

Assistive Computer Technology for Windows NT

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Accessibility Options (Win 95/NT)	1
Bookshelf 98 (Win)	5
Dragon Dictate Classic 3.0 (Win)	7
Dragon NaturallySpeaking Deluxe 3.0 (Win)	11
Half Qwerty (Win)	19
Inspiration 5.0 Educational Edition (Win)	21
JAWS 3.2 for Windows 95/NT	25
JAWS 3.2 with Internet Explorer 4.01	41
JAWS 3.0 with Netscape 3.0	45
JAWS v 3.20.19 Excel 97 (Win 95)	47
JAWS 3.2 with Word 97, version 8.0	57
Kurzweil 1000 3.0 (Win)	63
Kurzweil 3000 2.0 (Win 95/NT)	67
MAGic NT 5.1 (NT)	71
Microsoft Word 97 (Win)	73
textHelp! Ver 2.10 (Win)	77

Accessibility Options (Win 95/NT)

Publisher:

Microsoft Corp.
One Microsoft Way
Redmond, WA 98052-6399
(206) 635-7245
<http://www.microsoft.com/enable>

Retail Cost: Included in OS

System Requirements:

The Accessibility Options are found in the Windows 95/NT Control Panel which is accessed through **Settings** on the **Start** menu. The Accessibility Options are included in the default Windows 95/NT installation.

Description:

The Accessibility Options include five types of adaptive system support: Keyboard, Sound, Display, Mouse, and General. Note that there is no Display Tab on the NT Control Panel.

Recommended Uses:

The Options provide system support for: persons with physical difficulty in using the keyboard; persons who have visual disabilities and need larger print, stronger contrasts or larger mouse pointer; persons who are deaf or hard of hearing and need to see sound events; and, persons using a serial device to connect to the computer. What is singular about this cluster of operating system support is the fact that previously, almost all of these features had to be purchased from third party vendors.

Basic Use:

1. Enter **Ctrl-Escape** to bring up the **Start** menu.
2. Double Click on **Accessibility Options**. The Accessibility Properties window appears.
3. Click on a properties tab to go to a support feature.

The Keyboard Properties Tab

Three features: StickyKeys, FilterKeys, ToggleKeys are available; each has a settings window which is reached by clicking on a Settings button.

- **StickyKeys**

Use sticky keys to latch the special keys (Ctrl, Alt) or the shift keys. When one of these keys is pressed, it latches and releases only when a second key is

pressed, e.g., Ctrl-P. Tapping shift or a special key twice latches it down (e.g., to type many asterisks); tapping it again will unlatch it if that option has been set. This feature is used when the keyboard user is unable to hold two keys down at the same time.

The keyboard shortcut to turn sticky keys on is to tap the **Shift** key 5 times. There are additional options which may be selected for the StickyKeys feature: turn off StickyKeys when two keys are depressed at the same time (automatically turning the feature off for a regular typist); make a sound when a special key is pressed, and a very important feature, the ability to show a visual display of whether a special key is latched or not (not available in NT). Having the visual display on the screen is useful information for persons with short term memory deficits. Right clicking on this reminder brings up an option to adjust settings.

- **FilterKeys Properties Tab**

There are two types of options which may be set from the main FilterKeys property sheet. The one most frequently used is the second radio button option. This controls the function of RepeatKeys and SlowKeys.

1. RepeatKeys

This option will override settings on the Keyboard control panel. It is possible to turn off keyboard repeat entirely, or is it possible to slow down the rate at which the key repeat function repeats. Students with slow visual processing speeds benefit from a slowed key repeat function because it is easier to track the cursor. Students who are unable to quickly lift their hands off a key will benefit from having the repeat delay increased (a finger can stay on a key a bit longer before a key repeat begins).

2. SlowKeys

The SlowKeys function allows the user to set a time delay before a keystroke is registered. This in effect can create a virtual keyguard for the student who strikes many keys while moving over the keyboard to the target keystroke. No keystroke will be registered until a key has been depressed for a minimum length of time.

The keyboard shortcut which turns FilterKeys on is to hold down the **Right Shift** key for eight seconds. This option will not work unless the **Use shortcut** box is selected.

- **ToggleKeys**

Choosing this function invokes a tone when one of the special locking keys is **pressed (Caps Lock, Scroll Lock, Num Lock)**.

The Sound Properties Tab

At the current time, only one of the two options works: **SoundSentry**. Using this option generates visual warnings when a system sound occurs. From its Settings window, it is possible to have alerts for windowed programs or full screen text programs (not available in NT).

For Windowed Programs

Flash active window or flash the desktop

For Full Screen Text Programs

Flash display, characters, or border

The ShowSounds feature will display captions for speech and sounds generated by an application which has been designed to work with this feature. Currently this feature is not widely supported.

The Display Properties Tab (not available in NT)

From the front of this panel it is possible to invoke **High Contrast** color scheme if an application is "smart" about this feature. The **Settings** window allows the user to choose to invoke the shortcut key, **Left Alt-Left Shift-PrintScreen** and to set specialized high contrast color schemes.

It is possible to set everything to **white on black** or **black on white**, or specialized color sets. Many color sets come with standard, large and extra-large font choices.

The Mouse Properties Tab

Only one set of functions is controlled by this tab: the ability to use the numeric keypad to move the mouse pointer. It is possible to modify cursor speed as well as to use Ctrl to speed up mouse movement and **Shift** to slow down mouse movement.

The General Control Panel Tab

- **Automatic Reset**

From this level it is possible to set a time limit on keyboard inactivity; when that limit is reached, all accessibility functions automatically turn off.

- **Notification**

It also is possible to ask for warning messages when features turn on (not available in NT), or to set a sound to occur when a feature is turned on and off.

- **SerialKey Devices**

For students needing to connect serial communication devices to a computer, this access panel allows the user to set which serial port to use and what baud rate to use.

Notes:

Installation:

The Accessibility Options control Panel is part of the default Windows installation. If it is not installed, do so by going to the Windows Setup or Windows NT Setup tab of the Add/Remove Programs Control Panel. Check the box next to Accessibility Options and click OK. If the files are not on the local or network drive, you may have to insert the CD when asked.

Bookshelf 98 (Win)

Publisher:

Microsoft Corporation (Headquarters)
One Microsoft Way
Redmond, WA 98052-6399
(800) 426-9400
www.microsoft.com

Retail Cost: \$19.95**System Requirements:**

- Multimedia PC or compatible with 486SX or higher microprocessor, 8 Mb of RAM, 10 Mb of available hard disk space, Double speed CD-ROM drive, audio board, and VGA 256 color display.
- Microsoft Windows 95 or NT Workstation 4.0 or later.
- Microsoft Mouse or compatible pointing device.
- Headphones or speakers.

Description:

Microsoft Bookshelf CD-ROM reference library provides easy access to the following types of information: definitions and synonyms, quotations, maps, articles on specific topics, illustrations, photographs, animations, and audio recordings. The Bookshelf contains electronic versions of 7 popular volumes useful for writing. The American Heritage Dictionary, Bartlett's Familiar Quotations, The Concise Columbia Dictionary of Quotations, The Concise Columbia Encyclopedia, The Hammond Atlas, Roget's II Electronic Thesaurus, and The World Almanac and Book of Facts 1993.

Recommended Uses:

Bookshelf is recommended for enhancing any student's writing. Word meanings, quotations, and synonyms may improve writing style while information from the atlas and almanac can provide accurate facts.

Basic Use:

1. Choose Bookshelf from the Microsoft Multimedia group in the **Start** menu.
2. Click the **Bookshelf tips** text for instructions on how to navigate through Bookshelf.

Notes:

Dragon Dictate Classic 3.0 (Win)

Publisher:

Dragon Systems
320 Nevada Street
Newton, MA 02160
(800) 825-5897
<http://www.dragonsys.com>

Retail Cost: \$149.00**System Requirements:**

Windows 3.x: 12 Mb RAM, 36 Mb hard disk storage
Windows 95: 16 Mb RAM, 36 Mb hard disk storage
Windows NT: 16 Mb RAM, 36 Mb hard disk storage

All systems require Microsoft Windows 3.x or newer, or Windows NT, 486/66MHz or faster, 3.5 inch, high density drive.

All systems require a sound board, either Dragon Systems certified DSP audio board (note, this board does not work with Windows NT), Creative Labs Sound Blaster 16, Media Vision Pro Audio Studio 16, or Microsoft Windows Sound System.

Description:

The DragonDictate Classic program is a speaker dependent, discrete utterance, speech recognition system. It has an active vocabulary size of 30,000 words. Text can be dictated at around thirty to thirty-five words per minute.

Recommended Uses:

This program is recommended for persons with repetitive strain injury or moderate to severe physical disabilities.

Basic Use:

DragonDictate must be individually trained by each user. Training is accomplished through use of the Tutorial program. Training of the basic vocabulary can be completed in one to two hours. Speech-recognition is always used in combination with other programs; often, word processors. When using DragonDictate with a word processor, the following steps are taken:

1. Load DragonDictate with the user's voice profile.
2. Load the word processor.

3. Activate the microphone by pressing the numeric keypad + key.
4. Begin speaking with a short pause between each word.
5. If the word selected by DragonDictate is incorrect say "**Choose**" and the **number** of the desired word in the selection box.
6. If the desired word does not appear in the selection box, say "**Begin Spell Mode**" and begin spelling the word using military letter designators (Alpha, Bravo, Charley, etc.). Generally, the correct word will be identified after the first one or two letters have been spoken. When the desired word appears, say "**Choose**" and the number of the word.

Intermediate Use:

Users can insert punctuation marks by saying "**period**" or "**comma**" and capitalize words by using the command "**shift key**." Dragon Dictate includes voice macros for a variety (MS Word, WordPerfect, Lotus, etc.) of popular programs. Once installed, these macros provide easy voice activation of common commands like "end of line," "bold text," "delete word" and so forth.

DragonDictate provides a **Mouse Grid** navigation system to move the mouse pointer. Saying "**MouseGrid**" displays a 3x3 grid with nine numbered squares which cover the entire screen. Saying the number of a square "refocuses" the grid to the selected square. Repeating the selection process moves the mouse pointer to the desired object by a process of approximation. Saying "**click**" selects the object.

Saying "**MouseGrid Window**" opens the Mouse Grid in the current window. Additional fine tuning of the mouse pointer can be accomplished by using a limited set of mouse movement commands. Say "mouse (up, down, left or right)" followed by a number between 1 and 10, will move the mouse a few pixels in the selected direction. For example, saying "mouse up 9" would move the mouse pointer up about one-eighth of an inch.

The following table lists the text-to-speech commands available with DragonDictate.

Read That	Reads the currently selected text.
Read Word	Reads the current word.
Read Line	Reads the current line.
Read Page	Reads the current page.
Read Document	Reads the entire document.
Read E-mail	Reads the entire text of the E-mail document.

Notes:

The recognition software uses acoustic word models for both male and female voices to identify the sound of a word and statistical language models to establish the likelihood of the word in a given context. Each time the user dictates a word, the system updates the models with information on the user's speech pattern. Therefore, the system constantly improves its recognition of the user's voice. This is true however, only if the user corrects each unrecognized word. If unrecognized words are saved into the user's voice file the accuracy of recognition can severely degrade over time.

Network:

It is not recommended to run Dragon Dictate from a server. It is possible to keep voice files on a server but performance suffers from this configuration. Performance might also be degraded due to different hardware producing a different signal than the program has been trained to recognize.

