

Sony is pleased to introduce the NEX-FS700U/UK, NXCAM Super35, high frame-rate camera. The FS700 is equipped with a new 4K Exmor Super 35 CMOS sensor (Total 11.6 million pixels) capable of cranking at up to 960 frames per second. This high-speed readout chip is optimized for motion picture shooting, producing exceptional image fidelity with high sensitivity, low noise and minimal aliasing.

The FS series camera's E-mount is designed to accept virtually all 35mm SLR, DSLR and cinematography lenses, with the use of simple, inexpensive third party adapters sold separately -without optical degradation-. FS series camera owners are able to continue to use their existing 35mm lenses and add more lenses without being limited to a particular lens brand or mount type.

Sony is planning a future firmware upgrade that will enable the NEX-FS700U to output 4K bit-stream data over 3G HD-SDI when used with an optional Sony 4K recorder. Time frame/price for this planned upgrade has not been determined.

With this announcement of a large-sensor high speed NXCAM Super35mm camcorder, Sony addresses the needs of small and mid-range productions including commercials, independent film, documentary and music video production.

WorldCam recording

The NEX-FS700U/ UK are capable of shooting in 50Hz or 60Hz systems; enabling NEX-FS700 users to produce content for clients around the world. As in other NXCAM camcorders, the internal recording format is AVCHD 2.0. One memory card slot accepts either compatible memory sticks or SD Cards (see specs below). The optional HXR-FMU128 flash memory recording unit permits extended recording times exceeding 12 hours at 24Mbps and 10 hours at 28Mbps. Simultaneous HD-HD recording to the memory card and FMU128 is possible. Standard definition recording using the same MPEG-2 program stream system as DVD is also available.

Full HD Slow & Quick motion recording.

The NEX-FS700U can vary the recording frame-rate from 1 to 60 fps (1 to 50 fps in 50Hz system). Setting the frame-rate to 60 fps while recording at 24p yields 40% slowmotion; conversely, setting the frame-rate at 1 fps while recording at 60p yields 6000% speedup.

Super Slow Motion

Thanks to the high-speed image data reading characteristics of the new Exmor Super35 CMOS sensor, the NEX-FS700 can capture burst recordings at full-HD (1920x1080) at 120 or 240 fps. Using playback at 24 fps, the camcorder can simply and beautifully realize 80 seconds of full-HD 10x super slow motion pictures. For very high-speed shooting, you can choose 480fps (20x) and 960fps (40x)-fps recording at a reduced resolution.

Buildup modular architecture

The NEX-FS700U FS700 has a refined ergonomic design with a robust, detachable top handle, secured by a pair of screws. It incorporates two cold shoes, plus two sets of 1/4 and 3/8 inch holes) to allow secure mounting for heavy accessories.

It also features an adjustable-angle handgrip featuring four buttons for commonly used functions: expanded focus, auto iris, photo capture and recording start/stop. The handgrip is attached to the camera body with an industry standard Arri type rosette mount.

There are also two 1/4-inch screw holes on the top and six 1/4-inch plus two 3/8-inch screw holes on the bottom of the camera body for attaching the camera or mounting various peripheral devices and building various kinds of configurations to meet particular needs.

Switches

Larger buttons and improved tactile differentiation aids operation when wearing gloves. Although every button and switch can be accessed directly, the NEX-FS700 is equipped with a hold switch on the lower side of its body to protect inadvertent setting changes during operation.

Uncompressed 4:2:2 8-bit digital outputs

The 3G HD-SDI output enables easy integration with the highest-quality recording formats. The output signal is user selectable: native (same as the recording format), PsF or pull-down.

The HDMI output signal may be native or with pull-down. The HDMI 4:2:2 output includes embedded Time code, and embedded 2-3 pull-down markers.

ND filter turret

With its built-in, ultra-thin ND filters, the NEX-FS700 offers exceptional shallow depth-of-field on high-lights. Four position ND filters: clear, ND 0.6 (2 stops), ND 1.2 (4 stops) and ND 1.8 (6 stops).

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Compatible with Sony's E-mount Interchangeable Lens System.

E-mount lenses are ideal for motion picture shooting because the mechanism is compact and extremely quiet. When E-mount lenses are used, the camcorder can realize auto exposure and SteadyShot image stabilization during motion picture shooting.

