

SONY



Professional Camcorder Family

XDCAM™ Handy Camcorders

NXCAM™ Camcorders

Accessories

XDCAM **XAVC** **NXCAM** **XAVC S**

*4K: 3840×2160pix
Connect this product to HDR (HLG) compatible TV via HDMI cable and turn to HDR (HLG) mode by TV when displaying HDR (HLG) movie.

XDCAM™ Full Line-up



PXW-FS7M2/PXW-FS7M2K



PXW-FS7



PXW-FS5M2/FSSM2K

Camera Section			
Imaging Device (Type)	Exmor Super35 CMOS		Exmor Super35 CMOS
Effective Picture Elements (Video)	Approx. 8.3M 3840 (H) x 2160 (V) (16:9) Approx. 8.4M 4096 (H) x 2160 (V) (17:9)		Approx. 8.3M 3840 (H) x 2160 (V) (16:9) Approx. 8.4M 4096 (H) x 2160 (V) (17:9, at RAW output)
Built-in Optical Filters	Clear, 1/4, 1/16, 1/64, Variable (1/4 to 1/128)		Clear, 1/4, 1/16, 1/64
Slow & Quick Motion Function	Yes		
Slow Motion	XAVC-I mode 1920x1080: 1 to 180 frames (59.94p, 29.97p, 23.98p), 1 to 150 frames (50p, 25p)	XAVC-I mode 1920x1080: 1 to 180 frames (59.94p, 29.97p, 23.98p), 1 to 150 frames (50p, 25p)	[60i] Frame rate selectable 120, 240, 480, 960 fps [50i] Frame rate selectable 100, 200, 400, 800 fps
Gain	-3, 0, 3, 6, 9, 12, 18 dB, AGC		0, 3, 6, 9, 12, 15, 18, 24, 27, 30 dB, AGC
Gamma Curve	Selectable		
Minimum Illumination	0.7 lx (+18dB, 23.98P, Shutter OFF, ND Clear, F1.4)	0.7 lx (+18 dB, 23.98p, Shutter OFF, ND Clear, F1.4)	0.16 lux [60i] (IRIS F1.4, GAIN Auto, Shutter Speed 1/24) 0.18 lux [50i] (IRIS F1.4, GAIN Auto, Shutter Speed 1/25)
Lens			
Lens Mount	E MOUNT		
Zoom Ratio			
Focal Length			
Iris			
Filter Diameter			
Input/Output			
Audio Input	XLR-type 3-pin (female) (x2)		XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable
HDMI Output	Type A (x1)		
SDI Output	BNC (x2), 3G/HD/SD selectable	BNC (x2), 3G/HD/SD selectable	BNC type (x1), 3G/HD/SD selectable, FS RAW via SDI connector
Composite Output	No		Integrated into Multi/Micro USB jack (x1)
GENLOCK-IN	Option		
Audio Output	No		Integrated into Multi/Micro USB jack (x1)
TC In/Out	Option		No
Remote	Stereo mini-mini jack (ø2.5 mm) (x1)		
MI Shoe	Yes (x1)		
Headphone Output	Stereo mini jack (x1)		
Wired LAN	No		RJ-45 (x1), 1000BASE-T, 100BASE-T, 10BASE-T
Monitoring / Built-in Microphone & LED			
Viewfinder / LCD	3.5 inch type: Approx. 1.56M dots	3.5 inch type: Approx. 1.56M dots	0.39 type OLED: Approx. 1.44M dots 3.5 type: Approx. 1.56M dots
Built-in Microphone	Omni-directional monaural electret condenser microphone	Omni-directional electret condenser microphone	Omni-directional stereo electret condenser microphone
Built-in LED Light	No		
Media			
Internal Memory/Type	XQD Card slot (x2), SD Card slot (x1) for saving configuration data	XQD card slot (x2), SD card slot (x1) for saving configuration data	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1), SD/SDHC/SDXC (x1)
General			
Battery-type	BP-U		
Battery Operating Time	Approx. 3 hrs with BP-U90 battery (while recording XAVC-I QFHD 59.94p, SELP28135G Lens, Viewfinder ON, not using external device)	Approx. 3 hrs with BP-U90 battery (while recording XAVC-I QFHD 59.94p, SELP28135G Lens, Viewfinder ON, not using external device)	Approx. 6 hrs, 40 min. [60i] Approx. 6 hrs, 45 min. [50i] with BP-U90 battery (While recording with LCD On, EVF Off when the external device connector is not used.)
Wireless functions	Wi-Fi remote control		Streaming/FTP/Wi-Fi remote control and monitoring
NFC	NFC Forum Type 3 Tag compliant		
GPS	Yes		
Weight	Approx. 2.0 kg (Approx. 4 lb 6.5 oz) (body only)	Approx. 2.0 kg (Approx. 4 lb 6.5 oz) (body only)	Approx. 830 g (Approx. 1 lb 13.2 oz) (body only)
Dimension (W × H × D)	Approx. 158.9 x 245.2 x 247 mm (Approx. 6 3/8 × 9 3/4 × 9 3/4 inches) (body without protrusions)	Approx. 156 × 239 × 247 mm (Approx. 6 1/4 × 9 1/2 × 9 3/4 inches) (body without protrusions)	Approx. 111.3 x 128.7 x 172.4 mm (Approx. 4 1/2 x 5 1/8 x 6 7/8 inches) (body only including the projecting parts)



PXW-F55



PXW-Z280



PXW-Z190

Camera Section			
Imaging Device (Type)	Exmor Super35 CMOS	1/2 type back-illuminated Exmor R 3CMOS sensor	1/3 type back-illuminated Exmor R 3CMOS sensor
Effective Picture Elements (Video)	Approx. 8.3M 3840 (H) x 2160 (V) (16:9) Approx. 8.4M 4096 (H) x 2160 (V) (17:9, at RAW output) *Required Option CBKZ-F55RIF	3840 (H) x 2160 (V) (16:9)	
Built-in Optical Filters	Clear, 1/4, 1/16, 1/64, Variable (1/4 to 1/128)		
Slow & Quick Motion Function	Yes		
Slow Motion	[60i] Frame rate selectable 120, 240, 480, 960 fps [50i] Frame rate selectable 100, 200, 400, 800 fps	[60i]1 to 60fps (1fps units) [50i]1 to 50fps (1fps units)	
Gain	0, 3, 6, 9, 12, 15, 18, 24, 27, 30 dB, AGC	-3, 0, 3, 6, 9, 12, 15, 18 dB, 42 dB (Turbo Gain ON), AGC	-3, 0, 3, 6, 9, 12, 15, 18 dB, 30dB (Turbo Gain ON), AGC
Gamma Curve	Selectable		
Minimum Illumination	0.16 lux [60i] (IRIS F1.4, GAIN Auto, Shutter Speed 1/24) 0.18 lux [50i] (IRIS F1.4, GAIN Auto, Shutter Speed 1/25) 1.28 lux [60i] (IRIS F4.0, GAIN Auto, Shutter Speed 1/24) 1.40 lux [50i] (IRIS F4.0, GAIN Auto, Shutter Speed 1/25)	0.0013 lx (typical) (1920 x 1080/59.94i mode, F1.9, +42 dB gain, High Sensitivity Mode, with 64 frame accumulation)	0.01 lx (typical) (1920 x 1080/59.94i mode, F1.6, +30 dB gain, High Sensitivity Mode, with 64 frame accumulation)
Lens			
Lens Mount	E MOUNT	Fixed	
Zoom Ratio		17x (optical), servo/manual	25x (optical), servo/manual
Focal Length		5.6 - 95.2 mm (35 mm equivalent: 30.3 - 515 mm)	3.7 - 92.5 mm (35 mm equivalent: 28.8 - 720 mm)
Iris		F1.9 - F16 and close auto/manual selectable	F1.6 - F11 and close auto/manual swichable
Filter Diameter		M77 mm, pitch 0.75mm	M 82 mm, pitch 0.75 mm
Input/Output			
Audio Input	XLR-type 3-pin (female) (x2)	XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable	
HDMI Output		Type A (x1)	
SDI Output	BNC type (x1), 3G/HD/SD selectable	BNC (x1), 12G/3G/HD/SD selectable	BNC (x1), 3G/HD/SD selectable
Composite Output	Integrated into Multi/Micro USB jack (x1)	Yes (switchable to GENLOCK IN)	
GENLOCK-IN	NO	BNC (x1) (switchable to Video out) 1.0 Vp-p, 75Ω	NO
Audio Output	Integrated into Multi/Micro USB jack (x1)		
TC In/Out	No	BNC (x1)	
Remote	Stereo mini-mini jack (ø2.5 mm) (x1)		
MI Shoe	Yes (x1)	Yes (x2)	
Headphone Output	Stereo mini jack (x1)		
Wired LAN	RJ-45 (x1), 1000BASE-T, 100BASE-T, 10BASE-T		
Monitoring / Built-in Microphone & LED			
Viewfinder / LCD	0.39 type OLED: Approx. 1.44M dots 3.5 type: Approx. 1.56M dots	0.5 type OLED: Approx 2.36M dots 3.5 type: Approx. 1.56M dots	0.39 type OLED: Approx 2.36M dots 3.5 type: Approx. 1.56M dots
Built-in Microphone	Omni-directional stereo electret condenser microphone		
Built-in LED Light	No		
Media			
Internal Memory/Type	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1), SD/SDHC/SDXC (x1)	ExpressCard/34 slot (x2) (for XAVC/MPEG2/AVCHD,DV) SD/SDHC(x1) (for Proxy, Utility)	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1) (for XAVC/MPEG2/AVCHD, DV), SD/SDHC/SDXC (x1) (for XAVC/MPEG2/AVCHD, DV), SD/SDHC)(x1)(for Proxy, Utility)
General			
Battery-type	BP-U		
Battery Operating Time	Approx. 6 hrs, 40 min. [60i] Approx. 6 hrs, 45 min. [50i] with BP-U90 battery (While recording with LCD On, EVF Off when the external device connector is not used.)	Approx. 3 hrs, 15 min. with BP-U90 battery (While recording with LCD Off, EVF On when the external device connector is not used.)	Approx. 3 hrs, 15 min. with BP-U90 battery (While recording with LCD Off, EVF On when the external device connector is not used.)
Wireless Functions	Streaming/FTP/Wi-Fi remote control and monitoring		
NFC	NFC Forum Type 3 Tag compliant		
GPS	Yes		
Weight	Approx. 830 g (Approx. 1 lb 13.2 oz) (Body only)	Approx. 2.6 kg (Approx 5 lb 11.7 oz) (body only)	Approx. 2.3 kg (Approx. 5 lb 1.1 oz) (body only)
Dimension (W × H × D)	Approx. 111.3 × 128.7 × 172.4 mm (Approx. 4 1/2 × 5 1/8 × 6 7/8 inches) (body only including the projecting parts)	Approx. 178.4 × 202.0 × 426.3 mm (Approx. 7 1/8 x 8 x 16 7/8 inches) (With the accessories (lens hood, eyecup), excluding the grip belt and including the projecting parts)	Approx. 190.0 × 202.0 × 419.7 mm (Approx. 7 1/2 x 8 x 16 5/8 inches) (With the accessories (lens hood, eyecup), excluding the grip belt and including the projecting parts)



PXW-Z150



PXW-Z90



PXW-X70

Camera Section			
Imaging Device (Type)	1.0-type Exmor RS CMOS	1.0-type Exmor RS CMOS	1.0-type Exmor R CMOS
Effective Picture Elements (Video)	Approx. 14.2M 3840 (H) x 2160 (V) (16:9)	Approx.14.2M 3840 (H) x 2160 (V) (16:9)	Approx. 14.2M 3840 (H) x 2160 (V) (16:9)
Built-in Optical Filters	Clear, 1/4, 1/16, 1/64	Clear, 1/4, 1/16, 1/64	Clear, 1/4, 1/16, 1/64
Slow & Quick Motion Function	Yes		
Slow Motion	[60i]: XAVC HD: 120 fps [50i]: XAVC HD: 100 fps	[60i]: 1080p: Frame rate selectable 240,480,960fps [50i]: 1080p: Frame rate selectable 250,500,1000fps	No
Gain	-3, 0, 3, 6, 9, 12,15, 18, 21, B6, 27, 30, 33 dB, AGC	-3, 0, 3, 6, 9, 12,15, 18, 21, 24, 27, 30, 33 dB, AGC	-3, 0, 3, 6, 9, 12,15, 18, 21, 24, 27, 30, 33 dB, AGC
Gamma Curve	Selectable		
Minimum Illumination	1.7 lux (LOW LUX mode)	1.7 lux (LOW LUX mode)	1.7 lux (LOW LUX mode)
Lens			
Lens Mount	FIXED		
Zoom Ratio	12x (optical), servo [HD] 24x Clear image zoom, [4K] 18x Clear image zoom	12x (optical), servo [HD] 24x Clear image zoom, [4K] 18x Clear image zoom	12x (optical), servo [HD] 24x Clear image zoom, [4K] 18x Clear image zoom (with CBKZ-X70FX)
Focal Length	f = 9.3 - 111.6 mm (35 mm equivalent: 29.0 - 348 mm) (16:9)	f=9.3 - 111.6 mm (35 mm equivalent: 29.0 - 348 mm) (16:9)	f=9.3 - 111.6 mm (35 mm equivalent: 29.0 - 348 mm) (16:9)
Iris	F2.8 - F4.5 auto/manual selectable	F2.8 - F4.5 auto/manual selectable	F2.8 - F4.5 auto/manual selectable
Filter Diameter	M62 mm	M62 mm	M62 mm
Input/Output			
Audio Input	XLR-type 3-pin (female) (x2)	XLR-type 3-pin (female) (x2)	XLR-type 3-pin (female) (x2)
HDMI Output	Type A (x1)		
SDI Output	BNC (x1), 3G/HD/SD selectable	BNC (x1), 3G/HD/SD selectable	BNC (x1), 3G/HD/SD selectable
Composite Output	Integrated into Multi/Micro USB jack (x1), Composite 1.0Vp-p, 75Ω	No	Integrated into Multi/Micro USB jack (x1), Composite 1.0Vp-p, 75Ω
GENLOCK-IN	No		
Audio Output	Integrated into Multi/Micro USB jack (x1), RCA pin (Monaural) (x1)	Integrated into Multi/Micro USB jack	Integrated into Multi/Micro USB jack
TC In/Out	No		
Remote	Stereo mini mini jack ø2.5mm (x1)	Integrated into Multi/Micro USB jack, Stereo mini-mini jack (ø2.5mm)	Integrated into Multi/Micro USB jack, Stereo mini-mini jack (ø2.5mm)
MI Shoe	Yes (x1)		
Headphone Output	Stereo mini jack (x1)		
Wired LAN	Use with VMC-UAM2 and CBK-NA1. Both sold separately.	Use with VMC-UAM2 and CBK-NA1. Both sold separately.	Use with VMC-UAM2 and CBK-NA1. Both sold separately.
Monitoring / Built-in Microphone & LED			
Viewfinder / LCD	0.39 type OLED: Approx. 1.44M dots 3.5 type LCD monitor: Approx. 1.56M dots	0.39 type OLED: Approx. 2.36M dots 3.5 type: Approx. 1.56M dots.	0.39 type OLED: Approx. 1.44M dots 3.5 type LCD monitor: Approx. 1.56M dots
Built-in Microphone	Omni-directional stereo electret condenser microphone.		
Built-in LED Light	No		
Media			
Internal Memory/Type	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1), SD/SDHC/SDXC (x1)	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1), SD/SDHC/SDXC x1	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1), SD/SDHC/SDXC (x1)
General			
Battery-type	InfoLITHIUM L	InfoLITHIUM V	InfoLITHIUM V
Battery Operating Time	Approx. 260 min. with NP-F770 battery (while recording with LCD, XAVC 1080/60i, 50 Mbps) Approx. 400 min. with NP-F970 battery (while recording with LCD, XAVC 1080/60i, 50 Mbps)	Approx. 140 min. with NP-FV70A battery (while recording with LCD, XAVC QFHD 2160/30p, 60Mbps)	Approx. 120 min. with NP-FV70 battery (while recording with LCD, XAVC 1080/60i, 50 Mbps)
Wireless Functions	QoS Streaming/Streaming/FTP/Wi-Fi remote control and monitoring	QoS Streaming/Streaming/FTP/Wi-Fi remote control and monitoring	QoS Streaming/Streaming/FTP/Wi-Fi remote control and monitoring
NFC	Yes		
GPS	No		
Weight	Approx. 1895 g (Approx. 4 lbs 3 oz) (body only) Approx. 2270 g (Approx. 5 lbs (with lens hood, eyecup, NP-F770 battery))	Approx. 1020 g (Approx. 2 lb 4.0 oz) (with lens hood,eyecup)	Approx. 900 g (Approx. 1 lb 15 oz) (body only)
Dimension (W × H × D)	171.3 × 187.8 × 371.3 mm (6 3/4 × 7 3/8 × 14 5/8 inches) (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts)	121.0 mm × 104.0 mm × 274.5 mm (4 7/8 × 4 1/8 × 10 7/8 inches) (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts)	Approx. 120.7 × 103.5 × 274.3 mm (Approx. 4 7/8 × 4 1/8 × 10 7/8 inches) (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts)

