

DOCUMENT RESUME

ED 366 123

EC 302 717

TITLE Assitive Devices for Reading. Reference Circular No. 93-02.

INSTITUTION Library of Congress, Washington, D.C. National Library Service for the Blind and Physically Handicapped.

PUB DATE Sep 93

NOTE 78p.

PUB TYPE Reference Materials - Directories/Catalogs (132) -- Reference Materials - Bibliographies (131)

EDRS PRICE MF01/PC04 Plus Postage.

DESCRIPTORS *Assitive Devices (for Disabled); Blindness; Braille; Closed Circuit Television; *Communication Aids (for Disabled); Computer Oriented Programs; Electromechanical Aids; Electronic Equipment; Input Output Devices; *Low Vision Aids; *Physical Disabilities; Reading Materials; Sensory Aids; Speech Synthesizers; *Visual Impairments

ABSTRACT

This reference circular lists devices designed to provide people who have visual or physical disabilities with access to printed information. The circular includes devices that hold a book or turn the pages of a book, that magnify print material either manually or electronically, and that convert print into braille or synthetic speech. Listings for individual products provide a brief description, source, order number, and price. Devices include book holders and stands; braille displays, devices, and software; closed circuit television systems; magnifiers; page turners; reading machines; screen enlargers; screen reading software; and speech synthesizers. A selective list of 40 books and journal articles (published between 1989 and 1993) that evaluate specific devices is then provided. This bibliography is divided into the following categories: (1) general; (2) braille displays, embossers, and translation software; (3) reading machines; (4) screen enlargers; and (5) speech synthesizers. The final section gives the addresses and phone numbers of the producers and vendors. (JLB/DB)

* Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

Assistive Devices for Reading

**National Library Service
for the Blind and
Physically Handicapped**

The Library of Congress

Washington, DC 20542



Date September 1993

No. 93-02

ED 366 123

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.
Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

Introduction

The devices listed in this reference circular are designed to provide people with visual or physical disabilities access to print information. The circular includes devices that hold a book or turn the pages of a book, that magnify print material either manually or electronically, and that convert print into braille or synthetic speech.

Section I lists available products, Section II is a selective list of books and journal articles that evaluate specific devices, and Section III gives the addresses and telephone numbers of the producers and vendors. Because prices are subject to change without notice, companies should be contacted directly to verify current prices and product specifications.

Items listed in this reference circular are not part of the National Library Service for the Blind and Physically Handicapped program, and their listing does not imply endorsement.

EC 302717

Contents

I.	Assistive Devices	
	Book Holders and Book Stands	1
	Braille Displays and Other Braille Devices	7
	Braille Embossers	9
	Braille Translation Software	12
	Closed-Circuit Television Systems (CCTV)	15
	Magnifiers	22
	Page Turners	36
	Reading Machines	38
	Screen Enlargers	42
	Screen Readers (Software Only)	48
	Speech Synthesizers	52
II.	Selective Bibliography, 1989-1993	59
III.	Addresses of Sources	63

Book Holders and Book Stands

Book holders and stands hold books and magazines in an open position to make reading more comfortable for individuals whose strength or grasp may not be sufficient to support the weight of reading materials. Different models can be attached to a table, bed, or wheelchair and can be used from a sitting or supine position.

Adjustable Book Stand

Sits on a desk or table and adjusts for varying height and angle. Holds material with elastic strips. Folds. Aluminum support frame.

American Foundation for the Blind, Product Center, L90240, \$37.95

Bed Reader

Holds book in raised position above the reader, who views book through a clear plastic surface. Can be used with varying degrees of bed tilt. Folds automatically when lifted and stores flat.

Cleo, Inc., 88-1051, \$196.50

Fred Sammons, Inc., BK-4065, \$86.25

Maddak, Inc., H73243, \$196.50

Beil Bookholders

Uses tabletop stand with suction-cup mounting to hold book at a fixed angle.

C. Beil Designs, Model A, \$29.95

Attaches to bed, table, or arm chair with a C-clamp. Adjusts to any angle.

C. Beil Designs, Model B, \$49.95

Attaches to headboard or traction frame for overhead use. Has a 27" extension arm for tilt and swivel adjustment.

C. Beil Designs, Model C, \$79.95

Attaches to any smooth, hard surface with lever-action force vacu-base. Tilts to any angle.

C. Beil Designs, Model D, \$59.95

Book Butler

Features two spring-loaded posts or arms that open automatically and lock to hold book flat. Pages slip easily from one arm to the other.

Cleo, Inc., 88-1059, \$16.95

Fred Sammons, Inc., BK-4058, \$18.95

Maxi Aids, 18145, \$19.95

TASH, Inc., A4013, \$22

Book Maid/Book Mate

Has an aluminum sloping stand with a clear plastic bookholder. May be used on any wheelchair, armchair, bed, or table. Can adjust height and width.

Fred Sammons, Inc., BK-4060, \$53.95

Maddak, Inc., H73240-0000, \$79.50

Book Rest

Holds an open book at an angle on a lightweight stand of wire or plastic that sits on a flat surface. Folds flat for carrying or storing.

AJ Stationers, R6-10024, \$3.50

Demco, Inc., P148-0450, \$3.29

Library Store, Ltd, 87-566-001, \$3.49

Maddak, Inc., H73229, \$4.89, F73228, \$8.75

National Association for Visually Handicapped, D-26, \$0.00

TASH, Inc., A4010, \$11

Desktop Reading Stand

Has five positioning angles, left- and right-hand capability, adjustable page clamps, and built-in carrying handle. Wood.

American Printing House for the Blind, 1-03220-00, \$60.20

Easi-Reader

Has adjustable arms that swing to hold paperback books, large magazines, and newspapers. Chrome-plated steel. Folds.

Fred Sammons, Inc., BK-6043, \$4.25

Hoyle Products, Inc., HL710, \$3.98

Independent Living Aids, Inc., 275720, \$6.95

Lighthouse, Inc., Low Vision Products, Y1227, \$6.95

LS&S Group, 124-HL711, \$4.95

Maxi Aids, 84710, \$4.95
Vis-Aids, Inc., HL710, \$4.95

Easy Reader

Adjusts to one of four or six positions. Plastic.

Demco, Inc., P153-453, \$21.95
LS&S Group, 200-ER1, \$16.95
Tech-Optics International Corporation, ER, \$17

Fabian Writing/Reading Aid

Clamps to a headboard or screws to a wall, with easel suspended overhead, for use by individuals in traction or in a supine position. Adjusts to different angles.

Maddak, Inc., H73500, \$210

Gore Reading Stand

Fastens to most tabletop surfaces with a C-clamp and has an arm for a wide range of adjustment.

American Printing House for the Blind, 1-03210-00, \$73.16

Hinged Book-Reading Stand

Has a 9½" x 11½" hinged clear acrylic front that rests on the open book and holds it open. The rear book support can be adjusted to hold books up to 3½" thick. Heavy-duty pine base.

Demco, Inc., P148-0409, \$23.95

Hold-and-Read

Holds both the left and right side of a paperback book with folding plastic clips. Allows turning of pages with one hand.

Demco, Inc., P162-0632, \$4.95

Maddak, Inc., F73230, \$3.85

Leisure Reader

Holds reading materials up to four pounds in any position. Has adjustable arms. Uses Velcro strips to keep pages open. Clamps to desk, bed, chair.

AdaptAbility, 11381, \$79.95

Fred Sammons, Inc., BK-4084, \$79.50

Magazine Holder

Holds a variety of sizes of magazines.

C. Beil Designs, \$7.95

TASH, Inc., A4011, \$13

Mangold Adjustable Low-Vision Reading Stand

Adjusts to three positions. Can support over-sized textbooks. Collapses for easy carrying.

Exceptional Teaching Aids, RS1, \$42.95

Miller Deluxe Bookholder

Has spring-loaded levers that keep the pages flat. Easel back can be angled from flat to nearly vertical.

Cleo, Inc., 88-1060, \$29.95

Fred Sammons, Inc., BK-4059, \$33.25

J.A. Preston Corporation, PC F4059, \$29.95

Necksaver II Reading Stand

Offers various angle positions and shelf height adjustments and an extra-wide shelf to support thick books or binders. Folds flat for transport or storage.

Demco, Inc., P153-440, \$15.95

Library Store, Ltd, \$14.95

Newspaper Holder

Holds newspapers, large magazines, and oversize print books with plastic clips and wire rods. For table or bed use.

C. Beil Designs, \$18.95

Newspaper Holder

Holds top of newspaper with a center clip and supports edges with flat strips for full open display. Has a 28" wood holder that attaches to wheelchair trays and tables or can be inserted into a holder base (\$18.99) for tabletop use. Folds flat for storage.

Demco, Inc., P162-0638, \$138.99

Pagemate

Holds almost any size publication with an adjustable T-bar. Foam

grippers at top and bottom allow easy page turning. Folds flat.

Eagle Reading Aids, \$19.95

Highsmith Company, Inc., A42A-61102, \$22.78

Touch Turner Company, \$22.95

Reading Desk Stand

Adjusts to different positions and has an adjustable guide rail to hold material flat. Wood.

Tech-Optics International Corporation, 1605, \$69.95

Reading Desk with Storage

Can use on lap, bed, table, or wheelchair lap tray. Tilts to ten positions. Stores small books, paper, and writing utensils. Folds to two inches thick.

Fred Sammons, Inc., BK-4064, \$32.25

Raymo Products, Inc., LA26, \$39

Reading Rack

Holds papers, books, or magazines at an angle for reading or drawing. May be used on a wheelchair tray, table, or bed.

Raymo Products, Inc., RA24, \$28

Roberts Book Holder

Holds all size reading materials. Sits on any flat surface. Uses movable pegs to hold book open. Folds.

Access with Ease, Inc., RBHL1, \$15.95

Cleo, Inc., 88-1048, \$16.98

Demco, Inc., P162-0636, \$24.99

Fred Sammons, Inc., BK-4042, \$19.50

Highsmith Company, Inc., A42A-17538, \$15.08

Maddak, Inc., H73231-0000, \$16.95

Maxi Aids, 73231, \$13.95

Roberts Book Mark Company, RBH-G, RBH-L, \$12.95, \$15.95

Shafer Reading Stand

Has tripod legs for self support, an adjustable swivel arm to lock at any desired height along the vertical shaft, and a book rack that rotates or tilts in different positions. Can be used while sitting or standing.

American Printing House for the Blind, 1-03230-00, \$143.58

Uni-Reader

Has transparent acrylic tray that is attached to an S-shaped metal floor stand and can be adjusted to different positions.

Fred Sammons, Inc., BK-4008, \$312

Braille Displays and Other Braille Devices

Braille displays provide braille access to the information on a computer screen. They are available with 20-, 40-, or 80-character braille cells of six or eight dots each. Some are portable and battery-powered. Notetakers allow a user to take notes in braille and edit the saved text on a braille display, and other devices offer reverse translation of Grade 2 braille.

ALVA Braille Terminal

Includes a 43- or 83-cell, 8-dot braille display, 40 or 80 cells for reading and 3 cells for status information. Can be connected to any MS-DOS computer by means of the parallel printer port. Available in portable and desktop models.

HumanWare, Inc., \$4,995-\$14,495

BrailleMate

A hand-held braille notetaker. Has a braille keyboard, one 8-dot braille cell, and an optional built-in speech synthesizer for use with Soft Vert on a PC. Combined with a Navigator, it retains its features in a 20-, 40-, or 80-character refreshable braille format.

American Foundation for the Blind, Product Center, B90450, \$1,595
TeleSensory, DM1A-01, \$1,595

Braille-n-Print

Connects to a printer and produces a braille and print copy of documents created on a standard Perkins Brailler. Has 22K of memory allowing up to four files to be stored and printed at a later time. Comes in two models: the Slimline snaps to the bottom of a Perkins, and the Mark 2M is for multi-user settings.

HumanWare, Inc., \$995

LS&S Group, \$995

BRAILLEX-IB 80

Has 80-cell braille display and 4 status cells. Can be connected to the IBM-PC XT, AT, PS/2, and compatibles. Also available in a compact hardware version, BRAILLEX-IB 4040, that uses two 40 character lines.

ATR Computer Technology, \$8,995, \$13,995

DAVID

A notebook computer designed around a 386SL processor. Includes serial and parallel interfaces; a 40-cell, 8-dot braille display; a 4-braille-cell status/attribute display; and a memory-resident braille translator that translates screen contents or entire files into Grade 2 braille.

AccessAbility Technologies, Inc., \$15,000

DM 80/OSCR & FM 80

A computer access system. Optical Sensor Cursor Routing (OSCR) monitors the user's hand position above the braille display, enabling the control of various functions. Main display features 80 braille cells and four status elements, four pre-defined mode switches, and seven user-definable function keys for macros and overlays.

AccessAbility Technologies, Inc., \$25,000

Keybraille 200, Keybraille 360

Features battery-powered portable 25- or 45-cell, 8-dot braille display, 20 or 40 cells for reading and 5 cells for status information; parallel interface cable; built-in parallel printer port; screen-reading software; print and disk manuals; and a command summary in braille.

HumanWare, Inc., \$4,995, \$6,995

KTS Braille Display

Includes a 40- or 80-cell, 6- or 8-dot braille display; 40-cell status line available. Has hardware interfaces for PC, MicroChannel, and Toshiba systems.

American Thermoform Corporation, M6/K-0040, M6/K-0080,
\$6,395, \$14,995

MiniBraille

Features a 22-cell braille display that has 20 cells for text and attributes and 2 cells for status information. Can select for either 6- or 8-dot use. Connects to the serial port of a PC.

