JVC

JVC ProHD Clip Manager

User's Guide

LST0858-001A

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Please read this [User's Guide] carefully in advance to ensure proper use of this product.

■ JVC ProHD Clip Manager software

- JVC ProHD Clip Manager is a software for operating MP4 file format clips recorded using recorder devices that make use of JVC's ProHD series memory cards.
- This software can be used to copy clips recorded on the memory card to destinations such as computer hard disks, as well as to organize existing clips. Other possible operations include converting the format of clip files, previewing the clip content, and also viewing the metadata that comes with the clip.

Memo:

- It is recommended that all materials recorded on the memory card using a ProHD series recorder be backed up and made easily retrievable in future by copying them to the hard disk of the computer.
- The following procedure is recommended to ensure that materials on the memory card are safely copied.
  - ① Create a new folder for each memory card in advance
  - ② Copy all materials on the memory card to the folder created in ①
  - ③ To copy materials from another memory card, create a new folder, and copy the materials to it
- For details on how to safely copy the materials on the memory card, please read the following:
  - Windows: (☞ page 9～25)
  - Mac : (☞ page 30～46)

■ Main functions of the JVC ProHD Clip Manager software

- Operations on MP4 file format clips
  - Copying clips (copying all or any random clip on the memory card, etc.)
  - Moving or deleting clips
  - Previewing clip content
  - Viewing and operating the metadata of a clip
- Managing folders in which clips are stored
  - Creating new folders
  - Deleting, splitting, or combining folders

How to Read this User's Guide

■ Symbols used in this manual

Note : States precautions to be taken during operation.

Memo : States restrictions on the functions or use of this equipment. For reference purposes.

☞ : Indicates the page numbers or items to refer to.

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Operating Environment

Install this application on a computer meeting the following hardware and software requirements.

Item	Requirement
Processor	Intel Core 2 Duo 2 GHz or higher recommended
Memory	2 GB or more recommended
OS	Microsoft Windows XP SP3 or higher, or Microsoft Windows Vista SP1 or higher (32-bit version)

Installing the Application

Installing from the CD-ROM

1 Insert the bundled CD-ROM into the CD-ROM drive of your computer

2 Open the CD-ROM using My Computer and run the [Setup. exe] located in the following folders: [Software]➜[ClipManager]➜[Windows]➜[English]

- The setup wizard appears. Follow the on-screen instructions to complete the installation.
- The End-User License Agreement screen will appear, read the agreement and click [Agree] to proceed with the installation.
- If the [.NET Framework 2.0] setup screen appears, read the license agreement and click [Agree] to install [.NET Framework 2.0].

To Uninstall the Application

Select [Add or Remove Programs] in the Windows [Control Panel], and then select [JVC ProHD Clip Manager] from the list of installed programs and click [Delete].

Launching and Exiting the Application

Launching the Application

Double click the shortcut icon on the desktop. The application starts, and the operating windows appear. (☞ Page 6)

Exiting the Application

Do one of the following:

- Select [Close] from the [File] menu.
- Click the [×] (close) button in the upper right of the operating window.

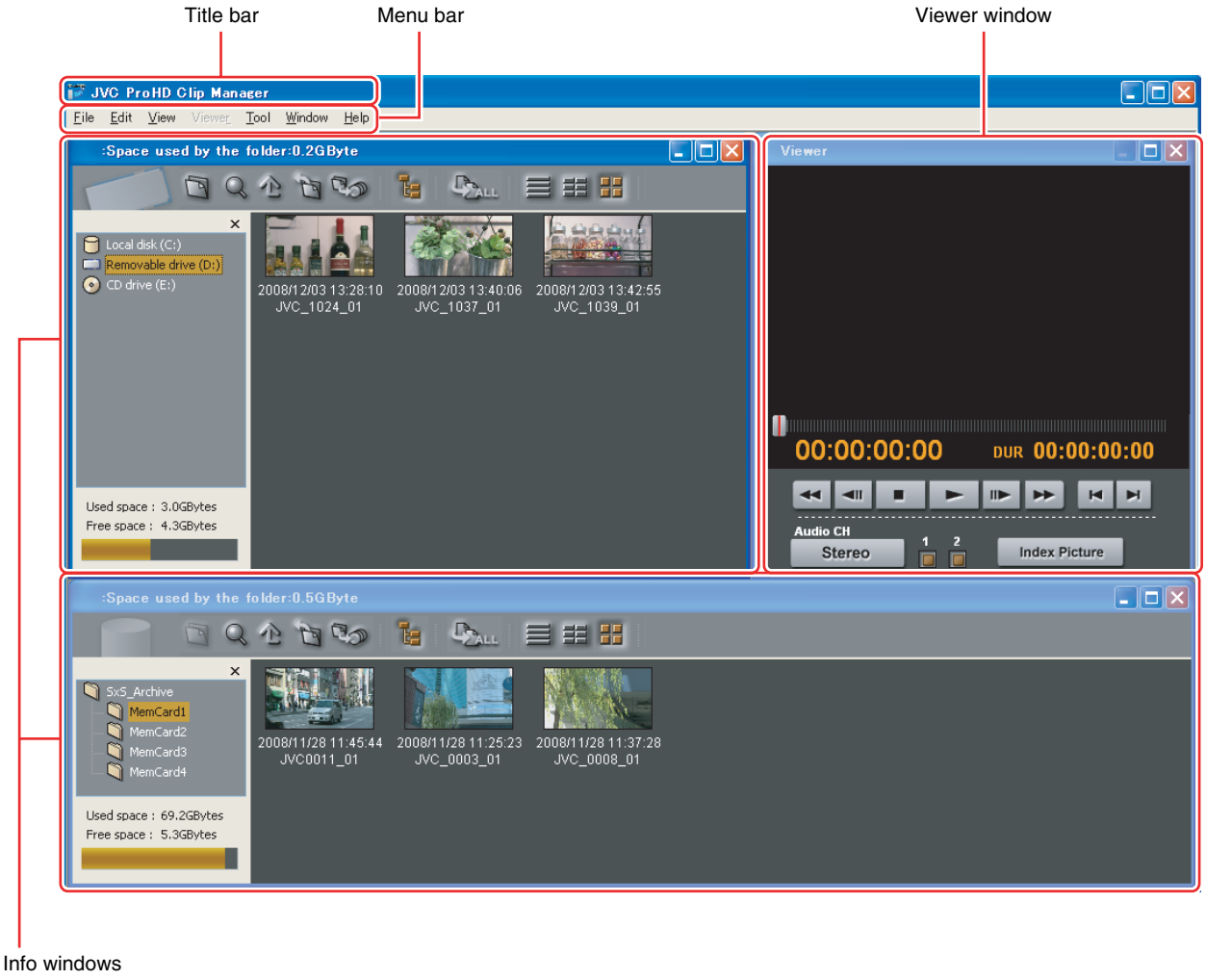
Note:

- Do not power off the computer while a file operation is still underway. Files may be corrupted. Wait until the operating finishes, or cancel the operation, before powering off.

