

# HELPING SENIORS WITH DISABILITIES GET ONLINE

ACCESSIBILITY FEATURES  
IN POPULAR COMPUTER  
AND MOBILE DEVICES



Proudly  
supported by: **nib** foundation

*This manual has been produced by Media Access Australia in collaboration with Council on the Ageing (COTA) Western Australia and proudly supported by the nib foundation, to assist seniors with disabilities access computers and digital technology through the use of free built-in assistive technologies.*

## ABOUT MEDIA ACCESS AUSTRALIA

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'We believe that all Australians have the right to access all forms of media and information, through technology, so they can participate fully in society.'

Media Access Australia (MAA) is Australia's only independent not-for-profit organisation devoted to increasing access to media for people with disabilities.

At the core of our work is the understanding that exclusion from mainstream media has profound effects on educational outcomes, workforce participation and social inclusion.

## ABOUT COUNCIL ON THE AGEING WESTERN AUSTRALIA

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Council on The Ageing Western Australia (COTA WA) is an incorporated, non-profit, organisation run by older people for older people. COTA (WA) has 3,000 individual supporters and more than 100 organisational members, themselves representing over 200,000 individuals. Our purpose is to work with all older Western Australians to achieve a just, inclusive and equitable society so that the rights of all Western Australians are protected and advanced.

COTA (WA) advocates on behalf of seniors to influence local, state and federal government, business and the community; it provides programs and projects that benefit seniors; and it is also a member organisation which provides benefits to individual and organisational members including the Ambassador Card, COTA News and free or reduced prices to attend events.

## ABOUT THE NIB FOUNDATION

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nib foundation is a not-for-profit charitable organisation aimed at improving the health and wellbeing of all Australians that was established in 2008 by nib health funds.

We focus our support on young people and carers, funding programs that provide unique approaches to improving their health outcomes.

Our foundation has already directly and positively impacted the lives of more than 26,000 people across Australia through \$10 million in funding for more than 40 programs. By 2015, we aim to increase this number to 50,000 Australian lives.

## ABOUT THE AUTHOR

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Dr Scott Hollier is a Project Manager and the Western Australia Manager for Media Access Australia. Scott's work focuses on making computers and Internet-related technologies accessible to people with disabilities. Scott also represents MAA on the Advisory Committee of the World Wide Web Consortium (W3C), the organisation primarily responsible for developing and promoting access to media through technology for people with disabilities.

Scott has completed a PhD entitled 'The Disability Divide: an examination into the needs of computing and internet-related technologies on people who are blind or vision impaired', and has a background in Computer Science and a wealth of experience in both the information technology and not-for-profit sectors. Scott is legally blind and as such understands the importance of access at a personal level.

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# 1.0 INTRODUCTION

This manual has been created for member organisations of the Council of the Ageing Western Australia (COTA WA) to support seniors with disabilities in participating online through the use of computers and mobile devices such as tablets and smartphones. Funding for the creation of this resource has been provided by the nib foundation and the manual itself has been created by Media Access Australia.

Accessibility, in this context, generally refers to the provision of a tool or method that makes it easier for people with disabilities to use computing devices and the Internet. Popular computing devices may include a desktop computer, a laptop computer, a tablet computer or a mobile phone.

Traditionally it has been expensive for people with disabilities to get access to computers and the Internet. A few years ago it would have been necessary to purchase software programs generally called Assistive Technologies (AT), and these tools could cost several thousand dollars. Today, however, most popular computers and mobile devices have accessibility features and AT which are built-in or can be freely downloaded from the Internet.

Due to the improved affordability of accessibility, initiatives by the Australian government to improve website accessibility and the rapid increase of social media among seniors, it could be argued that there has never been a better time for seniors with disabilities to join in the popular community interaction that occurs online, including keeping in touch with grandchildren, participating in community events and finding information related to interests and hobbies.

This resource provides step-by-step guides to assist in enabling the accessibility features on your computer or mobile device so that seniors with disabilities are able to participate in the same online benefits as everyone else. In addition, the resource also provides guidance on overcoming potential barriers in using social media and other popular tasks.

## 2.0 FEATURES OF THE MANUAL

### 2.1 HOW TO USE THIS MANUAL

This manual has been designed to be used in several ways depending on the need of the COTA WA organisation. Uses can include:

- Training by operating system: trainers can deliver step-by-step training to seniors with disabilities in the operating system of their choice including Windows, Mac, iOS or Google Android.
- Training by disability type: trainers can deliver step-by-step training to seniors with disabilities based on a particular disability. This manual focuses on vision, hearing and mobility-related disabilities, and the instructions provided are structured to provide the easiest way for a particular disability group to interact. For example, instructions for a person with a vision impairment are represented as keyboard shortcuts, while instructions for a person with a hearing impairment are presented as a visual walk-through with screenshots.
- Companion manual: this manual can also be used as a companion guide for seniors with disabilities who are undertaking other training courses, so that the relevant accessibility tools can be enabled prior to the training taking place.

### 2.2 OPERATING SYSTEMS AND DEVICES DISCUSSED IN HIS MANUAL

This manual provides accessibility information for the following operating systems:

- Microsoft Windows XP
- Microsoft Windows Vista
- Microsoft Windows 7
- Microsoft Windows 8 (consumer preview)
- Apple Mac OS X versions 10.4 (Leopard) to 10.7 (Lion)
- Apple iOS devices including the iPhone and the iPad
- Google Android 2.3 and 4.0 including mobile phones and tablets

Information is also provided on popular social media tools including Facebook, Twitter, YouTube and blogging tools.

## 3.0 WINDOWS ACCESSIBILITY FEATURES

### 3.1 WHAT ACCESSIBILITY FEATURES ARE IN WINDOWS?

Current versions of Windows such as Windows XP, Windows Vista and Windows 7 contain many accessibility features which can make computers easier and more comfortable to use. This document separates the main features into the following categories:

- Vision: accessibility features that can assist a person who has a vision impairment
- Hearing: accessibility features that can assist a person who has a hearing impairment
- Mobility: accessibility features that can assist a person who has a mobility impairment

Vision-related features include:

- Adjustment of the font size on the desktop
- Adjustment of the desktop icon size
- Adjustment of the screen resolution
- Adjustment of the colours, such as the use of a high contrast colour scheme
- Adjustment of the cursor width and blink rate
- The Magnifier application
- Toggle Keys which provide audio effect when Toggle keys are enabled, such as CAPS LOCK
- Text-to-speech through the Narrator screen reader application
- Adjustment of the mouse pointer size and trails

Hearing-related features include:

- Adjustment of the sound volume
- The ShowSounds and SoundSentry features which present visual alerts in addition to audio alerts

Mobility-related features include:

- Adjustment of the mouse double-click speed
- Adjustment of mouse pointer movement speed
- ClickLock, which allows icons to be dragged without holding down the mouse button
- Mouse Keys, which allows the mouse pointer to be moved using the keyboard
- Sticky Keys to use command keys such as SHIFT and ALT without having to keep it held down
- Filter Keys to remove accidentally repeated keystrokes
- The On-Screen Keyboard application



In addition, Windows 7 provides an 'Ease of Access' manager, a greater emphasis on speech recognition, improved 'under the bonnet' accessibility support and enhancements to existing utilities including a full-screen version of Magnifier and a predictive text feature in the On-Screen Keyboard.

**NOTE REGARDING WINDOWS 8:** At the time of writing, Microsoft Windows 8 has not been officially released. However, testing by Media Access Australia on early versions of Windows 8 has revealed the following additional accessibility features:

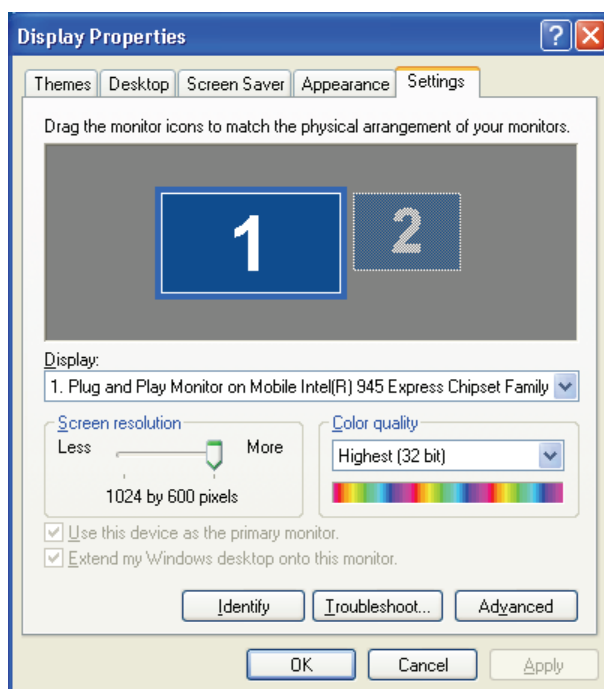
- Ability to use accessibility features while setting up Windows for the first time
- Ability to select accessibility features to start when the computer starts
- Magnifier and High Contrast colour schemes can be used at the same time

While the Windows 8 interface has changed significantly due to its new touch-optimised 'Metro' interface, many of the keyboard commands discussed in this manual for Windows 7 are likely to be applicable to Windows 8, such as holding down the 'Windows' key and pressing the 'U' key to bring up the Ease of Access panel. Further information on the accessibility of Windows 8 can be found at the Microsoft Accessibility website <http://www.microsoft.com/enable>

## 3.2 VISION-RELATED ACCESSIBILITY FEATURES

### 3.2.1 CHANGING THE FONT SIZE, ICON SIZE AND SCREEN SIZE

Changing the font size, icon size and screen size can all be achieved with one process. The easiest way to achieve this is by changing the screen resolution.

