

Local Services Assistive Technology Resource Pack

Purpose of this document

This document aims to suggest physical and online/software resources that local services working with AAC and EC may find appropriate to stock or have access to. The majority of these are items that we would consider come under the remit of local teams and therefore our team are unlikely to provide to clients. We may expect local teams to have trialled these or similar items prior to referring to the Barnsley team and be able to provide feedback on this in their referral.

This document does not cover the wider picture of local EC and AAC service provision – e.g. care pathways or staffing of local teams. Support on commissioning and service delivery of local AAC teams can be found on: <https://localaactools.co.uk/>. Other information and documentation can be found on our website on the AAC and EC pages: <http://www.barnsleyhospital.nhs.uk/assistive-technology/>

Please note:

This document is not designed to be an exhaustive list and we intend to update this document on a regular basis to ensure products are as up to date as possible, but this cannot be guaranteed, so please contact suppliers and manufacturers for the most up-to-date information.

We do not also always have first hand experience of all these products and some are given just as an indication of what is available. We would expect that local teams would use their own clinical judgement to decide whether products are suitable for individual clients. Other products are of course available and we are happy to discuss other options with you. Please let us know if you feel anything should be added or if any of the information is incorrect.

Some of the items listed in this resource pack are no longer available to buy on the market. They have continued to be included as you may come across these resources in use by individuals or may have access to them within your local services.

Contact us if you want to know more about any of the items described or are struggling to find suppliers. If you cannot find the appropriate equipment for your client then please ring or email the department and we will be happy to help.

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Alternative and Augmentative Communication (AAC)

Paper Based Resources

These are devices that do not require power to operate.

Boogie Board E Writers



Function	AAC
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Mid to high
Cognitive ability required	Mid to high
Ease of learning	Easy
Support needed	Minimum

Overview

LCD board with Stylus for writing messages or drawing pictures. Image can be erased when finished with. A wide range of e writers are easily available online.

Special Features:

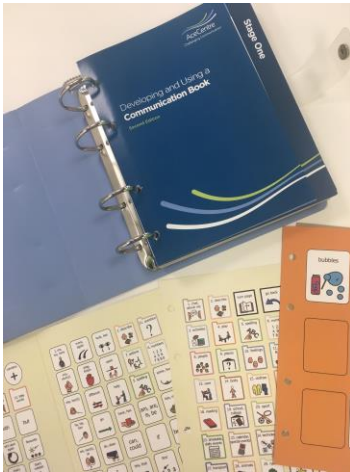
- A portable non-power based AAC solution.
- Available in different sizes (4.5 or 8.5 inch screen)
- Some models come with a kickstand or can be displayed using a magnetic attachment
- Some versions enable saving of text via an app
- Protective cases and replacement styluses can be purchased separately

Suitable for: Clients who can write or use drawings to support their spoken communication.

Product specification:

- Dependent on model chosen
- Power: Some versions have replaceable 2AAAA batteries
- Priced between approx £20-£40.

Developing and Using a Communication Book (ACE Centre)



Function	AAC
Category	Resource
Access Method	Direct or Partner assisted scanning
Operating system	N/A

Physical ability required	Varies dependant on access method
Cognitive ability required	Good
Ease of learning	Mid
Support needed	Mid to high

Overview

A resource developed by ACE Centre North as a guide for making and implementing a symbol based communication book. Provides templates for five stages of vocabulary. Available from:

<https://acecentre.org.uk/resources/developing-using-communication-book/>

Special Features:

- Left page always displays 'core vocabulary' and right pages show topic specific vocabulary.
- The core is based on the development of children's functional language as opposed to syntactical language. The core at Stage Five relates to the functions of language required by children working in the Foundation Stage of Education in England.

Suitable for: Clients who require a symbol based communication book, who can navigate by topic.

Product specification:

- 10 symbols in stage 1. 100 symbols in stage 5.
- Costs £45

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Look2Talk



Function	AAC
Category	Resource
Access Method	Eye pointing
Operating system	N/A

Physical ability required	Minimum
Cognitive ability required	Varies across levels
Ease of learning	Mid
Support needed	Mid to high

Overview

A resource to help parents and professionals develop a communication book for use with eye pointing. This guide introduces a step-by-step system that brings in symbols and pictures at a speed that suits both the child and the responder. It emphasises the importance of learning together in fun, relaxed activities where the child can take control. Accompanied by a DVD that contains tutorials and real-life example clips. Available from: <https://acecentre.org.uk/resources/look2talk/>

Special Features:

- A stable core vocabulary, available on each page of the communication binder, that develops through five stages. This core, ranging from just two symbols in Stage Two to 24 in Stage Five, is based on the development of children's functional language as opposed to syntactical language.
- A fringe vocabulary designed to meet an individual's interests, needs and varied environments.

Suitable for: Children who are developing eye pointing skills.

Product specification:

- Contains binder, instruction book, DVD with tutorials and videos and a CDC with templates.
- Cost is £150 including binder and all materials

PODD communication books



Function	AAC
Category	Software or Resource
Access Method	Direct, eye pointing or partner assisted scanning
Operating system	Windows

Physical ability required	Varies dependent on access method
Cognitive ability required	Dependent on template used
Ease of learning	Mid
Support needed	Mid to high

Overview

PODD stands for Pragmatic Organisation Dynamic Display. The CD bundle is an add on for Boardmaker and allows you to create communication books from the wide range of templates.

Special Features:

- Can be used with direct access, eye gaze or partner assisted scanning. However, the templates are only provided for direct access. Optional gridlines are available but must be copied and pasted onto each page before printing.
- Comes with detailed guides to help select the right template depending on the client's age, setting, comprehension and expressive language level.

Suitable for: All ages requiring AAC, either before high tech is considered or for use as a low tech option to support high tech.

Product specification:

- Requires Boardmaker software to use.
- Cost is approx. £395 including Boardmaker Plus

Light Tech Resources

Are those that are used for a limited range of communication functions. These devices generally include some or all of the following features: they are used to produce a relatively small number of utterances; are used to produce only single-concept utterances; have overlays or physical interfaces; are battery powered; use recorded speech.

BIGmack



Function	AAC
Category	Hardware
Access Method	Switch
Operating system	N/A

Physical ability required	Low to mid
Cognitive ability required	Low
Ease of learning	Easy
Support needed	Minimum

Overview

Record speech, music or any sound into the BIGmack. Record a repeated phrase from a story or song for a user to play back at the right time. Simply press the BIGmack to hear the sound.

BigMacks are available from a wide range of sellers.

Special Features:

- Includes interchangeable tops in red, blue, yellow and green.
- External switch jack for speciality switch operation.

Suitable for: Clients who can press a switch and are at an early level of communication.

Product specification:

- 2 minutes recording time.
- Volume control and on/off switch.
- Toy/appliance jack, cable included.
- 160mm x 55mm x 17mm.
- 1 x 9V battery (included).
- Cost is approx. £100 per unit

Smooth Talker and Smooth Talker Levels



Function	AAC
Category	Hardware
Access Method	Switch Touch
Operating system	N/A

Physical ability required	Low to mid
Cognitive ability required	Low
Ease of learning	Easy
Support needed	Minimum

Overview

The Smooth Talker is a versatile product capable of communication, toys & mains Control, switch activities and environmental Control. It is available in two versions; standard and 'levels.'

Special Features:

When using for communication, the following modes are available:

- **Sequential** play the messages in sequence, beginning with the first.
- **Random** plays a random message and is great as a speaking dice, for example.
- **Random (no repeats)**. Randomly plays every message exactly once before starting over.
- **Choice** requires two switches and is used to allow the user to exercise a choice between two items.
- **Choice Progression** Choose between multiple pairs of items or concepts.
- **Converse** Allows two users to conduct a two-way conversation without getting out of sequence.
- **Auditory Prompt**. Use the second switch to choose a message by searching through them quickly, and at low volume. Then play back the chosen message using the main switch at normal volume.
- **Question/Answer**. Record your messages as Q and A pairs and then this mode allows the question and answer to be repeated multiple times before moving on, to allow reiteration and reinforcement.

Suitable for: Clients who can press a switch and are at an early level of communication.

Product specification:

- £140
- Eight minutes of recording and playback time
- Built in rechargeable lithium battery - charge from a USB socket (can be used while charging).
- Input socket for attaching a wired switch, or alternatively use a wireless switch.
- Wireless toy activation using SimplyWorks Toy/Mains Appliance Controllers, or using the 3.5mm toy socket.

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Go Talk (series)



Function	AAC
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Low to mid
Cognitive ability required	Low to mid
Ease of learning	easy
Support needed	Low

Overview

A range of speech output communication devices. The message for each cell can be recorded into the microphone and then plays back when the cell is selected. Overlays can be created using your preferred symbol software and messages can be stored on up to five levels.

Special Features:

- Most devices have a top row of cells for 'core vocabulary' that stays the same across all levels.
- The Go Talk devices are durable and robust. The batteries last a long time. Volume can be adjusted.
- The devices have an inbuilt keyguard to facilitate direct access and a carry handle.

Suitable for: Clients starting out with AAC or those who only need to convey a small range of messages.

Product specification:

- Available with one, four, six, nine, twenty and thirty two cells.
- Prices range from £10 (Go Talk One) to £399 (Go Talk Express 32)
- Powered by 2 or 3 AA batteries

MegaBee



Function	AAC
Category	Hardware
Access Method	Eye pointing
Operating system	N/A

Physical ability required	Minimum (eye movement only)
Cognitive ability required	Good ability required including literacy
Ease of learning	Middle- needs to be able to understand 2 step process of letter selection
Support needed	Mid

Overview

An easy to use, low tech, eye pointing device. The communication partner presses the coloured buttons as indicated by the user and the screen then displays the message.

Special Features:

- Dual screens accommodate 20 characters in 2 lines with 260 custom abbreviations available.
- Easy to manage text or picture modes.
- Bluetooth pc connectivity allows large, remote display and text storage options.
- No demands on literacy skills of listener.

Suitable for: Clients who can eye point and have literacy skills and the cognitive ability to use colour coding.

Product specification:

- Dimensions: 16.9inch x 11.8 x 1.5
- Weight: 33.5oz
- Battery length 24hrs on full charge.
- Price is around £760-£780

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Proxtalker by Logan Technologies



Function	AAC
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Middle
Cognitive ability required	Low
Ease of learning	Easy
Support needed	Low

Overview

A mid-tech device which uses radio frequency technology to retrieve vocabulary stored on sound tags to produce recorded words. Users place the tags (with a symbol on) on a button and press to hear it say the word.

<https://logantech.com/products/proxtalker>

Special Features:

- Robust and water resistant. Portable in a backpack or wheelchair/wall mountable in binder format.
- Light touch option for easier access. Large tags available to support visual impairment.
- Speak All™ tag which enables sequence of tags to be played automatically.
- Colour coded pages for categorisation of tags.
- 5 location buttons allow single word or sentence level use.
- Sound tags can store 8 seconds of recording.

Suitable for: Clients who are familiar with Picture Exchange Communication System but not essential.

Product specification:

- Dimensions in back pack: 330mm x 180mm x 90mm
- Weight in backpack (with Tags): 2.17 kg
- £2, 399 (Correct Jan 2020)

SuperTalker



Function	AAC
Category	Hardware
Access Method	Direct or switch
Operating system	N/A

Physical ability required	Low
Cognitive ability required	Low
Ease of learning	Easy
Support needed	Minimum

Overview

A low tech speech output communication aid where up to eight messages can be recorded and added across eight levels with interchangeable overlays (total of 64 messages). A communication partner would need to change the overlays over.

Available from <http://www.inclusive.co.uk/supertalker-p2105> (other re-sellers are available)

Special Features:

- Built-in keyguard storage.
- Step-ahead jack for single switch sequential message playback.
- Volume control with lockout feature.
- Two Toy/Appliance output jacks.
- Eight input jacks for single-switch access to any specific location.

Suitable for: Clients starting out with AAC or those who only need to convey a small range of messages.

