

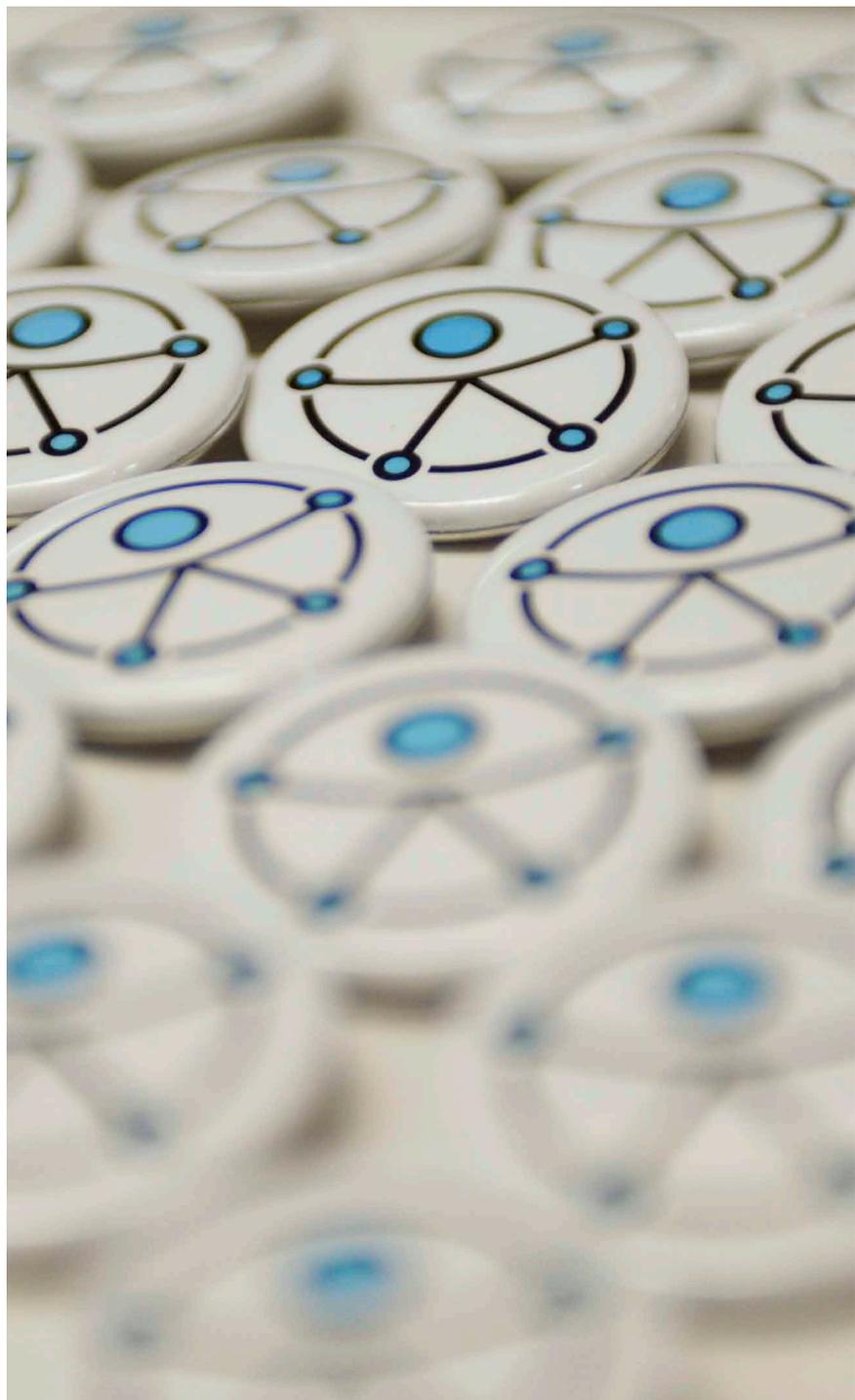


Assistive Technology Devices

UN Accessibility Centre

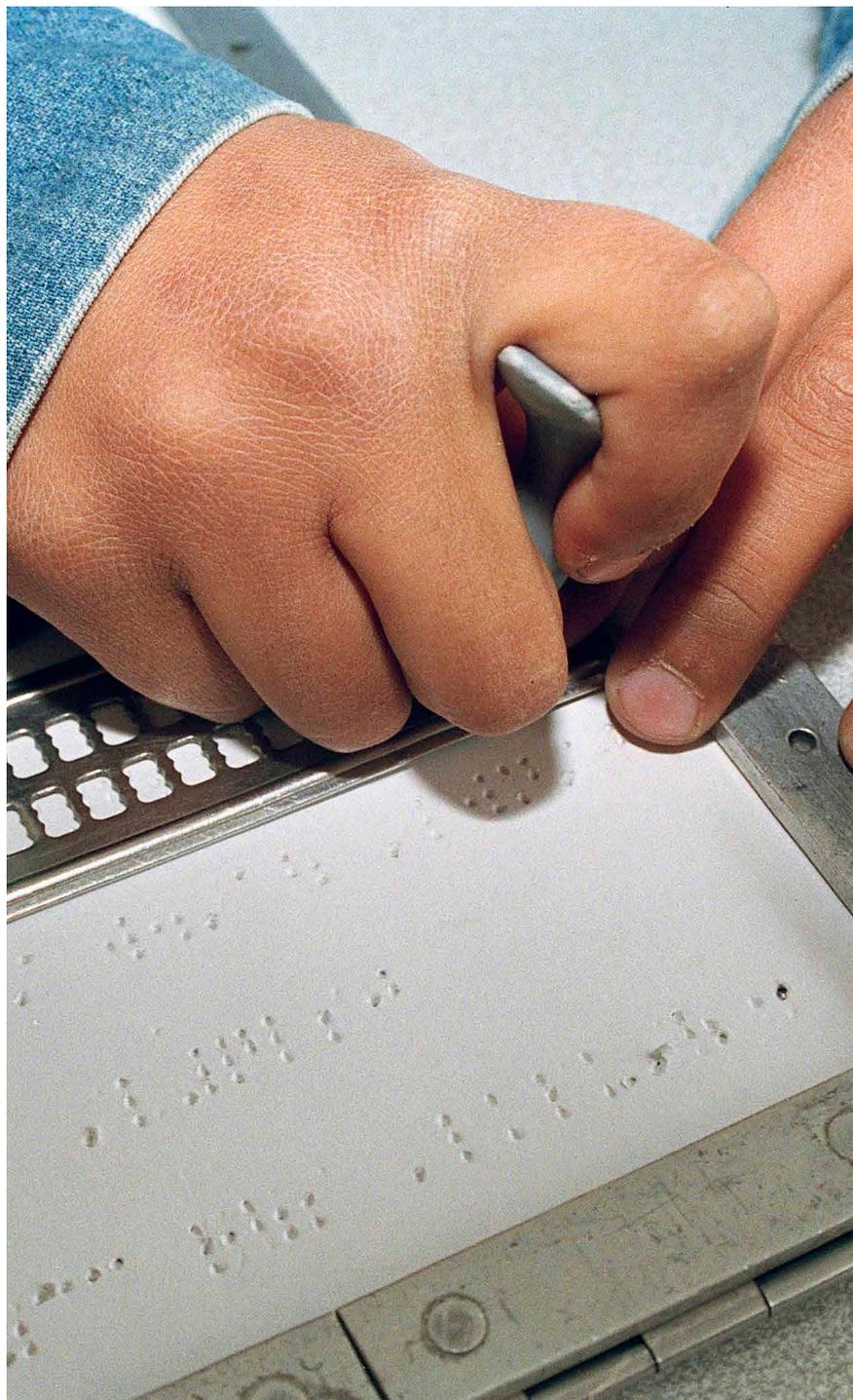


United Nations



Contents

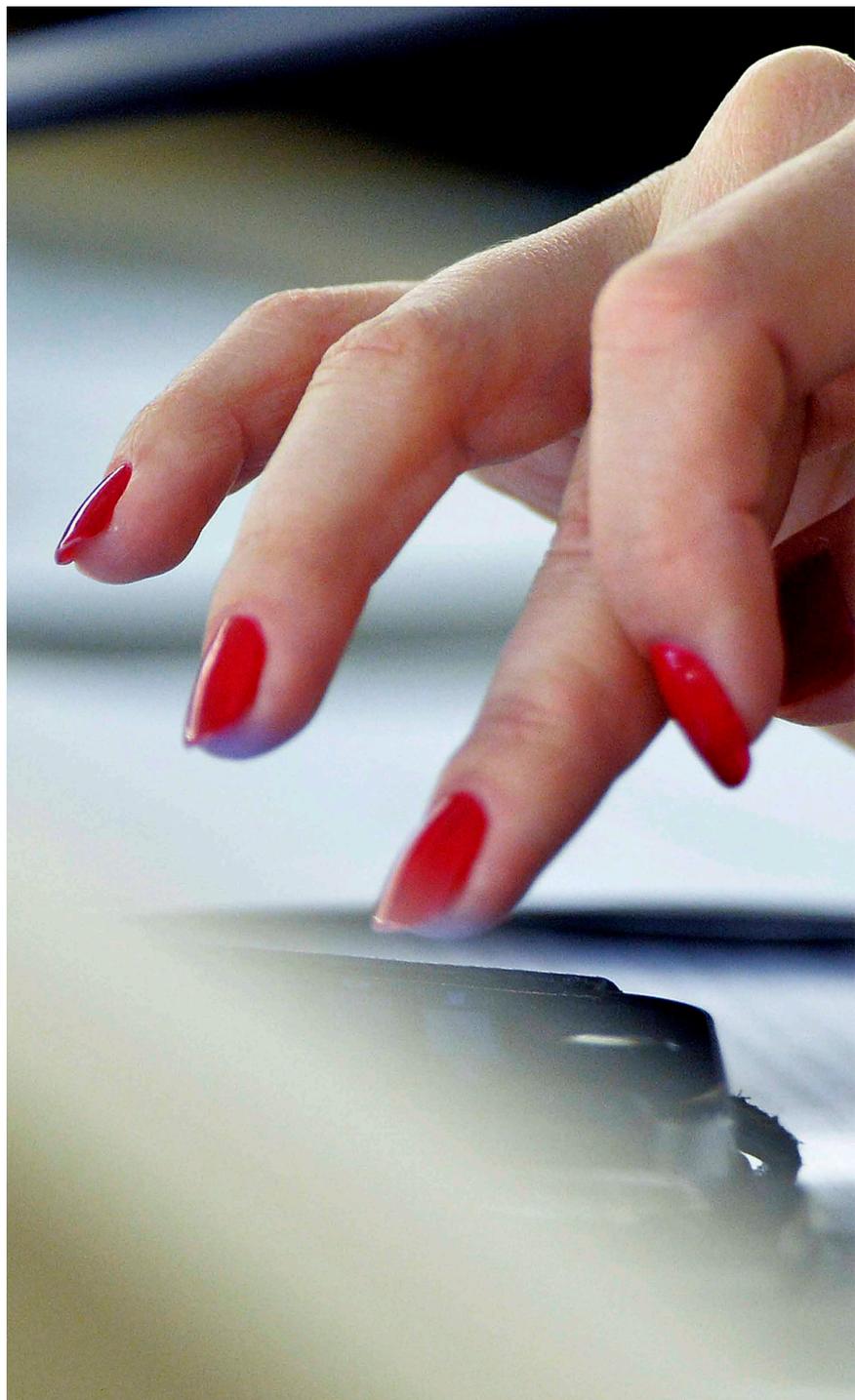
Visual impairment	5
Braille products	7
Low vision products	10
DAISY players	13
Optical character reader	16
Braille printer	17
Special keyboard	19
Physical disabilities	21
Special keyboard	23
Special mouse	24
Touch monitor	25
Hearing impairment	27
Image phone	29
Digital assistive aids	30



Visual impairment



Braille products	7
Low vision products	10
DAISY players	13
Optical character reader	16
Braille printer	17
Special keyboard	19



Braille Sense U2



Overview