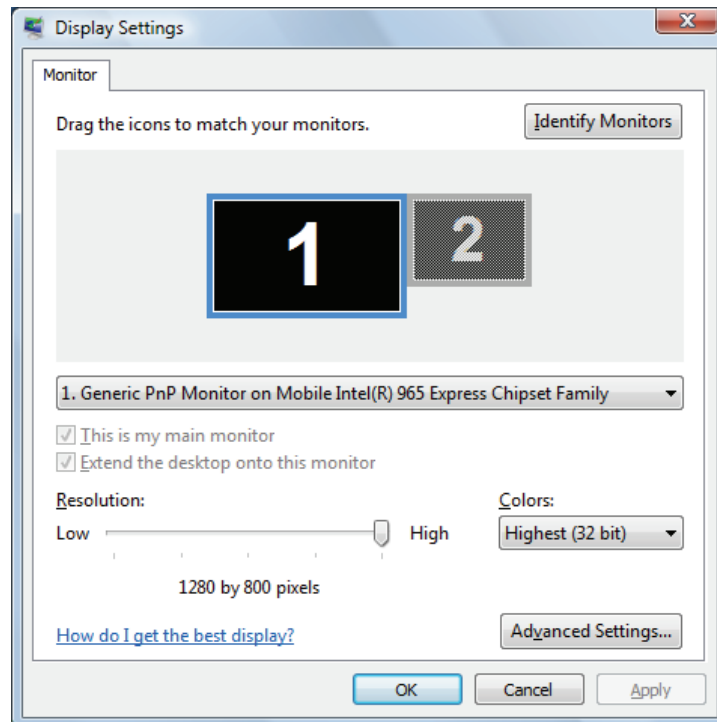


**Figure 1** Changing the screen resolution in Windows XP



## Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel, select 'Display'. If there is no 'Display' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side of the Control Panel.
- 4) In the Display window select the 'Settings' tab, located towards the top-right corner of the window.
- 5) Halfway down the window on the left side you will see a slider bar labelled 'Screen resolution'. Select and hold the slider bar. To make the text larger, move the slider bar to the left. To make the text smaller, move the slider bar to the right.
- 6) Select the 'OK' button.

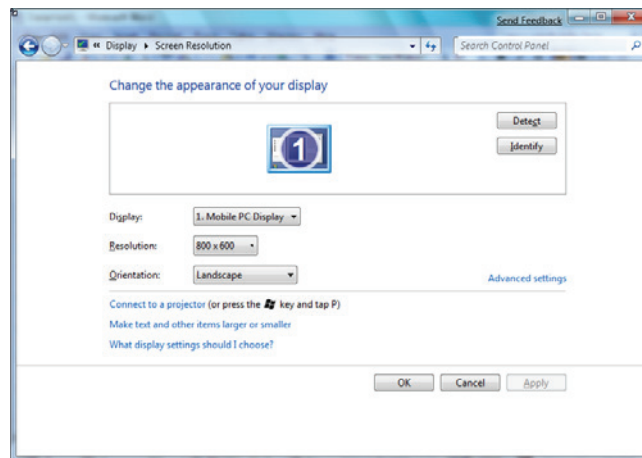


**Figure 2** Changing the screen resolution in Windows Vista

## Windows Vista:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Appearance and Personalization'.
- 4) Select 'Personalization'.
- 5) Select 'Display Settings' located towards the bottom of the window.
- 6) Halfway down the window you will see a section titled 'Resolution' with a slider bar. Select and hold the slider bar. To make the text larger move the slider bar to the left. To make the text smaller move the slider bar to the right.

7) Select the 'OK' button.



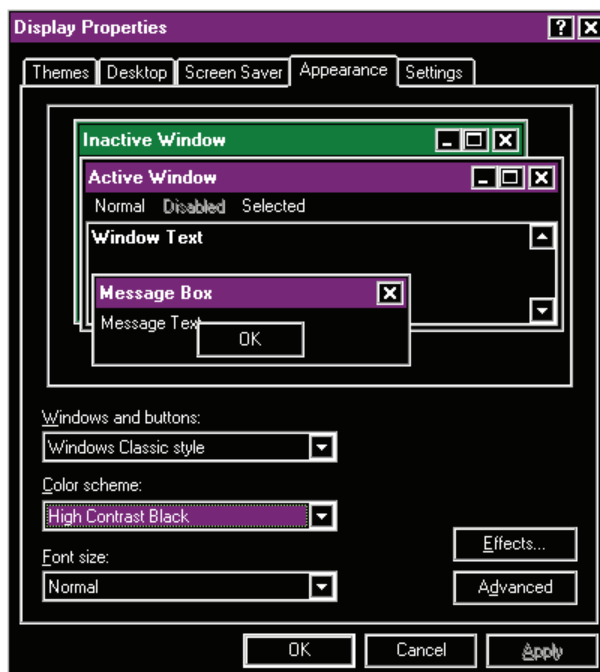
**Figure 3** Changing the screen resolution in Windows 7

Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Appearance and Personalization'.
- 4) Select 'Display'.
- 5) Select the 'Change display settings' link towards the top of the window on the left-hand side.
- 6) In the 'Resolution' section select the pull-down bar, and a slider bar should appear. Move the slider bar down to make the text larger or move it up to make the text smaller.
- 7) Select the 'OK' button.

### 3.2.2 CHANGING THE COLOURS TO HIGH CONTRAST

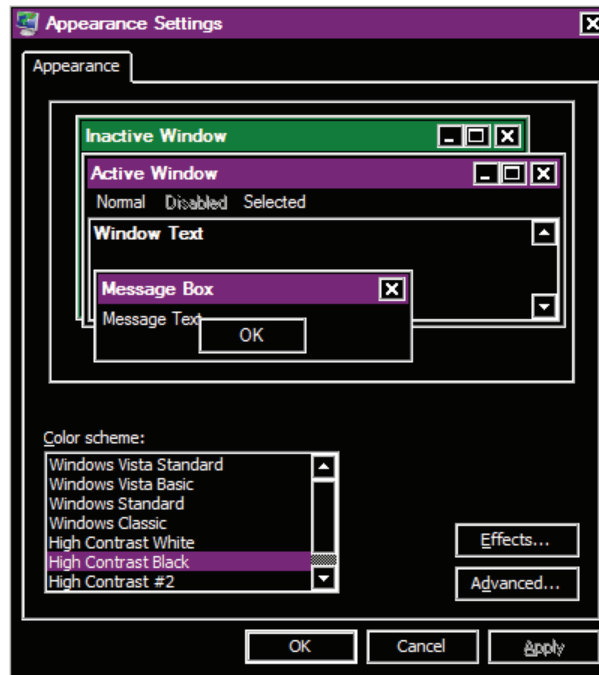
Changing the Windows colours to high contrast can help reduce glare or improve the clarity of the picture on the screen.



**Figure 4** Changing the colours to High Contrast Black in Windows XP

Windows XP:

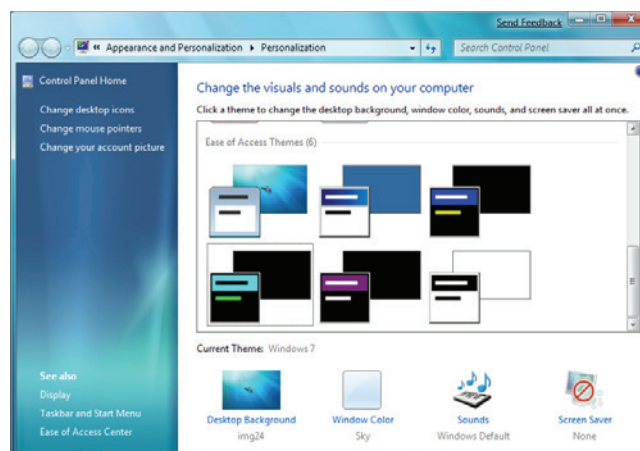
- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Display'. If there is no 'Display' icon, you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) In the 'Display Properties' window select the 'Appearance' tab, located towards the right middle of the top of the window.
- 5) Halfway down the window, on the left side, you will see a pull-down bar labelled 'Windows and buttons'. Change this to 'Windows Classic Style'.
- 6) Underneath you will find another pull-down menu labelled 'Color Scheme'. Change this to a high contrast colour scheme, such as 'High Contrast Black'.
- 7) Select the 'OK' button.



**Figure 5** Changing the colours to High Contrast Black in Windows Vista

Windows Vista:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Appearance and Personalization'.
- 4) Select 'Personalization'.
- 5) Select 'Theme' located towards the bottom of the window.
- 6) In the 'Theme' pull-down bar choose 'Windows Classic'.
- 7) Select the 'OK' button.
- 8) You should now be back in the 'Personalization' window. Select 'Windows Color and Appearance'.
- 9) In the 'Color scheme' section select a high contrast colour scheme.
- 10) Select the 'OK' button.



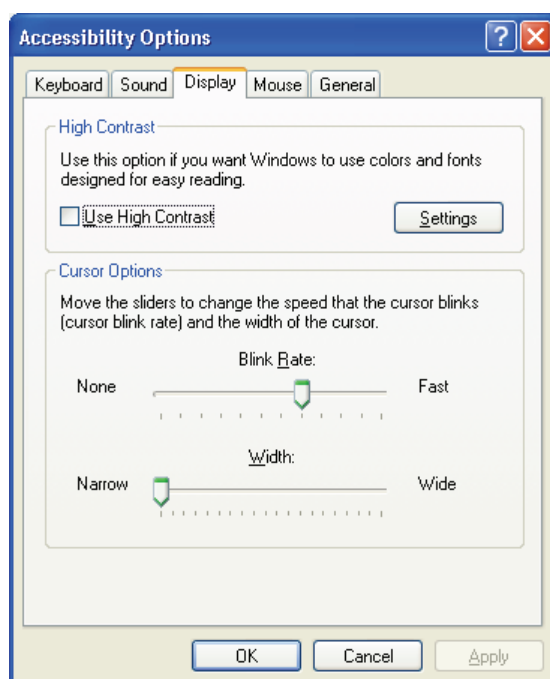
**Figure 6** Selecting a high contrast colour scheme in Windows 7

Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Appearance and Personalization'.
- 4) Select 'Personalization'.
- 5) Select the theme that you wish to use such as those in the 'Ease of Access Themes' section.

### 3.2.3 CURSOR WIDTH AND BLINK RATE

Changing the cursor width and blink rate can make it easier to see the cursor and control the text.

