SONY

4-697-475-**17**(1)

Optical Disc Archive Utility

Help

ODS-D55U
ODS-D77U
ODS-D280U
ODS-D380U

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About the Optical Disc Archive Software

Overview

This software can perform the following functions to ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U on the computer connected to ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U.

- **Information display function**
  - Drive information
  - Media information
- **Setup function**
  - Operation mode settings
  - Write-protect settings for media using Cartridge Memory
- **Media manipulation function**
  - Rollback
  - Format
  - Finalize
  - Recover file
  - Duplicate volume
- **Maintenance function**
  - Update firmware
  - Log display and export
  - System Check

Related Manual

OPERATION MANUAL

This manual is supplied with the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U.
It describes how to use the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U and the supplied software.

System Requirements

This software requires a computer system that meets the following requirements.

Item	Requirement
Processor	ODS-D55U/D77U/D77UA: Intel Core 2 Duo 2.66 GHz or higher, or Intel Xeon 2.0 GHz or higher ODS-D280U: 3rd Generation Intel Core i5 2.5 GHz or higher, or Intel Xeon 2.27 GHz or higher ODS-D380U: 6th Generation Intel Core i5 2.3 GHz, or Intel Xeon 2.0 GHz or higher
Memory	ODS-D55U/D77U/D77UA: 2 GB × (number of the connected units + 1) or more ODS-D280U/D380U: 4 GB × (number of the connected units + 1) or more
Free space on the destination location for installation	ODS-D55U/D77U/D77UA: 32 GB + 16 GB × (number of the connected units + 1) or more ODS-D280U: 32 GB + 32 GB × (number of the connected units + 1) or more ODS-D380U: 64 GB + 64 GB × (number of the connected units + 1) or more
Operating system	See the Sony Creative Software site [a] or Sony professional products site [b].
Other	ODS-D55U/D77U/D77UA: Hi-Speed USB (USB 2.0) (Hi-Speed USB (USB 2.0) host controller required) SuperSpeed USB (USB 3.2) (SuperSpeed USB host controller required) ODS-D280U: SuperSpeed USB (USB 3.2) (SuperSpeed USB host controller required) ODS-D380U: SuperSpeed USB 10 Gbps (USB 3.2) (SuperSpeed USB 10 Gbps (USB 3.2) host controller required) SuperSpeed USB (USB 3.2) [c] (SuperSpeed USB host controller required)

a) Sony Creative Software site

http://www.sonycreativesoftware.com/

b) Sony professional products site

U.S.A.	http://pro.sony.com
Canada	http://www.sonybiz.ca
Latin America	http://sonypro-latin.com

Europe	http://www.pro.sony.eu/pro
Middle East, Africa	http://sony-psmea.com
Russia	http://sony.ru/pro/
Brazil	http://sonypro.com.br
Australia	http://pro.sony.com.au
New Zealand	http://pro.sony.co.nz
Japan	http://www.sonybsc.com
Asia Pacific	http://pro.sony-asia.com
Korea	http://bp.sony.co.kr
China	http://pro.sony.com.cn
India	http://pro.sony.co.in

c) The SuperSpeed USB (USB 3.2) connection may not achieve the desired transfer speed.

Recommended settings for PC

The Optical Disc Archive media is recognized as one volume on the OS. If there is unexpected access from the OS, the reading/writing efficiency may deteriorate because the access efficiency may be different for random access devices such as hard discs.
The following recommended settings for the PC is valid for maximumly drawing the reading/writing efficiency of the Optical Disc Archive.
Since the following settings affect volumes other than the Optical Disc Archive Drive, it is recommended that you fully understand the effects when changing settings.

Note

The following steps are different depending on the version of the OS.

The following are steps for when the display method of the control panel is set to [Large icons].

1. Set Autoplay to off
   [Start] button > [Control Panel] > [AutoPlay] > Deselect the checkbox of [Use AutoPlay for all media and devices], then click the [Save] button.
2. Set thumbnail display of the explorer to off
   [Start] button > [Control Pane] > [Folder Options] > Mark the checkbox of [Always show icons, never thumbnails] on [Advanced settings] in the [View] tab, then click the [OK] button.
3. Set the window of the details and preview of explorer to off
   Start [Explorer], select [Layout] from [Organize], then set [Details pane] and [Preview pane] to off.
4. Power setting for PC
   [Start] button > [Control Panel] > [Power Options] > [Change when the computer sleeps] > Set [Put the computer to sleep] to [Never], then click the [Save changes] button.

   Note

   We do not recommend that the computer that is connected to the Optical Disc Archive device is battery driven.
5. Set the USB selective suspend to off
   Select the active power plan from the pull-down menu of the [Start] button > [Control Panel] > [Power Options] > [Change plan settings] > [Change advanced power settings], set [On Battery] and [Plugged in] of [USB settings] > [USB selective suspend setting] to [Disabled], and click the [OK] button.
6. Set the auto update function to off
   [Start] button > [Control Panel] > [Windows Update] > [Change settings] > Set [Important updates] to [Download updates but let me choose whether to install them], then press the [OK] button.

To display the drive on the explorer when the cartridge is not inserted to the drive, perform the following settings.
The default setting is set to on for Windows Server 2008 R2.
<Windows7>

Start [Explorer] > [Organize] > [Folder Options] > Select [View] tab, then deselect the checkbox of [Hide empty drives in the Computer folder].

About the Optical Disc Archive Utility

Starting and Quitting the Software

Starting

First make sure that the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U is connected to the computer.
For details on connection, refer to the OPERATION MANUAL.
To start this software, perform one of the following.

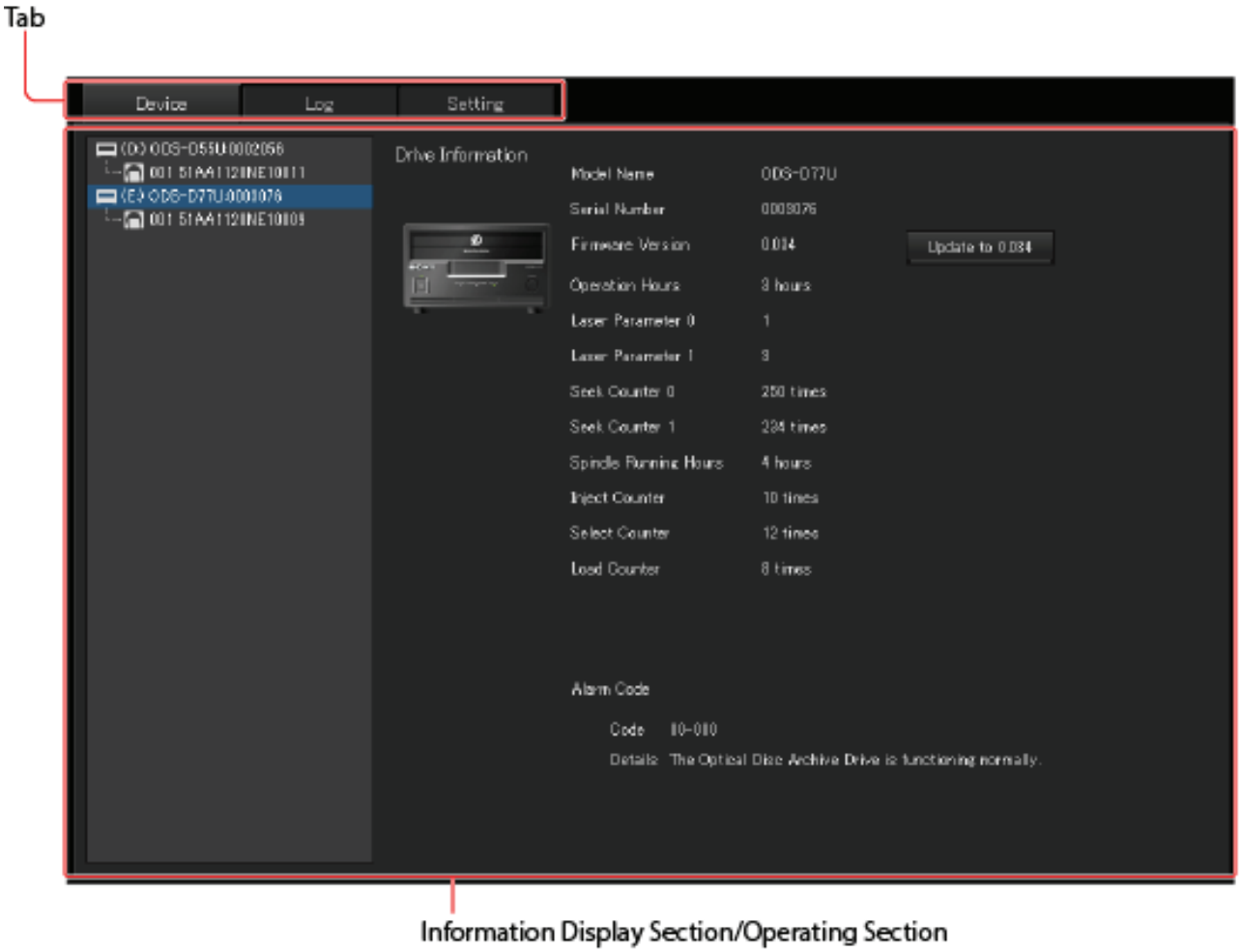
- Click the [Start] button on the computer to which the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U is connected, and then select [Sony Optical Disc Archive Software] > [Optical Disc Archive Utility].
- Open the folder in which this software is installed, and then double-click [ODAUtility.exe].
- If you created a shortcut icon on the desktop when you installed this software, double-click the icon.

Quitting

Perform one of the following.

- Click the  (close) button in the top right corner of the window.
- Right-click the title bar, and select [Close] from the context menu.
- While this software is active, press Alt + F4 (press the F4 key while holding down the Alt key).
- Select [View] > [Close] from the menubar.

Screen Organization



Menu Bar

Click a menu name to display the commands for that menu.

Tab

The Device screen, Log screen and Setting screen are switched.

Tip

You can also select function menus and menu items using the Tab key and cursor keys. In addition, the Enter key can be used to expand submenus and display operating screens.

Information Display Section/Operating Section

The screen selected in the Tab is displayed.

Menu Bar Items

The menu bar contains the following menus and commands.

View Menu

Update

Updates the content displayed in the Information display section/operating section to the latest data.
Log entries in the Log screen will be re-sorted.

Close

Closes the window of this software.

