

Hands-On with Technology: An Accessibility Primer

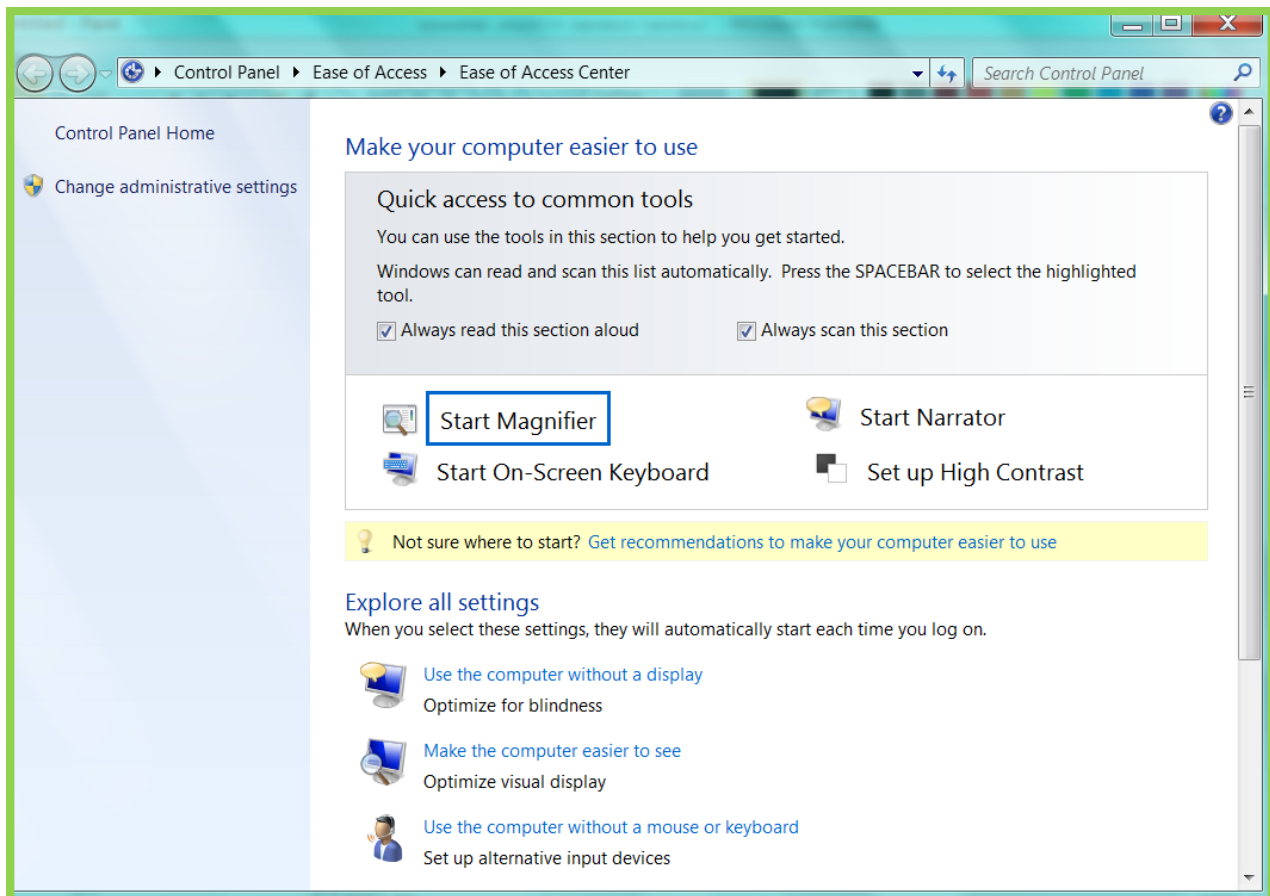
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Microsoft Computers

- Permanently change settings: Control Panel, Appearance and Personalization link, and then choosing Display.
- Temporary methods:
 - Ctrl plus +/-
 - In **Office** Programs, View tab and Zoom and Zoom slider at bottom right.
 - All programs: Hold down ctrl and scroll wheel on mouse.

Ease of Access—Control Panel, click Ease of Access, and then click Ease of Access Center.

- Magnifier
- Narrator
- Many other tools to assist with use of computer



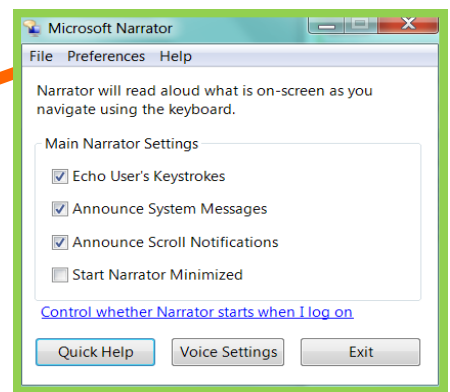
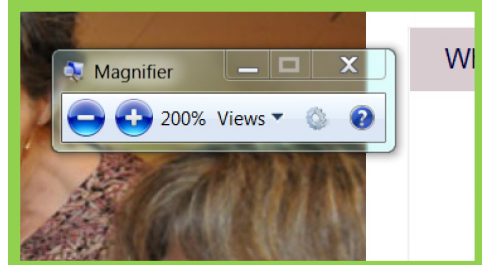
Windows 7 Magnifier Keyboard Shortcuts

