■ Key panel illumination light for use in low-light environments

■ Video process control via front panel operation
■ Phantom powered stereo microphone input
■ Audio level control
■ Audio channel mix monitor output
■ Direct FTP function: allows file transfer via Ethernet without a PC
■ EDL-based voice over: video over and audio over*5 (option: PDBZ-UPG03 or PDBK-MK1)

■ EDL-based audio split and audio level editing
■ Clip Continuous REC function
■ Easy metadata input via USB keyboard*6 or software keyboard
■ Composite input
■ HDMI output for viewing
■ IT interfaces for file transfer
  - i.LINK File Access Mode (FAM)
  - Gigabit Ethernet (1000BASE-T)
■ Input and output of an HDV-compatible stream in 1080i/720p format (option: PDBK-202)
■ DVB-ASI output (option: PDBK-202)

■ SxS Memory Card Adaptor (option: PDBK-MK1)
  - Two slots for SxS™ PRO™ Memory Card
  - Simultaneous recording on Professional Disc media and SxS Pro Memory Card
  - File copying or baseband copying*7 between Professional Disc media and SxS Pro Memory Card
  - Material copying from Professional Disc media to SxS Pro Memory Card based on a Clip List
  - EDL-based voice over: video over and audio over*5 (the PDBK-MK1 adaptor includes the function of the PDBZ-UPG03 key)

*1: Audio specifications vary according to recording mode.
*2: 18-Mbps mode is playback only.
*3: Viewable area measured diagonally.
*4: PDW-F800/700, HDW-650 Series, HDW-790, and HDW-F900R camcorders.
*5: Audio track must be less than three minutes.
*6: Some keyboards cannot be used. Please refer to the supplied manual.
*7: Capabilities depend on recording formats.

Simultaneous Recording

On-location Copy and Reuse

PDW-HR1 Rear Panel

Hand Grip

XDCAM Drive Unit

- Handles files in all formats: XDCAM HD422, XDCAM HD, and XDCAM SD
- Handles both the dual-layer disc (PFD50DLA) and single-layer disc (PFD23A)
- Supports the Hi-Speed USB (USB 2.0) interface - Compatible with most PCs
- Direct access to files on Professional Disc media from a USB-connected PC
- Data file recording via User Data folder
- Highly compact and lightweight
- Can be operated either horizontally or vertically

XDCAM Drive Unit
PDW-U1

- Handles files in all formats: XDCAM HD422, XDCAM HD, and XDCAM SD
- Handles quad-layer write-once (PFD128QLW) in addition to dual-layer disc (PFD50DLA) and single-layer disc (PFD23A)
- High capacity and a new workflow via quad-layer write-once media support
  - Over four hours of recording with HD422 50Mb/s
  - Reduce cost-per-media-capacity
  - Utilize memory media material as storage media
- High-speed read/write with the newly developed 2-channel 1-head DCHS drive
  - x2.6 (read) / x1.5 (write) faster than the PDW-U1 (single/dual-layer disc)
- Direct access to files on Professional Disc media from a USB-connected PC
- Support Super Speed USB (USB3.0) interface/Hi-Speed USB 2.0 interface
- Small and light, inheriting the concept of the PDW-U1
- Data file recording using a User Data folder
- Can be operated either horizontally or vertically

XDCAM Drive Unit
PDW-U2

PDW-U1/PDW-U2 Specifications

		PDW-U1	PDW-U2
Power requirements		DC 12 V	DC 12 V
Power consumption		10 W	19 W
Operating temperature		+41 to +104 °F (5 to 40°C)	+41 to +104 °F (5 to 40°C)
Storage temperature		-4 to +140 °F (-20 to +60°C)	-4 to +140 °F (-20 to +60°C)
Humidity		20 to 90% (relative humidity)	20 to 90% (relative humidity)
Weight		3 lb 1 oz (1.4 kg)	3 lb 12 oz (1.7 kg)
Dimensions		2 3/8 x 6 1/2 x 9 inches (59 x 164 x 226 mm)	2 3/4 x 6 1/2 x 8 5/8 inches (67.4 x 164 x 219 mm)
Recording/playback format	Video	MPEG HD422 (50 Mb/s)	
		MPEG HD (35/25/18 Mb/s)	
		MPEG IMX (50/40/30 Mb/s)	
		DVCAM (25 Mb/s)	
	Proxy Video	MPEG-4	
	Audio	MPEG HD422: 8 ch/24 bits/48kHz	
		MPEG HD: 4/2 ch/16bits/48kHz	
		MPEG IMX: 8 ch/16 bit/48 kHz, or 4 ch/24 bit/48 kHz	
		DVCAM: 4 ch/16 bit/48 kHz	
	Proxy Audio	A-law (8/4/2 ch/8 bit/8 kHz)	
Interfaces		Hi-Speed USB (USB 2.0)	Super Speed USB (USB 3.0) Hi-Speed USB (USB 2.0)
Connector		USB2.0 Standard B x 1	USB3.0 Standard B x 1
Supplied accessories		Operation manual (x1)	Operation manual (x1)
		XDCAM Drive Software (x1)	
		XDCAM Browser Software (x1)	

XDCAM Solid-state Memory Camcorder

PMW-500

The PMW-500 is the first Sony 2/3-inch Power HAD FX CCD-based shoulder-mount memory camcorder which records high-quality MPEG HD422 video as MXF files on SxS memory cards.
Designed to be compact and ergonomically well-balanced, the PMW-500, with a main body weight of only 3.4 kg (just over 7 lb) and low power consumption (only 27 W), provides a high level of mobility and comfort in a wide variety of shooting situations.