HumanWare, Inc., \$3,450

MPRINT

A circuit board that replaces the bottom of a Perkins Brailier. Translates characters into corresponding print and relays that information to a

printer. Print and braille copies are then produced simultaneously.
TeleSensory, MP1A/MP16001, \$995

Navigator

Translates ASCII text on the computer screen to Grade 2 braille on the braille display. Is available in 20-, 40-, or 80-character braille cells of 6 or 8 dots each. Works with both laptop and desktop MS-DOS computers, except that the 80-cell model is for desktop use only. The Track software module has all the components for Navigator to work with menu bars, mouse pointers, and multicolor screens.

TeleSensory, HB2A-206, HB2A-406, HB2A-408, HB1B-808(D),
\$4,595-\$12,995

NOTEX

Allows the user to take notes in braille and to save, edit, and review the text on the 24- or 40-cell braille display. When connected to a PC, NOTEX with its PC-Link software becomes a braille output unit.

ATR Computer Technology, \$5,995, \$6,995

Braille Embossers

Braille Blazer

Embosses at fifteen characters per second in either 6- or 8-dot braille. The voice of the built-in speech synthesizer can be used to configure the Blazer or can stand alone to make the computer talk. The embosser is supported by most popular screen-reading packages.

Blazie Engineering, \$1,695, \$1,745

Braille BookMaker

An interpoint desktop embosser. Runs at 80 characters per second and can be used with different paper stock. Commands are issued from a calculator-style keypad and confirmed by tones.

Enabling Technologies Company, \$10,500, \$11,500

Humanware, Inc., \$10,500

Braille Express

An interpoint embosser that runs at 150 characters per second.

Enabling Technologies Company, \$19,500
HumanWare, Inc., \$19,500

Braillo Comet

Upgraded version of the Braillo 90. Embosses at 50 and 75 characters per second. Includes graphics access and serial and parallel ports.

American Thermoform Corporation, M4/0-0060, \$3,795

Braillo 200

Embosses interpoint and single-side braille. Produces 600 pages an hour utilizing standard continuous pinfeed fanfold paper.

American Thermoform Corporation, M4/0-0200, \$36,995

Everest DT

An interpoint embosser. Provides 100 characters per second and has a built-in Duxbury Grade 2 braille translator.

TeleSensory, EV2A, \$5,995

Index

Produces either 6- or 8-dot braille at 50 characters per second. Features include parallel and serial interface and a 30k print and copy buffer.

Access Technologies, Inc., \$2,995

ATR Computer Technology, \$2,995

National Institute for Rehabilitation Engineering, 00023, \$2,999

Juliet

An interpoint embosser. Runs at 40 characters per second. Can handle inexpensive 15-inch-wide accounting stock. Has an impact control to produce braille on 100-pound paper.

Enabling Technologies Company, \$3,995

Marathon

A high-volume production embosser. Runs at 200 characters per second. Equipped with both serial and parallel ports to allow interface with virtually any computer system or host device.

Enabling Technologies Company, \$12,995

HumanWare, Inc., \$12,995

Mountbatten Brailier

Can be used as an embosser, a braille writer, a notetaker that can type braille directly into an electronic memory rather than on paper, a forward translation system that translates print into braille, and a back translation system for the brailist who wants a print copy. Can be driven by an external keyboard for one-handed use.

HumanWare, Inc., \$2,495-\$3,295

Ohtsuki BT-5000

Produces braille and print on the same page simultaneously. Also includes braille graphics and braille-only or print-only options. Compatible with most microcomputers, voice synthesizers, and popular software.

American Thermoform Corporation, M2/O-5000, \$4,695

Porta-Thiel

Portable. Embosses 6- and 8-dot braille on all sizes and types of paper, on single sheets, continuous forms, and plastic and magazine sheets. Uses a built-in speech synthesizer to say when paper is out and waits for more to be inserted. Has both a serial and parallel interface. Can be used with Braille 'n Speak or other PC.

Blazie Engineering, \$1,895

Romeo

Embosses single sided at 20 or 40 characters per second.

Enabling Technologies Company, RB-20, RB-40, \$2,995, \$3,795

HumanWare, Inc., 20, 40, \$2,995, \$3,795

Thiel Beta-X3

A high-speed embosser used in braille-production facilities, schools, and offices. Can create Grade 1 braille, Grade 2 braille, Nemeth Code, and graphics. Works with all current braille translation software.

Blazie Engineering, call for pricing

VersaPoint

Embosses text or graphics at 40 characters per second in either 6- or 8-dot braille. Adjusts to different paper widths and weights.

Raised Dot Computing, Inc., \$3,795

TeleSensory, BP1D, BP1D/90827-004, BP1D/90827-011, \$3795-\$4,290

Braille Translation Software

AutoBraille

Uses the same translation rules and algorithm as TurboBraille, but lacks its formatting language and does not support Grade 3 braille output.

Available as a stand-alone program or in combination with TurboBraille.

KANSYS, Inc., \$95, \$295

BEX

For the Apple II. Creates large-print output on the screen. Translates print files to Grade 1 or Grade 2 braille and supports braille output to every braille embosser on the market currently. Can back translate Grade 2 braille files to print.

Blazie Engineering, \$450

Carolyn's, BEX31, \$439.95

LS&S Group, \$450

Raised Dot Computing, Inc., \$450

Braille-Talk

Allows standard text files to be translated into Grade 1 or Grade 2 braille for embossing. Produces tables and charts using columns. Supports all standard and parallel braille and many speech synthesizers.

Carolyn's, GW8220002, \$189

Exceptional Teaching Aids, BT1, \$195

GW Micro, 8220-001, \$195

LS&S Group, \$195

Duxbury Braille Translator

For the Macintosh, IBM PC, and other MS-DOS computers. DUXWP works with WordPerfect 5.0 and 5.1 files. Can produce braille from print or print from braille. Features include automated formatting of documents from virtually any word processor, textbook layout according to Library of Congress standards, embedded grade-1 foreign languages, and compatibility with braille devices and accessibility aids such as speech synthesizers and

screen enlargement programs.

Access Technologies, Inc., \$475

ATR Computer Technology, \$495

Blazie Engineering, \$495

Duxbury Systems, Inc., \$295, \$495

LS&S Group, \$495

National Institute for Rehabilitation Engineering, 00023A, \$495

TeleSensory, 90827-004, 90827-007, \$495

E-Z Braille

Reads, reformats, and translates a document into braille. Recognizes paragraphs, tables, lists, and headings. Requires any IBM PC or PS2 computer or compatible and supports WordPerfect versions 4.2, 5.0, and 5.1.

LS&S Group, \$249.95

Hot Dots

Allows user to translate standard print text files to Grade 1 or Grade 2 braille and output the braille files to a variety of braille embossers. Includes a print formatter that interprets imbedded format commands to create formatted text files and a speech interface compatible with most IBM speech synthesizers. Runs on any MS-DOS computer that has at least 256k of memory.

Access Technologies, Inc., \$350

Blazie Engineering, \$360

Carolyn's, HOTD31, \$329.95

Raised Dot Computing, Inc., \$350

TeleSensory, 90827-011, \$350

MegaDots

Braille files can be viewed on the screen in one of four ways: braille dots, ASCII characters, line-by-line back-translation into print, or "pseudo text" (braille contractions "jammed" together on-screen). Requires an MS-DOS or IBM-compatible computer and a hard disk.

Access Technologies, Inc., \$595

Blazie Engineering, \$600

LS&S Group, 312-MD10, \$600

Raised Dot Computing, Inc., \$600

NFBTRANS

A text-to-braille software program. Requires an IBM or compatible computer using MS-DOS operating system, a brailleing device, and word processing software.

Roudley Associates, Inc., \$395

PC Braille

For the IBM PC, XT, AT, PS/2, and compatibles. Produces Grade 1, Grade 2, or the newly adopted computer braille (known as Grade 0). Translates by rule, not by dictionary search. Works with text editors and most word processors and can format the text for printing or for brailleing. Supports all commercial braille embossers operating through a communications or centronix port.

Arts Computer Products, Inc., \$495, \$1495

Ransley Braille Interface

This box connects any standard computer or computerized source to any standard braille embosser. Allows a person who does not know braille to produce automatically formatted Grade 2 braille.

HumanWare, Inc., \$995

TurboBraille

Translates documents into standard English braille for embossing or downloading. Can support most features of Grade 3 braille in addition to Grade 1, Grade 2, and computer braille. Accepts WordPerfect, WordStar, and ASCII files. Has an interactive mode, a command line mode, and complete on-line documentation.

KANSYS, Inc., \$295

Closed-Circuit Television Systems (CCTV)

Closed-circuit television systems enlarge printed material electronically onto a monitor screen. The major components are a camera with zoom lens and a light source, a monitor (television screen), and a viewing table. Copy is placed face up on a flat surface that can be moved in the X, horizontal direction, and in the Y, vertical direction. The monitor varies in size from a 4" to a 24" screen; larger monitor screens provide higher magnification. The camera, which is either color or black and white, can vary the amount of magnification, can be adjusted for brightness and contrast, and can reverse the image from black text on a white background (positive image or polarity) to white text on a black background (negative polarity).

Other features may include a handwriting adapter to magnify the paper to make it possible to write or sign documents and attachments for use with typewriters and computers. Some models can display the computer image and the camera image either simultaneously with a split screen or alternately by flipping from one screen to the other.

Big Vue

Magnifies up to 45x on a 13" black-and-white or color monitor and up to 60x on a 19" black-and-white and 20" color monitor. One 19" model provides split-screen typing and computer access.

LS&S Group, \$1,650-\$3,095

Bright Eye

Consists of a compact hand-held scanner and an eyepiece that projects a scanned image equal in size to that of a 12" television screen viewed at approximately 18" distance. Magnification, focus, and brightness are user adjustable. Battery-operated portable system with a hand-held scanner.

Optelec, \$2,995

Chroma CCD

Magnifies up to 45x on a 13" color monitor and up to 60x on a 20" color monitor. Chroma camera is compatible with the Vista/Lynx computer magnification system, producing color images on a VGA computer monitor.

Telesensory, \$3,295-\$3,495

ClearView

Magnifies 4x to 35x on a 12" black-and-white monitor, 5x to 50x on a 17" black-and-white monitor, and 4x to 40x on a 14" color monitor. Includes windowing, X-Y table, overlining, underlining, intensity, contrast, zoom, and brightness control.

Bossert Specialties, Inc., \$2,195-\$2,795

HumanWare, Inc., \$2,195-\$2,795

ELITE (Electronic Lightweight In-line Text Enlarger)

Has a magnification range of 2.5x to 50x, depending on monitor size. Can support up to a 14" monitor and connect to a larger monitor or a conventional television. Features video polarity, vertical and horizontal line markers, windowing, and two contrast settings.

Acrontech International, Inc., \$2,495

Executive

Magnifies from 12x to 45x, depending on the size of the monitor. Available in basic, complete, and traveling models.

Acrontech International, Inc., \$1,795-\$2,695

Bossert Specialties, Inc., \$1,850-\$2,650

Eye Quest

Magnifies 5x to 45x on a 13" monitor and 5x to 60x on a 19" black-and-white and 20" color monitor.

Carolyn's, \$1,395-\$2,575

EZ-Reader

Magnifies 10x, 20x, or 30x. Can be used with any television monitor on flat or curved surfaces.

Bossert Specialties, Inc., \$1,250

EZ Reader, \$1,129.50-\$1,249.50

LS&S Group, \$1,159.50-\$1,279.50

EZ-Reader on Wheels

Magnifies 10x or 20x. Has open front and back design that allows for writing under the unit and watching what is being written.

Bossert Specialties, Inc., \$1,350, \$1,750

EZ Reader, \$1,229.50-\$1,349.50

Gracefully Yours, Inc., \$1,350
LS&S Group, \$1,314.50-\$1,419.50

LV-101

Comes with a SONY camera, SONY 4" flat screen monitor, and a 2-hour rechargeable battery. Has three lens options: low, medium, and high. Can be connected to a desktop CCTV or a television set. This unit is self-contained and portable.

Independent Living Aids, Inc., 451510, \$1,855
National Institute for Rehabilitation Engineering,
\$1,870

LV-102

Has the same features as the LV-101, but does not have a built-in monitor or battery pack.

Independent Living Aids, Inc., 451515, \$1,440

LV-103

Provides large-screen viewing on a television screen or computer monitor with a choice of one of three interchangeable lenses. Offers only magnification, without digital capability.

Independent Living Aids, Inc., 451525, \$950

Magni-Cam

Magnifies from 9x to 38x on a 19" screen and from 12x to 48x on a 24" screen. Connects to any television set. Portable.

Innoventions, Inc., \$695

Max-See

Magnifies from 4x to 45x on 12" and 13" models and from 6x to 60x on 19" and 20" models. Is available in black-and-white and color models.

MaxiAids, \$1,995-\$2,695

Mini-Reader

Magnifies 12.5x on a 4" black-and-white flat screen monitor. Has rechargeable battery power system, direct AC power supply, and television hookup capabilities. Portable.

Magnisight, \$1,495-\$1,695

Optelec 20/20

Magnifies from 3x to 60x. Has 14" black-and-white monitor, normal and reverse image modes, on-screen line markers, and split-screen facility. Is easily collapsible for transport by hand or in a carrying case.

Bossert Specialties, Inc., \$3,395

C Tech, \$2,695

Optelec, \$2,695

Vision Loss Consultants, \$2,695

Optelec 20/20+

Offers all the operational features of Optelec 20/20. Has a 20" monitor with variable display colors in addition to the standard black on white or white on black. May be used with the monitor positioned above or beside the reading table.

