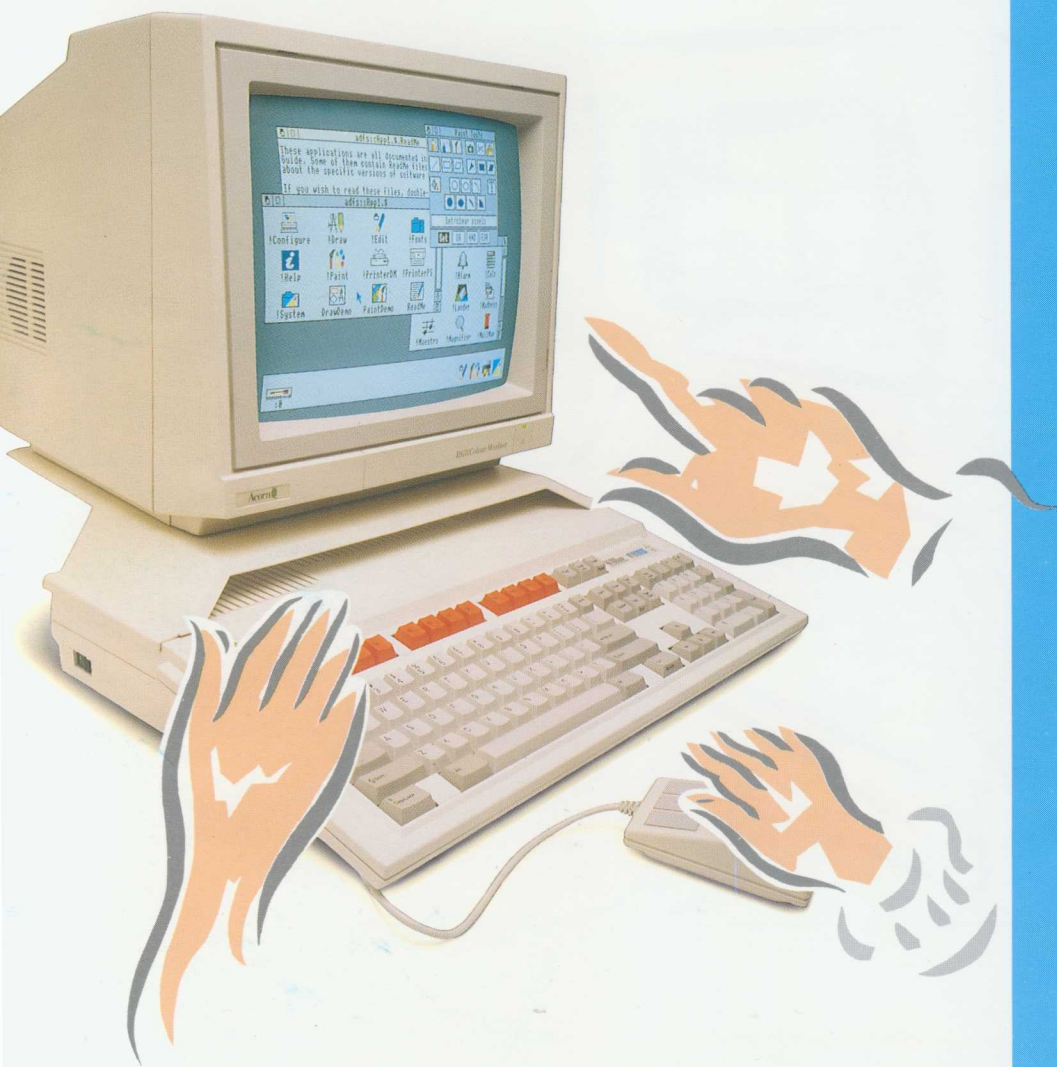# BBC A 3000

POWER IN YOUR HANDS

POWER IN YOUR HANDS

Acorn, makers of the famous BBC microcomputers, are bringing in new standards for the 1990s with a brand new BBC computer — the A3000. Putting the latest technology to work for you, the A3000 is so easy to use, but packed with ability for an amazing range of interests and applications.

