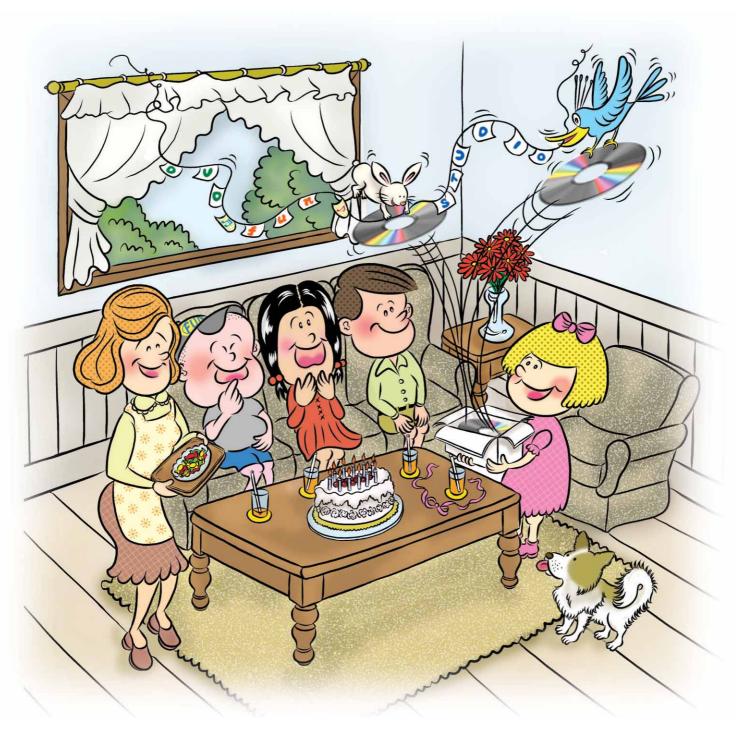
Panasonic

Operating Instructions

Authoring Software

DVDfunSTUDIO 2.6



- ▶ For details on the basic operations of your computer and Windows®, refer to the Operating Instructions of your computer.
- ▶ These instructions are based on examples which are used for explanatory purposes only. The instructions and screens set forth here for these examples may differ from the ones actually followed and displayed.

■ Before Startup
Features/system requirements for DVDfunSTUDIO3
Cautions on startup4
Usable discs5
Cautions on writing discs6
■ How to start
How to start DVDfunSTUDIO7
Starting from Start menu8
Starting from DVD-MovieAlbumSE 49
About DVDfunSTUDIO
Terms and title data structure of DVDfunSTUDIO10
Outline of operating procedures for DVDfunSTUDIO11
About material data12
■ Creating DVD disc by DVDfunSTUDIO
Selecting a storage medium13
Selecting a layout14
Registering movies15
Selecting movies
Adding chapters to a movie22
Selecting Movies to be registered with CollectTool
Editing pages
Adding pages
Editing the page design29
Changing the layout
Other page design editing functions
Checking the title data contents (Preview screen)32
Writing on discs
Writing on a hard disk for added convenience
Copying data from one disc to another
Saving/Loading the title data37
■ Useful information
Names and functions of screen parts38
Environment setting41
Troubleshooting42
Other 44

Before Startup

Features/system requirements for DVDfunSTUDIO

Features

DVDfunSTUDIO is an authoring software intended to arrange video files in any desired order and convert them into the DVD-Video format to record them on a DVD disc.

With DVDfunSTUDIO, you can arrange video files, replace the background and link button of each page with desired images, and write on a DVD R/RW disc. You can also add a chapter menu.

In these operating instructions, the DVD discs that can be recorded with DVDfunSTUDIO are described as DVD R disc, DVD RW disc, or DVD R/RW disc as a general term for the above-mentioned 2 types of disc.

When defining the disc type in this manual, it is referred to as the DVD-R disc or DVD-RW disc.

System requirements

Compliant PC:

IBM® PC/AT compatible personal computer

- The operation on PCs other than PC/AT compatible personal computer is not guaranteed.
- This software is not compatible with Macintosh.
- Supported OS:

Microsoft® Windows® 2000 Professional*1 (Windows® 2000 Service Pack 4)

Microsoft® Windows® XP Home Edition (Windows® XP Service Pack 2)

Microsoft® Windows® XP Professional (Windows® XP Service Pack 2)

Microsoft® Windows VistaTM Home Premium

Microsoft® Windows VistaTM Home Basic

- *1: DirectX[®] 9.0c must be installed. If DirectX[®] 9.0c or later has not been installed, DirectX[®] 9.0c will be installed automatically during installation of the supplied software.
- 64-bit OS's are not supported.
- CPU:

Intel® Pentium® III 800 MHz or higher (including compatible CPU)

- Hard disk:
 - The hard disk in use must support Ultra DMA-33 or higher and the DMA setting must be enabled.
 - Required free space for the installation: 200 MB or more

The free space of the hard disk must be nearly equal to or larger than the amount of data to be written.

A maximum of approx. 1.4 GB of free space will be required to write data equivalent to one 8 cm DVD R/RW disc. A maximum of approx. 4.7 GB of free space will be required to write data equivalent to one 12 cm DVD R/RW disc. Also, a maximum of approx. 8.5 GB of free space will be required to write data equivalent to one 12 cm DVD R DL disc and a maximum of approx. 2.6 GB of free space will be required to write data equivalent to one 8 cm DVD R DL disc*1.

- *1: This version of the software supports 8 cm DVD-R DL discs.
- Drive compression must not be specified.

If drive compression is specified, an error will occur during the writing operation. (In the hard disk's Properties dialogue box, uncheck [Compress drive to save disk space].)

RAM memory:

Windows® 2000/XP:256 MB or more

Windows Vista: 512 MB or more (1 GB or more is recommended)

Video function:

1024×768 pixels, Medium (16-bit) or HighColour (16-bit) or higher (DirectDraw® Overlay support) VRAM 4 MB or more

Sound function:

Sound device compatible with Windows (DirectSound® supported)

Interface:

USB 2.0 (Type A, high speed support)

Software:

Microsoft® DirectX® 9.0c. Acrobat® Reader™ 5.0 or later

* Even if the system requirements mentioned in these operating instructions are fulfilled, some personal computers can not be used.

Cautions on startup

- If you select NTSC as the TV system at the time of installation, PAL format images cannot be handled. (If PAL is selected, NTSC format images cannot be handled.)
- Do not operate other applications which require a DVD drive or those for recording, MPEG encoding or other purposes which highly utilize CPU and spend much memory.
- Do not perform the following operations when this software is started. Any of the following operations may interfere with normal writing operation, causing damage to the DVD R/RW disc.
 - Turning off the personal computer or DVD drive, or rebooting the personal computer.
 - · Switching the user or logging off.
 - · Changing the display settings, etc.
 - Using the screen saver or the power saving functions such as standby and hibernation. (If the power saving functions have been set so as to run automatically, cancel them.)
- If you perform the following operations, normal writing operation is impeded. They may cause damage to the external hard disk.
 - Plugging or unplugging the connecting cord of the external hard disk, and turning it on/off.
- If you connect the external hard disk through an interface with a low transfer rate (e.g., USB1.1) or use an external hard disk with low access speed, data may not be transferred in time and you may fail to write it.
- Do not use any shared drives of other personal computers on the network as the display folder for video material data or as the work drive.
- This software can only be started by users with administrator privileges. (For Windows® 2000/XP)
- This software cannot be used by Guest users. (For Windows Vista)
- Do not change or delete files or folders concerned with DVDfunSTUDIO. If you do so, DVDfunSTUDIO may not
 operate normally.
- Character entries by languages other than the language automatically selected in the installation of DVDfunSTUDIO (any of Japanese, English, Germany, French, Italian, Spanish or Simplified Chinese) is not guaranteed.
- This software can be activated only when the system clock is set in the following range.
 Between 0 hours 00 minutes, January 1, 1971 and 23 hours 59 minutes, December 31, 2037
 If the system clock is set out of this range, then this software may not be activated or operated properly.

When connecting the DVD video camera to a personal computer through a USB terminal

For how to connect the DVD video camera to a personal computer through a USB terminal and notes for USB connection, refer to the Operating Instructions for the DVD video camera.

- Use the AC adapter for supplying power to the DVD video camera.
- Do not pull out the PC connection cable when the disc in the DVD video camera is being accessed. Pull out the PC connection cable only when the DVD disc is not accessed.
- If the DVD video camera is connected to a personal computer via a USB hub or a USB terminal on the front panel of the personal computer or one on the keyboard, the DVD camera may not be recognized by the personal computer. In this case, connect the DVD video camera to a USB terminal on the rear panel of the personal computer.
- Panasonic cannot guarantee the operation with the equipment below.