Use this keyboard shortcut	To do this
Windows logo key + Plus Sign or Minus Sign	Zoom in or out
Control + Alt + Spacebar	Preview desktop in full-screen mode
Control + Alt + F	Switch to full-screen mode
Control + Alt + L	Switch to lens mode
Control + Alt + D	Switch to docked mode
Control + Alt + I	Invert colors
Control + Alt + arrow keys	Pan in the direction of the arrow keys
Control + Alt + R	Resize the lens
Windows logo key + Esc	Exit Magnifier



Windows 7 Narrator Keyboard Shortcuts

Use this keyboard shortcut	To do this
Windows Key, type narrator	To open Narrator
Ctrl+Shift+Enter	Get information about the current item
Ctrl+Shift+Spacebar	Read the entire selected window
Ctrl+Alt+Spacebar	Read the items that are selected in the current window
Insert+Ctrl+G	Read a description of the items that appear next to the currently selected element
Ctrl	Stop Narrator from reading text
Insert+Q	Move the cursor backward to the beginning of any preceding text that has different formatting. For example, the cursor moves from a bold word to the beginning of a non-bold word that precedes it.
Insert+W	Move the cursor to the beginning of any text that follows it that has different formatting. For example, the cursor moves from a bold word to the beginning of a non-bold word that follows it.
Insert+E	Move the cursor back to the beginning of any text that has the same formatting. For example, the cursor moves from the middle of a bold word to the beginning of that word.
Insert+R	Move the cursor to the end of any text that has the same formatting. For example, the cursor moves from the middle of a bold word to the end of that word.
Insert+F2	Select all of the text that has the same formatting as the character at the cursor
Insert+F3	Read the current character
Insert+F4	Read the current word
Insert+F5	Read the current line
Insert+F6	Read the current paragraph
Insert+F7	Read the current page
Insert+F8	Read the current document



Apple Computers

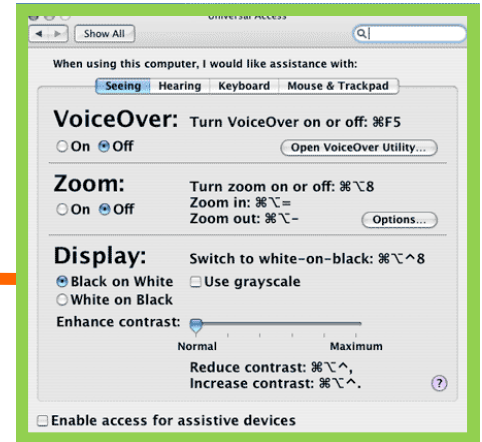
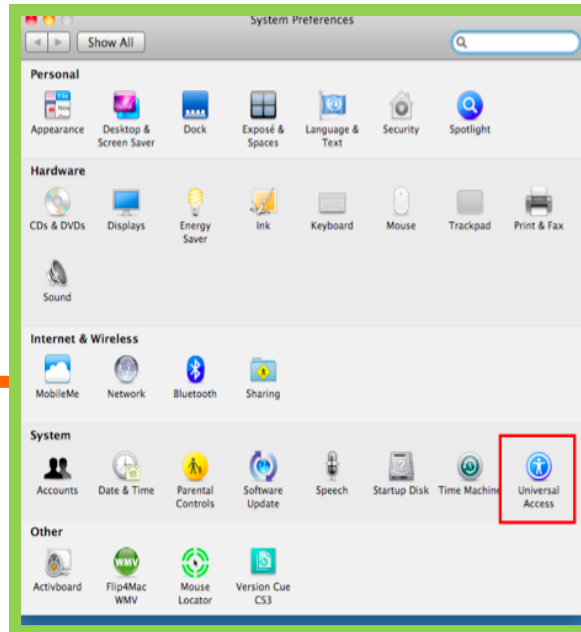
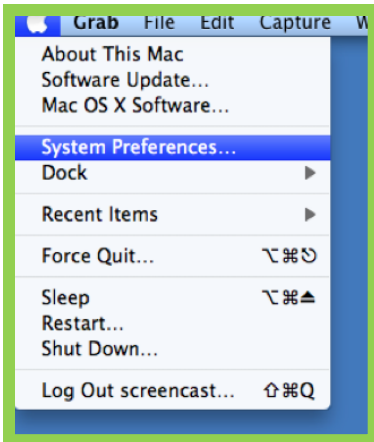


VoiceOver

- Turn on: Command-f5 and in Universal Access
- Basics: VO keys are Control plus Option

