



GOLDEN OLDIES

The Atari 810 disk drive has been on the market for some time now and many of its features are outdated. The storage capacity is limited and the speed of operation is also comparatively slow. However, it does have a comprehensive range of disk commands. Explanations of the most frequently used commands and routines are documented here.

When the Atari 400 and 800 computers were launched they were arguably the first designed specifically for home use. Atari almost immediately produced the 810 single disk drive system to augment the capabilities of the computers, but because of the high cost of each drive (now £299), the system has not proved popular. However, with the advent of the compatible Atari 600, it is worth looking afresh at the 810 disk drive.

The 810 uses single-sided, single density 5¼in floppy disks. It is connected to the computer via the special parallel I/O port. Up to four 810s can be 'daisy-chained' one to another, numbered 1 to 4 according to the settings of a drive code switch on the rear of each drive. Although the 810 contains its own microprocessor it cannot be considered a true intelligent drive, as part of Atari DOS II, the Disk Operating System currently supplied, must be loaded into RAM before the drive can be accessed. DOS takes up approximately five Kbytes of user RAM, leaving barely eight Kbytes of RAM free on 16-Kbyte machines such as the 600. However, in the near future, 48-Kbyte RAM boards will be available for the 600 to increase the RAM to 64 Kbytes.

Atari DOS is supplied with the disk drive on a master disk and consists of three separate but associated files. These are: DOS.SYS, which contains the File Management System (FMS) and the command instructions resident in RAM while in use; DUP.SYS, a disk utility file that holds the DOS menu and some DOS command instructions; and AUTORUN.SYS, which contains a file that on command is automatically loaded into RAM and executed to call the DOS menu and RAM-resident portions of the DOS.

To access DOS with the BASIC cartridge inserted, the drive must be switched on before the computer is powered up and the master disk is inserted. Switching the computer on then 'boots'—or more specifically loads—part of DOS.SYS into RAM. To call the 15-option DOS menu you have to type DOS (RETURN). If no cartridge is inserted, the DOS menu is called automatically from boot.

The DOS menu provides 15 disk management

command options selected with the letters A to O. The menu system offers a simple method of disk management but it has a major drawback in that it overwrites a portion of user memory, destroying any program or data currently stored. This means that a program being edited or written must be saved to disk before calling the menu and re-loaded on completion of menu options. DOS has a facility by which this can be carried out automatically if required, but this still seems a clumsy arrangement.

DOS includes an automatic verification of data stored with every write command, which limits the data transfer rate to 2.4 Kbytes per second. If greater speed is required, the automatic

The Atari 810

The greatest drawbacks of the Atari 810 are its serial interface, which makes the drive rather slow in operation, and its limited storage capacity of 88 Kbytes per disk. A rather sophisticated disk operating system, however, does help to counter these shortcomings

