



Key Strokes

Before electronic keyboards were devised, each key on the typewriter had to be physically connected to the tiny character-shaped casting that made the impression on the paper. This imposed constraints on the layout of the keyboard, for it was essential to keep commonly used keys separated so that the bars that carried the characters would not clash. Though this is no longer necessary, we still retain the familiar QWERTY layout. Keyboards such as the Maltron, which places keys according to their frequency of use, have not proved popular

program that performs this operation on cassette, because when you switch your machine off (or reset it), the value of each character will revert to the original!

Finally, if your interests extend to simple carpentry, you might consider constructing a purpose-built workstation, with the keyboard recessed into the worktop and the television set or monitor conveniently angled. Commercial versions of the workstation usually provide additional space for mass storage (disk or cassette drives) on shelves located under the worktop, and allow all the leads to be hidden away. Ergonomics is basically applied common sense, but a little thought will be repaid by a significant reduction in backache and eyestrain.

working with menu-driven software. You might care to attempt an inexpensive version of this using a joystick or trackball, and gauge for yourself the benefits. Of course, you will need to write some small programs to work with, but by using PEEK and POKE within the confines of screen memory this is not a difficult task.

Alternatively, if your computer allows you to re-specify the value for any particular key, you might care to rearrange the keyboard, sticking labels over the keys to indicate their new values. In this case it is perhaps easiest to PEEK the value of the eight bytes that make up the character into an array with eight variables, change the values within the array, and then POKE them back again. You could POKE the eight bytes that make up the character straight into the space allocated for the character that you wish to replace, but if you use this method remember to save the first set of values in a temporary array and then move each character to its new position in order. Save the



Future Alternatives

Many computer designers would dispense with keyboards completely if they could. Newer types of microcomputer, with larger memory and faster processing speeds, allow other devices such as joysticks, trackballs and mice to be used instead, with appropriate software

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