

Magnification: Settings, Apps, and Text-to-Speech

April 2022

Introduction	1
Simple Magnification Options	1
Display Settings	1
Web Browser Magnification	2
Magnification Apps	3
Common Features in Magnification Apps	3
Magnification Tools for Windows	4
Magnifier	4
ZoomText	5
Fusion	6
Magnification Tools for Apple Devices	6
iPad and iPhone	6
Macbook	7
Magnification Tools for Chromebooks	8

Introduction

In recent apps have become much more readily available, and most devices now have a handy magnification tool built in. These apps tend to have similar functions, but we'll review the specifics of different magnification tools in this document.

Simple Magnification Options

Some users may only need a little bit of magnification. Some simple magnification techniques, like adjusting a device's display settings or enlarging content within a browser, may be enough for these users to access their learning materials.

Display Settings

You can adjust your device's display settings to make icons and text bigger. These settings may not transfer to all applications. This is an easy starting point for enlarging content, but this may not address all of a user's magnification needs.

Here are some common settings that can be adjusted on devices.

- Display scale: Adjust the default scaling for everything on the screen.
- Text size: Enlarge text size independent from the display scaling. Some devices (like iPads) have a generic text enlargement setting and an additional text enlargement setting under the Accessibility menu.
- Color adjustments: At a minimum, devices offer the ability to invert colors. Some devices allow you to add color filters to increase contrast or address color blindness.
- Cursor adjustments: Make your mouse cursor larger or easier to track.

Web Browser Magnification

On laptops, you can adjust your browser's settings to enlarge text or to adjust the default magnification-level for web pages. On iPads, browser settings cannot be adjusted within an app and are instead controlled by your iPad's general display settings.

You can also use a simple keystroke to enlarge content within a web browser. By pressing Ctrl and + or Ctrl and -, you can adjust your magnification level on most web pages. Alternatively, you can hold Ctrl and use the scroll wheel on your mouse (or scroll gesture on a touchpad) to adjust the magnification level in the same manner. On many websites, content will readjust its layout so that users don't have to pan across the screen to view all of the content. This is called "reflow".

On iPads, you can easily adjust the magnification level by pinching in or out on the screen. This type of magnification does not trigger "reflow" on web pages, so the user will have to pan around the screen in order to access all of the content.

When using this approach, not all web content will magnify as expected, particularly interactive content. If you want to ensure that all content is enlarged effectively, consider using a stand-alone magnification app.

Magnification Apps

For users that require significant magnification, a stand-alone magnification app can be the best option. These magnification apps will magnify EVERYTHING on your computer screen. Using one of these tools can change the way you interact with your computer, so you will likely want to have some structured practice time before you try to utilize these tools regularly.

Common Features in Magnification Apps

- **Magnifier style:** Magnification apps typically have several magnification styles to choose from.
 - **Full Screen:** The magnified view takes up the entire screen. You can use your mouse (or gestures on a touch screen) to pan around and reach all areas of the screen.
 - **Lens:** Most of the computer screen is not magnified, but a magnified view is presented in a small window that follows the cursor. This allows the user to see an overview of the whole screen at all times.
 - **Docked:** Most of the computer screen is not magnified, but a magnified view is presented in a small window that is locked to a certain area of the screen. This allows the user to see an overview of the whole screen at all times.
- **Color Contrast:** Most magnification tools have a feature that allows the user to adjust the color contrast. Some tools can only invert colors, while other tools provide a greater level of customization. Further color contrast adjustments may be found in your device settings.
- **Text-to-speech (read aloud):** Many magnification tools have a built in text-to-speech tool to read text for the user. If this is not available within the magnification tool, it is likely available through other device settings.

Magnification Tools for Windows

Magnifier

[Windows Magnifier Overview](#)

Windows' Magnifier tool is a free magnification tool that is built into the operating system. You can turn on the magnifier by pressing the Windows key and + at the same time. To adjust the magnification, you can click the buttons on the Magnifier toolbar, or you can press Windows and + to zoom in and Windows and - to zoom out.

The Magnifier tool also has a built in text-to-speech tool. You can use the Play button to begin reading content, or you can click the "Read from here" button (cursor with a speaker icon) to read from wherever you click on the screen.

You can customize this tool further by clicking on the gear icon to adjust your Magnifier settings. You can adjust your magnification increments, invert colors, open Magnifier when your computer starts, and more!

Windows Magnifier Keystrokes

Function	Keystroke
Turn Magnifier On	Windows + +
Zoom In/Out	Windows + +/-
Read Aloud Play Button	Ctrl + Alt + Enter
Read Next Sentence	Ctrl + Alt + K
Read Previous Sentence	Ctrl + Alt + H
Read from Here	Ctrl + Alt + Left Mouse Click
Stop Reading	Press any key
Invert Colors	Ctrl + Alt + I
Cycle through Magnifier Styles	Ctrl + Alt + M

ZoomText

[\(Quick\) ZoomText Color Overlay and Mouse Cursor Demo Video](#)

The classic magnification software from Freedom Scientific. ZoomText costs around \$90 dollars a year and can be purchased with quota funds from APH.

