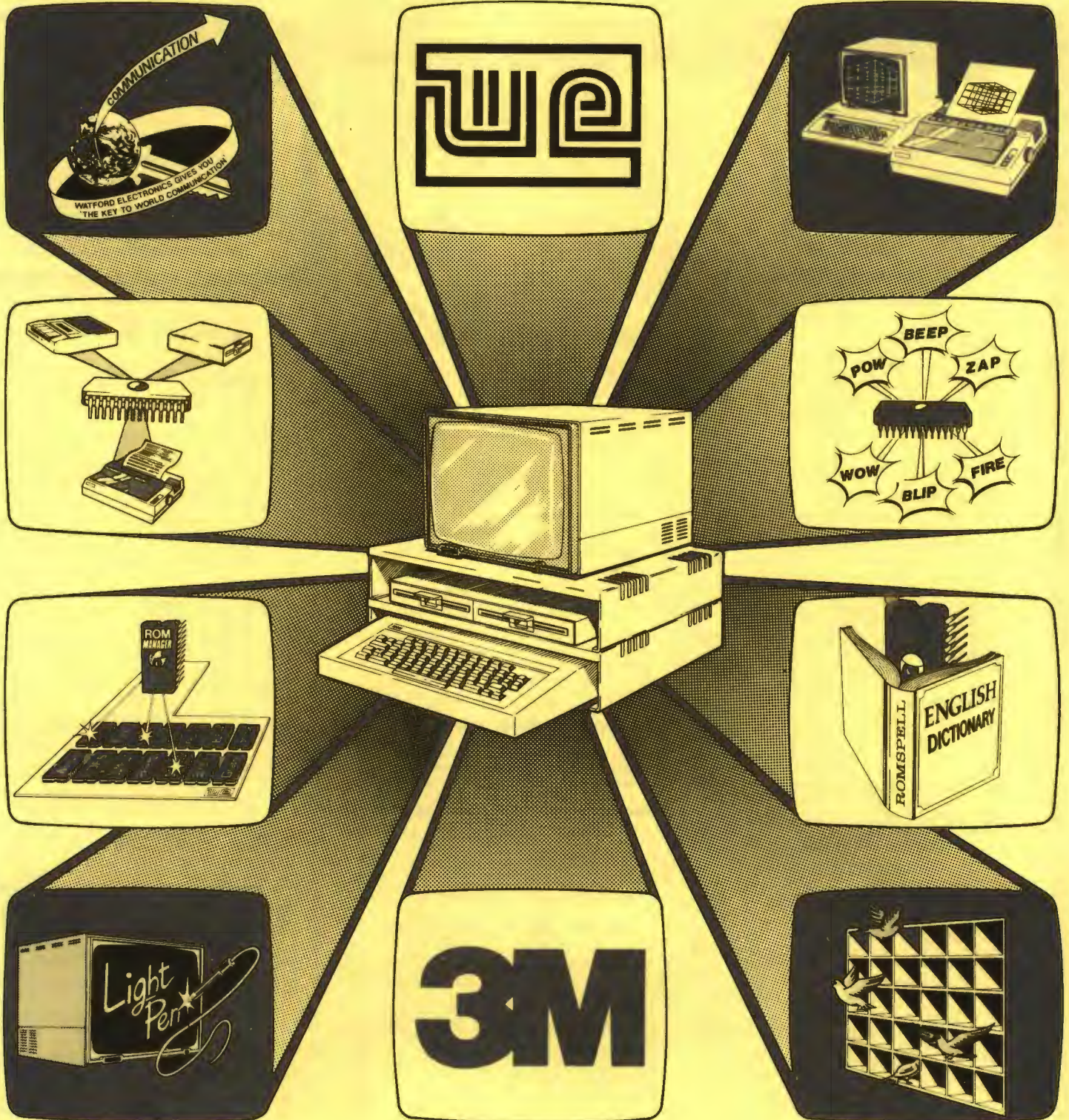


MICRO CATALOGUE MAY '85



 **Watford Electronics**

250, High Street, Watford, WD1 2AN. England

Tel. (0923) 37774

Tlx. 8956095



Watford Electronics

Dept. BBC, Jessa House, 250, Lower High Street, WATFORD, ENGLAND

Tel: Watford (0923) 40588/37774 Telex: 8956095 WAELEC

ACCESS ORDERS Tel: (0923) 50234



BBC Micro 'B' Only: £299

Price includes FREE
5 games software packages

BBC MICRO 32K + 32K

(extra 32K RAM Card already fitted)

Only: £359

BBC B with Watford DFS	£342
BBC B with Acorn DFS	£340
BBC B with Watford DDFS	£360
BBC B with ECONET	£335
BBC B + DFS + ECONET	£395
BBC B + DFS + 32K RAM Card	£407
BBC B + 13 ROM Board fitted	£325
BBC B + 32K RAM + 13 ROM Board	£386
BBC B + DFS + 32K RAM + 13 ROM Board all fitted	£439

Complete BBC B ECONET Networking System now available.

(P.S. ROM based software purchased with any of the above Micros will be fitted free of charge).

6502 Acorn 2nd Processor	£175
Z80 Acorn 2nd Processor	£339

TORCH Z80 Card + Software	£275
TORCH Z80 Card+Soft. + Disc Pack	£649
TORCH UNICORN Z80 System	£

Acorn Bitstick	£325
Acorn IEEE Interface Complete	£280
Acorn Teletext + Interface	£195

(Securicor carriage on Micros £7)

Dust Cover for BBC Micro

Protects your expensive Micro from foreign bodies while not in use. £3.50

PRINTERS

● EPSON RX80 Printer	£209
● EPSON RX80 F/T Printer	£219
● EPSON FX80 Printer	£316
● EPSON FX 100 Printer	£429
● Centronics Printer Cable to interface all the above Printers to BBC	£7
(Securicor carriage charge on printers £7)	

RX & FX PRINTER INTERFACES

Epson interfaces fit inside the printer to allow connection using techniques other than Centronics.

RS232	£25	RS232 + 2K Buffer	£55
IEEE 488	£62		

JX-80 FULL COLOUR PRINTER

The new Epson JX-80 DOT MATRIX COLOUR printer is fully compatible with the popular FX-80. Using a four colour ribbon, printing can be in 7 colours with speeds of up to 160 CPS. It is capable of 80 characters per line or 137 in condensed mode. Its resolution is selectable from 480 to 1920 dots per line. The printer has a friction and fully adjustable tractor feed mechanisms as standard.

Introductory offer £525

PRINTER RIBBONS & VARIOUS DUST COVERS

Type	Ribbons	Dust Covers
MX100/FX100	£10.00	£5.25
FX80/MX80	£4.50	£4.95
RX80	£4.50	£4.50
GP80	£4.50	-
GP100	£4.95	£3.95
GP250	£5.95	£3.95
KAGA KP810	£5.95	£4.75
CANON PW1080	£5.95	£4.75
MICROVITEC MONITORS	-	£5.50

4 COLOUR PLOTTER PRINTER

SAKATA SCP-800 printer/plotter facilitates plotting & printing in 4 colours on paper upto A4 size, using easily replaced pens. In text mode it prints upto 12 CPS. Max 160 Char. per line. In graphics mode it offers full plotting facilities incl. drawing, moving, scaling of text, rotation & drawing of axes. (Write for a sample printout).

Only £175

Set of 4 SPARE PENS only £3.95

PRINTER SHARER

Allows 3 BBC Micros to be connected to one Printer.

Only: £65

BROTHER HR-15

Brother HR15 is a high-quality daisy-wheel ideal for a budget printer for serious use. Notable features of this printer include a 3k buffer, 18cps (max), bi-directional proportional spacing, Centronics or RS232 interfaces as standard, optional Sheet Feeder and Keyboard.

