

SONY

Press Release

Sony Announces Three New Palm-Sized Camcorders Featuring Stunning Autofocus Performance with 273-point Phase-detection AF Sensor and 4K HDR Recording



The new XDCAM® PXW-Z90, NXCAM® HXR-NX80 and Handycam® FDR-AX700, equipped with 1.0-type stacked Exmor RS™ image sensor, offer an optimal choice to a wide range of users from professionals to video enthusiasts.

- Handycam® FDR-AX700 is the world's first consumer camcorder that captures 4K HDR video
- 4K²full-pixel readout without pixel binning, using an enhanced BIONZ X™ image processing engine
- Super Slow Motion¹ recording up to 960fps², which is industry leading among palm categories and Slow & Quick Motion³Full HD recording up to 120fps⁴
- S-Log3/S-Gamut3 capabilities for users to create and work with images as they desire.
- 29mm⁵ (35EQ)wide-angle ZEISS® Vario-Sonnar T* 12x optical zoom lens and 18x Clear Image Zoom⁶
- Less image distortion (rolling shutter phenomenon), in comparison to conventional models when shooting subjects in motion

¹ 4K recording is not available. Sound cannot be recorded. A class 10 or higher SDHC/SDXC memory card is required.

² 960fps in NTSC, 1000fps in PAL

³ Sound cannot be recorded. UHS-I (U3) SDHC/SDXC memory card is required

⁴ 120fps in NTSC, 100fps in PAL

⁵ 35mm equivalent

⁶ 18x(4K), 24x(HD)

Hong Kong, October 9, 2017 – Sony today announced three new 4K HDR⁷ camcorders: the Handycam® FDR-AX700, the XDCAM® PXW-Z90 and the NXCAM® HXR-NX80. Featuring Sony’s ground-breaking Fast Hybrid AF system, all three palm camcorders combine a fast and reliable autofocus (AF) function adapted for shooting with a 1.0-type stacked Exmor RS CMOS image sensor, delivering stunning image clarity alongside a range of versatile shooting features. The new camcorders all support an instant HDR (High Dynamic Range) workflow, enabling users to produce breath-taking HDR content with minimum post-production to suit a range of content creation scenarios and applications.

The Fast Hybrid AF system ensures highly accurate focusing and tracking during shooting, delivered by 273 phase-detection AF points that cover approximately 84% of the shooting area, high-density placement of autofocus points and a newly developed AF algorithm. This reduces the burden of focusing, especially when accurate focusing is required for shooting 4K films. In movie recording mode, the appearance of phase-detection AF frames indicates the focused area and easily allows users to monitor a subject that is in focus. The new camcorders feature a high-resolution OLED viewfinder (0.39-type OLED, 2,359k dots) and advanced touch screen operation, on the 3.5-type large LCD screen (1,555k dots), to allow users to quickly switch focus from one subject to another, while the AF Drive Speed, Tracking Depth Range and Subject Switching Sensitivity can all be configured as required for different subjects and content styles.

The new camcorders support 4K HDR¹ recording with HLG (Hybrid Log-Gamma), offering an instant HDR workflow. This enables users to reduce the post-production work and produce high-quality HDR content without grading, which usually requires a highly skilled technique and specialist knowledge.

Workflow efficiency benefits such as Proxy recording, relay recording and simultaneous backup recording are also delivered thanks to the new camcorders’ dual memory card slots and multi-camera operation capabilities supported by TC (time code)/UB (user bit). The three new camcorders also have REMOTE terminals, Multi-Interface Shoe™, and HDMI Type A to ensure enhanced operability.

In addition to the above key features as series, the XDCAM® PXW-Z90 and NXCAM® HXR-NX80 also feature dual XLR audio input, a detachable handle, and access to Content Browser Mobile - a supporting smartphone application to enable Wi-Fi® monitoring, Camcorder remote control and wireless timecode sync⁸ between multiple cameras.

The PXW-Z90 also includes several features to suit broadcast-specific requirements including XAVC® format recording, which provides high-quality images at 4:2:2 10 bit (HD) and 4:2:0 8 bit (QFHD) in addition to conventional broadcasting MPEG2HD⁹ format recording, 3G SDI

⁷ 3840 x 2160 pixels

⁸ Optional licences required

connectivity for compatibility with existing broadcasting equipment, and networking functions to support news reporting, such as compatibility with XDCAM® air, the Sony cloud-based ENG subscription service.

NXCAM® HXR-NX80 and Handycam® FDR-AX700 adopt XAVC S®⁹, an extended format of XAVC for consumer use which can record high-defined 4K² films.

