

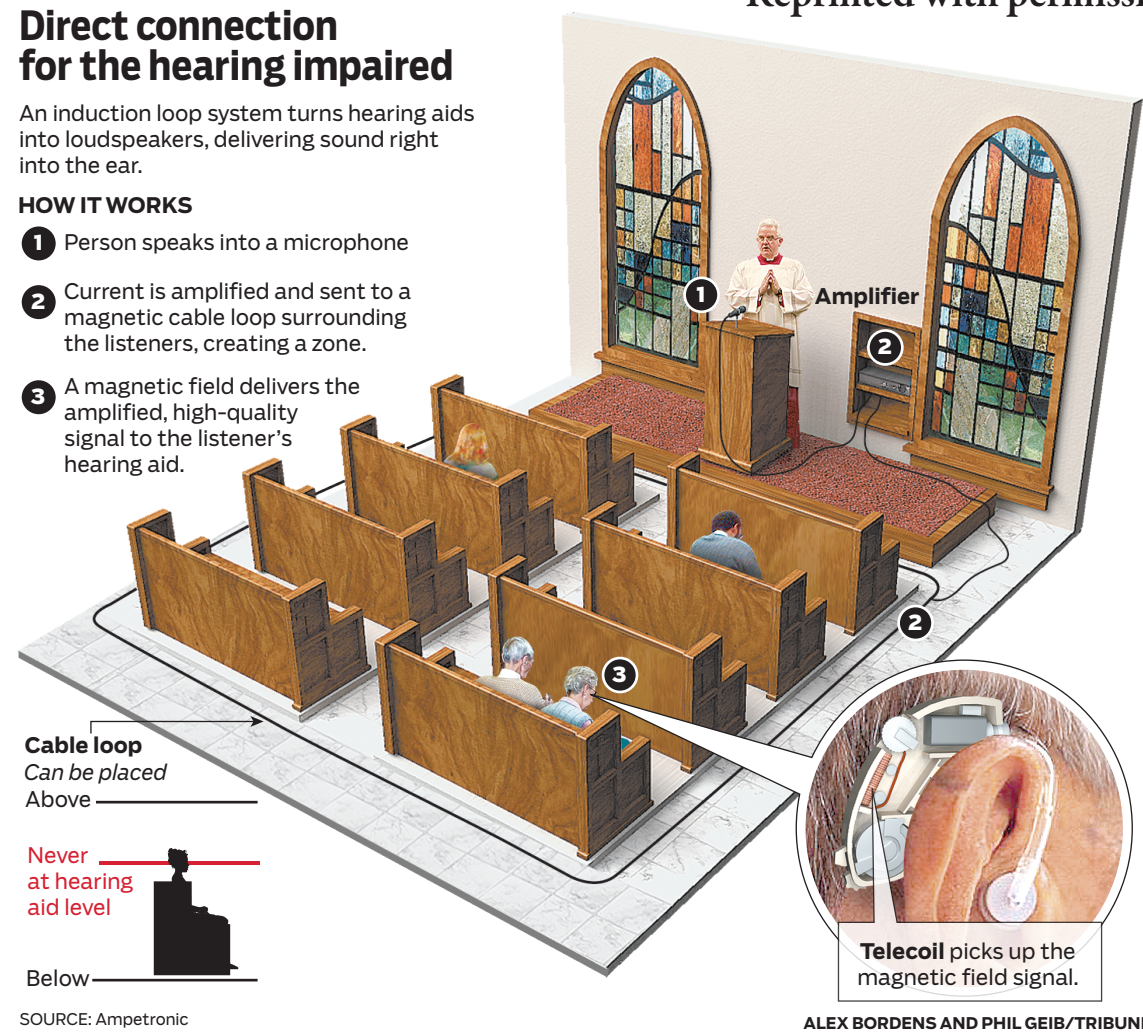
"Churches put Hearing-Impaired in Loop"
 Chicago Tribune, July 3, 2010
 Reprinted with permission

Direct connection for the hearing impaired

An induction loop system turns hearing aids into loudspeakers, delivering sound right into the ear.

HOW IT WORKS

- 1 Person speaks into a microphone
- 2 Current is amplified and sent to a magnetic cable loop surrounding the listeners, creating a zone.
- 3 A magnetic field delivers the amplified, high-quality signal to the listener's hearing aid.



SOURCE: Ampetronic

"Get in the Hearing Loop" National Campaign

The Hearing Loss Association of America (hearingloss.org), "the nation's voice for people with hearing loss," and the American Academy of Audiology (audiology.org), are collaborating on a "Get in the Hearing Loop" educational campaign. The campaign's purpose is to educate consumers and hearing professionals about the benefits of telecoils and hearing loops, thereby improving accessibility for close to 40 million Americans with hearing loss.

