

Telecommunications: Devices and Software

TS
Tip Sheet

Overview

Telecommunication technology has significantly changed the communication landscape for deaf individuals. For more than 40 years, text telephones (TTY) and amplified phones were their only options. Today, videophones, smartphones, and instant messaging most often replace TTY as preferred communication tools.

Telecommunications for deaf individuals most often refers to the telephone devices, platforms, and services used when a standard phone is not an effective telecommunication tool. Topics often fall into three broad categories: (a) equipment and devices, (b) FCC-supported relay services (VRS), and (c) fee-based video remote interpreting services (VRI). For an overview of VRS and VRI services, see [Telecommunications: VRS, VRI, and TRS](#).

What are the most commonly used devices and software?

Videophone: In its most basic form, a videophone is a device that houses a video display that allows two individuals to see each other on a screen and communicate in real time.

However, as it applies to deaf individuals, a videophone has a different context. It refers to a subscriber-based proprietary system available to *only* deaf individuals. Subscribers are assigned a 10-digit number that conforms to a standard telephone number; however, it is assigned by an FCC-approved relay service provider rather than a traditional telephone service provider.

Using proprietary equipment, or service provider-specific software downloaded to a computer or mobile device, subscribers are able to (a) call another videophone user directly or (b) call a hearing person through a video relay service provider. A hearing person wishing to speak to a videophone user simply dials the 10-digit number and is automatically routed to a relay service provider who then connects the two parties through an interpreter.

Open Market Video Calling Software: Due to the user restrictions placed on videophones, deaf and hearing individuals often use Skype, FaceTime, Fuze and the myriad other video calling software applications available on today's market to converse in real time.

Open Market Texting Software: In addition to taking advantage of current mobile phone texting capabilities, sign language users are increasingly using software programs such as YouTube and Glide to "text" messages in sign language.

Text Telephone (TTY): TTYs are sometimes referred to as TDDs, or Telecommunication Devices for the Deaf. TTY is the preferred term because individuals with other disabilities may use TTYs as well. A TTY is a device about the size of a small typewriter. It is configured to allow two individuals to type back and forth over a phone line in real time. In order to use a TTY, both parties must either have a TTY or use the relay service to communicate. It is not necessary to maintain a special line solely for TTYs. Just ensure that the TTY is accessible for individuals to use when a call comes in.

Sound-Enhancing Telephone Handset Devices: Often referred to as amplified telephones, these devices feature a volume control



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switch. Most handsets have a mechanism that allows the user to receive the sound directly to the hearing aid.

Even though some technology may seem obsolete, it is important to have an array of options available to deaf individuals. According to the Federal Communications Commission's Report on TTY Transition (March 2013):

- Text IP-Relay usage is still significant, with over one-third of text relay traffic originating from TTY users.
- Although the number of TTY users has significantly declined, there are still approximately 100,000 TTY users in the United States.
- Emergency centers receive over 20,000 emergency calls from TTY users each year.

What does the law say?

The provision of telecommunication devices for deaf individuals is covered by the Americans with Disabilities Act. It stipulates that public entities with pay phones or other telecommunication services must ensure that accommodations (e.g., videophone, TTY, etc.) are available.

Related Resources

Telecommunications: VRS, VRI and TRS:

www.nationaldeafcenter.org/tcservices

FCC: Telecommunications Relay Services (TRS):

www.tinyurl.com/FCCTrs

Captioned Telephone Service (CTS):

www.tinyurl.com/nadinfocts

CapTel Captioned Telephones:

www.captel.com/captel

Additional resources on this subject may be available at www.nationaldeafcenter.org/resources.



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Additional resources can be found at www.nationaldeafcenter.org