The Handycam® FDR-AX700 from Sony will be available from mid-October 2017 at HK\$ 17,980. The XDCAM® PXW-Z90 and NXCAM® HXR-NX80 will be launched from the beginning of December 2017 at HK\$25,900 and HK\$21,900, respectively.

Order Now

From October 10 to October 16, 2017, the Handycam® FDR-AX700 is available for pre-ordering at all Sony Stores, Sony Store online (www.sony.com.hk/store) and Sony sales hotline at (852) 2345-2966 as well as authorized dealers. Customers ordering the FDR-AX700 will receive the remote tripod VCT-VPR1 (worth HK\$780) and rechargeable battery NP-FV70A (worth HK\$650) for free. Besides, customers can enjoy a special offer of the XLR-K2M Adapter Kit and Microphone at HK\$3,800 (original price at HK\$4,990). Offers valid while stocks last.

Please find the full specifications of the Handycam® FDR-AX700 [HERE](#)

About Hong Kong Marketing Company

Hong Kong Marketing Company (HKMC), a division of Sony Corporation of Hong Kong Limited, provides sales, marketing and after sales services for Sony's consumer electronics products as well as broadcast and professional products in Hong Kong and Macau. For more information on Sony's products and services, please visit our website at <http://www.sony.com.hk>.

###

⁹ A Class 10 or higher SDHC/SDXC memory card is required to record movies in the XAVC S format. UHS-I (U3) SDHC/SDXC card is required for 100Mbps

Specifications of the PXW-Z90:

| General | |
|-----------------------------------|---|
| Mass | Approx 1020g (with lens hood, eyecup) Approx. 2 lb 4.0 oz (with lens hood, eyecup) Approx. 1390g (with lens hood, handle, eyecup, NP-FV70A battery) Approx. 3lb 1oz (with lens hood, handle, eyecup, NP-FV70A battery) |
| Dimensions (W x H x D) | 121.0mm×104.0mm×274.5mm (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts) 4 7/8 x 4 1/8 x 10 7/8 inches (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts) 130.0 x 181.5 x 287.0 mm (With the accessories (lens hood, large eyecup, XLR handle unit), excluding the grip belt and including the projecting parts) 5 1/8 x 7 1/4 x 11 3/8 inches (With the accessories (lens hood, large eyecup, XLR handle unit), excluding the grip belt and including the projecting parts) |
| Power Requirements | DC In: 8.4V Battery: 7.4V |
| Power Consumption | Approx. 6.5 W (while recording with viewfinder and XAVC QFHD 2160/30p 60Mbps) Approx. 6.9 W (while recording with LCD and XAVC QFHD 2160/30p 60Mbps) |
| Operating Temperature | 0°C to 40°C 32°F to 104°F |
| Storage Temperature | -20°C to +60°C -4°F to +140°F |
| Battery Operating Time | Approx. 140min. with NP-FV70A battery (while recording with LCD, XAVC QFHD 2160/30p, 60Mbps) Approx. 265 min. with NP-FV70A battery (while playing with LCD, XAVC QFHD 2160/30p, 60Mbps) |
| Lens | |
| Lens Mount | Fixed |
| Zoom Ratio | 12x (optical), servo |
| Focal Length | f=9.3 - 111.6mm equivalent to f=29.0 - 348.0mm on 35 mm lens(16:9) equivalent to f=32.8 - 393.6mm on 35mm lens(3:2) |
| Iris | F2.8 - F4.5 auto/manual selectable |
| Focus | AF/MF selectable 10 mm to ∞ (Wide) 1000 mm to ∞ (Tele) |
| Image Stabilizer | ON/OFF selectable, shift lens |
| Filter Diameter | M62 mm |
| Camera Section | |
| Imaging Device (Type) | 1.0-type (13.2mm x 8.8mm) back-illuminated Exmor RS CMOS sensor |
| Effective Picture Elements | Approx. 14.2M pixels(16:9)/Approx. 12.0M pixels(3:2) |
| Built-in Optical Filters | OFF: Clear, 1: 1/4ND, 2: 1/16ND, 3: 1/64ND |
| Minimum Illumination | Standard [60i] 3lux(1/60 Shutter Speed, gain 33dB) Standard [50i] 3lux(1/50 Shutter Speed, gain 33dB) LowLux [60i] 1.7lux(1/30 Shutter Speed, gain 33dB) LowLux [50i] 1.7lux(1/25 Shutter Speed, gain 33dB) |
| Shutter Speed | [60i]: 1/8 - 1/10,000 (1/6 - 1/10,000 when shooting with 24p) [50i]: 1/6 - 1/10,000 |
| Slow & Quick Motion | [60i]: 2160p: Frame rate selectable 1,2,4,8,15,30fps |

