

## XDS-PD1000

XDCAM Deck / IT Server with two SxS memory slots, Professional Disc drive and 1TB HDD



### Overview

The XDS-PD1000 supports operation of all SxS card types, including Memory Stick and SDHC cards, using MEAD adaptors as well as all XDCAM Professional Disc models in all recording formats and modes. The Internal 1TB Hard Disk Drive (HDD) and the 1Gigabit Ethernet connection allow a total of about 32 hours of continuous recording in HD422 50Mbps and multi-user simultaneous access to the AV content.

#### Hybrid XDCAM workflow

The XDCAM Station is a professional media station with a 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 operations, networking and other IT functions. Adding the XDCAM Station to an XDCAM workflow makes file-based operation much more convenient and efficient.

#### Increases functionality with Professional Disc drive

The unit's internal 4th generation 4G Professional Disc drive allows partial transfer of materials or full backup from the Professional Disc to the internal 1TB HDD. Furthermore, materials from the internal HDD can be partially copied to the Professional Disc. Simultaneous operation of baseband recording and playback or slow-motion is possible. Editing while recording

(growing file editing) is also possible.

## Features

### **Supports all XDCAM storage formats**

The XDS-PD1000 brings the XDCAM Professional Disc optical memory and XDCAM EX SxS solid state memory workflows together in a powerful "bridge" solution. The XDS-PD1000 supports all XDCAM and XDCAM EX file formats, codecs and metadata, effectively offering complete format transparency. It also supports industry-standard VDCP, ftp and CIFS protocols.

### **Supports 4th generation 4G Professional Disc drive and Quad Layer discs**

The XDS-PD1000 supports the new high-speed DCHS optical drive. It handles the Dual Layer disc (PFD50DLA), Single Layer disc (PFD23A) and Quad Layer disc (PFD128QLW) as well as SxS Pro, SxS-1 memory cards and card adaptors for memory sticks and SDHCs. The 4G drive and Quad Layer discs offer larger storage volumes and higher access speeds. They are ideal for archiving large quantities of material.

### **Multi-tasking internal storage operations**

The 1TB Hard Disk Drive (HDD) internal storage is capable of multi-tasking when carrying out certain tasks. This increases interoperability and overall efficiency when working with Network Production systems.

### **Familiar VTR-like user interface**

The layout of controls on the XDS deck follows industry-standard conventions already familiar to most users. This makes it easy to use, configure and integrate into the overall workflow.

### **Enhances network functionality**

The XDS-PD1000 allows users to access growing volumes of files from non-linear editors without file transfer, offering high-speed file transfer and multiple access via a network. The XDS-PD1000

offers 4 clients for file transfer and 4 clients for network control.

## SD / HD cross-conversion

The XDS-PD1000 supports SD and HD as standard with up-conversion record, and up/down/cross-conversion playback.

## Specifications

General	
Power Requirements	AC 100 V to 240 V, 50/60 Hz
Power Consumption	190 W
Operating Temperature	5°C to 40°C 42°F to 104°F
Storage Temperature	-20°C to +60°C -4°F to +140°F
Humidity	20% to 90% (relative humidity)
Mass	17 kg 37 lb 8 oz
Dimensions (W x H x D) *1	424 x 132 x 460 mm (excluding protrusions) 16 3/4 x 5 1/4 x 18 1/8 inches (excluding protrusions)
	MPEG HD422 (CBR, 50 Mbps) MPEG HD: - HQ mode (VBR, maximum bit rate: 35 Mbps),

Recording/Playback Format (Video)	<ul style="list-style-type: none"> <li>- SP mode *2 (CBR, 25 Mbps),</li> <li>- LP mode *2 (VBR, maximum bit rate: 18 Mbps),</li> <li>MPEG IMX (CBR, 50/40 *2 /30 *2 Mbps)</li> <li>DVCAM (CBR, 25 Mbps)</li> </ul>
Recording/Playback Format (Audio)	<ul style="list-style-type: none"> <li>MPEG HD422: 8 ch/24 bits/48kHz,</li> <li>MPEG HD: 4/2 ch/16bits/48kHz,</li> <li>MPEG IMX: 8 ch/16 bits/48 kHz, or 4 ch/24 bits/48 kHz,</li> <li>DVCAM: 4 ch/16 bits/48 kHz</li> </ul>
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)	<ul style="list-style-type: none"> <li>50 Mbps: Approx. 95 min (PFD50DLA), Approx. 43 min (PFD23A)</li> <li>35 Mbps, 4-ch audio: More than 145 min (PFD50DLA), More than 65 min (PFD23A)</li> <li>35 Mbps, 2-ch audio (playback only): More than 150 min (PFD50DLA), More than 68 min (PFD23A)</li> <li>25 Mbps, 4-ch audio: Approx. 190</li> </ul>

Recording/Playback Time (MPEG HD)	<p>min (PFD50DLA), Approx. 85 min (PFD23A)</p> <p>25 Mbps, 2-ch audio (playback only): Approx. 200 min (PFD50DLA), Approx. 90 min (PFD23A)</p> <p>18 Mbps, 4-ch audio (playback only): More than 248 min (PFD50DLA), More than 112 min (PFD23A)</p> <p>18 Mbps, 2-ch audio (playback only): More than 265 min (PFD50DLA), More than 122 min (PFD23A)</p>
-----------------------------------	--