Video cameras on which the software operation is not guaranteed:

DZ-MV100 Series, DZ-MV200 Series, DZ-MV300 Series, DZ-MV500 Series VDR-M10, VDR-M20, VDR-M30, VDR-M50, VDR-M70

Some DVD video camera models cannot be used as writable drives.
 Refer to the operating instructions of the equipment for more information.

Usable discs

- This software can write data on 12 cm and 8 cm DVD R/RW discs and 12 cm and 8 cm DVD R DL discs*1. Operation with DVD-RAM discs is not possible.
 - *1: This version of the software supports 8 cm DVD-R DL discs.
- DVDfunSTUDIO cannot create DVD-Audio, VideoCD, or miniDVD.

< Handling of discs >

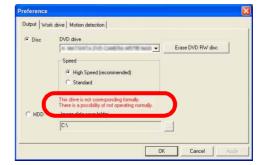
- For the handling of DVD R/RW discs, also refer to the operating instructions of your personal computer and DVD drive. Note that if you stain or scratch a disc, it becomes impossible to read or write the disc.
- DVD R/RW discs may not be recognized correctly or accept writing operation depending on compatibility with your DVD-ready drive. Select recommended discs by consulting the operating instructions of your personal computer and also your DVD drive.

< Preparation of DVD drive >

• To write to a DVD R/RW disc, a DVD drive is required. Before activating this software, connect a DVD drive and insert an unused DVD R disc or formatted DVD RW disc.

Activate this software. Open the environment setting panel from the Menu's [Tool] >> [Preference] and select the drive to write onto using the [Output] option.

DVD video cameras (\$\Display\$4) that can't be used as writable drives for personal computers do not appear in the list even if they are connected. If the message shown in the figure appears below the [Speed] column, the drive you are using is not supported by this software. The writing operation for drives that are not supported by this software is not guaranteed. In this case, change the output destination to [HDD]. Create an image on your HDD and then, transfer that image to your drive by using software that supports your drive.



- If the DVD video camera is selected as a writting drive, then the [] button will be indicated. In order to eject the disc from the DVD video camera, either click [] or select [Eject] in Explorer.
- For the method of formatting DVD RW discs, refer to "Names and functions of screen parts" (⇒38). If you format a DVD RW disc, all the data stored on the disc is erased. Before formatting, make sure that there is no necessary data on the disc. If you select [Full erase] at the time of format, it takes a maximum of about 1 hour to complete the format. (The time required for completing the format depends on the speed of the drive.) However, if the DVD video camera is selected as a write destination drive, then [Full erase] cannot be selected.
- If multiple DVD drives are connected, they may not be recognized correctly.

Preference Output | Work drive | Motion detection | (** Disc | DVD drive | O. MATSHITA DVD-RAM LNGK:1931 | Erase DVD RW disc | Speed | (** High Speed (recommended) | C* Standard | Thou | Image data save folder | C\\ OK | Cancel | Assoly

< Writing speed >

• The writing speed (2X, 4X, etc.) indicated on the DVD drive or DVD disc means its maximum capability, not its actual writing speed. (It varies depending on combinations of drives and discs and usage conditions.)

< DVD player for playback >

- Playing DVD discs created by this software on all DVD players, video game machines or DVD recorders is not necessarily guaranteed.
- The DVD R/RW disc created by DVDfunSTUDIO should be played back by a DVD player or video game machine that supports the type of the created disc.
- Even the DVD player that supports the type of used disc and the DVD video game machine that supports DVD discs cannot play back discs normally in some cases; for example, if you use an old model or the written data are imcompatible with the device, the playback image may become small or narrow, or part of the image may not be shown.
- When using a double layer disc, the playback image may be stopped for a moment or the audio may be muted at the point where the playback layer is switched from the 1st layer to the 2nd layer depending on the DVD player.

< Other >

- Discs created by DVDfunSTUDIO do not accept data addition by any DVD recorder.
- Non-finalized discs recorded by a DVD recorder do not accept data addition.

Cautions on writing discs

- The data recorded or edited by you can only be used for personal enjoyment and cannot be used without the permission of the copyright holder.
- If you use a notebook computer, employ AC power. When such a personal computer is operating on a battery only, normal writing operation may be impeded.
- If you write video files of images recorded through a TV under poor reception on a disc by DVDfunSTUDIO, the audio and video data may not be synchronized.
- If you write on a DVD R/RW disc by DVDfunSTUDIO, it may take several hours to convert data depending on the volume of data. An additional several hours may be needed to complete writing to the disc.
- When creating a DVD-Video disc (writing on the hard disk or a DVD R/RW disc), the end of the movie may be shortened by about half a second.
- When you select [LPCM] in [Audio settings], the volume of the audio data is increased to 7 times as large as that of the
 original MPEG2 format file. Therefore, the file sometimes cannot be written on 1 disc even if the original MPEG2 format
 file is less than the capacity of 1 DVD R/RW disc (4.7 GB).
- Audio data is converted from MPEG format to LPCM format. Accordingly, the volume of the audio data is increased by a factor of about 7; therefore, even if the original MPEG2 format file is less than the capacity of 1 DVD R/RW disc (4.7 GB), the file sometimes cannot be written on 1 disc.
- Data length that can be written on 1 DVD R/RW disc (Playback time)
 Given below is the data length that can be written on 1 DVD R/RW without being re-encoded, when 1 type of file created by the associated application (DVD-MovieAlbumSE or MotionDV STUDIO (optional)) is imported and written by DVDfunSTUDIO.
 - The table below gives approximate values for 12 cm DVD R/RW disc.

MPEG2 file created by DVD-MovieAlbumSE

Writing time in each mode when importing onto DVD-RAM by DVD-MovieAlbumSE

When importing AVI images in DVD-MovieAlbumSE	Length of data that can be written (minutes)		
(Setting of optional recording mode)	LPCM ^{*1}	Dolby Digital	
XP mode (High Quality)	60	70	
SP mode (Standard Quality)	100	130	
LP mode (Long time)	160	260	

^{*1:}If the bit rate of video exceeds 8 Mbps, you cannot select [LPCM] in [Audio settings].

MPEG2 file created by MotionDV STUDIO

MPEG2 format			MotionDV STUDIO data			
(Format specified)	720×480,	704×480	352×480		352×240	
(mpg)	LPCM	Dolby Digital	LPCM	Dolby Digital	LPCM	Dolby Digital
High Resolution	60	70	75	90	75	90
Standard	75	90	100	130	100	130
High Compression	-	-	125	180	160	260

AVI file created by MotionDV STUDIO

Setting of DVDfunSTUDIO encoding	Length of data that can be written (minutes)		
Setting of Dyblund Foologing	LPCM	Dolby Digital	
High quality (8 Mbps)	60	70	
Normal (3.2 Mbps/4 Mbps)	120	130	
Long play (2 Mbps)	160	260	
Extra long play (1.6 Mbps)	180	320	

How to start

How to start DVDfunSTUDIO

DVDfunSTUDIO can be started directly from the Start menu. In addition, if DVD-MovieAlbumSE 4 is already installed, DVDfunSTUDIO can be loaded and started from DVD-MovieAlbumSE 4 after you select a movie on it and export. DVDfunSTUDIO provides different available functions and operating methods according to how it has been started. For details, see the following pages.

Starting from Start menu	(⇔8)
Starting from DVD-MovieAlbumSE 4	(⇒9)



- ▶ DVDfunSTUDIO cannot be started normally from applications other than DVD-MovieAlbumSE 4 (applications with different version numbers).
- ▶ When DVDfunSTUDIO is started for the first time, the [License Agreement] screen appears. After accepting the contents of the license agreement, click [I agree.]. (If you click [I disagree.], DVDfunSTUDIO exits.)
- ▶ To read the operating instructions of DVDfunSTUDIO, click the Start menu, and then click [All Programs ([Programs])] >> [Panasonic] >> [DVDfunSTUDIO] >> [Operating Instructions]. Refer to the operating instructions of DVD-MovieAlbumSE 4 as well.

Starting from Start menu

Click the Start menu, then click
[All Programs ([Programs])] >> [Panasonic] >>
[DVDfunSTUDIO] >> [DVDfunSTUDIO].



DVDfunSTUDIO will be started.

Screen in DVDfunSTUDIO

On this screen, you can add video files, edit the background and link button of each page as you like, and write on a DVD R/RW disc.



- A Background
- B Movie
- Media selection
- Link button
- Material data

(Detailed operating procedures (⇒13))

Starting from DVD-MovieAlbumSE 4

DVD-MovieAlbumSE 4 (The following is an example of the operating procedure.)

 You can collect data stored in multiple DVD-RAM discs into onto a DVD R/RW disc.



- ①Select images, and then click the auxiliary function button [...].
- ②Click [File Export] >> [Export a title] or [Export all titles] to write on a hard disk.