With immediate effect, we are offering at no extra cost ON-SITE 12 months Maintenance on all HR15 Printers purchased from WATFORD on or after March 1985. W.E. GIVES YOU A GREAT DEAL

ONLY £325 (carr. £7)

Single Sheet Feeder	£195
Electronic KEYBOARD	£135
TRACTOR FEED Attachment	£90
RIBBON CARTRIDGES:	
Fabric £3.75; Carbon £3.75;	
Multistrike £6	
DAISYWHEELS (various typefaces)	£18

Listing Paper (Perforated)

1,000 Sheets 9½" Fanfold Paper	£7
2,000 Sheets 9½" Fanfold Paper	£13
1,000 Sheets 15" Fanfold Paper	£9
Teleprinter Roll (Econo paper)	£4

Carriage on 1,000 Sheets £1.50

PRINTER LABELS

(On continuous fanfold backing sheet)

1,000 90x36mm	£5.00
1,000 90x49mm	£7.75
1,000 102x36mm	£6.25

Carriage on 1,000 Labels £1.00

All prices exclude VAT

SPECIAL OFFER

HITACHI EPROMs for Sideways ROMs

2764-250ns £3.99

27128-250ns £8.75

RAMs (Low power) for ATPL, WATFORD, etc., Sideways ROM Boards

6264LP (8K) £8.95

KAGA KP810 NLQ PRINTER

This Dot matrix printer has EPSON FX/RX compatible control codes and is functionally equivalent to an FX80 with the added advantage of its 'Near Letter Quality' mode. It is solidly built and features include: Normal, Italic, Enlarged, super/subscript, proportional spacing and user-defined character set. Extras over the FX80 included in the price are Near Letter Quality (NLQ) print ideal for correspondence, Proper adjustable tractor feed, half speed quiet mode and 3K buffer. The printer is bi-directional and logic seeking to give a speed of 140CPS for high throughput in conjunction with the standard 3K buffer. 8K RAM may be added to give more user-defined character sets. Centronics parallel interface + Watford's 12 month NO QUIBBLE WARRANTY.

Special Offer: ONLY £252 (£7 carr.)

RS232 interface + 2K buffer to connect to other micros.

£89

NLQ FONT DESIGNER

For this NEW ROM (latest in NLQ Technology from Watford) please see later pages of this advert.

EPSON HI-80 PLOTTER

The latest addition to the popular range of EPSON Printers/Plotters. Prints in upto 10 colours. Has many more features. Please write in for spec sheet.

Price: Only £399 (£7 carr.)

KAGA KP910 Printer

Similar to the KP810 but with 17" carriage for wide print. Gives 156 columns of normal print or 256 columns in condensed mode. Ideal for printing out spreadsheets.

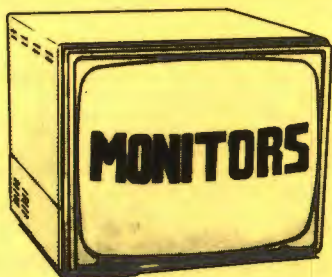
ONLY £339 (£7 carr.)

PRINTER LEAD

Centronics lead to connect BBC micro to EPSON, KAGA, SEIKOSHA, NEC, STAR, JUKI, BROTHER, SHINWA etc. printers.

Standard length (4 feet long)
Extra long (6 feet long)

£7
£9



We stock a range of monitors to suit all needs. Choice of a monitor is a matter of personal taste so we recommend that whenever possible, you ask for a demonstration at our shop.

MICROVITEC

- 1431 - Medium resolution as used on the BBC television computer programme **£165**
- 1451 - High resolution, suitable for word processing in mode 0 **£237**
- 1441 - High res, exceeds the capabilities of the BBC micro **£385**
- 1431AP RGB + PAL and AUDIO **£199**
- 1451AP RGB + PAL and AUDIO **£285**
- Dust Cover for Microvitecs **£5.50**

All Microvitec Monitors are 14" RGB in their distinctive right angle sturdy metal case or the new beige plastic case. They are supplied complete with connecting lead to the BBC and a 3pin mains plug.

KAGA

- KAGA KX1201G Hi-res Green Monitor **£90**
- KAGA KX1202G Ultra-Hi-Res Green Monitor ... **£105**
- KAGA KX1203A Ultra-Hi-Res Amber Monitor **£105**
- KAGA Vision 2, Hi-Res, RGB Colour Monitor **£225**
- KAGA Vision 3, Ultra Hi-Res, RGB Monitor **£310**

All KAGA monitors are 12" units housed in a professionally finished beige plastic cabinet. They all have as standard, a genuine etched anti-glare screen.

ZENITH

12" high resolution monochrome monitor. Ideal for word processing as its green or amber screen is very restful to read. The high resolution makes it good for games too - you can really see the detail that has been put into the graphics **ONLY £66**

LEADS

- BNC Lead for Zenith or Philips **£3**
 - RGB lead for KAGA **£5**
- N.B. Carriage on Monitors **£7** (securicor)

MYSTERIES OF DISC DRIVES & DFS REVEALED

Are you tired of faulty cassettes, and lengthy loading times? Do you want to upgrade your BBC micro to take discs but you get tied up in the plethora of jargon surrounding the choice and use of these systems.

For instance, what is the difference between single and double density formats, how can you use a 40 track disc on an 80 track disc drive? What is the difference between a DFS and disc interface kit? Should you acquire a single Disc drive or twin? What does 48 TPI and 96 TPI discs mean? These are just a few of the questions you may have asked yourself and never found the answer or maybe you have yet to encounter these questions.

Now the mystery of buying a suitable interface and disc drive for your BBC micro is revealed in Watford Electronic's new book entitled 'MYSTERIES OF DISC DRIVES & DFS REVEALED'. It describes in fine detail, yet remaining very readable to the beginner, how disc drives operate, the type of interfaces available, which type of discs to use on a disc drive and how data is stored on the discs.

There is even a handy section describing the phrases you are likely to encounter, and how to interpret them. This book must be an essential purchase at £5.95, especially if you own or are thinking of buying a disc system.

£5.95 (Book No VAT)

BBC MICRO WORD-PROCESSING PACKAGE

A complete word-processing package (which can be heavily modified to your requirements, maintaining the large discount). We supply everything you need to get a BBC micro running as a word-processor. Please call in for a demonstration.

EXAMPLE PACKAGE

BBC Model B, Watford Electronics' DFS upgrade, WORDWISE ROM, Twin 400k Epson drives in beige, Zenith 12" Hi-resolution monitor (Green or Amber), Brother HR15 daisywheel printer. Gemini software: BEEBCALC spreadsheet, analysis and DATABASE software on disc. 10 x 3M disc, 500 sheets fan-fold paper, 4 way mains trailing socket, manuals, all leads and BBC carrying case.

NEW LOW PRICE

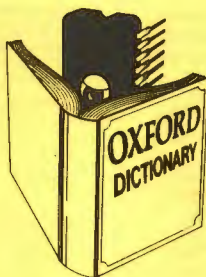
Only £1,025



**ACCESS
HOT LINE
(0923 50234)
24 Hours**

NEW

ROM-SPELL



ROMSPELL is the new fast Spelling Checker ROM from Watford. Packed with excellent features, ROMSPELL is probably the most advanced spelling checker available for the BBC micro.

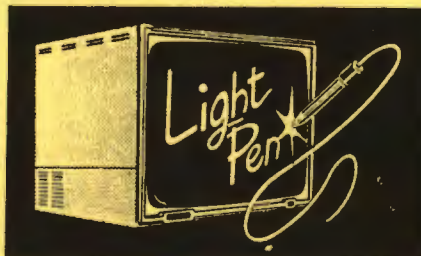
Features include:

- 30,000 word dictionary
- One pass check
- Two pass check
- Ambiguous word check
- Basic access to ROMSPELL
- Immediate entry check

ROMSPELL is fantastic value at **£25**

(Please specify 40 or 80 tracks when ordering)

LIGHT PEN

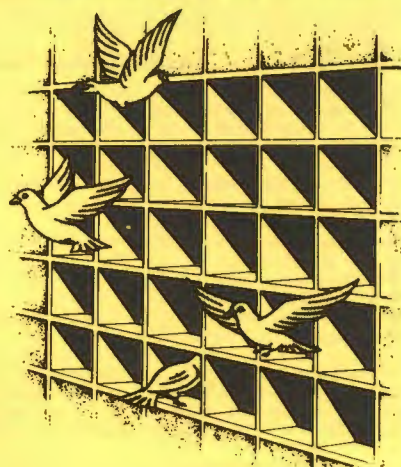


This Light Pen for the BBC micro is packaged in a neat pen shape with built in switch. Supplied complete with our sophisticated Pen-Pal software on cassette (see elsewhere in this ad).

Only £23

(For software on disc please add £2)

DATABASE MANAGEMENT SYSTEMS



DISCDATA

Discdata is an entirely disc based database handling system. It is extremely easy to use through its comprehensive menu system. The simplicity is such that we do not feel the need to provide explanation on use in the written guidance supplied with the program. The first-time database user will rapidly become familiar with this package designed throughout to be simple and obvious.