Tools Menu

System Check

Determines whether Optical Disc Archive Software functions correctly.
This uses CoreMark-Pro, an EEMBC benchmark software, to measure the performance of the CPU.





http://www.eembc.org/

Note

This does not mean that the performance is guaranteed.

Change File Cache Destination

Changes the destination that the File Cache is saved to.

Help Menu

Help

Displays the Help (this window) for this software.

Version Information

Displays version information for [Optical Disc Archive Software].

Related Topics

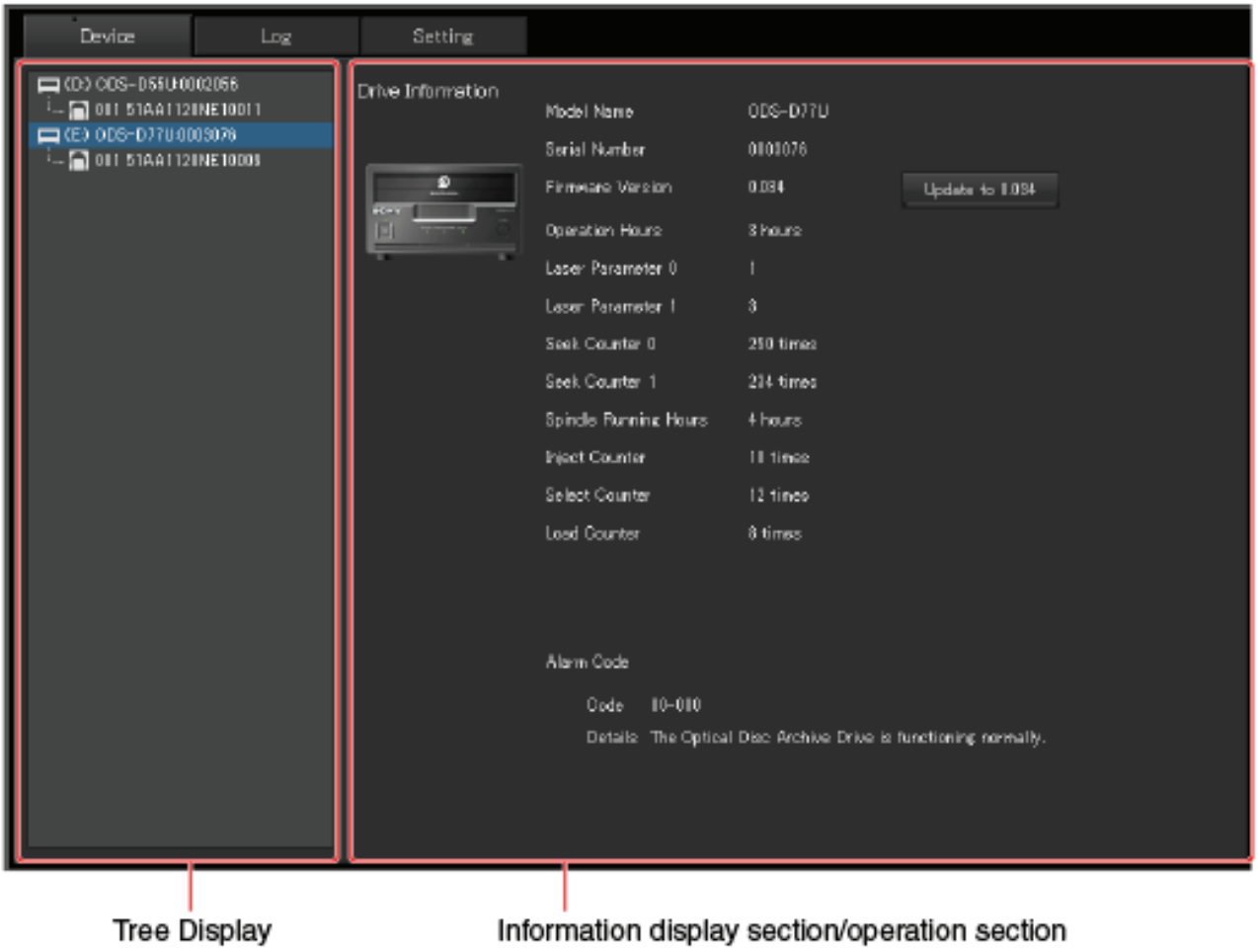
Starting and Quitting the Software

Functions of Operating Screens

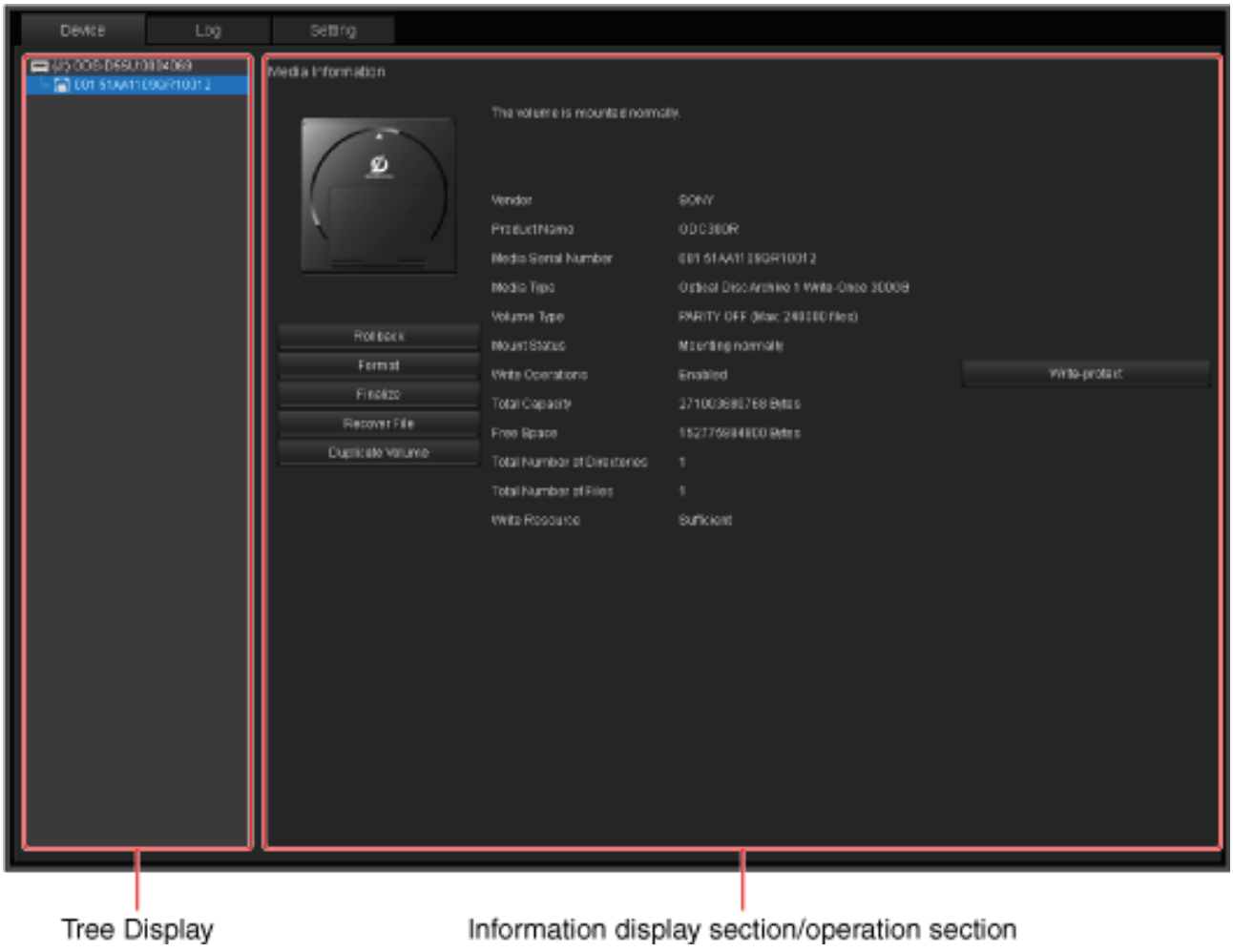
Device screen

Device screen-Screen Organization

Tree Display-Drive Information



Tree Display-Media Information



The connected drive (drive letter, model name and serial number) and media are displayed in the Tree Display. When two or more drives are connected, they are displayed in a list on the ascending order of a drive letter. Information about the selected drive or media will be displayed in the Information Display Section/Operating Section on the right of the list.

Note

One computer can connect to four drives.

Information display section/operation section

Displays the information or operates the drive or media selected in the Tree Display.

Drive Information

Item	Information displayed
Model Name	Name of the selected drive (ODS-D55U/ODS-D77U/ODS-D280U/ ODS-D380U)
Serial Number	The serial number of the selected ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U
Firmware Version	The firmware version of the selected ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U

Item	Information displayed
Operation Hours [a)]	Total number of hours the ODS-D55U/ODS-D77U/ODS-D280U/ ODS-D380U has been powered on (unit:hour)
Laser Parameter 0 to 3 [a)]	The cumulative light output time of the optical head
Seek Counter 0 to 3 [a)]	The cumulative number of seek operations of the optical head
Spindle Running Hours [a)]	The cumulative spindle rotating time (unit:hour)
Inject Counter [a)]	The cumulative counts of cartridge inserting
Select Counter [a)]	The select count of the internal disc
Carry Counter [a)]	The carry count of the internal disc
Disc Guide Counter	The cumulative number of disc carries using disc carrier rollers
Carry Motor (H) Counter	The cumulative number of disc carries using Carry Motor (H)
Carry Motor (V) Counter	The cumulative number of disc carries using Carry Motor (V)
Air Filter Parameter	Accumulated running time of the air filter (reset is possible) [b)]
Alarm Code	Displays information about any alarms that may have occurred on the selected drive.

a) This screen displays information about the operational history of the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U. Use the information as a guide in scheduling periodic maintenance. For details on periodic maintenance, consult your Sony service representative.

b) For details on how to reset the Air Filter Parameter, refer to the installation manual included in the air filter (RP).

Note

Some items are not displayed depending on models.

Drive operation

Item	Information
Update to 1.090 [c)]	The firmware version of the selected drive

c) Update when the firmware version in this package is 1.090.

