JAWS® for Windows®

Quick Start Guide

Freedom Scientific, Inc.

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Welcome to JAWS for Windows

Freedom Scientific has developed a full range of screen reading and screen magnification software, notetakers, braille displays, and other devices for blind and visually impaired computer users. With our products, users can access a whole world of information, education, and job-related applications for browsing the web, reading or writing email messages, working with spreadsheets, or accessing information in a database. Our software is the product of choice for blind and visually impaired people around the world.

Freedom Scientific leads by example, with software developed by blind people for blind people. Many of our developers, technical support personnel, and sales representatives are users of our products. We are dedicated to remaining at the forefront of assistive technology, ensuring our own progress in addition to that of the blind and low vision community at large.

JAWS offers comprehensive screen reading capability for Windows that includes extended product customization through powerful utility managers.

System Requirements

The system requirements for JAWS are listed below.

Specification	Minimum Requirement
Operating System	Windows® 10, Windows 8.1, Windows 7 Service Pack 1, Windows Server® 2016, Windows Server 2012, and Windows Server 2008
Processor speed	Minimum 1.5 GHz processor
Memory (RAM)	4 GB recommended (64-bit) or 2 GB recommended (32-bit
Required hard disk space	1.6 GB required during installation 20 MB to 690 MB required per voice for installing Vocalizer Expressive voices (file sizes will vary depending on the voice installed
Video	A display adapter capable of at least 800 x 600 screen resolution with 16-bit color (1024 x 768 screen resolution with 32-bit color recommended)
Sound	Windows compatible sound card (for speech)

Older Versions of JAWS needed for Windows XP and Windows Vista installations are still available from the Freedom Scientific website.

Note: You must have an active internet connection as well as be logged on to an account with administrator privileges to install JAWS.

If you have not already downloaded JAWS, you can get it from www.freedomscientific.com/Downloads/JAWS. Once the download is complete, navigate to where you saved the executable file, select it, and press **ENTER**.

The JAWS setup program starts. You will hear the installation speak the instructions as they appear on your screen. Follow these instructions to complete the JAWS installation. Once installation is complete, you must restart your computer before using JAWS.

If this is a new JAWS installation, the next step is to complete the activation process. Otherwise, the JAWS Startup Wizard opens. Use it to configure basic JAWS parameters.

Activating JAWS

Note: This section applies to perpetual licenses (Professional and Home). If you have an Annual license, you can skip to the next section.

Internet License Manager lets you activate JAWS using an Internet connection. The activation process begins automatically when you start JAWS. For information on other ways to activate, choose **Activation Help** when the activation process begins.

To activate JAWS using the Internet, do the following:

1. In the Activation dialog box, choose Start Activation.

2. Read the message that displays and then use the **ARROW** keys to select Internet (RECOMMENDED), and then press **ENTER**.

3.   If your 20-digit Authorization number is not automatically displayed, type it into the Authorization Number edit box.

4.   Press **ENTER** to continue. You will be asked to connect to the Internet if you have not already done so. You must establish an Internet connection before continuing with the activation.

5.   If you have not registered JAWS, you are asked to do so now. Registering JAWS lets you receive technical support. Choose Register Now and complete the online registration form by following the instructions provided. You can choose to register later, but you must register the next time you activate JAWS.

6.   After you submit your registration, Internet License Manager attempts to activate JAWS. This process may take several minutes. When the activation is successful, choose Finish.

Note: If Internet License Manager cannot activate JAWS, you may need to reconfigure your firewall. Refer to the Activation Help for more information.

Dongle Authorization

A dongle is a hardware device that you can connect to a computer's USB port. One dongle can be used to authorize all Freedom Scientific software products (JAWS, Fusion, and ZoomText). The software is authorized to run on that computer as long as the dongle remains connected. Dongles are useful if you are a trainer or consultant where you frequently use Freedom Scientific software on many different computers as you do not have to worry about activation.

When JAWS starts, it first determines whether a dongle is connected to the computer. If one is connected, JAWS uses the features and information for the license associated with the dongle to authorize JAWS. If no dongle is connected, JAWS searches for the license information stored on the computer. You can use the Dongle Viewer utility to view information on the license associated with the dongle currently connected to your computer. To start this utility, go to the Utilities menu located in the JAWS main window, choose "Explore Utilities Folder", and select Dongle Viewer.

Dongles are sold separately as an add-on for ILM perpetual licenses of JAWS and Fusion Professional and Home, as well as for ZoomText. To purchase one, contact Freedom Scientific Sales. Dongles are not available for adding to a Home Annual license.

Network JAWS

If you have a multi-user network license, your system administrator must go to www.fsactivate.com/network and download the network authorization tools and license server. This page also contains simple instructions for setting up the license server and activating the network license.

Running JAWS Startup Wizard

The JAWS Startup Wizard is a helpful tool that lets you configure specific JAWS parameters, such as speech and braille preferences, verbosity settings, and JAWS startup options. During a new JAWS installation, the Startup Wizard appears after you complete product activation. However, it can always be accessed later from the JAWS Help menu by pressing **ALT+H** and choosing Startup Wizard.

Installing Vocalizer Expressive Voices

Vocalizer Expressive provides mor natural-sounding speech in a variety of voices in several languages. To install these voices, press **INSERT+J** to open the JAWS application window, press **ALT+H** to open the Help menu, press **DOWN ARROW** until you reach More Voices, and then press **ENTER**. This opens the Synthesizers page on the Freedom Scientific website where you can preview voice samples, and then download and install voices.

FSReader and Training Materials

Freedom Scientific offers basic training materials in a digital document format known as DAISY (Digital Accessible Information System). You can listen to and read the training modules by using FSReader (Freedom Scientific's DAISY book reader), which is automatically installed with JAWS. By default, at least one DAISY book (FSReaderGettingStarted) is also installed.

To install training materials, do the following:

1. Press **INSERT+J** to open the JAWS application window.

2. Press **ALT+H** to choose the Help menu, and then press **ENTER** to choose Training.

3. FSReader opens and displays the JAWS Training Table of Contents which contains links to all of the available DAISY training books. Use the **ARROW** keys to navigate to the book you want to download and install and then press **ENTER**. FSReader will automatically download and install the book and then open it.

