
Figure 1: Logo of the Greater Detroit Agency for the Blind and Visually Impaired.

# SOFTWARE, MOBILITY & ADAPTIVE TECHNOLOGY RESOURCES AND SUPPLIERS

This information was archived in September 2012 from a previous version of the GDABVI website. We have done our best to update the website links but we will not be able to offer future updates. We apologize for any inconvenience and welcome your call to our office for any search assistance you may need (313) 272-3900.

## *Software*

**The Optacon Reading Device (Optical Tactile Converter**) is a reading device for the blind. It was first manufactured in 1970 but not longer in production. It is still in use by some users today. Telesensory, Inc., the inventor of the Optacon, is out of business. The Optacon is an electro-mechanical device that enables a visually impaired person to read printed material by feeling a tactile version of the visual image. The image is presented to the Optacon user on an array of vibrating metal rods placed under the user's finger tip. There is an active user group for the Optacon at http://www.freelists.org/list/optacon-l
Training and User manuals are available from Freedom Scientific at http://www.freedomscientific.com/fs_downloads/optacon.asp

RIT Equal Access to Software and Information
EASI is the premiere provider of on-line training on accessible information technology for persons with disabilities. Their mission is to serve as a resource by providing information and guidance in the area of access-to-information technologies by individuals with disabilities. They stay informed about developments and advancements within the adaptive computer technology field and spread that information to colleges, universities, K-12 schools, libraries and into the workplace.

Universal Internet Access Project
Information on how access technologies work with the Internet can be

scarce, even though it represents the largest repository of electronic information now available. Users with disabilities have often relied on their own trial and error methods or avoided the graphical user interface browsers which depict the most complete content on an increasingly graphical World Wide Web. Systematic study by non-commercial parties was lacking, as well as documentation on how enabling technology, often and add-on to most computer systems, is able to work with other more standard interfaces, such as the common Internet Web browsers.

A joint venture between the Diversity Management Directorate(DMD) of the Public Service Commission of Canada and the Adaptive Technology Resource Centre (ATRC) of the Information Commons, University of Toronto began in March 1996 with the ATRC performing the research and the testing of the adaptive technologies and browsers, as well as documenting findings. DMD facilitated and supported this project through funding the ATRC in this endeavor. We are now happy to bring you this information in a manner that is as user friendly as possible through HTML 2.0. and in both French and English at the following locations:
http://www.psc-cfp.gc.ca/dmd/enable/main.htm
http://www.utoronto.ca/atrc/
The content mirrored on these sites hopes to eliminate some of the trial and error, providing information such as: -keyboard equivalents for some of the most popular Web browsers, -the strengths and weaknesses characteristic of some adaptive technologies in controlling browser functions, -the customization required for effective use of enabling technology products with identified web browsers.

Whenever possible, we have incorporated feedback from adaptive technology manufacturers as to the research performed on their products; throughout the site you will find links to these manufacturers. User testing also added to the reviews. Although funding has not permitted reviews of products with the version 3.0 releases of Netscape Navigator and Internet Explorer, released last summer, we hope to add these to the sites in the near future.

Science Access Project
This web site is for an exciting project at Oregon State University. The Science Access project is dedicated to development of technologies that promote full accessibility of electronic information by future generations of people with print disabilities. "Print disabilities" include low vision,

blindness, and dyslexia.

Center for Applied Special Technology (CAST)
Founded in 1984, CAST (Center for Applied Special Technology) is a non-profit organization whose mission is to expand opportunities for people with disabilities through innovative multimedia computer technology. They pursue this mission through research, product development, and direct services.

University of Toronto Adaptive Technology Resource Center
This centre provides information, training, and on-site access to adaptive equipment to increase access to electronic information systems for persons with disabilities. This web site serves to expand the centre's outreach to the Internet community.

### *Suppliers of Adaptive-Mobility Technology, Guides and Special-Needs Products*

This section contains links to websites and contact information for companies and organizations noted for producing adaptive technology for people with visual impairments, including children. The vendors on this page offer a broad range of services and are listed alphabetically.

Adobe Acrobat Access is a software company famous for the popular Adobe Reader for PDF (Portable Document Format) documents. PDF documents are frequently encountered on the World Wide Web and as documentation for various software programs. Unfortunately, PDF documents have been inaccessible to blind users due to their graphically rich nature and the inaccessibility of tools for reading them. The Adobe Acrobat Access web site provides information and tools giving three separate approaches to accessing PDF documents for blind and visually impaired computer users.

Ai Squared is the manufacturer of the noted ZoomText screen magnification programs for MS-DOS and Windows.

