SONY

PMW-RX50
XDCAM XAVC Portable Recorder

The XAVC™ codec becomes even more attractive with the launch of Sony's PMW-RX50 XDCAM™ portable recorder. The compact deck features a 3.5-inch LCD display, two SxS™ card slots, and XLR audio inputs. With all the versatile features of the PMW-50, the PMW-RX50 is ideal for content viewing and copying in the field, SDI feed recording, and interfacing with NLE systems.

Because the recorder uses the same battery and AC adaptors as XDCAM hand-held camcorders, you can take it into the field at a moment's notice. There's no need to prepare a dedicated power supply. In addition to the XAVC I-frame and Long GOP codecs, the PMW-RX50 features MPEG HD422, MPEG HD420, and even standard definition to satisfy a broad range of needs. And by copying from SxS memory cards onto an external USB hard disk drive, the recorder makes data wrangling easy.

Features

The Perfect Companion in the Field

The PMW-RX50 accepts HD or SD signals via SDI, and records onto SxS cards. When video is coming in, the recorder can also output signals via the i.LINK™ interface or 3G SDI (60p/50p) for ingest into a nonlinear editor. The deck can even convert i.LINK interface inputs to SDI, perfect for feeding to other systems immediately after editing.

For added insurance, you can record material to two SxS cards at once, in Slots A and B*. For a quick, on-site review of recorded clips, you can output to a monitor via HD/SD-SDI, HDMI, or composite video. Don't have a monitor? The 3.5-inch color LCD display with a built-in speaker shows you what you've got.

The PMW-RX50 has XLR 3-pin audio inputs which you can detach when you don't need them. The recorder works with the same AC adaptor and BP-U Series battery as used with XDCAM hand-held camcorders. So it's available for immediate use in the field.

* Requires firmware upgrade (planned for Spring 2015).

With Audio Input Box

Without Audio Input Box

Convenient Data Wrangling

The PMW-RX50 makes it easy copy and back up your assets, using the two SxS slots or connecting an optional external USB hard disk drive. It's quick and simple to copy clips directly to hard disk. No PC required!

Multi-format Support in Both HD and SD

Whereas conventional decks support a single recording format, the PMW-RX50 supports many. To start with, choose from Sony's gorgeous 10-bit XAVC I-frame and Long-GOP codecs in the HD domain at up to 223 Mbps. Select from MPEG HD422 50 Mbps and MPEG HD420 35 Mbps/25 Mbps as well as standard-definition MPEG IMX50 and DVCAM™ at a choice of frame rates. In addition, the PMW-RX50 can down-convert HD content during playback, outputting SD signals. It therefore serves any production environment, be it SD or HD.

Clever Conveniences

To save time, you can choose to play back only those clips marked as "OK." Or you can play back selected portions of clips, between Shotmark1 and Shotmark2. The Continuous Recording function enables you to create a single file, even recording multiple clips for easier upload when editing. Loop Recording automatically switches to the next slot when the media in the active slot becomes full, and then continues recording until you press Stop. Whether you need field recording, field review, data wrangling, or NLE ingest, the PMW-RX50 XDCAM XAVC portable recorder is an outstanding choice.

