Digital SLR Survey

Canon

Canon EOS 1DS Mark III

When a digital SLR camera has a price tag of $11,999 — and that's just for the body — you know it's not something that everyday folk will appreciate. Instead it's likely it will only appeal to professionals who make a living from photography. Indeed, playing with a camera like the Canon EOS 1Ds Mark III, one quickly gets a sense of how the other half lives — photographically speaking — as it produces huge images with faithful colour reproduction and barely a hint of noise.

The Canon EOS 1Ds Mark III replaces the EOS 1Ds Mark II in the company's D-SLR line-up. It improves on the Mark II, which was released in September 2004, in a number of ways. Both cameras feature a full-frame (35mm) sensor (this is denoted by the 's' in the product name), but the Mark III is able to capture pictures at a much higher resolution. It has a 21.1-megapixel CMOS sensor, along with technology that makes sure enough light is able to reach each one of those pixels. The Canon EOS 1Ds Mark II only has a 16.7-megapixel sensor.

The extra resolution means that you'll need more storage than ever for RAW files, as each one will consume about 25MB. The Canon EOS 1Ds Mark III has a CompactFlash slot as well as an SD card slot. Either can be used to store images, and file transfers can also be made between the two slots.

Despite the huge resolution of the Canon EOS 1Ds Mark III, it is not slow. It's response time is instantaneous; the moment you press the shutter, you can feel the shutter release. There is no waiting time when capturing individual images, so you can quickly frame the next shot; in continuous mode we were able to shoot up to 13 frames in one burst before the camera had to slow down and process the images. We used a SanDisk Ultra II 1GB card for our tests, but got the same result when using a Panasonic Class 4 2GB SD card. The Canon EOS 1Ds Mark III uses two DIG!C III processors to handle captured images, and with a speed of five frames per second in continuous shooting mode, they can process up to 125 megabytes of data per second; this makes it much faster than the Mark II.

It's all well and good to capture images quickly, and this is one of the reasons to buy a professional camera, but the Mark III also captures them without a hint of noise. All of our test shots, whether in the studio or outdoors, were crystal clear, even when we shot at the maximum standard ISO speed of 1600 (you can use speeds up to 3200 via the custom function modes). The only time you will see noise is if you take shots in especially low light and then brighten them up significantly during post processing (and even then you can use noise removal to clean them up).

In fact, this is one of the things that make the difference between the Canon EOS 1Ds Mark III and an entry level D-SLR seem like night and day. The pictures taken with the Mark III just look noticeably cleaner, more natural, and also not as cramped (due to the full-frame sensor). Of course, this will depend on the type of lens you use, too, and the Mark III will accept any of Canon's EF-mount lenses. We used a Canon EF 24-105mm 1:4 L IS USM for our tests, and were able to produce near-perfect shots every time.

We did notice that some images came out a little too neutral, but this was easily fixed during our post processing. Most of our images — even ones taken on cloudy days — required only minimal post processing for contrast. We ran the camera in manual mode most of the time, as the f/4 lens didn't do a perfect job in aperture priority mode when taking photos in very bright light. Conversely, in low light the Mark III's performance while using a slow shutter speed was spectacular. Handheld shots at 1/20th of a second came out almost crystal clear thanks to the built-in image stabilisation of the lens. It's odd to hand hold the camera when using such a slow shutter speed, because it has a heavy shutter that you can really feel. The camera is heavy enough to keep steady for short periods of time (unless you use a massive lens). After long periods of time, you might get shaky hands. It's best to have a monopod on hand, just in case.

The Mark III's body has all the buttons you need to access the most common functions for affecting the exposure and the focus method (and there is a built-in hand grip for portrait shots), but we wish there was an extra dial near the shutter for the aperture control. As it stands, to change the aperture you must either press the exposure button and then move the hand dial, or set the camera's power switch to its third position to enable the thumb-wheel on the back of the camera and use it to change the aperture value. It's a tad unintuitive.