Installation:

For NT installations, always login as Administrator for that computer. Be sure to have the Install Key for the program, then insert the CD into the drive and wait for the install program to start. If your PC does not have autorun enabled, you will have to run setup either from the run command or by browsing in the Explorer. Follow the onscreen directions to install the program.

Most problems with Dragon Dictate stem from a poor signal to the program. This may be caused by any of the following: incompatible sound card, a bad microphone, microphone not matched to sound card which may need a booster pack installed, poor voice quality such as not loud enough or inconsistent speech production. High quality microphones are recommended to compensate for these problems.

Dragon NaturallySpeaking Deluxe 3.0 (Win)

Publisher:

Dragon Systems
320 Nevada Street
Newton, MA 02160
(800) 825-5897
<http://www.dragonsys.com>

Retail Cost: \$695.00 approx.**System Requirements:**

Microsoft Windows 95 or newer, or Windows NT, 133 MHz or faster, 32 MB RAM for Windows 95, 48 MB RAM for Windows NT (64 MB recommended).

All systems require a sound board, Currently, the following soundcards have been tested and certified for Dragon NaturallySpeaking:

- Sound Blaster 16 PnP (Creative Labs, Inc.)
- Sound Blaster AWE32™ PnP (Creative Labs, Inc.)
- Sound Blaster AWE64™ PnP (Creative Labs, Inc.)
- Sound Blaster AWE64™ Gold PnP (Creative Labs, Inc.)
- Audiotrix™ Pro (MediaTrix Peripherals, Inc.)
- Ensoniq™ SoundScape™ VIVO 90 (must be purchased directly from Ensoniq, Corp.)
- Ensoniq™ Audio PCI (32-bit) (Ensoniq Corp.)
- ExpertMedia Med 3240 with OPTi chip set (Expert Media)
- Turtle Beach™ Tropez Plus (Turtle Beach Systems).

Description:

The Deluxe version also includes Dragon Dictate. For more information on Dragon Dictate, see the Dragon Dictate guide. Dragon NaturallySpeaking is a speaker dependent, continuous speech recognition system. The active vocabulary size is 30,000 words with a 230,000-word dictionary which allows for accurate word prediction and spelling. Text can be dictated at around one hundred words per minute. The system accommodates multiple voice profiles per computer.

Recommended Uses:

This program is recommended for persons with repetitive strain injury or moderate to severe physical disabilities that impair keyboard usage. Users must be able to produce consistent speech output.

Basic Use:

Each user must individually train Dragon NaturallySpeaking. Training is accomplished through use of the General Training program. Creating a voice profile and completing the training process takes about 45 minutes. Unlike previous versions of Dragon Dictate which were always used in combination with other programs, often, word processors, NaturallySpeaking works within its own dedicated word processing environment and is intended for text dictation rather than applications control. When using NaturallySpeaking, the following steps are taken:

1. Load NaturallySpeaking from the Programs menu.
2. Activate the microphone by pressing the numeric keypad + key.
3. Begin speaking clearly and distinctly in short phrases with brief pauses between each phrase.
4. If a phrase or word selected by NaturallySpeaking is incorrect say "**Correct**" and the **word or phrase** to be corrected.
5. If the correct phrase or word appears in the suggestion list, say "**Choose**" and then the number of the desired phrase or word in the selection box.
6. If the desired phrase or word does not appear in the selection box, say "**Spell That**" and begin spelling the word using the letters of the alphabet. Generally, the correct phrase or word will be identified after the first one or two letters have been spoken. When the desired phrase or word appears, say "**Choose**" and the number of the phrase or word.

Intermediate Use:

Users can insert punctuation marks by saying the name of the mark, (i.e. "**period,**" "**comma,**" "**question mark**"). A variety of options exist for selecting text. Saying "**Select**" then **word, line, paragraph** or **document** selects a portion of text which can then be edited or formatted in a number of ways. (See attached Quick Reference Guide)

Reading Text

Listening to text that has been dictated provides a useful method for identifying misrecognition errors. NaturallySpeaking provides two methods for listening to dictated text:

To play back digitally recorded speech of your voice dictating text, select the text to be read (i.e. say "select previous paragraph") then say "play that back." Please note that this option only works for text that has not been previously saved and then reloaded.

To play back computer generated speech of any text in the NaturallySpeaking composition window, select the text to be read (i.e. say "select previous paragraph") then say "read that." This option works for any text file.

Topic Builder

In order to improve recognition accuracy, NaturallySpeaking provides a Topics option which extracts, analyzes and stores specialized vocabulary drawn from documents you've submitted for review. Topics are specific to each user and include one "general purpose" Topics list and as many other specialized vocabulary lists as needed.

To use this option, select **Topic Builder** from the **Tools** menu and select any MS Word document or plain text file which contains the specialized vocabulary you wish to include. **Topic Builder** scans the document, determines word and language usage patterns and rebuilds the **Topics** vocabulary.

Mouse Grid

NaturallySpeaking provides a **Mouse** Grid navigation system similar to that used in previous and current versions of Dragon Dictate to move the mouse pointer. Saying "**MouseGrid**" displays a 3x3 grid with nine numbered squares which cover the entire screen. Saying the number of a square "refocuses" the grid to the selected square. Repeating the selection process moves the mouse pointer to the desired object by a process of approximation. Saying "click" selects the object.

Saying "**MouseGrid Window**" opens the Mouse Grid in the current window. Additional fine-tuning of the mouse pointer can be accomplished by using a limited set of mouse movement commands. Say "mouse (up, down, left or right)" followed by a number between 1 and 10, will move the mouse a few pixels in the selected direction. For example, saying "mouse up 9" would move the mouse pointer up about one-eighth of an inch.

Notes:

Speaking distinctly and in short phrases will dramatically improve recognition performance. Saying "Thank you for your letter" brief pause "inviting me to the opera" brief pause "next Saturday night" will work better than saying the whole sentence. The Deluxe edition supports a larger vocabulary, macros, multiple topics and Command Wizard. It includes both Dragon Dictate (for hands free computer control) and Naturally Speaking (for continuous text dictation). At the present time, these two programs are

not well integrated and should be considered separate applications. Naturally Speaking Preferred Edition **is** a multi-user version available for \$229.00. It has a smaller vocabulary and does not support multiple topics. Naturally Speaking Standard Edition is a single user version which does not support reading or playback of dictated text. It is available for about \$109.00. Version 3.0 includes the following new features and improvements. Note that not all features are available in all editions.

What's new in version 3.0?

- A New User Wizard guides you when you first use Dragon NaturallySpeaking and each time you create a new user.
- BestMatch™ technology, which provides improved recognition on systems with faster processors and larger memories, is available in all editions.
- NaturallyMobile™ lets you dictate into portable recorders and transcribe your dictation into Dragon NaturallySpeaking. NaturallyMobile is available in the Preferred and Professional editions.
- NaturalText™ support for dictation in other applications is now available in all editions.
- NaturalWord™ modules are now available in all editions. NaturalWord can now provide NaturallySpeaking functions in both Microsoft Word 97 and Corel® WordPerfect® 8.
- NaturalWord for Microsoft Word 97 includes Natural Language Commands, which provide a natural way of controlling Word 97.
- Preferred and Professional editions now let you simulate pressing any key or key combination by voice.
- Preferred and Professional editions include a performance tuner that lets you tune Dragon NaturallySpeaking to maximize your computer's configuration.
- Select-and-Say™ has been improved to provide more ways to revise your words.
- The Quick Tour has been enhanced with new dictation instructions.
- This version works with Windows 98.
- Many additional improvements and fixes have been made.

NaturallySpeaking

At a glance, here are all the voice commands grouped according to when you can say them.

Global Commands

Microphone Off
Go to Sleep/Wake Up
Click (Menu or Button Name)
Move Left/Right/Up/Down 1-20
Move Left/Back/Right/Forward 1-20 Characters
Move Up/Down/Back/Forward 1-20 Lines
Select Next/Forward/Previous/Back Character
Select Next/Forward/Previous/Back Lines
Delete Next/Forward/Previous/Back Character
Delete Next/Forward/Previous/Back 1-20 Characters
Undo Last Action
Undo That
Copy All to Clipboard
Paste That
Switch to Next/Previous Window
Switch to Next/Previous Window
Switch to NaturallySpeaking
What Can I Say
Give Me Help
Give Me Help on (Topic)

Editing Commands

Go to Top/Bottom
Move Left/Back/Right/Forward/a word
Move Left/Back/Right/Forward/ 1-20 words
Move Left/Back/Right/Forward/ a paragraph
Move Left/Back/Right/Forward/ 1-20 paragraphs
Move to/Go to
 Top/Start/Beginning/End of line/Paragraph
 Document/Selection
Select Word/Line/Paragraph/Document
Select Next/Forward/Previous/Back Word
Select Next/Forward/Previous/Back 1-20 words
Select Next/Forward/Previous/Back Paragraph
Select Next/Forward/Previous/Back 1-20 Paragraphs
Set Font (Face/Size/Style)
 face Arial, Courier, Courier New, Times,

Times New Roman

size = 4-120

style = Bold, Italics, Plain, Plain Text,
Regular, Underline

Dictation Commands

New Line/Paragraph

Tab Key

All Caps

All Caps On/Off

Caps

Caps On/Off

No Caps

No Caps On/Off

No Space

No Space On/Off

Recorded Speech and Text Playback Commands

Play That Back/Read That

Play Back/Read

Line/Paragraph/Document/Window/to Here/from Here

Correction Commands

Scratch That

Correct That

Correct text

Select text

Select Again

Spell that abc

All Caps That/Selection

Cap That/Selection

No Caps That/Selection

Correction Dialog Box Commands

Choose 1-10

Select 1-10

Select Line

Select Next/Forward/Previous/Back Word/Character

Select Next/Forward/Previous/Back 1-20 Words/Characters

Move Left/Back/Right/Forward a Word/Character
Move Left/Back/Right/Forward 1-20 Words/Characters
Move to Top/Start./Beginning/Bottom/End of Line
Go to Top/Bottom
Go to Top/Start/Beginning/Bottom/End of Line
Cut That/Selection
Delete That/Selection
Delete Next/Forward/Previous/Back 1-20 Words/Characters
abc = Letters a-z, numbers 0-9 apostrophe, dash, hyphen, space bar, Cap,
question mark, slash
other punctuation marks (say with a brief pause)

Using Naturally Speaking with Other Applications

Say:

Copy All to Clipboard
Switch to Previous Window
Paste That

Network:

It is not recommended to run Dragon Naturally Speaking from a server. Even moving voice files from one computer to another requires a special sequence of steps.

Installation:

For NT installations, always login as Administrator for that computer. Be sure to have the Install Key for the program, then insert the CD into the drive and wait for the install program to start. If your PC does not have autorun enabled, you will have to run setup either from the run command or by browsing in the Explorer. Follow the onscreen directions to install the program.

Most problems with Dragon NaturallySpeaking stem from a poor signal to the program. This may be caused by any of the following: incompatible sound card, a bad microphone, microphone not matched to sound card which may need a booster pack installed, poor voice quality such as not loud enough or inconsistent speech production. High quality microphones are recommended to compensate for these problems.