Bossert Specialties, Inc., \$2,995

C Tech, \$2,995

Optelec, \$2,995

Vision Loss Consultants, \$2,995

Optelec 20/20 Spectrum

Magnifies from 5x to 60x on a 20" monitor. Can view materials in full-color display, or shut the color off when maximum contrast is desired for reading text.

Bossert Specialties, Inc., \$3,395

C Tech, \$3,395

Optelec, \$3,395

Vision Loss Consultants, \$3,395

OPTEQ I and II

Magnifies up to 45x on a 13" black-and-white monitor and up to 60x on a 19" black-and-white monitor.

Tojek & Associates, Inc., \$2,395-\$2,995

OPTEQ IV

Magnifies up to 45x on a 13" color monitor and up to 60x on a 20" color monitor.

Tojek & Associates, Inc. \$2,395-\$2,995

OPTEQ Mini-Cam

Magnifies from 10x to 45x. Comes with all hardware that allows hookup to any home television or monitor. Portable.

Tojek & Associates, Inc., \$995

P-See Color CCTV Systems

Magnifies 45x or 60x on a 13" or 19" color monitor. Is available on desktop stand, pneumatic arm, or customized wheeled console.

Talking and Visual Aids, \$2,395-\$2,850

Reader 1

Magnifies up to 45x on a black-and-white 12" monitor.

LS&S Group, \$1,695, \$1,895

Magnisight, \$1,795-\$1,995

Reader XL

Magnifies up to 60x on a black-and-white 19" monitor.

LS&S Group, \$2,095, \$2,295

Magnisight, \$2,195, \$2,295

SeeTec CCTV System

Magnifies 4x to 45x on a 12" black-and-white monitor and a 13" color monitor and 6x to 60x on a 19" black-and-white monitor and a 20" color monitor.

Bossert Specialties, Inc., \$1,995-\$3,295

LS&S Group, \$1,995-\$2,995

Seeing Technologies, Inc., \$1,995-\$3,295

Vision Loss Consultants, \$2,395-\$3,395

Seewell Reading Enhancer

Magnifies 6x to 50x on a 19" monitor. Can be used with any size television, black and white or color, and with flat or curved surfaces.

LS&S Group, \$950

S. Walters, Inc., \$900

TekVision 20" Color CCTV

Magnifies up to 50x. Comes with its own table that can be adjusted to any level. The monitor can be used for television or adapted at cost to

accommodate input from a computer.

Independent Living Aids, Inc., 759458, \$2,795

LS&S Group, 349-CVM1, \$2,795

Twin-Vu

Can simultaneously view computer information with enlarged text from a book by splitting the screen at any level. Works in conjunction with popular large-print software programs.

Acrontech International, Inc., \$1,695

Vantage CCD

Has a 14" monitor that enlarges print up to 45x. Besides the basic read-write features, it has electronic windowing for isolating lines of text, overline/underline, and split screen.

Telesensory, \$2,895

VersiColor XL CCD 14"

Magnifies up to 45x on a 14" color monitor. Offers choice of twenty-four customized foreground and background color combinations.

Telesensory, \$2,995

Viewpoint VGA

Magnifies from 8x to 32x and is available in three models: Mono 14" and 19" have black-and-white screens, Multi 14" has a color screen that allows the user to select any one of eight colors.

Bossert Specialties, Inc., \$2,795, \$2,895, \$2,995

HumanWare, Inc., VP14W, VP14C, VP19W, \$2,795, \$2,895, \$2,995

Viewpoint VGA with Computer Access

Computer-compatible versions of the Viewpoint VGA Mono 14" and Multi 14" models. Works with any desktop, laptop, or notebook computer with a facility for connecting an external monitor. Has the ability to display the enlarged computer image and the camera image either simultaneously or alternately.

Bossert Specialists, Inc., \$3,195, \$3,295

HumanWare, Inc., VP14WPC, VP14CPC, \$3,195, \$3,295

Voyager CCD

Magnifies up to 45x on a 12" black-and-white monitor. Includes enhanced contrast capabilities, positive-negative image reversal, and tilt screen display.

Telesensory, \$2,395

Voyager XL CCD

Magnifies up to 60x on a 19" black-and-white monitor. Compatible with Telesensory's computer magnification systems. Deluxe model includes automatic focus.

Telesensory, \$3,195

Magnifiers

Chest Magnifiers

Chest magnifiers rest on a person's chest and are supported by an adjustable cord around the neck. They allow both hands to be free to hold reading material or to work.

Easi-View

1.7x magnification.

Bossert Specialties, Inc., HF-146, \$38.59

Phillip Barton Vision Systems, 5820, \$18

Ezy-Mag

Double lens arrangement has a 4" round utility lens and a small high-power inspection lens.

Ann Morris Enterprises, Inc., VMA9, \$21.95

Bernell Corp., D875, \$12

Bossert Specialties, Inc., HF-421, \$14.75

Carolyn's, D875, \$9.95

Maxi Aids, 54430, \$9.95

Phillip Barton Vision Systems, EZM, \$8

Tech-Optics International Corporation, 1730, \$9.95

Vis-Aids, Inc., 01202, \$11.99

Large Magnifier with Neck Strap

4½" round lens.

Maddak, Inc., F73372-0002, \$9.25

Mag-Light

3¼" 2x magnifier has a 4x insert and a high-intensity lamp on a gooseneck arm. Uses 2 AA batteries.

Ann Morris Enterprises, Inc., VMA2, \$29.95

Magni-View

1.5x magnification.

Bernell Corp., BLN8887, \$19.50

Magni-Viewer

2x magnification.

Bossert Specialties, Inc., BL-832, \$20

Carolyn's, B813390, \$23.95

Massachusetts Association for the Blind, M057, \$15

Maxi-Plus

Consists of two lenses: a large rectangular lens with 2x magnification and a small round lens with 4x magnification.

Eschenbach Optik of America, Inc., 2678, \$39.95

No-Hold Magnifying Reader

4" biconvex lens, 2x magnification.

Fred Sammons, Inc., BK-3453, \$10.95

Over-the-Neck Magnifier

4" round lens has 5x bifocal insert.

LS&S Group, 350-SV-10, \$8.95

Science Products, 4420, \$22.50

Selsi Company, Inc., 367, \$5.50

Vis-Aids, Inc., 54430, \$5.95

Flat Magnifiers

Globe Magnifier, Dome Magnifier

Variou models in different magnification from 2x to 6x.

Bernell Corp., SE402, SE403, \$18, \$35

Bossert Specialties, Inc., SL-139, \$24

Eschenbach Optik of America, Inc., \$26.75-\$76.90

S. Walters, Inc., 109-003, 109-002, \$16.95, \$19.95

Science Products, A4170, A4473, \$19.95, \$62.50

Tech-Optics International Corporation, \$13.25-\$38

Magna-Bar Magnifier

Lies directly on the page and magnifies 2x. 4" to 6" long to cover the full page width of most books.

Bernell Corp., BLN8275, \$4.25
Bossert Specialties, Inc., HM-115, BL-813, \$4, \$5
Carolyn's, MB812630, \$4.50
Eschenbach Optik of America, Inc., 2602, 2603, 2605, \$8.20-
\$26.90
LS&S Group, 26-377, \$1.95
Massachusetts Association for the Blind, M055, \$4.25
Phillip Barton Vision Systems, 81-26-30, \$3.75
S. Walters, Inc., 109-204, \$6.95
Tech-Optics International Corporation, 81-26-30, \$2.95
Vis-Aids, Inc., 06203, \$2.90

Magna-Rule Magnifier

Over twice as long as the Magna-Bar Magnifier to span longer lines of type.

Bernell Corp., BLN8272, \$5.95
Bossert Specialties, Inc., BL-812, \$6
Carolyn's, MB812629, \$7.25
LS&S Group, \$3.50, \$7.50
Massachusetts Association for the Blind, M056, \$6.25
Phillip Barton Vision Systems, 81-26-29, \$5
S. Walters, Inc., 109-210, 109-214, \$12.95, \$21.95
Tech-Optics International Corporation, 81-26-29, \$4.45

Mirror Magnifier

3x or 4x magnification.

Lighthouse of Houston, \$15.25
LS&S Group, 212-MM1, \$19.95
Science Products, A4180, \$24.95

Paperweight Magnifier

3" square clear plastic base with 4x magnification.

Science Products, A4470, \$32.50

Hand-Held Rectangular Magnifiers

Hand-Held Rectangular Magnifiers

Various models in different lens sizes and magnification.

Bernell Corp., \$7-\$13.50
Bossert Specialties, Inc., \$6-\$93.80
Eschenbach Optik of America, Inc., \$27.50-\$98.40
Fred Sammons, Inc., BK-3459, \$7.50
Independent Living Aids, Inc., 454440, \$7.95
Maddak, Inc., H73363, \$15.69
Phillip Barton Vision Systems, \$8-\$53.75
Science Products, \$14.95-\$99.50
Selsi Company, Inc., 302, 312, \$6, \$13
Sense-sations, \$21.95
Tech-Optics International Corporation, \$8.85-\$51.55
Vis-Aids, Inc., \$19.95-\$92.95

Illuminated

Various models in different lens sizes and magnification.

Bernell Corp., LRX200, DM810, BLN8861, S154, \$15, \$26.95, \$31.50, \$38.50

Bossert Specialties, Inc., \$37-\$89.30

Phillip Barton Vision Systems, \$14.75-\$31

Tech-Optics International Corporation, \$24.95, \$28.50

2" x 4" lens with 2x or 3x magnification.

Carolyn's, DA2000, \$38.95

LS&S Group, 56-81-33-86, 56-1530-1, \$38.50, \$85.95

Selsi Company, Inc., 304, 313, \$11.20, \$43.80

Vis-Aids, Inc., 01204, \$39.99

Yellow Contrast Magnifier

Incorporates a specially developed yellow acrylic that many people find increases contrast and makes reading easier. 2" x 4" lens has 2x magnification with 4x bifocal.

Independent Living Aids, Inc., 186247, \$35.95

Vis-Aids, Inc., M58#5, M60#5, \$36

Hand-Held Round Magnifiers

Extension Arm Magnifier

Can be hand held or supported by its extension arm that adjusts to

various angles and permits hands-free use.

Independent Living Aids, Inc., 305754, \$3.95

Hand-Held Round Magnifiers

Various models in different round lens sizes and magnification.

Ann Morris Enterprises, Inc., VMA3, \$9.95

Bernell Corp., \$7-\$38.95

Bossert Specialties, Inc., \$4.95-\$69.61

Eschenbach Optik of America, Inc., \$15.90-\$93

Independent Living Aids, Inc., 370348, 370351, 370355, \$3.95, \$5.95, \$9.95

Phillip Barton Vision Systems, \$6-\$24.75

Science Products, \$4.95-\$67.50

Selsi Company, Inc., \$2.80-\$16

Tech-Optics International Corporation, \$4.25-\$31.85

Vis-Aids, Inc., \$14.95-\$54.95

Illuminated

Various models in different lens sizes and magnification.

Access with Ease, Inc., CM7343, \$6.95

Ann Morris Enterprises, Inc., VMA5, \$7.95

Bernell Corp., \$13.95-\$32.95

Bossert Specialties, Inc., \$14.40-\$68.75

Fred Sammons, Inc., BK-3456, \$14.50

Independent Living Aids, Inc., 786333, \$8.95

LS&S Group, \$30.95-\$57.95

Phillip Barton Vision Systems, \$10-\$29.75

Science Products, \$19.95-\$42.50

Selsi Company, Inc., \$5.60-\$31.50

Tech-Optics International Corporation, \$10.95-\$19.75

Vis-Aids, Inc., \$26.95-\$52.95

Yellow Contrast Magnifier

Incorporates a specially developed yellow acrylic that many people find increases contrast and makes reading easier.

Independent Living Aids, Inc., 186243, 186251, \$18.95, \$35.95

Vis-Aids, Inc., M58#1, M60#1, \$39

Magnifier Lamps

Big Eye Magnifying Lamp

Table lamp with a 2x acrylic 5" round lens attached to the lamp shade. Goose neck allows flexible positioning.

Bossert Specialties, Inc., LM-80, \$75

Carolyn's, BE010, \$59.95

Independent Living Aids, Inc., 369045, \$39.95

LS&S Group, 59-010, \$44.95

Massachusetts Association for the Blind, M065, \$48

Science Products, A4110, \$69.95

Big Eye Telescoping/Magnifying Floor Lamp

Floor lamp with a 2x magnifying lens and an 18" flexible arm with heavy base. Adjusts from 30" to 66" in height.

Bossert Specialties, Inc., LM-82, \$135

Carolyn's, BE518, \$119.95

LS&S Group, 59-518, \$88.95

Science Products, A4113, A4119, \$99.50, \$134.95

Big Eye Twin-Arm Lamp

Table lamp with a light on a 14" flexible arm and a 5" round lens on an 18" flexible arm. Light and lens can be used together or separately.

Bossert Specialties, Inc., LM-81, \$90

Carolyn's, BE1418, \$59.95

LS&S Group, 59-1418, \$58.95

Science Products, A4103, \$89.95

Circline Illuminated Magnifier

Desk model has 28" reach, floor model with casters has 28" or 42" arm, pedestal model has 28" arm.

Cleo, Inc., 81-1002, 81-1004, 81-1005, 81-1007, \$175-\$229

Available with a $\frac{3}{4}$ x or a $1\frac{1}{4}$ x lens and with a weighted base or a universal mounting clamp.