When Acorn introduced the original BBC micro, computing was an uncharted world to most people. Thanks in no small measure to the BBC microcomputer itself, millions of people young and old have learned to use computers, work with them, play with them, experiment with them. Some have learned to love them, some have just learned to live with them.

The A3000 brings in a NEW GENERATION of computing. It's powerful, it's adaptable, it's educational and yet it's fun. If you haven't been keen on using computers before, you will be astonished how quickly you take to this one. If you are already proficient, A3000 will delight you with its breadth of talent.

THE NEW BBC MICROCOMPUTER

If you learned on one of the first generation BBC microcomputers, the A3000 is your natural choice. You can step forward into new technology while keeping the reassuring character and wide adaptability of your faithful "Beeb". The A3000 even runs many programs written for the BBC Model B and Master series. You have the familiar one-piece layout (now with disc drive built in) and full size professional keyboard, in a neat compact unit. Low-cost expansion options allow you different facilities for control, experiments and communication, and the optional Econet module lets you plug into an Econet networking system and communicate with other Acorn computers.

Full software compatibility with the Acorn Archimedes range of personal workstations, and optional PC emulator allowing you to run MS DOS software, give the A3000 unlimited scope. Together with the legendary reliability of Acorn microcomputers, this guarantees years of value and service for A3000 owners.

TECHNOLOGY YOU CAN ENJOY

The A3000 was designed to use the phenomenal power of Acorn's RISC (Reduced Instruction Set Computer) processor to make the whole system easy to use. The A3000 combines the visual, intuitive way of working that newcomers take to so readily, with a speed of execution that experienced users appreciate. Many computers offer control by mouse and pointer, with displays arranged in windows, but they are often so slow that you can be held up by the so-called easy-to-use interface. The A3000 is so fast the easy way is also the quick way (still allowing diehard computer buffs to use the command line interface if they insist!)

The A3000's windowing system is more than a matter of style. With Acorn's RISC operating system (RISC OS), you really can do more than one activity at a time — full multi-tasking in fact. For example, you could be using a graphics program such as Draw to create an illustration, when you want to write some notes for later use. You just call up a text editor such as Edit in a window, write and save your notes, and then carry on with your drawing. No save/exit/load/write/save/exit/load/retrieve routine with the A3000.
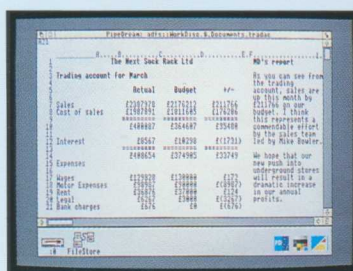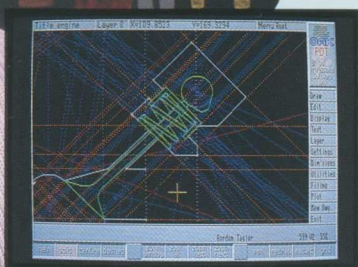
CLEVER WITH WORDS

For many people, writing letters or projects is the first computing application that comes to mind. With word processing packages as easy to learn as those on the A3000, you can quickly amend and correct what you write so that your finished work takes on a new quality. Make your business or personal letters carry conviction, and consider the educational benefit of being able to rework essays and projects. No more untidy crossings-out, or laborious writing again. You can hand in a really neat 'fair copy' every time.

