

DATI Assistive Technology Facts Computer Access

I do not fear computers. I fear lack of them.

- Isaac Asimov

What is assistive technology?

Assistive technology, or AT, is any tool that allows individuals with disabilities to use their own unique abilities to reach their goals. AT can range from low-cost tools such as a jar opener to more complex devices such as a power wheelchair or communication aid.

Infants, children, adults, and older persons with any type of disability can be aided by the use of AT.

What is computer access assistive technology?

This type of AT device improves access to computers by facilitating input or enhancing output. Input interfaces are devices or software systems that provide an alternate means to control the computer. Output devices provide alternate access to information available from the monitor or printer.

Who is able to benefit from computer access devices?

A computer can provide access to social interaction, shopping, activities, and information.

This category of AT will benefit anyone who has difficulty interacting with a computer because of sensory, motor, or cognitive limitations.

Where can I purchase computer access equipment?

Computer access technology can be purchased through electronics and computer stores as well as through companies that specialize in this type of technology.

While it may be tempting to select an AT device from a catalog or TV commercial, this is unwise. It is important to find a device with features that match the user's needs and this can only be done with the help of a professional with sufficient expertise. Following an

evaluation with a specialist, it is likely that s/he will recommend one or more devices for trial use before a final recommendation is made.

Can I use computer assistive technology with my home computer or do I need to purchase a special computer?

Computers equipped with Microsoft Windows or Mac OS X operating systems have many access features built into the software.

Computers can also be enhanced with specialized hardware and/or software that accommodates a user's particular needs.

What kinds of needs can be accommodated with computer access technologies?

For those with visual limitations, access can be made possible by hardware- or software-based screen magnification, by screenreading devices that convert visual information on the monitor into speech output, or by devices that convert information into Braille. Those who have difficulty with input using the keyboard and mouse have a vast number of options available to them: enlarged or miniaturized keyboards, reconfigured keyboards, modified mice, trackballs, joysticks, head- or eyegaze-controllers, speech input, or switch-activated scanning arrays. The traditional auditory cues can be replaced with visual cues for those with hearing difficulties. For those with cognitive limitations, computer control functions and the appearance of the display can be simplified.

What are some things I should consider before making an equipment purchase?

- Do I need help inputting information, receiving output, or both?
- What are my strengths, limitations, and preferences?
- For what tasks do I use my computer?
- What financial resources can I access?



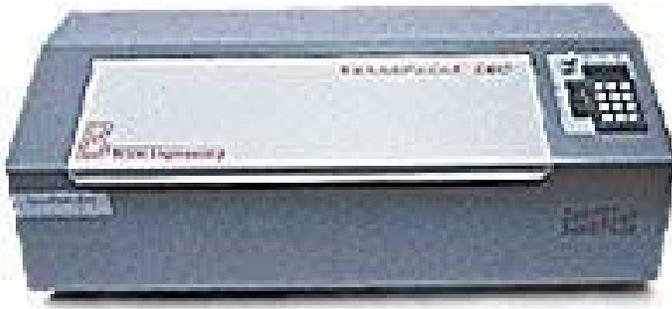
The **Goldtouch Split Keyboard** is an ergonomic keyboard that allows adjustments of the two alpha-numeric sections both horizontally and vertically to suit an individual's requirements.



Prentke Romich Company's HeadMouse replaces a standard desktop computer mouse for people who cannot use their hands.



Don Johnston's BigKeys Keyboard features extra-large keys, bright colors, and easy-to-read labels which help to reduce confusion and frustration.



VersaPoint Duo by Freedom Scientific is a high quality, interpoint Braille embosser. The speech synthesizer option speaks menus and doubles as external speech for the computer.



Kensington's Expert Mouse USB/PS2 provides smooth, precise tracking and a comfortable design.

DATI fact sheets are available on the following topics:

- Adapted Toys
- Aids for Daily Living
- Aids for Low Vision
- Assistive Listening Devices
- Augmentative and Alternative Communication
- Computer Access
- Seating, Positioning and Mobility
- Switches and Environmental Control Units
- Tools for Learning

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