

Canon EOS 5D Mark II

Canon's Upgraded "Medium Format" Camera

By John Rettie

When I penned my review of the original Canon EOS 5D just over three years ago, I said it performed like a medium format camera. In hindsight that now appears to be a misleading statement, as that camera only had a 12.8-megapixel sensor. In many ways, though, it's a great marker of the improvement in quality cameras and, more importantly, consumer expectations. Remember the old days when the size of film didn't change but the quality of an image improved immensely as films and processing technologies improved year by year? It's really no different with today's advances in digital technologies.

Fast-forward three years and here again I'm using the same description for the EOS 5D Mark II, which now sports a 21.1-megapixel CMOS sensor. At first blush this would appear to be the same sensor found in the EOS-1Ds Mark III, but apparently it is a newer version with improved image quality. According to Canon, the 5D Mark II shares 80% of its features with its predecessor and 10% with the 1Ds Mark III.

It is the other 10%—the 1080P HD video shooting capability of the camera—that's really most significant. Since the camera was launched, the video feature has garnered the most reaction, both positive and negative.

But first my thoughts on the stills side.

The 5D Mark II has a suggested retail price of \$2699, which is \$600 less than the initial price of the 5D when it was introduced in 2005. By the way, if you want to read about all of the changes and new features, Canon has produced an excellent white paper that can be downloaded via a link at Canon's Digital Learning Center (www.usa.canon.com/dlc).

Anyone who has grown accustomed to shooting with the 5D will immediately feel right at home with the upgraded version, as it's pretty similar with a few significant upgrades, including a much



▲ Externally the Canon EOS 5D Mark II differs very little from its predecessor. The 24–105mm lens shown here is available with the camera as a kit.

▼ The larger 3-inch 920,00-dot LCD screen is a major improvement compared to the one on the 5D, but it did mean relocating some buttons.



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nicer 920,000-dot rear LCD monitor. Because of the larger screen, however, some buttons had to be moved. The camera body is essentially the same size and weight but is now officially weather-resistant, although not as comprehensively sealed as the 1D series of cameras.

The 5D Mark II has the newest DIGIC 4-image processor that delivers 14-bit images and also helps to improve high ISO output, processing speed and card writing. The basic ISO range is listed as running from ISO 100–6400 but it can go as high as ISO 25,600 in the H2 setting. I tried the camera on several occasions at ISO 3200 and found the lack of noise to be exceptional.

Canon has also upped the shooting speed slightly from 3 to 3.9fps for the Mark II. With a high-speed UDMA-compliant Compact Flash card, the camera can shoot bursts at this speed up to 14



The beauty of a 21.1-megapixel sensor is that you can blow up an image and see “grain-free” details.