ART FOR ART'S SAKE

Illustrations are easily created with the A3000 mouse and pointer system. A picture, they say, is worth a thousand words, and you will soon be adding charts and diagrams to your projects and presentations. For creative and artistic work, the A3000's exceptional colour capability allows you considerable tone and shading control. The extra dimension of animation is also possible due to the outstanding speed of the A3000 system. This is graphic design the modern way. As computer-generated video effects are ever more widely used, the A3000 provides exciting educational and creative opportunities.
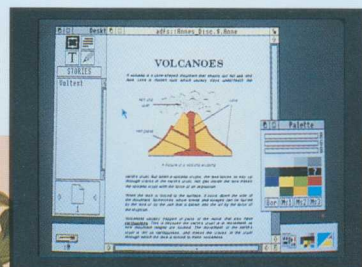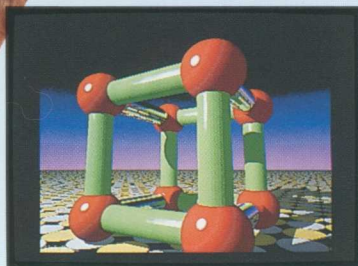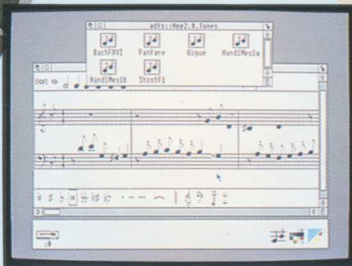
TO BE EXACT

As you would expect with its Archimedes heritage, the A3000's graphics software applications are outstanding. Precision drawing packages introduce the world of Computer Aided Design with its growing importance in all fields of design and technology. You can produce accurate technical drawings — you could even plan an extension to your home and have your A3000 work out all the dimensions for you — and then drop the finished drawing into the text you produced earlier!

DOWN TO BUSINESS

With the advantage of the huge range of software produced for the Acorn Archimedes series, the A3000 is ready for many professional business applications. Word processing, spreadsheets, database systems, business graphics, desktop publishing, the A3000 has the power to perform to the most demanding standards. With the optional PC emulator, the enormous library of MS DOS software for IBM compatible computers is accessible to you. You no longer have to choose between an educational computer or a business computer. The A3000 matches and exceeds the power of some of the most widely used business microcomputers, at a cost that puts it firmly in the home computer price range.

POWER OVER THE PRINTED PAGE

If you are looking for complete control over the appearance of your work, the Acorn Desktop Publisher package combines with the power of the A3000 to help you produce creatively designed and beautifully turned out printed pages. Lay out text and illustrations, arrange them in columns, add headlines and borders — you can keep changing the design until you like the way it looks. One of the powerful features of RISC OS is that it optimises the way printers are driven so that even inexpensive dot-matrix printers produce amazing results, as accurately as more expensive printers.

