

Telephone Equipment

- **Amplified telephones** offer various degrees of amplification or decibel (dB) levels. Common features include adjustable tone/frequency, adjustable ringer, volume, and pitch, visual ring indicator, speed dial, and audio jacks. Amplified telephones are offered in corded or cordless styles.
- **Amplified Telephone Ringers** help when a person has difficulty hearing the phone ring. Ringers can include features such as adjustable volume, tone selection, pattern selection, and a visual alert. Ringers can operate independently or can be connected to a telephone.
- **In-Line Telephone Amplifiers** are connected between the base of the telephone and the handset. In-line amplifiers are not compatible with telephones where the dial pad is in the handset.
- **Snap-On Telephone Amplifiers** slip over the earpiece of most telephones and are held in place with an elastic or rubber strap. Snap-on amplifiers are lightweight, portable, and battery operated.
- **Amplified Answering Machines** record messages that can be played back with amplification and adjustable tone and play-speed controls to allow for easier understanding of speech.
- **TTY's** (teletypewriters) are telecommunication devices with a keyboard and a visual display to type messages sent across telephone lines to be received by another TTY user. TTY's are used primarily by people who are deaf, hard of hearing, have a speech disability, and by people who communicate with these individuals. Features such as printers, answering machines, memory dialing, and cellular connections can be found on different models.
- **PC-Based TTY's** allow for TTY communication through a computer. Desktop or laptop computers must have special software, a proper modem and a telephone line connection in order to have TTY conversations via the computer.
- **Portable TTY's** are a smaller version of a standard TTY and come with rechargeable batteries that allow the user to make calls from virtually anywhere. Most portable TTY's can be used acoustically with a variety of phones, including payphones. Some models can also be used in a direct connect mode with a standard phone line. Specialized models offer connection to cellular phones.
- **Voice Carry Over (VCO) products** allow deaf and hard of hearing individuals to utilize their speech on the telephone. Using the Illinois Relay Service, the VCO user speaks directly to the other person, and when the person speaks back, the relay operator types a text response that is displayed on a TTY or VCO device. Available styles include: VCO telephones, TTY's with built-in VCO capability, and portable VCO devices that can be used on a variety of telephones.
- **Call Screeners and Routers** determine what type of call is coming in and route it appropriately. Some screeners will only allow a TTY call to ring the phone line and others can determine if the call is a TTY call, voice call, or a fax. Some routers will even route the call to an answering machine, if desired.

Closed Captioning

Closed Captioning displays speech as printed text, streaming across the lower portion of a television screen. Similar to subtitles, captioning is broadcast as an invisible transmission which requires a decoder to display the text. Closed captioning displays the text of spoken words, sound effects, music and emotions of the speakers. All television sets 13-inches or larger built after 1994 are required to have built-in decoder chip. Refer to the owner's manual for instructions on how to activate your television's closed captioning feature.

A Caption Decoder is a unit that is connected to your television to display closed captioning. It is used primarily for older televisions that do not have a built-in decoder. Models come with a remote control and are compatible with any TV. Portable caption decoders are available, which are ideal for travel.

Please contact the Illinois Deaf and Hard of Hearing Commission for further information regarding assistive technology. Our website offers links to a variety of organizations and manufacturers that can provide additional information on the availability of specific types of equipment:

www.idhhc.state.il.us

ASSISTIVE TECHNOLOGY

Equipment Available for Individuals with a
Hearing Loss



State of Illinois
Deaf and Hard of Hearing
Commission

V/TTY: 217.557.4495

V/TTY: 877.455.3323

Fax: 217.557.4492

www.idhhc.state.il.us

Assistive Technology is the general term for a variety of devices designed to aid individuals with hearing loss in leading an independent life. Many kinds of devices are available that will fit a particular need. These devices accommodate individuals with a hearing loss by amplifying sounds or converting auditory sounds into visual alerts.

Assistive Listening Devices

Assistive Listening Devices are designed to help people hear better in a variety of difficult listening situations. Listening in groups, meetings, restaurants, lectures, theaters, or in one-on-one conversations is not only influenced by environmental noises but also by the distance between the speaker and the listener. Assistive listening devices can bring sound directly to your ears without increasing background noise. Assistive listening devices can be used with a hearing aid equipped with a T-coil or without hearing aids by wearing earbuds or headphones. There are a variety of types of assistive listening devices:

FM Assistive Listening Systems use radio frequency to carry sound from a microphone-transmitter to a receiver. The receiver can be integrated with a hearing aid or amplified by use with earphones.

Infrared Assistive Listening Systems are similar to the FM system, but use invisible infrared light waves to carry sound from the transmitter to the receiver. The receiver converts the infrared light waves back into sound, which then can be amplified.

Loop Assistive Listening Systems use a wire antenna “loop” that physically surrounds a given area. A transmitter circulates a signal through the loop wire creating a magnetic field. Hearing aid users switched to “T-coil” will pick up the signal when they are within the “looped” area.

Personal Assistive Listening Devices pick up a sound through a microphone, amplify and direct the sound to the ears through earbuds, headphones, or a neckloop for listeners with T-coil integrated hearing aids.

Television or Radio Assistive Listening Devices use FM, infrared technology, or a wire antenna “loop” to transmit sound directly to the listener which helps people hear the television or radio better.

Alerting/Signaling Devices are designed to monitor sounds such as a doorbell, door knock, baby cry, alarm clock, telephone ring, smoke detector, motion detectors, or weather alerts. Options for signaling include a flashing light, a vibrating signaler, a loud horn, or a combination of these signals. Alerting/signaling systems are available as single-function alerts or multiple signal notification systems. Receivers can be used for multiple room notification. Hard-wired and wireless systems are available.

Alarm Clocks wake up a user by any of the following options: flashing light, vibration (bed shaker), audio alarm with adjustable tone and volume, or a combination of these. Some alarm clocks can work as a receiver for an alerting system. Alarm clocks are also available in smaller, portable designs for traveling.

Watches use a vibrating mechanism to alert a deaf or hard of hearing individual at a preset time.

Cellular Products allow TTY users and some hearing aid users to make cellular calls. A TTY user can connect a cell phone to a TTY acoustically or with a direct connect cable. A hearing aid user can connect a neckloop or silhouette (using the T-coil in their hearing aid) to a cell phone through the headset jack. A vibrating ring alert can be used to alert the user that there is an incoming call.

Pagers are a convenient way for people with a hearing loss to keep in touch. Some are used for basic text communication. Others can send messages to voice or TTY numbers, faxes, or have live TTY chat. Through a subscription service, pagers allow users access to current information, weather, stock prices, or to call for auto assistance.

Automobile Accessories

Autominder is a system that monitors such alerts as low fuel, fasten seat belts, and door ajar. This feature emits a loud tone and flashing light signal when one of these signals is activated to alert the driver.

Loud Turn Signal Flasher provides a flashing light and a 90-decibel pulsating sound when the directional signal is activated.

Emergency Response Indicator is a vehicle emergency alert device designed to notify drivers by lighting up when the device registers the siren of an approaching emergency vehicle.

Early Alert Response System (E.A.R.S.) is a vehicle emergency alert device designed to notify drivers by an audible tone and flashing red light when an emergency vehicle’s siren is activated within 500 feet of the driver’s vehicle.