A Braille tablet-like device that allows visually impaired users to access various functions, including word processing, e-book reading, web browsing, social networks, voice recording and e-mail using Braille and speech.

Features

- Keyboard type: Perkins
- Support for various applications including file explorer, word processor, document reader, contacts, calendar, e-mail, DAISY, media player, web browser and social networking
- Wired/wireless Braille input/output for smartphones, tablets or computers running screen readers
- Internet connectivity via Ethernet, Wi-Fi and cellular networks
- IMAP and POP3 e-mail access anytime from Internet mail servers
- Supports reading and writing in contracted Braille for all applications, including e-mail and social networking apps
- Enhanced sound for playing multimedia content including music and audio books, FM and web radio, DAISY audio and text books, and videos

Advantages

- An ultraportable device with 32 Braille cells, weighing only 924 grams
- Built-in character LCD
- 32 GB of built-in memory, with support for expansion using USB drives and SD cards.
- Essential applications: scientific calculator, e-mail/Excel/PowerPoint viewer, quick browser, word processor, Dropbox, Facebook, Twitter, etc.



Braille Sense U2 Qwerty



Overview

A Braille tablet-like device that allows visually impaired users to access various functions, including word processing, e-book reading, web browsing, social networks, voice recording and e-mail using Braille and speech.