Contact East, Inc., \$130.90-\$170.20

Clamp-on base, 42" arm reach, 22-watt fluorescent bulb included.
Dazor Manufacturing Corp., 8MC200, \$160

Magnifier mounted on a rolling caster base, 42" arm reach, arm and base purchased separately.

Dazor Manufacturing Corp., 8MC300/1050, \$145, base: \$93

Magnifier mounted on a stationary pedestal base, 42" arm reach, arm and base purchased separately.

Dazor Manufacturing Corp., 8MC300/3050, \$145, base: \$73

Weighted desktop base, 28" arm reach, 22-watt fluorescent bulb included.

Dazor Manufacturing Corp., 8MC100, \$180

Universal clamp model can be mounted on any horizontal, vertical, or sloped surface. Weighted-base model has an 18" arm with a 30" reach. Stationary pedestal stand model has a 24" arm with a 33" reach. Rolling-caster stand model has a 34" arm with a 42" reach.

Independent Living Aids, Inc. , 321630, 321635, 321640, 321645,
\$144.95-\$209.95

Economy Model

The lamp head has a 4" round 1.75x lens that will reach 36" on arms with a spring suspension system. Equipped with a 4-way mounting clamp.

Independent Living Aids, Inc., 275925, \$29.95

Fluorescent Magnifier

5" round $\frac{3}{4}$ x lens. Spring arm has 36" or 45" reach. Clamp mount.

Contact East, Inc., 16301, \$122.35

LS&S Group, 315-3700, 25-16301, \$69.95, \$149.95

Luxo Lamp Corporation, 16301, \$155

Halogen Electrix Magnifier Lamp

A 100-watt halogen bulb with a 5" round 1.75x lens. In two models: an adjustable clamp that permits horizontal or vertical mounting

or a weighted base.

Independent Living Aids, Inc., 288525 (clamp model), 288530 (desk model), \$139.95, \$162.95

LS&S Group, \$144.95, \$164.95

Halogen Illuminator/Magnifier

A 20-watt halogen lamp and a 2.5x acrylic 5" round lens are attached to a base with 12" gooseneck arms. The light and lens move independently for flexible positioning.

Independent Living Aids, Inc., 361412, \$119.95

Halogen Lamp and Magnifier

A 50-watt halogen lamp with a 24" reach and a 5" round lens with 21" reach are independently mounted to a weighted base.

LS&S Group, 145-7310, \$119.95

Illuminated Desktop Magnifying Lamp

5" round lens has a 30" reach and a weighted base.

LS&S Group, 145-7121WB, \$139.95

Illuminated Magnifier Lamp

3¾" round lens has a 36" reach and clips on.

LS&S Group, 315-1700, \$26.95

Illuminated Magnifier on Stand with Casters

5" round lens with 42" arm reach.

LS&S Group, 25-1450HR-5-EB-CW, \$259.95

KFM Series

Various models: ¾x or 1¼x magnification, 30" or 45" reach, clamp for mounting or weighted base. All models are on adjustable K-arm with 5" diameter lens.

Bossert Specialties, Inc., L-172, L-173, \$220, \$275

Contact East, Inc., \$165-\$228

LS&S Group, 25-KFM-2/FE: 30" reach, weighted base, \$239.95

Luxo Lamp Corporation, \$209-\$289

Phillip Barton Vision Systems, \$198.50-\$248.45

Science Products, A4115, A4116, A4124, \$225, \$365, \$275

Magna-Lux II Magnifier

$\frac{3}{4}$ x magnification and 39" arm reach.

Luxo Lamp Corporation, 16272, \$74

Magnifier Flex

Model 8ML-104 uses a 13-watt compact fluorescent tube. Model 8ML-100 uses a tubular incandescent bulb with a maximum of 60 watts. Three mounting options: insert base of flex arm into a table clamp (furnished), mount on a Dazor floor stand with caster (\$93) or pedestal (\$73) base, or mount on a vertical surface with a Dazor dual clamp universal base (Part 5000-9A).

Dazor Manufacturing Corp., 8ML-100, 8ML-104, \$73, \$99

Magnifying Lamp

4" diameter lens, clamps onto any edge up to 2" thick, swivels in almost any direction with a 36" reach, takes standard 60-watt bulb.

Access with Ease, Inc., WWG112, \$27.95

W.A.V.E. (Wide Angle Visual Enlargement) Magnifier

$\frac{3}{4}$ x magnification in a $6\frac{3}{4}$ " x $4\frac{1}{2}$ " viewing area. Twin 7-watt compact fluorescent tubes work independently. Clamps on and has 45" arm reach.

Bossert Specialties, Inc., L-168, \$390

LS&S Group, 25-17805, \$309.95

Luxo Lamp Corporation, 17801-17803, 17805-17807, \$360-\$625

Page Magnifiers

Fresnel Lens

Greater magnification occurs as distance increases. Measures 7" x 10", 7" x 11", 8" x 10", or $8\frac{1}{2}$ " x 11".

Ann Morris Enterprises Inc., VMA1, \$2.95

Bernell Corp., DV1500, \$4.50

Cleo, Inc., 88-1004, 88-1005, \$1.50, \$2.20

Independent Living Aids, Inc., 454444, \$1.99

LS&S Group, 26-436, \$1.95

Massachusetts Association for the Blind, M063, \$6

Science Products, A4155, A4677, \$1.95, \$6.95
Selsi Company, Inc., 435, 436, \$1.40, \$2.30
Vis-Aids, Inc., 54444, \$1.75

Magnifier on Legs

7" x 10" lens is mounted on four retractable 4" legs and magnifies reading matter 2x to 2.5x.

Bernell Corp., SVP, \$10
Fred Sammons, Inc., BK-3462, \$10.50
Independent Living Aids, Inc., 570284, \$9.95
Library Store, Ltd, \$9.95, \$19.95 (mounted)
LS&S Group, 350-SV-P, \$10.95

Pocket Magnifiers

Double Folding

Various models in different lens sizes and magnification.

Ann Morris Enterprises, Inc., VMA4, \$5.95
Bossert Specialties, Inc., \$12-\$18
Carolyn's, \$11.95-\$18.95
Contact East, Inc., \$18.60
LS&S Group, 56-81-23-63, 56-81-23-64, 56-81-23-65, \$19.95
Phillip Barton Vision Systems, \$5.75-\$7
Tech-Optics International Corporation, \$2.95-\$28.05
Vis-Aids, Inc., 06192, \$9.95

Illuminated

Various models in different lens sizes and magnification.

Ann Morris Enterprises, Inc., VMA8, \$18.95
Bossert Specialties, Inc., \$11.95-\$52.50
Carolyn's, \$4.95-\$9.95
Contact East, Inc., \$5.95-\$9.95
Eschenbach Optik of America, Inc., \$13.40-\$28.10
Fordham Equipment Company, 66-888, \$6.95
Independent Living Aids, Inc., 454424, 624538, \$5.95
LS&S Group, \$4.95-\$46.95
Science Products, A4331, \$9.95

Selsi Company, Inc., 431, 432, \$1.25
Tech-Optics International Corporation, \$5.95-\$26.35
Vis-Aids, Inc., \$5.75-\$22.95

Retractable

Various models in different lens sizes and magnification.

Bossert Specialties, Inc., \$6.50-\$8
Independent Living Aids, Inc., 502981, \$4.95
LS&S Group, 350-FM-5, \$4.95
Phillip Barton Vision Systems, \$4-\$6.50
Tech-Optics International Corporation, \$4.50
Vis-Aids, Inc., 06206, 06207, \$4.95, \$7.90

Single Folding

Various models in different lens sizes and magnification.

Bossert Specialties, Inc., \$3-\$17.02
Contact East, Inc., \$13.10
Eschenbach Optik of America, Inc., \$5.50-\$43.10
Independent Living Aids, Inc., 617123, \$3.95
LS&S Group, \$2.25-\$22.95
Phillip Barton Vision Systems, \$4-\$7.50
Science Products, \$4.95-\$9.95
Sense-sations, \$4.95
Tech-Optics International Corporation, \$1.65-\$8.75
Vis-Aids, Inc., \$6.00-\$15.95

Triple Folding

5x, 10x, and 15x magnification.

Phillip Barton Vision Systems, DF-15, \$10

5x, 7x, and 9x magnification.

Bossert Specialties, Inc., BL-814, \$19.50
LS&S Group, 56-81-23-67, \$24.95
Tech-Optics International Corporation, 81-23-67, \$13.85

4x, 6x, and 8x magnification.

Vis-Aids, Inc., 09516, \$18.95

Stand Magnifiers

Basic Stand Magnifiers

Various models with round or rectangular lens of different sizes and magnification.

- Bossert Specialties, Inc., \$10.95-\$95.47
- Eschenbach Optik of America, Inc., \$21.05-\$80.60
- LS&S Group, \$29.95-\$135.95
- Phillip Barton Vision Systems, \$15.75-\$97.75
- Tech-Optics International Corporation, \$24.50-\$58

Foldable Magnifier

Larger size stands 7¼" high with 4" lens. Smaller size has 1¾" lens.

- Selsi Company, Inc., 386, 396, \$2.80, \$10.30

Gooseneck Magnifier

Lens is attached to a flexible gooseneck arm that is mounted on a metal base. Various models in different lens sizes and magnification.

- Bernell Corp., D104D, \$39.95
- Edmund Scientific Company, C70,241, \$29.95
- Eschenbach Optik of America, Inc., \$66.25-\$175.60
- Fred Sammons, Inc., BK-3451, \$26.50
- Selsi Company, Inc., 357, 358, \$8.80-\$30.70
- Tech-Optics International Corporation, 2754, 2757, 2758, \$67.10-\$142.20
- Vis-Aids, Inc., 13158, \$17.95

Hand/Stand Combination Magnifier

3x magnification and a rectangular lens. Folding handle and wire stand permit use as a hand-held or stand magnifier.

- Eschenbach Optik of America, Inc., \$40-\$61
- LS&S Group, 56-2032, \$102.95
- Phillip Barton Vision Systems, 906-S, \$47.75
- Tech-Optics International Corporation, 2031, \$43.45
- Vis-Aids, Inc., 35628, \$59.95

Helping Hand Magnifier

Attached to a cast iron base are fittings for two clip arms to hold items to be magnified and a 1½" diameter lens with 2x magnification.

Edmund Scientific Company, C39,064, \$9.95

Independent Living Aids, Inc., 366174, \$12.95

Illuminated

Various models in different lens sizes and magnification.

Eschenbach Optik of America, Inc., \$131.40-\$278.30

Library Store, Ltd, \$39.95, \$415.95, \$599.95

LS&S Group, \$37.95-\$66.95

Phillip Barton Vision Systems, \$14.50-\$50

1.5x or 2x magnification, 2"-x-4" lens with 7-watt 115-volt lamp. Both the lens and light are adjustable.

Bernell Corp., BLN8481, \$39.95

Carolyn's, \$35.95

2x or 3x round 3" lens. Free-standing, with a 2" space between the lens and object being magnified. Two C batteries included.

Bernell Corp., M1, \$11.95

Fordham Equipment Company, \$39.95-\$54.95

Independent Living Aids, Inc., 336400, \$9.95

Masterlens Illuminated Stereo Magnifier

6" x 8" stereo magnifier sits in a frame on legs. This allows the reader space to work under the lens and to turn pages.

Contact East, Inc., \$389, \$499

LS&S Group, 129-STV-1, \$409

Reading Window

The lens is in the form of a thin plastic disc with 1.5x magnification. The Bookstand Model is 16" in diameter and allows reader to see both pages of an open book magnified at the same time. The Arm Model has a 12" lens mounted on a weighted base.

Eyetrionics, \$200, \$250

Library Store, Ltd, \$319.95, \$374.95

Stereotopic Magnifier

2.75x-4.6x magnification. Base is made of 1" square steel tubing. Lamp can be purchased separately for \$28.90.

Edroy Products Company, Inc., U66, U66-2, U68, U68-2, \$120.65-\$275.65

Twin Magnifier

Dual aspheric lens design with a 3x upper lens and an adjustable 2.5x lower lens that is 3" x 4".

Bernell Corp., STWIN, \$39.95

Wide-Field Stand Magnifier

8" x 10" Fresnel lens with 2x magnification. Adjusts to lie over paperwork or sits in front of computer screen to enlarge characters.

LS&S Group, 56-1790, \$149.95

Page Turners

Page turners assist individuals with limited use of their hands or arms in manipulating pages of print material. Electrical models have multiple switches to allow operation using finger, chin, cheek, eyebrow, breath, or toe.

Automaddak Page Turner System

The system includes the Automaddak Page Turner, a wooden bookstand, and an automatic page-holding device. The page turner is activated by pushing a pneumatic switch. The unit operates on 9 volts DC and is supplied with an AC/DC power adapter.

Gaylord Brothers, JAADA73204, \$1249

Maddak, Inc., H73204, \$928.50

GEWA Page Turner

Acrylic panels secure and flatten document being read. Rubber grip roller manipulates pages forward and backward, singly or continuously. Multiswitch arrays include joystick, sip-and-puff control, pedal control, and pushbutton control. The unit is powered by 24 volts AC and operates from a 110-volt wall outlet transformer. Reader can be sitting up or lying down.

Zygo Industries, Inc., BLV-6, \$3795

Next Page

Features include bi-directional page turning; adjustable book angle; and single-, dual-, or multiple-position switch control. The unit is powered by 12 volts DC, using batteries or adapter.

TASH, Inc., \$3,000

Page Turner

A clip that fits around the hand is secured to a tapered strip with a wide foam-rubber tip at the end for turning large sheets.

