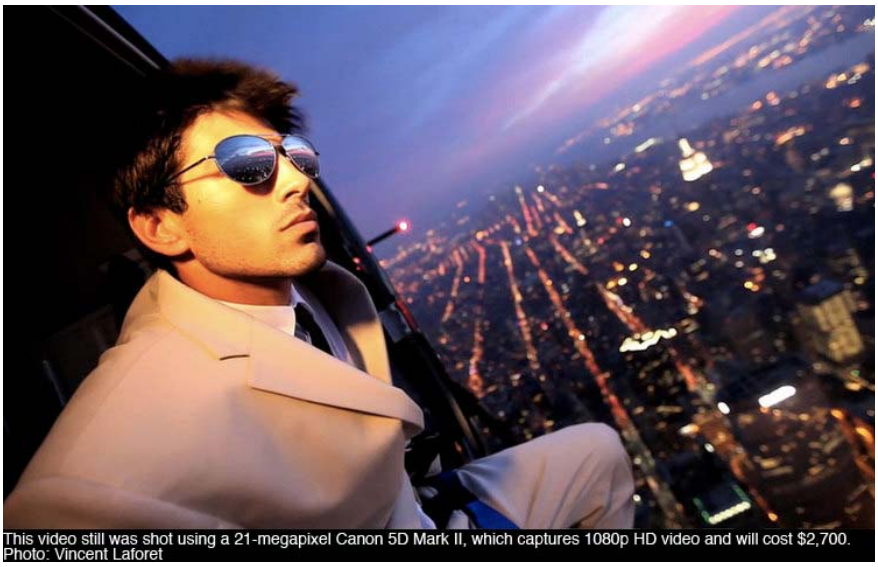
New Chips Poised to Revolutionize Photography, Film

By Dylan Tweney October 09, 2008 | 6:35:51 PM Categories: Cameras



This video still was shot using a 21-megapixel Canon 5D Mark II, which captures 1080p HD video and will cost $2,700. Photo: Vincent Laforet

For the first time, professional-grade single-lens reflex cameras are gaining the ability to record high-definition video. That capability, photographers say, has the potential to transform both still photography and moviemaking -- and it's largely thanks to advances in the semiconductor technology used to make the image sensors inside these cameras.

"I think this is the holy grail for news photography," says Randall Greenwell, the director of photography for the *Virginian-Pilot*, a newspaper in Virginia.

Greenwell says photojournalists are already shooting both stills and video, but using separate equipment for each medium, which is awkward, cumbersome and requires additional training. With a single camera that can do both stills and video, he says, the job of the new-media journalist will be greatly simplified.

"With that kind of flexibility, it's going to be a real game changer," Greenwell says.

While compact digital cameras have had video-recording capabilities for years, the image quality provided by these cameras has been disappointing because of their small image sensors and comparatively poor, miniaturized optics. High-end video and movie cameras produce top-notch HD video and their interchangeable lenses give filmmakers the creative control they crave, but the cameras are big and expensive. Even the RED ONE, a super-high-definition movie camera that records digital video that's comparable in quality to that of film stock, rings up at about $17,000. That's a bargain compared to movie cameras, but it's still a lot of dough for most people.

By contrast, the 21-megapixel Canon 5D Mark II, which shoots 1080p HD video, will cost $2,700 (plus the cost of lenses) when it becomes available later this year. The 12-megapixel, highly rated Nikon D90, which records 720p HD video and is available now, costs even less: a mere $1,300 gets you the body plus a basic zoom lens.

Both cameras deliver extremely high visual quality for both still and moving images -- and just as important, they allow photographers to use a wide complement of interchangeable lenses, from macro

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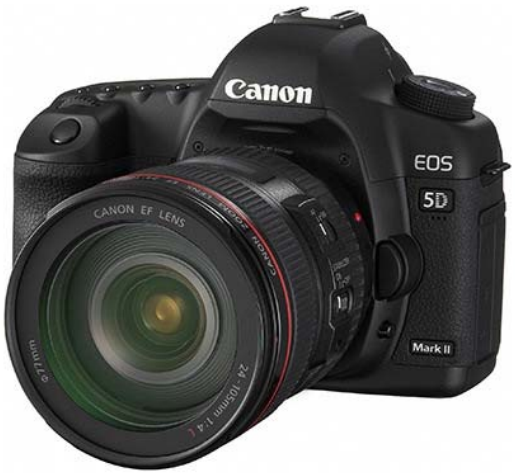
lenses for extreme closeups of insects to long telephoto lenses for shots of offensive plays on the other end of the football field. That's important to pro photographers, for whom lens choice is a critical component of the creative process.