Features

- Keyboard type: Qwerty
- Support for various applications including file explorer, word processor, document reader, contacts, calendar, e-mail, DAISY, media player, web browser and social networking
- Wired/wireless Braille input/output for smartphones, tablets or computers running screen readers
- Internet connectivity via Ethernet, Wi-Fi and cellular networks
- IMAP and POP3 e-mail access anytime from Internet mail servers
- Supports reading and writing in contracted Braille for all applications, including e-mail and social networking apps
- Enhanced sound for playing multimedia content including music, audio and text books, FM and web radio, DAISY and videos

Advantages

- An ultraportable device with 32 Braille cells, weighing only 838 grams
- Up to 17 hours of battery life
- 32 GB of built-in memory, with support for expansion using USB drives and SD cards
- Essential applications: scientific calculator, e-mail/Excel/PowerPoint viewer, quick browser, word processor, Dropbox, Facebook, Twitter, etc.

Smart Beetle



Overview

This palm-sized Braille display offers Braille input and output to all your devices on the go, including computers, phones and tablets. Allows simultaneous connection to one USB and up to five Bluetooth devices. Unique Bluetooth keyboard function allows you to use input with the Braille keyboard via a standard keyboard connection.

Features

- A Braille display that supports multiple connections to computers, tablets and phones running screen readers
- Simultaneously connects to up to six devices (one USB and five Bluetooth)
- Support for emulation of a Bluetooth keyboard with Braille input over Bluetooth connections
- Features 14 Braille cells, nine Braille input keys, four function keys and two scroll keys
- Data input and control of computers, tablets and smartphones
- Supports multiple simultaneous connections for Bluetooth keyboards and Braille display access to screen readers

Advantages

- Small and lightweight for maximum portability
- Wireless connectivity via Bluetooth
- Data input and control for computers, tablets and smartphones
- Fast and accurate Braille output
- Large-capacity rechargeable battery (lasting up to 24 hours)

E-bot Pro



Overview

A versatile portable electronic magnifier that connects to a wide variety of visual displays and offers Optical Character Recognition (OCR) with text-to-speech to assist with eye strain and fatigue. Easily control and navigate E-bot with the included wireless controller or the touch screen of your tablet.

Features

- High-definition image quality
- Zoom level: 2.1x to 43x, based on 24-inch monitors (varies by display types)
- Video output: a wide range of video output options using HDMI, USB 3.0 (compatible with 2.0) and Wi-Fi
- When using a tablet, touch-screen gestures are available for controlling magnification, contrast, color, etc.
- Easily switch to the distance view by pressing the Distance button on the wireless controller and magnify a distance image with the high-definition camera
- OCR quickly recognizes the entire A4 page and reads text aloud
- Assist your reading using markers, contrast/color change, focus lock, image freezing, etc.

Advantages

- Quickly and accurately recognizes printed texts using OCR, outputs the text in speech and saves the recognized images and text files to SD cards
- Enlarges near and distant images using a high-definition camera
- Motorized camera control using the wireless controller

GoVision



Overview

A transportable electronic magnifier with near, distance and self view modes. GoVision also offers unprecedented direct file viewing access of videos, images and documents via a USB drive.

Features

- Provides crisp, high-definition, high-resolution images that do not cause eye strain
- Three modes in one device: near view, distance view, and self view
- Document viewer: opens various document files stored on USB drives, with functions for text zooming, speech synthesis, and color change
- Video player: video file playback, looped playback, subtitle text zooming and color change
- Recognizes the printed text of books, mail, etc. using OCR and reads it aloud using human-sounding text-to-speech
- Image saving: captures images using the built-in camera and saves them to a USB drive
- Various additional functions: digital photo frame, digital clock, screen saver and PC screen sharing

Advantages

- First electronic magnifier to incorporate file viewer and explorer: opens documents, images, videos and OCR files stored on a USB drive and displays the information according to the user's preferences
- OCR: recognizes English and text of other supported languages quickly and accurately and reads them aloud
- Intuitive user interface: voice guide, wired remote control and jog switch

LifeStyle HD 22



Overview

Electronic desktop magnifier offering high-definition magnification of printed materials or images.

Features

- 3.4x to 95x zoom
- Seven color change options
- Normal picture mode and text mode for an enhanced reading experience
- Auto focusing and focus locking for easy handwriting
- Focus locking for easy marking of current position
- Monitor can also be used as a PC monitor

Advantages

- High-definition image quality
- Focus locking for easy marking of current position
- Up/down/left/right position and angle adjustment to align the monitor with user's eye level
- Safe XY table with a sealed track structure
- 22-inch screen

Candy 5 HD II



Overview

A 5-inch handheld electronic magnifier with an ergonomic three-position handle, Candy5 offers high-definition magnification, auto focus and many other features.