NXCAM™ Full Line-up



HXR-NX80



HXR-NX200



HXR-NX100



HXR-NX5R



HXR-MC2500

Camera Section					
Imaging Device (Type)	1.0 type Exmor RS CMOS	1.0-type back-illuminated Exmor R CMOS sensor	1.0-type Exmor R CMOS	3-chips 1/2.8 type Exmor CMOS Sensor	1/3.95 type Exmor R CMOS
Effective Picture Elements (Video)	Approx.14.2M (16:9)	Approx. 14.2 M (16:9)	Approx. 14.2 M (16:9)	Approx. 2.07M	Approx. 6.14M (16:9)
Built-in Optical Filters	Clear, 1/4, 1/16, 1/64	Clear, 1/4, 1/16, 1/64	Clear, 1/4, 1/16, 1/64	Clear, 1/4, 1/16, 1/64	No
Slow & Quick Motion Function	Yes				No
Slow Motion	[60i]: 1080p: Frame rate selectable 240, 480, 960f ps [50i]: 1080p: Frame rate selectable 250, 500, 1000 fps	[50i]: 1080p: Frame rate selectable 1.2.3.6.12.25, 50 fps	No		
Gain	-3, 0, 3, 6, 9, 12,15, 18, 21, 24, 27, 30, 33 dB, AGC	-3, 0, 3, 6, 9, 12,15, 18, 21, 24, 27, 30, 33 dB, AGC	-3, 0, 3, 6, 9, 12,15, 18, 21, 24, 27, 30, 33 dB, AGC	-6, -3, 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30 dB, AGC	0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33 dB, AGC
Gamma Curve	Selectable				No
Minimum Illumination	1.7 lux (LOW LUX mode)	1.7 lux (LOW LUX mode)	1.7 lux (LOW LUX mode)	1.2lux (1/30 Shutter Speed, iris/gain Auto)	[60i] 1.6 lux (MAN setting: SS 1/30sec, Iris F1.8, Gain 33dB) [60i] 0.8 lux (MAN setting: SS 1/15sec, Iris F1.8, Gain 33dB) [50i] 1.4 lux (MAN setting: SS 1/25sec, Iris F1.8, Gain 33dB) [50i] 0.7 lux (MAN setting: SS 1/12sec, Iris F1.8, Gain 33dB)
Lens					
Lens Mount	FIXED				
Zoom Ratio	12x (optical), servo [HD] 24x Clear image zoom, [4K] 18x Clear image zoom	12x (optical), servo/manual [HD] 24x Clear image zoom, [4K] 18x Clear image zoom	12x (optical), 24x Clear image zoom, servo	20x (optical), 40x (Clear Image Zoom), servo/manual	12x (Optical), 24x Clear image zoom, 200x Digital zoom, servo/manual
Focal Length	f=9.3 - 111.6 mm (35mm equivalent: 29.0 - 348 mm) (16:9)	f = 9.3 - 111.6 mm (35mm equivalent: 29.0 - 348 mm) (16:9)	f = 9.3 - 111.6 mm (35mm equivalent: 29.0 - 348 mm) (16:9)	f=4.1 - 82.0mm (35mm equivalent: 28.8 - 576 mm) (16:9)	f = 2.9-34.8 mm (35mm equivalent: 26.8 - 326.1 mm) (16:9)
Iris	F2.8 - F4.5 auto/manual selectable	F2.8 - F4.5 auto/manual selectable	F2.8 - F4.5 auto/manual selectable	F1.6 (Wide) - F3.4 (Tele) auto/manual selectable	F1.8 - F3.4 auto/manual selectable
Filter Diameter	M62mm	M62 mm	M62 mm	M72 mm	M37 mm
Input/Output					
Audio Input	XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable	XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable	XLR-type 3-pin (female) (x2)	XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable	No
HDMI Output	Type A (x1)				
SDI Output	No			BNC type (x1), BNC (x1), 3G/HD/SD selectable	No
Composite Output	No	BNC (x1)			
GENLOCK-IN	No				
Audio Output	Integrated into Multi/Micro USB jack	RCA pin	RCA pin	Stereo mini jack (x1)	RCA pin
TC In/Out	No				
Remote	Integrated into Multi/Micro USB jack, Stereo mini-mini jack (ø2.5 mm)	Stereo mini mini jack ø2.5 mm (x1)			
MI Shoe	Yes (x1)				
Headphone Output	Stereo mini jack (x1)				
Wired LAN	Option *required VMC-UAM2 USB adapter cable and network adaptor kit CBK-NA1	No			
Monitoring / Built-in Microphone & LED					
Viewfinder / LCD	0.39 type OLED: Approx. 2.36M dots 3.5 type: Approx. 1.56M dots.	0.24 type LCD: Approx. 1.56 M dots. 3.5 type LCD monitor: Approx. 1.56 M dots.	0.24 type LCD: Approx. 1.56 M dots. 3.5 type LCD monitor: Approx. 1.56 M dots.	0.39-inch* type OLED (1.0cm) Approx. 1.44 M dots 3.5-inch* type (8.8cm) Approx. 1.56 M dots.	0.39 type OLED: Approx. 1.44M dots 3.0 type LCD monitor: Approx. 921K dots.
Built-in Microphone	Omni-directional stereo electret condenser microphone.				
Built-in LED Light	No			Yes	No
Media					
Internal Memory/Type	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1), SD/SDHC/SDXC x1	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1), SD/SDHC/SDXC (x1)	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1), SD/SDHC/SDXC (x1)	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1), SD/SDHC/SDXC (x1)	Flash Memory 32GB Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible (x1)
General					
Battery-type	InfoLITHIUM V				
Battery Operating Time	Approx. 155 min. with NP-FV70A battery (while recording with LCD, XAVC S 4K 2160/30p, 60Mbps)	Approx. 150 min. with NP-F570 battery (while recording with LCD, AVCHD 1080/50i FX) Approx. 240 min. with NP-F570 battery (while playing with LCD, AVCHD 1080/50i FX)	Approx. 345 min. with NP-F770 battery (while recording with LCD, AVCHD 1080/60i FX)	Approx. 240 min. with NP-F770 battery (while recording with LCD, AVCHD 1080/60i FX) Approx. 440 min. with NP-F770 battery (while playing with LCD, AVCHD 1080/60i FX)	Approx. 285 min with NP-F570 battery (video light Off)
Wireless Functions	Streaming/Wi-Fi remote control	No		Wi-Fi remote control	
NFC	Yes	No		NFC Forum Type 3 Tag compliant	
GPS	No				
Weight	Approx. 955 g (Approx 2 lb 1.7 oz) (with lens hood, eyecup)	Approx. 1800 g (Approx. 3 lb 15 oz) (body) Approx. 2100 g (Approx. 4 lb 10 oz) (with lens hood, eyecup, NP-F570 battery)	Approx. 1900 g (Approx. 4 lb 3 oz) (body) Approx. 2100 g (Approx. 4 lb 10 oz) (with lens hood, eyecup, NP-F770 battery)	Approx. 2110 g (Approx. 4 lb 10 oz) (body) Approx. 2500 g (Approx. 5 lb 8 oz) (with lens hood, eyecup, NP-F770 battery)	Approx. 2.80 kg (Approx. 6 lb 2.8 oz) (body)
Dimension (W × H × D)	121.0mm × 104.0mm × 274.5mm (4 7/8 × 4 1/8 × 10 7/8 inches) (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts)	171.3 × 187.8 × 371.3 mm (6 3/4 x 7 1/2 x 14 5/8 inches) (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts)	Approx. 171.3 × 187.8 × 371.3 mm (Approx. 6 3/4 × 7 3/8 × 14 5/8 inches) (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts)	176.0 × 199.5 × 385.0 mm (7 × 7 7/8 × 15 1/4 inches) (With the accessories (lens hood, large eyecup), excluding the grip belt and including the projecting parts)	Approx. 265.0 × 235.0 × 455.0 mm (Approx. 10 1/2 × 9 3/8 × 18 inches) (body)

Recording Format



PXW-FS7M2/PXW-FS7M2K



PXW-FS7



PXW-FS5M2/FS5M2K



PXW-FS5



PXW-Z280



PXW-Z190



PXW-Z150

NTSC / PAL Switchable	Switchable						
--------------------------	------------	--	--	--	--	--	--

Recording Format (Video)							
XAVC Intra 4096 x 2160	59.94p: 600Mbps, 50p: 500Mbps, 29.97p: 300Mbps, 25p: 250Mbps, 23.98p: 240Mbps (after Upgrade in Mar.2015)	59.94p: 600Mbps, 50p: 500Mbps, 29.97p: 300Mbps, 25p: 250Mbps, 23.98p: 240Mbps (after Upgrade in Mar.2015)					
XAVC Intra 3840 x 2160	59.94p: 600Mbps, 50p: 500Mbps, 29.97p: 300Mbps, 25p: 250Mbps, 23.98p: 240Mbps	59.94p: 600Mbps, 50p: 500Mbps, 29.97p: 300Mbps, 25p: 250Mbps, 23.98p: 240Mbps			59.94p: 600Mbps, 50p: 500Mbps, 29.97p: 300Mbps, 25p: 250Mbps, 23.98p: 240Mbps		
XAVC Intra 1920 x 1080	59.94p: 222Mbps, 50p: 185Mbps, 59.94i, 29.97p: 111Mbps, 50i, 25p: 112Mbps, 23.98p: 89Mbps	59.94p: 222Mbps, 50p: 185Mbps, 59.94i, 29.97p: 111Mbps, 50i, 25p: 112Mbps, 23.98p: 89Mbps			59.94p: 222Mbps , 50p: 185Mbps , 59.94i, 29.97p: 111Mbps, 50i, 25p: 112Mbps, 23.98p: 89Mbps		
XAVC Intra 1280 x 720					59.94p:111Mbps, 50p: 112Mbps		
XAVC-Long 3840 x 2160	59.94p, 50p: 150Mbps, 29.97p, 25p, 23.98p: 100Mbps	59.94p, 50p: 150Mbps, 29.97p, 25p, 23.98p: 100Mbps	29.97p, 25p, 23.98p: 100Mbps/60Mbps	29.97p, 25p, 23.98p: 100Mbps, 60Mbps	59.94p, 50p, 29.97p,25p, 23.98p: 150Mbps		29.97p, 25p, 23.98p: 100Mbps, 60Mbps
XAVC-Long 1920 x 1080	59.94p, 50p, 59.94i, 50i, 29.97p, 25p, 23.98p: 50/35Mbps, 59.94i, 50i: 25Mbps	59.94p, 50p, 59.94i, 50i, 29.97p, 25p, 23.98p: 50/35Mbps, 59.94i, 50i: 25Mbps	59.94p, 50p: 50Mbps/35Mbps 59.94i, 50i: 50Mbps/35Mbps/ 25Mbps 29.97p, 25p, 23.98p: 50Mbps/ 35Mbps	59.94p, 50p: 50Mbps/35Mbps 59.94i, 50i: 50Mbps/35Mbps/ 25Mbps 29.97p, 25p, 23.98p: 50Mbps/ 35Mbps	59.94i, 50i: 50/35/25Mbps, 59.94p, 50p, 29.97p, 25p, 23.98p: 50/35Mbps		59.94p, 50p, 59.94i, 50i, 29.97p, 25p, 23.98p: 50Mbps, 35Mbps 59.94i, 50i: 25Mbps
XAVC-Long 1280 x 720			59.94p, 50p, 50Mbps	59.94p, 50p: 50Mbps	59.94p, 50p:50Mbps		59.94p, 50p: 50Mbps
XAVC S 4K 3840 x 2160							
XAVC S 1920 x 1080							
MPEG HD422 1920 x 1080	59.94i, 50i, 29.97p, 25p, 23.98p: 50Mbps	59.94i, 50i, 29.97p, 25p, 23.98p: 50Mbps	Optional *required CBKZ-SLMP		59.94i, 50i, 29.97p, 25p, 23.98p: 50Mbps	Optional *required CBKZ-SLMP	59.94i, 50i, 29.97p, 25p, 23.98p: 50Mbps
MPEG HD422 1280 x 720	59.94p, 50p, 29.97p, 25p, 23.98p: 50Mbps	59.94p, 50p, 29.97p, 25p, 23.98p: 50Mbps	Optional *required CBKZ-SLMP		59.94p, 50p, 29.97p, 25p, 23.98p: 50Mbps	Optional *required CBKZ-SLMP	59.94p, 50p, 29.97p, 25p, 23.98p: 50Mbps
MPEG HD420 1920 x 1080			Optional *required CBKZ-SLMP		59.94i, 50i, 29.97p, 25p, 23.98p: 35Mbps	Optional *required CBKZ-SLMP	59.94i, 50i, 29.97p, 25p, 23.98p: 35Mbps
MPEG HD420 1440 x 1080			Optional *required CBKZ-SLMP		59.94p, 50p, 29.97p, 25p, 23.98p: 35Mbps	Optional *required CBKZ-SLMP	59.94i, 50i: 35Mbps
MPEG HD420 1280 x 720			Optional *required CBKZ-SLMP		59.94p, 50p, 29.97p, 25p, 23.98p: 35Mbps	Optional *required CBKZ-SLMP	59.94p, 50p: 35Mbps
MPEG IMX50 720 X 486							
MPEG IMX50 720 x 576							
AVCHD™ 1920 x 1080			59.94p, 50p, PS mode (28Mbps) 59.94i/50i/29.97p/25p/23.98p, FX mode (24Mbps) FH mode (17Mbps)	59.94p, 50p, PS mode (28Mbps) 59.94i/50i/29.97p/25p/23.98p, FX mode (24Mbps) FH mode (17Mbps)			59.94p, 50p: 28Mbps, 59.94i, 50i, 29.97p, 25p, 23.98p: 24Mbps, 17Mbps
AVCHD 1440 x 1080							
AVCHD 1280 x 720			59.94p, 50p, FX mode (24Mbps) FH mode (17Mbps) HQ mode (9Mbps)	59.94p, 50p, FX mode (24Mbps) FH mode (17Mbps) HQ mode (9Mbps)			59.94p, 50p: 24Mbps, 17Mbps, 9Mbps
DVCAM® 720 x 480					59.94i, 29.97p (NTSC): 25Mbps	59.94i (NTSC): 25Mbps	
DVCAM 720 x 576					50i, 25p (PAL): 25Mbps	50i (PAL): 25Mbps	
PROXY H.264					1920 x 1080: 9Mbps, 1280 x 720: 9Mbps, 6Mbps 640 x 360: 3Mbps 480 x 270: 1Mbps, 500Kbps	1280 x 720: 9Mbps, 640 x 360: 3Mbps, 480 x 270: 1Mbps, 500Kbps	1280 x 720: 9Mbps, 640 x 360: 3Mbps
MP4							