- ▶ If the bit rate of video exceeds 8 Mbps, you cannot select [LPCM] in [Audio settings].
- ③If you click [YES] on the confirmation screen which appears after writing, DVD-MovieAlbumSE 4 is closed, DVDfunSTUDIO is started and the CollectTool screen is opened.





When the CollectTool screen is displayed, select the folder you want to register and click [OK]. Reference for how to select folders and change the order of folders (⇒25)



 If the disc name, title name, or chapter name is not set for the disc (when exporting all titles) or if titles or chapters are exported, then the folder name will become "Untitled".

Main screen

Video files selected by DVD-MovieAlbumSE 4 are registered automatically, and their thumbnails are displayed.





- ▶ When there are 10 or more movies, the movies are registered on the layout of 10 movie registration frames and the 11th and later movies are registered to the subsequent pages. To move to other pages, click the link button or the thumbnail on the layout display area. (⇒26)
- ▶ If you select [LPCM] in [Audio settings], the audio data is written without being compressed. Therefore, the file written onto a DVD R/RW disc by DVDfunSTUDIO becomes larger than the original video file.
- ▶ Reference for the files that can be used as material data (⇒12)

Terms and title data structure of DVDfunSTUDIO

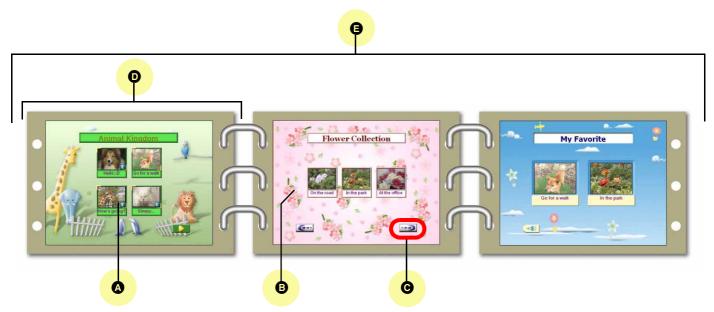
About DVDfunSTUDIO

DVDfunSTUDIO is an authoring software intended to register video files in any desired order, convert them into the DVD-Video format, and record them on a DVD disc or the hard disk.

Reference for usable material data (video files and still image files) (⇒12)

In this manual, the DVD discs that can be recorded with DVDfunSTUDIO are described as DVD R disc, DVD RW disc, or DVD R/RW disc as a general term for the above-mentioned 2 types of disc.

Terms and title data structure of DVDfunSTUDIO



Movie (Video files)

Movies can be registered or replaced simply by selecting the data which will serve as the material and moving it on the screen (drag and drop). (⇒15 - 16)

B Background

You can change it on any or all of the pages as you like. (⇒30)

Link button

This button is used to move to the previous or next page. The link button image can be changed for any or all of the pages as you like. (⇒31)

Page

A page is a collection of movies which has been put together as a set. (⇒26)

The page layout can be changed to suit the number of movies. (⇒29)

Title data

The title data is a collection of the movie data and other information on each page such as the movie play sequence which has been put together as a set. Sets of this data are written on the DVD R/RW discs.



- ▶ Details on the names and functions on the screen of DVDfunSTUDIO (⇒38)
- ▶ What is "drag and drop" ?:

"Drag and drop" means moving the mouse cursor to a desired object, left-clicking on the object and holding the mouse button down while moving (dragging) the mouse cursor to the desired location, and then releasing (dropping) the left mouse button.

Outline of operating procedures for DVDfunSTUDIO

Outline of operating procedures for DVDfunSTUDIO

Video files are converted into DVD-Video format and written on a DVD R/RW disc.

You can also replace the background image and link button images on any page with the images you like.

You can play back the DVD R/RW disc by DVD players that support playback of DVD R/RW discs.

■ Supported discs

DVD R discs and DVD RW discs are supported. For details, see "Usable discs". (⇒5)

■ Supported video files

- MPEG2 format video files created by DVD-MovieAlbumSE 4
- MPEG2 format and AVI format video files created by MotionDV STUDIO (optional)
- MPEG2 format video files created by any applications other than the above Some video image files cannot be written on a DVD R/RW disc even if they are in MPEG2 format. It may take long to display thumbnails depending on data.

Selecting a storage medium (⇒13)

Select the type of a medium that data is written on.



Selecting a layout and registering material data (⇒14 - 15)

Select material data from a specified folder and register them on each page as movies.



Editing pages and page designs (⇒26)(⇒29)

Edit title data by adding or deleting pages, changing the page background or the link button image, or by other operations.

The edited title data can be saved and then loaded later for use.



Checking the title data contents (⇒32)

Check the contents of the edited title data. The movie play sequence or contents can be checked during actual play.



Writing on discs (⇒33)

The title data is written on a DVD R/RW disc.



▶ This application can also be loaded and started from another associated application. It may provide different available functions and operations depending on how it has been started up. Please read "Cautions on startup". (⇒4)

About material data

The following video and still image files can be used as material data.

■ Video file

Video files can be registered as movies.(⇒15)

· ·	
File format	
DVD-MovieAlbumSE 4*1	MPEG2 format
MotionDV STUDIO (optional)	MPEG2 format
	AVI format
MPEG2 format files created by they are in MPEG2 format.)	any applications other than the above (Some video files cannot be registered even if

^{*1:} If the bit rate of video exceeds 8 Mbps, you cannot select [LPCM] in [Audio settings].

■ Still image file

Still image files can be used as background images. (⇒30)

- JPEG format
- BMP format



- ▶ The following are restrictions on MPEG2 format files created by software other than DVD-MovieAlbumSE 4 and MotionDV STUDIO (optional).
 - When such files are written on a disc, they are degraded in picture quality and take several hours to be written because they are re-encoded. (When re-encoding, select the picture quality from [High quality], [Normal], [Long play], and [Extra long play].)
 - Also, some files cannot be written due to the resolution, audio compression format and other factors. You cannot write files which have a resolution other than the following.

NTSC	720×480, 704×480, 640×480, 352×480, 352×240, 320×480, and 320×240
PAL	720×576, 704×576, 640×576, 352×576, 352×288, 320×576, and 320×288

- ▶ Data stored on an external hard disk connected to the IEEE1394 port, USB port, etc. can also be registered as material data.
- ▶ If you connect the external hard disk through an interface with a low transfer rate (e.g., USB1.1) or use an external hard disk with low access speed, data may not be transferred in time, and you may fail to write it.
- ▶ Data stored on removable media (demountable media) such as a CD-ROM and SD memory card cannot be used as material data.

Creating DVD disc by DVDfunSTUDIO

With DVDfunSTUDIO, you can easily create a DVD disc having a user-friendly menu screen by using a desired background, theme, etc.

Selecting a storage medium

Select the size of the DVD disc medium that data is written on.

Click on the media selection pull-down menu.



2. Select the size of the disc medium to be used.



You can select from [8 cm DVD], [8 cm DVD DL], [12 cm DVD], [12 cm DVD DL].

· Maximum capacity recordable on each medium

8 cm DVD	Approx. 1.4 GB
8 cm DVD DL	Approx. 2.6 GB
12 cm DVD	Approx. 4.7 GB
12 cm DVD DL	Approx. 8.5 GB

When a movie is registered (\$\DDST15\$), an approximate occupied volume of storage space is displayed in a numerical value and a bar graph. When the occupied volume exceeds the maximum recordable capacity of the selected medium, the excess is displayed in red on the graph.

• When the occupied volume is less than the maximum capacity:



• When the occupied volume exceeds the maximum capacity:



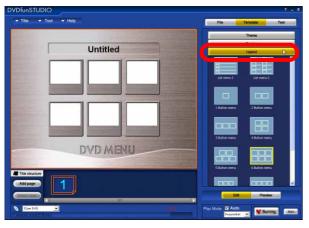
Selecting a layout

Set the number of movies to be registered and the positions where movies are registered.

1. Click the background.



2. Click [Layout].



3. Click a desired layout for the movie registration frame.



The layout for the movie registration frame will be changed.



- ▶ In the case when some movies are left unregistered because the number of registration frames is decreased after movie registration (⇒15), the screen to confirm whether or not to accept decreasing the number of movies to be registered appears. If you click [OK], the layout is changed and then the registrations on the excess movies are cancelled.
- ▶ The layout for different pages can be set separately.

Registering movies

Movies can be registered in desired sequence.

Selecting movies

1. Click the movie registration frame.



2.Click [Movie] and ▼, and then select [Change].



- When you double-click material data, the video file is played back. In this way, you can check the contents of the data before registering it.
- About designation of a folder to be displayed: When DVDfunSTUDIO has been started from DVD-MovieAlbumSE 4, you can select the folders that are to be managed by each application from the pull-down menu.



3. Select a folder where material data is stored and click [OK].



4. Drag and drop the material data you want to register to an empty movie registration frame on the main screen.



The movie will be registered.