"The single biggest difference between still photography and a movie, aside from motion, is lens choice and depth of field," says Vincent Laforet, a Pulitzer Prize-winning photographer who is part of a Canon marketing program, "Explorers of Light."



Laforet also touts the Canon's ability to capture images when there's not much light, an impression confirmed by other photographers. "That you can actually capture in available light is going to be a big difference," says Greenwell.

Laforet predicts that this low-light sensitivity will lead moviemakers to dispense with expensive, bulky, and obtrusive lighting equipment, shooting their movies entirely with available light.

In addition, the new cameras are small compared to professional video cameras, enabling photographers to shoot in a variety of situations with relative ease. Laforet, for instance, shot a demonstration video using the Canon camera over the course of a weekend, incorporating shots that required him to lean out of the open door of a helicopter.

The key to the Nikon's and Canon's incredible image quality lies with the large image sensors they contain. Whereas a typical compact camera might have an image sensor measuring about 5mm by 7mm, the sensor on a "full frame" SLR like the Canon 5D Mark II is the same size as a frame of standard camera film: 24mm by 36mm. That's a more than 24-fold increase in image area. (The Nikon D90 uses a smaller 16mm by 24mm sensor, but even that is 11 times the area of a compact camera's imaging chip.)

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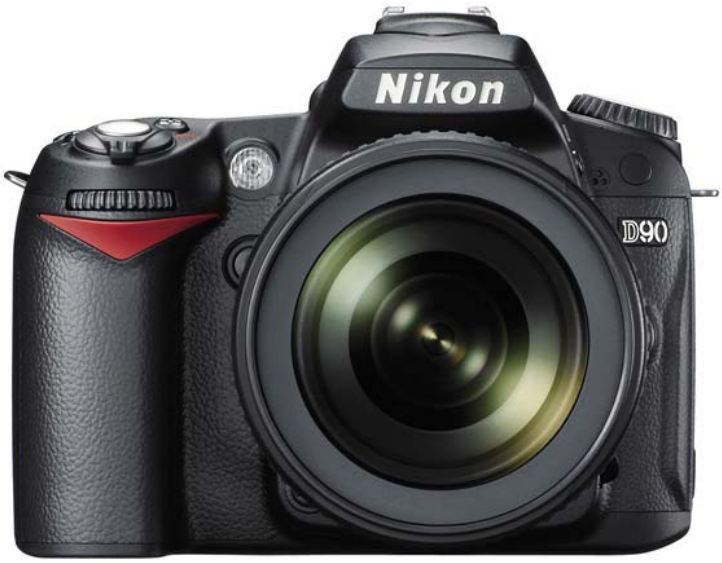

The increased size of the SLR's sensor allows each individual pixel to be larger, reducing the amount of "noise" in the image and increasing the amount of light each pixel is able to capture. The result: Dramatically better images, even at the same or lower number of megapixels, especially in low light.

A larger sensor also means it's easier for photographers to control the depth of field. Compact cameras have short focal-length lenses to match their small sensors. The laws of optics dictate that these lenses have a large depth of field.

"As image sensor size decreases, effectively you are getting more and more depth of field," says Chuck Westfall, a technical advisor at Canon. For point-and-shoot cameras, that's convenient, because it's harder to get an accidentally out-of-focus snapshot. But for creative photography, being able to control the depth of field is essential. That's how you get those portraits where a person's face is sharply in focus, while the background is pleasantly blurred.

So why has it taken so long for digital SLRs to add video-recording capabilities? The answer has to do partly with the physical design of SLRs, and partly with the type of imaging chips used.

