SONY

PXW-Z750

4K 2/3-type 3-chip CMOS Shoulder-mount Camcorder with global shutter, high sensitivity, 4K/HD simultaneous recording, 120p HFR in HD, 12G-SDI and advanced wireless workflow capabilities.



Overview

New benchmark for 4K, HDR and HD image quality

Capture beautiful 4K imagery with the deep depth of field made possible by the 3-chip 2/3-type CMOS sensor. The Z750 is Sony's first shoulder-mount camcorder with a global shutter to eliminate flash banding and "jello" effects. It sets a new class-leading standard for 4K, HDR and HD image quality for reality TV, documentary, news, and sports production. In fast-moving applications where a second take is impossible, the Z750 is the ideal choice.

Saving time and money

Delivering highest quality 4K with HD-era workflows wastes time and money. The Z750's latest generation XAVC-L422 QFHD 200 codec combined with high-speed SxS Pro media radically reduce real-world turnaround times. Premium 4K becomes deliverable on almost any project using the PXW-Z750.

Transformative cloud-based collaboration

The Z750 is at the vanguard of seamlessly integrating Cloud-based production tools with familiar, easy-to-use

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interfaces and proven Sony reliability. Build stories fast, with secure, direct access from the studio to camcorders out in the field with XDCAM air. Distribute content for preview and editing with stakeholders across the world using Sony's Ci Media Cloud.

Features

3-chip 2/3-type CMOS Sensor with Global Shutter

The PXW-Z750 incorporates a newly developed 3-chip 2/3" 4K CMOS sensor optical block with a wide color gamut that provides exquisite picture quality with true-to-life color reproduction, high sensitivity, and low noise level for a wide range of shooting scenarios.

Versatile B4 ENG lens options

Thanks to the versatile 3-chip 2/3-type size sensor block and traditional B4 lens mount, the Z750 allows you to install a variety of B4 ENG lenses including either 4K or HD. These flexible lens options support a variety of shooting applications while saving cost by leveraging existing lens investments.

High Dynamic Range and wider, richer colors

PXW-Z750 can record HDR using Sony S-Log3 or Hybrid Log Gamma (HLG). The camera's wide color gamut supports extended Sony S-Gamut3 and S-Gamut3. Cine color spaces, as well as the industry standard ITU-R BT.2020 color space.

- S-Log3 has a proven track record for premium applications, capturing the maximum dynamic range from the sensors, for the most creative color grading processes.*
- Industry standard HLG delivers content

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quickly without additional color grading, making it an ideal choice for day-to-day shooting, viewing, editing, and broadcasting workflows.

*QFHD only.

High quality at lower bitrates

As well as the established XAVC-I QFHD Class 300 4K and standard MPEG HD422 codecs, the PXW-Z750 also supports the latest generation XAVC-L422 QFHD 200 codec. Compressing 4K Ultra HD images with a LongGOP frame structure, this achieves significant bitrate savings over previous Intra Frame codecs while maintaining superb 4K image quality. Lower data rates increase recording times while reducing storage requirements. Uncompromised picture quality is ensured by 10-bit quantization and 4:2:2 color sampling, making the PXW-Z750 ideal for HDR productions. A wide range of 4K codecs provide the flexibility to select the recording format that is best suited for the requirements of the production you are working on.

Superb slow motion

Ideal for sports and nature programs, the PXW-Z750 can acquire footage in 60fps in QFHD and 120fps in Full HD for beautifully smooth, finely detailed slow-motion playback.

Cache recording

Never miss a shot with advanced cache recording in both 4K and Full HD modes.

Next generation wireless ENG workflow

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Built-in wireless connectivity enables advanced workflow production features including live-streaming, recording hi-res and proxy files, FTP transfer, and even remote control from a smartphone or tablet* via Wi-Fi. Wireless workflow is made even more efficient using XDCAM air, Sony's professional cloud service including dual-link cellular operation.**

*Requires Content Browser Mobile and device running iOS 9.0–10.3 or Android 4.4–7.1
**Requires XDCAM air subscription and CBK-DL1 USB Extension Adaptor.