- You can select multiple items by clicking the mouse or pressing the arrow keys while pressing the [Shift] key. When you click 1 item while pressing the [Ctrl] key, the item is selected or deselected.
- Depending on movies, it may take time to display the thumbnail of material data.
- You can switch the method of displaying the material data between the thumbnail view and thumbnails with detailed information.

Thumbnail view

Thumbnails and details





- ▶ Other ways to register movies
 - You can also register movies by right-clicking the material data and selecting [Registration]. (⇒38)
 If a movie registration frame is already selected on the main screen, the movie will be registered to that frame. If no registration frame has been selected, the movie will be registered to the first of the empty registration frames. (If there is no empty registration frame, [Registration] cannot be selected.)
 - You can also register movies by moving the movies onto the movie registration frames from Explorer using drag-and-drop.
- ▶ Reference for viewing the file information of registered movies (⇒18)
- ▶ Reference for MPEG2 format files created by other than the associated applications (⇒20)

Processing and checking registered movies

■ Deleting movies

1. Select a movie you want to delete.



[Registration info] is displayed on the right side of the screen.

• It is not possible to select more than one movie.

2. Click the [Delete] button.



The movie will be deleted.



The movie registration frame is not deleted.



- ▶ After selecting a movie you want to delete, you can also delete it in one of the following ways.
 - Press the [Del] key on the keyboard.
 - Select [Cancel registration] on the menu displayed by a right-click.

Changing movies

1.Click the [File] tab, and click [Movie].



2. Drag and drop desired material data to the movie registration frame where the movie you want to change is displayed on the main screen.



The movie will be changed.





▶ Replace movies by the above change function.







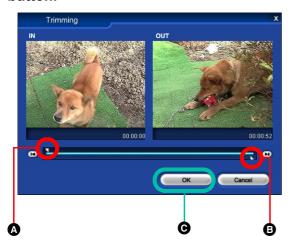
■ Setting the trimming of registered movies

You can trim off unnecessary parts at the start and end of the movie registered in a movie registration frame to write only a necessary part on a disc. However, the original movie file is not changed. If any chapters have been set for the movie, then it cannot be trimmed. So, before setting the trimming, delete all the chapters set for the movie. (\$\Display\$23)

1.Click a movie for which you want to set trimming and click the [Trimming] button.



2. Set the starting point and ending point of the desired range, and click the [OK] button.



- A Drag this slide bar to set the starting point of the desired range.
- Drag this slide bar to set the ending point of the desired range.
- © Click this button, and the trimming of the range is set for the movie.



- ▶ If you change the starting point or the ending point, the representative image of the movie is automatically changed to the image of the starting point. Set the representative image again if necessary. (⇒19)
- ▶ The position of the starting point or the ending point may have about 1 second deviation from the setting.



▶ The starting point and ending point of the trimming can also be set in steps of about 1 second.



- ▶ To move back the starting point by 1 second (or move it forward by 1 second), click ♠ and click ♠ (②) once.
- ▶ To move back the ending point by 1 second (or move it forward by 1 second), click ③ and click ① (②) once.

■ Viewing the file information of registered movies

Some files are encoded or re-encoded when written on a disc, and accordingly their file attributes are changed. On the [Conversion info] screen, you can confirm the information of the original data and the data at the time of writing on the disc. Changing the thumbnail of a movie, setting the picture quality on encoding, and selecting the audio of a movie on sound multiplex recording can be performed from the [Registration info] screen. (\$\infty\$19)

1. Click a movie whose information you want to view.

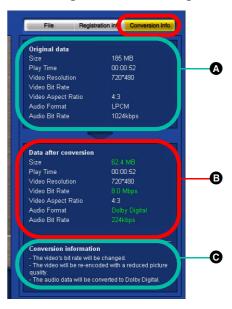


The registration information will be displayed on the right side of the screen.



- The file information of the movie currently selected is displayed.
- The conversion information of the movie is displayed.

2. Click the [Conversion info] tab.



- A You can confirm the size, playback time, etc. of the original data.
- You can confirm the size, resolution, bit rate, etc. at the time of writing on the disc. The items that will be changed from the original data are displayed in a different colour.
- © For movies with the mark, or if the DVD conversion is accompanied with degradation in picture quality, increase in data size, etc., detailed information is displayed in the Conversion Information block.



▶ Even if the audio of the original video file is in LPCM format, the size of converted data may be increased slightly.

■ Changing the representative image of a registered movie

You can select a desired scene as the representative image for each movie.

1. Click a registered movie.



The representative image will be displayed on the right side of the screen.

2. Move the slide bar to display the image you want to use as the representative image, and click the [Picture change] button.





The thumbnail in the menu will be changed to the selected image.

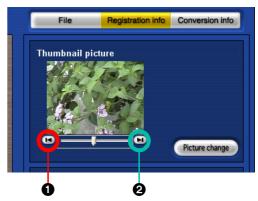




▶ If you change the starting point or the ending point by specifying the range of the movie (trimming), the representative image is automatically changed to the image of the point set as the starting point (⇒19). Set the representative image again if necessary.

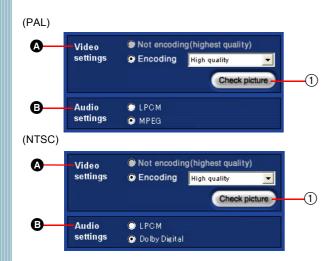


▶ If you click buttons on the right or left side of the slide bar, you can move the position of the representative image forward or backward in steps of about 1 second.



▶ If you click ①, the position of the representative image is moved backward by about 1 second. If you click ②, the position of the representative image is moved forward by about 1 second.

■ Changing the attributes of a registered movie



A [Video settings]

MPEG2 format files created by the associated application (DVD-MovieAlbumSE 4, MotionDV STUDIO (optional)):
 Since registered movies are displayed with the highest picture quality by default, the setting that will not re-encode is selected. When you want to re-encode registered movies, check [Encoding] and select desired picture quality from the list box. The mark is affixed to the thumbnails of encoded images or images that need encoding in the movie registration frame.

To obtain the best playback image in creating a DVD with this application, select [Not encoding(highest quality)].

- AVI (DV) format files and MPEG2 format files created by other than the associated application:
 - Images are always re-encoded. Picture quality can be selected from [High quality], [Standard], [Long play], and [Extra long play]. Changing the picture quality changes the recording time for a DVD.
- ▶ Movies are degraded in picture quality after encoding. Click the [Check picture] button (①) and check the picture quality. Clicking the button allows you to check the picture quality of the movie for about 10 seconds from the start of the movie. You can also check the audio.



B [Audio settings]:

The audio format can be set to [LPCM] or [Dolby Digital] for the NTSC system, and to [LPCM] or [MPEG] for the PAL system. It is recommended to check the movie on the [Preview] screen before writing on a DVD R/RW disc.



In the case of PAL:

You cannot chage the audio settings when you registered MPEG2 format files of which audio type is Dolby Digital.



▶ If the picture quality settings are changed, the movie size changes, and accordingly the recording time of 1 disc also changes.

Recording time to a DVD*1

The table below gives approximate values for 12 cm DVD R/RW disc.*2

Picture quality	Recordable time	Bit rate of video	Resolution	Audio file format
High quality	Approx. 60 min.		720×480 (720×576)	LPCM
	Approx. 70 min.	8 Mbps	720×480	Dolby Digital
	Approx. 60 min.		(720×576)	MPEG
	Approx. 120 min.	3.2 Mbps	352×480 (352×576)	LPCM
Normal	Approx. 130 min.	4 Mbps	352×480	Dolby Digital
	Approx. 120 min.	+ IVIDPS	(352×576)	MPEG
	Approx. 160 min.	352×240 (352×288)	LPCM	
Long play	Approx. 260 min.	2 Mbps	352×240	Dolby Digital
	Approx. 240 min.		(352×288)	MPEG
Extra long play	Approx. 180 min.	1.6 Mbps	352×240 (352×288)	LPCM
	Approx. 320 min.		352×240	Dolby Digital
	Approx. 300 min.		(352×288)	MPEG

^{*1:} The duration of time that data can actually be written on a disc varies depending on the file format, file attributes, picture quality settings, and other factors.

^{*2:} The values in parentheses are for the PAL system.

Adding chapters to a movie

You can add marks for searching scenes, called chapters, at some points in a movie. If chapters are added at desired positions, you can immediately play back the scenes you want to see. There are two ways to add chapters: adding chapters at arbitrary positions and adding chapters at fixed intervals.

■ Adding chapters at arbitrary positions in a movie

1. Click a registered movie.



For a movie with chapters already added, the thumbnails of the chapters are displayed in the chapter display section ((A)(\$\infty\$38). The chapter mark (C) is displayed in the upper right corner of the image, in the movie registration frame, that any chapter is added to.