Inside every SLR is a flip-up mirror that directs light either to the viewfinder or to the image sensor, but not both at the same time. In order to record video (or provide a live image on the LCD), the camera has to "lock up" the mirror, blocking the viewfinder. The pros who until recently defined the digital SLR market were initially loathe to do that because of the better optical quality afforded by the viewfinder.

"The viewfinder is arguably the best way to see your picture as you compose it, and it also offers the best, most stable platform for shooting SLR pictures," says Steve Heiner, a senior technical manager at Nikon.

But perhaps the most critical component of the new generation of cameras is the imaging chips inside.

For most of the past decade, consumer cameras have used a kind of imaging chip technology known as charge-coupled device (CCD). Recently, a competing imaging technology known as complementary metal-oxide semiconductor (CMOS) has come to the fore, largely because of its lower power requirements. CMOS chips appeared first in SLR cameras aimed at the high end of the market and have only recently started appearing in point-and-shoot cameras, which are still dominated by CCD technology. What drove the transition to CMOS was the large sensor size of SLRs.

"The power consumption of a CMOS is so much lower [than CCD] at the full frame size that this is the only way you could come up with a reasonable battery life," says Westfall.

But CMOS chips initially had trouble delivering live video images due to overheating, the need to come up with a way of resampling images on the fly (converting them from the sensor's maximum capacity to the smaller resolution of HD video) and other problems.

It wasn't until 2006 that Olympus first offered a digital SLR with a "live view" option, which kept the imaging chip in constant use while delivering a live image to the LCD. The feature proved popular, and other manufacturers soon followed suit.

Once they'd added live view, it was a small step for manufacturers to add the ability to record the video coming off the sensor instead of merely directing it to the screen on the back of the camera.

Now, experts say, CMOS imaging technology is developing much faster than CCD, partly because CMOS imaging chips are built with the same basic processes used in producing other kinds of semiconductors, like memory chips and processors. CCDs, by contrast, are less familiar to the majority of semiconductor

engineers.

And thanks to Moore's Law, the power and speed of semiconductor technology keeps increasing exponentially. That means CMOS image sensors are getting better and better, incorporating more sophisticated noise compensation, shrinking the size of the gaps between each light-gathering pixel that are devoted to wiring and other electronics, and adding image and video processing features to the chips themselves.

"I'm amazed myself at how quickly the tech developed a life of its own and how fast it's evolving," says Eric Fossum, an entrepreneur and engineer who developed the type of CMOS imaging technology used in most modern cameras while he was a researcher at NASA's Jet Propulsion Laboratory in the early 1990s. "It's kind of mind blowing to me."

A few points:
.
1) The Nikon is nowhere close to ready for primetime. It's got a doozy of a rolling shutter artifact problem. Something I'm assuming Nikon is going to fix (it's a common problem with CMOS) with later generations, but surprising nonetheless.
.
2) I like the Canon but video still seems a little...tacked on, for lack of a better term. I don't think the 5D is going to be a true "cine" cam, which is fine. No reason why it should be, not its primary purpose.
.
3) I will be intensely curious to see what Red's entry into this market, the far cheaper Red Scarlet, is going to be like. Red is revamping it and I get the feeling that we're going to see a 3K interchangeable cine camera for $3000.
.
4) I hate that "we can use available light now!" thing. Laforet means well, I'm sure, but come on! Does control of your light source mean NOTHING to people anymore?

Posted by: Dan | Oct 9, 2008 5:35:15 PM

"game changer"... my new favorite pet peeve. i guess the word "revolutionary" is too threatening in these uncertain time?

Posted by: m | Oct 9, 2008 5:45:32 PM

rad

Posted by: ughlee1 | Oct 9, 2008 5:58:17 PM

Finding the light is far more skillful than creating the light ever will be.

Posted by: jasin boland | Oct 9, 2008 6:11:36 PM

Common Misconception: "The laws of optics dictate that these (short focal-length) lenses have a large depth of field."
Not true:
"In fact, if the subject image size remains the same, then at any given aperture all lenses will give the same depth of field."
I recall this misconception being disproved over four decades ago.

Posted by: George Widman | Oct 9, 2008 6:54:14 PM

I found some light coming outta my bunghole... pretty skillful if I say so meself.

