



# VERSATILE PERFORMER

**Although it looks like an ordinary electronic typewriter, the Brother EP-44 is an exceptionally versatile machine that can also function as a printer, calculator and communications terminal. To top it all off, the machine costs a mere £250, making it an ideal companion for a home micro.**

The Brother EP-44 weighs five pounds and is battery-powered, making it a truly portable machine; a mains transformer is available as an optional extra for a further £20. On the keyboard, in addition to the conventional typewriter keys, are four keys to handle word processing and seven calculator keys. But the most noticeable feature is the 15-character liquid crystal display (LCD). This allows the user to display and edit text before it is printed out.

If the EP-44 is to be used as a conventional typewriter, the Print Mode Selector switch is set to 'Direct Print'. In this mode, text appears in the LCD 'window' and is simultaneously printed out on paper. Tabulation stops, line spacings and margins are set just as they are on a conventional typewriter. However, there is an unusual paper-feed system — instead of manually turning the

platen roller, the user must press one of two buttons to move the paper either up or down. The keyboard is not quite up to the standard of an electronic typewriter, but is perfectly adequate.

The EP-44 utilises a thermal print head to 'burn' a series of dots onto the paper and so form the desired character. Most thermal printers use a nine by seven matrix of dots to make up the characters, but the EP-44's 24 by 18 matrix gives higher quality print. Another printer in the Brother range, the EP-22, uses fewer dots and produces noticeably poorer print.

A major disadvantage of the thermal print system is the slow speed of the printout — in this case under 16 characters per second. When the Brother is used as a typewriter this is not a drawback, but when the machine is used as a computer printer the slow speed is very noticeable — a good dot matrix printer will produce text at 10 times the Brother's speed. The other problem with this system is the special thermal paper that is required; this is expensive and has a very glossy appearance. The thermal ribbon may be used with normal paper, but the print quality will suffer.

If the Print Mode Selector switch is moved to 'Correction Print', the LCD window shows its worth. In this mode, text appears in the window

## The Keyboard

The 51 printing keys are slightly sculptured, with a soft action, in a non-standard QWERTY layout. There are two character shifts with lock, a symbol shift and a function shift. The character keys are multi-function, giving a range of foreign characters and accents. 21 function keys control print, calculator and memory modes, margin setting, tabs, and paper movement



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