

Jargon buster

We focus on what you need to know

■ **APERTURE** The lens aperture is a hole through which light passes, affecting the depth of field (see below). Size is shown by the f-value and, like shutter speed, it can be manually adjusted on all DSLRs.

■ **DEPTH OF FIELD** This is the distance in front of and behind the subject that is in focus. Large depth of field means more of a picture is in focus, while shallow depth can mean a blurred background, which is useful for people shots.

■ **EXPOSURE BRACKETING** This allows you to take several shots, usually three, in quick succession on one press of the button. They'll have different levels of brightness, so you can choose your favourite.

■ **HOT SHOE** This attachment is for an external flash bought separately – which is useful for illuminating distant subjects.

■ **ISO** Increasing this setting makes it easier to get a good shot without using flash and decreases the chance of blur. However, a higher ISO can mean more noise – coloured dots more visible in even areas of colour on your photo. These dots can detract from image quality.

■ **SHUTTER SPEED** A fast shutter speed, such as 1/1,000 of a second, helps freeze action. A slower one, such as 1/25, can give some blur;

a nice technique for depicting movement. An even slower speed of several seconds can help create interesting effects at night, such as traffic-light trails. Use a tripod for this.

■ **WHITE BALANCE** Setting white balance manually can ensure natural colours.



Sophisticated snapper

An advanced digital camera can help you get more creative with your holiday snaps, so we've found the best digital SLRs

If you're eager to get more from digital photography, it may be time to swap your standard camera for a digital single-lens reflex (DSLR) model.

A DSLR can give better pictures and help open up your creativity, as these cameras are responsive and have a range of settings but are also convenient to use.

Reader Paul Cross (pictured above) has our Best Buy Nikon D50. As an artist with his own website, he wanted the all-round quality of a DSLR that he was not getting with his standard digital camera.

He says: 'A digital SLR gives me better colours, better sharpness and more detail in my photos – all important for showcasing my work.'

Paul adds: 'One of the reasons I chose Nikon is that I had an old Nikon film SLR with a 70-300mm lens, so I could transfer that straight on to the D50. This lens, with its 105-450mm zoom range when attached to the D50, is great for the long-distance outdoor shots that I take – for example, at air shows.'

'A DSLR gives me better colours, sharpness and detail'

Digital SLRs are good for spontaneous shots, with shorter shutter delays and start-up times. Rapid photography is also helped by shorter periods between takes, known as shot-to-shot time, and accessible controls that are easy to use.

Better image quality is another reason people buy DSLRs. They have bigger sensors to improve images in challenging conditions, like dim light or sunset.

But DSLRs can underexpose, meaning that pictures come out a little dark. However, you can avoid this by using the exposure compensation function to increase brightness slightly before you take a picture, or you can edit an image with photo-editing software on a computer.

You can also change lenses on DSLRs (see 'A look at lenses', opposite), allowing you to experiment with distances and produce exceptional shots. We tested each DSLR with its kit lens, but these aren't usually of fantastic quality and zoom power is limited, so you may want

A look at lenses

Lenses are crucial kit for enthusiastic snappers

What you can buy

Lenses for DSLRs come in many sizes and types. Zoom lenses are best for practicality; fixed-focal length lenses can give the best image quality; and macro lenses are better for close-ups. Buying used lenses saves money, but make sure they're in good condition. You can also often use lenses from old film SLRs of the same brand.

Fitting

There is some incompatibility between lenses and DSLRs. For example, Canon lenses fit only Canon DSLRs. And when you buy a lens made by a third-party maker, like Tamron, specify your model to ensure correct fitting. Take care when removing and fitting lenses as dust can cause problems, especially on models without dust-cleaning features. Remove and replace lenses quickly, with the camera switched off and facing down.



