Software Six
The cartridges for the Electron have an advantage over tape since they take only a couple of seconds to load compared to the several minutes taken by tape. Only six titles are available in cartridge format. These consist of four games and an educational program, costing £12.80 each, and the LISP language at £40

would not load on the expanded Electron. By using a series of operating system commands, however, you can 'fool' the Electron into thinking that the Plus 1 is not connected and so restore normal performance. This is barely mentioned in the manual and could prove confusing to the novice user.

On any Acorn machine, typing *HELP gives a list of the various ROMs inside the computer. Typing this on the Electron with the Plus 1 unit fitted tells you that the main operating system ROM is OS 1.00, and also lists Expansion 1.00 ADC/Printer/RS423. This is the operating system ROM inside the Plus 1 expansion unit, but the interesting thing about this is the last piece of information — RS423. This is a reference to a standard serial interface, yet neither the Electron nor the Plus 1 supports such a facility. Acorn is, in fact, planning to introduce a serial interface at a later date.

The major difference in the two BASICS is that the Electron lacks Mode 7, the teletext-compatible graphics mode. This mode is used for titles and instruction pages in BBC Micro programs as it is economical in terms of memory. On the Electron, the various viewdata attributes do not turn on the Mode 7 colours and flashing letters, but are instead displayed on the screen as gibberish. Most games programs use a different mode for the actual play, so there's no problem once the title page and instructions have been bypassed.

The other major difference between the two machines is in the SOUND and ENVELOPE commands. The Electron has a solitary sound channel, instead of the four offered by the BBC machine. Similarly, the Electron ENVELOPE command affects the pitch only, and not the volume. The commands are compatible, though, so a program that uses them will work on both machines — although the sound will be noticeably different on the Electron.

The Electron keyboard has a better 'feel' than that of the BBC Micro, but it has fewer keys. This means that on the Electron, as on the Sinclair Spectrum, most keys have three or four different functions. For example, the key marked 'L' will produce either 'l' or 'L', depending on whether the

Shift key has been pressed; but if used in conjunction with the Function key the 'L' key will generate the BASIC command LIST. Pressing the Control key at the same time as 'L' will clear the screen. It would perhaps have been better if Acorn had retained the 10 red Function keys provided on the BBC Micro, as these can be programmed to perform various useful tasks. The Electron does have Function keys, but these are merely the numeric keys pressed in conjunction with the Function key.

The one area in which the two machines differ dramatically is in the range of interfaces provided. The BBC Micro has more interfaces than any other home computer, which means that a host of peripherals — from printers, modems and disk drives to second processors and robot arms — may