4. Repeat this process for each book you want to download.

Starting and Using FSReader

The following describes how to start FSReader and open a DAISY book.

1. Do one of the following:

    - From the JAWS application window, press **ALT+H**, **T**, or

    - Choose the FSReader shortcut available on your desktop, and then press **CTRL+J**. The JAWS Training Materials Table of Contents opens. Each DAISY book is represented by a link.

2. Select a DAISY book and press **ENTER**. The selected book appears in FSReader.

3. Press **CTRL+P** to begin reading the book. Press **CTRL+P** again to pause reading the book. To fast forward five seconds, press **CTRL+PERIOD**. To rewind the book five seconds, press **CTRL+COMMA**.

Note: As long as FSReader is running, **CTRL+P** will toggle between play and pause. If you want to print while FSReader is active, you must use an application's Print command.

4. When you are finished reading the book, press **CTRL+J** to open another JAWS training book, press **ALT+F**, **O** to open a DAISY book from another provider, or press **ALT+F**, **X** to close and exit FSReader.

Updating JAWS

Freedom Scientific is continually seeking to improve and expand JAWS for Windows. Periodically, updates to JAWS will be released. It is recommended that you keep your software up-to-date so that you experience the greatest possible performance.

Updating your software is quick and easy. To search for updates to JAWS, do the following:

1. Establish a connection to the Internet.

2. Start JAWS.

3. From the Help menu, choose Check for Updates.

4. JAWS searches the Internet for updates and displays a list of any that are available to download. Use the **ARROW** keys to move through the list, and press the **SPACEBAR** to select the check box next to any updates that you want to download and install.

Note: If your computer has active firewall software (such as Windows Firewall), you may receive a warning indicating that either the FSAutoUpdate Application or FSAutoUpdate.exe is attempting to access the Internet. You must allow this process to access the Internet through the firewall in order to retrieve updates.

5. When you are finished selecting updates, choose the Install button. You may be required to restart your computer. If the updates are not installed successfully, repair your installation of JAWS (refer to the online help for more information) and then try the procedure again.

Freedom Scientific provides many ways to access help when using JAWS. With so many formats, you can always receive assistance in the most comfortable way possible.

JAWS Training Materials

The Basic Training for JAWS and the What's New in JAWS training materials can be downloaded and read using the FSReader DAISY reader included with JAWS. To start FSReader, open the Help menu and choose Training. For more information on using FSReader, select the "FSReaderGettingStarted" DAISY book and press **ENTER**.

The training materials are installed in the following folder: C:\Program Files\Freedom Scientific\Training\JAWS\enu. The JAWS Basic Training modules give you the best possible start on your road to mastering Windows with JAWS. The set takes you logically from starting JAWS to working in the Windows environment. The modules include actual samples of what you will hear as you perform various Windows and JAWS operations. All users are encouraged to take advantage of this training. Once JAWS is running, you should listen to all modules and perform the operations along with them.

JAWS Help System

Using the JAWS Help system is quick and easy. To start JAWS Help, press **INSERT+J** to switch to the JAWS window, press **ALT+H** to open the Help menu, and choose JAWS Help Topics.

When you first open JAWS Help, the Table of Contents appears on the left side of a split window. The Table of Contents lists a number of books and pages. Books are categories that contain pages. The pages are topics containing information. Use the **UP** and **DOWN ARROW** keys to move through the Table of Contents. Use **RIGHT ARROW** to open a book and **LEFT ARROW** to close a book. Press **ENTER** on a selected page to display the text of that topic and then press **F6** to move to the topic window. Press **F6** again to return to the Table of Contents, or press **ALT+C** to return to the Table of Contents from any section of the help system.

Use **CTRL+TAB** to access the Index and Search tabs in the Help system.

In almost all Windows applications, you can press **F1** to open Help for that application. This is also true in the JAWS window and in the JAWS Managers (**INSERT+F2**), such as Keyboard Manager.

Keystrokes to Get Help Wherever You Are

JAWS Context Sensitive Help provides information on using various dialog box options, buttons, and other controls. To activate this feature, move to the control you want help for and press **INSERT+F1**. This is a quick way to get specific help for the program you are using.

Hot Key Help is a feature that provides you quick access to available JAWS keystrokes that might be useful. It is aware of the applications that you are using so it gives you the proper help based on what you are doing at the time. To activate Hot Key Help, press **INSERT+H**.

Many popular applications have an additional help feature available. Pressing **INSERT+F1** twice quickly opens a JAWS Help topic for the currently running application.

As you learn commands, JAWS Keyboard Help is a beneficial tool. It gives information on key combinations while you are working in any application. To activate JAWS Keyboard Help, press **INSERT+1**. JAWS then says, "Keyboard help on." Press any key combination to hear a description of that command. Obtain a more extensive description of the command by holding down the first key or keys in the combination and pressing the last key twice quickly. If the command contains only one key, press this key twice quickly. For example, to get help on the Say All command you would press **INSERT+DOWN ARROW** twice quickly. While Keyboard Help is active, keystrokes that you press do not actually perform any action. Press **INSERT+1** again to turn off Keyboard Help.

You can also search for specific commands using the JAWS Command Search. Press **INSERT+SPACEBAR**, followed by **J** to open the Search for Commands window, begin typing text related to the type of command you want to perform, and JAWS will display commands matching what you entered along with their keystrokes.

The last keystroke to obtain help is **INSERT+W**, which provides help for some commonly used Windows application keystrokes.

Technical Support

Our Technical Support staff provides assistance for the setup of JAWS and other Freedom Scientific products. Ongoing Technical Support is available for those users who purchase and register JAWS. Before calling Technical Support, please visit our web site at www.FreedomScientific.com. You can also e-mail technical support at support@FreedomScientific.com, or call them at (727) 803-8600. When calling Freedom Scientific Technical Support, please have your JAWS serial number ready. To read your JAWS serial number, switch to the JAWS window and press **INSERT+PAGE DOWN** to read the status bar.