On disc at

Only £17

(Please specify 40 or 80 track when ordering)
(Please write in for technical specifications)

FILE-PLUS

The File-Plus package is even more powerful and flexible than Disc-Data. It is also largely menu driven but has its own command language for file searching. The 16K ROM contains all the normally required routines, with lesser used options supplied on the utilities disc. All input and output formatting is controlled through screen forms. A full screen editing system is used to define a form which allows tremendous flexibility in the format in which your data is displayed. It is very easy to change from form to form so that you can type in your data with one form, and examine it with others. You will typically design several forms before starting to access the database so that you can quickly and easily see the fields of each record that you want to appear in the layout you decide on. The form system is also used for output to your printer. File Plus has a unique file linking system that allows the entire on-line storage of your system to be used for one database. This can give around 1.5 Megabyte databases using dual drives and double density.

The built in FQL (File-Plus Query Language) can be used for searching the database. Presented in the form of a powerful command language with looping facilities etc. this allows the most flexible access to your data possible. Full arithmetic operations are provided to allow the system to be used for statistical analysis.

Operations supported are -, +, *, /, + - 999999 9999.9999 and compare facilities =, >, <>=, >=, <, &..

Many keywords are supported by the language: assign, compare, display, and, goto, iff, ift, print, read, search, spool and update.

Supplied with a very detailed 70 page manual to explain all the facilities with many examples.

Only £43

(Please specify 40 or 80 tracks for the utilities disc)

DATAGEM

Gemini's 24K ROM based
DATABASE Management System
Special Offer: **£99**

Continued



The ULTIMATE DFSs for the BBC MICRO

Adding disc drives to your BBC is probably one of the best ways of improving the power of your microcomputer system. Watford, with their reputation for providing quality products at an affordable price, have available a full range of disc drives and associated products, including:

- Disc Filing Systems
- Disc drives
- Disc covers
- Floppy discs
- Disc boxes
- Disc cases
- DFS Manuals
- Disc drive cleaning kits
- Disc based Software

Watford Electronics supply two highly sophisticated Disc Filing Systems specially designed to be fully entry point compatible with Acorn's standard DFS. As well as this, these two DFSs provide significant and powerful enhancements to allow the user greater ease in accomplishing a given task.

Many people who are about to buy a DFS find themselves wondering which one to opt for: should they buy the standard Acorn one and restrict their available features, or should they buy one of the other DFSs and find themselves running into compatibility problems if they opt for the wrong one? Before you look below to see the vast range of extra features that our DFSs provide, may we just point out that our DFSs are fully Acorn compatible; not just partially, like some of the "competition". We have been supplying DFSs for two years now with many thousands of satisfied users. Also, please note that the Watford DFS is supplied by a reputable firm via proper mail order and shop premises.

Just compare the features:

Features	Acorn	Watford	
	1.20	Single Density	Double Density
Max nos. of files per disc side	31	62	62
Max disc capacity	800k	800k	1440k
Tube compatible	Yes	Yes	Yes
Built-in Editor	No	Yes	Yes
Built-in Formatter	No	Yes	Yes
Built-in Verifier	No	Yes	Yes
MRUN a file	No	Yes	Yes
MLOAD a file	No	Yes	Yes
Extended RENAME	No	Yes	Yes
Selective COPY	No	Yes	Yes
Default file name	No	Yes	Yes
Disc space distribution	No	Yes	Yes
40/80 Software Switchable	No	Yes	Yes
Wide catalogue	No	Yes	Yes
Close open files	No	Yes	Yes
Improved OPENOUT	No	Yes	Yes
Copy between densities	N/A	N/A	Yes
OSWORD & 7F	Yes	Yes	Yes
Full entry point compatibility	Yes	Yes	Yes
Retain information over a break	1.20 partial	1.42	1.52
Games compatibility	Yes	Yes	Yes
Econet file server	Yes	Yes	Yes
Econet station	Yes	Yes	Yes
Full wildcard facilities	No	Yes	Yes

Note that whilst BOTH of our DFSs are compatible with the 6502 and Z80 Second Processors, the Acorn DNFS ROM (supplied by Acorn with the processors) should be present within the machine for the Tube transfer protocol. Our single density DFS is compatible with the Torch Z80 system. With the current versions of our DFS and DDFS, "PAGE" will remain unaltered by the presence of a DNFS ROM; i.e. the normal value of &1900 is retained.

THE WATFORD DFSs

Designed to offer power and flexibility, the two versions of our DFS are packed with features such as:

- Acorn's slightly antiquated DFS allows a maximum of only 31 files per side of a disc. OUR DFSs cater for either 31 or 62 files per side of a disc. In 62 catalogue mode, all these files are available and displayed as one continuous catalogue; not a collection of small catalogues that require extra effort on the part of the user to swap between. We have found that 62 files is adequate in normal use (more would require altering "PAGE", which is undesirable - again this is due to the way in which the BBC micro is organised).
- Built into each Watford DFSs are the disc Formatter, Verifier and Sector Editor that are so useful and essential for the operation of a DFS. We do not

ask you to pay extra for these features with our DFSs - they should always be present within a perfect DFS and therefore included in the price.

- One of the excellent features of the BBC is its 80 column mode of operation. Acorn's DFS, unfortunately, only displays in 40 columns even in these 80 column modes; ours displays the catalogue correctly in 4 columns. This feature has now been extended to include the 80 column display of the filing system information at the top of the catalogue as well.
- When working on a program, most "load and save" operations to the disc will use the same filename (ie that of the current program). To save typing, and minimise errors, our DFS has a novel feature whereby a "default" filename can be entered. Once this is done, the usage of a null filename will cause this previously entered filename to be used.
- Catalogues produced on the screen by our "Ultimate" DFS include extra information to say how many files are present within the catalogue, whether the catalogue is 31 or 62 files in size, how many tracks are on the disc, and whether the double stepping mode is active, etc.
- Due to the way that Acorn decided files should be stored, there is occasionally a need to "compact" the available spaces on the disc. As this can alter the contents of memory, we decided that it would be useful to implement a command that informs the user whether compaction is necessary, and if it will actually result in any significant gains.
- One standard requirement of a filing system is to be able to rename files. Acorn's simple DFS only allows for one named file to be changed to another named file. Our "Ultimate" DFS allows for groups of files to be renamed. For instance:

*RENAME *BERT* *FRED*

will take all the files that have BERT in their name, and change the BERT to FRED.

- The OPENOUT command on both versions of the Watford DFS has been improved so that it automatically selects the largest available space on the disc; thus minimising the frequency of the Can't extend error messages.
 - Both of our DFSs feature, as standard, the ability to make a normal 80 track disc drive read and write 40 track discs. This is normally accomplished by an expensive manual switching unit on the drives; our DFS does this as standard.
 - The software switching aspect of our DFS and DDFS is far more flexible than a standard switchable drive. The reason for this is quite simple: a switchable drive means that both sides of the disc are either 40 OR 80; you cannot have 40 track on one side and 80 track on the other side with a standard switchable disc drive. The Watford DFSs are fully independent, and thus far more powerful. With the DDFS, both the density and the 40/80 aspect are independent; thus offering incredible flexibility.
- There are many other features of the Watford DFS too numerous to mention, but all well documented in the excellent DFS manual sold separately.

WATFORD's SINGLE DENSITY DFS

This popular and widely acclaimed DFS has now been available for two years, and has gained a large following amongst serious users of the BBC Micro. Owners of Acorn's standard DFS can upgrade to our "Ultimate" DFS merely by replacing their DFS ROM. See below for the price of this upgrade.

PRICES

- Complete Disc Interface Kit incl. DFS ROM & fitting instructions **£79**
 - Acorn's DFS Kit complete **£75**
 - DFS Manual (Comprehensive) (no VAT) **£6.95**
- (P.S. Our comprehensive DFS Manual covers both Acorn & Watford DFSs)
- We will exchange your existing DFS ROM for Watford's Ultimate DFS ROM for only **£14**
 - Watford's DFS is exclusively available from Watford Electronics. Every ROM carries a special label with our LOGO and serial number.

WATFORD's DOUBLE DENSITY DFS

The DDFS from Watford Electronics represents a new standard in DFSs for the BBC micro. This is a double density version of our popular single density DFS, and combines all the features of this powerful DFS with the advantages of a system that gives 80% more storage per disc in double density mode. P.S. - Please note that not all DDFSs are capable of providing either the full 80% storage increase, or of allowing a file the full size of the disc - Ours allows both of these!

