Archimedia
Interactive video products for the Archimedes

The superb screen handling and unique design of the Acorn Archimedes RISC machine makes it an ideal starting point for interactive video and other multi-media presentations: for education, industrial training, point-of-sale and public information systems.

Over the next few months, The Soft Option will be launching a number of software and hardware products to satisfy the growing interest in Archimedes. The first of these is a Genlock Podule, which will be available to developers shortly after the the British Interactive Video Association's (BIVA) Conference in December.

The Genlock Podule will give a new 'integrated' look to Acorn-based IV computers, the only external connections being locking multipin connectors to a video source and to the monitor. Two versions of the Podule are planned, one providing hard-keyed linear RGB over fadeable composite video (for use with SCART monitors), and the other providing a pre-mixed linear RGB signal.

The release of Microtext 3.63 A/DR, running under the 6502 emulator, will give Archimedes owners access to much exisitng IV material.

The Soft Option has a long history of both hardware and software development for interactive video (IV) on Acorn machines, and are one of the country's leading IV systems suppliers. **Archimedia** represents a logical step in our pursuit of powerful, cost-effective delivery configurations for interactive video.

The INTAVIEW Videodisc Workstation

The success of the INTAVIEW Workstation has mirrored the success of The Soft Option itself in bringing interactive video to a wide range of organisations.

The system was initially specified for the British Telecom Management Training College at the beginning of 1985, as a low cost, readily available system for the delivery of IV, and marked our first entry into the business of supplying hardware. Since that time, virtually all of the major interactive video production houses have adopted the INTAVIEW configuration for IV production.

Consider the list :

- Black Rod   - for Allied Dunbar
- Charles Barker   - for in-house productions
- Convergent   - for Midland Bank
  and the Post Office
- Discourse Interactive - for the Welsh National Board
  and Greater Manchester Police
- EPIC Communications - for the EETPU
- IIS   - for Henley Management College
- INCS   - for Update-Siebert
- National Computer Centre - for Jaguar
- VPS Interactive   - for West Midlands Travel

INTAVIEW has also been adopted on a large scale by universities and colleges. Recently, the most significant recognition of INTAVIEW has been its adoption nation-wide for the "Interactive Video in Schools" projects (IVIS). Our flexibility in being able to configure systems around existing hardware, has been fundamental to the success-ful introduction of IV into over 60 IVIS trial sites, bringing the total number of users of the INTAVIEW configuration to over 500.

THE SOFT OPTION

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Specification

Host Computer:	Acorn series computers Master 128 BBC B & B+ 3.5" or 5.25" disk drives
Video Format:	Laservision
Video Players:	Philips 400 and 800 series Sony LDP1500P Other players on request
Screen Overlay:	Computer is 'genlocked', allowing superimposition of any computer screen mode onto still frame or moving video. Video may be enclosed within a screen 'window' or full screen.
Monitor:	Most modern TV/monitors are suitable, eg. Philips CM8533/8833, Matchline, Sony KX14, Profeel, Microvitec 700/702/704
Peripherals:	Touchscreens, mouse, trackerball, etc.
Computer Languages:	Microtext, Basic supplied as standard

The INTAVIEW Videotape Workstation

Development of an interactive videotape controller for the BBC Micro started, at the Polytechnic of Central London, in 1985. At that time, the Soft Option was looking for a videotape system to complement our existing INTAVIEW range of videodisc workstations.

Our initial need was for an affordable system for the prototyping of videodisc projects, and we agreed to enter into a licencing agreement with the Polytechnic in 1986. By this time, several test sites for the prototype unit were beginning to report back their findings, and further development of the system moved to the Soft Option's own team.

In April 1987, we showed *i.t.* (Intaview Tape) at the Spring Open, ETIC and Audio Visual exhibitions. By that stage, programs has successfully been transferred from various other available tape systems, including Cavis, Felix and Take 5. In all cases, the verdict was that *i.t.* offered **more facilities, more cheaply.**

We have now seen the first wave of applications designed specifically for *i.t.*, including work done at the Scottish Police College and the City of London Polytechnic, plus a generic program for librarians produced by Getting Started Training.

The INTAVIEW Videotape workstation offers a number of significant features, unavailable on other systems:

- Plug-compatible with our INTAVIEW disc-based systems.
  i.t. can be upgraded for videodisc use, simply by adding a disc-player, software in ROM and two cables.

- Supports full screen overlay capabilities, including captioning, windowing and colour-substitution.