Live View makes an appearance on the Mark III, but it didn't show us the results of autofocus functions on the LCD screen; manual focusing did show up through the screen, however. We're not fans of Live View in the first place, especially on cameras that have a beautifully large optical viewfinder such as this one, but it can be useful when framing shots in a studio environment. While on the subject of focusing, the Canon EF 24-105mm 1:4 L IS USM lens allowed us to select from nine manual focus points towards the middle of the scene, which is not as comprehensive as we would have liked. For autofocusing, the Mark III has 45 focus points, which is six less than Nikon's D3x.

In the end, the Canon EOS 1Ds Mark III is a huge improvement over the EOS D1s Mark II. It's faster, has a much larger sensor and has a 14-bit analog to digital converter. It also offers Live View and built-in dust reduction. It's a beast of a camera for any professional Canon user who wants to take a step up from the Mark II.

Review by Elias Plastiras (Good Gear Guide) 26/02/2009 14:30:00

Canon EOS 5D Mark II

The lowdown: This 21-megapixel camera with a full 35mm, frame-sized sensor is a revision of the 5D that was released to acclaim in 2005. The pixel count has been increased and a full-HD movie mode has been added as a function of live view. The body is as rugged and well-constructed as ever, and the ergonomics are good, but not as well thought out as the rival Nikon D700's. The LCD is now the industry-standard high resolution 75mm screen. Even with the large files produced by the camera, a burst speed of 3.9fps in JPEG is achievable. There is no pop-up flash - this is a serious camera.

Like: Used with the Canon EF 24-105mm L lens, image quality is superb. The resolution is such that small areas of the image can be cropped and enlarged without loss of detail. Low noise performance is exemplary at the highest ISO settings. Also, the movie mode is surprisingly effective, delivering true high-definition video straight from the camera.

Dislike: While the high-definition movies are excellent, we have reservations about the utility of this feature. To work properly, the camera needs to be tripod-mounted and the focus needs to be constantly tweaked manually. The user manual states "auto focusing is not recommended" when shooting movies. Maximum clip size is about 12minutes.

Verdict: There are three outstanding cameras in this market niche. The Canon 5D was the first by three years and the MkII is not a lot different from the MkI. Nikon and Sony have come at the design from fresh points of view. For anyone with an investment in Canon lenses, the choice is easy, but for the lucky few with (lots of) money, it is a little harder. But the good news is, whichever you choose, you will have a superb camera. It was sheer pleasure being reacquainted with the Canon 5D type.

Reviewed by Terry Lane (SMH) - March 12, 2009

Canon EOS 550D

Following hot on the heels of the EOS 500D, Canon's (former) top-of-the-line consumer digital SLR, the 550D, certainly looks and feels very similar to its predecessor. The body shape and external appearance is almost identical, with the notable distinction of the front insignia and some extra buttons around the back of the camera.

The back of the 550D shows the addition of the Live View button, as well as the quick control button that can access the on-screen shooting functions.

(Credit: Canon)

In the hand, the 550D feels sturdy and secure, though those with larger paws may find the controls a little too nimble, and the body a little too light. At the top of the camera, the mode dial contains all the requisite scene modes that are suitable for beginners, the Creative Auto mode, as well as PASM controls. Finally, at the far end of the dial is movie mode, the big calling card of this camera.

Video on the 550D comes courtesy of 1080p recording, at a selectable 24, 25 or 30 frames per second. As well as full manual control within the camera, there is also a dedicated video record button at the rear which automatically activates Live View.

As part of the video functionality, the 550D is also equipped with something that Canon is calling movie crop mode. It takes the centre portion of the image and zooms in using the full resolution of the sensor to deliver a VGA quality clip that's equivalent to 7x zoom.

Inside, the 550D contains an 18-megapixel CMOS sensor and the Digic 4 processor. And while it may be tempting to say that there are many similarities between the 550D and 7D, the latter camera is equipped with dual-Digic 4's that afford it an incredible burst speed. The 550D has to make do with a more pedestrian-like 3.7 frames per second (fps), which is just a touch ahead of the 3.4fps from the 500D. The 550D is also not built to the same standard as the 7D.

