

Using technology

Support throughout central vision loss

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

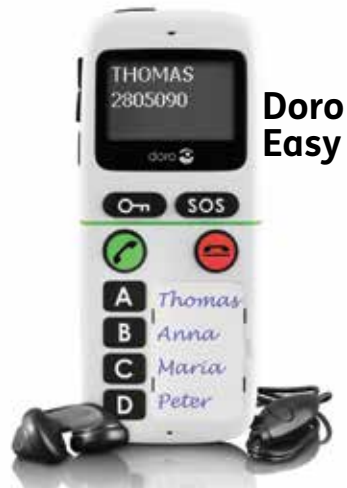
There is a wide range of phones available with varying degrees of complexity. At one end of the spectrum there are simple handsets

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.



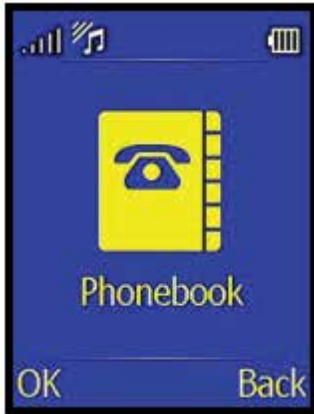
Alto 2



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.

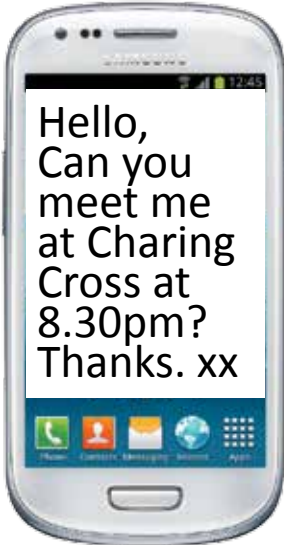


Models like the Alto 2 also have a read aloud

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 and Samsung Galaxy. These offer a combination of phone, text, email and web use.

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-



Enlarged text can be created on the screen.

Text-to-speech is available on most smartphones.



Smartphones can be voice activated.

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 have advanced

accessibility features. For example you can choose your font and adjust the font size or screen contrast.

Many of these devices allow you to use your voice to operate the phone or search the web by simply speaking into the microphone.

These systems will recognise the way you talk, and understand what you say, and even talk back to you. In addition to answering questions, you can ask your device to ‘Remind me to call the doctor’ or ‘Find Tony’s address’.

These voice applications speak with a human voice – not digitised speech - and will know what you mean when you ask ‘are there any fish restaurants round here?’

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.



AroundMe provides interactive, large format maps wherever you are.

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.



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.

Some apps use the internet to download live information to your smartphone.

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.

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



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.

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.



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

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

Our Tech Talk volunteers can help you with smartphones and computers through email or telephone support. Call the helpline on 0300 3030 111

Software such as Dolphin Guide is available which 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 using the keyboard 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. For many people a

larger computer screen 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

For those with sight loss, tablets may enable you to continue reading books and magazines.

There are three main types of tablet computer: the two familiar systems



Using an e-Book reader

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.

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.

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 to larger, table-top magnifiers such as the Optelec ClearView and Humanware's SmartView range. 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.

The Zoomax Butterfly is a pocket size video magnifier that is

lightweight enough to be hung around the neck or kept in the pocket. It is easy to switch on and off, capture images, change the colour mode and zoom in and out so you can read everyday items like a price label or menu.



Zoomax magnifier

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. 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 magnifiers 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/

How we can help

We are the national charity for anyone affected by central vision loss. We provide free information and support to improve lives today. We fund research so that one day we can overcome macular disease.

You don't have to be a Society member to use our services. We provide:

Helpline – confidential advice and information on all aspects of macular disease, including diagnosis, treatment and living with central vision loss.

0300 3030 111
Monday to Friday
9am – 5pm
help@
macularsociety.org

Counselling – It's natural to feel upset or angry when you're told you have a macular condition. Many people find it helps to talk, in confidence, to a professional counsellor.

Support Groups – we have a network of almost 300 local groups.

Befriending – Having a macular condition can leave you feeling isolated especially if it's hard to get out and about. Your

dedicated befriender will telephone regularly for a friendly, social chat about anything you like including, but not always, macular disease.

Advocacy – help accessing treatments.

Skills for seeing – training to make best use of remaining sight.

Treatment buddy – chat to people who've had treatment by injection for support and advice.

Charles Bonnet buddy – chat to others who've experienced visual hallucinations as a result of a macular condition.

Join us

Many people join the Macular Society so that they can make a difference.

Your support now will give desperately needed help to people losing their sight.

To join today call

01264 350 551

**info@
macularsociety.org**

and be part of a campaign for better care and fund research to find a cure.

AMD causes more than half of all blindness in Britain. 600,000 people have AMD and another 200 people are diagnosed every day.

We urgently need to find a cure and you can help today. We are the only UK charity dedicated to funding research into macular disease.

To make your vital donation and move us closer to a cure call us today or go online.

**Macular Society**

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