If you are new to JAWS, the following sections contain a summary of useful reading and navigation keystrokes to help you get started. To learn more about using JAWS, install and listen to the Basic Training DAISY files or open the JAWS Help file. For instructions describing how to install and locate the Basic Training, refer to *FSReader and Training Materials* on page 5 and *JAWS Training Materials* on page 8. Refer to *JAWS Help System* on page 8 for more information on opening and using Help.

Reading Screens and Documents

You can access many speech functions in JAWS by using the numeric keypad (**NUM PAD**) located on the far right side of most keyboards. JAWS uses the **INSERT** key at the bottom left of the **NUM PAD** in combination with the other keys on this keypad to control what JAWS will speak.

To start JAWS reading the screen, press the key combination **INSERT+DOWN ARROW**. This is the Say All command. While using the Say All command, you can press the **LEFT** or **RIGHT ARROW** keys to rewind or fast forward through the text. You can also press **PAGE UP** or **PAGE DOWN** to increase or decrease the speech rate. To halt speech, press the **CTRL** key.

The following are additional keystroke combinations that use this keypad:

- **NUM PAD 5** - Say Character

- **INSERT+NUM PAD 5** - Say Word

- **INSERT+NUM PAD 5** twice - Spell Word

- **INSERT+LEFT ARROW** - Say Prior Word

- **INSERT+RIGHT ARROW** - Say Next Word

- **INSERT+UP ARROW** - Say Line

- **INSERT+HOME** (the 7 key) - Say To Cursor

- **INSERT+PAGE UP** (the 9 key) - Say From Cursor

- **INSERT+PAGE DOWN** (the 3 key) - Say Bottom Line Of Window

- **INSERT+END** (the 1 key) - Say Top Line Of Window

More Reading Commands

There are more reading commands in addition to those listed previously. You can use the **LEFT** and **RIGHT ARROW** keys to move to and read the next or previous character. The **UP** and **DOWN ARROW** keys allow you to move to and read the previous or next line. Hold down the **ALT** key and press the **UP** or **DOWN ARROW** key to move through a document by sentence. Similarly, hold down **CTRL** and use the **UP** and **DOWN ARROW** keys to move through a document by paragraph.

Working with Dialog Boxes

Dialog boxes display information and allow you to interact with Windows programs. To move through the various options in a dialog box, press **TAB** or **SHIFT+TAB**. If the dialog box is divided into tabs, you can use **CTRL+TAB** to move between the tabs. Press **INSERT+TAB** to hear a description of the currently selected option.

Getting Started with the Internet

Web browsers such as Internet Explorer, Firefox, or Chrome allow you to view pages on the Internet as well as interact with other people in several ways. JAWS uses the Virtual Cursor in web pages, letting you read as you would in a word processing document. The Virtual Cursor is also available in other applications, such as HTML-based help systems, PDF files, and HTML email. Many of the features discussed in this section are also available wherever the Virtual Cursor is used. For specific information on which features are available, refer to the JAWS help topic for the application you are using.

Reading and Moving through Web Pages

When you start the web browser, your home page opens. If you don't have a home page specified, you can select a web page from the Favorites or Bookmarks menu, or press **ALT+D** to move to the Address Bar and type in the address of a page. After you select a page, the browser loads it and JAWS announces the presence of frames, links, headings, and forms and begins speaking the text on the screen. To move through the page, use the standard JAWS reading commands.

Note: If you start to read before a page finishes loading, some of the page may not be available.

JAWS says, "Link," when it encounters a link to another document or portion of the page. To follow a link, press **ENTER** while positioned on the link. To go back to the previous page, press **ALT+LEFT ARROW** or **BACKSPACE**. To move forward one page after you have moved back, press **ALT+RIGHT ARROW**.

Quick and Easy Navigation

JAWS provides easy to use and remember commands to move through web pages. You can press a single letter on your keyboard to move to an item. For example, you can press **T** for table, **F** for form control, **V** for visited link, **H** for heading, and so on. Add **SHIFT** to move to the previous element of that type. For a complete listing of these commands, refer to the JAWS help system.

Displaying Lists of Information

JAWS can compile lists of frames, links, headings, or form fields on a web page so you can quickly find what you need. Press **INSERT+F9** to display a list of all frames on the current page. Press **INSERT+F7** to display a list of all links on the current page. Press **INSERT+F6** to display a list of all headings on the current page. Press **INSERT+F5** to display a list of all form fields on the current page. Use the **ARROW** keys to select an item and press **ENTER** to move to it.

In addition, if you hold down **CTRL+INSERT** and press one of several Navigation Quick Keys, JAWS displays a list of those elements on the current page. You can then select an item using the **ARROW** keys and press **ENTER** to move to it. For example, to display a list of check boxes on the current page, press **CTRL+INSERT+X**.

> **Tip:** Pressing **INSERT+F3** allows you to view any of the lists of information that are available for web pages.

Interacting with Forms

JAWS lets you easily work with forms on the web. When you move into a form control, you can simply type in edit fields or select items in combo boxes. This is known as Auto Forms Mode and is on by default. If you would like to have more control over a form, you can turn off Auto Forms Mode by pressing **INSERT+V** and then setting the Auto Forms Mode option to Manual or Semi-Auto. In Semi-Auto, Forms Mode only activates when you navigate to an edit field or combo box using **TAB** or **SHIFT+TAB**.

To manually control a form, press **F** to move to the next form control on the page. Press **ENTER** to activate Forms Mode. Press the **TAB** key to move between form controls while in Forms Mode. Type in edit fields, select check boxes, and select items from lists and combo boxes. Press **NUM PAD PLUS** to turn off Forms Mode.

If you like, you can set Auto Forms Mode on or off based on the web pages that you visit. You can personalize settings for specific web pages by opening Quick Settings (**INSERT+V**), selecting the Personalize Web Settings group, and then configuring the Auto Forms Mode option.

Web Browsing Keystrokes

Note: The JAWS help system includes detailed information about using the Internet. In your browser, press and hold **INSERT** and press **F1** twice quickly. Once JAWS help is open, press **F6** to move to the help topic window.

