Using technology

Mobile phones and computers can help with some of the communication difficulties associated with sight loss. This leaflet is available on CD.

No one need face macular degeneration alone. For information and support call 0300 3030 111.

Using technology

This leaflet introduces a selection of technology that can help overcome some of the communication difficulties associated with sight loss.

Developments in mobile phones and computers are now so wide ranging that everyone should be able to find a device that suits their individual needs.

Portable equipment can speak, magnify and even identify items for you. Through text, audio and the internet these devices can keep you in touch with family and friends as well as help you to develop new skills.

In the early stages learning how to use a particular device may take a bit of effort but it will be worth it. Rather like riding a bicycle or driving a car don't be put-off by any early set backs.

It may be worthwhile asking family or friends to help you when starting out. If you feel technology is not your thing perhaps you know someone who enjoys solving problems and can help you compare the advantages of a mobile phone to a computer tablet.

Finding out just what works for you is very important. Try before you buy!

Mobile phones

There is a wide range of phones available with varying degrees of complexity. At one end of the spectrum there are simple handsets designed to offer basic functions with maximum accessibility.

Typically these will allow you to make and receive phone calls and to send and receive text messages using a tactile keypad, such as the Alto 2 or the Doro Easy range.
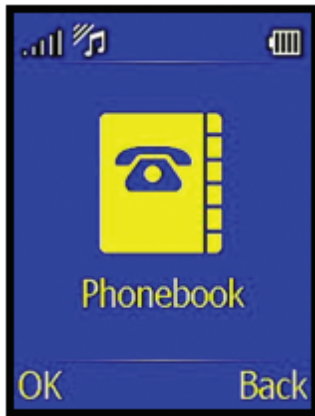
Alto 2

Doro Easy

Basic mobile phones with easy to change colour and text settings

Screen contrast and text size can be easily adjusted on these phones.

Phonebook

OK   Back
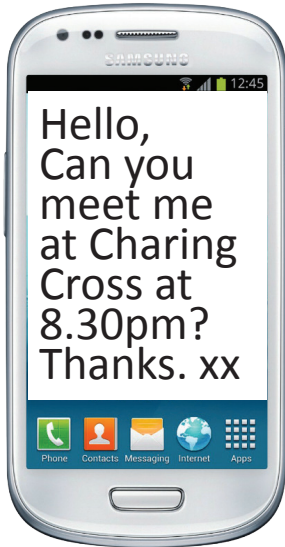

Phonebook

OK   Back

Models like the Alto 2 also have a read aloud option that means menus and messages are converted from text to speech. These phones also allow shortcut speed dials to be set – one button dialling in effect.

At the other end of the complexity and price scales are the smartphones like the Apple iPhone, Samsung Galaxy and HTC One. These offer a combination of in-built features and software applications.

As well as making and receiving calls and text messages they have a large screen and the options to enlarge text or switch to text-to-

Hello,
Can you
meet me
at Charing
Cross at
8.30pm?
Thanks. xx

Phone Contacts Messaging Internet Apps

Enlarged text can be created on the screen.

Text-to-speech is available on most smartphones.

Text-to-Speech

"Send flowers for birthday – 11 August"

speech. You can browse the internet, take photographs and videos, play music and use a calendar that will give audio reminders and/or voice alerts.

However these phones rarely have a tactile keypad. Instead they often have more advanced accessibility features. For example you can choose your font and adjust the font size or screen contrast.

The Apple iPhone comes with voice recognition so you can control the phone with verbal commands. This is particularly useful for dialling and texting.

The iPhone and Samsung Galaxy smartphones also have customisable magnification settings which allow you to navigate visual displays and read text more easily. The in-phone camera can also be used as a magnifier.

Phone apps

Another key feature of the smartphones are apps. These small, downloadable bits of software add an easy to operate programme to your phone.

There are thousands of apps available and they cater for all interests and needs.

For example, train timetables are available from Train Times or National Rail apps. Some apps use the internet to download live information to your smartphone.
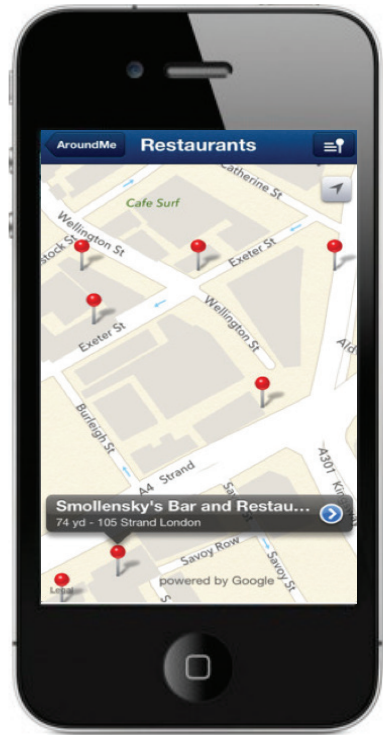
AroundMe provides interactive, large format maps wherever you are.