The 550D does have a few other tricks up its sleeve though, mostly to do with the LCD screen, as it's a 3-inch, 3:2 aspect ratio, 1,040,000-dot one. The viewfinder is relatively small, just like the 500D which makes manual focusing a little more difficult. Fortunately, the screen and the Live View implementation helps with this enormously.

Review By Alexandra Savvides/CNET Australia

Nikon

D700

The Nikon D700 is Nikon's, and the world's, best serious digital camera. The old professional D3 costs more and runs faster for sports, but the D700 is newer, smarter, smaller and lighter.

The D700 has image quality indistinguishable from the klunky old D3, both in terms of sharpness and at high ISOs. The D700 has the same superb 3" LCD, but handles even better than the old D3 better due to a new INFO button and smarter firmware. I own a D3, and I prefer the D700 except that the D700 lacks the 5:4 crop mode I often use (most people don't care).

Even at $8,000, the overpriced D3X isn't an improvement over the D3. Sorry rich people. The D3X is the same as the D3, except that it only has the same frame rate as the D700 (maybe even a little slower), and the D3X lacks the high ISO performance of either the D3 or D700.

Unless you're a full-time sports, news or action pro, the D700 replaces the D3 for studio, wedding, portrait, nature and landscape pros, as well as all advanced amateur photographers. (I'm a very strict grader for what defines a pro; everyone else is amateur.)

Forget the D3X, unless you're printing everything at 20 x 30" (50 x 75cm) and up, since the D3X is a hair slower than the D700, and has nowhere near the high ISO performance. I've made great 20 x 30" prints from a D40; pixels aren't worth what they used to be.

The Canon 5D Mark II costs a little more, and the choice between the two is easy. The 5D Mark II is the best thing Canon makes, but the D700 is better for almost everything.

The D700 wins for just about everything, especially action and taking pictures of your friends, family and kids. The D700 has superior autofocus performance over the Canon 5D Mark II. The 5D Mark II's AF system is inferior for photographing moving kids in dim light. All my D700 shots made with a 50mm f/1.4 indoors are just about perfect, most of my 5D Mark II shots made with a 50/1.4 USM just can't nail the focus because the 5D Mark II lacks the face recognition of the D700. The D700 magically focuses on a moving kid's nearest eye, while the 5D Mark II usually mis-focusses on his shirt, sleeve or background. At f/2, depth of field is so narrow that most of my 5D Mark II photos are useless for moving kids. Who needs 21MP if they're out of focus?

If you have incredible Canon lenses and regularly make prints many yards (meters) wide, the Canon 5D Mark II has more pixels, but the AF and ergonomic (handling, speed and comfort) performance of the D700 is superior. The 5D Mark II is mostly plastic, while the D700 is mostly metal. The D700 is sculpted to feel great in your hands all day, while my hands start to hurt fast holding the less well designed 5D Mark II. Nikon shooters can't believe that when you take a picture on the 5D Mark II, that you can't zoom or look at any other pictures until you use your other hand to press the play button manually!

Get the 5D Mark II if you're photographing things that hold still or pose for you AND you need to print them Bismarck sized, otherwise, get the D700.

I average 5,000 shots every month on my D3. When I got a D700, there wasn't much difference. The D700 has exactly the same image quality, and handles just a little bit better. I can't say anything better about the D700 than that. The D700 is a D3 with a smaller battery (unless you add the grip) and a cheaper finder screen system, and that's it. The D700 even has the superior rear thumb control of the D3, not the crappy single-piece thing from the D300.

The D700 is a mostly improved version last year's $5,000 camera, for just $3,000. If you want to read all the good things I think about the D700, read my D3 review in its entirety, and read this review simply for what differs between the two.

The thing I missed most in the D700 is the option to shoot in the professional 4:5 aspect ratio, which fits more of my subjects better than the outdated 2:3 aspect ratio of 35mm film and most DSLRs. On my D3, I program the FUNC button to let me chose my framing with one finger without having to take my eye from the finder.

