

WHAT'S THE FLIP?

It's a sensation in the US, so what's all the fuss about?

More than a million Flip Ultra camcorders have been sold in the US and it's now been released in the UK.

The idea of the Flip (17, in our standard camcorder table on p50) is to make video recording as simple as possible, and there are few features beyond straightforward record and play functions.

Small enough to fit in your pocket, this is truly a camcorder for the YouTube generation – those who want to upload their own mini films to video-sharing internet sites. The supplied software makes uploading videos remarkably straightforward.

Picture and sound quality is poor though, and the autofocus was lamentable, judged by our normal standards. However, results are acceptable for YouTube-style videos. It performed surprisingly well in low light, and its battery life puts many advanced models to shame.

If you have a camera phone with a decent video function, then the Flip may be superfluous. But for the usability of its software and unpretentious aspirations, there remains something to be said for the humble Flip.

It's such a different camcorder to the others on test that we haven't given it a total score. It costs £90 from www.theflip.com.



Shooting stars

We look at the best HD and standard camcorders, review the trendy Flip, and give tips on filming Christmas celebrations

High-definition models are increasingly proving their superiority over standard camcorders

With Christmas coming, this may be the time when you are tempted to splash out on a camcorder to record those special family moments.

High-definition (HD) models are increasingly proving their superiority over standard-definition (SD) models. The sharper images, more complex colour reproduction and smooth panning of HD-recording puts most SD camcorders in the shade.

But for many people, the biggest stumbling block remains price. There are few HD models available for less than £500, and they tend to give underwhelming results.

Prices remain intimidating, but the HD camcorders themselves are certainly shrinking. The bulky models that typified the first wave of HD camcorders to hit the market are

giving way to compact devices small enough for you to grip your hand around easily, such as the Canon HF100 (3), Samsung VP-HMX20C (4) and the JVC GZ-HD5 (7).

Interestingly, no HD model we've looked at in this test has been able to record directly to Blu-ray disc. One reason for this may be that having to incorporate a drive for 8cm Blu-ray discs makes a camcorder unappealingly bulky to use and carry around.

Yet, even with the fanfare surrounding Blu-ray's potential, the future of disc-based storage is limited.

The ease of storing even large high-definition content digitally via hard drives or memory cards may prove the death knell for DVD and Blu-ray technology, and future camcorders may well reflect this trend.

Don't Buy **It's easy to see why this pair are so cheap**

■ SAMSUNG VP-DX100, SAMSUNG VP-D381

These utterly underwhelming SD camcorders failed to impress our testers. Both produce images that are dark, poorly defined and very grainy in low light. They're bulky and uncomfortable to handle, and neither is helped

by their confusing instruction manuals.

The VP-D381 (15) uses Mini-DV tapes and the VP-DX100 (16) records to DVD.

These are among the cheapest models on test and with results like these, it's easy to see why. Worth avoiding.



Which? online Camcorders

Go online at www.which.co.uk/camcorders for reviews of 54 SD camcorders (including 16 Best Buys) and 18 HD models (with seven Best Buys). We tell you the most reliable makes, offer tips on the features you

shouldn't be without and explain the different recording formats available.



Contacts

Canon 0870 514 3723; www.canon.co.uk
Flip www.theflip.com
JVC 0870 330 5000; www.jvc.co.uk
Panasonic 0870 535 7357
www.panasonic.co.uk
Samsung 0845 726 7864
www.samsung.com
Sanyo 01923 246363; www.sanyo.co.uk
Sony 0870 511 1999; www.sony.co.uk
Toshiba 0870 442 4424
www.toshiba.co.uk





1 HIGH DEFINITION

71% Sony HDR-SR11E £650

We've yet to find an HD camcorder that betters this one's superb image quality. It shoots clear video with excellent colour reproduction even in low light.

There's an effective optical image stabiliser and 10 scene modes, including fireworks and candlelight, making it a great model for recording around the Christmas season. You can also capture 10Mp still photos. It's a little bulky, but does include a 60GB hard drive for storing video and images. Cheapest at www.pixmania.co.uk.

WE LIKE A built-in infrared lamp lets you take footage in complete darkness, though the effect is less than perfect.

