

# Assistive Technology GUIDE

An Educational Resource for Those with Hearing Loss!



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How can I hear my TV without blasting the volume? *Find out on page 3*

Will I ever be able to hear on the phone again? *Check out pages 4-7*

What is a loop system? *Find out on page 13*

How do I protect my hearing aid? *Hearing aid care explained on page 14*

What is a telecoil? *Its all explained on page 2*

I can't hear the doorbell or phone ring. *Signaling systems explained on pages 16-17*

I want to hear my pastor at church... *Jump to page 12*

My alarm clock isn't loud enough to wake me up. *Find solutions on page 15*

I'm worried I won't hear the alarm if there's a fire. *Check out pages 18-19*



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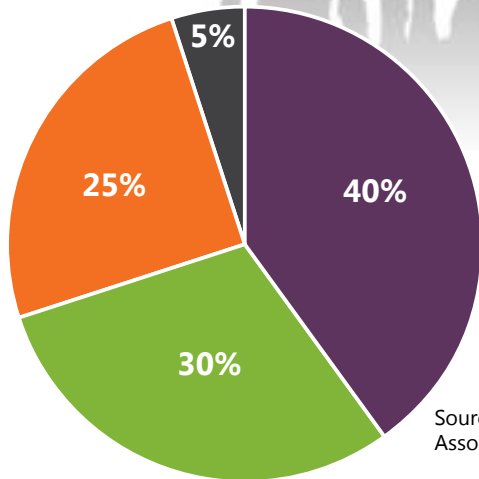
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## It's estimated that nearly 48 million Americans are currently living with some form of hearing loss. Of these...



- Use Hearing Aids (25%)
- Deny, Hide or are Unaware of their Hearing Loss (40%)
- Cannot Afford Hearing Aids (30%)
- Other (5%)

Source: Hearing Loss Association of America

Regardless of which category you may fall under, we can help. Over the course of 35 years we have become the industry leader in the world of assistive technology, helping improve the lives of hundreds of thousands of people with hearing loss.

While most people are familiar with hearing aids, cochlear implants and their benefits, there's a surprising lack of knowledge about assistive technology and the additional

benefits they provide people with hearing loss. They are simple to use, inexpensive, and can help you hear more clearly in a variety of situations. They can be a great addition to hearing aids, or an inexpensive alternative depending on your needs. This guide is here to teach you about the different categories of assistive technology and show you a whole world of products that you may have never even known existed.

We hope you find this guide useful, and that you share it with your friends, family, colleagues, audiologist, or anyone else you think could benefit from this information. Feel free to contact us any time to speak with one of our knowledgeable and friendly customer service representatives. We are here to help you find the best solution(s) for your hearing loss!

**We hope you've found this guide useful. Feel free to share it with your friends, family, colleagues, or anyone else you think could benefit from this information!**

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**All of the products in this guide can be used to fulfill ADA requirements. Share this guide with those who are responsible for making your workplace, places of worship or businesses you frequent ADA compliant. For more information about ADA compliance, see page 20.**

# Telecoils (t-coils)

Throughout this guide you will see the word “telecoil” or “t-coil” mentioned quite frequently. A telecoil is a very helpful (and relatively inexpensive) addition to hearing aids that can greatly expand their capabilities. Make sure to talk to your audiologist about telecoils when exploring your hearing aid options, as not all hearing aids are compatible with telecoils.



## What is a telecoil and how does it work?

A telecoil is a small coil of wire inside a hearing aid that is designed to pick up an electromagnetic signal. When your telecoil is turned on, it shuts off the microphone on your hearing aid and begins “listening” for an electromagnetic signal. Electromagnetic signals can come from numerous places, such as the earpiece of your phone, a neckloop, or a loop system. When your telecoil detects a signal, it will convert it into sound and play it through your hearing aid. This allows you to hear better in a variety of situations because it allows you to shut out unwanted background noise and focus in on only the sounds you truly want to hear. Telecoils can also help eliminate the annoying buzzing or feedback that hearing aid users can sometimes experience when using the phone.

Some hearing aids can be equipped to allow you to use both your telecoil and hearing aid microphone at the same time. This allows you to hear both sounds around you (such as your own voice) and sounds coming through your telecoil at the same time.

## When would I want to use a telecoil?

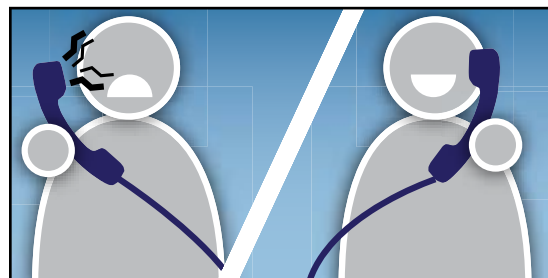
**There are many situations where a telecoil can benefit you. Some of the more popular examples include:**

- Talking on the phone in noisy environments
- Listening to music or TV through a neckloop or silhouette
- In public/private venues equipped with induction loop systems

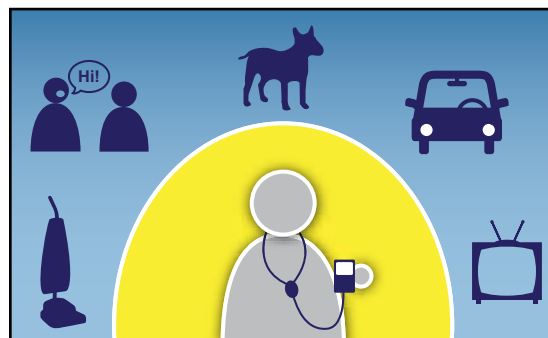
**The list could go on and on...**

## Which types of hearing aids are telecoils available on?

For the most part, telecoils are only available for Behind the Ear (BTE) and In the Ear (ITE) hearing aids. In the Canal (ITC) and Completely In the Canal (CIC) hearing aids are typically too small to fit a telecoil. Ask your audiologist or hearing health care provider about your options.