The Watford Electronics DDFS will operate with discs formatted in either single or double density: the density is automatically sensed on an access to the disc and this is then remembered for future accesses. The built-in formatter prompts for the density when a disc is formatted, allowing the user to select the density of his own discs.

The typical piece of games software these days is provided upon a protected disc. In order to work on any double density system (including the others on the market) a protected piece of software needs to make calls through the OSWORD & 7F routines. To ensure compatibility, the Watford DDFS features probably the most comprehensive and powerful 8271 emulation ever written for a double density system.

PRICES

- Complete DDFS Kit incl. fitting instructions **£85**
- DDFS Manual (no VAT) **£6.95**
- We will exchange your existing Single Density for our DDFS Unit at **£40**

Quality Disc Drives from Watford Electronics

To help you decide which drive is the most suitable for your needs (and your pocket!), we have produced the table below.

The first capacity given in the first column indicates the single density capacity. The double density storage capacity is second one, (that within the brackets). All disc Drive type numbers start with the prefix "C".

The tinting on some of the boxes is used to indicate which Drives are 40 track and which are 80 track. The 40 track ones are manufactured by EPSON, the world famous Japanese company, (non-tinted boxes). The 80 track drives are famous MITSUBISHI drives (tinted boxes).

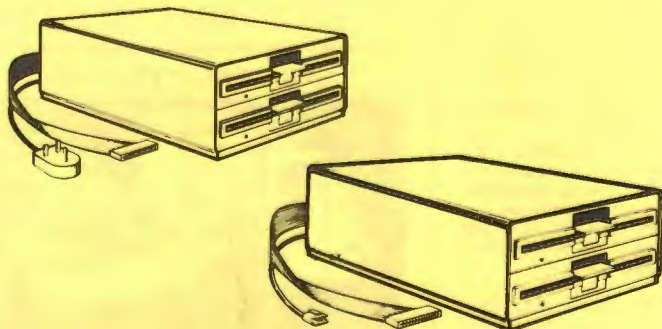
With two prices in a box (e.g. £295/£299), the first price is for the standard drive and the second for the same unit in switchable type. Users of either of the two Watford DFSs will not need switchable drives as their DFS will provide software switching for them. Users of Acorn's DFS will find that they need to pay the extra for switchable drives if they wish to use 40 track discs in an 80 track drive.

Both the EPSON and MITSUBISHI drives that we supply are fast (3ms track to track, 15ms settle), quiet and have a low power consumption (average well under 1 amp). Extensive experience of the usage of disc drives suggests that the MITSUBISHI and EPSON drives currently represent about the best in terms of speed, reliability and overall "elegance" available for the BBC Micro. Various other "manufacturers" of disc drives for the BBC micro (more accurately, "packagers" label other manufacturers drives with their own name). We buy the high quality Epson and Mitsubishi drives in large quantities directly from the manufacturers, package them and sell them at "dealer" prices direct to the public.

Names you can trust, at prices you can afford!

If you look around the popular BBC micro press, you will find that the prices we quote are, virtually without exception, some of the best around. These prices, coupled with the backup of one of the country's largest distributors of BBC peripherals provides a superb deal. STOP PRESS - SEE LATER FOR AN EVEN BETTER DEAL.

Unless you anticipate using dual drives in a fully expanded BBC system for long periods of time with little ventilation, then we suggest that our range of "CL" disc drives without the PSU (Power Supply Unit) would be quite adequate: extensive tests within our workshops have confirmed this. All disc drives advertised here will operate in double density mode with the appropriate interface and software.



Capacity	Drives without P.S.U.		Drives with P.S.U.	
	Single	Twin	Single	Twin
100K (180K)	CLS100 £85	—	CS100 £119	—
200K (360K)	CLS 200 £89	CLD200 £165	CS 200 £129	CD200 £194
400K (720K)	CLS 400 £120 CLS400S £130	CLD 400 £175	CS 400S £145	CD400 £200
800K (1.44M)	—	CLD800 £235 CLD 800S £265	—	£285 CD 800S

Prefix C = Cased Drive
L = Less PSU
S = Single
D = Double

Suffix S = 40/80 Switchable

e.g. CLS400S = Cased drive, Less power supply unit, Single 400K, Switchable (40/80 track).

FREE FREE FREE FREE

As an added bonus to customers of Watford Electronics who purchase disc drives from us; we are now including a special utilities disc **ABSOLUTELY FREE!**

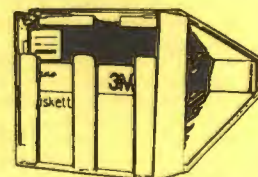
This disc contains a disc formatter and verifier (especially for those who own the Acorn DFS), Watford's popular "Centipede" like game called CRAWLER, a fascinating graphics program, a disc/high score data base index program and a special utility for "REMOVING" by software, ROMs from a machine; this feature is operative over a Break, providing that the workspace is not corrupted.

3M-5 $\frac{1}{4}$ " DISKETTES

Top quality 3M-SCOTCH Diskettes from Watford Electronics (Your 3M Appointed Distributors). All our discs carry a lifetime warranty. These discs are quiet in operation and insert positively with their reinforced hub rings. Boxes of 10 supplied complete with self stick disc labels and write protect tabs.

FREE FREE FREE FREE FREE

Watford Electronics are now the biggest single distributor of 3M's 5 $\frac{1}{4}$ " floppy discs throughout the UK. As a gesture of thanks, we are this month giving away absolutely **FREE** this Disc library case with every box of 10 discs purchased from us. (Offer valid until stocks last!)



DON'T SETTLE FOR LESS, BUY THE BEST

- 10 x S/S D/D 40 Track Diskettes **£13**
- 10 x D/S D/D 40 Track Diskettes **£18**
- 10 x S/S D/D 80 Track Diskettes **£22**
- 10 x D/S D/D 80 Track Diskettes **£24**

DISC ALBUMS

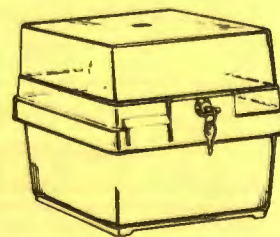
Attractively finished in beige leather-look vinyl, these conveniently store up to 20 Discs. Each Disc can easily be seen through the clear view pockets.

£4.25

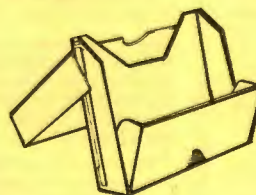
M35 holds up to 40 discs **£12**

LOCKABLE DISC STORAGE UNITS

Strong plastic case that afford real protection to your discs. The smoked top locks down. Dividers and adhesive title strips are supplied for efficient filing of discs.



M85 holds up to 95 discs **£15**



PLASTIC LIBRARY CASES

FOR 5 $\frac{1}{4}$ " DISC STORAGE holds 10 Discs.

£1.80

FLOPPY HEAD CLEANER KIT

The heads in floppy disc drives are precision made and very sensitive to dirt. Drive manufacturers recommend that you clean the heads approximately once a week. Unless your home or office is dust free, one of these Kits is a very sensible precaution against losing valuable data. A dirty head can destroy many discs before you realise the trouble. Very simple to use.

£9

DUST COVERS

(For our Disc Drives)

Single (without PSU) **£3.20** Twin (without PSU) **£3.85**
Single (with PSU) **£3.25** Twin (with PSU) **£3.90**

Continued



Impress your friends and business colleagues with the quality of your letters and printed material with Watford's very simple to use EPSON NLQ! (Near Letter Quality) ROM. Suitable for FX80, RX80, RX80F/T, FX100.

Look at the features:

- Simply type *NLQ80/100 and a single VDU code to use NLQ print.
- NLQ is then available without any modifications from BASIC, WORDWISE, VIEW (with NLQ DRIVER) or virtually any other program or language.
- Single codes select PROPORTIONAL type (yes even on the RX80); ENLARGED type; UNDERLINED type. These features can be used separately or in any combination.
- Full UK character set; Standard 'pica size'; Proportional spacing; Enlarged; Underlined; Normal type.

The NLQ ROM is supplied complete with comprehensive manual.

P.S. NLQ ROM is compatible with the Torch Z80 system and can be used from within the Perfect Writer software.