							
	PXW-Z90	PXW-X70	HXR-NX80	HXR-NX200	HXR-NX100	HXR-NX5R	HXR-MC2500
NTSC / PAL Switchable	Switchable			Not Switchable			
				PAL	NTSC	PAL	NTSC
Recording Format (Video)							
XAVC Intra 4096 x 2160							
XAVC Intra 3840 x 2160							
XAVC Intra 1920 x 1080							
XAVC Intra 1280 x 720							
XAVC-Long 3840 x 2160	29.97p, 25p, 23.98p: 100Mbps, 60Mbps	29.97p, 25p, 23.98p: 100Mbps. 60Mbps with CBKZ-X70FX firmware option					
XAVC-Long 1920 x 1080	59.94p, 50p, 29.97p, 25p, 23.98p: 50Mbps, 35Mbps 59.94i, 50i: 50Mbps, 35Mbps, 25Mbps	59.94p, 50p, 29.97p, 25p, 23.98p: 50Mbps, 35Mbps 59.94i, 50i: 50Mbps, 35Mbps, 25Mbps					
XAVC-Long 1280 x 720	59.94p, 50p: 50Mbps	59.94p, 50p: 50Mbps					
XAVC S 4K 3840 x 2160			29.97p, 25p, 23.98p: 100Mbps, 60Mbps	25p, 100Mbps/60Mbps			
XAVC S 1920 x 1080			119.88p, 100p: 100Mbps, 60Mbps 59.94p, 50p: 50/25Mbps 29.97p, 25p: 50/16Mbps 23.98p: 50Mbps	50p, 25p, 50Mbps	59.94p, 29.97p, 23.98p, 50Mbps	50p, 25p, 50Mbps	59.94p, 29.97p, 23.98p, 50Mbps 50p, 25p, 50Mbps
MPEG HD422 1920 x 1080	59.94i, 50i, 29.97p, 25p, 23.98p: 50Mbps Optional *required CBKZ-SLMP	59.94i, 50i, 29.97p, 25p, 23.98p: 50Mbps Optional *required CBKZ-SLMP					
MPEG HD422 1280 x 720	59.94p, 50p: 50Mbps (Optional *required CBKZ-SLMP	59.94p, 50p: 50Mbps Optional *required CBKZ-SLMP					
MPEG HD420 1920 x 1080	59.94i, 50i, 29.97p, 25p, 23.98p: HQ mode (35Mbps) (Optional *required CBKZ-SLMP	59.94i, 50i, 29.97p, 25p, 23.98p: HQ mode (35Mbps) Optional *required CBKZ-SLMP					
MPEG HD420 1440 x 1080	59.94i, 50i: HQ mode (35Mbps) Optional *required CBKZ-SLMP	59.94i, 50i: HQ mode (35Mbps) Optional *required CBKZ-SLMP					
MPEG HD420 1280 x 720	59.94p, 50p: HQ mode (35Mbps) Optional *required CBKZ-SLMP	59.94p, 50p: HQ mode (35Mbps) Optional *required CBKZ-SLMP					
MPEG IMX50 720 x 486							
MPEG IMX50 720 x 576							
AVCHD 1920 x 1080	59.94p, 50p: PS mode (28Mbps) 59.94i, 50i: FX mode (24Mbps), FH mode (17Mbps) 29.97p, 25p, 23.98p: FX mode (24Mbps)	59.94p, 50p: 28Mbps, 59.94i, 50i, 29.97p, 25p, 23.98p: 24/17Mbps	59.94p, 50p: PS mode (28Mbps) 59.94i/50i: FX mode (24Mbps), FH mode (17Mbps) 29.97p/25p/23.98p: FX mode (24Mbps)	50p, PS mode (28 Mbps) 50i/25p, FX mode (24 Mbps) FH mode (17 Mbps)	59.94p, PS mode (28Mbps) 59.94i/29.97p/23.98p, FX mode (24Mbps) FH mode (17Mbps)	50p, PS mode (28Mbps) 50i/25p, FX mode (24Mbps) FH mode (17Mbps)	59.94p: 28Mbps 59.94i/29.97p/23.98p: 24Mbps, 17Mbps 50p: 28 Mbps 50i/25p, 24Mbps, 17Mbps
AVCHD 1440 x 1080	59.94i, 50i: LP mode (5Mbps)		59.94i, 50i: LP mode (5Mbps)	50i, HQ mode (9 Mbps) LP mode (5 Mbps)	59.94i, HQ mode (9Mbps) LP mode (5Mbps)	50i, HQ mode (9Mbps) LP mode (5Mbps)	59.94i, HQ mode (9Mbps) LP mode (5Mbps) 50i, HQ mode (9Mbps) LP mode (5Mbps)
AVCHD 1280 x 720	59.94p, 50p: HQ mode (9Mbps)	59.94p, 50p: 24Mbps/17Mbps/9Mbps	59.94p, 50p: HQ mode (9Mbps)	50p, FX mode (24 Mbps) FH mode (17 Mbps) HQ mode (9 Mbps)	59.94p, FX mode (24Mbps) FH mode (17Mbps) HQ mode (9Mbps)	50p, FX mode (24Mbps) FH mode (17Mbps) HQ mode (9Mbps)	59.94p, FX mode (24Mbps) FH mode (17Mbps) HQ mode (9Mbps) 50p, FX mode (24Mbps) FH mode (17Mbps) HQ mode (9Mbps)
DVCAM® 720 x 480		59.94i (NTSC): 25Mbps			59.94i, 25 Mbps		59.94i, 25 Mbps 59.94i, 25 Mbps
DVCAM 720 x 576		50i (PAL): 25Mbps		50i, 25 Mbps		50i, 25Mbps	50i, 25Mbps 50i, 25Mbps
PROXY H.264	1280 x 720: 9Mbps, 640 x 360: 3Mbps	1280 x 720: 9Mbps, 640 x 360: 3Mbps (ver 2.0 or above)	1280 x 720: 9Mbps, 640 x 360: 3Mbps				
MP4							



SELP18110G sold separately

PXW-FS7M2/PXW-FS7M2K

Ultimate Super35 versatility

FS7 II dramatically improves your experience of shooting

How did we improve on our bestselling FS7? We listened to our users to create an advanced version of the FS7 with technical, mechanical and ergonomic enhancements to take your products to even greater heights. A host of enhancements, from an all-new lens mount to Electronic Auto Variable ND system and enhanced ergonomics, transform the possibilities of what you can do.

Shoot and move. Handheld, shoulder-mount or suspended from a gimbal. FS7 II delivers the spectacular imagery you expect from Sony.

E mount flexibility extended

E-mount offers unsurpassed compatibility with Sony's E-mount lenses, along with simple third-party adapter for PL Mount cinema lenses, SLR and DSLR glass, and even classic rangefinder lenses. And for FS7 II there's an all-new lever lock design. Simply put the lens in place and rotate the collar until it locks in place. A lens release lever provides added security. The process of switching lens can be simplified to save time. And of course, the E-mount can take cinema lenses and SLR lenses with a third party adapter, as well as Sony's E-mount and A-mount lenses. Whatever your lens requirements, FS7 II has you covered.



Freedom to shoot & move with Electronic Auto Variable ND

Shooting with FS7 II is a truly liberating experience – shoot and move with no need to worry about changing light conditions, no time wasted fiddling with exposure settings or changing filters. Sony's unrivalled technology continuously adjusts the density of the electronic ND Filter without losing resolution while maintaining color balance. See FS7 II in action for yourself to discover how Sony has transformed shooting on the move.



Super 35/APS-C power zoom for 4K movies

SELP18110G powered zoom lens delivers optimum performance in Super 35/APS-C moviemaking applications, starting at 18 mm wide-angle and extending through an impressive 6.1x zoom range with a constant F4 maximum aperture.



XDCM

4K

XAVC

MPEG HD422

Exmor
CMOS Sensor

XQD

α Mount System

G Lens optical performance suitable for 4K throughout the zoom range.

- Lag-free mechanical manual zoom for high-level, versatile zoom control.
- Refined manual focus operation for subtle adjustment.
- Optical SteadyShot image stabilization helps keep images blur-free as well as minimizing the need to boost ISO in low light conditions.
- Compact, lightweight design ideal for active shooting and when using gimbals.
- Reliable in challenging conditions with a sealed dust and moisture-resistant design.

You also have the choice of purchasing the FS7 II on its own (PXW-FS7M2) or with SELP18110G lens (PXW-FS7M2K).



Shoulder mount comfort and control

FS7 delivered a revolution in ergonomics, but we listened to cinematographers to make FS7 II even more comfortable to use, especially when operating for hours in the field. The number of assign buttons is increased from six to ten, all extra large, while the LCD monitor arm and mic holder can be swapped for left-eye shooting. The telescoping arm offers even more settings, allowing the camcorder to be mounted closer to your body. You no longer need a tool for adjustments.

You can be sure the remarkable Sony smart grip is always at hand with all the key controls at your fingertips.



180 fps High Frame Rates

High Frame Rate shots can turn everyday actions into slow-motion ballet, a visual feast of elegant movement. The FS7 II delivers a maximum of 180 frames per second (fps) continuous shooting in Full HD. If your project plays at the cinematic 24 fps, you get beautiful 7.5x Super Slow Motion. There's no sacrifice in bit depth and no "windowing" of the sensor. So there's no crop factor, no loss in angle of view. The camera also performs Slow & Quick (S&Q) motion from 1 to 180 fps in 1 fps increments. So you can alter the narrative by selectively speeding up or slowing down the action.

Luxurious color at money-saving bitrates

Long-form projects shine with Sony's XAVC™ L (Long GOP) recording system. Record luxurious QFHD at 59.94p/50p at a maximum bit rate of 150 Mbps. Or take advantage of the superior grayscale rendition of 10-bit High Definition, plus the uncompromised detail of 4:2:2 color – all at budget-friendly data rates of 50, 35 or even 25 Mbps in HD mode. You can also record on-board 4K (4096x2160) at cinema standard 24p, 59.94p, 50p, 29.97p, 23.98p or 25p. The camera captures different color spaces, including the wide ITU-R BT.2020 for Ultra High Definition.

Other formats include XAVC I (Intra) 4K at 600 Mbps, QFHD (3840x2160) and Full HD (1920x1080), plus the well-accepted MPEG HD 422, Apple ProRes 422 (with XDCA-FS7 extension unit, sold separately), and even outboard RAW recording (with XDCA-FS7 and outboard recorder, sold separately).



Next-generation memory

Long-form programs need media that's both reliable and affordable. As specified by the CompactFlash Association, XQD™ memory cards score big on both accounts. Reliability comes from in-camera recovery. You get very low cost-per-minute compared to CFast™ cards.

Sony's G-Series XQD card extends these benefits with "EB Stream" technology for a blistering 400 Mbps write-speed and 440 Mbps read-speed. Using our 256GB G-Series card, you can record approximately 45 minutes of 4K footage at 60P or 3.5 hours at 30P in 2K. And when it's finally time to swap out cards, it's now even easier – on FS7 II the card protrudes by a more easily pinchable 8mm.

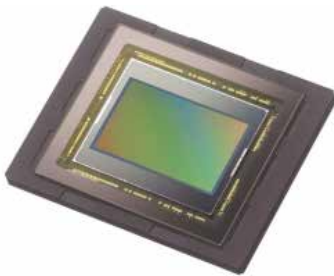


PXW-FS7

Solid-State Memory Camcorder

High-sensitivity 4K Super35 Exmor CMOS Sensor

The FS7 is equipped with a Super 35 Exmor CMOS Sensor with approximately 11.6 million total pixels and 8.8 million effective pixels. The high image readout speed of the image sensor allows the FS7 to support 4K motion-picture shooting and Super Slow Motion. The sensor also realizes a high sensitivity of ISO20000 and a wide dynamic range of 14 stops. Thanks to its full-pixel readout capability without pixel binning and sophisticated camera processing, jaggies and moiré are minimized.



Exmor
CMOS Sensor

Full HD Recording with Super Slow Motion

The FS7 offers Continuous Recording at Full HD image quality and a frame rate of up to 180fps. This makes it possible to attain up to 7.5x Super Slow Motion when played back at 23.98fps. Furthermore, support for unlimited shooting at Super Slow Motion means no more mistimed shots leading to extra takes. It also lets you pick out footage at exactly the point that you want.

Internal Recording in 4K*1 Resolution at 60fps*2

The FS7 supports internal recording at 4Ki resolution as well as a wide range of frame rates (59.94p, 50p, 29.97p, 25p, and 23.98p).

*1 Support for QFHD 3840 x 2160 resolution will be available by the date of launch. 4096 x 2160 resolution support will be provided by firmware update scheduled for early 2015.

*2 59.94fps

Supports Various Formats

The FS7 supports two formats, XAVC and MPEG-2 HD 422, which can be selected to suit the application. Two XAVC compression systems (IntraFrame and Long GOP) are provided through an H.264/MPEG-4 AVC codec. IntraFrame supports recording with 4:2:2 10-bit sampling for 4K and Full HD, as well as a high bit rate of up to 600 Mbps*3. In Long GOP, image quality and recording time are balanced to allow Full HD shooting with 4:2:2 10-bit sampling at 50, 35 or 25 Mbps, making this format suitable for longer duration shooting. Support is also provided for the MPEG2 HD 422 recording format which is mainly used at broadcast stations around the world. Supported formats and bit rates are indicated below.

*3 During 4K 59.94 fps recording.

Support for S-Gamut3.Cine/S-Log3, S-Gamut3/S-Log3 and Other Log Curves

The FS7 supports such log gamma curves as S-Gamut3.Cine/S-Log3 and S-Gamut3/S-Log3. Due to the fact that 18% gray is set at a bright level, S-Log3 is noted for delivering a wider dynamic range than the 1300% achieved by S-log2 incorporated in a camera such as the NEX-FS700R, a difference equal to 1.5 stops. The log gamma itself is close to Cineon log, so color correction is easier to perform and it is possible to achieve the look of film. In addition, compared to the color gamut of S-Gamut3.Cine, which is geared toward reproducing the wide color gamut of DCI-P3 color space used in digital cinema, the color gamut of S-Gamut3 is geared toward the reproduction of almost all actual colors, and is thereby suitable for archival purposes. In latest version, S-log2 which is popular among cinematographers and videographers is supported as well.