Features

- Zoom level: 1x to 22x (2.5x to 10x when using the reading stand)
- Portable and lightweight at 330 grams
- Includes reading stand, optimized for reading books and newspapers
- Easy to use with on-screen icons showing controls for advanced features
- Color modes and brightness levels: the device offers five color modes, four of which can be customized. Brightness can be controlled using four levels
- The handle supports three angles, making it equally easy to use for those who are left- or right-handed
- Mirror view: the device can act as a mirror using the front camera

Advantages

- A high-definition image on a 5-inch wide screen
- Ergonomically designed rotating handle with three angle adjustments
Includes a stand, optimized for reading longer print materials
- Screen capture and image saving (up to five images)
- Autofocusing: autofocusing on all objects regardless of distance

Blaze ET



Overview

Offers an optimal, on-the-go reading experience for the visually impaired, providing access to electronic documents, media and DAISY books as well as printed material.

Features

- Optical Character Recognition (OCR): fast and accurate character recognition, continuous capturing
- OCR saving: Save OCR results as image and text files
- Supports media playback, FM and web radio
- Podcast and book search and download via Wi-Fi
- Talking clock and alarm interface: SD card, micro USB, Bluetooth
- Note taking: creating, viewing, editing, deleting, sorting and searching notes

Advantages

- Fast and accurate character recognition
- Support for DAISY, media and text file playback and a host of useful applications, as well as recognition of printed material
- Intuitive file management: text input, and copying, cutting and pasting files and folders
- Podcast and web radio playback over Wi-Fi

3Star



Overview

A multimedia player to help the visually impaired access information independently.

Features

- An accessibility device that delivers independence, simplicity and universality to users
- Web-based content upload/download over Wi-Fi, instead of depending on computers
- Text reading and DAISY playback support
- As easy as using a remote control or radio, especially easy for non-technical users
- Playback support for MP4 and various video formats to allow listening to the audio content of videos
- Video and document viewing on monitors using HDMI for users with low vision

Advantages

- A computer is unnecessary as file upload/download can be done over Wi-Fi
- Enables independent daily activities
- A simple interface that is easy for visually impaired users
- FM radio, DMB, and multimedia (MP3, MP4) playback
- Voice recording, weather forecast, notes, wired/wireless Internet access, scientific calculator and Bluetooth functions



ReadEasy Move



Overview

Improves access to printed material for the blind and print disabled by utilizing optical character recognition to analyze printed text and read it aloud.

Features

- Fast: scans in approximately seven seconds
- All-in-one design: designed to be used without a computer or scanner
- Saves recognized data as text and audio files: the data is saved as structured text documents and MP3 files for easy editing

Advantages

- 5 megapixel camera: high-resolution document recognition ensures full compatibility in 300dpi environments
- All-in-one design: simple, stand-alone usage without a computer or scanner
- Text data extracted from print materials is saved in removable memory cards
- Data is saved in both MP3 audio files and text files

Juliet Pro60 Braille printer



Overview

A durable and light-weight Braille embosser for the blind and visually impaired to create hard copy Braille at work, school and home.

Features

- Printing speed: (interpoint) 60 characters per second, (single-sided) 40 characters per second
- Line width: 40 characters with Library of Congress spacing
- Paper: Continuous tractor feed paper
- Paper width: adjustable, 1.5 to 15 inches (3.8 to 38.1 cm)
- Page length: selectable, 3 to 14 inches (7.6 to 35.6 cm)
- Paper weight: variable, standard computer paper through heavy index-type card stock

Advantages

- Braille graphics, high-resolution graphics and dynamic Braille scaling, which enables you to choose different Braille sizes
- Options for increased line spacing, California sign Braille, jumbo Braille, or the smaller Braille often preferred by Japanese customers
- Ability to mix sizes within a document



Basic D V4



Overview

A durable and lightweight Braille embosser for the blind and visually impaired to create hard-copy Braille at work, school and home.

Features

- Printing speed: 150 pages per hour/100 characters per second
- Supported paper dimensions: 5.2-11.7 inches wide/1-17 inches long/48 characters maximum

Advantages

- Easy-to-use interface, excellent speech support and support for continuous Braille paper
- Lightweight and small for maximum portability
- Optimal for using in small spaces
- Support for 2.5 mm spacing, double-side, jumbo Braille 3.2 mm, and Japanese-style 3.2 double-sided printing

RiVO keyboard



Overview

A Bluetooth keyboard that helps the visually impaired more quickly and accurately operate an iPhone or iPad.