- Tapes may be prepared by the workstation. No synchronising pulses or tones need to be added in an edit suite, nor do you have to obtain preformatted tapes from us. Program duplication is a case of simply copying your tapes and floppy disks.

- Compatibility - Material produced for *i.t.* will run on either U-matic, Betamax or VHS formats.

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The INTAVIEW Videotape Workstations are designed to address three separate needs:

Cheap, in-house production of interactive video material.

Although, tape systems do not offer the sophistication of professionally produced videodisc, the *i.t.* Controller enables either industrial or domestic players to deliver effective interactive video quickly and cheaply.

The application may be in education, training, information systems or recreation - the cost is reduced to that of in-house video production, to your own standard.

Prototyping/simulation for videodisc applications.

While videotape cannot offer the fast response of videodisc, many design and production decisions will be assisted by simulating the videodisc environment with a tape-based system. This can help designers, programmers, authors, directors, actors and editors.

Updatable information systems.

With the reliability of industrial tape players, the flexibility of computer control, and the ease of duplication offered by the tape medium, the tape based INTAVIEW workstation offers the ideal solution for effective, updatable video information networks.

SPECIFICATION & COST.

A complete tape-based INTAVIEW system (excluding the VCR) comprises:

> Acorn Master 128 (with Genlock)
> Dual 3.5" disk drive
> Philips CM8833 monitor
> *i.t.* Controller
> Microtext Authoring ROM
> Software and cables
> Fully integrated and tested   £2,250

We supply a range of suitable VCR players with connecting cables. Please contact us for prices.

If you already have some of the components, we will integrate them into an INTAVIEW configuration. Deduct the retail value of any item in the list above that you wish to supply yourself.

Prices exclude VAT and delivery.

i.t. – The Interactive Videotape Controller

i.t. is the tape controller used in the videotape version of the INTAVIEW Interactive Video workstation. *i.t.* enables a BBC Micro or Master computer to search for and play predefined sequences recorded on videotape, control the presentation of both picture and sound, and combine both computer and video pictures on the same screen.

i.t. consists of three components :

The *i.t.* Control Unit

This is the electronic heart of the system and comes complete with all interconnecting leads. In conjunction with the *i.t.* Control Software, it allows the INTAVIEW Tape System to operate the following videotape recorders:
> U-Matic
> Betamax
> Industrial VHS machines
> Domestic VHS machines

We can advise on suitable models of each type, and provide control cables for use with the unit.

The *i.t.* Control Software

The control software allows a series of taped sequences to be accessed and played in an order determined by the application program. We would normally expect such programs to be written in either BASIC or Microtext but, as the control software is language independent, other languages can be used.

You have control over **which** sequence is to be shown, **when** it is to be played, and **whether** the audio and video channels are to be enabled. It is also possible to pause and restart the tape within the sequence.

The *i.t.* Utilities

This software package allows you to 'log' the sequences on the tape, 'cue' important sequences with reference tones, and 'edit' your log of a tape. This log is called the 'timing file'.

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How does *i.t.* work?

The *i.t.* Control Unit interfaces a variety of tape machines to the microcomputer, switching both video and audio and distributing signals around the system. It connects to the micro via the 1mHz bus and provision is made to extend the bus allowing other peripherals to be used.

The *i.t.* Control Software is a piece of relocatable machine-code. This means that it can be loaded into **any** Acorn BBC Micro, running under **any** language. The software requires a 'timing file', loaded from floppy-disc, ROM or the videotape itself, to be able to fully control a specific piece of video. The timing file contains information about the position and length of each video sequence on that tape, measured relative to the start of the tape.

For additional accuracy, particularly with domestic machines, you would normally record cue-tones on to the tape's audio channel between the video sequences or onto the second audio track using a stereo machine. Searches are made relative to the last known tone - it is not necessary to record a cue-tone for every possible branching point, but their use allows accurate resynchronisation without having to rewind the tape.

With industrial machines, the tape system merely plugs into an existing socket. For domestic machines, a simple wiring modification is required inside the VCR. Details for specific models are available. Machines supplied by The Soft Option will be despatched ready for use.

Microtext Extensions & Utilities

Device Drivers for Microtext Plus

Video Extension Commands   £75.00
These commands allow full control of the disc-player, including support for remote control handset and the ability to lock a specific portion of the disc in order to allow total flexibility in the use of videodiscs.

Pointing Device Commands   £75.00
These provide an interface to the cursor keys, the AMX Mouse, Digimouse and Marconi Trackerball, plus a mechanism for labelling a screen and retrieving the labels.