Posted by: fd | Oct 9, 2008 6:59:34 PM

"And thanks to Moore's law"
Oh, please- clarify your writing. It's not as if there is some entity known as "Moore's law" that magically improves semiconductors. Give credit where credit is due. The researchers who do the heavy lifting. Don't cop out with that Moore's law bullshit!

Posted by: lol | Oct 9, 2008 7:52:02 PM

okay, now come back to me when it's affordable

Posted by: um | Oct 9, 2008 8:03:36 PM

"...compared to professional video cameras". Too bad audio wasn't mentioned - it's a vital feature of nearly every video camera in use today. Guess Canon, Nikon, etc. will be trying to integrate a usable microphone into their next-gen D-SLR's. And that will probably mean a design that more resembles a video camera than a still camera.

Posted by: cypressgringo | Oct 9, 2008 8:51:55 PM

George Widman, it is still a fact that you need an 8mm lens in a compact to produce a near normal view in a DSLR. So a 8mm lens will have more depth of field. And the canon does have a microphone input, so you can get a better mic and plug it in, or like in film cameras record audio to a separate and much audio recorder.
As of now this camera is in my wishlist!

Posted by: Ramon Acosta | Oct 9, 2008 9:33:34 PM

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As of now this camera is in my wishlist!

Posted by: Ramon Acosta | Oct 9, 2008 9:34:26 PM

I saw this PR stunt for the new Nikon with $40,000 dollars in lenses and probably 2 light trunks needed to pull it off. I could do the same job with a top of the line Lumix point and shoot for $450 bucks.
Shooting little videos with your DSLR is very cute but for anyone to take you seriously at it probably isn't gonna be a paying client.
Nice try though...

Posted by: dino reyes | Oct 9, 2008 9:43:09 PM

Is this the death of "The Decisive moment"?

Posted by: jeff frazier | Oct 9, 2008 9:48:07 PM

Is this the death of "The Decisive moment"?

Posted by: jeff frazier | Oct 9, 2008 9:49:28 PM

The issue on depth of field is more complex, but I agree the pro camreras in general are going to be much morecapable of achieving the desired very-short depth of field.
1. The F 1.0 (or even lower in some cases) aperture ratio that is available on pro SLR lenses is not even close to being offered on smaller chipped cameras. So although the same aperture ratio creates the same depth of field, that same ratio cannot be used if nobody makes a lens at that ratio that fits on the camera!
2. As the sensor pixel size gets down around a few microns, you start to get within a few multiples of the wavelength of light. Guess what happens then? Your lens design becomes mostly diffraction-limited no matter how large you make the aperture, or how well you correct the ray-traced design of the lens. That means it has a much less pronounced difference between being in-focus and out-of focus. Its just not as sharp overall.
3. The instant cameras tend to get used a lot more in "program" mode. Pro camerass get used a lot more by "pros" who know what depth of field is, and use it to artistic effect (either increasing it or decreasing it by choosing the aperature).
4. Smaller chipped cameras are going to be noise limited in low light. That means the exposure time tends to be longer so as to get more signal and less noise. Longer exposure leads to camera and subject moition, again contributing to bluriness. If the whole image is fuzzy due to camera shake, its hard to see the pop of the short depth of field.
5. I am not sure on this last one, but I would think that the geometric depth of field is related to both aperture AND reduction ratio. The size of the subject (a person's face) is fixed. Therefore, the reduction ratio between the face and the chip is different for different sized chips. A 1:1 ratio has the highest angles and thus the shortest geomtric depth of field. As you increase the reduction factor from that ratio, the angles get smaller on the subject side of the lens, and thus the depth of field gets deeper.

Posted by: Rick | Oct 9, 2008 10:51:51 PM

I think that first shot would have looked a lot better had they focused on the cityscape rather than the dude. A lot of cameras can get a good shot of a person up close, but can you get a good cityscape in high res from a helicopter?

