WHEELS OF FIRE

With the Dragon DOS, which Dragon Data supplies with its disk drives, the company has maintained its policy of providing easyto-use commands, couched in Microsoft Advanced Color BASIC. Up to four drives can be connected to the Dragon 32 or 64 via the parallel interface cartridge supplied, which also contains the DOS in ROM form.

Dragon drives use $5^{1}/_{4in}$, single-density disks. These are magnetically formed, on command, with 40 tracks, divided into 18 sectors, each containing storage space of 256 bytes. This gives a total storage capacity per disk of $40 \times 18 \times 256 =$ 184,320 bytes or 180 Kbytes. The DOS requires part of the storage space for file identification, disk management and the directory leaving about 175 Kbytes of formatted space.

The directory is a list of all files contained on a disk. On command it displays the file names, file types, the number of bytes in the file and the number of bytes free. Four types of file are possible: BASIC program, data, binary and backup. The type of file stored is indicated by appending .BAS, .DAT, .BIN and .BAK, respectively, to the relevant file names. The Dragon DOS does not

mention how the files on a disk are distributed in memory and accessed, but as there is no command to close up free space on a disk there is probably a form of BAM (Block Availability Map).

Strangely, the Dragon DOS has no means of accessing data randomly, a byte at a time. This is a useful facility for a program that needs to read small amounts of data frequently — a database, for instance. Instead, the DOS uses what it calls 'simulated random access', which appears to do the same thing except that a few extra lines of BASIC code are required to implement it. The way Dragon DOS is implemented complements BASIC extremely well.

A relatively high purchase price and small storage capacity make this disk system only average value for money. Perhaps conscious of this, Dragon Data plans to increase its range of drives to include 80-track double-sided, doubledensity drives at reasonable cost. For the Dragon 64 an optional RAM-resident operating system, booted from disk, is being introduced. Called 0S9, this takes a hefty 16 Kbytes of RAM but provides an advanced 6809 operating system that includes an exceptionally powerful DOS and has PASCAL, c, COBOL and 09 structured BASIC available on separate disks.



Language Options

Dragon's first batch of disk software runs under the OS9 operating system and includes advanced computer languages such as PASCAL and the C compiler shown here



Sophisticated Package DS9 also enables you to run sophisticated business software. This word processing package includes a spelling checker with a 42,000 word dictionary and the ability to produce 'mailshot'-style etters

Driving Power

The Dragon disk drives come in a single cabinet with its own built-in power supply and room for two drives. A ribbon cable connects this to an interface cartridge which then plugs into the Dragon. The disks work with Dragon's own operating system or the more expensive and professional OS9 software range. Each disk has room for 175K of data

104 THE HOME COMPUTER ADVANCED COURSE