

Epson HX-20

Not only can this 'lap-held' machine be carried anywhere — it can be used for your office work while you're travelling

The Epson HX-20 was the first genuinely portable computer. As it is fully programmable in BASIC it makes possible far more applications than the most sophisticated calculators. Yet a self-contained design and total weight of less than two kilograms means that it can be carried in a briefcase.

Much larger machines that had hitherto been sold as 'portables' were rapidly christened 'luggable' by the trade. The HX-20 has sold across the whole spectrum of microcomputer users: home enthusiasts, businessmen and engineers.

Because the HX-20 is not based on a standard design but is completely new, there is still relatively little software available. However, it is an ideal machine for learning to program BASIC. Often, the purchaser's intention is to write a program that will perform a specific (perhaps unusual) application: an estimation program for insurance salesmen, a navigational aid for yachtsmen, and a note-taker for journalists — all have been devised for the Epson.

The unit comes with a liquid crystal display that can handle up to four lines of 20 characters, or simple graphics up to a resolution of 120 x 32. In most applications, this display acts as a 'window'

that can be moved by the cursor keys (marked with arrows) to show any section of a much larger text area handled by the computer.

The built-in printer mechanism uses ordinary paper on a five centimetre (two inch) wide roll, on which it can print up to 24 columns of text.

The microcassette drive is an optional extra but is usually shown as if built in because most people require it. The space it occupies can be used for solid-state cartridge software, though none has yet been produced. The microcassette is superior to a domestic cassette recorder. The computer can sense the position of the tape, and it moves automatically 'fast forward' to find the required program or piece of data.

The range of interfaces on the back and side of the casing reflects the diversity of intended applications; there is even a socket for a bar code reader pen (see page 40). The 16 Kbytes of RAM can be expanded to 32 Kbytes, using an add-on pack on the side.

Inexpensive hardware and software are available to enable the HX-20 to communicate over the telephone line — either to a like machine or to a mainframe computer to gain access to central information.



CHRIS STEVENS

Epson HX-20 Keyboard

It is the full typewriter-sized keyboard that really determines the dimensions of the HX-20. Though the 'feel' of the keys is somewhat different from a normal typewriter, it is well-liked by touch typists.

In addition to the numerals along the top row of keys, pressing 'NUM' converts the keys U, I, O, J, K, L, M into a numerical keypad. This is faster for entering large amounts of numerical data.

Cursor movement and other editing keys are found at the top right, together with a SCRNY key for scrolling the small screen up and down.

The five programmable function keys (PF1 to PF5) are physically different from the other keys and two of them double up to control the microcassette, and to copy the contents of the screen on to the printer.