Posted by: Anus | Oct 9, 2008 11:55:15 PM

"Laforet predicts that this low-light sensitivity will lead moviemakers to dispense with expensive, bulky, and obtrusive lighting equipment"
Maybe Laforet went without some extra lights in his video but watch the making of video, it shows him using nothing but expensive, bulky, and obtrusive equipment to get the dramatic effects he is achieving. Rigs, lenses, not to mention a helicopter.
The camera looks amazing and will be great for news and tons of other stuff but Canon and Laforet are selling it as a tool for pro "moviemakers" when it really is'nt.

Posted by: KC | Oct 10, 2008 12:28:30 AM

apparently the new 5d is going to beat all video cameras under $15000. I don't understand why anybody would still buy Sony or Panasonic garbage. Sony in particular is not even offering progressive scan on most of its range. With their 1/3 inch CCD and CMOS chips, even with 3 lined up, all they do is perform like children video toys. Canon understands where the market and technology needs to go now.

Posted by: principalli | Oct 10, 2008 12:59:31 AM

"come on! Does control of your light source mean NOTHING to people anymore?"
No, and thank goodness for that. One of the best developments brought forth by low-noise sensors.

Posted by: Rat | Oct 10, 2008 1:02:46 AM

Dino, I get the feeling you're one of those stick-up your-a** art director/wannabee directors who couldn't stand the idea of someone more creative than you coming along and accessing opportunity that is "rightfully" yours. People pay high dollar amounts for sub-par imagery all the time. Did you see the last Superman film? I guess they felt they could only use a Panavision camera to shoot digital, since it's the most expensive. People of quality can always appreciate quality results. Jackson and Soderburgh are shooting the Red. They might not sub it for a Panaflex yet, but the truth is only those of questionable talent refuse access to those whose talent is undeniable.

Posted by: Maxxx | Oct 10, 2008 3:01:17 AM

"come on! Does control of your light source mean NOTHING to people anymore?"
No, and thank goodness for that. One of the best developments brought forth by low-noise sensors."
Wrong! outdoors you can still do as you like! I prefer to shoot indoors and control my lighting by what ever means.

Posted by: Frank Bloggs | Oct 10, 2008 3:17:00 AM

This article is a bit missleading.
The limiting factor in video capture is not in the chips or mechanical design. Its purely a matter of "how to store 240 MB per second".
The D5 can record 16 seconds of full HD RAW into its RAM buffer, while the best full HD camcorder in that field (the announced A-CAM DII) can record up around 5,5 minutes using a unique high-performance solid-state "drive". Frankly for ENG and Moviemaking 16 seconds is far from enough. And having to wait for the camera to "save" the 16 sec video to its underpowered minidrive or SD card is very cumbersome and incompatible with ENG.

Posted by: Gerold | Oct 10, 2008 3:43:15 AM

i agree that the 5Dii (and the nikon equivelants) are not going to take over cinema cameras any time soon simply becuase of the form factor of the camera bodies -- they are built like still cameras. if they could take the 5Dii technology and put it into a film camera setup (more tubular) it might be better suited for people used to working with other types of movie cameras... also, you people whine a lot

Posted by: nsr | Oct 10, 2008 5:29:10 AM

The author was nice to include the Nikon D90 in this article, but there's nothing special about the video from that camera.
The real excitement is about the image quality and low light performance from the 5D Mark II. While reduced functionality and form keep DSLR video from being a true camcorder replacement, the performance of the 5DII show the next big thing in this field.

Posted by: Don | Oct 10, 2008 5:37:38 AM

The low light performance on the 5D mkii is incredibly exciting for field work, but just because you can crank it to 6400 and have it look useable, doesn't mean you'll get better results than actual good, well thought out lighting. At least meet somewhere in the middle. The sloppy won't survive.

Posted by: Gmarley | Oct 10, 2008 6:08:15 AM

According to Canon's site ~
The EOS 5D Mark II is capable of shooting clips almost half an hour long at full 1080 resolution. Recording format: MOV H.264 [MPEG-4 AVC] and is limited to 4GB or 29min 59sec whichever comes first. It might not be HD RAW but neither is it limited to 16 second clips as Gerold would have us believe in his comment. Having seen the Video Laforet produced, RAW or not... the Video Quality is stunning.