Name and Function of Parts

Operating Window Configuration

(☞ Page 22 “Option Settings”)

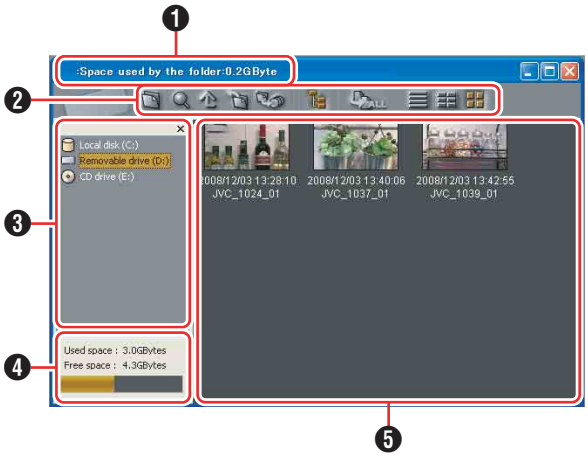


Memo :

- You can customize the window configuration by resizing or moving the window according to the operating environment of the various Info windows. (☞ Page 7)
- To return to the default configuration, select [Default position] from the window menu.
- The application remembers your most recent configuration and recreates it the next time it starts.
- The Viewer window cannot be resized. However, you can click on the maximize button during playback to play in full screen.

Info Windows

These windows display the clips in the media and folders. You can view, copy or delete the clips. Two Info windows are displayed by default. Clips from the memory card can therefore be easily copied to the hard disk by dragging and dropping the icon of the clip. The configuration of Info window is as follows:



Note:

- Information in Info windows does not display properly if the selected font does not support the character code set used in the software operating environment. Before displaying information in the Info windows, select an appropriate font and character code set in the Options dialog.
- Carriage returns may be displayed for some fonts. For details, please refer to "Option Settings" (☞ Page 22).

❶ Media name, Used capacity

Displays the media name assigned to the media or folder, and the capacity used by clips and their related data in the currently selected media or folder.

❷ Toolbar

Contains tool buttons for operations on clips and folders.

Tool buttons		Function	Reference
Icon	Name		
	Create New Folder	Creates a new folder in the currently selected location.	☞ Page 11
	Search	Opens the clip search screen, and allows you to search a clip by title or date.	☞ Page 19
	Up	Moves up to the next folder.	—
	Change Root Folder	Changes the root folder in the Tree View pane.	—
	Split	Splits a folder according to the size selected.	☞ Page 12
	Tree View	Shows or hides the Tree View pane.	—
	Copy All	Copy all of the clips in the current media or folder.	☞ Page 13
	List view setting	You can select from the following list view modes. : Details : List : Thumbnails	—

❸ Tree View pane

Displays two levels of the tree structure of removal media or folders in the hard disk drive. A folder in the lower level can be double clicked to make it the root folder and display the level beneath that folder. When you click a media item or double click a folder, the clips in the media or folder appear in the List View pane.

❹ Capacity

Displays the total capacity and remaining capacity of the media selected in the Tree View pane. The remaining capacity is shown as a numeric value and as a bar graph. The orange bar grows longer as more of the media's capacity is used.

Name and Function of Parts (continue)

❺ List View pane

Displays the clips in the media or folder that is selected in the Tree View pane.

You can select from the following three view modes in the list view setting under ❷ Toolbar: Details, List and Thumbnail.

A mark indicating the status of the clip is display on the thumbnail shown as follows. This also applies to List/Details view.

View mode	Icon	Description
Thumbnails view		Normal clip
		Clip with OK status (as set on the recorder) ※1
		One of the smaller clips into which a longer recording has been split (a frame is displayed around it) ※2
		Imported MP4 clip
		Unregistered MP4 clip (clip that has not been imported)
		Abnormal clip ※3 ※4

※1 : Clips with OK status can be moved or deleted by this application.

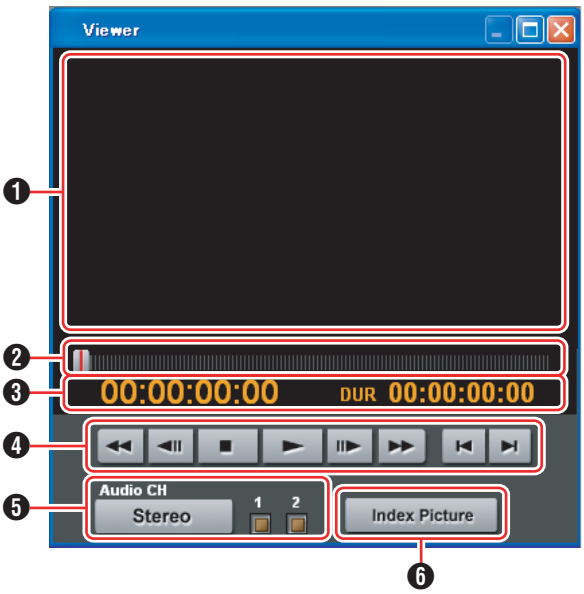
※2 : A video that exceeds 4 GB will automatically be saved as multiple clips. These clips are parts of the complete recording and can be saved on multiple media. All of the original recorded video is not played back when a split clip is played back.

※3 : A clip that cannot be played or displayed properly by this application. The file may be corrupted, file links may be broken or changed, required files may be missing, or thumbnail creation may have failed.

※4 : When another application is using the clip file.

Viewer Window

This window is where you preview clips. You can use the preview control buttons to playback, fast forward or fast rewind.



❶ Screen

Displays the playback video.

❷ Position bar

Displays the current position in the clip. You can move to any position in the clip by dragging the knob or by clicking directly on the position bar.

❸ Timecode

Displays the timecode of the position bar and the duration of the clip.

Note:

- The counter operates at 25 fps for unregistered clips.
- The count for import clips starts at 00:00:00:00.