- 2/3-inch-type Full HD Power HAD FX CCD
- MPEG-2 HD 4:2:2 50 Mbps Long GOP CODEC recording
- Two SxS memory card slots
- Record up to four hours of 50 Mbps MPEG HD422 using two 64-GB SxS-1A memory cards
- UDF (Professional Disc-compatible) or FAT (XDCAM EX-compatible) file format mode shooting
- SD recording and playback with optional hardware key
- Low power consumption: 27 W (body only)
- Compact and lightweight: 3.4 kg (body only)

Professional Media Station: XDCAM Station

The XDCAM Station is a professional media station with built-in storage and interfaces for both Professional Disc media and SxS memory cards, enabling hybrid operation in an XDCAM workflow. It features better support for multi-task operation, networking, and other IT functions. Adding the XDCAM Station to an XDCAM workflow makes file-based operation much more convenient and efficient.

- Handles files in all format: XDCAM HD422, XDCAM HD/SD, and XDCAM EX
- Supports HDD or SSD drives as internal storage to offers multi-task, multi-access functions
- Offers bridge functions for Professional Discs and SxS memory cards
  - Supports the new high-speed DCHS optical drive
  - Handles the dual-layer disc (PFD50DLA), single-layer disc (PFD23A) and quad-layer disc (PFD128QLW)
  - Handles SxS Pro, SxS-1 and card adaptors for memory sticks and SDHCs
- Enhances network functionality
  - Access growing volumes of files from nonlinear editors without file transfer
  - High-speed file transfer and multiple access via the network
- Supports SD and HD as standard with up-conversion Record, and up/down/cross-conversion playback
- Supports industry-standard protocols (VDCP, ftp, CIFS)
- VTR-like user interface with front control panel

XDS-1000

XDS-PD1000

XDS-PD2000

	XDS-1000	XDS-PD1000	XDS-PD2000
Input and output	1 input channel and 1 output channel		
Disk Storage System	500 GB SATA HDD, 3 Drives, Raid-4		256 GB, SATA SSD , 2 Drives, Raid-4 (option)
Recording Time, 50 Mbps Video	30 H		16 H
Media Drive	2 SxS Memory Slots	2 SxS memory slots and a Professional Disc Drive	
Network Interface	GbE, ftp and CIFS		
Control Protocol	RS422A (Protocol: VTR, VDCP), Video Process Control, API/Ethernet control, GPI (4in/4out)		
Power requirement	AC 100 V to 240 V, 50 Hz/60 Hz, 190 W	AC 100 V to 240 V, 50 Hz/60 Hz, 250 W	
Dimension / Weight	16 3/4 x 5 1/4 x 18 1/8 inches (424 x 132 x 460 mm) / 37 lb 8 oz (17 kg)		

XDCAM Cart

- Accommodates XDCAM decks
- Ideal for multi-disc ingesting, nearline archiving and on-air playout applications
- Equipped with the VCC protocol (RS-422A or RS-232C)
- File-based content management using metadata
- Equipped with a barcode reader unit
- Optional PDJ-CS10 application software allows third-party applications to transfer files from the cart over a network, without controlling the cart's robotics or decks
- High reliability with low-cost maintenance
- Data file recording with a Professional Disc user data folder


PDJ-C1080


PDJ-A640

Robotic disc library with 640-disc capacity

PDJ-A640

Robotic disc library with 80-disc capacity

PDJ-C1080

XDCAM Cart Main Specifications

	PDJ-A640	PDJ-C1080
Max. number of discs	640	80
Total storage capacity	32 Terabytes (50-GB disc x 640) 15 Terabytes (23-GB disc x 640)	4.0 Terabytes (50-GB disc x 80) 1.8 Terabytes (23-GB disc x 80)
Max. number of decks installed	4	4
Compatible decks	PDW-F1600, PDW-HD1500, PDW-F75*1, PDW-1500 in any combination	PDW-F1600, PDW-HD1500, PDW-1500 in any combination

*1: Requires an optional PDBK-A640 XDCAM Cart Mount Kit for the PDW-F75.

XDCAM Archive

- Selectable and upgradeable hardware configuration
- Online HDD-based storage
- Offline Professional Disc media management capability for archiving using shelves
- Generates proxy data for browsing and cataloging via the network
- Web-based application allows users access to the system using web browsers with easy-to-use GUIs
- Supports XDCAM HD422, XDCAM HD, XDCAM SD, and XDCAM EX video files
- Every type of PC file can be imported and managed with metadata
- Video materials on tapes can be ingested via the HD/SD-SDI interface
- Storyboarding capability

Turnkey file-based content archiving system

XDCAM Archive

Hardware Configuration and Specifications

	3 Servers	2 Servers	1 Server*2
Streaming Proxy Capacity (TB)	18	12	6
Streaming Proxy Capacity (hours)	85,000	54,000	27,000
High-Res Capacity (TB)	18	12	6
Hi-Res Capacity (hours)	800*1	500*1	250*1
Concurrent Streaming Client	100	50	10
Concurrent XDCAM Decks/Drives	6	4	2

*1: Approximate hours, based on 50-Mbps material.