Product specification:

- 16 minutes of recording time with variable message lengths.
 - Four different grid formats with matching key guards.
 - Requires four AA batteries.
 - Priced at approx. £290
- When to move the client on from this equipment: If the client is consistently using the vocabulary independently and is likely to be able to express a wider range of vocabulary than can fit on the device.

Tech Speak / Tech Chat / Tech Talk



Function	AAC
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Low to mid
Cognitive ability required	Low to mid
Ease of learning	Easy
Support needed	Minimum

Overview

Range of recorded, durable, rugged speech output devices with Real-Voice high quality audio reproduction.

Available from <http://www.inclusive.co.uk/tech-talk-with-12-levels>

Special Features:

- Light-weight, rugged and portable.
- Optional colors, level amounts and recording times.
- Light touch membrane activation.
- Tech Speak (32 messages, 12 levels)
- Tech Chat (16 messages 12 levels)
- Tech Talk (8 messages 12 levels)

Suitable for: Clients who require a rugged direct touch AAC device.

Product specification:

- Standard message length of 2.25 seconds.
- Price ranges from £490- £770 dependent on type of device, battery options and length of recording per cell
- Cell size is biggest on the Tech Talk

Doozy switch



Function	AAC, environmental control, access practice
Category	Hardware
Access Method	Direct, switch
Operating system	N/a

Overview

A switch with multiple functions. The light touch, low profile switch can have light and vibration prompts and feedback, making it easy to access for those with complex sensory or physical needs. The Doo-zy can even work with no touch at all by moving your hand over the top of the controller.

Special Features:

The Doozy switch can be used as...

- Sound Recorder
- Switch Communicator
- Toy controller
- Music Player
- Magic Eye
- Step Communicator
- Infra-red Remote Control

Suitable for: Those exploring alternative access for AAC or environmental controls.

Product specification:

- Fitted with a 1GB SD card
- 6.5 hours recording time
- Rechargeable battery with mains adaptor
- External switch socket.
- Microphone socket

Direct Access, Literacy-based Equipment

Non specialised devices also include those devices that require message formulation by spelling and through direct access (i.e. finger pointing) with the device.

Allora



Function	AAC and environmental control
Category	Hardware
Access Method	Direct or switch
Operating system	N/A

Physical ability required	Good for direct access, low for switch
Cognitive ability required	Good- requires good literacy
Ease of learning	Easy if literate
Support needed	Minimum

Overview

The Allora is a keyboard and switch accessible, text to speech, communication device. It is designed to meet the needs of people that are literate and that may need to move from direct access to switch access. <https://www.techcess.co.uk/newallora/>

Special Features:

- Choice of voices.
- Infrared environmental control option.
- SMS text send and receive function.
- Speech recording function.
- Transfer text documents to be read aloud via USB port.
- Abbreviation expansion and word and phrase prediction.

Suitable for: Text to speech users requiring direct or switch access.

Product specification:

- 250mm x 175mm x 20-60mm
- £2, 550 (correct Jan 2020)

Lightwriter



Function	AAC and environmental control	Physical ability required	Good for direct access, low for switch access
Category	Hardware	Cognitive ability required	Good-requires good literacy
Access Method	Direct or switch		
Operating system	N/A	Ease of learning	Easy if literate
		Support needed	Minimum

Overview

A range of products offering text to speech voice output with varying additional features.
<https://www.abilia.com/en/our-products/communication/lightwriter-sl50>

Special Features:

- SL40 and SL40 Connect series offers scanning as an access option (a variety of switches can be plugged in and used dependent on access needs).
- SL40 and SL40 Connect offer SMS texting.
- SL40 Connect offers mobile phone calls and USB back up.
- Lightwriter Swift is pocket sized and accessed via joystick access.
- A range of different depth keyguards are available for those with some access issues

Suitable for: Clients with good literacy skills, those able to manage direct or switch access and those who may progress to requiring switch access in future.

Product specification:

- See manufacturer's website for individual product specifications.

AAC Screening, Assessment and Evaluation

This section details assessment and software that can assist professionals in assessing clients who may benefit from AAC and also evaluate their use of AAC and help to set goals once AAC has been provided.

AAC Evaluation Genie



Function	AAC
Category	Assessment
Access Method	Direct or switch
Operating system	iOS

Overview

AAC Evaluation Genie is an informal diagnostic tool that is intended to assist professionals with identifying skill areas that relate specifically to the language representation methods commonly found on augmentative communication systems. The purpose of AAC Evaluation Genie is not to identify a particular speech generating device, but rather build a framework for selecting an appropriate augmentative communication device for ongoing evaluation and / or device trial.

<https://apps.apple.com/gb/app/aac-evaluation-genie/id541418407>

Special Features:

There are 14 subtests that can be administered with screening options available for each subtest.

Visual Identification
Function Vocabulary
Word Association
Pixon Core Vocabulary
Picture Description

Visual Discrimination
Verb Vocabulary
Category Inclusion
Unity Core Vocabulary
Word Prediction

Noun Vocabulary
Category Recognition
Category Exclusion
Unity Icon Patterns

Suitable for: An assessment tool to determine the appropriate level of AAC.

Product specification:

- 32.8MB
- Requires iOS 5.0 or later.
- £12.99

Carla



Function	AAC
Category	Assessment
Access Method	Direct, switch or eyegaze
Operating system	Windows

Overview

A compact and complete comprehension assessment tool with automated recording which can be used with a range of clients.

<https://www.techcess.co.uk/carla1/>

Special Features:

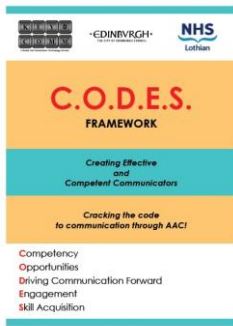
- Compatible with any Windows PC, laptop or tablet making it familiar to use and attractive to children.
- Can be used with a full range of access methods such as eye gaze, mouse pointers, switch scanning and touch screen displays.
- Visually appealing and motivating using photo images for target words. With bright graphics and sound rewards.
- Powered by Mind Express from Jabbla
- Ability to use your own images in the assessment.

Suitable for: Assessing the comprehension levels of children who have a reliable access method.

Product specification:

- Requires Mind Express software (free demo available)

CODES framework



Function	AAC
Category	Resource
Operating system	N/A

Overview

The C.O.D.E.S. Framework has been developed by Keycomm Resource Centre to help monitor progress of an individual using an AAC system. It is not an assessment tool, but a framework for measuring effective communication post assessment following discrete guidelines and identifying skill development over time. Available from <https://codesframework.wordpress.com/>

Special Features:

- Easy-to-use and update proformas that encourage joint planning, meaningful target-setting and collaborative working amongst professionals.
- All resources can be provided in hard copy and electronically.
- Training and support is readily available.

Suitable for: Adults and children using AAC at any stage.

Frenchay screening tool



Function	AAC
Category	Assessment
Access Method	Direct or partner assisted scanning
Operating system	N/A

Overview

The Frenchay Screening Tool for AAC is designed to assess people's abilities in terms of physical access, visual acuity, visual processing, visual contrast sensitivity, identifying different types and fonts of symbols and words, categorisation, word-picture matching, reading and spelling (with and without symbol support), alpha encoding and focusing thoughts.

<https://www.nbt.nhs.uk/bristol-centre-enablement/services-at-centre/bristol-communication-aid-service/bcas-products>

Special Features:

The parameters the Frenchay Screening Tool for AAC assesses includes the following:

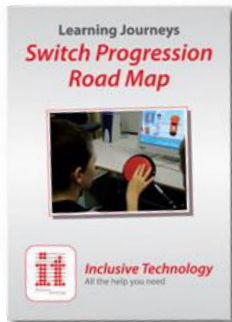
- physical access
- visual acuity
- visual processing
- visual contrast sensitivity
- identifying different types of symbols
- focusing thoughts
- identifying different fonts and words
- categorisation
- word-picture matching
- reading and spelling (with and without symbol support),
- alpha encoding

Suitable for: All age ranges.

Product specification:

- Presented in a sturdy stand alone ring binder. Uses photos and PCS symbols. Assessment forms can be downloaded.
- £85 +VAT

Switch Progression Roadmap



Function	Access practice
Category	Resource
Operating system	N/A

Overview

A teaching and assessment document detailing every stage of switch skills acquisition from cause and effect to confident scanning. The Switch Progression Road Map will help you assess a learner's baseline, set achievable learning milestones and provide you with all the help you need to teach these important skills in a way which is both meaningful and motivating.

<http://www.inclusive.co.uk/articles/switch-progression-road-map>

Special Features:

- The booklet provides advice on which software and hardware works best and how to set them up to personalise the learning experience.

Suitable for:

- People learning to use switches to access a computer, with a view to developing switch access for environmental controls or AAC.

Product specification:

- Free to download from www.inclusive.co.uk

When to move the client on from this equipment:

This resource guides you through the stages of switch assessment and indicates when and how to move your client on.

Environmental controls

Environmental Control refers to devices or systems, which enable clients to control their immediate living space (with different methods of access to suit different types of disability).

Environmental Control Systems can enable you to operate everyday domestic appliances and mechanisms by infra red or radio frequency. Mechanisms that can be operated include door and window openers, electronic curtain rails and blinds. Appliances that can be operated include lamps, televisions, telephones and pagers.

Environmental control systems vary considerably in their capabilities. Some only turn one or two devices on and off and handle like a remote control, others control a range of settings for several devices and are more complex. Generally those systems which control a number of different functions would come under the remit of specialised services, unless the local service is confident in implementing these.

Environmental control systems that incorporate the need for adaptations to a property are often fitted in conjunction with our service, but the local Social Services may be responsible for the funding and fitting of certain adaptations including door openers, plug sockets etc.

For those clients who do not meet the criteria for a specialised service, there are still a large number of products out there on the market that can help with environmental control. These can range from simple large button remote controls and phones all the way through to more complex 'Smart' home automation systems, controlled via a smart speaker such as an Amazon Echo.

This section hopes to provide some suggestions for items that may support clients with a certain level of disability. There are however many similar equivalents out there, so please take this in to account when suggesting items for clients.

Phones

There are a number of options out there to support with phone access ranging from big button mobiles and landline phones for those with difficulties with fine motor control, through to ways to adjust the accessibility options within a mobile itself or using alternative ways to access your phone such as a mouse or switch.

Phone calls and SMS can also be accessed via a computer either via a mobile phone or an online service or from smart speakers such as Amazon Echos/Google Homes.

Doro Secure 580 mobile phone



Function	Environmental control
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Mid
Cognitive ability required	Low to mid
Ease of learning	Easy
Support needed	minimum

Overview

An easy to use mobile phone with simplified keypad and loud and clear sound. Stores four speed dial numbers with one touch calling.

Special Features:

Visual ring indicator, hearing aid compatible, speakerphone, adjustable text size, can receive SMS, splash proof, safety features including an assistance button and GPS localisation, easy handling

Suitable for:

- Individuals with reduced memory, hearing or dexterity.
- Those struggling with a standard mobile phone

Product specification:

- 3G, takes a micro-SIM, 10 hours talk time, 350 hours standby time

Doro Memory Phone Plus



Function	Environmental control
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Low to mid
Cognitive ability required	Low to mid
Ease of learning	Easy
Support needed	minimum

Overview

Ergonomic telephone handset with large, simple to use high contrast concave keys and low reflective finish, making dialling easy. One touch memory buttons with photo option for pre stored numbers.

Special Features:

- 4 Speed dial numbers stored under a photo or symbol of your choice.
- Hearing aid compatible, visual ring indicator, loud and clear sound.

Suitable for:

- Individuals with reduced memory, cognitive problems, reduced hearing or dexterity.

Product specification:

- Handset volume amplified by up to 35dB

BigTel 40 Plus Phone



Function	Environmental control
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Low to mid
Cognitive ability required	Low to mid
Ease of learning	Easy
Support needed	minimum

Overview

Easy to use, amplified, big button phone with six photo memory buttons, which can be set up to call family/friends etc. at the press of a button. Ideal for users with memory and/or dexterity difficulties.