Only: £22

VIEW PRINTER DRIVER for NLQ ROM

This specially written printer driver has been designed to allow View access to the full features of our NLQ ROM. A must for all VIEW and NLQ ROM users.

£7.00

NEW LAUNCH

THE NLQ DESIGNER

The Kaga Taxan KP810 and KP910 are two superb printers, as our many thousands of satisfied customers would surely attest to. One of its particularly strong points is the NLQ option that it offers; perhaps one of the more weaker points is the effort required to design your own custom NLQ font.

Well the solution is here NOW in the shape of Watford's NLQ DESIGNER ROM! This powerful piece of software allows easy design and entry of a full NLQ font, with further fonts recallable from disc. Once a font has been programmed with the versatile NLQ DESIGNER, it can be saved to disc, downloaded to your Kaga (or Canon) printer, or even programmed into an EPROM (given the appropriate hardware) and then plugged directly into your printer so that it is available immediately when you turn it on.

A 40/80 track format disc containing plenty of example fonts, etc. is also included in the package.

(P.S. This ROM is not suitable for Epson printers as they don't normally have NLQ ability. Keep reading our adverts though - work is in development!)

SPECIAL INTRODUCTORY PRICES

NLQ DESIGNER & FONT DISC £25

INDIVIDUAL Preprogrammed FONT ROMS £15

(Please write in for further details on both the NLQ DESIGNER and the individual font ROMs available.)

DUMPOUT 3



A highly sophisticated screen dump ROM. This has to be the most flexible and powerful screen dump ROM yet produced for the BBC micro. It will put on paper anything you see on the screen, including all Mode 7 facilities etc. We have to admit that there is one facility that we cannot replicate - if anyone can supply flashing ink we would like to know! The ROM also provides window setting utilities and two new OSWORD calls that allow mode 7 graphics pixels to be read and plotted using the standard graphic co-ordinate system. The latest version includes a graphic dump trigger for dumping screens from games whilst they are running.

Two commands are used to operate the dump routines:
*GIMAGE - This provides a full graphics dump of any graphics mode, plus modes 7 and '8'. There are many optional parameters but you need only specify the parameters you wish to change.

Features available include:

- Vertical and horizontal scaling through all the graphic modes and mode 7
- Rotation of the image produced through 90, 180 and 270 degrees
- Left hand indentation setting
- Screen dump window definition
- Colour grey scaling
- Two tone fast dump
- Special colour mask
- Mode 7 contrast expansion
- Mode 7 contiguous dump
- Key triggered dumps
- User port switched dumps

What does the independent press say!

Practical Electronics, May 1985

"The Dump Out 3 ROM from Watford Electronics represents one of the most sophisticated types of printer dump utilities available for the BBC Micro . . ."

"an extremely sophisticated and powerful dump utility".

"VERDICT - Dump Out 3 ROM has all the facilities which you are ever likely to need for producing printer dumps. The facilities available work extremely well and if printer dumps are something which you require, then this ROM can be recommended to help you to get the best out of your dot matrix printer".

The Micro User Feb. 1985.

"Well, here is that winner!"

"provide(s) some rather sophisticated screen dumps. Producing high resolution paper copies of graphic screens in any (graphics) mode will be the major reason for buying this ROM, and this is where Dump Out 3 performs PAR EXCELLENCE". (Our capitals for their italics.)

"The versatility of *GIMAGE (the graphics dump command) when using these parameters is amazing. Pictures of almost any size, shape, contrast or distortion may be produced without the need for a reducing photocopier or trick photography".

"Without reservation I wholeheartedly recommend the Dump Out 3 ROM as the ultimate screen dump facility for the BBC micro. It is easy to use yet highly versatile, and caters for all BBC screen modes in multitone high resolution printing. Whole, partial, rotated and scaled screens may be dumped to almost any BBC compatible dot matrix printer (see our list at the end of this advert). At £24 it must represent excellent value for money and surely cannot be beaten".

Designed for use with the following printers: CP80, GP80/100/250, CANNON, STAR, KAGA/TAXAN, NEC, SHINWA CP80, GEMINI, EPSON MX/RX/FX, LPVII, NEC PC8023, DMP100/120/200/400, etc. etc.

Price including comprehensive manual

£24

P.S. Existing owners of Dump Out 2 may now upgrade to Dump Out 3. Please return BOTH the original ROM (with its label and serial number) and the manual to our "Upgrades Dept" with your remittance.

For a limited period only **£10.00**

VIEW

VIEWWORDPROCESSOR

We are supplying the new VIEW version 2.1 allowing printing of memory contents etc **£46**

HI-VIEW

A special version of VIEW designed for use with 6502 2nd Processor. Available on disc, it offers 47K of text memory.

£49

VIEWSHEET (Acomsoft)

£49

Watford's own Sophisticated VIEW PRINTER DRIVER for Epson FX80 & KAGA KP

Only £9

VIEW DRIVERS FOR JUKI & BROTHER PRINTERS

Only £8

VIEW/VIEWSHEET PRINTER DRIVER for SILVER REED

(Officially approved by Silver Reed)

A range of VIEW Printer drivers to complement the Silver Reed range of printers EXP400/500/550 & 770 EB 50 and converted typewriters EX43/44 55.

Only: £8

BEEB PRINTER ROM



This utility ROM is designed to simplify using all the facilities of your printer. It has many facilities:

- ★ Selection of printer modes such as underline, font and size is by 'Single Key' operations.
- ★ From Wordwise, a single number following OC will select a mode rather than a long and incomprehensible string of control codes. This makes using your printer with Wordwise much more convenient.

★ When using Basic (or other languages) you can have control over the formatting of the output to the printer in the style of a wordprocessor. You can define page top, bottom and side margins etc. with intelligent page skip for binders an option. All supported printers will now respond to form-feed etc. commands.

- ★ User defined characters are printed as you see them on the screen so that non-standard characters are automatically printed out correctly.
- ★ Commands select the options for the following printers:

GP100, STAR, NEC, MX/FX, KAGA, LP/VII/DMP100, DMP200.

Operates with either parallel or serial interfaces.

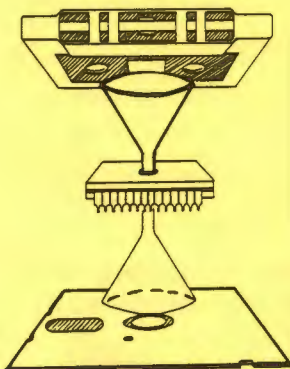
★ Supplied with a 50 page manual that is very comprehensive and easy to follow. Please specify printer type when ordering so that we can send the correct function key strip.

Price: £24



TRANSFEROM

(Tape to Disc Utility)



After months of top secret development, we are now able to supply details of this advanced and sophisticated utility ROM for the BBC micro. Just look at the features:

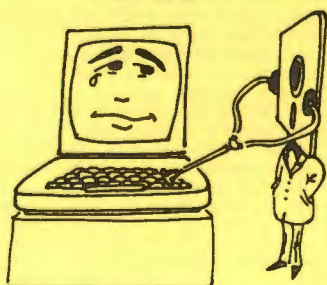
- Fully menu driven for ease of use
- Copies with locked programs
- Copies Elite
- Copies Aviator
- Copies very long adventure games
- Supplied with comprehensive manual

The single density DFS version of TRANSFEROM is available NOW, and the double density version is in preparation as YOU read this very advert.

TRANSFEROM takes your software on tape and saves them onto disc. TRANSFEROM does not stop when one disc is full; you just insert another disc in and carry on with that one! Surely this is the most valuable investment you could make if you have tape software that you wish to transfer to disc!

Introductory Price
£22.00

DIAGNOSTICS DISC



The BBC micro is a very complex machine and thus diagnosing a fault can be very difficult. Until now, the only way to discover the nature of a fault was either to find a competent friend with a large degree of patience or to find your nearest dealer and pay him to find out what is wrong.

At Watford Electronics, we realise how difficult it can be when faced with a problem, finding yourself a long way from your nearest dealer, or even just uncertain about your Beeb's health, but not wanting to waste time and money taking it to be looked at.

The solution to these problems is here now, in the form of the Watford's Diagnostics Disc. This excellent utility is specially designed to test out the following areas of your Beeb:

RAMs, ROMs, ULAs, Sound, Keyboard, Disc, RS423, ADC, User Port, Printer Port, Cassette, Joysticks, Speech, Disc Drives, 6502 and Z80 2nd Processors.