Available Online **Format** Hard disk/memory card **Weight** 640g **Optical zoom** 12x **Viewfinder** Yes



1 STANDARD DEFINITION

60% Panasonic SDR-H280 £345

A drop in price makes this estimable standard-definition model worthy of consideration. Image quality can't compete with better HD models, but we liked its overall video performance, helped by the optical image stabiliser. It's heavier than most SD models, but has a superb autofocus which keeps videos sharp. The 30GB hard drive lets you record up to seven hours of video in the highest quality setting. Cheapest at www.purelygadgets.co.uk.

WE LIKE The wind filter effectively minimises interference with the internal microphone when filming in breezy conditions.

Available Online **Format** Hard disk/memory card **Weight** 420g **Optical zoom** 10x **Viewfinder** No



ONLINE
Watch our video guide to taking the best footage
www.which.co.uk/advice/how-to-take-great-video

Worth considering



Compact HD

CANON HF100 £580 The Canon HF100 (3) is small enough to fit in your hand and is one of the lightest HD models we've tested, though still heavier (430g) than many SD models.

It takes sharp images that reproduce colour excellently. This is complemented by a superb autofocus and a 12x optical zoom. It narrowly missed being a Best Buy. The HF100 is cheaper than the virtually identical HF10 (2) as it doesn't feature the HF10's built-in flash memory. It's cheapest at Comet.

If you are looking for a similarly compact design but want a less expensive model, consider the FS10 (2) or FS100 (3) models in our standard camcorder table, p50.

CAPTURING CHRISTMAS

The holiday celebrations are a perfect time to try out your new film-making skills. Here are a few tips to get you started

There's no better time to try out a new camcorder than during Christmas and New Year, but filming in party conditions can bring a range of challenges.

FILMING IN LOW LIGHT

A dimly-lit room filled with candles or fairy lights can be a strain for many camcorders, so be sure to check our test results for low-light video image quality. Poorer performers tend to produce 'noisy' results, where a grainy effect can ruin your low-light videos. A built-in video lamp can help with foreground objects as you film, and 'gain-up' digitally brightens a dark image.

SCENE MODES

Many new camcorders have scene modes which, when selected, automatically adjust the camcorder's settings to get the best results from certain conditions. On some models these would include, for example, scene settings for fireworks and candlelight, especially handy around the festive period.

IMAGE STABILISATION

When embracing the party spirit, even the most dedicated cameraman can be forgiven for wobbly hands. This is when a good image-stabilisation system comes in handy. Optical image

stabilisers are built into the lens and react as hands shake, compensating with a sensitive mechanical adjustment.

Sensor-based image stabilisers compensate for slight shaking by adjusting the sensor within the camcorder.