Special Features:

- High contrast, easy press buttons
- Amplified ringer and sound
- Hearing Aid compatible
- Visual ringer for incoming calls

Suitable for:

- Individuals with reduced memory, cognitive problems, reduced hearing or dexterity.

Product specification:

- Does not require additional power socket. Just plugs in to phone line.

Using a smart speaker for phone calls



Function	Environmental control	Physical ability required	Minimal
Category	Software/ Hardware	Cognitive ability required	Good
Access Method	voice	Ease of learning	moderate
Operating system	n/a	Support needed	Support required for initial set up

Overview- Smart hubs

Increasingly people are using smart hubs such as the Amazon Echo or Google Home to make phone calls to mobile and landline numbers.. This requires contacts to either be saved on the device/app and then the user is able to say 'Call mum' etc. and the call will be placed or alternatively they say 'call.....' and read out a phone number. Alternatively the individual can search the internet for a phone number and then call this.

Some devices with screens enable video calls such as the Amazon Echo show and the Facebook Portal. The Portal however only enables you to call contacts with smartphones, tablets or Portals.

Different devices work in different ways so it is worth checking that a particular device is compatible before purchase.

Suitable for:

- Those with limited physical ability to control a mobile or landline phone
- Those wishing to use voice as an access method to phone control
- Those with clear speech
- Those with a back up method for attention calling/emergency calling etc.
- Users may require their own smartphone with appropriate app for this function to work

*****PLEASE NOTE. THESE DEVICES RELY ON WI-FI TO FUNCTION. IF THE WI-FI FAILS, SO DOES THE DEVICE. IN ADDITION THEY RELY ON CLEAR SPEECH TO WORK AND DO NOT ALWAYS CORRECTLY RECOGNISE A PERSON'S VOICE EVERY TIME THEY SAY SOMETHING. DO BEAR THIS IN MIND IF AN INDIVIDUAL IS THINKING OF RELYING ON THIS FOR ATTENTION CALLING IN THE CASE OF AN EMERGENCY. A BACK UP OPTION OR AN ALTERNATIVE E.G. A COMMUNITY ALARM MAY BE A SUITABLE OPTION.**

USB On The Go (OTG) Cable for phone access



Function	Phone access/ Environmental control
Category	Hardware
Access Method	Mouse/ alternative mouse
Operating system	Android

Physical ability required	Mid- but depends on access method e.g. mouse, headmouse, joystick etc.
Cognitive ability required	Good to be able to manage use of phone
Ease of learning	Easy if good understanding of a smart phone
Support needed	Minimum if good understanding of a smartphone

Overview

Enables connection of an external mouse, keyboard or memory stick with USB to an Android mobile phone or tablet with Micro USB (as long as the device supports the OTG function). Most recent phones and tablets (released within the last 2 years) will detect the device and allow use. The user can use any type of mouse or keyboard. A mouse will be able to access all parts of the phone.

Special Features:

- Widely available from Amazon/Ebay etc. at low cost
- More than one USB device can be attached via a powered USB hub plugged in to the phone
- OTG cables are generally USB to micro USB
- Users may need to download an extra app to place any actual physical phone buttons on to the screen to be able to access with the mouse (Soft keys) e.g. home and back buttons. (depends on phone type)

Suitable for: Those who struggle to access the phone/tablet touchscreen due to limited fine motor control, but can manage a mouse or keyboard.

Product specification:

- Some cables advertise that they are suitable for certain phones or tablets, so just check compatibility
- Requires Android OS 3.1 or higher
- Many OTG cables will prevent charging of the phone whilst in use as they use the same socket, but some allow both, so it is worth looking for one of these if a user is wishing to have continuous phone access.

Accessing your mobile phone from your computer



Function	Phone access
Category	Software
Access Method	Direct, switch, eye gaze, head mouse
Operating system	Windows, Android

Physical ability required	Varies dependent on computer access method
Cognitive ability required	Good- needs to be able to navigate a computer
Ease of learning	Easy if has good understanding of computer use
Support needed	Medium- requires download of app or software and connection of phone e.g. via Bluetooth

Overview

A number of apps/software are available that can connect your Android phone to your Windows computer, enabling the user to answer/make phone calls and send/receive SMS via their computer. One such app is **Remote Phone Call**, which can be trialled for free from Google Play for 15 days. This requires download of a PC Client called *Call Centre*, both available from <http://www.justremotephone.com/>. Other apps include **scrcpy**, **Airdroid's Airmirror** and **Vysor**

Mac users are also easily able to use their iphones from their Macs via the facetime app on the Mac and appropriate settings on the phone. Both devices will need to be signed in to the same icloud account and on the same wifi.

Remember there are other apps and software that enable you to make internet voice calls, send messages or SMS, sometimes without the need for a mobile phone such as **Skype, Facebook Messenger, Viber and Whatsapp**

Special Features:

- Connects your phone to your computer via Bluetooth, Wifi or USB lead
- May require an app on the phone and a download for the computer
- Enables easy use of a phone by a client with limited upper limb movement as long as they are able to access their computer by any means (eyegaze, headmouse, standard mouse/keyboard etc.)

Suitable for: Anyone who is struggling to access the touchscreen or buttons of their smartphone, but is able to access a computer or who would find combining the two devices more convenient

Product specification:

- Depends on type of phone and computer
- Some phones or computers come with installed apps to allow connection

Adapted remote controls

There are several large button, simplified remote controls on the market to support those with fine motor or cognitive difficulties. These are often a simple and cheap solution for some and are simple to set up and use.

Alternatively, increasingly apps on a smartphone can be used for TV control dependent on phone and TV type.

TV 5 Remote control



Function	Environmental control
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Low to mid
Cognitive ability required	Low to mid
Ease of learning	Easy
Support needed	Moderate to set up initially

Overview

Simple, large button remote control. Enables volume and channel change, turning the TV on and off, changing to source and a mute button.

Special Features:

- 6 programmable buttons
- Can be set up to control up to two different devices
- Easy set up but will require some support with set up from another person

Suitable for:

Those with memory, dexterity or visual difficulties

Product specification:

- Requires x 2 AAA batteries

****ALSO AVAILABLE IN TV10 AND TV15 VERSIONS- BOTH OFFERING FURTHER FUNCTIONALITY BUT STILL OFFERING A SIMPLER REMOTE THAN STANDARD, LARGER, EASIER TO PRESS BUTTONS AND OFFERING THE POSSIBILITY OF CONTROLLING TWO DIFFERENT DEVICES E.G. TV UPSTAIRS/TV DOWNSTAIRS

Doro Handle Easy remote control



Function	Environmental control
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Low/Mid level
Cognitive ability required	Low to mid
Ease of learning	Easy
Support needed	Some support for initial set up

Overview

Simple, seven buttoned remote control. Enables power on/off, channel up/down and volume up/down to a TV (could be used with other devices that work by infra red remote control).

Special Features:

- High contrast buttons/design for those with visual difficulties

Suitable for:

Those with memory/cognitive issues or problems with dexterity

Product specification:

- Light indicator flashes when batteries are low
- Requires some support from a family member or carer to set up via the usual remote control

Flipper remote



Function	Environmental control
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Low to medium
Cognitive ability required	Low to medium
Ease of learning	Easy
Support needed	Minimum

Overview

Remote control for Sky, Virgin and Digital TV. The Dual-Function feature allows you to turn both your television & Freeview/Sky/Virgin boxes on/off using just the Flipper. This removes the need for 2 remote controls & helps reduce confusion.

Special Features:

- Only 6 key buttons; On/Off, Channel up, Channel down, Volume up, Volume down, and mute.
- Favourites Function, save up to 25 channels to the remote control.
- Comes with almost 1000 codes for all major TV and set top box brands; quick set up
- Lock feature; stops accidental reprogramming of control

Suitable for: Any individual who has a physical and/or cognitive need for a simple way of operating their terrestrial and digital TV.

Product specification:

- Operating Distance: 7m
- Type of Battery: 2 x AAA (included)

Using a mobile phone as a remote control



Function	Environmental control
Category	Software/ Hardware
Access Method	Direct/switch /mouse
Operating system	iOS/Android

Physical ability required	Good (dependent on access method)
Cognitive ability required	Good
Ease of learning	Easy if good understanding of a smart phone
Support needed	Minimum if good understanding of a smartphone

Overview-

Phones with IR Blasters

Some phones have inbuilt IR (infra red) blasters and can work as a remote control with an appropriate app

e.g **Galaxy Universal Remote app**: Or **Anymote**:

These apps have customisable screens, where the number, size and position etc. of buttons can be altered to facilitate access.

Phones without IR blasters

It is now possible to control certain TVs with linked apps e.g. **Samsung smart things** app for Samsung TV control or using an iPhone to control an **Apple TV**

Usually your phone will need to be on the same wifi as the TV to work.

Alternatively you are able to download an app on to your phone to control a specific TV service e.g. Virgin media with '**Virgin TV control**' or 'Roku' with the **Roku mobile app**

Hardware:

There are some systems that use a piece of hardware to link your smartphone and your TV/other devices. These tend to use your home Wifi network or sometimes Bluetooth e.g. **Logitech Harmony Hub, Anymote Home**.

Suitable for:

- Those with limited mobility and/or some limited dexterity that can control a touchscreen/smart phone (could be via alternative methods) and wish to control their TV or other remote control devices
- Those with appropriate smartphones/TVs/TV services/devices
-

One for all remote–Simple 4



Function	Environmental control
Category	hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Medium
Cognitive ability required	Medium
Ease of learning	Easy
Support needed	Moderate to set up remote initially. Minimum ongoing

Overview

An easy to use universal remote that controls up to four different devices including TV, Satellite/Freeview, DVD, Blu-ray player, iPod docking stations, amplifiers etc. all from one remote. This company provides a range of multifunction remotes with the ability to control varying amounts of devices. Similar remotes are available from other companies.

Special Features:

Large buttons, quick set up, shockproof.

Suitable for:

People with limited mobility- users are able to control a number of devices from one position. Users with some dexterity problems, but reasonable dexterity is still required.

Product specification:

- Takes 2 x AAA batteries
- Support may be needed for set up

Attention calling / pagers

There are numerous solutions on the market for attention calling within the home to family or carers. These range from basic mainstream baby monitors and wireless doorbells through to more specialist pendant/wrist worn alarms including those with switch access.

Consideration will need to be taken in regards to what movement an individual has to ensure they have the right type of device.

If an individual lives alone, it may be more appropriate to consider a community alarm that would alert a central switchboard or family member. It would also be appropriate to look at phone access in these circumstances to give individuals a back up method for attention calling.

Pagers – standalone type



Function	Environmental Controls
Category	hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Medium
Cognitive ability required	Low
Ease of learning	Easy
Support needed	Minimum

Overview

A number of standalone pager systems are available on the market. They allow an individual to call a carer/family member who is in the same house or garden (check range of device) by pressing a pendant alarm button, which triggers the receiver (carried by the carer). Can be used straight out of the box/easy to set up. The device pictured is the **Lifemax Safety Alert**.

Special Features:

- Works wirelessly
- No ongoing cost

Suitable for:

- Individuals that have a carer or family member in the house at all times and who may need to alert them at short notice. This could be an individual with physical or memory/cognitive difficulties. Useful for an individual who may sleep in another room to their carer/family member.

Product specification:

- Uses short range radio signals

Med Page pagers (easy press)



Function	Environmental Controls
Category	Hardware
Access Method	Direct or switch
Operating system	N/A

Physical ability required	Low
Cognitive ability required	low
Ease of learning	easy
Support needed	minimum

Overview

Medpage <http://www.medpage-ltd.com/index.html> do a number of standalone radio pager options including this Big button pager kit (£80.64) <https://medpage-ltd.com/wireless-help-call-pendant/help-call-button/BIG-BUTTON-HELP-CALL-TRANSMITTER-SWITCH-WITH-PAGER-MPPL-JSK> and another kit with a waterproof easy press pendant alarm (£67.20).

Special Features:

- Additional switches and transmitters can be used with a single pager e.g. to have switches set up in different rooms, one for bed/chair etc.
- Waterproof pendant alarm comes with lanyard and wrist strap
- Also available with a soft pillow switch for activation via head movement
- The receiving unit can be set to vibrate, make a noise or both
- Has low battery indicator

Suitable for: Those with poor dexterity and potentially visual or memory problems that may struggle with a more standard type pager. Those who may be unable to verbally alert a carer who is in the same property or use a standard paging system.