*T-coils help eliminate buzzing and feedback when using the phone*



*T-coils shut out background noise, allowing you to focus on the sounds you want to hear, and none of the sounds you don't*



# TV Listening & Home Loop Systems

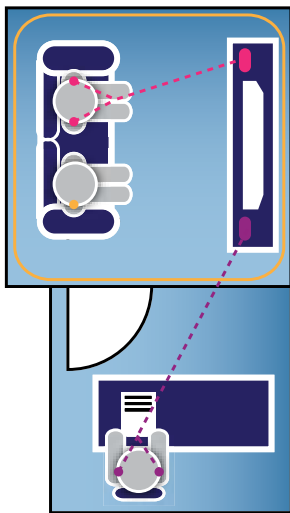
You may find that you're turning up the TV really loud to try and compensate for your hearing loss. This can be frustrating not only for you, but for others in the room. With a TV listening or home loop system, you can listen to the TV at a volume that's comfortable for you, without disturbing anyone else!

A TV listening system consists of two parts—a transmitter and a receiver. The transmitter connects to your TV and transmits audio to the receiver which is worn by you.

If you have telecoil-equipped hearing aids, home loop systems allow you to enjoy watching TV through the comfort of your hearing aids.



## Technology



### TV Listening Systems:

Radio Frequency/FM Systems transmit sound through radio waves and have a range of anywhere from 100-300 ft. A benefit to RF systems is that their signal can travel through walls and ceilings, so you can hear the TV no matter what room you are in!

Infrared Systems look and function the same as RF systems, but have a limited range because they cannot transmit sound through walls or ceilings. These systems are very affordable, and depending on the frequency of your local theater you may even be able to take your system to the movies!

### Home Loop Systems:

Home Loop Systems consist of three parts; the loop wire, loop amplifier and telecoil-equipped hearing aids. Place the loop wire around your desired listening area and plug it into the loop amplifier, then plug the amplifier into the audio output jacks on your TV. Your telecoil-equipped hearing aid then acts as a receiver for the TV whenever you walk into the looped area!

## Wearing Styles for TV Listening Systems



### Neckloop

*For those with t-coil equipped hearing aids*

The neckloop style receiver is worn comfortably around the neck, and sends sound directly to your telecoil-equipped hearing aid(s) through a magnetic signal.



### Stethoscope

This style of receiver is the most common wearing style. The earpiece goes directly into the ear canal. This style is great if you do not have hearing aids or take them out while watching TV.



### Headphone

The headphone style receiver can be worn with or without hearing aids by simply wearing it like a traditional pair of headphones.



### TV Speakers

TV speakers are nice if you find other receivers uncomfortable or isolating. The speaker is placed near you and amplifies the sound from the TV.

Share this guide with friends, family, colleagues, or anyone else you think could benefit from this information.

Refer them to: [www.harriscomm.com/freeguide](http://www.harriscomm.com/freeguide)

# Amplified Phones & Phone Accessories

Many of us take for granted life's simple joys, such as talking to our loved ones on the phone. But if you have a hearing loss, this can quickly become a frustrating experience. Standard phones can actually make voices sound muffled and words more difficult to understand. This may cause you to stop using the phone altogether.



## Technology



### Amplification

Amplified phones give those with hearing loss a simple and enjoyable way to communicate with their friends and family. Amplified phones allow you to turn up the volume to a level loud enough where you can hear comfortably and clearly.



### Tone Control

Most people with hearing loss have a high-frequency loss, which makes it difficult to hear high pitched sounds. But whether you have a high or low frequency loss, tone control allows you to adjust the actual frequency of the sounds being heard to fit your hearing loss.



### Hearing Aid Compatible

All of our amplified phones are Hearing Aid Compatible (HAC), meaning they are designed to virtually eliminate any of the feedback or interference sometimes experienced with hearing aids. We also have some cordless phones that meet or exceed the TIA-1083 standard for digital cordless phones. This higher compatibility standard was developed to further reduce interference that digital cordless phone technology was causing with hearing aids. Cordless phones that meet the TIA-1083 standard provide the clearest possible sound if you wear hearing aids.

## How to Choose an Amplified Phone

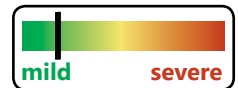
The most important step in choosing an amplified phone is determining the amount of amplification you need. As a rule of thumb, hearing loss can be categorized as mild, moderate, or severe. If you're not sure which category you fall under, we have developed some basic guidelines (to the right) to help you choose. It's a good idea to have your hearing checked by a licensed hearing health professional as they can give you a more accurate assessment.

Keep in mind that hearing loss can be degenerative. It may be a good idea to get a phone with a little more amplification than you currently need, as you can always turn the volume down if it's too loud.



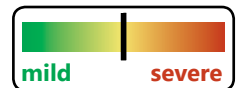
### Mild Hearing Loss

If you miss occasional words or strain to hear on the phone, but still manage to get through the conversation, we recommend a phone with up to 30dB of amplification.



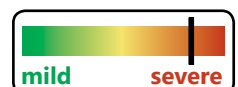
### Moderate Hearing Loss

If you find yourself constantly asking the person on the other end of the phone to repeat what they're saying, we recommend a phone with 30-45dB of amplification.



### Severe Hearing Loss

If you've decided to stop using the phone because you can hardly hear anything at all, or are only able to hear certain people's voices, we recommend 50dB or more of amplification.



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## Phone Amplifiers

We also have a simple and inexpensive way to bring phone amplification with you on the go! A phone amplifier might be all you need when you want to hear on the phone at a friend's house, hotel, or even work. They are small enough to fit into a bag or purse, making them easy to take with you.



### Portable Amplifiers

These amplify incoming sounds up to 30dB, and are great for mild-to-moderate hearing loss. They simply attach to the handset on a standard phone and have a built-in volume control that allows you to turn up the volume to your desired level. All they take is a few batteries and they're ready to go!



