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*Compact*  
BRITISH BROADCASTING CORPORATION  
MASTER SERIES MICROCOMPUTER

THE MASTER *Compact*





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BRITISH  
BROADCASTING  
CORPORATION  
MASTER SERIES  
MICROCOMPUTER

**S**UCCESS IN the future will depend on confidence in using the new technologies. That's why a computer in the home has to be more than just an interesting diversion, or even a useful tool. It has to be an investment in tomorrow for you and your children.

The Master Compact has been designed to make that investment pay dividends. It's the newest member of the

prestigious range of British Broadcasting Corporation Microcomputers and it has been planned with the needs of home users specifically in mind. It's a neat, stylish system that can be set up in moments. It's exceptionally easy to use, even for computing novices. It comes complete with an impressive array of software that includes the entertaining, the effective and the educational.

THE MASTER COMPACT

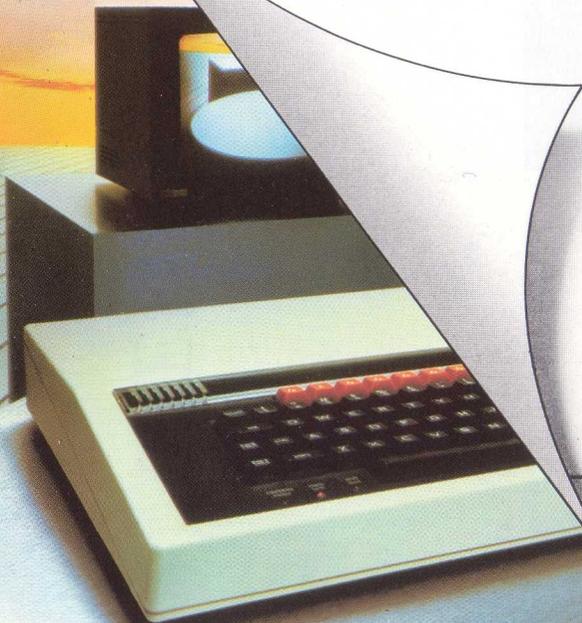
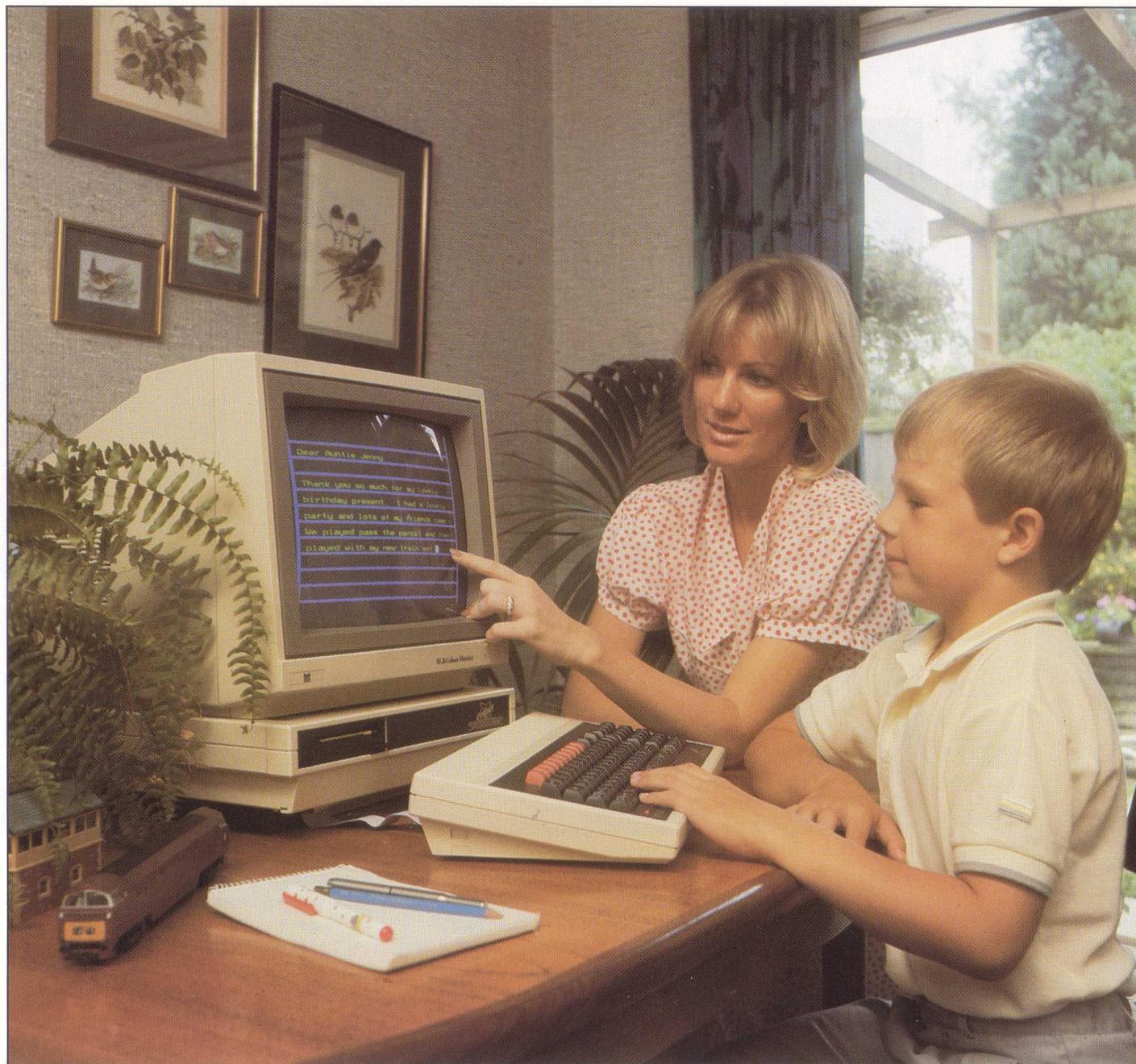
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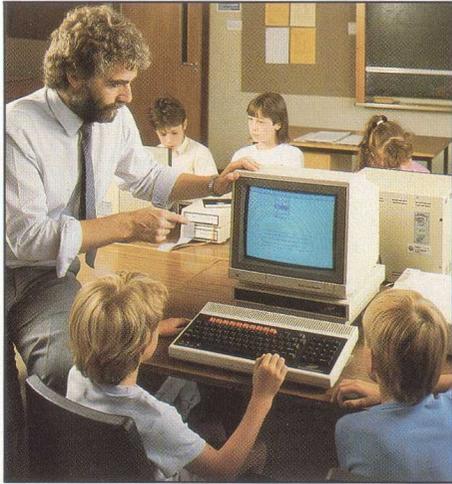
COMPACT

