SONY

PXW-Z450

4K XDCAM Shoulder Memory Camcorder

Sony proudly introduces the groundbreaking PXW-Z450 XDCAM™ XAVC™ 4K*1 Shoulder Camcorder. With 4K/HD compatibility, you can make heavy use of this camcorder not only for ENG but also for a variety of 4K/HD TV program applications.

The PXW-Z450 incorporates a newly developed 2/3" Exmor R™ CMOS sensor delivering stunning 4K/HD images. Also incorporating a versatile B4 lens mount, this camcorder allows you to use the wide range of HD ENG lenses available in today's marketplace, as well as your own lens assets. If you install a 4K-compatible lens to this PXW-Z450 camcorder, you can enjoy fine 4K image shooting.

Inheriting the well-received weight balance of the PXW-X400 XDCAM HD Shoulder Camcorder, the PXW-Z450 offers user-friendly ergonomic-designed weight balance.

Further to these fundamental characteristics, this camcorder also offers low power consumption, convenient networking features, and a wide range of XAVC recording formats including 4K (3840 x 2160 pixels) – all of which are highly beneficial to shoulder camcorder users. A lineup of optional HDVF Series OLED viewfinders (HDVF-EL30 and HDVF-EL20) supports your 4K image production in respect of fine focusing.

Still more, the PXW-Z450 is designed to suit a wide range of applications with versatile features such as SDI output for 4K 59.94p/50p*2 and simultaneous 4K and HD recording*3. This is helpful when you are operating both 4K and HD production in parallel.

*1 4K (3840 x 2160 pixel resolution)
*2 This function requires optional upgrade software available in 2017.
*3 Available in 2017.

XDCAM XAVC MPEG HD422 MPEG HD MPEG IMX DVCAM Exmor R

Stunning Picture Quality

The PXW-Z450 incorporates a newly developed 2/3-inch 4K Exmor R CMOS sensor (3840 x 2160 pixels). This new Exmor R CMOS sensor is optimally designed to fit the shoulder camcorder, and delivers stunning picture quality.

Exmor R

Versatile B4 ENG Lens Options

Thanks to the camcorder's versatile 2/3-type native sensor and B4 lens mount, you can install a variety of B4 ENG lenses including either 4K or HD. This lens option flexibility supports all of your various shooting applications while saving cost.

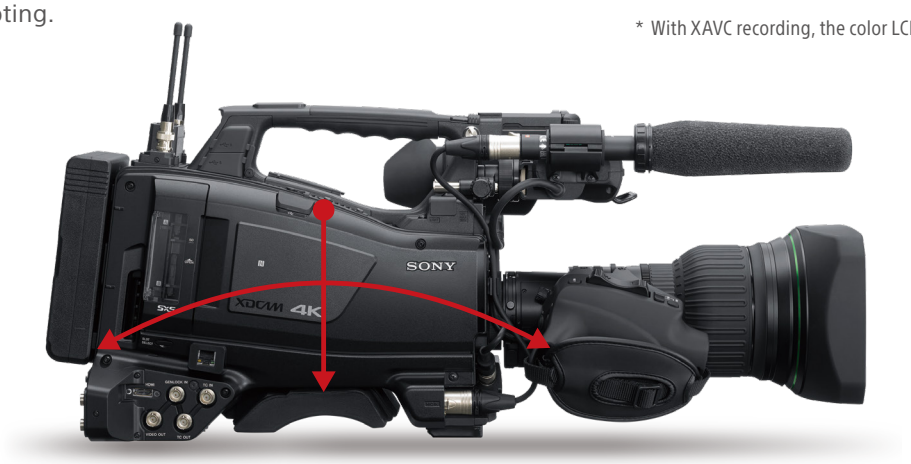
PXW-Z450 with 4K lens

PXW-Z450 with HD lens

Discover Optimized Weight Balance

The PXW-Z450 is the industry-leading 4K shoulder-mount camcorder and it inherits – with favorable reception – the design concept of the PXW-X400 XDCAM camcorder.

Thanks to its ergonomic design, the PXW-Z450 camcorder achieves optimized weight balance; this lessens the weight on the lens grip and contributes to stable image shooting.



Multiple-Format Recording – XAVC Intra/Long 50p/59.94p

The PXW-Z450 offers well-accepted XAVC 4K (3840 x 2160) Intra/Long 50p and 59.94p formats. Further to this, de facto HD formats including XAVC Intra/Long, MPEG HD422, and MPEG HD are also supported. This camcorder allows you to shoot in robust HD and switch over to 4K for a variety of applications.

