

## HD VIDEO CAMERA'S ON TEST

When did photography become art, or indeed, when did photography become television? For many years I struggled with the constant changes in camera and television technology then I discovered Which magazine! This month we review the latest "best buys" available for HD video cameras.

High Definition camcorders offer stunning image quality, more fine details, and a sharper picture than an average camcorder. Colours are often better too. So if you're thinking of going HD, what are the features you should look out for, and how much will you need to spend to get a quality product?

Here we provide information on 12 of the latest models; these have been tested for video and sound quality, ease of use, auto-focussing, battery life, recording format and additional features such as image stabilisation and zoom.



SonyHDR\_XR520

SCORE: 85%

Artificial light video:	★★★★★
Dim light video:	★★★★★
Overall video quality:	★★★★★
Image stabilisation:	★★★★★
Approx. €1160	

Weighing a hefty 589g with a huge 240GB hard drive and 29hrs of footage videos taken in bright daylight conditions are a joy to watch, with near flawless colour reproduction and superb definition. Subjects are captured sharply and motion appears smooth and fluid. In artificial light, the XR520 maintains its great performance, capturing colour and tone intelligently.



Canon HF 10

SCORE: 76%

Artificial light video:	★★★★★
Dim light video:	★★★★☆
Overall video quality:	★★★★☆
Image stabilisation:	★★★★☆
Approx. €890	

Weighing only 430g the HF10 truly shines over its SD counterparts with its crisp, vivid image quality. Even in panning shots images stay sharp and clearly defined. Colour definition is extremely good, though. Despite this, the quality of video you can take with the HF10 far surpasses anything we've seen from SD models.



Canon HF 100

SCORE: 75%

Artificial light video:	★★★★★
Dim light video:	★★★★☆
Overall video quality:	★★★★☆
Image stabilisation:	★★★★☆
Approx. €710	

This is identical to the more expensive Canon HF10, except that it lacks the 16GB internal flash memory, so you will have to buy a memory card to store videos on. It takes strong images clearly better than those produced by SD models. These are sharp even when panning across a scene. Colour reproduction is good, though not the best we've seen in an HD camcorder. Even so, subtle colour differences are convincingly displayed, though you need to play back videos through an HD television to get the best out of them. The recorded sound isn't great!



Canon HF 20

SCORE: 80%

Artificial light video:	★★★★★
Dim light video:	★★★★★
Overall video quality:	★★★★★
Image stabilisation:	★★★★☆
Approx. €810	

Weighing 396g, the HF20 is fairly light. The Canon HF20 is an excellent choice for an HD camcorder, wowing the Which testers with its superb image quality and a generous selection of features. It's not one of the cheapest models around. The HF20 has a built-in flash memory of 32GB (enough for around three hours of footage at the highest quality setting) and also gives you the option of recording to memory card. It's similar to the cheaper Canon HF200, which records to memory card only.



Canon HF 200

SCORE: 80%

Artificial light video:	★★★★★
Dim light video:	★★★★★
Overall video quality:	★★★★★
Image stabilisation:	★★★★☆
Approx. €750	

Weighing only 395g the Canon HF200 is a superb camcorder with excellent image quality and compact good looks. The Canon HF200 is virtually identical to the Canon HF20. However, unlike the HF20 it has no internal memory and can only record to SD or SDHC memory card, which you'll need to buy separately. The HF20 is much more expensive, though, so it's worth considering whether this model may suit you.



Canon HF S100

SCORE: 82%

Artificial light video:	★★★★★
Dim light video:	★★★★★
Overall video quality:	★★★★★
Image stabilisation:	★★★★★
Approx. €1450	

The Canon HF S100 is a top-of-the-line HD camcorder, with a price to match its impressive credentials. In fact, it's one of the most impressive camcorders Which have tested. It's been a few years since the first HD camcorders were introduced. The first wave of bulky models has given way to sleeker, slimmer designs, but our testers have found that image and sound quality are sometimes not up to scratch.

The HF S100, however, manages to combine an attractive, portable design with impeccable video quality. It's an impressive camcorder to look at even before switching it on. At 495g, this isn't one of the lightest models around, but it's still very portable and designed to fit comfortably into the right hand.



Canon HR 10E

SCORE: 75%

Artificial light video:	★★★★★
Dim light video:	★★★★☆
Overall video quality:	★★★★☆
Image stabilisation:	★★★★☆
Approx. €600	

Canon's HR10E is an older high-definition camcorder. The image quality is of a great standard, both indoors and out, and still images are very good for a camcorder. The sound quality is also impressive. Its autofocus is great in dim conditions, and the built-in microphone does well not to ignore the mechanical sounds that some of its operations produce. The wind filter is efficient, as is the image stabiliser. It records to DVD-RW or DVD-R, and also has a memory card slot. It's a very versatile model, and provides more manual functions for stills photography than many entry level cameras, including slow shutter speed and Pictbridge.



