

Just Your Type

Alternative Keyboard Options

Simon Technology Center

a project of PACER Center



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The information contained in this book is current as of May, 2005. This listing is not comprehensive, and the availability and price of listed items are subject to change.

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Just Your Type: Alternative Keyboard Options

Alternative keyboards have been created to meet the needs of individuals for whom standard keyboards are difficult or impossible to use. Alternative keyboards usually differ from standard keyboards in some respect such as size, shape, layout, design, or function. People with limited use of their hands and arms as well as individuals with visual or cognitive disabilities may find it easier to use an alternative keyboard or keyboarding method. Often an alternative keyboard will provide individuals with special needs greater efficiency, control, and comfort when keyboarding.

This booklet provides an overview of keyboard alternatives. The content of this booklet is not comprehensive, and the availability and price of listed items is subject to change. If you would like further information on alternative keyboarding options, please contact the Simon Technology Center, a project of PACER Center



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HARDWARE

Alternative Keyboards

Compact or Mini Keyboards

Compact keyboards are smaller than standard keyboards because they have fewer keys and less space between each key. Compact keyboards are a popular choice for typists who use one hand since they shorten the reach to distant keys. Some compact keyboards are designed with smaller key sizes for young children or people with small hands. Mini keyboards may also be useful to individuals who use mouth sticks or other pointing devices to access the keyboard.



Compact or Mini Keyboards Chart

Product	Features	Vendor
Datalux Space Saver Keyboard \$100-\$160 (Windows)	Compact size comes in flat, angled, or desktop styles.	Datalux Corp. Tel: 800-DATALUX www.datalux.com
Little Fingers Contact vendor for pricing. (Windows/Mac)	Smaller key size and spacing for small hands.	Datadesk Technologies Tel: 888-446-3222 www.datadesktech.com
Low Profile Keyboard \$85 (Windows)	Compact 101-style keyboard measures 5.5" x 11.5"	Infogrip Tel: 800-397-0921 www.infogrip.com
Frog Pad Keyboard \$169 (Windows)	One-handed mini keyboard with ergonomic 17 key layout measures 3" x 5". Bluetooth wireless options.	Enable Mart Tel: 888-640-1999 www.enablemart.com
Mini Wireless Keyboard \$55 (Windows)	88-key footprint keyboard	Fentek Industries Tel: 800-639-0710 www.fentek-ind.com
Touchstream Mini-Keyboard \$220 (Windows/Mac)	Flat touch sensitive mini-keyboard ideal for one-handed, one-finger typists gesture mouse control features.	Fentek Industries Tel: 800-639-0710 www.fentek-ind.com



Large Keyboards

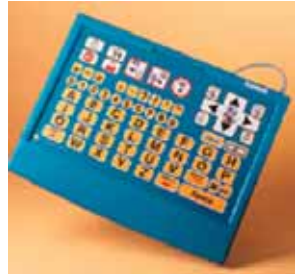
People with limited motor skills may benefit from an oversized keyboard with larger keys and more space between the keys. The larger keys provide a bigger target area. Many large keyboards also offer customized layouts and adjustable pressure sensitivity. (See also programmable keyboards.)

Large Keyboards Chart

Product	Features	Vendor
BigKeys \$169-\$185 (Windows/Mac)	Full-featured keyboard with keys 4 times bigger than a standard keyboard. QWERTY or ABC layout, color or black and white keys.	Greystone Digital, Inc. Tel: 800-249-5397 www.bigkeys.com
Intellikeys Keyboard \$400 (Windows/Mac)	Large programmable flat keyboard, standard keyboard overlays have large keys, can control mouse from the keyboard.	Intellitools Tel: 800-899-6687 www.intellitools.com
Discover Board \$500 (Windows/Mac)	Large programmable flat keyboard, standard keyboard overlays have large keys, can control mouse from the keyboard.	Madentec Limited Tel: 877-623-3682 www.madentec.com

Programmable Keyboards

Programmable keyboards can be customized to so that letters, numbers, and even pictures can be added to the keyboard overlay. They can be larger in size than a standard keyboard, allowing for a larger target area. Many programmable keyboards can also be used to control mouse functions.