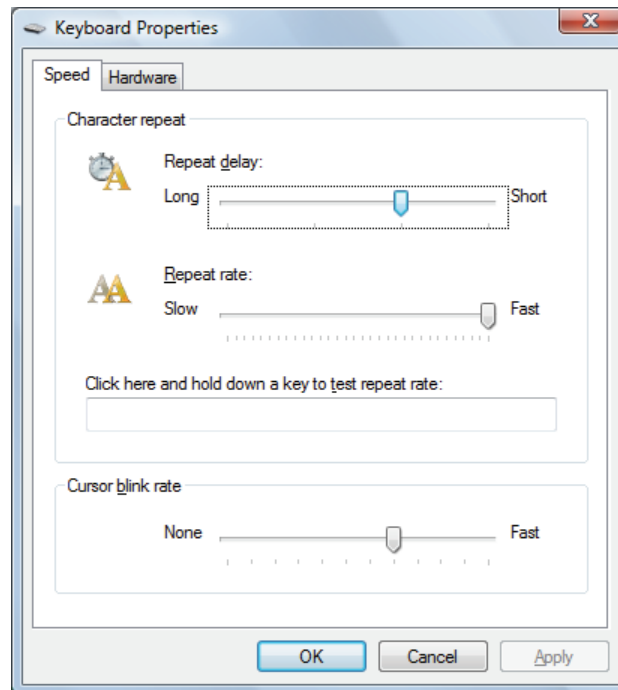


**Figure 7** Cursor width and blink rate settings in Windows XP

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Accessibility Options'. If there is no 'Accessibility Options' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) The 'Accessibility Options' window should appear. Select the 'Display' tab located in the top-middle of the window.
- 5) In the 'Cursor Options' section located halfway down the screen a 'Blink Rate' slide bar can be selected. Select and hold the bar, moving it left to slow down or stop and right to speed it up.

- 6) Underneath is a second slide bar for the cursor width. Move it left to make the cursor more narrow and right to make it thicker.
- 7) Once the preferences have been set, select the 'OK' button.



**Figure 8** Cursor width and blink rate settings in Windows Vista

Windows Vista and Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Make the keyboard easier to use'.
- 6) In the 'See also' section at the bottom of the window select 'Keyboard settings'.
- 7) To adjust the repeat delay select and hold the first slide bar. Moving the bar to the left will make the delay longer, moving it right will make it shorter.
- 8) To adjust the repeat rate select and hold the second slide bar. Moving to the left will slow down the repeat rate, moving it to the right will speed it up.
- 9) To adjust the cursor blink rate select and hold the third slide bar, located towards the bottom of the window. Move the bar left to slow down the blink rate and right to speed it up.
- 10) Select the 'OK' button.

### 3.2.4 MAGNIFIER

The Magnifier is a major accessibility feature in Windows. In Windows XP and Vista, Magnifier puts a bar at the top of the screen which shows a magnified view of an area near

the mouse pointer. In Windows 7, Magnifier has become a more powerful full-screen magnification tool.

Windows XP:

- 1) Hold down the 'Windows' key and press the letter 'R'. This will display the 'Run' command line.
- 2) Type in the word 'magnify' and press the 'Enter' key. Alternatively, Magnifier can also be opened by selecting the 'All Programs' section, followed by the 'Accessories' section, followed by the 'Accessibility' section and selecting 'Magnifier'.
- 3) A message will appear on its first use. Select the 'OK' button.
- 4) A magnified bar should now appear at the top of the screen along with a settings panel. The magnified area will follow the mouse when you move it or jump to an area where something important is happening on the screen. To move the focus of the window move the mouse arrow.
- 5) The magnification level can be adjusted in the 'Magnifier Settings' window. At the top of the window is a 'Magnification level' option. Select the pull-down bar to increase or decrease the magnification.
- 6) The magnification window itself can also be adjusted and moved around. If you wish to move the window move your mouse arrow into the magnified area, select it and drag it to another part of the screen. The size of the window can also be adjusted by moving the mouse arrow to the edge of the magnified window, selecting the edge and dragging it to another part of the screen.

Windows Vista:

- 1) Hold down the 'Windows' key and press the letter 'U'.
- 2) Select the 'Start Magnifier' option. This can be done by either directly selecting the words 'Start Magnifier' or by using the 'Tab' key to have the menu options read out and pressing the 'Enter' key once the words 'Start Magnifier' are heard.
- 3) A magnified bar should now appear at the top of the screen along with a settings panel. The magnified area will follow the mouse when you move it or jump to an area where something important is happening on the screen. To move the focus of the window move the mouse arrow.
- 4) The magnification level can be adjusted in the 'Magnifier' window. About a third of the way down the window select the 'Scale factor' pull-down bar to increase or decrease the magnification.
- 5) The magnification window itself can also be adjusted and moved around. If you wish to move the window, move your mouse arrow into the magnified area, select it and drag it to another part of the screen. The size of the window can also be adjusted by moving the mouse arrow to the edge of the magnified window, selecting the edge and dragging it to another part of the screen.



Windows 7:

- 1) Hold down the 'Windows' key on the keyboard and press the '+' key. This will zoom in on the Windows desktop.
- 2) Repeat the above step until the zoom is large enough for your needs.
- 3) To reduce the magnification hold down the 'Windows' key on the keyboard and press the '-' key.
- 4) To scroll around the magnified desktop move the mouse to the area you wish to view.

NOTE: The full-screen magnifier switches back to the traditional Magnifier interface when a high contrast colour scheme is used. To switch back to the full-screen magnifier select a default theme or colour scheme.

### 3.2.5 TOGGLE KEYS

Toggle Keys will allow Windows to make audio noises when toggle keys are enabled such as CAPS LOCK.

Windows XP:

- 1) Hold down the 'NUM LOCK' key for five seconds to turn on Toggle Keys.
- 2) Repeat the step above if you wish to turn off Toggle Keys.

NOTE: For a screenshot of Toggle Keys please refer to Figure 18 for Windows XP and Figure 19 for Windows Vista below.

Windows Vista and Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Make the keyboard easier to use'
- 6) Select the 'Turn on Toggle Keys' checkbox.
- 7) Select the 'Save' button.

### 3.2.6 NARRATOR

Narrator is a text-to-speech screen reader application that allows certain elements in Windows, and applications such as a web browser, to be read out.

Windows XP:

- 1) Hold down the 'Windows' key and press the letter 'R'. This will display the 'Run' command line.
- 2) Type in the word 'narrator' and press the 'Enter' key. Alternatively Narrator can also be opened by selecting the 'All Programs' section, followed by the 'Accessories' section, followed by the 'Accessibility' section and selecting 'Narrator'.

- 3) A message will appear the first time Narrator is used. Select the 'OK' button.
- 4) Narrator will start reading information to you about the Windows environment. To have Narrator read out any window again hold down the 'CTRL' key and the 'SHIFT' key followed by pressing the space bar.

Windows Vista and Windows 7:

- 1) Hold down the 'Windows' key and press the letter 'U'.
- 2) Select the 'Start Narrator' option. This can be done by either directly selecting the words 'Start Narrator' or by using the 'Tab' key to have the menu options read out and pressing the 'Enter' key once the words 'Start Narrator' are heard.
- 3) Narrator will start reading information to you about the Windows environment.
- 4) To have Narrator read out any window again hold down the 'CTRL' key and the 'SHIFT' key, then press the space bar.

Links to further information on the features and keyboard shortcuts of Narrator can be found in the Additional Tools and Resources section of this manual.

NOTE: While Narrator provides basic screen reader functionality, many blind and vision impaired users prefer to use a more advanced screen reader such as the free NVDA application. Further information on screen reader alternatives can be found in Section 4.6.

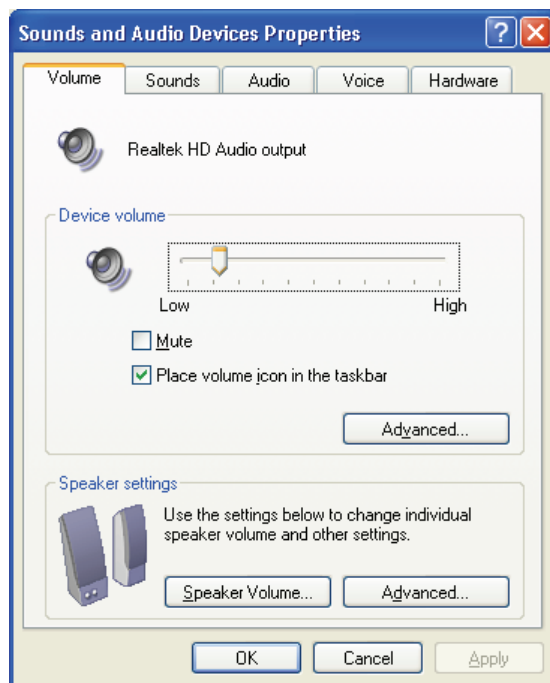
### 3.2.7 ADJUSTING THE MOUSE POINTER SIZE

For information on adjusting the mouse pointer size and other related properties, please refer to Section 4.5.1.

## 3.3 HEARING-RELATED ACCESSIBILITY FEATURES

### 3.3.1 ADJUSTING THE VOLUME

The volume for Windows can be adjusted in Windows.



**Figure 9** Sound preferences in Windows XP

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Sounds and Audio Devices'. If there is no 'Sounds and Audio Devices' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) The 'Sounds and Audio Devices Properties' window should appear. Towards the top of the screen is a section labelled 'Device volume' with a slide bar. Select and hold the bar and move it left to decrease the volume and right to increase the volume.
- 5) You may also wish to have the volume control as an icon on the taskbar. To do this, select the checkbox labelled 'Place volume icon in the taskbar' just below the 'Device volume' slide bar.
- 6) Select the 'OK' button.

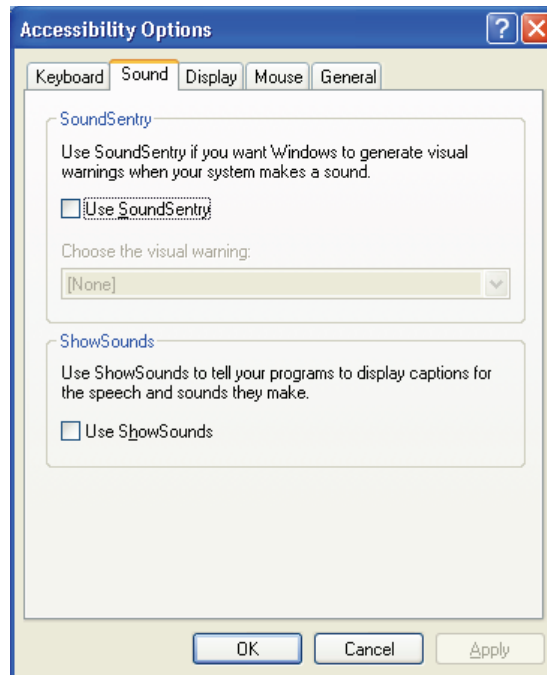
Windows Vista and Windows 7:

- 1) Select the volume icon appearing as a little sound speaker located in the bottom-right of the desktop.

- 2) A slide bar should appear. Select and hold the slider and move it up to make the sound louder and down to make it softer. A sample noise at the desired volume should sound when the slider is released.