THIS ATTRACTIVE package inherits the traditions of the famous Model B BBC Microcomputer, which is used by children in almost every school in the United Kingdom as well as in colleges, hospitals, laboratories, factories, offices, banks and shops. Moreover it shares the basic design of the BBC Master Series Microcomputers which since their launch have been setting new standards for speed, sophistication and flexibility.

Investing in a Master Compact will bring you and your family handsome returns: a lot of fun and enjoyment, and skills and abilities which are invaluable during education and beyond into business and professional life.

The Master Compact packs a lot of potential into a very neat package. Like its Master 128 cousin it provides 128K of RAM. The full-size keyboard has a responsive, professional feel and includes a numeric keypad which is particularly convenient if you are entering financial or mathematical data.



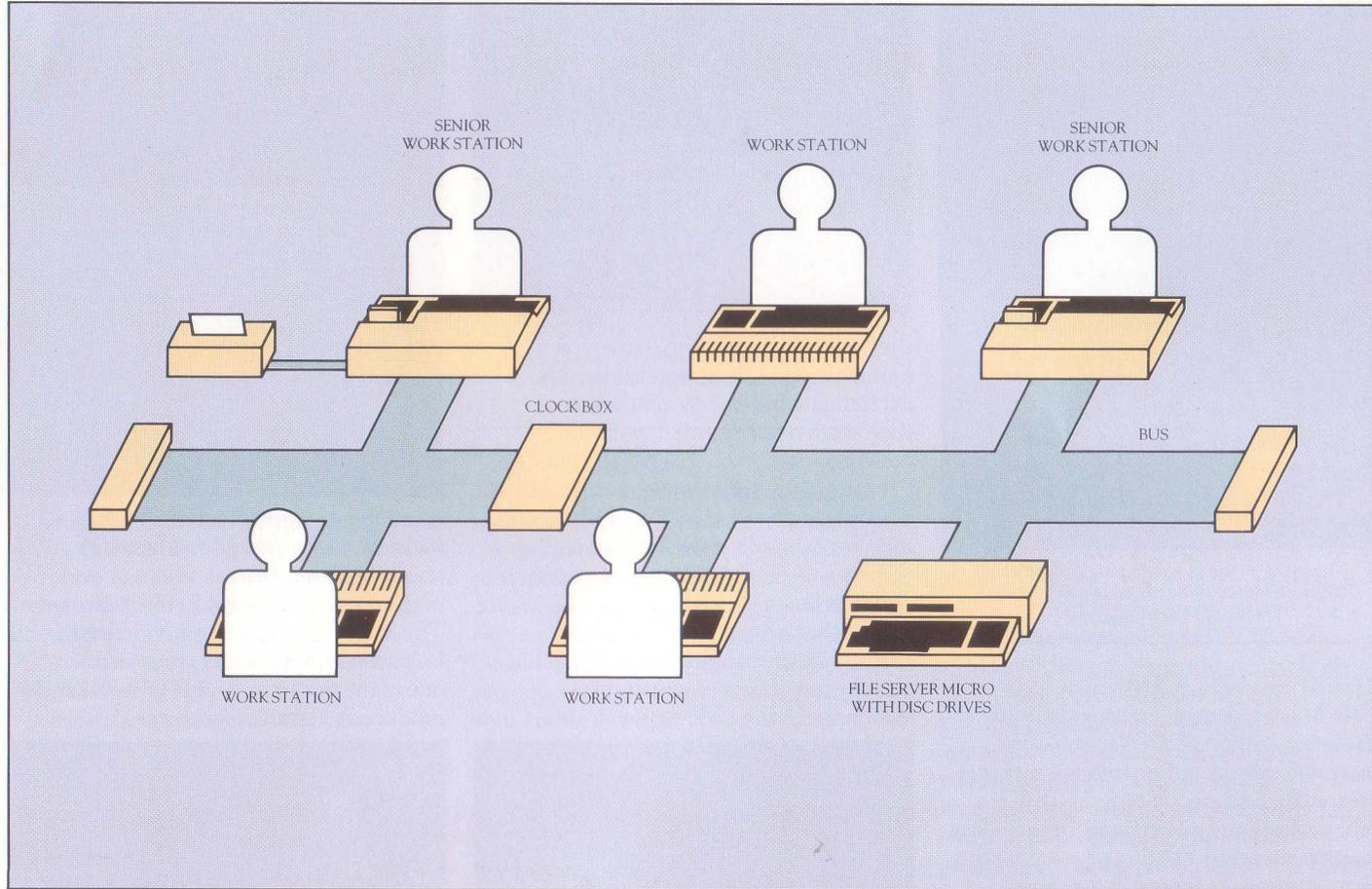


The disc drive unit allows high speed loading of programs and saving of data. The Master Compact uses the 3.5" format discs which are rapidly becoming the industry standard. The discs are tough and reliable, and are (almost) proof against damage by sticky-fingered children (or clumsy adults!). The robust design of the drive unit means that it can also double as a monitor support.

Finally there's a choice of high quality monitors. The Master Compact's monochrome monitor is ideal for a wide variety of applications including word-processing; but the colour monitor opens up to you the full possibilities of the Master Compact's very sophisticated graphics facilities.