Programmable Keyboards Chart

Product	Features	Vendor
IntelliKeys \$400 (Windows/Mac)	Large keyboard with a flat membrane. Comes with 6 standard overlays, but user can adapt key size, color, or shape to create custom overlays.	IntelliTools, Inc. Tel: 800-899-6687 www.intellitools.com
Discover Board \$500 (Windows/Mac)	Large keyboard with a flat membrane. Comes with 5 standard overlays, with the option to create custom overlays. Features talking keys and software to control the mouse.	Madentec Limited Tel: 877-623-3682 www.madentec.com

Ergonomic Keyboards

Ergonomic keyboards are designed to minimize fatigue and discomfort of the arms and hands while promoting productivity. They are often recommended for individuals with repetitive strain injuries such as

carpal tunnel syndrome.



Ergonomic keyboards come in a wide variety of shapes and sizes and often feature split keyboards, adjustable parts, and remappable keyboard layouts.

Ergonomic Keyboards Chart

Product	Features	Vendor
Microsoft Natural Keyboard Elite \$40 (Windows)	Split, gently sloped design allows placement of hands, wrists, and forearms in a natural position for greater comfort. Built-in wrist support.	Microsoft Corp. Tel: 800-426-9400 www.microsoft.com
Comfort Keyboard \$350 (Windows/Mac)	Three sections, each section can be adjusted to suit the needs of the user.	Comfort Keyboard Co. Tel: 414-431-4622 www.comfortkeyboard.com
Kinesis Contoured Keyboard \$240 (Windows/Mac)	Contoured design separates the keyboard into 2 concave sections, or key wells, to accommodate different finger lengths and shorten reach to distant keys.	Kinesis Corp. Tel: 800-454-6374 www.kinesis-ergo.com
Maltron Adapted Keyboards (Windows) Two-handed keyboard: \$450	Maltron adapted keyboards provide ergonomic positioning of the fingers to reduce fatigue.	Solutions for Humans Tel: 415-989-3400 www.sforh.com

Keyboard Accessories

Keyguards

Keyguards fit over the top of a keyboard and have holes that fit over the keys. They can increase typing accuracy by reducing accidental keystrokes. Keyguards are useful for people with tremor, weakness, or other motor difficulties. Keyguards can be custom made or purchased ready-made with an accompanying keyboard.



Vendors	
Inclusive TLC Tel: 800-462-0930 www.inclusiveTLC.com	Solutions for Humans Tel: 800-953-9262 www.sforh.com
Turning Point Therapy and Technology, Inc. Tel: 877-608-9812 www.turningpointtechnology.com	Note: Prices vary according to keyboard style.

Keyboard Protectors

A keyboard protector, sometimes called a moisture guard or keyboard skin, is a clear form-fitting cover for the keyboard. This kind of cover protects the keyboard from dust, dirt, liquids, food crumbs, and other contaminants. A keyboard protector should fit snugly and be designed specifically for the brand of keyboard it covers. The keyboard cover may be fastened to the keyboard with double-sided tape or Velcro.

Vendors	
Protect Keyboard Covers Tel: 800-669-7739 www.protectcovers.com	Fentek Industries Tel: 800-639-0710 www.fentek-ind.com
Keyskin Keyboard Protector Tel: 800-874-6391 www.compucover.com/ksinfo.html	Viziflex Tel: 800-307-3357 www.viziflex.com
Note: Prices vary according to keyboard style.	

Keytop Labels

Adhesive keytop labels stick to individual keys on a keyboard to make keys more visible for individuals with visual impairments. Some labels feature enlarged letters, alternative color schemes or writable surfaces so computer users can customize their keyboards.

Vendors	
Don Johnston, Inc. Tel: 800-999-4660 www.donjohnston.com	Fentek Industries Tel: 800-639-0710 www.fentek-ind.com
Hooleon Corp. Tel: 800-937-1337 www.hooleon.com	DataCal Enterprises Tel: 800-223-0123 www.datacal.com
Note: Prices vary according to keytop styles.	

