[Update of XDCAM Drive Software] XDCAM Drive Software Ver6.4.0 is released. 29/Jun/2023

[Summary in Ver6.4.0]

- Support for 64bit macOS 13 Ventura
- Support for PDW-U2/PDW-U4 new firmware
- Support to work with HDD/SDD\* formatted with 4KB native sector on Windows PC
- Improvement for the problem that writing error occurred after applying the latest cumulative update program of Windows 11/10
  - \* HDD/SSD stands for Hard Disk Drive/Solid State Drive.

### [System Requirements]

The supplied set of software has been tested and found to run under the following conditions. OS:

# Windows

Microsoft Windows 10 x64

Microsoft Windows 11 x64

### Mac

macOS 11.7.7

macOS 12.6.6

macOS 13.4

\* The Mac version is compatible with Apple Silicon in addition to Intel Mac.

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(It is required to change security settings of a Mac with Apple Silicon and installation
of Rosetta may be necessary in case when it is not yet done. For more details, please
reference the section of [How to install the XDCAM Drive Software].)
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Processor:

Windows

6th Generation Intel Core i5 2.3GHz or higher

## Mac

6th Generation Intel Core i5 2.3GHz or higher

### Memory:

2GB or more (4GB when using TL-RE or QL-WO discs)

### USB:

Hi-Speed USB (USB 2.0):

Hi-Speed USB (USB 2.0) host controller required.

SuperSpeed USB (USB 3.2): (PDW-U2)

SuperSpeed USB (USB 3.2) host controller required.

SuperSpeed USB 10Gbps (USB 3.2): (PDW-U4)

SuperSpeed USB 10Gbps (USB 3.2) host controller required.

PDW-U4 is not guaranteed to work with USB 2.0 connection.

Connection between Mac & PDW-U1, PDW-U2 and PDW-U4 is supported only via built-in USB ports on Mac.

#### Power setting for PC:

Please set the PC not to become the sleep state. If it becomes the sleep state, the connection between the PC and the drive may fail or the driver may not operate normally.

Windows

If you set the display method of the control panel to icons, open Power Options > Change plan settings > Change advanced power settings) in the control panel and change the following items (If you set the display method to category, the hierarchy will be deeper).

- [Sleep]-[Sleep after the next time] : "None"

- [USB]-[USB Setting]-[USB Selective Suspend Setting] : "Disable"

Mac

For Mac Laptop products,

- select System Preference > Battery from the Apple menu and change the following items.
- Battery Low Power Mode : Set to Never or uncheck
- Put the hard disk to sleep if possible in Option : Set to Never
- (If there is a display off time slide setting, set it to Never if possible)
- For Mac Laptop (Intel Mac) products or Mac Desktop (Intel Mac) products,
  - select System Settings > Power Saving or Battery from the Apple menu and change the following items.
  - Enable Power Nap : Disable

Compatible discs for PDW-U4:

For following Professional Media, PDW-U4 supports only playback.

SONY	:	PFD23	(2x)

TDK : All Discs

FUJIFILM : PD711, PD711DL manufactured before 2013\*

maxell : PD-23SL, PD-50DL manufactured before 2013\*

\*You can check by XDCAM drive software when inserting disc in PDW-U4 drive if it is supported for recording or not.

PDW-U1 and PDW-U2 will continue to support both playback and recording for above.

Power supply via USB cable:

PDW-U1/U2 : It is not possible to power this unit through a USB cable.

PDW-U4 : Supports power delivery via a USB cable when connected to a computer can deliver 60 W or higher conforming to the USB PD 3.0 standard.

The maximum number of units connectable to a PC is the following.

32bit system: 1 unit

64bit systems: 4 units

Connections through a USB hub are not supported.

## Note:

These system requirements may not apply to all computers.

About Mac with Apple Silicon

- -When installing on a Mac with Apple Silicon, it is necessary to change the Security Policy setting. You also need to install Rosetta. For details, refer to "How to install XDCAM Drive Software" below.
- -When connecting the PDW-U4 to a Mac equipped with Apple Silicon, make a HUB connection for the following serials.
  - If you do not connect to the HUB, the following symptoms may occur.
  - PDW-U4 is not recognized by the XDCAM Drive Utility.
  - USB connection is cut during data transmission and reading and writing stop.
  - Record incorrect data.
- U4 Serial No. PDW-U4 SYM 0100001~0100941 PDW-U4 CN 0500001~0500115

Connectable HUB

- Belkin Thunderbolt 3 Dock <TypeC(3.1 Gen2), (Thunderbolt 3) >
- OWC Thunderbolt Hub <TypeC> (Multiple connections possible)
- Micro Solution Thunderblot 4/USB 4 Hub PD mini Dock <TypeC> (Multiple connections possible)
- Apple USB-C to Digital AV Multiport Adapter <TypeA>

If you cannot connect to HUB, please contact the service.