MODEL	SPECIFICATION								WHICH? TEST PERFORMANCE					SCORE %
	PRICE (£)	FORMAT	HARD DISK RECORDING (mins)	WEIGHT (g)	SIZE (hxxwxd) (cm)	OPTICAL ZOOM	LCD SIZE (Inches)	BATTERY (mins)	IMAGE STABILISATION	LOW-LIGHT VIDEO IMAGE QUALITY	OVERALL VIDEO IMAGE QUALITY	SOUND	EASE OF USE	
HD														
1 SONY HDR-SR11E	650	HDD/MC	430	640	9.5x7.5x14	12	3.2	99	★★★★★	★★★★★	★★★★★	★★★★	★★★★★	71
2 CANON HF10	720	MC/flash	-	430	6.5x8x13	12	2.6	92	★★★★	★★★★	★★★★	★★★★	★★★★★	66
3 CANON HF100	580	MC	-	430	6.5x8x13	12	2.6	89	★★★★	★★★★	★★★★	★★★★	★★★★★	65
4 SAMSUNG VP-HMX20C	550	MC/flash	-	500	7x8x14	10	2.6	95	★★★★	★★★★	★★★★	★★★★	★★★★	61
5 SONY HDR-TG3E	545	MC	-	300	12x3.5x6.5	10	2.6	102	★★★★★	★★★★	★★★★	★★★★	★★★★	59
6 JVC GZ-HD6EK	1100	HDD/MC	600	600	7.5x9x15.5	10	2.7	91	★★★	★★★★★	★★★★★	★★★★	★★★★	54
7 JVC GZ-HD5	900	HDD/MC	300	580	7.5x9x14.5	10	2.7	95	★★★	★★★★★	★★★★★	★★★★	★★★★	54
8 CANON HV30	680	HDV/M-DV	-	610	8.5x10x14	10	2.6	68	★★★	★★★★★	★★★★★	★★★	★★★★	53
9 TOSHIBA GSC-A100FE	505	HDD	720	570	8x9x13.5	10	3.0	83	★★★	★★★★	★★★★	★	★★★★★	40
10 TOSHIBA GSC-A40FE	400	HDD	280	560	8x9x13.6	10	3.0	84	★★★	★★★★	★★★★	★	★★★★★	40
11 TOSHIBA GSC-K80HE	300	HDD/ MC	690	580	8x9x15.5	10	3.0	105	★★★★	★	★★★	★	★★★★	35
STANDARD														
1 PANASONIC SDR-H280	345	HDD/MC	420	480	8.5x7.5x14	10	2.7	143	★★★★★	★★★★	★★★★	★★★★	★★★★	60
2 CANON FS10	280	MC/flash	-	310	6x6.5x12.5	37	2.6	163	★★★★	★★★	★★★	★★★★	★★★★	50
3 CANON FS100	250	MC	-	310	6x6.5x12.6	37	2.6	149	★★★★	★★★	★★★	★★★★	★★★★	50
4 SONY DCR-SR75E	380	HDD/MC	880	400	7.5x8.5x11.5	25	2.6	96	★★★★★	★★★	★★★	★★	★★★★	49
5 CANON DC330	290	DVD	-	430	9x7x12.5	37	2.6	95	★★★★	★★★★	★★★	★★	★★★★	45
6 CANON DC320	240	DVD	-	430	9x7x12.5	37	2.6	95	★★★★	★★★★	★★★	★★	★★★★	42
7 CANON DC310	230	DVD	-	430	9x7x12.5	37	2.6	97	★★	★★★★	★★★	★★	★★★★	41
8 CANON MD255	230	Mini-DV	-	460	8.5x7.5x12.5	37	2.6	75	★★	★★★★	★★	★★	★★★★	40
9 JVC GZ-MG530	430	HDD/MC	430	380	7x7.5x12	10	2.6	83	★★	★★	★★	★★	★★★★	38
10 JVC GZ-MG730	700	HDD/MC	430	380	7x7.5x12	10	2.6	82	★★	★	★★	★★	★★★★	36
11 SANYO VPC-CA8EX	230	MC/flash	-	260	11.5x4.5x9	5	2.4	58	★	★★	★★	★★	★★★★	35
12 SANYO VPC-CA65EX	220	MC/flash	-	250	11.5x4.5x9	5	2.4	74	★	★★	★★	★	★★★★	34
13 JVC GR-D820EK	140	Mini-DV	-	490	7.5x8x12.5	35	2.6	140	★★	★★	★★	★★	★★★★	33
14 PANASONIC SDR-S7 EG-K	190	MC	-	190	6x4.5x10.5	10	2.6	72	★★	★★	★★	★★★★	★★★★	32
15 SAMSUNG VP-D381	110	Mini-DV	-	420	10x7x12	34	2.6	87	★★	★	★	★★	★★★★	27
16 SAMSUNG VP-DX100	170	DVD	-	460	9x7.5x12.5	34	2.6	51	★★	★	★	★★★★	★★	27
17 FLIP Ultra series	90	Flash	-	150	11x5.5x3.5	1	1.5	201	n/a	★★★★	★	★★	★★★★	n/a

USING THE TABLE

The more stars the better.

Specification

Price See p37 for price details. **Format** Recording format used. HDD stands for hard disk drive, MC for

memory card. **Weight** With memory card, disc or Mini-DV, battery and hand strap. **Optical zoom** The higher this is, the closer you can zoom. **Battery** How long it records on a single charge.

Test performance

Low-light video image quality How well the camcorders perform in dim light. **Overall video image quality** Includes low light, artificial light and daylight. **Sound** How well

the built-in mic performs.

Ease of use Portability, comfort, recording, playback, LCD display, viewfinder and manual.

Score

These ignore price and

are based on:

Image quality	35%
Ease of use	20%
Sound quality	15%
Still photos	10%
Features	10%
Autofocusing	5%
Battery	5%