Optical zoom

The first number in the zoom range indicates how far you can zoom out – the lower the number, the further out you get, and the wider the angle of view. The second number indicates how far the zoom extends – the bigger the number, the further you can zoom in. The stated optical zoom range on a lens is not normally the range you get when used on a DSLR. For example, with the Canon's 18-55mm kit lens, you'll get an optical zoom range of 18-55mm if it's fitted to a film SLR, but fitted to the Canon EOS 350D the zoom range becomes 29-88mm. Fitting a lens on a DSLR usually changes both numbers in the zoom range, often by a factor of 1.5 (see table, p48).

More information

Go to www.which.co.uk/digitalcameras for more information on lenses plus photography tips, alongside reviews of more than 130 digital cameras.



78% Canon EOS 350D £400

This DSLR and lens combination is very quick. A shutter delay of 0.2 seconds, a shot-to-shot time of 0.5 seconds and a start-up time of a lightning 0.3 seconds mean that you have a bigger chance of getting the shot you want. Picture quality with the kit lens was the best on test. Colours are attractive and accurate, especially if you set white balance yourself. Even in automatic mode, it beats all the opposition. It's also one of the most portable DSLRs. It's small and even lighter than some of our larger standard digital cameras. It's available from Argos, Boots, Comet, and Tesco Direct.

WHICH? BEST BUY

WORTH KNOWING Any Canon lens marked EF or EF-S will fit this model.

Cheapest store Comet **Kit lens** 18-55mm **Optical zoom range of lens on camera** 29-88mm **Resolution** 8.2Mp **Size** 10x13x14cm **Weight with lens** 772g



77% Nikon D50 £330

This Nikon takes great photographs with its built-in flash and, like all DSLR cameras, there's a hot shoe for extra lighting. Focusing with the kit lens is good – it was best on test for autofocus and manual focusing is easy, too. Its LCD for reviewing images is also very good; although small, we found it easier to view pictures with this than with any other camera, in dim and bright light. Picture quality is good and although its 6Mp resolution is less than many DSLRs have, this may be an issue only if you want to create very large prints. It's available from John Lewis and PC World.

WHICH? BEST BUY

WORTH KNOWING Be quick to buy this – it won't be around much longer.

Cheapest store PC World **Kit lens** 18-55mm **Optical zoom range of lens on camera** 27-82.5mm **Resolution** 6Mp **Size** 11x15x16cm **Weight with lens** 890g

What you should look for

IMAGE STABILISATION

This helps avoid blurry pictures and camera shake if shooting in dim light or with a long lens. It can be built into the camera or a lens and can be called different names – look out for Super SteadyShot and Shake Reduction, for example

A SIZE TO SUIT YOU

DSLRs are quite heavy but usually comfortable due to good handgrips. But when buying, handle cameras to see which is best for you and whether you like the positioning of buttons

THE RIGHT SCREEN

Most DSLRs can't compose shots on the LCD screen, but viewfinders are clear and accurate. The LCD is for reviewing photos and information, but some DSLRs have an additional information screen on top



to invest in others. You can often buy DSLRs without lenses, for up to £120 less. Buying lenses separately can be expensive but if you want to make the most of DSLR photography, lenses are a must.

Digital SLRs are generally pricey. They lack video recording features you get with standard digital cameras and they're not exactly pocket-sized, but keen photographers won't be disheartened when they see the results.

Be creative

Put people in the picture

Shots of people with a blurred background can look great

- Have as plain a background as possible.
- Aim for a shallow depth of field. First, move physically closer to your subject, then zoom in closer to it. Finally, select

aperture-priority mode, choosing the lowest f-value – f3.5, for example.

■ Focus on the eyes, and if one is closer than the other – if your subject is looking to the side, for example – focus on that one.

■ Shots taken when someone has just stopped laughing are often great, as facial muscles will be at their most relaxed.

Make art out of action

Panning can create striking images of moving objects – such as a frozen image of a car against a blurred background



■ The idea of panning is to follow the object in the viewfinder as it passes across your field of vision, and continue to follow as you press the shutter button down and for a while afterwards.

■ Use shutter-speed priority to set a slow shutter speed – around 1/15th of a second.

■ Use manual focus or autofocus.