[Additional Items in Ver6.4.0] 1. This Version supports for macOS 13 Ventura

2. Firmware of PDW-U4 is updated.

Changes from V2.10 to V2.20

- When the write protect tab of Cartridge is SAVE, mount may not be completed. Corrected the reaction timing for recording prohibition to complete the mount.
- There was a case where the Cartridge could not be ejected when startup failed due to a malfunction of the optical block, so the startup process was fixed.
- In rare cases, not possible to read correctly. The setting value at the time of reading has been correct.

3. Firmware of PDW-U2 is updated.

Changes from V3.42 to V3.50

-Recording characteristics have been improved.

3-layer media : In rare cases, the adjustment value was not appropriate for recording temperature changes that is improved.

2-layer and 3-layer media : Improved to readjust the recording power for temperature changes.

2-layer media : In some cases, the recording power was lower. fine-tuned adjustment target.

2-layer media : The recording power adjustment was sometimes varied. Improved adjustment accuracy. -Reading characteristics have been improved.

In rare cases, the readout characteristics deteriorated in areas with good recording condition. Changed reading method.

2-layer media : In rare cases, the inner part of the media could not be read. Modified the read settings.

-Improved startup adjustment.

3-layer media : In rare cases, startup adjustment may not be completed. Changed and improved the retry method in the adjustment

- 4. Support to work with HDD/SSD formatted with 4KB native sector on Windows PC.
  - This software supports for HDD/SSD that physical sector size formatted with 4 KByte native, in addition to conventional HDD/SSD that physical sector size formatted with 512 bytes or that equipped with an emulator function so that it can be accessed at 512 bytes.
- 5. Improvement for the problem that writing error occurred after applying the latest cumulative update program of Windows 11/10.
  - Improved the problem that cannot be written to Professional Disc with Explorer or Copy command after applying Cumulative Update Program.

# 1. How to install the XDCAM Drive Software

### Windows)

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- (1) Any old version of the XDCAM Drive Software must first be uninstalled. Remove the Sony XDCAM Drive Software by using the Add/Remove Programs tool in Control Panel and then restart your computer before installing the new version.
- (2) Unzip [XDCAMDriveSoftware\_6\_4\_0\_win.zip] and run the [XDCAMDriveSoftware\_6\_4\_0\_win.exe] file. And follow the on-screen instructions to install both the XDCAM Drive Software and the utility software.
- (3) Launch the utility software to check the version number(\*) of the PDW-U1, PDW-U2 and PDW-U4 firmware and update it if necessary.
  - \* Please see the (Compliant firmware version) below.

### Mac)

- When installing on an Mac with Apple Silicon, you need to change the security policy settings.
   Before installing the XDCAM Drive Software on a Mac equipped with Apple Silicon, follow the procedure below. You need to change the security policy setting to "Low Security".
  - 1. On the Mac with Apple silicon, select [Shut Down] form Apple menu.

- 2. Press and hold the power button until you see "Loading startup options."
- 3. Click [Options], then click [Continue].



- 4. In macOS Recovery, if you are prompted for user selection, click [Next] and enter the password for an administrator account, if required.
- 5. In the Recovery Application, select [Startup Security Utility] from the [Utilities] menu.
- 6. Select the startup disk you want to use to set the security policy.

If the disk is encrypted with FileVault, click [Unlock], enter the password, then click [Unlock].

- 7. Click [Security Policy].
- 8. Select [Reduced Security], then select the [Allow user management of kernel extensions from identified developers] checkbox to allow installation of software that uses legacy kernel extensions and enter the password for an administrator account, if required.
- 9. Restart your Mac to apply the changes.

### Note:

Rosetta must be installed on your computer when you install XDCAM Drive Software. You can also change the "Change security policy settings" after installation.

-System software permission is required when installing on macOS 11.7 or 12.6, 13.4.

- 1. When you install new XDCAM Drive Software and utility software, the existing version is overwritten. If the utility software Ver1.0 has been installed in any location other than the default location, you must manually delete it before upgrading.
- Unzip [XDCAMDriveSoftware\_6\_4\_0\_mac.zip]. Open [XDCAMDriveSoftware\_6\_4\_0\_mac.dmg], and execute the install package.

Follow the on-screen instructions to install the XDCAM Drive Software and the utility software.

3. If the following dialog is displayed during installation, select "Open Security Preferences" to open the "Security and Privacy" screen.

Please "permit" "load system software" in it. Be sure to check any new additions as well. If it was already permitted at the time of the previous installation and it is the same software, it will not be necessary.



The figure above is an example for macOS Monterey.

Note:

If you do not allow it during installation, it will be restored after the OS is restarted. In that case, run the installer again to set the system software permissions.