Posted by: Jered Talbot | Oct 10, 2008 6:13:51 AM

I admire LaForet as a photographer, have for a while. He's inventive, technologically adept, and has a great eye for color and composition.
That said, I think it's telling that the best -he- could produce with the 5d mkII, a crew, and a full light kit is kind of sub-par.
No sync sound, no manual exposure, no 24p, rolling shutter artifacts, and a crippling 16 second RAW record time make this a non-starter for film guys. The 5D mkII is simply not ready for the prime time.
Given the limitations listed above, I wouldn't even use it for B-roll.
That's not to say that the mkII isn't worth the money. I'm a videographer, but I assist every few weeks on a wedding or band photo shoot, and I love my 5D (mkI, I guess). For my money it's the best DSLR in the sub-$3k range. I might even upgrade to the mkII. But it sure won't be for the video features.

Posted by: Paul Bryant | Oct 10, 2008 6:51:56 AM

Paul: The only light LaForet brought with him was a single ProFoto monolight. Everything else is ambient. Granted, there was a bunch of rigging gear, but that's far from a full kit.

Posted by: Gmarley | Oct 10, 2008 7:19:57 AM

How are new chips going to revolutionize film?

Posted by: Darcy McGee | Oct 10, 2008 7:41:32 AM

Hey, I've got nothing against found and natural light, guys, but it's not the only way to go and it's also not going to achieve a full range of lighting effects. You also have the problem in that those lights are designed and placed to provide illumination for the human eye, not a camera sensor. You can get just as many

unpleasing or flat-out ass-ugly results as you can interesting effects. Low light performance is great, yes, but it's just another tool in the tool kit, not a replacement for anything in there.
.
The 5DmkII has rolling-shutter problems? Really? Wow. Nikon I was surprised, but not shocked, they're not much a cine company, but Canon is a respected video company. They should know better. Yeesh!

Posted by: Dan | Oct 10, 2008 7:57:37 AM

I agree with some of the general comments that this camera will NOT be a game changer. I don't think a lot of videographers will be using this camera for actually making movies. But rather, it will be for the photographer who wants a serious full frame SLR and could then make some great videos. I am looking forward to it being under the Christmas tree for me. I plan on using it sparingly for video, but when i want video, it will be oh-so-great to have the 1080p. Video is just a wonderful add on for the pro-sumer but not a boon for the hardcore photographer or videographer.

Posted by: Jerome | Oct 10, 2008 8:00:28 AM

No one seems to have mentioned the issues this camera has with being operated like a film camera. Focus pulling while moving the camera in any way will be a nightmare. there are no accessories for it that would take it anywhere close to a movie camera.
this is in no way an alternative at that level im afraid.. great for lining up shots on a Recce though..

Posted by: mark j | Oct 10, 2008 8:00:59 AM

Gmarley:
duly noted. My objections stand, however. ^_^

Posted by: Paul Bryant | Oct 10, 2008 8:50:50 AM

the D90 is an amateur camera, and it's nowhere near professional quality video. it will revolutionize amateur video, possibly, but professional video? not in the near future. maybe the red scarlet will address that market, but it's gonna be another 18-24 months before we see pro-grade still/video convergence devices.

Posted by: almostinfamous | Oct 10, 2008 9:26:34 AM

Sure, the D90 and 5D are the first DSLRs to do HD-video, but putting the two side-by-side is like putting a Nissan next to a Porsche. The D90 is a sub-$1,000 body, the 5D is a full bore pro-body that costs $2,700 without a lens. The 5D is a full-frame 21 MP cam, the D90 is a 12 MP APS-C frame.
For those of us that do landscape photography, and purchase our equipment for the ability to capture images well, I couldn't care less about the video option. In fact, I question whether the time spent on the video option could have been better spent on enhancing other parts of the camera.
How about creating bodies that we switch out the sensor/processing unit, rather than buying whole new bodies ever 2-4 years? There is no reason to have to ditch a mag-alloy body every 2-4 years, because the sensor goes obsolete. The buttons and layout rarely change, and the LCD's are reaching a maximal size. The camera giants need to spend time developing these sorts of technologies, rather than video options on SLR's. Buy a F*ing video camera if you want video!