TapTapSee is an object recognition app which uses the phone's camera to image an object and the audio function to speak the description.

LookTel is an app that uses your smartphone to recognise money, while

Color ID and HueVue will identify the colour of a picture or object.

Vision Assist and Your Magnifying Glass are apps that turn the phone into a portable magnifier for you.

TapTap See

HueVue

LookTel Object Recogniser

LookTel Money Recogniser

AroundMe

Vision Assist

National Rail

Your Magnifying Glass

Just a few of the many thousands of apps that are available for smartphones and tablets.

TV

You may find that watching the television is no longer as comfortable as in the past. In the first instance you may need to sit closer to the screen than you have been used to. There is no hazard in doing this.

Large-screen, high-definition TVs are available which, with their size and the sharpness of the image, may benefit you.

A backlit LCD model may offer more clarity. Visit a store where they have all the models on display and see which works best for you.

MaxTV glasses are special magnifying spectacles and for some people these can be effective for viewing the TV .

They consist of two individually-adjustable lenses on a standard glasses frame. The glasses allow you to sit at a more natural and comfortable distance from the TV screen.

These glasses are available commercially and, in some instances, via local low vision clinics. But again not everyone will find them useful, so do try before buying.

MaxTV glasses

Some TV programmes now offer the option of an accompanying audio description. The BBC currently provides this for 10% of their schedule. This narration is additional to the programme's original soundtrack.

It provides a verbal description of the visual content of a programme. Typically it will describe scenery and a character's clothing or facial expression.

It may describe relevant written information in the scene itself or activity taking place in the background.

How to set audio description on TV

Freeview and Freesat:

Select Menu > Settings > Language > Audio Description.

Sky TV:

Select Services > System Setup > Languages and Subtitles.

Then select the audio description function.

Computers and Laptops

There are Windows and Apple computers – two different operating systems. However, they both have in-built options that allow you to make simple changes to suit your particular vision.

You can adjust the settings of your computer to control text size, magnification, and the screen contrast. These can be fixed to work whenever you switch on the computer, enabling a blind or visually-impaired person to work independently.

There are several commercial software applications that will enable full computer use regardless of your level of visual impairment. Also, be aware that Open Source software can be free or low cost.

With screen-reading software such as Dolphin, SuperNova and JAWS, the computer reads out the information on the screen, for example a description of what is under the mouse pointer, the text in a document or on a web page, or the characters you are

typing. Full web browsing is also supported.

Magnification software such as iZoom will enable you to adjust magnification strength and the area to be magnified.

Typically you can control screen contrast, the mouse pointer size and the background colour.

Software such as Dolphin Guide is available which

iZoom software gives magnification levels from 1.25x to 50x. You can zoom in really close on your screen.

simplifies the main functions within a Windows-based PC.

This allows a blind or partially-sighted user with limited computer knowledge to access email, word-processing functions and the internet via a series of simple menus accessed via the keyboard's number keys.

Voice recognition software like Dragon Naturally Speaking may help you if you want to input large amounts of text. With this, you can dictate passages of text into a document using a microphone.

There are adapted keyboards like the KidGloves keyboard from KeyTools available in high-contrast and large print designs. An ordinary keyboard can be adapted by using high-contrast or large print sticker sets.

Computer screens are available in a wide range of sizes and for many people a larger monitor will prove helpful.

Remote sharing

If you sometimes need help with your computer it may be worth considering remote sharing with a family member or friend.

This remote access facility can be set up between your computer and a trusted family member to let them operate your computer over the internet. It will allow you both to see the information on your computer screen.

It means a relation living many miles away can help you solve problems like locating a lost email message without having to visit you to do it.

Talking to each other over the telephone as you solve a difficulty like this means that you can reduce the stress of learning new skills.

However, you will need to consider very carefully the security issues and make sure that you can fully trust the other person.

For Windows based systems access is through the Remote Desktop Connection programme that can be found in the Control Panel.

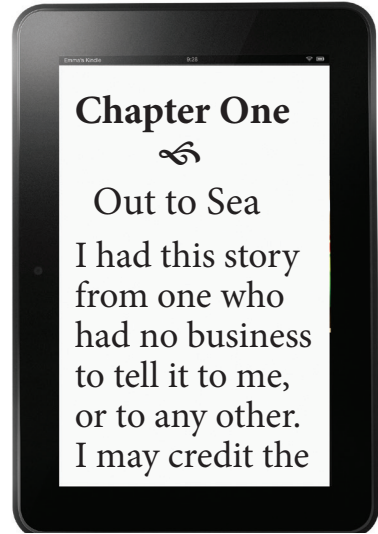For Apple computers you will need to look in the Apple Remote Desktop application in the System Folder.