Using autofocus, press the shutter button halfway to focus on a point your subject will pass, and keep the button half pressed as you start to pan.

■ To take the shot, keep the subject in the same position in the viewfinder as you twist your upper body round, and press the shutter button down fully when you're facing your subject square on. Keep a finger under the camera to hold steady.

For Best Buy photo processors, see p50

MODEL	SPECIFI						
	KIT LENS (mm)	PRICE (£)	OPTICAL ZOOM RANGE (mm)	RESOLUTION (Mp)	SIZE (cm) (hxxwxd)	WEIGHT WITH LENS (g)	MAXIMUM ISO
1 CANON EOS 350D	18-55	400	29-88	8.2	10x13x14	772	1600
2 NIKON D50	18-55	330	27-82.5	6.0	11x15x16	890	1600
3 CANON EOS 30D	18-55	750	29-88	8.2	15x11x14	1,050	3200
4 SONY A100	18-70	430	27-105	10.0	14x10x15	945	1600
5 NIKON D70s	18-70	510	27-105	6.0	15x11.5x15.5	1,140	1600
6 OLYMPUS E-330	14-45	550	28-90	7.4	14x9x15.5	980	1600
7 PENTAX K10D	18-55	650	27-82.5	10.0	10.5x14.5x14.5	1,070	1600
8 NIKON D40	18-55	350	27-82.5	6.0	10x12.5x15	790	3200
9 NIKON D80	18-70	700	27-105	10.0	14x11x15	1,045	3200
10 PENTAX K100D	18-55	390	27-82.5	6.0	13.5x10x14.5	960	3200
11 CANON EOS 400D	18-55	500	29-88	10.1	13x14x10	810	1600
12 SAMSUNG GX 1L	18-55	570	27-82.5	6.0	13.5x10x14.5	870	3200
13 OLYMPUS E-400	14-42	600	28-84	10.0	9.5x13x13.5	680	1600

USING THE TABLE

We tested the biggest-selling low- to mid-priced DSLRs fitted with their standard kit lenses. The more stars the better.

Specification

Price For Best Buys we give the cheapest widely available high-street price as we went to press. Prices for other models are a guide to what you should expect to pay.

Prices for models available only online are in *italics*. Price includes kit lens. **Optical zoom range** With kit lens fitted. **Battery** With alkaline batteries, buying rechargeables separately is more cost effective in the long run. **Memory card type** You need to buy a memory card separately. CF = CompactFlash; MS DUO = MemoryStick Duo; SD = Secure Digital; xD = xD Picture **Image stabilisation** In camera body.

Which should you choose?



Best for zoom

SONY A100, £430 The supplied kit lens gives an optical zoom range of 27-105mm on this Sony (4), which is the joint longest-reaching lens on test. And the built-in image stabilisation reduces the chances of camera shake, which is useful when you've zoomed in.

Best for beginners

NIKON D40, £350 This Nikon (8) is small and light with a large screen. It also gives you warnings such as 'subject too dark' and you can then access tips on what to do about such problems.

Best for action shots

PENTAX K10D, £650 The speedy burst mode on this Pentax (7) means shots can be taken every 0.3 seconds, so it's great for capturing high-speed action.



