

SONY'S HDR-FX1000 BREAKS THE MOLD

An Exclusive Hands-on Preview

by [David Speranza](#)



Reaffirming its commitment to the HDV format, Sony has announced its newest top-of-the-line prosumer camcorder, the [HDR-FX1000](#). This model replaces the [HDR-FX1](#) and adds a substantial number of improvements, including three Exmor-enhanced 1/3" CMOS sensors, a wide-angle 20x G-Series lens, and—in a

welcome first from Sony's consumer division—24p/30p progressive scan recording. Other new features include increased low-light sensitivity (down to 1.5 lux), dedicated zoom, focus and iris rings, 3 built-in ND filters, and a 3.2" Xtra Fine LCD with an impressive 921K-pixel screen.

Having just laid our hands on a preproduction model, it seems safe to say that this camera delivers on more than specs alone. About half an inch shorter than the FX1, the FX1000 feels exceptionally solid and balanced, with a more professional and robust build than its predecessor in just about every respect. Any part of the FX1 that felt plastic-y or hollow seems to have been ruggedized, from the internal lens cover, which feels less toy-like, to the grooved top handle, the focus ring, the inset control buttons, and even the eyepiece hinge—it all just says "professional." For a camcorder that's technically a "consumer" model, that's pretty remarkable.

And while the continued lack of [XLR inputs](#) keeps this fixed-lens camera from full professional status, its street price of \$3,199 is \$500 less than the FX1 and less than half the price of the pro-level [HVR-Z7U](#) (which adds an interchangeable lens to an otherwise similar feature set). This makes the FX1000 an amazing package for independent videographers and filmmakers seeking broadcast-quality, 24p film-like imagery.

Along with introducing the FX1000 and discontinuing the FX1, Sony also plans to reintroduce its previously discontinued [HDR-FX7](#), drastically cutting its price from \$3,500 to \$1,999. While an unusual move, this effectively diversifies the company's prosumer line by positioning the FX7 as a credible bridge between the more consumer-oriented [HDR-HC9](#) and the now-flagship FX1000. At the

same time it gives Canon's and Panasonic's comparable products more price-to-price and feature-to-feature competition. Aside from the [XH-A1's](#) XLR inputs, the FX1000 provides far more bang for the buck, its new specs giving it a substantial edge over arguably any sub-\$4,000 camcorder out there.

With only a preproduction model at our disposal, we were unable to properly test the quality of video output, but let's see exactly what all those new specs mean.

Image Quality

In switching from the FX1's three 1/3" CCD imagers to new 1/3" ClearVid CMOS sensors, Sony included the Exmor technology used in their more recent flash memory and [pro XDCAM EX cameras](#). Adding this on-sensor analog/digital conversion to three CMOS chips—each dedicated to its own color in the red/green/blue spectrum—provides several important benefits. First and foremost are sharper, more detailed images (along with an extended battery life due to the CMOS chips using less power). But even more significant for HD shooters, many of whom still miss the great low-light capabilities of standard-def workhorses like the [VX2100](#) and [PD170](#), is the FX1000's ability to accurately capture images down to 1.5 lux. This is twice the ability of the FX1, [Z1U](#) or Panasonic's [HVX200](#) (all at 3 lux), and compares even more favorably to the FX7, [VIU](#), and Canon's XH-A1 and [GL2](#)—rated at 4 lux. This greater light sensitivity seems mostly the result of the improved noise reduction afforded by Exmor processing, along with what Sony claims to be a 30% increase in dynamic range (bringing greater detail to the image's dark and light areas).



At the same time, the FX1000 is the first camcorder to come with Sony's new G-series 20x zoom lens, replacing the previously standard Carl Zeiss lenses. These high-performance lenses, originally made for Minolta/Sony D-SLR professional still cameras, offer improved optics (aspheric elements, a circular aperture, internal focus, extra-low dispersion glass) and were designed to match the camera's sensor and image processor more precisely.

This particular lens also brings something else to the table: a wider angle. Its 35mm-equivalent 29.5mm-590mm zoom range makes it easily the widest lens in the Sony line—topped only by the 28mm on Panasonic’s new [AG-HPX170](#) and [AG-HMC150](#) (but wider than the Canon [XH-A1’s](#) 32.5mm). This is a real boon to filmmakers needing to shoot in tight spaces, as it avoids the inconvenience, expense, and reduced image quality that comes with wide-angle converter lenses. Sony also seems to have carried over the digital extender from its FX7, which further magnifies the zoom by 1.5x with minimal quality loss.

x.v.Color technology is the final element in Sony’s bag of improved imaging. This provides the images with a widened color range—nearly double that of standard RGB—and offers more natural color reproduction when displayed on an x.v.Color HDTV or monitor.

