The new medium: CD-ROM

CD-ROM technology has promised wonderful things for a long time; now it is really starting to fulfil those promises with exciting products coming on to the market for Acorn RISC OS computers.

The massive storage capacity of a CD-ROM (600MB) allows the combination of stunning and complex graphics with extensive text, and even the incorporation of music and video clips into programs.

Several companies are beginning to produce CD-ROMs for RISC OS computers. The first to appear have been some beautifully produced electronic books, or 'hyperbooks'. These emulate a real book, letting the user flick from page to page, read text, look at pictures and move around from one section to another, but are easier to use than real books for many users with special needs. Hyperbooks go further than an ordinary book in offering
'hyperlinks', or active cross-reference links that let the reader jump from one reference to another, usually by clicking on a word or icon. A further departure from real books is the ability to play back music or video clips associated with a piece of text or a picture. This means that an illustration of a bird can be linked to a sample of its song, for example.

**Hutchinson's Electronic Encyclopedia** has 25,000 text articles (7000 of them biographies). There are pictures and sound tracks to accompany some entries. Users can browse, pick an entry from the index, or use the search software to look for information on a particular topic. Published by Britannica Software Inc, £58 + VAT.

**Dictionary of the Living World** has 3000 text articles on topics relating to plant and animal life. There are more than 1000 colour and monochrome illustrations, and 100 sampled animal sounds. Animations illustrate some biological processes. Published by Media Design Interactive Ltd, £157 + VAT.

**British Birds** has thousands of colour pictures of British birds, accompanied by hypertext (text with electronic links), video clips using Acorn Replay and sampled bird song. There is some teaching material for National Curriculum use. It has been produced in association with the RSPB and the British Library. Published by Interactive Learning Productions Ltd, £125 + VAT.

Other hyperbooks planned for the autumn include the full text of the Bible and the works of Shakespeare and Conan Doyle, all to be published by Animated Pixels Publishing Ltd at £23 + VAT each.

Besides hyperbooks, CD-ROMs are a good medium for storing large volumes of data of many kinds. Spacetech (0305 822753) has produced CD-ROMs of images collected by NASA. The introductory **Space Science Sampler** (£40 + VAT) comes on two discs and includes 800 images of Uranus and 400 other files of space and Earth science data. The data have been collected by NASA satellites and the space shuttle.

**Voyager Spacecraft to the Outer Planets** (£200 + VAT) comes on twelve discs and provides over 26,000 images of Uranus, Saturn, Jupiter and Neptune, their satellites and rings. The images were collected by the Voyager Spacecraft.

Both sets require PDSView or another suitable image processing program. PDSView is available from Spacetech, £99.50 + VAT.

**Revelation 2, CD-ROM edition** from Longman Logotron (0223 425558; £139 + VAT) provides the powerful art and image processing program Revelation 2 with a library of 65MB of colour images. Revelation can be used to create completely new graphics or to enhance library, scanned or video-captured images. It includes National Curriculum guidance and suggestions.

The number of CD-ROMs available specifically for RISC OS computers is now growing rapidly, with many more publishers promising titles in the near future. Amongst them is a Special Needs Resource CD-ROM being produced by Northwest SEMERC and Cumana with money from the DSE. It will provide a huge library of graphics and sound suitable for teachers to build into teaching programs for all ages and levels of ability, and for users to incorporate in their own stories and projects. Graphics will include pictures and photographs of common objects and situations from British and European life, classic children's book illustrations such as Peter Rabbit, and pictures of children and adults at work and play. Sounds will include effects for stories (such as storms and screams) and words to use with talking flashcards.

For a full catalogue of CD-ROMs available for the Archimedes range and information about planned developments, contact Cumana (0483 503121). All the CD-ROMs mentioned here are available from Cumana.

**FUTURE EVENTS**

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<td>Oldham, Micros for Special Needs Exhibition</td>
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NEW FROM ACORN

Acorn A4

For users with special needs, the Acorn A4 portable computer is the most exciting of Acorn's recent developments.

The footprint of the A4 is exactly the same size as an A4 sheet of paper. The computer weighs 3kg.

The A4 is available with 2MB RAM and a 2MB floppy disc drive (£1399 + VAT, £1099 + VAT for educational establishments), or with 4MB RAM and a 60MB hard disc (£1699 + VAT, £1399 + VAT for educational establishments).