All three parts of the Master Compact system are powered from a single mains lead: you won't have to make your living room look like an electrical laboratory.

To this system you can add virtually any type of printer, from the cheap but



#### ECONET NETWORKS

The Acorn Econet provides a versatile networking option. The network shown above contains Master Compacts fitted with the optional network interface. Using a network, extensive peripherals and software can be shared between users.

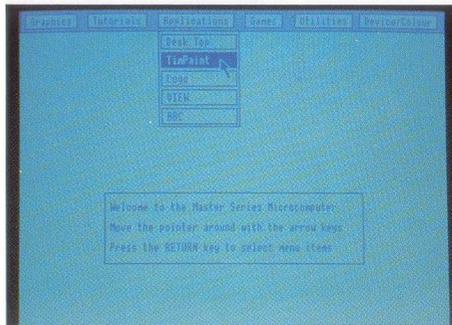
Communication can be made between stations using the software contained on the fileserver. The use of Econet bridges would allow expansion of the network over a larger area by linking networks together.

effective dot-matrix to the high quality daisy-wheel. You can also connect a joystick or a desk-top 'mouse' – especially useful for the rapid and simple control of games and graphics programs.

If you wish the Master Compact can be fitted with a network interface enabling it to be linked, via an Econet local area network, to large numbers of other BBC Micros within a school, office or factory.

The network can be used to pass messages, monitor operations, share software and to make available central resources such as printers, high-capacity disc drives and databases.

THE POWER and simplicity of the Master Compact are apparent from the moment you switch on. Your 'Welcome' disc presents you with a range of exciting options, accessed via an easy-to-use 'pull-down menu' system, which includes something to amuse, intrigue and challenge just about everybody.



Access to all the programs provided with the Master Compact is by means of simple-to-use 'pull-down' menus

### THE WORD-PROCESSORS

Your Master Compact is provided with the latest version of VIEW, one of the most successful word-processing packages created for a microcomputer. VIEW is a full, professional word processor including features such as the ability to print out the same letter or document many times incorporating variable information: for example, different names and addresses.

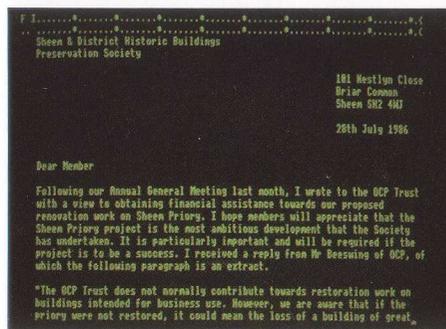
The Master Compact can hold a document 25,000 characters long in its memory: that's about seven full pages of typescript. If you need to handle longer texts you can create a document which is 80 or more pages long, all stored on a single disc.

But that's not all. The Master Compact also comes with a second word processor called ABC. As the name suggests, it's extremely simple to use, making it the ideal introduction to word processing for children (or cautious adults).

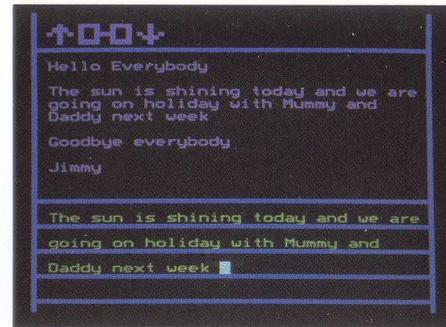
Because mistakes can be corrected so easily using ABC, children are less inhibited by the fear of making them, enabling their writing to flow more freely and creatively. Many people seem to find it easier to spot and correct mistakes on the 'neutral' screen than in their own handwriting. ABC gives children the excitement and satisfaction of seeing their work neatly printed, without crossings-out.

Letters and stories written using ABC can be transferred to VIEW. This means that, for example, a teacher can easily combine the contributions from many children into a class magazine.

