Features

Exmor™ Super35 CMOS Sensor for Shooting Motion Pictures

Equipped with a large CMOS sensor equivalent in size to Super 35mm film, the NEX-FS100E enables shooting with the same creative depth of field as the PMW-F3.

The sensor also features the optimum number of effective pixels for shooting HD moving images. At a high 50fps in all-pixel scan mode, this allows images to be captured with less colour aliasing, jaggedness and rolling shutter than DSLR cameras, while providing the sensitivity to shoot at a minimum illumination of 0.28lux*. Another advantage of Exmor[™] technology is minimal noise when shooting low-light scenes.

* When using a fixed shutter speed of 1/25, auto gain and an iris setting of F1.4. The SEL18200 lens supplied with the NEX-FS100EK enables shooting in illumination as low as 1.5lux when using a fixed shutter speed of 1/25, auto gain and auto iris

E-Mount Interchangeable Lens System

Sony's E-mount interchangeable lenses let you enjoy a level of creative freedom unimaginable with camcorders of the past. Thanks to the E-mount's short 18mm flange-back distance, using a mount adaptor allows shooting with a wide range of existing lenses. For example, with the optional LA-EA1 mount adaptor, you can take advantage of the abundant lenses (A-mount lenses)*. Third-party lens adaptors enable use of an ever wider variety of additional lenses.

*When using A-mount lenses on the NEX-FS100 with the LA-EA1 mount adaptor, both the focus and iris can only be adjusted manually. In addition, other performance limitations may apply to some lenses, for example the aperture mechanism may emit a sound when adjusting. When the aperture is moved towards the open position, this sound will be noticeable or the aperture will not change smoothly.

Modular design for a variety of shooting styles

Featuring a compact, lightweight body with detachable grip, handle, and viewfinder, the NEX-FS100E is ideal for a wide range of shooting situations.

During hand-held shooting, the angle of the grip can be changed as desired, and recording started and stopped with a button on the grip. Recording start/stop buttons are also provided on the top and lower right of the camera.

There are also 1/4- and 3/8-inch screw holes on both the handle and the bottom of the camera body for mounting various peripheral devices. Plus a tape measure hook and an image sensor position index on the body.

XtraFine LCD panel

Located on the optical axis, the 3.5-inch-type XtraFine[™] LCD panel enables easier, more intuitive framing, especially during hand-held shooting. And the LCD panel can be rotated for stress-free operation when shooting low-angle scenes and digital signage footage. For easier, more precise focusing in daylight, the viewfinder comes with a detachable 1.2x magnifier.

1920 x 1080P Slow and Quick Motion

Recording images at a different frame rate from that used for playback provides the extra versatility of slow and quick motion shooting. Furthermore, the NEX-FS100E enables Full HD (1920 x 1080) progressive slow and quick motion. Frame rates are selectable from among 50fps, 25fps, 12fps, 6fps, 3fps, 2fps and 1fps.* So, for example, when recording at 1080/25p, if the frame rate is set to 50fps, images are recorded in half speed slow motion. This means you can create impressive slow motion scenes without the need for troublesome editing.

*60fps, 30fps, 15fps, 8fps, 4fps, 2fps, 1fps frame rates will be available as a result of a future firmware upgrade planned for release in early 2012. It will provide 1/2.5 speed slow motion when 60fps images are recorded in 24p for example.

Note: Shooting in slow and quick motion is possible during HD recording and in the progressive mode. Simultaneous recording to a memory card and the flash memory unit is not possible.

Hybrid recording

Recording to the directly mountable HXR-FMU128 Flash Memory unit allows continuous recording for over 10 hours without changing the recording medium. Simultaneous recording using memory cards and other media is also possible for secure backup when shooting footage that can't be reshot.

Note: When recording on different media, the resolution must be HD or SD. HD and SD cannot be simultaneously on different media.

NXCAM Recording Format

Like other NXCAM series cameras, the NEX-FS100E uses the well established AVCHD recording format supported by a wide range of nonlinear editing systems. Better still, it's ready to shoot with a maximum frame rate of 1920 x 1080/50p (28Mbps) for even higher quality recording. For more flexibility, it's also possible to record in Standard Definition MPEG-2 format.

Uncompressed 4:2:2 Output with Embedded Time code

When shooting, the NEX-FS100E can output uncompressed 4:2:2 footage via HDMI (with an embedded SMPTE Time Code) which can be recorded onto external media, such as HDD.

Geotagging with built-in GPS receiver

A built-in GPS receiver makes the NEX-FS100E an ideal choice for professional videographers. The receiver gives you the ability to "geo-tag" shooting locations - making it easy if you need to return to the same location or to create a log when surveying remote locations. Your locations can be tracked on Google Maps and all GPS data can be extracted with a PC.

Additionally, the receiver automatically adjusts your camcorder's clock to the proper time zone when international travel is part of your assignment.

Picture Profile[™]

Six picture profile settings for different shooting conditions are provided as default settings. Selecting a picture profile for a particular scene offers an easy way to creatively change your shoot.

Last Scene Review

Press a single button to immediately review the last recorded scene.

Expanded Focus

Press a button and this enlarges the centre of the displayed image by 2x, a particularly useful feature when making critical focusing adjustments.

Histogram

Onscreen display of a histogram enables easier exposure adjustment. The histogram also shows the point where the zebra pattern appears (the zebra point). This enables confirmation of overall brightness distribution and the brightness level set with the zebra function. As well as preventing overexposure, this is useful as a guide when aiming for optimum exposure of certain parts of an image, such as faces.

Peaking

A peaking function draws a defined line around the subject displayed in the LCD monitor and viewfinder. Peaking sensitivity and colour (red, white, yellow) can be selected to enable more precise focusing.

Markers

Centre, aspect, safety zone, guide frame and other markers can be displayed on the LCD.

Firmware Update

Sony has implemented a firmware update scheme for future functions, the next firmware version scheduled for release in early 2012 will include a 60Hz upgrade allowing the use of a wider range of recording frame rates including 1920x1080/60p and 24p.