

Product Information



NXCAM Prototype

1/3-inch Exmor CMOS Professional AVCHD Camcorder

Tentative Camcorder Product Information

Introducing the prototype NXCAM product, Sony's first professional AVCHD camcorder. It can record stunning quality 1920 x 1080 images at 24Mbps (50i or 25p), as well as supporting 720/50p and Standard Definition recording. Operational flexibility is further enhanced by support for dual media. The primary recording media is Memory Stick Pro consumer memory cards, which are affordable, readily available worldwide and subject to continuous development. There is also an all-new optional 128Gb Flash Memory Unit which offers 11 hours recording time at 24Mbps. As with Sony's HYBRID HDV range, usage of the media is designed to be as flexible as possible - allowing simultaneous recording to dual media or a choice between media depending on the customer requirements.

To fully realise the potential of the AVCHD codec in a compact camcorder, the prototype utilises much of the same advanced technology used in the multiple-awarding winning HVR-Z5E. Sony's newly designed G Lens provides excellent resolution, colour and contrast, in combination with 3 x 1/3-inch Exmor CMOS Sensor system using ClearVid array for excellent low-light sensitivity.

This new compact camcorder is ideal when high performance is demanded using only available light. The ergonomically designed body allows flexible shooting under any conditions, while maintaining Sony's worldwide reputation for quality and high performance.

All NXCAM Camcorders come supplied with a 2-year PrimeSupport contract which offers unique extra services and benefits for added peace of mind.

Features

Sony's exclusive high-performance "G Lens"

The NXCAM benefits from the exceptional optical performance of Sony's "G Lens". This sophisticated lens incorporates Sony's unique optical technology and unparalleled quality control. Moreover, it's been optimised to perfectly complement the advanced image sensor and image-processing technology, thus expanding your shooting possibilities.

Major "G Lens" Features on NXCAM

- The 29.5mm wide-angle "G Lens" (equivalent to 35mm film) on the NXCAM offers a field of view that's ideal for shooting situations ranging from broad landscape shots to conditions where sufficient distance from the subject is difficult to obtain. A 20x optical zoom also enables shooting over a wide zoom range.
- Two ED (Extra-low Dispersion) glass elements reduce chromatic aberrations caused by differences in light refraction to minimise colour fringing. The advanced 10-group, 15-element lens structure also includes compound aspheric lenses for images that are crisp and clear even when shooting movies at high zoom ratios.
- Advanced optical lens technology makes the most of Sony's Exmor CMOS Sensor to realise sharper images with higher resolution and less noise even when shooting in very low light.
- The six-blade iris diaphragm is nearly circular, enabling the creation of extremely beautiful background blur.

Natural-touch Lens Operation

Newly designed focus, zoom and iris control functions provide convenient lens operation. The iris ring, located next to the zoom ring as with traditional professional lenses, allows users to adjust exposure with great precision. The zoom function is variable and can be controlled by using the lens barrel ring, the lever at the lens grip or lever on the camera handle. Additionally, once you select the high-speed zoom mode, you can zoom from wide to telephoto 1.5x faster than with the HVR-V1E.

The NXCAM also provides 3 built-in ND (Neutral Density) filters and allows the use of an optional 0.8x wide conversion lens.

1/3 inch-type 3 Exmor CMOS Sensor system with ClearVid array

The newly developed 1/3-inch type Exmor CMOS Sensor system with ClearVid array has 45-degree rotated pixels on each chip in order to increase the signal density, while

each pixel maintains sufficient surface area.

In combination with Enhanced Imaging Processor (EIP), the Exmor CMOS Sensor system achieves high resolution, high sensitivity, wide dynamic range, and excellent colour reproduction. The pixel shift interpolation technique has been traditionally used in small 3CCD camcorders. However, it normally requires the combination of all three colour element (RGB) signals to maximise resolution. If an object lacks one or more colour elements, the resolution of the object may be degraded.

The Exmor CMOS Sensor system with ClearVid array is different because it can always produce maximum resolution, regardless of the balance between colour elements, thanks to its unique and sophisticated interpolation technology.

Enhanced functionality with the technology of Exmor

Exmor technology, which utilises the full potential of the CMOS Sensor system. Exmor features the column-parallel A/D conversion technique and the dual noise cancelling method also used in the Sony's top-of-the-line models.

Multiple A/D (analogue to digital) converters on each pixel row convert analogue signals to digital as soon as they are generated, unlike traditional technology that only has one A/D converter on each chip.

Exmor technology can eliminate the influence of external noise that enters the signal chain during transfer to the A/D converter, resulting in high-quality digital signals with extremely low noise. This significantly enhances shooting in low-light environments.

By adopting this groundbreaking technology, the new 1/3-inch Exmor CMOS Sensor system enables the NXCAM to achieve a low light sensitivity of just 1.5 lux*

* At 1/25 shutter, auto iris and auto gain.

