

PMW-1000

XDCAM® HD422 Recording Deck

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Sony proudly introduces the PMW-1000 studio recorder with two SxS® card slots providing a wide range of AV and IT interfaces including HD-SDI, SD-SDI, HDMI®, and composite outputs. The PMW-1000 provides outstanding MPEG HD422 picture quality as well as an uncompromising eight-channel (HD-SDI), 24-bit audio recording capability, all packed in a compact half-rack-size deck. In addition to MPEG HD422, XAVC™ Intra HD Record/Playback is supported¹, as well as MPEG IMX™ and DVCAM® formats in the SD domain. What's more, the RS-422 interface and Gigabit Ethernet enables the PMW-1000 to be used as a player deck for linear editing and a feeder deck for non-linear editing.

¹ 4K is not supported.



Features

Multi-format Capability in HD and SD

The PMW-1000 comes standard with a highly flexible, multi-format capability. Users can select recording and playback formats from HD (XAVC, MPEG HD422, and MPEG HD420) and SD (MPEG IMX50/40/30² and DVCAM) in a variety of frame frequencies. By supporting XAVC Intra 100-Mbps, XDCAM HD workflow can be enhanced with PMW-F5/F55 camera operation. In addition, with its up- and down-conversion function, the PMW-1000 is ideal for integration into an existing SD production system and also for future HD operation.

² Playback only.

Similar Operability to Tape-based Devices

The PMW-1000 is equipped with a jog/shuttle dial and RS-422 control, providing VTR-like operation (Jog: -1 to +1 times normal speed; Variable: -2 to +2 times normal speed; Shuttle: -20 to +20 times normal speed). This gives the PMW-1000 a very familiar feel, and enables easy migration from tape-based operation.



Variety of Interfaces

The PMW-1000 is a perfect addition to an existing NLE system, thanks to its versatile input and output interfaces:

- RS-422 9-pin remote control interface to be used as a feeder for linear editing
- Gigabit Ethernet for high-speed file transfer for network operation
- HDMI monitoring output for more flexible operation on any occasion



External USB Storage

The PMW-1000 is equipped with a USB interface for connection to an external USB HDD. This enables users to copy clips directly to a USB HDD without employing any other devices; helping to reduce storage costs, and means that users can make copies and backups simply and quickly.



Three-way Power Source Selection

The PMW-1000 can operate on AC, DC, and battery power, making it highly versatile and suitable for both in-house and field operations (for example, in a studio or OB vehicle).



Specifications

	PMW-1000
Power Requirements	AC 100 V to 240 V, 50/60 Hz, DC 12 V
Power Consumption	AC: 80 W, DC: 12V 5.7A
Operating Temperature	42°F to 104°F (5°C to 40°C)
Storage Temperature	-4°F to +140°F (-20°C to +60°C)
Humidity	20% to 90% (relative humidity)
Weight	11 lb 2 oz (5.0 kg)
Dimensions (W x H x D) ¹	8 3/8 x 5 1/4 x 16 1/2 inches (excluding protrusions) 210 x 132 x 418 mm (excluding protrusions)
Recording/Playback Format (Video)	MPEG HD422 (CBR, 50 Mbps) MPEG HD: - HQ mode (VBR, maximum bit rate: 35 Mbps) - SP mode (CBR, 25 Mbps) ^{*2} - LP mode (VBR, maximum bit rate: 18 Mbps) ^{*2} MPEG IMX (CBR, 50/40/30 Mbps) ^{*2} DVCAM (CBR, 25 Mbps) XAVC (CBR, 100 Mbps)
Recording/Playback Format (Audio)	MPEG HD422: 8 ch/24 bits/48 kHz MPEG HD: 4 ch/16 bits/48 kHz MPEG IMX: 8 ch/16 bits/48 kHz or 4 ch/24 bits/48 kHz ^{*2} DVCAM: 4 ch/16 bits/48 kHz XAVC: 8 ch/24 bits/48 kHz
Recording/Playback Format (Proxy Video)	MPEG-4
Recording/Playback Format (Proxy Audio)	A-law (8 ch/8 bits/8 kHz)
Recording/Playback Time (XAVC)	exFAT/MXF (100 Mbps CBR): Approx. 120 min (128GB), Approx. 60 min (64GB), Approx. 30 min (32GB), Approx. 15 min (16GB)
Recording/Playback Time (MPEG HD422)	UDF/MXF (50 Mbps CBR): Approx. 240 min (128GB), Approx. 120 min (64GB), Approx. 60 min (32GB), Approx. 30 min (16GB)
Recording/Playback Time (MPEG HD)	UDF/MXF (35Mbps VBR): Approx. 360 min (128GB), Approx. 180 min (64GB), Approx. 90 min (32GB), Approx. 45 min (16GB) FAT/MP4 (35Mbps VBR) ^{*2} : Approx. 400 min (128GB), Approx. 200 min (64GB), Approx. 100 min (32GB), Approx. 50 min (16GB) FAT/MP4 (25Mbps CBR) ^{*2} : Approx. 560 min (128GB), Approx. 280 min (64GB), Approx. 140 min (32GB), Approx. 70 min (16GB)
Playback Time (MPEG IMX)	UDF/MXF (50Mbps Intra) ^{*2} : Approx. 240 min (128GB), Approx. 120 min (64GB), Approx. 60 min (32GB), Approx. 30 min (16GB)
Recording/Playback Time (DVCAM)	UDF/MXF (25Mbps CBR): Approx. 440 min (128GB), Approx. 220 min (64GB), Approx. 110 min (32GB), Approx. 55 min (16GB) FAT/AVI (25Mbps CBR) ^{*2} : Approx. 520 min (128GB), Approx. 260 min (64GB), Approx. 130 min (32GB), Approx. 65 min (16GB)
Search Speed Range (Shuttle Mode)	-20 times to +20 times normal speed (max +/-50 by Remote)
Search Speed Range (Variable Mode)	-2 times to +2 times normal speed
Search Speed Range (Jog Mode)	-1 time to +1 time normal speed (-2 to +2 by Remote)
Search Speed Range (Fast Forward/Reverse)	-35/+35 times normal speed (max +/-50 by Remote)
Media Type	SxS Memory Card Drive, ExpressCard/34 (x2)
Reference Input	BNC (x2) (including loop-through), HD Tri-level sync (0.6 Vp-p/75 Ω/negative) or SD blackburst/ composite sync (0.286 Vp-p/75 Ω/negative)