Half Qwerty (Win)

Publisher:

The Matias Corporation
178 Thistle Down Boulevard
Rexdale, Ontario
Canada M9V 1K1
416-749-3124
www.dgp.toronto.edu/matias

Retail Cost: \$ 395.00**System Requirements:**

Windows 95 operating system; also available for Mac and for Windows 3.1

Description:

This small program allows the user to type one-handed. Its key feature is that when the user types a letter with the space bar pressed, a letter equivalent to key position on the other side of the alpha keyboard appears.

Recommended Uses:

This simple mirrored keyboard concept provides a working environment for a user who types with the left hand or right hand. A testimonial article in Macworld (August 1992) stated that someone new to HalfQwerty, but very familiar with touch typing, could type 15 words per minute after 15 minutes of use. It is suggested that prior learning facilitates transfer to mirrored keystroke use.

This program is not recommended for persons with cognitive disabilities who would find it difficult to relearn prior typing patterns.

Basic Use:

For example, to type the word "type," tap the "t" key, then hold down the Space Bar with the left thumb and tap the "t" key. A "y" appears on screen. Still holding down the Space Bar, tap the "q" key to generate a "p." Release the Space Bar and tap "e." The word "type" has been entered.

Notes:

The program does not work in Windows NT. The Web site is informative, and the 1996 research paper, "One-Handed Touch Typing on a QWERTY Keyboard," is an excellent example of material structured to take advantage of the capability of the Web to support hypertext and graphics ([www.dgp.toronto.edu/people/ematias/papers/hci96/#fn2] 12/3/96).

Inspiration 5.0 Educational Edition (Win)

Publisher:

Inspiration Software Inc.
7412 SW Beaverton Hillsdale Highway
Suite 102
Portland, OR 97225
(800) 877-4292
www.inspiration.com

Educational Cost \$89.00

System Requirements:

386 processor or higher, 8 MB RAM, Windows 95, VGA or better video

Description:

Inspiration is an application that assists users to express thoughts effectively by integrating easy-to-use diagramming and outlining. Concepts entered can be viewed as a chart or as text by easily switching from one view to the other.

Inspiration is based on the visual creativity concepts of mind-mapping and clustering. Mind-mapping comes from the work of Tony Buzan and his book, *Use Both Sides of Your Brain*. Mind-mapping is used for memory retention, note taking, and creative thinking. Clustering is a creative writing technique presented by Dr. Gabriele Rico in her book, *Writing the Natural Way*. Clustering is non-linear, visual and has a free form style that assists the user in associating thoughts and reducing the barriers to creative thinking.

Recommended Uses:

Inspiration can be used for brainstorming and creating a visual representation (diagrams, charts and plans) of thoughts through the use of symbols that hold each concept and associated linking ideas. In text, the same concepts and ideas can be represented through outline topic levels. The program design allows for easy organizing, rearranging, prioritizing and adding of details, which enable the user to create a dynamic document.

Basic Use:

The following activity will take the user through initial steps of creating a visual outline.

Main Idea and Sub-Categories

enter: The Role of Pets
click on: an arrow in the shape palette

type: a source of income
click on: The Role of Pets
click on: an arrow in the shape palette
type: provides company

To Do Rapid Fire

press: enter (from the keypad)
type: for children
press: enter
type: for the sick
press: enter
type: for the elderly
press: enter

To Create Different Shapes

click on: provides company
click on a shape from shape palette

To Delete Links

click on: arrow from Role of Pets to Source of Income
press: delete key

To Draw Links

select: The Role of Pets
position pointer on diamond-shaped handles at the top
click and drag the link to the Source of Income symbol
(to delete link, select it and delete)

To Edit Diagram or Outline

click and drag items anywhere

Adding Text to Link

type: As mentioned in the news

To Change Text Font and Style

select: text in any box
go to: the FORMAT menu

select: FONT
select: font choice

For Rushwriting

select: any shape
double click: upper left corner rectangle, write notes

To View on One Page

from VIEW menu: choose "fit to window"

To See in Outline Format

from VIEW menu: choose outline

To Print on One Page

choose from FILE menu

Notes:

The most recent version of Inspiration will export files in html format. If the user has Inspiration 4.0, the most recent update is downloadable from the Inspiration Web site. (www.inspiration.com/updatewin.html)

JAWS 3.2 for Windows 95/NT

Publisher:

Henter-Joyce, Inc.
11800 31st Court North
St. Petersburg, FL 33716-1805
(800) 336-5658
<http://www.hj.com>

Retail Cost: \$ 795/1495

(See Notes section for more
Purchase Information and
Software Maintenance
Agreement information)

System Requirements:

To use JAWS for Windows, version 3.2, you need:

- A personal computer that will run the Microsoft Windows® 95 operating system or later, or the Microsoft Windows NT® Workstation 4.0 or later.
- If Eloquence, the free software synthesizer for JFW software will be used, a Windows 95 or Windows NT compatible sound card is necessary. If Eloquence is not used, a JFW compatible hardware synthesizer such as the DECtalk Express is required.
- 30MB of available hard disk space required.
- VGA or higher-resolution video adapter (Super VGA 256-color recommended).

As with most systems, the faster the processor and the more memory your computer has the better the performance of your computer and our product.

JFW 3.2 for Windows 95 is a true 32-bit program, and will not work in the Windows 3.1x environment. For the convenience of those who need speech access in the Windows 3.1x environment, JFW 2.0 is also included on the installation CD.

JAWS supports Microsoft Word under Microsoft Windows 95 and Microsoft Windows NT. When using Microsoft Windows NT, Service Pack 4 or later is required. For system requirements for Microsoft Word, refer to the Microsoft Word documentation. For most complete Web access, MS Internet Explorer (IE) 4.01 must be used. This version of IE is on the JFW 3.2 distribution CD.

Description:

JAWS for Windows is a screen reader that uses the numeric keypad for its basic reading functions. A number of interactive hot key commands are available to change settings easily; these generally are prefixed by the **Insert** key and then a letter, number or function key **from the alpha side of the keyboard**.

There are two particularly strong features in JAWS which help the user:
Verbosity Level and Help.

1. There are three levels of verbal assistance provided to the user: a lot (beginner), some (intermediate) and little (advanced). The default full verbosity level is very informative for the new user.
2. The extensive help functions in JAWS for Windows are well developed. The on-line help for JAWS is rich, and there is included an additional level of help: context-sensitive help.

Extensive information about the Windows environment is included with the JAWS documentation. A developed scripting language also comes with JAWS so that advanced users may configure JAWS for unique applications or customize an existing application configuration.

Basic Commands:

Working with Context Sensitive Help

JAWS has a powerful on-demand Help feature that provides verbal information and/or instructions for a current task. At any time:

- use **Insert F1** to hear screen sensitive help—useful for learning windows.
- use **Insert F1,F1** to bring up application-specific help window in major applications: e.g., Word.
- use **Insert H** to hear JFW hot key commands and/or context-sensitive, application-specific help.
- use **Insert W** to hear Windows keyboard commands.

Working with Keyboard Help Mode

JAWS supports a user-exploration mode. This function, called the Keyboard Help Mode, is toggled on by **Insert-One** (from the number row on the alpha portion of the keyboard). When this function is turned on, all letter keys echo their identity, and all command sets, e.g., **Insert V**, do not actually perform a function, but instead are identified and their function described. This mode is toggled off by entering **Insert-One**.

About the JAWS Interface

JAWS uses the numeric keypad as its keyboard base for special reading commands. Two cursors are monitored: a JAWS cursor and PC cursor.

The JAWS cursor is directly linked to the Microsoft Windows mouse pointer. Like the mouse pointer, it is possible to move around windows with the JAWS cursor while the PC cursor remains at its current location. Likewise, the JAWS cursor stays stationary when the PC cursor moves and remains in

a fixed location until activated. As in the case of the mouse pointer the JAWS cursor is not affected when you type.

The PC cursor is directly linked to keyboard operations. To activate the PC cursor, press **Numpad Plus**. To activate the JAWS cursor, press **Numpad Minus**. Only the PC cursor or the JAWS cursor can be active at any one time.

It is possible to toggle between the two cursors, and it is also possible to route one cursor to the other cursor. **Insert Minus** routes JAWS to the PC cursor. **Insert Plus** routes the PC cursor to the JAWS cursor.

Interactive reading is also possible by using the standard arrow keys. There are two types of commands in JAWS: the majority are reading commands issued from the numeric keypad, but there also are interactive settings commands issued from the alpha keyboard.

How JAWS Settings are Managed

Basic screen reader settings such as voice pitch and rate, type of keyboard announcement, etc., are accessible through a menu bar in the JAWS Settings Window. Use **Insert J** to bring up the JAWS application window. (Although many functions available through the menus can be configured by hot key commands.) There are five menu options:

1. **File** (use to have JAWS start first, to change from full to laptop keyboard, or to exit the JAWS program)
2. **Voices** (use to change speech rate; unchanged from Ver. 1)
3. **Utilities** (to access Macro Editor or Configuration Wizard—for advanced use)
4. **Language** (use to change languages, if installed, or to change synthesizers, if installed)
5. **Help** (Contains good information: JFW Help Topics, Quick Reference, What's New, Customizing JAWS [for advanced use], a selection for how to get technical support, and an option listing the user's JFW version number and serial number). A copy of the user license agreement is also accessible through the Help menu options.

Refreshing the Screen

Sometimes JAWS does not seem to read properly, and when this is suspected, refreshing the screen display with the JAWS command **Insert Escape** will usually restore normal reading function.

How to Open a Menu

1. Tap the **Alt** key and then tap the first letter of the menu option. Once the **Alt** key has been tapped, it is possible to arrow across through the main menu options.
2. Move down in the menu with the **Down** arrow key.
3. Tap the **Enter** key after hearing the desired topic announced to open its settings box.

Interactive Hot ke^{ys} from the Alpha Number Row

Insert-1 Toggles the keyboard help on or off.

Insert-2 Toggles through the keyboard echo function: characters, words, or none.

Insert-3 Use this before entering an application command that is identical to a JAWS command; JAWS will ignore the command.

Insert-4 Toggles to standard or active graphics mode. Use active graphics mode if JAWS does not read all tool bar buttons.

Insert-5 Reads color of text at cursor.

Insert-6 Hot key to bring up the Configuration Manager.

Insert-7 An advanced command to work with types of window classes.

Insert-8 Brings up Keyboard Manager, an advanced component. The Keyboard Manager allows you to create application specific key map files. To create a key map file for a specific application, start the Keyboard Manager from the hot key. After you start the application, press **Insert+8** to start the Keyboard Manager.

Insert-9 Brings up Frame Manager, an advanced component.

Insert-Zero Brings up JAWS Script Manager, an advanced component.

Interactive Hot Keys from the Alpha Keyboard

Insert B Read all of dialog box in Tab order. This allows the user to understand what is in a dialog box before attempting to Tab through its topic area.

Insert C in some applications will read word in context (e.g., spell check).

Insert F Identify font name, size and attribute of text at active cursor.

Control Insert F Brings up JAWS Find dialog.

Insert H Context-sensitive hot key application-specific help is verbalized.

Insert E In a dialog box or special window, announces what button will be selected if **Enter** is tapped.

Insert J Bring JAWS window forward. If JAWS is minimized, this will maximize the window; if JAWS is open but covered, this will bring the window forward.

Insert F4 Unload JAWS.

Insert F6 Minimize all applications on the desktop.

Insert R Restrict action of JAWS cursor. If this is turned on, JAWS will read only in the active child window. When restriction is toggled off, JAWS cursor can read anywhere on screen display.

Insert S Toggle through screen echo settings.

Insert T Read title bar of window.