*2: Planned to be available in the summer 2011. The specification is tentative.

XDCAM Browser (Application Software)

All XDCAM HD422 products come with XDCAM Browser application software that maximizes the benefits of XDCAM file-based operations. This software not only allows users to browse video clips on MS Windows PCs and Macintosh computers, but also to register and edit metadata, and to convert file formats.

Features :

- Browse video clips recorded by XDCAM HD422, XDCAM HD/SD, and XDCAM EX
- Copy video clips from SxS memory card or Professional Disc to hard disc drives
- Register and edit metadata (Title, Creator, or Description)
- Format SxS memory cards and Professional Discs
- Import video clips to Apple Final Cut Pro editing system
- Cut editing to create Clip List (XDCAM EDL) on storyboard*1
- Convert video clips to WMV format (for viewing)*2
- Remote control for XDCAM Station (control Rec / Play, copy video clips)
- Live viewing and logging with wi-fi connection to XDCAM camcorders*3
- XMPilot (Planning Metadata) support to allow assignment-based content management*4

*1: MXF video clips only.
*2: Requires optional plug-in software from MainConcept AG (www.mainconcept.com/plugin4xdcambrowser).
*3: Support planned for later in 2011.
*4: Creating, editing, and customizing Planning Metadata support planned for later in 2011.

Codec by MAIN CONCEPT

System Requirements:

Windows OS

OS:	Microsoft Windows XP SP3 or higher (32-bit version), Microsoft Windows Vista SP1 or higher (32-bit or 64-bit version), or Microsoft Windows 7 (32-bit or 64-bit version)
CPU:	Intel Pentium 4 2.0 GHz or higher (Intel Core 2 Duo Processor 2.0 GHz or higher recommended)
Memory:	1 GB or more (2 GB or more recommended)

Mac OS:

OS:	Mac OS X 10.5.8 or higher, or Mac OS X 10.6.4 or higher
CPU:	Intel Core 2 Duo Processor 2.0 GHz or higher (Intel Core 2 Duo Processor 2.4 GHz or higher recommended)
Memory:	1 GB or more (2 GB or more recommended)

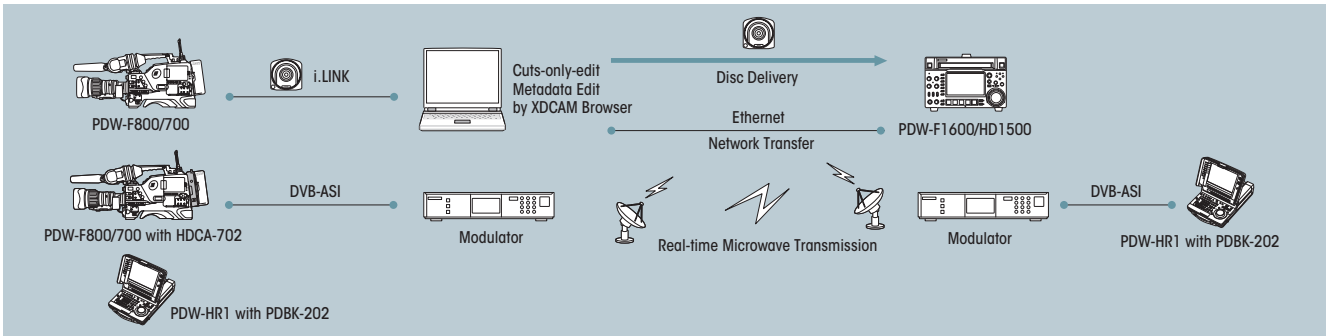
XDCAM SDK for XDCAM Application Developer

Sony supplies the XDCAM SDK for effective application software development, such as Logging, Ingest, Browsing, Editing and Playback Software.
The XDCAM SDK covers the following functions:

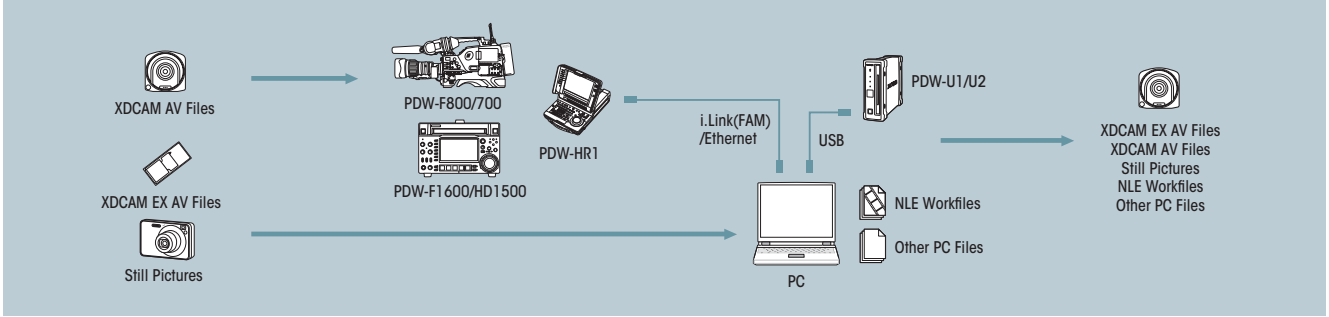
- Playback clips
- Copy clips
- Retrieve/edit metadata
- File transfer via FTP
- Control the XDCAM Station