Alva B.V., based in the Netherlands, is a well-known manufacturer of refreshable Braille displays. Alva recently acquired all assets of Berkeley Access, the access technology division of Berkeley Systems in the U.S.

Berkeley Systems was known for its OutSpoken for the Macintosh and Microsoft Windows. Berkeley Access is now known as Alva Access Group, Inc

**American Print House Products Catalog: Unique Products Designed for People Who Are Visually Impaired or Blind.** This covers a wide range of educational materials for people who are blind or visually impaired. To obtain a copy call 1-800-223-1839.

Ann Morris Enterprises is a consumer products catalog service catering to the special needs of people with a visual impairment.

Aroga is one of the largest distributors of assistive technology products in Canada. They provide both technology recommendations and the technology itself for people with various disabilities including visual impairment.

Biolink was the first to develop a talking screen reader for Microsoft Windows NT. They offer screen reading and screen enlargement software for the visually impaired.

Choice Technology & Training is a British company specializing in inexpensive screen reading and screen magnification software as well as training for the visually impaired. Their feature products are LookOUT, a screen reader selling for 80 British pounds, Magnus, a screen magnifier selling for 80 pounds, and DUAL, a combined speech and magnification program for 120 pounds.

Compusult Limited is a high technology company in its fourteenth year of providing innovative solutions for the visually and reading impaired. They specialize in speech technology, automatic identification, and Internet applications.

Dancing Dots is the manufacturer of the GOODFEEL Braille Music Translator for Windows 95, Windows 98, and Windows NT. The program operates with a number of commercially available MIDI and music sequencer packages to produce Braille music scores complete with lyrics. Dancing Dots also offers a Braille music transcription service. Bill McCann is a blind musician who founded the company to increase availability of Braille music materials.

Dolphin Computer Access is the American branch of Dolphin Computer Access Limited of the United Kingdom. Dolphin produces an assortment of software and hardware aids for computer access for the blind and visually impaired. They have screen readers, speech synthesizers, and Braille translators, among other things, described on their web site. Their HAL screen reader is gaining in popularity worldwide.

Duxbury Systems is a company noted for its Duxbury Braille translation software. Their web site includes information on Duxbury-related Internet mailing lists for keeping in touch with the latest developments at the company. In 1999 Duxbury Systems merged with Braille Planet, makers of products such as MegaDots. The Duxbury Systems web site now includes information on both the traditional Duxbury Systems products and those acquired from Braille Planet.

EconoNet International is a company whose main business is providing web site hosting services. However, they have also introduced a series of inexpensive windows applications which are both speech friendly and speech enabled. In other words, their software will work both as stand-alone talking applications or in conjunction with screen readers. They also sell an inexpensive Windows screen reader that works with many of the most popular programs on the market.

Emacspeak, written by T.V. Raman, is a free-of-charge add-in to the popular Emacs editor for the Unix operating system. Emacspeak provides a complete "audio interface" for Unix.

En-vision America in Normal, Illinois markets a device that permits associating a digitally recorded voice message with a bar code on a package. Once a voice message has been recorded for a given bar code, a blind user can run a bar code scanner over a package to identify the contents.

Enabling Technologies is one of the world's major producers of Braille embossers.

Eschenbach Optic of America is the American sales arm of Eschenbach of Germany. Eschenbach has been making magnifying aids for over eighty

years. Their mission is to be the comprehensive resource for low vision rehabilitation; for both the eye care provider and the visually impaired.

Freedom Scientific is a company formed from the merger of the former Arkenstone, Blazie Engineering, and Henter-Joyce, three major suppliers for the visually impaired. The merged company produces a wide variety of software and hardware products including screen readers, Braille embossers, refreshable Braille displays, page scanning packages, and screen magnification software.

Frontier Computing is a leading distributor of access technology in Canada.

FutureForms sells Braille paper.

GW Micro is a firm specializing in screen readers for the IBM PC. They are famous for the Vocal-Eyes screen reader for DOS and the Window-Eyes package for Microsoft Windows. The web site includes a link to GW Micro's FTP site for downloading files.

The Guide Dog Foundation for the Blind has provided guide dogs free of charge since 1946 to blind people who seek enhanced mobility and independence. They also offer extensive public education vehicles to broaden society's understanding of vision, vision impairment, blindness, and disability rights. They are located in Smithtown, New York.

Guide Dogs for the Blind, Inc. accepts visually impaired students from throughout the United States and Canada for training with a Guide Dog. They provide all of their services completely free of charge, and they are supported entirely by private donations. They have campuses in San Rafael, California, and Boring, Oregon.

Guide Horse Foundation is a non-profit charity dedicated to providing free guides for visually impaired individuals. Their guides are miniature horses which perform similar duties to those traditionally associated with guide dogs.