Media Information

Item	Information displayed
Vendor	The manufacturer of the selected media
Product Name	The product name of the selected media
Media Serial Number	The serial number of the selected media
Media Type	The type and capacity of the selected media • Optical Disc Archive 1 Rewritable 300GB • Optical Disc Archive 1 Rewritable 600GB • Optical Disc Archive 1 Rewritable 1200GB • Optical Disc Archive 1 Write-Once 300GB • Optical Disc Archive 1 Write-Once 600GB • Optical Disc Archive 1 Write-Once 1500GB • Optical Disc Archive 2 Write-Once 3300GB • Optical Disc Archive 3 Write-Once 5500GB
Volume Type	The volume type of the selected media
Mount Status	The mount status of the selected media
Write Operations	The selected media can be written or not.
Total Capacity	The total capacity of the selected media
Free Space	The write availability of the selected media

Item	Information displayed
Total Number of Directories	The total number of directories of the selected media
Total Number of Files	The total number of files of the selected media
Rewrite Count	The cumulative rewrite count of the selected media (Only rewritable media displayed)
Format Count	The cumulative format count of the selected media (Only rewritable media displayed)
Write Resource	[Empty], [Few] or [Full] is displayed. (Displayed only WO media)

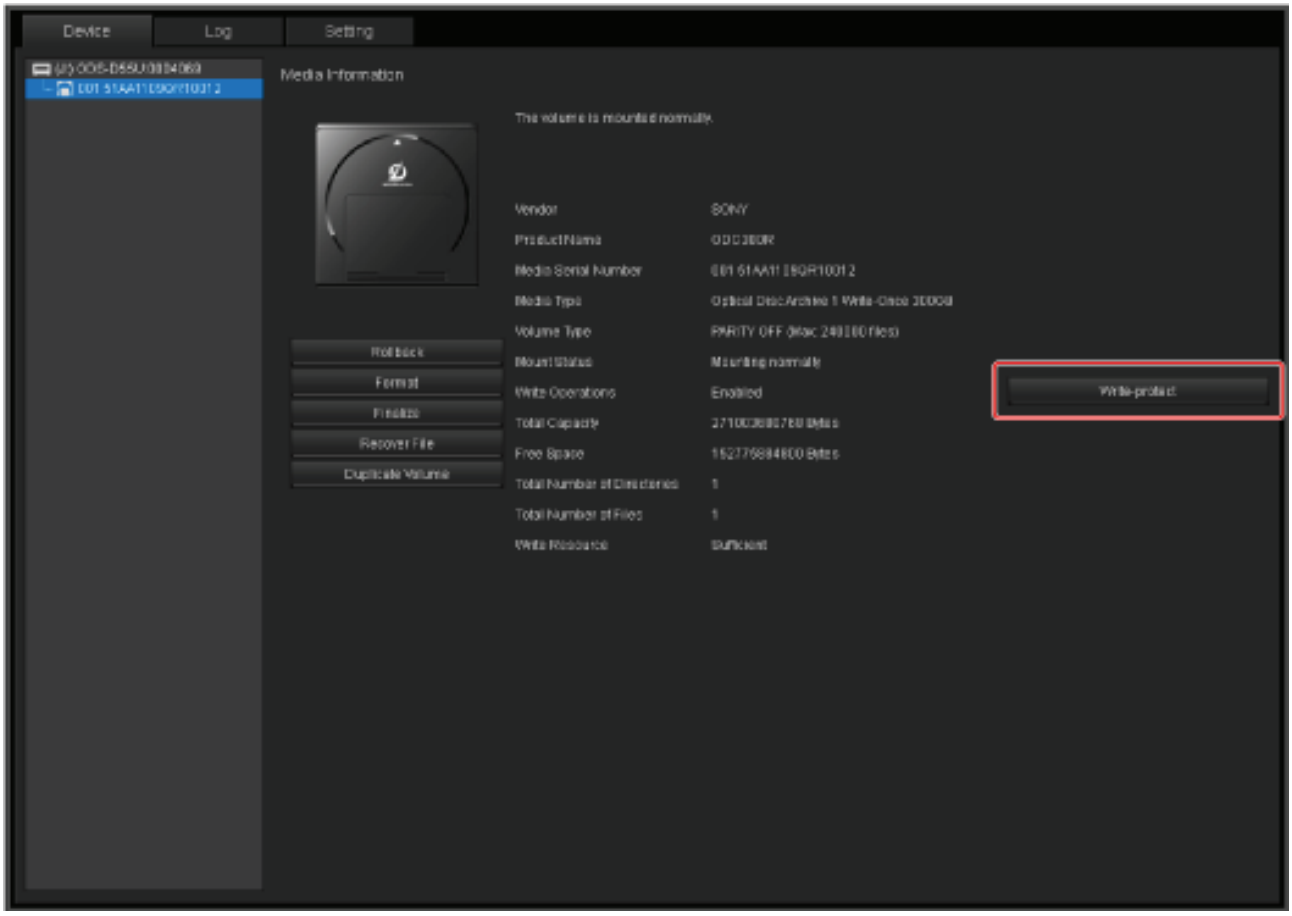
Media operation

Item	Information
[Rollback] button	Starts to seek the rollback points.
[Format] button	Starts to format.
[Finalize] button	Starts to finalize.
[Recover File] button	Displays the screen of the recover file list.
[Write-protect (or Write-protect release)] button	Starts to set or release the write-protection.
[Duplicate Volume] button	Starts to duplicate volume.

Related Topics

Alarm Code

Device screen-Write-protect settings for media



Write-protect settings for media using Cartridge Memory

1. Click the [Write-protect] button.
   "Do you want to change the write-protect setting? If so, the cartridge is automatically ejected." appears.
2. Click the [Apply] button.
   The media is write-protected and the cartridge is ejected.

To release the write-protection for media using Cartridge Memory

1. Click the [Write-protect release] button.
   "Do you want to change the write-protect setting? If so, the cartridge is automatically ejected." appears.
2. Click the [Apply] button.
   Write-protection for media is released and the cartridge is ejected.

Alarm Code

This screen displays information about any alarms that may have occurred on the selected ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U. This information is preserved until the error is eliminated.

Code

This displays the code number of the alarm that occurred on the selected ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U.

Details

This displays information about the alarm that occurred on the selected ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U and information about how to deal with it.
For details on alarms, see Alarm Code List.

Refreshing the Display

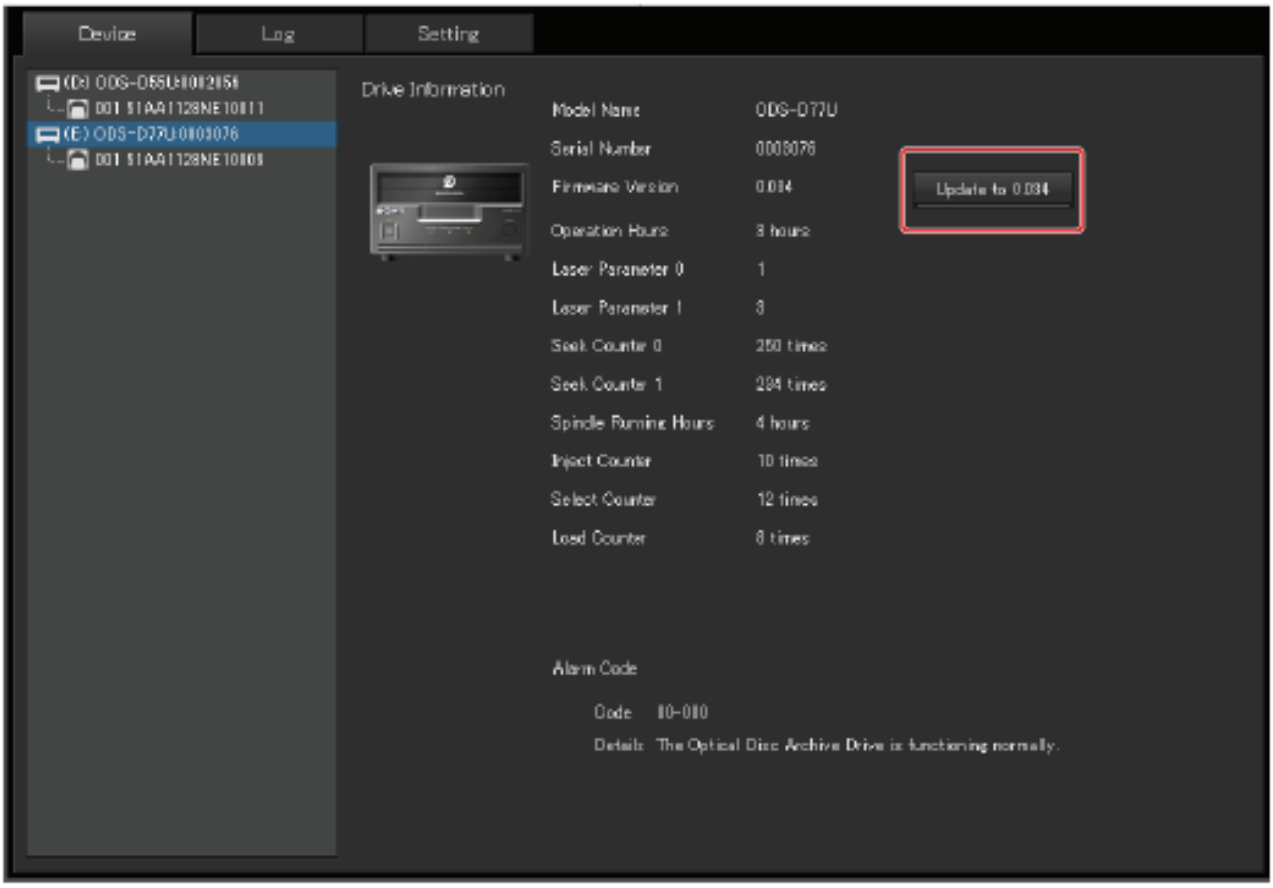
Select [Update] from the View menu.

Related Topics

Device screen-Screen Organization

Update Firmware

Updates the firmware of ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U.



How to update the firmware

1. Click the [Update to 1.630] button [a)].
   "Do you want to update the firmware?" appears.
2. Click the [Yes] button.
   "Updating the firmware. Do not turn off the PC and the drive; do not disconnect cables during the update." appears and the update starts.
   After a certain period of time, the drive will restart and the update will be complete.