ABC has gained not only the enthusiasm of children and teachers but also the respect of computing professionals. In the 1986 British Micro-



The Master Compact comes complete with the latest and most sophisticated version of VIEW, one of the best selling word-processing packages on the market

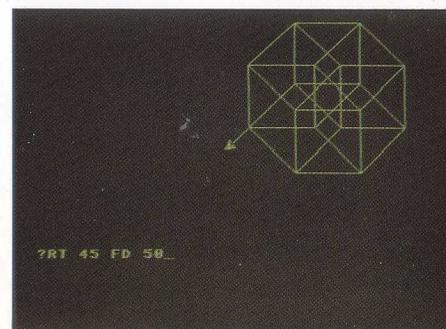


ABC is a simple and attractive word-processing program that develops children's keyboard skills whilst encouraging their creativity

computing Awards it won both the Best Software in Schools and the Home Educational Software of the Year categories.

### THE MIND STRETCHER

LOGO is the famous 'turtle driving' program; you may well have seen the computer-controlled robots (with or without stuck-on head and flippers) scurrying around on television or even on the floor of your children's classroom. The Master Compact is provided with Logotron LOGO, widely regarded as one of the most successful versions yet produced for a microcomputer.



LOGO is a powerful educational tool that enables children to discover important mathematical and programming concepts whilst having a lot of fun

Logotron LOGO closely follows the original concepts of Seymour Papert and his colleagues at the Massachusetts Institute of Technology. Simple commands enable a 'turtle' symbol to be moved around the screen, drawing shapes, patterns and pictures.

However, Logotron LOGO is much more than just a 'turtle graphics' package. It's also a powerful and sophisticated programming language, in many respects far superior to the older BASIC. In fact it incorporates the key 'list processing' concepts which are the basis of artificial intelligence.

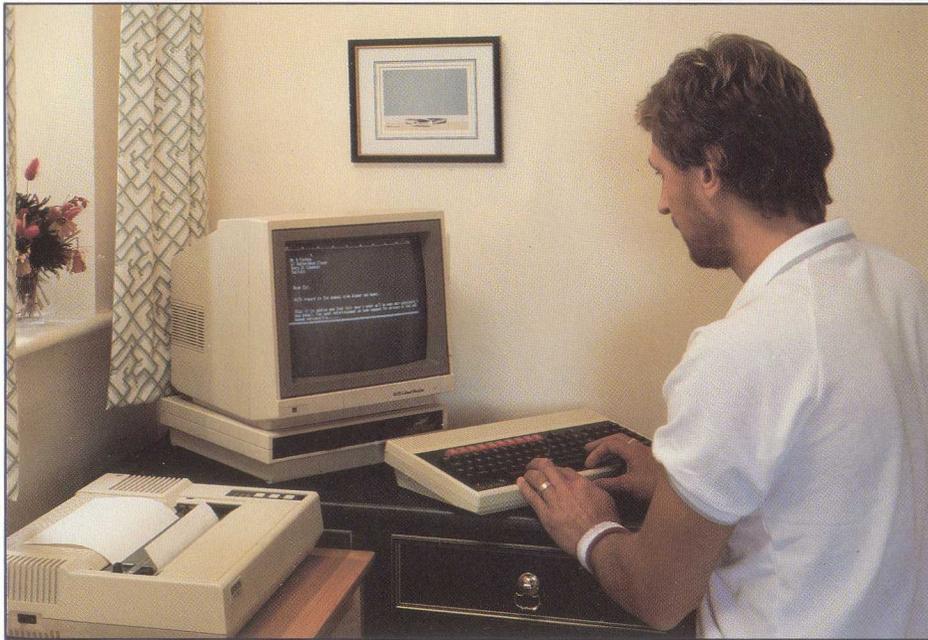
The beauty of LOGO is not simply that the user can learn powerful mathematical and programming concepts in a stimulating and enjoyable way, nor that discussion of what the turtle is doing (and why) is an important means of developing language and reasoning. It is that the user is both learner and teacher, not passively accepting the limited information contained in a conventional program, but actively extending the knowledge and abilities of her or his 'pupil', the computer.