Insert V Brings up Adjust JAWS Verbosity list box. Tapping the Space Bar toggles through verbosity levels of selected item in list box. Specific verbosity levels may be set for user preference, graphics, ANSI characters, Braille, screen echo, typing echo, and mute synthesizer.

Insert W Speaks general Windows help.

Speech Pad Minus Turn on JAWS Cursor.

Speech Pad Plus Turn on PC Cursor. The PC cursor tracks the insertion point or the highlighted selection cursor.

Insert Up Arrow Read Current Line.

Up Arrow Read Prior Line.

Down Arrow Read Next Line.

Left Arrow Read Prior Character.

JAWS Cursor Speak Prior Character.

PC Cursor Select prior icon, select prior menu item, or move insertion point to the prior character.

Right Arrow Read Next Character.

JAWS Cursor Speak next character.

PC Cursor Select next icon, select next menu item, or move insertion point to the next character.

Speech Pad 5 Read Current Character.

Insert Left Arrow Read Prior Word.

Insert Right Arrow Read Next word.

Insert Speech Pad 5 Read Current Word.

Insert Speech Pad 5 (pressed twice within a half second) Spell Current Word.

Page Up Move Up One Screen or to Top of Window.

JAWS Cursor Move to top of active application or child window depending on the setting for JAWS cursor restriction. (Information about cursor restriction is presented elsewhere in this chapter.)

PC Cursor Move insertion point up one screen.

Page Down Move Down One Screen or to Bottom of Window.

JAWS Cursor Move to bottom of active application or child window depending on the setting for JAWS cursor restriction. (Information about cursor restriction is presented elsewhere in this chapter.)

PC Cursor Move insertion point down one screen.

End Move to the End.

JAWS Cursor Move to the end of text on the current line or to the last graphics on current line.

PC Cursor Performs the End function for the application. For example, it could move the insertion point to the end of text on the current line or to the last item in a list box.

Home Move to the Beginning.

JAWS Cursor Move to the beginning of text on the line or to the first graphics on the line.

PC Cursor Performs the Home function for the application. For example, it could move the insertion point to the beginning of text on the current line or to the first item in a list box.

Insert Home Speak From the Left Edge of the Window to the Cursor.

Insert Page Up Speak From the Cursor to the Right Edge of the Window.

Insert End Read Top Line of Window.

Insert Page Down Read Bottom Line of Window.

Insert Delete Speak the Coordinates of the Active Cursor.

Insert Minus Route (move) the JAWS Cursor to the Location of the PC Cursor.

Insert Plus Route (move) the PC Cursor to the Location of the JAWS Cursor. This moves the insertion point or selection cursor to the location of the JAWS cursor and is equivalent to a single click of the left mouse button.

Insert Escape Refresh Screen.

Delete Delete character at cursor; does not announce character deleted; instead announces the new character at the cursor.

Alt Delete Announce active cursor position (in pixels).

Insert Delete Announce PC cursor position in row and column position.

Alt **Insert** Toggle between insert and overwrite editing modes.

Alt Down Arrow Read dialog prompt.

Insert 3 (from alpha) Pass next command through to application.

Plus Invoke PC cursor.

Minus Invoke JAWS cursor.

Minus (tapped twice) Invoke invisible cursor from either PC or JAWS Cursor.

Additional Interactive Commands

Insert F11 Say Taskbar

Insert F12 Say System Tray

Control Shift H Say hotkey for current control focus.

Insert Control Down Arrow Say Help window.

Insert Shift Down Arrow Say selected text.

Insert Tab Say window prompt and text.

Insert E Say default button of dialog box.

Intermediate Use:

How to Hear All Dialog Options in Settings Box

1. Hold down the **Insert** key and tap the b key. JAWS will announce the entire contents of the box in the order that the **Tab** key will take. Current settings are not announced.

How to Navigate with Tab Key Through a Dialog Box

1. Tap the **Tab** key to navigate forward through options.
2. **Shift Tab** will navigate backward through options.
3. JAWS will announce each topic box and its current setting.
4. Use the **Arrow** keys to move up and down within the topic box to hear other possible settings. Each setting is automatically selected as it is read and automatically de-selected if the arrow is moved off the selection.
5. Once the right setting for the topic is selected, resume with the Tab key to move to the next topic box.
6. If a **scroll bar** is announced in a dialog box, the **Right** and Left arrows will move the **scroll bar** selector point. For example, a scrollbar is used to set speech rates and volume.
7. A **check box** can be selected or de-selected by tapping the **Spacebar**.

Selecting Text

Key commands for selecting text in Windows applications are listed elsewhere in the training guide. Refer to them for more information. What follows is one way to select two lines of text and read them before deciding to delete, move or copy the text.

1. Type one or two sentences so that text appears on two lines.
2. Make sure the PC cursor **is** active by tapping the **Insert Del** key to check status.
3. Move the cursor to the beginning of the first line of text.
4. Hold down the Shift key and tap the **End** key to select text to end of line. The text will be read.
5. Still holding down the **Shift** key, tap the **Down** arrow key to select the next line of text. The text will be read.
6. Text can be de-selected by tapping the **Slash(/)** key on the numeric keypad.

Copying Selected Text To Another Position In A Document.

1. **Enter Control C** to copy selected text to the clipboard.
2. Move the cursor to another position in the open document.
3. Enter **Control V** to place the copied text.

Deleting Selected Text

Once text has been selected, enter **Control X**.

Moving Selected Text To Another Position In A Document

When text has been cut, move cursor to new position in document and enter **Control V**.

Formatting Text Once It Has Been Selected

The following keyboard shortcuts will format selected text:

Control B	Bold
Control U	Underline
Control Shift Z	Remove formatting and return text to normal

Advanced Use:

How to use the JAWS cursor like a Mouse Pointer

The JAWS cursor can be used like a mouse pointer with the mouse keys that are described below. To move the Mouse Pointer, use speech pad keys:

Slash (/) Single Left Mouse Click on speech pad.
This selects the item at the JAWS cursor.

Slash (/) twice in a second, Double Left Mouse Click.
This chooses the item at the JAWS cursor.

Insert Slash (/) Drag an Object on the Desktop.
Use the JAWS cursor to point to the object, press **Insert** and then **Slash (/)** to lock the mouse pointer on the object, then use arrow keys to drag it. Press **Insert Slash (/)** to release the drag command.

Asterisk Right Mouse Click on speech pad.

Restricting Movement of the JAWS Cursor

Insert R Turn JAWS Cursor Restriction On or Off.

If several application windows are on the desktop, it is possible for them to overlap or totally cover one another. This means that parts of several windows could be visible around the active application window. The PC cursor stays within the active window, which means it will not read information from the surrounding windows. The JAWS cursor also stays within the active window.

The restriction setting does not affect the movement of the PC cursor. When restriction is turned on, the JAWS cursor is restricted to the active section of

the screen where it is currently located. If it is in a dialog box when restriction is turned on, it can only read the active dialog option. When using the JAWS cursor restriction, in order to ensure that the cursor is being restricted to the proper section of the desktop, it is best to do the following:

1. Route the JAWS cursor to the location of the PC cursor with **Insert Minus**.
2. Turn on JAWS cursor restriction with **Insert R**.

How to use the JAWS Configuration Manager

The Configuration Manager contains a Set Options menu. When you choose a Set Options menu item, a dialog opens. The Configuration Manager includes the following menu options: User, Text Processing, Window Classes, Graphics and Symbols, Cursor, Keyboard, Braille, and Advanced. These dialogs enable you to configure your applications to your own specifications. Use the hotkey **Insert** (alpha keyboard) 6, or

1. Press **Insert J** to activate the JAWS application.
2. Press **Alt U** to open the Utility menu item.
3. Press C to open to Configuration Manager.

Settings led by Configuration Manager

Using the command for context-sensitive help, **Insert F1**, when the focus is on an element in a configuration dialog, will cause JAWS to speak a help message regarding the nature of the element (e.g., typing interrupt), its function, and its default setting.

- **User Options**

These include typing echo, screen echo, verbosity level, typing interrupt, reading interrupt, key repeat and Insert key mode.

- **Text Processing**

These include punctuation mode, filter repeat characters, number processing, list item, mixed case processing, dictionary processing, speak window type first, speak window state first.

- **Graphics and Symbols**

These include graphic verbosity, ANSI character verbosity, graphic dimensions, graphics mode toggle.

- **Advanced Options**

Among these options is found the "go-to-sleep" checkbox. This can be used to silence JAWS in a particular application. To silence JAWS in a particular application, open the application itself, with JAWS running; open the

Configuration Manager and select the go-to-sleep option from the Advanced menu. Save the change. Now, if JAWS is loaded and this application loads in, JAWS will not speak in the application at all, but will in all others.

There are other main types of options, but they relate to advanced use.

How to use the JAWS Keyboard Manager

The keyboard manager is the assignment of keystrokes to JAWS activities. It is important to understand a little about scripts before learning about Keyboard Manager. All JAWS activities assigned to keystrokes are scripts. A script is a small computer program that shows how JAWS reacts and what you hear. To open Keyboard Manager, use **Insert** (alpha keyboard) 8, or

1. Press **Insert J** to activate the JAWS application.
2. Press **Alt U** to open the Utility menu item.
3. Press **K** to open the Keyboard Manager.

How to use the JAWS Dictionary Manager

This application allows you to alter the JAWS Dictionary. The JAWS Dictionary is a collection of files that stores all the correctly pronounced words. The Dictionary Manager is the tool that enables you to manage your own JAWS Dictionary files. Press **INSERT+D** to start the Dictionary Manager and add words to your dictionary.

Use the Dictionary Manager to alter words for specific applications or all your applications. If you want your changes to be saved to all your applications, save the changes to the default file.

1. Press **Insert J** to activate the JAWS application.
2. Press **Alt U** to open the Utility menu item.
3. Press **K** to open the Keyboard Manager.

How to use the JAWS Frame Manager

You can use Frame Manager to create and work with frames. Frames are boundaries on a screen for which you define a JAWS action.

- Use a frame to define an area of the window or screen to be spoken automatically.
- Use a frame to define an area of the window or screen to be spoken when a keystroke is pressed.
- Use a frame to define an area of the window or screen for JAWS to ignore.
- Use a frame to define an area of the window or screen for JAWS to treat differently than other areas.

To open Frame Manager, use **Insert 9**, or

1. Press **Insert J** to activate the JAWS application window.
2. Press **Alt U** to open the Utility menu item.
3. Press **F** to open the Frame Manager.

How to use the JAWS Script Manager

Small script files are created, edited and compiled with Script Manager. A script is a small computer program that controls how JAWS reacts and what you hear. For example, when Insert 5 is pressed, the SayWord script runs. In addition to just saying the current word, it also checks to see if Insert 5 has been pressed twice, in which case it spells the word. Groups of scripts are stored in the script files. There are two basic types of script files: default and application. The default script files contain those scripts and other things that are always available. Application script files contain scripts and other things that are only available when a particular application program is running.

1. Press **Insert J** to activate the JAWS application.
2. Press Alt U to open the Utility menu item.
3. Press S to open the Script Manager.