General

Description	Keystroke
Go Back a Page	**ALT+LEFT ARROW** or **BACKSPACE**
Go Forward a Page	**ALT+RIGHT ARROW**
Read Address Bar	**INSERT+A**
Next Link	**TAB**
Prior Link	**SHIFT+TAB**
Open Link	**ENTER**
List Frames	**INSERT+F9**
List Links	**INSERT+F7**
List Headings	**INSERT+F6**
Heading at Level	**1** through **6**
Virtual HTML Features	**INSERT+F3**
JAWS Find Next and Previous	**F3** and **SHIFT+F3**
Assign Custom Label	**CTRL+INSERT+TAB**

Description	Keystroke
ARIA Drag-and-Drop	**WINDOWS Key+CTRL+EQUALS**
ARIA Live Region Text Filter	**WINDOWS Key+CTRL+DASH**
Open Flexible Web Wizard	**INSERT+SPACEBAR** followed by **X**
Temporarily Toggle Smart Navigation	**INSERT+X**

Tabbed Browsing Quick Keys

Description	Keystroke
Open a New Tab	**CTRL+T**
Open a New Tab from the Address Bar	**ALT+ENTER** (on address bar)
Switch to the Next Tab	**CTRL+TAB**
Switch to the Previous Tab	**CTRL+SHIFT+TAB**
Switch to a Specific Tab Number	**CTRL+n**, where n is a digit from 1 through 8
Switch to Last Tab	**CTRL+9**
Close Current Tab	**CTRL+W** or **CTRL+F4**
Close All Tabs	**ALT+F4**
Close Other Tabs	**CTRL+ALT+F4**
Open Links in a New Tab in the Background	**CTRL+ENTER**
Open Links in a New Tab in the Foreground	**CTRL+SHIFT+ENTER**

Navigation Quick Keys

Tip: If you hold down **SHIFT** before pressing one of the following Navigation Quick Keys, you can move to the previous instance of that element, for example, press **A** to move to the next radio button, press **SHIFT+A** to move to the previous radio button. In addition, if you hold down **CTRL+INSERT** while pressing keystrokes with an asterisk (*) next to them, JAWS displays a list of those elements on the page.

Description	Keystroke
Next Radio Button	**A***
Next Button	**B***
Next Combo Box, List Box, or Tree View	**C***
Next Different Element	**D**
Next Edit Box	**E***
Next Form Control	**F**
Next Graphic	**G***
Next Heading	**H**
Next Item in a List	**I**
Jump to Line	**J***
Next PlaceMarker	**K***
Next List	**L***
Next Frame	**M**
Skip Past Links	**N**
Next Article	**O***
Next Paragraph	**P***

Description	Keystroke
Move to Main Region	**Q**
Next Region	**R***
Next Same Element	**S**
Next Table	**T***
Next Unvisited Link	**U**
Next Visited Link	**V**
Next Check Box	**X***
Next Division	**Z***
Next Tab Control	**APOSTROPHE***
Next Separator	**DASH**
Next Clickable Element	**SLASH***
Next Mouse Over Element	**SEMICOLON***
Next Element	**SHIFT+PERIOD**
Previous Element	**SHIFT+COMMA**

Forms

Description	Keystroke
Enter Forms Mode	ENTER
Exit Forms Mode	NUM PAD PLUS
List Form Fields	INSERT+F5
First Form Field	INSERT+CTRL+HOME
Next Form Field	F
Prior Form Field	SHIFT+F
Last Form Field	INSERT+CTRL+END
Next Radio Button	A
Prior Radio Button	SHIFT+A
List Radio Buttons	CTRL+INSERT+A
Next Button	B
Prior Button	SHIFT+B
List Buttons	CTRL+INSERT+B
Next Combo Box, List Box, or Tree View	C
Prior Combo Box, List Box, or Tree View	SHIFT+C
List Combo Boxes, List Boxes, or Tree Views	CTRL+INSERT+C
Next Edit Box	E
Prior Edit Box	SHIFT+E
List Edit Boxes	CTRL+INSERT+E

Description	Keystroke
Next Check Box	**X**
Prior Check Box	**SHIFT+X**
List Check Boxes	**CTRL+INSERT+X**

Tables

Description	Keystroke
List keystrokes for table navigation	**INSERT+SPACEBAR**, followed by **T**, and then **QUESTION MARK**
Next Table	**T**
Prior Table	**SHIFT+T**
Select Table	**F8**
Next Row	**WINDOWS KEY+ALT+DOWN ARROW**
Prior Row	**WINDOWS KEY+ALT+UP ARROW**
Read Row	**WINDOWS KEY+COMMA** or **WINDOWS KEY+NUM PAD 5**
Next Column	**WINDOWS KEY+ALT+RIGHT ARROW**
Prior Column	**WINDOWS KEY+ALT+LEFT ARROW**
Read Column	**WINDOWS KEY+PERIOD**
Next Cell in Row	**ALT+CTRL+RIGHT ARROW**
Prior Cell in Row	**ALT+CTRL+LEFT ARROW**
Cell Below in Column	**ALT+CTRL+DOWN ARROW**

Description	Keystroke
Cell Above in Column	**ALT+CTRL+UP ARROW**
Jump to Table Cell	**CTRL+WINDOWS KEY+J**
Return to Previous Cell	**CTRL+WINDOWS KEY+SHIFT+J**

PlaceMarkers

Description	Keystroke
Set Temporary PlaceMarker (Permanent Marker for Word)	**CTRL+WINDOWS Key+K**
Add, Delete, Edit, or Rename Permanent PlaceMarkers	**CTRL+SHIFT+K**
Move to the Next or Prior PlaceMarker	**K** or **SHIFT+K**
Read Text at PlaceMarkers 1 through 4	Number Row Keys **7** through **0**
Move to PlaceMarker 1 through 4	**SHIFT+** number row keys **7** through **0**
Return to PlaceMarker in Word	**ALT+WINDOWS Key+K**
Select Text from PlaceMarker to Cursor Position	**INSERT+SPACEBAR** followed by **M**