Product specification:

- Takes batteries

Baby monitors for attention calling



Function	Environmental control
Category	Hardware
Access Method	Handsfree
Operating system	N/A

Physical ability required	None
Cognitive ability required	minimum
Ease of learning	Very easy/Na
Support needed	None beyond initial set up

Overview

These monitors can be used if an individual is unable to press a pendant alarm/pager but may wish to alert a carer or relative, who is in the property, particularly at night time. The individual would be able to speak to/alert the carer hands-free if the monitor is placed near to them.

Special Features:

- Widely commercially available at a variety of cost levels, including video monitors.

Suitable for:

- Those with very limited upper limb movement/dexterity and who are unable to shout/call to alert a carer when required or press a button on a pager etc. Those who have a carer or family member at all times within the property, who can carry the receiver. The individual will need to be able to speak or make some sort of vocalisation to be able to be heard.

Product specification:

- Dependent on model chosen - a wide range are commercially available

Wireless doorbells



Function	Environmental Controls
Category	Hardware
Access Method	Direct
Operating system	N/a

Physical ability required	Low to mid
Cognitive ability required	low
Ease of learning	easy
Support needed	minimum

Overview

These can often be used by individuals and their families/carers as a type of pager system within a property. When the individual presses the doorbell, which can be positioned on their table/lap/lanyard etc, the chime on the base unit will activate, alerting the carer. Base units can be plug in or mobile, allowing the carer to move around the property and take it with them if they wish.

Examples include: www.screwfix.com –Wireless Byron portable and plug-in door bell. approx. £32.99.

Special Features:

- Widely available from high-street/mainstream retailers at low cost e.g. Screwfix, B&Q, Amazon

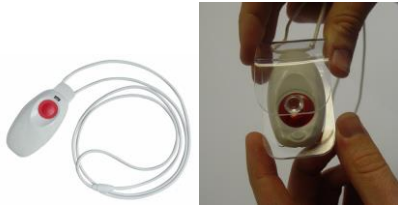
Suitable for:

- Those with mobility problems or difficulty with calling out to alert a carer/family member
- Those who sleep downstairs and a carer/family member sleeps upstairs/out of range of calling

Product specification:

- Dependent on model chosen-range of use will vary

Telecare – various devices



Function	Environmental Controls
Category	Hardware
Access Method	Direct or switch
Operating system	N/a

Overview

A range of devices to support individuals to remain independent and safe in their own homes. These can range from pendant alarms to falls detectors, bed and chair occupancy detectors, flood and smoke detectors and property exit sensors. These are usually available via the local council Social Services, but can also be purchased directly from private companies. There is usually an ongoing cost involved with the service.

Special Features:

- **Easy press adaptors** or switches may be available from companies for those with limited dexterity and difficulty pressing pendant alarm buttons.
- May be able to incorporate in to a full environmental control system if appropriate

Suitable for:

- Those at risk of safety issues around the home, those living alone or spending time alone.
- Those with physical and/or cognitive/memory problems.

Product specification:

- Dependent on product/company used. A landline phone line is usually required. May link to a central switchboard/service or to a family member

Controlling items around the home

The Barnsley Assistive Technology Team has produced further in depth guidance on control of products around the home, which is detailed in an additional document:

<https://www.barnsleyhospital.nhs.uk/assistive-technology/files/2018/03/Additional-EC-Equipment-Resource-v3.pdf>

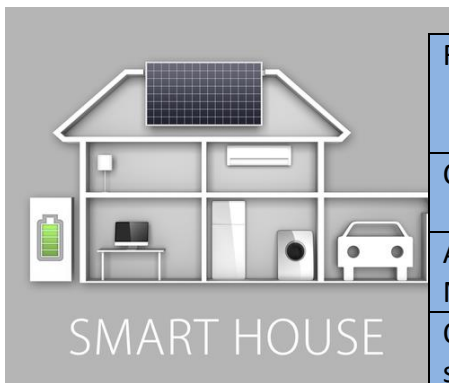
The above resource may be particularly useful for occupational therapists working in equipment and adaptations services or those who do not meet the assessment criteria for a specialised service, but who would benefit from more mainstream environmental control.

It contains information on the following:

- Use of smart speakers and apps for environmental control including:
- Remote control (smart) light bulbs and remote control light switches
- Remote control (smart) heating controls
- Remote control sockets
- Intercoms (including app based video intercoms)
- door, window, blind and curtain openers

Further ideas on individual products are listed below.

Smart home products/ systems



Function	Environmental control
Category	Software and hardware
Access Method	Direct
Operating system	iOS/ Android

Physical ability required	Variable dependent on how client is accessing the system.
Cognitive ability required	Good
Ease of learning	Medium to high- requires good understanding of smartphone or smart speaker use
Support needed	Support required for initial set up and install of products

Overview

Please see our additional support information on our website as follows:

<https://www.barnsleyhospital.nhs.uk/assistive-technology/resource/additional-environmental-control-equipment-peripherals/>

There are an increasing number of 'Smart Home' products and systems on the market, which are now widely available from suppliers such as B&Q/ Amazon etc. These include **WEMO, Phillips Hue, Insteon, Samsung Smarthome** and **Loxone**.

Systems give control over items in the same range such as sockets (for plug in devices), lighting (lamps and main lighting via wall switches or Smart lightbulbs), motion detectors, web cams etc.

Access is via a free app, which is downloadable on either an Android or Apple device. Or systems can also be made accessible via smart speakers such as the **Amazon Echo, Google Home or Apple Home pod**, which also offer access to other functions e.g. playing music, making phone calls and searching the internet.

Devices can be controlled via an phone app from anywhere with an internet, 3G or 4G signal. Additional devices can be added at any point.

It is usually necessary to have a wireless 'hub' or 'bridge' within the property to connect all of the devices. The smart speakers themselves will usually be unable to control peripherals without additional equipment.

Special Features:

- Suitable for both Android and Apple products
- Able to 'build/design your own system' by choosing the products that you require
- Widely commercially available and fittable/ Non-specialist

Suitable for:

- Individuals who may have difficulty mobilising and reaching different devices e.g light switches, sockets, thermostats etc. but have good enough upper limb function to control a smartphone or ability to use a smart speaker- some of these clients may be appropriate for a referral to Barnsley AT Team also for assessment for an environmental control system and would be assessed on an individual basis. We would be happy to discuss

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Barnsley Hospital, Gawber Road, Barnsley. S75 2EP

Web: www.barnsleyhospital.nhs.uk/at/ - Email: Barnsley.AT@nhs.net - Phone: 01226 432159

Energenie remote control sockets



Function	Environmental control
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Mid level
Cognitive ability required	Low to mid
Ease of learning	Easy
Support needed	Minimum (for initial set up)

Overview

Radio frequency remote controlled sockets (pack of 4) to control any domestic appliances (up to 13A). Comes with simple remote controller with on/off buttons for each of the four sockets and a button to turn them all on/off at the same time. Similar sockets are available from a range of different companies.

Special Features:

- Will work even when the socket is hidden behind furniture or in an adjacent room.
- An LED light on the remote on the sockets indicates when they are switched on.
- Easy to program/set up

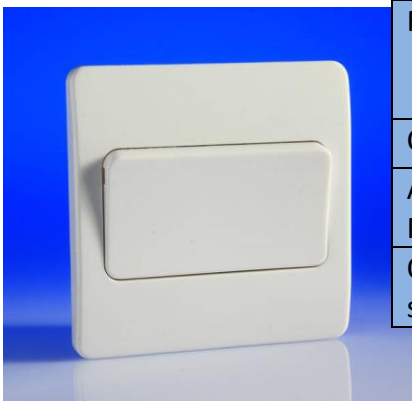
Suitable for:

- Those with limited mobility and some reduced dexterity that wish to be able to control a number of plug-in devices from one position e.g. bed or wheelchair.

Product specification:

- 30metre range

Easy press light switches



Function	Environmental control
Category	Hardware
Access Method	Direct
Operating system	N/A

Physical ability required	Mid level
Cognitive ability required	Low to mid
Ease of learning	Easy
Support needed	Requires installation by qualified person

Overview

Large sized, easy press light switch. Suitable for those that struggle to press normal rocker type light switches. Can be positioned at a lower height for those that struggle to reach up or are wheelchair users.

Suitable for:

Those with difficulties with fine and gross motor control

Product specification:

- Will require installation by a qualified person due to electrical work involved
- Available in different versions to suit lighting circuit e.g. double switch (2 gang) or 2 way versions.
- Available from a wide range of suppliers

Computer Access

There are a range of devices, hardware and software that allow people, who have problems using conventional controls (e.g. keyboards or mice) to access their computer. Adaptations to assist with computer access can include the following:

- alternative keyboards e.g. large key keyboards
- alternative mice e.g. a trackball, joystick or touchpad
- additional accessibility software, e.g. on screen keyboards, speech recognition, ability to adjust keyboard and mouse settings (these are often built into the computer e.g. within Windows)
- Physical supports, adaptations or alterations which may assist with the position of the client and physical access to the computer itself

Client and equipment positioning



Overview

Computer access can often be improved by looking at the positioning of either the client or the equipment itself. This may range from seating for the client e.g. type of, or adjustments to a wheelchair or looking at alternative seating with good postural support if appropriate.

Clients may benefit from an external keyboard as opposed to the inbuilt laptop keyboard, or an external mouse rather than a laptop touchpad.

Position of the mouse and keyboard should also be considered. It may be easier for these to be placed nearer to the individual e.g. on their lap, on a laptray or on a computer desk with slide out keyboard tray. Using an overbed table whilst in bed may also facilitate use.

Tablets and iPads may be best mounted on a wheelchair or desk at a certain angle to enable easier access to the screen. There are a number of 'off the shelf' mounts available for this purpose. Alternatively individuals may find it easier if tablets are placed on their lap or on a table.

Consideration of placement of other access methods should also be taken in to account e.g. a switch or joystick. This may be positioned in a particular place for hand or head access e.g. on their lap or pillow or may need mounting on their wheelchair, headrest, laptray etc.

If access, mounting or switch or device positioning becomes complex, it may be that a referral to the Barnsley team may be appropriate for either advice or provision.

Arm and wrist supports



Function	Computer access
Category	Hardware
Access Method	Direct
Operating system	any

Overview

Foam or gel pads placed in front of the keyboard can be helpful when resting from, or when typing. These are widely available from most office suppliers and PC outlets or from more specialist suppliers.

Where there are difficulties supporting the weight of the arms (e.g. those with muscle weakness as in Motor Neurone Disease or Muscular Dystrophy), mobile arm supports which clamp to the table top or wheelchair can also be useful. Again these are available from similar companies but are also sometimes available from local Equipment services. Other sources of funding may be available e.g. charitable organisations.

Suitable for:

Individuals with weakness in the upper limbs, tremor, fatigue, pain in the upper limbs including hands and wrists.

Product specification:

Products are available from companies such as Posturite: <http://www.posturite.co.uk/> and Inclusive Technology: <http://www.inclusive.co.uk/>

Alternative mice and keyboards

There are a large range of alternative mice and keyboards available to suit a range of abilities. Alternative mice include joysticks also, which will act as a mouse and move the cursor around the screen. There are also mice available that are head, mouth, chin and foot controlled.

Alternative keyboards come in different sizes and colours and include those with keyguards to facilitate access. Onscreen keyboards are also a good option for those who are able to manage a mouse and can 'point' at the letters on the screen with their mouse cursor.

Kensington Orbit trackball mouse



Function	Computer access
Category	Hardware
Access Method	Direct
Operating system	Windows, iOS, Android

Physical ability required	mid
Cognitive ability required	Mid- depends on what you are using the mouse for
Ease of learning	Easy
Support needed	minimum

Overview

Plug and play easy to use trackball mouse. The user moves their hand over the ball to move the cursor on the screen, limiting the overall movement necessary compared with a standard mouse. Larger buttons make it easier to click. The mouse can be positioned on a table or on the user's lap and is often suitable for users, who struggle to use a standard mouse.

