

# Assistive Technology (AT)



The Assistive Technology (AT) program provides adaptive devices and technical consulting to consumers and employers to aid those who are legally blind in daily activities, improving their independence and functionality in home, classroom, and workplace settings.

MCB's AT program provides adaptive equipment training and deployment, focusing on software and device training such as screen readers that turn regular computers into talking personal computers. AT also includes the process used in selecting, locating, and using technology to perform activities of daily living independently or with assistance.

## Key Technologies Supported by MCB:

#### Screen Magnification Technology

Those with residual vision benefit from the use of video magnifiers and computer screen magnification software. If the consumer is able to use functional vision, they may benefit from the use of a Closed-Circuit Television System (CCTV) or screen



magnification software.

# **Closed-Circuit Television**

A Closed-Circuit Television (CCTV) is an electronic magnification system consisting of a video camera, reading tray, and large video monitor. CCTVs enlarge text and objects for easy viewing of books, magazines, food containers, prescription bottles, and anything you need to access for independence and employment. Material is placed on the reading tray beneath the camera, the desired magnification level and other adjustments are selected, and the text is viewed on the television screen. Alternatively, portable handheld video magnifiers provide flexibility for reading tasks that might not be conveniently placed under a fixed desktop camera.



# For more information: Call: 800-392-6450 Email: mcbinfo@mass.gov Visit: mass.gov/mcb



## **Optical Character Recognition (OCR)**

Optical character recognition (OCR) converts typed, clearly handwritten, or printed text into digitally read text using a standalone device, a camera added onto a computer system with supporting software, a video magnification device, or a smart device app. This technology tends to be portable and versatile, used for reading correspondence, printed news, financial documents and statements, business cards, printed data, text of computer printouts, or any suitable documentation.



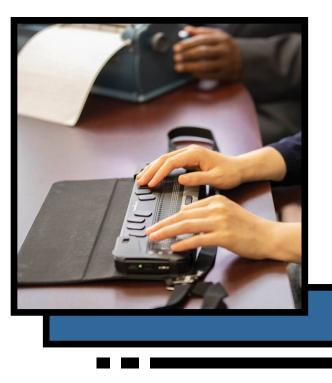
#### **Screen Magnification** Software

Screen magnification software enlarges and enhances the contrast of text and graphics on digital devices, supporting various operating systems (Windows, Macintosh, Linux, iPhones, Androids, and others). The consumer can magnify the size of text and graphics to a level that is most comfortable for working with their applications, helping to gain full access to computers, software, information, and the internet.

#### **Screen Readers and** Voice Technology

One of the most powerful and cost-effective adaptive technologies currently available, the screen reader turns a computer into an accessible tool for the consumer by reading aloud text displayed on screens. These tools facilitate email, internet browsing, and database and spreadsheet management.





## **Braille Refreshable Displays** and Embossers

Refreshable braille displays and embossers work with screen readers to access a computer and the internet just like a sighted computer user reads a monitor. A person who is DeafBlind may use braille embossers and displays to assist with day-to-day communication and computer access for work, school, or home independence. A braille embosser and translation software can be used to "print" hard-copy braille from computer documents for a wide variety of applications.