Posted by: Peter | Oct 10, 2008 9:32:36 AM

I really don't think that these DSLR cameras will substitute professional video cameras. The design and layout of the cameras themselves are based around the intended use, which for most DSLR's is setting up an individual shot through the on-screen menu without the need to adjust settings on the fly. Professional video cameras have most of these adjustments tangibly on the camera somewhere, strategically placed within easy reach. I admire Canon and Nikon for trying, but still cameras and video cameras are used differently, held differently and require different add-on accessories and outputs, etc.

Posted by: Jere | Oct 10, 2008 9:34:21 AM

There will always be a trade off between still picture quality and video quality. For the aspiring professional still photographer $2700 will be better spent on a DSLR that cannot do video (4-6 FPS is good enough for them), or a medium format film camera like Hasselblad (and Zeiss Lenses). The fact that these new CMOS's can run at 30+ fps, doesn't mean that each still in that shot will be as good as a high end DSLR that is designed to run at 4-6 FPS. On the other spectrum a professional film maker can and will afford a high end film camera or consider the RED camera as a cheap ($17k is not that much) alternative. The only people I see using this camera are student film-makers, hobby photographers, etc. who are either restricted by a budget or want to have video option on a DSLR. I find that encouraging.
To those that it matters we are comparing apples with apples when comparing video and stills, read on. In the "film" world 35mm motion picture snapshot is typically constrained within a 24mm by 18mm frame [vertically running film], while still photos are 36mm by 24mm. So there is only a slightly compromise in quality going from stills to motion picture. Shouldn't the same paradigm hold true for digital when going from stills to video ? Or let me rephrase that question,... is a 30 FPS CMOS full frame chip just as good as a 6 FPS CMOS full frame chip in terms of color reproduction, noise, etc. etc. ? Someone please answer this question for me.

Posted by: Alex Pandian | Oct 10, 2008 10:43:02 AM

My opinion that Canon is better than Nikon

Posted by: Vitaliy | Oct 10, 2008 11:00:09 AM

When I saw the headline along with the photo, I thought they were talking about a new remake of the TV show Chips, haha. The guy IS wearing those big CHP mirror glasses.

Posted by: russdogg | Oct 10, 2008 11:03:59 AM

For many years Nikon was Da Bomb but lately, it seems Cannon is moving to the top rank.
Jiff
http://www.privacy.de.tc

Posted by: Justin Burns | Oct 10, 2008 11:04:54 AM

I applaud Nikon to being first in bringing video to a dslr. It may be far from perfect but it is a great start. I'm eagerly awaiting it's next offering. kudos to Canon as well for following up.
"the 5D is a full bore pro-body": No. the 5D series is not considered "Pro" by Canon, only the 1D Series is.

Posted by: roman | Oct 10, 2008 11:28:24 AM

The RED Scarlet camera isn't going to revolutionize anything...
It's been canceled.
RED is planning to do something else and scrubbed the Scarlet a few weeks back.

These cameras will find their homes. If you dig around and see the things people are accomplishing with cameras like Canon's HV20, you see some footage that's been nicely shot with all kinds of hacked together rigs like 35mm lens adapters and vibrating ground glass viewers. Footage that has a very nice cinematic quality to it.
Will major motion pictures be shot with a Canon 5D next month...of course not. But will some super low budget indie look really slick next year because it was shot with one of these...more than likely.
Everything in it's place.

Posted by: Andy | Oct 10, 2008 11:36:23 AM

you have to wonder whether anyone involved in the R&D of these things ever bothered to ask themselves: WHY would a professional photographer (of STILL images) want to shoot video?!! (i guarantee you that even if they are required to do so, most would prefer not to) ....ridiculous features added on to justify keeping the price tag high. photographers don't need this "feature". we're not videographers or film-makers, nor do we want to be. the power of photography is in it's ability to icon-ize history... to make a symbolic, STATIC image of a moment in time. this is something that moving images can't do. the camera has been streamlined to be a photographic tool; when you start messing around with making by adding on UNNECESSARY bells and whistles, you get in the way of the photographer carrying out his craft.

Posted by: lee | Oct 10, 2008 11:44:22 AM

Lee-
I would completely disagree that most photographers wants nothing to do with film/video. Maybe you aren't excited about this feature, but there are a lot of people that straddle the line between photography and filmmaking that would love this. To be able to use the tools that you're used to to add those extra dimensions of movement and narrative is incredibly exciting.