Both models use RISC OS 3 and the ARM 32-bit RISC processor, and run at 12 mips.

The A4 runs from a rechargeable nickel cadmium battery pack, operating for about two and a half to three and a half hours before it needs recharging. It has parallel and serial ports, and a printer can be attached. It can also be attached to a network, or linked to a desktop computer for file transfer.

The A4 has a mouse, but keys on the keyboard can be used to move the pointer and emulate the mouse buttons if using the mouse isn't convenient or possible.

A keyguard is already available for the Acorn A4 from Interface Designs (see Hardware Update). The computer can be attached to a large monitor and is then capable of running the special needs screen mode available with RISC OS 3 (mode 22) described below.

**Special access upgrade pack**

A special access upgrade pack is planned for the A5000, and new A4000, A3010 and A3020 computers.

It comprises an Acorn input/output expansion board or a Morley user analogue port, the second issue of the Special Needs Handbook and the Special Access Welcome Guide which explains how to use the software included. The software is:

- ASP2 (allows input using one switch or keypress)
- SpecialKB (gives fine control of keyboard timings and allows key-latching)
- Pointer (gives a large-size pointer)
- Close-up (magnifies areas of the screen)
- Microscope (similar to Close-up, but with a resizeable window)
- Move window ( enables windows to be moved by dragging any part of them)
- Flashbell (the desktop flashes red when the error bell sounds)
- Flasher (makes the caret flash in all applications)
- Swap Mouse (swaps the functions of the Select and Adjust buttons).

The pack will be available from dealers, and must be fitted when the computer is purchased.

**Mode 22**

A special screen mode for users who have difficulty seeing elements of the display with the normal size screen modes is provided with RISC OS 3. Mode 22 gives a large colour display, with a large pointer. It can be used with standard Acorn monitors and with many other monitors.

**ASP template library**

Several users of the ASP program are designing their own templates. The Special Needs department is building up a library of templates to avoid duplication of effort. Please send your templates to Vorn Hancock; he will return your disc with the currently available templates.
Optima from Northwest SEMERC (061 627 4469) is a program for linking pictures, words and sounds. Images from a bank of compressed pictures can be dragged onto a page and linked with words or music. Music can be linked with a picture, so that clicking on the picture plays the sound. Pages can be linked, so that clicking on a picture on one page displays the linked page.

Optima has two modes. The edit mode allows pages to be built up and edited. Clicking mode lets users use the pages created without being able to make any changes.

Price: £28 + VAT

Scribble is an easy-to-use art package for RISC OS computers from Honormead Solutions (0332 510951). At any one time, up to eight colours, five tool icons and five user icons — pictures that can be placed on a scene — are available. Icons are shown down the right-hand edge of the screen, and blocks of colour along the top of the screen.

The rest of the screen is the painting area. Users click on a paintbrush or other tool and then use it to draw, or click on a user icon and place a copy in the picture.

Scribble comes with a set-up program which allows a teacher or enabler to select the colours and icons that will be available. Extra user icons can be created and used. Scribble also offers dot-to-dot and colouring-in options.

Price: £29.95 + VAT

Gemini from Cambridge-shire Software House (0480 67945) is a content-free matching game that can use pictures and/or words. It can be used on any RISC OS computer.

Gemini is supplied with sets of sample files that include pictures of animals, everyday objects and words for matching. Any sprite can be used, though, so teachers and enablers can tailor the program to individual users' levels of ability and interests.

An uncompleted game can be saved for completion later, and a game can be replayed step by step. Games can be competitive, and are not repetitive.

Price £29.95 + VAT

Interface Designs (0483 32909), have produced a keyguard for the Acorn A4. The rigid, clear Perspex keyguard is fixed with velcro. It must be removed before the lid of the computer can be closed.

Price: £49 + VAT

The Access 1000 Interface from Hybrid Technology (0223 861522) is a new way of connecting access devices to RISC OS computers without a user port expansion board and access box.

It has two sockets, one for a concept keyboard/joystick and one for switches. A third device may be plugged into the user port expansion slot. An AccessLink Power Unit is needed with a concept keyboard.

Price: £49 + VAT

SRS Systems (021 643 2877) have improved their Matchmaker product. There is now an analogue joystick setting with an adjustable dead band to help users with tremor. The single switch options have been improved, and users can store messages to use with programs.