For information about Sony's XDCAM SDK license contract, please contact:
xdcam_sdk_promo@jp.sony.com

XDCAM Transfer Operation



Data File Recording by User Data Folder



Optional Accessories

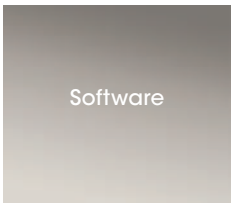
Professional Disc Media

PFD50DLA
Professional Disc

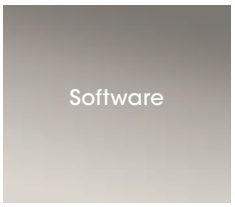
PFD23A
Professional Disc

PFD128QLW
Professional Disc

PDW-700 Camcorder Options

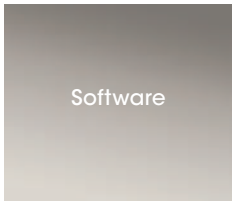


CBKZ-MD01
SD Record and Playback Key



CBKZ-FC02
24P Record and
Playback Key

PDW-F800/700 Camcorder Common Options



CBKZ-UPG01
Software Upgrade Key

HDVF-C30WR
HD Electronic Viewfinder

HDVF-C35W
3.5-inch*1 LCD Color
Viewfinder

HDVF-20A
2.0-inch*1 CRT B/W
Viewfinder

HDVF-200
2.0-inch*1 CRT B/W
Viewfinder

**BP-GL95A/GL65A/
L80S/L60S/GL95/
GL65**
Lithium-ion Battery Pack

BC-L500
Battery Charger

BC-L160
Battery Charger

BC-L70
Battery Charger

AC-DN10/DN2B
AC Adaptor
(Photo shows AC-DN10)
AC-DN10: Max. 100 W
AC-DN2B: Max. 150 W

RM-B750/B150
Remote Control Unit
(Photo shows RM-B750)

**RCP-1530/1501/
1500/1001/1000**
Remote Control Unit
(Photo shows RCP-1530)

MSU-1500/1000
Master Setup Unit
(Photo shows MSU-1500)

DWR-S01D*2
Wireless Microphone
Receiver

WRR-855S
Wireless
Microphone Receiver

ECM-680S
Shotgun-type Electret
Condenser Microphone

ECM-674/678
Shotgun-type Electret
Condenser Microphone
(Requires supplied 3-pin to
5-pin conversion cable.
Photo shows ECM-674)

HDCA-702
MPEG TS Adaptor

VCT-14
Tripod Adaptor

BKW-401
Viewfinder Rotation Bracket

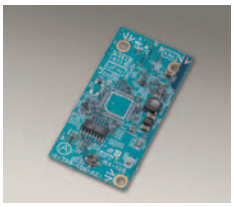
*1: Viewable area measured diagonally.
*2: The digital wireless microphone system is not available in some countries where prohibited by local radio law.

PDW-F800/700 Camcorder Common Options

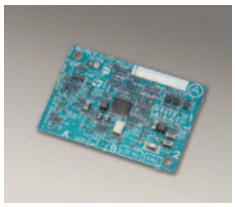
CAC-12
Mic Holder

LC-H300
Carrying Case (Hard)

LC-DS300SFT
Carrying Case (Soft)



CBK-HD01
HD/SD-SDI Input Board



CBK-SC02
Analog Composite Input Board

PDW-F1600/HD1500 Recording Deck and PDW-HR1 Field Station Common Options

CBK-WA01
Wi-Fi Adapter

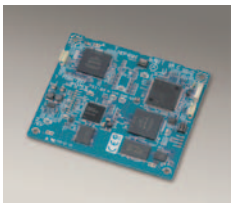
BP-GL95A/GL95/L80S
Lithium-ion Battery Pack

RM-280
Editing Controller (Ver 2.03 or later)

RCC-5G
Remote Control Cable (5 m)

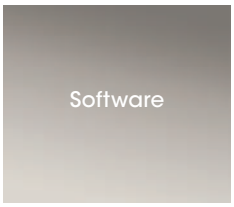
PDW-F1600/HD1500 Recording Deck Common Options

BKP-L551
Lithium-ion Battery Adaptor



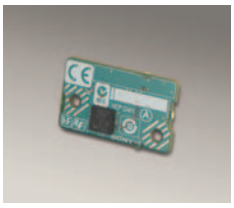
PDBK-201
MPEG TS IN/OUT Board

HKDV-900
Video Control Unit (Ver 2.00 or later)