2. Click the [Edit chapter] button.



The chapter editing dialogue box will appear. This dialogue box allows you to perform chapter editing operations such as chapter addition and cancellation.

3. Move the slide bar from side to side to find the desired image and click [Add] to add a chapter.



The thumbnails of the chapters will be exhibited in the thumbnail field (A). Add them to the movie by repeating this operation.

- You can change the text under a thumbnail by clicking it. The text can be changed to a maximum of 8 bytes.
- If you click buttons on the right or left side of the slide bar, you can move the position of the

representative image forward or backward in steps of about 1 second.



▶ If you click ①, the position of the representative image is moved backward by about 1 second. If you click ②, the position of the representative image is moved forward by about 1 second.

4. Click [OK] to register chapters in the movie.



If you click [Cancel], the operations performed after the chapter editing dialogue box was displayed are all cancelled.



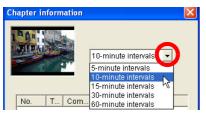
- ▶ It is not possible to add chapters at intervals of less than 10 seconds.
- ▶ Up to 23 chapters can be inserted.
- It is not possible to add a chapter within 1 second from the end of the movie.
- ▶ The position that a chapter is added at may deviate from the set point by about 1 second.

- Setting chapters at fixed intervals
- 1. Follow Steps 1 and 2 in "Adding chapters at arbitrary positions in a movie".
- 2. Click [Fixed interval].



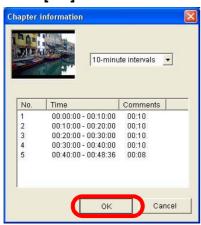
The chapter setting (fixed interval) dialogue box will be displayed.

3. Specify a fixed interval by clicking \blacksquare .



You can select from [5-minute intervals], [10-minute intervals], [15-minute intervals], [30-minute intervals].

4. Click [OK].



The thumbnails of the chapters added at regular intervals will be displayed in the thumbnail field. The chapters registered before are deleted.



- ▶ When setting chapters at fixed intervals (constant intervals), up to 23 chapters can be inserted.
- ▶ The time indicated on the application may differ from the time indicated on a DVD player.

- **■** Deleting chapters
 - 1. Follow Steps 1 and 2 in "Adding chapters at arbitrary positions in a movie".
 - 2. Click the thumbnail of the chapter you want to delete, and click [Delete].



The thumbnail of the chapter will be deleted.

3. Click [OK] to delete the chapter from the movie.



The thumbnail of the chapter will be deleted.



▶ The start of a movie is always added as the first chapter. You cannot delete it.

- Deleting all chapters in the movie at one time
- 1. Click [Delete All].



All chapters are deleted except the first chapter.

2. Click [OK] to close the chapter editing dialogue box.



▶ When all chapters are deleted, the chapter mark ☐ in the movie on the main screen is deleted.

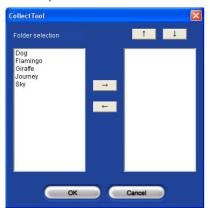
Selecting Movies to be registered with CollectTool

You can transfer data stored on multiple DVD-RAM discs onto a DVD R/RW disc. Movies imported from multiple DVD-RAM discs using DVD-MovieAlbumSE4 can be converted into a DVD disc by using CollectTool within the capacity of the DVD disc. If CollectTool has not been opened from DVD-MovieAlbumSE 4, follow the procedure below to open it. If CollectTool has been opened, proceed to Step 2.

1.Click [Tool] >> [CollectTool].

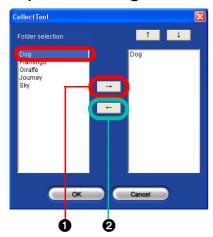


The [CollectTool] screen will appear and all folders which include movies saved on DVD-Movie AlbumSE 4 will be displayed. (Refer to the operating instructions of DVD-Movie AlbumSE 4 for details on specifying folders.)



 If, on DVD-MovieAlbumSE 4, the disc name, title name, or chapter name is not set for the disc (when exporting all titles) or if titles or chapters are exported, then the folder name will become "Untitled".

2. Select folders in the disc you want to import and click 1.



The selected folders are added to the import list on the right side of the screen. To cancel importing a folder, select the folder from the import list on the right side of the screen and

click 2.

 You can change the order of the folders to be imported in the list of folders by clicking



3. Click [OK].



All of the movies in the folders listed on the import list are registered and the thumbnails of the movies will be displayed.





- ▶ When CollectTool is opened from DVDfunSTUDIO, the movies will be registered on a page of 6 movie registration frames. If there are 7 or more movies, another page of 6 movie registration frames is added and the movies will be registered.
- If you want to cancel the registration or change the order of the movies, refer to "Processing and checking registered movies" (⇒16).

Editing pages

Adding pages

1. Click the last page in the layout display area.



The last page will appear on the main screen.

• You cannot add any page except after the last page.

2.Click the [Add page] button.



A new page will be added immediately after the last page.

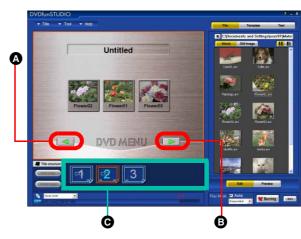
The added page will be displayed on the main screen.





- You can add up to 10 pages.
- ▶ Any added page will have 6 movie registration frames, and the background and frame specified in the [Theme] of the [Template]. To change the layout (⇒29).

■ To move between pages



- A You can move to the previous page if you click A.
- B You can move to the next page if you click B.
- **©** You can move to the page on which the clicked thumbnail is located.

Other page editing functions

- Deleting pages
- Click the last page in the layout display area.



The last page will appear on the main screen.

- You cannot delete any page other than the last page. Also, you cannot delete if there is only 1 page.
- 2. Click [Delete page] button.



3. Click [OK] on the confirmation screen.



All of the page registration will be deleted.



- Changing the names of page titles and movie
 - 1. Click inside the text box of the page title or movie name you want to change.



The text change screen will appear, and the character attributes will be displayed on the right side of the screen. [Untitled] is displayed in the text box for each movie at startup.

2. Change the characters of the name.

The page title or the movie name will be changed.





- Maximum number of characters that can be input:
 - Up to 64 bytes can be input.
 - The maximum number of characters that can be displayed varies depending on the font and size.
 - In the text box, line feed and tab cannot be used.
- ▶ The height of the movie name box can be doubled according to the number of characters to be input. Depending on the page layout, however, the movie name box may overlap the movie registration frame under it. In that case, make adjustments such as decreasing the font size.
- Movie name: Every movie is automatically assigned a file name.
- ▶ If the page title is not changed, the characters and the text box of the page title are not displayed on the preview screen or after creating the DVD disc.

- Changing the character attributes of page titles and movie name
- 1. Click inside the text box of the page title or movie name you want to change.



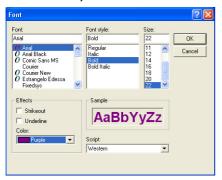
The character attributes will be displayed on the right side of the screen.

2. Click the [Change] button.



The [Font] screen will appear.

3. Change the font, colour of the characters, etc.



[Font]......For changing the character font.

[Font style]For changing the character font style into italics or bold, for instance.

[Size]For changing the character size.

[Strikeout]For adding a line that strikes out the characters.

[Underline]For underlining the characters.

[Color]For changing the colour of the characters.

4.Click [OK] to complete the change. The character attributes will be changed.





- ▶ Depending on the font used, the characters displayed on the [Edit] screen will appear slightly different from the ones displayed on the [Preview] screen. To check how they will appear when they have been written on a disc, display them on the [Preview] screen. (⇒32)
- When the [Text] tab is displayed, clicking the [Text] tab also displays the character attributes screen.
- ▶ Character entries by languages other than the language automatically selected in the installation of DVDfunSTUDIO (any of Japanese, English, Germany, French, Italian, Spanish or Simplified Chinese) is not guaranteed.

Editing the page design

You can set the elements of the page design individually or altogether by selecting a theme, so as to suit the contents of the movie.

With the [Template] function, you can do the following.

- Layout....... The number of movie registration frames (1 to 10 pieces) can be set according to the number of movies.
- Theme The combination of background, frame and arrow is called a theme. You can select the desired theme from among several preset themes.
- · Custom The background, frame, and arrow images can be changed individually.

Frame: Denotes the movie registration frame.

Arrow mark (link button): Added automatically when the number of pages reaches 2. Click the arrow, and you will go to the next page.

The page design can be edited page by page.

Select the page design element which you want to change, and follow the steps below.

Changing the layout

1. Click the background.



2. Click [Layout].



3. Click a desired layout for the movie registration frame.



The layout for the movie registration frame will be changed.



▶ If the number of registration frames in the selected layout is smaller than the number of movies already registered, the registrations for excess movies are cancelled.