Zoom

- Turn on: Option-Command-8 and in Universal Access.
- Zoom in and Out— Command-option-plus (+)/minus (-)



Apple VO Shortcuts (brief)

Use this keyboard shortcut	To do this
VO + A	Start reading
Control (Ctrl)	Stop Reading
VO + →	Read next item
VO + ←	Read previous item
VO + P	Read paragraph
VO + S	Read sentence
VO + W	Read word (press W multiple times to spell words alphabetically and phonetically)
VO + B	Read from top to current location
VO + Home	Jump to top of page (on laptop keyboards, fn + ← is Home)
VO + End	Jump to bottom of page (on laptop keyboards, fn + → is End)
VO + command + ← / →	Select speech setting option (speaking rate, voice, pitch, etc.). Use VO + command + ↑ / ↓ to modify the selected speech setting
VO + u	Web Item Rotor: use ← / → to move between lists of links, headings, form controls, tables, web spaces, and ARIA landmarks. Move up and down list with ↑ / ↓ and press Enter to go to the list item on the webpage.

iPad, iPod touch, iPhone

- Settings—General—Accessibility
 - VoiceOver (screen reader) and Zoom (magnifier)
 - VoiceOver—touch to hear item, double tap to open.



Apple VO Gestures (brief)

Use this keyboard shortcut	To do this
Tap	Speak item.
Flick right or left	Select the next or previous item.
Flick up or down	The effect varies depending on the Rotor Control setting.
Two-finger tap	Stop speaking the current item.
Two-finger flick up	Read all, from the top of the screen.
Two-finger flick down	Read all, from the current position.
Three-finger flick up or down	Scroll one page at a time.
Three-finger flick right or left	Go to the next or previous page (for example, on the Home screen or in Safari).
Three-finger tap	Speak the scroll status (which page or rows are visible).
Four-finger flick up or down	Go to the first or last element on a page.
Four-finger flick right or left	Go to the next or previous section (for example, on a webpage).
Select and Activate	
Double-tap	Activate selected item.
Touch an item with one finger, tap the screen with another finger (“split-tapping”)	Activate item.
Double-tap and hold (1 second) + standard gesture	Use a standard gesture.
The double-tap and hold gesture tells iPad to interpret the subsequent gesture as standard. For example, you can double-tap and hold, and then without lifting your finger, drag your finger to slide a switch.	The double-tap and hold gesture tells iPad to interpret the subsequent gesture as standard. For example, you can double-tap and hold, and then without lifting your finger, drag your finger to slide a switch.
You can use standard gestures when VoiceOver is turned on, by double-tapping and holding your finger on the screen. A series of tones indicates that normal gestures are in force. They remain in effect until you lift your finger, then VoiceOver gestures resume.	You can use standard gestures when VoiceOver is turned on, by double-tapping and holding your finger on the screen. A series of tones indicates that normal gestures are in force. They remain in effect until you lift your finger, then VoiceOver gestures resume.
Two-finger double tap	Play or pause in iPod, YouTube, or Photos. Start or stop the stopwatch.
Three-finger double tap	Mute or unmute VoiceOver.
Three-finger triple tap	Turn the display on or off.

Android Tablets

- Samsung Galaxy (Will work for most Android Tablets)
 - Font Size: Settings—Display— Font Size
 - Settings— Accessibility— TalkBack ON



Android Gestures

Use this keyboard shortcut	To do this
Drag one finger	Explore your screen and hear audible feedback for what is being touched
Double-tap anywhere on the screen	Opens or activates the item that you last touched
Swipe up or down using two fingers	Scroll lists and pages
Swipe left or right using two fingers	Change pages and screens
Swipe right (or down) using one finger	Move to the next item
Swipe left (or up) using one finger	Move to the previous item
Swipe down then up using a single motion	Transition to the next reading level when reading blocks of text, then swipe right to read forward or left to read backward
Swipe up then down using a single motion	Transition to the previous reading level when reading blocks of text, then swipe right to read forward or left to read backward
Swipe right then left using a single motion	Move to the next piece of information
Swipe left then right using a single motion	Move to the previous piece of information
Up then right	Open local context menu
Up then left	Home button
Down then right	Open global context menu
Down then left	Back button
Right then down	Open notifications
Left then up	Recent apps button

Other Tablets

Kindle Fire

- Settings—Accessibility- Voice Guide: On and Explore by Touch: On
 - Can touch items and have read aloud. Double tap to select an item.
 - Note: use two fingers for most actions
 - Three swipes down from top to open settings again.
- Text to Speech (TTS) in books can be used without VoiceGuide or Explore by Touch.

Kindle e-readers

- Settings—VoiceGuide

Nook Tablets (Tablet HD is similar to general Android gestures)

- Settings– Accessibility– TalkBack and Explore by touch ON.
 - Explore, double tap to select. Two fingers to scroll through Apps.
- Also Extra Large Text option in Settings—Accessibility

Great Resources

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