

## How hearing loops help persons with hearing aids hear in church:

Reverberation, distance to sound source and ambient noise reduce intelligibility. Increasing the speaker volume will not always make it easier for a person with hearing loss to understand the message and may make it too loud for those with normal hearing. What is needed for this person with hearing loss is an increase in the intensity of the signal (for example the sermon) in proportion to the background noise (of those gathered), this means increasing the signal-to-noise ratio.

Hearing loops take the desired speech signal straight from the basic source at the microphone and broadcast directly to the listener's hearing aids. The signal at the listener's ears is free from distance issues, reverberation and ambient noise interference.

The hearing loop user's response is: "I can *hear* the sermon again" but what is meant is that the speech is now *intelligible* enough to be understood because the signal-to-noise ratio is improved by the hearing loop.

Our experience is that even the most practiced and well adjusted hearing aid user is frequently surprised to find out how much better they understand the speech signal through a hearing loop in church.

## Assistance is available for those who do not own hearing aids or those who do not have T-coils in their instruments:

Loop systems can, thanks to portable receivers, *serve everyone* including all who are served by existing systems. However, it is those who most need hearing assistance who are most likely to have telecoils built in their hearing aids.



Fox Valley Hearing Loop is owned by Dr. Juliëtte Sterkens & LeRoy "Max" Maxfield.

Originally from the Netherlands, Dr Sterkens holds a Doctorate Degree in Audiology, practices at Fox Valley Hearing Center, and provides start-up support for churches, advises users new to hearing loops and offers public speaking.

Max Maxfield, who served in the US Army Signal Corps in his early years, holds a Master's Degree in Engineering and recently retired from Oshkosh Corporation after 27 years in Test & Development, engineers and installs the hearing loops.

### Our Mission

**Promote awareness & installation of hearing loops in the Fox Valley**

### Our Vision

**A Fox Valley where all kinds of assistive listening systems are common place**

For further information:

[www.foxvalleyhearingloop.com](http://www.foxvalleyhearingloop.com)

[www.hearingloop.org](http://www.hearingloop.org)

# FAQs about Hearing Loops

- This sign informs people that a church is looped:



- What is a hearing loop?
- Why churches need loops?
- Who needs hearing loops?
- How loops help people with hearing aids hear?

## How an induction loop works:

A hearing loop provides a magnetic, wireless signal that is picked up by the hearing aid when it is set to 'T' (Telecoil) setting. The loop system consists of a microphone to pick up the spoken word; an amplifier which processes the signal which is then sent through the final piece; the loop cable, a wire placed around the perimeter of a room or sanctuary to act as an antenna that radiates the magnetic signal to the hearing aid.

When a hearing aid user selects the 'T' setting; he or she can pick up the sounds spoken into the PA system's microphone instead of the hearing aid's internal microphone. This results in improved speech understanding because the listener receives a clear signal without any background noise.

## How a person with hearing aids can benefit from a hearing loop:

Digital hearing aids have significantly improved in the last decade, but they still do not restore hearing to normal. Therefore, understanding speech in reverberant places such as auditoriums or churches is often still difficult. Hearing aids equipped with T-coils can help greatly in this situation.

When a hearing aid is set to "T"-coil, the instrument becomes a *personalized* speaker in the ear for the sounds that are picked up by the microphone of the public address system. That way sounds are heard clearly, without distortion or background noise pick-up.

## Loop systems are the preferred assistive listening systems:

Unlike FM or infra-red assistive systems which usually sit unused, hearing loop systems:

- *Require* (for those with T-coils) *no pick up* and remembering to return portable receiving units or wear a headset.
- *Operate on a universal frequency* (FM systems operate on differing frequencies, requiring receivers for each church).
- *Are inconspicuous*: No need to display "I am hard of hearing!" with visible headphone. Loop systems offer an easy and invisible solution to an invisible problem & are thus more likely to be used.
- *Work in transient situations*: They allow hands-free listening while moving around in church where other assistive listening systems are impractical.
- *Are hearing-aid compatible*. There's no need to juggle between hearing aids and headsets (for example, when shifting from sermon to singing during worship).
- *Deliver personalized in-the-ear sound* customized by one's own hearing aids to address one's own hearing loss.

**...Are, for all these reasons, more likely to be used - and to be increasingly used - once installed (as people purchase future hearing instruments with T-coils).**

## Most hearing aids have T-coils:

More than sixty percent of all, but the tiniest custom hearing aids, have a T-coil built in. Over ninety percent of all persons with more severe hearing loss are so equipped. At times the T-coil is installed in an aid but was never activated. This can be easily taken care of retro-actively by the audiologist or dispenser.

## Keep church members involved:

According to the Better Hearing Institute almost one out of every 11 persons has hearing loss. By offering barrier free hearing access, churches will help their auditorially challenged members once again join in the worship experience and prevent some from giving up on attending because they can not hear well enough.

***In Europe thousands of hearing loops are in use, including one in London at Westminster Abbey.***

*"What I experienced last Sunday was nothing short of a miracle. For the very first time in many, many years I was able to hear every single word said in church along with every note of music."*

Chris Prust ~ Algoma Blvd UMC - Oshkosh