

Buying advice: monitors

Focusing on three main monitor categories – 17in and 19in CRT monitors and flat-panel displays – *Buying advice* is here to help you choose the right screen for your needs and budget



17in monitors

If money is tight, your desk is large and you don't require the maximum screen inches, a 17in CRT (cathode ray tube) monitor is your best bet – and now you can pick up a good screen for under £200. There are cheaper models out there, but anything below the £100 mark is likely to be poor quality.

- **Dot pitch** Measured in millimetres, the lower this figure is, the sharper the resulting images should be. The dot pitch tells you the distance between each phosphor dot of the same colour. The number you are looking for is the horizontal (not vertical) dot pitch, so double-check this before you buy. Seek out a dot pitch of not more than 0.25mm, but aim for 0.24mm.

- **Resolution and refresh rate** Many monitor manufacturers quote super-high maximum resolutions, but in reality anything above 1,024x768 doesn't look good on a 17in screen. What is important is that the refresh rate is at least 85Hz, to ensure that the picture does not suffer from screen flicker.

- **Tube type** The choice of tube types boils down to aperture grille or shadow mask, although there are many permutations on these technologies. Essentially, aperture grille uses a grid of fine wires to guide the beam on to the screen to make up images, while shadow mask uses a thin metal mask. Aperture grille screens are judged to be brighter and sharper than their shadow mask counterparts. If possible, though, it is worth looking at an example of each type to see which suits your personal preference.

19in monitors

The rules for picking out a 19in model are roughly the same as choosing a 17in monitor. Look for a dot pitch of at least 0.25mm – preferably 0.24mm – and pick your tube type following the guidelines above. Expect to pay £260-plus.

- **Resolution and refresh rate** As you start increasing your screen size, maximum resolutions begin to play a much bigger part. The top resolution you are likely to need is 1,600x1,200 for everyday work, so don't be led astray by claims of astronomical resolution. Indeed, you may even prefer to work at 1,024x768. Again, refresh rate is important and 85Hz is the minimum required.

- **Extras** A good 19in model should cost you around £260-£290. If the monitor costs more than £300, you can expect to see some useful extras. USB (universal serial bus) is a useful addition for the future, and extra ports will aid connectivity.



Built-in stereo speakers are also a convenient way of reclaiming desk space. However, if you value high audio quality, you may find the sound lacking the punch of separate speakers.

Flat-panel displays

CRT and flat-panel display screen sizes are not directly comparable. Generally, a 15in flat-panel offers a display size approaching that of a 17in CRT, while a 17in flat-panel is comparable to a 19in CRT.

- **DVI** A graphics card works digitally, converting its digital signals to analogue output for the analogue monitor. Inevitably, digital to analogue conversion introduces losses, or interference, even if miniscule. However, some flat-panel displays are digital. DVI (digital visual interface) on both the graphics card and flat-panel mean a digital signal will operate throughout, providing better image quality.

- **Pivot support** If you work with a lot of documents with a portrait aspect ratio then pivot support is worth looking for. Pivot allows the screen to be rotated 90 degrees, so it is taller than it is wide. Coupled with pivot software, this allows you to use your display in portrait mode or landscape as you please.

- **Extras** A flat-panel display increases your desktop space, but if you really want to cut down on clutter then look for a model with lots of extras. Many units incorporate speakers, microphones or a USB hub, all of which mean one less bit of clutter on the table. ■