The path from photography to film has worked out for a lot of people. In particular in the last 25 years there has been a well worn path from fashion photographer, music video director, film director. It's a logical step for many many photographers.

Posted by: Andy | Oct 10, 2008 11:54:17 AM

"Available Light" means more work for the Grips, haha, Electrics. Eat It. I can't wait to show up on set and see a DSLR, yyyyyeeeeaaaa. ha

Posted by: amishjim | Oct 10, 2008 12:16:22 PM

Uh, Andy, the Scarlet hasn't been "scrubbed" or "cancelled". It's simply being redesigned. Jim Jannard (who, you know, owns the company) has said that delivery dates won't be affected and price will be "very near the original target". Scarlet is actually going to be at NAB. Soooo, yeah. Still in the game.

Posted by: Dan | Oct 10, 2008 12:23:37 PM

Needs to come down by half.

Posted by: Katrineholm Uncensored | Oct 10, 2008 1:35:29 PM

My 5DMkII is already pre-ordered, and I'll be retiring one of my 5D's.
I can think of a dozen ways to use it while shooting weddings, and some for my art photography as well. Plus the advantage of having a great HD camera for home movies.
So as a photographer, I'm excited about this camera and can't wait to get it in my hands.
But I do agree that there are two key missing features that will make it a non-starter for filmmakers:
- Lack of 24p mode. This could be fixed by software. Aside from the obvious benefit, side-benefits of 24p would include file size reduction and even better noise response (assuming electronic shutter speed can be set longer).
- Lack of manual controls. Again, could be a software fix. I haven't heard for sure what control the user will have over shutter, ISO, aperture, or color balance, especially when you want to use other settings for capturing stills at the same time (more an issue for event video, not film-making).
I don't think sync audio (assuming that is referring to SMTPE or some other time-code metadata) is necessary. This is digital, it runs at 29.97fps, so syncing shouldn't be an issue as it would be for analog media. Maybe I'm wrong on that, though--I'm definitely more of a still photography guy.

Posted by: Richard Tallent | Oct 10, 2008 1:39:50 PM

First of all, I'm pretty sure I read somewhere that Laforet used professional lighting in most circumstances, and secondly the evening shot of the city out the helicopter looks choppy.
Other than that, the colors look great (if not edited in post - which I think he listed Lightroom or some special editing software). Focus changes and DOF shots look great.

Posted by: licensetoshoot | Oct 10, 2008 1:53:46 PM

I'm sure these cameras produce great visuals. But for most news video coverage we need quality audio captured from the same device. This will not replace our Canon XH-A1 video cameras just yet for LoHud.com / The Journal News video reporting.

Posted by: Randall Wolf | Oct 10, 2008 2:04:20 PM

Where are the XLR audio jacks? How do I mount a boom mic? These look like good D-SLRs but they won't touch a decent video camera, like the XH-A1.

Posted by: Bryan | Oct 11, 2008 12:22:02 AM

Since LaForets Video has been pulled-
any alternative source to see this footage?
thank You

Posted by: Tray Loader | Oct 11, 2008 2:16:30 AM

It does have an external Mic option, that you would be ahead to use if you want to use it for video. IMHO the video is a toy. The live video on the screen can be nice for not getting the screen gummed up from your cheeks if you have not installed the extension on the eye piece.
The new 5D MkII is an improvement (replacement) of the 2 year old one that was only 12MB resolution. It now gives you 21MB resolution, close to the resolution of the Hasselblad!! Thats something in and of itself.
If you want digital video buy a video only unit. Keep photo and video apart. That is a common rule. You don't buy a digital video camera and expect to take stills with it do you? They are often mixed in consumer models for simplicity, but you want to avoid it when possible. Video drains the battery FAST.
YES Nikkor and Canon make great f2.x super telephoto lenses if you have the investment account to spend. Canon's 800 (or is it 1200) lens weighs in at a beefy 25 POUNDS and are not carried in stock; made for every order.

Posted by: Ed | Oct 11, 2008 4:37:24 AM

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