❹ Preview control buttons

These are buttons for controlling clip previews. The buttons (starting from the leftmost button on the screen) and their functions are as follows.

Fast Rewind button : Search back from the current position (rewind).

Single Frame Reverse button : Step back 1 frame.

Stop button : Stop at the current position.

Play button : Start play.

Single Frame Forward button : Step forward 1 frame.

Fast Forward button: Search forward from the current position (fast forward).

Move to First Frame button : Go to the first frame of the clip.

Move to Last Frame button : Go to the last frame of the clip.

❺ [Audio CH] (Audio channel) selection buttons

Click the [Stereo]/[Monaural] button to switch between the Stereo and Monaural modes. When [Stereo] is displayed, audio is output from both channels. When [Monaural] is displayed, audio can be output by selecting CH1 or CH2.

❻ [Index Picture] button

Sets the index picture of the current preview clip to a still image of the currently displayed frame. However, setting performed using this button will not be applied to the thumbnail display on the device.

Note:

- Playback in this window is preview playback. Note the following points:
  - Depending on the performance of your computer and the processing load, dropped frames may occur and timecode may differ from the actual values.
  - When the playback clip is defective, video breakup may occur and the playback may freeze.
  - All of the original recorded video is not played back when a split clip is played back.
  - It may not be possible to play clips created on devices other than the device you are using.
  - If the colors of the playback video are not normal, exit the software and try adjusting the color parameters in the Properties window of your desktop screen. It may be possible to restore normal colors.
  - Improper playback may occur if the screen properties of your computer are changed during playback. If this occurs, restart the application.
  - The video may not appear on both monitors when you try to display it on the computer's monitor and an external monitor, for example when using a laptop computer.

Procedures for Operating Clips Using Clip Manager

This section describes the procedures for operating clips that are recorded in the MP4 file format, which is supported by this software.

Note:

- Make sure that operations such as copying and deletion of clips are performed using this application. The recorded video/audio clips (MP4 files) come with other information files. Operating the clips via other means may therefore cause problems that prevent proper file management.

The basic procedures for operating the clips are as follows:

Step 1	**Selecting Work Media and Work Folders (☞ Page 10)** Select the media or folder in which the clips are stored, and display the corresponding Info window.

▼

Step 2	**Folder and Media Operations (☞ Page 11)** Select the folder to be manipulated, such as the folder to copy files to, or create a new folder. All clips inside a media/folder can be copied or backed up.

▼

Step 3	**Clip Operations (☞ Page 14)** Make use of the toolbar buttons and other buttons to perform the necessary operations, such as copying, moving, or deleting clips stored in a media/folder.

Selecting Work Media and Work Folders

This section explains how to select the media or folder that contains the clips you want to work with.

There are two ways to select them, by using the Tree View pane of an Info window, or by using the Change Root Folder dialog.

Memo:

- In this manual, “media” refers to the following media types:
  - SxS memory card
  - USB memory
  - SDHC memory card
  - Internal hard disk
  - Externally connected hard disk
  - CD-R
  - DVD-R
  - Blu-ray Disc

To Select in the Tree View Pane

1 In the Tree View pane of an Info window, double click the media or folder that you want to select

- The level beneath the double clicked media or folder appears. The Tree View pane displays two levels, consisting of the media or folder itself and the next lower level.
- When there are clips saved directly to the top level of the media, they appear in the List View pane.

2 Double click a lower-level folder

- The double clicked folder becomes the root folder, and its lower level folders appear.

■ To return to the next higher level

Select [Up] from the [View] menu, or click the Up button in the toolbar.

3 Repeat step *2* as required

- The contents of the selected folder appear in the List View pane.

To select in the Change Root Folder dialog

1 Open the [Change Root Folder] dialog by selecting [Change Root Folder] from the [View] menu, or click the Change Root Folder button in the toolbar

2 In the Tree View pane of the dialog, select a media item or folder

3 Click [OK]

- The [Change Root Folder] dialog closes, and the contents of the selected media or folder appear in the List View pane.

■ When there are no clips in the selected media or folder

If the List View pane is in Thumbnails View mode, nothing appears in the List View pane.

If it is in List View or Details View mode, a message appears saying that there are no clips to display.

Note:

- When you select a media item, a message may appear saying that “The work folder or media needs to be repaired.”, and that “Restore on the recording device”. This message appears when the data is defective, typically because the device was powered off during recording, or because the media was ejected too soon. If this message appears, you should reinsert the media into the device and attempt to salvage it as soon as possible. The data may become unrecoverable if you continue to work with it without salvaging it.

Folder and Media Operations

Note:

- Always observe the following precautions during processing of folder and media operations:
  - Do not power off the computer or media drive before the operation completes.
  - Do not eject the media before the operation completes.

Clip Folders for MP4 File Format

The clips are stored together with a BPAV folder (☞ Page 21). (This folder does not appear in the Info windows, but it can be seen in Windows Explorer.) Whenever you copy or move clips with this application, copy or move the BPAV folder along with the clips. You cannot work with clips separately from the BPAV folder.

Note:

- Simultaneous access to files may not be possible when you attempt to access the same folder at the same time from several computers over a network connection.

Creating Folders

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 10), select the media or open the folder where you want to create the folder, making it the root folder of the Tree View pane

2 With the root folder having the focus, select [Create New Folder] from the [File] menu, or click the [Create New Folder] in the toolbar

- A new folder is created on the selected media or in the selected folder in step *1*.

■ Reasons why folder creation may fail

Folder creation operations may fail for the following reasons. In these cases, an error message appears and the folder is not created.

- You do not have write privileges for the media or folder selected in step *1*.
- The media or folder selected in step *1* is write protected.

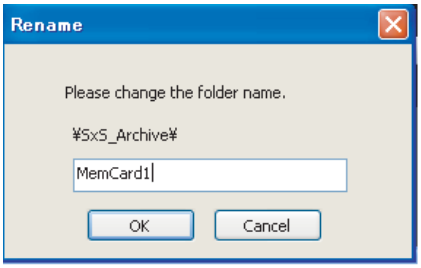
Note:

- A new folder for storing files cannot be created in a folder where clips are already stored. Create a folder at a location that is at least two levels higher.
  Example: With the Archive folder as the root work folder, new folders can be created at the higher level for each media or administrative classification (Media1, Media2, etc.).
- New folders cannot be created using [My Computer] as the root folder.
- Folders cannot be created when this is not allowed by the computer file system.
- Immediately after they are created, new folders are normal folders. But when even one clip is copied or moved to the new folder, the folder is formatted as an work folder with the same format as the device in use. (The required subfolders and metadata files are created automatically.)
- The name "BPAV" is reserved and cannot be specified.
- Characters forbidden by the operating system and the "$" character cannot be used in folder names.