Special Features:

- 2x large buttons, which are programmable with the ability to control the button functions, scrolling and pointer speed via the software.

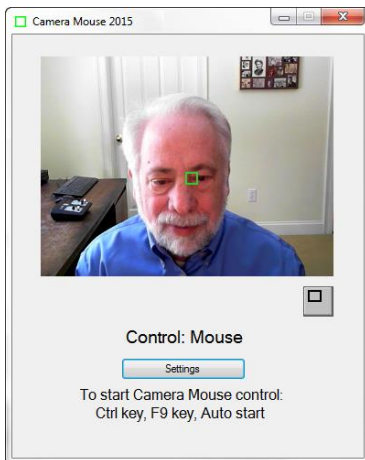
Suitable for:

- Those with limited upper limb movement and dexterity and who are struggling to use a standard mouse.

Product specification:

- Plugs in to the computer via a USB cable
- Kensington also produce a number of other trackball mice, including wireless options.

E(nable) Viacam and Camera Mouse



Function	Computer access
Category	Software
Access Method	Head movement/webcam
Operating system	Windows

Physical ability required	low
Cognitive ability required	Good ability to manage computer access
Ease of learning	Mid range
Support needed	mid

Overview

Free downloadable mouse replacement software that moves the onscreen cursor as you move your head. Works on any standard PC, laptop or Windows tablet with a webcam.

Eviacam available from: <http://eviacam.sourceforge.net/index.php>

Camera Mouse available from: <http://www.cameramouse.org/>

Special Features:

- Enables hands free use of a Windows or Linux (Eviacam only) computers
- Tracks movement of a particular feature on your face via the webcam
- The amount of head movement required can be adjusted in the settings
- Uses dwell to click
- Pointer speed, smoothness, dwell time and acceleration can all be adjusted
- Useful to try as a free alternative to **Headmouse Extreme** or **Smartnav**

Suitable for:

- Those requiring handsfree use of a computer with webcam
- Those who struggle with standard control of a keyboard/mouse and who have reasonable head movement

Product specification:

- Works on Windows or Linux (Eviacam) platforms (download the correct version).
- Requires the computer to be placed on a table or mount to ensure stable positioning

n-ABLER Joystick



Function	Computer access
Category	Hardware
Access Method	Direct +/- switches
Operating system	Windows, iOS, Android

Physical ability required	mid
Cognitive ability required	Varied dependent on what you are using it for
Ease of learning	easy
Support needed	Minimum

Overview

Light touch joystick to enable easier computer navigation. Can be used with the left or right hand. Available from Inclusive Technology <http://www.inclusive.co.uk/n-abler-joystick>. Other similar joysticks are available.

Special Features:

- Interchangeable heads are available to assist those with poor grip/dexterity (ball, T-bar etc.)
- Light touch/ minimal hand movement only required
- Large base means good stability or can be mounted if required

Suitable for:

- Those with limited hand control, motor skill difficulties, poor hand-eye-coordination, limited manual dexterity, involuntary muscle spasms and hand or wrist tremors.

Product specification:

Mac or PC compatible.

Jumbo XL Keyboard



Function	Computer access
Category	Hardware
Access Method	Direct
Operating system	Windows, iOS, Android

Physical ability required	Low to mid
Cognitive ability required	Mid- dependent on what using for- requires literacy
Ease of learning	Easy if literate
Support needed	Minimum if client is literate

Overview

Large sized keyboard with chunky 1inch sized keys to aid those with poor dexterity and/or vision. Plugs in to a standard computer- ready to use immediately.

The Keyboard shown is the Jumbo XL II High Visibility Keyboard, available from **Inclusive Technology**:
<http://www.inclusive.co.uk/jumbo-xl-2-hi-vis-keyboard-p6332>

Special Features:

- Has two extra USB ports in the side for connecting mice, number keypads etc.

Suitable for:

- Users with poor vision, cognitive difficulties, young users, users with limited manual dexterity

Product specification:

- Plugs in to the computer via USB.
- Available in standard black/white, colour coded categorising vowels, consonants and punctuation or yellow/black for high visibility/contrast

Keyboard stickers – high visibility



Function	Computer access
Category	Hardware
Access Method	Direct
Operating system	Windows, iOS, Android

Overview

Sheets of stickers with various coloured backgrounds and text to stick on computer keyboard keys to assist those with visual difficulties. Available from Inclusive Technology £5-£10.

<http://www.inclusive.co.uk/product-list?Text=keyboard%20stickers>

Special Features:

- Upper and lowercase letters available.
- Available in a variety of colours (yellow on black, white on black, black on white and white on yellow).
- Easy to apply, cheaper than purchasing a new keyboard

Suitable for:

Those with reduced vision, who struggle to see the letters on a standard keyboard but have the physical ability to press the keys.

Keyguards for keyboards



Function	Computer access
Category	Hardware
Access Method	Direct
Operating system	Windows, iOS, Android

Physical ability required	Low to mid
Cognitive ability required	Requires literacy
Ease of learning	Easy if literate
Support needed	Minimum once set up

Overview

These are rigid plates with holes designed to work with specific keyboards. The holes are positioned over each key and they make it impossible to press two keys at once. As a further benefit it is possible to rest hands and arms on the guard without pressing keys. It can often be easier to purchase a keyboard and guard together rather than get one to fit a specific keyboard

Special Features:

- Can be removed and fitted for use only when required

Suitable for:

- Users with limited upper limb function including those with difficulties with dexterity and tremor

Product specification:

Try Keytools or Maxcess for a variety of different keyguards/keyboards

<https://www.keytools.co.uk/>

<http://www.maxessite.co.uk/index.html>

Superkeys on-screen keyboard



Function	AAC, computer access
Category	software
Access Method	Direct
Operating system	iOS

Physical ability required	Low to mid
Cognitive ability required	Requires literacy
Ease of learning	Easy
Support needed	None once installed

Overview

Downloadable keyboard for iPad or iPhone where keys are grouped in to clusters for easy access. Tap on the cluster and it will bring up the letters in that cluster. Tap on the one that you want.

Available via Crick Software/App store: <http://www.cricksoft.com/uk/products/superkeys/superkeys-home.aspx> (£9.99)

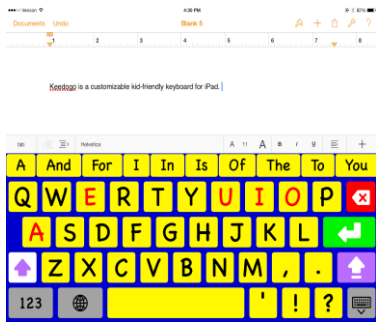
Special Features:

- Has only seven large keys to target rather than more than more than 30 small keys on the standard iPad keyboard
- Includes word prediction to facilitate typing
- Includes shortcut keys to certain customisable phrases
- Customisable colours to assist with low vision

Suitable for:

- Those who are able to access a touchscreen but may struggle to isolate individual small icons due to limited fine motor control
- Also suitable for those with low vision, once they are familiar with the keyboard layout

Keeble keyboard



Function	AAC, computer access
Category	Software
Access Method	Direct, switch
Operating system	iOS

Physical ability required	Mid level
Cognitive ability required	Requires literacy
Ease of learning	Easy
Support needed	Minimum to set up

Overview

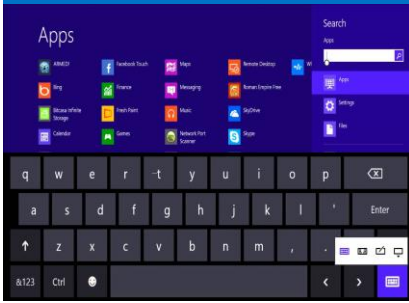
Accessible keyboard for iOS from AssistiveWare that can be used in place of the standard Apple keyboard. Can be used in a wide range of different apps, wherever the standard Apple keyboard appears.

Special Features:

- Wide range of accessibility options including 'select on release' 'select on dwell' 'hold duration'
- Switch scanning as an access method is available using either an external switch or the touchscreen as a switch
- Auditory feedback options (including hearing which key you are on when moving your finger across the screen)- useful for those with visual impairment
- Customisable layouts/colours/themes – can support those with visual difficulties, dyslexia etc.
- Range of different language keyboards available
- Includes word prediction options
- Text to speech

Suitable for: Those with physical or visual impairments, dyslexia or emergent writers

Windows / Mac On Screen keyboard



Function	Computer access
Category	software
Access Method	Direct, switch, mouse or mouse equivalent
Operating system	Windows, iOS, Android

Physical ability required	Varies dependent on computer access method
Cognitive ability required	Requires literacy and computer knowledge
Ease of learning	Easy
Support needed	Minimum

Overview

Onscreen keyboards can be used instead of a physical keyboard to interact with your computer. You can use your mouse or pointing device or a switch to select the keys. They can be found in accessibility settings on both Windows and Mac devices.

Windows (Ease of Access Centre → Use the computer without a mouse or keyboard → Use on screen keyboard → apply)

Mac (Finder → System preferences → International → Input menu → Keyboard viewer → Show input menu in menu bar, close the open window then click on the Union Jack in the menu bar → Show Keyboard viewer)

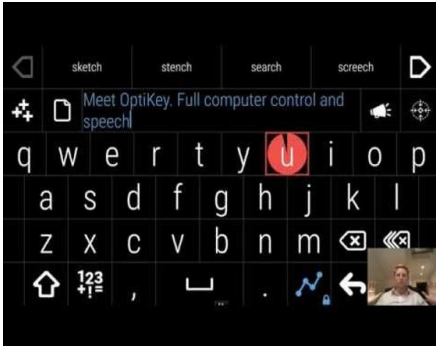
Special Features:

- Some keyboards include word prediction and can be re-sized for easier access

Suitable for:

- Anyone struggling with using an actual keyboard but who can manage a mouse or similar (including eyegaze). Individuals may also manage a touchscreen onscreen keyboard on a tablet via direct access.

Optikey on screen keyboard/ AAC



Function	AAC, computer access
Category	Software
Access Method	Direct, eyegaze
Operating system	Windows

Physical ability required	Minimum/none
Cognitive ability required	Good level and literacy
Ease of learning	Low to mid
Support needed	low

Overview

Free assistive onscreen keyboard, that runs on Windows devices and can be used with eyegaze tracking devices or a mouse. Enables full computer control (keyboard control and mouse control) as well as speech for those with physical and speech difficulties. Download from : <https://github.com/OptiKey/OptiKey/wiki>

Special Features:

- Can be used to type in to any application
- Includes predictive text
- Can replace a mouse- enabling all mouse actions
- Can convert whatever you type in to speech and be used for AAC
- Can use dwell to select or a mouse button or keyboard key
- Can be used with lower cost Eyegaze devices without the need to purchase expensive AAC software

Suitable for:

- Anyone with physical difficulties that struggles to use a physical keyboard and mouse
- Those with speech difficulties who are looking for free computer based communication software

Adjusting accessibility settings

There are usually a range of inbuilt accessibility settings within most modern mobile phones, tablets and computers. These can usually be accessed by going in to the settings or control panel and searching for accessibility options.

On phones this can enable adjustments to facilitate direct access, setting up of switch access, voice control options, options for individuals with visual difficulties and many others.

Windows computers and Macs have even more in depth accessibility settings. These are easy to access and adjust and can make a significant difference to those with disabilities.

It is hoped that local therapists would have tried making adjustments to these options prior to making a referral to Barnsley AT Team if possible. Often they may be enough to facilitate access for some without the need for any additional equipment

Options vary between devices so it is recommended to look at each device individually to discover the options that it offers.

Windows /APPLE accessibility settings

Modifying the Keyboard

The way that the keyboard behaves can be changed to facilitate use for those with physical limitations. This can be done on Windows and Apple operating systems in their inbuilt accessibility settings. The following adjustments are available:

StickyKeys

This allows one finger or one handed users to press and hold down a number of keys at once e.g. to operate shift, control and alt keys simultaneously.