This utility is an invaluable aid for all those who take the reliability of their system seriously. A comprehensive manual provides full operating details and a list of possible causes and remedies for any faults that you may find along the way. The package also enables a permanent equipment and service record to be maintained.

Trial Price
Only £15.00

ROMAS THE CROSS ASSEMBLE AND MACRO EDITOR FOR SERIOUS PROGRAMMERS!



ROMAS is a carefully designed, sophisticated yet simple to use, development system for serious assembly language programmers. Using the BBC as the development system, you can choose your target system from the following processors:

6502, 65C02, Z80, 8085, 8041, 6809 and Z8

ROMAS features a powerful expression analyser, making complex table easy to generate. To aid in documentation, fully formatted assembly listings may be produced, with full symbol table output at the end.

ROMAS is provided with a powerful cross referencer to produce a listing of all the labels in a given "source" program; this makes it easy to check to see if you are about to duplicate a label.

The Macro Editor

Features of this powerful editor provided with the ROMAS package include:

- Works in all 40 and 80 column screen modes
- Fast load and save speeds
- Continuous line and column number displays
- Search, replace and move; all available in macros
- Command repetition

The ROMAS package includes two comprehensive manuals, providing detailed documentation and plenty of examples.

A give away at...
Only £45

Special Offer

Purchase a copy of ROMAS and our EPROM programmer (retail price £113.00), and we'll give you the very special price of:

£99.00! (£4 p&p)

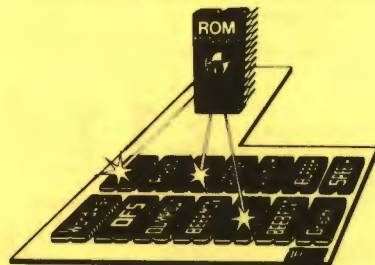
**Watch this space
DELSYS is COMING**

ADE

'Systems' complete program development package in a 16K ROM. Full assembling and debugging facilities provided. We are now supplying the new 6502 2nd processor compatible version.

SPECIAL OFFER ONLY £43

ROM MANAGER



'Provides comprehensive management of all your installed ROMs - BEEBUG Nov. '84'. This ROM is unique in its capabilities. It allows you, the user, full control over the BBC Micro's sideways ROM paging system with simple to use commands. This ROM is essential for those with several ROMs. At a simple level ROM MANAGER can be used to remove the problem of clashing command names and allow full use of all the facilities of your ROMs. This is coupled with facilities to completely enable or disable various ROMs in the machine including ROM manager itself.

ROM MANAGER can also be used to develop sideways ROMs using the machine's standard memory. This is achieved by sending sideways ROM calls to your code in RAM, saving the expense of fitting sideways RAM for ROM development purposes. ROM status reports are also given by the ROM, including ROM lengths, checksums, entry points supported and current filing system title.

The ROM also provides facilities to examine ROMs, list function keys for editing, modify RAM (using a HEX/ASCII editor) and list ROM titles neatly and concisely.

All selection between particular ROMs is by the name of the ROM and this may be abbreviated for convenience. ROM numbers can also be used if required. This ROM is very simple and obvious to use. All the facilities are explained in the clear and detailed manual.

Price £22

DISC EXECUTOR

Disc Executor is a sophisticated disc utility for the transfer of your programs from cassette to disc. It copes with 'locked' files and full length adventures (up to &6E blocks long) and programs that load below &E00. Disc Executor is simple to use and provides menus to prompt the user along the way. Disc Executor will cope with the vast majority of tapes. (Please note that Disc Executor is not compatible with double density disc interfaces - keep reading our adverts though!)

Price only £10

(Please specify whether 40 or 80 track disc when ordering)

ULTRACALC 2

The mark 2 version of the BBC Publications extremely popular electronic spreadsheet ROM. Features include: Simple communication with program, with many prompting messages; Full range of editing commands; Efficient memory usage, allowing large spreadsheets to be constructed; The handling of labels, as well as numbers, as values; Individual variations of the width of columns; Display available in all screen modes; Operates as HICALC on 6502 2nd processor giving 44k of workspace; Flexible printer controls.

Only: £66

Continued →

Nightingale Modem

Now Watford brings you PACE's NIGHTINGALE MODEM PACKAGE including the popular Commstar ROM software for the BBC Micro. Nightingale is considered to be by far the most versatile BT approved modem available at the price for the BBC Micro. It is ideal for home or business use. It offers Prestel/Viewdata baud rates (1200/75 & 75/1200) as well as 300/300 baud full duplex for communication between BBC and other computers, including bulletin boards. A bargain at our

SPECIAL INTRODUCTORY OFFER

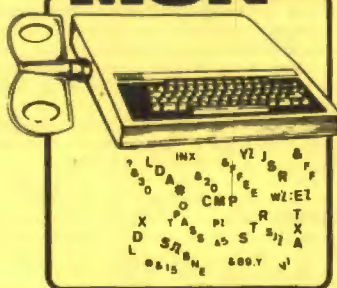
(Price includes
COMMSTAR ROM &
comprehensive manuals)

£119

Nightingale Modem without software
Only £99

COMMSTAR ROM package only £29
(P&P on modem £2.00)

BEEB MON



Watford's own Machine code Monitor ROM written by Andrew Bray (Cambridge), co-author of the BBC Micro Advance User Guide.

The most powerful and versatile machine code monitor ROM yet written for BBC Micro. It has all the normal memory editing, moving and relocating facilities, plus all editing is with a full screen editor allowing scrolling up and down memory, entering in Hex, ASCII or standard assembler mnemonics. In use as a debugging tool, you run code under a total emulation system. Ever felt a desperate urge to set a break point in ROM? No problem - you can even have breakpoint on reading or writing locations in memory and on register contents. The system fully supports debugging of sideways ROMs e.g. BASIC can fully and easily be run from within Beebmon and from there DFS and other sideways ROMs can be used in total emulation mode. Beebmon can even run itself. In so doing you can nest Beebmon up to a level limited only by the memory size. Beebmon uses 256 bytes of workspace, located anywhere in memory, even on the 1MHz 8us. Beebmon effectively uses no zero page workspace, so your program (e.g. BASIC) can use any or all of the base page. How does it achieve this? By providing a 6502 interpreter all programs running under it exist in a virtual BBC, so special memory locations like the ROM latch are not actually accessed by your programs, instead they alter a location in Beebmon's workspace. Emulation also allows immediate return to Beebmon command level by ctrl-escape no matter what code is being executed at the time. All this exceptional power and flexibility is complemented by a clear and detailed manual included in a value for money price of:

£24

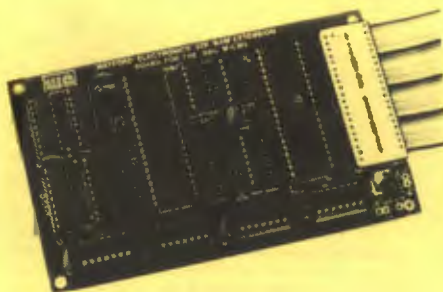
DISASSEMBLER ROM

Discover the hidden secrets of BASIC and the OPERATING SYSTEM with this easy to use programmers tool.

ONLY £18

Please write in for technical details.

32K RAM EXPANSION BOARD



Now Watford Electronics brings you the latest state-of-the-art MEMORY EXPANSION BOARD for your BBC microcomputer. It's ribbon cable simply plugs into your micro's 6502 processor socket. This compact board which fits inside the computer doesn't just give you 16k or even 20k of extra RAM, but a massive 32K!!!

There are many more useful facilities available with this board:

- The top 20K of the expansion RAM can be used as the screen display memory, leaving all the standard BBC RAM free for programs or data storage. This allows good graphics and long programs to be combined. For instance you could have MODE 0/1/2 GRAPHICS AND 28K OF PROGRAM SPACE. The extra memory can be used by virtually any language or utility such as BASIC, VIEW, WORDWISE (1.20+), WORDWISE-PLUS, etc. and NOW COMPATIBLE with Beebug's TOOLKIT.
- The FULL 32K or the bottom 12K of the expansion RAM can be used as a PRINTER buffer for SERIAL PARALLEL printers, sound channels, RS423, keyboard or speech synthesiser. This allows very long text files to be printed while you are using 28K of program and 20K of graphics! THE BUFFER IS UNIQUE because it replaces one of the BBC Micro's buffers so all the buffer options are available on it. eg. *FX15,21, 138, 145, ADVAL(-no.) etc.
- This board is the IDEAL COMPLEMENT to any WORD PROCESSING system, disc or cassette based. There is no need to wait for slow printers as you can type in long text in 80 column display mode while printing is going on - TWO JOBS DONE SIMULTANEOUSLY!!! (an equivalent printer buffer would cost you £120 +).
- Unlike our competitors, the board is compatible with a vast range of software and hardware available for the BBC microcomputer, including our ROM expansion boards, double density DFS units, and the ATPL ROM extension board. This is because our board is connected to the computer by means of a ribbon cable without soldering. It can either be left in the micro or stuck to the lid with the 4 self adhesive feet supplied.
- The board comes with a comprehensive manual and ROM based software with a large range of commands for machine code and BASIC users, including many *HELP messages.
- Now the ROM has had a HOST of utilities added to the large number already provided and has been made even easier to install.