### In-Line Amplifiers

These amplify incoming sounds up to 40dB, and are great for moderate-to-severe hearing loss. They also feature tone control. These connect directly between the handset and the base of a corded phone. In-line amplifiers are compatible with all analog and most digital phones, making them a great option for amplifying your work phone.

## Ring Signalers

Most of our amplified phones have a built-in extra loud ringer and visual indicator, making it easy to hear the phone ring. However, it can sometimes be difficult to hear the phone ring in another room. We offer ring signalers that can connect to any phone or plug into any phone jack in your home. These ring signalers alert you of an incoming call in a number of ways:



### Loud Audible Ringer

Most of our signalers are equipped with tone control and can ring up to 95dB, which is about five times louder than a standard phone rings.



### Flashing Strobe Light

Most of our signalers are equipped with a bright flashing strobe light, offering you visual notification when the phone rings.



### Tactile Notification

A handful of signalers have the added ability to plug in a bed shaker that can be placed under a mattress or pillow, which will then vibrate when the phone rings. If you wear hearing aids, this is especially useful at night when you're asleep without hearing aids in, but still want to know if the phone rings. This is also a great feature for deaf people.

## Captioned Phones

A captioned phone works just like an amplified phone, but with one very cool exception—it comes with a large, built-in screen that displays captions of everything the other caller is saying. This allows you to read along and see everything the caller is saying at the same time you're having the conversation. Now you never have to worry about missing a word again!

### So how does it work?

Whenever you place or receive a phone call on a captioned phone, the phone automatically connects to a 3rd party captioned phone service that operates in the background. A trained operator then listens to the person on the other line and re-voices everything they say into a speech recognition program that transcribes their voice into captions. These captions are then displayed on the screen of your captioned phone. The operator can also quickly jump in and correct errors with the captions by typing the correct word(s) in manually.

### How much does the captioning service cost?

The captioning service is funded by the FCC and provided 100% free of charge! All you need is a regular home phone line, an electrical outlet and high speed internet.



## Amplified Emergency Phones

These phones offer all the same benefits as our regular amplified phones, but also offer independence and peace of mind for aging parents and their families. These phones have an "emergency connect" function that can help keep elderly people safe in the event an emergency prevents them from reaching the phone.

### Here's how it works:

1. Program the phone numbers of family, friends, neighbors, and/or emergency personnel into the phone.
2. Wear the pendant around your wrist or neck during your daily activities at home.
3. In the event of an emergency, simply push the button on the pendant to activate the speakerphone and begin dialing your pre-programmed emergency contacts.
4. The phone will then play a pre-programmed message, or one that you have recorded, informing the person on the other line that you need help right away. A two-way conversation then begins.



***There are no monthly fees with these products!***

Contact us anytime to speak with one of our knowledgeable and friendly customer service representatives. We're here to help you! Phone: (800) 825-6758 • Email: [info@harriscomm.com](mailto:info@harriscomm.com)



## Bluetooth®-Enabled Amplified Phone

Answer your cell and landline calls all with one phone! If you are looking to save money by cutting landline service, you can take and place calls through your existing cell phone provider.

### So how does it work?

Simply pair your Bluetooth®-enabled smartphone to the base of the amplified phone. Your cell phone calls will get same quality sound as your landline calls—amplification, loud/visual ringer, tone control, speakerphone and more! Many models allow multiple cell phones to be paired to one base unit, making it convenient if your partner has a hearing loss as well.



## Office Phone Equipment

All of the phone solutions we've discussed up to this point have been in relation to using your phone at home, but it's also important to get a solution that works for you at the office. The solutions below are all specifically designed to help you communicate more effectively on your existing office phone.



### Professional Office Neckloop System (PONS Kit)

A PONS kit comes with everything you need to communicate on your office phone—an in-line phone amplifier, amplified neckloop, connectivity cable, and handset line splitter. This is a great office solution if you have telecoil-equipped hearing aids because it reduces feedback and cuts out background noise. Your neckloop will come with a built-in microphone, giving you a completely hands-free solution for communicating over the phone.



### Wireless and Bluetooth® Solutions

If you move around a lot at the office, especially while you're on the phone, you'll want to check out a wireless neckloop or headset solution. These are similar to the PONS and POHS kits, but have wireless components that allow you to move about the office freely while on the phone. These are usually purchased with a remote handset lifter, so that you can answer and hang up your phone even when you're not by it!



### Professional Office Headset System (POHS Kit)

These are very similar to the PONS kits mentioned above, but come with a headset instead of a neckloop. This solution is ideal if you do not have telecoil-equipped hearing aids, prefer to take them out when on the phone, or if you do not own a hearing aid in the first place. Many headsets are also telecoil compatible though, so these systems can work great if you have telecoil-equipped hearing aids. In that case, it really just boils down to personal preference.

# Cell Phone Accessories

Today's cell phones can do just about anything, but they still can't turn off the sounds around you. So if you're in a car, or at a busy shopping mall, it can be a nightmare to try and carry on a phone conversation if you have hearing loss. Fortunately, several accessories are available that can not only boost the volume of your phone, but also cut out all the background noise while allowing you to communicate completely hands-free. Most of our cell phone accessories are designed to be used with your telecoil-equipped hearing aids, but some allow you to plug in earphones if you do not have hearing aids.



## Technology



### Wireless Bluetooth®

Most cell phones today are equipped with Bluetooth®, a technology that uses radio waves to wirelessly connect electronic devices up to 30 feet apart. Many amplified cell phone accessories are available with this technology, allowing you to connect to your cell phone wirelessly and still experience the benefits of amplification.



### Direct Connection

This is a simple and inexpensive solution that allows you to directly connect a listening accessory to your cell phone. You plug the device into your cell phone's headset jack (typically 2.5mm or 3.5mm). Direct connection requires no initial set up—you just plug it in and go! With this solution, you are still able to be hands-free, although there will be a cord running from your phone to the device.

