QL Vs Plus/4
Objectively, there is no comparison: the QL with its built-in Microdrives, bigger memory, SuperBASIC and superb software is, by market standards, a snip at £400; the Plus/4 with cassette recorder for about £350 scores only on the quality of its keyboard. A cool appraisal would indicate the QL without hesitation, and yet most of us will finally decide entirely on 'feel' and brand loyalty. Without doubt the Plus/4 will sell and sell!

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Serial Bus
Standard Commodore peripherals such as a disk drive and printer can plug in here

Cassette Socket
The computer's dedicated cassette recorder plugs in here

User Port

Joystick Sockets
These two sockets take the Plus/ 4's dedicated joysticks. Standard joysticks cannot be used

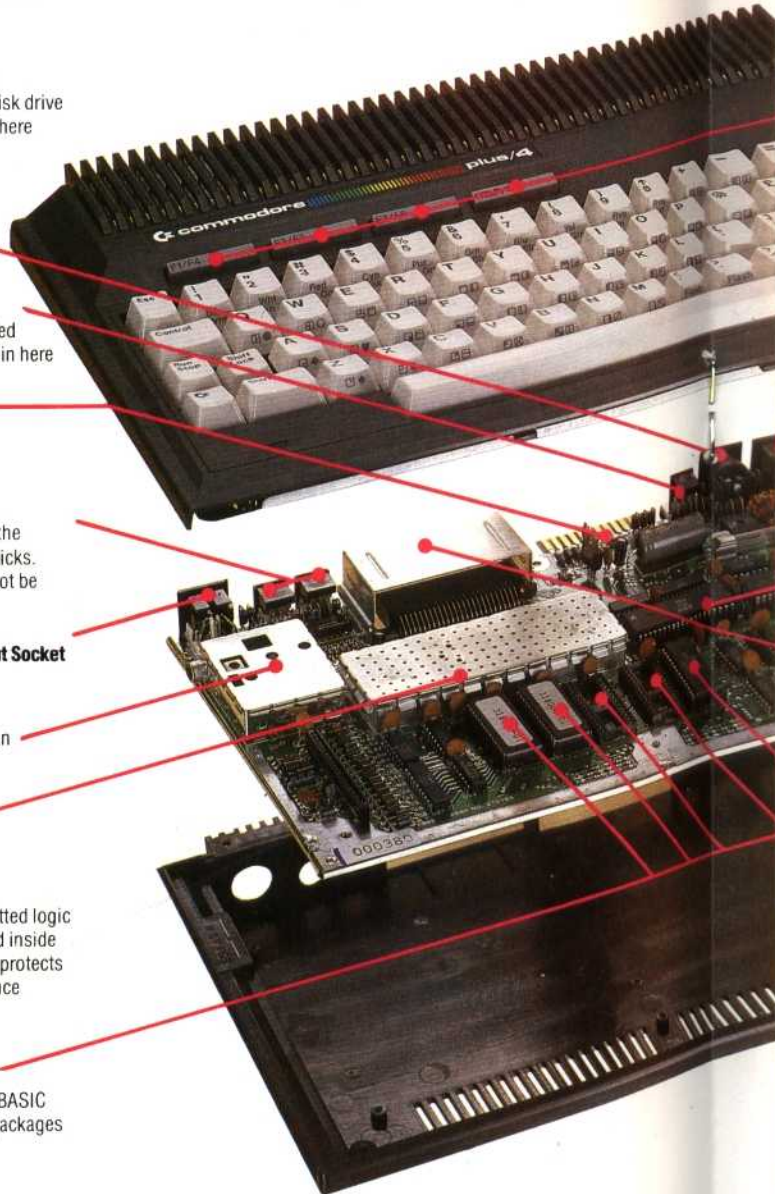**Video And Sound Output Socket**

TV Modulator
This gives a signal for an ordinary television set

ULA Case
A large ULA (uncommitted logic array) chip is contained inside this metal case, which protects against radio interference

ROMs
The ROMs contain the BASIC and the four software packages

enable the user to define a new command of up to 128 characters for each key. Eight different functions can be produced from the four keys by using them with the Shift key.

The generous amount of memory space allows the Plus/4 to have built-in applications software. Four programs are provided: a word processor, spreadsheet, database and graphics package. These programs are designed to work together.

Unfortunately, the word processor is rather difficult to use. The Plus/4 can display only 40 characters across its screen width, but many printers can produce 80 characters. To match this width, the screen pans sideways once the 37th column is reached and continues panning until the 77th column, when it jumps back to the first column. The program has formatting commands to set margins and justify text, but these come into effect only when the text is printed out. It also has SEARCH and REPLACE commands to locate particular words or phrases within a document and replace them if necessary. A limit of 99 lines is set on the amount of text that may be entered. The 77-character line width means that this is a maximum of 1,500 words, which is not sufficient for serious applications.

The spreadsheet program is easier to use than the word processor, although it also suffers from the limitations of a 40-column screen display. This means that it can show only three spreadsheet cells across the width of the screen and 12 down, even though it can handle models up to 17 cells wide and 50 deep.

The graphics program is rather disappointing. All it does is transform a set of figures from the spreadsheet into a kind of crude bar graph, made up from block graphics, and transfer it to the word processor. There it can be displayed or printed.

Both the word processor and spreadsheet can be used with the standard machine, but the only way to save their results is with a disk drive. This

means they are of little use to people who rely on cassette storage. The last program, the database, cannot be used at all without a disk drive. It works by defining a standard format that is recorded onto disk as empty records. All data is then entered into the empty records. This means that one disk can be used for one database only and the format of the data cannot be changed once data has been recorded. Each database can hold up to 999 records, each with up to 17 fields of 38 characters. Generally, the software is disappointing, being too crude for serious business use, and requiring the home user to buy a disk drive.

Many home users will be far more pleased with the built-in machine code monitor, Tedmon, than with the software. The monitor is a great help to the machine code programmer and is called into use by the command MONITOR.

Commodore is producing a number of add-ons for the Plus/4. The most important of these for many users will be the cassette recorder. Like other Commodore micros, the Plus/4 needs a cassette recorder made specially by Commodore.

Word Processor

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