

SONY



PXW-X180 PXW-X160

1/3-type 3CMOS Solid-state Memory Camcorders

The PXW-X180 and PXW-X160 are the latest addition to Sony's XDCAM® Series of professional camcorders. They feature three 1/3-type Full HD Exmor® CMOS sensors and a newly developed 25x optical zoom G Lens® that extends from 26 mm wide angle. The PXW-X180 and PXW-X160 can record in XAVC Intra and Long GOP, enabling 10-bit sampling for high-definition recordings with rich tonal expression, as well as MPEG HD422® at 50 Mbps, a format widely preferred by today's broadcasters and production houses. They can also record in MPEG HD420 at 35 Mbps, AVCHD™, and DV formats.

These advanced camcorders have been created to satisfy the needs of broadcast stations, production houses, and independent video creators, with performance and features that are ideally suited for news, documentaries, events, and more.

While maintaining the same high level of performance, the PXW-X160 differs slightly from the PXW-X180 and does not offer features such as wireless functionality, NFC or GPS.

XDCAM

XAVC

MPEG HD422

AVCHD
Progressive

G
Sony Lens G

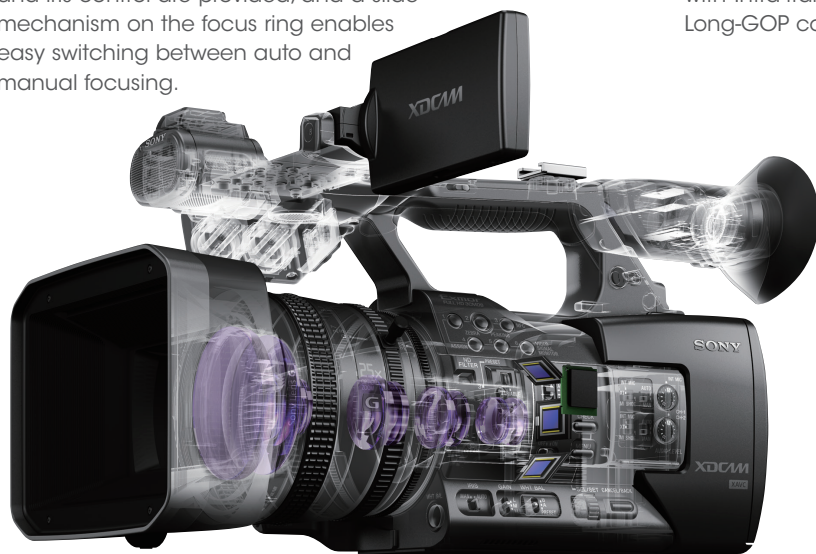
Exmor
3CMOS Sensors

WiFi
CERTIFIED



Newly developed 25x optical zoom G Lens with 26 mm wide angle

This new lens delivers uncompromised Sony G Lens quality and a 26 mm angle of view at the wide end of its 25x zoom range (35 mm equivalent; 26 mm to 650 mm). That's more than enough range for a wide variety of shooting situations. Independent manual zoom and focus rings with end-stop and iris control are provided, and a slide mechanism on the focus ring enables easy switching between auto and manual focusing.



Innovative Sony image sensor, image processor, and lens achieve outstanding image quality

Sony's Exmor 3CMOS Sensor system provides independent 1/3-type CMOS image sensors for the red, blue, and green color channels, each with 2.07 effective megapixels (16:9). The result is high resolution and sensitivity that contribute to superb color reproduction. An advanced image processor that features sophisticated noise reduction and distortion compensation is instrumental in delivering superb detail and texture reproduction, with image quality settings rivaling high-end broadcast camcorders.

Compatible with XAVC and a range of other recording formats

In addition to XAVC Intra/Long GOP, the PXW-X180 and PXW-X160 can record in MPEG2, AVCHD, and DV format. The MXF file format is used for XAVC recording, 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 Intra-frame compression at 112 Mbps, or high-efficiency Long-GOP compression at 50/35/25 Mbps.



Support for SxS, XQD™, and SD memory cards plus Memory Stick® media

To provide compatibility with a variety of workflows, the PXW-X180 and PXW-X160 feature two SxS memory card slots for high-speed read/write capability. An XQD card adaptor allows recording to XQD memory cards, and an SD card adaptor enables recording to SD memory cards for maximum economy when shooting for extended periods.