Products and services in this leaflet are not tested or endorsed by the Macular Society.

Tablets and e-Book Readers

There are three main types of tablet computer: the two familiar systems Windows based and Apple based tablets and a third Android system.

Each has advantages and disadvantages. Tablet devices such as the Apple iPad, Samsung Galaxy Note and Kindle Fire can be smaller alternatives to a portable computer. Their versatility and accessibility features mean you can easily browse the web, write large format notes or read an e-book.

Chapter One

Out to Sea

I had this story from one who had no business to tell it to me, or to any other. I may credit the

e-Book reader

Features that you may find useful include the option to increase text size and screen contrast. Additional features may include screen-reading and magnification options.

Many publications including newspapers are now available in electronic format and tablets let you read

these by capitalising on the ability to change the basic settings to make text or images larger. There will also be options to alter the background colours so you can read with a white or yellow background, for example.

Like the mobile phones there are now plenty of apps for tablet devices. If you want a map that you can view in large format then Around Me may be a suitable app. Or there is TextGrabber, an app that will capture and then read aloud the text from a document.

Some e-Book readers have backlit screens to make night-time reading possible and there are e-Book reader cases with in-built reading lights available. e-Book readers such as the Amazon Kindle and Kobo Mini have a more limited level of functionality than the larger tablets from Apple and other computer manufacturers. However, for those with vision loss, tablets may still enable you to continue reading books.

CCTV and Magnifiers

Magnifiers provide visually-impaired users with an enlarged view of printed materials and small objects. They range from

pocket-size magnifiers like the Optelec Compact HD and Ash Crystal through to larger, table-top models such as the Optelec ClearView and Humanware's SmartView ranges.

Most have a range of contrast options that allow you to choose how you want the text to be displayed. For example, black text on a white background or blue text on a yellow background. You can also take snapshots.

With snapshots you create a still image of an object or text and can alter the contrast options or

magnification to suit your vision. This is particularly useful with a portable pocket-size reader when looking at something like a timetable at a bus-stop or a wall mounted information board.

Where a magnifier uses a closed circuit camera, abbreviated as CCTV, they have their own screen. With some of these CCTV units you can connect them to your computer and view the image on the larger screen.

In this case, a keypad or foot pedal is used to switch between the computer display and the camera display.

Split-screen settings also enable you to see both at the same time; this is ideal if you need to copy something into a computer from a sheet of paper.

Some desktop CCTV units like the DaVinci All-in-One HD Video Magnifier come complete with in-built Optical Character Recognition, referred to as OCR software.

DaVinci Video Magnifier.

Using OCR means you can scan text under the reader and the unit will read it aloud using digitised speech.

See our booklet **Low Vision Aids** MS014 for further information on magnifers and CCTV.

Further information

AbilityNet runs computer training for people with a visual impairment. 0800 269 545 www.abilitynet.org.uk

BBC My web my way – making the web easier. www.bbc.co.uk/accessibility/

Macular Society services

Helpline: Our helpline team is there for anyone affected by macular conditions.

Call 0300 3030 111 Monday – Friday 9am – 5pm

help@ macularsociety.org

The helpline can give advice and information about all aspects of macular disease including diagnosis, treatment and living with central vision loss.

Befriending: Having a macular condition can leave you feeling isolated especially if it's hard to get out and about. Your dedicated befriender will call regularly for a friendly, social chat about anything you like including, but not always, your macular condition.

Counselling: It's natural to feel upset or angry when you're told you have a macular condition, especially if you have lost central vision. Sometimes it is compared to a bereavement.

Many people find it helps to talk, in

confidence, to a professional counsellor. We have a free telephone counselling service for anyone who would like to use it. Our counsellors are fully qualified and regulated by BACP.

Treatment buddy: About to have injections for your macular condition? Find out what to expect. Our helpline can put you in touch with people who've already had the treatment for an informal, friendly chat.

No one has to face macular disease alone. Find out more about all our services, including our local groups on **0300 3030 111**.

Want to talk online? Join one of our forums. **www.macularsociety. org/forum**

www.healthunlocked. com/macularsociety

Join us Many people join the Macular Society so that they can make a difference. Your support enables us to provide services and helps us fund research into a cure so that one day we can overcome macular disease.

For more information on membership call 01264 350 551 or email info@ macularsociety.org

If you've found this leaflet useful please consider making a donation to support our work.

Macular Society

Support throughout central vision loss

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