SOFTWARE

On-Screen Keyboards

An on screen keyboard is a virtual image of a keyboard that can be accessed using a mouse, touch window, head/eye pointer, or switch input device. The size, position, layout, and color scheme can be modified to suit the user's preferences. Many on screen keyboard software programs include word prediction, word expansion, and other macro (shortcut) capabilities that enhance productivity. On screen keyboards are particularly useful to individuals with physical disabilities.

On-Screen Keyboards Chart

Product	Features	Vendor
Onscreen \$100 (Windows)	Includes mouse-click control functions, visual modifications, text-to-speech and word prediction.	Innovation Management Group, Inc. Tel: 800-889-0987 www.IMGPresents.com
SofType \$295 (Windows)	Includes mouse-click control functions, abbreviation expansion, and word prediction.	Origin Instruments Tel: 972-606-8740 www.orin.com
Wivik3 REP \$350 (Windows)	Includes mouse-click control functions, word prediction and abbreviation expansion. Scanning version available.	Prentke Romich Tel: 800-262-1984 www.prentrom.com
Click-N-Type Free (Windows)	Includes mouse-click control functions.	www.lakefolks.org/cnt
KeyStrokes \$250 (Mac)	Onscreen keyboard for Mac. Comes with 5 resizable layouts. Includes mouse-click control functions.	Solutions for Humans Tel: 415-989-3400 www.sforh.com

Word Prediction Software

Word prediction software allows users to type only the first few letters of each word and then choose from a list of words that start with those letters. Each time a letter is typed, a prediction list appears giving a number of words starting with that letter. The user then selects the desired word from the list, and the program types it into the word processing application. Predictions are based on the letter(s) typed, personal preference, and how frequently words are used.

Word prediction software reduces the number of keystrokes necessary to enter text on the computer, increase written productivity and reduce fatigue from keyboarding. Most programs also include abbreviation expansion (see the word prediction software chart on the following page).

Word Prediction Software Chart

Product	Vendor
Co:Writer 4000 \$325 (Windows/Mac)	Don Johnston, Inc. Tel: 800-999-4660 www.donjohnston.com
SoothSayer Word Prediction \$150 (Windows)	Applied Human Factors, Inc. Tel: 888-243-0098 www.ahf-net.com
Telepathic 2000 \$255 (Windows)	Madentec Tel: 877-623-3682 www.madentec.com
Word Q \$185 (Windows)	Quillsoft Ltd. Tel: 866-629-6737 www.wordq.com

Abbreviation Expansion Software

Abbreviation expansion software expands short abbreviations created by the user into phrases, sentences, or paragraphs. It is particularly helpful when typing repetitive information, such as addresses, greetings, or common phrases. Abbreviation expansion reduces the number of keystrokes needed to input text. Abbreviation expansion features are commonly included with word processors, on screen keyboards and word prediction programs.

Abbreviation Expansion Software Chart

Product	Vendor
1. Shortkeys/\$20 (Windows) 2. Shortkeys Lite/Free (Windows)	Insight Software Solutions www.shortkeys.com
Typelt4Me \$27 (Mac)	www.typeit4me.com

Keyboard Accessibility Features

Control Features

Control features, included in both the Microsoft Windows and Macintosh operating system software, help users improve keyboard control. For instance, the *StickyKeys* feature in Windows allows people who are unable to hold down two or more keys at one time, such as “Shift + P,” to get the same result by typing one key at a time. *FilterKeys* tells the computer to ignore brief or repeated keystrokes.

To learn more about Microsoft Windows accessibility features, log on to www.microsoft.com/enable

For information on Macintosh Access features, visit the Apple Web site: www.apple.com/disability/easyaccess.html

Keyboard Layout

QWERTY

The layout of the keys on a standard keyboard is referred to as a QWERTY layout because the first six keys on the left side of the keyboard spell out QWERTY.

ABC

The keys on an ABC keyboard are in alphabetical order from left to right.