JAWS ver. 3.0

PC CURSOR FUNCTIONS

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<p>Num Lock Key - off</p> <p>7 Home</p> <p>Reads beginning of text line or first item in list box. Ins + 7 = reads from beg. of line up to cursor, but not including cursor.</p>	<p>/ left mouse button</p> <p>8 +</p> <p>Reads prior line. Ins + 8 = reads whole line</p>	<p>* right mouse button</p> <p>9 PgUp</p> <p>Moves insertion point up one screen. Ins + 9 = reads from cursor to end of line.</p>	<p>-</p> <p>JAWS cursor</p> <p>ins + - = routes to PC cursor</p> <p>+</p> <p>PC cursor on</p> <p>Ins + + = routes to JAWS cursor</p>
<p>4 4-</p> <p>Select previous icon or menu item or move insertion point to previous character. Ins + 4 = reads previous word</p>	<p>5</p> <p>Reads current character. Ins + 5 = reads current word. Ins + 5 twice to spell word.</p>	<p>6 4</p> <p>Select next icon or menu item or move insertion point to next character Ins + 6 = reads next word</p>	
<p>1 END</p> <p>Reads end of line or list box. Ins + 1 = reads top line of the window</p>	<p>2</p> <p>Reads next line down below. Ins + 2 = reads to end of file or box</p>	<p>3 PgDn</p> <p>End of line or list box Ins + 3 = reads last line of the window (status line).</p>	<p>Enter</p>
<p>0 Insert</p> <p>With Alt, toggle between Insert and Overwrite mode.</p>	<p>. Delete</p> <p>With Alt =speaks active cursor</p>		

JAWS ver. 3.0

JAWS CURSOR FUNCTIONS

librarykeyad jaw

<p>Num Lock Key - off</p> <p>7 Home</p> <p>Reads beginning of line. Ins + 7 = reads from beg. of line up to cursor, but not including cursor.</p>	<p>/ left mouse button</p> <p>- single click selects - double click chooses - shift + / = locks left mouse button</p> <p>8 +</p> <p>Reads previous line.</p> <p>Ins + 8 = reads whole line</p>	<p>* right mouse button</p> <p>- right button mouse click - ins + * = locks right mouse button.</p> <p>9 PgUp</p> <p>Reads top of application or child window. Ins + 9 = reads from cursor to end of line.</p>	<p>JAWS cursor on</p> <p>ins + - = routes to PC cursor</p> <p>+</p> <p>PC cursor on</p> <p>Ins + + = routes to JAWS cursor</p>
<p>4 4</p> <p>Reads previous character.</p> <p>Ins + 4 = reads previous word</p>	<p>5</p> <p>Reads current character.</p> <p>Ins + 5 = reads current word. Tap twice to spell word.</p>	<p>6 →</p> <p>Reads next character.</p> <p>Ins + 6 = reads next word</p>	
<p>1 END</p> <p>Goes to end of line and reads last word or graphic.</p> <p>Ins + 1 = reads top line of the window</p>	<p>2 +</p> <p>Reads next line down below. Ins + 2 = reads from cursor to end of window (sa^y all mode). Ctrl + 2 = reads active child window.</p>	<p>3 PgDn</p> <p>Reads bottom of application window or child window</p> <p>Ins + 3 = reads last line of the window (status line).</p>	<p>Enter</p>
<p>0 Insert</p> <p>With Alt, toggle between Insert and Overwrite mode .</p>	<p>. Delete</p> <p>Deletes character at cursor With Alt = speaks active Cursor</p>		

JAWS 3.2 with Internet Explorer 4.01

Getting Started

Make sure that Internet Explorer (IE) is installed properly on the system and running correctly. Henter-Joyce suggests not installing the Active Desktop component with IE.

Set Appropriate Options

Henter-Joyce also suggests doing the following:

- From the View menu, select **Internet Options**. From the **General** panel, click on the **Accessibility** button. In this Accessibility dialog, make sure "Ignore colors specified on Web pages" is checked.
- Under Advanced options, there is another **Accessibility** section along with other general options. Make sure the following are checked:
 - Move system caret with focus/selection changes
 - Always expand "Alt" text for images
- Under the **Browsing** section, make sure the following are **not** checked:
 - Show channel bar at startup
 - Show friendly URLs
 - Use smooth scrolling
 - Enable page transitions

If the Internet connection is slow, it may be desirable to turn off Multimedia options to increase speed when loading pages.

Basic Use:

The current version of JAWS takes advantages of advances in browsers and internet standards and provides two unique commands which radically eliminate much of the difficulty which can accompany the process of reading the Internet via screen reader. These two commands function only in Internet Explorer 4.01, and they provide a quality of access very different from that which can be achieved through current versions of Netscape. For this reason, the HTCTU currently is suggesting that IE 4.01 be the browser of choice for students who use JAWS to browse the Web.

Two Important New Commands

Insert F5

Reformat Document

tapping the **Control** key. To begin reading from the same place, use **Insert Down Arrow**. Use **Control PageDown** to move to the next screen.

Control Page Down

Read Next Screen

Does a page down and begins reading with the JAWS cursor. Does a standard page down to bring up the next screen and starts reading from the top with the JAWS cursor. It is possible to stop reading by tapping the **Control** key. To resume reading from the same place, use **Insert Down Arrow**.

Control PageUp

Read Prior Screen

Does a page up and begins reading with the JAWS cursor. Does a standard page up to bring up the prior screen and starts reading from the top with the JAWS cursor. It is possible to stop reading by tapping the **Control** key. To resume reading from the same place, use **Insert Down Arrow**.

Reading Specific Areas

Insert A

Address Window

Sends the JAWS cursor to the address field and reads its contents. Places the JAWS cursor in the address field. The user can then click the left mouse button (**Numpad Slash**) to highlight the current address. At that point, typing in a new address will replace the current address. **Note:** The JAWS cursor is left on once this action is performed.

Insert F8

ToolBar

Used to access the toolbar. While in 1E4, this script brings up a dialog list box, which contains every button in a list that appears on the toolbar. In this dialog the user can choose one of the buttons on the toolbar and press Enter to select it.

Control Insert Home

Move to First Forms Field

If there is a forms field on a page, this command will move to the first one and speak it. Move to next with **Tab** key.

Column Reading Functions

Control Down Arrow

Read Down Column

When the JAWS cursor is active, reads the next line of the current column.

Control Up Arrow

Read Up Column

When the JAWS cursor is active, reads the prior line of the current column.

Control Left Arrow

Read Column Left

When the JAWS cursor is active, reads the current line in the prior column.

Control Right Arrow

Read Column Right

When the JAWS cursor is active, reads the current line in the next column.

History Options**Control Shift O**

Open History

Opens the history tree view and moves the focus to the first item in the tree.

Control Shift X

Close History

Closes the history tree view and moves the focus back to the web page.

JAWS 3.0 with Netscape 3.0

Introduction

JAWS for Windows is easy to use with Netscape. What follows is a brief list of the most important commands to use in the Netscape environment. The Menu Bar of Netscape can be read as a standard Windows application.

General Suggestions for Reading Netscape Screens

1. Let JAWS automatically read screen contents before entering any keyboard commands.
2. A fail-safe way of hearing screen again: tap **Control PageDown** and then **Control PageUp** and JAWS will read the refreshed display automatically.
3. Tap the Tab key to hear what links are on the page.
4. Reread the screen in its entirety again in order to understand the context of the links.
5. Turn on the JAWS cursor by tapping the **Minus** key on the numeric keypad.
6. Move the cursor to top left corner of document by entering **Home** and then **PageUp** from the numeric keypad.
7. Read line-by-line with the **Numpad 2** key.

Basic Netscape Commands

Maximize the application by entering **Alt SpaceBar** and then x.

Alt Left Arrow takes the user back through previous screens.

Alt Right Arrow moves the user forward through previous screens.

JAWS Context-Sensitive Help

Insert F1 provides cursor-specific context-sensitive help.

Insert H provides extensive application-specific help.

Reading Commands

JAWS automatically begins reading a new screen after it has loaded.

Tapping the **Control PageDown** key will display more site content if present. JAWS will automatically read these screens.

Numpad 2 will cause JAWS to read the entire contents of the screen.

Control or **Shift** stops speech at any time.

Tapping **Down Arrow** when the PC cursor is active generates line-by-line reading.

Accessing Hyperlinks

Tapping the Tab key takes the user to the first link displayed on the screen. Tab through links until JAWS announces "no more hyperlinks on this page."

Shift Tab takes the user back through the hyperlinks. To page up or down after using the Tab key to access hyperlinks, use **Control PageUp** or **Control PageDown**.

Accessing Form Fields

This capability **is** one of the most important features incorporated into the JAWS interface for Netscape.

Insert Tab moves the PC cursor to the first edit box of the form field.

Tab moves to the next field.

Shift Tab moves to previous field.

Insert X moves document focus from edit box to screen display; use **Control PageUp** and **Control PageDown** to move up or down a screen.

JAWS v 3.20.19 Excel 97 (Win 95)

New Developments

November 1998

Renter-Joyce has recently released a public beta patch for JAWS. Once the patch is installed, the new JAWS version is 3.20.19. Among its additions is a greatly enhanced set of scripts for Excel 97. The patch download can be obtained from the following address.

<http://www.hj.com/SoftwareDownload/SWdnld.html>

In late October of this year the Iowa Department for the Blind posted an extensive step-by-step tutorial for using JAWS 3.2 with Excel 97. The address for downloading this tutorial material with exercises is listed below.

<http://www.blind.state.ia.us/assist/jfw.htm>

System Requirements

Microsoft Excel is supported both under Microsoft Windows 95 and Microsoft Windows NT. When using Microsoft Windows NT, Service Pack 4 or later is required. Service Pack 4 has finally been released. The address for downloading Service Pack 4 is listed below.

<http://www.microsoft.com/support/vinnt/default.htm>

Set Up

Install the Iowa tutorial materials first; do not overwrite the jfw.xkm file when prompted. Then install the patch for JAWS. In this way, JAWS will overwrite any key command changes that the tutorial materials may have made if files are inadvertently overwritten. The new JAWS keys command scripts in this new version of JAWS are much more complete than those available to the tutorial developers who used the prior version of JAWS (ver 3.20.09).

Helpful Hints

Toolbars can now easily be navigated in Microsoft Excel 8. Use Alt to activate the menu bar. You can then use **Control+Tab** to move from control bar to control bar and use the Arrow or Tab keys to move from button to button within each command bar.

The Office Assistant can be a very useful tool in Microsoft Word. It does however frequently cover useful information. If you find that text seems to disappear or parts of windows seem to be covered; the Office Assistant may

be on top of the active window. In many cases it is preferable to disable most of Office Assistant's capabilities. To do this, move to the Office Assistant button (Microsoft Word Help button) in the Standard Toolbar or from the Help Menu. Press **Enter** to activate the Office Assistant. Tab to the **Options** button and press **Enter**. This will bring up the Office Assistant multi-page dialog. On the Options page, turn off the undesired options.

A different solution is to follow that offered in the Iowa curriculum: a multi-step process to rename a critical folder and make it unavailable for any Office product. The Office Assistant easily can be reactivated by renaming the critical folder to the name that the Office Assistant expects. Instructions for disabling the Office Assistant can be found on pages through ii-7.

System Requirements:

Microsoft Excel is supported both under Microsoft Windows 95 and Microsoft Windows NT. When using Microsoft Windows NT, Service Pack 4 or later is required. Microsoft has just recently released Service Pack 4 for NT.

Keystrokes and Descriptions

CTRL or **SHIFT** SilenceJFW at anytime:

INSERT+T ReadTitleBar

INSERT+ESCAPE Refresh the screen: (It may be necessary to refresh the screen frequently in order for JFW to read properly.)

