

# Sony Debuts Digital Still Camera with Back-Illuminated 'Exmor R' CMOS Sensor

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DSC-TX1 Cybershot Blue

Sony today announced two new Cyber-shot cameras (DSC-TX1 and DSC-WX1 models) that provide unprecedented advances in low-light performance with approximately twice the sensitivity of cameras with traditional image sensors.

These Cyber-shot cameras are the first to employ Sony's new “Exmor R” back illuminated CMOS sensor technology to improve shooting in low-light scenarios, enhancing image clarity and drastically reducing grain.

Conventional [image sensor](#) architecture has required wires and other circuit elements to be positioned above the light sensitive photo-diodes, limiting the imager’s light gathering capability. Positioning these

elements behind the photo-diodes, [Sony](#)'s "Exmor R" image sensors can gather more light, resulting in approximately twice the sensitivity compared to conventional sensors.

To further extend low-light shooting performance, the TX1 and WX1 cameras incorporate the hand-held twilight and anti-motion blur multi-shot modes introduced in Sony's breakthrough Cyber-shot DSC-HX1. Using "Exmor R" CMOS sensor's high speed, these modes capture six separate images in less than a second and utilize Sony's BIONZ processor to combine the shots into a single image of extraordinary detail and low noise.



DSC-WX1 Cybershot

Combining the "Exmor R" technology with hand-held twilight and anti-motion blur modes delivers a breakthrough in low-light photography. Users can now capture images of stunning detail and low noise in scenes with no more than candlelight—without flash or the need of a tripod.

In addition to their breakthrough low light performance, these new cameras also include Sony's Sweep Panorama and 10 frames per second

burst shooting features, which were introduced with the Sony DSC-HX1 camera. The TX1 and WX1 cameras offer these features in smaller, more compact bodies that match nearly any unique style.

Capturing wide landscapes is as easy as “press and sweep.” Sweep Panorama mode lets you reach beyond the traditional wide-angle lens and capture breathtaking shots. Using the high-speed “Exmor R” CMOS sensor, the cameras shoot continuously while you sweep across the scene. Using the BIONZ imaging processor, they automatically stitch the pictures together to create one stunning panoramic photo.

The TX1 and WX1 Cyber-shot models can take up to 185 and 256-degree panorama shots respectively in one easy press-and-sweep motion with an image size of 7152 x 1080 (ultra wide horizontal).

While the HX1 camera is a well-rounded solution for customers who are looking for high-zoom and speed in a smaller size than a DSLR, the TX1 and WX1 cameras are made for an audience that wants advanced technology in an even more compact design.

With its slim profile of just 16.5mm, the 10.2 mega-pixel TX1 offers streamlined, distinguished curves for a sophisticated look appealing to the fashion-oriented who are also looking for great performance. This model features a new operation on the touch panel that lets you scroll through images with an effortless “flick” of your finger and directly access menus on the 3-inch Clear Photo LCD Plus display.

With a Carl Zeiss Vario-Tessar lens, the TX1 camera lets you focus as little as 0.4 inches from your subject for extraordinary close-up shots. The 4x telescopic zoom is perfect for capturing far-away subjects, and Sony’s Optical SteadyShot image stabilization helps overcome camera shake.

The 10.2 mega-pixel WX1 camera has a 2.7-inch Clear Photo LCD Plus display and is just over three quarters of an inch thin—an ideal choice for DSLR owners who also want to carry a compact, high performance [digital still camera](#).

The WX1 camera features a Sony G lens with an extraordinary wide angle 24-120mm 5x optical zoom. This lens' f/2.4 maximum aperture offers nearly twice the light gathering capability of conventional lenses, and works together with the “Exmor R” imager and low-light shooting modes to provide low-light photography beyond the abilities of other compact cameras.

These cameras include the most recent Sony technology, including, Intelligent Auto (iAuto) mode which, recognizes scenes, lighting conditions and faces, and adjusts settings resulting in clearer images, faces with more natural skin tone and less blur; Face Detection that detects up to eight faces and optimizes focus, flash, exposure and white balance and intelligent Scene (iSCN) that delivers nine Scene Selection modes to quickly adjust for specific shooting conditions.

Pet mode is a new Sony feature that minimizes blur when shooting moving pets. This new mode also reduces glowing pet red-eye.

Additionally, the cameras have technologies Sony Cyber-shot customers have come to expect. These include Smile Shutter technology that automatically captures a smile, dynamic range optimization (DRO) that improves exposure and contrast, intelligent Auto Focus that captures fleeting moments and HD video capability that records HD movies in 720p high definition MPEG4 format.

With HD video capability, these cameras record HD movies in 720p high definition MPEG4 format for stunning large-screen home movie playback. You can record up to 29 minutes (or up to 2GB file size) in

720p format.

The TX1 camera will be available in silver, gray, pink and blue this September for about \$380. The WX1 [camera](#) will be available in black this October for about \$350.

Source: Sony

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