COMPOSE YOURSELF

If you do not immediately link computing with music, let your A3000 persuade you. Stereo sound capability with built-in stereo speakers allows you to explore music making without extra equipment. Score music on screen and then play it back straight away. But if you are really involved in computer music, the low cost MIDI expansion option additionally puts a whole range of digitally controlled musical instruments within your reach.
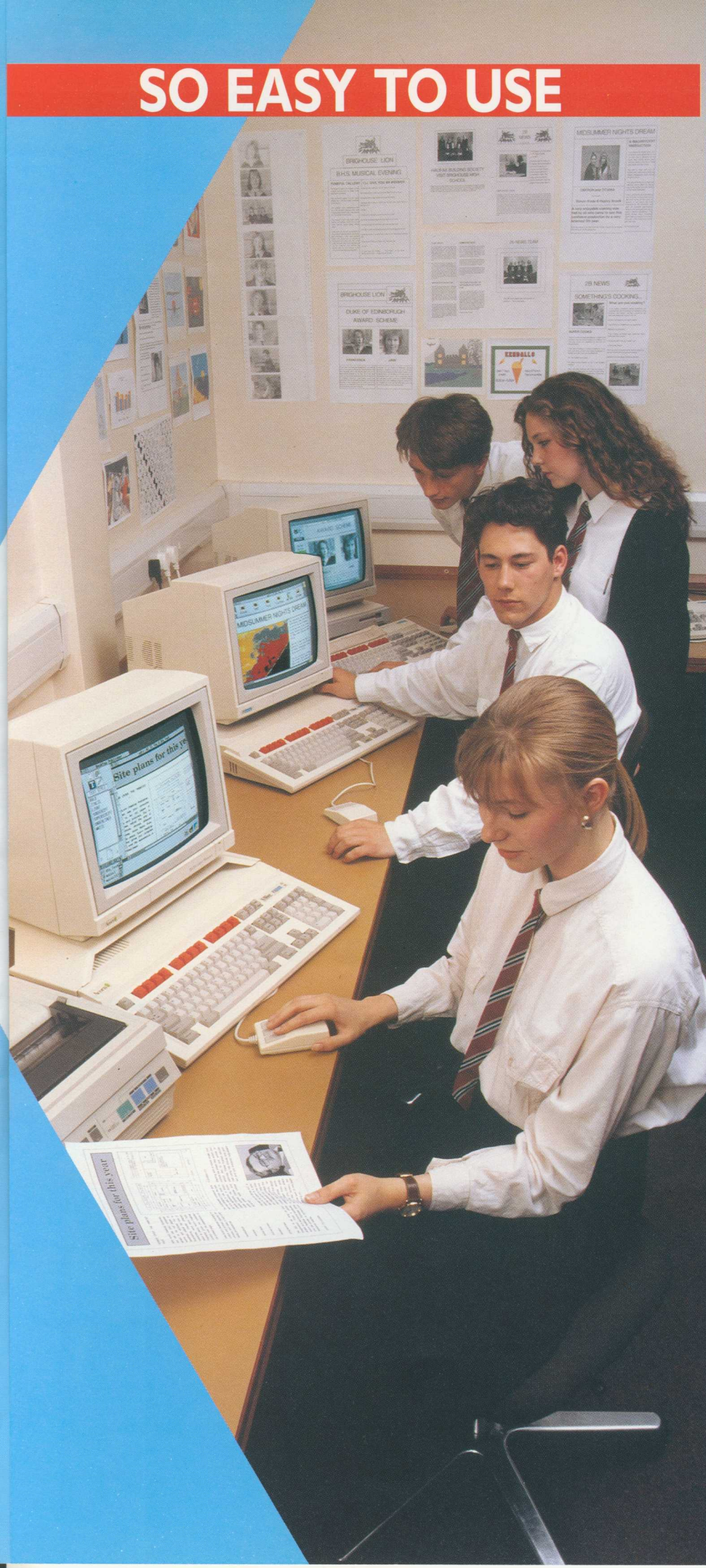
AFTER GAMES

Many people have bought computers with an eye to their educational value, only to find they end up being used for games or basic word processing and nothing else. The A3000 is different. Admittedly, with its high speed colour graphics, the A3000 is a games machine par excellence; but all its interesting capabilities are so accessible with the mouse and pointer system that the A3000 positively encourages you to explore, to learn, to develop, to create. The educational opportunities are beckoning. You will discover endless possibilities in your A3000. You will discover new skills in yourself.

SO EASY TO USE

The A3000 has a visual method of control that is so easy to learn, you will get going in no time. Switch on and use the mouse to point at the disc icon on the screen, and then to point at the application you would like to run. Write a letter, paint a picture, make music. Within minutes you will find yourself confidently controlling your A3000 with delightful results.

Unlike many computers, the A3000 has a tremendous variety of software readily available, all controlled by the same mouse and pointer method, so you will find that you are soon enjoying all sorts of new activities. You may start with practical applications like word processing, or with entertaining computer games, but before long you will be drawing and painting, scoring music, storing names and addresses . . . the list will grow and grow.

TECHNICAL FEATURES	BENEFITS

CENTRAL PROCESSING UNIT

ARM (Acorn RISC Machine) 32 bit microprocessor using Reduced Instruction Set Computer (RISC) technology.

A typical execution rate of 4 MIPS (Million Instructions Per Second) makes the A3000 system the world's fastest microcomputer in its class to date.

MEMORY AND DATA STORAGE

1 Mbyte of fully addressable built-in RAM.

Complex software applications run from RAM without frequent delays for disc reading.

Optional expansion to 2 Mbytes of RAM.

512 Kbytes of ROM store the RISC operating system including the BASIC V programming language along with the window/icon/pointer interface.