XAVC

XAVC Intra	3840 x 2160/59.94p, 50p, 29.97p, 25p, 23.98p 1920 x 1080/59.94p, 50p, 59.94i, 50i, 29.97p, 23.98p, 25p 1280 x 720/59.94p, 50p
XAVC Long	3840 x 2160/59.94p, 50p, 29.97p, 25p, 23.98p 1920 x 1080/59.94p, 50p, 59.94i, 50i, 29.97p, 23.98p, 25p 1280 x 720/59.94p, 50p
MPEG HD422	1920 x 1080/59.94i, 50i, 29.97p, 23.98p, 25p 1280 x 720/59.94p, 50p, 29.97p, 23.98p, 25p
MPEG HD (420)	1920 x 1080/59.94i, 50i, 29.97p, 23.98p, 25p 1440 x 1080/59.94i, 50i 1280 x 720/59.94p, 50p
MPEG IMX	720 x 480/59.94i, 720 x 576/50i
DVCAM	720 x 480/59.94i, 720 x 570/50i

Simultaneous 4K (3840 x 2160) / HD Recording

The PXW-Z450 can also record 4K (3840 x 2160) and HD simultaneously.* This is helpful when you are operating both 4K and HD production in parallel.

* Available in 2017.

Low Power Consumption

With an improved inside circuitry design, the PXW-Z450 achieves power consumption as low as 24 W in normal recording mode*. This enables continuous recording operation while saving battery consumption.

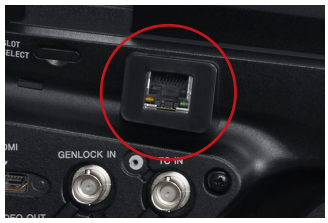
* With XAVC recording, the color LCD is ON.

Variety of Network Functions

To support effective wireless ENG/EFP workflows, the PXW-Z450 incorporates a built-in wireless capability. Including ONLINE button operation, this camcorder provides simple proxy transfer operation. This feature is extremely useful for 4K production. Further to this, the PXW-Z450 enables users to send streaming images during 4K image shooting.

CBK-WA02 wireless LAN adaptor attached to the PXW-Z450

ONLINE button



Embedded RJ-45 Connector

NFC (Near Field Communication) for Easy Wireless LAN Connection

An NFC function supports easy connection for launching the CBM (Content Browser Mobile) application on a smartphone or tablet.
This means you can skip cumbersome setup procedures.

Versatile Output/Input Interfaces

In addition to common interfaces, the PXW-Z450 includes versatile I/O interfaces such as:

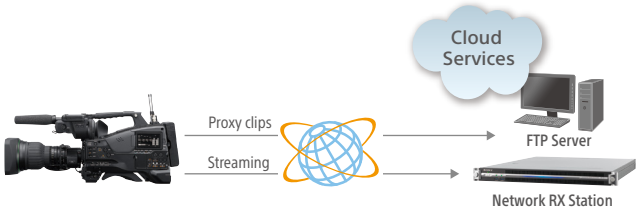
- Quad (x4) 3G-SDI output that enables output of up to 4K (3840 x 2160) 59.94p/50p signals*
- Multi-purpose audio input that accepts both analog audio signals and AES/EBU digital audio signals
- SDI input for pool-feed operation, so you can input and record 1.5G HD/SD-SDI distributed signals from another camera

Each connector is located separately and – as there's no need for you to switch between input and output – you can use these connectors simultaneously.

* The SDI 4K 59.94p/50p output function will be supported with an optional software upgrade available in 2017.

Networked Workflow

You can connect Sony's PWS-110RX1 Network RX Station to send stable and high quality live streaming with Sony's QoS technology. This allows you to send the HD-quality images without SNG or an external adaptor. The RX station can output SDI signals for live streaming and/or store streaming images in networked storage.
In addition, the RX station employs a web GUI to manage connection with the camcorder. Called the Connection Control Manager, this GUI can monitor the streaming live images, display a thumbnail list of proxy clips, and send the proxy clips to a networked FTP server. This provides efficiency in your workflow from image acquisition to the editing process.



Supports Full HD OLED Viewfinders

The PXW-Z450 supports a variety of Sony's viewfinders, including the Full HD OLED HDVF-EL30 and HDVF-EL20. The OLED viewfinders are particularly useful for focusing 4K shooting. The HDVF-EL30 has a 960x540 resolution sub-LCD panel.