Overexposed

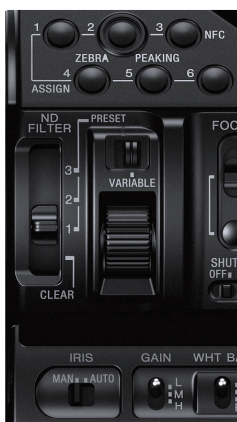


Optimum Exposure

Fine aperture control from 1/4 ND to 1/128 ND makes it easy to dial in perfect exposure for a wide range of scenes.

Variable ND filter

The PXW-X180 and PXW-X160 are the first professional Sony camcorders to feature a continuously variable ND filter. A new filter device that electronically controls density enables continuous adjustment from 1/4 ND to 1/128 ND via a simple dial operation. In conjunction with iris setting that controls depth of field and brightness, this advanced filter facilitates shooting techniques such as the use of slow shutter in daylight and other bright conditions. For operators who prefer the conventional ND selector interface, the PXW-X180 and PXW-X160 feature a dual ND filter control mechanism that provides both continuous electronic control and the standard four-position switch.



Wireless functions*¹ for file transmission and remote control (PXW-X180 only)

Near Field Communication (NFC*²) functions allow easy, one-touch wireless LAN connection to a smartphone or tablet. The Content Browser Mobile*³ application enables confirmation of the angle of the shot before shooting, monitor recording, and remote operation of the camcorder (field angle/white balance/iris, etc.). The use of mobile routers (sold separately) and other mobile devices also allows transmission of files after shooting. In addition, lightweight proxy video files can be generated separately from the main line recording and recorded to SD cards for quick sharing of content over low-bandwidth mobile networks.

*1. Wireless operation cannot be guaranteed with all smartphones and tablet devices.

*2. NFC, or Near Field Communication, allows close-range wireless communication between the PXW-X180 and an NFC equipped smartphone or tablet device.

*3. The required Content Browser Mobile smartphone application can be downloaded from the Google® Play Store or Apple App Store. Check these sites for the latest software version.



3.5-inch* type LCD panel and 0.5-inch* type OLED viewfinder

The PXW-X180 and PXW-X160 are equipped with a 3.5-inch type QHD LCD panel (960 x 540 xRGB, 16:9) that provides easy viewing in a wide range of lighting conditions. Both models also feature a 0.5-type OLED viewfinder (1024 x 768 xRGB, 4:3). High resolution makes precise manual focus easy. Compared to LCOS devices, there is no color breakup and viewing comfort is significantly improved.

*Viewable area measured diagonally



(Onscreen image simulated)

Multi-Interface Shoe

Compatible accessories attached to the Multi-Interface (MI) Shoe can be controlled from the PXW-X180 or PXW-X160. The HVL-LBPC video light, for example, can be switched on and off from the camcorder. Power and audio connections for a UWP-D11 or UWP-D12 wireless microphone receiver are made via the MI Shoe, minimizing the need for extra batteries and additional cabling.