Frames

Description	Keystroke
Next Frame	**M**
Prior Frame	**SHIFT+M**
List Frames	**INSERT+F9**

Elements

Description	Keystroke
Next Same Element	**S**
Prior Same Element	**SHIFT+S**
Next Different Element	**D**
Prior Different Element	**SHIFT+D**
Next Element	**SHIFT+PERIOD**
Prior Element	**SHIFT+COMMA**
Select Entire Element	**F8**
Display Entire Element	**SHIFT+INSERT+F1**
Display Detailed Element Information	**CTRL+SHIFT+INSERT+F1**
Activate Mouse Over	**INSERT+CTRL+ENTER**

Desktop and Laptop Keystrokes

For Reading Text

Description	Desktop Keystroke	Laptop Keystroke
Say Character	**NUM PAD 5**	**CAPS LOCK+COMMA**
Say Character Phonetically	**NUM PAD 5** twice quickly	**CAPS LOCK+COMMA** twice quickly
Say Prior Character	**LEFT ARROW**	**CAPS LOCK+M**
Say Next Character	**RIGHT ARROW**	**CAPS LOCK+PERIOD**

Description	Desktop Keystroke	Laptop Keystroke
Say Word	**INSERT+NUM PAD 5**	**CAPS LOCK+K**
Spell Word	**INSERT+NUM PAD 5** twice quickly	**CAPS LOCK+K** twice quickly
Say Prior Word	**INSERT+LEFT ARROW**	**CAPS LOCK+J**
Say Next Word	**INSERT+RIGHT ARROW**	**CAPS LOCK+L**
Say Line	**INSERT+UP ARROW**	**CAPS LOCK+I**
Spell Line	**INSERT+UP ARROW** twice quickly	**CAPS LOCK+I** twice quickly
Say Prior Line	**UP ARROW**	**CAPS LOCK+U**
Say Next Line	**DOWN ARROW**	**CAPS LOCK+O**
Say Sentence	**ALT+NUM PAD 5**	**CAPS LOCK+H**
Say Prior Sentence	**ALT+UP ARROW**	**CAPS LOCK+Y**
Say Next Sentence	**ALT+DOWN ARROW**	**CAPS LOCK+N**
Say Paragraph	**CTRL+NUM PAD 5**	**CAPS LOCK+CTRL+I**
Say Prior Paragraph	**CTRL+UP ARROW**	**CAPS LOCK+CTRL+U**
Say Next Paragraph	**CTRL+DOWN ARROW**	**CAPS LOCK+CTRL+O**
Say to Cursor	**INSERT+HOME**	**CAPS LOCK+SHIFT+J**

Description	Desktop Keystroke	Laptop Keystroke
Say from Cursor	**INSERT+PAGE UP**	**CAPS LOCK+SHIFT+L**
Say All	**INSERT+DOWN ARROW**	**CAPS LOCK+A**
Rewind During Say All	**LEFT ARROW**	**LEFT ARROW**
Fast Forward During Say All	**RIGHT ARROW**	**RIGHT ARROW**
Say Color	**INSERT+5** on the numbers row	**CAPS LOCK+5**
Increase Voice Rate During Say All	**PAGE UP**	**PAGE UP**
Decrease Voice Rate During Say All	**PAGE DOWN**	**PAGE DOWN**
Temporarily Increase Voice Rate When Not in Say All	**ALT+CTRL+PAGE UP**	**ALT+CTRL+PAGE UP**
Temporarily Decrease Voice Rate When Not in Say All	**ALT+CTRL+PAGE DOWN**	**ALT+CTRL+PAGE DOWN**

Description	Desktop Keystroke	Laptop Keystroke
Permanently Increase Voice Rate When Not in Say All	**ALT+WINDOWS Key+CTRL+PAGE UP**	**ALT+WINDOWS Key+CTRL+PAGE UP**
Permanently Decrease Voice Rate When Not in Say All	**ALT+WINDOWS Key+CTRL+PAGE DOWN**	**ALT+WINDOWS Key+CTRL+PAGE DOWN**
Start Skim Reading	**CTRL+INSERT+DOWN ARROW**	**CAPS LOCK+CTRL+DOWN ARROW**
Change Skim Reading Preferences	**CTRL+SHIFT+INSERT+DOWN ARROW**	**CAPS LOCK+CTRL+SHIFT+ DOWN ARROW**
Toggle Full Speech, Speech On Demand (default), or Mute Speech	**INSERT+SPACEBAR**, followed by **S**	**CAPS LOCK+SPACEBAR, followed by S**
Toggle Speech On Demand or Mute Speech (Full Speech must be disabled)	**INSERT+SPACEBAR**, followed by **SHIFT+S**	**CAPS LOCK+SPACEBAR**, followed by **SHIFT+S**

Informational

Description	Desktop Keystroke	Laptop Keystroke
Interrupt Speech	CTRL	CTRL
Say Font	INSERT+F	CAPS LOCK+F
Say Window Title	INSERT+T	CAPS LOCK+T
Say Window Prompt and Text	INSERT+TAB	CAPS LOCK+TAB
JAWS Find	CTRL+INSERT+F	CAPS LOCK+ CTRL+F
JAWS Find Next	INSERT+F3	CAPS LOCK+F3
JAWS Find Previous	INSERT+SHIFT+F3	CAPS LOCK+SHIFT+F3
Say Top Line of Window	INSERT+END	CAPS LOCK+SHIFT+Y
Say Bottom Line of Window	INSERT+PAGE DOWN	CAPS LOCK+SHIFT+N
Say Selected Text	INSERT+SHIFT+ DOWN ARROW	CAPS LOCK+SHIFT+A
Get Application Version	CTRL+INSERT+V	CAPS LOCK+CTRL+V

For Cursors and Mouse

Description	Desktop Keystroke	Laptop Keystroke
PC Cursor	NUM PAD PLUS	CAPS LOCK+SEMICOLON
JAWS Cursor	NUM PAD MINUS	CAPS LOCK+P