Seamless wireless audio workflow

PXW-Z750 is compatible with Sony's DWX series of digital wireless microphone systems offering ENG and documentary teams the benefits of an all-digital audio workflow, including robust end-to-end encryption for truly secure operation.*

- Wireless transmitter parameters can be controlled directly from the PZW-Z750 using the Cross Remote function.
- Transmitter power save mode synchronizes with the camera's on/off control, and is controllable by assignable buttons to save transmitter battery life.
- Audio and video are precisely synchronized, ensuring no delays or lip-sync problems.
- Power save status and receiver RF levels are displayed in the viewfinder.

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*For details, please consult your local sales company.

Lightning-fast transfers with latest generation media

The PXW-Z750 supports latest-generation SxS Pro X media, enabling very high speed file transfers at up to 10 Gbps (1,250 MB/s)* with the SBAC-T40 Thunderbolt™ 3 SxS card reader/writer. Transfers are approximately three times faster than previous generation media/reader combinations, dramatically accelerating workflows for any application and bringing down production costs.

*Based on Sony internal testing. Transfer speeds vary and are dependent on host devices, the OS version or usage conditions.

Specifications

General	
Mass	Approx. 3.8 kg (body only without lens, VF, Mic)
Dimensions (W x H x D)	Approx. 5.91 × 10.59 × 13.07 inch (excluding protrusions, body only)
Power Requirements	DC 12 V (11 V to 17.0 V)
Power Consumption	Approx. 41 W (while XAVC recording, color LCD on)
Operating Temperature	32 to 104°F
Storage Temperature	-4 to +140°F

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Continuous Operating Time	Approx. 110 min with BP-GL95B
Lens Mount	Sony 2/3 type bayonet mount

Camera Section

Imager	2/3-type 3-chip 4K CMOS
Effective Resolution	3840 (H) x 2160 (V)
Built-in Optical Filters	1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
Shutter Speed (Time)	59.94i/p, 50i/p: 1/60 sec to 1/2,000 sec + ECS 29.97p: 1/40 sec to 1/2,000 sec + ECS 25p: 1/33 sec to 1/2,000 sec + ECS 23.94p: 1/32 sec to 1/2,000 sec + ECS
Shutter Speed (Slow Shutter(SLS))	2, 3, 4, 5, 6, 7, 8, 16-frame accumulation
Slow & Quick Motion	2160p: Frame rate selectable from 1fps to 60fps 1080p: Frame rate selectable from 1fps to 60fps /72/75/80/90/96/100/110/120 fps
Sensitivity (2000 lx, 89.9% reflectance)	F12 (1080/59.94i), F13 (1080/50i) *High Sense Mode ON (Typical) F12 (2160/59.94p), F13

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	(2160/50p) *High Sense Mode ON (Typical)
Minimum Illumination	0.019 lx (F1.4, +42 dB, 16-frame accumulation)
White Balance	Preset (3200K), Memory A, Memory B/ATW
Gain Selection	-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42 dB
S/N Ratio	62 dB (Noise Suppression ON, 1920 x 1080 59.94i) (Typical)
Horizontal Resolution	2,000 TV lines or higher (3840 x 2160p mode) 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 x 1080: 59.94p, 50p, 59.94i, 50i, 29.97p, 25p, 23.98p
XAVC Long (XAVC-L422 QFHD 200)	3840 x 2160: 59.94p, 50p
XAVC Long (XAVC-L420 QFHD 150)	3840 x 2160: 59.94p, 50p
XAVC Long (XAVC-L422 HD 50)	1920 x 1080: 59.94p, 50p, 59.94i, 50i, 29.97p, 25p, 23.98p

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MPEG HD422	1920 x 1080: 59.94i, 50i, 29.97p, 25p, 23.98p 1280 x 720: 59.94p, 50p, 29.97p, 25p, 23.98p
MPEG HD420	1920 x 1080: 59.94i, 50i, 29.97p, 25p, 23.98p 1440 x 1080: 59.94i, 50i 1280 x 720: 59.94p, 50p

Recording Format (Audio)

