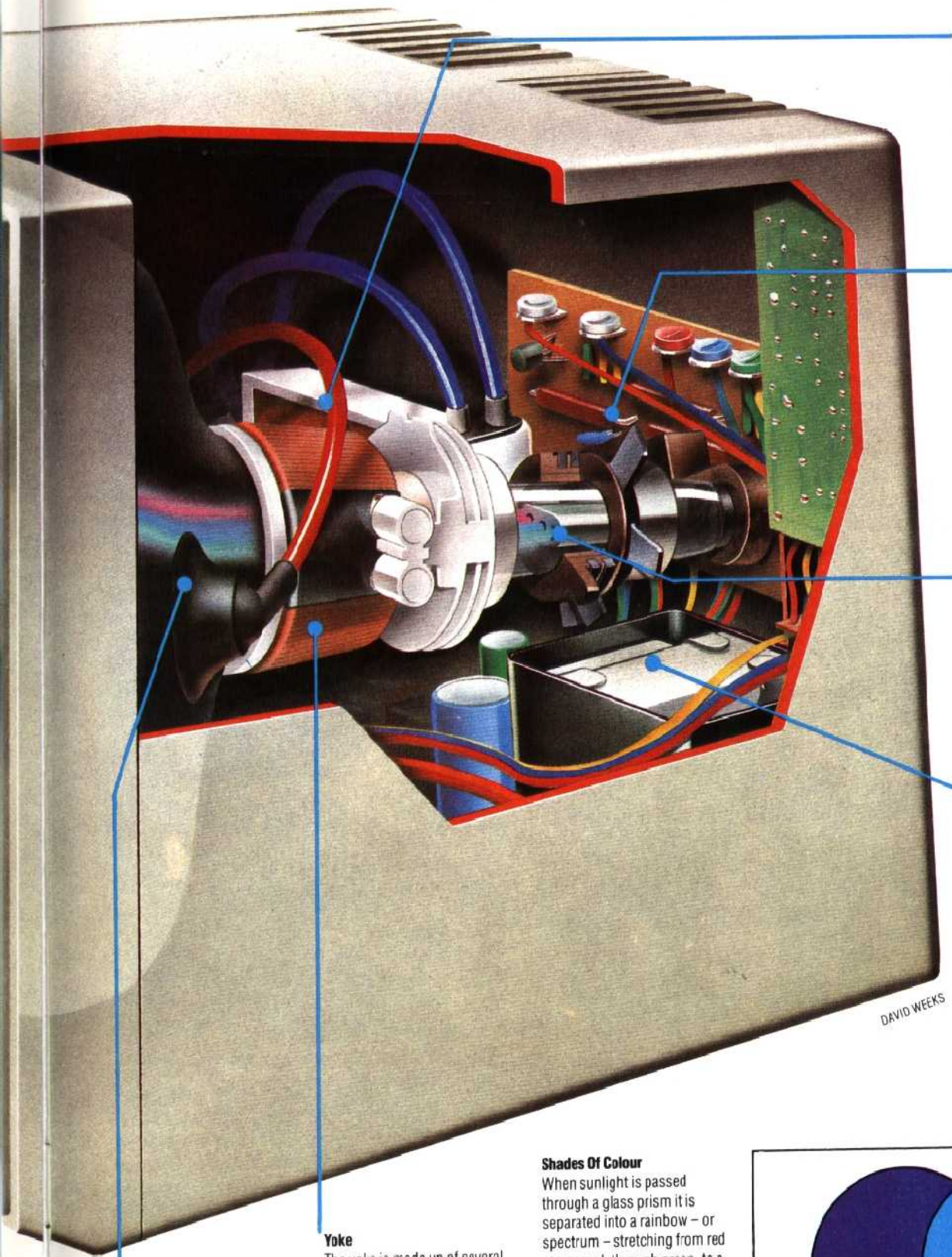


High Tension Circuits
Because cathode ray tubes need very high voltages, they must have a rectification circuit to boost the mains voltage (240v) to the required level

Main Circuit Board
The circuits necessary to produce the controlling currents which move the beam and turn the guns on or off are found here. Part of the line synchronisation section, which works at very high frequencies, can be utilised as a switching-power supply for the tube itself

Guns
A colour monitor, like a colour television, has three colour guns, red, green and blue

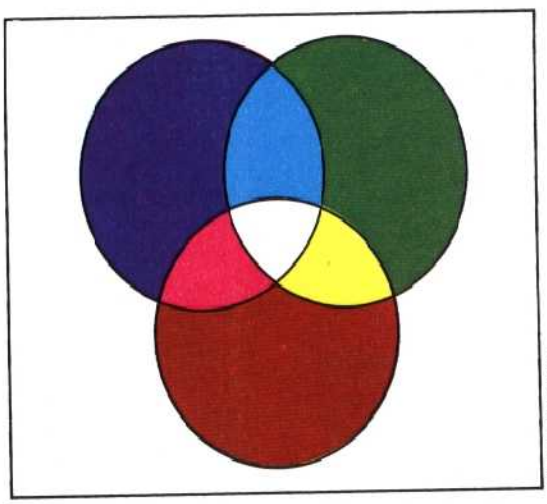
Power Supply
A cathode ray tube must be driven by very stable DC voltages, and requires fairly heavy currents, so a large transformer is needed

DAVID WEEKS

Yoke
The yoke is made up of several large coils that produce powerful magnetic fields. These vary rapidly, so that the dot on the phosphor is moved about, producing the picture

Anode Attachment
Once the beam is ejected from the guns, it is accelerated by the high voltage field. This must be at the other end of the tube and is applied by means of this large, heavily insulated plate, which is on the end of the cable

Shades Of Colour
When sunlight is passed through a glass prism it is separated into a rainbow – or spectrum – stretching from red at one end, through green, to a blue-violet at the other. If this spectrum is then passed through another prism, similar to the first, the colours recombine to give the original sunlight (often called 'white light'). This process of recombination or addition is used in a colour monitor. By adding different strengths of the three main colours, red, green blue, every colour can be created.



MARK WATKINSON