CONTROL+INSERT+V SayExcelVersion

INSERT+V Adjust JAWSVerbosity

Brings up a dialog that allows to adjust several JFW verbosity levels.

INSERT+C SayCellCoordinates

Speaks the coordinates of the active cell.

CENTER key (5 on numeric keypad) Read current cell contents and coordinates.

INSERT+CENTER+CENTER Spell Selected Word.

ALT+1 ColumnFirstCellFromTop

Reads the first cell in the current column. This may report the Letter for the column or first cell. Depending on the particular spreadsheet, this may be the proper column heading required.

ALT+2 ColumnSecondCellFromTop

Reads the second cell in the current column. This may report the first or second cell in the column. Depending on the particular spreadsheet, this may be the proper column heading required.

ALT+3 ColumnThirdCellFromTop

Reads the third cell in the current column. This may report the second or third cell. Depending on the particular spreadsheet, this may be the proper column heading required.

ALT+4 ColumnFourthCellFromTop

Reads the fourth cell in the current column. This may report the third or fourth cell in the column. Depending on the particular spreadsheet, this may be the proper column heading required.

ALT+5 RowFirstCellFromLeft

Reads the first Cell from the left margin in the current row. Depending on the particular spreadsheet, this may be the proper row heading required.

ALT+6 RowSecondCellFromLeft

Reads the second Cell from the left margin in the current row. Depending on the particular spreadsheet, this may be the proper row heading required.

ALT+7 RowThirdCellFromLeft

Reads the third Cell from the left margin in the current row. Depending on the particular spreadsheet, this may be the proper row heading required.

ALT+8 RowFourthCellFromLeft

Reads the fourth Cell from the left margin in the current row. Depending on the particular spreadsheet, this may be the proper row heading required.

CONTROL+F2 SayFormula

This key combination reads the formula that is in the current cell.

INSERT+F7 SpellCheck

This script activates the spell checker.

Excel Keystrokes

CONTROL+DOWN ARROW DataRegionDown

Moves down to the edge of the current data region. Moves to the last cell in the current data region. If you are already on the last cell, it will move you to the first cell of the next data region. Blocks of empty cells can define a data region.

CONTROL+PAGE UP PriorSheet

This key combination moves the focus to the prior sheet.

CONTROL+PAGE DOWN NextSheet

This key combination moves the focus to the next sheet.

INSERT+N SayFocusRect

Say Focused Rectangle says the contents of the focus rectangle Returns TRUE if any text was spoken, FALSE otherwise.

ALT+EQUALS AutoSum

Used to automatically add a group of user defined cells. Puts the user in an edit mode in a particular cell where they can define the cells to be summed.

CONTROL+B BoldText

Toggles bold on or off. If text is selected, then only that text **is** affected. Otherwise, new text being typed will be affected by the state of the new bold condition.

CONTROL+I ItalicText

Toggles italics on or off. If text is selected, then only that text is affected. Otherwise, new text being typed will be affected by the state of the new italic condition.

CONTROL+U UnderlineText

This key combination toggles the underline on and off.

CONTROL+L LeftJustify

This key combination toggles the left justification on and off.

CONTROL+E CenterText

Toggles Centered on or off. If text is selected, then only that text is affected. Otherwise, new text being typed will be affected by the state of the new italic condition.

CONTROL+R RightJustify

This key combination will toggle the feature that justifies text to the right side of the document.

SHIFT+SPACE SelectRow

This key combination selects the entire row that the active cell happens to be sitting on.

CONTROL+SPACE SelectColumn

This key combination selects the entire column that the active cell happens to be sitting on.

CONTROL+HOME MoveToFirstCell

This key combination moves the focus to the first cell in this particular document.

CONTROL+END MoveToLastCell

This key combination moves the focus to the last cell in this particular document.

EQUALS FormulaMode

Activates formula input mode. Allows you to type in a formula for the current cell location.

CONTROL+; DateStamp

Puts the Date in the current cell.

CONTROL+SHIFT+; TimeStamp

This key combination gets the time that is stored in the computer and Inserts it into the current field.

ALT+PAGE UP PriorScreen

This key combination moves the focus to the prior screen in this document.

ALT+PAGE DOWN NextScreen

This key combination moves the focus to the next screen in this document.

CONTROL+SHIFT+8 SelectRegion

This key combination selects the current region.

CONTROL+UP ARROW DataRegionUp

Moves up to the edge of the current data region. Moves to the first cell in the current data region. If you are already on the first cell, it will move you to the last cell of the previous data region. Blocks of empty cells can define a data region.

CONTROL+RIGHT ARROW DataRegionRight

Moves right to the edge of the current data region. Moves to the last cell in the current data region. If you are already on the last cell, it will move you to the first cell of the next data region. Blocks of empty cells can define a data region.

CONTROL+LEFT ARROW DataRegionLeft

Moves left to the edge of the current data region. Moves to the first cell in the current data region. If you are already on the first cell, it will move you to the last cell of the previous data region. Blocks of empty cells can define a data region.

SHIFT+BACK SPACE CollapseSelectionToActiveCell

This key combination collapses the highlight of the current selection down to the active cell.

Excel Keystrokes by Task Type

Entering Data

Complete cell entry:	Enter
Cancel a cell entry:	Esc
Repeat last action:	F4 or Ctrl-Y
Start new line in same cell:	Alt-Enter
Delete character to left or selection:	Backspace
Delete character to right or selection:	Delete
Delete text to end of line:	Ctrl-Delete
Move one character up, down, left or right:	Arrow keys
Move to beginning of line:	Home
Edit a cell:	F2
Create names from row and column labels:	Ctrl-Shift-F3
Fill down:	Ctrl-D
Fill to right:	Ctrl-R
Complete a cell entry and move up:	Shift-Entry
Complete a cell entry and move right:	Tab
Complete a cell entry and move up:	Shift-Tab

Working With Formulas

Start a formula:	= (Equals sign)
Cancel an entry in the cell or formula bar:	Esc
Edit the active cell:	F2
Paste a name into a formula:	F3
Define a name:	Ctrl-F3
Calculate all sheets in all open workbooks:	F9
Calculate the active worksheet:	Shift-F9
Insert the AutoSum formula:	Alt-= (equals sign)
Enter date:	Ctrl-; (semicolon)
Enter time:	Ctrl-Shift-: (colon)
Insert a hyperlink:	Ctrl-K

Copy the value from the cell above the

active cell into the cell or Formula Bar:

Ctrl-Shift-" (quotation)

Alternate between displaying cell values & cell formulas:

Ctrl-Shift-' (single left quotation)

Copy the formula from the cell above the active cell into the cell or formula bar:

Ctrl-Shift-'(apostrophe)

Display formula palette after you type a valid function name in a formula:

Ctrl-A

Insert argument names & parentheses for a function, after you type a valid function name in a formula:

Ctrl-Shift-A

Display the AutoComplete list:

Alt-Down Arrow

Formatting Data

Display the Style command:

Alt-' (apostrophe)

Display the Cells command:

Ctrl-1

Apply the General number format:

Apply the Currency format with two decimal places:

Ctrl-Shift-\$

Apply Percentage format with no decimal places:

Ctrl-Shift-%

Apply Exponential number format with two decimal place:

Ctrl-Shift- A

Apply the Date format with the day, Month, and year:

Ctrl-Shift-#

Apply Time format with the hour and minute and A.M. and P.M.:

Ctrl-Shift-@

Apply Number format with two decimals places, 1000 separator:

Ctrl-Shift-!

Apply outline border:

Ctrl-Shift-&

Remove all borders:

Ctrl-Shift-_

Apply or remove bold formatting:

C trl-B

Apply or remove italic formatting:	Ctrl-I
Apply or remove an underline:	Ctrl-U
Apply or remove strikethrough formatting:	Ctrl-5
Hide rows:	Ctrl-9
Unhide rows:	Ctrl-Shift-(
Hide columns:	Ctrl-0
Unhide columns:	Ctrl-Shift-)

Editing Data

Edit active cell:	F2
Paste a name into a formula:	F3
Copy selection:	Ctrl-C
Paste selection:	Ctrl-V
Cut selection:	Ctrl-X
Clear contents of selection:	Delete
Insert blank cells:	Ctrl-Shift-+
Delete selection:	Ctrl-Dash
Undo last action:	Ctrl-Z

Move Within A Selection

Move from top to bottom:	Enter
Move from bottom to top:	Shift-Enter
Move from left to right:	Tab
Move from right to left:	Shift-Tab
Move clockwise to next corner:	Ctrl-Period
Move Right between nonadjacent selections:	Ctrl-Alt-Right Arrow
Move Left between nonadjacent selections:	Ctrl-Alt-Left Arrow

Select Data, Cells, Chart Items, Or Objects

Select current region around the active cell (the current region is an area enclosed by blank rows and columns):	Ctrl-Shift-*
Extend selection by one cell:	Shift-Arrow key
Extend selection to last non-blank cell in same column or row as active cell:	Ctrl-Shift-Arrow
Extend selection to beginning of row:	Shift-Home
Extend selection to beginning of worksheet:	Ctrl-Shift-Home

Extend selection to end of worksheet:	Ctrl-Shift-End
Select entire column:	Ctrl-Spacebar
Select entire row:	Shift-Spacebar
Select entire worksheet:	Ctrl-A
If multiple cells are selected, select only active cell:	Shift-Backspace or Home
Extend selection down one screen:	Shift-Page Down
Extend selection up one screen:	Shift-Page Up
Show or hide Standard toolbar:	Ctrl-7

Move and Scroll on Worksheet

Move one cell in a direction:	Arrow key
Move to the edge of the current data region:	Ctrl-Arrow key
Move to beginning of row:	Home
Move to beginning of worksheet:	Ctrl-Home
Move to last cell on worksheet:	Ctrl-End
Move down one screen:	Page Down
Move up one screen:	Page Up
Move one screen to right:	Alt-Page Down
Move one screen to left:	Alt-Page Up
Move to next sheet:	Ctrl-Page Down
Move to previous sheet:	Ctrl-Page Up
Move to next workbook or window:	Ctrl-F6 or Ctrl-Tab
Move to next pane:	F6
Move to previous pane:	Shift-F6

Print & Preview

Display Print command (Alt W from this: dialog box will bring up print preview)	Ctrl-P
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Ke^ystrokes For Menus

Shortcut menu (right click menu):	Shift-F 10
Activate menu bar:	Alt or F10
Application menu:	Alt-Spacebar

Select command on a menu:	Up or Down Arrow
Select a menu command or sub-menu:	Left or Right Arrow
Select first or last command:	Home or End
Close visible menu and sub-menu:	Alt
Close visible menu or sub-menu only:	Escape

After pressing Alt to select the menu bar, it is possible to press Ctrl-Tab to move between toolbars. Use the Arrow keys to navigate between the icons.

Miscellaneous

Find command:	Ctrl-F
Go To command:	Ctrl-G
Save:	Ctrl-S
Open:	Ctrl-O
Print:	Ctrl-P
Replace:	Ctrl-H
Spelling:	F7
Help:	F1
Bold Text:	Ctrl-B
Italic Text:	Ctrl-I
Underline Text:	Ctrl-U
Left Justify:	Ctrl-,L
Center Text:	Ctrl-E
Right Justify:	C trl-R

Notes:

The commands listed on these pages are extracted from the standard JAWS documentation and from the keyboard commands suggested in the Iowa tutorial. Thanks go to those good resources.