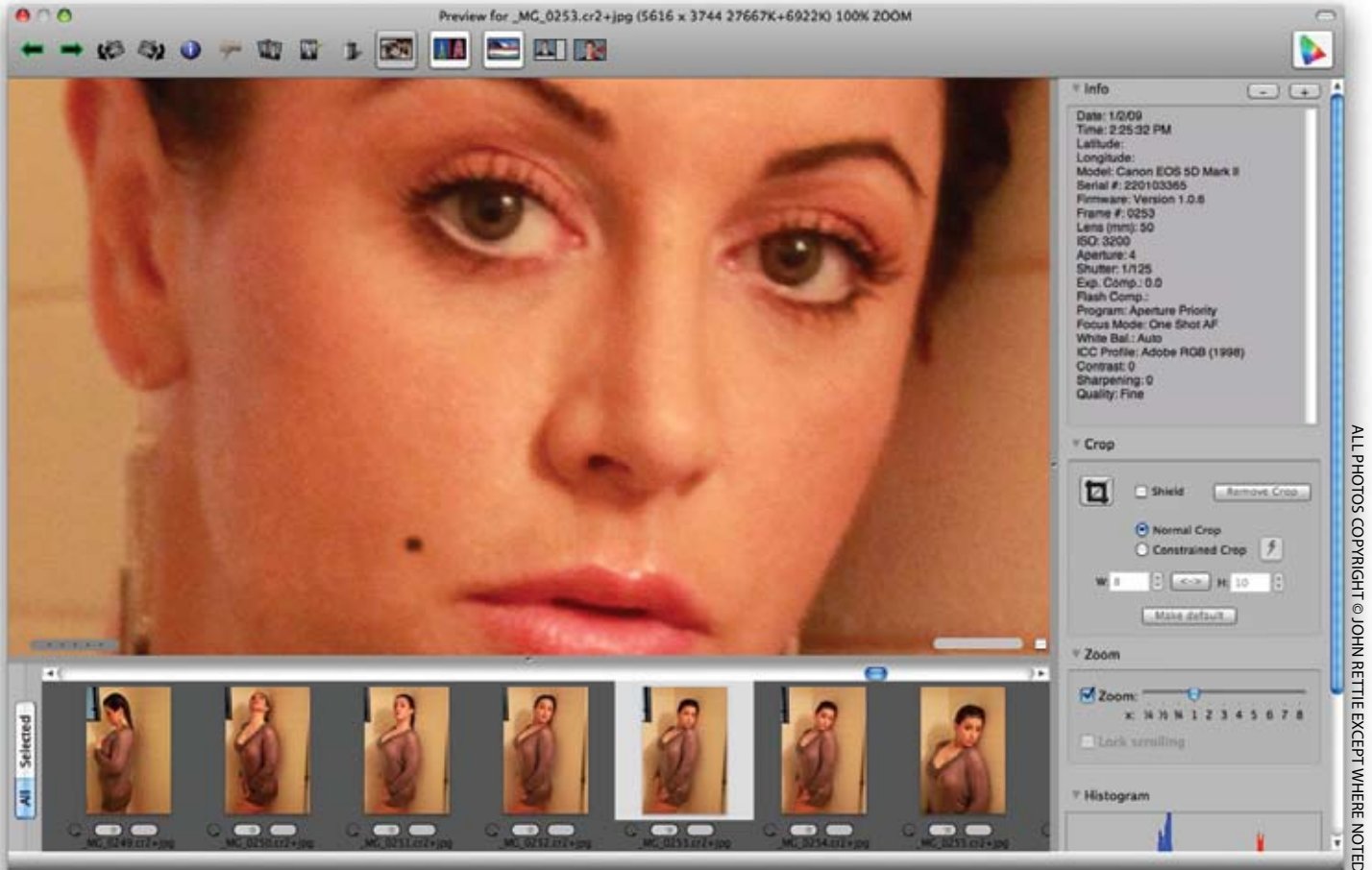
images in RAW or until the card is full in JPEG.

Those of you who read my review on the Nikon D3X know that I tried that camera while covering the Dakar 2009 auto rally in Argentina and Chile. I also took along a 5D Mark II with a 24–105mm lens, which is sold as a kit for \$3299—coincidentally the same price Canon charged for the 5D body alone three years ago.

I elected to use the 5D for shooting scenes in the bivouac each night and the D3X for action photography during the day. Because of the horrendous problems with dust I did not change lenses unless absolutely necessary and, consequently, I avoided getting any dust spots on either camera. The 5D Mark II includes a dust reduction system, so it should not have been a problem anyway!

Once I saved all the images from both cameras and checked the results I was pleased to have used the cameras the way I did. On the whole I found the 5D Mark II images to be more “film-like” (some would say “creamier”) than the D3X images. Part of this was because many more of the photos I shot on the 5D were taken in the shade, under cloudy weather or after dark. Meanwhile, most of the race action shots were taken in bright sunshine in the middle of

Update: Just as we went to press, Canon U.S.A. Inc. announced it would be issuing a “greatly anticipated” firmware update for the EOS 5D Mark II. It said, “This new firmware will accommodate a great number of user requests for manual exposure control in the EOS 5D Mark II video mode. Manual exposure control while shooting video on the EOS 5D Mark II is expected to make a big impact with cinematographers and videographers using the 5D Mark II for high-end HD video production.” This will obviously address the concerns of cinematographers as noted in the review, making the camera even more desirable as a low-cost, “high-end” movie camera.



the day so the comparison of the two is not really fair.

On the other hand, I found the D3X was easier to use for action photography as I still find the ergonomics of Nikon bodies better than those of Canon's. Two immediately noticeable things are the position of the on/off switch and the front thumbwheel for adjusting aperture or shutter speed. I know I am not alone in this opinion

▲ *Although there is some noise at high ISO settings, it is not too objectionable, as seen here in this 100% close-up of LA-based model/actress Samantha James.*

RedRockMicro has already introduced an extensive accessory kit to help cinematographers make the most of the 5D Mark II.



as so many of my peers, especially those who have switched in the past few years from Nikon to Canon systems, say the same thing. Of course, for longtime Canon users it is not a big deal as they have become familiar with the Canon way of doing things.