Description	Desktop Keystroke	Laptop Keystroke
Touch Cursor	**SHIFT+NUM PAD PLUS**	**CAPS LOCK+SHIFT+SEMICOLON**
Route PC Cursor to JAWS Cursor	**INSERT+NUM PAD PLUS**	**CAPS LOCK+APOSTROPHE**
Route JAWS Cursor to PC Cursor	**INSERT+NUM PAD MINUS**	**CAPS LOCK+LEFT BRACKET**
Left Mouse Button	**NUM PAD SLASH**	**CAPS LOCK+8**
Right Mouse Button	**NUM PAD STAR**	**CAPS LOCK+9**
Drag and Drop	**CTRL+INSERT+NUM PAD SLASH**	**CAPS LOCK+CTRL+8**
Restrict JAWS Cursor	**INSERT+R**	**CAPS LOCK+R**

For Dialog Boxes

Description	Desktop Keystroke	Laptop Keystroke
Say Default Button of Dialog Box	**INSERT+E**	**CAPS LOCK+E**
Read Window from Top to Bottom	**INSERT+B**	**CAPS LOCK+B**
Read Word in Context	**INSERT+C**	**CAPS LOCK+C**
Say Current Control Hot Key	**SHIFT+NUM PAD 5**	**CAPS LOCK+SHIFT+COMMA**

Description	Desktop Keystroke	Laptop Keystroke
Open Combo Box	**ALT+DOWN ARROW**	**ALT+DOWN ARROW**
Close Combo Box	**ALT+UP ARROW**	**ALT+UP ARROW**
Announce Progress Bar Status	**INSERT+TAB**	**CAPS LOCK+TAB**

For Help

Description	Desktop Keystroke	Laptop Keystroke
JAWS Command Search	**INSERT+SPACEBAR**, followed by **J**	**CAPS LOCK+SPACEBAR**, followed by **J**
Context Sensitive Help	**INSERT+F1**	**CAPS LOCK+F1**
Keyboard Help	**INSERT+1**	**CAPS LOCK+1**
JAWS Help for Applications	**INSERT+F1** twice quickly	**CAPS LOCK+F1** twice quickly
Hot Key Help	**INSERT+H**	**CAPS LOCK+CTRL+SHIFT+H**
Windows Key Help	**INSERT+W**	**CAPS LOCK+W**

Miscellaneous

Description	Desktop Keystrokes	Laptop Keystrokes
JAWS Window	**INSERT+J**	**CAPS LOCK+CTRL+SHIFT+J**
Refresh Screen	**INSERT+ESC**	**CAPS LOCK+ESC**
Quick Settings	**INSERT+V**	**CAPS LOCK+V**

Description	Desktop Keystrokes	Laptop Keystrokes
Run JAWS Manager	**INSERT+F2**	**CAPS LOCK+F2**
Shut Down JAWS	**INSERT+F4**	**CAPS LOCK+F4**
Window List Dialog	**INSERT+F10**	**CAPS LOCK+F10**
Select a System Tray Icon Dialog	**INSERT+F11**	**CAPS LOCK+F11**
Say System Time	**INSERT+F12**	**CAPS LOCK+F12**
Graphics Labeler	**INSERT+G**	**CAPS LOCK+G**
Auto Graphics Labeler	**CTRL+INSERT+G**	**CAPS LOCK+CTRL+G**
Pass Key Through	**INSERT+3** on the numbers row	**CAPS LOCK+3**
Virtualize Window	**ALT+INSERT+W**	**ALT+CAPS LOCK+W**
Virtualize Current Control	**ALT+SHIFT+INSERT+W**	**ALT+CAPS LOCK+SHIFT+W**
Select Scheme	**ALT+INSERT+S**	**ALT+CAPS LOCK+S**
Select Language	**CTRL+WINDOWS Key+L**	**CTRL+WINDOWS Key+L**
Select Voice Profile	**CTRL+INSERT+S**	**CAPS LOCK+CTRL+S**

Description	Desktop Keystrokes	Laptop Keystrokes
Read Columns 1 through 10 of a List View	**CTRL+INSERT+n**, where n is a value from 1, 2, 3 through 0	**CAPS LOCK+CTRL+n**, where n is a value from 1, 2, 3, through 0
Copy Selected Text to FSClipboard	**INSERT+WINDOWS Key+C**	**CAPS LOCK+WINDOWS Key+C**
Show Speech History	**INSERT+SPACEBAR** followed by **H**	**CAPS LOCK+SPACEBAR** followed by **H**
Toggle Audio Ducking (Windows 8.1 and later)	**INSERT+SPACEBAR** followed by **D**	**CAPS LOCK+SPACEBAR** followed by **D**
Toggle Default Mode (used for troubleshooting)	**INSERT+SPACEBAR** followed by **Z**	**CAPS LOCK+SPACEBAR** followed by **z**
Toggle Screen Shade	**INSERT+SPACEBAR**, followed by **F11**	**CAPS LOCK+SPACEBAR**, followed by **F11**

For Frames

Description	Desktop Keystroke	Laptop Keystroke
Frame Get Top Left	**CTRL+SHIFT+LEFT BRACKET**	**CTRL+SHIFT+LEFT BRACKET**
Frame Get Bottom Right	**CTRL+SHIFT+RIGHT BRACKET**	**CTRL+SHIFT+RIGHT BRACKET**
Frame Set to Window	**CTRL+SHIFT+LEFT BRACKET** twice quickly	**CTRL+SHIFT+LEFT BRACKET** twice quickly

For JAWS Tandem

Description	Desktop Keystroke	Laptop Keystroke
Ends JAWS Tandem Session	**INSERT+ALT+T**	**INSERT+ALT+T**
Toggle Between Target and Controller Desktop (Controller User only)	**INSERT+ALT+TAB**	**INSERT+ALT+TAB**
Toggle Video On or Off on Controller (Controller User only)	**INSERT+CTRL+SHIFT+V**	**INSERT+CTRL+SHIFT+V**

For Research It

Description	Desktop Keystroke	Laptop Keystroke
Open Research It	**INSERT+SPACEBAR**, followed by **R**	**CAPS LOCK+SPACEBAR**, followed by **R**
Launch Research It Using the Primary Lookup Source	**INSERT+WINDOWS Key+R**	**CAPS LOCK+WINDOWS Key+R**