Two XQD Media Slots Support Simultaneous and Relay Recording

Built-in Multi-Interface (MI) Shoe

XDCM™

4K

XAVC

MPEG HD422

Exmor™
CMOS Sensor

XQD™

α Mount System

Built-in ND Filter Unit

Clear, 1/4 (2eV), 1/16 (4eV), and 1/64 (6eV)



Support for 4-channel Audio Input and Recording



Flexible Design Supports a Wide Range of Shooting Styles

The FS7 is equipped with a shoulder pad for stable shoulder-style shooting. Users can also choose other supported shooting styles including handy style, chest style (using the curved rear part of the FS7), tripod shooting, etc. depending on conditions



Extension Unit "XDCA-FS7" for Shooting Support

Extension Unit "XDCA-FS7" can be connected directly to the PXW-FS7 to enable the use of functions that support the operator's shooting style or workflow.



XDCA-FS7



VCT-FS7

RAW Output for External 4K/2K RAW Recording

The FS7's FS RAW Interface can be connected to an HXR-IFR5 interface unit and RAW AXS-R5 recorder to enable external 4K/2K RAW recording. The interface also allows the use of compatible third-party external recorders. Full HD footage shot with the unit is time code-synchronized to allow offline editing of the content.

Precise Timecode Synchronization Provided by Genlock

Timecode In/Out Functions

Support for Apple ProRes 422 Recording

The FS7 now supports ProRes recording* (ProRes 422 HQ and ProRes 422)**, providing an easy-to-use environment for those accustomed to the ProRes workflow. * ProRes recording requires attachment of the optional XDCA-FS7 extension unit and a compatible optional power supply (BP-FL75 V-mount battery, etc.) ** This function does not support simultaneous recording, S&Q recording, Picture Cache Rec or other special shooting functions. The corresponding frame rates are listed below.

ProRes

Format	Resolution	Wrap	Frame-Rate
ProRes 422 HQ	1920 × 1080	MOV	59.94i
			29.97p
			23.98p
			50i
			25p
ProRes 422	1920 × 1080	MOV	59.94i
			29.97p
			23.98p
			50i
			25p



PXW-FS5M2/FS5M2K

New look for unbounded creativity

Stunning New Super 35 Look

FS5 II's all-new default look is specifically tuned to meet the requirements of today's content creators with rich mid-range colours, alluring facial tones and a softer tonal look tuned with the same expertise as Sony's world-leading VENICE digital cinematography camera. Straight out of the camera your content will look fresh and vivid, with subjects that really stand out, while still retaining plenty of latitude for post production refinement due to the high performance Super 35 Exmor™ sensor.



High Frame Rate (HFR) Recording

FS5 II delivers stunning slow motion imagery, including four seconds of 120fps in 4K, continuous 240fps in 2K RAW when used in partnership with a compatible third-party external recorder.

FS5 II also offers High Frame Rate (HFR) cache recording at Full HD 10bit 4:2:2 image quality and a frame rate of up to 240 fps (8 second cache recording) and continuous 120fps internal recording in Full HD.

Resolution	Frame rate	Internal/output	Continuous / Burst
4K (4096x2160)	60* / 50	Output FS RAW	Continuous
	120 / 100	Output FS RAW	Burst four seconds
2K (2048x1080)	240 / 200 / 120 / 100	Output FS RAW	Continuous
	120 / 100	Internal recording XAVC HD 422 10bit	Continuous, or burst sixteen seconds
Full HD (1920x1080)	120 / 100	Internal recording XAVC HD 422 10bit	Burst eight seconds
	240 / 200	Internal recording XAVC HD 422 10bit	Burst eight seconds

* 59.94

Spectacular HDR Performance

Demand for HDR content is increasing and FS5 II offers you a choice of two powerful workflows. A phenomenal fourteen stops of exposure latitude ensures the highest fidelity in capturing highlights and details within shadows.

- Instant HDR Workflow is all about speed. Shoot, edit and view content in Hybrid Log-Gamma (HLG) to deliver content quickly without compromising on imaging expression and quality of content.
- S-Log2/3 is the proven choice for premium applications where you wish to capture as much data as possible for the ultimate flexibility in grading.

4K Super 35 Exmor™ Sensor

- **4K resolution:** 11.6 million total pixels and 8.8 million* effective pixels deliver 4K resolution.
- **Super 35 size sensor** offers 'bokeh,' the defocused backgrounds made possible by shallow depth of field, as well as excellent low-light sensitivity.
- **14 stops of exposure** latitude deliver powerful grayscale rendition without crushing shadow detail or blowing out highlight detail.
- **Record 10bit 4:2:2 in Full HD** at up to 50Mbps internally.
- **Record 4K at 60**/50 fps** in FS-RAW via a compatible third-party external recorder.

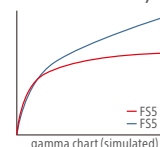
* RAW output **59.94.

α Mount Flexibility

Built-in electronic Variable ND Filters

Creative Picture Profiles

FS5 II features an all-new default look with beautiful highlights and subtle, well rendered facial tones for more emotive visuals where your subjects naturally stand out. There's also an additional nine Picture Profiles, including ones customised for S-Log2, S-Log3 and a profile specifically tuned to provide vibrant, high contrast visuals for creators who desire a DSLR-style look.



Clear Image Zoom

Once you've zoomed in at maximum optical magnification, Pixel Super Resolution technology can enlarge the image by additional 200% in Full HD. It is also compatible with fixed focal length lenses, so you can zoom into a scene while using a prime lens.

Lightweight, Modular and Robust

Versatile Monitoring

Networked for High Mobility

- **Live stream** from any event thanks to a choice of Wi-Fi or built-in wired LAN.
- **Control FS5 II** from your smartphone or tablet.
- **Built-in NFC** supports one-touch authentication possible with appropriate devices.
- **Be first with breaking news** thanks to a built-in wired LAN jack for high-speed FTP transfer of full resolution content.
- **GPS function** automatically records GPS data.

Dual SD card slots with independent record control

Multi-interface (MI) Shoe

Dual XLR inputs

α Mount System

Exmor™
CMOS Sensor



XDCAM

XAVC





PXW-FS5

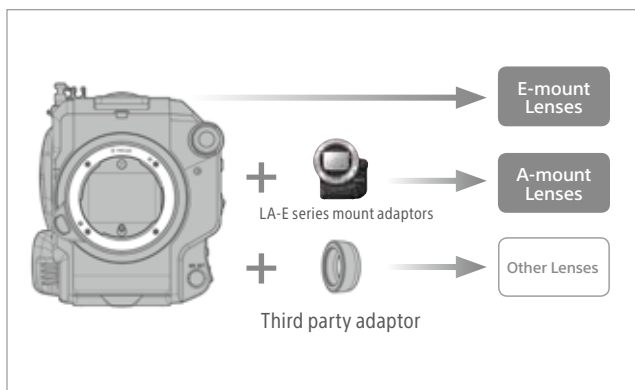
Solid-State Memory Camcorder

Grab and Shoot with Handheld Super35

A handheld camera should be able to get you into tight places. To work in your lap. To move with the talent. To shoot high and low angles with equal agility. And a handheld camera should function beautifully against your chest comfortably steadied by your right hand with all the controls at your fingertips. Sony's extraordinary PXW-FS5 does all of this, and more.

α Mount Flexibility

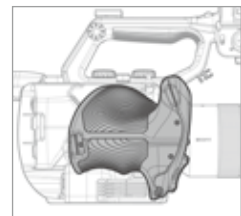
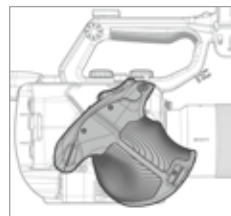
Sony's α mount system offers unsurpassed compatibility with both Sony and third-party lenses. The FS5's E-Mount can take Cinema lenses and SLR lenses with a third party adaptor, as well as Sony's E-mount and A-mount lenses. So whether buying new lenses, or making use of lenses you've already purchased, the FS5 makes it easy.



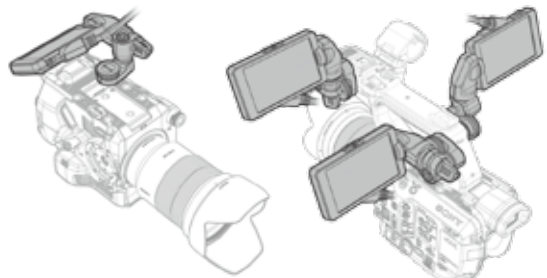
Ultimate Mobility

The FS5 is a radical re-imagining of the FS7 for unsurpassed on the go shooting in the most demanding of conditions. With a body-only weight less than half the FS7 at 0.83kg, you can shoot almost anywhere. Handheld operation is simply exceptional as the superbly balanced chassis is easily configured to shoot from high to low angles thanks to a flexible, rotatable grip and a LCD viewfinder that can be mounted in no less than nine locations.

1 lb 12 oz
(0.8Kg)



Rotatable Grip



Versatile Monitoring

XDCM

4K

XAVC

Exmor
CMOS Sensor

α Mount System

4K Super35 Exmor® Sensor

The FS5 is built around a Exmor CMOS Sensor that offers all the benefits of a large format sensor in combination with the exceptional image readout speeds required for 4K motion-picture shooting and Super Slow Motion.

RAW Output Option*

Sony's FS RAW allows user to record 4K (4096x2160) 60p/50p and continuous 2K (2048x1080) 240fps/200fps on an external recorder.

Note: Since lens compensation is not compliant with RAW output, distortion might appear under specific condition with use of the SELP18105G, part of PXW-FS5K kit lens.

* Requires Version 2.0 firmware or above, plus CBKZ-FS5RIF upgrade kit.

Full HD **10** bit

High Frame Rate (HFR) Recording

The FS5 offers High Frame Rate (HFR) cache recording at Full HD 10bit 4:2:2 image quality and a frame rate of up to 240 fps. The 8-second cache recording means no more mistimed shots leading to extra takes. It also lets you pick out footage at exactly the point that you want. It is also possible to record 120 fps with up to 16-second cache recording. Higher frame rates of 480 fps and 960 fps are also possible



240 fps

(Actual images)

Instant HDR workflows

Shoot, edit and view HDR content in HLG without the need for additional colour grading*.

As the expanding need for HDR content continues, internet video platforms and professionals producing corporate or event content are paying more attention to the added value of HDR. They need to deliver content quickly, without compromising on imaging expression and quality of content. To meet this demand, the PXW-FS5 offers HLG (Hybrid Log Gamma) curve and BT.2020 color space shooting, in addition to S-Log3, for easy file-based workflows, whilst achieving the image quality of HDR. This simple workflow enables the shooting, editing and viewing of HDR content in HLG, without devoting a lot of time to post-production work and additional color grading.

* HLG/BT.2020 compatible display required.

Color, Contrast and the XAVC Codec

When quality is everything, make the most of the FS5's Super35 Exmor sensor and shoot 100Mbps 4K (3840 x 2160) using Sony's advanced XAVC (Long GOP) recording system. In the future, there will even be the option to record RAW externally (details to be announced). If you need a fast turnaround, switch to Full-HD (1920 x 1080)- recording at up to 60p XAVC 10bit 4:2:2 50Mbps. The FS5 has the flexibility to suit how you need to work, today and tomorrow.

Built-in Electronic Variable ND Filter / Auto ND

The FS5 is the world's first Super 35mm camcorder* with a built-in electronic variable Neutral Density (ND) filter, further expanding the depth of field capability of its large format sensor. Unlike conventional optical ND filters, the electronic ND filter on the FS5 can be controlled from 1/4ND to 1/128ND linearly. This makes the FS5 ideal for fast-moving shoots in changeable environments - there's no need to change filters as lighting conditions change and variable control makes it easy to keep depth of field under control. Furthermore, ND filter can be set to Auto* to automatically keep the best exposure while keeping the aperture and depth of field.

*Requires Version 2.0 firmware or above.

1/128 ND



Std. Gamma, ISO1000 F2, No ND Filter (Clear)



Std. Gamma, ISO1000 F2, 1/128ND



PXW-Z280

World's first 4K 3-chip Camcorder with 1/2-type Exmor R™ CMOS Image Sensors, Redefines Handheld Production Image Quality and Workflow

World-leading Handheld 4K 50p/60p* Performance

Capture the whole scene with PXW-Z280. An all-new 4K 3CMOS 1/2-type sensor delivers a deep depth of field with image quality, contributing to high resolution, high sensitivity of F12 (59.94p), and wide dynamic range. 4K 4:2:2 10-bit adds vivid imagery and delicate color gradation.

*59.94p

Instant HDR Workflow

Shoot, edit and view HDR content in HLG without the need for additional colour grading. Premium content services are switching to HDR and the PXW-Z280 is ready with Hybrid Log-Gamma (HLG) recording, which allows you to easy file-based workflows, whilst achieving the image quality of HDR in addition to S-Log3. This simple workflow enables the shooting, editing and viewing of HDR content in HLG without devoting a lot of time to post-production work and additional colour grading.

Built-in Electronic Variable ND Filters

Sony's ground-breaking integration of electronic variable ND filters into the body of a camcorder enables fast, agile shooting. Moving from shadowy interiors to bright sun-lit exteriors is no problem. Unlike conventional optical ND filters, the electronic ND filter on the PXW-Z280 can be controlled from 1/4ND to 1/128ND linearly while ND Filters can be set to fully auto. You can even manually adjust Depth of Field using the iris lens ring, while relying on the camcorder to maintain constant exposure without changing gain nor shutter speed.

17x Professional Zoom Lens with Three Independent Rings with End-stop and Sensor Cropping Extender

The PXW-Z280 is equipped with a 17x professional zoom lens able to zoom from 30.3mm to 515mm (35mm equivalent). The 1/2-inch type lens has three independent control rings with end-stop, which allows manual control of focus, zoom and iris, making for better and faster adjustment.

Face Detection Autofocus (AF)

This feature is important especially in more demanding 4K shooting applications, such as recording interviews or lectures, helping a specific person subjects automatically stay in pin-sharp focus.



Face Detection AF

Revolutionary Networking Capabilities

Based on the technology developed for Sony's cloud-based ENG service, "XDCAM air," the new camcorder uses Sony's Quality of Service (QoS) for live distribution of high-quality broadcast content using a Dual Link connection multiplexing two cellular networks, assigning Planning Metadata and browsing and getting clips in the recording media on camcorders from a distant broadcast station via the cloud.

The Complete Package for Professional

Advanced XAVC-Long and XAVC Intra for 4K QFHD and HD, plus MPEG HD422, MPEG HD and DVCAM to support any workflow. Four-channel audio recording with independent volume dials enables precise control of external input audio and an attached MI shoe microphone. 12G-SDI enables 4K 50p / 60p transfer between long distance using only one BNC cable and dual MI shoes provide cable-less connection with Sony's UWP-D series wireless microphone receiver and use of a video light at the same time.



Dual MI Shoe

* HVL-LBPC and URX-P03D are optional





PXW-Z190

4K Handheld Camcorder with all-new 1/3-type 3CMOS with 4K 50p/60p* recording capability, 25x zoom lens and advanced Face Detection AF

* 59.94p

4K 50p/60p Performance

The newly developed three 1/3-type Exmor R CMOS image sensors capture RGB light independently and deliver 4K 50p/60p imagery with high resolution and a wide range of gradation. In HD shooting, 4:2:2 10-bit ensures vivid and rich color content.