Selectable AVCHD recording Modes

The NXCAM will be able to utilise the innovative AVCHD format to record at a variety of bit rates and interlace or progressive depending on requirement. Recording up to 24Mbps 1920 x 1080 50i or 25p. 720/50P recording is also possible. SD recording is also possible using the MPEG-2 codec at 9Mbps, similar to DVD quality. Audio is recorded in AVCHD modes in full 2-channel linear PCM audio.

Active SteadyShot

The initial NXCAM product will feature an all new Active SteadyShot offering 6.6 x more stabilisation at the wide end of the lens than the conventional SteadyShot. This

stabilisation is effective for many hand-held shooting situations where the operator needs to move with a subject or is carrying out handheld shooting for a long period of time.

GPS Metadata

The NXCAM features a GPS function which embeds GPS metadata when recording. Time and location is recorded and can be displayed on playback. This function is useful for locating footage for specific geographical locations from the archive, else for displaying the location graphically on a third-party mapping software.

HD-SDI Output

HD-SDI output is available for use with other HD-SDI infrastructure such as picture monitoring.

HDMI output connector

Uncompressed digital HD video and audio signals are output from the HDMI connector. You can see stunning HD images on an HDMI-compatible monitor display. During shooting, a pre-compressed 1920x1080i/4:2:2 signal is output from the HDMI connector.

XtraFine LCD Panel

A 3.2-inch type XtraFine LCD is located on the NXCAM in the same position as on the HVR-Z5E. With approximately 921,000 pixels, this is 4x greater than the LCD of the HVR-Z1E. The XtraFine LCD displays virtually 100% of the recorded picture area at 6500K colour temperature.

XtraFine EVF

The 0.45 inch type XtraFine EVF (Electronic View Finder) has approximately 1,227,000 pixels (852x3[RGB] x 480). This device has three independent LEDs for Red, Green, and Blue colours. This technology allows users to monitor objects with remarkable colour reproduction accuracy and high resolution*. The EVF has a selectable display mode between Colour or Black and White. The Xtra Fine EVF displays virtually 100% of the picture area at 6500K colour temperature.

* When the camcorder is panned quickly or when an object in the screen moves quickly, the primary colours of R/G/B may be seen on the object in the EVF momentarily.

InfoLITHIUM™ L Series Battery Compatibility

The NXCAM uses the same NP-F970/B batteries as the HVR-Z5E, HVR-Z1E, HVR-V1E, and DSR-PD170P, so you can use your existing chargers and batteries.

One-touch Clip-type Microphone Holder

A one-touch clip-type microphone holder makes it easy to attach and remove the microphone for quick setup/storage.

Benefits

The NXCAM Camcorder Prototype is designed to exploit the potential of consumer Memory Stick Pro DUO memory and the AVCHD codec with one of the highest performance and most advanced compact camcorder feature sets on the market. Solid State media offers a high speed, nonlinear workflow coupled with superior picture performance over existing pixel-shift HD camcorders. NXCAM will revolutionize what's expected from a professional entry-level, solid state camcorders.

Exceptional Picture Performance

Set yourself apart from the competition with superb quality images and superior low-light capabilities providing the ability to work in the most demanding natural light conditions. The key to this exceptional performance is one of the best camcorder front ends on the market. Sony's "G Lens" incorporates unique optical technology and unparalleled quality control. Moreover, it's been optimised to perfectly complement the advanced image sensor and image-processing technology of the newly developed Exmor CMOS processors with ClearVid array.

Superior Audio Performance

Outstanding images demand similarly high quality audio and Sony is the first manufacturer to provide Linear PCM audio for a compact AVCHD camcorder. You can be confident of getting the best possible audio whatever the circumstances.

Recording Media Choice

The NXCAM Camcorder provides a choice of recording media to suit different applications. Dual Memory Stick PRO Duo slots mean you can make use of affordable, easily available consumer media products for most shoots. However, when recording time is a key requirement, the optional 128GB Flash Memory Unit offers over 11 hours of recording time at 24Mbps. You can also use both media simultaneously. Many customers require simultaneous recording for a variety of different client needs, including ease of editing and archiving. The recording of SD and HD at the same time is also possible. Flexibility is key to the NXCAM concept.

Advanced, Flexible Workflow

Work the way you want to with a wide-ranging choice of bit rates, interlace or progressive recording and even Standard Definition using MPEG-2 codec at 9Mbps. High Definition recording is possible at up to 24Mbps 1920 x 1080 50i or 25p. 720/50P recording is also possible. Audio is recorded in AVCHD modes in full 2-channel linear PCM audio.

Peace of Mind

All NXCAM Camcorders will come supplied with a 2-year PrimeSupport contract which offers unique extra services and benefits;

- 2 years' cover
- Free telephone helpdesk support in English, German, French, Italian and Spanish.
- Collection and replacement product delivery anywhere in EU, Norway and Switzerland

Technical Specifications

To Be Confirmed

www.sonybiz.net/broadcast