Testimonials:

"I am home now and I can't stop smiling. The system went way beyond meeting my expectations. I was in awe. From the very first words [spoken], I could understand every word. It was wonderful" (CP - hearing aid user in Oshkosh, WI)

"The experience of actually hearing such clear sounds was thrilling and hard to describe. One has to experience the improvement. It seemed overwhelming." (DV - hearing aid user in Holland MI)

"I experienced a bone crushing hug from a lady at St. Patrick's Catholic Church in Lodi, WI. She was crying and said I changed her life. FM hearing assistance failed to help her. She attended Mass faithfully despite the fact she could not hear. (MM - audio engineer)

"We have a man in the congregation who took a bullet to the head in Vietnam. It has impacted his hearing to the point that he is nearly deaf. Through the VA he received hearing aids to access the loop system. One day coming out of church, he was filled with joy because he could hear every word. He was like the deaf man in the gospel healed by Jesus. (KF - Senior Pastor, Holland, MI)

From TECHNOLOGIES FOR WORSHIP, May, 2010, with permission

LET'S LOOP America's WORSHIP CENTERS

By making assistive listening hearing aid compatible, churches are leading the way to doubled hearing aid functionality for people with hearing loss

by David G. Myers

Imagine yourself as a person with hearing loss attending your place of worship. As you struggle to hear, which of these two hearing solutions would you prefer?

1. To take the initiative to get up, go locate, check out, wear, and return special equipment (often a conspicuous headset that is incompatible with your hearing aids)? Or,
2. To simply push a button that transforms your aids or cochlear implant into a wireless, in-the-ear loudspeaker that broadcasts sound customized to your own hearing loss?

Solution 1-the hearing aid incompatible solution-has been the prevalent assistive listening technology in America's worship places and theatres. Solution 2-the hearing aid compatible solution-has spread throughout the United Kingdom, across the Nordic countries, and now is being adopted in several states, including by several hundred Michigan churches.

The simple "hearing loop" technology takes a feed from a PA system and transmits it through a wire loop surrounding the worshipers. The loop projects a magnetic signal to an inexpensive "telecoil" receiver, now found in a growing number-60 percent-of new hearing aids (even more among people most

needing hearing assistance). The telecoil also serves as a receiver for magnetic signals transmitted by "hearing aid compatible phones," which include all landline phones and designated cell phones. (For any without suitably equipped hearing instruments, portable receivers and headsets are available.)

Thus when one worships at Westminster Abbey in London, or in virtually any church with a PA system in Holland or Grand Rapids, MI, all you need do when the preaching begins is to activate your hearing aid telecoils. Voila! A clear voice is now speaking from the center of your head!

This simple technology, which also enables a home TV to broadcast through one's hearing aids, is now being advocated by a growing number of hearing leaders. In 2010, the Hearing Loss Association of America ("the nation's voice for people with hearing loss") and the American Academy of Audiology (the world's largest association of hearing professionals) announced a joint "collaborative public education campaign 'Get in the Hearing Loop.'" The campaign aims "to enlighten and excite hearing aid users, as well as audiologists and other professionals who dispense hearing aids, about telecoils and hearing loops and their unique benefits." Hearing loops are coming to America.



Martin Luther Evangelical Lutheran Church, Oshkosh, Wi

The move to making future assistive listening installations hearing aid compatible is gaining momentum:

- The California, Michigan, Wisconsin, and New Mexico hearing loss associations are now advocating hearing loops. "In all new and extensively remodeled buildings, wherever there is a public address system, a loop should be permanently installed," declared the California Hearing Loss Association. "When there is a loop, all a hard-of-hearing person has to do to be able to hear is click on the T-switches on their hearing aids."

- Local hearing loop initiatives are underway in Albuquerque, Tucson, Silicon Valley, central Wisconsin and elsewhere.

- Michigan's second largest airport, in Grand Rapids, now offers the technology throughout both its concourses and in all gate areas.

- A national service organization, Sertoma ("SERvice TO Mankind") announced in 2010 that it will be promoting the installation of hearing loops through its 540 clubs nationwide.

- Several new companies have begun manufacturing and marketing hearing loop equipment and training audio professionals in its installation (see hearingloop.org/vendors.htm).

- New York City Transit, with a nudge from the Hearing Access Program and using federal stimulus monies, is installing hearing loops at 488 subway information booths.

- Scientific American reported on the move to hearing loops in its January, 2010 issue.

- The first international "Hearing Loops" conference, hosted in late 2009 by the European Federation of Hard of Hearing People (www.efhoh.org) for attendees from 15 countries, adopted a resolution recommending that "Venues and service points where sound is broadcast shall offer assistive listening, such as induction loop systems designed to the IEC 60118-4:2006 standard, which broadcast sound directly to hearing aids and cochlear implants, enabling them to serve as customized, wireless loudspeakers (without the need for extra equipment)."

FAQS ABOUT HEARING LOOPS

- Hearing loops harness magnetic energy. So is magnetic interference problematic?