### 3.3.2 SHOWSOUNDS AND SOUNDSENTRY

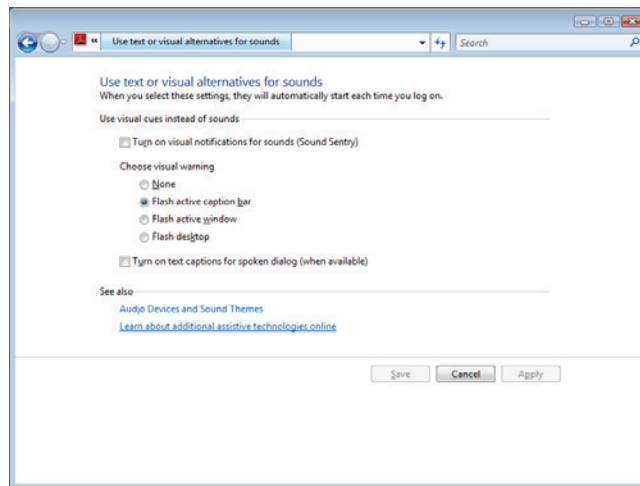
ShowSounds and SoundSentry both provide visual cues for audio sounds in Windows.



**Figure 10** ShowSounds and SoundSentry preferences in Windows XP

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Accessibility Options'. If there is no 'Accessibility Options' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) The 'Accessibility Options' window should appear. Select the 'Sound' tab located in the top-middle of the window.
- 5) To enable SoundSentry select the SoundSentry checkbox located towards the top of the window.
- 6) To enable ShowSounds select the ShowSounds checkbox located towards the bottom of the window.
- 7) Select the 'OK' button.



**Figure 11** ShowSounds and SoundSentry preferences in Windows Vista

Windows Vista and Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Use text or visual alternatives for sounds'.
- 6) Select the 'Turn on visual notifications for sounds' checkbox.
- 7) Select the 'Save' button.

## 3.4 MOBILITY-RELATED ACCESSIBILITY FEATURES

### 3.4.1 ADJUSTING THE MOUSE PROPERTIES

The mouse properties allow for the adjustment of the mouse double-click speed, the pointer movement speed, the pointer size, the use of mouse pointer trails and the ClickLock function.

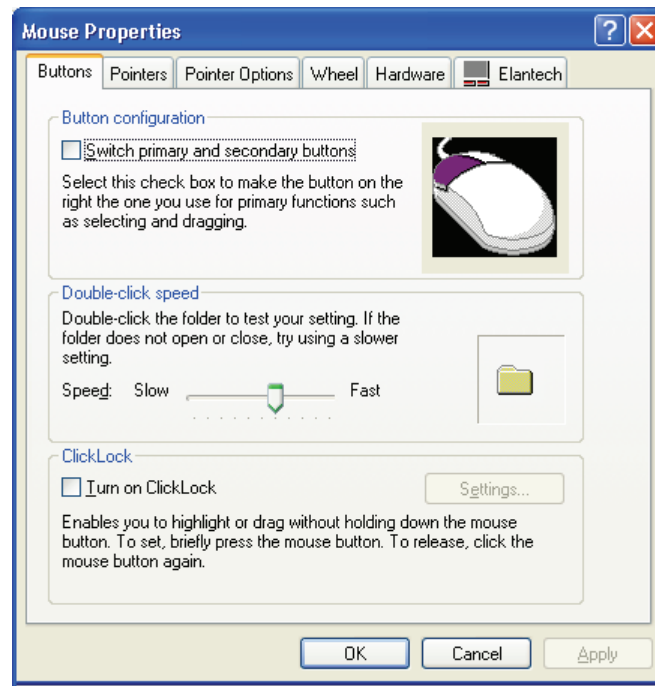


Figure 12 Mouse settings in Windows XP

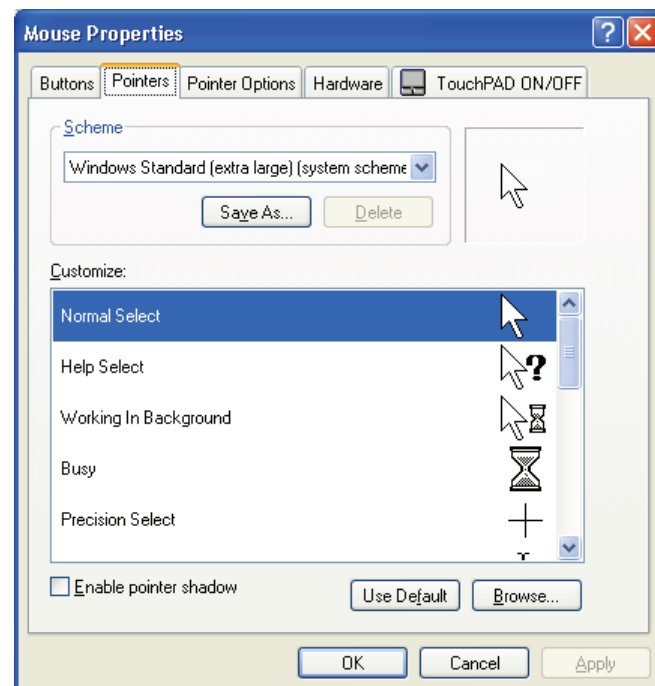
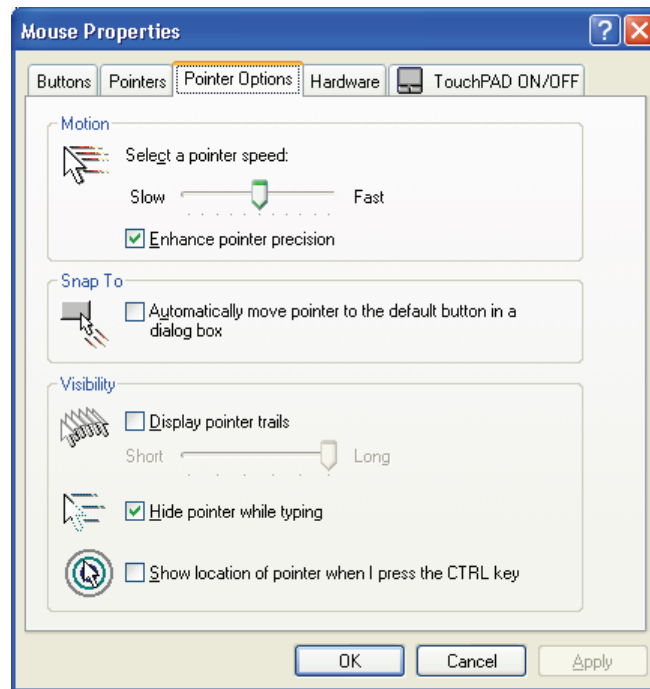


Figure 13 Mouse settings in Windows XP (ii)

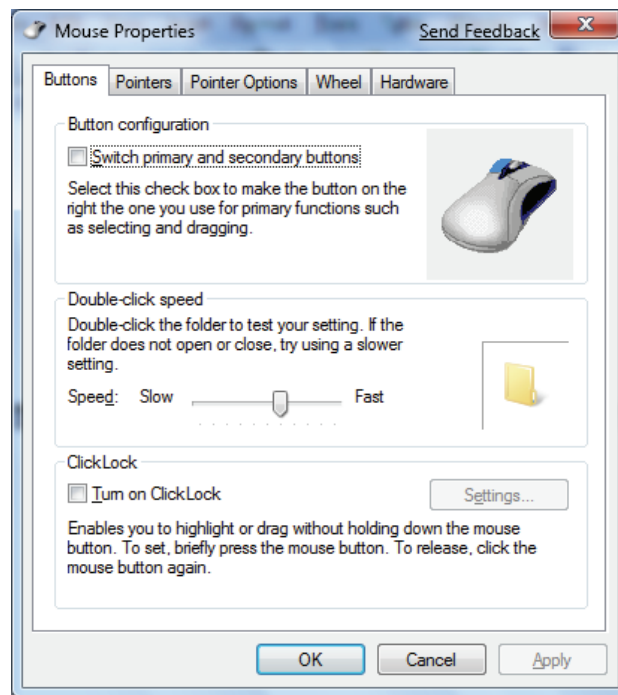


**Figure 14** Mouse settings in Windows XP (iii)

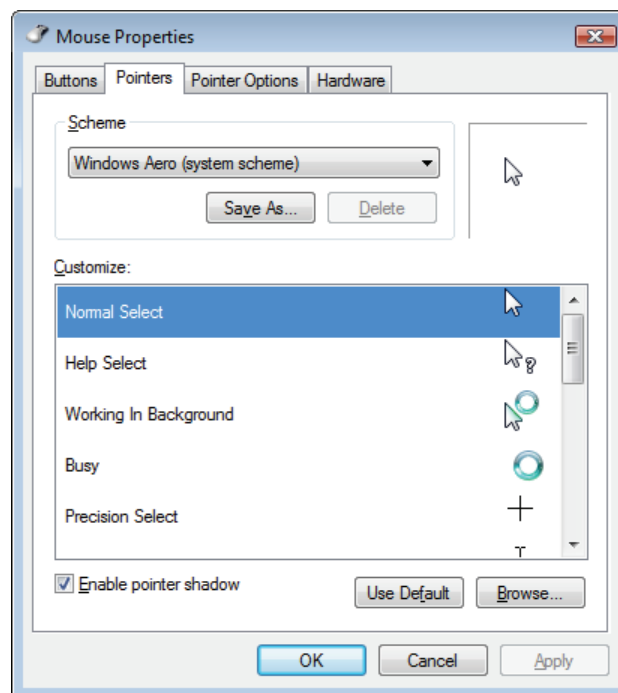
Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Mouse'. If there is no 'Mouse' icon, you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) To adjust the double-click speed select and hold the slide bar located in the 'Double-click speed' section, located about half way down the screen. Move the slide bar left to slow down the speed or right to speed it up.
- 5) To enable the ClickLock function select the checkbox labelled 'Turn on ClickLock', located towards the bottom of the window.
- 6) To adjust the pointer size select the 'Pointers' tab at the top of the window, then select the 'Scheme' pull-down bar located at the top of the window. Select an appropriately large pointer.
- 7) To adjust the pointer speed and trails options select the 'Pointer Options' tab at the top-middle of the window. To adjust the pointer speed select and hold the first slide bar. Moving the bar left will slow down the speed, moving the bar right will speed it up. To add mouse trails select the checkbox labelled 'Display pointer trails' located towards the bottom of the window under the 'Visibility' section.
- 8) Select the 'OK' button.