Demco, Inc., P162-0633, \$12.99

Maddak, Inc., F73216, \$16.70

Page Turner and Cuff (Hand-held)

A rubber friction tip on a wooden dowel is attached to a lightweight cuff that has a soft palm pad. The device fits on the hand with a large D-ring that is secured with Velcro.

Cleo, Inc., 88-1067, \$9.90
Gaylord Brothers, F73216, \$11.25
Maddak, Inc., F73216-0136, \$9.90

Sip-and-Puff Switch for Touch Turner

For mouth operation of Touch Turner. Must be factory installed.

Cleo, Inc., 88-1073, \$95
Touch Turner Company, Model B, \$95

Touch Turner

The switch that operates the turning action can be activated with the movement of the chin, finger, eyebrow, or breath. It is powered by D batteries. Models available are one-way and two-way turners for paperback and hardback books.

Cleo, Inc., 88-1070-1071-1072, \$495-\$595
J.A. Preston Corporation, PC7601A-76015, \$825-\$895
G.E. Miller, Inc., GM3692B, C, D, E, F, G, H, \$495-\$690
Touch Turner Company, Models C, CR, PB, \$495-\$595

Touch Turner Adaptor

To use 110/120 volt AC. Must be factory installed.

Cleo, Inc., 88-1074, \$55
G.E. Miller, Inc., GM3692J, \$55
Touch Turner Company, Model A, \$55

Reading Machines

Reading machines recognize print materials and convert them into another medium. The output of the Optacon, or Optical to Tactile Converter, is tactile. The user moves a small camera across a line of print with one hand and places a finger of the other hand in a slot to feel an array of small vibrating pins. Optical character recognition (OCR) systems are computer based and consist of a scanner (hand-held, flatbed, or page), OCR card, user-interface software, adaptive equipment, and a personal computer. The scanner is a hardware device that takes a "picture" of the printed material. This picture is transferred to the computer where the OCR translates the picture into text characters. The output device is most commonly synthetic speech but may also be the monitor, printer, or braille display.

An Open Book

Enables a reader to scan materials and listen to short items in minutes or to place lengthy items in the machine's memory for later listening. Offers a choice of several voices and a variety of speeds. The deluxe edition has additional speed and holds more than twice as many pages or books as the standard edition.

Access Technologies, Inc., \$4,795, \$5,795

Arkenstone, Inc., \$4,995, \$5,995

Arts Computer Products, Inc., \$4,995, \$5,995

An Open Book Unbound

A software-only product. Includes Calera Recognition Systems OCR technology, Microsoft Windows 3.1, and Hewlett Packard Accupage automatic contrast software. Requires a 386 or 486 PC, a scanner, and compatible speech synthesizer.

Access Technologies, Inc., \$995

Arkenstone, Inc., \$995

Arkenstone Reader

Comprises three components: TrueScan scanner recognition card, desktop scanner, and software. Can use with PC/AT or compatible computers. Available reading options are voice, large print, or braille.

Arkenstone, Inc., \$2,390-\$3,845

Arts Computer Products, Inc., \$2,645-\$4,295

Electronic Visual Aids Specialists, \$2,495-\$3,895
GW Micro, \$2,840-\$4,495
Personal Data Systems, Inc., \$2,390-\$3,845

Arkenstone Reader 400

Based on Reduced Instruction Set Computer (RISC) technology. Reads three times faster than earlier products. Comes with a Hewlett Packard ScanJet IIP scanner and Arkenstone Reader II software.

Access Technologies, Inc., \$3,795
Arkenstone, Inc., \$5,145

Arkenstone Ready to Read

Has a three-channel audio management system that replaces the video screen and manages a voice synthesizer, computer speaker, and one other device, such as a telephone.

Arkenstone, Inc., RTR 50, RTR 100, \$7,295, \$7,995
Personal Data Systems, Inc., RTR 50, RTR 100, \$7,295, \$7,995

Boxer-Reader

Includes the Truescan optical character recognition board, full-page hand scanner, DocuRead software, Synphonix 215 speech synthesizer with Artic Vision screen reader, word processor, database management system, and on-line bookstore.

Adhoc Reading Systems, Inc., 286, 386, \$7,140-\$7,854
LS&S Group, 120-BR-286, 120-BR-386, \$7,140-\$7,854

DocuRead Expert

Includes scanner, scanner interface (daughter card), Truescan Model E for PC/AT computer, and DocuRead software.

Adhoc Reading Systems, Inc., \$3,750

Hand Scanner OCR Kit

Enables one to read 4- to 36-point text with one's own IBM AT or compatible. The 8.5" wide scanner eliminates tracking problems. Kit also has a "sound picture" providing tones that allow reader to interpret the layout of a page.

LS&S Group, 120-HSDT-I, \$3,572

IRIS Reading System

Consists of the following components: an IBM/AT 286 or 386 or compatible computer, a TrueScan character recognition unit, a voice synthesizer (DECtalk), and the IRIS software. Reads or navigates by character, word, line, sentence, paragraph, or page.

Visuaide 2000, Inc., Can\$10,640

Optacon II

Converts regular print or computer output into vibrating tactile shapes that can be read with the finger. Can operate on battery power for at least eight hours. Accessories include Training System Software for IBM PC or Apple IIe/GS (\$395) and inTOUCH software program for Macintosh (\$395).

TeleSensory, \$3,695

OsCaR

Can scan virtually any type or size font. Designed to be used with large print, speech, electronic braille, and hardcopy braille access devices to display the scanned information. Can produce Grade 2 braille with a braille translation program. Runs on AT, PS/2 Micro Channel, or compatible computer.

TeleSensory, \$1,295-\$2,840

ReadMan

Scans materials on the flat surface of the desktop model or with the hand-held scanner of the portable unit. Has nine different voices. User can store materials on floppy disks.

Schamex Research, \$2,992-\$5,492

The Reading AdvantEdge

A software-only OCR product. Recognizes virtually any typeface or size, italics, bold, underscore, documents with multiple columns, faxes, and six international languages. The user can select a variety of options for scanned text: have the text read aloud with a screen reader and a synthesized speech card, convert and save the text for editing, enlarge the text on the computer screen, or convert into braille. Requires IBM PC 386 or greater or compatible.

Xerox Imaging Systems, Inc., Adaptive Technology Products, \$795 (software only), \$1,295 (software and automatic scanner), \$2,995

(software and bookedge scanner)

The Reading Edge

Consists of a bookedge scanner, Intelligent Character Recognition (ICR) software, synthetic speech, and custom keypad. Can scan virtually any printed or typeset document and provide voice output.

Xerox Imaging Systems, Inc., Adaptive Technology Products, \$5,495

Screen Enlargers

Screen enlargers display the information on a computer screen in a variety of magnifications and fonts. They may be software or hardware based. The software programs are compatible with many word-processing, database, and spreadsheet applications. The hardware is available in several models that are compatible with most computers.

Artic Business FOCUS

Software has same features as Artic FOCUS and also includes magnification up to 10x, additional fonts, additional reading functions, additional tracking and split-screen modes, and graphics support for DOS and Microsoft Windows 3.0.

Artic Technologies, \$695

Artic FOCUS

Software magnifies up to 8x and is compatible with EGA/VGA laptop computers and Toshiba T-1000 CGA laptops.

Artic Technologies, \$495, \$695

B-Edit

A text-editor program that magnifies up to 5x and functions with any standard graphics display card and monitor (CGA, EGA, VGA).

Hexagon Products, \$39

National Institute for Rehabilitation Engineering, 00012, \$99.95

BIG

Software in two versions: WP for WordPerfect or LetterPerfect magnifies from 1.5x to 6x, and Lotus 1-2-3 magnifies at 6x.

Hexagon Products, \$39

BIGED

A word processor for the IBM PC and compatibles that runs in graphics mode to display from 20 to 80 columns of text on the computer screen. At 20 columns, characters are magnified about 4x. BIGED enlarges only its own output; does not include formatted printing capability. Speech output is provided when appropriate hardware is present; currently supports Accent and Speech Thing speech systems.

TurboPower Software, \$79

Compu-Lenz

A computer peripheral that uses a Fresnel lens to enlarge characters to more than twice their size. It attaches to IBM-PC and most other computers with monitors of similar size.

- AbleTech Connection, \$199.95
- C Tech, \$225
- Carolyn's, CL16A, \$191.95
- Florida New Concepts Marketing, Inc., CL-16, \$204.95
- LS&S Group, 22-CL-16, \$194.95
- Science Products, A8053, \$245
- Tech-Optics International Corporation, CL, \$174.95
- Vis-Aids, Inc., 07096, \$167.99

Eye Relief

A software program for word processing that runs on any PC with 512K of RAM and a graphics screen. Screen fonts can magnify up to 5x. User can create, edit, and print standard ASCII text files.

- Bossert Specialties, Inc., \$295
- HumanWare, Inc., ERS-1, \$295
- LS&S Group, 281-ERWP, \$295
- National Institute for Rehabilitation Engineering, 00011A, \$299.95
- SkiSoft Publishing Corporation, \$295

Full-Featured Publisher

Software program allows user to set type from 8 point to 36 point. It can read text files created with other word processors and then display and print the text in large print. Large text on the screen prints as large text on the paper.

- National Institute for Rehabilitation Engineering, 00013B, \$129.95

Full-Featured Word Processor

Software program can switch the display or printout between standard size and 2x.

- National Institute for Rehabilitation Engineering, 00013A, \$99.95

Horizon Low Vision Magnifier

A computerized scanning system converts text to continuously scrolling words that can be read in single-line, columns, or full-page mode with up to 35x magnification. The unit consists of a flat-bed scanner, a computer processor, a 13" VGA monitor, and a trackball.

Mentor O & O, Inc., \$3,695

inFocus

Software magnifies the entire screen, a single line, or a scalable window of either text or graphics to 2x. Requires PC compatible computer and VGA graphics adapter.

AI Squared, \$149

Carolyn's, \$149

LS&S Group, 213-INFOCUS, \$149.95

National Institute for Rehabilitation Engineering, 00015, \$149.95

inLARGE

Software for the Macintosh that magnifies the entire screen or a portion of text or graphics 2x to 16x.

Berkeley Systems, Inc., \$195

Carolyn's, BINI \$95

LS&S Group, 262-IL1, \$95

National Institute for Rehabilitation Engineering, C3249, \$105

Large-Print Display Processor (DP)

Hardware-based design enlarges computer text up to 16x on a 19" black-and-white monitor. DP consists of three components: an interface board, a processing box, and a user control panel with a four-directional joystick that executes all functions. Models are available for IBM computers and compatibles and for Apple II series computers.

TeleSensory, DP-11 PLUS, DP-11 PLUS MCA, \$2,795-\$2,995

LP-DOS

Software provides text magnification from 2x to 16x and is compatible with all IBM PC, PS2, and laptop computers.

Access Technologies, Inc., \$495

C Tech, \$495

Carolyn's, \$495
Computer Conversations, Inc., \$495
LS&S Group, 158-LPDOS, \$495
Optelec, \$495
Talking and Visual Aids, \$495
Vision Loss Consultants, \$495

LP-DOS Deluxe

Software magnifies both text and graphics displays and is compatible with Microsoft Windows and all MS DOS-based applications.

Access Technologies, Inc., \$595
Bossert Specialties, Inc., \$595
C Tech, \$595
Carolyn's, \$595
Computer Conversations, Inc., \$650
LS&S Group, 158-DELUXE-LPDOS, \$595
Optelec, \$595
Talking and Visual Aids, \$650
Vision Loss Consultants, \$595

Lunar

Software provides text enlargement on the screen of an IBM PC or PS/2 compatible. Lunar can display normal or double width characters with a CGA card; normal size, double height, or double height and double width characters with an EGA card; and 1x and 8x magnification with a VGA card. Lunar enlarges only ASCII-based screen text and will not enlarge graphics or any characters displayed in a graphics mode.

Electronic Visual Aid Specialists, 3DSPD-L1S, 3DSPD-L1SM, \$495,
\$595

Lynx

Together with the Vista computer magnification system, Lynx displays a video camera's image on a VGA or multi-sync monitor. The image can be enlarged, moved, frozen, or saved to disk. The Lynx system includes software and a daughterboard that snaps onto the Vista board.

TeleSensory, \$1,095-\$5,995

MAGic

Software provides 1.2x, 1.4x, and 2x text magnification and 2x graphics and Windows magnification. Requires IBM PC or compatible with VGA, super VGA, and XGA support.

Bossert Specialties, Inc., \$79

LS&S Group, \$79

Microsystems Software, Inc., \$79

MAGic Deluxe

Software magnifies text 2x to 12x and magnifies graphics and Windows 2x. Features include bookmarking, smooth panning, and screen location display.

Bossert Specialties, Inc., \$295

Carolyn's, MAG, \$295

Electronic Visual Aid Specialists, 3MSI-MD, \$295

LS&S Group, \$295

Microsystems Software, Inc., \$295

Seeing Technologies, Inc., STM, \$295

MagniWORD

Software magnifies text 2x or 4x and works with DOS, VGA, or extended VGA modes. It automatically scrolls and pans screen when in zoom mode.

General Business Machines Corporation, \$79

Panorama, Powerama

Text and graphics are magnified from 2x to 10x on IBM 286-, 386-, or 486-based systems furnished with 384k extended memory and either an EGA or VGA video card. Powerama is able to synchronize all synthetic speech and large-print commands so the user can both see and listen to the text that is on the computer screen.

