



In-House Printing

Small dot-matrix or type-roller printers have formed an integral part of cash registers — and even calculators — for quite some time, and Epson, who started life as printer manufacturers, were quick to incorporate the idea into their HX-20 portable. This dot-matrix printer is capable of graphics as well as character output



Power Socket

With the transformer connected the HX-20 will draw its power from the mains and recharge its internal batteries.

Bar Code Connector

A reader pen can be connected here for reading the bar codes now found in many shops

Cassette Port

Works with a domestic cassette recorder and includes control over the motor. Performance, however, is not as efficient as with the microcassette

Reset Button

Printed Circuit Board

In our illustration, the PCB has been turned upside-down for clarity. The chips normally face the underneath of the computer and removable doors in the bottom of the case mean that the important chips can be exchanged without dismantling the entire unit

Microprocessors

Two 6301 microprocessors (manufactured by Epson) control the computer and its interfaces. Unusually, each has 4 Kbytes of ROM and 128 bytes of RAM built-in, in addition to the external chips

RAM

The HX-20 comes with 46 Kbytes of RAM as standard, configured as eight 2 Kbyte chips



Mass Storage

The HX-20's built-in microcassette recorder, built around the sort of cassette tapes used in pocket dictating machines, is a significant advance over ordinary cassette recorders because the computer controls the 'fast wind' function. The time taken to get to a specified point on the tape is therefore drastically reduced. Another advantage is that the unit plugs straight into a reserved space in the casing — there are no leads to get in the way