In fact if there had to be just one justification for the invention of the microcomputer, LOGO might well be it.

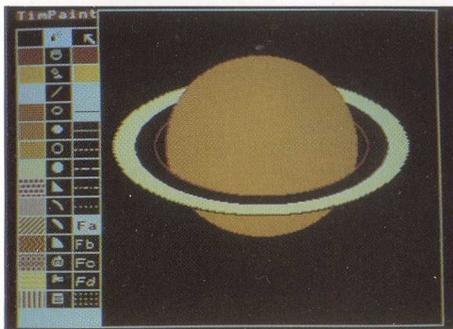
### THE ARTIST

Not content with encouraging your use of language and developing your abstract reasoning, the Master Compact can also stimulate your artistic potential! Its TimPaint program makes full use of the graphics facilities for which the BBC Micro is renowned, and which the Master Series has developed even further.

By simply moving a cursor you can



select from a screen 'palette' offering an almost unlimited range of colours, shades and patterns, and use them to draw lines, create shapes and 'colour in' areas. It's even possible to create animation effects. (The Master Compact comes with five sample graphics pictures to encourage your own ideas.)



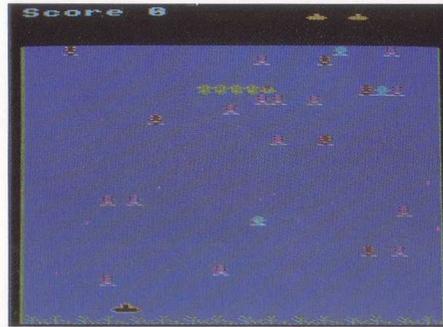
TimPaint enables you to create your own computer graphics using sophisticated facilities usually found only on dedicated systems

TimPaint's editing routines include the ability to move sections of a picture by 'cut and paste', a facility you would expect to find on a dedicated graphics or computer-aided design system.

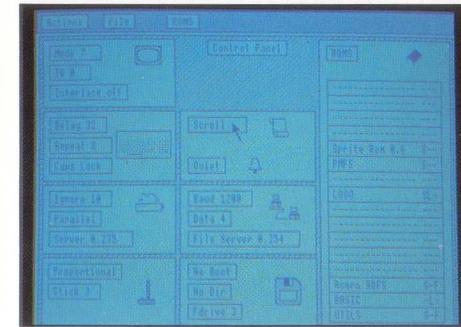
#### THE ORGANISER

If you are the secretary of a club or organisation, or just want to keep track of relatives or social or business acquaintances, the Master Compact provides you with the perfect tool. It's a computerised Card Index, a simple and easy-to-use system that allows you to choose the information you record and the way in which you record it.

You can locate a particular 'card' in seconds to retrieve or update the information. The card index is also compatible with Acorn's powerful ViewStore database so that the information you record can be transferred without laborious retyping.



The Master Compact doesn't neglect the lighter side of computing and comes with a challenging arcade game and an infuriating adventure



The Control Panel utility, unique to the Master Series Micros, enables you to configure your computer so that it starts up in the way that you choose

#### THE TUTORIALS

The Master Compact's commitment to user-friendliness doesn't stop at making the programs easy to run. It is also provided with on-screen tutorial programs covering some of the main aspects of using the machine, including the Advanced Disc Filing System. Question and answer sessions are built in to enable you to check your understanding.

In addition, a printed Welcome Guide provides all the information you need to start using the Master Compact and the programs supplied with it, whilst comprehensive reference guides are available separately to answer your detailed questions about BBC Microcomputing.

#### AND THE REST

In this brochure there is only space to summarise the main features of the software provided with the Master Compact. There isn't room to talk about the games; the program that allows you to

redefine the shape of your characters; the way in which you can investigate the sound generating capabilities of the Master Compact; the help you're given to create new colour shades or patterns; or the fastest-ever version of BBC BASIC.