■ To rename a folder

1 Select the newly created folder, and then select [Rename] from the [File] menu

- The [Rename] dialog appears.



2 Enter the new name in the edit box (up to 80 alphanumeric characters and symbols)

Note:

- The name "BPAV" is reserved and cannot be specified.
- Characters forbidden by the operating system and the "$" character cannot be used in folder names.

3 Click [OK]

Folder and Media Operations (continue)

Creating Folders (continue)

■ To back up folders

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 10), select the folder that you want to back up

2 Select [Open Containing Folder] from the [File] menu

- The Windows Explorer appears.

3 Perform your backup operations in Explorer

When a folder is too large to save to your backup media

You can split the folder into smaller folders, which can be saved on separate discs. Split folders can later be combined to restore the original large folder.

Memo:

- For details, refer to "Splitting Folders" (☞ Page 12) and "Combining Folders" (☞ Page 13).

Deleting Folders

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 10), select the folder to delete

2 Press the Delete key, or select [Delete] from the [Edit] menu

Reasons why a folder deletion may fail

Folder deletion operations may fail for the following reasons. In these cases, an error message appears and the folder is not deleted.

- You do not have delete/write privileges for the selected folder.
- The selected folder is write protected.
- Clips or other folders exist beneath the folder. ※1

Note:

- Be careful when deleting folders, because all data in the folder is deleted.
- Deletions cannot be undone after they finish.

※1 : The following shows two situations in which a folder cannot be deleted

- When there is a file that is not linked to the object folder
- When there is another folder besides the object folder

In these cases, the file which is not linked to the object folder and any other folder must be deleted beforehand.

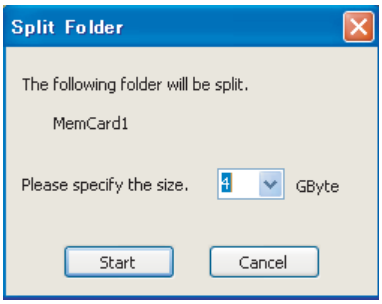
Splitting Folders

You can split large folders into smaller folders. This allows you to back up all of the clips in a large folder to media that is not large enough to save the entire folder without splitting. For example, you can split an 8 GB folder into two 4 GB folders in order to save them on 4 GB DVD-R media. Note that individual files in the large folder are not split.

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 10), select the folder to split

2 Select [Split Folder] from the [Edit] menu, or click the Split Folder button in the toolbar

- The [Split Folder] dialog appears.



- Note that individual files in the large folder are not split. Clips are assigned to the split folders in such a way that the split folders have the specified size. This means that it is not possible to specify a split folder size smaller than the largest file in the original folder.
- It is also not possible to specify a split folder size smaller than 4 GB.

3 Select the size of the split folders from the drop-down list

4 Click [Start]

- You can select from 4 GB to 60 GB in increments of 4 GB.
- The folder is split into the minimum number of folders that will produce the specified folder size, and clips are assigned to the smaller folders. The folders produced as a result of the split have the same name as the original folder, followed by serial numbers.

Note:

- Once it starts, a split operation cannot be canceled before it finishes.
- Split clips may be assigned to different folders. If you would prefer that split clips be assigned to other folders, you can move them manually after the folder split.

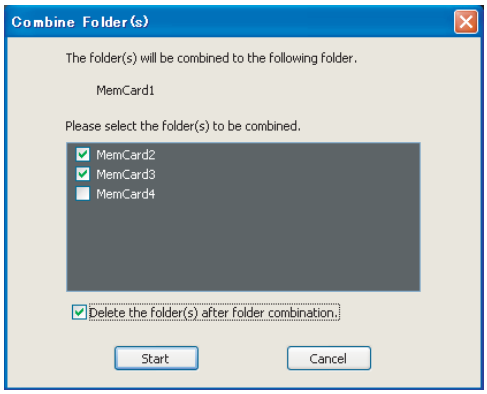
Combining Folders

You can combine specified folders into another folder. This allows you to restore the original folder from split folders.

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 10), select the destination folder into which the other folders will be combined

2 Select [Combine Folder] from the [Edit] menu

- The [Combine Folder] dialog appears.



3 Check the check boxes of the folders that you want to combine into the folder selected in step *1*. Check the [Delete the folder(s) after folder combination.] check box if you want to delete the combined folders after the combine.

Note:

- The combined folders are not deleted when:
  - They contain other folders.
  - You do not have delete/write privileges to the original folders.
  - The folders are write protected.

4 Click [Start]

- The folders selected in step *3* are combined into the destination folder specified in step *1*. The clips in all of the folders are gathered into the destination folder.
- If any of the clips are split clips, they are automatically grouped, allowing them to be handled as a single clip.

■ Reasons why a folder combine operation may fail

Folder combine operations may fail for the following reasons. In these cases, an error message appears and the combine is not executed.

- There is not enough free capacity in the combine destination folder.
- You do not have write privileges to the source or destination folders.
- The source or destination folder is write protected.
- Multiple instances of the same clip exist.

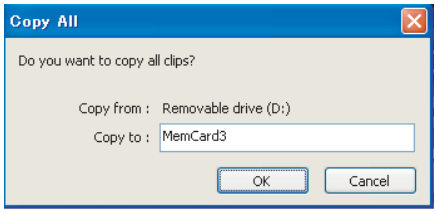
Copying All the Clips in Media or Folders

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 10), select a copy source media or folder in one of the Info windows

2 In the other Info window, select a copy destination media or folder

3 Activate the copy source Info window, and select [Copy All] from the [Edit] menu or click the Copy All button in the toolbar

- The [Copy All] dialog appears.



4 Check [Copy from :] and [Copy to], and then click [OK] to execute the copy
Or click [Cancel] to cancel it

■ To change the copy destination

Click the [Copy from :] box to highlight it, and enter a folder name as the new copy destination.

- When the copying starts, a progress dialog appears to display the status of the copy task.

■ To cancel the copy

Click [Cancel] in the progress dialog.

■ Reasons why a copy operation may fail

Copy operations may fail for the following reasons. In these cases, an error message appears and the copy is not executed.