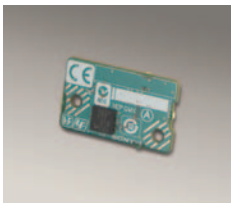


PDBZ-UPG02
Software Upgrade Key

PDW-HD1500 Recording Deck Options

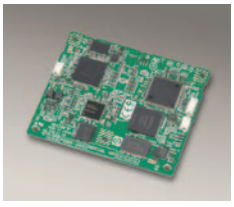


PDBK-S1500
SD Record and Playback Key



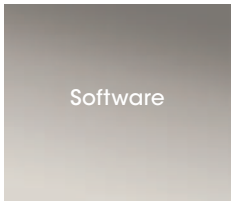
PDBK-F1500
24P Record and Playback Key

PDW-HR1 Field Station Options



PDBK-202
MPEG TS IN/OUT Board

PDBK-MK1
SxS Memory Adaptor for HR1



PDBZ-UPG03
Software Upgrade Key

XDCAM HD422 Common Options

LUMA Series
Professional LCD Monitor

Vegas® Pro 10

XDCAM HD422 Camcorder Specifications

	PDW-700	PDW-F800	PMW-500
General			
Weight	9 lb 8 oz (4.3 kg) (body), 13 lb 4 oz (6.0 kg) (w/ VF, Mic, Disc, BP-GL95 battery)		7 lb 7 oz (3.4 kg) (body only without lens)
Power requirements	DC 12 V +5.0 V/-1.0 V		
Power consumption	40 W (while recording, w/o options, color LCD On) 44 W (while recording, w/viewfinder, color LCD On, manual lens, microphone)		Approx. 31 W (with viewfinder, lens, and microphone while recording) Approx. 27 W (body while recording)
Operating temperature	32°F to 104°F (-5°C to +40°C)		
Storage temperature	-4°F to +140°F (-20°C to +60°C)		
Humidity	10% to 90% (relative humidity)		
Continuous operating time	Approx. 120 min w/BP-GL95 battery		approx. 170 min w/BP-GL95 battery
Recording format (Video)	MPEG HD422 (CBR: 50 Mbps) MPEG HD: HQ mode (VBR, maximum bit rate: 35 Mbps), SP mode (CBR, 25 Mbps), LP mode (VBR, maximum bit rate: 18 Mbps) (playback only), MPEG IMX*4 (CBR, 50/40/30 Mbps) DVCAM*4 (CBR, 25 Mbps)		MPEG-2 Long GOP HD422 mode: CBR, maximum bit rate: 50 Mbps, MPEG-2 422P@HL HQ mode: VBR, maximum bit rate: 35 Mbps, MPEG-2 MP@HL SP mode: CBR, 25 Mbps, MPEG-2 MP@H-14 SD mode*5: IMX, DVCAM
Recording format (Audio)	MPEG HD422: 4 ch/24 bits/48 kHz MPEG HD: 4 ch/16 bits/48 kHz MPEG IMX*4: 4 ch/24 bits/48 kHz or 4 ch/16 bits/48 kHz DVCAM*4: 4 ch/16 bits/48 kHz		(UDF Mode) HD 422 50 Mode LPCM 24 bits, 48 kHz 4 channels HD 420 HQ Mode LPCM 16 bits, 48 kHz 4 channels SD IMX Mode*5 LPCM 16/24 bits, 48 kHz 4 channels SD DVCAM Mode*5 LPCM 16 bits, 48 kHz 4 channels (FAT Mode) HD Mode LPCM 16 bits, 48 kHz 4 channels SD DVCAM Mode*5 LPCM 16 bits, 48 kHz 2 channels
Headroom	20/18/16/12 dB (selectable)		
Recording format (Proxy Video)	MPEG-4		
Recording format (Proxy Audio)	A-law (4 ch/8 bits/8 kHz)		
Recording/Playback time (MPEG HD422)*1	50 Mbps: Approx. 95 min (PFD50DLA), Approx. 43 min (PFD23A)		UDF mode 50Mbps : Approx. 120 min(SBS-64G1A), Approx. 60 min(SBP-32/SBS-32G1A)
Recording/Playback time (MPEG HD)*1	35 Mbps, 4-ch audio: More than 145 min (PFD50DLA), More than 65 min (PFD23A) 35 Mbps, 2-ch audio (playback only): More than 150 min (PFD50DLA), More than 68 min (PFD23A) 25 Mbps, 4-ch audio: Approx. 190 min (PFD50DLA), Approx. 85 min (PFD23A) 25 Mbps, 2-ch audio (playback only): Approx. 200 min (PFD50DLA), Approx. 90 min (PFD23A) 18 Mbps, 4-ch audio (playback only): More than 248 min (PFD50DLA), More than 112 min (PFD23A) 18 Mbps, 2-ch audio (playback only): More than 265 min (PFD50DLA), More than 122 min (PFD23A)		FAT mode 35Mbps : Approx. 200 min(SBS-64G1A), Approx. 100 min(SBP-32/SBS-32G1A) 25Mbps : Approx. 280 min(SBS-64G1A), Approx. 140 min(SBP-32/SBS-32G1A) UDF mode 35Mbps : Approx. 180 min(SBS-64G1A), Approx. 90 min(SBP-32/SBS-32G1A)
Recording/Playback time (MPEG IMX)*1	50 Mbps*4: Approx. 100 min (PFD50DLA), Approx. 45 min (PFD23A) 40 Mbps*4: Approx. 120 min (PFD50DLA), Approx. 55 min (PFD23A) 30 Mbps*4: Approx. 150 min (PFD50DLA), Approx. 68 min (PFD23A)		UDF mode 50Mbps*5 : Approx. 120 min(SBS-64G1A), Approx. 60 min(SBP-32/SBS-32G1A)
Recording/Playback time (DVCAM)*1	25 Mbps*4: Approx. 185 min (PFD50DLA), Approx. 85 min (PFD23A)		FAT mode 25Mbps*5 : Approx. 260 min(SBS-64G1A), Approx. 130 min(SBP-32/SBS-32G1A) UDF mode 35Mbps*5 : Approx. 220 min(SBS-64G1A), Approx. 110 min(SBP-32/SBS-32G1A)
Inputs/Outputs			
GENLOCK IN	BNC (x1), 1.0 Vp-p, 75Ω (Composite input (option: CBK-SC02) shares the same connector)		BNC (x1), 1.0 Vp-p, 75Ω (Composite input (option: CBK-HD02) shares the same connector)
TC IN	BNC (x1), 0.5 Vp-p to 18 Vp-p, 10 kΩ		
SDI IN	(Option: CBK-HD01) BNC (x1), (HD/SD switchable) HD-SDI: SMPTE 292M (w/embedded audio) SD-SDI: SMPTE 259M (w/embedded audio)		(Option : CBK-HD02) BNC (x1), (HD/SD switchable) HD-SDI: SMPTE 292M (w/embedded audio) SD-SDI: SMPTE 259M (w/embedded audio)
AUDIO IN	CH-1/CH-2: XLR-type 3-pin (female) (x2), Line/Mic/Mic +48V/AES/EBU selectable		CH-1/CH-2: XLR-type 3-pin (female) (x2), Line/Mic/Mic +48V
MIC IN	XLR-type 5-pin (female, stereo) (x1)		
