

Windows 10

Accessibility Features for People with Vision Impairments



There are many Accessibility features available in Windows 10. This document outlines the most popular options used by people with vision impairments!

The Magnifier

Windows 10 comes with a built-in magnifier. It is ideal for magnifying the contents of the whole screen! This includes not only the text and images found inside documents, email messages and web pages, but other screen elements such as menus, toolbars and Desktop icons.

Turning the Magnifier On

To turn the Magnifier on, hold down the **WINDOWS** key (the key with the Microsoft logo printed on it) and then press the **+** (Plus) key on the Number Pad. Upon doing this, the screen's contents will be magnified. If you are using a laptop, you can press **WINDOWS** and **=** (Equals) situated towards the end of the number row instead to turn Magnifier on.

Changing the Magnification

To increase the magnification, hold down the **WINDOWS** key and press **+** (Plus) on the Number Pad, or **=** (Equals) on the number row. Each time you press this combination of keys, the magnification level gets larger.

To decrease the magnification, hold down the **WINDOWS** key and press **-** (Minus) on the Number Pad, or **-** (hyphen) on the number row. Each time you press this combination of keys, the magnification level gets smaller.

When using magnification, it will be necessary to scroll the screen using the mouse in order to see all of the text. The larger you make the magnification, the less you get on the screen!

Changing the Zoom Increment

By default, when you increase or decrease the magnification, it changes incrementally by 100%. This makes it difficult to find the ideal size! Fortunately, it is possible to specify a smaller Zoom increment. Choosing a smaller incremental value, will enable you to fine-tune the magnification to meet your needs.

To change the Zoom increment, follow these steps:

1. Hold down the **CTRL** and **WINDOWS** keys together and then press the letter **M**. Upon doing this, the Magnifier Settings screen will be displayed.
2. In the Magnifier Settings screen, select **25%** from the Change Zoom Increments combo box. For reference, a combo box is a dropdown list of pre-set values.
3. Close the Magnifier Settings screen.

Now, when you increase or decrease the magnification, it will change by 25% at a time. This will make it easier to find the ideal magnification level!

Turning the Magnifier Off

To turn the Magnifier off, hold down the **WINDOWS** key and press the **ESCAPE** key. Upon doing this, the text and images on the screen will return to their standard size!

For further information about the Windows 10 Magnifier, see the document called 'An Introduction to the Windows 10 Magnifier', found on the Sight For Surrey web site.

For your convenience, the link to the appropriate page is as follows:

<https://sightforsurrey.org.uk/get-help/vision-impairment/technology-and-equipment/ict-handouts-tutorials/>.

The Windows Zoom Feature

The Windows Zoom feature is similar to the Magnifier, however, it only affects text and images found inside documents, email messages and on web pages. It doesn't change the size of the menus, toolbars and other screen elements like the Magnifier does.

The Zoom feature is most commonly used on web pages and inside email messages. It is an ideal solution for someone who has reduced vision, such as someone suffering from Glaucoma or AMD, who needs to adjust the size of text by small amounts in order to read it.

To use the Zoom feature, follow these steps:

1. Open a web page or email message.
2. Move the mouse pointer into the area which contains the text. Then, hold down the CTRL key (the bottom left key on the keyboard) and roll the wheel on the mouse away from you. Upon doing this, the text will become larger!
3. To decrease the size of the text, hold down the CTRL key and roll the wheel on the mouse towards you. Upon doing this, the text size will become smaller.

You can also change the zoom level by pressing keyboard commands. To increase the zoom level, hold down the CTRL key and press the = (Equals) key on the number row. To decrease the zoom level, hold down the CTRL key and press the - (hyphen) key on the number row.

Zoom is a real quick and easy to use option!

Changing the Screen Colours

For many people, the default screen colours in Windows 10 are not easy to see. This is especially true if you suffer from glare. Fortunately, there are some alternative high contrast screen colours you can choose from.

To choose a high contrast colour scheme, follow these steps:

1. Open the Start Menu and in the search field at the bottom, type "High Contrast" (without the quotes). Upon doing this, a list of options will be displayed.
2. Choose the option labelled "Turn High Contrast on or off". Upon doing this, the High Contrast Settings screen will be displayed.
3. In the High Contrast Settings screen, select the button towards the top of the screen labelled "Turn on high contrast". Upon doing this, the screen colours will change to a black background with white text.

4. From the High Contrast Theme combo box, select the theme which meets your requirements. For reference, a combo box is a dropdown list of pre-set values.
5. If you wish, you can choose to customise the background colour, text colour, hyperlink colour etc, by selecting the appropriate options and then adjusting the colour. This is a little tricky and probably won't be necessary!
6. When you've made your selections, close the High Contrast Settings screen.

If you find the colour scheme you chose isn't suitable, then turn the High Contrast feature off by following steps 1, 2 and 3 outlined above.