For Convenient OCR

Description	Desktop Keystroke	Laptop Keystroke
Acquire image from camera or scanner	**INSERT+SPACEBAR**, followed by **O**, and then **A**	**CAPS LOCK+SPACEBAR**, followed by **O**, and then **A**
Recognize currently selected image file	**INSERT+SPACEBAR**, followed by **O**, and then **F**	**CAPS LOCK+SPACEBAR**, followed by **O**, and then **F**
Recognize current PDF document	**INSERT+SPACEBAR**, followed by **O**, and then **D**	**CAPS LOCK+SPACEBAR**, followed by **O**, and then **D**
Recognize current application window	**INSERT+SPACEBAR**, followed by **O**, and then **W**	**CAPS LOCK+SPACEBAR**, followed by **O**, and then **W**
Recognize entire screen	**INSERT+SPACEBAR**, followed by **O**, and then **S**	**CAPS LOCK+SPACEBAR**, followed by **O**, and then **S**
Recognize currently selected control	**INSERT+SPACEBAR**, followed by **O**, and then **C**	**CAPS LOCK+SPACEBAR**, followed by **O**, and then **C**

| Cancel recognition while in progress | **INSERT+SPACEBAR**, followed by **O**, and then **Q** | **CAPS LOCK+SPACEBAR**, followed by **O**, and then **Q** |
| Announce help message for OCR commands | **INSERT+SPACEBAR**, followed by **O**, and then **QUESTION MARK** | **CAPS LOCK+SPACEBAR**, followed by **O**, and then **QUESTION MARK** |

For Mouse Echo

Description	**Desktop Keystroke**	**Laptop Keystroke**
Toggle Mouse Echo	**INSERT+SPACEBAR**, followed by **E**, and then **O**	**CAPS LOCK+SPACEBAR**, followed by **E**, and then **O**
Speak Character	**INSERT+SPACEBAR**, followed by **E**, and then **C**	**CAPS LOCK+SPACEBAR**, followed by **E**, and then **C**
Speak Word	**INSERT+SPACEBAR**, followed by **E**, and then **W**	**CAPS LOCK+SPACEBAR**, followed by **E**, and then **W**
Speak Line	**INSERT+SPACEBAR**, followed by **E**, and then **L**	**CAPS LOCK+SPACEBAR**, followed by **E**, and then **L**

Description	Desktop Keystroke	Laptop Keystroke
Speak Paragraph	**INSERT+SPACEBAR**, followed by **E**, and then **P**	**CAPS LOCK+SPACEBAR**, followed by **E**, and then **P**
Announce help message for Mouse Echo commands	**INSERT+SPACEBAR**, followed by **E**, and then **QUESTION MARK**	**CAPS LOCK+SPACEBAR**, followed by **E**, and then **QUESTION MARK**

For Touch Cursor

Description	Desktop Keystroke	Laptop Keystroke
Touch Cursor	**SHIFT+NUM PAD PLUS**	**CAPS LOCK+SHIFT+SEMICOLON**
Next Element	**RIGHT ARROW** or **TAB**	**RIGHT ARROW** or **TAB**
Prior Element	**LEFT ARROW** or **SHIFT+TAB**	**LEFT ARROW** or **SHIFT+TAB**
Next Element by Type	**DOWN ARROW**	**DOWN ARROW**
Prior Element by Type	**UP ARROW**	**UP ARROW**
Cycle Through Element Navigation Types	**PAGE UP** or **PAGE DOWN**	**PAGE UP** or **PAGE DOWN**
First Element	**CTRL+HOME**	**CTRL+HOME**

Description	Desktop Keystroke	Laptop Keystroke
Last Element	**CTRL+END**	**CTRL+END**
Say Current Element	**INSERT+UP ARROW**	**CAPS LOCK+I**
Say All with Touch Cursor	**INSERT+DOWN ARROW**	**CAPS LOCK+DOWN ARROW**
Route Touch Cursor to Focused Element	**INSERT+NUM PAD PLUS**	**CAPS LOCK+APOSTROPHE**
Route Touch Cursor to JAWS Cursor	**INSERT+SHIFT+NUM PAD PLUS**	**CAPS LOCK+SHIFT+APOSTROPHE**
Route JAWS Cursor to Touch Cursor	**INSERT+SHIFT+NUM PAD MINUS**	**CAPS LOCK+SHIFT+LEFT BRACKET**
Text Review	**NUM PAD SLASH** or **INSERT+ENTER**	**CAPS LOCK+ENTER**
Advanced Navigation	**NUM PAD STAR**	**CAPS LOCK+A**

Windows Keystrokes

General

Description	Keystroke
Get Help	**F1**
Open the Start menu	**CTRL+ESC**
Open Windows Explorer	**WINDOWS KEY+E**
Open Run Dialog	**WINDOWS KEY+R**
Find File or Folder from Desktop	**F3**
Minimize All Applications	**WINDOWS KEY+M**
Switch Between Open Applications	**ALT+TAB**
Quit the Active Application	**ALT+F4**

For Windows and Menus

Description	Keystroke
Open the Application Control Menu	**ALT+SPACEBAR**
Move to Current Application's Menu Bar	**ALT**
Choose a Menu Item	**ENTER**
Move Between Menus	**ALT, ARROW KEYS**
Cancel or Close a Menu	**ESC**
Cancel or Close a Cascading Menu	**ALT**

Open a Child Window Control Menu	**ALT+DASH**
Close a Child Window	**CTRL+F4**
Open the Context Menu	**APPLICATIONS KEY** or **SHIFT+F10**

For Dialog Boxes

Description	Keystroke
Move Through Dialog Controls	**TAB**
Move Backward Through Dialog Controls	**SHIFT+TAB**
Move to Another Page	**CTRL+TAB**
Reverse Direction Through Pages	**CTRL+SHIFT+TAB**
Select or Deselect in List View	**SPACEBAR** or **CTRL+SPACEBAR**
Toggle a Check Box On/Off	**SPACEBAR**