Specifications

		PXW-X180	PXW-X160
Weight	Approx. 5lb 15.2 oz (body) Approx. 2.7 kg (body) Approx. 7lb 0.9 oz (with lens hood (1), eyecup (1), battery pack BP-U30 (1), SxS memory card(1)) Approx. 3.2 kg (with lens hood (1), eyecup (1), battery pack BP-U30 (1), SxS memory card (1))		
Dimensions (W x H x D)*1	7 5/8 x 8 x 16 1/4 in (Approx. 191.5 x 201.5 x 412 mm) (without protrusions)		
Power Requirements	DC19.5 V (AC Adaptor), DC14.4 V (battery pack)		
Power Consumption	Approx. 19.9 W (while recording with LCD Off, EVF On when the external device connector is not used.) Approx. 20.8 W (while recording with LCD On, EVF On when the external device connector is used.)		
Operating Temperature	32°F to 104°F (0°C to 40°C)		
Storage Temperature	-4°F to +140°F (-20°C to +60°C)		
Battery Operating Time	With battery pack BP-U30: approx. 4 hours (While recording with LCD Off, EVF On when the external device connector is not used.) With battery pack BP-U30: approx. 2 hours, 35 minutes (While recording with LCD Off, EVF On when the external device connector is not used.) With battery pack BP-U30: approx. 1 hour, 15 minutes (While recording with LCD Off, EVF On when the external device connector is not used.)		
Recording Format (Video)	XAVC-Intra 1920x1080	59.94i: 111Mbps max, 50i: 112Mbps max, 29.97P: 111Mbps max, 25P: 112Mbps max, 23.98P: 89Mbps max	
	XAVC-Intra 1280x720	59.94P: 111Mbps max, 50P: 112Mbps max	
	XAVC-Long 1920x1080	59.94i, 50i: 50/35/25Mbps max, 59.94P, 50P, 29.97P, 25P, 23.98P: 50/35Mbps max	
	XAVC-Long 1280x720	59.94P, 50P: 50Mbps max	
	MPEG HD422 1920x1080	59.94i, 50i, 29.97P, 25P, 23.98P: 50Mbps max	
	MPEG HD422 1280x720	59.94P, 50P, 29.97P, 25P, 23.98P: 50Mbps max	
	MPEG HD420 1920x1080	59.94i, 50i, 29.97P, 25P, 23.98P: 35Mbps max	
	MPEG HD420 1440x1080	59.94i, 50i: 35Mbps max	
	MPEG HD420 1280x720	59.94P, 50P: 35Mbps max	
	AVCHD 1920x1080	59.94P, 50P: 28Mbps max, 59.94i, 50i, 29.97P, 25P, 23.98P: 24Mbps max	
AVCHD 1280x720	59.94P, 50P: 24Mbps max		
DVCAM® 720x480	59.94i: 25Mbps		
	50i: 25Mbps		
	Proxy	1280x720: 9Mbps 640x360: 3Mbps 480x270: 1Mbps 480x270: 500Kbps	-
Recording Format (Audio)	LPCM (XAVC/MPEG2/AVCHD/DVCAM), Dolby Digital (AVCHD): 2ch		
Lens			
Lens Mount	Fixed		
Zoom Ratio	25x (optical), servo/manual		
Focal Length	f=3.7-92.5 mm equivalent to 26-650 mm on 35 mm lens		
Iris	F1.6 - F11 and C (close)		
Focus	AF/MF selectable, 10 mm ~ ∞ (Wide), 800 mm ~ ∞ (Tele)		
Image Stabilizer	ON/OFF/ACTIVE selectable, shift lens		
Filter Diameter	M82 mm		