Film-Like 24p Progressive Scan

Unlike Canon and Panasonic, the cameras from Sony’s consumer division have historically offered either HD or 24p, never both. The FX1000 breaks that mold, dropping the FX1’s CineFrame mode for true progressive-scan 1080/24p and 30p—allowing budget-minded filmmakers and videographers to achieve the much-coveted “film” look. Two CinemaTone Gamma and CinemaTone Color settings are also available, which together enhance the 24p’s film-like motion by creating deeper blacks and colors while maintaining detail in the middle tones and highlights. Although the FX1000 does not offer native progressive recording, its 24p/30p progressive modes (along with standard 1080/60i) go a long way toward giving Sony’s HD customers the widened image palette that Canon and Panasonic users have taken for granted. For anyone who was on the fence about whether they could sacrifice 24p for the sake of brand loyalty, that decision no longer has to be made.

Improved Control

Both the FX1 and FX7 offered a healthy amount of control over the image coming through the lens. But the FX1000 ups the ante on the degree of professional control in camcorders at this price point. The most obvious change is the new iris ring, which joins the focus and zoom controls where it



rightfully belongs—on the lens. This brings a more reliable, intuitive feel to image adjustment, especially for shooters used to working with higher-end cameras and lenses. Also added is a third built-in neutral density filter, making the FX1000 the first prosumer camera to offer 1/4, 1/16 and 1/64 ND settings, giving greater versatility when compensating for excess light. Retained from the FX1 are color bars (for professional color alignment) and zebra display (highlighting overexposed areas), now joined by a live histogram display—an exposure tool that measures the distribution of light and dark within an image.

But it's the FX1000's Xtra Fine LCD that redefines monitoring and playback at the prosumer level. At a resolution of 921K pixels—versus the norm of 250K—the new display is a real eye-opener. The image clarity and sharpness this resolution is capable of brings a dramatic improvement to the critical focusing needed for hi-def capture. At 3.2" it's a tad smaller than the FX1's 3.5", but what it loses in size it more than makes up for in clarity and viewing angles. The accompanying .45" Xtra Fine viewfinder is likewise a significant step up, from 252K pixels to 1,226K, while the very useful peaking function—which broadens edges in the viewfinder to assist in focusing—has also been retained.



The standard complement of manual controls also remains in place—gain, shutter and white balance adjustments—along with settings for color (mode/level/phase/depth), sharpening and knee point levels, all of which are especially useful in fine-tuning cinematic looks. Other notable features include Minus Auto Gain, 2:3 pull-down to 60i for editing, a Memory Stick slot for 1.2MP still image capture,

Smooth Slow Record, and HDV/DV switchability. An improved button layout repositions several functions to better advantage, including a more prominent and easily accessed audio control and recessed placement beneath the tape mechanism.

The only thing missing, it seems, are the fixed end points and lens barrel markings found on the FX1's zoom ring—an unusual and seemingly unnecessary downgrade on a camera that's otherwise all about one-upmanship. But given the FX1000's added iris ring and the impressive responsiveness of all three servo-controlled rings, it's hardly a deal-breaker. Assuming the image quality is up to Sony's usual high standards, this camera—and its forthcoming professional counterpart—is going to make a lot of shooters very, very happy.

Bundling Vegas

In a related announcement, Sony is now bundling a special version of its Vegas Pro 8 editing software, specifically for its photo channel retailers, with its two most popular consumer HD camcorders, the HDV-format [HDR-HC9VBDL](#) and the hybrid 120GB HDD/Memory Stick [HDR-SR12VBDL](#)—providing a \$500 value to filmmakers looking to take advantage of Vegas' intuitive and extremely robust interface. For those who have never used Vegas, this is definitely a smart way to spread the word on a great piece of software that deserves to find its way into more professional environments.



The HDR-FX1000 and newly priced FX7 are scheduled to ship in November, with the pro version of the FX1000, the HVR-Z5U, soon to follow. It will be interesting to see how video makers—and the competition—respond.

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