Syntha-voice Computers, Inc., \$495, \$795

Verbal View

Software works on MS DOS computers, supports ASCII characters, and can enlarge any line or block of text in three sizes. Either 2, 3, or 6 lines fill the screen; the size of the magnification varies with the size of the screen.

Computer Conversations, Inc., \$249.95

Vista

Screen-enlarging system for IBM PC and PS/2 computers and compatibles. Vista has screen navigator, cursor tracking, and special presentation views that magnify text and graphics up to 16x. Vista VGA and Vista/2 models come with a circuit board, software, and a 3-button mouse that connects directly to the Vista circuit board.

TeleSensory, SF3C, SF2B, \$2,495-\$2,595

ZoomText

Software for the IBM PC, XT, AT and other compatibles that magnifies text from 2x to 16x in a variety of fonts.

AI Squared, \$495

Arts Computer Products, Inc., \$495

ATR Computer Technology, \$495

Carolyn's, \$495

Electronic Visual Aid Specialists, 3ZOOM-A, \$495

HumanWare, Inc., ZT, \$495

LS&S Group, 213-ZT, \$495

Raised Dot Computing, Inc., \$495

ZoomText Plus

Software has all the features of ZoomText and also includes graphics magnification in 2x, 4x, 6x, and 8x; Microsoft Windows interface; and font editor.

AI Squared, \$595

Arts Computer Products, Inc., \$595

ATR Computer Technology, \$595

Carolyn's, \$595

Electronic Visual Aid Specialists, 3ZOOM-B, \$595

HumanWare, Inc., ZT+, \$595

LS&S Group, 213-ZT-PLUS, \$595

National Institute for Rehabilitation Engineering, 00014, \$595

Raised Dot Computing, Inc., \$595

Screen Readers (Software Only)

Screen readers are software packages that interact with speech synthesizers to enable individuals who are blind or visually impaired to access the information displayed on a computer screen through voice output. Most of the readers can be used with a range of commercially available text-to-speech synthesizers.

AppleWorks Companion

Modifies AppleWorks Startup software by adding speech and new function commands. Requires the Slotbuster II with speech synthesizer option and AppleWorks version 2.0 or later. Does not work with the Echo or Cricket synthesizers.

LS&S Group, 188-SB0202, \$49.95

Raised Dot Computing, Inc., \$50

RC Systems, Inc., SW0202, \$49.95

Artic Business Vision and Business Vision D/K

Requires IBM XT, AT, PS/2 or compatibles. Processes all keyboard input and screen output into speech and is interactive with spreadsheet programs. Business Vision consists of a speech board and screen access software. D/K version is software only for use with DECtalk and compatible synthesizers.

Artic Technologies, \$595, \$895

ASAP (Automatic Screen Access Program)

Works on MS-DOS machines. Supports the following hardware: Accent, Audapter, BrailleMate, Braille 'n Speak, DECtalk, DoubleTalk, Echo, LapTalk, LiteTalk, Sounding Board, and VoTalker.

Blazie Engineering, ASAP, \$525

Exceptional Teaching Aids, ASAP1, \$525

LS&S Group, 251-ASAP-SOFT, \$525

MicroTalk, \$525

Raised Dot Computing, Inc., \$595

Flipper

Requires MS-DOS or PC-DOS 2.1 or later. When used with an electronic braille printer, can braille a line or a portion of the screen.

LS&S Group, 269-F1, \$495
Omnichron, \$395, \$495
Raised Dot Computing, Inc., \$495

IBM Screen Reader

Compatible with many popular personal computer applications and supports a range of commercially available text-to-speech synthesizers. Screen Reader/2 runs under OS/2 2.0 and converts IBM's Graphical User Interface to speech.

Arts Computer Products, Inc., \$648, \$721
Blazie Engineering, IBM SR11, IBM SR, \$648, \$721
Carolyn's, \$650, \$725
ComputAbility Corporation, \$720
Electronic Visual Aid Specialists, \$648, \$721
International Business Machines Corporation Special Needs Systems, \$500, \$723
LS&S Group, 279-2261648, 279-2261649, \$500, \$600
National Institute for Rehabilitation Engineering, C2201, \$648, \$720
TeleSensory, 91500-213, 91500-214, \$648, \$721

ISOS (Interactive Speech Operating System)

Requires IBM PC/XT/AT and PS/2 or compatible, 55k of available system memory, and a speech synthesizer. Uses an interfacing module Prospeak to be able to read text from the PRODIGY service's graphic screens.

Interface Systems International, \$499
LS&S Group, \$569

JAWS (Job Access with Speech)

For the IBM PC and compatible systems. Dual cursor design allows the user to read the screen with the JAWS cursor and have the PC cursor ready to communicate with the application program.

Access Technologies, Inc., \$475
Blazie Engineering, \$495
Carolyn's, \$495
Henter-Joyce, Inc., \$495
LS&S Group, 237-J2, \$495

outSPOKEN

Uses Macintosh's internal speech synthesizer to provide speech output. Allows a visually impaired person to work with text-based programs. Works with Optacon and inTouch and with the Duxbury Braille Translator for the Macintosh.

Berkeley Systems, Inc., \$495

Carolyn's, BOS, \$395

LS&S Group, 262-OS17, \$495

National Institute for Rehabilitation Engineering, C3385, \$415

TeleSensory, RZ4A, \$395

PROVOX

Works with DOS 5. Detects and adapts to large EGA and VGA display screens. Supports more than a dozen speech synthesizers.

KANSYS, Inc., \$95, \$295

SCAT (Screen Articulator)

For the Apple II. Requires Slotbuster II multifunction card with speech synthesizer option or DoubleTalk speech synthesizer card.

RC Systems, Inc., SW0200, SW0201, \$19.95, \$34.95

Slimware and Slimware Window Bridge

Both require IBM compatible 386 or better, mouse or trackball, and 4 MB hard disk space. They differ in the speech synthesizers they support. Slimware Window Bridge provides access to Windows and Window-based application programs and supports ALVA braille display, Keybraille, and MiniBraille.

HumanWare, Inc., \$695

LS&S Group, 209-SW-WIN, \$695

Syntha-voice Computers, Inc., \$495, \$695

Soft Vert

Software-only version of Vert that can be combined with a synthesizer. Available for IBM PC, Micro Channel, and laptop computers.

TeleSensory, C8C, \$495

TEXTALKER

Text-to-speech software for the Apple II.

American Printing House for the Blind, D-89570-00,
D-89571-00, \$21.75, \$34.50

Tinytalk Personal

For IBM-compatible computers. Uses very little memory. Supports some inexpensive speech synthesizers and the 43- and 50-line screen displays that are available with EGA and VGA video cards.

OMS Development, \$75

Vocal-Eyes

Runs on all IBM and IBM compatible computers at all speeds. Can be used with virtually any commercially available voice synthesizer.

Access Technologies, Inc., \$435

Arts Computer Products, Inc., \$450

ATR Computer Technology, \$450

Carolyn's, GW8210004, \$435

Electronic Visual Aid Specialists, \$450

GW Micro, \$450

LS&S Group, 68-8210-004, \$450

VOS (Verbal Operating System)

Works with MS DOS microcomputers and supports more than fifteen voice synthesizers. Consists of fourteen modules that are both interactive and transparent to application software.

Computer Conversations, Inc., \$350, \$550

National Institute for Rehabilitation Engineering, C3601, \$650

Word-Talk for Apple

A word-processing program. Offers synthesized speech output and screen display. Can momentarily silence or turn off entirely the speech at any time. Can set rate of speech to three different levels.

Carolyn's, GW8220007, \$189

Speech Synthesizers

Speech synthesizers provide voice output of the information on a computer screen. These hardware attachments consist of either a peripheral device or a circuit card that is placed in the computer itself. They can be used with a variety of screen-reader software programs. Different models are compatible with different computers, feature male and female voices with adjustable tone and speed, and may be available in foreign languages.

Accent

Converts ordinary ASCII text into intelligible speech. Can speak in the text mode or the spell mode. Comes in different models for IBM PC, XT, and AT; IBM PS/2 computers or compatibles, and Toshiba to cover a wide range of cost and environmental requirements. Please call AICOM for the dealer nearest you.

AICOM Company, \$395-\$995

Artic TransPort

Portable external synthesizer. Has serial interface, text-to-speech algorithm, and rechargeable batteries. Can be used with Artic Business Vision or by itself with other screen access programs.

Artic Technologies, Model 611, 615, \$895, \$1,295

ASAP Classic

Includes ASAP (Automatic Screen Access Program) software and a speech synthesizer that fits into one of the slots on a standard XT- or AT-style computer.

LS&S Group, 251-ASAP-PC, \$795
MicroTalk, \$795

ASAP Lite

Includes ASAP (Automatic Screen Access Program) software and a portable battery-powered speech synthesizer that connects to any computer with a serial or parallel port. Works with microchannel, laptop, and notebook computers.

LS&S Group, 251-ASAP-SA, \$895
MicroTalk, \$895

Audapter

Connects to any computer able to send ASCII text over a standard serial or parallel interface. Can be used with talking screen-review programs.

Blazie Engineering, \$895

LS&S Group, 278-AU1, \$895

Personal Data Systems, Inc., \$895

Raised Dot Computing, Inc., \$895

CompuSight Speech Systems

Comes in three models. Apollo II is a self-contained speech synthesizer with internal 4-inch speaker. PCII Speech System is an internal half-card for 386 and 486 machines and comes with 4-inch external speaker. Juno Speech System is a battery-powered synthesizer that connects to the serial port of a laptop and comes with a 4-inch external speaker. All models feature six resident voices and adjustable inflection, tone, and speed. Some models can speak up to seven languages.

Electronic Visual Aid Specialists, \$695-\$895

DECtalk

A stand-alone box. Translates ASCII text files into high-quality speech. Offers a choice of nine voices and a range of speaking rates from 120-550 words per minute.

Blazie Engineering, \$1,195

Digital Equipment Corporation, \$1,195

Electronic Visual Aid Specialists, \$1,195

GW Micro, 8110-010, \$1,195

Henter-Joyce, Inc., \$1,195

LS&S Group, 40-DTC07-AA, \$1,195

National Institute for Rehabilitation Engineering, \$1,195

Personal Data Systems, Inc., \$1,195

DoubleTalk

Dual synthesizer design for Apple II computers. Translates text output into a male voice and is Slotbuster compatible. The LPC synthesizer can speak in a male or female voice and is compatible with software written for the Echo speech synthesizers.

Exceptional Teaching Aids, DTAP1, \$249.95

LS&S Group, 188-DT1000, \$249.95

Raised Dot Computing, Inc., \$250
RC Systems, Inc., DT1000, \$249

DoubleTalk PC

A half-size plug-in card. Requires IBM PC, XT, AT, and PS/2 models 25 and 30. Includes external speaker.

Blazie Engineering, DBL-TK, \$295
Exceptional Teaching Aids, DTPC1, \$279
Henter-Joyce, Inc., \$289
LS&S Group, 251-DT-PC, \$279
RC Systems, Inc., DT1002, \$279

DoubleTalk PC Professional

Same as DoubleTalk PC but with a deluxe speaker.
RC Systems, Inc., DT1010, \$289

Echo (MS-DOS based)

Echo MC is for the IBM PS/2 models 50 and 60. Echo 1000 is for the Tandy 1000 EX and HX. Comes with supporting software and an external speaker with volume control.

LS&S Group, 90-Echo-1000, 90-Echo-MC, \$149.95, \$199.95

Echo II

A circuit board that plugs into an available slot of an Apple IIe and IIgs. Compatible with most existing software programs.

American Printing House for the Blind, 1-70212-00, 1-07213-00,
\$136.15, \$144.15
Carolyn's, ECHOII, \$129.95
Don Johnston Developmental Equipment, Inc., C57, \$129
Echo Speech Corporation, \$129.95
GW Micro, 8110-006, \$140
Hartley Courseware, Inc., \$149.95
LS&S Group, 90-Echo-II, \$129.95
Raised Dot Computing, Inc., \$130

Echo LC

Interfaces to the Apple IIc and IIc Plus and the Macintosh LC through the modem port. Compatible with most existing software programs.

Carolyn's, ECHOLC, \$129.95

Don Johnston Developmental Equipment, Inc., C28, \$129

Echo Speech Corporation, \$129.95

GW Micro, 8110-007, \$150

Hartley Courseware, Inc., \$129.95

LS&S Group, 90-Echo-LC, \$159.95

Raised Dot Computing, Inc., \$130

Echo PC

A stand-alone speech synthesizer. Features an on-board microprocessor, a built-in speaker, text-to-speech firmware, serial interface, and a wall-mount transformer.

Echo Speech Corporation, \$129.95

GW Micro, 8110-011, \$129.95

LS&S Group, 90-ECHO-PC, \$129.95

Echo PCII

An IBM PC/compatible plug-in speech output board.

Carolyn's, ECHOPCII, \$139.95

Echo Speech Corporation, \$99.95

Hartley Courseware, Inc., \$179.95

LS&S Group, 90-Echo-PCII, \$139.95

Infovox

Available in both male and female voices and in different languages. Connects to serial port.

Personal Data Systems, Inc., \$1,295

Keynote GOLD

May be purchased with one or more of the following: MasterTouch screen-reading program, TouchTablet that provides a spatial understanding of the computer's screen, and Keysoft software package. Runs on IBM compatible computers. Available with speech options in French or Spanish.

HumanWare, Inc., \$1,545-\$2,495

LiteTalk

Portable speech synthesizer. Connects to a computer through the serial or parallel port. Can be used in conjunction with screen access software. Has built-in speaker and built-in battery.