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HD-SDI Input	BNC (x1) (HD/SD switchable) HD-SDI: SMPTE 292M (w/embedded audio) SD-SDI: SMPTE 259M (w/embedded audio)
Analog Audio Input	XLR-type 3-pin (female) (x2) (channel selectable), +4/0/-3/-6 dBu (selectable), 10 kΩ, balanced
Digital Audio Input (AES/EBU)	
Timecode Input	BNC (x1), SMPTE timecode, 0.5 Vp-p to 18 Vp-p/3.3 kΩ/unbalanced
Analog Composite Output	BNC (x2), 1: 1.0 Vp-p/75 Ω/negative, SMPTE 170M 2: 1.0 Vp-p/75 Ω/negative, SMPTE 170M, character On/Off
HD-SDI Output	BNC (x2), 1: SMPTE 292M (w/embedded audio) 2: SMPTE 292M (w/embedded audio), character on/off
SD-SDI Output	BNC (x2), 1: SMPTE 259M (w/embedded audio) 2: SMPTE 259M (w/embedded audio), character on/off
HDMI Monitor	TYPE A 19-pin (x1) Video : 1080i, 720P, 480i, 480P, 576i, 576P Audio : 2 ch/16 bits/48 kHz
Analog Audio Output	XLR-type 3-pin (male) (x2) (channel selectable), +4/0/-3/-6 dBu (selectable), 600 Ω, Lo-z, balanced XLR-type 3-pin (male) (x2), +4 dBu, 600 Ω, Lo-z, balanced
Analog Audio Monitor	
Digital Audio Output (AES/EBU)	
Headphone Output	JM-60 Stereo phone jack (x1), -13 dBu, 8 Ω, unbalanced
Timecode Output	BNC (x1), SMPTE timecode, 1.0 Vp-p/75 Ω/unbalanced
Video Control	
Ethernet	RJ-45 (x1) 1000BASE-T: IEEE 802.3ab 1000BASE-TX: IEEE 802.3u 10BASE-T: IEEE 802.3
Remote Input (9-pin)	D-sub 9-pin (female) (x1), RS-422A
USB	Front: (x1) USB 3.0 Rear: (x2) for Maintenance, USB Keyboard, USB Mouse
Maintenance	
DC Input (12 V)	XLR-type 4-pin (male) (x1)
DC Output (12 V)	4-pin (female) (x1), DC 12 V, 7.5 W
AC Input	AC Input (x1), 100 V to 240 V, 50/60Hz
Sampling Frequency	Y: 74.25 MHz, Pb/Pr: 37.125MHz
Quantization	HD422, MPEG HD, IMX, DVCAM: 8 bits/sample XAVC: 10 bits/sample
Error Correction	Reed Solomon Code
Video Level	∞ to +3 dB
Chroma Level	∞ to +3 dB
Set Up/Black Level	-30 IRE to +30 IRE/210 mV to +210 mV
Chroma Phase	-30° to +30°
System Sync Phase	-15 μs to +15 μs
System SC Phase	0 ns to 400 ns
Sampling Frequency	48 kHz
Quantization	24 bits
Frequency Response	20 Hz to 20 kHz +0.5/-1.0 dB (0 dB at 1 kHz)
Dynamic Range	More than 90 dB
Distortion	Less than 0.05% (at 1 kHz)
Headroom	20/18/16/12/9 dB (selectable)
Built-in Display	4.3-inch ³ type color LCD monitor
Built-in Speaker	Monaural (x1)
Supplied Accessories	Operation guide (1)

¹ The values for dimensions are approximate.

² Playback only.

³ Viewable area measured diagonally.

Optional Accessories



SBP-64A/32
SxS Pro™ Memory Card



SBS-64G1A/32G1A
SxS-1 Memory Card



MEAD-MS01
Memory Stick® Adaptor



MEAD-SD01
SD Card Adaptor



QDA-EX1
XQD Adaptor



BP-GL95A/GL65A
Lithium-ion Battery Pack



BP-L80S/L60S/L551
Lithium-ion Battery Pack



BKP-L551
Lithium-ion Battery Adaptor



BC-L70
Lithium-ion Battery Charger



RM-280
Editing Controller (Ver 2.03 or later)