- There is not enough free capacity at the copy destination.
- A clip with the same name as one of the copied clips already exists at the copy destination. Even if the titles are different, clips are recognized as the same clip if they share they same ID (UMID).
- You do not have delete/write privileges to the source or destination media or folders.

Clip Operations

Note:
- Always observe the following precautions during processing of clip operations.
  - Do not power off the computer or media drive before the operation completes.
  - Do not use Windows Explorer or other file management tool to delete folders that contain the clips being processed.
  - Do not eject the media before the operation completes.

Copying Clips

You can duplicate clips on your media or computer, and copy clips between the media and the computer.

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 10), display the clips that you want to copy in one of the Info windows

2 In the other Info window, select a copy destination media or folder

■ If you want to copy the clips to a new folder

Create a new folder in the copy destination media or folder.

Memo:
- For details on how to create folders, please refer to "Creating Folders" (☞ Page 11).

3 Select the clips to copy in the copy source window

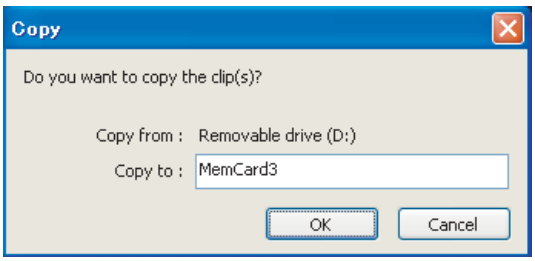
■ To select multiple clips

Note:
- Click the clips one after the other with the Ctrl key held down.
- Unregistered clips and abnormal clips can be selected, but they are not copied.

4 Do one of the following

- Drag the selected clips and drop them in the List View pane of the Info window of the copy destination media or folder.
- Select [Copy] from the [Edit] menu. Then click the Info window of the copy destination media or folder and select [Paste] from the [Edit] menu.

A message appears asking if you want to execute the copy.



5 Check [Copy from :] and [Copy to], and then click [OK] to execute the copy Or click [Cancel] to cancel it

When the copying starts, a progress dialog appears to display the status of the copy task.

Note:
- Once it has been completed, a copy cannot be undone.

■ To change the copy destination

Click the [Copy from :] box to highlight it, and enter a folder name as the new copy destination.

■ To cancel the copy

Click [Cancel] in the progress dialog.

■ Reasons why a copy operation may fail

Copy operations may fail for the following reasons. In these cases, an error message appears and the copy is not executed.

- There is not enough free capacity at the copy destination.
- A clip with the same name as one of the copied clips already exists at the copy destination. Even if the titles are different, clips are recognized as the same clip if they share they same ID (UMID).
- You do not have delete/write privileges to the copy destination media or folders.
- The copy destination media or folder is write protected.

Moving Clips

You can move clips on your media or computer, or move clips between the media and the computer.

Note:

- Clips with OK status can be moved by this application. (☞ Page 8)

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 10), display the clips that you want to move in one of the Info windows

2 In the other Info window, select a move destination media or folder

■ If you want to move the clips to a new folder

Create a new folder in the move destination media or folder.

Memo:

- For details on how to create folders, please refer to "Creating Folders" (☞ Page 11).

3 Select the clips to move in the move source window

■ To select multiple clips

- Click the clips one after the other with the Ctrl key held down.

Note:

- Unregistered clips and abnormal clips can be selected, but they are not moved.

4 Do one of the following

- Drag the selected clips with the Ctrl key held down and drop them in the List View pane of the Info window of the move destination media or folder.
- Select [Cut] from the [Edit] menu. Then click the Info window of the move destination media or folder and select [Paste] from the [Edit] menu.

A message appears asking if you want to execute the move.

5 Check [Move from :] and [Move to :], and then click [OK] to execute the move
Or click [Cancel] to cancel it

A dialog illustrating the progress of the move appears when the move starts.

Note:

- Once it has been completed, a move cannot be undone.
- Do not exit this application during the move. Doing so can break the links between clips and their metadata. The link information for split clips can be lost, causing them to become abnormal clips. We recommend that you move important clips by copying them and then deleting the copy sources.

■ To change the move destination

Click the [Move to :] box to highlight it, and then enter the name of the folder that you want to use as the move destination.

■ To cancel the move operation

Click [Cancel] in the progress dialog.

■ Reasons why a move operation may fail

Move operations may fail for the following reasons. In these cases, an error message appears and the move is not executed.

- There is not enough free capacity at the move destination folder.
- A clip with the same name as one of the copied clips already exists at the move destination. Even if the titles are different, clips are recognized as the same clip if they share they same ID (UMID).
- You do not have delete/write privileges to the source or destination media or folders.
- The source or destination media or folder is write protected.

Clip Operations (continue)

Deleting Clips

Note:
- Clips with OK status can be deleted by this application. (☞ Page 8)

1 **Referring to "Selecting Work Media and Work Folders" (☞ Page 10), display the clips to delete**

2 **Select the clips to delete by clicking them**

■ To select multiple clips

Click the clips one after the other with the Ctrl key held down.

3 **Do one of the following**

- Press the Delete key.
- Select [Delete] from the [Edit] menu.

A message appears asking if you are sure you want to delete the clips.

4 **Click [OK] to execute the deletion**
Or click [Cancel] to cancel it

Note:
- Deletions cannot be undone after they finish.

■ Reasons why a delete operation may fail

Folder deletion operations may fail for the following reasons. In these cases, an error message appears and the folder is not deleted.

- You do not have delete/write privileges to media or folder where the clips are stored.
- The media or folder where the clips are stored is write protected.

Grouping Split Clips

When you have split clips created as a result of an extended recording session, and those clips are saved on separate media, you can group those clips by collecting them in a single location. Grouped clips can be handled as a single clip.

■ Procedures for grouping the split clips

1 **Move or copy the media where the split clips are stored to folders with different names (Media1, Media2, Media3, etc.)**

- Create each of the folders in the same root folder.

2 **Combine Media2 and Media3 to the Media1 folder according to the procedures for "Combining Folders" (☞ Page 13)**

3 **The split clips are virtually combined in the Media1 folder, and displayed as a single thumbnail**

Memo:

For details on the operation, please refer to the following:
- [Copying Clips] (☞ Page 14)
- [Moving Clips] (☞ Page 15)
- [Combining Folders] (☞ Page 13)

Note:
- Split clips which are not continuous along the time axis are not grouped.
- Unregistered clips and abnormal clips are not grouped.
- Grouping is performed on the basis of the UMIDs of split clips, and not on the basis of their file names. Clips with altered UMIDs are not grouped.