FilterKeys

This allows you to alter the length of time a key needs to be held down before it initially appears or repeats on the screen. This reduces the sensitivity of the keyboard and can prevent accidental or repeated key presses, which can be useful for those with a tremor or for those with poor dexterity.

Keyboard shortcuts

These are built in to Windows and can enable users to achieve actions quickly on their computer without the use of a mouse

MouseKeys

This allows the mouse pointer to be moved around using the numeric keypad keys.

Adjustments for those with visual difficulties

There are numerous adjustments that can be made to make the computer easier to use for those with visual difficulties. This can include:

- Making the text larger
- Magnifying the screen
- Making the mouse pointer easier to see
- Changing the colour of the text and background
- Turning on the narrator

For step by step guides on how to implement all of these features, visit Ability Net :

<http://www.abilitynet.org.uk/mcmw/>, who provide an excellent guide on computer accessibility

Also see their free fact sheets: <https://abilitynet.org.uk/free-resources/abilitynet-factsheets>

Adjusting the Way the Mouse Behaves

It is also possible to adjust the behaviour of the mouse within Windows.
You can change the following types of things via the **Ease of Access Centre**:

- Swap over the right and left mouse buttons
- Change the speed required to double click
- Drag and drop without holding down the mouse button
- Change the appearance, visibility and speed of the pointer
- Change the amount that a wheel on the mouse scrolls up and down

Automated Clicks

There are a number of pieces of software which will detect when your mouse has stopped moving (dwells) and then send a click. This works well for individuals that can move a mouse, but struggle with clicking.

Dwell Clicker is a good example of this and is free to download for a 30 day trial or costs around £10 for the full version:

<https://thinksmartbox.com/download-dwell-clicker-2/thank-you-for-downloading-dwell-clicker/>

Voice control

Increasingly there are voice control options in the majority of phones, tablets and computers that enable at least some level of function, if not full control.

Additionally extra software can be purchased to download on to a computer to allow full control of the device by voice.

Consideration must be given of course to how clear an individual's speech is and to how effective this is as an access method.

Windows Voice Recognition

Recent versions of Windows include a free voice recognition programme. You can use your voice to control your computer. You can say commands that the computer will respond to, and you can dictate text to the computer. There are three steps to setting up Speech Recognition: set up your microphone, learn how to talk to your computer, and train your computer to understand your speech. Dependent on your computer you may be able to use the built in microphone. Alternatively you will need a headset with microphone or desktop microphone to improve the quality.

Open Speech Recognition by clicking the **Start** button , clicking **Control Panel**, clicking **Ease of Access**, and then clicking **Speech Recognition**.

The programme offers a tutorial of how to use and improve your use of speech recognition.

It is likely that clients would benefit from support with setting up and learning to use any speech recognition packages until they are proficient in their use.

Siri / Cortana / Alexa/ Google Voice etc.

Many computers, phones and tablets now have some form of voice assistant built in to them e.g. Siri, Cortana, Bixby, Alexa, Google Voice, etc. and have some ability to control at least some functions by voice e.g. answer calls, search the internet, set alarms, reminders etc.

It is worth exploring these options if an individual is struggling to access their device to see if they can help. Currently most do not enable full access to devices, so they may be used in conjunction with other access methods to facilitate accessibility.

iOS Voice Control

One exception of this is the new **Voice control** featured in the most recent updates of iOS. This enables full control of all aspects of an iPhone or iPad via voice. This setting and information on the commands required to do this can be found in the accessibility- voice control setting within the iOS settings. This new addition to iOS accessibility options opens up easier iPad and iPhone access for a wide range of individuals with physical disabilities.

Further details on how to set up and use this method are discussed on the following page:

<https://support.apple.com/en-us/HT210417>

Dragon Naturally Speaking



Function	Computer access
Category	Software
Access Method	Voice
Operating system	Windows, iOS

Physical ability required	None
Cognitive ability required	Good ability required
Ease of learning	Can take time and practice
Support needed	Mid to high level support for set up and learning

Overview

Dragon NaturallySpeaking is a voice recognition program that converts your speech into text on your computer as you talk. It allows you to completely control your email package using you voice, to dictate documents in Word, take notes without looking at the screen and even post to your Twitter or Facebook - all without touching a keyboard. You can also dictate your presentations in Powerpoint.

Special Features:

- A number of different versions are available including:
 - Dragon Home, Dragon Premium, Dragon for Mac, Dragon Professional and Dragon Legal.
- A reduced price version is available for students

Suitable for:

- Those who struggle with using a keyboard and mouse, but wish to have access to all parts of their computer, including internet, writing documents, Social media, Windows etc.
- Those with some support to get them set up, practising and learning basic commands
- A reasonably high level of attention and memory is required to learn how to use the software initially

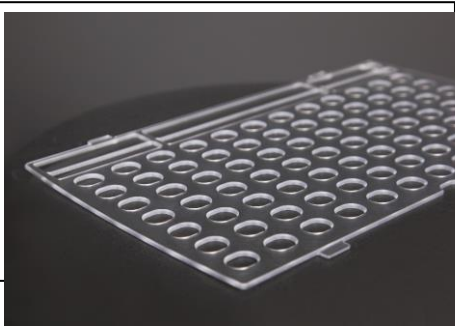
Product specification:

- Available either as an electronic download or as a CD set, which includes a microphone headset
- Tends to work better with an appropriate microphone headset

Facilitating direct access

For some, support with directly accessing a computer/tablet may be enough, without the need for further hardware or software. This may involve something as simple as using a stylus instead of their finger to access smaller items on a touch screen. Many tablets and phones also include 'touch' settings which may reduce issues with fine motor control or tremor.

Touchscreen Keyguides / touchguides



Function	AAC, computer access
Category	hardware
Access Method	Direct
Operating system	Windows, iOS, Android

Physical ability required	Low to mid
Cognitive ability required	Requires individual to be literate
Ease of learning	Easy if literate
Support needed	minimum

Overview

Touchguides and touchscreen keyguards work similarly to keyboard keyguards. They consist of a plastic sheet with precisely engineered holes to help guide the user's touch to targeted icons on the screen. They are generally used with communication devices or for communication apps on a tablet or iPad that has the same layout on each screen.

A user would need to use a touchguide that is made specifically for their communication device/communication grid and app to enable accurate access. They can be purchased for AAC apps such as Predictable, Proloquo2go, Proloquo4text and GoTalk Now.

Special Features:

The touchguide can be removed for cleaning or replaced when necessary.

Suitable for:

Users with limited manual dexterity, tremor, spasms or co-ordination difficulties

Product specification:

A range of touchguides and guards are available for specific devices from Liberator <http://www.liberator.co.uk> and Logan technologies <http://www.logan-technologies.co.uk/>

Barnsley Assistive Technology Team can provide touchguards for clients that meet the spec of the service.

Styli/Styluses /Adapted styli



Function	AAC, Environmental control, computer access
Category	Hardware
Access Method	Direct
Operating system	Windows, iOS, Android

Physical ability required	Low to mid
Cognitive ability required	Varies dependent on task/function
Ease of learning	easy
Support needed	minimum

Overview

Clients with limited dexterity may often find it easier to access a tablet, iPad or touchscreen phone using a stylus rather than their finger to increase their accuracy on the screen. This can be particularly useful for small mobile phone screens.

This may be a **standard stylus** or an **adapted/specialist** version which may help with grip. **Mouthstick styluses** are also available.

Standard styluses are available from many mainstream electrical retailers. Specialised styluses are available from the following companies: **Inclusive Technology, Amazon, Dad in a shed, Etsy (Shapedad).**

Special Features:

- Alternative styluses are available to enable an easier grip for those with poor dexterity
- Styluses can be held with a strap e.g. Homecraft utensil Multiholder (available from Amazon) if the user struggles with grip

Suitable for:

- Individuals with poor dexterity who may struggle to isolate small icons on a touchscreen
- Mouthstick styluses are suitable for those with no or limited upper limb movement, but good head control

Switch access

Switch access is possible to virtually all smartphones, tablets and computers with the right connectors and software or settings enabled.

The choice of switches out there is massive, enabling anyone with even the smallest bit of movement to access a device.

The Barnsley Assistive Technology Team will consider referrals for client's who may require this sort of access, however simple switch access to play games etc. on computers via appropriate software (e.g. HelpKidzLearn) is easy to set up locally and practice with users, who may be developing their switch skills with the view of accessing further AAC, environmental control or computer access functions in future.

Mouse access to iOS devices

iOS have recently introduced the ability to access Apple devices via a Mouse. This can be done directly with a blue tooth mouse, via an appropriate cable or via a device such as the Amaneo BTi, which offers the added benefit of having tremor control.

This and voice control access to iOS offer much easier access to Apple devices now compared to switch access, which was previously the favoured method for those that were unable to access the touch screen.

Joy cable



Function	Computer access
Category	Hardware
Access Method	Switch
Operating system	Windows

Overview

The Joy cable allows one or two switches to be connected to a device such as a laptop or tablet using a USB connector. (widely available). A switch can then be used with specific switch software e.g. to play games etc. (e.g. for <https://www.helpkidzlearn.com/>) or access communication (e.g. with Grid3 software or similar) . Alternatively a switch can be set to perform a certain action e.g. a mouse click or certain key press.

Special Features:

- Suitable for up to two switches
- USB interface

Suitable for:

- People who require switch access for a device which only supports USB.

Product specification:

- The switch adaptor is supported by most switch accessible software. It comes with Sensory's Switch Driver software to allow it to be used with programs that do not directly support switch access.

Blue 2 switch (Ablenet)



Function	Computer access
Category	Hardware
Access Method	Switch
Operating system	iOS

Physical ability required	Low- dependent on type of switch used
Cognitive ability required	Good level although depends on set up in ipad settings
Ease of learning	Varies depending on set up, but mid to high
Support needed	Mid level support with set up and training

Overview

iOS devices, tablets and phones are able to be controlled by one or more switches for those with limited movement. This requires setting up of switch access on the device within accessibility settings plus the use of switch. Switch interfaces allow connection of one or more switches to a device.

The Blue 2 switch is a simple switch interface that provides access to iOS devices as well as computers, tablets and Android phones via the two built in switches or alternative plugged in switches.

Suitable for:

- People who are using apple devices and require switch access and have the cognitive ability to understand how this works
- Android tablets or phones that require switch access

Product specification:

- Works with iPad, iPad mini, iPod touch, iPhone as well as Android 5.0 or later
- Paired via Bluetooth
- Rechargeable using supplied charger

There are a number of switch interfaces for ipads, which mostly work in the same way and include the following:

- **Hook +** (wired)
- **iSwitch** (bluetooth)

Amaneo BTi



Function	Computer access
Category	Hardware
Access Method	Switch
Operating system	iOS

Physical ability required	Low- dependent on type of switch used
Cognitive ability required	Good level although depends on set up in ipad settings
Ease of learning	Varies depending on set up, but mid to high
Support needed	Mid level support with set up and training

Overview

Newer iOS devices with the updated version of iOS can now be used via mouse control. The Amaneo BTi Adaptor enables a mouse or adapted mouse to be plugged in to an ipad or iphone, enabling a user, who is unable to use the touchscreen, to access the device.

Special Features:

- Connects to your ipad/phone via Bluetooth
- Includes an anti-tremor filter, for those with tremor that may affect mouse use
- Option of setting up 'Auto click' for those that struggle to press mouse buttons
- Includes two switch ports for switches for left and right mouse buttons if required

Suitable for:

Those that are unable to access the touchscreen or an ipad/iphone but who have a device that does not enable Bluetooth mouse access directly.