All of these lenses feature precision-crafted optics with aspherical glass elements for compact high performance, and a circular iris mechanism for smooth background defocusing (bokeh). The SEL18200 lens supplied with the NEX-FS700UK boasts 11x zoom power, a quiet AF motor for silent recording, and Optical SteadyShot image stabilization with an advanced Active mode that lets you take steady handheld shots while walking around.

Compatibility with A-mount lenses for Sony DSLR.

Thanks to the short 18 mm flange-back distance of E-mount interchangeable lens system, using a mount adaptor allows shooting with a wide range of existing lenses. For example, with the optional LAEA-2 A-mount to E-mount adaptor, you can take advantage of the many available A-mount lenses. Thanks to Translucent Mirror Technology on LAEA-2, continuous, fast and precise phase detection auto focus and one push auto iris functions are available during motion picture shooting with most A-mount lenses.

Photo capture

The NEX-FS700 can capture high-quality 8.3M still images with beautiful shallow depth-of-field. The aspect ratio of the still image is selectable from 16:9 to 3:2. This camcorder also includes a face detection function and auto focus (with E-mount lenses), to help ensure subject is always kept in focus.

SPECIFICATIONS

Video signal	NTSC color, EIA standards HDTV 1080/60i, 1080/60p, 720/60p specification.
	PAL color, CCIR standards HDTV 1080/50i, 1080/50p, 720/50p specification.
Video recording system	HD MPEG-4 AVC/H.264 AVCHD Ver.2.0 SD MPEG-2 PS
HD Recording modes	PS max 28 Mbps, 1920 × 1080/60p, 50p, 16:9 FX max 24 Mbps, 1920 × 1080/60i, 50i, 30p, 25p, 24p, 16:9 1280 × 720/60p, 50p, 16:9

	FH approx. 17 Mbps (ave), 1920 × 1080/60i, 50i, 30p, 25p, 24p, 16:9 1280 × 720/60p, 50p, 16:9 HQ approx. 9 Mbps (ave), 1440 × 1080/60i, 50i, 16:9 LP approx. 5 Mbps (ave), 1440 × 1080/60i, 50i, 16:9
SD Recording mode	HQ approx. 9 Mbps (ave), 720 × 480/60i, 720 × 576/50i, 16:9, 4:3
Audio recording system	Linear PCM 2ch (48 kHz 16-bit) Dolby Digital 2ch (48 kHz 16-bit) Dolby Digital Stereo Creator employed.
Still image recording system	DCF Ver. 2.0 Compatible Exif Ver. 2.3 Compatible MPF Baseline Compatible
Recording media (movies/still images)	Memory Stick PRO Duo media FMU 128 flas memory SD card (Class 4 or faster)
Image sensor	Exmor Super35 CMOS sensor Total: Approx. 11. 6 million pixels Effective (motion): Approx. 8.3 million pixels (16:9) Effective (photo): Approx. 8. 4 million pixels (16:9), Approx. 7. 1 million pixels (3:2) Recording pixels (photo): Approx. 8.3 million pixels (16:9), Approx. 7 million pixels (3:2)
Minimum illumination	1.2 lx (lux)* with Shutter Speed 1/24 auto gain control, auto iris (when selecting [60i]) 1.5 lx (lux)* with Shutter Speed 1/25, auto gain control, auto iris (whenselecting [50i])
Input/output connectors	
VIDEO OUT jack	RCA connector 1 Vp-p, 75 ΩΩ (ohms) unbalanced, sync negative
AUDIO OUT jacks	RCA connectors -10 dBu (at load impedance 47 kΩ (kilohms)), Out-
COMPONENT OUT jack Mini-D	put impedance with less than 2.2 kΩ (kilohms) (0 dBu = 0.775 Vrms)
jack k	Y: 1 Vp-p, 75 Ω (ohms) PB/PR, CB/CR: 0.7 Vp-p, 75 75Ω (ohms) Stereo mini-minijack (Ø 2.5 mm)
REMOTE jack	HDMI Connector (Type A)
HDMI OUT jack	BNC SMPTE259M/292M/424M/425M compatible
SDI OUT jack	Stereo minijack (Ø 3.5 mm)
Headphones Jack	XLR 3-pin × 2, female, MIC: -48 dBu/3 kΩ (kilohms) LINE: +4 dBu/10
INPUT1/INPUT2 jacks	kΩ (kilohms) (0 dBu = 0.775 Vrms). Stereo mini-minijack (Ø 2.5 mm)
REMOTE jack	
LCD screen	
Picture	8.8 cm (3.5 type, aspect ratio 16:9)
Total dot number	921 600 (1 920 × 480)
General	
Power requirements	DC 7.2 V (battery pack) DC 7.6 V (AC Adaptor)
Average power consumption	During camera recording using the microphone ECM-XM1, LCD with normal brightness (using the E 18-200 mm F3.5-6.3 OSS lens*) When selecting [60i]: 9.6 W When selecting [50i]: 8.8 W When Flash Memory Unit HXRFMU128 is used, the average power consumption increases about 1.1 W.
Operating temperature	32 °F to 104 °F (0 °C to 40 °C)
Storage temperature	-4 °F to +140 °F (-20 °C to +60 °C)
Dimensions (approx.)	Camcorder body only (including the projecting parts): 5 3/4 in. × 7