To make up for it, the D700 adds an AUTO option to the Auto Dynamic Range mode, which will probably give the D700 slightly better image quality in difficult light with less twiddling (I leave my D3 set at Normal, since it has no AUTO setting), and more importantly, the D700 added a much needed way to get to my color saturation and contrast Picture Control settings, as well as a way to display the huge INFO panel on the 3" LCD, each with just one tap of one finger on my shooting hand. On the D700, I can get to all the menus with just one hand.

Which is better? If I didn't use the 4:5 mode so often and have a personal issue with the obstructive black AF sensor markers and too-small exposure compensation marks in the D700's finder, it's obvious that the D700 is better so long as you're not shooting action at 9FPS.

The D700 uses the same image sensor and has exactly the same image quality as the D3, even at ISO 3,200.

The D700 has some subtle, but critical firmware improvements which make it far easier and faster to use than the D3. I can shoot the D700 with one hand, but need to two hands to set Picture Controls and get to the menus in the D3. See my D700 User's Guide for details. In the D700, I can program the FUNC button to call up my Picture Controls, program the power button to call up the rear INFO display, and another tap of the INFO button gets me to other frequently used menu settings. The D3 lacks these options, so it takes a second hand on the MENU button to do all this. Time wasted jacking with more button pushes on the D3 needing an extra hand means missed photos.

Review by Ken Rockwell

Nikon D3

The professional Nikon D 'single digit' series of digital SLR's started life back in June 1999 with the groundbreaking D1. Groundbreaking because it was the digital SLR that broke Kodak's stranglehold on the digital SLR market and fundamentally brought prices down to a level which most professionals could afford (around the US$5,500 mark). Since then we have seen a steady progression in the evolution of this line of cameras. Whilst the core values of a high quality full-size body with integrated grip have remained constant, the line split into two halves (indicated by the X and H suffixes), one targeted at high resolution photography the other high speed sports type photography (lower resolution but faster continuous shooting). It's been almost three years since Nikon introduced a completely new digital SLR with a new sensor (the D2X) and there had been much anticipation that Nikon's next move would be a full-frame chip.

And so it was, with the introduction last August of the new 'FX format' D3, featuring a 36 x 23.9 mm 12.1 megapixel CMOS sensor as well as a vast array of new features which absolutely raise it another notch above previous single digit Nikon DSLRs. Important headline improvements include high sensitivity support by default, up to ISO 6400 with 25600 available as a boost option, 14-bit A/D conversion, a new standard image processor, a new shutter, new auto focus sensor, focus tracking by color, nine frames per second continuous, dual compact flash support, DX lens support (albeit at lower resolution) with automatic cropping and a 3.0" 922,000 pixel LCD monitor (which it has to be said is lovely).

Some will undoubtedly question Nikon for 'only' delivering twelve megapixels on their first full frame digital SLR, all we can presume by looking at past model line history is that this camera is designed for speed (both in sensitivity, auto-focus and continuous shooting). Our first comment on seeing the D3 in the late summer of last year was 'where's the 'H' suffix?', something echoed many times in the months following announcement by commentators and photographers. Although Nikon remains tight-lipped about its future plans it seems fair to assume that Photokina will bring an EOS 1DS Mark III competitor (with higher resolution but without the high speed shooting).

Review by http://www.dpreview.com

Nikon D3100

Nikon has developed a habit of making very attractive entry-level DSLRs, which are rarely the best specified but cleverly designed so that they're easy and enjoyable to shoot with. The D3000 fitted this pattern perfectly, a gentle refresh of the D60 (which was itself a slightly updated D40X), it added ease-of-use features to make it a pleasant little camera despite a specification that was beginning to look rather out-of-step with the rest of the market.

The D3000 sold well, despite its rather aged 10 megapixel sensor and lack of both live view and video. However, there's only so long that clever product design and feature integration can make up for a specification that looks dated. So with this in mind, Nikon has announced the D3100 - probably the biggest refresh of its entry-level offering since it really attacked the low end market with the original D40.

The D3100 is built around a 14.2 megapixel CMOS sensor (possibly the one seen in Sony's NEX cameras?), bringing not only live view but also Full HD video capture to Nikon's entry-level model. This not only makes it the company's second-highest pixel-count SLR (after the D3X) but also makes it the first to offer 1920x1080 movie recording. It can only record clips up to ten minutes long but it's still an impressive feature addition at this level.