SDI OUT	BNC (x2) 1 (HD/SD switchable) HD-SDI: SMPTE 292M (w/embedded audio) SD-SDI: SMPTE 259M (w/embedded audio) 2 (HD/SD switchable, character On/Off) HD-SDI: SMPTE 292M (w/embedded audio), SD-SDI: SMPTE 259M (w/embedded audio)		BNC (x1) (HD/SD switchable, character On/Off) HD-SDI: SMPTE 292M (w/embedded audio), SD-SDI: SMPTE 259M (w/embedded audio)
VIDEO OUT (TEST OUT)*9	BNC (x1) (switchable) HD Y/SD composite SD composite (character On/Off)		
AUDIO OUT	CH-1/CH-2: XLR-type 5-pin (male, stereo) (x1)		
TC OUT	BNC (x1), 1.0 Vp-p, 75 Ω		
EARPHONE	Mini-jack (x2) (front: manaural, rear: stereo/monoral)		Mini-jack (x1) (rear: stereo/monoral)
DC IN	XLR-type 4-pin (male) (x1), 11 V to 17 V		
DC OUT	4-pin (x1) (for wireless microphone receiver), 11 V to 17 V DC (MAX 0.5 A)		
LENS	12-pin		
REMOTE	8-pin		
LIGHT	2-pin, DC 12 V, max. 50 W		
CAMERA ADAPTOR	50-pin		50-pin (Option : CBK-HD02)
i.LINK	IEEE 1394*6, 6 pin (x1), File Access Mode		IEEE 1394, 6-pin (x1), HDV (HDV 1080i)/DVCAM stream input/output(*7)
Memory Stick	(x1) for camera setup files		
Ethernet	RJ-45 (x1), 100BASE-TX: IEEE 802.3u, 10BASE-T: IEEE 802.3		
USB	USB host A Type (x1 for version-up)		USB device B Type (x1), host A Type (x1)
Camera Section			
Pickup device	3-chip 2/3-inch type HD Power HAD FX CCDs		
Effective picture elements	1,920 x 1,080 (H x V)		
Optical system	F1.4 prism		
Built-in optical filters	1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND	CC: A: Cross, B: 3200K, C: 4300K, D: 6300K ND: 1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND	1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
Shutter speed (Time)	59.94i: 1/100, 1/125, 1/250, 1/500, 1/1000. 1/2000, ECS, SLS 50i: 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS 25p: 1/33, 1/50, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS	59.94i: 1/100, 1/125, 1/250, 1/500, 1/1000. 1/2000, ECS, SLS 50i: 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS 29.97p: 1/40, 1/60, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS 25p: 1/33, 1/50, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS 23.98p: 1/32, 1/48, 1/50, 1/60, 1/96, 1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS 720/23.98p (Pull-down): 23.98P: 1/32, 1/48, 1/50, 1/60, 1/96, 1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS	59.94i: 1/60,1/100, 1/120, 1/125, 1/250, 1/500, 1/1000. 1/2000, ECS, SLS 50i: 1/60, 1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS 29.97p: 1/40,1/50, 1/60,1/100 1/120, 1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS 25p: 1/33, 1/50, 1/60, 1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS 23.98p*5: 1/32, 1/48, 1/50, 1/60, 1/96, 1/100, 1/120,1/125, 1/250, 1/500, 1/1000, 1/2000, ECS, SLS
Shutter speed (Slow shutter (SLS)*2	2-, 3-, 4-, 5-, 6-, 7-, 8-, 16-frame accumulation		
Slow & Quick Motion function		(MPEG HD422 mode only) 23.98p: Selectable from 1 to 48 frame/sec as recording frame rate 25p: Selectable from 1 to 50 frame/sec as recording frame rate 29.97p: Selectable from 1 to 59.94 frame/sec as recording frame rate	720p: Selectable from 1 fps to 60 fps as recording frame rate* (from 1 fps to 50 fps in the case of Pal Area Setting in the UDF Mode) 1080p: Selectable from 1 fps to 30 fps as recording frame rate (from 1 fps to 25 fps in the case of Pal Area Setting in the UDF Mode)
Lens mount	2/3-type SONY bayonet		
Sensitivity (2000 lx, 89.9% reflectance)	59.94i: F11, 50i: F12 (typical)		
Minimum illumination	Approx. 0.016 lx (F1.4 lens, +42 dB, with 16-frame accumulation)		
Gain selection	-6, -3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42 dB		
Smear level	-135 dB (typical)		
S/N ratio	59 dB (Y) (typical)		
Horizontal resolution	1,000 TV lines or more (1920 x 1080i mode)		
Registration	Less than 0.02%		
Modulation depth	45% or more at 27.5 MHz (typical)		
Viewfinder			
Viewfinder	Option Supplied interfaces (20-pin IF for HDVF)		Option Supplied interfaces (20-pin IF for HDVF, 26-pin IF for CBK-VF01)
Media			
	Professional Disc slot (x1)		ExpressCard slot (x2)
Others			
Built-in LCD Monitor	3.5-inch*3 type color LCD monitor		3.5-inch*3 type color LCD monitor: approx. 921,000 effective pixels, 640 (H) x 3 (RGB) x 480 (V), 16:9, hybrid type
Built-in Speaker	(x1)		
Supplied Accsesory			
	Shoulder belt (x1), Operation manual (x1), XDCAM Application Software (x1), Microphone cable (for converting 3-pin to 5-pin) (x1)		Shoulder Strap (x1), Cold Shoe Kit (x1), Operation Manual (x1), XDCAM Application software (x1), SxS device driver software (x1)