25x Optical Zoom Lens with Three Independent Rings

The PXW-Z190 is equipped with a 25x professional zoom lens able to zoom from 28.8mm to 720mm (35mm equivalent), with three independent control rings, which allows manual control of focus, zoom and iris, making for better and faster adjustment. The image can be enlarged without any picture degradation in an HD mode and a 50x zoom equivalent image is captured with sensor cropping extender.



25x optical zoom

Advanced Face Detection AF

The PXW-Z190 features newly developed Face Detection AF, selectable from Face Priority AF or Face Only AF. Simply keep the person in frame and however you move to obtain a better angle, you can be confident the PXW-Z190 will keep your subject in pin-sharp focus.

Built-in electronic Variable ND Filters

Moving from shadowy interiors to bright sun-lit exteriors is no problem. PXW-Z190 can be controlled from 1/4ND to 1/128ND linearly while ND Filters can be set to fully auto. You can even manually adjust Depth of Field using the iris lens ring, while relying on the camcorder to maintain constant exposure without changing gain nor shutter speed.

Dual Multi-Interface (MI) Shoe and 4ch Audio Input

Instant HDR Workflow

Shoot, edit and view HDR content in HLG without the need for additional colour grading. Premium content services are switching to HDR and the PXW-Z190 is ready with Hybrid Log-Gamma (HLG) recording for easy file-based workflows, whilst achieving the image quality of HDR.

Network Workflow Flexibility

Install the free "Content Browser Mobile" app on your smartphone to operate the camera remotely controlling Iris, Zoom, Focus WB and other functions from the palm of your hand. The PXW-Z190 is also easily upgraded to offer all the below features with optional CBKZ-SLNW1.

- High quality QoS Streaming to Network RX station**.
- XDCAM air secure wireless workflow.
- MPEG TS UDP streaming to peripheral common receiver.
- FTP Transfer of proxy and high resolution clip to remote servers.
- Trimming proxy and high resolution clip prior to sharing.

A Wealth of Formats and Features for Professional

The PXW-Z190 covers a wide range of main formats including XAVC-Long, DVCAM. In addition to these formats, MPEG HD 422 and MPEG HD are available with an optional license. Proxy 1080i up to 9Mbps can be utilized for 4K and HD simultaneous recording.

** Optional





PXW-Z150

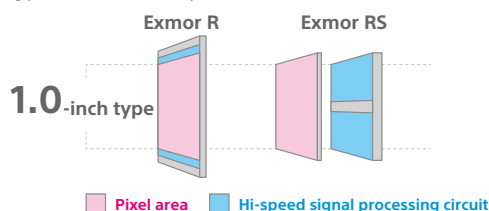
4K Handheld Memory Camcorder

Imaging performance with Exmor RS™ sensor

To deliver imaging performance previously impossible for a compact camcorder, Sony has developed the world's first 1.0-inch type stacked CMOS image sensor that delivers amazing imaging performance professionals have come to expect.

Exmor RS sensor

Advanced 'stacked' sensor design allows for a larger signal processing area without reducing pixel size within a compact chassis.



Sony's G lens with maximum 24x zoom

To maximize the quality of your images, the PXW-Z150 has a stunning optical 12x zoom lens that offers high resolution and contrast across the entirety of the image. Sony's advanced Clear Image Zoom feature doubles magnification to 18x when shooting in 4K QFHD and 24x in HD, to fully exploit the imaging capabilities of the PXW-Z150's large 1.0-inch type stacked sensor.

Compact and lightweight body

The PXW-Z150 is ergonomically designed to provide a lightweight and easy-to-use shooting experience. Three manual, independent lens rings enable smooth, natural adjustment of focusing, zooming and iris control. The camcorder can also be used in full-auto mode or completely manual for maximum creative control. Exceptional 6.3W power efficiency offers high performance within a compact handheld body style without compromising battery life. Up to 400 minutes with optional NP-F970 battery.*

* While recording XAVC 1080/50i or 60i, 50Mbps with LCD on.

Instant HDR workflows

Shoot, edit and view HDR content in HLG without the need for additional colour grading*.

As the expanding need for HDR content continues, internet video platforms and professionals producing corporate or event content are paying more attention to the added value of HDR. They need to deliver content quickly, without compromising on imaging expression and quality of content. To meet this demand, the PXW-Z150 offers HLG (Hybrid Log Gamma) curve and BT.2020 color space shooting for easy file-based workflows, whilst achieving the image quality of HDR. This simple workflow enables the shooting, editing and viewing of HDR content in HLG, without devoting a lot of time to post-production work and additional color grading.

* HLG/BT.2020 compatible display required.

Flexible 4K and Full HD recordings

Stunning 4K picture performance is supported with 4K QFHD (3840x2160) XAVC Long GOP at 100Mbps, while integration with established broadcast workflow is simplified with Full HD recording in XAVC Long GOP(4:2:2/10bit 50Mbps) and MPEG-2 HD (50Mbps/35Mbps). You can even use AVCHD to further expand workflow flexibility.

Networked for high mobility

The PXW-Z150 has advanced networking capabilities that give you more mobility in your work, allowing you to FTP files directly from the camcorder or live stream from any event using built-in Wi-Fi® features with no accessories required. Sony's unique QoS technology*¹ dramatically improves the clarity that's possible on a wireless connection, giving you better pictures even with the limitations of today's real-world networks. You can also remotely control the PXW-Z150 with a smartphone or tablet, including the ability to adjust settings such as focus, zoom, iris, REC START/STOP and more using Sony's Content Browser Mobile*² software.

High resolution monitoring

The PXW-Z150 gives you precise monitoring and low latency, however you choose to shoot, with its advanced, wide viewing-angle and high contrast 0.39 type 1440K dots OLED electronic viewfinder (EVF) with large eye-cap, and an easily adjustable, flip-out 3.5-inch*³ type 1550K dots LCD panel.

Multi-Interface (MI) Shoe

The PXW-Z150 takes advantage of Sony's flexible built-in Multi-Interface (MI) Shoe, which provides power, signal connections and coordinated on/off switching to compatible accessories from Sony. For example, you can connect and control Sony's wireless microphone systems such as the UWP-D11 or UWP-D12 or attach the HVL-LBPC light.

*¹ QoS will initially require a firmware update and PWS-100RX1 receiver.

*² The Content Browser Mobile application can be downloaded at no additional cost from the Google Play Store or App Store.

*³ Viewable area measured diagonally.





PXW-Z90

1.0 type Exmor RS CMOS sensor palm-sized XDCAM 4K camcorder with XAVC, Fast Hybrid AF, Instant HDR Workflow & 3G-SDI

Revolutionary imaging performance with Exmor RS

Exmor RS is a Sony's CMOS image sensor that adopts a unique "back-illuminated" and stacked structure. A large 14.2-megapixel (effective) 1.0-type stacked CMOS image sensor delivers beautiful background bokeh defocus effects and superior sensitivity for capturing high-quality images with less noise, even under dark or bright conditions. This sensor integrates up to 273 phase-detection AF points that densely cover approx. 84% of the image area, for precise tracking of subjects throughout the shooting frame.

Exmor RS
CMOS Sensor



Enhanced Fast Hybrid auto focus captures action

Enhanced Fast Hybrid auto focus (AF) is comprised of a number of features: Phase-detection AF with up to 273 reference points covering approximately 84% of the image area, face detection and lock-on auto focus technology to estimate subject movement. They all work together seamlessly to capture fast-moving subjects with amazing sharpness.



Instant HDR workflows

Shoot, edit and view HDR content in HLG without the need for additional colour grading*.

As the expanding need for HDR content continues, internet video platforms and professionals producing corporate or event content are paying more attention to the added value of HDR. They need to deliver content quickly, without compromising on imaging expression and quality of content. To meet this demand, the PXW-Z90 offers HLG (Hybrid Log Gamma) curve and BT.2020 color space shooting, in addition to S-Log3, for easy file-based workflows, whilst achieving the image quality of HDR. This simple workflow enables the shooting, editing and viewing of HDR content in HLG, without devoting a lot of time to post-production work and additional color grading.

* HLG/BT.2020 compatible display required.

Stunning slow motion in Full HD

High Frame Rate shots can turn everyday actions into slow motion ballet and the PXW-Z90 delivers up to 120 frames* per second (fps) in Full HD, giving you a maximum of 5 times slow motion expression. There's no sacrifice in bit depth and no "windowing" of the sensor. So there's no crop factor, no loss in angle of view. Higher frame rates** are also possible at specific resolutions.

* 120fps (NTSC)/100fps (PAL)

** 240, 480, 960 (NTSC)/250, 500, 1000fps (PAL)

Broadcast quality 4K (QFHD) and HD

The PXW-Z90 allows you to record a wide range of 4K (QFHD) and HD formats for maximum flexibility from this stunning palm-sized camcorder. The Z90 supports XAVC QFHD 100Mbps recordings at 30p/25p/24p, XAVC HD Long GOP 422 50Mbps, MPEGHD 422 50Mbps*, MPEGHD 420 35Mbps and AVCHD.

* MPEG HD recording requires optional licence (CBKZ-SLMP) upgrade.

XDCAM

4K

Exmor RS
CMOS Sensor

XAVC

BIONZ X

AVCHD
Progressive

Wi-Fi
CERTIFIED



Networked for high mobility

The PXW-Z90 comes with 5GHz* and 2.4GHz Wi-Fi as standard – simply turn on and log onto your preferred network to enable a host of advanced wireless production features:

* 5GHz support dependent on country/regional regulation.

Ustream® Direct Streaming allows you to share scenes as they happen with high quality picture and sound without a switcher.

QoS Streaming to XDCAM air allows images to be streamed live from the camcorder for viewing at a remote location.

FTP Transfer allows content files recorded with MPEG HD 422/420 proxy feature (CBKZ-SLMP required) and other content files shot in XAVC (QFHD/FHD) and AVCHD formats to be sent over the internet for remote storage on an FTP server.

XDCAM air can upload proxy footage to the cloud from multiple camera operators in the field, so editing can start immediately. Uploaded content can be accessed securely from any location. News teams can even start logging clips while shooting's still going on, saving even more valuable time when a story's breaking.

Wi-Fi/NFC (Near Field Communication) with Content Browser Mobile™ allows the PXW-Z90 to be remotely controlled from a smartphone or tablet computer (iOS 9.0 - 10.3 or Android 4.4 through 7.1) via a Wi-Fi connection. One-touch authentication is also possible with smartphones that offer NFC connectivity

* The Content Browser Mobile™ application can be downloaded from the Google Play Store or App Store. Wi-Fi operation cannot be guaranteed with all smartphones and tablet computers.

Wired LAN connection allows the PXW-Z90 to be connected to the internet over a wired connection via the separately available VMC-UAM2 USB adapter cable and network adaptor kit (CBK-NA1), allowing files to be streamed or transferred by FTP.

Wide-angle zoom lens with great control

The PXW-Z90 is supplied with a fixed 29mm wide-angle ZEISS Vario-Sonnar T* lens, ideal for capturing panoramic landscapes. The 12x optical zoom can be increased to 18x with Clear Image Zoom, maintaining full QFHD resolution using Super Resolution Technology or 24x in HD. In addition, the Digital Extender can double this range again, up to 48x zoom.

The camcorder's lens ring enables smooth, natural adjustment of focusing or zooming, depending on which mode is selected; while the manual dial and buttons on the side of the body allow swift and easy adjustment of IRIS (aperture), ISO/GAIN and shutter speed.



Superb quality monitoring with enhanced OLED viewfinder

You have superb monitoring options with the Z90: an enhanced 0.39-type 2359K dot OLED viewfinder and 3.5-type 1550K dot LCD. The super high resolution OLED viewfinder offers excellent quality brightness, contrast and response, giving you better precision of manual focus operations and eliminating any colour-breaking phenomenon. The LCD gives you further flexible composition options.



Dual XLR inputs

Two XLR inputs reject electromagnetic interference for unhindered audio. Switchable phantom power supports mics that need it, while true input level controls put you in charge of sound.

Remote operation

The PXW-Z90 has a featured remote interface (2.5 mm stereo mini-mini jack) wired interface. Using a wired remote controller such as the RM-1BP or RM-30BP the focus, zoom, rec start/stop and rec review can be controlled remotely.

Dual media slots

To extend recording time and workflow flexibility, the PXW-Z90 is equipped with two memory card slots and is compatible with SDXC and SDHC cards.

Relay mode automatically switches recording from the first to the second memory card when the first is full; Simul mode allows simultaneous recording to two memory cards (for example to create an immediate back-up version). The PXW-Z90's two Start/Stop buttons on the handle grip and camcorder body can independently start and stop recording on different memory cards while recording in Simul mode.



Multi-Interface (MI) Shoe

The PXW-Z90 takes advantage of Sony's flexible Multi-Interface (MI) Shoe, which provides power, signal connections and coordinated on/off switching to compatible various Sony accessories.



Wide choice of connections

The PXW-Z90 offers numerous connections to suit the broadcast workflow, including 3G HD-SDI, HDMI®, Multi/Micro USB jack and composite output. The Rec Trigger signal can be sent through SDI and HDMI to link an external recording device. HDMI/SDI/composite output is possible during QFHD recording*.

* HDMI supports up QFHD resolution, 3G-SDI supports up to HD resolution. Composite is SD-only.



Simple live solution

The PXW-Z90 is designed to work seamlessly with Sony's MCX-500 Multi Camera Live Producer, a robust and cost-effective switcher that makes it easy for one person to run a multi-camera live event shoot. When used with the MCX-500 and Remote Commander RM-30BP, a Tally indicator will automatically appear on each PXW-Z90's LCD panel and viewfinder – a red icon indicates when the shot is live (PGM) while Green indicates preview mode (PVW). The MCX-500 supports up to 9 video inputs, 5 channel stereo inputs including XLR with both internal recording and live streaming via Ustream™, Facebook Live, and YouTube Live*.

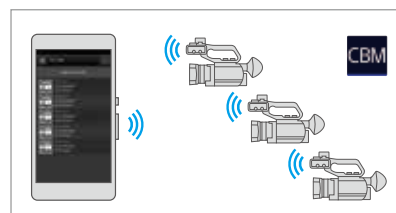
* Facebook live and YouTube live available with V2.0 firmware



Wirelessly Synchronise Multiple Camcorders

When shooting with multiple camcorders, you can synchronize the timecode of each camcorder using Content Browser Mobile™ (CBM) smartphone application* with optional CBKZ-WTCL upgrade. With this feature, all camcorders can synchronise to the primary camcorder you select or to a manually set time – whichever you prefer.

* Version 3.0 Content Browser Mobile™ is required.





PXW-X70

1.0 type Exmor R CMOS Compact Solid-State Memory Camcorder

1.0-inch type Exmor® R CMOS Sensor with a Resolution of 20 Megapixels

The Exmor R CMOS sensor with 1.0-inch type picture elements delivers high resolution and minimal noise even when shooting in low-light conditions. The 20-megapixel sensor comfortably supports 4K resolution, and 4K recording requires purchase of an optional 4K Upgrade License (CBKZ-X70FX).