XAVC · XDCAM HD · MPEG HD422 · MPEG HD · MPEG IMX · DVCAM · SxS

Specifications

	PMW-RX50
General	
Power Requirements	DC 12 V
Power Consumption	Approx. 13 W (while recording, LCD monitor On)
	Approx. 22.5 W(while recording, LCD monitor On, with CBK-WA100)
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to +140°F (-20°C to +60°C)
Weight	Approx. 1 kg (without Audio Input Adapter)
	Approx. 1.2 kg (with Audio Input Adapter)
Dimensions (W x H x D) *1	124 x 86 x 237 mm (without protrusions & Audio Input Adapter)
	124 x 115 x 237 mm (with Audio Input Adapter & without protrusions)
Recording/Playback Format (Video)	[exFAT]
	- XAVC-I mode: CBG, 223 Mbps max, MPEG-4 AVC/H.264
	- XAVC-L50 mode: VBR, 50 Mbps max, MPEG-4 AVC/H.264
	- XAVC-L35 mode: VBR, 35 Mbps max, MPEG-4 AVC/H.264
	- XAVC-L25 mode: VBR, 25 Mbps max, MPEG-4 AVC/H.264
	- HD422 mode: CBR, 50 Mbps, MPEG-2 422P@HL
	- HD420 mode: VBR, 35 Mbps, MPEG-2 MP@HL
	- DVCAM mode: DVCAM
	- IMX 50 mode: CBR, 50 Mbps, MPEG-2 422P@ML Intra
	[UDF]
	- HD422 mode: CBR, 50 Mbps, MPEG-2 422P@HL
	- HD420 mode: VBR, 35 Mbps, MPEG-2 MP@HL
	- DVCAM mode: DVCAM
	- IMX 50 mode: CBR, 50 Mbps, MPEG-2 422P@ML Intra
	[FAT]
	- HQ mode: VBR, 35 Mbps, MPEG-2 MP@HL
	- SP mode: CBR, 25 Mbps, MPEG-2 MP@H14
	- DVCAM mode: DVCAM
Recording/Playback Format (Audio)	[exFAT]
	- XAVC-I mode: LPCM 24bits, 48kHz, 4 channel
	- XAVC-L50 mode: LPCM 24bits, 48kHz, 4 channel
	- XAVC-L35 mode: LPCM 24bits, 48kHz, 4 channel
	- XAVC-L25 mode: LPCM 24bits, 48kHz, 4 channel
	- HD422 mode: LPCM 24 bits, 48 kHz, 4 channels
	- IMX 50 mode: LPCM 24/16 bits, 48 kHz, 4 channels
	- Other mode: LPCM 16 bits, 48 kHz, 4 channels
	[UDF]
	- HD422 mode: LPCM 24 bits, 48 kHz, 4 channels
	- IMX 50 mode: LPCM 24/16 bits, 48 kHz, 4 channels
	- Other mode: LPCM 16 bits, 48 kHz, 4 channels
	[FAT]
	- HD mode: LPCM 16 bits, 48 kHz, 4 channels
	- SD mode: LPCM 16 bits, 48 kHz, 2 channels
Recording/Playback Time (XAVC)	[XAVC-I]
	Approx. 60 min with SBP-128B(128 GB) memory card
	Approx. 30 min with SBP-64AB(64 GB)/ SBS-64G1A(64GB) memory card
	[XAVC-L50]
	Approx. 240 min with SBP-128B(128 GB) memory card
	Approx. 120 min with SBP-64AB(64 GB)/ SBS-64G1A(64GB) memory card
	[XAVC-L35]
	Approx. 340 min with SBP-128B(128 GB) memory card
	Approx. 170 min with SBP-64AB(64 GB)/ SBS-64G1A(64GB) memory card
	[XAVC-L25]
	Approx. 440 min with SBP-128B(128 GB) memory card
	Approx. 220 min with SBP-64AB(64 GB)/ SBS-64G1A(64GB) memory card
Recording/Playback Time (MPEG HD422)	[UDF]
	HD 422 mode:
	Approx. 120 min with SBP-64A/ SBS-64G1A (64 GB) memory card
	Approx. 60 min with SBP-32/ SBS-32G1A (32 GB) memory card