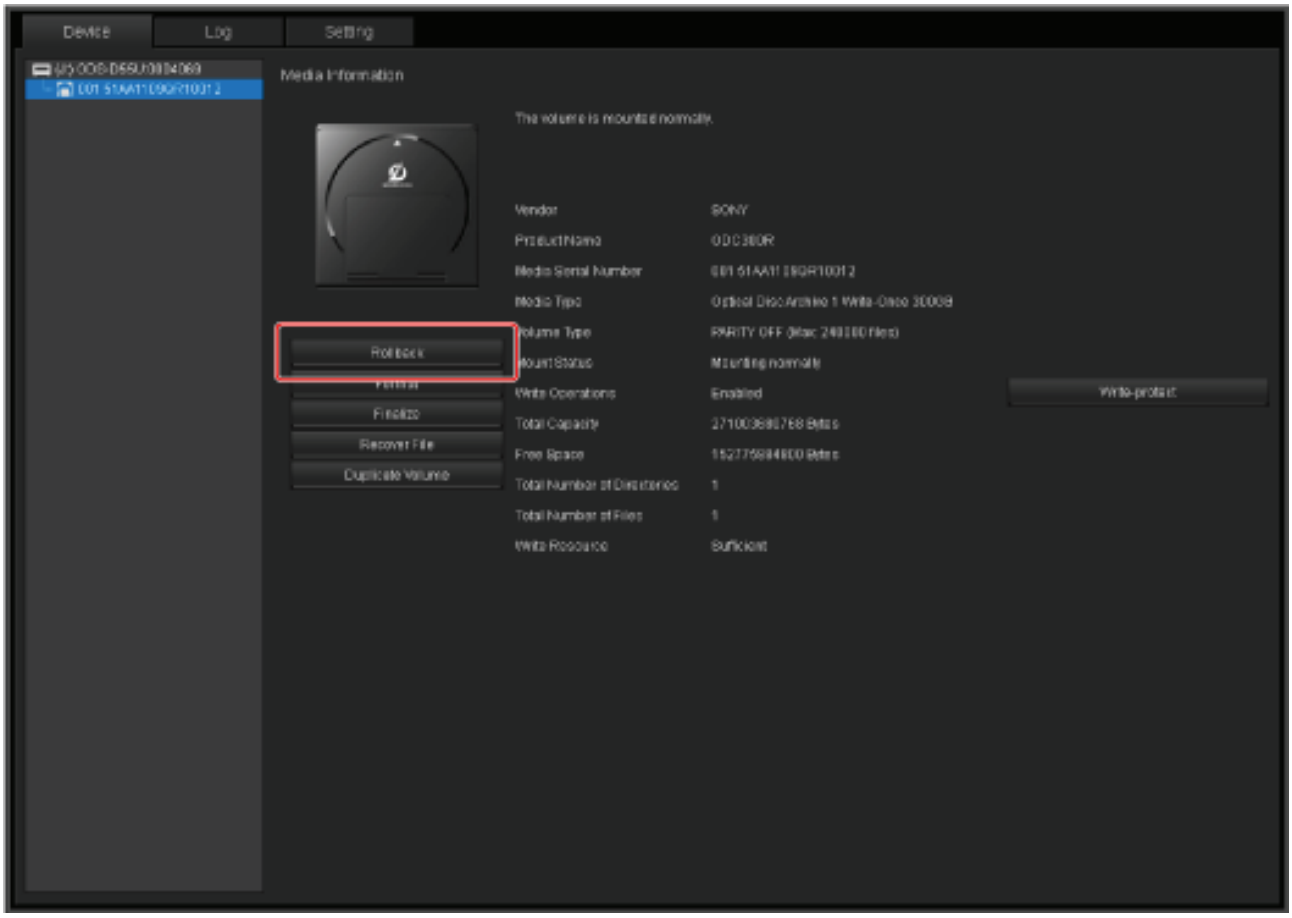
a) Update when the firmware version in this package is 1.630.

Related Topics

Device screen-Screen Organization

Rollback

If you delete the file system control information or media file accidentally, you can restore the file by searching for the roll-back points.



How to perform the rollback

1. Click the [Rollback] button.
   The [Search roll-back points] screen appears and seeking for the roll-back points starts.
2. Select the roll-back point in the list and then click the [Mount] button.
   The message appears, then read-only mount starts.
   When read-only mount succeed, “Read-only mount to the roll-back point completed. You can copy the whole volume to another volume by Optical Disc Archive Filer, or copy files or directories in the volume. Or, please select one below.” appears.
3. Select [Apply writable to this roll-back point.] and then click the [OK] button.
   The message appears, writable mount to the roll-back point starts.
   “Writable mount applied. Roll-back successfully completed.” appears, roll-back is completed.

How to perform the rollback (capacity recovery)

When using rewritable media, media capacity can be recovered by performing rollback processing, deleting the rollback point of time newer than selected roll-back point.

1. In step 3 in “How to perform the rollback”, select both [Apply writable to this roll-back point.] and [Restore the capacity of the media.], click the [OK] button.

Note

You cannot recover the deleted roll-back point.

How to perform the rollback (file recovery)

The files in the volume can be recovered under read-only mount.

1. In step 2 in “How to perform the rollback”, select [Recover files in the volume.], and then click the [OK] button.

How to perform rollback (volume duplication)

1. In step 3 of “How to perform the rollback”, select [Duplicate the volume to another media], then click the [OK] button.
   “Are you sure you want to duplicate the volume? Please do not change files during the volume duplication” appears.
2. Click the [Yes] button.
   “Please select a duplication destination.” appears.
3. Select [Select another volume.], then click the [OK] button.
   Select an empty folder from another volume in the displayed screen or click the [New Folder] button to create a new folder, then click the [OK] button.
   Volume duplication starts. The duplication status is displayed on the progress bar.

Tip

When you select the Optical Disc Archive volume as a duplication destination and select [Restrict disc spanning.], you can restrict a single file from being recorded spanning multiple discs.

Related Topics

Device screen-Screen Organization

Format

All files and directories in the media are deleted.

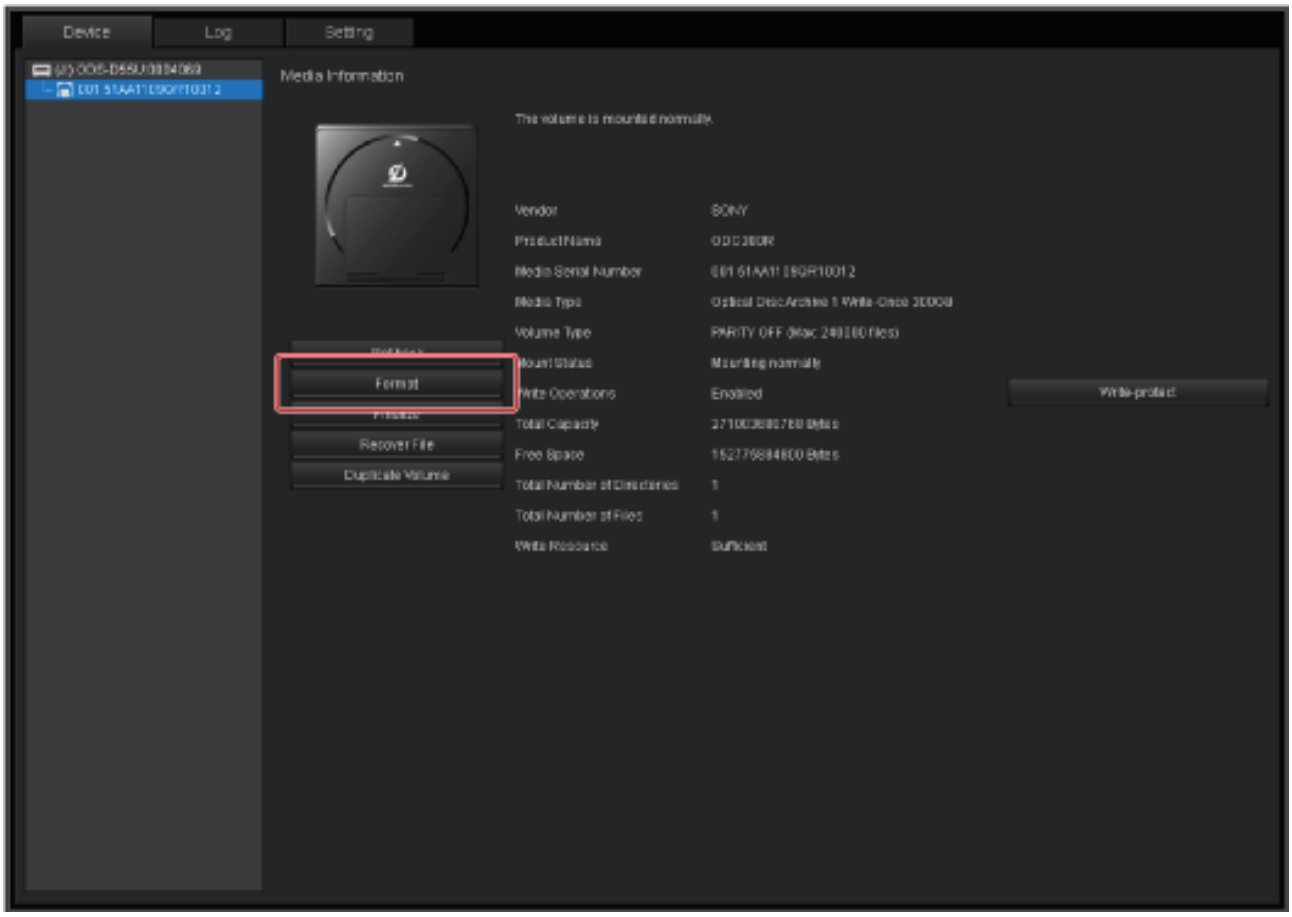
Tip

After formatting, you can return to the state before format processing by a rollback function.

Note

- The media capacity cannot be recovered after being formatted.
- When you select [Restore the capacity of the media.], media capacity can be recovered. Otherwise, the rollback function cannot be used.
- When unable to format
  The media is write-protected. Check the following, then format again.
  - that the cartridge is possible to write with the Optical Disc Archive Drive. (For details, refer to the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U OPERATION MANUAL.)
  - that the write-protect tab of the cartridge is not set to [Writing disabled]. (For details, refer to the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U OPERATION MANUAL.)
  - that the [Make the drives rec-Inhibit] checkbox is not set to ON in the Setting screen. (Set the checkbox to OFF, then perform "How to change the Operational Mode".)