## Wearing Styles



### Neckloop

This style is great if you have telecoil-equipped hearing aids. It is worn around the neck and sends sound directly to your hearing aids through magnetic waves. Most neckloops have volume control, which allows for more amplification beyond what your phone offers. Some neckloops also allow you to plug in headphones if you do not have telecoil-equipped hearing aids.



### Silhouette Ear Hook

This style is also great if you have telecoil-equipped hearing aids. The silhouette rests gently on the user's ear, next to the hearing aid. Because it is placed in close proximity to the hearing aid, the silhouette provides a more direct sound signal to the hearing aid than a neckloop. This style may work better for some people, depending on the position of the actual telecoil in your hearing aid. But for the most part, both neckloops and silhouettes should work great for most people.



### Earbuds/Earphones

This style is great if you do not have hearing aids. They are placed inside the ear canal, helping block background noise.

## Cell Phone Amplifiers



### Hand-Held Amplifier

These amplifiers connect to your cell phone through Bluetooth® and are used like a handset. They increase amplification, include tone control and feature a t-coil mode for added clarity for those with t-coil enabled hearing aids.



### Bluetooth®-Enabled Amplified Phone

Answer your landline and cellphone calls all in one phone! Pair the amplified phone to your Bluetooth®-enabled smartphone and get same quality sound as your landline calls—amplification, loud/visual ringer, tone control, speakerphone and more.

## Cell Phone Signalers

Are you always missing calls and texts from your cell phone? There are a few solutions that can help you out! If you would like to stay on top of your emails or social media messages, these cell phone signalers are able to detect those alerts as well.



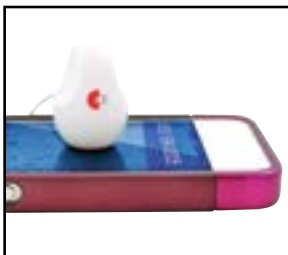
### Bluetooth® Signalers

These signalers connect to your phone via Bluetooth®. They can be clipped to your clothes or worn around your wrist. When you receive a phone call, text or email, the signaler will vibrate to alert you. You can also choose to receive notification from many different apps including your calendar, Skype, Facebook and much more!



### Vibration Sensing

Vibration sensing cell phone signalers detect incoming calls and texts by sensing the vibration from your phone. Place your phone in the cradle of the signaler and it will alert you to incoming calls and texts by bright flashing lights. Some models will also alert you by a loud audible alarm or you can plug in a bed shaker for night time notification. Some connect to signaling systems to alert you to different events or in multiple rooms (read more about signaling systems on pages 16-17).



### Light Sensing

Light sensing cell phone signalers are placed on top of your cell phone and when light from an incoming message is detected, a signal is sent to a receiver which will then notify you by flashing light or sound. Light sensing cell phone signalers are part of a signaling system. You can add additional transmitters to be notified of doorbell, alarm clock and other sounds and additional receivers to be notified in multiple rooms (read more about signaling systems on pages 16-17).

# Personal Amplifiers & FM/Digital Systems



These products are designed to help you hear better in a variety of situations, whether it be in a work meeting, noisy restaurant, classroom, church service, or virtually any other situation. They can be used together with hearing aids to further improve your hearing, or as an alternative to hearing aids depending on your needs. The primary benefit to these products is that they help eliminate background noise while amplifying the sounds you truly want to hear, making it much easier to hear in different situations.

## In-Ear/PSAP Personal Amplifiers

These are very discreet and amplify sounds 15-30dB, making them great for anyone needing an extra boost. For those needing more amplification, check out the body worn personal amplifiers (see next page) which can amplify up to 60dB.



In-Ear Personal Sound Amplifiers, or Personal Sound Amplification Products (PSAPs) pick up the sounds around you, filter out background noise, and amplify speech for a more effortless listening experience. Some models even allow you to customize your listening settings through a smartphone app. Many come with a built-in t-coil option, which picks up sounds from hearing aid compatible phones and venues with a loop system as well as your cell phone or MP3 player by plugging in a neckloop.

PSAPs are similar to hearing aids in many ways, but are not FDA approved devices and do not come with the specialization you get when purchasing hearing aids. However, PSAPs are far less expensive than hearing aids and can be purchased without the need for a professional exam. We still recommend seeing a hearing health professional before buying a PSAP, as they can help evaluate your hearing and talk about all your options.

### Use in these situations:



**One-on-one conversations**



**While driving/riding in the car**



**Small group meetings**

## Wearing Styles



### In-Ear

In-ear models slip into your ear much like an earbud. You don't have to worry about tubes or fitting the unit behind your ear. It can be more comfortable for those who wear glasses.



### Behind the Ear

With these models, the main unit is worn behind the ear and a tube connects to a tip that is placed inside your ear. You can use different kinds of tips and tubes to increase the amplification of the sounds you hear.

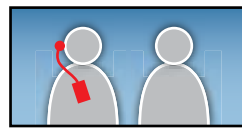
## Hand-Held/ Body Worn Personal Amplifiers

While slightly bulkier, the larger size of the hand-held/body worn personal amplifiers allows them to amplify sound up to 60dB, louder than the more discreet in-ear personal amplifiers (*previous page*). They are also less expensive, typically retailing for less than \$200.



The base unit takes incoming sound from the microphone, amplifies it, and sends it to the headphones, earbuds, or neckloop. The volume can be adjusted on the base unit to a level that is comfortable for you. There is also a tone control that allows you to adjust the frequency of sounds you are hearing to best suit your hearing loss. Personal amplifiers are small enough to hold comfortably in your hand, are easy to use, and are very affordable. Many of them can also be used to amplify everyday things in your home, such as the television or phone (with additional accessories).

Use in these situations:



**One-on-one  
conversations**



**While driving/  
riding in the car**



**Small group  
meetings**

Many of them can also be used to amplify everyday items in your home with additional accessories:



**Television**



**Phone**

## Wearing Styles



### Neckloop

Worn around the neck, this style is generally regarded as the most comfortable and discreet. Neckloops can easily be worn underneath your clothes. For the most part, these can only be used with telecoil-equipped hearing aid(s).