| | |
|-----------------------------|--|
| Function | [50i]:2160p:Frame rate selectable 1,2,3,6,12,25fps [60i]:1080p:Frame rate selectable 1,2,4,8,15,30,60,120fps [50i]:1080p:Frame rate selectable 1,2,3,6,12,25,50,100fps |
| Super Slow Motion | [60i]:1080p:Frame rate selectable 240,480,960fps [50i]:1080p:Frame rate selectable 250,500,1000fps |
| White Balance | Preset (Indoor:3200K, Outdoor:5600K±7 steps, Color temperature set range:2300-15000K) Onepush A, B, Auto selectable |
| Gain | -3, 0, 3, 6, 9, 12,15, 18, 21, 24, 27, 30, 33 dB, AGC |
| Gamma Curve | Selectable |
| Input/Output | |
| Audio Input | XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable |
| Video Output | Integrated into Multi/Micro USB jack (×1) , Composite 1.0Vp-p, 75Ω |
| Audio Output | Integrated into Multi/Micro USB jack |
| SDI Output | BNC (x1), 3G/HD/SD SMPTE 424M/292M/259M standards |
| USB | Multi/Micro USB jack (x1) |
| Headphone Output | Stereo mini jack (x1) |
| Speaker Output | Monaural |
| DC Input | DC jack |
| Remote | Integrated into Multi/Micro USB jack Stereo mini-mini jack (Φ2.5mm) |
| HDMI Output | Type A (x1) |
| Monitoring | |
| Viewfinder | 1.0cm (0.39 type) OLED Approx. 2.36M dots |
| LCD | 8.8cm (3.5 type) Approx. 1.56M dots |
| Built-in Microphone | |
| Built-in Microphone | Omni-directional stereo electret condenser microphone |
| Media | |
| Type | Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible x1 SD/SDHC/SDXC x1 |
| Wi-Fi/NFC | |
| Supported format | IEEE 802.11 a/b/g/n/ac |
| Frequency band | 2.4 GHz bandwidth 5.2/5.3/5.6/5.8 GHz bandwidth |
| Security | WEP/WPA-PSK/WPA2-PSK |
| NFC | NFC Forum Type 3 Tag compliant |
| Supplied Accessories | |
| Supplied Accessories | XLR handle unit (1) Lens hood (1) Lens cap (1) Large eyecup (1) Accessory shoe kit (1) USB cable (1) Rechargeable battery pack (NP-FV70A) (1) AC Adaptor (AC-L200D) (1) Power cord (mains lead) (1) Wireless Remote Commander (RMT-845) (1) Lithium battery (CR2025 for the Wireless Remote Commander) (1), Pre-installed to the Wireless Remote Commander Operating Guide (2) CD-ROM “Manuals for Solid-State Memory Camcorder” (1) Warranty (1) |

Specifications of the HXR-NX80:

| General | |
|---|---|
| Mass | Approx 955 g (with lens hood, eyecup) Approx. 2 lb 1.7 oz (with lens hood, eyecup) Approx. 1320g (with lens hood, handle, eyecup, NP-FV70A battery) Approx. 2lb 14.6oz (with lens hood, handle, eyecup, NP-FV70A battery) |
| Dimensions (W x H x D) | 121.0mm×104.0mm×274.5mm (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts) 4 7/8 x 4 1/8 x 10 7/8 inches (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts) 130.0x181.5x287.0 mm (With the accessories (lens hood, large eyecup, XLR handle unit), excluding the grip belt and including the projecting parts) 5 1/8 x 7 1/4 x 11 3/8 inches (With the accessories (lens hood, large eyecup, XLR handle unit), excluding the grip belt and including the projecting parts) |
| Power Requirements | DC In: 8.4V Battery: 7.4V |
| Power Consumption | Approx. 5.7 W (while recording with viewfinder and XAVC S 4K 2160/30p 60Mbps) Approx. 6.1 W (while recording with LCD and XAVC S 4K 2160/30p 60Mbps) |
| Operating Temperature | 0°C to 40°C 32°F to 104°F |
| Storage Temperature | -20°C to +60°C -4°F to +140°F |
| Battery Operating Time | Approx. 155min. with NP-FV70A battery (while recording with LCD, XAVCS 4K 2160/30p, 60Mbps) Approx. 265 min. with NP-FV70A battery (while playing with LCD, XAVCS 4K 2160/30p, 60Mbps) |
| Lens | |
| Lens Mount | Fixed |
| Zoom Ratio | 12x (optical), servo |
| Focal Length | f=9.3 - 111.6mm equivalent to f=29.0 - 348.0mm on 35 mm lens(16:9) equivalent to f=32.8 - 393.6mm on 35mm lens(3:2) |
| Iris | F2.8 - F4.5 auto/manual selectable |
| Focus | AF/MF selectable, 10 mm to ∞ (Wide), 1000 mm to ∞ (Tele) |
| Image Stabilizer | ON/OFF selectable, shift lens |
| Filter Diameter | M62 mm |
| Camera Section | |
| Imaging Device (Type) | 1.0-type (13.2mm x 8.8mm) back-illuminated Exmor RS CMOS sensor |
| Effective Picture Elements | Approx.14.2M pixels (16:9) / Approx.12.0M pixels (3:2) |
| Built-in Optical Filters | OFF: Clear, 1 : 1/4ND, 2: 1/16ND, 3: 1/64ND |
| Minimum Illumination | Standard [60i] 3lux(1/60 Shutter Speed, gain 33dB) Standard [50i] 3lux(1/50 Shutter Speed, gain 33dB) LowLux [60i] 1.7lux(1/30 Shutter Speed, gain 33dB) LowLux [50i] 1.7lux(1/25 Shutter Speed, gain 33dB) |
| Shutter Speed | [60i]: 1/8 - 1/10,000 (1/6 - 1/10,000 when shooting with 24p) (1/125 - 1/10,000 when shooting with 120p) [50i]: 1/6 - 1/10,000 (1/100 - 1/10,000 when shooting with 100p) |
| Slow & Quick Motion Function | [60i]:2160p:Frame rate selectable 1,2,4,8,15,30fps [50i]:2160p:Frame rate selectable 1,2,3,6,12,25fps [60i]:1080p:Frame rate selectable 1,2,4,8,15,30,60,120fps |

| | |
|-----------------------------|--|
| | [50i]:1080p:Frame rate selectable 1,2,3,6,12,25,50,100fps |
| Super Slow Motion | [60i]1080p:Frame rate selectable 240,480,960fps [50i]:1080p:Frame rate selectable 250,500,1000fps |
| White Balance | Preset (Indoor:3200K, Outdoor:5600K ± 7 steps, Color temperature set range:2300-15000K) One push A, B, Auto selectable |
| Gain | -3, 0, 3, 6, 9, 12,15, 18, 21, 24, 27, 30, 33 dB, AGC |
| Gamma Curve | Selectable |
| Input/Output | |
| Audio Input | XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable |
| Video Output | Integrated into Multi/Micro USB jack (×1), Composite 1.0Vp-p, 75Ω |
| Audio Output | Integrated into Multi/Micro USB jack |
| USB | Multi/Micro USB jack (x1) |
| Headphone Output | Stereo mini jack (x1) |
| Speaker Output | Monaural |
| DC Input | DC jack |
| Remote | Integrated into Multi/Micro USB jack, Stereo mini-mini jack (Φ2.5mm) |
| HDMI Output | Type A (x1) |
| Monitoring | |
| Viewfinder | 1.0cm (0.39 type) OLED Approx. 2.36M dots |
| LCD | 8.8cm (3.5 type) Approx. 1.56M dots |
| Built-in Microphone | |
| Built-in Microphone | Omni-directional stereo electret condenser microphone |
| Media | |
| Type | Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible x1 SD/SDHC/SDXC x1 |
| Wi-Fi/NFC | |
| Supported format | IEEE 802.11 b/g/n |
| Frequency band | 2.4 GHz bandwidth |
| Security | WEP/WPA-PSK/WPA2-PSK |
| NFC | NFC Forum Type 3 Tag compliant |
| Supplied Accessories | |
| Supplied Accessories | XLR handle unit (1) Lens hood (1) Lens cap (1) Large eyecup (1) Accessory shoe kit (1) USB cable (1) Rechargeable battery pack (NP-FV70A) (1) AC Adaptor (AC-L200D) (1) Power cord (mains lead) (1) Wireless Remote Commander (RMT-845) (1) Lithium battery (CR2025 for the Wireless Remote Commander) (1), Pre-installed to the Wireless Remote Commander Operating Guide (2) CD-ROM “Manuals for Solid-State Memory Camcorder” (1) Warranty (1) |