PointSize

Control Shift P

When no Format Toolbar is present, the Font Dialog box is called up by this command and the PC cursor focus is in the size edit box. Use the Arrow keys to move up or down through available point sizes.

When the Format Toolbar is present, the PC cursor is moved up to the Font Size list box. Using the arrow keys will move through available font sizes. Press Enter to set size and return to document.

Left Justify

Control L

Aligns text that is selected or entered. This action uses the Word command to left justify the text. The left margin is even or aligned. Use **Insert F** to confirm the setting.

Center Text

Control E

Positions any selected text so that the left and right margins are equal. Used, for example, to center an essay title. Aligns text to the center that is selected or entered. This action is using the Word command to center text. Use **Insert F** to confirm the setting.

Right Justify

Control R

This makes the right margin even or aligned. Use **Insert F** to confirm the setting.

Justify Text

Control J

Using the Word command to justify text, the text is made even along both the left and right margins. Use **Insert F** to confirm the setting.

Using the Spellcheck Function

Read Mistake and Suggestion

Insert F7

Reads and spells the misspelled word and the first suggestion in the spelling dialog.

Read Word in Context

Insert C

Reads entire document line in which the highlighted word in spellcheck box appears.

Find Functions

Top of Screen

Control PageUp

Performs a Find Prior. If an initial find has not been performed, then moves the cursor to the top of the screen.

Table Functions

Say First Cell in Column

Alt 1

Speaks the content of the first cell in the current column. Reads the content of the first cell in the current column, which is often the header of the column.

Say First Cell in Row

Alt 7

Speaks the content of the first cell in the current row. Reads the content of the first cell in the current row, which is often the name of the row.

Convert Table to Text

Insert F5

Converts a table to text and puts the PC cursor at the beginning of the converted text. The table is replaced by the converted text.

Notes:

Pricin :

For extensive information about pricing, site licenses and software maintenance agreements (SMA), use this web address: www.hj.com/JFW/JFWPricing.html

Installation:

The NT version does not use MS Active Accessibility so there will be differences in functionality between the Win 95 and NT versions in applications that use Active Accessibility, e.g., MS Office.

When installing new video drivers on your system, you must first uninstall MAGic and/or JFW, install the new drivers, then reinstall MAGic and/or JFW. If you have both products installed on your computer, you must uninstall them in this order: first JFW, then MAGic. You must re-install in this order: first MAGic, then JFW.

It may also be possible to unload the JFW NT video driver with the following command from a command line window: **c:\winnt\system32\setjv /R**
JFW will reset itself when restarted.

If you are using a remote software application such as PC Anywhere or Remotely Possible, you must first uninstall it before installing JFW. Once you have installed JFW you can re-install your remote access program. When installing on a dual boot system with NT and some other OS, you must first install under NT. After installing under NT, you can reboot to Win 95 or Win 98 and reinstall JFW. This will avoid authorization conflicts.

Note that with JFW NT version, the authorization must be on the hard disk and not on a floppy as is possible with the Win 95 version.

Network:

Site license costs: for 5 users, \$2,400; for 10 users, \$4,000; for 15 users, \$6,000; for 20 users, \$6,500. The SMA or Software Maintenance Agreement is ten percent of the JFW license price and entitles the district to the next two JFW upgrades.

The following is from the Henter-Joyce web site:

"The current version of JAWS for Windows 3.0 does not support multiple profiles or an actual network installation. If you want to use your JAWS for Windows 3.0 application on a network, there are some suggestions we can make that may or may not help your specific situation; although we will not be able to provide support if you encounter network problems. Our first suggestion is that we recommend you install both JAWS for Windows and the Authorization Key on each workstation required. We feel that this is the most reliable and trouble free method.

Other possible solutions would be to install JFW on the network drive and install the JFW authorization on a workstation. However, it is sometimes possible to install both the JAWS software and authorization on a network drive. In doing so, then JFW is conceivably accessible from any workstation on the network. In essence, it becomes a one-user network with one person being able to access JAWS for Windows from anywhere in your network. A very necessary caveat must be mentioned at this point. All of this depends on how your network is configured and the way you installed the software. This is not a guarantee that installing JAWS for Windows on your network will work.

The obvious drawback to installing one copy of JAWS for Windows on the network is that it cannot be customized for each user. If you had two users of JFW, they would be accessing the same configuration files. These files cannot be customized for each user within the same copy of JAWS for Windows. As a workaround to this situation, If you want to have two people on the same network with different configurations, you can install two copies of JAWS for Windows in separate folders on the network. As long as these two people access their own folders and run JFW from within their own folders, they should be able to customize their own configuration files. Most JAWS for Windows Authorization Keys will allow more than one copy of JFW to be installed. You should test this with your own authorization and within your own network environment.

If you need to put JAWS for Windows on a restricted network, JFW must be installed you or the user is under administrative privileges. The JFW user must also have READ access to the JFW30 directory and all of its subdirectories, as well as the Windows and Windows \System subdirectories. Without WRITE access, the user won't be able to personalize JFW. This limits the powerful customization features JAWS for Windows is recognized for."

Kurzweil 1000 3.0 (Win)

Publisher:

Kurzweil Educational Systems, Inc.
411 Waverley Oaks Road
Waltham, MA 02154
800-894-5374
<http://www.kurzweiledu.com>

Retail Cost: \$ 1295.00

System Requirements:

- Pentium 133 MHz processor or higher
- 24 MB of RAM (32 MB recommended)
- 60 MB available hard disk space available
- 6X CD-ROM drive
- Single-pass color flat-bed scanner (TWAIN compatible)
- Sound Blaster sound card or compatible
- Microphone, if you wish to use the voice command option
- Full size keyboard or 17-button Kurzweil 1000 keypad
- Windows 95/NT operating system

Description:

The Kurzweil 1000 is a computer-based reading system that converts printed material into speech. Users navigate through their documents by using the optional keypad that comes with it or by using the numeric keypad on a full size keyboard. In addition to reading documents, users can use dictionary and spelling tools to enhance their reading. Kurzweil 1000 documents can also be managed from the keypad.

Recommended Uses:

The Kurzweil 1000 was designed for non-sighted users. It could be used in any setting where students need access to print materials. Because there are no on-screen controls available, it is not as suitable as a reading machine for students with learning disabilities as the companion product the Kurzweil 3000 which provides many useful tools for sighted users.

Basic Use:

1. Basic use involves using the Reading Keypad to first scan a document then read it. Refer to the picture below to find these keys. Insert your document into the scanner facedown. Tap the **Start & Stop Scan** button (plus key on numeric keypad) to begin scanning.
2. After the page has been scanned, use the **Start & Stop Reading** button (Zero key on numeric keypad) to read through the page.

3. To learn about the other keys, use the Help and Status key.

The Reading Keypad.

Cancel	Erase Text	Dictionary	Accept
Volume Up	Speed Up	Reading Unit	Start Stop Scan
Volume Down	Speed Down	Column Went.	
Rewind	Forward	Go To Page	Help Status
Start & Stop Reading		Spell	

Reading Keypad

No Function	Paste Page	No Function	Change Keypad Layer
No Function	No Function	No Function	Insert or Rescan
Enable Voice Command	Insert Bookmark	No Function	
Rewind by Unit	Forward by Unit	Go To Bookmark	Help Status
Shift		3Pd with Mnemonics	

Reading Keypad, Shifted

Intermediate Use:

1. Below is the File Management Keypad. To change keypads, press and hold down the Start and Stop Reading key, then press and release the Accept key, then release Start and Stop Reading.

File Management Keypad

Cancel	Favorite Folders	Favorite Files	Accept
Change Folder or A through E	New Folder or F through J	Delete Folder or K through O	No Function
Open File or P through T	Close File or U through Z	Delete File or 0 through 4	
Save File or 5 through 9	Save File As or Space	Export File Format	Help Status
Shut & Stop Reading		No Function	

File Management Keypad

No Function	Delete Favorite Folder	Delete Favorite File	Change Keypad Layer
Change Folder under Current	No Function	No Function	No Function
No Function	No Function	No Function	
No Function	Save in Export Format	No Function	Help Status
Shift		No Function	

File Management Keypad, Shifted

Advanced Use:

1. Below is the **Settings Keypad**. Change to this keypad and use the **Help & Status** key to learn about these keys.

Settings Keypad

Cancel	Page Orientation	Numeric keypad Layout	Accept
Reading Voice	System Voice	Progress Messages	No Function
Dynamic Threshold	Scan Mode	No Function	
No Function	No Function	No Function	Help Status
Start & Stop Reading		Save or Restore Settings	

Settings Keypad

No Function	No Function	No Function	Change Keypad Layer
No Function	No Function	No Function	No Function
Brightness	No Function	No Function	
No Function	No Function	No Function	Help Status
Shift		No Function	

Settings Keypad, Shifted

Notes:

Kurzweil 3000 2.0 (Win 95/NT)

Publisher:

Kurzweil Educational Systems, Inc.
411 Waverley Oaks Road
Waltham, MA 02154
800-894-5374
<http://www.kurzweiledu.com>

Retail Cost: \$ 1995.00**System Requirements:**

- Pentium 133 MHz processor or higher
- 24 MB of RAM required, 32MB recommended
- 70 MB hard disk space available
- 1.44 MB 3.5" floppy disk drive
- CD-ROM drive
- SVGA monitor
- TWAIN compatible scanner
- Sound Blaster or compatible 16-bit or better sound card
- Speakers and microphone
- Full size keyboard with mouse
- Windows 95 or Windows NT

Description:

The Kurzweil 3000 is a computer-based reading system that converts printed material into speech. Users can hear printed words spoken aloud as they read them on the computer screen. In addition to reading documents, users can use dictionary and phonetic spelling tools to enhance their reading. Scanned pages appear on the screen as they appear in the original material. As the Kurzweil 3000 reads, it highlights each word and its context. The reading voice, background/foreground colors, and text size are easily adjustable.

Recommended Uses:

The Kurzweil 3000 was designed for sighted users who have difficulty reading. It could be used in any setting where students need access to print materials. It may also serve as a writing environment for users who would benefit from its special features. Because there are many on-screen controls available, it is not as suitable as a reading machine for non-sighted students as the companion product the Kurzweil 1000 which provides easy access for non-sighted users.

Basic Use:

1. Start the Kurzweil 3000. Enter your name if prompted. A window appears with a number of menus, buttons, and combo boxes.
2. Run the mouse pointer over the buttons, pausing over each without clicking and read the tool tips that appear which describe each button's function.
3. To scan a document, place it in the scanner and click the **Scan** button.
4. After the image of the document appears on the screen, resize it to your desired size by choosing a percentage in the **Zoom** box or by clicking on the little arrows on the box.
5. Read the document by clicking on the Play button. Notice the Play button changes to a **Pause** button to be clicked when you wish to stop reading.
6. To get more information on a word, highlight any word in the document by double-clicking on it. Click on the **Dictionary** button in the toolbar.
7. Click the **Read** button to hear the definitions read aloud. To see a list of words with similar meanings, click **Get Synonyms**.

Intermediate Use:

1. Click the right mouse button in the document to see a context menu of choices to make. This method may prove to be quicker.
2. To select a reading unit, choose from the **Read By** list box either by word, by phrase, by sentence, by line, or by paragraph.
3. To select a reading mode, choose from the **Read Mode** list box. Continuous mode will read until you stop it with a mouse click or clicking on the pause button. If you choose Self-Paced, reading will pause at the end of whatever reading you have selected.