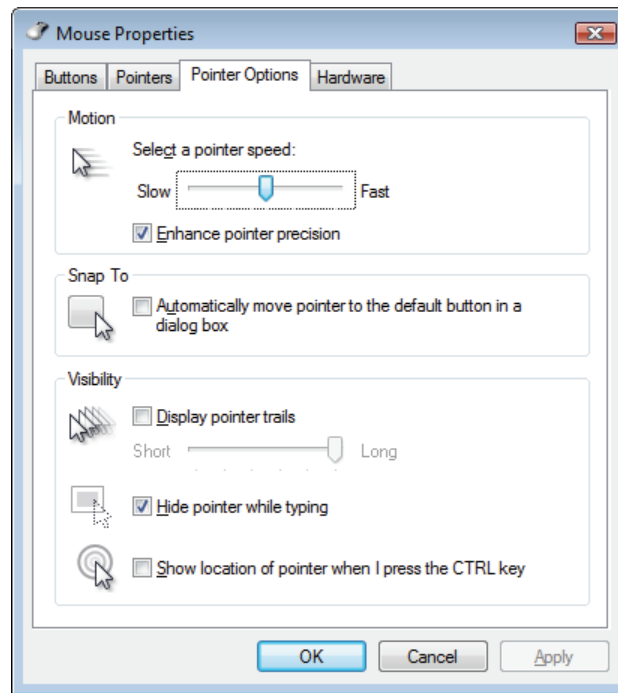




**Figure 15** Mouse settings in Windows Vista and Windows 7



**Figure 16** Mouse settings in Windows Vista and Windows 7 (ii)



**Figure 17** Mouse settings in Windows Vista and Windows 7 (iii)

Windows Vista:

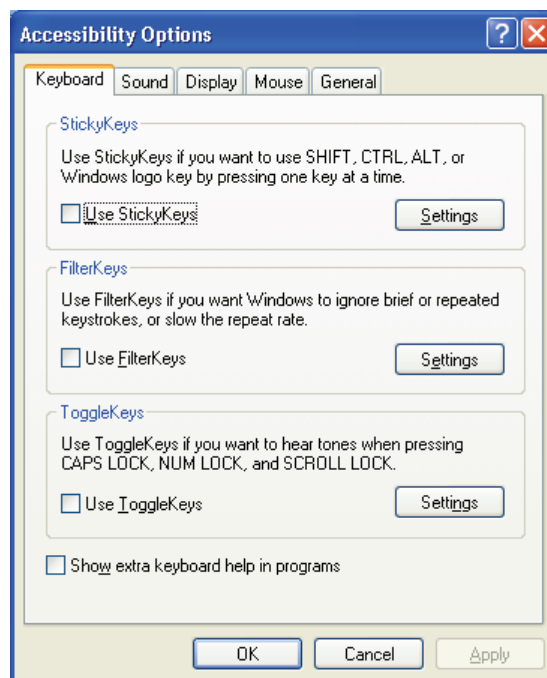
- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Hardware and sound'.
- 4) Select 'Mouse'.
- 5) To adjust the double-click speed select and hold the slide bar located in the 'Double-click speed' section, located about half way down the screen. Move the slide bar left to slow down the speed or right to speed it up.
- 6) To enable the ClickLock function select the checkbox labelled 'Turn on ClickLock', located towards the bottom of the window.
- 7) To adjust the pointer size select the 'Pointers' tab at the top of the window, then select the 'Scheme' pull-down bar located at the top of the window. Select an appropriately large pointer.
- 8) To adjust the pointer speed and trails options select the 'Pointer Options' tab at the top-middle of the window. To adjust the pointer speed select and hold the first slide bar. Moving the bar left will slow down the speed, moving the bar right will speed it up. To add mouse trails select the checkbox labelled 'Display pointer trails' located towards the bottom of the window under the 'Visibility' section.
- 9) Select the 'OK' button.

10) Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Type the word 'mouse' and press the 'Enter' key.
- 3) The mouse window should appear. To adjust the double-click speed, select and hold the slide bar located in the 'Double-click speed' section, located about half way down the screen. Move the slide bar left to slow down the speed or right to speed it up.
- 4) To enable the ClickLock function select the checkbox labelled 'Turn on ClickLock', located towards the bottom of the window.
- 5) To adjust the pointer size select the 'Pointers' tab at the top of the window, then select the 'Scheme' pull-down bar located at the top of the window. Select an appropriately large pointer.
- 6) To adjust the pointer speed and trails options select the 'Pointer Options' tab at the top-middle of the window. To adjust the pointer speed select and hold the first slide bar. Moving the bar left will slow down the speed, moving the bar right will speed it up. To add mouse trails select the checkbox labelled 'Display pointer trails' located towards the bottom of the window under the 'Visibility' section.
- 7) Select the 'OK' button.

### 3.4.2 MOUSE KEYS

The Mouse Keys function enables the keyboard to be used to move the mouse pointer around instead of a mouse.

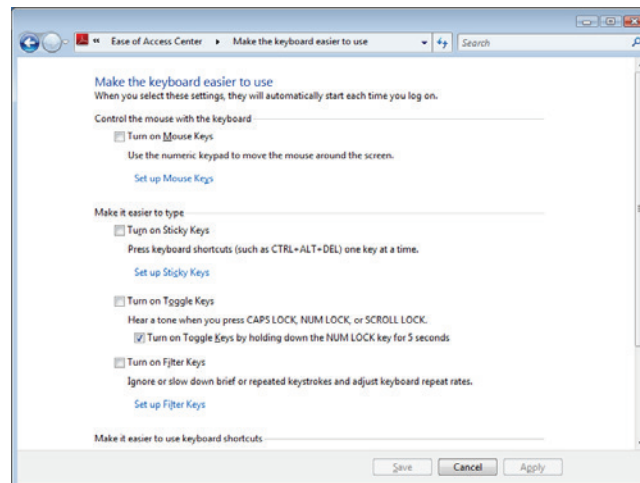


**Figure 18** Mouse accessibility settings in Windows XP

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.

- 3) In the Control Panel select 'Accessibility Options'. If there is no 'Accessibility Options' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) The 'Accessibility Options' window should appear. Select the 'Mouse' tab, located in the top-middle of the window.
- 5) Select the 'Use MouseKeys' checkbox.
- 6) Select the 'OK' button. The keys on the numeric keypad can now be used to move the mouse pointer.



**Figure 19** Mouse accessibility settings in Windows Vista

Windows Vista and Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Make the keyboard easier to use'.
- 6) Select the 'Turn on Mouse Keys' checkbox.
- 7) Select the 'Save' button.

### 3.4.3 STICKY KEYS

The Sticky Keys function allows the command keys such as the SHIFT and ALT keys to be used without having to keep the relevant key held down.

Windows XP, Windows Vista and Windows 7:

- 1) Press the 'SHIFT' key five times.
- 2) Select the 'Yes' button.
- 3) To turn off Sticky Keys repeat the first step, then select the 'No' button.

#### 3.4.4 FILTER KEYS

Filter keys can help prevent mistyping through a tremor or sudden movement on the keyboard.

NOTE: For a screenshot of Filter Keys, please refer to Figure 18 above.

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Accessibility Options'. If there is no 'Accessibility Options' icon you may need to switch Control Panel into Classic View. This can be done by selecting the words 'Switch to Classic View' located on the left-hand side.
- 4) The 'Accessibility Options' window should appear. Select the 'Keyboard' tab, located in the top-left of the window.
- 5) Select the 'Use FilterKeys' checkbox.
- 6) Select the 'OK' button.

NOTE: For a screenshot of Filter Keys, please refer to Figure 19 above.

Windows Vista and Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Make the keyboard easier to use'.
- 6) Select the 'Turn on Filter Keys' checkbox.
- 7) Select the 'Save' button.

#### 3.4.5 ON-SCREEN KEYBOARD

The On-Screen Keyboard is designed to assist people who use a pointing device such as a touchscreen, mouse, joystick or head-mounted device to type.

Windows XP:

- 1) Select the 'Start' button.
- 2) Select 'All Programs'.
- 3) Select 'Accessories'.
- 4) Select 'Accessibility'.
- 5) Select 'On-Screen Keyboard'.
- 6) Load the application in which you wish to type.
- 7) Select letters on the On-Screen Keyboard. The text should appear in your chosen application.

Windows Vista:

- 1) Select the Windows logo 'Start' button.

- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'Start On-Screen Keyboard'.
- 6) Load the application in which you wish to type.
- 7) Select letters on the On-Screen Keyboard. The text should appear in your application.

#### Windows 7:

- 1) Select the Windows logo 'Start' button.
- 2) Select 'Control Panel'.
- 3) In the Control Panel select 'Ease of Access'.
- 4) Select 'Ease of Access Center'.
- 5) Select 'On-Screen Keyboard'.
- 6) Load the application in which you wish to type.
- 7) Select letters on the On-Screen Keyboard. The text should appear in your application.

Links to further information on the features of the On-Screen Keyboard, including the new predictive text feature in Windows 7, can be found in the Additional Tools and Resources section of this manual.

### 3.5 ADDITIONAL TOOLS FOR PEOPLE WHO ARE BLIND OR VISION IMPAIRED

Some people with disabilities need additional tools to help make a computer easier to use. For people who are blind or vision impaired a more advanced text-to-speech screen reader program is available called NVDA. This program operates a little bit like the built-in tool Narrator, but is able to read information from web pages more effectively in Firefox. NVDA is free and can be downloaded from:

<http://www.nvda-project.org/>

The Firefox web browser is recommended for use with NVDA and will also need to be downloaded and is available from:

<http://www.mozilla.com/en-US/firefox/>

For people who need to use a computer in a public place or in areas where software cannot be installed an application called WebAnywhere can help. WebAnywhere operates as a text-to-speech tool that integrates into the web browser, providing basic voice access to the Internet. The voice software can work on almost any computer with sound and will start almost immediately by going to the website

<http://wa.cs.washington.edu>.