	PMW-RX50
Recording/Playback Time (MPEG HD)	[UDF]
	HD 420 mode:
	Approx. 180 min with SBP-64A/ SBS-64G1A (64 GB) memory card
	Approx. 90 min with SBP-32/ SBS-32G1A (32 GB) memory card
	[FAT]
	HQ mode:
	Approx. 200 min with SBP-64A/ SBS-64G1A (64 GB) memory card
	Approx. 100 min with SBP-32/ SBS-32G1A (32 GB) memory card
	SP Mode:
	Approx. 280 min with SBP-64A/ SBS-64G1A (64 GB) memory card
	Approx. 140 min with SBP-32/ SBS-32G1A (32 GB) memory card
Recording/Playback Time (MPEG IMX)	[UDF]
	IMX 50 mode:
	Approx. 120 min with SBP-64A/ SBS-64G1A (64 GB) memory card
	Approx. 60 min with SBP-32/ SBS-32G1A (32 GB) memory card
Recording/Playback Time (DVCAM)	[UDF]
	DVCAM mode:
	Approx. 220 min with SBP-64A/ SBS-64G1A (64 GB) memory card
	Approx. 110 min with SBP-32/ SBS-32G1A (32 GB) memory card
	[FAT]
	DVCAM mode:
	Approx. 260 min with SBP-64A/ SBS-64G1A (64 GB) memory card
	Approx. 130 min with SBP-32/ SBS-32G1A (32 GB) memory card
Battery Operating Time	Approx. 110 min with BP-U30 battery (while recording, LCD monitor On)
	Approx. 220 min with BP-U60 battery (while recording, LCD monitor On)
	Approx. 330 min with BP-U90 battery (while recording, LCD monitor On)
Media Drive	
Media Type	ExpressCard/34 slot (x2)
Input/Output	
3G-SDI Input	BNC (x1), 3G/HD/SD selectable
	SMPTE 424M/292M/259M standards
HD-SDI Input	BNC (x1), 3G/HD/SD selectable
	SMPTE 424M/292M/259M standards
SD-SDI Input	BNC (x1), 3G/HD/SD selectable
	SMPTE 424M/292M/259M standards
Analog Composite Output	BNC (x1)
	NTSC, PAL or HD-Y
3G-SDI Output	BNC (x2), 3G/HD/SD selectable
	SMPTE 424M/292M/259M standards
HD-SDI Output	BNC (x2), 3G/HD/SD selectable
	SMPTE 424M/292M/259M standards
SD-SDI Output	BNC (x2), 3G/HD/SD selectable
	SMPTE 424M/292M/259M standards
HDMI Output	Type A 19-pin (x1), output
Analog Audio Input	XLR 3pin (CH-1, CH-2)
	LINE: +4dBu (Reference Level)
Analog Audio Output	Phono jack (CH-1, CH-2)
	-10dBu (Reference Level), 47kΩ
Headphone Output	Stereo mini jack (x1)
i.LINK	IEEE 1394, 4-pin (x1)
	HDV stream input/output, DVCAM stream output, S400
USB	USB Type-A (x1)
	USB Type-miniB (x1)
DC Input (12 V)	DC jack (12 V)
DC Output	UnReg (4pin) for CBK-WA100
Other Equipment	
Built-in Display	3.5-inch type color LCD monitor: 960 (H) x 3 (RGB) x 540 (V), 16:9
Supplied Accessories	
	USB cable (1), Infrared Remote Commander (1), BC-U1 battery charger (1), Lithium battery (CR2025 for the IR Remote Commander) (1), Pre-installed to the IR Remote Commander, Leaflet: Before Using this Unit (1), Shoulder strap (1), Side spacer (1), CD-ROM: - Operating instructions in PDF (1)

*1 The values for dimensions are approximate.

Optional Accessories

SBP-128B/SBP-64G1A
SxS Memory Card Series

SD Card Adaptor

QDA-EX1
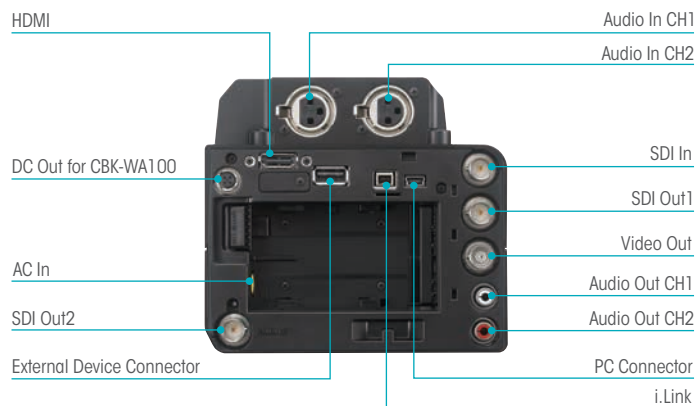XQD Adaptor

Lithium-ion Battery Pack

Battery Charger (1-slot/2-slot)

CBK-WA100
Wireless Adapter

Interfaces

HDMI
Audio In CH1
Audio In CH2
DC Out for CBK-WA100
SDI In
SDI Out1
AC In
Video Out
Audio Out CH1
SDI Out2
Audio Out CH2
External Device Connector
PC Connector
i.Link

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