Other page design editing functions

■ Setting the theme

1. Click [Theme].



2. Select a desired theme.



The selected theme will be reflected in the design.

■ Setting the background

1. Click [Custom].



2. Click [Background].



The thumbnails usable for the background will be displayed.

3. Click a desired thumbnail.



The background will be changed.



▶ If you prepare JPEG format and BMP format still image files as material data, you can use them for the background. Click the [File] tab and then click [Still image], and still image files are displayed. You can also change the background by moving the still image file you want to use for the background to the background in a drag-and-drop manner or by right-clicking the still image file and selecting [Background registration].

■ Changing the image of the arrow (link button)

1. Click [Custom].



2. Click [Arrow mark].



The thumbnails usable for the link button will be displayed.

3. Click a desired thumbnail.



The image of the link button will be changed.



▶ If there is only 1 page, the link button is not displayed.

To add pages, follow the steps in $(\Rightarrow 26)$.

■ Changing the frame

1. Click [Custom], and then click [Frame].



The thumbnails for the frame will be displayed.

2. Click a desired thumbnail.



The frame (movie registration frame) will be changed.

■ Unframing the thumbnails

Select [With shadow] from the thumbnails.



Checking the title data contents (Preview screen)

You can check the structure of edited title data such as a page background, movie playback sequence, etc., before writing on a DVD R/RW disc.

1. Click the [Preview] button.



2. Check the contents of each page.



- [Top Menu] button This button displays the menu of the page on which the movie is registered.
- (B) [Menu] button
 When a movie is played back, this button stops the playback. When chapters have been added to the stopped movie, the chapter menu is displayed, and when there are no chapters in the movie, the menu for the page where the movie is registered is
- displayed.

 Arrow keys and [Enter] button
 The up, down, left, and right arrow buttons are used to select movies and link buttons. When the [Enter] button is pressed, the selected movie is played back. If any link button has been selected, operation moves to the link destination page. If any movie frame has been selected, playback starts from that movie.
- Playback button
 This button starts playback from the currently selected movie.
- Skip button
 This button skips to the next chapter.
- Fast Forward button
 This button plays back in fast forward mode (at approximately double speed). (It is available during playback or pause.)
- Stop button

 This button stops playback and displays the image indicating that a movie is stopped.
- Pause button
 This button temporarily stops playback.

3. Click the [Edit] button if you want to edit again. (⇔15)
To write to a DVD R/RW disc, click the [Burning] button. (⇔33)

■ Checking the chapter menu

When you click the [Preview] button, playback starts at once. When you click [Menu] (1) during movie playback, the chapter menu is displayed.



- A The thumbnail of each chapter is displayed. The thumbnail position may deviate from the set point by 1 second or so. The name cannot be changed.
- (Up to 3 pages) When there are more than 8 chapter thumbnails, excess thumbnails are displayed on the next page.
 - In that case, you can switch the page of the chapter menu by clicking **3**.



- ▶ The picture quality of movies and the play timing (time taken for a movie to be played after buttons are clicked, playback interval between one movie and the next, etc.) are slightly different from when movies are played on a DVD player, etc.
- With some display units used by a DVD player (a TV set connected to a DVD player or, in the case of a portable DVD player, its own display screen), parts of the screens may not be displayed.
- ▶ Movies with the mark are re-encoded during a write operation, and thus degrade in picture quality.
- ▶ Since the original data is played back on the [Preview] screen, you cannot check the picture quality that will be seen on a DVD player. Go back to the [Edit] screen, and display the preview by clicking the [Check picture] button to check the picture quality. (⇒20)

Writing on discs

Writing on DVD R/RW discs

You can write edited and checked data on DVD R/RW discs. Written discs do not accept further data addition. For writing data on a disc, a work drive having a free space equivalent to the disc is required. (Up to about 8.5 GB of free space will be needed.) You can change the work drive on [Tool] >> [Preference] >> [Work drive]. (⇒41)

The writing drive can be changed using [Output]. (⇒41) When writing data on a used DVD RW disc, execute [Quick erase] or [Full erase] from [Erase DVD RW disc] on the [Tool] menu. (⇒40)



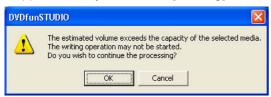
CAUTION

- When writing on a DVD R/RW disc using another application, perform neither a writing operation using this software nor the formatting of a DVD RW. Moreover, during the writing operation of this software, never operate any other writing application. If so, you may fail to create the disc and cause damage to the disc.
- ▶ If the DVD video camera is used as a writting drive, then a message will be displayed asking you to wait until the writing starts depending on the status of continuous operations. If this message appears, then wait approx. 10 minutes and retry writing.

1. Click the [Burning] button.



 If it is expected that the disc volume required for writing exceeds the maximum recordable capacity of the selected disc, then the following message will appear when you click the [Burning] button.

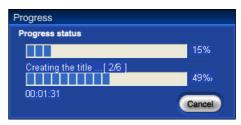


If you export movie files from an 8 cm DVD-RAM or DVD-RW disc and write them onto an 8 cm DVD R/RW disc by using the DVD-MovieAlbumSE 4 and this software, then you may proceed to the following steps by clicking the [OK] button even if this message appears and write these discs.

(If the capacity is still insufficient when these steps are executed, then they will be cancelled before the writing actually starts.) 2. Click [Yes] on the confirmation screen.



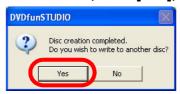
The writing operation will start.



 The [Progress] dialogue box is displayed, and 2 bars indicating the progress in percent figures are displayed on it. The lower bar shows the progress for 1 movie and the upper bar indicates the progress for the whole.

The elapsed time shown below is an approximate value.

3. After the data has been written, the screen shown below appears. To write data on another disc, click [Yes], otherwise click [No].





- ▶ If the DVD video camera is used as a writing drive, the screen above does not appear.
- ▶ Under the DVD standard, at least about 1 GB of data must be written. If the created data is less than 1 GB, dummy data is added to round it up to 1 GB, and recorded. For this reason, it will take some moments for the data to be written even if the amount of data is small.
- ▶ If you connect an external hard disk through an interface with a low transfer rate (e.g., USB1.1) or use an external hard disk with low access speed, data may not be transferred in time and you may fail to write it.



▶ Do not perform any other task until the data writing is completed.

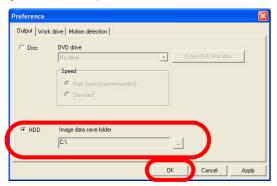
Writing on a hard disk for added convenience

You can write edited and checked data on the hard disk as a DVD-Video disc image. The DVD-Video disc image can be played back by DVD playing applications. The DVD-Video disc image stored on the hard disk can also be written to a DVD R/RW (\$\ightarrow\$35). Moreover, when you have no DVD R/RW disc at hand, a disc image on the hard disk can be used as temporary storage.

■ Writing on the hard disk

1.Select [Preference] from the [Tool] menu.

The Preference screen will be displayed. Select [HDD] and click the [OK] button, and you go back to the previous screen.



2. Click the [Burning] button.



3. Click [Yes] on the confirmation screen.



Writing to the hard disk will start.



4. After the completion of writing, the screen shown below is displayed. Then click the [OK] button.



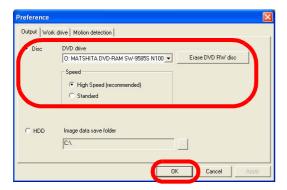


- ▶ The DVD-Video disc image written to the hard disk can be played back by DVD playing applications. For the detailed operating procedures, refer to the operating instructions of your DVD playing application.
- ▶ Do not move or edit the "VIDEO_TS" folder in the folder designated using [Image data save folder] on the [Preference] screen. If you move or edit the "VIDEO_TS" folder, it may become impossible to write on DVD R/RW discs.

- Writing the image written to the hard disk on DVD R/RW discs
- 1. Insert the DVD R/RW disc to be written onto in the drive.
- 2. Select [Preference] from the [Tool] menu.

The [Preference] screen will be displayed.

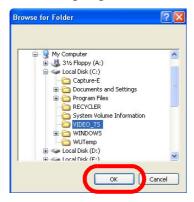
Check [Disc] in the [Output] to select the write destination drive, then click the [OK] button.



4. Select [Burn from an image] from the [Title] menu.

The [Browse for Folder] screen will be displayed.

5. Select the DVD-Video disc image ([VIDEO_TS] folder) to be written and click the [OK] button.



6. Click [Yes] on the confirmation screen.



Writing to a DVD R/RW disc will start.



- ▶ Once writing to a DVD R/RW disc starts, you cannot suspend the writing operation.
- ▶ The only disc images that can be written with [Burn from an image] are the files that were created by and saved with DVDfunSTUDIO or that were recorded by a DVD video camera. DVD-Video disc images created by other applications cannot be written.