### Earphones and Earbuds

These can be used without hearing aids.

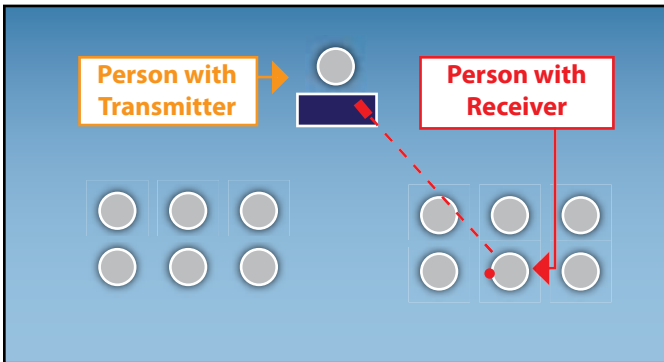


### Headphones

These can be used with or without hearing aids.

## FM/Digital Systems

These are great for helping you hear in situations where the person or people you're trying to listen to are further away (up to 150 feet), such as the teacher in a classroom or the pastor at a Church. They can also be used for smaller settings, just like a personal amplifier.



With these systems, the person you want to be able to hear speaks into the microphone on the transmitter, while you sit a distance away with the receiver. The transmitter picks up sound from the microphone and sends a wireless signal to the receiver, which reproduces the sound to you through the connected headphones. The person speaking could be up to 150 feet away, and yet it would sound like they were speaking directly into your ear!

Many systems also have a microphone on the receiver. This gives you the option to hear both the person speaking through the transmitter AND the people directly around you simultaneously.

FM and Digital systems allow you to control the volume and tone of the sounds to customize what you are hearing. These systems are ideal for hearing better in church, classroom, lecture and noisy environments.



## Wearing Styles



### Neckloop

Worn around the neck, this style is generally regarded as the most comfortable and discreet. Neckloops can easily be worn underneath your clothes. For the most part, these can only be used with telecoil-equipped hearing aid(s).



### Earphones and Earbuds

These can be used without hearing aids.



### Headphones

These can be used with or without hearing aids.

# Personal Induction Loop Systems

Hearing aids are designed to take the sounds around you and amplify them so you can hear better, but one of the peculiar things about hearing aids is that in certain situations this can actually become more annoying than it is helpful. Generally speaking, the more background noise there is in your environment, or the farther you are from the sound source, the more difficult it can be to hear. This is where a personal induction loop can help.

A personal induction loop system works together with your telecoil-equipped hearing aids to bridge the distance gap between you and the sound source you wish to listen to, and virtually eliminate any unwanted background noise. This allows your hearing aid to focus on just the sounds you truly want to hear.

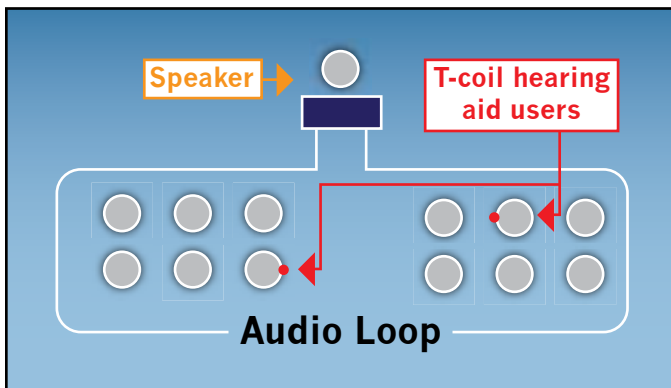


Loop Amplifier



Loop Wire

## Technology



## What is included?

A loop system typically consists of a thin wire, special amplifier, and a microphone.

## So how does it work?

First, the thin wire is looped around your desired listening area and then plugged into the amplifier. The amplifier is then hooked up to whatever sound source(s) you'd like to listen to. Possible examples include your TV, sound system, home phone, or the included microphone.

Once the amplifier is turned on, any sound signals that pass through the amplifier are then amplified and circulated throughout the loop, generating an invisible magnetic field that can be detected and amplified wirelessly by the telecoil in your hearing aid.

All you have to do is turn your telecoil on and your hearing aid now becomes your own little personal loudspeaker! Turning the telecoil on will simultaneously turn the microphone on your hearing aid off, which will eliminate unwanted background noise. If you have a Mic + T Coil setting, you can also choose to use both the microphone and telecoil at the same time. Your audiologist can help you choose the best option for you.

## DID YOU KNOW?

*A growing number of public facilities are installing their own loop systems. Just look for this handy symbol and switch your telecoil to the "on" position!*



# Hearing Aid Care

Maintaining the condition of your hearing aids is just as important as getting them in the first place. Without proper maintenance, your hearing aids may need to be repaired or even replaced. We offer several products that will help maintain the condition of your hearing aids by keeping them clean and dry, ensuring they operate at their finest for many years to come.



## Hearing Aid Care Products



### Hearing Aid Dryers

Hearing aid dryers are great for removing moisture and ear wax, killing germs and deodorizing your hearing instruments. We carry dryers that you can use for everyday use, which hold up to two pairs of hearing aids. We also have small travel containers that you can bring with you anywhere you go.



### Ear Hygiene

If you need something to keep your eardrums clean, remove earwax, relieve itchy ears, or even find a DVD to learn how to do all of these things, check out our “ear hygiene” supplies.



### Hearing Aid Protectors and Sweatbands

Hearing aid protectors and sweatbands are an effective, inexpensive way to protect your hearing aids from moisture, dust and dirt. They are acoustically transparent, meaning they won't interfere with your hearing aid's performance. Some models even have a cord that you can clip on to your clothing so you don't lose them while being active.



### Hearing Aid Batteries

The average hearing aid battery lasts 4-7 days, depending on the size of the battery and how powerful the hearing aid is. That means you would have to buy a new card of batteries every 15-30 days to keep your hearing aids running. Why not buy a few month's supply at a time? Save money by buying hearing aid batteries in value packs!



