

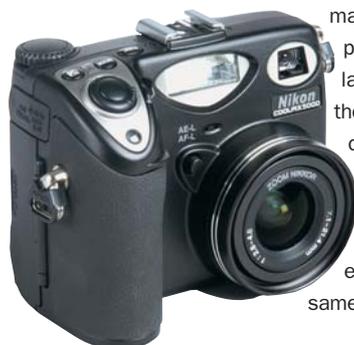
# Buying advice: digital cameras

If you're thinking of getting into digital photography or video, there are a few factors you should consider. Just follow our simple buying guide to be sure you get the best for your money

## Professional digital cameras: over £701

• **Megapixels** Most professional digital cameras have a resolution of between 3.3Mp and 5Mp (megapixels). While this figure is important, it is not the only measure of a camera's quality. Often other features, such as a good lens or high-powered zoom, will contribute just as much to the quality of the final image.

• **Storage** Resolutions in the Professional category tend to be higher, but still consider actual file sizes to calculate how many images will fit on a memory card – and remember that larger files suffer from fewer compression artefacts. The sensor chips in expensive SLR (single lens reflex) devices



may also be physically larger than those in cheaper models, which means better quality even at the same resolution.

• **Peripherals** In terms of the lens, the maximum aperture is important: smaller 'f' numbers are better. If you're into long exposures, look for noise reduction modes to eliminate random bright blobs. Most digital cameras feature a built-in flash, but hotshoes and sync plugs will connect to external flashes.

Digital SLRs (single lens reflexes) offer the responsiveness to take a picture the instant you press the shutter. An SLR viewfinder is also essential for precise focusing.

• **Zoom** Only pay attention to optical zooms, but be aware some lenses may go wider, or offer better close-up 'macro' facilities than others.

## Intermediate digital cameras: £301-£700

• **Megapixels** Go for a camera with at least 3Mp (megapixels). At the upper end of the price range you can even get 4Mp.

• **Storage** Memory comes in all shapes and sizes but, regardless of the card used, make sure you're getting about 16MB and – if you're lucky – 32MB.

• **Peripherals** Rechargeable lithium batteries are ideal, but you may have to settle for NiMH (nickel metal hydride). With good rechargeable batteries an adapter isn't necessary. Also, look out for a comprehensive software bundle.



• **Zoom** Aim for a 3x optical zoom. This is more important than a digital zoom, though a 2x or 3x digital zoom on top of the optical zoom is a bonus.

## Beginner digital cameras: under £300

• **Megapixels** This rating differs widely in the Beginner chart; from 1Mp to 3.3Mp (megapixels). For the best picture quality go for the higher-rated cameras, but this will mean you lose out on other extras so don't rule out the lower-resolution models.

• **Storage** Most cameras will have at least 8MB, but if you're lucky you'll pick up one with 16MB.

• **Peripherals** Higher-resolution cameras may cut corners on things like batteries and software to keep the price low, so weigh up how important these things are to you before making your choice.

• **Zoom** Even less expensive cameras have good zoom capabilities these days. Aim for a 3x optical zoom – a digital zoom isn't as important, but if possible you should get a camera than has a 2x digital zoom. ■



## Moving pictures: digital camcorders

• **CCD (charge-coupled device) pixels** This figure gives you the resolution of still images taken by the camera – a number that's usually much lower than for digital cameras as stills facilities on camcorders are currently quite basic.

• **DV (digital video) resolution** This consists of horizontal and vertical resolution and is measured by the number of lines of colour in an image. Most camcorders have a vertical resolution of 540 lines, which is the theoretical limit for the PAL video

format. However, the horizontal resolution varies slightly on camcorders from between 500 to 540 lines.

• **Zoom** There is a clear difference between the optical and digital zoom of a camcorder. The optical zoom is the 'true' zoom that the lens is capable of, while the digital zoom offers artificially enhanced magnification. The down side to using the digital zoom is that it tends to make magnified pictures fuzzy.

• **Connectivity** These days, DV (FireWire) support is essential for a camcorder. Even better is a camcorder that has a FireWire input and output because, if you plan to edit video, it allows you to record your final cut from your PC to a MiniDV tape. You could splash out on a digital recorder, but these can be expensive.