DVORAK

Dvorak keyboard layouts have the most frequently used characters in the center of the keyboard. Windows system software contains three Dvorak layouts: one for typists who use both hands, one for the left hand, and one for the right hand. Keyboard keytops need to be relabeled to correspond with the Dvorak keyboard configuration.

For information on changing a keyboard layout, visit the Microsoft and Macintosh accessibility sites listed above or contact the Simon Technology Center at PACER Center.

Keyboarding Tutorial Software

One-handed

Product	Features	Vendor
Five-Finger Typist \$70 (Windows/Mac)	One-handed touch-typing software program for the standard keyboard. Suitable for child/adult.	SoftDawn Distributed in U.S. by Mayer-Johnson, Inc. Tel: 800-588-4548 www.mayer-johnson.com
One-Hand Keyboarding \$150 (Windows)	Software tutorials for typists with one hand or typists with missing fingers. Teaches touch typing for standard keyboard.	Teachers' Institute for Special Education Tel: 561-967-5818 http://special-education-soft.com
Keyboarding by Ability Individual Editions \$150 (Windows)		
One Hand Typing and Keyboarding Resources CD \$50 (Windows)	This CD includes a typing tutorial manual and some one-handed typing activities for the computer.	About One Hand Typing and Keyboarding www.aboutonehandtyping.com

Visually Impaired

Product	Features	Vendor
Talking Typer for Windows \$79 (Windows)	Talking typing tutorial with speech feedback. Various skill levels.	American Printing House for the Blind Tel: 800-223-1839 www.aph.org
Learn Keys: Verbal Keyboard Feedback \$15 (Windows)	A keyboard exploration program with speech feedback.	American Printing House for the Blind Tel: 800-223-1839 www.aph.org

Special Learning Needs

Product	Features	Vendor
Type to Learn 3 \$30 Grades 3 and Up (Windows/Mac)	Customized features— modify speed of drill, intensity, vocabulary, test modifications	Sunburst Communications Tel: 800-786-3155 www.sunburst.com
Type to Learn Jr. \$29 Grades K-2 (Windows/Mac)	Basic program that teaches young learners how to locate keys, does not teach touch typing method	Sunburst Communications Tel: 800-786-3155 www.sunburst.com
Type to Learn Jr. New Keys for Kids Grades 1-3 \$70 (Windows/Mac)	Teaches use of home row keys, in addition to keyboard awareness	Sunburst Communications Tel: 800-786-3155 www.sunburst.com
Custom Typing Online Training Program \$4/month (Windows/Mac)	Customized keyboarding lessons. Comprehensive assessment of users' alternate input methods for typing/text entry.	Custom Typing Training www.customtyping.com
UltraKey \$40 (Windows/Mac)	Talking instructions, animated demonstrations, and imbedded videos teach correct hand positioning and posture.	Bytes of Learning Tel: 800-465-6428 www.bytesoflearning.com

KEYBOARDING RESOURCES

Resource Listings

www.tifaq.com/keyboards.html Frequently asked questions and information about keyboarding ergonomics and equipment to promote healthy typing practices.

www.aboutonehandtyping.com Lilly Walter's site offers a variety of resources about learning to type one-handed with or without adaptive equipment. Includes a one-handed typing tutorial.

www.keyboardingresearch.org This web page includes many interesting research reports on how and when to start teach children typing skills. Also offers reviews on various typing software programs for children and free online typing tutorials.

<http://atto.buffalo.edu/registered/ATBasics/AdaptingComputers/KeyboardOptions> The Assistive Technology Training Online Project (ATTO) at the University of Buffalo maintains this web site on alternative keyboard options. The page provides a link to a list of keyboard vendors.

PACER CENTER

The Simon Technology Center, a project of PACER, is dedicated to making the benefits of technology accessible to children and young adults with disabilities. Parents, professionals, and consumers serve as partners with the Center.

PACER Center is a statewide nonprofit organization that serves families of children and adults with disabilities. PACER (Parent Advocacy Coalition for Educational Rights) is a coalition of 18 disability organizations.

PACER is staffed primarily by parents of youth with disabilities and by persons with disabilities. PACER Center carries out the philosophy of “parents helping parents” through workshops, individual assistance, and written information.



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