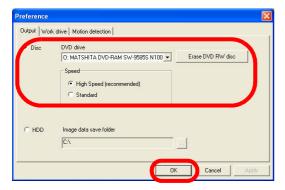


▶ Do not perform any other task until the data writing is completed.

Copying data from one disc to another

You can copy data recorded in DVD-Video format on a DVD R/RW disc to the hard disk using Explorer and then write it onto another DVD R/RW disc.

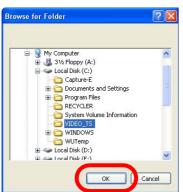
- 1.Insert a disc in DVD-Video format created on DVDfunSTUDIO or a disc in DVD-Video format (finalized disc) containing video recorded by a DVD video camera into the drive.
- 2. Copy the [VIDEO_TS] folder to the hard disk using Explorer.
- 3. Insert the DVD R/RW disc to be written onto in the drive.
- 4. Start DVDfunSTUDIO and select [Preference] from the [Tool] menu. The [Preference] screen will be displayed.
- Check [Disc] in the [Output] to select the write destination drive, then click the [OK] button.



6. Select [Burn from an image] from the [Title] menu.

The [Browse for Folder] screen will be displayed.

7. Select the DVD-Video disc image ([VIDEO_TS] folder) to be written and click the [OK] button.



8. Click [Yes] on the confirmation screen.



Writing to a DVD R/RW disc will start.



- ▶ Once writing to a DVD R/RW disc starts, you cannot suspend the writing operation.
- ▶ The only disc images that can be written with [Burn from an image] are the files that were created by and saved with DVDfunSTUDIO or that were recorded by a DVD video camera. DVD-Video disc images created by other applications cannot be written.
- ▶ It is also possible to copy data on an 8 cm DVD-R DL (Double Layer) disc recorded by a DVD video camera onto a 12 cm DVD R disc.



▶ Do not perform any other task until the data writing is completed.

Saving/Loading the title data

Saving the title data

You can save the title data such as the movie registrations, and changes made to the background or link button.

1. Click [Title], and then click [Save as].



2. Specify the folder in which the data is to be saved and the file name, and then click [Save].





- Precautions for saving and loading
 - Do not save the title data to the DVD drive, CD drive, etc. The data will not be saved properly.
 - What can be saved by clicking [Title] and [Save as]:
 Edited contents such as movie registrations and page designs
 - What cannot be saved by clicking [Title] and [Save as]: Original files of moving images, etc.
 - When registered original files have been deleted or folders have been moved, for instance, after data has been saved, it will no longer be possible to load the saved title data the next time.

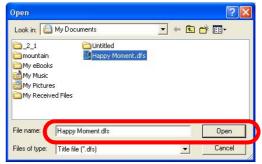
Loading the title data

You can load the title data that has been saved.

1.Click [Title], and then click [Open].



2. Select the file, and then click [Open].



The title data will be opened, and the edited contents that have been saved will appear.



- ▶ To start editing new title data from the beginning, click [Title], and then click [New].
- ▶ Precautions for saving and loading
 - When registered original files have been deleted or folders have been moved, for instance, after data has been saved, it will no longer be possible to load the saved title data next time.

Useful information

Names and functions of screen parts



A Main screen

The title data is displayed page by page. Select the page to be displayed on the layout display area (3).

B Layout display area/Chapter display area

When you click the background area of the main screen (A), this area serves as the layout display area, where the title data pages are displayed side by side, enabling the overall structure of the title data to be checked. In addition, the page selected here appears on the main screen.

When you click a movie to which chapters have already been added, this area switches to the chapter display area, and the chapter thumbnails are displayed there.

• Media selection area / Disc utilization display area

Select the size of the medium on which you want to write. The maximum memory space varies depending on the medium. (⇒13)

The total volume of the registered movies will be displayed by a numerical value and a bar graph. If the total volume exceeds the maximum recordable capacity of the medium, the numerical value and the excess on the graph are displayed in red.

Material data and information display area

When you select material data and double-click it with the left mouse button, the data is played back; when you right-click the data, the following menu appears.

[Play] : Plays back the selected material data.

[Registration]: Registers the selected material data onto the main screen.

- Registration of video files
 - If a movie registration frame is already selected on the main screen, the movie will be registered to that frame. If no registration frame has been selected, the movie will be registered to the first empty registration frame. (If there is no empty registration frame, [Registration] cannot be selected.)
- Still image files can be used as background images. Right-click a still image file, and select [Background registration]. (⇒30)

Names and functions of screen parts

■ Design material selection area
When you click the background of the main screen,
the thumbnails of images that can be used for the
background, frame, and arrow are displayed. It is also
possible to confirm and change the text attributes of
page titles and movie names.

■ Movie information display area
When you click a movie on the main screen, the information on the movie is displayed.
When you click [Conversion info], the information at the time of writing to DVD R/RW disc is displayed.





[Text] tab



[Registration info] tab



[Conversion info] tab



■ [Edit] button

This button is used to edit registered movies.

● [Preview] button

Click this button when you want to confirm the contents of any registered movie, and the [Preview] screen appears.

G Setting for playback methods

You can select the playback method from [Individual] and [Sequential]. Moreover, you can set whether or not to use [Auto]

Individual:

Select this if you want to return to the title menu every time a playback of 1 movie is finished when you play back a disc on a DVD player or other equipment.

· Sequential:

Select this if you want to continue playing back movies on a disc without returning to the title menu screen after a playback of 1 movie is finished when you play back a disc on a DVD player or other equipment. (When playback of the last movie is finished, the screen is returned to the title menu even if you select this option.)

- Auto: Check this if you want to play back a disc from the 1st movie without displaying the title menu at first when you play back a disc on a DVD player or other equipment.
- (Burning) button

This button is used to write edited and checked data to a DVD R/RW disc.

● [Exit] button

This button is used to exit DVDfunSTUDIO.

Menu



■ [Title] menu

This menu is used to save and load what has been edited.

[New]

This menu item is used to close the existing edited contents and newly create title data. [Open]

This menu item is used to read stored files of edited contents (title data files). (⇒37) [Save]

This menu item is used to overwrite the current edited contents onto the title data file. [Save as]

This menu item is used to save the current edited contents under a new file name. (⇒37)

Names and functions of screen parts

[Burn from an image]

This menu item is used to read DVD-Video disc images written on the hard disk for storage and write them into a DVD R/RW disc. (⇔35)

[Exit]

This menu item is used to exit DVDfunSTUDIO.

■ [Tool] menu

[Preference]

This menu item is used to open the [Preference] panel which allows you to set the work drive, writing drive or other. (⇒41)

[CollectTool]

Working with DVD-MovieAlbumSE 4, you can efficiently import video files recorded onto a DVD-RAM disc to DVDfunSTUDIO.

[Erase DVD RW disc]

This is used to format DVD RW discs.

If you format a DVD RW disc, all the data stored on the disc is erased. Before formatting, make sure that no necessary data is stored on the disc.

· [Quick erase]:

This type of erasure is completed in approx. 1 minute. (Only the information in the table of contents is deleted.)

• [Full erase]:

This type of erasure is completed in a maximum of approx. 1 hour. (The whole DVD RW is deleted.)

Erasure time depends on the speed of the drive and media used.



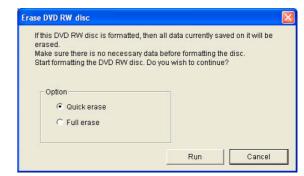
- ▶ If the DVD video camera is selected as a write destination drive, then [Full erase] cannot be selected.
- ▶ In DVDfunSTUDIO, you can also record the data onto DVD RW discs formatted by quick erasure method.

■ [Help] menu

[DVDfunSTUDIO Help]

This menu item is used to open the operating instructions of DVDfunSTUDIO in PDF file format. [About DVDfunSTUDIO]

This menu item is used to display the version of this software.





The [Preference] panel is opened by selecting [Tool] >> [Preference] on the menu.

The contents set on the panel are stored by DVDfunSTUDIO. The contents will be saved until you start this software next time except the following settings.

- [Output]: [Speed] will be set to [High Speed (recommended)].
- [Motion detection]: At the time of startup, [1] is set.

[Output] panel

This permits you to change the writing drive.

· Writing on DVD R/RW discs

Place a checkmark in the [Disc] checkbox, click at the extreme right of [DVD drive], and select the destination drive from the menu.

DVD video cameras (⇒4) that can't be used as writable drives for personal computers do not appear in the list even if they are connected.

Setting the writing speed

[High Speed (recommended)] is checked as a recommended setting by default. Normally, retain this setting for use.

If you fail in writing, check [Standard]. The writing speed is slowed; however, the writing process may be performed more successfully.

Use DVD R/RW discs which are recommended for the DVD drive you use.

