ATARI UPDATE

Atari entered the home computer market very early with two models, the 400 and the 800. These computers were characterised by a high standard of construction, superb graphics and excellent sound. Now Atari has updated both models. The two new XL models sell at a cheaper price and include some welcome refinements.
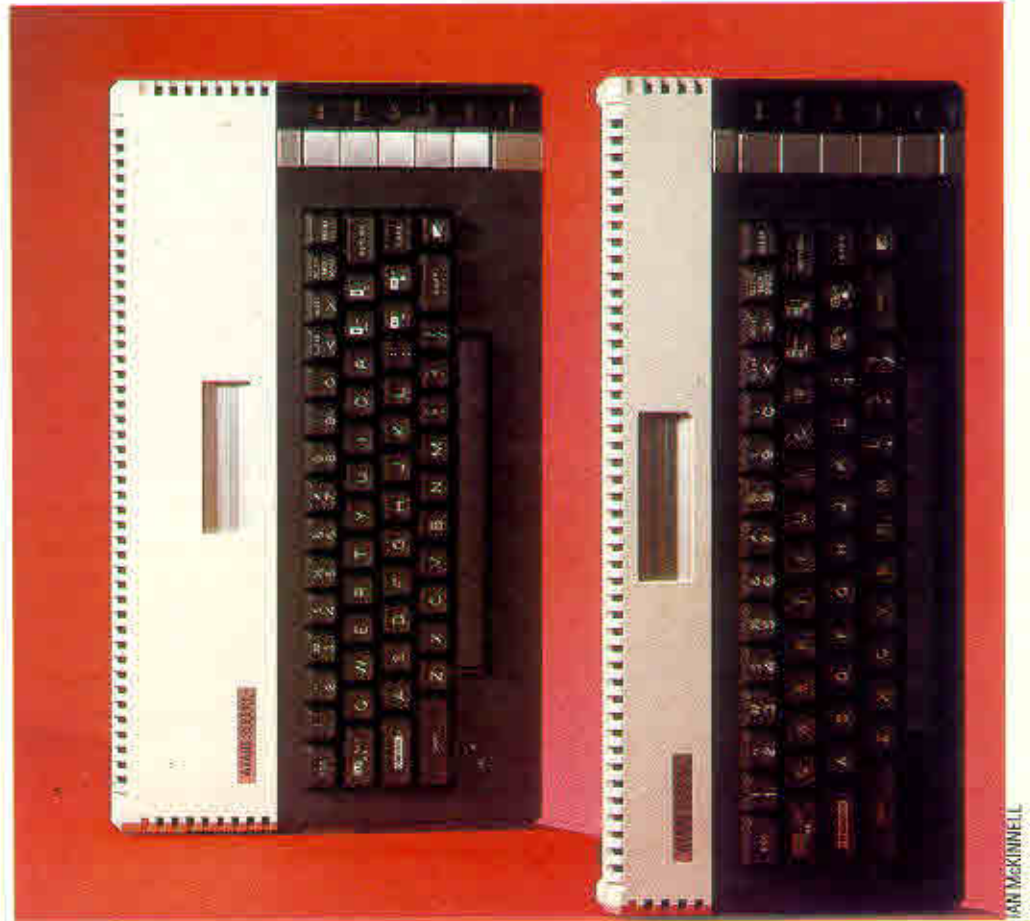
Faced with the growing competition among home computer manufacturers, Atari redesigned its line of computers and introduced the 600XL and 800XL. The new machines can use the software written for the 400 and 800, which opens up a wide range of programs, from top-selling games to business packages.

Fortunately, both machines have adopted the keyboard of the 800. The Atari 400 has a membrane-style keyboard, similar to the ZX81, with its characters printed on a flat plastic membrane. Because of the small size of the keys and the amount of pressure needed to make contact, touch-typing is virtually impossible. In contrast, the 800 has a full-size typewriter-style keyboard that is one of the best on the market.

The keyboards of the new machines are identical and have a total of 62 keys. These include four function keys: START, SELECT, OPTION and RESET, which are positioned on the right-hand side of the keyboard. There is also a HELP key, which works with some new software to provide helpful hints on the screen. There are 29 graphics keys and the Ataris have a full ASCII character set built in. One quirky feature of the keyboard that has been inherited from the 800 is the way the cursor keys are used. The arrows are printed as the third character on four separate keys. To move the cursor you hold down the CONTROL key while pressing the appropriate arrow key. Apart from this strange feature, the keyboards are well-designed and comfortable to type on.

The Atari 400 comes with 16 Kbytes of user memory, while the 800 has 48 Kbytes. Both computers have expansion slots on the system board that can be accessed by removing the top of the machine. The XL models should not be opened. Instead, expansion ports are built into the outside of the case. The only significant difference between them is the amount of memory that comes as standard. The 600XL comes with 16 Kbytes, which can be expanded to 64 Kbytes by plugging in an expansion pack. The 800XL comes with 64 Kbytes.

Both of the XL machines have an interface built in called the 'Expander'. This is a bus-type

expansion port that can be connected to a variety of peripherals and expansion packs. There is also a ROM cartridge slot just behind the keyboard for cartridge games and other software. The original Atari 800 has two cartridge slots, but virtually no software has been written to make use of the second slot, so it has been removed from the XL line. The 400 and 800 have four joystick ports, but again there is little software that uses all of these, so they have been reduced to two on the XL machines, and these ports have been moved from the front of the case to the side.

SOUND AND LIGHT

All the Atari computers can be connected directly to a television set, and all but the 400 can connect to a computer monitor as well, but the Atari screen display is good, even on a television. The character set is generally easy to read and the contrast between text and background is quite good. There are a number of colour options available, but the normal text display comprises white lettering on a deep blue background. The Atari computers display a maximum of 40 columns by 24 lines of text. There are four text modes with different displays.

The Ataris were among the first computers to provide sprite graphics. Their sprite function is called Player-Missile graphics, and is controlled

The Atari Twins
Atari's 600XL and 800XL home computers are very similar, but the 600XL has 16K of memory while the 800XL has 64K. The machines have a high quality keyboard and good colour graphics. Because they are updated versions of the original Atari computers, they also enjoy a wide range of software

Disk Drive
A useful option for the 800XL is the disk drive. This gives 127K of fast storage. The standard 600XL does not have sufficient memory to use the disk drive but can be expanded. A number of excellent games and business programs are available only on the disk format