- that the [Write-protect release] is not displayed on the [Write-protect] button in the Device screen/Media Information.



How to format

1. Click the [Format] button.
   "Are you sure you want to format the media? If you format it, all files saved on it are deleted. " appears.
2. Click the [Yes] button.
   When formatting is completed, "Format completed." appears.
3. Click the [Close] button.
   Formatting is completed.

How to format (capacity recovery)

When you use rewritable media, you can format the whole media in order to free up the recorded space. In addition, you can select the volume type from PARITY ON (Max: 60000 files) or PARITY OFF (Max: 240000 files) when the Optical Disc Archive 1 cartridge is injecting.

1. Select [Restore the capacity of the media.] in step 2 above, and click the [Yes] button.

Related Topics

Device screen-Screen Organization

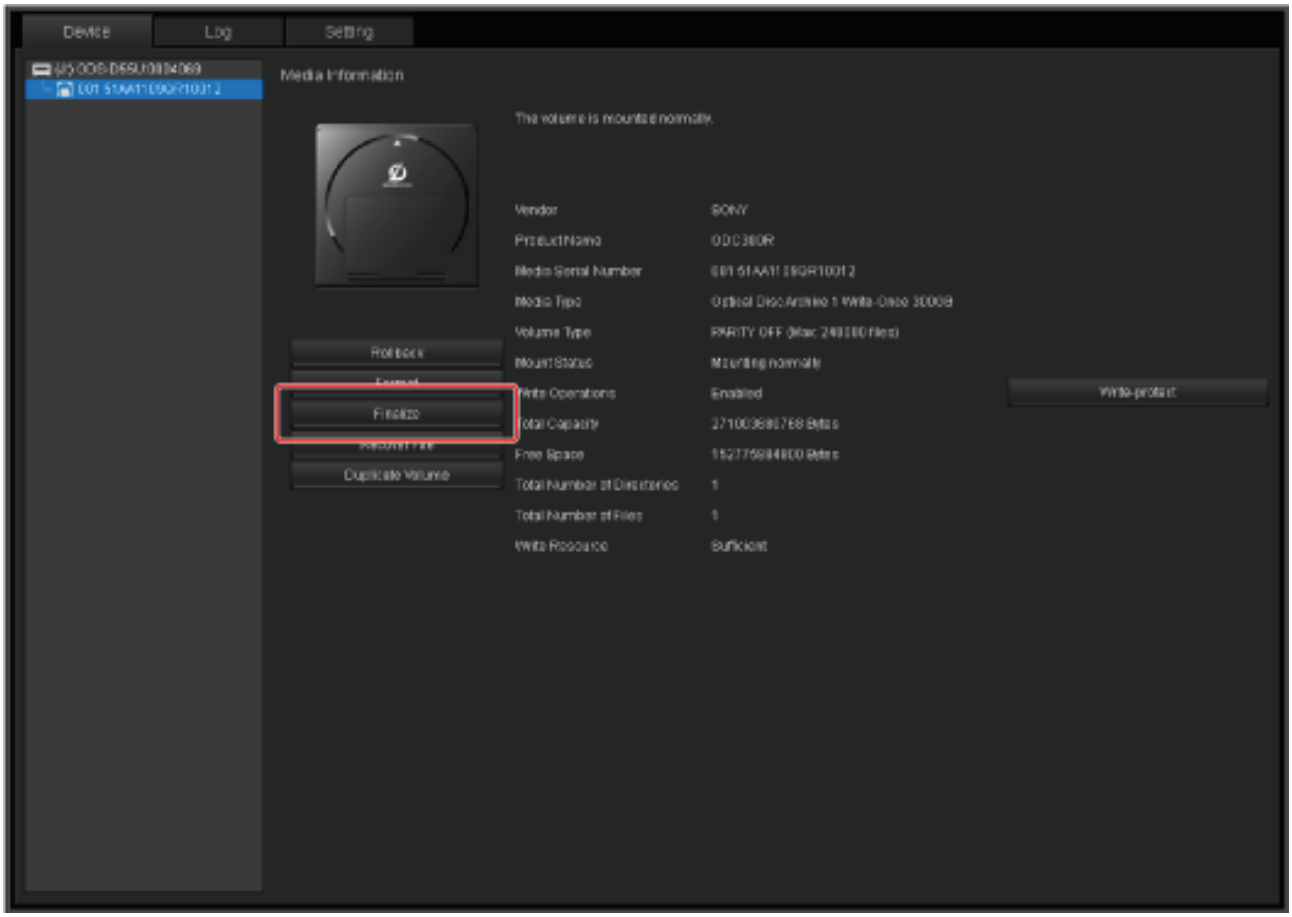
Finalize (Write-Once media only)

When you finalize a media, the media will be read-only and cannot be written. The tolerance of the data is improved.

Note

- When unable to finalize

  The media is write-protected. Check the following, then finalize again.
  - that the cartridge is compatible with the Optical Disc Archive Drive. (For details, refer to the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U OPERATION MANUAL.)
  - that the write-protect tab of the cartridge is not set to [Writing disabled]. (For details, refer to the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U OPERATION MANUAL.)
  - that the [Make the drives rec-Inhibit] checkbox is not set to ON in the Setting screen. (Set the checkbox to OFF, then perform "How to change the Operational Mode".)
  - that the [Write-protect release] is not displayed on the [Write-protect] button in the Device screen/Media Information.



How to finalize

1. Click the [Finalize] button.

   "Are you sure you want to finalize the media? If you finalize it, it is altered to be read-only. Once started finalizing, it is irreversible. " appears.

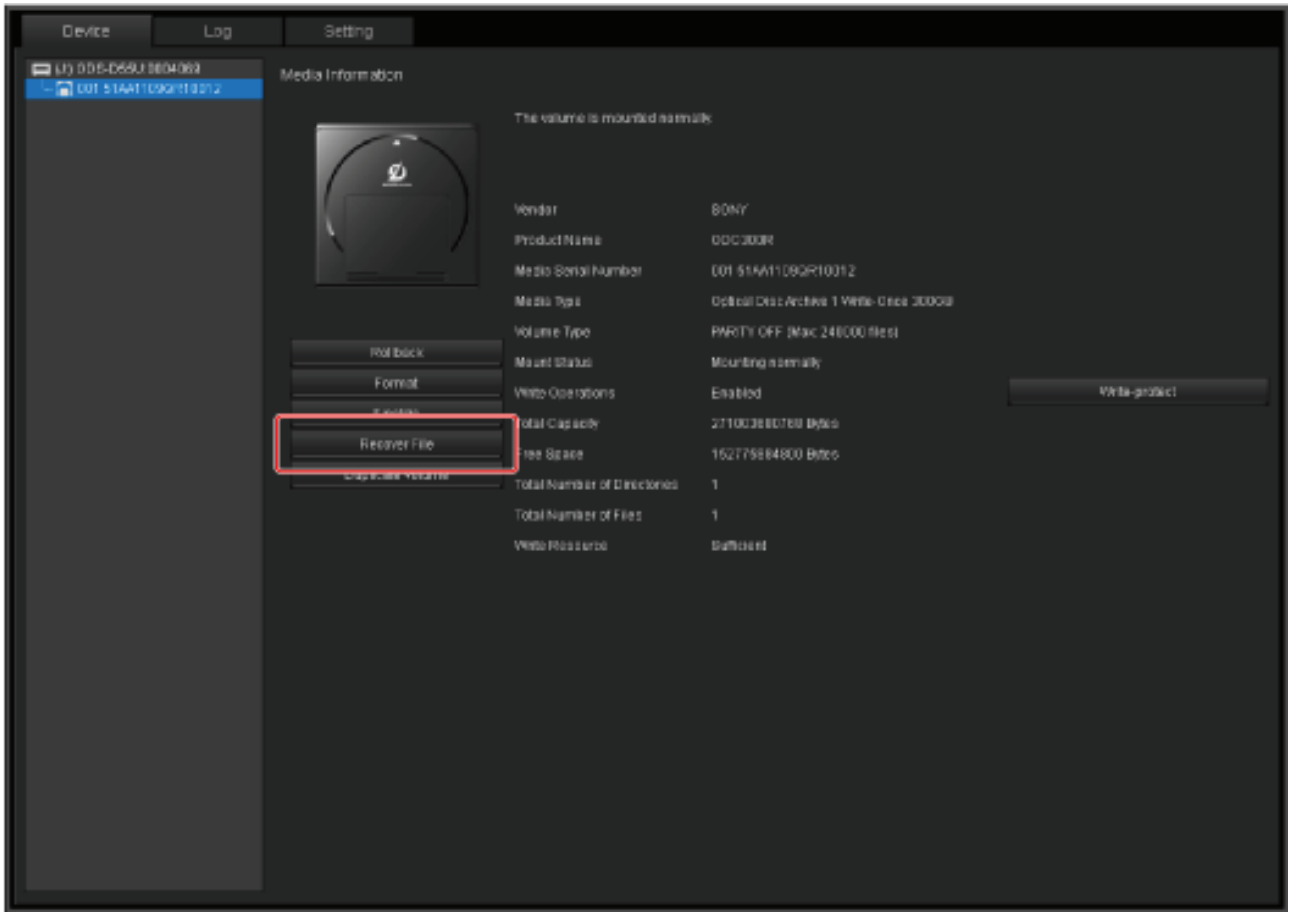
2. Click the [Yes] button.
   After finalizing is completed, "Finalization completed." appears.
3. Click the [Close] button.
   Finalizing is completed.

Related Topics

Device screen-Screen Organization

Recover File

You can recover and restore broken files.



How to recover a file

Register a file

1. Click the [Recover File] button.
   The list screen is displayed.
2. Click the [Add files] button.
3. Select the file you want to recover in the displayed screen, then click the [Open] button.
   The file you want to recover is added in the list screen.

Tip

You can also drag and drop a file to add to the screen in step 3 by drag and drop.

Recovering a file

1. Click the [Recover File] button.
   The list screen is displayed.
2. Select a file you want to recover and click the [Perform recovery] button.
3. Select the destination to save on the displayed screen after recovery, and then click the [OK] button.
   Returning to the list screen, file recovery starts. When file recovery is completed, “Status” is changed to “Recovery completed.”

Note

When you perform [Recover File], the file is recalled from the cartridge and recovered, and then stored in other storage devices such as HDD.

How to perform the volume check

You can check and recover the file system.