CATION				WHICH? TEST PERFORMANCE								SCORE %
BATTERY	LCD SCREEN (mm) (wxdh)	MEMORY CARD TYPE	IMAGE STABILISATION	START-UP TIME (sec)	SHOT-TO-SHOT TIME (sec)	SHUTTER DELAY (sec)	EASE OF USE	BATTERY LIFE	FOCUSING	PICTURE QUALITY	FLASH	
Rechargeable	36x24	CF		0.3	0.5	0.2	★★★★★	★★★★★	★★★★	★★★★★	★★★★★	78
Rechargeable	37x24	SD		0.9	0.8	0.2	★★★★★	★★★★★	★★★★	★★★★★	★★★★★	77
Rechargeable	50x33	CF		0.2	0.6	0.2	★★★★★	★★★★★	★★★★	★★★★★	★★★★	73
Rechargeable	49x33	CF or MS DUO	✓	1.4	0.9	0.3	★★★★	★★★★★	★★★★	★★★★★	★★★★★	72
Rechargeable	37x25	CF		0.7	0.7	0.1	★★★★★	★★★★★	★★★★★	★★★★	★★★★★	69
Rechargeable	47x35	CF or xD		3.0	1.6	0.5	★★★★	★★★★★	★★★★	★★★★	★★★★★	67
Rechargeable	50x33	SD	✓	0.6	0.5	0.5	★★★★	★★★★★	★★★★	★★★★	★★★★★	67
Rechargeable	48x32	SD		1.2	0.6	0.5	★★★★	★★★★★	★★★★	★★★★	★★★★★	66
Rechargeable	48x32	SD		0.8	0.9	0.5	★★★★	★★★★★	★★★★	★★★★	★★★★★	66
Alkaline	49x33	SD	✓	1.4	0.8	0.3	★★★★	★★★★	★★★★	★★★★	★★★★★	65
Rechargeable	50x33	CF		1.1	0.8	0.3	★★★★	★★★★★	★★★★	★★★★	★★★★	64
Alkaline	49x33	SD		1.5	0.8	0.4	★★★★	★★★★	★★★★	★★★★	★★★★★	63
Rechargeable	49x36	CF or xD		1.6	0.7	0.2	★★★★	★★★★★	★★	★★★★	★★★★	62

Test performance

Start-up time Time it takes for the camera to be ready to shoot after pressing the power-on button.

Shot-to-shot time Time after a photo is taken for the camera to be ready for the next shot.

Shutter delay Measured with the camera in automatic focusing mode, though the result depends on the lens used. It's measured from when the button is fully

pressed down to when the picture is taken. **Ease of use** This looks at speed-related performance, such as shot-to-shot time, and handling, such as inserting and removing a memory card or using the shutter button. **Focusing** Performance of automatic focusing. This varies according to lens used. **Picture quality** We examine colour reproduction, contrast and problems such as noise and

distortion on real-life photos and on test charts using white balance mode.

Score

Ignores price and is based on:

Picture quality	31%
Ease of use	26%
Features	12.5%
Viewfinder/monitor	12.5%
Battery life	10%
Flash	8%

Contacts

Canon 0870 514 3723 www.canon.co.uk	Pentax 0870 736 8299 www.pentax.co.uk
Nikon 0870 770 0231 www.nikon.co.uk	Samsung 0870 242 0303 www.samsungcamera.co.uk
Olympus 020 7253 0513 www.olympus.co.uk	Sony 0870 511 1999 www.sony.co.uk

BEST BUY COMPETITION

Win a Best Buy Canon EOS 350D digital SLR camera worth £400

We're giving away five Canon EOS 350Ds, with 18-55mm kit lens, worth £400 each

TO ENTER, ANSWER THE FOLLOWING QUESTION

According to our report, what is a hot shoe?

- (a) Small attachment for adding an external flash
- (b) Hole through which light passes
- (c) Type of image file

To enter our Best Buy competition online, go to www.which.co.uk/bestbuycompetition or send your entry on a postcard to 'Best Buy June 07', Which?, PO Box 44, Hertford SG14 1SH.

Include your name, address and postcode, daytime phone number and Which? membership number (found on your Which? membership card as your user name). Entries received by 27 June 2007 will be entered. Our competition is open only to current Which? members. Only one entry per household. Winners will be informed in writing within seven days after the closing date. To claim a prize you must contact us, and your claim be received by us, by midnight 20 days after.

If we do not hear from you by the deadline we will select another winner. The first five winners drawn will win our Best Buy Digital SLR camera, the Canon EOS 350D worth £400. If the model offered is not available, an equivalent will be given. No cash equivalent. Editor's decision is final. Which? reserves the right to feature names, photographs and towns of winners in future promotions.

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**Worth
£400**