



## Professional Disc™ Media

### It's all about workflow.

The XDCAM® Professional Disc system brings you the efficient workflow of file-based recording, plus the comfort, reliability, and predictability of a medium that you can exchange like tape. It provides the advantages of both conventional VTR operation and cutting-edge IT features like high-speed data transmission and proxy A/V data management. With these advantages comes a highly sophisticated and comprehensive workflow for your content.

A crucial component of the XDCAM HD system is Sony's Professional Disc media which was co-engineered with XDCAM hardware equipment to assure maximum compatibility, stability, and performance in extreme temperature, humidity, and vibration environments.

### High density recording.

Sony's blue-violet laser technology means extraordinary high density recording. This enables Sony to provide high capacity discs that support

various video recording workflows. The formatted 23GB\* single-layer disc (PFD23A/3) holds up to 43 minutes, the 50GB\* dual-layer disc (PFD50DLA/3) holds up to 95 minutes, and the 100GB\* triple-layer disc (PFD100TLA) holds up to 190 minutes of material at the best quality (HD 422, 50 Mbps). The 128GB\* quad-layer write-once disc (PFD128QLW) holds up to 240 minutes of recording capability at 50Mbps.

### Affordable, removable, archivable media.

Depending on the feature set of your recorder, Professional Disc media can capture a wide range of video formats, including DVCAM® and MPEG IMX® standard definition, as well as XDCAM HD and XDCAM MPEG HD422. When used with select decks, the entire disc capacity can be used for writing data files of any type. This gives the XDCAM disc format expanded flexibility beyond video content.

Unlike some other tapeless media, Professional Disc media can be used

for everything from acquisition to program exchange, editing, play-to-air, and archiving.

### Professional Disc™ Media.

- **Quick random access with near-line storage.** One of the great benefits of optical disc is instant access to your clip. There's no fast forward, no rewind, no need to "cue up" to the end of the last recorded portion.
- **Dust- and shock-resistant cartridge.** Helps to protect the disc surface from fingerprints and dirt.
- **Incredible durability.** Thanks to non-contact recording and playback, the disc supports up to 1,000 read/write/erase cycles (Re-writable disc only).
- **Amazing archival life.** Professional Disc has an estimated shelf life of 50 years in accelerated testing.

\* 1 GB = 1 billion bytes.  
Actual formatted capacity will be less.

## Hardware compatibility

|                                                                  | PFD23A/3 | PFD50DLA/3 | PFD100TLA | PFD128QLW |
|------------------------------------------------------------------|----------|------------|-----------|-----------|
| XDCAM MPEG IMX/DVCAM: PDW510, 530, 1500, R1, D1                  | OK       | -          | -         | -         |
| XDCAM HD: PDWF335L, F355L, F75                                   | OK       | OK         | -         | -         |
| XDCAM MPEG HD422: PDW700, F800, F1600, HD1500, HR1, U1           | OK       | OK         | -         | -         |
| XDCAM Content & Archive Solutions: PDWU2, XDS-PD2000, XDS-PD1000 | OK       | OK         | OK        | OK        |

## Pre-Formatted Disc Compatibility:

- It is required that the latest firmware versions be used to take advantage of the pre-formatted benefit and ensure compatibility with the hardware listed to the right. Otherwise, users may not be able to record to this pre-formatted disc.

- Hardware List: PDW-F350L, PDW-F330K, PDW-F330L, PDW-530, PDW-510, PDW-F70, PDW-F30, PDW-70MD, PDW-1500, PDW-R1, PDW-D1, PDW-V1, PDW-U1
- If users want to use the disc with the equipment models listed above, without upgrading the equipment firmware version, the disc becomes recordable only after being re-formatted with the equipment being used.

## Record Times \*

|                     | Recording Format | Recording Bit Rate | PFD23A/3 | PFD50DLA/3 | PFD100TLA | PFD128QLW |
|---------------------|------------------|--------------------|----------|------------|-----------|-----------|
| High Definition     | XDCAM MPEG HD422 | 50 Mbps            | 43 min.  | 95 min.    | 190 min.  | 240 min.  |
|                     | XDCAM HD         | 35 Mbps            | 65 min.  | 145 min.   | 290 min.  | 360 min.  |
|                     |                  | 25 Mbps            | 85 min.  | 190 min.   | 380 min.  | 480 min.  |
|                     |                  | 18 Mbps            | 112 min. | 248 min.   | 496 min.  | 600 min.  |
| Standard Definition | MPEG IMX         | 50 Mbps            | 45 min.  | 100 min.   | 200 min.  | 240 min.  |
|                     |                  | 40 Mbps            | 55 min.  | 120 min.   | 240 min.  | 300 min.  |
|                     |                  | 30 Mbps            | 68 min.  | 150 min.   | 300 min.  | 360 min.  |
|                     | DVCAM            | 25 Mbps            | 85 min.  | 185 min.   | 370 min.  | 450 min.  |

\* Actual recording times are approximate and may vary depending on number of clips and audio channels. Specifications are subject to change.

## Specifications

|                            | PFD23A/3                                             | PFD50DLA/3 | PFD100TLA | PFD128QLW  |
|----------------------------|------------------------------------------------------|------------|-----------|------------|
| Disc Type                  | Re-Writable                                          |            |           | Write-Once |
| Formatted Capacity         | 23.3 GB*                                             | 50 GB*     | 100 GB*   | 128 GB*    |
| Cartridge Dimensions       | 5-1/8 x 5-1/8 x 3/8 inch (128.6 x 130.6 x 9.1 mm) ** |            |           |            |
| Disc Diameter              | 4-3/4 inch (120mm) **                                |            |           |            |
| Max. Transfer Rate (Write) | 86 Mbps                                              |            | 86 Mbps   | 144 Mbps   |
| Erase/Write/Read Cycles    | more than 1,000 times                                |            |           |            |
| Read Cycles                | more than 1,000,000 times                            |            |           |            |
| Estimated Shelf Life       | ≥ 50 years***                                        |            |           |            |
| Estimated Archival Life    | ≥ 50 years***                                        |            |           |            |
| Laser Wavelength (nm)      | 405                                                  |            |           |            |
| Operating Conditions       | 23 ~ 131°F (-5 ~ 55°C) / 10 ~ 90% Relative Humidity  |            |           |            |
| Storage Conditions         | 14 ~ 131°F (-10 ~ 55°C) / 5 ~ 90% Relative Humidity  |            |           |            |

\* A portion of the user data area will be used for data management. The total user area may vary.

\*\* Non-metric weights and measurements are approximate and may vary.

\*\*\* Estimation from Sony's accelerated testing using actual drives.

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