*1 Recording/Playback time may vary the according to the encoding or recording media. *2 Slow Shutter setting frames vary according to system frequency. *3 Viewable area measured diagonally. *4 The PDW-700 requires an optional CBKZ-MD01 key.
*5 The PDW-500 requires an optional CBK-MD01 key. *6 An AV/C (DV) interface is NOT supported. *7 HDV/DV stream input/output are available only in FAT mode. DVCAM stream input is only for monitoring use on a viewfinder. *8 Requires an optional CBKZ-FC02 key.
*9 The interface name of the PDW-700/F800 is "TEST OUT" (on the PMW-500, it is "VIDEO OUT").

XDCAM HD422 Deck and Field Station Specifications

	PDW-F1600	PDW-HD1500	PDW-HR1
General			
Power requirements	AC 100 V to 240 V, 50/60 Hz, DC 12 V		AC 100 V to 240 V, 50/60 Hz, DC +12 V, Battery
Power consumption	AC: 80 W, DC: 65 W, SAVEMODE (DC): 55 W		AC: 65 W, DC: 55 W
Operating temperature	+41°F to 104°F (5°C to 40°C)		32°F to 104°F (0°C to 40°C)
Storage temperature	-4°F to +140°F (-20°C to +60°C)		
Humidity	25% to 90% (relative humidity)		
Weight	14 lb 5 oz (6.5 kg)		16 lb 5 oz (7.4 kg)
Dimensions (W x H x D) (excluding protrusions)	8 3/8 x 5 1/4 x 15 5/8 inches (210 x 132 x 396 mm)		11 7/8 x 5 1/8 x 15 3/4 inches (300 x 129 x 400 mm)
Recording/Playback format (Video)	MPEG HD422 (CBR: 50 Mbps) MPEG HD: HQ mode (VBR, maximum bit rate: 35 Mbps), SP mode (CBR, 25 Mbps), LP mode (VBR, maximum bit rate: 18 Mbps) (playback only), MPEG IMX*1 (CBR, 50/40/30 Mbps) DVCAM*1 (CBR, 25 Mbps)		
Recording/Playback format (Audio)	MPEG HD422: 8 ch/24 bits/48 kHz MPEG HD: 4 ch/16 bits/48 kHz MPEG IMX*1: 4 ch/24 bits/48 kHz or 8 ch/16 bits/48 kHz DVCAM*1: 4 ch/16 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 (MPEG HD422)	50 Mbps: Approx. 95 min (PFD50DLA), Approx. 43 min (PFD23A)		
Recording/Playback time (MPEG HD)	35 Mbps, 4-ch audio: More than 145 min (PFD50DLA), More than 65 min (PFD23A) 35 Mbps, 2-ch audio (playback only): More than 150 min (PFD50DLA), More than 68 min (PFD23A) 25 Mbps, 4-ch audio: Approx. 190 min (PFD50DLA), Approx. 85 min (PFD23A) 25 Mbps, 2-ch audio (playback only): Approx. 200 min (PFD50DLA), Approx. 90 min (PFD23A) 18 Mbps, 4-ch audio (playback only): More than 248 min (PFD50DLA), More than 112 min (PFD23A) 18 Mbps, 2-ch audio (playback only): More than 265 min (PFD50DLA), More than 122 min (PFD23A)		
Recording/Playback time (MPEG IMX)	50 Mbps*1: Approx. 100 min (PFD50DLA), Approx. 45 min (PFD23A) 40 Mbps*1: Approx. 120 min (PFD50DLA), Approx. 55 min (PFD23A) 30 Mbps*1: Approx. 150 min (PFD50DLA), Approx. 68 min (PFD23A)		
Recording/Playback time (DVCAM)	25 Mbps*1: Approx. 185 min (PFD50DLA), Approx. 85 min (PFD23A)		
Search speed range (Shuttle mode)	-20 times to +20 times normal speed		
Search speed range (Variable mode)	-2 times to +2 times normal speed		-1 time to +1 time normal speed
Search speed range (Jog mode)	-1 time to +1 time normal speed		-1 time to +1 time normal speed
Search speed range (F.Fwd/Rev)	-35/+35 times normal speed		-20/+20 times normal speed