LS&S Group, 251-LT-100, \$495

MultiVoice

A battery-operated version of DECTalk that attaches through a standard RS-232 port. Ten voices (male, female, child, custom) are available.

Access Technologies, Inc., \$1,475

Institute on Applied Technology, Children's Hospital, \$1500

Pointer Systems, Inc., \$1,600

Personal Vert II

Includes Vert screen access software, a high-speed internal or external speech synthesizer, Intercept keyboard-handling program, and the cursor-tracking program Track. Available in English, Spanish, or French.

TeleSensory, CV1A-01, 02, 03; CA4B-01, 02, 03, \$1,495, \$1,695

PROSE 4000

A full-size card that fits in IBM PC/XT/AT or compatibles or the PS/2 models 25 and 30. Converts ASCII text to speech in real time. Drives a speaker through an on-board amplifier and provides for external computer communications via RS-232 port.

Centigram Communications Corporation, \$1,750

ProVoice

Converts text to speech in two phases using a set of phonetic translation and pronunciation rules. Speaks through the standard internal speaker and supports a variety of sound accessories.

First Byte, \$595

RealVoice PC

Speech synthesizer hardware for IBM PC desktop and portable computers. Plugs into the computer serial port (a cable is included). Available in either male or female voice.

Adaptive Communication Systems, Inc., \$1,595-\$3,295

Pointer Systems, Inc., \$1,600

Slotbuster II

Multifunction interface card. Compatible with the Apple II, II Plus, IIe, and IIGS. Must be ordered with one or more options: Slotbuster speech synthesizer (\$39.95), parallel print port, serial printer port, modem port.

LS&S Group, 188-SB1010, \$149.95

RC Systems, Inc., SB1010, \$149.95

Sounding Board

Can be used with virtually any speech program designed to utilize a general-purpose synthesizer. Four different models to fit an IBM PC or different models of Toshiba.

Access Technologies, Inc., \$375

Arts Computer Products, Inc., \$395

ATR Computer Technology, \$400

Blazie Engineering, SDB, \$395

Carolyn's, GW8110001, \$389.95

GW Micro, 8110-001, 8110-002, 8110-003, 8110-008, \$395

LCI Systems, Inc., \$395

LS&S Group, 68-AF1000, \$395

National Institute for Rehabilitation Engineering, \$395

Speak-Out

Portable battery-powered external voice synthesizer with the same features as the Sounding Board. Both serial and parallel interfaces allow for compatibility with many types of computers.

GW Micro, 8110-009, \$640

Speaqualizer

A hardware attachment for some IBM PCs and compatibles. Enables the user to hear data being displayed on the video monitor. Requires no additional text-to-speech software so computer's memory is free for application programs.

American Printing House for the Blind, 1-07250-00, \$872

Speech Thing

A digital-to-analog speech synthesizer. The hardware component attaches in-line with the parallel printer port outside the computer and does not interfere with printer operation. Includes SmoothTalker text-to-speech software.

Covox, Inc., STPC-PO-273, \$99.95
Pointer Systems, Inc., \$150

SynPhonix

Models for IBM PC, XT, AT compatibles, IBM PS/2 microchannel, and the Toshiba laptop.

Artic Technologies, \$395-\$1,195

National Institute for Rehabilitation Engineering, \$395-\$1,095

Verbette Mark I and Mark II

Mark I is an IBM PC internal card. Mark II is a small serial-interfaced synthesizer that runs off a 9-volt battery.

Computer Conversations, Inc., \$329.95, \$399.95

Vert Pro

Includes Vert screen access software, human-sounding DECtalk circuit board, Intercept keyboard-handling program, and the cursor-tracking program Track.

TeleSensory, CP1A, \$1,795

Selective Bibliography, 1989-1993

General

Berliss, Jane R., and others, eds. Trace ResourceBook: assistive technologies for communication, control, and computer access. 1991-92 ed. Madison, WI: Trace Research and Development Center, Waisman Center, University of Wisconsin-Madison, 1991. 887p.

Closing the Gap. Resource directory: a guide to the selection of microcomputer technology for special education and rehabilitation. Closing the Gap, v. 11, Feb.-Mar. 1993: 31-223 (entire issue).

Espinola, Olga, and Diane Croft. Solutions: access technologies for people who are blind. Boston: National Braille Press, 1992. 215p.

McNulty, Tom, and Dawn M. Suvino. Access to information: materials, technologies, and services for print-impaired readers. Chicago: American Library Association, 1993. 162p.

Roatch, Mary A. High tech and library access for people with disabilities. Public libraries, v. 31, Mar.-Apr. 1992: 88-98.

Braille Displays, Embossers, and Translation Software--Evaluation

Andrews, David. Comments on Hot Dots and the Arkenstone Reader. Braille monitor, June 1991: 345-347.

Cantisani, Peter. ALVA braille display: a powerful tool for computer access. Technology update (Sensory Access Foundation), June 1991: 4-7.

Fischer, Juanita. The many features of MegaDots. Technology update, Feb. 1993: 4-8.

Gayzagian, Al. Something for everyone? a review of the Mountbatten braille [with a response from the manufacturer]. Raised Dot Computing newsletter, v. 10, May-June 1992: 9-12.

Leventhal, Jay D., Elliot M. Schreier, and Mark M. Uslan. Electronic braille displays for personal computers. *Journal of visual impairment and blindness*, v. 84, Oct. 1990: 423-427.

Leventhal, Jay D., Mark M. Uslan, and Elliot M. Schreier. A review of braille printers. *Journal of visual impairment and blindness*, v. 85, Oct. 1991: 346-350.

A mountain of braille: [the Everest embosser]. *Technology update*, June 1992: 1, 3-4.

Range of braille translation software. *Technology update*, Apr. 1992: 14-15.

Widening range of braille displays. *Technology update*, June 1990: 5-13.

Reading Machines--Evaluation

Carney, Carolyn Ann. Reading with ReadMan. *Technology update*, Dec. 1992: 3-6.

Converso, Lori, and Saba Hocek. Optical character recognition. *Journal of visual impairment and blindness*, v. 84, Dec. 1990: 507-509.

How scanners work. *Technology update*, June 1991: 11-14.

Kendrick, Deborah. The Optacon revisited. *Technology update*, Aug. 1992: 12-15.

McKinley, Janice. A review of the PC/KPR. *Technology update*, Aug. 1991: 7-14.

Nowakowski, Annette. A review of the Adhoc reading system. *Technology update*, Aug. 1992: 9-11.

Ogg, Harold C., and Marlene H. Ogg. *Optical character recognition: a librarian's guide*. Westport, CT: Meckler, 1992. 171p.

A perspective on OCRs: [interview with Ms. Debbie Cook]. *Technology*

update, Dec. 1990: 15-19; Feb. 1991: 17-22.

Schreier, Elliot M., and Mark M. Uslan. An evaluation of PC-based optical character recognition systems. *Journal of visual impairment and blindness*, v. 85, Mar. 1991: 131-135.

Uslan, Mark M., and others. A review of optical character recognition systems. *Journal of visual impairment and blindness*, v. 84, May 1990: 221-223.

What you should know about scanners. *Technology update*, June 1991: 9-11.

Screen Enlargers--Evaluation

Low-cost, large-print software. *Technology update*, Feb. 1990: 1, 3-6.

New horizons in magnification. *Technology update*, Feb. 1992: 1, 3-4.

Screen Readers--Evaluation

Chong, Curtis. JAWS. *Computer science update* (National Federation of the Blind in Computer Science), spring 1989: 7-11.

Chong, Curtis, and Steve Jacobson. JAWS: a comprehensive review. *Technology update*, June 1989: 6-10.

Crabb, Nolan. Take a look at Vocal-Eyes. *Braille forum*, v. 31, July-Aug. 1992: 31-34.

An interview with a user of IBM's new screen reader. *Technology update*, Oct. 1992: 9-14.

Lazzaro, Joseph. Speaking out about outSPOKEN. *Technology update*, Dec. 1990: 4-7.

Lazzaro, Joseph. Window Bridge: the first speech program for MS Windows. *Technology update*, Oct. 1992: 3-7.

Meyers, Andrea, and Elliot Schreier. An evaluation of speech access

programs. *Journal of visual impairment and blindness*, v. 84, Jan. 1990: 26-38.

Vocalize with Vocal-Eyes. *Technology update*, Apr. 1990: 6-8.

Whaley, Antoinette. Vocal-Eyes: clever title, neat features. *Technology update*, Dec. 1990: 7-11.

Speech Synthesizers--Evaluation

Chong, Curtis. Speech output with the Speaqualizer. *Technology update*, Oct. 1989: 14-17.

Edwards, Alistair D.N. *Speech synthesis: technology for disabled people*. London: P. Chapman Pub.; Baltimore, MD: Distributed by P. H. Brookes Pub. Co., 1991. 157p.

Norling, Deborah. The Accent speech synthesizers. *Technology update*, Dec. 1989: 4-8.

Range of new speech synthesizers. *Technology update*, Apr. 1991: 7-10.

Addresses of Sources

AbleTech Connection

P.O. Box 898
Westerville, OH 43081
(614) 899-9989

Access Technologies, Inc.

P.O. Box 2101
Decatur, AL 35602
(205) 351-1002
800-842-1308

Access with Ease, Inc.

P.O. Box 1150
Chino Valley, AZ 86323
(602) 636-9469

AccessAbility Technologies, Inc.

BAUM USA
17525 Ventura Boulevard
Suite #303
Encino, CA 91316-3843
(818) 981-2253
(818) 981-7124 Fax

Acrontech International, Inc.

5100 Main Street
Williamsville, NY 14221
(716) 854-3814
(716) 854-4014 Fax

ACS Technologies, Inc.

1400 Lee Drive, Suite 3
Coraopolis, PA 15108
(412) 269-6656
800-227-2922
(412) 269-6675 Fax

adaptAbility

P.O. Box 515
Colchester, CT 06415-0515
800-937-3482 Customer Service
800-243-9232 Orders
(203) 537-2866 Fax

Adhoc Reading Systems, Inc.

28 Brunswick Woods Drive
East Brunswick, NJ 08816
(908) 254-7300
(908) 254-7310 Fax

AI Squared

1463 Hearst Drive NE
Atlanta, GA 30319
(404) 233-7065
(404) 233-7059 Fax

AICOM Company

1590 Oakland Road
Suite #B112
San Jose, CA 95131
(408) 453-8251
(408) 453-8255 Fax

AJ Stationers

1327 Ashton Road
Hanover, MD 21076
(703) 803-6500
(703) 803-9029 Fax

**American Foundation for the Blind
Product Center**
100 Enterprise Place
P.O. Box 7044
Dover, DE 19903-7044
800-829-0500
800-676-3299 Fax

**American Printing House for the
Blind**
1839 Frankfort Avenue
Louisville, KY 40206
(502) 895-2405
800-223-1839
(502) 895-1509 Fax

American Thermoform Corporation
2311 Travers Avenue
City of Commerce, CA 90040
(213) 723-9021
(213) 728-8877 Fax

Ann Morris Enterprises, Inc.
890 Fams Court
East Meadow, NY 11554
(516) 292-9232
(516) 564-9692 Fax

Arkenstone, Inc.
1390 Borregas Avenue
Sunnyvale, CA 94089
(408) 752-2200
800-444-4443
(408) 745-6739 Fax

Artic Technologies
55 Park Street
Troy, MI 48083
(313) 588-7370
(313) 588-2650 Fax

Arts Computer Products, Inc.
33 Richdale Avenue
P.O. Box 604
Cambridge, MA 02140
(617) 547-5320
800-343-0095
(617) 547-5597 Fax

ATR Computer Technology
4420 Norledge Street
Kansas City, MO 64123
800-421-9775
(816) 483-8869 Fax

Berkeley Systems, Inc.
2095 Rose Street
Berkeley, CA 94709
(510) 540-5535
(510) 540-5115 Fax

Bernell Corp.
750 Lincolnway E
P.O. Box 4637
South Bend, IN 46634
(219) 234-3200
800-348-2225
(219) 233-8422 Fax

Blazie Engineering
105 East Jarrettsville Road Unit D
Forest Hill, MD 21050
(410) 893-9333
(410) 836-5040 Fax

Bossert Specialties, Inc.

P.O. Box 15441
Phoenix, AZ 85060
(602) 956-6637
800-776-5885

C Tech

2 North William Street
P.O. Box 30
Pearl River, NY 10965
(914) 735-7907
800-228-7798
(914) 735-0513 Fax

C. Beil Designs

5435 North Artesian Avenue
Chicago, IL 60625
(312) 275-3940

Carolyn's

P.O. Box 743
Brookfield, WI 53008-0743
800-648-2266
(414) 784-4487 Fax

Centigram Communications Corporation

91 East Tasman Drive
San Jose, CA 95134
(408) 944-0250
(408) 428-3732 Fax

Cleo, Inc.

3957 Mayfield Road
Cleveland, OH 44121
(216) 382-9700
800-321-0595
800-537-9880 Fax

Computer Conversations, Inc.

6297 Worthington Road, SW
Alexandria, OH 43001
(614) 924-2885

Contact East, Inc.

335 Willow Street
North Andover, MA 01845-5995
(508) 682-2000
(508) 688-7829 Fax

Covox, Inc.

675 Conger Street
Eugene, OR 97402
(503) 342-1271
(503) 342-1283 Fax

Dazor Manufacturing Corp.

4483 Duncan Avenue
St. Louis, MO 63110
(314) 652-2400
800-345-9103
(314) 652-2069 Fax

Demco, Inc.