For Reading Text

Description	Keystroke
Move One Character Left	**LEFT ARROW**
Move One Character Right	**RIGHT ARROW**
Move One Word Left	**CTRL+LEFT ARROW**
Move One Word Right	**CTRL+RIGHT ARROW**
Move to Beginning of Line	**HOME**
Move to End of Line	**END**

Description	Keystroke
Move One Paragraph Up	**CTRL+UP ARROW**
Move One Paragraph Down	**CTRL+DOWN ARROW**
Scroll Up One Screen	**PAGE UP**
Scroll Down One Screen	**PAGE DOWN**
Move to Beginning	**CTRL+HOME**
Move to End	**CTRL+END**

For Editing Text

Description	Keystroke
Copy	**CTRL+C**
Cut	**CTRL+X**
Paste	**CTRL+V**
Read Clipboard Contents (Desktop or Laptop Layout)	**WINDOWS KEY+INSERT+X** or **WINDOWS KEY+CAPS LOCK+X**
Virtualize Clipboard Contents (Desktop or Laptop Layout)	**INSERT+SPACEBAR** followed by **C** or **CAPS LOCK+SPACEBAR** followed by **C**
Undo	**CTRL+Z**
Delete Current Character	**DELETE**
Delete Prior Character	**BACKSPACE**
Select One Character Left	**SHIFT+LEFT ARROW**
Select One Character Right	**SHIFT+RIGHT ARROW**
Select One Word Left	**CTRL+SHIFT+LEFT ARROW**
Select One Word Right	**CTRL+SHIFT+RIGHT ARROW**

Description	Keystroke
Select to Beginning of Line	**SHIFT+HOME**
Select to End of Line	**SHIFT+END**
Select to Beginning	**CTRL+SHIFT+HOME**
Select to End	**CTRL+SHIFT+END**
Select All	**CTRL+A**

For Windows Explorer

Description	Keystroke
Delete files	**DELETE**
Rename a file or folder	**F2**
Open Properties for Selected File or Folder	**ALT+ENTER**
Refresh a window	**F5**
Switch between panes	**TAB** and **SHIFT+TAB**
Go up one level	**BACKSPACE**

Gestures for Touch Navigation, Text Reading, and Speech Settings

Gesture	Touch Navigation	Text Reading	Speech Settings
One-finger tap	Speak the element at the current location (continuously move your finger around the screen to explore)	Speak the element at the current location (continuously move your finger around the screen to explore)	-
Split tap	Speak the character at the current location while exploring, or activate the selected Touch Keyboard button in both Standard and Touch Typing modes	Speak the character at the current location while exploring, or activate the selected Touch Keyboard button in both Standard and Touch Typing modes	-

Gesture	Touch Navigation	Text Reading	Speech Settings
Split double tap	Speak the word at the current location while exploring, or open and close the panel of alternative keys related to the selected Touch Keyboard button in Touch Typing mode	Speak the word at the current location while exploring, or open and close the panel of alternative keys related to the selected Touch Keyboard button in Touch Typing mode	-
Flick right or left	Next or prior element	Next or prior character	Increase or decrease speech rate
Flick down or up	Next or prior element (of the type previously set by two-finger flick right or left) or changes the value in slider controls	Next or prior line (or anywhere that up/down arrow works to move by line)	Decrease or increase main volume settings
Two-finger flick right or left	Cycle forward or backward through element navigation types, such as regions, headings, list items, etc.	Next or prior word	-

Gesture	Touch Navigation	Text Reading	Speech Settings
Two-finger flick up	Say current element	Prior paragraph (performs a **CTRL+UP ARROW**)	-
Two-finger flick down	Say all	Next paragraph (performs a **CTRL+DOWN ARROW**)	-
Triple tap	Select or clear an item in a list or open and close the panel of alternative keys related to the selected Touch Keyboard button in Standard Typing mode	Toggle text selection	Toggles touch cursor on/off
Two-finger triple tap	Speak selected text	Speak selected text	-
Three-finger flick right or left	Performs a **TAB** or **SHIFT+TAB**	End or beginning of current line (performs a JAWS **END/HOME**)	-

Gesture	Touch Navigation	Text Reading	Speech Settings
Three-finger flick up or down	Cycle between application panes similar to pressing **F6** or **SHIFT+F6**	Beginning or end of text area (performs a **CTRL+HOME/END**)	-
Four-finger flick up or down	First or last element	Move up or down a page or screen (performs a **PAGE UP/DOWN**)	-
Four-finger swipe down	-	Say All (a single tap anywhere on the screen stops reading)	-
Four-finger swipe down-up	Toggles Windows touch keyboard on/off	Toggles Windows touch keyboard on/off	-
Four-finger double tap	List gestures for touch navigation	List gestures for text reading	List gestures for speech settings

Gestures for General Windows and JAWS Commands

Gesture	Action
Double tap	Activate the current element or Touch Keyboard button in Standard Typing mode (Works for both touch navigation and text reading)
Two-finger swipe right-left	Escape (performs **ESC** for both touch navigation and text reading)
Two-finger swipe up-down	Close application (For both touch navigation and text reading)

Gesture	Action
Three-finger swipe down-up	Toggle text review window for elements with text names that do not support standard cursor navigation, such as buttons and list items
Two-finger tap	Silence speech
Two-finger double tap	Same as pressing the **APPLICATIONS** key
Two-finger rotate clockwise	Set next gesture mode
Two-finger rotate counter clockwise	Set prior gesture mode
Three-finger double tap	Toggle speech on/off
Four-finger tap	Display gesture context help
Four-finger triple tap	Gesture practice mode, similar to keyboard help
Four-finger rotate	Passes the next gesture through to Windows
Five-finger tap	JAWS Manager dialog box (If the gesture mode is not already set to touch when this command is used, the mode is set to touch.)
Five-finger double tap	JAWS window (If the gesture mode is not already set to touch when this command is used, the mode is set to touch.)
Five-finger triple tap	Shut down JAWS (If the gesture mode is not already set to touch when this command is used, the mode is set to touch.)
Five-finger rotate	Toggle JAWS gestures off and on