ie. they have a little loop system in the headset which allows the hearing aid wearer to use the telecoil setting. Simply adjust the aid to the telecoil setting to use it. Some cell phones have this facility also. There is a range of hearing aid compatible phones at Hearing House. People are welcome to come in for a demonstration and members are encouraged to take phones home for a free trial.

## **TV Listening**

It is possible to install a loop system for TV in a lounge situation. This is available for testing and purchase at Hearing House (12% discount for members). We can help with installation as well.

## **M/T position**

Many hearing aids have an 'M/T' setting where both the microphone and telecoil setting work at the same time. The 'M/T' setting is useful for TV's which are set up with a loop system. This setting not only allows you to hear the TV clearly directly in your ear, but also enables you to pick up surrounding sounds such as conversation, doorbell and the telephone ringing.

## **Larger Loop Systems for Public Places**

You will need to contact an electronics specialist to obtain advice and quotes for loop systems in halls, meeting rooms and other larger situations. Several firms in Nelson specialise in this work and we can give advice in this matter. When fitting a loop system it is worth considering a combined loop and public address system as this will also cater for hearing impaired people without aids.

For further information please contact Hearing Association Nelson Inc.

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