29-mm Wide-angle Carl Zeiss Vario-Sonnar T* Lens with 12x Optical Zoom (Maximum 48x Zoom)

The wide-angle 29-mm ZEISS Vario-Sonnar T* lens ensures stunning quality to the very corners of the image and offers 12x optical zooming that can be increased to 24x via Clear Image Zoom. Magnification can be further increased to 48x by Digital Extender, which takes full advantage of the 20-megapixel high-resolution image sensor. From wide-angle to telephoto shooting, this lens enables various professional level applications. Additionally, seven shutter blades contribute to impressive background bokeh.

Wi-Fi and Wireless Functions for Remote Control Streaming

This feature allows images to be streamed live from the PXW-X70 for viewing at a remote location. Data transfer rate, specified by two image quality menu settings (9Mbps and 3Mbps), can be selected to suit the network environment being used.

FTP Transfer

This feature supports FTP file transfers on the PXW-X70, allowing content files recorded with the XAVC Proxy Recording feature and other content files shot in XAVC (4K/HD) and AVCHD formats to be sent over the Internet for remote storage on an FTP server.

Wired LAN Connection

When wireless LAN is unavailable, this feature allows the PXW-X70 to be connected to the Internet over a wired connection via a USB adapter cable "VMC-UAM2" and Network adaptor kit "CBK-NA1R", both sold separately, allowing files to be streamed or transferred by FTP.

XAVC Proxy Recording

Proxy recording supports the use of a low-bit-rate video file in place of an XAVC format, high-bit-rate file with the same timecode.

Wide Variety of Recording Format Capabilities Including XAVC Long GOP (MXF)

The PXW-X70 provides multiple choices depending on the application required, including XAVC, AVCHD™, and DV® file based recording. When recording in XAVC, the PXW-X70 uses the MXF file format, efficiently compressing Full HD (1920 x 1080) resolution using the MPEG-4 AVC/H.264 CODEC. Image sampling is 4:2:2 10-bit with high-efficiency Long GOP compression at 50 Mbps, 35 Mbps, or 25 Mbps. Moreover, the ability to record in AVCHD format, which is widely used already, provides playback compatibility with wide range of consumer electronics equipment.

3.5-inch* type LCD Panel and 0.39-inch* type OLED Viewfinder

Four Position (clear, 1/4, 1/16, 1/64) Switchable

Compatibility with HDMI and 3G-SDI Output

XLR Handle Unit

Dual Media Slots

Picture Profile Function

Compatible Accessories Attached to the Multi-Interface (MI) Shoe

Optional 4K Upgrade License "CBKZ-X70FX"

CBKZ-X70FX is the Upgrade License which enables 4K recording on the PXW-X70. Firmware version 2.0 is required for use of the Upgrade License.

* Viewable area measured diagonally.

Optional MPEG2HD Upgrade License "CBKZ-SLMP"

CBKZ-SLMP is the Upgrade License which enables MPEG2HD recording on the PXW-X70. Firmware version 3.0 is required for use of the Upgrade License.

XDCAM

Exmor R
CMOS Sensor

XAVC

AVCHD
Progressive

Wi-Fi
CERTIFIED

Multi
Interface Shoe

MPEG HD422

* Requires Version 3.0 firmware or above, plus CBKZ-SLMP upgrade kit.



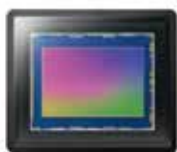
HXR-NX80

1.0 type Exmor RS CMOS sensor palm-sized NXCAM 4K camcorder with XAVC S, Fast Hybrid AF, & Instant HDR Workflow

Revolutionary imaging performance with Exmor RS

Exmor RS is a Sony's CMOS image sensor that adopts a unique "back-illuminated and stacked structure". A large 14.2-megapixel (effective) 1.0-type stacked CMOS image sensor delivers beautiful background bokeh defocus effects and superior sensitivity for capturing high-quality images with less noise, even under dark or bright conditions. This sensor integrates up to 273 phase-detection AF points that densely cover approx. 84% of the image area, for precise tracking of subjects throughout the shooting frame.

Exmor RS
CMOS Sensor



Enhanced Fast Hybrid auto focus captures action

Enhanced Fast Hybrid auto focus (AF) is comprised of a number of features: Phase-detection AF with up to 273 reference points covering approximately 84% of the image area, face detection and lock-on auto focus technology to estimate subject movement. They all work together seamlessly to capture fast-moving subjects with amazing sharpness.



Instant HDR workflows

Shoot, edit and view HDR content in HLG without the need for additional colour grading*.

As the expanding need for HDR content continues, internet video platforms and professionals producing corporate or event content are paying more attention to the added value of HDR. They need to deliver content quickly, without compromising on imaging expression and quality of content. To meet this demand, the HXR-NX80 offers HLG (Hybrid Log Gamma) curve and BT.2020 color space shooting, in addition to S-Log3, for easy file-based workflows, whilst achieving the image quality of HDR. This simple workflow enables the shooting, editing and viewing of HDR content in HLG, without devoting a lot of time to post-production work and additional colour grading.

* HLG/BT.2020 compatible display required.

Stunning slow motion in Full HD

High Frame Rate shots can turn everyday actions into slow motion ballet and the HXR-NX80 delivers up to 120 frames* per second (fps) in Full HD, giving you a maximum of 5 times slow motion expression. There's no sacrifice in bit depth and no "windowing" of the sensor. So there's no crop factor, no loss in angle of view. Higher frame rates** are also possible at specific resolutions.

* 120fps (NTSC)/100fps (PAL)

** 240, 480, 960 (NTSC)/250, 500, 1000fps (PAL)

Professional quality 4K (QFHD) and HD

The HXR-NX80 allows you to record a wide range of 4K (QFHD) and HD formats for maximum flexibility from this stunning palm-sized camcorder. The NX80 supports XAVC S 4K 100/60 Mbps recordings at 30p/25p/24p, XAVC S and AVCHD.

NXCAM



Exmor RS
CMOS Sensor

XAVC S

BIONZ X

AVCHD
Progressive

WiFi
CERTIFIED



Networked for high mobility

The HXR-NX80 comes with 2.4GHz Wi-Fi as standard – simply turn on and log onto your preferred network to enable a host of advanced wireless production features:

Ustream® Direct Streaming allows you to share scenes as they happen with high quality picture and sound without a switcher.

Wi-Fi/NFC (Near Field Communication) with Content Browser Mobile™ allows the HXR-NX80 to be remotely controlled from a smartphone or tablet computer (iOS 9.0 - 10.3 or Android 4.4 through 7.1) via a Wi-Fi connection. One-touch authentication is also possible with smartphones that offer NFC connectivity

* The Content Browser Mobile™ application can be downloaded from the Google Play Store or App Store. Wi-Fi operation cannot be guaranteed with all smartphones and tablet computers.

Wide-angle zoom lens with great control

The HXR-NX80 is supplied with a fixed 29mm wide-angle ZEISS Vario-Sonnar T* lens, ideal for capturing panoramic landscapes. The 12x optical zoom can be increased to 18x with Clear Image Zoom, maintaining 4K resolution using Super Resolution Technology or 24x in HD. In addition, the Digital Extender can double this range again, up to 48x zoom.

The camcorder's lens ring enables smooth, natural adjustment of focusing or zooming, depending on which mode is selected; while the manual dial and buttons on the side of the body allow swift and easy adjustment of IRIS (aperture), ISO/GAIN and shutter speed.



Superb quality monitoring with enhanced OLED viewfinder

You have superb monitoring options with the NX80: an enhanced 0.39-type 2359K dot OLED viewfinder and 3.5-type 1550K dot LCD. The super high resolution OLED viewfinder offers excellent quality brightness, contrast and response, giving you better precision of manual focus operations and eliminating any colour-breaking phenomenon. The LCD gives you further flexible composition options.



Dual XLR inputs

Two XLR inputs reject electromagnetic interference for unhindered audio. Switchable phantom power supports mics that need it, while true input level controls put you in charge of sound.

Remote operation

The HXR-NX80 has a featured remote interface (2.5 mm stereo mini-mini jack) wired interface. Using a wired remote controller such as the RM-1BP or RM-30BP the focus, zoom, rec start/stop and rec review can be controlled remotely.

Dual media slots

To extend recording time and workflow flexibility, the HXR-NX80 is equipped with two memory card slots and is compatible with SDXC and SDHC cards.

Relay mode automatically switches recording from the first to the second memory card when the first is full; Simul mode allows simultaneous recording to two memory cards (for example to create an immediate back-up version). The HXR-NX80's two Start/Stop buttons on the handle grip and camcorder body can independently start and stop recording on different memory cards while recording in Simul mode.



Multi-Interface (MI) Shoe

The HXR-NX80 takes advantage of Sony's flexible Multi-Interface (MI) Shoe, which provides power, signal connections and coordinated on/off switching to compatible various Sony accessories. For example, you can connect and control Sony UWP-D wireless microphone systems (sold separately).



Simple live solution

The HXR-NX80 is designed to work seamlessly with Sony's MCX-500 Multi Camera Live Producer, a robust and cost-effective switcher that makes it easy for one person to run a multi-camera live event shoot. When used with the MCX-500 and Remote Commander RM-30BP, a Tally indicator will automatically appear on each HXR-NX80's LCD panel and viewfinder – a red icon indicates when the shot is live (PGM) while Green indicates preview mode (PVW). The MCX-500 supports up to 9 video inputs, 5 channel stereo inputs including XLR with both internal recording and live streaming via Ustream™, Facebook Live, and Youtube Live*

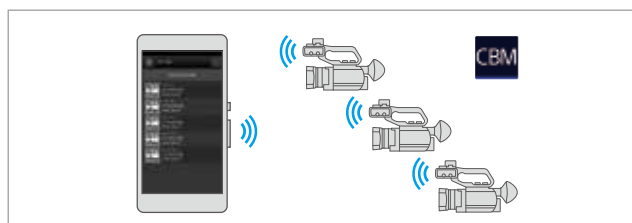
* Facebook live and YouTube live available with V2.0 firmware



Easily Synchronise Multiple Camcorders

When shooting with multiple camcorders, you can synchronize the timecode of each camcorder using Content Browser Mobile™ (CBM) smartphone application* with optional CBKZ-WTCL upgrade. With this feature, all camcorders can synchronise to the primary camcorder you select or to a manually set time – whichever you prefer.

* Version 3.0 Content Browser Mobile™ is required.





HXR-NX200

1.0-type Exmor R™ CMOS Sensor delivers 4K Superb Image with Beautiful Color Reproduction 3 independent manual lens rings, 24x zoom (FHD Clear Image Zoom)

4K or HD : Simply Superb Image Quality

A large, 20 megapixel* 1.0-type sensor delivers stunning image quality in 4K (3840x2160) or Full-HD. Its 1.0-type sensor is brighter, has higher resolution and offers beautiful de-focused background.

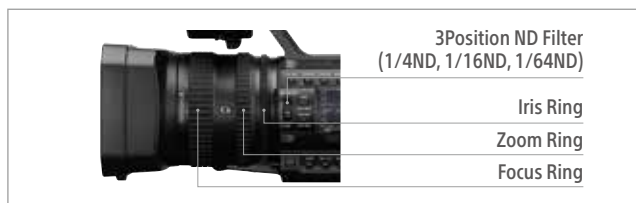
Beautiful Colour Reproduction

Natural facial tone and rich mid-range colours deliver vivid, yet true-to-life imagery regardless of exposure setting. It's perfect for capturing live music, seminars and weddings with a look that's ready to share as soon as you export.



The Professional's Choice

There's no need to choose between professional features and superb 4K imaging at an entry level price-point. Advanced manual controls, including three independent manual lens rings, built-in 4-step ND filters and class-leading 4K and Full-HD performance make NX200 a choice you can rely upon for live events, corporate, education and wedding videography.



Stunning Quality from a Large 1.0-type Sensor

NX200's single 20 megapixel* 1.0-type Exmor R CMOS sensor is approximately the same size as a 16mm film frame. The key benefit of this large size is low noise and less blur because more light reaches the sensor, offering clear and steady pictures even in a dark scene with minimum illumination 1.7 lux**. The large sensor size also en-

ables beautiful background bokeh to enable you to focus on what you want to show and defocus the rest of the image.

* 14.2 million effective pixels

** LOW LUX mode low noise and good low-light sensitivity

Sony G Lens with 24x Clear Image Zoom (FHD)

A fixed 29mm wide-angle lens with 12x optical zoom makes it easy to capture even the most expansive landscape scenes while also offering superb clarity and sharpness – maximizing the performance of the NX200's large 1.0 type sensor. In addition, zoom performance can be doubled at any point with a digital extender. The G Lens is Sony's own camera lens family, designed and manufactured to the high standards of optical performance.

Multi-format Recording with 100Mbps XAVC S 4K, HD and DV

NX200 offers superb all-round performance whatever your workflow. For 4K or Full-HD production, XAVC S offers stunning picture quality, but also workflow flexibility and storage efficiency. Compared to AVCHD, XAVC S captures more details and less noise thanks to the higher bitrate, while also being supported by all the major non-linear editors. NX200 also offers the option to record in AVCHD or DV, making it easy to integrate your content into existing workflows. NX200 offers recording frame rates of 25p 4K:QFHD (3840*2160), 50p/50i/25p Full HD, and 50i DV

Simple Live Solution

NX200 is designed to work seamlessly with Sony's MCX-500 Multi Camera Live Producer, a robust and cost-effective switcher that makes it easy for one person to run a multi-camera live event shoot in HD. When used with the MCX-500 and Remote Commander RM-30BP, a tally indicator will automatically appear on each NX200's LCD panel and viewfinder – a red icon indicates when the shot is live (PGM) while green indicates preview mode (PVW). The MCX-500 supports up to nine video inputs, five channel stereo inputs, five channel stereo inputs including XLR with both internal recording and live streaming via Facebook Live and YouTube Live.

nxcam

4K

Exmor R
CMOS Sensor

G

XAVC S

AVCHD
Progressive



HXR-NX5R

Full-HD 3CMOS Compact Camcorder

Sony's HXR-NX5U was a classic: our first NXCAM® camcorder and a landmark in the transition from tape to memory recording. Now that classic is reborn in the form of Sony's new HXR-NX5R. With enhanced features like Wi-Fi® file transfer, OLED viewfinder and MI shoe, the NX5R is a worthy successor. It's the ideal tool for documentaries and corporate assignments, weddings and events, nature, sports and journalist newsgathering.

Stunning pictures made easy

Designed to get the job done quickly and efficiently, the NX5R's advanced three 1/2.8-type Full HD Exmor® CMOS system can be relied upon to deliver sharp, cleanly focused imagery in almost any shooting scenario. Recorded images are remarkably life-like in texture and detail, while shooting is fast and hassle-free with all the NX5R's key functions right at your fingertips. Direct Menu options display on-screen, so shooting parameters can be changed quickly and conveniently without taking your eyes off the action.

Working smarter

The NX5R's advanced network functions mean there's no need for expensive add-on's to take advantage of new business opportunities or speed-up your workflow efficiency. The HXR-NX5R is ready to go straight out of the box, whatever the business opportunity today or tomorrow – live streaming events, multi-camera shoots and FTP'ing breaking news to your editor are all just a button press away.

Simple multi-camera shoots

The NX5R is also an ideal partner for Sony's innovative MCX-500 Multi Camera Live Producer* – an affordable, easy-to-operate and full-featured switcher that delivers broadcast quality results. Expand your business with multi-camera shoots for live presentation, live streaming and recording across a wide number of applications.

* RM-30BP Remote Commander required for advanced integrated functionality.