Generally not. Old fluorescent lighting and some old dimmer switches generate interference. But the experience in hundreds of West Michigan venues and thousands of Scandinavian and British venues is that interference-free installation is nearly always possible.

- Isn't this a decades-old technology?

Like electronic computers, magnetic induction loop technology began more than a half century ago, and now is in newly developed forms (with new amplifier and telecoil technologies, and new computer-modeled designs for complex installations) and with increasing applications.

- Will new wireless connective technologies work better?

New wireless technologies, including Bluetooth, do some helpful things, such as enable binaural phone listening. But Bluetooth is not an assistive listening answer (it requires significant battery power and has limited range). An alternative future assistive listening solution-one that, like hearing loops, is hearing aid compatible-will need similarly to a) be inexpensive (essentially no cost to the consumer), b) be capable of covering a wide area, c) drain little battery power (telecoils require no power), d) be universally accessible, and e) be sufficiently miniaturized that the receiver can fit in nearly all hearing aids.

- Can hearing loops be used in adjacent rooms?

Yes, with a professional design that controls sound spillover.

- Where can one find more information about equipment, installation, applications, and costs?

Visit the nonprofit information resource www.hearingloop.org

There are many advantages to hearing aid compatible loop systems. For example, many hearing aids now come with a mic + telecoil (M/T) setting that enables one to hear sound from nearby people singing or speaking while simultaneously receiving direct PA system input. Additionally, sound broadcast by one's own hearing instrument is contained in one's ear, without bothering others nearby. Moreover, there is no need to juggle between headsets and hearing aids (during, say, a worship service). There are no hygienic concerns about putting in or on one's ear what has been around others' ears. And most importantly, when not hearing well, people need only activate their telecoils. There's no need to get up, seek out, and wear conspicuous equipment (which, as TFWM readers have likely noticed, few people with hearing loss take the initiative to do).

Wisconsin audiologist Juliëtte Sterkens and her engineer husband Max Maxfield have recently installed hearing loops in 30 Wisconsin churches, with gratifying responses, sometimes spoken through tears. The following is a list of testimonials they have heard.*

"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. I cannot express my thankfulness in words. It was truly one of my most memorable moments in my life and I felt 'normal.'"

"I took my mother to Mass. In her words, 'I could hear every word, and this is the first time that's happened in years.' She went on to say how much more she got out of the service and realized how much she had been missing."

One skeptic from another state undertook due diligence to assess the suitability of a hearing loop for his own church:

"I can certainly attest to the spread of the loop system in Michigan. Before we installed our [church's] system I telephoned a number of facilities listed by a loop vendor as having installed such a system. I was amazed to discover that not a single installed site had anything but vociferous praise for the product! One would expect at least one naysayer in a group that large (22). But there was not a single one!"

As we approach a tipping point where hearing loops become the accepted user-friendly assistive listening technology, we can take satisfaction in knowing that churches are leading the culture. As they enable their people to better hear the word, worship centers are also enabling people to glimpse a future in which hearing instruments have doubled functionality- as not only microphone amplifiers, but also as customized, wireless loudspeakers. ♦

Hope College social psychologist David G. Myers has written two dozen articles advocating the coming transformation in American assistive listening. He has also created hearingloop.org and authored 'A Quiet World: Living with Hearing Loss' (Yale University Press).



Hearing Loop Technology in the News

Bloomberg.com News (November 2013)
www.tinyurl.com/simple-tech-fix

ABCNews (October 2013)
www.tinyurl.com/ABCNews-Loop-Story

Today's Catholic News (Oct 2013)
tinyurl.com/CatholicNews-loop

Church Executive Aug/Sept 2013
tinyurl.com/church-accessibility

Technology for Worship Magazine (Aug 2013)
www.tinyurl.com/TFWM-2013

Scientific American (Blog June 2013)
www.tinyurl.com/SciAmLoops

New York Times (Front Page Oct 2011)
nytimes.com/2011/10/24/science/24loops.html?_r=1

Sound and Communications (for A/V Contractors)
tinyurl.com/SoundComm-for-AVPros

For a handout on how to procure a hearing loop for your facility
tinyurl.com/Loop-Purchase

IEC Standard 60118-4:2006

Induction loop systems are used worldwide and should meet the established international standard IEC 60118-4 as developed under auspices of the International Electrotechnical Commission. This standard defines the strength of the magnetic field, frequency response and methods of measuring these requirements. It also specifies the maximum levels for electromagnetic background noise. Compliance with the IEC standard will be the result of correct equipment specification, wiring loop design and installation and requires verification by an installer & hearing aid user(s).

For more information visit:
www.hearingloop.org

* This article was first published in May 2010. In January 2014, parishioners in nearly two hundred Wisconsin Houses of Worship are enjoying the technology. Many more are in the planning stage.