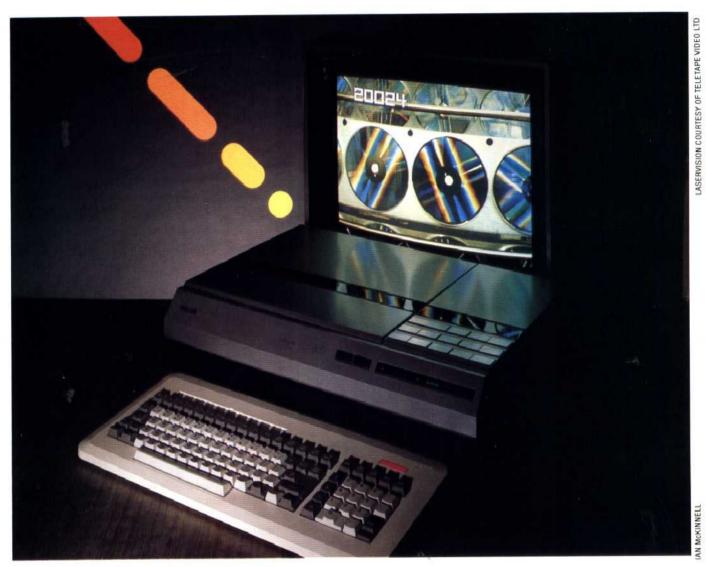# LIGHT REVOLVER

Floppy disks and video discs are high-density direct-access storage devices that until recently have been too expensive for the home enthusiast or small business user. However, increased production and competition in both industries have resulted in a steady fall in price. We review their range of applications for home micros.

Many people will be surprised to learn that laser disc players, regarded as high-cost luxury items a few years ago, now cost less than video cassette recorders, yet provide far better picture reproduction. A television picture is a dynamic image that can be recorded on a video tape as an unbroken sequence. The only way to find a particular part of the sequence is to wind the tape forward, either at 'play' speed or by using 'fast forward' with the tape counter to guide you. Discs store the images as separate frames and enable you to go directly, accurately and quickly to any one of

them. A frame's location on disc can be described in terms of track and sector, and a microprocessor can keep an up-to-date catalogue of the locations. The microprocessor oversees the disc access and can provide freeze-frame or slow motion facilities, and stereophonic sound.

The microprocessor's tasks of driving a turntable at constant high speeds and positioning a playback head precisely at certain positions on the surface are not the major technical achievements of disc technology. The greater challenge was in facilitating the enormously high storage density of the discs. To enable thousands of frames to be stored on a disc the size of a 12″ long playing record was especially daunting.

If you've ever used high resolution graphics on your micro, then you know that a television picture is made up of individual dots (pixels) of light — the more dots per screen the better the picture displayed — and that storing high resolution screen displays uses up a lot of memory. The BBC Micro, for example, has a maximum resolution of

Laser Lounge
Laser disc players will soon be as inexpensive as home computers and it won't be unusual to find the two linked together in the home. By buying appropriate discs and software, you will have access to vast pictorial databases and sophisticated training programs, as well as animated adventure games