You can also turn High Contrast on/off by pressing the keyboard shortcut SHIFT and ALT and PRINT SCREEN. When you turn High Contrast on in this way, you'll receive a message asking if you'd like to turn High Contrast on. Activate the "Yes" button and the screen colours will be changed a second or two later. When you turn High Contrast off using SHIFT and ALT and PRINT SCREEN, you won't receive a confirmation message asking if you'd like to do this! The colours will be set back to the original a second or two later!

Note 1: If you are using a laptop computer, it's highly likely that the keyboard doesn't contain a PRINT SCREEN key. Therefore, you won't be able to turn High Contrast on/off using a keyboard shortcut!

Changing the Size and Colour of the Mouse Pointer

Windows 10 allows you to change the size and colour of the mouse pointer. This can be extremely useful for people who have reduced vision. The mouse pointer can be made extremely large!

To change the mouse pointer size and colour, follow these steps:

1. Open the Start Menu and in the search field at the bottom, type "mouse" (without the quotes). Upon doing this, a list of options will be displayed.
2. Choose the option labelled "Change mouse pointer size". Upon doing this, the Change Pointer Size and Colour screen will be displayed.
3. Adjust the slider associated with the mouse pointer size. For reference, there are 15 settings, each being approximately 25% different in size than the other.

4. When you've selected the ideal size for the mouse, select the Custom option from the Change pointer Colour list. Then, select the desired colour.
5. When you've finished making the necessary adjustments, close the Change Pointer Size and Colour screen.

The mouse pointer will now be larger and in a different colour!

Narrator

Narrator is the screen reader built-in to Windows 10. It is designed to provide spoken guidance to a person who has very little, or no vision. In simple terms, a screen reader works by following the cursor and speaking what is at that position. Using a screen reader will take time and dedication to learn, but it is probably the only way a person with very poor or no vision can use a computer efficiently.

All screen readers react to keyboard commands. Although it is possible to use a screen reader in conjunction with the mouse, the tasks you can perform will be limited. Therefore, it is essential that you've good keyboarding skills in order to get the most out of Narrator.

Starting Narrator

To start Narrator, hold down the **CTRL** and **WINDOWS** keys together and then press the **ENTER** key. Upon doing this, Narrator will start.

By default, upon starting Narrator, you will be focused in a window titled Narrator Home. This is designed to provide you with tips and information on how to use Narrator. At the bottom of this screen, you'll find a check box labelled "Show Narrator Home when Narrator starts". This will be ticked. It's recommended to untick this option to avoid this window from being displayed each time you use Narrator. To untick this option, press **TAB** until Narrator says "Show Narrator home when Narrator starts" and then press the **SPACEBAR**. Once you've done this, minimise the Narrator Home window. For reference, a quick method of minimising a window is to hold down the **WINDOWS** key and pressing the letter **M**.

Reading Text with Narrator

Now that Narrator has been started, it will speak the contents of the Desktop, menus, toolbars and most importantly, documents and email messages. The following keyboard commands can be used to read text using Narrator:

Note 2: By default, Narrator uses either the **CAPS LOCK**, or the **INSERT** key, in conjunction with other keys for certain Narrator commands. These keys are referred to as the 'Narrator' key.

RIGHT ARROW Read next character
LEFT ARROW Read previous character
CTRL and RIGHT ARROW Read next word
CTRL and LEFT ARROW Read previous word
DOWN ARROW Read next line
UP ARROW Read previous line
NARRATOR and CTRL and L Read next paragraph
NARRATOR and CTRL and J Read previous paragraph
NARRATOR and DOWN ARROW .. Read all text from the cursor position

Adjusting the Speech Rate and Voice Volume

You can increase and decrease the speed at which Narrator reads. You can also increase and decrease the volume of the voice. Use the following commands to make adjustments to the reading speed and volume:

NARRATOR and = (Equals) Increase reading speed
NARRATOR and - (minus/hyphen) Decrease reading speed
narrator and CTRL and = (Equals) Increase volume
NARRATOR and CTRL and - (minus/hyphen) Decrease volume

Note 3: The - key (minus/hyphen) is the one to the left of the = key (Equals), found on the number row above the letter keys.

There are many more keyboard commands which can be used with Narrator. However, the above list should be enough to get you started!

If you feel brave, or just inquisitive, you can explore the settings for Narrator by holding down the **CTRL** and **WINDOWS** keys together and then pressing the letter **N**. Upon doing this, the Narrator Settings screen will be displayed. In this screen, you can choose a different voice, change the reading speed, change the punctuation level etc.

Exiting Narrator

To exit Narrator, press **NARRATOR and ESCAPE**. Alternatively, you can also exit Narrator by holding down both the **CTRL** and **WINDOWS** keys and pressing **ENTER**. When you turn Narrator back on, the voice rate and volume will be the same as when you last used it!

This is the end of the introduction to those Accessibility features designed to help people with Vision Impairments use their Windows 10 computer. Whilst there are other options available, the ones mentioned in this document should be sufficient to allow you to find a feature which works for you.

If you require further information regarding the Windows 10 Accessibility features, contact the author, Gary Eady, using the following email address:

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