Performing the volume check

1. Click the [Recover File] button.
   The list screen is displayed.
2. Click the [Volume Check] button.
   "Are you sure you want to perform the volume check?" appears.
3. Click the [Yes] button.
   The volume check screen is displayed, and the volume check starts.
4. When the volume check is completed successfully, "No problem is found." appears.

If any problems are found, recover the volume according to the on-screen instructions.

Note

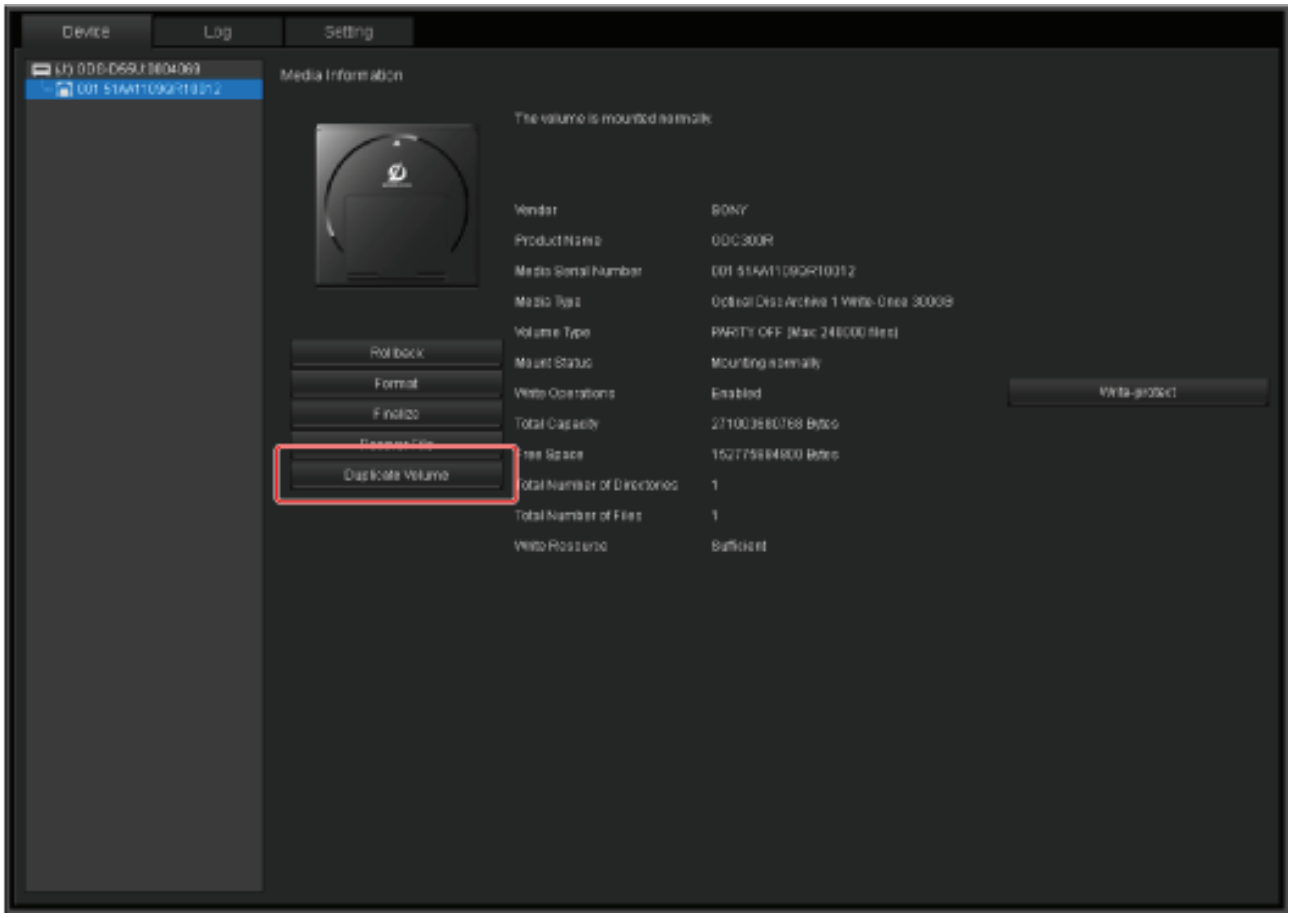
To recover the broken files, see "How to recover a file."

Related Topics

Device screen-Screen Organization

Volume Duplication

You can promptly duplicate the selected media data on a volume or folder unit to another media.
Also, you can duplicate to the hard disk drive (HDD) other than ODC (Optical Disc Cartridge).



To duplicate from Optical Disc Archive volume to other file system volume such as local disk

1. Click the [Duplicate Volume] button.
   "Are you sure you want to duplicate the volume? Please do not change files during the volume duplication." appears.
2. Click the [Yes] button.
   Select [Duplicate on a volume unit.] or [Duplicate on a folder unit.], and then click the [OK] button.
   When you select [Duplicate on a folder unit.], click the [Reference] button to select the folder you want to duplicate in the displayed screen.
3. Select [Select another volume.], and then click the [OK] button.
   Select the folder you want to duplicate in the displayed screen or create the new folder, and then click the [OK] button.
4. Select [Terminate the volume duplication.] or [Rewrite it.], and then click the [OK] button.
   Volume duplication starts. The duplication status is displayed on the progress bar.

To duplicate from Optical Disc Archive volume to another Optical Disc Archive volume

1. Click the [Duplicate Volume] button.
   "Are you sure you want to duplicate the volume? Please do not change files during the volume duplication." appears.

2. Click the [Yes] button.
   Select [Duplicate on a volume unit.] or [Duplicate on a folder unit.], and then click the [OK] button.
   When you select [Duplicate on a folder unit.], click the [Reference] button to select the folder you want to duplicate in the displayed screen.
3. Select [Select the volume of Optical Disc Archive Drive.] and another Optical Disc Archive volume from the pull-down menu, and then click the [OK] button.
   Note that empty folder should be selected or new folder should be created.
4. Select [Terminate the volume duplication.] or [Rewrite it.], and then click the [OK] button.
   Volume duplication starts. The duplication status is displayed on the progress bar.

Tip

When you select a duplication destination and select [Restrict disc spanning.], you can restrict a single file from being recorded spanning multiple discs.

To duplicate to the same Optical Disc Archive volume

1. Click the [Duplicate Volume] button.
   "Are you sure you want to duplicate the volume? Please do not change files during the volume duplication." appears.
2. Click the [Yes] button.
   Select [Duplicate on a volume unit.] in the displayed screen and the same Optical Disc Archive volume from the pull-down menu, and then click the [OK] button.
3. Select the backup destination from another volume, and then click the [OK] button.
4. Select [Terminate the volume duplication.] or [Rewrite it.], and then click the [OK] button.
   Volume duplication starts from the duplication source to the backup destination. The duplication status is displayed on the progress bar.
   When the volume duplication terminates from the duplication source to the backup destination, the cartridge is automatically ejected and [Inject another cartridge as a duplication destination.] appears.
5. Inject the cartridge, and then click the [OK] button.
   [When injecting another cartridge] => Step 6
   [When injecting the same cartridge] => Step 7
6. Select [Format the media, and duplicate to it.] or [Duplicate to the folder which you select.], and then click the [OK] button.
   Volume duplication starts from the backup destination to duplication destination. The duplication status is displayed on the progress bar.
7. [The same cartridge as a duplication source has injected. You are recommended to duplicate the media to another cartridge.] appears.
   Click [Reselect] or [Confirm].
   When you select [Reselect], the cartridge is automatically ejected and "Inject another cartridge as a duplication destination." appears.
   When you select [Confirm], go to Step 6.

Tip

When you select a duplication destination and select [Restrict disc spanning.], you can restrict a single file from being recorded spanning multiple discs.

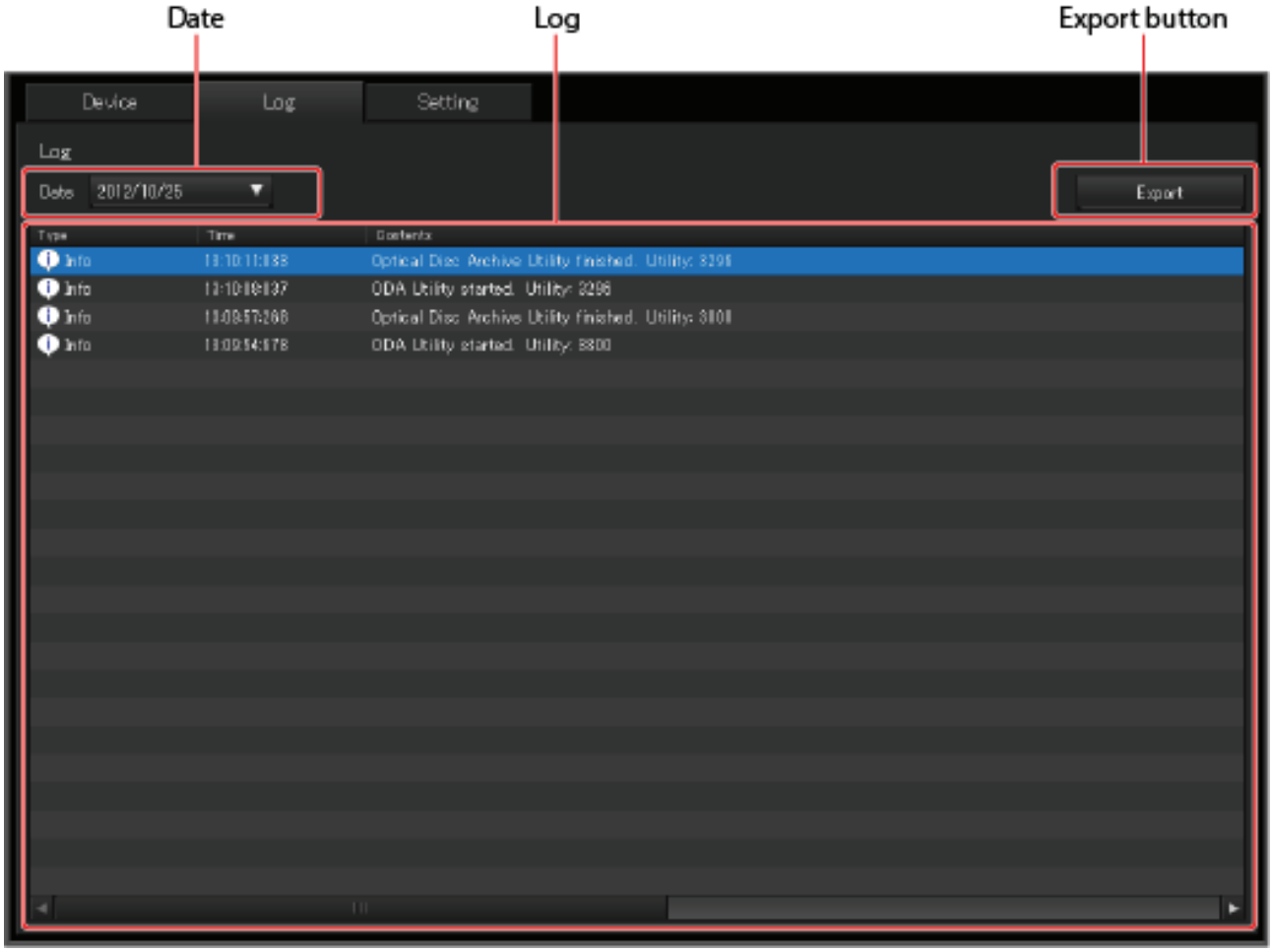
Related Topics

Device screen-Screen Organization

Log screen

Log screen-screen Organization

The log that occurred on the driver.



