What is a Telecoil?

- A telecoil is a tiny coil of wire around a metal core that’s in 70% of all hearing aids and in all recently sold cochlear implants.
- A telecoil induces an electrical signal (just like a microphone) when it senses a variable magnetic signal.
- Your hearing aid or CI with a telecoil can be used instead of or in addition to your device’s regular microphones.
- You can get a better signal that overcomes noise, reverberation and distance using your telecoils.
How can I use my telecoils?

- Phone Calls
- Smart Phone music and podcasts
- Looping Facilities
  - Theatres
  - Meetings
  - Churches
  - Taxi Cabs
- Places with Assistive Devices
  - Museums
  - Movies
- Listening to TV
- Noisy Places
  - Restaurants
  - Parties
  - Cars
Phone Calls

• Most phones are “Telecoil Compatible”
• That means they send out a magnetic signal that the telecoils can hear.
• Just switch to telecoil mode and put the phone up to your ear.
• Or (if your phone lets you) to hear with both ears plug in a neckloop, silhouettes or pair with using a Bluetooth pendant.
Music and Podcasts

- Plug in a neckloop, silhouettes or pair with a Bluetooth pendant and hear with both ears
- Music download or stream from several sources
- Install a Podcast app and subscribe to any of thousands of podcasts such as:
  - Fresh Air
  - All Things Considered
  - Car Talk
Looped Facilities

- HLAA Meetings and Conferences
- Some theatres (like RLT)
- Some churches
- Even some taxi cabs in NYC
- Just sit where you want, switch to telecoil mode and hear your best without receivers or other equipment
- They’ll display this logo
- Find Looped Facilities at
  - http://www.loopfinder.com/
  - www.aldlocator
• Many places offer Assistive Listening Systems, ALS’s (typically FM or Infrared and not a loop)
  • Movie theaters
  • Churches
• These places usually have telecoil compatible headphones and many offer neckloops
• Just ask to borrow their receiver and use their headphones or a neckloop
• Now even some businesses are telecoil compatible
  • Bank Tellers (even automatic ones)
  • Grocery Store Checkouts
Selecting Telecoil Mode

• Sometimes just select the right program
  • By toggling button
  • By Remote Control
  • Automatically
• Sometimes it’s a special button that applies telecoil inputs to all programs
• Make sure your provider explains and demonstrates how to do it
Interfacing with ALSs

- Even without a “looped facility” you can use your telecoils with an appropriate “user interface”
  - Neckloop
  - Silhouettes
  - Chair Pads
  - Table Loops
  - Bluetooth Neckloops
    - Standard analog systems
    - Near Field Magnetic Interface (aka Gateways, or Streamers) available in some hearing aids use a digital magnetic protocol and won’t work with standard analog magnetic signals, but some also have standard telecoil capabilities.
Hear the TV Better

- You can install a room loop for as little as $200 that will magnetically transmit your TV sound throughout the room so your telecoils will hear that sound.
- Even without a room loop, you could use a personal amplifier patched by wire to the audio outputs of your TV and then use that amplifier to drive a neckloop, silhouettes or chair pad that lets you hear TV better through your telecoils.
Noisy Places

- Restaurants, Parties, Cars*
- You can use a personal amplifier or FM system in restaurants or at parties to hear better using a neckloop to drive your telecoils.
  - Pocketalker (or similar)
  - FM (greater distance without wires)
- Directional microphones can block background noise
- If you choose one program to be “Telecoil Only” then your microphones won’t hear the noise and the signal feeding your telecoils will be as clear as possible.

* Some cars will have an EMI (interference) problem.
Avoiding EMI

- Telecoils will hear ElectroMagnetic Interference (EMI) if it’s present
  - Dimmer switches
  - Faulty wiring
  - Fluorescent lights
  - Some car motors
  - Electric motors

- How to Solve
  - Turn off offending device
  - Move away from it
  - Use a silhouette instead of a neckloop
  - Turn down sensitivity of your hearing aid or CI
  - Push your CI up into your cap and rotate it until the EMI is not so loud
  - Have an expert address faulty wiring
Orientation Matters

• The physical alignment of the telecoils in your hearing aids or Cis will vary depending on the model.
• Some orientations are better for phone use, but not so good in large area loops
• If you are in a large area loop and can’t hear well with your telecoils, try moving to the left or right side of the room. For some telecoil orientations, that may give you a better signal.
• A professionally installed loop can avoid the orientation problem using a “phased array” loop.
**Installation Challenges**

- **Metal** in the building (e.g. rebar in a concrete floor) can sap the strength of the magnetic signal of a standard loop, but this can be overcome with a “Phased Array” loop.
- Multiple loops installed close together (like in adjacent classrooms or theaters) can “spillover”; this can be avoided with a “phased array” loop.
- **ElectroMagnetic Interference (EMI)** can cause a “buzzing” in the telecoil, but can be avoided by finding the source and eliminating the problem.
Advantages of Loops

HLAA supports all Assistive Listening technology, and each has its advantages/disadvantages. Here’s what makes Loops great where appropriate:

• Consumers
  • No equipment to borrow or return
  • No problems with batteries
  • Discrete; no extra accessories to wear
  • Sit anywhere

• Venues
  • Less equipment to buy, distribute, retrieve and maintain*
  • No batteries to assure are replaced or charged
  • Happy customers

* Only a few loop receivers/interfaces
Your Responsibility

• Tell your audiologist or hearing aid dealer that you want telecoils
  • If you already have telecoils, get them activated
  • If you don’t have telecoils, then ask if they can be added to your current hearing aids (or choose carefully when you upgrade).
• Make sure they activate your telecoils, adjust the signal to your needs, and demonstrate them in their office.
• Make sure if your telecoils have an automatic mode, that they also allow you to manually switch.
• Decide whether your telecoil programs should include:
  • Telecoil-only (this is best for blocking background noise).
  • Mixed telecoil and microphone (best if you need to hear others nearby).
  • You can have both options.
• Learn how to switch into and out of telecoil mode.
• Learn where and how you can use telecoils.
You Can Advocate

- Use all options available
  - FM
  - Infrared
  - Loops
- Understand how to make the most of options
  - Bring your own favorite user interface
  - Know how to use available options
- Know how to find available options
- Don’t be afraid to ask about ALDs
- Thank the providers and make sure they know how much you appreciate their support
- Join HLAA
Support HLAA

- **Individuals and Families**
  - Join HLAA (http://www.hearingloss.org/content/member-benefits)
  - Sign up to hear about Wake meetings/Activities
  - Attend Wake Chapter meetings and events (FREE)
    - Learn how to be GOOD at hearing loss
    - Enjoy new friends that really understand
  - Participate in and support the NC Walk4Hearing

- **Professionals**
  - Tell your patients about HLAA and Wake Chapter
  - Attend Wake Chapter Meetings
  - Advertise on HLAA-NC web site
    - www.nchearingloss.org/advert.htm
    - Reach your target audience
  - Sign up for an HLAA Professional Membership at http://www.hearingloss.org/content/member-benefits
  - Participate in and sponsor the NC Walk4Hearing