The body gets a slight refresh, gaining an extra button to the left of the screen, a drive mode switch at the base of the mode dial, a sprung lever to engage live view and a direct record movie button. There are also revisions made to the feature-teaching, hand-holding 'Guide Mode' and an additional autofocus mode to allow better focusing in live view and autofocus during video shooting.

Sony

Sony Alpha-900

The Alpha 900 represents in a nutshell the almost schizophrenic nature of Sony's digital camera division, which can market compact cameras with smile detection and a Playstation style user interface at the same time as this, perhaps the most pared-down, frill-free and unashamedly 'serious' DSLR we've seen in a long time.

You can't help feel that Sony's long-held worry that as a consumer electronics giant it will never be totally accepted as a serious camera manufacturer has been instrumental in shaping a flagship camera that studiously avoids the creeping 'gadgetization' of DLSRs and concentrates on old fashioned stuff like picture taking.

And hey, for the most part this is no bad thing; the Alpha 900 is uniquely approachable for a camera in this class, has the best viewfinder on the market and produces, as long as you don't venture into the higher reaches of the ISO range range too often, very appealing output indeed. It feels and acts like a camera - in stark contrast to many of Sony's compacts, which seem to be designed to act like a cross between a camera phone and a games console - without offering the utility of either. Looking through the huge viewfinder you get the full advantage of the full frame format; the engulfing view makes you feel totally involved in the picture taking process.

No doubt about it, there is much to like about the Alpha 900 - from the quality of images it produces to the extensive control over image parameters and, as I've already mentioned, the excellent, intuitive and uniquely user-friendly handling. The built-in image stabilization is a real boon and makes the Alpha 900 a no brainer purchase for anyone with a sizeable Minolta 35mm camera lens collection. The only 'frippery' I found myself missing was live view (we do a lot of work in the studio where magnified live view, when done well, can be a real time saver), though not everyone will care.

Of course we can't talk about the Alpha 900 without talking about its 24.6 megapixel sensor; currently the highest resolution you can get in a 35mm format body (borne out by the class-leading resolution figures in our tests). What real advantage that gives most users is harder to say, especially when you factor in the rather disappointing high ISO performance that is the inevitable consequence of such a high pixel density, and the demands it puts on any lens you put in front of it - not to forget the fact the immense files will choke all but the most powerful PC and fill your hard disk in no time. But let's not knock Sony's achievement; at low ISO settings the Alpha 900 offers more resolution than any other digital SLR on the market, period - and for serious studio or landscape shooters this, combined with the excellent dynamic range, makes it an appealing option at a (relatively) affordable price point.

The biggest challenge to the Alpha 900 is probably the as yet untested Canon EOS 5D Mark II, which promises a similar resolution and a bag full of features (live view, video mode and so on) at a price that's around 10% lower. There's no doubt that existing Sony SLR and legacy Minolta film SLR users now have a fitting flagship model to salivate over and save up for, but in the face of such strong competitors the Alpha 900 may have a tough job persuading anyone to switch systems for it.

In conclusion this is, more than anything else at this end of the market, a true photographer's camera, with at least one totally unique feature (the Super SteadyShot stabilization) and one that offers the best viewfinder and highest nominal resolution (and the lowest 'cost per megapixel, incidentally) in its class. It's capable of stunning results at up to ISO 400 (and is fine at ISO 800-1600 as long as you're not printing posters), and it is incredibly fast and responsive in use. If Sony had managed to keep the price nearer to the $2000 mark (even if this meant fewer megapixels) I think it would be flying off the shelves. As it stands it will, I fear, struggle to make a serious impression on anyone other than the Sony/Minolta faithful. One thing is clear, however: anyone who thinks a consumer electronics giant can't make a heavyweight photographic tool is seriously misguided.

As long as you take into account our reservations about the high ISO image quality (which we'd more easily forgive on a camera that wasn't the best part of $3000), the Alpha 900 is a camera that just, by the skin of its teeth, offers enough to gain our highest award.