Date

Selects the date of log you want to display.

Click ▼ to display the dates of log in the list form.

Log

Displays the log list of selected date.

You can filter log types by [Information], [Warning], or [Error].

Double-click or right-click the list to display the log's detailed dialog.

Item	Information displayed
Type	Displays the type of log (information/warning/error)
Time	The time when log occurred.
Contents	Contents of log

Export button

Exports the log to any desired location.

Note

You cannot select the capacity for the Optical Disc Archive Drive.

How to export the log

1. Click the [Export] button.
   The [Save as] screen is displayed.
2. Designate the file name and the destination to save, then click the [Save] button.
   “Export completed.” appears.
3. Click the [Close] button.
   The log is exported to the designated place.

Refreshing the Display

Select [Update] from the View menu.

Note

- A drive log may not be available with the old version of the Optical Disc Drive firmware.
- A drive log is not available from the drive with a cartridge injected.

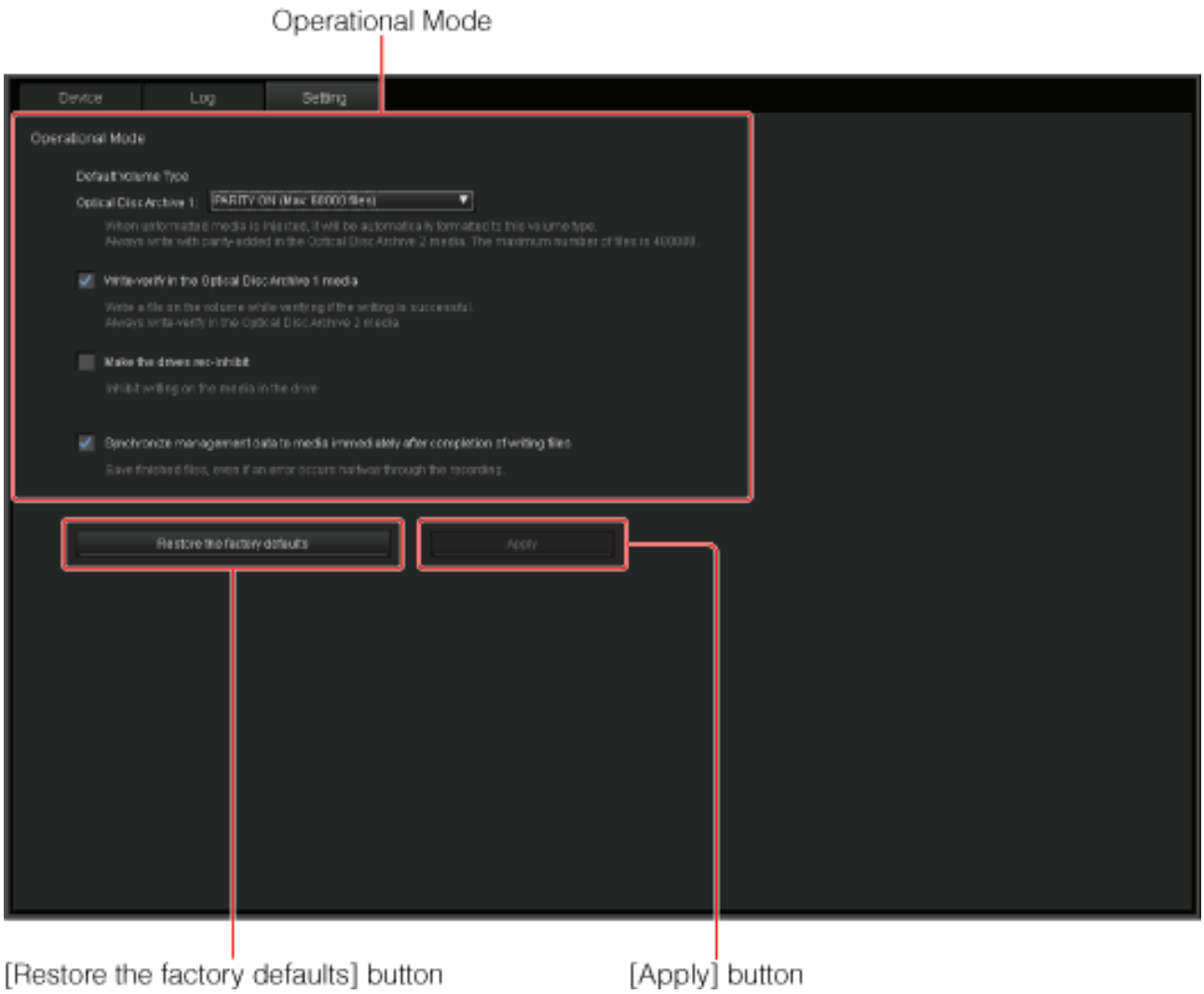
Setting screen

Setting screen-Screen Organization

Sets the Operational mode for ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U and the Optical Disc Archive Software.

Note

To validate change of a setup, it is necessary to re-inject the cartridge.



Operational Mode

Operational Mode	Information
Write-verify	Write-verify in the Optical Disc Archive 1 media Write a file on the volume while verifying if the writing is successful. Always write-verify in the Optical Disc Archive 2/3 media. **Note** Transfer speed will be changed. For details, refer to the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U OPERATION MANUAL.
Make the drives rec-Inhibit	Prevents from writing to the drive.

Operational Mode	Information
Synchronizes management data to media, immediately after completion of writing files	Saves finished files, even if an error occurs halfway through the recording. **Note** “File System” operation mode: ON – Default setting Even in the event of a drive power interruption or a failure in recording a file, previously finished files are safely stored. Next time the volume is mounted, only the damaged file during recording due to such interruptions is deleted, while the other completed files are recovered automatically. This is because system information is updated and written every time a new file is recorded. It is recommended to set to [ON], when safety comes on top of your priorities. “File System” operation mode: OFF The [OFF] mode provides improved performance in recording a series of small files. In addition, it enhances the efficiency rate of cartridge usage. On the other hand, many files could possibly be deleted due to troubles such as a power interruption during successive recordings. This is because system information is updated and written once, right after consecutive files are recorded. In the case of a recording trouble, a rollback occurs and it returns to the previous state before you start recording a series of files. Next time the volume is mounted, the last complete file system update written to the cartridge is valid. All previous small files unaccompanied by complete file system records will be deleted and irrecoverable. For this reason, it is recommended to set to [ON] under unstable power supply environments.
Default Volume Type	Optical Disc Archive 1 : When unformatted media is injected, it will be automatically formatted to this volume type. Always write with parity-added in the Optical Disc Archive 2/3 media. The maximum number of files is 480000/800000 respectively. **Note** When parity-added write is performed, broken files will be recovered/restored since performing “Recover File” corrects the error with parity information.

[Restore the factory defaults] button

Restores the operational mode to the factory default settings.

[Apply] button

Determines the operational mode.

How to change the Operational Mode

1. Select a check box of the Operational Mode. Select [Default Volume Type] from the pull-down menu.
2. Click the [Apply] button.
   “Operational mode setting has been changed. Reinject the cartridge to activate the mode newly set.” appears.
3. Click the [Close] button.
4. Re-inject the cartridge.
   The operational mode is changed.

How to return the operational mode to the factory default setting

1. Click the [Restore the factory defaults] button.
   “Do you want to restore the factory defaults of operational mode settings?” appears.
2. Click the [Yes] button.
   “Operational mode setting has been changed. Reinject the cartridge to activate the mode newly set.” appeas.
3. Click the [Close] button.
4. Re-inject the cartridge.
   The operational mode returns to the factory default setting.

Appendix

Alarm Code List

The contents of the alarm displayed on the drive information in the device screen are listed according to each state of ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U.
When the error is eliminated, the indicator goes off.

- Alarms when a Cartridge is injected
- Alarms during Operation
- Alarms Relating to Sensors and Drives

Alarms when a Cartridge is injected

LED [a]	Alarm code	Description	Possible solution
Flashes four times per second	50-010 50-011 51-020 51-021 54-008	The management area of the disc is unreadable.	Unusable media; inject another cartridge.
	51-500	Unsupported disc. The latest firmware is required to use the media.	Get the latest Optical Disc Archive Software, install it, and update the firmware.
Flashes every second	21-001 6D-000	This cartridge is nearing the end of its use cycle.	You are recommended to duplicate the data to another cartridge at your earliest convenience.
	21-100	Unusable media;	Consult your Sony Service representative.
	54-009	The cartridge and the disc do not correspond.	Unusable media; inject another cartridge.
	54-000 54-001 54-002 54-003	Unsupported format of the disc.	Unusable media; inject another cartridge.
	54-006	Unsupported format of the cartridge memory.	Unusable media; inject another cartridge.
	54-004 54-005 54-007 95-517 95-518	Inaccessible to the cartridge memory.	Reinject the cartridge.

a) ALARM indicator on the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U.