# Alarm Clocks & Timers

Standard alarm clocks are not very effective at waking people with hearing loss, especially if you are severely hard of hearing or deaf. Even if you have hearing aids you don't benefit from standard alarm clocks because you take your hearing aids out before you go to bed. The alarm clocks we carry are designed with a combination of special features that make them an ideal solution if you have a hearing loss, are deaf, or are just a deep sleeper.



## Notification Options



### Extra Loud Audible Alarm

All of our alarm clocks have an extra loud audible alarm adjustable up to 113dB, which is comparable to what a rock concert sounds like from your seats. Many also come equipped with tone control, allowing you to adjust the alarm to a frequency that is easier for you to hear in the morning. The combination of volume and tone control allows you to tailor your alarm clock to your hearing loss.



### Bed Shaker

Almost all of our alarm clocks come with a bed shaker that you can place under your mattress or pillow. When the alarm goes off, the bed shaker will vibrate your bed to wake you up. This tends to be the most effective wake-up option for people.



### Lamp Flasher

Clocks that have this function allow you to plug a lamp into an outlet on the back of the clock or into the end of the cord, depending on the clock. When the alarm goes off, the lamp will flash. This feature is less common than the other two, but for many people it is their favorite.



### Wrist Vibration

Some clocks come with a wristband that vibrates when the alarm goes off. These are useful when you want to wake up without disturbing your partner or roommate.

## Portable Options



### Travel Clocks

We also have some smaller alarm clocks designed for traveling. These travel alarm clocks are battery-operated, and can alert you through vibration and/or audible alerts.



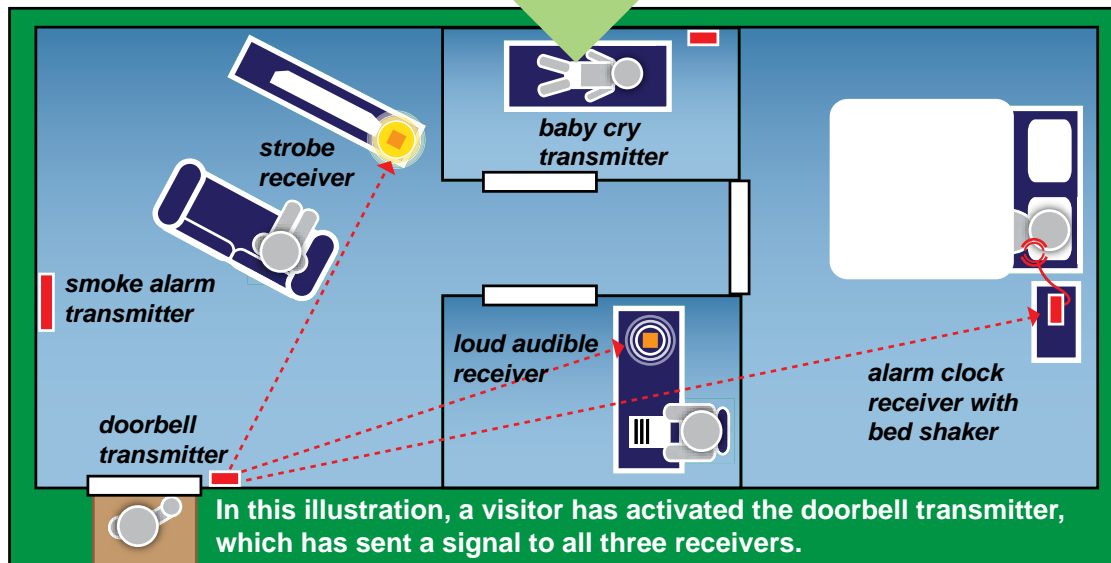
### Watches and Timers

We sell an array of vibrating watches and timers that operate like normal watches and timers, with the added functionality of vibration to alert you when the timer or alarm goes off. Great for deaf and hard of hearing people alike!

# Signaling Systems

Signaling systems are designed to help notify you of different events, such as the phone/videophone ringing, the doorbell, a baby's cry, motion, weather alerts, and smoke or carbon monoxide alarms. Also known as "Alerting or Notification Systems," these devices can alert you to different events through flashing lights, loud audible alarms, and/or vibration.

Below is an illustration of how someone might use a signaling system. There are many different transmitter and receiver options. The next page offers a description of your choices, and walks you through purchasing a system.



## Doorbell Transmitter

A doorbell transmitter looks and feels just like a regular doorbell, but also has a built-in transmitter so that when someone pushes the button, it will send a signal to receivers placed in your home. The receivers will then alert you to the fact that someone is at the door.



## Baby Cry Transmitter

A baby cry transmitter can be used to alert you whenever your baby is crying. These have built-in sensitivity switches that can easily be adjusted if you find the transmitter is over or under-reacting to your baby's cry. If your baby starts crying, the transmitter will send a signal to your receivers.



## Smoke Alarm Transmitter

These transmitters can be placed throughout your home. Whenever a fire is detected, the transmitter will send a signal to your receiver.



## Strobe Receiver

A strobe receiver has been placed in the living room. Whenever any of your transmitters are activated, the strobe will start flashing and give you a visual indicator.



## Loud Audible Receiver

A loud audible receiver has been placed in the office room. Whenever a transmitter is activated, this receiver plays a loud audible sound to alert you. These also typically have built-in volume and tone controls.



## Alarm Clock Receiver

You can use this receiver as a normal alarm clock that will wake you with a loud audible alarm, by shaking the included bed shaker, or even by flashing a lamp. But it also acts as a receiver that can alert you if any of your transmitters are activated.