4810 Forest Run Road
Madison, WI 53704
(608) 241-1201
800-356-1200
800-245-1329 Fax

Digital Equipment Corporation

Digital Drive
P.O. Box 9501
Merrimack, NH 03054-9501
(603) 884-5111
800-832-6277

**Don Johnston Developmental
Equipment, Inc.**
1000 North Rand Road
P.O. Box 639
Building 115
Wauconda, IL 60084-0639
800-999-4660
(708) 526-4177 Fax

Duxbury Systems
435 King Street
P.O. Box 1504
Littleton, MA 01460
(508) 486-9766
(508) 486-9712 Fax

Eagle Reading Aids
P.O. Box 35341
Tulsa, OK 74153-0066
(918) 663-4477
(918) 664-0309 Fax

Echo Speech Corporation
6460 Via Real
Carpinteria, CA 93013
(805) 684-4593
(805) 684-4593 Fax

Edmund Scientific Company
101 East Gloucester Pike
Barrington, NJ 08007
(609) 573-6250
(609) 573-6295 Fax

Edroy Products Company, Inc.
245 North Midland Avenue
Nyack, NY 10960
(914) 358-6600
800-233-8803

Electronic Visual Aids Specialists
16 David Avenue
P.O. Box 371
Westerly, RI 02891
(401) 596-3155
800-872-3827
(401) 596-3979 Fax

Enabling Technologies Company
3102 SE Jay Street
Stuart, FL 34997
(407) 283-4817
800-777-3687
(407) 220-2920 Fax

Eschenbach Optik
904 Ethan Allen Highway
Ridgefield, CT 06877
(203) 438-7471
(203) 431-4718 Fax

Exceptional Teaching Aids
20102 Woodbine Avenue
Castro Valley, CA 94546
(510) 582-4859

Eyetrionics
24C Maple Street
P.O. Box 252
Danielson, CT 06239
(203) 779-1076
(203) 779-1559 Fax

EZ Reader
3920 Central Avenue
St. Petersburg, FL 33711-1238
800-275-7232

First Byte

19840 Pioneer Avenue
Torrance, CA 90503
(310) 793-0610
(310) 793-0601 Fax

**Florida New Concepts Marketing,
Inc.**

P.O. Box 261
Port Richey, FL 34673-0261
(813) 842-3231
800-456-7097

Fordham Equipment Company

3308 Edson Avenue
Bronx, NY 10469-2694
(212) 379-7300

Fred Sammons, Inc.

P.O. Box 32
Brookfield, IL 60513-0032
(708) 325-1700
800-323-5547
800-547-4333 Fax

G.E. Miller, Inc.

540 Nepperhan Avenue
Yonkers, NY 10701
800-431-2924
(914) 969-3511 Fax

**General Business Machines
Corporation**

6053 Bristol Parkway
Culver City, CA 90230
(310) 649-9199
(310) 649-9177 Fax

Gracefully Yours, Inc.

12527 Ulmerton Road
Largo, FL 34644-2740
(813) 593-1010
800-331-2211

GW Micro

310 Racquet Drive
Fort Wayne, IN 46825
(219) 483-3625
(219) 484-2510 Fax

Hartley Courseware, Inc.

133 Bridge Street, Box 419
Dimondale, MI 48821
(517) 646-6458
800-247-1380
(517) 646-8451 Fax

Henter-Joyce, Inc.

10901-C Roosevelt Boulevard
Suite #1200
St. Petersburg, FL 33716
(813) 576-5658
800-336-5658
(813) 577-0099 Fax

Hexagon Products

P.O. Box 1295
Park Ridge, IL 60068-1295
(708) 692-3355

Highsmith Company, Inc.

W5527 Highway 106
P.O. Box 800
Fort Atkinson, WI 53538-0800
(414) 563-9571
800-558-2110
800-835-2329 Fax

Hoyle Products, Inc.
302 Orange Grove
Fillmore, CA 93015
(805) 524-1211
800-345-1950
(805) 524-5496 Fax

HumanWare, Inc.
6245 King Road
Loomis, CA 95650
(916) 652-7253
800-722-3393
(916) 652-7296 Fax

Independent Living Aids, Inc.
27 East Mall
Plainview, NY 11803
800-537-2118
(516) 752-3135 Fax

Innoventions, Inc.
5921 South Middlefield Road
Suite #102
Littleton, CO 80123-2877
(303) 797-6554
800-854-6554

**Institute on Applied Technology
Children's Hospital**
300 Longwood Avenue
Boston, MA 02115
(617) 735-6486

Interface Systems International
P.O. Box 20415
Portland, OR 97230
(503) 665-0965

**International Business Machines
Corporation**
Special Needs Systems
P.O. Box 1328
Boca Raton, FL 33429-1328
(407) 443-2000
800-426-2133

J.A. Preston Corporation
P.O. Box 89
Jackson, MI 49204
(517) 787-1600
800-631-7277
800-245-3765 Fax

KANSYS, Inc.
1016 Ohio Street
Lawrence, KS 66044
(913) 843-0351
800-279-4880

LCI Systems, Inc.
P.O. Box 30
2 North William Street
Pearl River, NY 10965-9998
(914) 735-7907
800-228-7798

Library Store, Ltd
7720 Wisconsin Avenue
Bethesda, MD 20814
(301) 652-8811
800-858-8117
(301) 654-4960 Fax

Lighthouse, Inc.
Low Vision Products
36-20 Northern Boulevard
Long Island, NY 11101
800-453-4923
(718) 786-0437 Fax

Lighthouse of Houston
3530 West Dallas
Houston, TX 77019
(713) 284-8433
(713) 527-8165 Fax

LS&S Group
P.O. Box 673
Northbrook, IL 60065
(708) 498-9777
800-468-4789
(708) 498-1482 Fax

Luxo Lamp Corp.
36 Midland Avenue
Port Chester, NY 10573
(914) 937-4433
800-222-5896
800-648-2978 Fax

Maddak, Inc.
6 Industrial Road
Pequannock, NJ 07440-1993
(201) 628-7600
800-443-4926
(201) 305-0841 Fax

Magnisight
P.O. Box 2653
Colorado Springs, CO 80901
(719) 634-4767
800-753-4767

**Massachusetts Association for the
Blind**
200 Ivy Street
Brookline, MA 02146
(617) 738-5110
800-682-9200 toll free in MA
(617) 738-1247 Fax

Maxi Aids
42 Executive Boulevard
P.O. Box 3209
Farmingdale, NY 11735
(516) 752-0521
800-522-6294
(516) 752-0689 Fax

Mentor O & O, Inc.
3000 Longwater Drive
Norwell, MA 02061
(617) 871-6950
800-992-7557
(617) 871-7785 Fax

Microsystems Software, Inc.
600 Worcester Road
Framingham, MA 01701
(508) 879-9000
800-828-2600
(508) 626-8515 Fax

MicroTalk
337 South Peterson Avenue
Louisville, KY 40206
(502) 897-2705
(502) 895-3022 Fax

National Association for Visually Handicapped

3201 Balboa Street
San Francisco, CA
(415) 221-3201

National Association for Visually Handicapped

22 West 21st Street, 6th Floor
New York, NY 10010
(212) 889-3141

National Institute for Rehabilitation Engineering

P.O. Box T
Hewitt, NJ 07421
(201) 853-6585
800-736-2216

Omnichron

1438 Oxford Street
Berkeley, CA 94709
(510) 540-6455

OMS Development

1921 Highland Avenue
Wilmette, IL 60091
(708) 251-5787

Optelec

4 Lyberty Way
P.O. Box 729
Westford, MA 01886
(508) 392-0707
800-828-1056
(508) 692-6073 Fax

Opteq Vision Systems

See: Tojek & Associates, Inc.

Personal Data Systems, Inc.

100 West Rincon Avenue
Suite #103
Campbell, CA 95008
(408) 866-1126
(408) 866-1128 Fax

Phillip Barton Vision Systems

3911 York Lane
Bowie, MD 20715
(301) 262-3665

Pointer Systems, Inc.

One Mill Street
Burlington, VT 05401
(802) 658-3260
800-537-1562

Raised Dot Computing, Inc.

408 South Baldwin
Madison, WI 53703
(608) 257-9595
800-347-9594
(608) 241-2498 Fax

Raymo Products, Inc.

212 South Blake
Olathe, KS 66061
(913) 782-1515

RC Systems, Inc.

121 West Winesap Road
Bothell, WA 98012
(206) 672-6909

Roberts Book Mark Company
3038 North Federal Highway
Times Square Building H
Fort Lauderdale, FL 33306
305-563-6155

Roudley Associates, Inc.
P.O. Box 608
Owings Mills, MD 21117
(410) 363-7049
800-333-7049
(410) 581-7064 Fax

S. Walters, Inc.
30423 Canwood, Suite 126
Agoura Hills, CA 91301
(818) 706-2202
800-992-5837
(818) 706-2206 Fax

Schamex Research
19443 Superior Street
Northridge, CA 91324
(818) 772-6644
(818) 993-2946 Fax

Science Products, Inc.
Box 888
Southeastern, PA 19399
800-888-7400
(215) 296-0488 Fax

Seeing Technologies, Inc.
7074 Brooklyn Boulevard
Minneapolis, MN 55429
(612) 560-8080
800-462-3738
(612) 560-0663 Fax

Selsi Company, Inc.
40 Veterans Boulevard
Carlstadt, NJ 07072
(201) 935-0388
(212) 473-4451
(201) 935-5851 Fax

Sense-sations
919 Walnut Street
Philadelphia, PA 19107
(215) 627-0600
800-876-5456
(215) 922-0692 Fax

Sensory Aids Corporation
See: HumanWare, Inc.

SkiSoft Publishing Corporation
1644 Massachusetts Avenue
Suite 79
Lexington, MA 02173
(617) 863-1876
800-662-3622
(617) 861-0086 Fax

Street Electronics Corporation
See: Echo Speech Corporation

Syntha-voice Computers, Inc.
125 Gailmont Drive
Hamilton, Ontario,
CANADA L8K 4B8
(416) 578-0565
800-263-4540
(416) 578-0625 Fax

Talking and Visual Aids
8136 Appoline
Detroit, MI 48228
(313) 935-1266

TASH, Inc.
Technical Aids & Systems for the Handicapped, Inc.
Unit 1, 91 Station Street
Ajax, Ontario
CANADA L1S 3H2
(416) 686-4129
(416) 686-6895 Fax

Tech-Optics International Corporation
59 Hanse Avenue
Freeport, NY 11520
(516) 546-7480
800-678-4277
800-678-0002 Fax

TeleSensory
455 North Bernardo Avenue
P.O. Box 7455
Mountain View, CA 94039-7455
(415) 960-0920
800-227-8418
(415) 969-9064 Fax

Tojek & Associates, Inc.
17355 Mierow Lane
Brookfield, WI 53045
(414) 784-4979
(414) 784-4487 Fax

Touch Turner Company
443 View Ridge Drive
Everett, WA 98203
(206) 252-1541

TurboPower Software
P.O. Box 49009
Colorado Springs, CO 80949-9009
(719) 260-6641
(719) 260-7151 Fax

Vis-Aids, Inc.
102-09 Jamaica Avenue
P.O. Box 26
Richmond Hill, NY 11418
(718) 847-4734
800-346-9579
(718) 441-2550 Fax

Vision Loss Consultants
1357 East David Road
Kettering, OH 45429-5703
(513) 294-2433
(513) 294-2433 Fax

Visuaide 2000, Inc.
955, rue D'Assigny, Suite 143
Longueuil, Quebec
CANADA J4K 5C3
(514) 463-1717
(514) 463-0243 Fax

VTEK
See: TeleSensory

Xerox Imaging Systems
Adaptive Technology Products
9 Centennial Drive
Peabody, MA 01960
(508) 977-2000
800-248-6550
(508) 977-2437 Fax

Zygo Industries, Inc.
P.O. Box 1008
Portland, OR 97207-1008
(503) 684-6006
800-234-6006
(503) 684-6011 Fax

Compiled by
Carol Strauss
Reference Section
September 1993

73

76

The reference circulars listed below are available free on request from:

Reference Section
National Library Service for the Blind
and Physically Handicapped
Library of Congress
Washington, DC 20542

REFERENCE CIRCULARS

Assistive Devices for Reading, 1993

Bibles, Other Scriptures, Liturgies, and Hymnals in Special Media, 1993

Blindness and Visual Impairments: National Information and Advocacy Organizations, 1990

Braille Instruction and Writing Equipment, 1986

Building a Library Collection on Blindness and Physical Disabilities: Basic Materials and Resources, 1990

Deaf-Blindness: National Organizations and Resources, 1993

Guide to Spoken-Word Recordings: Foreign Language Literature and Instruction, 1988

Guide to Spoken-Word Recordings: Popular Literature, 1987

Information for Handicapped Travelers, 1987

Learning Disabilities: National Information and Advocacy Organizations, 1990

Parents' Guide to the Development of Preschool Children with Disabilities: Resources and Services, 1992

Reading Materials in Large Type, 1987

Sources of Audiovisual Materials about Handicapping Conditions, 1985

Sources of Braille Reading Materials, 1985

Sports, Outdoor Recreation, and Games for Visually and Physically Impaired Individuals, 1991

BIBLIOGRAPHIES

A series of bibliographies is also published by the Reference Section. The following titles are available free on request:

Accessibility: Designing Buildings for the Needs of Handicapped Persons, 1983

Assistive Technology: A Selective Bibliography, 1992

Disability Awareness and Changing Attitudes, 1991

Library and Information Services to Persons with Disabilities, 1989

Mobility and Mobility Aids for Visually Handicapped Individuals, 1984

75⁷⁸