Importing Clips

This application does not recognize MP4 files that do not contain the necessary file information. You can import these MP4 files (unregistered clips) and register them as clips that can be handled by this application.

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 10), select the media or folder that contains the MP4 files to be imported

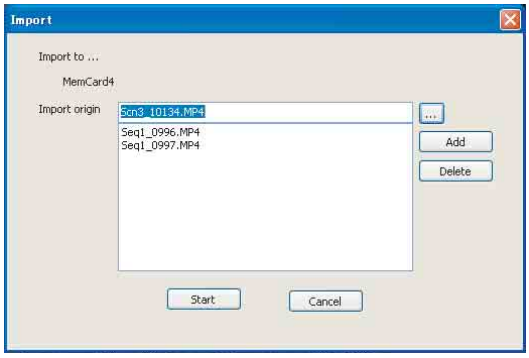
2 Do one of the following to select the MP4 files to be imported

■ Select unregistered clips (MP4 files) in the List View pane

- Select unregistered clips in the List View pane, and then select [Import] from the [File] menu.
- The Import dialog opens with the selected clips already entered in the import list.
- Proceed to step **6**.

■ Select unregistered clips in the Import dialog

- Select [Import] from the [File] menu.
- The [Import] dialog appears.
- Proceed to step ***3***.



3 Click the [...] button to open a folder browsing window and specify the MP4 file to import in that window

- The specified file appears in the [Import origin] edit box.

Note:

- Files over 4 GB in size cannot be imported.

4 Click the [Add] button to add the file to the list

5 Repeat steps *3* and *4* until you have selected all the files you want to import

■ To delete a file from the list

- Select the file to delete and click [Delete].

6 Click [Start] to start the import

- Before you start importing, check to make sure that the import destination indicated in the dialog is correct.
- When the import finishes, the unregistered clips are converted to normal clips.
- An ← mark is displayed for imported clips. (☞ Page 8)

■ Reasons why an import operation may fail

File import operations may fail for the following reasons. In these cases, an error message appears and the files are not imported.

- You do not have delete/write privileges for the import destination media or folder.
- The import destination media or folder is write protected.

Memo:

- What are unregistered clips?

  The file format supported by this application contains files for managing the clip's registration information. Unregistered clips are MP4 files that are not registered on this file. Clips cannot be registered manually via other means. Make sure that this is done using the import feature of this application.
- How to display the unregistered clips in the List View pane?

  If a BPAV folder is found in the media or folder at the import destination, and MP4 files are located in the CLPR folder under the BPAV folder, a ? mark appears beside the clip icon, and the clips can be displayed. If the clips are located in a folder other than CLPR, they cannot be listed.

Note:

- The properties of import clips are set automatically.
- The timecode of import clips starts from 00:00:00:00.
- The import clips may not be playable on your device.

Clip Operations (continue)

Previewing Clips

You can preview clips in the Viewer window.

You can also display the clips on the computer in full-screen mode.

Memo:

- Several limitations apply to playback in the Viewer window. For details, please refer to "Viewer Window" (☞ Page 8).

■ To display clips in the Viewer window

Display the clip that you want to preview in the List View pane of an Info window, and then double click it.

- Playback of the clip begins in the Viewer window.
- To stop the playback, click the Stop button.
- The timecode of the clip's current position (or a counter value) and the duration of the clip (DUR) appear at the bottom of the screen.

■ To control the preview

You can use the following methods to control playback and searches in the Viewer window.

- Use the "Preview control buttons" (☞ Page 8) in the Viewer window.
- Select [Play Control] from the [Viewer] menu, and then select the command you want to use.
- Drag the knob on the position bar.

■ To select full-screen playback

- With a clip displayed in the View screen, double click the title bar of the Viewer window, or select [View]➔[Full Screen] from the [Viewer] menu.
- To return the screen to its original size, double click on the screen or press the Esc key.

Changing the Index Picture of a Clip

You can change index pictures during clip previews.

1 Play a clip, and display the frame you want to use as the index picture

2 Click the Index Picture button, or select [Edit]➔[Index Picture] from the [Viewer] menu

- The currently displayed frame becomes the clip's index picture.

Note:

- If you are previewing a clip that is stored on removable media, do not eject the media until the operation finishes.
- Do not power off the computer until the operation finishes.
- A frame near the specified frame may be displayed as the index picture on your device, instead of the specified frame itself.

Searching for Clips

If you cannot find the clip you want to play, you can search for it by title, comment or date of shooting.

1 Do one of the following

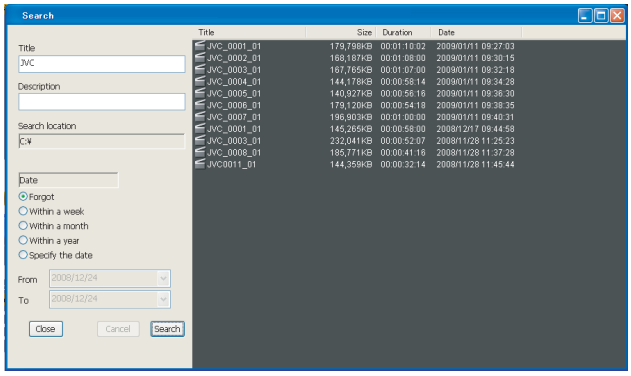
- In the Tree View pane of an Info window, select the media or folder where you think the clip is located.
- Open the [Change Root Folder] dialog by selecting [Change Root Folder] from the [View] menu, or by clicking the Change Root Folder button in the toolbar, and then select the media or folder where you think the clip is located.

A list of the clips in the selected media or folder appears in the List View pane.

2 Do one of the following

- Select [Search] from the [View] menu.
- Click the Search button in the toolbar.

The Search dialog appears. It appears with the path of the currently selected folder displayed in the [Search location] box.



3 Specify at least one of the following search conditions

- Enter all or part of a title in the [Title] box.
- Enter all or part of a comment in the [Description] box.
- Use the [DATE] buttons or list box to specify a range of dates.

4 Click [Search]

- A list of clips meeting the conditions specified in step ***3*** appears in the Search dialog.
- Double click the clip you want to preview to display it in the Viewer window and start playback.
- A list of the clips stored in the same folder as the preview clip appears in the List View pane of an Info window.

Note:

- Always observe the following precautions during a search.
  - Do not delete a target folder.
  - Do not eject the media before the operation completes.

