SONY

HDV

SONY

HVR-Z5E

Introducing a truly amazing new compact professional HDV camcorder from Sony. The **HVR-Z5E** is designed to enhance creativity and deliver the highest standard of optical and audio quality. Sony's newly designed G Lens[™] is incorporated into the camcorder, boasting excellent resolution, colour and contrast, for breathtaking images.

Hav

3 ClearVid CMOS Sensor[™] system utilising the technology of Exmor™ provides excellent low-light sensitivity. This new compact camcorder is ideal when high performance in available light conditions is a requirement. The ergonomically designed body allows flexible shooting under any conditions, while maintaining Sony's worldwide reputation for quality and high performance.

The HVR-Z5E's standard features include 1080/25p HDV native progressive recording modes.

Sony's new cutting-edge HYBRID recording system offers use of an optional HVR-DR60 or HVR-MRC1K. This allows simultaneous recording of HDV and/ or standard DV/DVCAM to dual media for improved NLE and archive workflow efficiency. Sony is continuously developing and expanding its HDV line-up in response to professional user feedback.



PROGRESSIVE

PRELIMINARY



Advanced Camera and Recorder Features

Sony's Exclusive New High-performance "G Lens"



Discover 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. Achieve the best content possible with the utmost precision of Sony's "G Lens".

Major "G Lens" Features on HVR-Z5E

- > The 29.5mm wide-angle "G Lens" (equivalent to 35mm film) on the HVR-Z5E 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 3 ClearVid 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 HVR-Z5E also provides 3 built-in ND (Neutral Density) filters and allows the use of an optional 0.8x wide conversion lens.

Cutting-edge Imaging System for New Camcorders

1/3 Inch-type 3 ClearVid CMOS Sensor System



The newly developed 1/3-inch type 3 ClearVid CMOS Sensor system 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 3 ClearVid 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 3 ClearVid CMOS Sensor system 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

The new HVR-Z5E includes cutting-edge features such as Sony's Exmor technology, which utilises



the full potential of the 3 ClearVid 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-theline 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 3 ClearVid CMOS Sensor system enables the HVR-Z5E to achieve a low-light sensitivity of just 1.5 lux*

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



HYBRID Ready



New "G Lens"



HVR-MRC1K Optional Memory Recording Unit

Switchable Recording and Playback - HDV1080i/DVCAM/DV

The HVR-Z5E can switch between HDV 1080i, DVCAM and standard DV recording, providing the ultimate flexibility to suit your production needs.

Built-in Down-converter for SD Production

The HVR-Z5E can convert material from 1080i down to 575i and output the video signals through its i.LINK interface and other SD output connectors. This allows users to edit recorded material with a compatible non-linear editing system using current DV editing software, as well as record SD signals to an external VTR.

* Letterbox mode is not available from the i.LINK connector. i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connector. Not all products with an i.LINK connector will necessarily communicate with each other. For information on compatibility, operating conditions, and proper connection, please refer to the documentation supplied with any device with an i.LINK connector. For information on devices that include an i.LINK connection, please contact your nearest Sony service centre.

Versatile Audio Input Selection

The HVR-Z5E features versatile audio input selection with a newly designed high-quality built-in stereo microphone, as well as two XLR audio input channels for professional microphones or connecting to an external-line audio source.

By adjusting the INPUT ASSIGN switch located on the side panel of the HVR-Z5E, you can easily assign the 2 audio input channels to the built-in stereo microphone, external-line audio, or dedicate one channel to each and record them separately or mixed. When assigned to one channel, the built-in stereo microphone acts as a wide-directional monaural microphone. The high-quality ECM-XM1 monaural microphone is a supplied accessory with the HVR-Z5E.

Operational Versatility

XtraFine[™] LCD Panel

A 3.2-inch type XtraFine LCD is located on the HVR-Z5E in the same position as on the HVR-Z1E. 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)x480). 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 XtraFine 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 HVR-Z5E uses the same batteries as the HVR-Z1E, HVR-V1E and DSR-PD170P, so you can use your existing chargers and batteries.

Creative Versatility

Picture Profile™

Up to six different picture-quality settings, including gamma and colour settings can be registered in the memory as picture profiles.

Smooth Slow Rec

The Smooth Slow Rec function of the HVR-Z5E camcorder enables smooth slow-motion playback of images capturing 4x faster than normal (200 fields/s).

Shot Transition[™] Function

The Shot Transition function allows for smooth automatic scene transitions. After you have programmed a shot's START and END point settings (e.g., for zoom, focus, iris, gain, shutter speed and white balance) and pressed the start button, a smooth picture transition takes place over the duration of the shot by automatically calculating intermediate setting values.

Assignable Features

The HVR-Z5E provides seven ASSIGN buttons for quick access to frequently used functions suitable for variable shooting conditions. Some default functions are pre-assigned by name.

HYBRID Ready

HYBRID Solution for Media, Format and Workflow

The HVR-Z5E is ready for HDV HYBRID operation with the optional HVR-MRC1K Memory Recording Unit. In HYBRID operation you can simultaneously record video footage to tape and to a standard CompactFlash (CF) card. The HVR-Z5E has a special shoe connector* for direct attachment of the HVR-MRC1K without the use of a cable. This smart combination never interferes with shooting operations. The ergonomically integrated design provides easier handling in any shooting situation. The HVR-MRC1K automatically synchronises with the recording commands of the HVR-Z5E. Various recording options are available when using the HVR-MRC1K in HYBRID operation. These include Synchronous recording, Relay recording or HVR-MRC1K only recording. Furthermore, the HVR-Z5E can display HVR-MRC1K status information on its LCD for convenient reference. The display data includes Connection status, REC status and the remaining CF recording time. It is very convenient to be able to monitor the HVR-MRC1K's operation without having to check the rear display panel.

* The intelligent shoe connector inputs and outputs an HDV/DV stream and supplies power to the Memory Recording Unit HVR-MRC1K. The i.LINK connector is not available when the unit is attached to the camcorder.

Sony, DVCAM, ClearVid CMOS Sensor, Exmor, Enhanced Imaging Processor, i.LINK, InfoLITHIUM and their respective logos are trademarks of Sony Corporation. G Lens, XtraFine, Shot Transition are trademarks of Sony Corporation. HDV and the HDV logo are trademarks of Sony Corporation and Victor Company of Japan, Limited. Features and specifications are subject to change without notice. All non-metric weights and measurements are approximate. All other trademarks are the property of their respective owners.