

Moving pictures

Consumer electronics: High-definition video cameras are getting cheaper, but sometimes it is better to keep things simple



ASURE way to discover how easy it is to use a consumer-electronics product is to give it to an eight-year-old, point out where the power switch is, and then stand back and see what happens. The Flip video camera (pictured above) passes this test with ease. And with bigger kids strapping it onto bikes, flying it in model aeroplanes and taking it to rock concerts, the results are impressive. But whether it is right for you depends on a number of other factors.

The Flip's simplicity has made it a huge success in America, where more than 10 million have been sold. Made by Pure Digital, a company based in San Francisco, the Flip has recently gone on sale in other countries, too. In Britain it costs £100 (\$187). The Flip encapsulates two trends in home video. The first involves the way people are using camcorders: nowadays they are more likely to film a short clip and post it on YouTube or Facebook than to produce an epic account of a family holiday and show it to friends on a large-screen TV.

The second trend is that digital camcorders increasingly store video using "solid state" memory, rather than recording it onto a physical medium such as magnetic tape or burning it directly to DVD. Like digital still-cameras and portable music-players, the latest camcorders store their footage on internal flash-memories, plug-in memory cards or tiny built-in hard disks.

Taking account of the first trend requires a bit of honesty from a consumer: what do you really want a camcorder for? If you are under 25, then the answer is like-

ly to be to shoot video that you will share with others over the internet. Most young buyers want a camcorder that performs a bit better than a camera-phone or the video function on a digital still-camera. They certainly want it to be a lot less fiddly when it comes to uploading video clips.

On that score, the Flip performs admirably. With a built-in USB plug which flips out, it can plug into any Windows or Mac computer to transfer clips. The software for this is stored on the camcorder, so there are no tricky programs to install. Like the camera itself, the software is simple to use. Just a few clicks send a video directly to YouTube or to a friend. You can trim clips and or even compile a short movie-though that feature is unavailable on a Mac.

The Flip, which is not much bigger than some phone handsets, can store about an hour of video in its internal flash-memory before clips need to be deleted to make more space. The camcorder has its own small screen for playback, on which its video looks good. The quality of clips, captured at a resolution of 640 by 480 pixels, is fine for e-mail and social-networking sites, but not for a television screen.

Zooming in

The Flip's editing limitations can be overcome with third-party software. But that starts to take users in another direction. On a Mac you have to spend \$30 (or £20) to upgrade to QuickTime Pro to convert the Flip's video clips into a format that iMovie, the Mac's video-editing program, will recognise. And the edited results, though good enough for the web, fall short of what you need to burn a reasonable DVD. For that, a better camera is needed.

There are more and more small digital camcorders to choose from. Sony's HDR-TG3 (pictured below), for instance, is not much bigger than a Flip and is slim enough

to slip into a jacket pocket. It is also rugged, with a body made from titanium. The camcorder can shoot high-definition video at 1,920 by 1,080 pixels, and do a lot of other tricks, including something called "Intelligent Face Detection", which automatically identifies human subjects so that their faces can be recorded in more detail.

Sony's camcorder stores its clips on Sony's version of a memory card, the Memory Stick. This means the cards can be changed when one of them fills up, which-with enough cards-allows for unlimited shooting. Even though such high-quality video results in very large files, Memory Sticks are now available in capacities as large as 16 gigabytes (GB). Depending on the settings, that is enough for several hours of filming. But all this comes at a price: the HDR-TG3 costs around \$1,000.

Panasonic also makes a high-definition camcorder, the HDC-SD100, which uses three CCD sensors, as professional video-cameras do. It records onto standard SD memory cards, which are now available with up to 32 GB of capacity-enough for around 12 hours of filming. Another version of the camera allows recording onto either an SD card or an internal 60GB hard drive. Using both gives about 35 hours of high-definition video.

These camcorders, and others, can record hours and hours of high-quality video. But imagine uploading all that to YouTube. The videos would need heavy editing and compression, reducing their quality. And that is assuming that the user has a computer and software that is powerful enough to handle such high-quality video without grinding to halt.

For home movies, the latest high-definition camcorders are extremely powerful machines. And storing video on flash-memories and hard drives may also provide a longer shelf-life than videotape or even DVDS. (No one is really sure about the longevity of those more traditional storage media, and a lot depends on how they are stored.) The more immediate question is: having shot all that video and edited it, is anyone going to bother to watch it? If the honest answer is no, then something simple and easy like the Flip is perhaps all that is needed. And if YouTube is still around in another century, then your video clips may be as well. •