Product specification:

- AMAneo BTi is compatible with iPhone 5s or higher, iPad 5 (Air) or higher, iPad Pro, iPad Mini 2 or higher. Please note: AMAneo BTi is compatible with devices supporting iAP2 and iOS 11 and above.
- Please note, for newer versions of ipads/phones, you can connect a Bluetooth mouse directly to the device without the need for an AMAneo- please check this before purchasing this device.
- Available from various companies including Inclusive Technology: <http://www.inclusive.co.uk/amaneo-bti>

Therapy Box Switch Box for iPad



Function	AAC, computer access	Physical ability required	Depends on type of switch buy low
Category	Hardware	Cognitive ability required	Mid level- need to cope with scanning and use of Predictable app
Access Method	switch	Ease of learning	Middle
Operating system	iOS	Support needed	Mid range

Overview

Bluetooth switch interface for iPads produced by Therapy Box, which enables simple access to their **Predictable** app and **Scene and Heard** apps with a switch. Has 2 switch ports to enable autoscanning (1 switch) or user scanning (2 switches) within the app. Does not work with other apps. (£89).

<https://www.therapy-box.co.uk/product?id=42>

Special Features:

- Rechargeable via mini USB cable
- LED indicator
- Pairs with your device easily by Bluetooth
- Simpler to use than some other switch interfaces if the client is only wanting access to Predictable or Scene and Heard (locked in to the app)
- Can be used with any switch with any body part

Suitable for:

- Anyone using Predictable or Scene and Heard, who requires switch access to their iPad
- Those with upper limb limitations

Access practice

For some people, direct access (touching buttons or a touchscreen with their finger) may not be possible or prove difficult and switch access, eye gaze or other methods may need to be utilized. These can be difficult skills to learn and it is often best to allow clients to practice these skills through games and activities before introducing them to communication aids or environmental control systems to facilitate their success. This section outlines some software and hardware designed for access practice.

Eye Can Fly



Function	Access practice
Category	Software
Access Method	Eye gaze
Operating system	Windows

Overview

24 exciting games for users to control with eye gaze.

Special Features:

- Master control of your aircraft to become a fully-fledged pilot whilst learning Geography skills such as compass directions, landmarks and regions across the world as well enhancing your eye gaze skills.
- In addition to eye gaze, play can also be controlled with any mouse pointer device, the keyboard, switches and joysticks.
- easy to set up and takes the students through carefully graded activities to learn how to use eye gaze with precision and control.
- Useful options and a range of activities at different levels ensure success and maintain motivation for students of different ages and abilities.

Suitable for: Clients with some experience of eye gaze control and ability to follow simple verbal instructions.

Product specification:

- Software is issued via a downloadable file.

HelpKidzLearn



Function	Access practice
Category	Resource
Access Method	Direct, switch, eyegaze
Operating system	Windows, iOS

Overview

www.HelpKidzLearn.com is a website from Inclusive Technology with a collection of software for young children and those with learning difficulties to play online. The software is split into five sections: Early Years, Games and Quizzes, Stories and Songs, Creative Play & Find Out About.

Special Features:

Each activity in HelpKidzLearn can be accessed using a variety of access methods:

- Mouse and keyboard
- iPad and Android tablets
- Touch screens
- Interactive classroom displays
- One or two switches
- Eye gaze

Suitable for:

Children who are learning to explore alternative access methods or developing cause and effect through direct access (touchscreen)

Product specification:

- Flash Player 11 & above required
- 1GB Ram required
- Broadband required
- Annual subscription required

When to move the client on from this equipment:

When they become proficient at their chosen access method and are successfully using a low tech communication system which is no longer meeting their communication needs, a high tech communication aid may then be suitable.

Inclusive Eye Gaze Learning Curve



Function	Access practice
Category	Software, resource, assessment
Access Method	Eyegaze
Operating system	Windows

Overview

These 54 fun and meaningful activities can be used with any child to teach eye gaze and develop early choice making skills.

This collection can be used to determine visual skills and potential use of eye gaze, as well as being used as a progressive teaching tool that provides structure and lots of opportunities for practice at each level.

Special Features:

Uses relevant vocabulary, pictures and sounds and lots of variety to offer opportunities to children with additional needs to develop early interaction, communication and learning skills.

Includes 3 Eye gaze software packages:

- Attention and Looking
- Exploring and Playing
- Choosing and Learning

Suitable for: All children beginning to use eye gaze.

Product specification:

- A collection of 3 software titles that can be purchased as individual CDs or as a package of all 3.

Look to Learn



Function	Access practice
Category	Software, assessment
Access Method	eyegaze
Operating system	Windows

Overview

Look to Learn is a software package with 40 activities designed for adults and children starting out with eye gaze technology (although the activities are very child focused.)

Special Features:

- The 40 activities have been split into five key areas of learning and development:
 - Sensory - teaches cause and effect.
 - Explore - encourages engagement with the whole screen.
 - Target - helps improve accuracy of eye gaze access.
 - Choose - develops choice making skills.
 - Control - improve eye gaze control.
- Look to Learn Workbook (see p.34) can guide support staff to track progress of users.
- Analysis- The built-in analysis tool creates a heat map to show where you have looked on the screen during an activity. Heat maps can be saved, printed and used to measure progress and record successes

Suitable for: Clients who are learning to use eye gaze, prior to using communication packages.

Product specification:

- A downloadable file delivered via email.

When to move the client on from this equipment: When they are consistently successful across the range of activities they may then be ready to use eye gaze for communication.

Sensory Eye-FX



Function	Access practice
Category	Software, assessment
Access Method	Eyegaze
Operating system	Windows

Overview

A package of thirty games designed for the earliest level of eye gaze exploration. The software is divided into five levels of exploration; blank screen engagement, object displacement, zoned focusing, active exploration and controlled targeting.

Special Features:

- Can be used without calibrating.

Suitable for: Those who are beginning to explore and develop their eye gaze skills at a cause and effect level.

When to move the client on from this equipment:

If the client is engaged with the games and shows understanding at a cause and effect level, they may be ready to progress to more challenging eye gaze exploration software such as Look to Learn or Inclusive Eye Gaze Learning Curve.

SwitchIt! Maker



Function	AAC, access practice
Category	Software
Access Method	Direct, switch
Operating system	Windows

Overview

SwitchIt! Maker 2 will turn your text, images, movies and sounds into simple on-screen activities. These activities are automatically accessible using a mouse, whiteboard, touch monitor, keyboard, one or two switches or IntelliKeys. Make talking books starring your pupils, or a slide show of a recent trip. Put that digital camera to good use!

Special Features:

- Children can make activities as part of a lesson. SwitchIt! Maker 2 first asks you to choose a layout for a new page - do you want words with a picture, or just a picture? Then add an image or some video. Type in the text using your keyboard or the on-screen keyboard (great on an interactive whiteboard), then add some voiceover or load some music.
- Export and import features let you transfer your activities to other computers or onto CD, etc.
- The program also has over 1,500 useful example files, including a selection of PCS symbols from Mayer-Johnson and Rebus Symbols from Widgit, clip-art pictures, sample videos and music. It also allows you to import a wide range of image and sound files.

Suitable for: Children who need to practice access methods.

Powerlink



Function	AAC, environmental control, computer access
Category	Hardware
Access Method	Switch
Operating system	N/a

Overview

The PowerLink® 4 control unit allows switch users to control up to two electrical appliances with single switches. Six unique modes of control allow you to define exactly how, and for how long, appliances will be turned on.

Special Features:

- Easy to set up with built-in display and a simple new design.
- Powerful access with six modes of control.
- Accurate programming and data collection.
- Flexible outlets allow custom positioning of up to two appliances, activating independently.
- Linkable wireless technology for use with multiple Big or Jelly Beamer switches.
- Two switch input jacks.

Product specification:

Modes of control

- Direct: Behaves like a traditional switch.
- Count: Behaves like direct, but shows the number of activations.
- Two switch: Behaves like direct, both switches must be activated.
- Timed Seconds: Runs appliance from 1 to 99 seconds.
- Timed minutes: Runs appliance from 1 to 99 seconds.
- Latch: First activation turns appliance ON; second activation turns it off.

Switch adapted toys



Function	Access practice
Category	Hardware
Access Method	Switch
Operating system	N/a

Physical ability required	Varies dependent on switch, but low
Cognitive ability required	Low- cause and effect level
Ease of learning	easy
Support needed	low

Overview

A wide range of ready-made switch activated toys are now available, which can be great for teaching cause and effect as a precursor to moving on to more complex AAC and EC. They are also great for practising switch activation as an access method. Toys contain a switch port into which any 3.5mm switch can be plugged. Toys are available from companies including **Liberator** and **Inclusive Technology**.

A wide range of switch accessible computer software and games are also available.

Please see our separate resource 'Examples of activities for developing switch use' available on our website.

Special Features:

- Any type of switch can be used- dependant on the functional ability of the user
- Fun way to learn

Suitable for:

Users who need to develop an understanding of cause and effect and the ability to consistently activate a switch, with a view of using switch access for accessing communication or environmental control in future.

Product specification:

- Dependent on device – usually take batteries

Mounting solutions

There are now a wide range of manufacturers and suppliers of mounting solutions for switches, communication aids, EC controllers, tablet computers, smartphones etc.

A large number of 'off the shelf' mounts are available, which may often meet the needs of clients for mounting items on to tables, beds, wheelchairs etc.

For more complex mounting, some companies offer a bespoke virtual mounting service, where they will use photographs of the client in their wheelchair along with measurements and other details provided via email to design a mounting solution which is tailor made. This can be useful when the client is seated in an unusual position or has an unusual or challenging type of chair.

It may also be worth liaising with a client's local wheelchair service to see whether they provide any options in regards to mounting on a wheelchair.

Remap are also a useful point of contact for more complex solutions. <http://www.remap.org.uk/> They are a national charity of skilled volunteers, who custom make equipment for disabled individuals.

Any equipment that is provided by, and comes under the specification of Barnsley Assistive Technology Team can be mounted by the team as necessary.

Recommended companies:

Inclusive Technology – also offer a free virtual mounting service
<http://www.inclusive.co.uk/virtual-mounting-service>

Mounts and More
Mounting solutions.
www.aacmounts.com

Smartbox
<https://thinksmartbox.com/products/mounting/>

Smile Rehab
Also provide an assessment, supply and fitting service if required
<http://www.smilerehab.com>

Steeper
http://assistive-technology.co.uk/products/mounting_systems

RAM mounts

<http://www.ram-mount.co.uk/> or <http://www.inclusive.co.uk/hardware/mounting-options/ram-mounting-solutions>

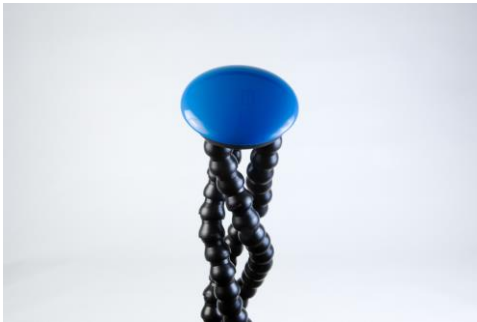
Rehadapt- offer a virtual mounting solutions service

<http://www.rehadapt.com/index.php/en/>

Techcess – offer advice and fitting on AAC aids purchased from them

<http://www.techcess.co.uk/daessy-mounts.php>

Flexzi Mounts



Overview

Range of flexible, easy to position and strong mounting arms from Meru: <http://meru.org.uk/> . Also available from Inclusive Technology. Different versions are available for mounting different size/weight products. Have a clamp base for clamping to tables, wheelchairs, bed frames etc. Switches/devices etc. are attached with Velcro pads. A desk top version is also available. (cost £36-£96 approx)

Special Features:

- Designed to hold anything from switches and mobile phones to ipads (dependant on version)
- Easy to position and reposition
- Variety of colours available
- Can attach to flat surfaces e.g. table edge or to tubing (e.g. wheelchair or bed)
- Can have one or more 'strands' to increase the strength of the mount

Suitable for:

Those that require specific positioning of switches, devices etc. that is sturdy and easily adjustable

Product specification:

- Dependent on model chosen

RAM Mounting Solutions



Overview

Range of mounts for different size tablets, phones, Kindles, monitors etc.: <http://www.ram-mount.co.uk/> as well as flexible arms for mounting on to wheelchairs: <http://www.ram-mount.co.uk/pod-i-mount-with-clamp-base-and-diamond-adapter-p-1874.html> . The company also do mounting for laptops.