HDVF-EL30

HDVF-EL20

Specifications

	PXW-Z450
General	
Mass	Approx. 3.6 kg (body only without lens, VF, Mic) Approx. 7 lb 15 oz (body only without lens, VF, Mic)
Dimensions (W x H x D)	170 x 269 x 332 mm (excluding protrusions, body only) 6 3/4 x 10 5/8 x 13 1/8 inches (excluding protrusions, body only)
Power Requirements	DC 12 V (11 V to 17.0 V)
Power Consumption	Approx. 24 W (while XAVC recording, color LCD on) Approx. 26 W (CBK-VF02 viewfinder, lens, microphone, while XAVC recording, color LCD on)
Operating Temperature	0° C to 40° C (32° F to 104° F)
Storage Temperature	-20°C to +60°C (-4°F to +140°F)
Camera Section	
Imager	2/3-type "Exmor R" 4K CMOS
Effective Picture Elements	3840 (H) x 2160 (V)
Built-in Optical Filters	1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
Shutter Speed (Time)	1/60 sec to 1/2,000 sec + ECS (Extended Clear Scan)
Shutter Speed (Slow Shutter (SLS))	2, 3, 4, 5, 6, 7, 8, 16-frame accumulation
Slow & Quick Motion	1080p: Frame rate selectable from 1 fps to 60 fps
Sensitivity (2000 lx, 89.9% reflectance)	F10 (typical) (1920 x 1080/59.94i mode or 3840 x 2160/59.94p mode) F11 (typical) (1920 x 1080/50i mode or 3840 x 2160/50p mode)
Minimum illumination	0.019 lx (typical) (F1.4, +42 dB gain, 16-frame accumulation)
White Balance	Preset (3200K), Memory A, Memory B/ATW
Gain Selection	-9, -6, -3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42 dB
S/N Ratio	61 dB (Y) (typical, 1920 x 1080/59.94i mode, Noise Suppression On)
Horizontal Resolution	1,000 TV lines or higher (1920 x 1080i mode)
Recording format (Video)	
XAVC Intra (XAVC-I QFHD 300):	- 3840 x 2160: 59.94p, 50p, 29.97p, 25p, 23.98p
XAVC Intra (XAVC-I HD 100):	- 1920 × 1080: 59.94p, 50p, 59.94i, 50i, 29.97p, 25p, 23.98p - 1280 × 720: 59.94p, 50p
XAVC Long (XAVC-L QFHD 150):	- 3840 x 2160: 59.94p, 50p
XAVC Long (XAVC-L QFHD 100):	- 3840 x 2160: 29.97p, 25p, 23.98p
XAVC Long (XAVC-L422 HD 50):	- 1920 × 1080: 59.94p, 50p, 59.94i, 50i, 29.97p, 25p, 23.98p - 1280 × 720: 59.94p, 50p
XAVC Long (XAVC-L422 HD 35):	- 1920 × 1080: 59.94p, 50p, 59.94i, 50i, 29.97p, 25p, 23.98p
XAVC Long (XAVC-L422 HD 25):	- 1920 × 1080: 59.94i, 50i
MPEG HD422:	- 1920 × 1080: 59.94i, 50i, 29.97p, 25p, 23.98p - 1280 × 720: 59.94p, 50p, 29.97p, 25p, 23.98p
MPEG HD420:	- 1920 × 1080: 59.94i, 50i, 29.97p, 25p, 23.98p - 1440 × 1080: 59.94i, 50i - 1280 × 720: 59.94p, 50p
MPEG IMX:	- 720 × 486: 59.94i - 720 × 576: 50i
DVCAM:	- 720 × 480: 59.94i - 720 × 576: 50i
Recording Format (Audio)	
XAVC Intra:	LPCM 24 bits, 48 kHz, 4 channels
XAVC Long:	LPCM 24 bits, 48 kHz, 4 channels
MPEG HD422:	LPCM 24 bits, 48 kHz, 4 channels
MPEG HD:	LPCM 16 bits, 48 kHz, 4 channels
MPEG IMX:	LPCM 16/24 bits, 48 kHz, 4 channels *1
DVCAM:	LPCM 16 bits, 48 kHz, 4 channels
Recording Format (Proxy Video)	
XAVC Proxy:	AVC/H.264 Main Profile 4:2:0 Long GOP, VBR 1280 × 720, 9 Mbps (Target Rate) 1280 × 720, 6 Mbps (Target Rate) 640 × 360, 3 Mbps (Target Rate) 480 × 270, 1 Mbps, 500 kbps (Target Rate)
Recording Format (Proxy Audio)	
XAVC Proxy:	AAC-LC, 128 kbps, 2 channels
Input/Output	
Genlock Input	BNC (x1), 1.0 Vp-p, 75 Ω, unbalanced
Timecode Input	BNC (x1), 0.5 V to 18 Vp-p, 10 kΩ
SDI Input	SMPTE ST292/ST259 standard compliant, 4-channel audio 1.5G Poolfeed Recording (upto 1080 59.94i)
Audio Input	CH1/CH2: XLR-type 3-pin (female) (x2), Line/Mic/Mic/+48V selectable LINE: +4, 0, -3 dBu AES/EBU: AES3 compliant MIC: -70 dBu to -30 dBu
Mic Input	XLR-type 5-pin, female: -70 dBu to -30 dBu
WRR (Wireless Microphone Receiver)	D-sub 15-pin Analog CH1: -40 dBu Digital CH1/CH2: -40 dBFS
SDI Output	Output 1/2/3/4: BNC (x4), 0.8 Vp-p unbalanced, 3G/HD/SD selectable SMPTE ST424/ST425, ST292/ST259 standard compliant 4-channel audio
Video Output	BNC, SD analog composite/HD-Y selectable
Audio Output	XLR-type 5-pin, male, +4/0/-3 dBu (balanced)
Timecode Output	BNC, 1.0 Vp-p, 75 Ω

