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Red SCARLET
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[RED Shocks with SCARLET and EPIC Features and Price](#)

At NAB 2008, RED positives overwhelm negatives

Time is not exactly on the side of potential RED SCARLET buyers, of which I count myself as one. Finding out details on [Jim Jannard's](#) new pocket cam turned out to be an unbearably long wait, and now that NAB 2008 has opened its doors and the news is out, we're subjected to a new and unplanned pause in our unusual quest for details: red.com servers can't handle the influx of traffic. After a handful of refreshes, I found out that that the three new products are the 3K RED SCARLET (obviously), a new 5K camera called the RED Epic, and the RED Ray, a digital player that supports a maximum resolution of 4K. They're all due in early 2009, but we're told to count on their specifications, design and delivery dates being subject to change. SCARLET's sensor is going to be a 2/3" version of the new and improved Mysterium X sensor, and will resolve a maximum resolution of 3K. That is more than most people expected, but there are no details on whether or not buyers could, in time, choose to upgrade the sensor with a bigger and better future version of itself. On the other hand, the RED EPIC's sensor, body, boards and mount are mentioned to be 'fully upgradeable'. Is this a hint of the SCARLET breaking the RED tradition of 'future proofing' their camera? Then why go for a beautiful, all metal body? If SCARLET doing 3K was a mild shock, real amazement was created by the frame-rates going from 1 to 120. Even with no mention of the resolution at which the higher frame rates are attainable, there currently is no other sub-\$10k camera with these possibilities for under and over-cranking frame-rates. A 180 FPS burst mode is in the works, but no details of how many seconds it will be able to run for, and if it will degrade resolution even further. No matter what the specs, 180 FPS is huge at this or most any other price point, but with REDCORE RAW and RGB recording at transfer rates of 100 Mbps, don't expect anything over 5 or 7 seconds, if that. Recording, by the way, will be done to dual compact flash, but with HDMI and HD-SDI ports in the specs hard-drives are an obvious second option. However, there is no mention of audio ports or interchangeable lenses, and that is already worrying prospective buyers. A timecode connector would fix the lack of audio ports (and make economic sense) and provide input for more complex sound devices. The SCARLET will be delivered with a very large (by consumer camcorder standards) 4.8" LCD, an 8X RED zoom lens that opens up to f2.8, and will be compatible with 'many RED one accessories'. Lenses are not likely to be among those accessories. Giving SCARLET focus, zoom and iris rings (which do not appear in the photos) or a faster lens, say - a f/1.8 or f/1.5 would give it significantly more professional value for digital cinema and therefore make it more competitive with the RED ONE itself. This is not likely to be within the company's plans. Suggesting (even if just subtly) that RED really wants to take on a broader market is the still photo mode. Taking photos with the SCARLET? It wasn't the first item on most people's wish-lists, but after all, why not? And given that it's meant to compete with the sub-\$10k camcorder crowd, it will have both full manual and full auto shooting modes, as well as WI-FI control. Imagine remote controlling an all-metal military-looking gadget. I do appreciate the cool factor here. And the price? Under \$3,000. This is better than most expected, even if the sensor is 'just' 2/3" (the \$200,000 Sony F23 camera is equipped with 2/3" sensors - 3 of them for acquire RGB colors as opposed to SCARLET's single-chip Bayer pattern, to be fair). The small price will place the SCARLET in an ideal spot for conquering as big a share of the market as possible, and it comes as amazing news for those who couldn't otherwise afford to pay much more for it. On the other hand, there are those who would gladly pay even double for interchangeable lenses and a slightly bigger 1" sensor. But make no mistake, right now nothing can touch the SCARLET's features to price ratio. The EPIC spearheads the RED

evolution in a similarly daring, but very different direction. With 5K resolution in a new Mysterium sensor that has the same S35mm (24mm x 14mm) size as the RED, this might be the camera that truly competes with film. Or it could miss its mark, both in terms of image quality and customer base. The most obvious problem the EPIC might face is that of small pixels. 'Same sensor/higher resolution' has been one of the problems plaguing the photo and video industries for ages. Everyone from indie filmmakers to big studios is almost exclusively concerned with dynamic range as the ultimate test of cinematic quality, so an increase in resolution might not be RED's best bet. With the EPIC rumored to cost between \$30,000 and \$40,000 for the body only, some extreme programming has to have gone into this camera's firmware to justify the price. So perhaps the real upgrade here will indeed be in the sensor's processing - the dynamic range, the way it handles highlights (notoriously problematic in digital cinema), and color and motion. There is going to be plenty of controversy, because many like to both edit and output RED footage in 2K resolution. Hardware costs and processing times for 4K post-production are prohibitive even on some fully professional (non-indie) movie sets; arguments have been made for better apparent resolution and detail when downconverting 4K footage to 2K; and very importantly - there is a complete lack of projection options for 4K files. 5K is only going to aggravate these problems, at least in the public's eye. The [RED RAY](#) is a high definition player, with support for 4K, 2K, 1080P, 720P and SD, and ability to play native RAW R3D files from compact flash. This is not the answer to everyone's projection problems, and it is a letdown given the pre-NAB 2008 talks of a complete shoot-to-projection solution. A projector should be a huge priority for RED. Not only would it make the very large resolutions their cameras are capable of seem more accessible and worthwhile, it would also give their RED RAW codec a significant boost in popularity. They need to have a projector coming out around the release date of the EPIC to psychologically support the much larger investment in the new 5K camera RED's big brother will go up to 100 FPS, will record REDCORE RAW and RGB to REDFLASH, have a fullsize dual-link HD-SDI, HDMI, Firewire 800 and 2 XLR audio inputs. As already mentioned, it will be fully upgradeable, compatible with RED ONE accessories, and will weigh all of 6 pounds of fully machined aluminum (a lot less than the RED), PL mount included. This article will be updated during the next 24 hours, as info comes in. Knowing that there have been problems with traffic on Red.com, I've decided to provide a link for download of the [RED brochure](#). I hope bandwidth problems will be solved soon and you'll be able to download it from RED. **Here are the full specs for the three products:** RED EPIC FULL FRAME S35MM NEW MYSTERIUM X SENSOR 1-100 FPS UP TO 100 MB/SEC. REDCODE RAW AND RGB RECORDING TO REDFLASH FULL SIZE DUAL LINK HD-SDI, 2-XLR AUDIO INPUTS AND HDMI WI-FI CONTROL FIREWIRE 800 and USB2 6 POUND FULLY MACHINED ALUMINUM BODY WITH HYBRID STAINLESS PL MOUNT COMPATIBLE WITH MOST RED ONE ACCESSORIES FULLY UPGRADABLE SENSOR, BODY, BOARDS AND MOUNT RED SCARLET NEW 2/3" MYSTERIUM X SENSOR 1-120 FPS (180FPS BURST) UP TO 100 MB/SEC REDCODE RAW AND RGB RECORDING TO DUAL COMPACT FLASH 4.8" LCD 8X T2.8 RED ZOOM LENS FULL AUTO OR FULL MANUAL SHOOTING MODES HDMI and HD-SDI FIREWIRE 800 and USB2 STILL MODE COMPATIBLE WITH MANY RED ONE ACCESSORIES WI-FI CONTROL [RED RAY](#) PLAYS 4K, 2K, 1080P, 720P AND SD FROM RED DISC AND RED EXPRESS ALSO PLAYS NATIVE RAW R3D FILES FROM COMPACT FLASH