ZoomText is fairly easy to use and has lots of useful features. You can zoom in and out using Caps Lock and the up and down arrows. You can use the built in text-to-speech tool to have text read aloud to you as you move around your computer. There are several options for enlarging your mouse cursor and helping you track the cursor on the screen. There are also several color contrast options that can be applied to the entire screen. If you dig into the ZoomText settings, you can customize many aspects of the tool so that it works just right.

*ZoomText will not read aloud or echo typing in Google Docs.

ZoomText recommends learning the following hotkey commands.

ZoomText Hotkey Commands that every user should know

Function	Keystroke
Zoom In/Out	Caps Lock + Up / Down
Zoom to 1x (toggle)	Caps Lock + Enter
Enhance Colors On/Off	Caps Lock + C
Show User Interface	Caps Lock + Ctrl + U
ZoomText On/Off	Caps Lock + Ctrl + Enter
Launch AppReader	Caps Lock + Alt + A
Voice Faster/Slower	Caps Lock + Alt + Up/Down
Voice On/Off	Caps Lock + Alt + Enter
Quiet	Ctrl

Fusion

[Fusion Starter Hotkey Commands](#)

Fusion is available through APH for \$300 annually. Fusion combines JAWS and ZoomText into a single app so that you can use the two programs simultaneously. This is a great option for students who will primarily be using a screen reader but want to occasionally use their vision to reference items on screen. It can also be a good transition tool for users who are familiar with magnification apps but need to move to a screen reader.

Fusion uses a combination of ZoomText and JAWS keystrokes. Refer to the table above for ZoomText keystrokes. You can [learn more about JAWS keystrokes here](#).

*Fusion can read text aloud and echo typing in Google Docs. I had the best results by turning the Google Docs Screen Reader Support off (Ctrl + Alt + Z) and turning Braille Support on (Ctrl + Alt + H).

Magnification Tools for Apple Devices

Apple devices (iPhone, iPad, Macbook, etc.) have a built-in magnification tool called “Zoom”. You can find and enable this tool in the Accessibility section of the Settings app (System Preferences on a Macbook). Text-to-speech is controlled by a separate group of settings in the Spoken Content section of the Accessibility settings.

iPad and iPhone

[Zoom in on the iPad Screen](#)

Once you have Zoom enabled in your device settings, you can turn it off and on by double tapping on your device with 3 fingers. To adjust the magnification, double tap and hold your fingers on the screen on the second tap; you can then move your fingers up or down to zoom in or out. Use 3 fingers to pan around the screen. To access additional options, triple tap with 3 fingers. This will bring up the Zoom controller, which will allow you to quickly adjust the magnification with a slider, change your magnification style, or adjust your color filters.

Apple uses different terms for its magnification styles. On iPhones and iPads, “Window Zoom” is a lens style magnifier, and “Pinned Zoom” is a docked style magnifier.

iPad and iPhone Zoom Gestures

Function	Gesture
Turn Zoom on and off (once enabled in Settings)	3-finger double tap
Zoom In/Out	3-finger double tap and hold, then move up or down
Open Zoom Controller	3-finger triple tap

Macbook

[How to use Accessibility's zoom feature on Mac](#)

In the Macbook's Accessibility settings, you can choose how to enable the Zoom tool. You can enable Zoom with a keystroke only, or you can hold a key and use a scroll gesture. If you choose to use keystrokes, you can start the Zoom tool by pressing Command + Options + 8. If you choose to use the scroll gesture, you can start the Zoom tool by holding down your modifier key (Control is the default key) and using the scroll gesture (two finger swipe on the trackpad).

Apple uses different terms for its magnification styles. On Macbooks, "Picture-in-picture" is a lens style magnifier, and "Split Screen" is a docked style magnifier.

Macbook Zoom Keystrokes

Function	Gesture
Turn Zoom on and off with keystroke	Command + Options + 8
Turn Zoom on and off with keystroke	Ctrl + two-finger swipe up
Zoom In/Out with keystroke	Command + Options + = (zoom in) Command + Options + - (zoom out)
Zoom In/Out with gesture	Ctrl + two-finger swipe up or down

Magnification Tools for Chromebooks

[Zoom in or magnify your Chromebook screen](#)

Chromebooks have a built-in magnifier that can be enabled and adjusted in the device settings. To open the device settings on a Chromebook, click on the time in the bottom right corner of the screen, and then click on the gear icon to access the Settings. Once the Settings screen is open, click on the collapsed “Advanced” menu and open the Accessibility settings. The magnifier settings can be found under the Display heading.

The Chromebook magnifier is fairly simple, but you can enable additional settings from the Accessibility menu. Under the Text-to-Speech heading, you can enable the Select-to-Speak tool to have text read aloud. There is a high contrast setting under the Display heading. Under Keyboard and text input, the “Highlight keyboard focus” and “Highlight text caret” tools will help you keep track of your cursor. The mouse cursor can be enlarged and can also be highlighted when moving by adjusting the settings in the Mouse and touchpad section.

Chromebook Magnifier Keystrokes

Function	Keystroke
Turn Fullscreen Magnifier On/Off	Ctrl + Search + M <u>OR</u> Ctrl + Launcher + M
Turn Docked Magnifier On/Off	Ctrl + Search + D <u>OR</u> Ctrl + Launcher + D
Zoom In/Out with keystrokes	Ctrl + Alt + Brightness up/down
Zoom In/Out with touchpad	Ctrl + Alt + two-finger swipe up/down