



How Persons Who Are Deaf and Blind Have Conversations

By Andrew Leib

Blind persons can hear voices and words read aloud. Deaf persons can read lips and printed words. But what if both senses are lost? For many deaf-blind persons, the dual sensory disability requires significant adaptations to make talking and learning possible.

Technologies, however, are becoming increasingly flexible in facilitating face-to-face conversations between sighted and deaf-blind persons. Most solutions combine braille and QWERTY keyboards with refreshable displays and screens; e.g., on a smart phone, for reading typed text.

The deaf-blind person composes messages on a braille keyboard that appear as text on an LCD screen. The sight person types responses on a mobile device or Bluetooth keyboard. The deaf-blind person reads responses in braille off the refreshable display.

In addition to having meaningful conversations with loved ones, these solutions can also help deaf-blind persons interact with a wider world.

HumanWare's DeafBlind Communicator (DBC) combines its DB BrailleNote with a cell phone that has a visual display and QWERTY keyboard and software enabling Bluetooth connectivity between the two devices.

A deaf-blind person starts a conversation by handing a sighted person the DB phone, which displays the message, "Hi, I'm blind and I can't hear. To communicate with me, type a message on this keyboard and press return." The DBC converts the typed text into braille, which appears on the BrailleNote's display.

If connected to a landline, the DBC can also function as a TTY. With a SIM card and wireless plan, the DB-Phone can be used to send text messages. The unit also has a built-in answering machine.

Users enter TTY or relay service numbers in the chat menu or their address book. They can also communicate with other DBCs and mPower-installed BrailleNote devices. Note: mPower software provides simple menus, navigation, and context-sensitive help, as well as access to additional applications such as a word processor, web browser, and email.

A similar solution is HIMS Chat, a free app that connects an iPhone to a Braille Sense device (including the U2, OnHand, and Braille EDGE 40) via a Bluetooth keyboard. As with the DeafBlind Communicator, a deaf-blind person starts the chat by typing on the braille keypad and pressing “Enter” to send the message. The sighted person reads the text on his or her iPhone screen and responds using the Bluetooth keyboard.

HIMS Chat also enables deaf-blind persons to receive vibrating alerts (if using the Braille Sense U2) for new messages, access built-in and user-created macros to speed data entry, and save conversations for later reading. Such features and iPhone integration may make HIMS Chat a more convenient solution as mobile devices proliferate.

At present, HIMS Chat is only available on the iPhone. Support for the iPad and iPod touch is in development.

Deaf-blind persons may be eligible to receive free or low-cost communications equipment through the National Deaf-Blind Equipment Distribution Program. This Federal Communications Commission (FCC) program is mandated by the 21st Century Communications and Video Accessibility Act and supports local distribution of accessible communications technology.

Combined hearing and vision loss must meet standards defined by the Helen Keller National Center. One’s income cannot exceed 400 percent of the Federal Poverty Guidelines. Call 800.825.4595 for more information.

Resources:

HumanWare DeafBlind Communicator

<http://assistivetechology.about.com/od/ATCAT2/p/Humanware-Deafblind-Communicator.htm>

Converse with Deaf-Blind Persons with HIMS Chat

<http://assistivetechology.about.com/od/PersonalCommunicators/a/Converse-With-Deaf-blind-Persons-With-Hims-Chat.htm>

HIMS Makes Adaptive Devices for Persons Who are Blind or Visually Impaired

<http://assistivetechology.about.com/od/ATCAT1/p/Hims-Makes-Adaptive-Devices-For-Persons-Who-Are-Blind-Or-Visually-Impaired.htm>

National Deaf-Blind Equipment Distribution Program

<http://assistivetechology.about.com/od/DHHSC1/a/Telecommunications-Equipment-Distribution-Programs-Offer-Free-Accessible-Phones.htm>

iCanConnect

<http://www.icanconnect.org/>

FCC: Affordable Telephone Service for Income-Eligible Consumers

<http://www.fcc.gov/guides/lifeline-and-link-affordable-telephone-service-income-eligible-consumers>