# How to Choose a Signaling System

There are 4 main things to consider when customizing a signaling system:

## 1 Transmitters



Doorbell/  
Door Knock



Phone: Landline/  
Cell/VP/TTY



Sound



Baby Cry



Fire/CO



Alarm Clock

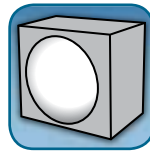


Motion



Pendant

## 2 Receivers



Strobe



Lamp



Bed Shaker



Pager



Horn/Audible



Watch

## Which events do you want to be notified of?

As a general rule of thumb, you will need to purchase one transmitter for each event you would like to be notified of. Each transmitter is designed to alert you to a specific event. For example, if you want to be alerted whenever your phone rings or whenever your baby cries—you would purchase one phone transmitter and one baby cry transmitter. Some transmitters do work for more than one event, such as a door and phone transmitter.

## How many rooms do you want to be notified in?

For each room you want to be notified in, you will need to purchase a receiver. For example, if you wanted to be alerted in the bedroom, living room, and kitchen, you would want to purchase 3 receivers. Some manufacturers also make portable receivers that you can bring with you wherever you go in your home, limiting the need for additional receivers. Each receiver will work with all transmitters, as long as they are the same brand.

## 3 Compatibility

To ensure compatibility you must purchase the same brand of signaling components (both transmitters and receivers).

## 4 Technology

### Radio Frequency (RF) technology:

This technology sends a signal from your transmitters to your receivers through radio waves. It is ideal for both home use and for people who live in apartments, dorms, or other types of public housing because built-in dip switches can be adjusted to ensure your system will not interfere with a neighboring system. For various reasons, some people find that this technology works more reliably for them than line carrier does.

### Line Carrier Technology:

This technology sends a signal from your transmitters to your receivers through your home's electrical circuits. One of the advantages to this technology over RF is that you are no longer limited by distance.

**The following brand is line carrier:**



**The following brands are RF:**



# Emergency Notification Devices



**“Recent research has found that nearly half of those with mild to severe hearing loss will not wake up to a standard auditory alarm.”<sup>1</sup>**

The implications of the statement above are clear and simple—people with hearing loss and those who are deaf need better options when it comes to keeping them and their families safe in the event of an emergency. We offer smoke detectors, carbon monoxide (CO) detectors, and severe weather warning systems designed for this very purpose.

The products we carry are specially designed to alert you through a combination of auditory, visual, and/or tactile stimuli. When used simultaneously, these stimuli have been proven to significantly increase the chances that a hard of hearing or deaf person is woken from their sleep in an emergency. In fact, in the very same study mentioned above, 100% of subjects were successfully woken by a bed shaker placed under their mattress.



## Notification Options

There are 3 primary ways you can be alerted in an emergency. We strongly suggest getting a system that has all 3 notification options to keep you and your family as safe as possible.

### Visual

#### Strobe Light

Many of our emergency products can alert you with a flashing strobe light. Some have built-in strobe lights, while others will send a signal wirelessly to a remote strobe light placed elsewhere in your home. When the alarm goes off, the strobe light will flash.



### Tactile

#### Vibration

Some of our emergency products can also alert you through vibration, whether it be a bed shaker, watch, or pager. Bed shakers are simply connected to a device by your bed and then placed under your mattress or pillow. When the alarm goes off, it sends a signal to the bed shaker which then vibrates and shakes your bed. We also carry vibrating watches and pagers that offer you a more portable solution.



### Auditory

#### Loud Audible Alarm

All of our emergency devices have standard loud audible alarms that put out up to 90dB of sound.



**We offer smoke alarms with a Temporal 3 (T3) sound pattern. A T3 smoke alarm notifies with 3 beeps, a pause and then repeats the pattern. The T3 alarm is offered at most stores and is a more versatile alarm pattern because it can work with specialty “listen and alert” fire alarms. (See next page for more details.)**

<sup>1</sup>Bankaitis, A.U. “Alarming Facts About Smoke Detectors A. U. Bankaitis, Ph.D., FAAA, Vice President, Oaktree Products Inc. AudiologyOnline.” Audiology Online 22 Feb. 2010. [www.audiologyonline.com/articles/article\\_detail.asp?article\\_id=2330](http://www.audiologyonline.com/articles/article_detail.asp?article_id=2330).

Contact us anytime to speak with one of our knowledgeable and friendly customer service representatives. We're here to help you! Phone: (800) 825-6758 • Email: [info@harriscomm.com](mailto:info@harriscomm.com)

### Specialty “Listen and Alert” Fire Alarms



#### Recommended if...

You already have existing smoke alarms in your home and are concerned with being awoken at night in an emergency.

#### How it works...

Rather than detecting smoke itself, these fire alarms are designed to “listen” to your home’s existing Temporal-3 (T3) smoke alarms. If one becomes activated, your fire alarm will then alert you by emitting a high decibel, low frequency audible alarm, and by vibrating a bed shaker that is placed under your mattress or pillow. These are relatively simple to install.

### Hard-Wired Alarms



#### Recommended if...

You who live in medium-to-large size home containing multiple floors and rooms.

#### How it works...

Multiple units are placed around your home and interconnected, so that when any one detector senses smoke, all alarms in the home go off simultaneously. This significantly increases the chances that you will get out safely before a fire spreads. The more rooms and floors your home or apartment has, the more important it is to have a hard-wired system installed. Hard-wired alarms must be installed by a licensed electrician.

### Signaling System Alarms



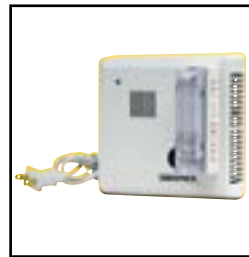
#### Recommended if...

You want the safest and most customizable solution, and the ability to expand your system to alert you to other events in your home such as the doorbell or phone ringing.

#### How it works...

Signaling system alarms and detectors work like normal alarms, but also come with a transmitter that will send a wireless signal to receiver(s) placed around your home. Receivers can be purchased that can alert you through a bed shaker, flashing strobe light, or audible sound. Additional smoke detectors and transmitters can also be purchased to alert you in any room in your home.