Only: £65

GRAPH PAD

With this popular British Micro's Graph-pad, you can add new dimensions to your computer enjoyment. It helps you to create your own application programs by the simple use of the Graphpad. Ideal for Educational use. Supplied complete with Cables, Manual and a two program cassettes.

SPECIAL OFFER £86

BEEBFONT ROM

BEEBFONT is a remarkable and different concept in BBC software supplied on a 16K ROM. It allows you to display text on the screen in 13 different styles:

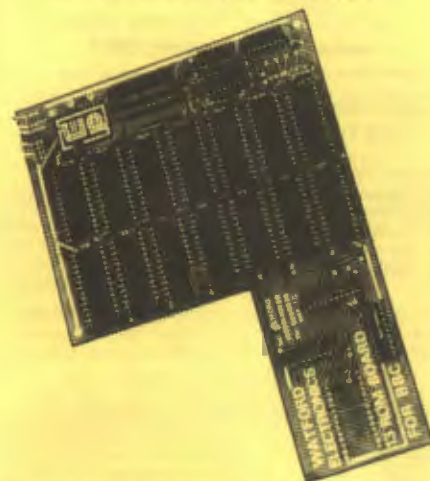
It works in modes 0, 1, 2 and 4 using the full colour capabilities of each mode. Characters are printed in the same way as normal. Selection between the various fonts is very easily achieved with Ctrl-V - press this followed by a font number and the output will continue in the new font. Beebfont ROM is particularly useful in display work with the characters produced at twice the normal size.

You can create your own character fonts with the editor supplied. You can also print-out pre-formatted text files using the special characters with Epson FX, RX and NEC printers. The full range of character styles can be used, controlled from within the text. The editor and spooler program are supplied with the package, on cassette or disc. The spooler allows word processor (Wordwise & View) output to be printed in the new characters.

A twenty page manual is supplied. Please state printer type and media for the editor & spooler when ordering (cassette, 40 or 80 track disc).

ONLY £32

Mk-2 13 ROM SOCKET EXPANSION BOARD



Now all lines fully buffered - On board battery back-up facility - will now accept EPROMS 2716, 2732, 2764 & 27128 and ROMs 6116 & 6264.

Simply plugs into one of the four ROM sockets currently available in BBC Micro. There are only 5 solder connections to be made. Full instructions are supplied. Unlike other ROM Boards, this board has been ergonomically designed to enable the user, easy further expansion inside the Micro, e.g. Double Density Board, Torch Board, RAM Card, etc., without any clash. (At Watford, we think ahead). Our Mk2 13 ROM Socket Board enables the User to increase the sideways ROM capacity from the basic 4 sockets upto full 16 capable of being supported by current operating systems. In addition the board is designed with the facility to hold upto 16K RAM, which when switched into operation is automatically selected by any WRITE signal to the Sideways ROM area. This gives the User the ability to write a utility or language and upon pressing break have the utility or language up and running (new ROM software can be developed and tested in situ.)

The Board gives the User, plenty of freedom to explore the possibilities of the new paged ROMs due in the coming months and offers them the chance to develop their own.

All lines are fully buffered and the board meets or exceeds all timings for operation in the BBC Microcomputer.

Supplied ready-built and tested complete with fitting instructions.

Only £30

PCB NI-CAD Battery for ROM Boards.

£2.75

COMPUTER CONCEPT'S ROMS

CARETAKER Basic Utility	£28
Graphics ROM	£28
Disc Doctor ROM	£28
TERMI	£27
COMMUNICATOR	£58

Wordwise

Without doubt a very sophisticated piece of software for the BBC Micro. It has all the features of a professional word processor yet is easy to use.

SPECIAL OFFER THIS MONTH: £32

WORDWISE PLUS

Now available from stock **£47**

WORDWISE PLUS UPGRADES

Existing users of Wordwise can upgrade to WORDWISE + for £17. Please return the old WORDWISE package complete with Chip and MANUAL with your remittance and we will send you the new WORDWISE + package.

£17

SIDEWAYS ZIF SOCKET



Now Watford Electronics brings you a ROM board for small budgets or for those of you who do not wish to open up your Micro frequently. It allows you to change ROMs quickly and efficiently with the minimum of effort – no screws to loosen or keyboard to remove. The unit consists mainly of a zero insertion force (ZIF) socket on a small circuit board which is located into the position of the 'ROM Cartridge' and is connected to one of the internal ROM sockets via a ribbon cable.

● Very simple to install. **NO SOLDERING REQUIRED.** The ZIF eliminates the possibility of damage to your ROM pins when inserting and extracting them.

● The low profile of the socket allows unrestricted access to the keyboard, unlike other cartridge systems. In addition, there are no costly extras, such as ROM cartridges for every new ROM.

● All data and address lines are correctly terminated to ensure correct operation of suitable ROMs with the BBC micro. We also supply a purpose designed see-through storage container with anti-static lining, allowing you to store up to 12 ROMs, protecting them from mechanical and static damage.

● This versatile hardware solves the problem of running out of socket space, simply unplug the ROM and plug in a different one. It is a real must for Professionals and Hobbyists alike.

ONLY £18

THE AMX MOUSE

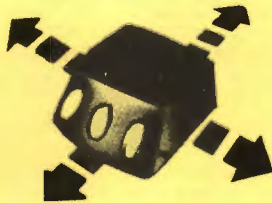
'The program is simplicity itself and the user manual is virtually redundant' . . . Micro User Jan. 85.

Bring into your home or office the last word in user friendly input devices for the Beeb. The AMX MOUSE that won the hearts and the minds of thousands of visitors at the Show has arrived at Watford Electronics at a very special price!

Using simple icons, and small movements of the mouse on a work surface, you can select any one of the functions from the pull down menus. The mouse will operate from within Wordwise, View and many other software packages. The three buttons built in to the mouse are user programmable for many extra functions.

The package consists of the mouse, the advanced controlling software in ROM and a disc containing the icon designer and the AMX ART software.

To summarise this superb product a comment passed by a very senior authority on BBC micro at the last Micro User Show was, 'My only criticism of the product is that, IT'S TOO CHEAP!'



OUR SPECIAL PRICE

ONLY: £68.50

FREE FREE FREE

This month we are giving away the sophisticated COLOUR ART package absolutely FREE with every purchase of the AMX Mouse from Watford.

COLOUR ART!

As seen at the Micro User Show

Watford Electronics has long been a source of innovation in the BBC field; e.g., we were the first to market a ROM board. Well now We've done it again!

The AMX Mouse is, as we are sure you already know, a very easy to use and powerful drawing package. Throughout the country, there is no single bigger distributor of this excellent package than Watford Electronics. To celebrate this fact, we are, during this month only, including FREE with every AMX Mouse package purchased from us the superb piece of software called COLOUR ART.

This novel program allows you to add COLOUR to any drawing produced with your AMX Mouse package, and really bring those pictures alive. Not with just any colours, mind you, but a full range from up to 255 different shades! It's simplicity itself to use this "painting by numbers" painter to create simple, striking and powerful images to please the eye.

Price **£13**

NEW

16K DISC RAM

This is the RAM you've been waiting for!! This battery backed up, write protectable 16K sideways RAM board allows you to run from disk every sideways ROM available. Beware of other sideways RAM boards which are not backed up as certain ROMs will not run in these boards even though the RAM can be write protected. The Battery Backup facility allows retention of DATA after power off. On switch on the Micro will think the WATFORD DISC RAM is a ROM. Features available are:

- No soldering or modifications to BBC micro necessary.
- Plugs into normal ROM socket fitting neatly under the keyboard allowing room for other add-ons.
- Easy to use. Comes with disk based software to SAVE and LOAD ROMs. Allows you to make backup copies of your ROMs.
- Disk software can be copied onto other discs when disc is full.
- All existing ROMs can be stored on disk and used in DISC RAM.
- No messy plugging and unplugging of your ROMs. Simply Load the one you want into DISC RAM.
- Ideal for Professional users to develop ROMs. Backup facility allows testing of final versions without using EPROMs.
- The switch provided allows backup and write protection to be switched off externally.
- Can also be used as 16K printer buffer RAM.