# 4.0 MAC OS X ACCESSIBILITY FEATURES

## 4.1 WHAT ACCESSIBILITY FEATURES ARE IN MAC OS X?

Current versions of Mac OS X such as 10.4 Tiger, 10.5 Leopard, 10.6 Snow Leopard and 10.7 Lion contain many accessibility features which can make computers easier and more comfortable to use. This document separates the features into the following categories:

- Vision: accessibility features that can assist a person who has a vision impairment
- Hearing: accessibility features that can assist a person who has a hearing impairment
- Mobility: accessibility features that can assist a person who has a mobility impairment

Vision-related features include:

- Adjustment of the font size on the desktop
- Adjustment of the desktop icon size
- Text-to-speech through the VoiceOver screen reader application
- Screen magnification Zoom application
- Adjustment of the colours, such as the use of a high contrast or reverse colour scheme

Hearing-related features include:

- Adjustment of the sound volume
- Screen Flash, the presentation of a visual alerts in addition to audio alerts
- Mono Audio, the ability to ensure that all audio information can be received in one ear

Mobility-related features include:

- Slow Keys, the adjustment of the sensitivity of the keyboard
- Sticky Keys to use command keys such as CONTROL and OPTION without having to keep them held down
- Mouse Keys to move the mouse pointer using the keyboard
- On-Screen Keyboard application
- Speech recognition to use your voice to perform basic commands

The instructions and screenshots provided are based on the current version of Mac OS X 10.7 Lion. However, while the accessibility features in Mac OS X have improved in later versions, the changes are largely incremental since Mac OS X 10.4 Tiger and the steps to



use the features remain largely unchanged. As a result, the screenshots presented in this manual may differ slightly from your own screen depending on your version of Mac OS X.

## 4.2 VISION-RELATED ACCESSIBILITY FEATURES

### 4.2.1 CHANGING THE FONT SIZE, ICON SIZE AND SCREEN SIZE

Changing the font size, icon size and screen size can all be achieved with one process. The easiest way to achieve this is by changing the screen resolution.



**Figure 20** System Preferences in Mac OS X Lion

- 1) Select the Apple pull-down menu
- 2) Select the 'System Preferences' option.
- 3) Once the System Preferences screen appears, select the 'Displays' icon.
- 4) Once the Displays screen appears, select a resolution.
- 5) The display will change immediately to the new resolution.

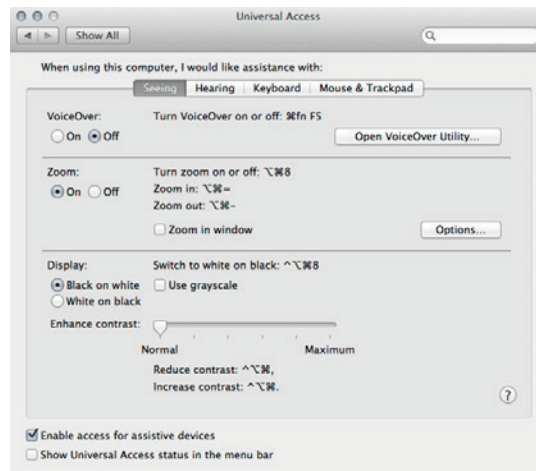
### 4.2.2 VOICEOVER SCREEN READER

VoiceOver is a text-to-speech screen reader application that allows certain elements on the computer, and applications such as a web browser, to be read out.

- 1) Hold down the 'Command' key and press the 'F5' key. Voiceover will now start.
- 2) When VoiceOver is launched for the first time, audio instructions will be provided to you to explain how to use it. Follow the audio instructions.

To turn on VoiceOver using the mouse pointer and to change a number of VoiceOver settings:

- 1) Select the Apple pull-down menu.
- 2) Select the 'System Preferences' option as shown in Figure 20.
- 3) Once the System Preferences screen appears, select the 'Universal Access' icon.



**Figure 21** Seeing features of the Universal Access settings in Mac OS X Lion

4) Once the Universal Access screen appears, select the Seeing section.

A full list of VoiceOver commands and keyboard shortcuts can be located in the Apple VoiceOver Getting Started Guide

<http://help.apple.com/voiceover/info/guide/10.7/English.lproj/index.html>

#### 4.2.3 ZOOM SCREEN MAGNIFIER

The Zoom screen magnifier allows the user to enlarge elements to make it easier to see.

To turn on the Zoom screen magnifier:

- 1) Hold down the 'Option' and 'Command' keys and press the number 8'. Voiceover will now start.
- 2) To increase the zoom, hold down the 'Option' and 'Command' keys and press the '+' key. Repeat this step to further increase the zoom.
- 3) To decrease the zoom, hold down the 'Option' and 'Command' keys and press the '-' key. Repeat this step to further decrease the zoom.

#### 4.2.4 CHANGING THE COLOURS TO HIGH CONTRAST OR INVERSE

Changing the Mac OS X colours to high contrast or inverse can help reduce glare or improve the clarity of the picture on the screen.

To inverse the colours:

- 1) Hold down the 'Option', 'Control' and 'Command' keys and press the number '8'. The colour scheme will now inverse to a black-on-white theme.
- 2) Repeat step 1 to change the colours to their original state.

## 4.3 HEARING-RELATED ACCESSIBILITY FEATURES

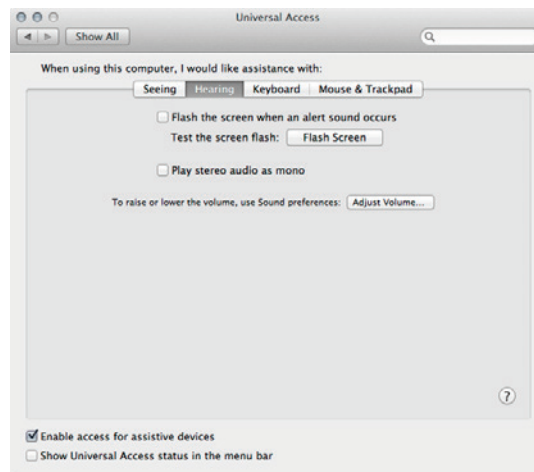
### 4.3.1 ADJUSTING THE VOLUME

The volume of your computer can be adjusted. Most Mac computers will have physical volume buttons located on the computer itself. Use these buttons to make the volume louder or softer.

### 4.3.2 SCREEN FLASH

A visual cue is provided when an audio alert occurs. To turn on Screen Flash:

- 1) Select the Apple pull-down menu.
- 2) Select the 'System Preferences' option as shown in Figure 20.
- 3) Once the System Preferences screen appears, select the 'Universal Access' icon.



**Figure 22** Hearing features in the Universal Access settings in Mac OS X Lion

- 4) Select the 'Hearing' tab as shown in Figure 22.
- 5) Tick the box labelled 'Flash the screen when an alert sound occurs'.

### 4.3.3 MONO AUDIO

The stereo effect can be removed to ensure that all sounds can be heard with one ear. To turn on mono audio:

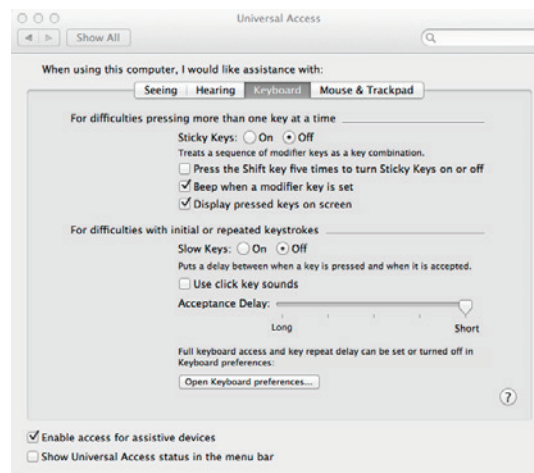
- 1) Select the Apple pull-down menu.
- 2) Select the 'System Preferences' option as shown in Figure 20.
- 3) Once the System Preferences screen appears, select the 'Universal Access' icon.
- 6) Select the 'Hearing' tab as shown in Figure 22.
- 7) Tick the box labelled 'Play stereo audio as mono'.

## 4.4 MOBILITY-RELATED ACCESSIBILITY FEATURES

### 4.4.1 SLOW KEYS

The sensitivity of the keyboard can be changed to make it easier to press keys on the keyboard. To turn on slow keys:

- 1) Select the Apple pull-down menu.
- 2) Select the 'System Preferences' option as shown in Figure 20.
- 3) Once the System Preferences screen appears, select the 'Universal Access' icon.



**Figure 23** Keyboard features in the Universal Access settings in Mac OS X Lion

- 4) Select the 'Keyboard' tab as shown in Figure 23.
- 5) Select the 'On' button next to the words 'Slow Keys'.

### 4.4.2 STICKY KEYS

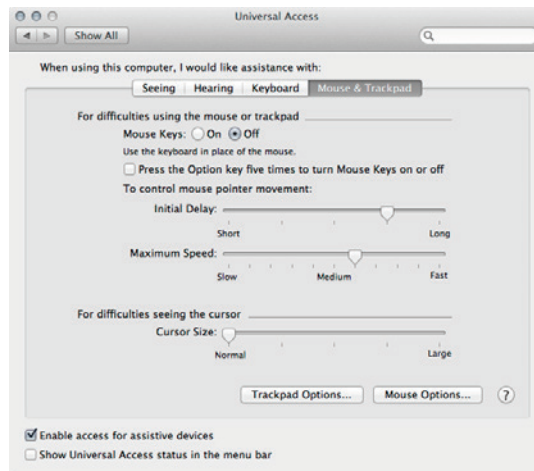
The Sticky Keys function allows the command keys such as the SHIFT and OPTION keys to be used without having to keep the relevant key held down. To turn on Sticky Keys:

- 1) Select the Apple pull-down menu.
- 2) Select the 'System Preferences' option as shown in Figure 20.
- 3) Once the System Preferences screen appears, select the 'Universal Access' icon.
- 4) Select the 'Keyboard' tab as shown in Figure 23.
- 5) Select the 'On' button next to the words 'Sticky Keys'.

### 4.4.3 MOUSE KEYS

The Mouse Keys function enables the keyboard to be used to move the mouse pointer around instead of a mouse. To turn on Mouse Keys:

- 1) Select the Apple pull-down menu
- 2) Select the 'System Preferences' option as shown in Figure 20.
- 3) Once the System Preferences screen appears, select the 'Universal Access' icon.