Related Topics

Alarms during Operation

Alarms Relating to Sensors and Drives

Alarms during Operation

LED [a]	Alarm code	Description	Possible solution
Flashes every second	6D-001	Unusable media;	Consult your Sony Service representative.
	54-200 54-201 53-502	Detected an error in the management area of the disc.	Reinject the cartridge.
	54-004 54-005 54-007 95-517 95-518	Inaccessible to the cartridge memory.	Reinject the cartridge.
	54-006	Unsupported format of the cartridge memory.	Unusable media; inject another cartridge.
	54-300	Physical format of the disc for recording is being restored.	Do not turn off the power while an error occurs.
Non-lighting	22-001	Multiple, simultaneous access were frequently made to the cartridge.	Do not conduct the following operation; performance may decline. • Reading multiple files at the same time • Reading (writing) a file while it is being written (read) • Producing a duplicate copy of a file in the same volume For details, see “Inadvisable Operations.”
	91-552	Mounting failed.	Eject the cartridge and insert the same cartridge again.
	91-553	A read error occurred.	
	91-554	A write error occurred.	

a) ALARM indicator on the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U.

Related Topics

Alarms when a Cartridge is injected

Alarms Relating to Sensors and Drives

Alarms Relating to Sensors and Drives

LED [a)]	Alarm code	Description	Possible solution
Flashes four times per second	95-50D 95-51D 37-901 37-A01 37-B01 37-C01 47-901 47-A01 47-B01 47-C01	Internal temperature of the drive is abnormal.	Turn off the drive immediately and disconnect the power cable. If you continue to use the drive, the internal temperature may rise higher and cause damages or fire.
Flashes every second	95-50E 95-51E 37-900 37-A00 37-B00 37-C00	Internal temperature of the drive has risen.	Be sure not to block up ventilation holes on the front and back of the drive, and release heat.
	95-50F 95-51F 95-52F	Internal temperature of the drive has risen.	Be sure not to block up ventilation holes on the front and back of the drive, and release heat. If the problem persists, consult your Sony Service representative.
	3E-500	The drive is not set horizontally.	Please set the drive horizontally.
	95-52A	Mismatch of the serial number of the drive unit was detected.	Perform the drive adjustment.

LED [a]	Alarm code	Description	Possible solution
Flashes four times per second	3E-501	The drive is not set horizontally.	Turn off and turn on the drive after setting the drive horizontally.
	20-xxx	Detected an abnormality in the mechanical control of the drive.	Please push the EJECT button and eject the cartridge when the cartridge is not ejected. Turn off and turn on the drive if the cartridge cannot be ejected.
	20-117	Detected an abnormality in the mechanical control of the drive.	There is a possibility that the cartridge unable to handle was injected.
	52-00B 52-08B 52-10B 52-18B 72-00B 72-08B 72-10B 72-18B	Inaccessible to the disc.	Reinject the cartridge.
Flashes every second	6F-E00 6F-E80 6F-F00 6F-F80 8F-E00 8F-E80 8F-F00 8F-F80	Unable to write to the disc.	Reinject the cartridge.
Flashes four times per second	6F-E03 6F-E83 6F-F03 6F-F83 8F-E03 8F-E83 8F-F03 8F-F83	Inaccessible to the disc.	Reinject the cartridge.
Flashes every second	3F-511	It is time for replacement of the air filter.	Replace the air filter.[b]

a) ALARM indicator on the ODS-D55U/ODS-D77U/ODS-D280U/ODS-D380U.

b) For details, refer to the operation manual.

Related Topics

Alarms when a Cartridge is injected

Alarms during Operation

About the file system

Overview

This section explains the overview of the file system.

- Mount operations
- Limitations
- Inadvisable Operations

Mount operations

[Volume] means the file system of the media that is formatted.
[Mount] means the status where access to the volume is possible.

For the blank media

When the media is inserted to the drive, it is formatted automatically, then it is mounted as the empty volume that does not contain files and directories.

Optical Disc Archive 1 media
You can select one of the following volume types depending on the volume type for the setting screen/ rule for Utility in advance.

- PARITY ON (Max 60000 files)
  This is the format that can create up to 60,000 files (including directories).
  When recording the file, the redundant parity data is created automatically. This parity data is used when file restoration is needed.
- PARITY OFF (Max 240000 files)
  This is the format that can create up to 240,000 files (including directories).
  When recording the file, the parity data is not created.

Optical Disc Archive 2 media

- PARITY ON (Max 480000 files)
  This is the format that can create up to 480,000 files (including directories).
  When recording the file, the redundant parity data is created automatically.
  This parity data is used when file restoration is needed.

Optical Disc Archive 3 media

- PARITY ON (Max 800000 files)
  This is the format that can create up to 800,000 files (including directories).
  When recording the file, the redundant parity data is created automatically.
  This parity data is used when file restoration is needed.

For the rewritable media

You can change the volume type of the media that is formatted to one of the volume types above to another volume type by selecting [Restore the capacity of the media.] when using the format function of Utility.
(Refer to How to format (capacity recovery).)

For the write-once media

You cannot change the volume type of the media that is formatted to one of the volume types above.

For media that is already formatted

You can access files and directories created on volume.
When the volume is recordable, you can create a new file and directory.
You can also perform reading, viewing, deleting, changing of the name, moving, changing of the attributes, and changing of the volume label, of the file and directory that are already created.
When the recording operation of the volume is disabled or restricted, you can perform reading and viewing of the file and directory, but you cannot perform creating, changing of the name, moving, changing of the attributes, and changing of the volume label.
You can check whether the volume is recordable or not on the device screen/media information/ recording operation of Utility.

When the media cannot be mounted due to an abnormality

You cannot access the file or directory that is created on volume.
Check the mount state of the volume on the device screen/media information/mount state of Utility.

Related Topics

Device screen- Format

Limitations

The number of the maximum files + directories

You can create the following files + directories depending on the type of the volume.

Optical Disc Archive 1 media

- PARITY ON (Max 60000 files): Up to 60,000
- PARITY OFF (Max 240000 files): Up to 240,000

Optical Disc Archive 2 media

- PARITY ON (Max 480000 files): Up to 480,000

Optical Disc Archive 3 media

- PARITY ON (Max 800000 files): Up to 800,000

The root directory is counted as one. There is one directory (root directory) even with an empty volume.

File and directory hierarchy

You can create up to 64 hierarchies for files and directories.

The root directory is counted as one hierarchy.

The file that is created on the root directory is counted as the second hierarchy.

File name

The usable characters for the file and directory name are from 1 to 127 characters in Unicode 2.0.

Characters in surrogate pair are counted as two characters.

You cannot use the following characters for names.

Code	Character
U+0000	(null)
U+0000 - U+001F	a)
U+0022	" (double quotation) a)
U+002A	* (asterisk) a)
U+002F	/ (slash)
U+003A	: (colon) a)
U+003C	< (less than) a)
U+003E	> (greater than) a)
U+003F	? (question mark) a)
U+005C	\ (back slash, or Yen mark) a)
U+007C	| (vertical bar) a)
U+007F	(DEL) a)

a) The character recorded by Macintosh/Linux is changed with a change rule of UDF.

You cannot compose a name using only “.” (dot) or “..” (consecutive dots).

You cannot use “ ” (space) or “.” (dot) at the end of s name.

You cannot use double file names in (IGNORE CASE) on the same directory.

You cannot compose a name using only “$” (dollar) or “$$” (consecutive dollar) under the root directory.

Volume label

The usable characters for the volume label are from 1 to 63 characters in Unicode 2.0.

Characters in surrogate pair are counted as two characters.

You cannot use the following characters for names.

Code	Character
U+0000 - U+001F	
U+0022	" (double quotation)
U+002A	* (asterisk)
U+002F	/ (slash)
U+003A	: (colon)
U+003C	< (less than)
U+003E	> (greater than)
U+003F	? (question mark)
U+005C	\ (back slash, or Yen mark)
U+007C	| (vertical bar)
U+007F	(DEL)

You cannot use a character string beginning with “.” (dot).

File recording

You can only open one file in recording mode. Only sequential recording is possible.
Normally, you cannot open the recorded file in recording mode.
The following recording file can be opened in recording mode and recorded additionally through sequential recording.

- Last recorded file
- Size zero (0) files.

Inadvisable Operations

Files of the source and destination may be lost if an impairment occurs during the file moving process. Do not move the file if an impairment occurs.
When any of the following inadvisable operations ([1] to [4]) is performed to the cartridge, cartridge accessing becomes slow. If this situation continues for a long time, access to the cartridge will be temporarily prohibited.
This error will be resolved when the cartridge is re-inserted.
Perform the operations on Possible solution instead of the inadvisable operations.

Inadvisable operations	Possible solution
[1] Reading files simultaneously Example: In Windows Explorer, while copying the recorded file on the ODA media to your local folder with drag-and-drop, at the same time you drag-and-drop another file on the ODA media to your local folder. Such simultaneous operations should not cause an error. However, if the two files are located on different discs, the transfer rate will become extremely slow because the discs will swap for every 64 KB to 1 MB of data copied, and the media's durability will deteriorate.	Finish copying the first file to your local folder (the computer’s hard disk or another medium), then start copying the next file.

Inadvisable operations	Possible solution
[2] Reading a file while recording, or recording a file while reading Example: In Windows Explorer, while copying a file in your local folder to the ODA media with drag-and-drop, at the same time you copy another file on the ODA media to your local folder with drag-and-drop. These two operations will continue but if the files are on different discs, the transfer rate will become extremely slow because the discs will swap for every 64 KB to 32 MB of data copied, and the media's durability will deteriorate.	Finish copying the file to the ODA media, then copy the file on the media to your local folder (the computer’s hard disk or another medium).
[3] Producing a duplicate copy of a file in the same volume Example: In Windows Explorer, right-click and drag the file recorded on the ODA media to the folder, then select [Copy here]. This copy operation does not cause an error, but if the files are on different discs, the transfer rate will become extremely slow because the discs will swap for every 64 KB to 32 MB of data copied, and the media's durability will deteriorate.	Finish copying the file to the computer’s hard disk (or some other medium), then copy that file again from the hard disk to the ODA media.
[4] Reading a file which is spread over more than one disc Example: When playing a clip file via XDCAM Viewer, if the file is recorded over more than one disc in the ODA media, then you move the slider on the position bar repeatedly from side to side. The transfer rate will become extremely slow because the discs will swap frequently, and the media's durability will deteriorate.	Copy the file to the computer’s hard disk (or some other medium), then play (or scrub, etc.) the copied file from that medium. When Content Manager (recommended software for ODA) is used while recording to the ODA media, recording over multiple discs can be prevented. (If the recording file size is larger than the available disc space, the recording over multiple discs cannot always be prevented.)

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