Everything you need

Forget about expensive accessories: the NX5R's built-in features include an adjustable brightness LED video light, 3G-SDI terminal with Full HD 60p output and advanced Multi-Interface (MI) Shoe to power and control key accessories. The HXR-NX5 and HXR-NX3's accessories are fully compatible,* including Sony's popular L-Series batteries, so your existing investment is protected. Widely available consumer SDHC and SDXC media make shooting with NX5R both economical and convenient.

* HXR-FMU128 is not supported as dual-relay recording has been built into NX5R.

Features

Rich color imagery

The NX5R offers latest-generation imaging performance, with Full-HD progressive image capture rather than the interlaced output of the original HXR-NX5. Its three 1/2.8-type Full HD Exmor CMOS sensors provide 2.07 million effective pixel count at the 16:9 aspect ratio. Red, blue, and green light are independently captured by separate image sensors, contributing to high resolution, high sensitivity and wide dynamic range. An advanced LSI (featuring intelligent noise reduction, enhanced detail reproduction and distortion correction technologies) delivers remarkably life-like images.



NXCAM

Exmor[®] IR[™]
CMOS Sensor

XAVC S

AVCHD
Progressive

G

SD[™]

WiFi[®]
CERTIFIED

Multi
Interface Shoe

MEMORY STICK[™]

Built-in LED lighting

An easily adjustable brightness LED video light is positioned just above the camcorder's built-in microphone, providing convenient illumination for a wide range of shooting situations and minimizing the need to carry external lighting equipment. Illumination is approximately 200 lux/1m (approx. 800 lux/0.5m) with a beam angle of 30° and a color temperature of approximately 5500K.

*An external microphone connected via the XLR connector may cast a shadow if used simultaneously with the built-in LED video light.



Networked for high usability

Live internet stream from any event using hassle-free live streaming service such as Ustream™ or a generic streaming mode for a local area network for a secure corporate presentation. Remote control makes the NX5R perfect for multi-camera shoots. Mount on a tripod and use your smart phone or tablet to monitor and control focus, zoom, iris, REC START/STOP and more.* FTP allows you to click and send Full-HD content to your editor for fast-breaking news stories.

* Sony's Content Browser mobile application can be downloaded from the Google Play Store or App Store.



Wide choice of connections including 3G-SDI

The NX5R provides all the connectivity options professionals expect, including 3G-SDI (Full HD 60p output), plus REMOTE, composite (BNC) and audio XLR terminals.



Multi-Interface (MI) Shoe

The NX5R takes advantage of Sony's flexible Multi-Interface (MI) Shoe, which provides power, signal connections and coordinated on/off switching to compatible Sony accessories. For example, you can connect and control Sony's UWP-D wireless microphone systems (sold separately).



Dual media slots

To extend recording time and workflow flexibility, the NX5R has dual media slots compatible with SDXC and SDHC cards as well as Memory Stick PRO Duo™ (Mark 2) and PRO-HG Duo™. Relay mode automatically switches recording from the first to the second memory card when the first is full; Simul mode allows simultaneous recording to two memory cards (for example, to create a back-up). Start/Stop buttons on the NX5R's handle grip and camcorder body can independently start and stop recording on different memory cards in Simul mode.



Get closer with 40x zoom

The NX5R's high-performance Sony G lens offers an expansive 28.8 mm (35mm full-frame format equivalent) angle of view at the wide end and a stunning 40X zoom.

The 20x optical zoom range will easily cover most shooting situations, but when more reach is required, Sony's advanced Clear Image Zoom employs Super Resolution Technology to double your optical zoom up to 40x while still delivering exceptional image quality.



Multi-format recording

The NX5R is designed to provide exceptional performance for Full HD productions, recording in AVCHD and DV to support proven legacy workflows, as well as the newer, more advanced XAVC S at 50Mbps. XAVC S offers stunning picture quality, but also workflow flexibility and storage efficiency. In XAVC S, the NX5R uses the MP4 file format, sampling at 50Mbps. Compared to AVCHD, XAVC S 50Mbps captures more details and less noise, thanks to the higher bitrate.

	Format	Color space/bit rate	Max rate
HD	XAVC S	4:2:0/8 bit	50 Mbps
	AVCHD	4:2:0/8 bit	28 Mbps
SD	DV	DV 4:1:1 (60Hz)/8bit (NTSC)	25 Mbps

Flexible controls

All of the NX5R's key functions are at your fingertips – from intuitive Direct Menu controls to a responsive joystick on the hand grip. Direct Menu options display on-screen, so shooting parameters can be changed quickly and conveniently without taking your eyes off the action.



Precision monitoring

However you choose to shoot, the NX5R adapts to fit your style. It has a high visibility wide viewing angle and high contrast 0.39-type 1440K OLED viewfinder and an easily adjustable, flip-out 3.5-inch* type 1550K LCD, for precision monitoring and low latency.

*Viewable area measured diagonally.



Perfect partnership

The NX5R was designed alongside Sony's MCX-500 Multi Camera Live Producer, a robust and cost-effective switcher that makes it easy for one person to run a multi-camera live event shoot. When used with the MCX-500 and optional RM-30BP Remote Commander, a Tally indicator will automatically appear on each NX5R's LCD panel and Electronic Viewfinder – a Red icon indicates when the shot is live (PGM) while Green indicates preview mode (PVW). The MCX-500 supports up to 9 video inputs, 5 channel stereo inputs including XLR with both internal recording and live streaming via Ustream™ service.*

*Service agreement purchased separately.





HXR-MC2500

Solid-State Memory Camcorder

Highly-sensitive Exmor™ R CMOS Sensor and Built-in LED Light

The HXR-MC2500 is capable of shooting clearly even in low-light or indoor environments. Its highly-sensitive Exmor R CMOS sensor adopts a back-illuminated technology that enables the image sensor to utilize incidental light more efficiently (minimum illuminance of 0.8 lux* [60i], 0.7 lux [50i]**). The HXR-MC2500 is also equipped with a convenient built-in LED light for valuable extra illumination.

* Manual setting mode: Shutter Speed - 1/15 sec, F1.8, Gain33dB

** Manual setting mode: Shutter Speed - 1/12 sec, F1.8, Gain33dB



Wi-Fi/NFC Functions for Seamless Connection to Smartphones

The HXR-MC2500 can connect to mobile devices such as smartphones or tablets via a Wi-Fi connection, enabling monitoring and remote control functions such as start/stop recording, zoom control, iris control and touch auto focus. Furthermore, it is also NFC-capable (Near Field Communications) to allow easy, one touch wireless connections to compatible mobile devices.

High Contrast 1.44 Million Dots OLED Viewfinder and 0.92 Million Dots 3-inch* Wide LCD Panel

* Viewable area measured diagonally.

32GB internal flash memory and low power consumption

A 32GB internal flash memory storage system on board of the HXR-MC2500 enables longer duration recording of more than 150 minutes. In addition, by using a combination of the internal flash memory and memory card in the MS/SD slot, recording functions such as "Relay" and "Simultaneous" for backup can be available. When Sony's L-Series InfoLithium batteries (such as the optional NP-F970) are used, the HXR-MC2500 is capable of continuous long recording of up to 14 hours.

26.8 mm Wide-Angle Lens

Multi-Interface (MI) Shoe

Expands options to use accessories without cables, such as the UWP-D11 wireless micro phone receiver and XLR audio input by XLR adapter

BNC Composite Terminal

TC/UB Implementation



Exmor R
CMOS Sensor

AVCHD
Progressive



Wi-Fi
CERTIFIED



mi Multi
Interface Shoe

MEMORY STICK





MCX-500

Multi-Camera Live Producer

The MCX-500 is an affordable, uniquely user-friendly and flexible production switcher that makes it simple for a single operator or small team to produce a broadcast-quality live event. Multiple video inputs, including professional 3G-SDI, HDMI,® Composite Video plus dedicated DSK, mean you can mix and match as needed for each production.

Smart controls with configurable LCD Touchscreen

If you're running the show on your own, you need controls that suit the way you work – intuitive and yet somehow also fully featured. The MCX-500 achieves this by carefully thought-out physical controls that you will find easy to operate without looking away from the action for a second.

More advanced features can be tuned to your exact workflow requirements and mapped to an LCD touch-screen control with easily recognizable ICON buttons. Trigger the sophisticated effects you've pre-defined with a single touch on a user-defined ICON. It's a robust, user-friendly system that's easily extended to bring in additional team members as productions grow.



Multi-view monitoring

See all your sources simultaneously on one display. The switcher's multi-view output makes it easy for you to see all your sources and outputs on a single screen. Monitoring on the multi-view is always four inputs.

Mix between 8 video sources + 1 Title (total 9 inputs)

The switcher is designed to expand your operations for full control of a multi-camera shoot. There is no need to worry about swapping out inputs during a production – the MCX-500 features no less than 8 video inputs (plus dedicated Title input) to easily accommodate any small-to-medium sized production. Inputs include professional 3G-SDI (x4), standard HDMI (x2) and even composite video (x2), allowing you to connect a wide variety of cameras and other equipment. A dedicated RGB Title input allows you to connect a PC or Macintosh to use as a dedicated source of titles for your production.



Stream content live over the internet

The MCX-500 is ideal for live streaming events and productions. The switcher allows you to live-mix the output of multiple sources with direct streaming in real time using services such as Youtube Live and Facebook Live. Share scenes as they happen with high-quality picture and sound, direct from the MCX-500 to a router via Ethernet – no PC required.



Tally function

When used with the MCX-500 and Remote Commander RM-30BP, a tally indicator will automatically appear on each compatible camcorder's** LCD panel and viewfinder – a red icon indicates when the shot is live (PGM) while green indicates preview mode (PVW).

** compatible camcorders: PXW-F55 (ver4.0 or above), PXW-Z280, PXW-Z190, PXW-Z150 (ver2.0 or above), HXR-NX5R, HXR-NX80, HXR-NX200 as of Sep 2018.





RM-30BP

Remote Commander

The RM-30BP is the successor to the RM-1000BP, one of the industry's first comprehensive, multifunctional remote commanders.



Ideal for freelancers and small-budget productions, the lightweight remote can be handheld, placed on a table or attached to a tripod arm for operation. The RM-30BP can control most camera functions including:

- Lens control: one push auto / manual focus, iris and zoom control
- Camera control: recording / display functions, shutter speed, white balance - including six assignable buttons
- Playback and multi camera control (up to 3 cameras)

The RM-30BP can also be connected to the new MCX-500 for multi-camera control directly from the switcher, and is compatible with the HXR-NX5R and PXW-FS7 v4.0, with plans to introduce compatibility for other camcorders from Sony. Check the latest compatible camcorder on the Sony website.





FDR-AX700

1.0-type Exmor RS™ Sensor Handycam® with XAVC S™, Fast Hybrid AF, & Instant HDR Workflow

Incomparable AF performance

The Fast Hybrid AF system with 273 phase-detection autofocus points covering approx. 84% of the frame swiftly locks onto and tenaciously tracks even fast subjects.



Advanced operation

Take command of movie production with a wide range of manual controls, as well as ergonomic button and grip design for fluid handheld shooting. The 2359k-dot high-resolution OLED Tru-Finder™ and 3.5-type 1555k-dot Extra Fine LCD make it easy to preview and monitor shots in precise detail. A new menu system offers faster access and live setting preview. Dual slots are convenient for extended relay or simultaneous backup recording.



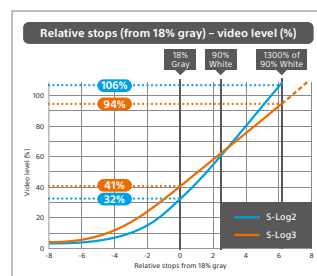
4K HDR (HLG)* recording

Produce movies of wide dynamic range without devoting a lot of time to post-production work.



High functionality

S-log2/S-log3 lets you capture far wider ranges of brightness and colour for enhanced post-processing potential. With Super Slow Motion*2 and Slow & Quick Motion*3, you can record within a vast range of speeds, from the most fleeting at up to 40x super slow motion, to up to 60x quick motion videos.*



*2 Sound cannot be recorded. A Class 10 or higher SDHC/SDXC memory card is required.

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

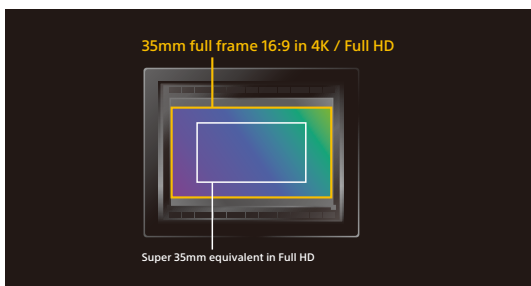
Other features

Built-in ND filters, Picture Profile, Zebra function, Peaking display, Proxy recording, TC/UB, 4K movie playback capability on an HD TV, manual setting for extra control, NIGHTSHOT, etc.

HANDYCAM



*1 3840 x 2160 pixels. Connect this product to a HDR(HLG) compatible Sony TV via a USB cable when displaying HDR movies.



Exmor
CMOS Sensor

BIONZ X

4K
3840 x 2160

XAVC S

5-axis
SteadyShot
INSIDE

XGA OLED
Tru-Finder

α7S II

Ultra-high Sensitivity up to ISO 409600 with Wide Dynamic Range and Internal 4K Movie Recording

- Ultra-high sensitivity up to ISO 409600*¹ and wide dynamic range for stills and movies, thanks to the 35mm full-frame Exmor CMOS sensor with 12.2 megapixels*²
- Internal 4K (QFHD: 3840 x 2160)*³ movie recording in full-frame format features full pixel readout*⁴ with no binning for higher image quality
- Professional video features include S-Gamut3.Cine/S-Log3 profile as well as XAVC S
- Full HD recording at 120fps and 4x/5x slow motion recording
- 5-axis optical image stabilization extends the expressive potential of still and movie images
- Fast Intelligent AF with enhanced speed and accuracy performs reliably in light as low as EV -4
- Full frame image sensor provides extensive control of plane of focus for creative movie making

*¹ Standard ISO range: 100-102400 for stills and movies.

Expandable ISO range: 50-409600 for stills, 100-409600 for movies.

*² Approximate effective megapixels.

*³ Internal recording and HDMI output, both at 4K resolution, are available in full-frame format.

*⁴ 1 in 29.97p (25p)/23.98p movie setting.

*⁵ The viewfinder magnification is approx. 0.78x (with 50mm lens at infinity, -1m⁻¹).



Optional Camera Control Box CCB-WD1

- Ultra-compact size as RX0
- Reliable wired multi-camera solution
- Multiple camera synchronization

RX0

Ultra-Compact Camera with Waterproof and Shockproof Design

- 15.3 megapixels*¹ 1.0-type stacked Exmor RS™ CMOS sensor with DRAM chip
- 24mm*² F4 ZEISS® Tessar T* lens delivers high-resolution images
- Ultra-compact size, lightweight and rigid extra super duralumin body
- 33 ft (10 m) waterproof*³, 6.5 ft (2.0 m) shockproof*³, 440 lbf/2,000 N (200 kgf) crushproof*³
- Super slow motion movies*⁴ at high frame rates up to 960fps (NTSC)/1000fps (PAL)
- Anti-distortion shutter of up to 1/32000 sec.
- Up to 16 fps*⁵ Continuous Shooting
- Picture Profile and S-Log2 gamma settings enable pro-style movie expression
- Uncompressed high-quality 4K QFHD data can be recorded on an external recorder.
- Wireless*⁶ or Wired*⁷ multi camera control for multi-view applications

*¹ Approx., effective

*² 35mm format equivalent

*³ Sony's test condition. Depending on usage conditions and circumstances, no guarantee is made regarding damage to, malfunction of, or waterproof performance of this camera.