One feature that is lacking on the 5D (and the EOS-1 cameras as well as the D3X) is a built-in pop-up flash. I know the reasons given by the manufacturers (fragility and inability to weatherproof), and pros that use flash all the time, as to why pro-level cameras don't have this convenient feature. However, I disagree and my experience is that, for the minimal extra cost, a pop-up flash is more than worthwhile.

While jumping in and out of a cramped SUV with two other photographers who were also covering the Dakar rally, my cameras spent most of the time lying on the floor by my feet. I did not want to put a flash on top, as it would likely have gotten damaged. Most of the time I did not need it but every now and then a quick flash for fill light would have been beneficial. It's on those few occasions when you only need flash for a couple of shots that a pop-up becomes so convenient. Also it can be used to fire remote wireless flashguns without using an expensive external flash or trigger-only unit. Please, Canon and Nikon, give us pop-up flashes on your pro-level cameras!

I have barely mentioned the video side of the 5D Mark II. That's partly because, unfortunately for one reason or another, I did not shoot any meaningful video with the camera while I had it on loan. As you've no doubt read elsewhere the 5D Mark II and other DSLR cameras with video capabilities have garnered mixed reviews—it's interesting why. The video quality captured by the 5D is stunning. Cinematographers are raving about it, comparing it with that



▲ While the drivers and navigators rest after a full day of driving across the deserts of Chile and Argentina in the Dakar 2009 Rally, the service crews, such as these on the Mitsubishi team, check every inch of the race vehicles each night in the bivouac. Photo captured by John Rettie on Canon 5D Mark II, EF24–105mm f/4 L IS lens set at 28mm, 1/50 second, handheld, f/5, ISO 1600, fully auto mode.

Former World Rally Car champ, Spaniard Carlos Sainz, left, chats with American Mark Miller, right, while relaxing before the start, delayed due to fog, of a day of racing in their VW Race Touaregs across the Atacama Desert in Chile, during the Dakar 2009 Rally. Photo captured by John Rettie on Canon 5D Mark II, EF24–105mm f/4 L IS lens set at 47mm, 1/249 second, handheld, f/10, ISO 1600, fully auto mode.



obtained by \$100,000 camcorders. It's not surprising as the 5D's sensor is about 10 times the size of a sensor in a good, pro-quality camcorder. The 5D has a wide range of lenses that are not easily available or affordable for camcorders and the large sensor size also means that depth of field is lessened—making for movie-like pictures, especially when shooting people close-up. Another benefit of the larger sensor is low-light capabilities that surpass most other camcorders.

Yet ironically, serious cinematographers lament the lack of manual controls on the 5D. They complain that exposure and shutter speed are set automatically and cannot be adjusted. On the other hand, inexperienced videographers, including myself,

lament the lack of true autofocus. Another shortcoming of current hybrid DSLRs is the way fast-moving subjects can become distorted because of the rolling shutter. The problem is caused because the top edge of the image is captured slightly ahead of the lower edges—leading to an objectionable look.

Despite the apparent shortcomings of the 5D as a use-any-time camcorder, there are hundreds of serious videographers who have started using it for video capture. Forums, such as www.cinema5D.com, have appeared and several hackers are try-

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ing to change the camera's firmware to disable automatic functions! There are already several companies who have introduced accessories that help turn the camera into a fully featured high-end camcorder. Considering this is Canon's first attempt at a so-called hybrid DSLR it will be fascinating to see how it evolves.

Overall, as expected, I was impressed by the 5D Mark II just as I was by the original 5D over three years ago. Strangely enough though, it did not make me want to rush out and buy one. For the majority of my work 12 megapixels is still more than enough resolution, so 21 megapixels is overkill. I also would miss having a built-in flash. I do want to own a DSLR that shoots HD video but I am not a high-end cinematographer who appreciates the unique video capabilities of the 5D. I want a DSLR that can shoot more automated video with an articulated rear screen.

For those of you who want/need more megapixels, the 5D Mark II is an amazing camera. When you consider that it's less than half the price of an EOS-1Ds Mark III, it's a bargain—you get a better picture, far better low-light capability and you save a lot of weight and bulk. Yet you barely give up anything—a small amount of speed (3.9fps vs. 5fps) and some weatherproofing. In my view, the 5D Mark II makes the 1Ds Mark III look like a dinosaur and, apparently, it makes many extremely expensive cinematic cameras look the same way.

To see more examples of my 5D Mark II images, visit: <http://www.johnrettie.com/Canon5DMarkIIsamples>.

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Further Information

www.usa.canon.com/dlc

Link to images captured on test camera:
<http://www.johnrettie.com/Canon5DMarkIIsamples>