

## PDW-F75

XDCAM HD Professional Disc recorder with multiple interfaces



### Overview

The PDW-F75 is designed to place XDCAM HD at the heart of any existing infrastructure - it can as easily be connected to a composite analogue world as a digital file-based workflow.

At the touch of a button, the PDW-F75 can up or downconvert any input/output signal in real-time with complete transparency. It is as easy to plug in an entry-level DV camcorder as a top-of-the-range HDCAM VTR.

The PDW-F75 features a comprehensive array of interfaces as standard.

Using either the built-in LCD screen or a monitor, you have full access to all the benefits of the advanced XDCAM workflow with Scene Selection, Thumbnail operations and high-speed file-based editing.

### **Enhanced Productivity**

No matter how you work, the PDW-F75 offers productivity improvements impossible with tape-based media:

- As soon as you insert a Professional Disc, the PDW-F75 will display a thumbnail index of each recorded scene either on a monitor or the built-in LCD screen
- Any scene can be accessed instantly with no time-

- wasted due to fastforwarding/rewinding
- No need to worry about accidentally overwriting precious content
- 'Essence Marks' can be reviewed and edited to identify critical scenes
- Cut edit content on the deck itself - no need for a PC!
- Import proxy files onto your PC at high speed for faster browsing and editing
- Smart import only the full resolution content you require faster than real-time
- Up to four and a half hours recording at 18Mb/s MPEG HD, with Dual Layer Professional Discs
- Built-in high quality 16:9 colour screen
- SDI and HD-SDI output with audio embedded
- Digital Audio AES-EBU output
- TC IN/OUT

## **Compatibility with today and tomorrow's workflow**

The PDW-F75 is built around support for existing standards such as DV/DVCAM and open standards like MXF so you've got the maximum flexibility to use it just the way you want.

- Stay with DV/DVCAM format to work with existing non-linear editors
- HD-SDI, SDI, i.Link, analogue video, analogue/digital audio interfaces for connectivity to a wide range of editing systems
- i.Link File Access Mode (FAM) interface for high-speed, file-based connectivity to a PC
- Optional network interface for sharing content on a standard IT-based network
- i.LINK TS option for easy connectivity to HDV
- MXF open standard ensures maximum compatibility with new generation NLEs

- Long-term accessibility - storing content as files means you will always be able to access data in the future

## **Smarter, Faster Archiving**

You don't need an expensive IT-storage system to revolutionise the way you store, retrieve and manage your archive material. While Professional Discs costs the same as tape, they're a true high-speed, non-linear media with a wealth of advanced meta-data automatically generated in camera.

- Import metadata and/or low resolution proxies onto your PC hard drive for a smart, searchable mirror of your high resolution archive
- Locate , watch and even edit proxy clips quickly using fast search of meta data, then instantly locate the archived high resolution content
- Non-linear media means faster, more reliable access to valuable archive content
- Professional Discs will retain information for 50 years in normal conditions
- Because information is stored as data files, there's no worries about video standards not being around in years to come

## Features

**This Sony professional deck has been designed to provide the very best features at the very best price - there's no need to compromise on quality, functionality or results!**

**Real-time SD output**

**Quick and Slow Motion Support**

**HD 1080 Recording at Selectable Frame**

**High-quality Audio Recording**

**File-based Disc Recording**

**Advanced Scene Selection Functionality**

**Analogue-like Jog Audio**

**High-quality Slow-motion**

**High Level of Reliability**

**Comprehensive interfaces**

**Additional features**

## Specifications

### General

|                    |                             |
|--------------------|-----------------------------|
| Power Requirements | AC 100 V to 240 V, 50/60 Hz |
|--------------------|-----------------------------|

|                   |      |
|-------------------|------|
| Power Consumption | 70 W |
|-------------------|------|

|                       |                              |
|-----------------------|------------------------------|
| Operating Temperature | 5°C to 40°C<br>42°F to 104°F |
|-----------------------|------------------------------|