Inclusive Technology sell ready-made kits that include 'X-grips' for various size devices and a 'Tough Claw' clamp to attach to wheelchairs <http://www.inclusive.co.uk/hardware/mounting-options/ram-mounting-solutions> . RAM mounting kit can fit together with **Manfrotto** items to provide a good mounting solution.

Special Features:

- Wide range of different mounts for a range of devices
- Securely holds device
- The device holders are compatible with different mounting arms with the correct parts e.g. Manfrotto arms
- Waterproof mounts e.g. for smartphones are also available

Suitable for:

Those who struggle to hold their devices to use them or who wish to have their device held steady on their wheelchair whilst they use it directly or with a switch.

Product specification:

- Dependent on model chosen- check that the mount you have ordered matches your device specifics

Daessy Mounts



Overview

Wide range of specialist mounting solutions available <http://www.daessy.com/> including floor, desk and wheelchair mounts. Wheelchair mounts are component based and customisable and require some specialist knowledge to fix together, however the rolling floor mounts and desk mounts are straightforward to set up with the use of an Allen key. Fits all AAC devices with Daessy mounting plates on the back (check plate is correct size).

Available from **Mounts and More, Techcess, Smartbox, Liberator** and many more.

Special Features:

- Ensures communication aids are held safe and stable on a desk/table/floor
- Angle is adjustable- to facilitate positioning of screen/eyegaze
- Component based system- customisable

Suitable for:

Anyone requiring secure mounting of their communication aid

Rehadapt Mounts



Overview

Rehadapt mounting systems offer a wide range of adjustable wheelchair mounting, floor stands, table clamps and stands and switch mounts: <http://www.rehadapt.com/index.php/en/>. The company also offer a virtual mounting solutions service, where you can send details of the device, wheelchair etc. and they will provide a list of parts needed for mounting.

These mounts are also widely available from other companies including **Sensory Guru, Smartbox, Inclusive Technology, Liberator** and **Smile Rehab Ltd.**, (who also provide an assessment, supply and fitting service if required).

Special Features:

- Appropriate for mounting a wide range of AAC or EC devices in various settings (bed, armchair, wheelchair etc.)
- Floor stand is easily adjustable and useful for mounting devices for clients in bed or reclining chairs

Suitable for:

Those requiring mounting of AAC or EC devices in a variety of settings

Product specification:

- You will need to ensure that the device to be mounted has the appropriate mounting plate on the back (check with the supplier)

Manfrotto



Overview

Manfrotto produce a number of useful mounting items including the Super Clamp, Magic Arm and Variable Friction Arm. These are available from a number of AAC/EC suppliers e.g., **Mounts and More, Inclusive Technology, Liberator** (listed as 'Universal Switch Mounting system) or direct from **Manfrotto** <https://www.manfrotto.com/uk-en/>. They need to be used in conjunction with appropriate mounting plates.

Special Features:

- Super Clamp can be mounted to wheelchairs, table edges etc. and attaches easily to both the Magic Arm or Variable Friction Arm.
- The arms (+ suitable mounting plate) can hold switches and lightweight devices e.g. smart phones, tablets etc. (supports up to 2kg)
- Need to be used with an appropriate mounting plate (available separately or as part of a package dependent on supplier)
- The arms extend to 51cm

Suitable for:

Clients requiring highly adjustable/specific mounting of switches and lightweight devices e.g. phones

Product specification:

- Dependent on item chosen- check individual suppliers for specifics

Trabasack



Overview

Ergonomically designed carry bag suitable for AAC device, laptop, iPad, notebook etc., that also doubles as a laptray for wheelchair users. The bag has a bean bag base to hold the tray steady on the users lap. Available in a 'Curve' model and standard model (rectangle shape). Available with a hard top and one with a soft 'Velcro-ready' top (Connect)

<https://trabasack.com/>

Special Features:

- The 'Curve Connect' version has a soft surface, to which Velcro can be attached to secure devices, switches etc.
- Straps allow attachment to back of wheelchair when not in use

Suitable for:

- Users who are mobile and wish to take their device from place to place in a protective bag
- Those, who wish to use their devices out and about or who may not have access to a table/desk to use their devices.

Product specification:

- Available with different colour trims
- Hard or soft tray surface (dependent on model)
- Shape dependent on model chosen

Tablet cases

Cases may be required for tablets for a number of reasons, including for protection (including against water), to facilitate grip to hold the tablet to use, to make the tablet easier to carry (e.g. with a handle or strap), or to increase the volume of the inbuilt speaker if the tablet is to be used as a communication aid. Some cases will feature an additional speaker/amplifier which is worth considering if using a tablet for communication.

Below are a few of the available iPad cases but there are many more out on the market including for different tablets. Please make sure that the case is suitable for your particular device prior to purchase.

It is important to consider what the case is required for/what features are required when choosing a case for a client.

ChatWrap iPad case



Function	AAC, computer access
Category	hardware
Operating system	iOS

Overview

ChatWrap Series amp case by Silver Kite creates a protective solution for individuals using iPad or iPad mini as an AAC option. The rubber boot and shell provide the protection while the Bluetooth handle amp delivers high quality speech output for the user. The handle amp provides optimal portability and comes standard with a blue and a black rubber boot.

Special Features:

- Case design ensures all features and functions of iPad are accessible, including microphone speaker, headphone jack, camera, and connector port.
- Durable rubber boot and shell provide protection against drops.
- Amp connects via Bluetooth.
- Handle for increased portability
- Switch interface for scanning

Suitable for: iPad users.

Product specification:

The following accessories can be purchased separately:

- Keyguards (including an 84 location that would be compatible with Words for Life)
- Wheelchair Mounting Plate (will **not** work with hinged amp)
- Additional Colored Boots.
- Shoulder Strap.
- Waist Belt.
- Handle amp only (landscape mode)

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Barnsley Hospital, Gawber Road, Barnsley. S75 2EP

Web: www.barnsleyhospital.nhs.uk/at/ - Email: Barnsley.AT@nhs.net - Phone: 01226 432159

Griffin Survivor Case



Function	AAC, computer access
Category	Hardware
Operating system	iOS

Overview

Ultimate protection for your iPad and the iPad Mini (inc. with Retina Display). Griffin's Survivor military-duty case is designed from the inside out to protect your iPad from conditions including dirt, sand, rain, shock and vibrations.

Special Features:

- Built-in screen protector deflects wind, rain and dirt.
- Rigid internal frame protects from shock and drop.
- Sealed ports block sand and dust.
- Silicone cladding blocks vibration.
- The included stand clips on and then folds open for landscape viewing.

Suitable for:

Those wanting extra protection for their iPad, whether this be from knocks, the weather etc. Those who are at risk of dropping or damaging a device.

Product specification:

- Available in black and black/blue
- Available for different sizes/versions of iPads including iPad mini and iPod touch.

iAdapter 6 Case for iPad



Function	AAC, computer access
Category	Hardware
Operating system	iOS

Overview

Protective iPad case with built in amplifier and speakers, carry handle and built in table top stand. Designed generally to be used for those using an iPad as a communication aid, who have a need for it to be amplified, protected and mobile. Available from Inclusive Technology (£245 <http://www.inclusive.co.uk/iadapter-6-for-ipad>). This is the new and improved version of this case.

Special Features:

- detachable stand, handle and shoulder strap
- Utilises Bluetooth technology for sound
- Has an internal battery that requires charging via USB
- Low battery indicator light
- High impact housing
- Insert on back to allow wheelchair mounting plate attachment
- Switch ready access

Suitable for: Those wishing to use their iPad as a communication aid, who may need further amplification to enable their voice to be heard and a protective, easy to carry case to prevent it being dropped.

Product specification:

- Available to fit the iPad 2/3 or 4 or iPad Air2017/Air 2/Pro 9.7" (different case versions)
- iPad mini version also available in the old version

Big Grips iPad Case



Function	AAC, computer access
Category	Hardware
Operating system	iOS

Overview

Lightweight protective case for iPads made from soft foam. Available from Amazon, Inclusive Technology and Therapybox.

Special Features:

- Highly protective, protects against knocks and dropping
- Makes the device easier to pick up and hold
- Matching angled stand available
- Easy to clean
- Durable

Suitable for: Those finding it difficult to pick up and hold a standard iPad safely and who may be at risk of dropping the device or damaging it in some way. Those who will be picking up and using the device rather than having it mounted on a wheelchair etc.

Product specification:

- Variety of colours available
- Can be bought together with the stand or separately

Suppliers and websites

Useful websites for resources and information

AbilityNet

A charity supporting those who require assistive technology

<https://www.abilitynet.org.uk/>

CALL Scotland

Training and resources including 'app wheel', lots of 'how to' guides.

www.callcentre.education.ed.ac.uk

candle

Useful resources, lots of downloads.

www.candleaac.com

Carole Zangari

A large range of information relating to AAC with lots of downloads.

www.practicalaac.org

Euan's Guide

Access guide and review of services/venues.

www.euansguide.com

HelpKidzLearn

Educational games and games for access practice online (requires subscription)

www.helpkidzlearn.com

Ian Bean

Special needs resources and training

www.ianbean.co.uk

Communication Matters

A national charity supporting AAC users and professionals

www.communicationmatters.org.uk

Motor Neurone Disease Association

Support and information about MND.

www.mndassociation.org

Multiple Sclerosis Society

Support and Information about MS.

www.mssociety.org.uk

Other ways of speaking

A useful guide to AAC

http://www.thecommunicationtrust.org.uk/media/3414/other_ways_of_speaking_final.pdf

SpeechBubble

A website to support with AAC choice making

<http://www.speechbubble.org.uk/>

Suppliers

Abilia

GEWA (Environmental controls) Manufacturer

<http://www.abilia.com/en/producs/environment-control>

Ability World

AAC product supplier

<http://www.ability-world.com/>

AssistiveWare

AAC software developer

www.assistiveware.com

Crick Software

Educational software, Clicker Communicator AAC app and Superkeys adaptive keyboard

<http://www.cricksoft.com/uk/home.aspx>

Dad in a Shed

Supplier of alternative access products, AAC apps, iPad bundles and simple home automation

<http://www.dadinashed.com/#/home/11377/>

DH2 Solutions

Environmental control solutions

www.dh2solutions.co.uk

Ian Syst

Assistive Technology Distributor

www.iansyst.co.uk/technology/assistive-technology

Inclusive technology

Wide range of AAC and computer access hardware and software including mounting solutions.

www.inclusive.co.uk

Jabbla

AAC product manufacturer

www.jabbla.com

KeyTools

Assistive technology product and software supplier

<http://www.keytools.com/>

Liberator

Low and high tech AAC products

www.liberator.co.uk

Logan technologies

iPad keyguards, AAC solutions, iPad accessibility

<http://www.logan-technologies.co.uk/>

Manfrotto

Parts for mounting – adjustable arms/clamps etc.

<https://www.manfrotto.co.uk/>

Maxess

Keyboards and keyguards

<http://www.maxesssite.co.uk/html/mpkeykey.html>

Medpage Limited

Telecare and pagers including easy press and long range systems

<http://www.medpage-ltd.com/index.html>

Mounts and More

Mounting solutions.

www.aacmonuts.com

NRS Healthcare

Disability aids including large button remotes, phones, pagers etc.

<https://www.nrshealthcare.co.uk/>

Possum

Environmental controls

www.possum.co.uk

RAM mounts

Range of mounts for smartphones, Apple products, laptops etc.

<http://www.ram-mount.co.uk/>

Rehadapt

<http://www.rehadapt.com/index.php/en/>

Remap

Charity that custom makes solutions for those with disabilities

www.remap.org.uk

Sensory Guru

Wide range of special needs products

www.sensoryguru.com

Smartbox

Communication aids and software

www.thinksmartbox.com

Smile Rehab

Mounts, wheelchair controls and other assistive technology

<http://www.smilerehab.com>

Steeper

Communication aids and environmental controls

www.rslsteeper.com

Techcess

Communication aids and software

www.techcess.co.uk

Therapy Box

AAC products and apps.

www.therapy-box.co.uk

Tobii Dynavox

Communication aids

www.tobiidynavox.com

Toby Churchill

Communication aids and environmental controls

www.toby-churchill.com