Features

- Ability to input voice-over commands
- Efficient text input via a small Qwerty layout or traditional alphabetical layout
- Text editing (cursor navigation, text selection, cut, copy, paste, undo, redo)
- Remote audio control (play, pause, rewind, fast forward, previous track, next track, volume control)

Advantages

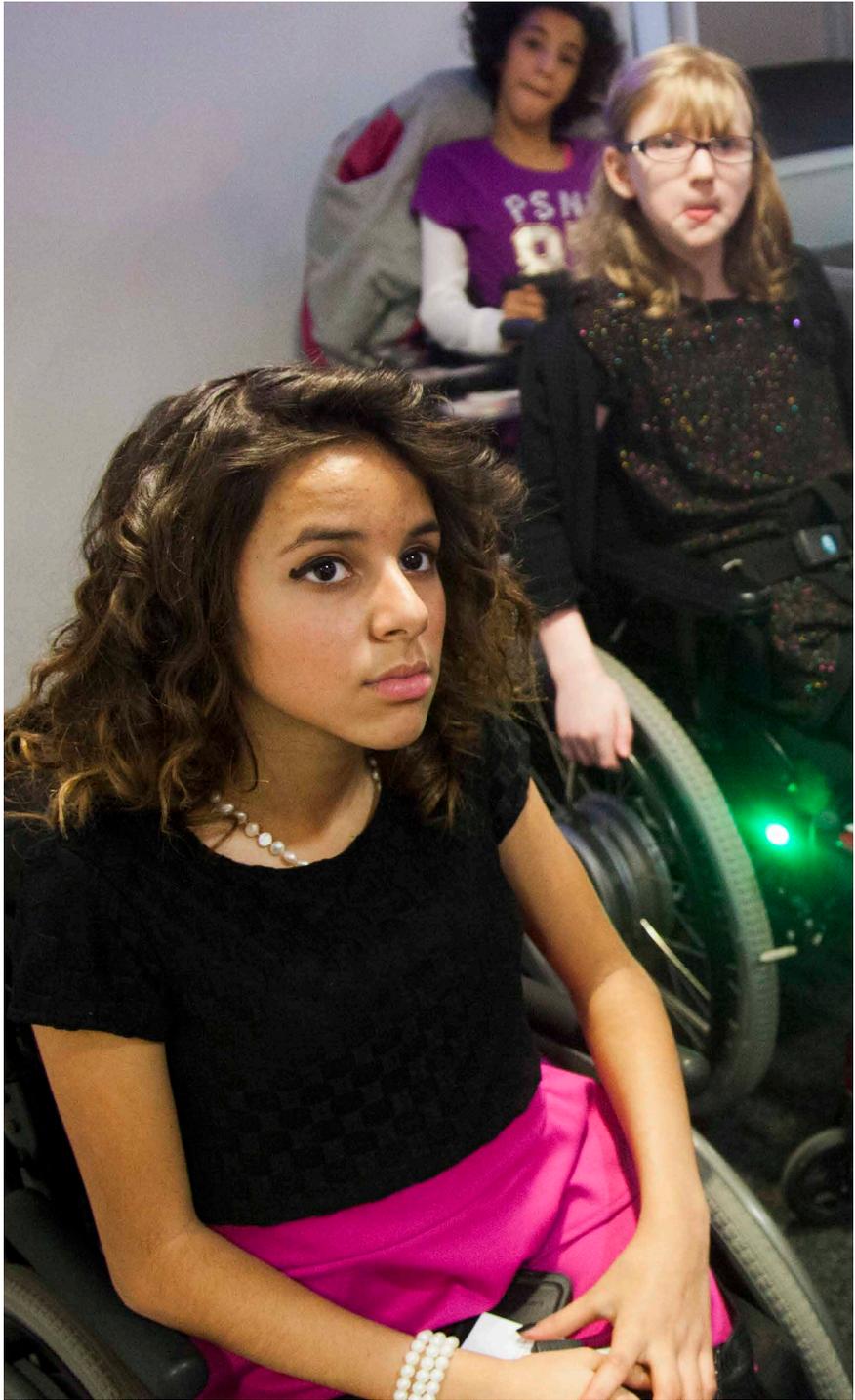
- RiVO allows you to use your iPhone, iPad or iPod Touch with greater accessibility and productivity
- A palm-sized Bluetooth keyboard, featuring 20 large keys in four rows and five columns



Physical disabilities



Special keyboard	23
Special mouse	24
Touch monitor	25



PalmOn keyboard



Overview

A specialized keyboard with key guards to assist those with limited dexterity to type more accurately and easily.

