

Calling my Sweetheart

Keeping in touch with people who are important can be a challenge if you have a hearing loss. Cell phones have paved the way in breaking the barrier that landlines have presented. Technology changes so rapidly so the following information is just a broad view of information about cell phones.

Accessible cell phones for the hard of hearing with T-coil hearing aids

Hearing aids work by using an internal microphone to take sound, convert it to a digital signal that is filtered and amplified, then converts the digital sound back to sound for the user. The hearing aid's microphone often does not work well with the cell phone. To counter this problem, the cell phone industry from directions of the Federal Communications Commission (FCC) has implemented Microphone and Telecoil Standards.

Some hearing aids experience a buzzing or whining noise with wireless phones. The noise is caused when the electronics within the hearing aid pick up and demodulate radio frequency (RF) and/or electromagnetic interference (EMI) emitted by the phone.

Hearing devices may also be measured for immunity to this type of interference. Your hearing device manufacturer or hearing health professional can help you find results for your hearing device. The more immune your hearing aid is, the less likely you are to experience interference from mobile phones and other sources of RF/EMI such as computer monitors and fluorescent lighting.

T-RATINGS AND COMPATIBILITY WITH HEARING AIDS WITH TELECOILS

A telecoil is a small device built into some hearing aids for use with the telephone as well as assistive listening devices. The telecoil picks up magnetic fields generated by the telephones and converts these fields into sound. Not all hearing aids have telecoils.



M-Ratings: reduced hearing aid device interference:

Phones with an M-Rating of M3 or M4 meet FCC requirements and are less likely to generate interference with hearing devices than phones that are not labeled. M4 is the better/higher of the two ratings.

T-Ratings: compatibility with hearing aids with telecoils:

Phones with a T-rating of T3 or T4 meet FCC requirements and are more likely to work well for people who use hearing aids with telecoils. T4 is the better/higher of the two ratings.

Because individual experiences may vary significantly, it is recommended that individuals try several hearing-aid compatible phones at phone stores to determine which phones will work best.

Variety of features for cell phones

There are a variety of features, depending on the type of device you choose that can assist a person with a hearing loss in keeping in touch with those that are important to them. Most smart phones include the usual text messaging, instant messaging, email, social media and mobile web. It also has a volume control that the user should test to see if it is loud enough to hear if they are using their audition for listening. Other things to consider may include:

- ❖ **Audio, visual and vibrating features:** you can assign specific audible, visual and vibrating alerts for incoming calls or messages, calendar events and confirming keyboard inputs. You can also assign, create, purchase and download distinctive ringtones at frequencies you can hear more easily.
- ❖ **Bluetooth, Loopset, Neckloops, or Silhouette Compatible:** (See article to right)
- ❖ **Closed captioning for video:** wireless devices that support video programming capabilities can also support open captions, closed captions or subtitling for video. When available, captions appear onscreen just as on TV.
- ❖ **HD voice:** wireless handsets that support HD Voice provides a fuller, more natural sounding voice calling experience, plus noise cancelling technology that helps to reduce background noise. The HD Voice feature must be available on both wireless handsets to function
- ❖ **Hearing aid compatible - HAC Standards:** M and T rating standards explained on other page.
- ❖ **TTY compatible:** Cell phones usually work with certain Text Telephones (TTY) devices. This feature must be enabled on your wireless device and may require an adaptor (sometimes called a dongle)
- ❖ **Video conferencing:** Some cell phones support two-way video conferencing services depending on the phone's capabilities and speed of available wireless service. Look for a "front-facing" camera in a wireless device that supports video conferencing.
- ❖ **Video displays to indicate call functions:** Some phones use visual indicators like written characters, icons or flashing lights on the display screen to show the phone's status, indicating the device is ringing, in use, busy or turned on or off.
- ❖ **Wireless emergency alerts (WEA):** WEA is an alerting network designed to disseminate emergency alerts to mobile devices such as cell phones and smartphones to enhance public safety. Look for a special WEA symbol on the device packaging to determine whether a cell phone supports it.
- ❖ **QWERTY keyboards** standard keyboard layout on English-language computers.
- ❖ **Customization:** If a cell phone does not have a built-in accessibility feature, ask a wireless carrier representative if it can be customized by adding or downloading applications (apps).



Clearsounds
Bluetooth
Amplified
Neckloop



ClearSounds
ClearLink CL003
Single Silhouette
with earbud

Neckloops & Silhouette

A neckloop is a "handsfree" accessory. The most basic ones plug into the phone's audio port. They are also widely available in Bluetooth wireless versions, i.e. no wire plugs into the phone. They work on the same principle described in the telecoil. The main difference being that you don't have to hold the phone up to the hearing aid when wearing a neckloop as with a T-rated cell phone. A silhouette looks like a flat hook that goes between the ear and hearing aid. It is an induction system for hearing aids and cochlear implants with telecoils. It provides a much stronger signal to the hearing aid or cochlear implant than a neckloop (due to the close proximity). This may be the only effective device for someone with a profound loss. Requires the T-switch to be turned ON to function.

IPAT Telecommunications Equipment Distribution Service Program Requirements

If you meet qualifications, IPAT provides free telephone equipment including cell phones, however, you would have to pay for cell phone services. Contact at

800-895-4728 FREE or
ipatinfo@ndipat.org
for more information.