**Figure 24** Mouse features in the Universal Access settings in Mac OS X Lion

- 4) Select the 'Mouse' tab as shown in Figure 24.
- 5) Select the 'On' button next to the words 'Mouse Keys'

#### 4.4.4 ON-SCREEN KEYBOARD

The On-Screen Keyboard is designed to assist people who use a pointing device such as a touchscreen, mouse, joystick or head-mounted device to type. To turn on the on-screen keyboard:

- 1) Select the Apple pull-down menu.
- 2) Select the 'System Preferences' option as shown in Figure 20.
- 3) Once the System Preferences screen appears, select the 'Language & Text' icon.
- 8) Select the 'Input Sources' tab.
- 9) Tick the box labelled 'Keyboard & Character Viewer'.
- 10) A new icon should appear at the top of your screen. Select this icon to activate the on-screen keyboard.

#### 4.4.5 SPEECH RECOGNITION

Verbal commands can be used to perform basic functions in Mac OS X. To enable the speech feature:

- 1) Select the Apple pull-down menu.
- 2) Select the 'System Preferences' option as shown in Figure 20.
- 3) Once the System Preferences screen appears, select the 'Speech' icon.
- 4) Select the 'On' button next to the words 'Speakable Items'.

## 5.0 IOS DEVICES – IPHONE AND IPAD

### 5.1 WHAT ACCESSIBILITY FEATURES ARE IN IOS?

Many mobile devices made by Apple run an operating system called iOS. Devices that run iOS include recent models of the iPhone and the iPad. These devices contain many accessibility features which can make using the phone or tablet computer easier and more comfortable to use. This document separates the features into the following categories:

- Vision: accessibility features that can assist a person who has a vision impairment
- Hearing: accessibility features that can assist a person who has a hearing impairment
- Mobility: accessibility features that can assist a person who has a mobility impairment

Vision-related features include:

- Adjustment of the font size
- Text-to-speech through the VoiceOver screen reader application
- Screen magnification Zoom application
- Adjustment of the colours, such as the use of a high contrast or reverse colour scheme

Hearing-related features include:

- Adjustment of the sound volume
- Mono Audio, the ability to ensure that all audio information can be received in one ear

Mobility-related features include:

- On-Screen Keyboard application

The instructions and screenshots provided are based on the third generation iPad.

However, the instructions are also applicable to the iPhone 3GS, 4, 4S or later and all iPad models.

### 5.2 VISION-RELATED ACCESSIBILITY FEATURES

#### 5.2.1 ADJUSTING THE FONT SIZE

Changing the font size can help make the text on the screen reader easier for people with low vision to see.

- 1) Select the Settings icon on the Home screen



**Figure 25** Accessibility settings panel on the Apple iPad

- 2) Select the word 'General' in the menu on the left-hand side of the screen.
- 3) A new menu will appear. Select the word 'Accessibility'. If you cannot see the word 'Accessibility', you may have to scroll down the menu. To scroll down the menu, place your finger on the new menu and perform an upwards flicking motion. The menu should scroll and reveal the 'Accessibility' option.
- 4) Select the 'Accessibility' option. The 'Accessibility' options panel will appear as shown in Figure 25.
- 5) In the 'Large Text' section, select the word 'off'. This will change the option to 'on'.
- 6) Select the size of text you wish to use.

### 5.2.2 VOICEOVER SCREEN READER

VoiceOver is a text-to-speech screen reader application that allows certain elements on the device and applications such as a web browser to be read out.

- 1) Select the Settings icon on the Home screen
- 2) Select the word 'General' in the menu on the left-hand side of the screen.
- 3) A new menu will appear. Select the word 'Accessibility'. If you cannot see the word 'Accessibility', you may have to scroll down the menu. To scroll down the menu, place your finger on the new menu and perform an upwards flicking motion. The menu should scroll and reveal the 'Accessibility' option
- 4) Select the 'Accessibility' option. The 'Accessibility' options panel will appear as shown in Figure 25.



- 5) In the 'VoiceOver' section, select the word 'off'. This will change the option to 'on'. Agree to any messages that may wish to confirm the selection.

Basic VoiceOver commands include:

- Tap: Speak item.
- Flick right or left: Select the next or previous item.
- Flick up or down: Depends on the Rotor Control setting. See Using the VoiceOver rotor control.
- 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.
- Two-finger 'scrub': Move two fingers back and forth three times quickly (making a 'z') to dismiss an alert or go back to the previous screen.
- Two-finger triple tap: Open the Item Chooser.
- 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 (such as the Home screen, Stocks, or Safari).
- Three-finger tap: Speak additional information, such as position within a list or whether text is selected.
- Four-finger tap at top of screen: Select the first item on the page.
- Four-finger tap at bottom of screen: Select the last item on the page.
- Double-tap: Activate the selected item.
- Triple-tap: Double-tap an item.

A complete list of VoiceOver gesture commands can be found in the Apple User Guides

- iPhone: [http://store.lighthouse-sf.org/p832/Braille-iPhone-User-Guide-for-iOS-5.0-Software/product\\_info.html](http://store.lighthouse-sf.org/p832/Braille-iPhone-User-Guide-for-iOS-5.0-Software/product_info.html)
- iPad: [http://manuals.info.apple.com/en\\_US/ipad\\_user\\_guide.pdf](http://manuals.info.apple.com/en_US/ipad_user_guide.pdf)

NOTE: If you wish to use VoiceOver on a regular basis, you can make it easier to turn on by setting the 'Triple click' option. This will allow you to turn VoiceOver on by clicking the Home button three times.

To set the Triple-click option to VoiceOver:

- 1) Select the 'Accessibility' options again as shown in Figure 25.
- 2) In the 'Triple Click Homer' section, select the word 'off'.
- 3) Select the 'VoiceOver' option.

### 5.2.3 ZOOM SCREEN MAGNIFIER

The Zoom screen magnifier allows the user to enlarge elements to make it easier to see.

- 1) Select the Settings icon on the Home screen.
- 2) Select the word 'General' in the menu on the left-hand side of the screen.
- 3) A new menu will appear. Select the word 'Accessibility'. If you cannot see the word 'Accessibility', you may have to scroll down the menu. To scroll down the menu, place your finger on the new menu and perform an upwards flicking motion. The menu should scroll and reveal the 'Accessibility' option
- 4) Select the 'Accessibility' option. The 'Accessibility' options panel will appear as shown in Figure 25.
- 5) In the 'Zoom' section, select the word 'off'. This will change the option to 'on'. Agree to any messages that may wish to confirm the selection.
- 6) To change the magnification, use three of your fingers to tap twice on the screen, leaving your three fingers on the screen after the second tap. Push your fingers up the screen and the magnification should increase. Move your fingers down the screen to decrease the magnification.
- 7) To move around the magnified screen, put your three fingers on the screen and move in the direction of the screen you wish to view.

NOTE: If you wish to use Zoom on a regular basis, you can make it easier to turn on by setting the 'Triple click' option. This will allow you to turn Zoom on by clicking the Home button three times.

To set the Triple-click option to Zoom:

- 1) Select the 'Accessibility' options again as shown in Figure 25.
- 2) In the 'Triple Click Homer' section, select the word 'off'.
- 3) Select the 'Zoom' option.

### 5.2.4 ADJUSTING THE COLOURS TO HIGH CONTRAST OR INVERSE

Changing the colours to high contrast or inverse can help reduce glare or improve the clarity of the picture on the screen.

- 1) Select the Settings icon on the Home screen.
- 2) Select the word 'General' in the menu on the left-hand side of the screen.
- 3) A new menu will appear. Select the word 'Accessibility'. If you cannot see the word 'Accessibility', you may have to scroll down the menu. To scroll down the menu, place your finger on the new menu and perform an upwards flicking motion. The menu should scroll and reveal the 'Accessibility' option.
- 4) Select the 'Accessibility' option. The Accessibility options panel will appear as shown in Figure 25.
- 5) In the 'White on Black' section, select the word 'off'. This will change the option to 'on'.

## 5.3 HEARING-RELATED ACCESSIBILITY FEATURES

### 5.3.1 ADJUSTING THE VOLUME

iOS-based devices like the iPhone and iPad have a physical volume button located on the outside of the device. On the iPad, for example, these buttons are located on the top left-hand side. Use these buttons to make the volume louder or softer.

### 5.3.2 MONO AUDIO

The stereo effect can be removed to ensure that all sounds can be heard with one ear. To turn on mono audio:

- 1) Select the Settings icon on the Home screen.
- 2) Select the word 'General' in the menu on the left-hand side of the screen.
- 3) A new menu will appear. Select the word 'Accessibility'. If you cannot see the word 'Accessibility', you may have to scroll down the menu. To scroll down the menu, place your finger on the new menu and perform an upwards flicking motion. The menu should scroll and reveal the 'Accessibility' option.
- 4) Select the 'Accessibility' option. The Accessibility options panel will appear as shown in Figure 25.
- 5) In the 'Mono Audio' section, select the word 'off'. This will change the option to 'on'.

## 5.4 MOBILITY-RELATED ACCESSIBILITY FEATURES

### 5.4.1 ON-SCREEN KEYBOARD

The on-screen keyboard will automatically appear whenever text needs to be input. Typing a letter can be achieved by lightly touching the screen on top of the key that you wish to select.

## 6.0 GOOGLE ANDROID-BASED SMARTPHONES AND TABLETS

### 6.1 WHAT ACCESSIBILITY FEATURES ARE IN GOOGLE ANDROID?

The Google Android operating system runs on most non-Apple smartphones and tablets such as those from LG, HTC and Samsung. While accessibility features are available for Google Android, most models do not come with accessibility features out-of-the-box, and significant time and effort is required to set up the required accessibility features. The features themselves are also generally considered to be inferior to iOS-based products provided by Apple such as the iPhone and iPad.

However, if you have a smartphone or tablet that runs Google Android, there are a number of vision-related accessibility tools that can be added to your device. Applications include:

- TalkBack: a text-to-speech screen reader application
- KickBack: an application that creates vibration feedback
- SoundBack: an application that provides audio alters

In addition to the apps, most Google Android devices running version 4.0 or higher have an additional accessibility feature that allows TalkBack to read out more features by holding your finger down on the screen.

Other applications designed by a Google initiative called Project Eyes-Free has created additional applications to help people who are blind to use basic phone functionality. These include:

- Eyes-free Shell: provides verbal feedback for key phone functions such as the time, battery indicator and location
- Talking Dialler: provides audio feedback so that people with no vision can dial phone numbers

Popular third-party applications include:

- Big Launcher: a simplified user interface to make it easier for people with low vision to use the phone. Includes large print messages, easy access to applications and an SOS call function
- Zoom Plus Video Magnifier: a screen magnification application

### 6.2 CHOOSING A GOOGLE ANDROID DEVICE

One of the challenges of choosing a Google Android device is that there are many different types of device running many different versions of the Google Android operating system. To ensure maximum accessibility, ask the phone retailer if it runs Google 4.0 or later.