Viewing Clip Properties

You can display a Properties window to view the properties of a clip.

Note:

- Information in Info windows does not display properly if the selected font does not support the character code set used in the software operating environment. Before displaying information in the Info windows, select an appropriate font and character code set in the Options dialog.
- Carriage returns may be displayed for some fonts. For details, please refer to "Option Settings" (☞ Page 22).

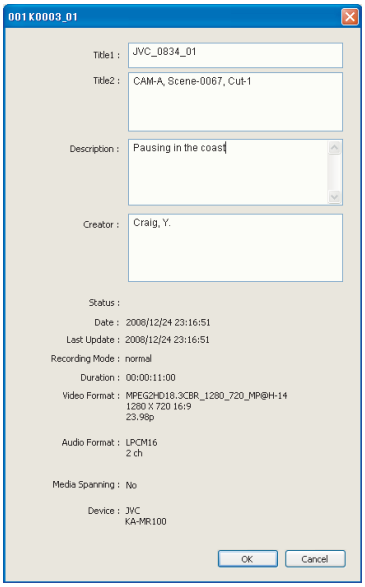
■ To display the Properties window

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 10), display the media or folder that contains the clip whose properties you want to check

2 Select the clip you want to check

3 Select [Properties] from the [Edit] menu

- The clip [Properties] appears.



Clip Operations (continue)

■ Information displayed in the [Properties] window

The following table lists the information displayed in the Properties window. You can change the [Title1], [Title2], [Description] properties.

Item	Description
Title1 (title)	Displayed as the clip title in the List View pane. (Unless [Title2] has been set, in which case [Title2] is displayed.) Title1 can consist of up to 63 alphanumeric characters and symbols (carriage returns not allowed). Valid symbols: Space, –, +, #
Title2 (subtitle)	Displayed as the clip title in the List View pane. The information can be up to 127 bytes in length. (Multi-language titles are supported.) Comments consisting of alphanumeric characters only can be up to 127 characters in length. UTF-8 encoding is used for multi-language comments. (The number of bytes required to encode UTF-8 characters varies. Normally it is between 1 and 3 bytes per character.)
Description (comment)	A free comment about the clip. The comment can be up to 2047 bytes in length. (Multi-language comments are supported.) Comments consisting of alphanumeric characters only can be up to 2047 characters in length. UTF-8 encoding is used for multi-language comments. (The number of bytes required to encode UTF-8 characters varies. Normally it is between 1 and 3 bytes per character.)
Creator	Information about the creator of the clip. The information can be up to 127 bytes in length. (Multi-language titles are supported.) Information consisting of alphanumeric characters only can be up to 127 characters in length. UTF-8 encoding is used for multi-language information. (The number of bytes required to encode UTF-8 characters varies. Normally it is between 1 and 3 bytes per character.)
Status	[OK] is displayed when the clip status is OK. Nothing is displayed when the status is anything else. (☞ Page 8)
Date (creation date)	Date and time when the clip was created.
Last Update	Date of the most recent modification to the clip. This date is updated whenever the clip is copied, moved, or grouped, and when its title, description, or index picture is changed.
Recording Mode	Operating mode of the device when it recorded the clip Normal : Normal recording mode Slow&QuickMotion : Slow & Quick Motion mode **Memo:** ● For details on each mode, please refer to the “INSTRUCTIONS” of your device.
Duration	Duration of the clip in hours:minutes:seconds:frame format
Video Format	Detailed information about the video format.
Audio Format	Detailed information about the audio format.
Media Spanning (splitting the media)	[Yes] appears for split clips, and [No] appears for clips which are not split.
Device	Information about the recording device.

■ To save changes to the displayed content

- Click [OK] to save the changes.
- Click [Cancel] to discard the changes.

Appendix

Recording Format and Recording Folders

■ Recording format

This application software supports MP4 file format. This format has the following specifications.

- Folder names and the folder configuration are as shown in the following figure.
- Files contain link information pertaining to links between files and folders.

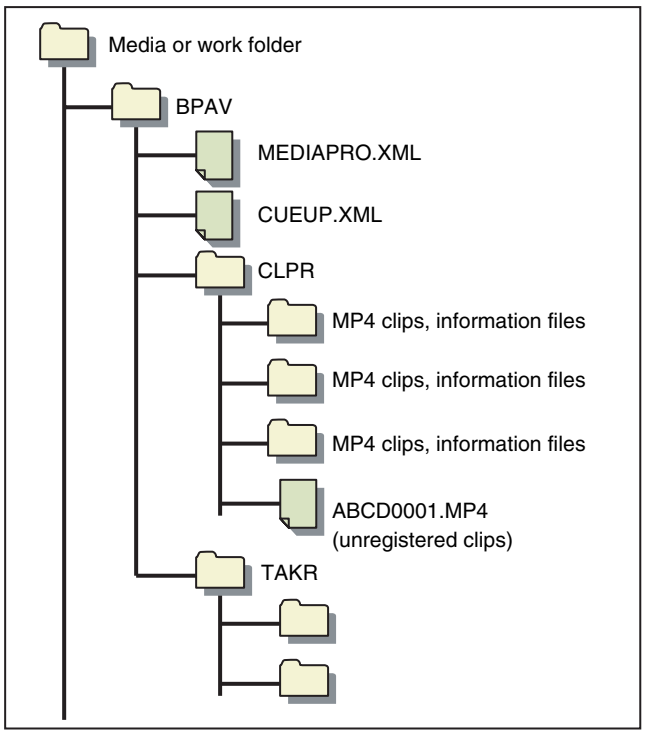
Note:

- Do not use applications other than the JVC ProHD Clip Manager to edit the files, delete, move, or rename the files and folders. Unless the format specifications are observed, files can become unreadable by ProHD series devices and by this application.

■ Recording folders

The configuration of video and metadata folders is as shown in the following figure.

The data beneath the BPAV folder is handled as a single set of data.