Features

- Concave keyboard with integrated key guards: assists with accurate typing for those with limited dexterity
- Keyboard mouse function: some character keys on the keyboard can be used to replace mouse functionality, such as navigation keys, left-click and right-click
- USB hub: external devices can be connected to the two USB hub ports on the main unit

Advantages

- Color-coded large buttons with large fonts for easy recognition of keys and typing
- Support for special function keys including Korean-Chinese switching, Korean-English switching and Internet shortcuts
- Keyboard/mouse mode selector button
- Two-port USB hub
- Qwerty layout

BIG Track



Overview

An oversized track ball for those who have difficulty using a standard mouse due to limited dexterity.

Features

- Large track ball and click buttons for users with limited dexterity
- USB/PS2 connection to PC
- No additional drivers necessary
- Compatible with Windows
- Compatible with OS X

Advantages

- Rolling the big trackball moves the cursor and pressing the big button clicks the selected item
- Trackball acts as a mouse wheel, allowing easy mouse control for users having difficulty with delicate operations or finger movements
- Additional switches can be connected through the switch jacks

24-inch multi-touch monitor



Overview

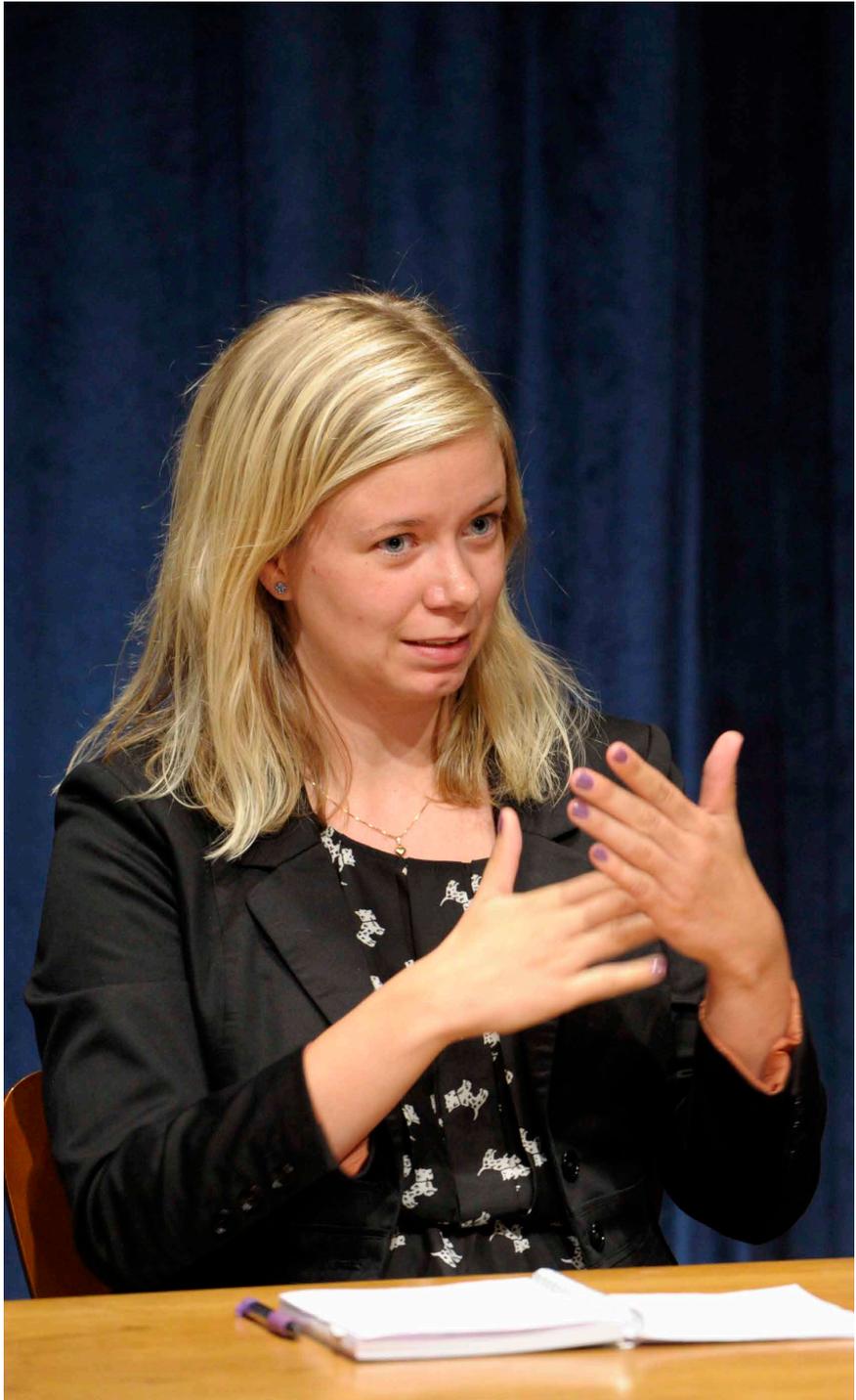
A computer monitor with capacitive multi-touch technology, offering users with limited dexterity easier ways to control a computer. Instead of a keyboard or mouse, users can use their hands or other body parts to interact with the monitor and control their PC.