- 4. On macOS 10.15 or later, you need to set full disk access. Follow the "Full Disk Access Configuration Procedure" section of the Help Guide to configure. You can also set "Full disk access settings" after installation.
- 5. Once the installation of the XDCAM Drive Software is completed, launch the utility software to check the version number (\*) of the PDW-U1, PDW-U2 and PDW-U4 firmware and update it if necessary.
  \* Please see the (Compliant firmware version) below.
- If multiple PDW-U1, PDW-U2 and PDW-U4 drives are connected and the mounted discs are untitled, then the contents of the first disc to be inserted may be shown as the contents of other discs in Finder. To avoid this, please name the discs.

(Compliant firmware version) PDW-U1:v2.900 PDW-U2:v3.500 PDW-U4:v2.200

# 2. About XDCAM Drive Software

- Since Full Security is the default Secure Boot setting on Mac includes the Apple T2 Security Chip or with macOS Big Sur, XDCAM disc dose not mount properly when you start or restart your Mac with the drive connected. If such a case, turn power of the drive off/on, reconnect the USB cable, or connect the drive after starting up the Mac.
- Drives and XDCAM disc may not be recognized on macOS 10.13 or later. Also, on macOS Big Sur, drives and XDCAM disc may not be recognized after updating XDCAM Drive Software.

In such a case, the security function of macOS may block the loading of system software included in XDCAM Drive Software. Follow the steps below to unblock.

- 1. Restart your Mac with the drive disconnected, and then connect the drive after booting. At this time, close System Preferences.
- Make sure that Sony Corporation's allow button for system software appears in System Preferences /Security & Privacy/General. And give permission. Then restart your Mac with the drive disconnected.
- The application which writes a file to XDCAM disc shall check the returned error of create, write, close function.

Furthermore, the application shall check that the file written to the XDCAM disc exists and that the written file size in XDCAM disc is equivalent to the source file size after completing the file writing.

 On macOS Catalina, if you copy or delete a large number of files with Finder, part of file operations may not be completed.

In that case, please perform the same operation again with Finder, or perform the same operation with Terminal.

- The XDCAM Drive Software must be upgraded to Ver2.1 or later for write-access to discs formatted by PDW-700 and PDW-HD1500 (or later models) with PDW-U1.
- The XDCAM disc recorded by XDCAM Drive Software Ver3.0.0 (or later) isn't mounted by XDCAM Drive Software Ver2.3.2 or before version.
- XDS Ver1.1 or later are not compatible with the XDCAM Drive Software Ver2.3.2. When it is used with XDS Ver1.1 or later and the XDCAM Drive Software, use the XDCAM Drive Software Ver3.2.0 or later.
- The XDCAM Drive Software may not function correctly if installed alongside some antivirus packages, some anti-spyware tools, and some products that contain OS non-standard UDF 2.5 or UDF 2.6 file system drivers.

The anti-virus software that has been tested on Windows is as follows.

# Symantec

Endpoint Protection 14.3

Trellix (IE McAfee)

Trellix Endpoint Security 10.7 McAfee Total Protection 16.0 McAfee Security Center 19.21 McAfee VirusScan Engine 5169.0 (Version:26.6) Microsoft Defender

- Also, playback with an AV file stored in the UserData directory or the General directory may not be smooth.
- This unit cannot read the following discs.
  - Blu-ray Disc
  - Professional Disc for Data

- An AV file may not be smoothly played back while the ACCESS indicator is blinking.

# 3. About XDCAM Drive Utility Software

- Starting

In the case on a Windows computer, XDCAM Drive Utility is resident (It can also remove the resident setting).

In the case on a Mac computer, please start by specifying the XDCAM Drive Utility.

- Firmware

Eject the disc before updating the firmware.

Do not turn off the PDW-U1, PDW-U2, PDW-U4 or the computer, or disconnect the USB cable during the firmware update.

When the firmware update is finished, the PDW-U1, PDW-U2 or PDW-U4 must be turned off and on again. The firmware version cannot be downgraded.

- Volume Recovery Function

It is not guaranteed that any broken conditions will be recovered by the recover function in this software.

The software cannot repair discs broken by XDCAM devices other than PDW-U1, PDW-U2 and PDW-U4. Discs broken by PDW-U1, PDW-U2 and PDW-U4 cannot be recovered by XDCAM devices other than PDW-U1, PDW-U2 and PDW-U4.

# 4. About XDCAM Drive (PDW-U1/PDW-U2/PDW-U4)

Eject the discs from PDW-U1, PDW-U2 and PDW-U4 drives if PDW-U1, PDW-U2 and PDW-U4 drives will be connected to a computer for lengthy intervals without reading or writing data.

The discs may be accessed, depending on the software installed on the computer, even if you do not intentionally read or write.

This may lead to early replacement of the optical head or may adversely affect the disc.