Haptic Technologies of Montreal, Quebec, Canada is a technology licensing company which develops and markets haptic hardware and software technologies that stimulate the sense of touch using high fidelity force feedback. They are engaged in research that should allow a blind

person to "feel" and interact with a virtual computer screen without the need for an expensive full-page tactile graphics display.

HotBraille is a free service that permits users to submit plain text letters over the web for translation into grade II Braille and mailing to their recipients. This can permit a person who does not know Braille to mail a Braille letter. The site also features a variety of Braille-related resources.

Humanware produces and distributes a wide variety of products for the visually impaired.

IBM Corporation Human Ability and Accessibility Center has links for downloading demonstration versions of some products.

Independent Living Aids is the oldest, privately held, national mail-order distributor of aids to daily living for the blind and visually impaired in the United States. They are now in their twenty-first year of doing business and their fourth year as the Royal National Institute for the Blind's importer and distributor in the United States.

Ion Systems is a company that produces products for on-screen publishing. They feel that their publishing process can aid in the presentation of web content for low vision users. Visit their low vision demo page. This demo relies heavily on Java and other technologies that may be inaccessible to users of screen readers, so blind users may have trouble with the page.

JBliss Imaging Systems was founded by James Bliss, one of the major people behind the development of the Optacon. JBliss Imaging Systems is dedicated to providing access to information for persons with a visual impairment through PC-based solutions.

Kurzweil Educational Systems is a leading supplier of print reading software for the blind and others who have problems reading standard print. Kurzweil Educational Systems produces Kurzweil 1000 optical character recognition software for the visually impaired and the Kurzweil 3000 system for people with learning disabilities.

Magnisight is a manufacturer of closed circuit television systems. One of their feature items is a system that uses a standard television set for the monitor.

Maxi-Aids is one of the largest distributors of products for people with Special Needs. They have several thousand products for daily living, from Sewing needles to Voice Recognition Computer products.

Microcomputer Science Centre Inc of Toronto, Ontario, Canada has been devoted to creating computer solutions for people with special needs since 1980. They have their own lab for assessing the needs of prospective clients. They also have web-based catalogs of products grouped by disability.

Microsoft Accessibility includes information on accessibility features of Microsoft Windows and other Microsoft products. The site also presents recommendations for creating programs accessible to people with a wide variety of disabilities.

New Designs Unlimited is a manufacturer of assistive technology for the blind and visually impaired. Their mission is to make technology more accessible by increasing affordability while reducing complexity. Their SpeakEasy Media System is a computer built specifically for blind and low vision individuals. This system is not a typical screen reader. The features are menu-driven and, aside from typing text, require few key commands. The Media System enables a user with no computer experience to start taking advantage of many different types of media (e-mail, podcasts, news articles, audio books, physical typed documents, and more) with minimal training. There are demonstrations and pictures on our website at www.ndu.com. They also offer a traditional reading machine designed to convert typed documents to speech. In addition to scan and read capabilities, it also provides access to a library of thousands of audio books. The available upgrades on the basic machine include an LCD monitor for text magnification for low vision/ print disabled users and a portable player to take documents on the go.

Robotron is an Australian company famous for the Eureka A4, several optical character recognition machines, palmtop Braille and talking computers, and so on.

Shadows in the Dark sells a range of Braille greeting cards for several occasions and cards in languages other than English.

Sighted Electronics in Austin, Texas is a dealer for closed circuit television systems, Braille embossers, and other technology items for the visually impaired.

Soundscapes from the voice – Seeing with your ears is an experimental method for representing the visual environment using sound. Software is also available for download that can let a person try out these techniques using a personal computer and a PC-based camera.

Taking Charge of Your Travel: A Guide for Persons with Disabilities helps individuals with any of several disabilities have a successful travel experience. The article is written for a Canadian audience but includes tips that could be useful to anyone planning a trip by air, including a travel checklist.

Techno-Vision Systems is one of the leading specialists in the supply of equipment and systems for visually impaired people in Great Britain.

Technologies for the Visually Impaired is a dealer for a wide variety of adaptive devices and software ranging from adapted computers to screen magnification software to reading machines.

Telesensory is probably best known for its development of the Optacon, a tactile reading device for the blind. TeleSensory has ceased production of the Optacon.

textHELP Systems is a company that specializes in various computer products for persons with disabilities. They have a screen reader product that they intend primarily for people with dyslexia and related perceptual difficulties. They have other products as well, mostly intended to assist people with physical disabilities.

Vision Technology - Low Vision Products manufactures reading systems for people with low vision.

Voice Diary Inc. manufactures a full-featured portable personal data assistant that stores spoken-word information in its internal computer memory.