Features

- Replaces conventional keyboard and mouse controls with multi-touch touch-screen gestures activated by your hands or other parts of the body
- The unit can also display digital TV
- Allows zoom in/out of documents, images, and web-pages with multi-touch (supports Windows 7 and higher)

Advantages

- 10-point multi-touch capability delivers optimal user experience on Windows 7 and higher
- Wide viewing angle LED panel delivers maximum viewing experience. No need to install drivers or calibrate (automatic Windows setup)
- Projected Capacitive Touch (PCT) technology delivers a smooth and accurate touch experience for zooming in/out, rotating images, etc.
- High-performance TV reception chipset enables high-quality full HDTV viewing
- LED backlight provides high energy efficiency and maximum power saving
- Excellent durability with 2 mm-thick reinforced glass and front sensors
- T-stand provides improved stability when touching the screen



Hearing impairment



Image phone	29
Digital assistive aids	30

.



MPAD



Overview

A wide-screen wired and wireless video phone for those who are deaf or hard of hearing to assist with sign language communications.

Features

- Videophone for the hearing impaired or speech disabled
- Text messaging, bandwidth adjustment and alert forwarding during video calls
- Save/add/edit/delete contacts
- Call history management
- Wireless network environment and remote upgrades

Advantages

- 10.2-inch touchscreen, video calls, text messaging, contacts and call history management
- Simple and intuitive interface with LED functions optimized for deaf users
- USB 2.0 and SD card slots with support for USB keyboards and mice
- Built-in Wi-Fi support

ESOB Necklace Type



Overview

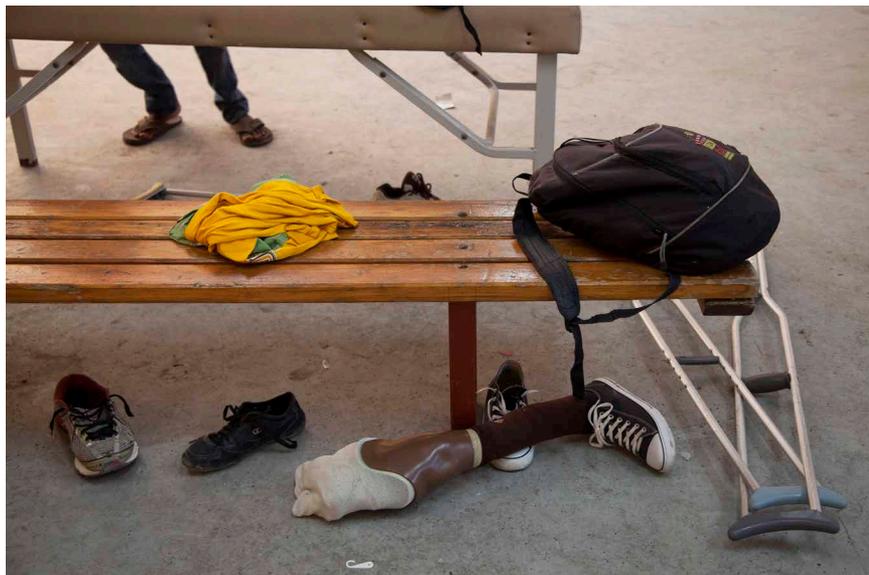
A combination Bluetooth and digital audio amplifier to help those who are hard of hearing listen to television or music, or to talk to others.

Features

- Digital audio amplification
- Wireless Bluetooth communications
- Remote listening to smartphone audio
- Remote listening using dedicated transmitters (for classrooms, TV viewing, seminars, etc.)
- Support for stereo listening using both ears
- Compatible with cochlear implants
- Rechargeable

Advantages

- This three-in-one device incorporates a conventional digital audio amplifier, a wireless Bluetooth communicator and a remote listening device
- Assists remote listening of various sound information such as phone calls and music on smartphones, as well as amplification of speech, etc. for clear and easy listening.
- Can be used with a dedicated transmitter for remote listening to lectures in classrooms, sounds on TV, etc.



Contact

Accessibility Centre

Room: S-1B32

Phone: +1 212 963 7373

E-mail: accessibilitycentre@un.org

Website: www.un.org/accessibilitycentre

Copyright © 2016 United Nations
All rights reserved worldwide

All photos: UN Photo
AAK/CPPU/MSS/MPD/DGACM



United Nations