|                     |                                  |
|---------------------|----------------------------------|
| Storage Temperature | -20°C to +60°C<br>-4°F to +140°F |
|---------------------|----------------------------------|

|          |                                |
|----------|--------------------------------|
| Humidity | 20% to 90% (relative humidity) |
|----------|--------------------------------|

|      |                      |
|------|----------------------|
| Mass | 7.2 kg<br>15 lb 6 oz |
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|                        |  |
|------------------------|--|
| Dimensions (W x H x D) | 307 x 100 x 411 mm (excluding protrusions) |
|------------------------|--|

|   |   |
|---|---|
| *1                                      | 12 1/8 x 4 x 16 1/2 inches (excluding protrusions)  |
| Recording/Playback Format (Video)       | <p>MPEG HD:</p> <ul style="list-style-type: none"> <li>- HQ mode (VBR, maximum bit rate 35 Mbps)</li> <li>- SP mode (CBR, 25 Mbps)</li> <li>- LP mode (VBR, maximum bit rate 18 Mbps)</li> </ul> <p>DVCAM *2 *3 (CBR, 25 Mbps)</p>  |
| Recording/Playback Format (Audio)       | <p>MPEG HD: 4 ch/16 bits/48 kHz or 2 ch/16 bits/48 kHz</p> <p>DVCAM: 4 ch/16 bits/48 kHz</p>  |
| Recording/Playback Format (Proxy Video) | MPEG-4  |
| Recording/Playback Format (Proxy Audio) | A-law (4 ch/8 bits/8 kHz)   |
| Recording/Playback                      | <p>35 Mbps, 4-ch audio: More than 145 min (PFD50DLA), More than 65 min (PFD23A)</p> <p>35 Mbps, 2-ch audio: More than 150 min (PFD50DLA), More than 68 min (PFD23A)</p> <p>25 Mbps, 4-ch audio: Approx. 190 min (PFD50DLA), Approx. 85 min (PFD23A)</p> <p>25 Mbps, 2-ch audio: Approx. 200</p> |

|                |   |
|----------------|---|
| Time (MPEG HD) | min (PFD50DLA), Approx. 90 min (PFD23A)<br>18 Mbps, 4-ch audio: More than 248 min (PFD50DLA), More than 112 min (PFD23A)<br>18 Mbps, 2-ch audio: More than 265 min (PFD50DLA), More than 122 min (PFD23A) |
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|                                 |  |
|---------------------------------|--|
| Recording/Playback Time (DVCAM) | 25 Mbps: Approx. 185 min (PFD50DLA), Approx. 85 min (PFD23A) *2 *3 |
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|-----------------------------------|-------------------------------------|
| Search Speed Range (Shuttle Mode) | -20 times to +20 times normal speed |
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|                                    |                                  |
|------------------------------------|----------------------------------|
| Search Speed Range (Variable Mode) | -1 time to +2 times normal speed |
|------------------------------------|----------------------------------|

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|                               |                                  |
|-------------------------------|----------------------------------|
| Search Speed Range (Jog Mode) | -1 time to +2 times normal speed |
|-------------------------------|----------------------------------|

## Media Drive

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|------------|------------------------------|
| Media Type | Professional Disc Drive (x1) |
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## Input/Output

BNC (x2) (including loop-through),

|                               |   |
|-------------------------------|---|
| Reference Input               | 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        | (Option: PDBK-104 *3) BNC (x1), 1.0 Vp-p/75 Ω/negative, SMPTE 170   |
| HD Composite Input            | (Option: PDBK-103 *3) BNC (x4), Y/Pb/Pr/(Sync) or G/B/R/(Sync)  |
| HD-SDI Input                  | BNC (x2), SMPTE 292M (w/embedded audio)   |
| SD-SDI Input                  | (Option: PDBK-104 *3) BNC (x1), 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) | BNC (x2), 4 ch (2 ch each, 1/2 ch and 3/4 ch), AES-3id-1995   |
| Timecode Input                | BNC (x1), SMPTE timecode, 0.5 Vp-p to 18 Vp-p/3.3 kΩ/unbalanced   |
| Analog Composite Output       | BNC (x1), (1.0 Vp-p/75 Ω/sync negative), character On/Off<br>Phono jack (x1), (1.0 Vp-p/75 Ω/sync negative) |

