

# Sord M5

Though this machine features only four Kbytes of user memory as standard, its superb graphics facilities mean that the user can still write worthwhile programs

Most of the early home computers were designed in California, USA. More recently, British-designed machines have started to capture a large share of the worldwide market. However, it can only be a matter of time before the Japanese dominate the scene, as they have done in every other consumer electronic market. The Sord M5 is certainly not the first Japanese microcomputer, but it is the first to have made a significant impact on the home, as distinct from the business market.

It is a solid and compact machine similar in size to the Sinclair Spectrum, but is considerably heavier and feels much more robust. In many other respects it has similar capacities, with a Z80A CPU, single-key entry for BASIC, and program/data storage on cassette. Internally, however, it's much more sophisticated, as witnessed by the built-in Centronics printer port. But the two major differences are the size of the RAM memory — which at four Kbytes (expandable to 36 Kbytes) is much smaller in the unexpanded machine — and the inclusion of dedicated graphics and sound chips.

The graphics are handled by a TI 9918, 9928 or 9929 (depending on the country in which the computer is sold), which gives a resolution of  $192 \times 256$  dots in up to 16 different colours. There are four main graphic modes, three of which may have up to 32 independently moving sprites, which can

## Printer Connector

A Centronics compatible parallel printer interface is available at this socket, allowing many widely available printers to be directly connected to the M5

## RF Connector

TV compatible output comes out of here

## Modulator

The output from the VDP is converted into a standard TV signal

## Video Connector

The unmodulated composite video signal from here can be used to drive a monitor

## Audio Connector

The audio output can be fed into an amplifier from this socket

## VDP

The Texas TMS 9929 Video Display Processor (in the UK version of the M5) is responsible for controlling the screen, and can handle up to 32 separate sprites

## Joyypad Connectors

The two Joyypads plug in here for games playing

## Video RAM

All the data needed to handle the screen including the actual images, is held in this 16 Kbyte block of RAM



## The ROM Cartridge

One of the best features of the M5 is that the language can be changed because it is kept in a ROM cartridge. Three versions of BASIC are available for the M5: BASIC-I (simple, for beginners); BASIC-G (very strong on graphics); and BASIC-F (scientific and mathematical). There is also a special user-oriented, general-purpose program called FALC, which has a combination of spreadsheet, filing and graphics functions, and can be used to develop sophisticated applications for home or business use