

Launch your  
BBC micro  
with the Torch  
Z80 disc pack.



If you already have a BBC Model B microcomputer, you will have discovered that the machine is not a toy. But neither is it suitable as a business machine, or for serious programming. What it lacks is the ability to store and process data – at the speeds and in the quantities that only floppy discs can provide.

The ideal answer is the TORCH Z80 DISC PACK. The twin discs can store up to 800K of data and programs, while a Z80A processor board provides an extra 64K of Random Access Memory (RAM). Because a CP/M\* compatible operating system is built into the hardware, an enormous range of standard software becomes available.

For the business user, this means immediate access to sophisticated word processing, financial and accounting packages. For the programmer who has outgrown BASIC (the language supplied with the BBC machine), the TORCH DISC PACK can cope with the more powerful, compact and specialised languages – such as Pascal, C, BCPL, FORTRAN, LISP – even COBOL.

The advanced design of the Disc Pack hardware gives still more advantages. The operating system is based in Read Only Memory (ROM), providing nearly all the extra RAM (63K) for programming use –conventional CP/M\* systems often give only 53K. There are no "system tracks" required on a disc, and re-initialisation takes less than a second. Disc access is dramatically enhanced, because the 6502 peripheral processor captures complete tracks of information at a time.

The TORCH DISC PACK comes complete with a disc containing useful programs. They include a full disc function test, print-out, a character redefinition program, a file structure checking program, a music generator, a Z80 monitor and a number of impressive demonstration programs.



Abberley House, Great Shelford, Cambridge CB2 5LQ,  
Telephone: (0223) 841000 Telex: 818841 TORCH G

## Technical Information

### CPU and Memory

Z80A processor running at 4 MHz  
16K ROM containing TORCH CPN operating system  
64K RAM (giving total of 96K RAM)  
Peripherals handled by 6502 operating simultaneously with Z80A

### Disc Drives

Twin double-sided, double track density 5<sup>1</sup>/<sub>4</sub>" floppy drives, each with a capacity of 400K Bytes. Because the Operating System is in fast ROM, no 'system tracks' are required. 6502 allows complete tracks to be cached', speeding up file access considerably.

### Integral Power Supply

Switch mode, 240/110V, 50 or 60 Hz. The integral power supply reliably powers both the disc pack and the BBC microcomputer.

### System Commands (ROM-based, 'built in')

B change the background screen colour  
BASIC enter the ROM resident BBC BASIC  
COMMAND submit a file  
COPY one or more files, more friendly than 'PIP'  
DELETE erases a file or set of files  
DIR (Directory), optionally giving size and protection status  
DUPLICATE a disc for backup purposes  
F Changes the background screen colour  
FORMAT for 'clearing' a new or used disc  
HELP gives an onscreen list of commands  
INPUT to a file from the keyboard  
KEY to set up 'soft' function keys  
MODE selects the screen format  
PRINT copies files directly to the printer  
RENAME files – including groups of filenames  
TYPE copies files to the screen  
USER selects a user number  
PROTECT protects files from accidental erasure  
VDU establishes 'windows' and scroll areas  
VIEW displays picture files

### Utilities (Supplied on the system disc)

POKEDISC disc examination utility  
FONT 'Soft' character generator for defining new characters or symbols  
SNAKE game using colour and speech  
SUPER VDU a set of high-level graphics features  
TORCHBUG simple Z80 monitor/patcher  
RDACORN/WRTACORN Acorn DFS to/from CPN conversion  
And many others.

Dealer