*⁴ Sound cannot be recorded when shooting slow motion. A Class 10 or higher micro SDXC or SDHC memory card is required.

*⁵ In Speed Priority Continuous mode. Focus and exposure settings fixed at first shot.

*⁶ Requires PlayMemories Mobile ver. 6.1 to control up to 5 cameras and 6.2 or higher more than 6 cameras

*⁷ Requires optional accessories Camera Control Box CCB-WD1

ZEISS

Exmor RS
CMOS Sensor

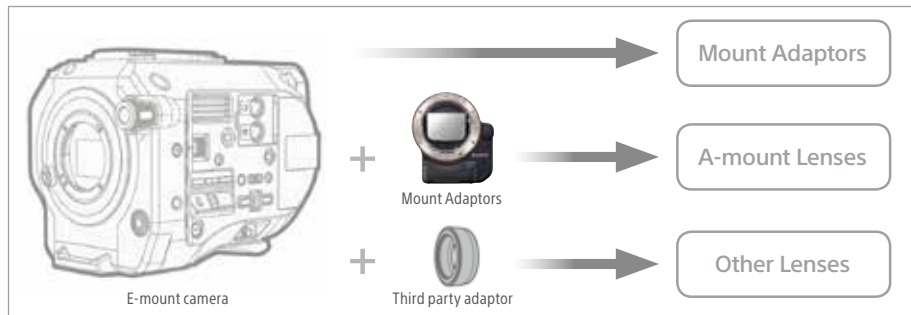
BIONZ X

XAVC S

α Mount System for a Wide Selection of Lenses

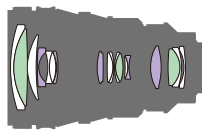
E-mount Interchangeable Lens System

Sony's E-mount interchangeable lens system enables the attachment of Sony's lenses as well as other brand lenses that utilize third-party adapters.



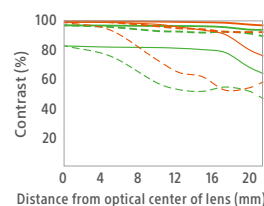
E-mount FE PZ 28-135mm F4 G OSS SELP28135G

This top-quality powered zoom lens for 35mm full-frame and Super35 format cameras has been created to satisfy professional moviemaking requirements, including the high resolution 4K format. Focus breathing and zoom image shift have been reduced to an absolute minimum, while aspherical elements and advanced multi-coating technology effectively suppress aberration. Quiet operation is also a priority, so an SSM (Super Sonic wave Motor) drive system has been employed for precise, quiet zooming. Independent control rings for zoom, focus, and aperture are provided for the first time in an α lens. Built-in Optical SteadyShot® image stabilization adds to the extraordinary performance of this outstanding lens.

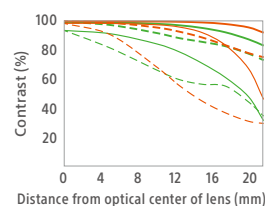


- Lens groups/elements: 12 / 18
- Minimum focus: 0.4 m (AF) / 0.95 m (MF)
- Filter diameter: 95 mm
- Size: 105 mm (diameter) x 162.5 mm (length)
- Weight: approx. 1190 g (without tripod mount)
- Aspherical lens ● ED glass

■ 28 mm focal length



■ 135 mm focal length



- Max. aperture
- R 10 line pairs/mm
 - R 30 line pairs/mm
 - - - T 10 line pairs/mm
 - - - T 30 line pairs/mm
- F8 aperture
- R 10 line pairs/mm
 - R 30 line pairs/mm
 - - - T 10 line pairs/mm
 - - - T 30 line pairs/mm
- (R: radial values, T: tangential values)

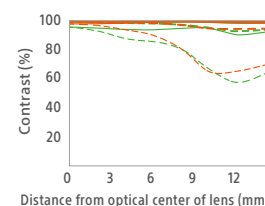
E-mount E PZ 18-110mm F4 G OSS SELP18110G

18 to 110mm zoom (27-165mm equiv. in 35mm full-frame format) covers the most frequently used range for Super 35mm/ APS-C movies with a constant F4 maximum aperture. G Lens optical performance delivers image quality that is suitable for 4K production throughout, right out to the image periphery. Sony SMO design minimizes image shift due to lens operation, while high-level zoom control and refined focus add to professional overall performance.

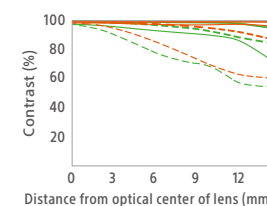


- Lens groups/elements: 15/18
- Minimum focus: 0.4 (W) - 0.95 (T) m (AF / MF) ; 0.95 m (Full MF) m
- Filter diameter: 95 mm
- Size: 110 mm (diameter) x 167.5 mm (length)
- Weight: approx. 1105 g (Without tripod mount)
- Aspherical lens ● ED glass

■ 18 mm focal length



■ 110 mm focal length



- Max. aperture
- R 10 line pairs/mm
 - R 30 line pairs/mm
 - - - T 10 line pairs/mm
 - - - T 30 line pairs/mm
- F8 aperture
- R 10 line pairs/mm
 - R 30 line pairs/mm
 - - - T 10 line pairs/mm
 - - - T 30 line pairs/mm
- (R: radial values, T: tangential values)

E-mount FE 16-35mm F2.8 GM SEL1635GM

Full ED XA Nano AR Coating IF FHB AF/MF Switch



- Lens groups/elements: 13/16
- Minimum focus: 0.28 m
- Filter diameter: 82 mm
- Size: 88.5 mm (diameter) x 121.6 mm (length)
- Weight: approx. 680 g

E-mount FE 24-70mm F2.8 GM SEL2470GM

Full ED XA Nano AR Coating IF DDSSM FHB AF/MF Switch



- Lens groups/elements: 13/18
- Minimum focus: 0.38 m
- Filter diameter: 82 mm
- Size: 87.6 mm (diameter) x 136 mm (length)
- Weight: approx. 886 g

E-mount FE 70-200mm F2.8 GM OSS SEL70200GM

Full ED XA Nano AR Coating IF Linear SSM OSS FRL FHB AF/MF Switch



- Lens groups/elements: 18/23
- Minimum focus: 0.96 m
- Filter diameter: 77 mm
- Size: 88 mm (diameter) x 200 mm (length)
- Weight: approx. 1480g (without tripod mount)

Full 35 mm full frame format APS-C APS-C/Super 35 format Circular aperture ED ED (Extra-low Dispersion) glass / Super ED Aspherical lens / Advanced aspherical lens XA XA extreme aspherical lens Nano AR Coating Nano AR Coating IF Internal focusing DDSSM Direct Drive Super Sonic wave Motor Linear Linear Motor SSM Super Sonic wave Motor SMO Smooth Motion Optics PZ Power Zoom RF Rear focusing OSS Optical Steady Shot FRL FRL Focus range limiter / Electronic Focus range limiter FHB Focus hold button AF/MF Switch Auto Focus / Manual Focus switch

Accessories

Battery and Charger BP-U Series



Specifications

	BP-U90	BP-U60	BP-U60T	BP-U30
Maximum voltage	16.4 V DC			
Nominal voltage	14.4 V DC			
Nominal capacity	85 Wh	57 Wh		28 Wh
Operating temperature	-4°F to +113°F (-20°C to +45°C)			
Dimensions (W x H x D)	1 11/16 x 4 7/8 x 2 3/4 inches (41.5 x 120.7 x 69.7 mm)	1 11/16 x 3 1/4 x 2 3/4 inches (41.5 x 82.5 x 69.7 mm)	1 11/16 x 4 1/8 x 2 3/4 inches (41.5 x 102.5 x 69.7 mm)	1 11/16 x 1 13/16 x 2 3/4 inches (41.5 x 41.5 x 69.7 mm)
Weight	1 lb 6 oz (630 g)	15 oz (420 g)	16 oz (450 g)	8 oz (220 g)
Supplied accessory	Operating Instructions (1)			



BC-U2A

Two-channel Simultaneous Battery Charger

- Simultaneously charges two BP-U90/U60/U30 batteries
- Can charge one battery while supplying DC power to a camcorder



BC-U1A

Battery Charger

- Charges one BP-U90/U60/U30 battery
- 12 V DC power output

Specifications

	BC-U2A	BC-U1A
Power requirements	100 V AC to 240 V AC, 50/60 Hz	
Power consumption	85 Wh	38 Wh
Operating temperature	32°F to 113°F (0°C to 45°C)	
Dimensions (W x H x D)	7 x 8 1/8 x 5 1/2 inches (177 x 53.2 x 137 mm)	5 1/8 x 1 13/16 x 3 7/8 inches (128 x 45 x 98 mm)
Weight	1 lb 7 oz (650 g)	12 oz (330 g)
DC output	12 V, 2.0 A	
Number of mountable batteries	2	1
Chargable battery	BP-U90/BP-U60/U30	
Supplied accessories	Operating Instructions (1), DC output cable (1), Warranty Booklet (1)	

Approximate Charge Time

Model name (capacity)	BC-U2A		BC-U1A
	1 battery	2 battery	1 battery
BP-U90 (85 Wh)	190	190	220
BP-U60 (57 Wh)	150	150	170
BP-U30 (28 Wh)	130	130	130

unit: minutes

Battery and Charger L / V / W-Series

Batteries L-series



Specifications

	NP-F970
Voltage	7.2 V
Capacity	6300 mAh
Performance	45 Wh



AC-VQ1051D

AC Adapter / Charger compatible with L-series

- InfoLITHIUM™ batteries

Batteries V-series



Specifications

	NP-FV50A	NP-FV70A	NP-FV100A
Voltage	7.3 V	7.3 V	7.4 V
Capacity	950 mAh	1900 mAh	3410 mAh
Performance	6.9 Wh	13.8 Wh	25.0 Wh



AC-VQV10

AC Adapter / Charger compatible with V-series

- Quick and easy charging for InfoLITHIUM™ P/M/V series batteries

Batteries W-series For α series



Specifications

	NP-FW50
Voltage	7.2 V
Capacity	1020 mAh
Performance	7.3 Wh



BC-TRW

Battery Charger compatible with W-series

- Quick and easy charging for InfoLITHIUM™ W series batteries

Video Light



HVL-LBPC

Battery Video Light



CBK-WA100/WA101

Wireless LAN Adapter



CBK-NA1

Network Adapter Kit



CBK-WA02

5GHz/2.4GHz Wireless LAN Adapter

Related Products

Recording Media



SBP-256/128/64E
SxS PRO+ Memory Card



SBS-128/64/32G1C
SxS-1 Memory Card



QD-G256/128/64/32E
XQD Memory Card



SF-G1/64/32/16UZ
SDXC/SDHC Memory Card



SF-G1/64/32UX2
SDXC/SDHC Memory Card



MS-HX32B
Memory Stick® PRO-HG Duo™



QDA-EX1
XQD Express Card Adapter



MEAD-SD02
SD Card Adapter for XDCAM



SBAC-UT100
Thunder bolt2 and USB3.0
Reader/Writer for SxS



SBAC-US30
USB3.0 reader/writer for SxS



MRW-E90
Card Reader for XQD and SD



QDA-SB1
USB adapter for XQD



HXR-FMU128

128 GB flash memory recording unit

The HXR-FMU128 Flash Memory Unit is an optional solid-state memory recorder designed for NEX-FS700, NEX-FS100 and NEX-EA50 camcorders, and attaches directly to the right side of the camera with ease. Hybrid recording functionality is possible by being able to record on both the HXR-FMU128 and Memory card at the same time. The unit also offers long recording times of up to 10 hours at the highest HD quality (28Mbps) and 11 hours at 24 Mbps



Audio



UWP-D11

UTX-B03

Bodypack Transmitter

URX-P03

Portable Receiver



UWP-D12

UTX-M03

Handheld Wireless
Microphone

URX-P03

Portable Receiver



UWP-D16

UTX-P03

Plug-on Transmitter

UTX-B03

Bodypack Transmitter

URX-P03

Portable Receiver



URX-P03D
2-channel Portable
Receiver



SMAD-P3D
MI Shoe Adapter
(For URX-P03D)



SMAD-P3
MI Shoe Adapter
(For URX-P03)



1Channel use :
SMAD-P3 + URX-P03 with Camcorder
2Channel use :
SMAD-P3D + URX-P03D with Camcorder

- Internal connection
- No need for separate audio cable
- Power supply from camera*1
- On/Off control from camera*1

*1 For details on cameras that support this unit, visit Sony's website: www.sony.com/professional.

mi Multi
Interface Shoe



ECM-VG1
Shotgun Microphone



ECM-MS2
Stereo Microphone

LCD Picture Monitors



	LMD-A240	LMD-A220	LMD-A170	LMD-B240	LMD-B170
Screen Size (Inch, Diagonal)	24" (24.1")	22" (21.5")	17" (16.5")	24" (23.8")	17" (17.3")
SDI Input	3G-SDI (x2)	3G-SDI (x2)	3G-SDI (x2)	HD-SDI (x2)	HD-SDI (x2)
HDMI Input	●	●	●	●	●
Image Comparison	Side by Side, False Color	Side by Side, False Color	Side by Side, False Color	Side by Side	Side by Side

Software



Catalyst Browse

Catalyst Browse is a free, simple viewing and logging tool exclusively for all of Sony's Pro formats

Catalyst Browse offers simple media management functions such as browsing a collection of files from a particular device, viewing in detail individual clips, viewing and editing metadata associated with the media, source color space support for accurate viewing, basic color correction and color looks, copying from the device to a local hard drive, transcoding files to a variety of formats, and ingesting and exporting clip lists for Sony Professional Discs.



Catalyst Prepare

The fast, simple, reliable path from camera to post

The ultimate preproduction assistant that allows you to easily and intuitively browse your camera, deck, or card reader, view clips, off-load the media for safe backup, view and edit metadata, batch copy, batch transcode to a wide variety of pro formats, precisely perform first-pass color correction, and more.



Catalyst Production Suite

Focused, fast production for 4K, RAW, and HD video

Catalyst Production Suite fuses powerful media preparation and fast, focused video editing to provide the backbone for video productions. Catalyst Prepare paves your path from camera to post production, while Catalyst Edit provides a lean, focused video editing environment. Both support 4K and Sony's RAW media from beginning to end.



To find out more and download a free trial please see:
<http://www.sonycreativesoftware.com/catalyst>



Distributed by

©2018 Sony Corporation. All rights reserved.

Reproduction in whole or in part without written permission is prohibited.

Features and specifications are subject to change without notice.

The values for mass and dimension are approximate.

"SONY" is a registered trademark of Sony Corporation.

XDCAM, NXCAM, Memory Stick, Memory Stick PRO, Memory Stick Duo, Memory Stick PRO Duo, Memory Stick Micro, AVCHD, DV, DVCAM, HDV, XAVC, Exmor, i.LINK, BRAVIA, α , XGA OLED TruFinder, SteadyShot, InfoLITHIUM, and the Sony logo are trademarks of Sony.

WiFi is a trademark of the WiFi Alliance

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

All other trademarks are the properties of their respective owners.

*i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 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.