Notes:

Installation:

The installation is very simple, just insert the CD and follow the on-screen directions. The authorization floppy disk must be in the A: drive during installation when it is automatically installed. There are three authorizations on the floppy disk. If you need to uninstall, there will be a step in the process that places the authorization back on the floppy disk.

However, if you have a previous version or a version of Omni 1000 the sequence of installation becomes important. If you have Omni 1000 ver. 2.0, you must install Kurzweil 3000 ver. 2.0 after Omni 1000. Otherwise, the Omni 1000 will stop working. As a general rule, install the older of the Kurzweil programs first, then the newer one to avoid conflicts.

If you have previously installed MS Active Accessibility, be sure to uninstall it before installing Kurzweil 3000. When Installing on Win 98, you will see a

dialog with a message about Active Accessibility. Just click on the dialog box to continue.

The Read-the-Web feature uses Internet Explorer 3 only. Before installing Internet Explorer 3, Internet Explorer 4 must be uninstalled if it is present.

If installing on Win NT, be sure to obtain the NT drivers for your scanner.

MAGic NT 5.1 (NT)

Publisher:

Henter-Joyce, Inc.
11800 31st Court North
St. Petersburg, FL 33716-1805
(800) 336-5658
<http://www.hj.com>

Retail Cost: \$ 995**System Requirements:**

486 or later PC running Windows NT 4.0
16MB RAM (NT Minimum)
256-color display driver at any resolution
650K free hard disk space

Description:

MAGic (Magnification in Color) is screen magnification software that enlarges a PC, laptop, or notebook screen from 2 to 20X! It is ideal for low-vision computer users or anyone who is required to spend extended periods of time in front of a computer screen. MAGic enlarges text, graphics, or any Windows system screen, maintaining type-through access in both text and graphics mode. This software-only solution is easy to install and requires minimal memory.

Recommended Uses:

MAGic is intended for use by persons with low vision.

Basic Use:

1. Open the program by choosing MAGic from the Start/Programs/MAGic menu. The MAGic dialog appears. Settings change via the Preferences menu or the 4 tabs below the menu bar.
2. To turn on magnification, from the magnification area of the magnification tab, click on the up and down arrows to set the level of screen magnification, then click the **On** box to turn on the magnification.
3. Screen Color: Mark Normal to keep the screen colors as is. Mark Reverse to reverse the screen colors. Screen colors are reversed only when the screen is magnified.
4. Mouse Color: Mark Normal to keep the mouse pointer colors as is. Mark Reverse to reverse the mouse pointer colors. Mouse pointer colors are reversed only when the screen is magnified.
5. Locator On: Mark On to show the Locator; unmark On to not show the Locator. The Locator is for full screen magnification only. Pressing <Ctrl+Shift+L> also toggles the Locator on and off. The Locator is a pair

of rectangles: one rectangle along the left edge of the screen and one rectangle along the top edge of the screen. The position of the rectangles matches the position of the viewport relative to the desktop. The rectangle color is the reverse of the screen content.

Notes:

Installation:

When installing new video drivers on your system, you must first uninstall MAGic and/or JFW, install the new drivers, then reinstall MAGic and/or JFW. If you have both products installed on your computer, you must uninstall them in this order: first JFW, then MAGic. You must re-install in this order: first MAGic, then JFW.

It may also be possible to unload the JFW NT video driver with the following command from a command line window: **c:\winnt\system32\setjv /R**
JFW will reset itself when restarted.

The installation setup automatically moves the authorization from the floppy to the hard disk. Use the HJAUTH.EXE application to manage the authorization process in NT.

Microsoft Word 97 (Win)

Publisher:

Microsoft Corporation (Headquarters)
One Microsoft Way
Redmond, WA 98052-6399
(800) 426-9400
www.microsoft.com

Retail Cost: \$ 339.00**System Requirements:**

Computer with 486 processor or greater
Microsoft Windows 95 or later, and a 1.2 Mb or greater floppy disk drive
Hard drive with at least 8 MB space available and 35 MB for complete installation
At least 8 MB RAM
VGA Monitor or better resolution
Mouse
CD-ROM drive

Description:

Word is a powerful document processing environment. This version includes the basic features of several applications users generally think of as separate from their word processor, e.g., charting with the graph function, graphics with a draw function, mathematical equation writing with an equation editor, and built-in spell check, grammar check, and thesaurus.

Recommended Uses:

Word can be used to accomplish nearly every word processing task. This Windows version adds ease of use to its list of powerful features. For students with learning or cognitive disabilities, the menus and icons of the graphical user interface may be more intuitive and thus easier to use. Built-in interactive spell check, autocorrect, thesaurus, and grammar check should also help these students. For students with physical disabilities, having an equation editor and draw function built-in should also prove to be very useful. Students with mild visual disabilities will benefit from having larger print available within the program by changing the size of the type or using the zoom feature. All users will like the extensive on-line help.

Basic Use:

1. Start up Word by choosing it from the **Start Menu**.

2. From the **Help** menu, choose **Microsoft Word Help**. The paperclip agent appears with some suggestions.
3. Type a topic of interest into the text field, then click **Search**. The help topic or topics the agent thinks you might want to look at are listed.
4. Pick a topic by clicking on it and follow the directions. Many topics include wizards that walk the user through a tutorial.

Intermediate Use:

Real-Time Spell Check Function

When this option is selected, Word puts a wavy red line under any word not in its dictionary. The user can right click on an underlined word to see what list of suggested correct words the program has selected. If the correctly spelled word is present, clicking on it will automatically cause it to replace the misspelled word. To turn on this function in Word do the following:

1. From the **Tools** menu select **Options**.
2. Click on the **Spelling & Grammar** tab.
3. Under the Spelling area, check the box next to **Check spelling as you type**.

Grammar Checker

The use of a grammar checker may be helpful for students with some prior knowledge of grammar rules and writing style conventions. However, for students not able to benefit from grammar checker use, creating a custom grammar check profile for them is a consideration. It is possible to turn off or on every feature within the grammar check program. Perhaps only one grammatical rule could be checked, that of subject-verb agreement. Students could work in instructor-created text especially constructed to effectively trigger the grammar checker. This focused activity could have a two-fold benefit: students could experience a grammar checker working efficiently, and they might also learn more about subject verb agreement—either from the activity itself or from actively reading all the **Explain** screens if their reading levels allow it.

How to Customize the Grammar Checker

1. From the **Tools** menu select **Options**.
2. Click on the **Spelling & Grammar Tab**.
3. Make sure the **Check Spelling as You Type** function is not checked; keep the use of the Spell Check as a dedicated activity. From the Grammar section, select the box next to **Check Grammar as You Type**.
4. Click the **Settings** button to see the grammar checker options.
5. Deselect all grammar and style options except **Subject-Verb Agreement**.
6. Click OK.

The grammar checker now has been modified. The next task is to write text with subject-verb errors which effectively trigger the grammar check rules.

An Auto-Correct Function

When this function is on, Word will automatically correct "adn" to "and" as the user types. Word comes with many common typing errors entered into the autocorrect dictionary. It also is very easy to add one's own personal common typing errors.

Directions for turning on this function and for adding personal choice typing errors:

1. From the **Tools** menu, select Autocorrect.
2. Make sure that **Replace Text as You Type** is selected.
3. Enter a frequent typing error into the **Replace** field, and in the With field enter a correctly spelled version of the word.

Outline Function

It is useful for some students to work in the outline mode for pre-writing activities, brainstorming and making a list of related ideas. The outline function allows topics to be dragged, or moved up or in through the tool bar, and students can develop a coherent document structure.

To begin Outline mode, go to the View **Menu** and choose **Outline** view. Note the new tool bar. To return to Normal view, go to the View menu and select **Normal**.

Use Word Document Templates or Wizards

Microsoft Word comes with many useful document templates. They can be accessed through the **New** dialog box. Also accessible from this dialog box are numerous "Wizards" which lead the user through customization processes for different document types.

Notes:

textHelp! Ver 2.10 (Win)

Publisher:

Lorien Systems
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U.S. contact (800) 747-0429
<http://www.loriens.com/>

Retail Cost: \$ 250.00**System Requirements:**

Windows 3.1x; at least at 386DX processor running at 33 MHz; 4 MB RAM, although 8 is recommended; up to 16 MB free disk space before installation; a Sound Blaster compatible sound card.

Description:

This software program provides students with learning disabilities and dyslexia with specialized tools to make the writing and reading process easier. textHelp! is a free-standing utility which works with other applications. The program speaks text as it be being typed, performs real time spell checking, can suggest phonetically close spellings, will automatically correct words, will support a small magnified viewing area, and provides automatic word prediction as a person types. Although in actual practice any one student generally will only use a few of these features, they all will work together.

Lorien Systems also sells an institutional site license (e.g., \$9,000 for 15,000 users) and all users (staff and students) are free to copy the program.

Recommended Uses:

This program is recommended for students who have difficulty spelling, difficulty in reading what they have written, or who have poor recognition ability in differentiating between homonyms. Additionally some students with mild visual disability may benefit from the limited ability of the program to magnify small areas of text, and students with orthopedic difficulties who are unable to key in text rapidly may benefit from using this program.

Basic Use:

Starting the Program

1. From the Program Manager Icon, **double -click** on the textHelp! icon.
The program (in default usage) puts up a blank word suggestion box.
2. Start a word processing program: e.g., Word for Windows or Write.
3. Depending upon its settings, textHELP! will appear as a small window on top of the document screen or as a small toolbar positioned in the title bar of the major application.
4. The following basic functions can be accessed by hot keys:

Display the Main Menu

It is possible to display the main menu by pressing **Alt-Ctrl-M**. When the tool bar is displayed, it is also possible to click on the Menu button (the last button on the right) to bring up the main menu.

Toggle Word Prediction

Pressing **Alt-Ctrl-P** starts or stops the word prediction function. When the function is invoked, the toolbar moves to the word prediction panel which is positioned on top of the document window.

Using the word prediction function is very easy: watch the panel as keys are entered, enter the number of the word when it appears in the word prediction panel. Press the Spacebar after the word has been entered. The word will be spoken if the speech option has been set up to include word echo.

Toggle Real Time Spell Check

The command **Alt-Ctrl-S** starts and stops the ability of textHelp! to monitor keystrokes as they are entered. If the program detects a word not in its dictionary, or a misspelled word, a spell check window appears on the screen.

In order to bring up a suggested word list, enter **Alt-G** or click on the **Suggest** button. Move the highlight through the words, pressing **Alt-S** or clicking or the **Speak** button to have the word pronounced. Tapping **Enter** when the highlight bar is on the desired word replaces the misspelled word with the correctly spelled word. The command **Alt-R** will do the same thing.

Speak Selected Text

Entering **Alt-Ctrl-V** causes textHelp! to read any text which has been selected. The only way to stop the speech is to select **stop Speech** from the main menu (**Alt-Ctrl-M**).

Toggle the Magnification Function (the Zoomer)

The command **Alt-Ctrl-Z** turns on and off the textHelp! magnification function. It also is possible to control the magnification function from the main menu.

Temporarily Stop All Text Help Functions

The hockey combination **Alt-Ctrl-X** stops textHelp! from processing any keystrokes (however, it will not stop speech already in progress; only the Stop Speech selection from the main menu will do that).

Notes:

Installation:

TextHelp installs its own speech engine that does not seem to interfere with other software synthesizers we have used.