XAVC Intra (XAVC-I QFHD 300)	LPCM 24 bits, 48 kHz, 4 channels
XAVC Intra (XAVC-I HD 100)	LPCM 24 bits, 48 kHz, 4 channels
XAVC Long (XAVC-L422 QFHD 200)	LPCM 24 bits, 48 kHz, 4 channels
XAVC Long (XAVC-L420 QFHD 150)	LPCM 24 bits, 48 kHz, 4 channels
XAVC Long (XAVC-L420 HD 50)	LPCM 24 bits, 48 kHz, 4 channels
MPEG HD422	LPCM 24 bits, 48 kHz, 4 channels
MPEG HD420	LPCM 24 bits, 48 kHz, 4 channels

Recording Format (Proxy Video)

	AVC/H.264 Main Profile 4:2:0

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XAVC Proxy	Long GOP, VBR 1920 × 1080, 6 MBps, 9 MBps (Target Rate) 1280 × 720, 6 MBps , 9 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/AES/EBU/Mic +48 V selectable LINE: +4, 0, -3 dBu AES/EBU: AES3 compliant MIC: -70 dBu to -30 dBu
	XLR-type 5-pin, female: -70

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Mic In	dBu to -30 dBu
WRR (Wireless Microphone Receiver)	D-sub 15-pin Analog CH1: -40 dBu Digital CH1/CH2: -40 dBFS
SDI Output	BNC ×2 (Both SDI are selectable from 12G, 3G and 1.5G) 4ch Embedded Audio
Sync Output	BNC, SD analog composite/HD-Y selectable
Audio Output	XLR-type 5-pin, female: +4/0/-3 dBu
Timecode Output	BNC, 1.0 Vp-p, 50 Ω
Earphone Output	Stereo mini jack (×1) -12 dBu (reference level output, maximum monitor volume, 16 Ω load)
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

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Camera Adapter	D-sub, 50-pin (x1) (only for Japan model)
Ethernet	RJ-45 (x1), 100BASE-TX: IEEE 802.3u, 10BASE-T: IEEE 802.3
USB	4-pin (A type) x2, 4-pin (B type)
HDMI	A type, 19-pin (×1) output up to 3840 × 2160
Viewfinder	20-pin IF for HDVF Series Viewfinder

Audio Performance

Frequency Response	20 Hz to 20 kHz (±3 dB or less)
Dynamic Range	90 dB (typical)
Distortion	0.08% or lower (-40 dBu input level)
Headroom	20 dB (factory default) (20, 18, 16, 12 dB), EBUL

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) x

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	540 (V) for video display, audio level, TC, battery, and media remaining capacity

Other Functions

Built-in Speaker	(x1)
Media SxS Card Slots	Number of slots: 2
Media SD Card Slots	Proxy (1), Utility (1)
HDR	(OETF): HLG/S-Log3, (Color Space): BT.2020/S-Gamut3/S-Gamut3.cine
GPS	Yes
Built-in Network Module	Yes
NFC	Yes

Supported Media

High Resolution Video/Audio	SxS card SDXC card (SD Card Adapter, MEAD-SD02)
Proxy Video/Audio and utility	SDXC/SDHC

Supplied Accessories

	Shoulder Belt (1)

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Supplied Accessories	Cold Shoe Kit (1) Lens Mount Cap (1) USB wireless LAN module (IFU-WLM3) (1) Protective Cap (1) Operating Instructions (CD-ROM) (1) Before using this unit (1)

Related products



BVM-E171

16.5-inch TRIMASTER EL™ OLED critical reference monitor with wide viewing angle supports 4K production



BVM-HX310 v1.1

TRIMASTER HX™ Professional Master Monitor



BVM-HX310

31-inch (diag.) 4K TRIMASTER HX™ Professional Master Monitor



LMD-A170

17-inch lightweight Full HD high grade LCD monitor for studio and field use



LMD-A220

22-inch lightweight Full HD high grade LCD monitor for studio and field use



LMD-A240

24-inch lightweight Full HD high grade LCD monitor for studio and field use

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Gallery













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