# Dragon 32

# A Welsh computer boasting a new chip and a set of sophisticated graphics

Dragon Data, as the name and logo suggest, is a Welsh company, backed by investors such as the Welsh Development Agency and the Prudential Group but originally founded by toymakers Mettov.

The Dragon 32 was introduced for Christmas 1982 and achieved instant success because of its full 32 Kbytes of RAM and its Microsoft BASIC interpreter.

The Dragon 32 is highly compatible with the Tandy Color Computer: it is possible to use Tandy add-ons and some game cartridges, but not the cassettes. The two machines use the same microprocessor, the Motorola 6809E (see box), where most home computers favour the 6502 or Z80.

A set of sophisticated graphics commands gives greater control than that offered by many machines with better maximum resolution. Examples of such commands are: DRAW, CIRCLE, PAINT, COLOUR and MOVE.

The Dragon can only play one note at a time, as distinct from computers with more than one 'voice', which can generate chords. But the BASIC commands available make it far easier than on most machines to produce a recognisable tune.

Though well-endowed with interfaces, there are few expansion devices for the Dragon 32 apart from joysticks.

The upgraded version of the Dragon incorporates 64 Kbytes of RAM, and thus offers the user the possibility of small business applications, putting the Dragon into competition with machines such as the Commodore 64.



### **Dragon Disk Drive**

This unit comes in two parts: a disk controller card that plugs into the Dragon's cartridge slot, and the main box, which contains one disk drive and costs £275

#### Keyboard

The Dragon 32 has a typewriter-style keyboard.

The cursor movement keys for up/down and left/right are inconveniently situated at opposite ends of the keyboard. The BREAK key interrupts the operation of a program and CLEAR wipes the screen.

Although the design suggests that a small television might be placed on top of the casing, this is not recommended



Pressing this has the same effect as switching the computer off and on again but results in less wear on the power supply

#### **Cassette Port**

An ordinary cassette recorder can be plugged in here, and Dragon 32 BASIC allows control of the cassette's motor

two joysticks for playing games

#### **Printer Port**

A standard eight-bit parallel interface allows the Dragon 32 to work with most makes of printer

#### Video Controller

signals required by a television or monitor screen from the characters and graphic symbols stored in memory

#### RF Modulator

Converts the video signals to a form suitable for input to the aerial socket of a television set

#### Video Interface

Separate red, green and plue signals are provided here for criving the appropriate monitor This system yields the best quality results

## Interface Chips

Two 6821 Peripheral Interface Adaptors (PIAs) handle all the necessary conversion of signals from the CPU to the keyboard, cassette recorder and external devices such as the printer

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