The A3000 system is ready to run as soon as you switch on. You do not have to load the operating system from disc.

3.5″ floppy disc drive, 1 Mbyte (unformatted) capacity.

Industry standard discs with rigid protective cases for safe handling. High storage capacity on each disc.

Neat design with disc drive built into the body of the computer unit.

DISPLAY

Colour monitor:

14″ analogue RGB colour monitor, text and graphics display; resolution 640 × 256. Up to 256 colours.

Clear characters and brilliant colours.

Outputs for alternative monitors:

Analogue RGB and sync (via 9-pin D type socket).

Allows use of a high resolution multiscan colour monitor (resolution up to 640 × 512)

Composite mono video

Allows the use of a monochrome monitor showing grey scales in place of colours.

SOUND

Two-channel stereo with seven stereo positions and eight voices.

The A3000's sound facilities present creative opportunities for music composition with on-screen scoring and audio replay.

Standard 3.5mm 32 ohm stereo jack.

For private listening with stereo headphones or connection to external amplifier.

Two built-in stereo speakers.

Provision for MIDI expansion option.

Musical Instrument Digital Interface (see below).

KEYBOARD AND MOUSE

103-key "enhanced PC" layout keyboard.

Full size typewriter layout keys with precise action.

Separate cursor key group and separate numeric keypad.

Three-button mouse.

Three buttons, programmed to suit each application.

Accurate response to your hand movement to give you 'intuitive' control over the computer.

INTERFACES

Parallel interface port is fitted as standard, with provision for optional serial port.

The connection of printers and plotters to produce printed output of your text and graphics.

Modems for communication with other computers via the telephone system, for electronic mail, and for access to public data systems.

Parallel port: Standard 25-pin D type socket Centronics 8-bit compatible.

Serial port (optional): Standard 9-pin RS232 D-type plug.

ACORN EXPANSION OPTIONS

Econet module/(internal plug-in module)

Connection to Econet-Acorn's low cost local area network.

MIDI and I/O expansion card (internal):

The Musical Instrument Digital Interface allows control of music synthesisers and sound equipment; Input/output port provides user port for applications in control and instrumentation.

Serial port upgrade:

Allows the connection of a wide range of peripheral devices including printers and plotters.

Memory upgrade:

RAM upgrade from 1 Mbyte to 2 Mbytes

External expansion:

64 way connector allows the use of existing (5V power supply) expansion cards (externally mounted).

Expansion cards available include those for ROM, Hard disc and MIDI.

PLANNED THIRD PARTY UPGRADES

Hard disc upgrade: #

Allows the addition of an external hard disc drive.

I/O internal expansion card:

Provides user port and 1MHz bus with connectors for applications in control and instrumentation.

Second floppy disc upgrade: #

Allows the addition of an external 3.5″ or 5.25″ floppy disc drive.

Note: All internally fitted A3000 expansion options are for dealer fitment only.
\# fitted externally.

STANDARD SOFTWARE

In built software in ROM:

Desktop Manager mouse and pointer system

Sophisticated utilities which disguise the complexity of the operating environment — leaving the user with the intuitive, graphics interface which is so easy to use.

Advanced Disc Filing System (ADFS)
Advance Network Filing System (ANFS)

Very powerful disc and file handling systems, with network capability built-in (requiring just the Econet module to be up and running).

BBC BASIC V

Highly flexible language, probably the most familiar programming environment, supplied as standard.

Character sets: ISO 8859, Latin 1-4, Greek.

APPLICATIONS DISC 1:

Configuration, Draw, Edit, Fonts, Help, Paint, Printer Driver: dot matrix, Printer Driver: postscript

APPLICATIONS DISC 2:

6502 emulator, Alarm clock, Calculator, Lander game, Music demo, Magnifier utilities, Electronic mail software, Patience game, Puzzle game, BASIC Editor

DOCUMENTATION

Welcome guide, User guide, BBC Basic guide (optional), Programmer's reference manual (optional)

Acorn
The choice of experience.