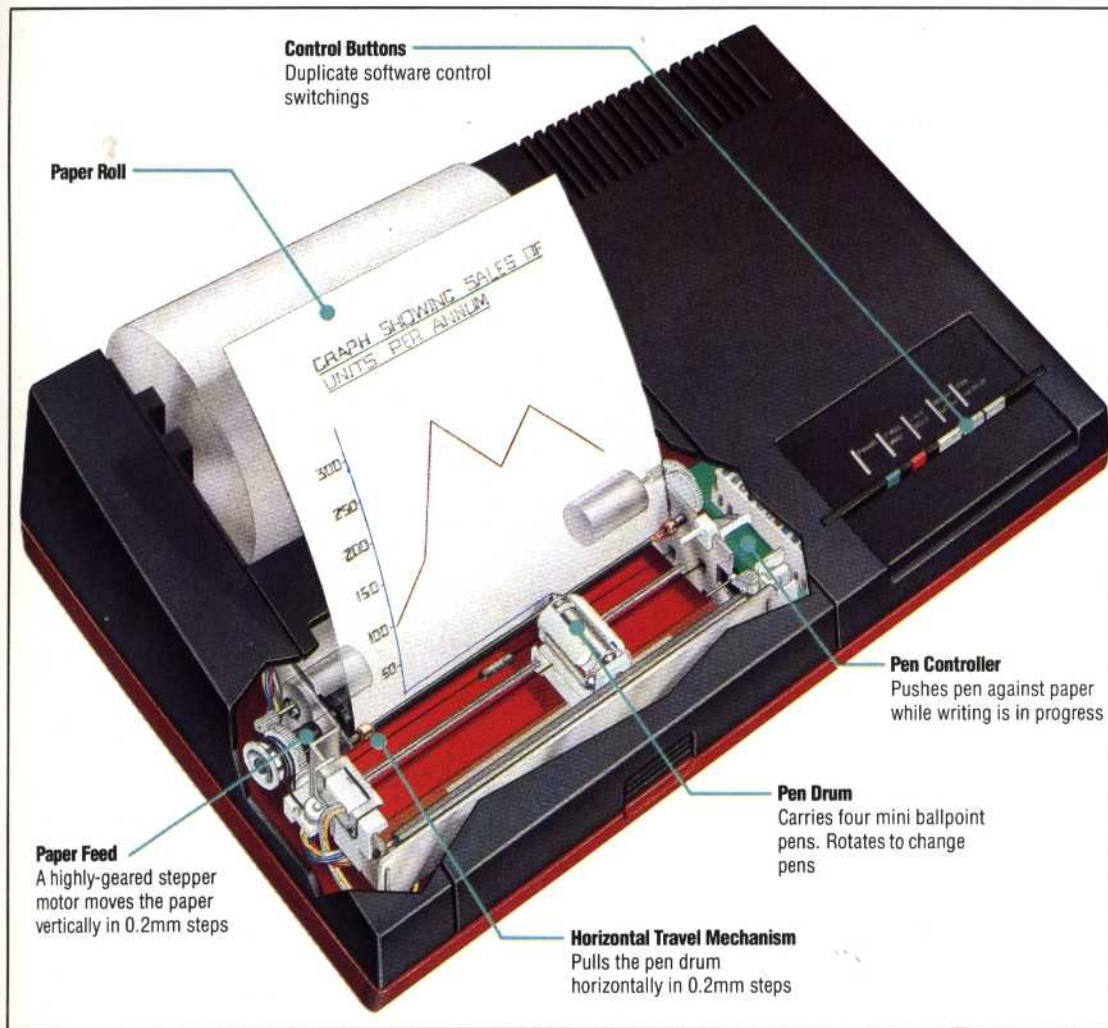




PEN PALS



Family Plot

The printer/plotter has a resolution of roughly 500x2000 pixels in plotter mode, and a choice of type sizes. The pen colour is selected by rotating the pen drum, and plotting or printing involves moving the pen drum horizontally left and right and scrolling the paper up and down. The pen can be pushed against or pulled away from the paper, to permit plotting or trace-free movement respectively. The mechanism is capable of high-accuracy plotting, but repeated movement of paper and drum causes a slight loss of registration

STEVE CROSS

Plotters are complex devices, which are used for producing detailed colour graphics on paper. As such, they are priced beyond the means of most home computer users. However, there is one model — costing just over £100 — that appears under a variety of different names and is eminently suited to use with micros.

The Atari 1020, Commodore 1510 and Oric MCP-40 are just some of the names under which a remarkably cheap microcomputer plotter is sold (a marketing technique called *badge engineering*). The device behind all these machines is made by a Japanese manufacturer and adapted to each company's requirements.

In addition to its graphics capability, the plotter will also produce text, and is thus referred to as a *printer/plotter*. Inside the unit is a revolving head,

which contains four small ballpoint pens. To draw a line, the head is rotated to select the correct colour (red, blue, green and black are fitted as standard), and the chosen pen is then moved into contact with the paper. A horizontal line is drawn as the head moves from side to side; a vertical line is produced by up and down movement of the paper. Text is produced in much the same way as graphics — the printer/plotter stores the patterns for letters and other characters in its own memory. When a signal is received from the computer, the printer/plotter simply finds the relevant character in its internal memory and then draws it as if it were a graphics pattern. The resulting print quality is extremely good — certainly better than the majority of cheap dot matrix printers.

When in text mode, the printer/plotter operates in exactly the same way as any other printer. Although the paper used is only 115 mm (4.5 inches) wide, the unit will produce either 40