Microtext Plus Toolkits

No. 1.   £45.00
A collection of extension commands which make the author's task easier. $PEEK gives the ability to PEEK into a single location and POKE a new value into it. $CHANGE allows the use of quotes or angle-brackets within Microtext variables. $GLOBAL will treat variables as permanent. $TITLE protects users if they need to change floppy disk from within a program. $SORT alphabetically sorts the contents of a Microtext variable and $VDU will allow you to send control codes to the BBC Micro VDU driver.

No. 2   £45.00
The collection of extension commands in this Toolkit include the following: $PERCENT to overcome one of the shortcomings in Microtext arithmetic abilities; $ERROR to trap run-time errors; $FRAME to read the current Microtext frame number, $FETCH to enable changes of extension modules at run-time.

Graphics Kit   £35.00
A set of extension commands for use in graphics modes, which enhance the graphics facilities in Microtext. Boxes, Circles, Flood Fills, and Drop Shadows are among the facilities included.

Notepad   £35.00
There have been frequent requests for a note facility within Microtext courses. This extension command allows the student to use a full screen (in the current mode) to prepare their own notes, with rudimentary word processing facilities. On completion, this screen is written to Microtext's summary, appended to any information already there. The summary may subsequently be saved or printed as normal.

Microtext Plus Authoring Utilities

Split, Merge & Renumber   £45.00

A utility which gives an author the ability to renumber modules as easily as program-
mers can renumber BASIC programs. Additionally, part of a module can be removed
and saved independently to disk whilst sub-routines can be added from disk to the
module in memory. All these functions are performed *on screen*.

Gedit   £45.00

This provides a more flexible authoring environment. There are two main functions -
 a pixel editor and a teletext control-code finder and display. All of the normal
Microtext editing facilities are unaffected when **Gedit** is enabled.

LeTrick   £55.00

A BASIC program to allow the creation of plot files. A Microtext extension command
will then read the file and plot it onto the screen. Pictures are generated in Mode 1 and
any plot command can be used.

PC Microtext Extensions for MS-DOS

Snapper   £86.00

A memory resident utility which allows whole or part pictures to be exported for use
with Microtext. These are saved to disk and then brought into the current box when
required using $PICTURE. (Please note that *Snapper* is included in version 3.2 of PC
Microtext.)

INRS/OUTRS   £40.00

This provides an RS232 driver which contains extension commands for Microtext to
input and output character strings from the RS232 port of a PC running MS-DOS.

Unlock your Domesday System

The AIV (Advanced Interactive Video) System designed for the Domesday Project is currently only able to play the two Domesday videodiscs and the recently released ecology disc. Now, The Soft Option have produced add-on packages which enable AIV systems to play many other available interactive videodisc programs and to be used for developing new programs.

The **AIV Enhancement Kit** enables you to develop your own interactive programs using the pictures and sound on Domesday, as well as many other videodiscs containing a wide range of still and moving video material. You can develop programs using the popular authoring language, Microtext Plus, as well as other Acorn languages.

The **AIV INTAVIEW Conversion Kit** also includes an RGB overlay unit so that it provides all the features of our standard INTAVIEW system while preserving the basic AIV capabilities. This upgrade gives you access to all the videodisc programs which have been produced for INTAVIEW workstations. These include IIS training packages and the Interactive Video in Schools (IVIS) programs. The kit also enables you to use the Domesday system as a normal Acorn computer without having a videodisc running in the player.

The kits are based on The Soft Option's **VideoROM**, which is used in the INTAVIEW range of interactive video workstations. It provides a comprehensive range of control functions to enable sophisticated interactive video programs to be developed and run. The VideoROM is mounted on a plug-in cartridge and is supplied with software utilities on a floppy disc and a cable to connect your computer to the videodisc player.

You will require an Acorn BBC compatible disc drive to develop programs and to access existing videodisc programs. If you want to develop programs in Microtext, you will need a **Microtext Plus Authoring ROM** which can also be mounted on the cartridge. If you only want to run programs developed in Microtext, you will need a **Microtext Plus Run-time ROM**.

Prices:		
AIV Enhancement Kit		
VideoROM, Cartridge, Software & Cable		£165.00
AIV INTAVIEW Conversion Kit		
AIV Enhancement Kit, Overlay Unit & Cables		£390.00
Acorn Disc Drives		
3.5" Single		£121.00
3.5" Dual		£210.00
5.25" Single		£156.00
5.25" Dual		£295.00
Microtext Plus Authoring ROM		£199.00
Microtext Plus Run-time ROM		£17.40

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