Erasing DVD RW discs

Click the [Erase DVD RW disc] button, and the [Erase DVD RW disc] window will appear. (⇒40)

• Writing a disc image on the hard disk

Place a checkmark in the [HDD] checkbox, and set the destination folder in [Image data save folder].

(The destination folder can also selected by clicking ...)

The folder named "VIDEO_TS" is automatically created under the destination folder, and data is written in that folder. (⇒35)

How to eject a DVD disc (when a DVD video camera is connected)
 When a DVD video camera is connected to a personal computer, the eject button on the DVD video camera is disabled. Either click [] or select [Eject] in Explorer.

[Work drive] panel

This permits you to change the work drive.

Click at the extreme right of [Work drive], and select the work drive from the menu.
 The amount of free space in the drive selected as the work drive and the free space required for creating a title currently registered are displayed. Select a drive with free space larger than required as the work drive.

[Motion detection] panel

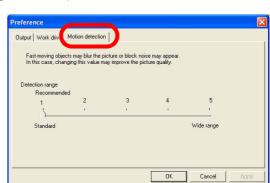
You can set the range of the detection for motion (degree of changes) in video on a 1-to-5 scale. [1] is recommended, but the picture quality of a created DVD may be improved by changing the range of the value to between [2] and [5].

Use this function when block noise and blurred edges are conspicuous in the output picture. The settings are retained until they are next changed.

[Standard] is the recommended setting because the processing time is prioritized.

As you bring the setting close to [Wide range], the picture quality is improved, but the processing time becomes longer. Assuming the processing time at setting [1] to be 1, the processing time at setting [3] is about 2, and that at setting [5] is about 3.5.







Trouble	▶ Remedial action
DVDfunSTUDIO cannot be started.	 ▶ This software can only be started by users with administrator privileges. (For Windows[®] 2000/XP) ▶ This software cannot be used by Guest users. (For Windows Vista)
Material data cannot be recorded.	▶ Data stored on removable discs (demountable discs) such as a CD-ROM and SD memory card cannot be written.
A page name or movie name is cut off.	▶ Depending on the font used, the characters displayed on the [Edit] screen may appear slightly different from the ones displayed on the [Preview] screen. To check how they will appear when they have been written on a disc, display them on the [Preview] screen. (⇒32)
Pages cannot be added.	▶ Pages cannot be added when a page other than the last page is displayed. In addition, the maximum number of pages which can be added is 10.
Content with an aspect ratio of 16:9 changes into content with an aspect ratio of 4:3 in letter box format.	 When importing content with an aspect ratio of 16:9, keep the following items in mind. When you select [Not encoding (highest quality)] in the picture quality setting, the original aspect ratio is used to record. When the resolution of the original movie file is not 720×480, 704×480, 720×576 or 704×576, [Encode] is selected. When you select [High quality] in the picture quality setting, the aspect ratio of 16:9 is used to encode. When you select [Normal], [Long play], or [Extra long play] in the picture quality setting, the aspect ratio of 4:3 (letter box) is used to encode.
The link buttons are not displayed.	▶ If there is only 1 page, no link button is displayed.
Playback does not start even when the button is pressed on the Preview screen.	▶ If the ■ button is pressed after the ▶ button has been pressed, play will not start unless the movie is on the first page. First select the movie to be played, and then press the ▶ button again.
The message [The disc space is insufficient.] appears and the data cannot be imported.	 ▶ Writing cannot be performed because the volume of the data exceeds the maximum capacity of the DVD R/RW in the drive. Delete registered movies or change the picture quality settings. • For the length of the data that can be written on one disc (⇒6). ▶ If you export movie files from an 8 cm DVD-RAM or DVD-RW disc and write them onto an 8 cm DVD R/RW disc by using the DVD-MovieAlbumSE 4 and this software, then you may proceed to the following steps by clicking the [OK] button even if this message appears and write to these discs. (If the capacity is still insufficient when these steps are executed, then they will be cancelled before the writing actually starts.)
The title data saved using [Title] >> [Save as] cannot be loaded.	▶ If original files are deleted or folders are moved after the title data have been saved, it is no longer possible to load the title data the next time. For instance, if the original files of movies are stored on an external hard disk and that hard disk is then removed, the title data can no longer be loaded.
The drive is not recognized, or the message [No drive] is displayed.	 If writing software made by companies other than Panasonic or ASPI drivers supplied with scanners, printer, etc., writing on a DVD disc may not be completed properly. In this case, uninstall other applications (ASPI driver) and then reinstall DVDfunSTUDIO. (When uninstalling or installing DVDfunSTUDIO, follow the instructions on the screen, and reboot the personal computer without fail.) When multiple DVD drives are connected, they may not be recognized properly. DVD video cameras (⇒4) that can't be used as writable drives for personal computers do not appear in the list even if they are connected.

Troubleshooting

	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Trouble	▶ Remedial action
The message [No drive is connected.] is displayed.	▶ Select [Tool] >> [Preference] >> [Output], uncheck [HDD] and then check [Disc]. (⇒34)
Data cannot be written to a disc completely, though the data size is less than 4.7 GB. (Re-encoding is required.)	▶ Even though the original data is an MPEG file less than 4.7 GB, the sound data is increased by a factor of approximately 7 if it is converted into LPCM format when written on a DVD disc. As a consequence, the volume of the data exceeds the capacity of the DVD disc. Select [Dolby Digital] in the Audio setting, or re-encode the original data. For approximate size of data to be recorded without re-encoding (⇒6).
When data is being written to a DVD disc, an error occurs.	 Data sometimes cannot be recorded satisfactorily due to poor compatibility between the drive and disc. Use discs recommended by the manufacturer. Depending on media used, media sometimes cannot be played even if writing to the media has been completed normally. After writing, be sure to check that the media plays normally. During the writing process onto DVDfunSTUDIO, never operate any other writing application. If so, you may fail to create the disc and cause damage to the disc. Do not operate other applications which require a DVD drive (Drag'n Drop CD™, B's Recorder GOLD™, etc.) or those for recording, MPEG encoding or other purposes which highly utilize CPU and spend much memory. When resident antivirus software or other resident software is working, inactivate the software. If writing software made by companies other than Panasonic or ASPI drivers supplied with scanners, printer, etc., writing on a DVD disc may not be completed properly. In this case, uninstall other applications (ASPI driver) and then reinstall DVDfunSTUDIO. If an error occurs during the writing process onto a DVD R/RW disc, a DVD-Video disc image is stored as a backup. Refer to "Writing the image written to the hard disk on DVD R/RW discs". (➡35) The DVD-video disc image stored as a backup will be automatically deleted when you exit DVDfunSTUDIO. DVDfunSTUDIO may not operate normally depending on the condition of the drive where the OS is installed or the drive designated as the work drive. Analyze the condition of the hard disk, and defrag it when necessary.
Parts of the screen are not displayed when a disc containing saved data is played.	▶ With some display units used by a DVD player (a TV set connected to a DVD player or, in the case of a portable DVD player, its own display screen), parts of the screen may not be displayed.
A very small amount of the movie is cut off at the end when a disc containing saved data is played.	▶ When creating a DVD-Video disc (writing on the hard disk or a DVD R/RW disc), the end of the movie may be shortened by about 0.5 second.
Data cannot be added to a DVD-R or DVD-RW disc.	▶ Discs written by DVDfunSTUDIO do not accept any data addition. You cannot add data to discs recorded with software other than DVDfunSTUDIO.
A disc cannot be played by a DVD player.	▶ Check if your DVD player supports playing back DVD R/RW discs.

Other

- It is prohibited to copy or transmit the contents of these Operating Instructions in part or in their entirety.
- The contents of these Operating Instructions are subject to change without notice.
- Parts of the illustrations and screens shown in these Operating Instructions may differ slightly from actuality.
- · Concerning copyrights:

The data edited by users may be used for the individual enjoyment of those users but not for any other purpose.

- Windows[®], Microsoft[®] and DirectX[®] are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- IBM® and PC/AT are registered trademarks of International Business Machines Corporation of the U.S.
- Intel®, Pentium® and Celeron® are registered trademarks or trademarks of Intel Corporation in the United States and other countries.
- Acrobat[®] is a registered trademark of Adobe Systems Incorporated.
- Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation.
- "Drag'n Drop CD" is the trademark of EasySystems Japan Ltd. and DigiOn, Inc.
- "B's Recorder GOLD" is the trademark of BHA Co., Ltd.
- Manufactured under license from Dolby Laboratories.
 Dolby and the double-D symbol are registered trademarks of Dolby Laboratories
 Confidential unpublished works. Copyright 1992-1997 Dolby Laboratories. All rights reserved.
- Other names of systems and products mentioned in these instructions are usually the registered trademarks or trademarks of the manufacturers who developed the system or product concerned.