



## COMMODORE 16

### PRICE

Including cassette unit and 4 games programs: £140

### DIMENSIONS

76.2 × 203.2 × 406.4mm

### GPU

MOS 7501, .89 to 1.76 MHz

### MEMORY

16K RAM (12K user memory), 32K ROM includes OS and BASIC interpreter

### SCREEN

Text: 25 rows of 40 columns. Graphics: 320 by 160 pixels. Five modes: text, hi-res, hi-res with 5-lines of text, multicolour, multicolour with 5 lines of text, 15 colours x 8 brightness levels, plus black = 121 shades

### INTERFACES

Commodore serial port, ROM cartridge/memory expansion slot, cassette unit interface port (8-pin), 2 joystick ports (8-pin), monitor output: composite/chrominance/brightness/audio, RF output with high/low tuning switch, power supply input (9v)

### LANGUAGES AVAILABLE

BASIC 3.5 interpreter in ROM, 75 commands including full graphics plotting

### KEYBOARD

Typewriter-style, 66 keys, including 7 reprogrammable function keys and HELP key

### STRENGTHS

Advanced BASIC, excellent disk handling, simple sound and graphics commands, easy access to monitor for machine language programming

### WEAKNESSES

Not upward compatible with previous CBM equipment, hence very little software available. Incompatible I/O sockets and no sprites

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you can look it up in a table in the manual and use the supplied figure to define the note to be played. For example:

**SOUND 1,770,60**

will sound note A (at a frequency of 440 Hz) for 60 sixtieths of a second, (i.e., one second) on channel 1.

The lowest sound that can be played is A two octaves below middle C (110 Hz), and the highest is G two octaves above middle C (1,575 Hz), giving a total musical span of four octaves. Two music channels are available (1 and 2), or one music channel (1 or 2) and one white noise

channel (3). Both channels are combined, since the audio out signal is in mono, and there is no way of separating the two.

The Commodore 16 is an attractive machine, with a very advanced BASIC and good graphics commands, but its sound facilities are fairly primitive, even in comparison with the Vic-20, although they are easier to execute on the new machine.

Very little software is available for it at launch-time, which could hold back its success in the marketplace until the situation is rectified. Buyers upgrading from the older machine may also be put off to find that it won't RUN their old programs.