1/8 in. × 10 in. (145 mm × 178.5 mm × 253.5 mm) (w/h/d)
 When recording (including the projecting parts): 7 3/4 in. × 8 in. × 22 1/2 in.) (195.5 mm × 202.5 mm × 569.5 mm) (w/h/d)

(With the accessories (lens*, lens hood*, large LCD viewfinder, large eyecup, handle, microphone (ECMXM1), and grip (without the belt attached.))

Weight (approx.). Camcorder body only: 3 lbs. 11 oz. (1 680 g) When recording: 3 060 g (6 lbs. 12 oz.) (With the accessories (battery pack (NP-F770), lens*, lens hood*, large LCD viewfinder, large eyecup, handle, microphone (ECM-XM1), grip, and flash memory unit cover) attached.) * Supplied with NEX-FS700UK/FS700EK/FS700K	
AC Adaptor AC-PW10 Power requirements Power consumption Output voltage Operating temperature Storage temperature Dimensions (approx.) Mass (approx.)	AC 100 V - 240 V, 50 Hz/60 Hz 24 W DC 7.6V* 32 °F to 104 °F (0 °C to 40 °C) -4 °F to +140 °F (-20 °C to +60 °C) 127 mm × 35 mm × 63 mm (5 in. × 1 7/16in. × 2 1/2in.) (w/h/d) excluding the projecting parts 10 oz. (300 g.) excluding the power cord (mains lead)
Charger AC-VL1 Power requirements Power consumption Output voltage Operating temperature	AC 100 V - 240 V, 50 Hz/60 Hz 22 W DC 8.4 V* 32 °F to 104 °F (0 °C to 40 °C)
SEL 18-200mm lens (Supplied with NEX-FS700UK) When converted to a 35 mm still F-value SteadyShot Minimum focus Maximum magnification Minimum f-stop Filter diameter Dimensions (≈diameter × height) Mass (approx.)	30.6 mm - 340 mm (1 1/4 in. - 13 1/2 in.) (16:9) 34.2 mm - 380 mm (1 3/8 in. - 15 in.) (3:2) F3.5-F6.3 Optical-shift biaxial-linear-drive and hall effect sensor 11 7/8 in. -19 3/4 in. (0.30 m (W) - 0.50 m (T)) ×0.35 f/22 - f/40 2 3/4 in. (67 mm) 3 in. × 4 in (75.5 mm × 99.0 mm) 18 1/2 oz. (524 g)
Supplied accessories	AC Adaptor (AC-PW10), Charger (AC-VL1), Rechargeable Battery Pack (NP-F770), Microphone (ECM-XM1), Remote Commander (RMT-845), Component video cable, A/V connecting cable, USB cable, USB Adaptor Cable (VMC-UAM1), Large eyecup, Lens hood with lens cover (Lens cap & Lens hood), Lithium Battery (CR2025), Clock Lithium (Installed), Application Software (CD-ROM) (CMU2.1)

Features and specifications subject to change without notice.