Many other programs are available on 3.5" discs for use with your Master Compact, including games, business applications, and programs covering educational topics such as maths, language, reasoning, general knowledge and foreign languages. Additional programs are being published all the time.

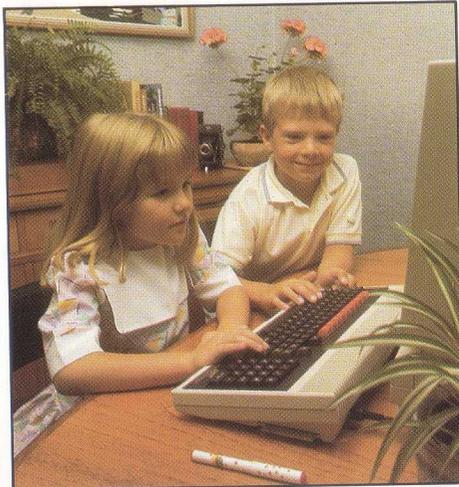
Moreover, much of the ROM-based software that has been created for the rest of the BBC Microcomputer Series will be available for use with the Master Compact, including spreadsheets, databases, spelling checkers and a variety of specialist programming languages. A catalogue of software and peripheral devices that can be used with the Master Compact is provided with every machine.

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THE SOFTWARE



# THE BACKGROUND



FOLLOWING IN the footsteps of the original BBC Microcomputer, the BBC Master Series has been a resounding success. The speed and versatility of the Master Micros has pleased existing supporters and won new friends and admirers.

Now the Master Compact has distilled the key features of the Master Series, and added a few of its own. It provides the same basic design as the rest of the Series but presented with the disc drive and monitor in a complete package.

Like the rest of the Master Series, the Master Compact incorporates the experience gained by Acorn Computers on more than 1,000,000 microcomputers over six years of operation. Acorn's design skills and production expertise ensure that the Master Series maintains the BBC Micro's tradition of high engineering standards and its reputation for reliability.

Acorn has demonstrated its



commitment to the microcomputer market, and to existing owners of BBC Microcomputers, through its policy of steady but progressive product innovation. If you want advice or assistance, it's readily available from an

existing network of dealers throughout the UK or from Acorn's central Services and Training Unit.

The Master Compact combines hardware and software excellence with professionalism and experience, and a

keen understanding of what users want from a computer. It's a combination that will make the Master Compact the yardstick by which all home microcomputers are judged throughout the second half of the 1980s.

# THE MASTER COMPACT SPECIFICATIONS



## COMPUTER

### CPU

65C12  
2 MHz clock frequency

### RAM

64 Kbytes main  
64 Kbytes sideways, four 16 Kbyte pages  
EEPROM retains user's start-up configuration whilst power off  
User RAM is not affected by filing system workspace  
Character set (ASCII 32-255) can be redefined with no loss of user RAM

### ROM

64 Kbytes  
CONTENTS:  
32 Kbytes Operating System  
16 Kbytes BBC BASIC version 4 (1986)  
16 Kbytes ADFS, Advanced Disc Filing System

### Internal ROM sockets

1 × 32 Kbyte capacity  
3 × 16 Kbyte capacity

### Disc Interface

Shugart standard

#### SUPPORTS:

MFM, double data density  
FM, single data density (with optional software)  
12 ms step-rate or faster drives  
25-way D-type connector

### Network Interface (optional)

Acorn ECONET  
16 Kbytes ANFS ROM

### Parallel Printer Interface

8-bit Centronics compatible  
24-way Delta ribbon connector

### Serial Interface (optional)

RS232, 75-9600 baud software selectable  
Independent Rx/Tx baud rate selection  
5-pin DIN socket

### Expansion port

50-way edge connector

### Display

MODES:  
8 standard modes + 8 'Shadow' modes  
Mode 0, 2 colour  
80 × 32 text, 640 × 256 graphics  
Mode 1, 4 colour  
40 × 32 text, 320 × 256 graphics  
Mode 2, 8 colour + 8 flashing  
20 × 32 text, 160 × 256 graphics  
Mode 3, 2 colour  
80 × 25 text only