## 6.3 INSTALLING VISION-RELATED ACCESSIBILITY APPLICATIONS ON A GOOGLE ANDROID DEVICE

If you would like to install the most popular accessibility tools in the easiest way, download the free IDEAL Accessibility Installer from the Google Play store. This application will in turn install most of the other applications including TalkBack, KickBack and SoundBack.

The Google Play store can be found at <http://play.google.com>. Additional accessibility applications can also be found at the Play store by searching for the key word 'accessibility'.

## 7.0 SOCIAL MEDIA ACCESSIBILITY

### 7.1 HOW DO SENIORS USE SOCIAL MEDIA?

Social Media has become a popular way for seniors to keep in touch with family and friends. Situations that often lead to this type of use include:

- Personal: examples include creating online commentary of personal thoughts, sharing photos with grandchildren and discussing social events.
- Work: examples include volunteering or supporting a club or social event.
- Entertainment: examples include sharing videos, following discussion from celebrities, discussing strategies in online games.
- Provision of goods and services: examples include sharing information about a product, responding to user feedback about a product, accessing government services.
- Education: examples include participation in online classes and sharing learning resources.

While the reasons for and potential benefits of creating, modifying, sharing and discussing things online are clear for seniors, it is often more challenging for seniors with disabilities due to a number of accessibility issues with the websites of tools such as Facebook and Twitter. The tips provided in this manual are part of research conducted by Media Access Australia to identify ways in which people with disabilities could navigate around the barriers to participate in social media. A full copy of the report, entitled 'Sociability' can be found on the Media Access Australia website, [www.mediaaccess.org.au](http://www.mediaaccess.org.au).

### 7.2 FACEBOOK

Facebook is a popular social networking tool that lets users create a personal profile, add other users as friends, send messages and share photos and videos.

People with disabilities who use Facebook have provided some tips and tricks on how to overcome some of its accessibility issues:

- Mobile Facebook website: if the main Facebook website proves too difficult to use try the mobile site [m.facebook.com](http://m.facebook.com).
- Facely HD app: if you use an iPhone, iPod Touch or iPad, this app provides Facebook access that works with the VoiceOver screen reader.
- Keyboard shortcuts: the Facebook website has some additional keyboard shortcuts available. See Facebook Help links below.
- Finding friends: one potential barrier for blind or vision impaired users is finding friends without being able to see their photo. It's helpful to know that the first search results will be people who live closest to you or have friends in common with you and are more likely to be the correct person.

- Captions for photos: photo descriptions are helpful for screen reader users and can be added by using the 'Add a caption' option beneath an image.
- ARIA landmarks: the Facebook website has WAI-ARIA support allowing modern screen readers to jump between website sections.

Additional Facebook accessibility resources and step-by-step instructions can be found at:

- The Online Media section of the Media Access Australia website:  
[mediaaccess.org.au/online-media](http://mediaaccess.org.au/online-media)
- Facebook assistive technology helpdesk:  
[facebook.com/help/contact.php?show\\_form=accessibility](https://facebook.com/help/contact.php?show_form=accessibility).
- Facebook accessibility information including keyboard shortcuts:  
[facebook.com/help/?page=440](https://facebook.com/help/?page=440)

## 7.3 TWITTER

Twitter is a popular social networking tool that allows users to send short messages of up to 140 characters known as 'tweets'. These tweets are then published online and can be publicly viewed. Twitter users can post their own tweets, follow the tweets of other users and contribute to a wider online discussion based on a particular topic or event.

People with disabilities who use Twitter have provided some tips and tricks on how to overcome some of its accessibility issues:

- Easy Chirp accessible portal: instead of using the Twitter website, try this accessible alternative [www.easychirp.com](http://www.easychirp.com).
- Mobile Twitter website: another alternative portal is the mobile site [m.twitter.com](http://m.twitter.com).
- Twitter apps: Accessible Twitter apps for iPhone, iPod Touch and iPad include the main Twitter app itself, Twittrific, Twittelator for iPad, Tweetosaurus, Tweetero and TweetList Pro (links via [applevis.com](http://applevis.com)).
- Accessibility hashtags: popular accessibility chat uses #a11y and #axs.
- Disability-related tweets: follow organisations that provide disability-related information through Twitter such as Media Access Australia @mediaaccessaus, ACCAN @accan\_au or @ABCRampUp.

Additional Twitter accessibility resources and step-by-step instructions can be found at:

- The Online Media section of the Media Access Australia website:  
[mediaaccess.org.au/online-media](http://mediaaccess.org.au/online-media)
- Easy Chirp accessible Twitter website: [www.easychirp.com](http://www.easychirp.com)
- Mobile Twitter website: [m.twitter.com](http://m.twitter.com)
- AppleVis accessible apps: [applevis.com](http://applevis.com)
- Twitter help centre: [support.twitter.com/](https://support.twitter.com/)
- Contact Twitter: [twitter.com/about/contact](https://twitter.com/about/contact)

## 7.4 YOUTUBE

YouTube is the world's most popular video sharing website. It contains a mix of personal and professional videos that entertain, inform and spark discussion, from home videos to music videos, trailers and advertisements.

People with disabilities who use YouTube have provided some tips and tricks on how to overcome some of its accessibility issues:

- Accessible YouTube players: websites such as Accessible YouTube, Easy YouTube and Accessible Interface to YouTube (listed below) provide screen reader-friendly websites for playing back YouTube videos.
- YouTube app: the YouTube app for iPhone, iPod Touch and iPad works with the VoiceOver screen reader.
- Captions: if a YouTube video is captioned, a 'CC' button will be available in the bottom right-hand corner of the video. Select this and captions should appear.
- Requesting auto-captions for your video: YouTube has the ability to automatically caption videos. After uploading your video, go to the Captions and Subtitles pane and select the 'Request Processing' button. The captions are generally completed within 24 hours.
- Editing captions: The auto-captions service, while helpful, is not always accurate. Free online applications such as Overstream and CaptionTube (listed below) provide a way to create and edit captions.

Additional YouTube accessibility resources and step-by-step instructions can be found at:

- The Online Media section of the Media Access Australia website: [mediaaccess.org.au/online-media](http://mediaaccess.org.au/online-media)
- Accessible YouTube: [povidi.com/yourtube/](http://povidi.com/yourtube/)
- Easy YouTube: [icant.co.uk/easy-youtube/](http://icant.co.uk/easy-youtube/)
- Accessible Interface to YouTube: [tube.majestyc.net/](http://tube.majestyc.net/)
- Overstream: [overstream.net/](http://overstream.net/)
- CaptionTube: [captiontube.appspot.com/](http://captiontube.appspot.com/)
- Contact YouTube: [youtube.com/t/contact\\_us](http://youtube.com/t/contact_us)

## 7.5 BLOGGING

A blog, an abbreviated term for web log, is an area of a website where you can put text, images, video and links that can be viewed and commented on by others. The most popular blogging websites in Australia are [BlogSpot.com](http://BlogSpot.com) and [Wordpress.com](http://Wordpress.com) but there are many other blogging tools that you can choose from. Check to see if the blogging tool allows you to publish posts by email. Most blogging tools have this option and can help avoid website accessibility issues.

People with disabilities who have blogs have provided some tips and tricks on how to make sure the content you create is accessible:



- Video linking: some videos can lose their accessibility features such as captions or accessible buttons when they are embedded in a blog. Include the external link so people can go direct to the video source.
- Images with alternative text: when adding an image, make sure that there is some text present to describe the image. In most cases, the blog tool will prompt you for this text.
- Link labels: make sure any links are labelled with a description. Text such as 'click here' can make it difficult for people using screen readers to understand the nature of the link.
- Template selection: consider using a template that only has one column with a simple layout to improve accessibility for people with print disabilities.
- Font selection: consider using a basic font like Arial at a standard size.
- Opening links: allow links to be opened in the same window. Users can always get back to your blog using the 'back' button in their web browser.

Additional blogging accessibility resources and step-by-step instructions can be found at:

- The Online Media section of the Media Access Australia website: [mediaaccess.org.au/online-media](http://mediaaccess.org.au/online-media)
- BlogSpot: [blogspot.com](http://blogspot.com)
- Blogger Help (BlogSpot): [support.google.com/blogger/?hl=en](http://support.google.com/blogger/?hl=en)
- Wordpress.com: [wordpress.com](http://wordpress.com)
- Wordpress.com Forum: [en.forums.wordpress.com/](http://en.forums.wordpress.com/)
- American Foundation for the Blind blogging tips: [afb.org/Section.asp?SectionID=57&TopicID=167&DocumentID=2757](http://afb.org/Section.asp?SectionID=57&TopicID=167&DocumentID=2757)
- Accessible blogs: [georgiatechcatea.wordpress.com](http://georgiatechcatea.wordpress.com)
- Is Your Blog Accessible?: [getaheadblog.wordpress.com/2009/02/20/accessible-blogging/](http://getaheadblog.wordpress.com/2009/02/20/accessible-blogging/)
- Tech tips for blogging – University of Washington: [washington.edu/doit/Newsletters/Jun10/12.html](http://washington.edu/doit/Newsletters/Jun10/12.html)

## 8.0 ADDITIONAL RESOURCES

In addition the accessibility features discussed in this manual, there are a number of other popular applications that also contain accessibility features. This section provides links to additional information on the features discussed and links to other accessibility resources such as those that relate to web browsers, Adobe Acrobat Reader and Skype.

Microsoft products (includes Windows, Internet Explorer and Office :  
<http://www.microsoft.com/enable>

Apple products (includes Mac OS X, iOS for the iPhone and iPad):  
<http://www.apple.com/accessibility>

Google products (includes Android and the Chrome web browser:  
<http://www.google.com/accessibility/products/>

Mozilla Firefox web browser accessibility:  
[http://kb.mozillazine.org/Accessibility\\_features\\_of\\_Firefox](http://kb.mozillazine.org/Accessibility_features_of_Firefox)

Adobe Acrobat PDF accessibility:  
<http://www.adobe.com/accessibility>

Skype support: <http://support.skype.com>

NVDA screen reader for Windows:  
<http://www.nvda-project.org>

For step-by-step guides and a comprehensive analysis of accessibility features in popular products, please refer to the Media Access Australia website [www.mediaaccess.org.au](http://www.mediaaccess.org.au) or follow us on Twitter @mediaaccessaus





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