---

Recording/Playback Time (MPEG IMX)	<p>50 Mbps: Approx. 100 min (PFD50DLA), Approx. 45 min (PFD23A)</p> <p>40 Mbps: Approx. 120 min (PFD50DLA), Approx. 55 min (PFD23A)</p> <p>30 Mbps: Approx. 150 min (PFD50DLA), Approx. 68 min (PFD23A)</p>
------------------------------------	---

---

Recording/Playback Time (DVCAM)	<p>25 Mbps: Approx. 185 min (PFD50DLA), Approx. 85 min (PFD23A)</p>
---------------------------------	---

---

Search Speed Range	-20 times to +20 times normal
--------------------	-------------------------------

(Shuttle Mode)	speed
Search Speed Range (Variable Mode)	-2 times to +2 times normal speed
Search Speed Range (Jog Mode)	-1 time to +1 time normal speed
Search Speed Range (Fast Forward/Reverse)	-35/+35 times normal speed

## Media Drive

Media Type	Professional Disc Drive (x1) SxS Memory Card Drive, ExpressCard/34 (x2)
------------	---

## Internal Storage

Storage Type	HDD, SATA, 500 GB, (x3)
Total Capacity (For Recording)	1 TB
Raid	Raid-4

MPEG HD422:  
- 50Mbps: Approx. 30 hour  
MPEG HD:

Recording/Playback Time (Internal Storage)	- 35 Mbps, 4-ch audio: More than 48 hour
	- 35 Mbps, 2-ch audio: More than 50 hour *2
	- 25 Mbps, 4-ch audio: Approx. 63 hour *2
	- 25 Mbps, 2-ch audio: Approx. 66 hour *2
	- 18 Mbps, 4-ch audio: More than 82 hour *2
	- 18 Mbps, 2-ch audio: More than 88 hour *2
	MPEG IMX:
	- 50 Mbps: Approx. 33 hour
	- 40 Mbps: Approx. 40 hour *2
	- 30 Mbps: Approx. 50 hour *2
DVCAM:	
- 25 Mbps: Approx. 61 hour	

## Input/Output

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)
	BNC (x1) (HD/SD switchable)

HD-SDI Input	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 k $\Omega$ , balanced
Digital Audio Input (AES/EBU)	BNC (x4), 8 ch (2 ch each, 1/2 ch, 3/4 ch, 5/6 ch and 7/8 ch), AES-3id- 1995
Timecode Input	BNC (x1), SMPTE timecode, 0.5 Vp- p to 18 Vp-p/10 k $\Omega$ /unbalanced
System Timecode Input	BNC (x1), SMPTE timecode, 0.5 Vp- p to 18 Vp-p/10 k $\Omega$ /unbalanced
Analog Composite Output	BNC (x1), 1.0 Vp-p/75 $\Omega$ /negative, SMPTE 170M
HD-SDI Output	BNC (x2), 1: SMPTE 259M (w/embedded audio) 2: SMPTE 259M (w/embedded audio), character on/off
Monitor	DE-15 (x1), VGA  BNC (x1), SMPTE 292M



HD-SDI Monitor	(w/embedded audio), character on/off BNC (x1), SMPTE 259M (w/embedded audio), character on/off
Analog Composite Monitor	BNC (x1), 1.0 Vp-p/75 Ω/negative, SMPTE 170M, character on/off
HDMI Monitor	Type-A (x1), 19 pin
Analog Audio Output	XLR-type 3-pin (male) (x2) (channel selectable), +4/0/-3/-6 dBu (selectable), 600 Ω, Lo-z, balanced
Analog Audio Monitor	XLR-type 3-pin (male) (x2), +4 dBu, 600 Ω, Lo-Z, balanced
Digital Audio Output (AES/EBU)	BNC (x4), 8 ch (2 ch each, 1/2 ch, 3/4 ch, 5/6 ch and 7/8 ch), AES-3id-1995
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	D-sub 9-pin (female) (x1), EIA RS-423
	RJ-45 (x1)

Ethernet	1000BASE-T: IEEE 802.3ab 100BASE-TX: IEEE 802.3u 10BASE-T: IEEE 802.3
Remote Input (9-pin)	D-sub 9-pin (female) (x2), RS-422A
Remote (GPIO)	D-sub 15-pin (female) (x1), Input: CMOS, Output: open-collector
Maintenance	USB (x5)
AC Input	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	$-\infty$ to +3 dB
Chroma Level	$-\infty$ to +3 dB
Set Up/Black Level	-30 IRE to +30 IRE/-210 mV to +210 mV
Chroma Phase	$-30^{\circ}$ to $+30^{\circ}$

---

System Sync Phase	-15 $\mu$ s to +15 $\mu$ s
-------------------	----------------------------

---

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	20/18/16/12/9 dB (selectable)
----------	-------------------------------

---

## Other Equipment

Built-in Display	4.3-inch type color LCD monitor
------------------	---------------------------------

---

Expansion Slot	PCI Express (x2), 8-lane
----------------	--------------------------

---

## Supplied Accessories

Supplied Accessories	Operation manual (1) Installation manual (1)
----------------------	---

---

## Notes

Note

\*1 The values for dimensions are approximate.

\*2 Playback and copy only.

---

## Related products



### **PDW-850**

Three 2/3-inch Power HAD FX CCD sensors  
XDCAM HD422  
ultimate Professional Disc camcorder with best picture quality and easy-to-share and archive media

## Gallery