Mode 4, 2 colour  
40 × 32 text, 320 × 256 graphics  
Mode 5, 4 colour  
20 × 32 text, 160 × 256 graphics

Mode 6, 2 colour  
40 × 25 text only  
Mode 7, 8 colour  
40 × 24 'Teletext' text and graphics

8 Shadow modes provide the same displays without affecting user memory  
Graphics commands extend colour range by colour mixing

#### OUTPUTS:

Phono socket  
Composite Video 1V peak to peak, monochrome  
6-pin DIN socket  
RGB TTL level, selectable +ve or -ve sync.  
TV modulator (optional - plugs into RGB socket)  
UHF channel 36, full colour

### Sound

4 channels full software control  
Internal 16 ohm speaker, 40 mm diameter

### Joystick/Mouse port

9-pin D-type connector  
Suitable for Atari-compatible digital joystick; various modes of operation supported by operating system software  
Almost any mouse with suitable connector can be used

### Keyboard

64-key QWERTY keyboard with 2 key rollover and auto repeat  
10 function keys  
19-key numeric pad

Screwdriver-operated BREAK key lock  
Direct keyboard access to ASCII 128 to 255 possible

### Power input

5 V DC - provided from disc drive/monitor stand

### Dimensions

Width: 426 mm  
Depth: 219 mm  
Height: 75 mm

## DISC DRIVE/ MONITOR STAND

### Disc drive

Single 3.5" MFM drive  
Second drive available as dealer-fitted option  
Formatted capacity: 640 Kbytes per disc

### Power input

230 ± 15% V AC (50 Hz)  
IEC320 mains inlet socket complete with appropriate mains lead

### Power consumption

150 watts (maximum), including monitor, computer and disc unit

### Power outlets

Mains for monitor  
5 V DC for computer

### Dimensions

Width: 351 mm Depth: 333 mm Height: 95 mm



**MASTER COMPACT  
 COLOUR MONITOR**

WHERE PURCHASED

**Medium resolution**

0.42 mm dot pitch

**Power input**

230 ± 15% V AC (50 Hz) provided from disc drive/monitor stand

**Dimensions**

Width: 320 mm

Depth: 350 mm

Height: 387 mm

(Monitor specifications may vary)

**MASTER COMPACT  
 MONOCHROME MONITOR**

WHERE PURCHASED

**High resolution**

850 lines minimum

**Power input**

216-264 V AC (50 Hz) provided from disc drive/monitor stand

**Dimensions**

Width: 305 mm

Depth: 303 mm

Height: 280 mm

(Monitor specifications may vary)

**SOFTWARE**

DISC CONTAINING:

VIEW series 3 word processor

VIEW printer drivers for Epson and other popular printers

ABC word processing for beginners

Logotron LOGO

TimPaint graphics painting program

*Welcome suite:*

Card index

Calculator

Note pad

Clock

Adventure game

Arcade game

Five demonstration graphics programs

Four tutorials and demonstrations covering

ADFS, keyboard skills, screen modes and text facilities

*Welcome utilities:*

Pull-down menu start-up system

Control Panel for setting restart parameters

Character redefinition

Sound generation

Pattern editor

Foreground/background colour selection

Alternative character fonts

*Additional ADFS utilities:*

Catalogue directory

Examine directory

Copy directory

Copy file between filing systems

BAS 128 – BBC BASIC for sideways RAM

use, 64 K free RAM

IN FIRMWARE:

Operating system

BBC BASIC version 4(1986)

ADFS including Format, Verify and Backup utilities

**DOCUMENTATION**

Welcome Guide, providing an introduction to the Master Compact's facilities and applications

VIEW reference card

VIEW and ABC function key strips

Logotron LOGO user guide

*Separately available:*

Reference Guides 1 & 2

VIEW Guide

Advanced Reference Guide





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DEALER

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