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Earphone Output	Stereo mini jack (x1) -11 dBu reference level output, maximum monitor volume, 16 Ω load
Speaker Output	Monaural, 300 mW output
DC Input	XLR-type 4-pin, male, 11 V to 17 V DC
DC Output	Round type 4-pin, 11 V to 17 V DC, 1.8 A maximum rated current
Lens	12-pin, lens power source (11 V to 17 V DC, 1.0 A maximum rated current)
Remote	8-pin
Light	2-pin
Camera Adaptor	D-sub, 50-pin (x1)
Ethernet	RJ-45 (x1), 100BASE-TX: IEEE 802.3u, 10BASE-T: IEEE 802.3
USB	USB 3.0/2.0 4-pin (type A), USB2.0 4-pin (type B), USB2.0 4-pin (type-A)
HDMI	A type, 19-pin (x1)
Viewfinder	20-pin IF for HDVF Series Viewfinder, and 26-pin IF for CBK-VF02, HDVF-L750
Monitoring	
Viewfinder	Option
Built-in LCD Monitor	Color LCD, Screen size: 8.8 cm (3.5 inch) diagonal, Aspect ratio: 16:9, Number of pixels: 960 (H) × 540 (V) for Video display, Audio level, TC, battery and media remaining capacity
Other Functions	
Built-in Speaker	(x1)
Media SxS Card Slots	Form factor: Express Card/34, Number of slots: 2, Connector: PCMCIA Express Card compliant, Write rate: 50 Mbps or higher, Read rate: 50 Mbps or higher
Media SD Card Slots	Proxy (1), Utility (1)
GPS	Yes
Built-in Network Module	Yes
NFC	Yes
Media	
High resolution Video/Audio	SxS card XQD card (with XQD ExpressCard Adapter, QDA-EX1) SDXC card (with XQD ExpressCard Adapter, MEAD-SD02)
Proxy Video/Audio and Utility	SDXC/SDHC
Supplied Accessories	
	Shoulder belt (1) Cold shoe kit (1) Lens mount cap (1) Protective cap (2) Operation Guide (1) Operation Manual (CD-ROM) (1) USB wireless LAN module (IFU-WLM3) (1)

*1: Viewable area, measured diagonally.

Optional Accessories

SBP-256D
SxS Pro+ memory

HDVF-EL20
0.7-inch* OLED Viewfinder

HDVF-EL30
0.7-inch* OLED Viewfinder

CBK-VF02
3.5-inch* LCD color Viewfinder

ECM-680S/678/674
Shotgun-type electret condenser microphone

DWR-S02D
Digital wireless receiver

URX-S03D
Wireless receiver

BP-FLX75
Lithium-ion Battery pack

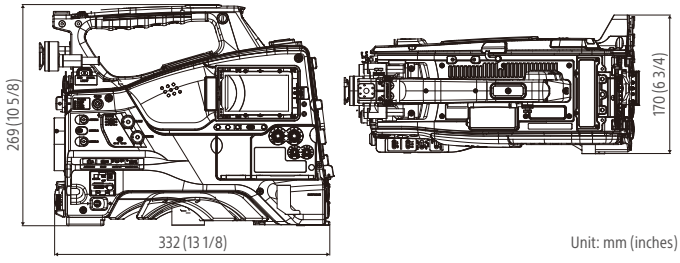
RM-B170
Remote control unit

RCP-1000/ 1500/1530
Remote control panel

PWS-110RX1
Network RX station

CBK-SP01
Soft shoulder pad

Dimensions



Unit: mm (inches)

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