JVC GZ X900

SCORE: 77%

Artificial light video:	★★★★★
Dim light video:	★★★★☆
Overall video quality:	★★★★★
Image stabilisation:	★★★★★
Approx. €530	

JVC hasn't had a great track record of achieving Best Buys status with its camcorders. However, the X900 bucks this trend in style - this is a terrific HD camcorder to consider. At 299g, the X900 is a great deal lighter and more compact than most bulky HD camcorders, and it's lighter than several standard-definition models. It slips easily into a bag or a jacket pocket, and is great for taking on trips. However, given its size, it's not surprising that some features are missing. For example, it doesn't have a viewfinder, so you have to use the LCD screen to compose your shots. The screen itself is clear and bright, but it's difficult to see in very bright sunlight. The optical zoom is limited to a modest x5 magnification - most HD camcorders offer zooms of x10 or above. There's an optical image stabiliser built into the lens, and the tests found this does a good job of limiting the effects of shaky hands.



Panasonic HDC HS20

SCORE: 72%

Artificial light video:	★★★★★
Dim light video:	★★★★☆
Overall video quality:	★★★★☆
Image stabilisation:	★★★★☆
Approx. €480	

The HDC-HS20 is a great high definition camcorder, and it's a good choice if you're looking for a compact model with the flexibility of hard drive or memory card recording. The 80GB hard drive is enough to record more than 10 hours of footage at the highest quality setting, and you can also record to SD or SDHC memory card. The HDC-HS20 is very compact and weighs 411g. The lens has an optical zoom of x16 - quite generous for an HD camcorder. It's a shame that the HDC-HS20 doesn't have a viewfinder to help you get the best out of filming with the zoom. Composing shots using the LCD screen alone can be quite tricky when you're trying to keep your hand steady.



Panasonic HDC HS9

SCORE: 76%

Artificial light video:	★★★★☆
Dim light video:	★★★★★
Overall video quality:	★★★★★
Image stabilisation:	★★★★★
Approx. €685	

The Panasonic HDC-HS9EG-S camcorder captures great movies in high definition and can store them on either its whopping 60GB of internal memory (430 minutes at top recording quality), or a suitable SD card. The quality of the picture is wonderful, both indoors and out, with the only minor criticism being that the focus isn't so sharp when zooming in dim light. Sound is picked up well and there's very little disturbance from any of the device's mechanisms. The image stabiliser works effectively to give a smoother picture, without sacrificing too much picture quality. The wind filter noticeably reduces the whistling of the wind well, which is particularly useful as an external microphone can't be attached to this model.



Samsung HMX-H100P

SCORE: 75%

Artificial light video:	★★★★★
Dim light video:	★★★★★
Overall video quality:	★★★★★
Image stabilisation:	★★★★★
Approx. €710.00	

The sleek, compact Samsung HMX-H100P produces superb HD videos. It's small enough to sit comfortably in your hand, and, at 389g it won't weigh your arm down. The design is compact and, despite its large and imposing lens, the camcorder easily fits into a jacket pocket or bag. The HMX-H100P records to memory card only and has no internal hard drive, but you'll have to buy an SD or SDHC memory card separately. HD footage is quite memory-hungry, so it's best to get one with a large capacity. The HMX-H100P wowed the testers with the quality of its footage. Videos shot in bright daylight conditions were crisply rendered with excellent colour accuracy, and the HMX-H100P also handles indoor artificial light very well. When filming in challenging low light conditions, the HMX-H100P does an impressive job. It also does a good job of capturing colours and keeping graininess to a minimum. The camcorder benefits from an excellent autofocus system, which reacts quickly as you pan and zoom and copes well in low light conditions.



Sony HDR-CX6EK

SCORE: 74%

Artificial light video:	★★★★★
Dim light video:	★★★★☆
Overall video quality:	★★★★★
Image stabilisation:	★★★★★
Approx. €800	

The HDR-CX6 high-definition camcorder from Sony won't be around for much longer, but if you can track it down, then it is certainly worth getting. Image quality is fantastic in even the more challenging of light conditions, and the audio quality is reasonable. Still picture results are rather good for a camcorder, especially outdoors, but the delay between capturing the picture and depressing the shutter is quite lengthy. There's very little noise interference from the zoom or other mechanical functions, and an external microphone can be fitted, although the connection dictates that it must be one of Sony's own. Footage, which can also be captured in standard definition, is stored on a memory card and can then be transferred to a PC via the supplied docking station. There's a built in back-light function, a x10 optical zoom, and still pictures can be sent directly to a compatible printer via PictBridge. Like many of the other Sony models it has a NightShot mode that allows you to record in complete darkness using the built-in infrared light. Video quality is poor, but it's a nice feature that can be good fun. This camera is easy and

comfortable to use, with a clear monitor and healthy battery life. The image stabiliser is effective, audio is recorded in surround sound, and clips can be shot in widescreen.

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***Information provided by: "Which" Magazine***