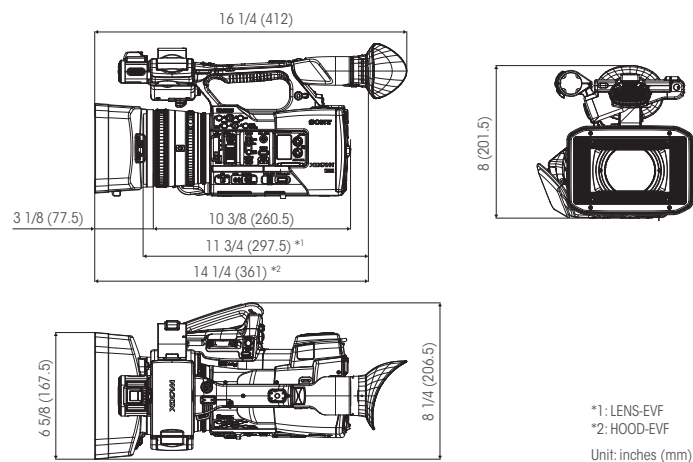
Camera Section		PXW-X180	PXW-X160
Imaging Device (Type)		3-chips 1/3-type Exmor CMOS Sensor	
Effective Picture Elements		1920 (H) x 1080 (V)	
Built-in Optical Filters		Clear, 1/4-1/28 Variable	
Sensitivity		F9 (typical) (1920 x 1080/59.94i mode) F10 (typical) (1920 x 1080/50i mode)	
S/N Ratio		60 dB (V) (typical)	
Shutter Speed		1/32 sec to 1/2000 sec	
Slow & Quick Motion Function		1920x1080p: Frame rate selectable 1-60p (depends on Recording Format) 1280x720: 1-120P (depends on Recording Format) Angle of view becomes smaller over 60fps.	
White Balance		Preset (3200K), A, B	
GPS		Yes	No
Wireless functions		Yes	No
NFC		Yes	No
Input/Output			
Audio Input		XLR-type 3-pin (female) (x2)	
HDMI Output		Type A (x1)	
3G-SDI Output		BNC Connector (x1)	
Composite Output/ GENLOCK-IN		BNC Connector (x1)	
Audio Output		Stereo mini jack ø3.5 mm (x1)	
USB		mini-B/USB2.0 Hi-speed/mass-storage (x1) Type A/for Wireless LAN module (x1) Type A/USB3.0 (x1) (future Update)	mini-B/USB2.0 Hi-speed/mass-storage (x1) Type A/USB3.0 (x1) (future Update)
TC in/out		BNC Connector (x1)	
Remote		Stereo mini jack ø2.5 mm (x1)	
DC Input		DC jack (x1)	
Shoe		Multi Interface Shoe (x1)	
Headphone Output		Stereo mini jack ø3.5 mm (x1)	
Monitoring			
Viewfinder		0.5-inch type color OLED, 2.36M dots	
LCD		3.5-inch type color LCD monitor Aspect ratio 16:9, 1.56Mdots	
Built-in Microphone			
Built-in Microphone		Omni-directional stereo electret condenser microphone	
Media			
Type		ExpressCard/34 slot (2) (for XAVC/MPEG2/AVCHD/DV) SD/SDHC (1) (for Proxy) SD/SDHC (1) (for Utility)	ExpressCard/34 slot (2) (for XAVC/MPEG2/AVCHD/DV) SD/SDHC (1) (for Utility)
Supplied Accessories			
Lens hood (1), pre-installed to the Camcorder EVF large eyecup (1) USB cable (1) Audio connecting cable (1) Infrared Remote Commander® Unit (1) Lithium battery (CR2025 for the IR Remote Commander) (1) CD-ROM: Operating instructions in PDF (1) AC adaptor (1) BC-U1 battery charger (1) BP-U30 battery pack (1) AC Cable (2) Shoulder strap (1) Wireless LAN module (1) Warranty booklet (1) Accessory shoe kit (accessory shoe (1), accessory shoe plate (1), screws (4)) XQD card adaptor (1) PXW-X180 UC model only		Lens hood (1), pre-installed to the Camcorder EVF large eyecup (1) USB cable (1) Audio connecting cable (1) Infrared Remote Commander (1) Lithium battery (CR2025 for the IR Remote Commander) (1) CD-ROM: Operating instructions in PDF (1) AC adaptor (1) BC-U1 battery charger (1) BP-U30 battery pack (1) AC Cable (2) Shoulder strap (1) Warranty booklet (1) Accessory shoe kit (accessory shoe (1), accessory shoe plate (1), screws (4)) SD card adaptor (1)	

*1 The values for dimensions are approximate.

Available Accessories

BP-U30/BP-U60/ BP-U60T/BP-U90 Rechargeable Battery Pack	BC-U1/BC-U2 Battery Charger/ AC Adaptor	HVL-LBPC Battery Video Light	UWP-D11/UWP-D12 Wireless Microphone Package	SMAD-P3 MI Shoe Mount Adaptor * required for cable-free operation with UWP-D11/UWP-D12	ECM-VG1 Electret Condenser Microphone	ECM-MS2 Electret Condenser Microphone	ECM-673 Electret Condenser Microphone	RM-1BP Remote Commander Unit
SBP-128B/SBP-64B SxS Memory Card "SxS PRO"™	SBS-64G1A/ SBS-32G1A SxS Memory Card "SxS-1"™	QD-S64E/QD-S32E XQD Memory Card S Series	SF-32UX (32 GB, 16 GB, 8 GB) SD/SDHC Memory Card	MS-HX32B (32 GB, 16 GB, 8 GB) Memory Stick PRO-HG Duo™	QDA-EX1 XQD ExpressCard Adaptor	MEAD-SD02 SD Card Adaptor for XDCAM Series	MEAD-MS01 Memory Stick Adaptor for XDCAM EX™	

Dimensions



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Features and specifications are subject to change without notice.
Weights and dimensions are approximate.
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