|                                   |   |
|-----------------------------------|---|
| HD-SDI Output                     | BNC (x2), SMPTE 292M<br>(w/embedded audio)<br>character ALL ON/OFF/HD-SDI 2<br>only                       |
| SD-SDI Output                     | BNC (x1), SMPTE 259M<br>(w/embedded audio)<br>character ALL ON/OFF/SDI only                               |
| Monitor                           | D-sub 15-pin (x1), (G/B/R or<br>Y/Pb/Pr)  |
| Analog Audio Output               | XLR-type 3-pin (male) (x2) (channel<br>selectable), +4/0/-3/-6 dBu<br>(selectable), 600 Ω, Lo-z, balanced |
| Analog Audio Monitor              | Phono jack (x2) (L, R, Mix), -6 dBu,<br>47 kΩ, unbalanced   |
| Digital Audio Output<br>(AES/EBU) | BNC (x2), 4 ch (2 ch each, 1/2 ch<br>and 3/4 ch), AES-3id-1995  |
| Headphone Output                  | JM-60 Stereo phone jack (x1), -14<br>dBu, 8 Ω, unbalanced   |
| Timecode Output                   | BNC (x1), SMPTE timecode, 2.2 Vp-<br>p ± 3.0 dB/600 Ω/unbalanced  |
| i.LINK                            | IEEE 1394 6-pin (x1)*<br>AV/C (DV) IN/OUT, File Access<br>Mode, HDV TS(1080i) (selectable)                |



\*Optional PDBK-102 is required for HDVIN/OUT. \*3

|                      |   |
|----------------------|---|
| Ethernet             | (Option: PDBK-101) RJ-45 (x1),<br>1000BASE-T: IEEE 802.3ab,<br>100BASE-TX: IEEE 802.3u,<br>10BASE-T: IEEE 802.3 |
| RS-232C              | D-sub 9-pin (male) (x1)   |
| Control              | Mini jack 4-pin (x1), for RM-LC2  |
| Remote Input (9-pin) | D-sub 9-pin (female) (x1), RS-422A  |
| Maintenance          | Memory Stick (x1)   |
| AC Input             | (x1), 100 V to 240 V, 50/60Hz   |

## Video Performance

|                    |                                   |
|--------------------|-----------------------------------|
| Sampling Frequency | Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz |
| Quantization       | 8 bits/sample                     |
| Error Correction   | Reed Solomon Code                 |

## Processor Adjustment Range

|              |                |
|--------------|----------------|
| Video Level  | -3 dB to +3 dB |
| Chroma Level | -3 dB 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  | -3 μs to +3 μs                        |
| System SC Phase    | -200 ns to +200 ns                    |

## Audio Performance

|                    |  |
|--------------------|--|
| Sampling Frequency | 48 kHz                                       |
| Quantization       | 16 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)                  |

## Other Equipment

|                  |                                 |
|------------------|---------------------------------|
| Built-in Display | 3.5-inch type color LCD monitor |
|------------------|---------------------------------|

## Supplied Accessories

Operation manual (1)

|                      |  |
|----------------------|--|
| Supplied Accessories | Installation manual (1)<br>XDCAM Application Software CD-ROM (1) |
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## Notes

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| Note | <p>[*1] The values for dimensions are approximate.</p> <p>[*2] Optional PDBK-104 is required for DVCAM recording.</p> <p>[*3] Only one of the PDBK-102, PDBK-103 or PBDK-104 boards can be installed at any one time.</p> |
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## Gallery

