



# WISH FULFILMENT

**The Eaca Colour Genie is a large, sturdy machine that is designed for home use. Its robust casing contains many features that are unusual in machines costing less than £200. These include an internal power supply, an on/off switch with indicator LED, a built-in aerial lead and several peripheral interfaces.**

Based around the popular Z80 microprocessor, the Colour Genie boasts a typewriter-style keyboard with 62 keys. These include four function keys, two Resets (which must be pressed simultaneously) and a Mode Select key, which allows pre-defined graphic characters to be obtained from the keyboard.

The machine has 32 Kbytes of memory. Of this, two Kbytes are set aside for system use, and high resolution graphics use a further four Kbytes. The 16 Kbytes of ROM contain an extended version of Microsoft BASIC, which offers none of the structured programming features found in more recent dialects of BASIC. However, it does allow integer variables, single and double precision variables, multi-dimensional arrays of any variable type, and extensive string-handling facilities. It includes many useful commands to handle sound and high resolution graphics.

Sound facilities are relatively sophisticated, offering three channels (allowing chords to be played), and providing output through the television set. Two BASIC commands control sound generation — PLAY gives a pre-defined sound similar to a glockenspiel, while SOUND allows other noises to be generated.

Although extensive and powerful, the Colour Genie's graphics facilities are now somewhat outdated. The screen is considered as two 'pages' (really two different areas of screen memory), one of which stores and displays text, graphics character blocks and user-defined graphics characters, while the other page is used for the display of high resolution graphics. In text mode, the Genie can display up to 25 lines of 40 characters. In graphics mode, the display size is 160 × 102 pixels — which is hardly 'high resolution' by current standards.

## GRAPHICS MANIPULATION

The Mode Select key accesses the high resolution page, setting aside 4 Kbytes of memory. The BASIC features numerous commands for graphics manipulation — you may draw lines, fill areas with solid blocks of colour and define, draw and erase shapes. When incorporated into a BASIC program, the command FGR displays the graphics page, but the computer will automatically revert to text



### Bashful Genie

One computer that has never achieved the fame of the Spectrum or the Commodore 64 is the Colour Genie, even though it's been around for just as long. All the same, it has a small but dedicated following. The machine has 32 Kbytes of memory and unusual joysticks — they come in a matched pair with built-in number pads and their own holder — for £50