Inputs/Outputs			
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)		
Analog composite input	-		BNC (x1), 1.0 Vp-p/75 Ω/negative, SMPTE 170M
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		XLR-type 3-pin (female) (x4) (channel selectable), +4/0/-3/-6 dBu (selectable), 10 kΩ, balanced CH1 and CH2: switchable phantom powered mic input
Digital audio input (AES/EBU)	BNC (x2), 4 ch (2 ch each, 1/2 ch and 3/4 ch), AES-3id-1995		-
Time code input	BNC (x1), SMPTE time code, 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		BNC (x1), 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		BNC (x1), SMPTE 259M (w/embedded audio), character On/Off
HDMI	-		(x1), output
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) (x4) (channel selectable), +4/0/-3/-6 dBu (selectable), 600 Ω, Lo-z, balanced CH3 and CH4: switchable analog audio monitor
Analog audio monitor	XLR-type 3-pin (male) (x2), +4 dBu, 600 Ω, Lo-Z, balanced		-
Digital audio output (AES/EBU)	BNC (x2), 4 ch (2 ch each, 1/2 ch and 3/4 ch), AES-3id-1995		-
Headphone output	JM-60 Stereo phone jack (x1), -13 dBu, 8 Ω, unbalanced		
Time code output	BNC (x1), SMPTE time code, 1.0 Vp-p/75 Ω/unbalanced		
Video control	D-sub 9-pin (female) (x1), EIA RS-423		-
i.LINK	IEEE 1394*2 6-pin (x1), File Access Mode, (Option: PDBK-201) HDV 1080i/720p IN/OUT		IEEE 1394*2 6-pin (x2), 1: File Access Mode, 2: (Option: PDBK-202) HDV 1080i/720p IN/OUT
Ethernet	RJ-45 (x1), 1000BASE-T: IEEE 802.3ab, 100BASE-TX: IEEE 802.3u, 10BASE-T: IEEE 802.3		
Remote (9P) input	D-sub 9-pin (female) (x1), RS-422A		-
Remote (9P) input/output	-		D-sub 9-pin (female) (x1), RS-422A
DC input (12 V)	XLR-type 4-pin (male) (x1)		
DC output (12 V)	4-pin (female) (x1), DC 12 V, 7.5 W		
Maintenance	USB (x2)		
AC input	(x1), 100 V to 240 V, 50/60Hz		
Video Performance			
Sampling frequency	Y: 74.25 MHz, Pb/Pr: 37.125MHz		
Quantization	8 bits/sample		
Error correction	Reed Solomon Code		
Processor Adjustment Range			
Video level	-∞ to +3 dB		
Chroma level	-∞ to +3 dB		
Set up/black level	± 30 IRE/±210 mV		
Chroma phase	±30°		
System sync phase	±15 µs		
System sync phase (fine)	0 ns to 400 ns		
System SC phase	0 ns to 400 ns		
Audio Performance			
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 dB (selectable)		
Others			
Built-in display	4.3-inch*3 type color LCD monitor		9-inch*3 type color LCD monitor
Built-in speaker	(x1), monaural		(x2), L/R
Supplied Accessories			
	Operation manual (x1), Installation manual (x1), XDCAM Application Software CD-ROM (x1)		

*1: The PDW-HD1500 requires an optional PDBK-S1500 or PDBK-F1500 hardware key.
*2: An AV/C (DV) interface is NOT supported.
*3: Viewable area measured diagonally.

Sony Electronics Inc.
1 Sony Drive
Park Ridge, NJ 07656
sony.com/professional

V-2408-D (MK10484V5)

The PDW-F800, PDW-700, PDW-F1600, PDW-HD1500, and PDW-HR1 are produced at Sony EMCS Corporation Kosai Tec or Sony UK Technology Centre, which have received ISO14001, the Environmental Management System certification.

Printed in USA (6/11)