

SONY

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PDW-75MD

XDCAM HD Medical Recording Deck



With its outstanding image reproduction and a number of advanced features (such as instant random access to recordings, easy editing, quick copying of material to IT-based devices, and network capability), the PDW-75MD is an ideal medical video recorder that improves both image quality and operational efficiency.

Features

Selectable HD recording bit-rate depends on your usage

Dual-layer disc drive for long-time operation recording

- You can select desired bit rates of either 35/25/18Mb/s depending on your requirements for picture quality and recording length.
- The 35Mb/s results in the highest-quality images over a recording time of about 150min (Dual-layer 50GB Disc) for the academic presentations or research purpose.
- The 18 Mb/s provides longer recording time of more than 265min (Dual-layer 50GB Disc).
- Current 23GB (Single-layer) disc, PFD23A can also be used.

Highly reliable and durable "Professional Disc" Media with professional quality

- Suitable for the archiving (More than 50years data preservation)

- Reduced environmental impact (against Dust / Heat / Shock etc.)
- More than 1,000 times read and write cycles
- More than 1,000,000 read cycles

Benefits

World first 1080i HD recorder with medical safety standard

- Compliance with medical safety standards: IEC 60601-1, UL 60601-1, and CAN/CSA-C22.2 No.601.1 - The only removable media recorder with medical grade
- HD image recording: high resolution of 1440 x 1080 pixels (one of the standard video formats of HD broadcasting)

The only and best matching HD recorder with Olympus HD endoscope systems

- Equipped RS-232C interface for communication with the Olympus HD processor
- Multiple HD inputs for the connection with new (HD-SDI, standard) and current (Analog HD, optional) endoscope systems
- Connection tests already done by both Olympus and Sony.

File based Editing & Network Operation

- "FAM" and "DV" NLE editing via i.LINK
- High speed file transfer via i.LINK or Ethernet (Option)
- Easy cuts-only editing by "Scene Selection" function in main unit or with supplied software PDZ-1

Technical Specifications

--General--	
Power requirements:	100 V to 240 V AC, 50/60 Hz
Power consumption:	70 W
Operating temperature:	+5 to +40 °C (+41 to +104 °F)
Storage temperature:	-20 to +60 °C (-4 to +140 °F)
Humidity:	20 to 90% (relative humidity)
Mass:	7.2 kg (15 lb 6 oz)
Dimensions (W x H x D):	307 x 100 x 411 mm (12 1/8 x 4 x 16 1/2 inches)
Recording format	Video MPEG HD (MPEG-2 MP@HL): HQ mode (VBR, maximum bit rate: 35 Mb/s), SP mode (CBR, 25 Mb/s), LP mode (VBR, maximum bit rate: 18 Mb/s) Proxy Video MPEG-4 Audio 4 ch or 2 ch, 16 bits/48 kHz Proxy Audio A-law (4 ch / 2 ch, 8 bit, 8 kHz)
Playback format	Video MPEG HD (MPEG-2 MP@HL): HQ mode (VBR, maximum bit rate: 35 Mb/s), SP mode (CBR, 25 Mb/s), LP mode (VBR, maximum bit rate: 18 Mb/s), DVCAM Proxy Video MPEG-4 Audio MPEG HD: 4 ch or 2 ch, 16 bits/48 kHz DVCAM: 4 ch, 16 bit/48 kHz Proxy Audio A-law (4 ch / 2 ch, 8 bit, 8 kHz)
Recording/playback time	MPEG HD (HQ mode): With PFD50DLA: audio 2ch : approx. 150 min. , Audio 4ch : approx. 145 min. With PFD23A: audio 2ch : approx. 69 min. , Audio 4ch : approx. 66 min. MPEG HD (SP mode): With PFD50DLA: audio 2ch : approx. 200 min. , Audio 4ch : approx. 190 min. With PFD23A: audio 2ch : approx. 92 min. , Audio 4ch : approx. 87 min. MPEG HD (LP mode): With PFD50DLA: audio 2ch : approx. 265 min. , Audio 4ch : approx. 248 min. With PFD23A: audio 2ch : approx. 122 min. , Audio 4ch : approx. 113 min. DVCAM: With PFD50DLA: approx. 185 min. With PFD23A: approx. 85 min.
Search speed (in color)	Jog mode: ±1 time normal speed; Variable mode: -1 to +2 times normal

	speed; Shuttle mode: ±20 times normal speed
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--Signal inputs--	
Analog reference input:	BNCx2(including loop through), HD Tri-level sync or SD composite sync (0.3 Vp-p/75 Ohms/sync negative)
Analog composite input (option: PDBK-104):	BNCx1, RS-170M
Analog HD component input (option: PDBK-103):	BNC x4, Y/Pb/Pr/(Sync) or G/B/R/(Sync)
HD-SDI input:	BNCx1, SMPTE 292M
SD-SDI input (option: PDBK-104):	BNCx1, SMPTE 259M
Analog audio input:	XLR x2 (channel selectable), +4/0/-3/-6 dBu (selectable), 10k Ohm load, balanced
Digital audio input:	AES/EBU, BNCx2, 4 channels
Timecode input:	BNCx1, SMPTE Time code

--Signal outputs--	
Analog composite video output:	BNCx1, (1.0 Vp-p/75 Ohms/sync negative) , RCA-pin x1,(1.0 Vp-p/75 Ohms/sync negative)
Monitor output:	D-sub 15-pin (G/B/R or Y/Pb/Pr)
Built-in display:	3.5-inch type color LCD monitor
HD-SDI output:	BNCx2, SMPTE 292M
SD-SDI output:	BNCx1, SMPTE 259M
Analog audio output:	XLRx2 (channel selectable), +4/0/-3/-6 dBu (selectable), 600 Ohms load, balanced
Audio monitor output:	RCAX2 (L, R, Mix), -6dBu, 47 kOhms, unbalanced
Headphone output:	Stereo phone jack, -14dBu, 8 Ohms, unbalanced
Digital audio output:	AES/EBU, BNCx2, 4 channels
Timecode output:	BNCx1, SMPTE Timecode

--Other inputs/ outputs--	
i.LINK:	IEEE1394, 6-pin x1, AV/C (DV stream output) or File Access Mode
i.LINK(HDV 1080i) (option: PDBK-102):	IEEE1394, 6-pin x1, HDV 1080i IN/OUT
Ethernet (option: PDBK-101):	1000Base-T (RJ-45)
RS-422A:	D-sub 9-pin x 1
RS-232C:	D-sub 9-pin x 1

CONTROL:	Mini-jack 4-pin
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--Video performance--	
Sampling frequency:	Y: 74.25MHz, R-Y/B-Y: 37.125MHz
Quantization:	8 bits/sample
Analog composite output(DV):	Frequency response : 0 to 4.2 MHz +1.0/-3.0 dB (525), 0 to 4.8 MHz +1.0/-3.0 dB (625), S/N(Y) : 53 dB or more , Y/C delay (K2T) : ±25 ns or less , K-factor(K2T) : 2% or less

--Audio performance--	
Sampling frequency:	48 kHz
Quantization:	16 bits/2 channels or 16 bits / 4 channels
Frequency response:	20 Hz to 20 kHz +0.5/-1.0 dB(0 dB at 1 kHz)
Dynamic range:	90 dB or more
Distortion:	0.05% or less (at 1 kHz)
Headroom:	20/18/16/12 dB (selectable)

Accessories

Accessories



PDBK-101

Network Board



PDBK-103

Analogue HD Input Board



PDBK-102

TS Input / Output Board



PDBK-104

SD Input Up Converter Board