### AC-Powered Alarms



#### Recommended if...

You are on a budget and live in a studio apartment or dorm.

#### How it works...

Simply plug into any wall outlet in a room, mount the alarm on the wall, and you will be notified of a fire when smoke reaches that room. These cannot be interconnected like hard-wired alarms can, so if you place one in your bedroom and a fire starts in your living room, you may not be alerted until it’s too late. If you are planning to purchase an AC-powered alarm, we strongly recommend you purchase one in conjunction with a specialty “listen and alert” fire alarm.



### Weather Alert

Another type of emergency that is commonly overlooked is severe weather. We offer a few weather alert systems that receive updates from NOAA weather bureau channels, and will indicate the specific type of weather alert and what level it is at. Our systems are unique in that they also include components (strobe lights and bed shakers) to ensure you are alerted immediately and have time to get to safety before severe weather hits.

# ADA Compliance

The Americans with Disabilities Act (ADA) of 1990 requires that public and private entities make reasonable accommodations to ensure their facilities are accessible to people with disabilities, including the deaf and hard of hearing.

There are many different types of products that can help make your workplace, public venues or businesses that you frequent ADA compliant. All of the products in this guide can be used to fulfill ADA requirements, below are some suggestions for different situations.

Feel free to pass on this guide to those who may need to become ADA compliant. If you need any help choosing the solutions to fit your situation, contact us for suggestions.

For more information and to view the full law, go to: [www.ada.gov](http://www.ada.gov)



## Workplace



### Office Phone Equipment

There are many different products that can help you hear while on your office phone, including headsets and neckloop systems. Read about these solutions on page 7.



### Personal Amplifiers & FM/Digital Systems

Personal amplifiers and FM/digital systems will help you hear better in a variety of office situations, including meetings, conversations and while on the phone. Read more on pages 10-12.

## Public Venues and Businesses

Includes theaters, stores, museums, libraries and hospitals.



### Counter Loops

Counter loops instantly turn any counter space into a looped area. The employee talks into the microphone and their voice is transmitted to your telecoil-equipped hearing aid. Counter loops typically have a listening range of 4-5 feet.



### Infrared TV Listening Systems

If a movie or concert theater is equipped with an infrared (IR) transmitter, bring the headset from your IR TV listening system and have sound transmitted directly into your ears! Read more on page 3.

## Assembly Areas

Includes places of worship, schools and courtrooms.



### Large Area Systems

These systems can be FM, infrared or loop technology. The transmitter is hooked into the sound system and receivers are given to those with hearing loss. If you have telecoil-equipped hearing aids, loop systems allow you to use your hearing aids as a receiver.

## Hotels



### ADA Kits

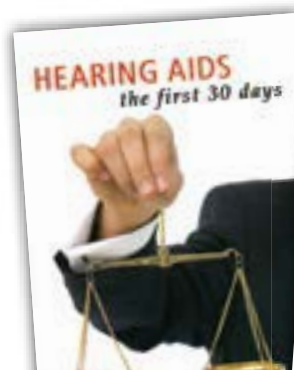
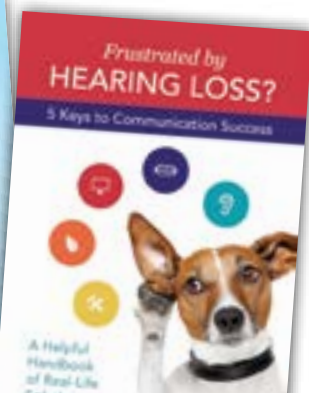
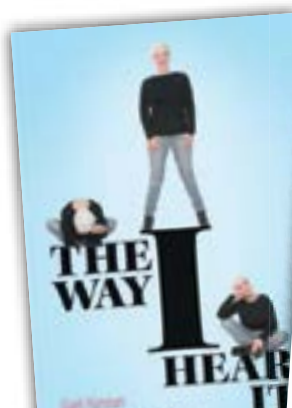
ADA kits provide the equipment that may be crucial during your hotel stay. These kits may include a signaling system (pg 16-17), smoke detector (pg 18-19), vibrating alarm clock (pg 15) and a phone handset amplifier (pg 5).

# Hearing Loss Resource Library



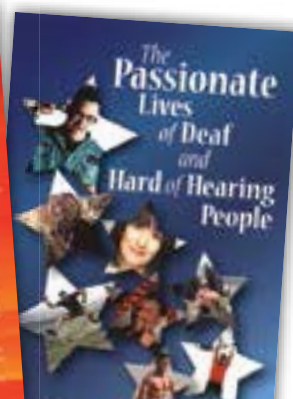
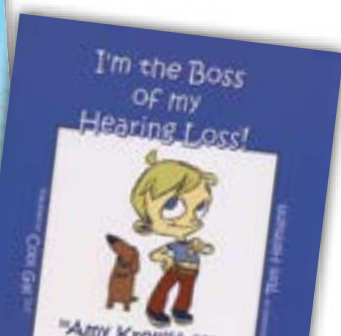
Want to learn more about hearing loss on your own?

We have a large selection of books related to hearing loss, spread across a wide range of topics such as:



Coping with Hearing Loss

Information on Hearing Aids and Cochlear Implants



Books/DVDs for Children

And Much More!

We also offer books, DVDs and CD-ROMs on sign language, deaf culture and interpreting!

## Why Assistive Technology?

Assistive technology is simple to use, inexpensive, and can benefit almost anyone with hearing loss. Whether you have a mild or profound hearing loss, hearing aids or not, there's an assistive device out there today that can greatly improve your quality of life. This guide is here to teach you about all these different devices, and show you just how easy it can be to solve some of the common problems that people with hearing loss face on a daily basis.



*Amplified Telephones*



*Cell Phone Accessories*



*TV Listening Systems*



*Personal Amplifiers & FM/Digital Systems*



*Induction Loop Systems*



*Hearing Aid Accessories*



*Signaling Systems*



*Emergency Notification*



*Loud/Vibrating Alarm Clocks*