New Low Price: £35

P.S. 16K DISC RAM Board is not designed to work in conjunction with a Sideways ROM Board.

Versatile BEEB SPEECH SYNTHESISER Unit



SIMPLY the best! – An unlimited speech synthesis system. Complete with easy-to-follow manual. Controlling software is in ROM so no Cassette Loading problems!

PHONEMES for word synthesis – That means unlimited vocabulary! No extra speech dictionary chips to buy!

BUILT-in Library of approximately 500 words to get you started.

ENGLISH accent – Utilises inflexion techniques to produce highly comprehensible speech.

EASY to use system – Just plug the software ROM into a socket, the Speech unit into the User Port, and away you go! No specialised 'dealer upgrade' required!

COMPACT unit – The whole system is built into a small case – easily tucked behind the computer. Auxillary output socket provided for direct connection to an external amplifier.

HOURS of fun! – Suitable for any application – Games, Educational Programs, Specialised Packages.

We know this all seems to good to be true but **DON'T BE LEFT SPEECHLESS!** Order your Versatile Speech Unit now!

SPECIAL OFFER £35

Continued →

BOOKS (No VAT on Books)

30 Hour BASIC (BBC Micro)	£6.95
35 Education Programs for BBC	£6.95
40 Educational Programs for BBC	£5.95
100 Programs for BBC Micro	£6.95
6502 Application Book	£12.50
6502 Assembly Language Program	£13.95
6502 Assembly Language Subroutines	£17.50
6502 Machine Code for Beginners	£5.95
6502 Machine code for Humans	£7.95
A young persons guide to BBC Basic	£4.50
Advanced Machine Code Technique for BBC	£7.95
Advanced Programming for the BBC Micro	£6.95
Advanced User Guide for BBC Micro	£11.95
Advanced Graphics with BBC	£9.95
Advanced 6502 Programming	£12.45
Assembly Language Programming on BBC Micro	£7.95
Advanced Programming Techniques for the BBC Micro	£7.95
BBC BASIC for Beginners	£7.95
BBC BASIC	£5.95
BBC DIY Robotics & Sensors	£6.95
BBC Forth	£7.50
BBC MICRO add on guide	£6.95
BBC Micro An Expert Guide	£6.95
BBC Micro Book BASIC Sound & Graphics	£7.95
BBC Micro Graphics and Sound	£6.95
BBC Micro Programs in Basic	£5.95
BBC Micro ROM PAGING System Explained	£2.00
BBC Micro Revealed	£6.95
BBC Micro Disc Companion	£7.95
BBC Micro in Education	£6.50
Basic Programming on BBC Micro	£5.95
BBC Software Projects	£5.95
Brain teasers for BBC micro	£5.95
CP/M Handbook with MPM	£11.95
CP/M The software BUS	£8.95
Creating Adventure Programs on BBC Micros	£6.95
Creative Animation & Graphics	£7.95
Creative graphics on BBC Micro	£7.50
Complete Programmer for BBC	£5.95
DISC FILING SYSTEM (DFS) Operating Manual for BBC	£6.95
Discover BBC Machine Code	£6.95
Discover FORTH	£13.95
DIY Robotics & Sensors with BBC	£6.95
Easy Programming for the BBC Micro	£5.95
Exploring FORTH	£6.95
Further Prog. for BBC Micro	£5.95
FORTH on the BBC Micro	£7.95
Forth Programming	£14.40
Functional Forth for the BBC Micro	£5.95
Games BBC Computer Can Play	£6.95
Getting more from your BBC & Electron	£6.95
Graphs & Charts on BBC Micro	£7.50
Graphic Art for BBC Computer	£5.95
Handbook of Procedure & Functions for the BBC Micro	£6.95
Introducing the BBC Micro	£5.95
Introducing LOGO	£5.95
Introduction to PASCAL	£14.95
Let your BBC teach u to program	£6.45
LISP	£9.25
LISP Cassette	£15.50
Logo Programming	£8.95
Mysteries of DISC DRIVES and DFS REVEALED	£5.95
Mastering CP/M	£13.65
Programming the 6502	£11.95
Programming the BBC micro	£6.95
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It describes in detail how to obtain the maximum in graphics capability from your printer and includes full indexes allowing you to cross index the numerous commands. Every command is explained in detail, with an accompanying BBC Basic program and an example of its use from Wordwise.

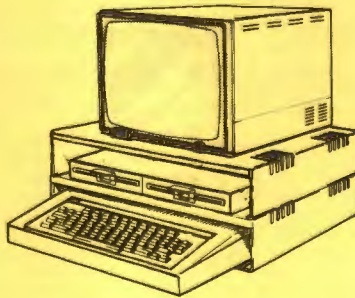
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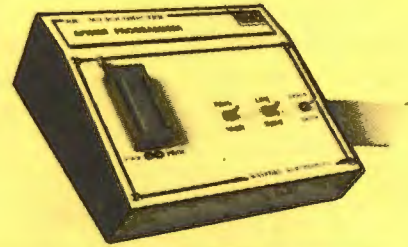
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Protect your computer from the weight and heat of your monitor. The BBC micro plinths have slots for maximum ventilation. The single plinth is suitable for a BBC and monitor, whilst the double height version provides enough room for our stacked or side-by-side dual disc drives or TORCH Disc pack, to be placed in the centre section. If you use our stacked drives, the remaining space can be used for further peripherals e.g. Speech Synthesizer, EPROM programmer or simply stationery. The computer slides neatly in to the lower section allowing easy access to remove the lid. The printer plinth is equally sturdy but without the cooling slots. It allows for access to the paper from the front as well as from the rear, (a facility not often thought of in similar products) if the paper is located beneath the plinth. This is a very convenient way to work especially if your work area is not deep enough to take the printer and paper separately.

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DOUBLE BBC PLINTH	£19 (carr. £2.00)
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SOFTWARE PACKAGE

The software is supplied on an EPROM which plugs into the Micro and is instantly available with a single command (no time wasting as on Cassette/disc loading). It is a fully purpose designed and integrated package to simplify ROM development. The system is menu driven with many prompts to avoid any accidents.

Software facilities include:

Load File - Save File - Down Load EPROM - Program EPROM - Verify - Blank Check - Editing of memory contents prior to programming.

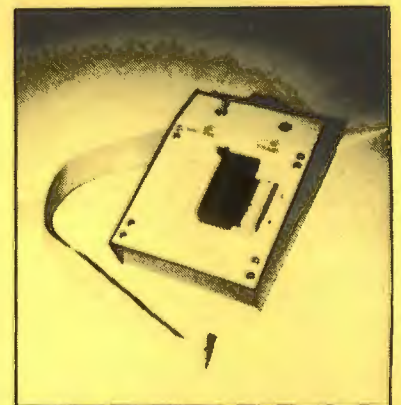
Also included is an automatic system to allow Basic programs to be put in EPROM and accessed through the *ROM filing system. More than one program may be put in an EPROM. All these facilities and more are explained in the comprehensive and clear 15 page manual.

SPECIAL OFFER £69

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The Attache carrying case is attractively finished in mottled antique brown leatherette. The case is made of tough plywood, providing a very solid and safe way to carry your BBC micro. There is room provided to fit all the leads necessary behind the computer and manuals in the front. Locks supplied with two keys. Price **£11** (£2 carr.)

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DISC DRIVE POWER LEADS

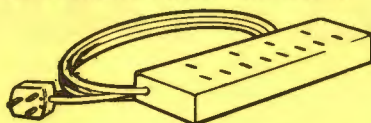
Supply from BBC power supply to standard Disc Drive connector.

Single **£3.00** Dual **£3.75**

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EPROMs need careful treatment if they are to survive their expected lifetime. Over erasure of EPROMs very rapidly turns them into ROMs! The TEX erasers operate following the manufacturers specifications to give the maximum possible working life by not erasing too fast. We use these erasers for all our own erasing work.

- ERASER EB - Standard version erases up to 16 chips. **£28**
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