Memo:

- One BPAV folder exists when a work folder is opened in Explorer.
- To copy and backup your data, select the folders beneath the BPAV folder.
- When a work folder is selected in a Tree View pane of this application, a list of clips registered in the BPAV folder appears in the corresponding List View pane. AV data is saved in the folders beneath the CLPR folder.
- On the SxS memory card used by the recorder (KA-MR100G), the BPAV folder is created beneath the root folder of the media.
- On the SDHC memory card used by the recorder, the BPAV folder is created in the PRIVATE/JVC/ folder beneath the root folder of the media.
- MP4 files can be copied to beneath the CLPR folder. When this is done, they appear in a List View pane as unregistered MP4 clips when the BPAV folder to which the CLPR folder belongs is displayed in Thumbnails View or List View mode.
- The unregistered clips of MP4 files beneath the CLPR folder can be imported. When this is done, new folders are created beneath the CLPR folder, and the MP4 files are moved to those folders.
- The unregistered clips of MP4 files can also be imported from other folders. When this is done, new folders are created beneath the CLPR folder, and the imported clips are copied to those folders. Folder names are assigned automatically.
- Up to 600 clips can be saved in one recording folder.

Note:

- Folder and file names are linked to metadata files. Do not change them.

Appendix (continue)

Option Settings

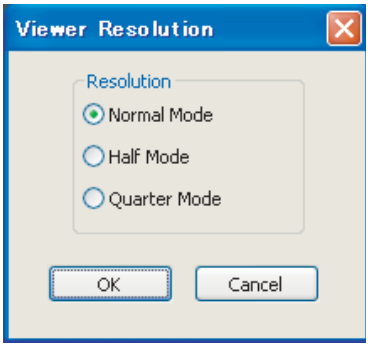
The Options dialog allows you to configure the options of this application.

To open the Options dialog, select [Options]➔[Manage] from the [Tool] menu.

Date Format	For selecting the display format. YYYY represents the calendar year, MM the month, and DD the day. You can also specify a delimiter character for use between years, months, and days by selecting it from the [Pause Character] list box. The date below the list box shows the current date formatted with the selected character.
Multi Language	Click the [Font] button to open a font selection dialog, which selects the display font and character code set for titles and comments.
Display Language	Selects “English” or “Japanese” as the display font for this application.

Resolution Settings

Select [Options]➔[Resolution] in the [Tool] menu to open the [Viewer Resolution] dialog that allows you to set the playback resolution.



■ To change the playback resolution

Select the resolution from among [Normal Mode], [Half Mode] and [Quarter Mode].

Video quality is lower at [Half Mode] and [Quarter Mode], but playback response is better because these resolutions lower the burden on the decoder.

These resolutions are recommended if your computer is not powerful enough to deliver smooth playback at Normal resolution.

Shortcut Key List

This application supports keyboard shortcuts for many operations. The following tables show keyboard shortcuts by menu. In the Operation column, the notation “Ctrl + R” indicates operations in which one key (in this case the Ctrl key) is held down while pressing another key (in this case the R key).

■ File menu

Command	Operation	Function	Reference
Rename	Ctrl + R	Rename the selected folder.	☞ Page 12
Create New Folder	Ctrl + N	Create a new folder in the selected media or folder.	☞ Page 11
Open Containing Folder	Ctrl + E	Start Explorer and open the currently selected folder.	☞ Page 12
Import	Ctrl + M	Import MP4 file (unregistered clip).	☞ Page 17

■ Edit menu

Command	Operation	Function	Reference
Copy All	Ctrl + Shift + C	Copy all of the clips in the current media or folder.	☞ Page 13
Cut	Ctrl + X	Cut the selected clip.	☞ Page 15
Copy	Ctrl + C	Copy the selected clip.	☞ Page 14
Paste	Ctrl + V	Paste a cut or copied clip.	☞ Page 14 ☞ Page 15
Delete	Delete	Delete the selected clip.	☞ Page 16
Properties	Ctrl + I	Open the Properties window of the selected clip.	☞ Page 19
Split	Ctrl + W	Split the selected folder into smaller folders of a specified size.	☞ Page 12
Combine	Ctrl + J	Combine specified folders into another folder.	☞ Page 13

Appendix (continue)

■ View menu

Command	Operation	Function	Reference
Tree View	Shift + T	Display or hide the Tree View pane.	—
Change Root Folder	Shift + O	Change the root folder of the Tree View pane.	☞ Page 10
Up	Shift + U	Moves up to the next folder.	☞ Page 10
Thumbnails	Shift + H	Put the List View pane into Thumbnails View mode.	☞ Page 7
List	Shift + L	Put the List View pane into List View mode.	
Details	Shift + D	Put the List View pane into Details View mode.	
Sort By>Title	Ctrl + Shift + N	Sort the clips in the List View pane in ascending or descending order by title.	
Sort By>Size	Ctrl + Shift + S	Sort the clips in the List View pane in ascending or descending order by size.	
Sort By>Duration	Ctrl + Shift + D	Sort the clips in the List View pane in ascending or descending order by duration.	
Sort By>Date	Ctrl + Shift + P	Sort the clips in the List View pane in ascending or descending order by date and time.	
Search	F3	Search for a clip.	☞ Page 19
Refresh	F5	Update the data displayed in the Tree View pane and List View pane with the latest data.	—

■ Viewer menu

Command	Operation	Function	Reference
Play Control>Play	5 or L	Start play.	☞ Page 8
Play Control>Stop	Space or K	Stop at the current position.	
Play Control>Fast Forward	S	Search in the forward direction (fast forward).	
Play Control>Rewind	A	Search in the reverse direction (rewind).	
Play Control>Jump To Head	Q	Move to the first frame of the clip.	
Play Control>Jump To End	W	Move to the last frame of the clip.	
Play Control>Next Frame	4	Step 1 frame forward.	
Play Control>Previous Frame	3	Step 1 frame back.	
View>Full Screen	F11	Display in full-screen mode.	☞ Page 18

■ Tools menu

Command	Operation	Function	Reference
Options>Manage	Ctrl + O	Open the Options dialog of this application.	☞ Page 22
Options>Resolution	Ctrl + P	Set the playback resolution.	☞ Page 22

This product uses software subject to the GNU Lesser General Public License (LGPL).
Library name: FFMPEG

Thank you for your purchase of this product.
This product uses the following software, which is subject to the LGPL. You have the right to obtain, modify and distribute the source code to this software.

FFMPEG
- avcodec-51.dll
- avformat-51.dll
- avutil-49.dll

The source code is contained in the /Software/ClipManager/SRC folder of the bundled CD-ROM.
It may also be downloaded from the following web site.
http://www.jvc-victor.co.jp/download/lnx/06jvc_pro/jvc_pro_linux_download_page.html

Please note that we cannot respond to inquiries regarding the content of the source code.

FFmpeg is a trademark of Fabrice Bellard, originator of the FFmpeg project.

Operating Environment

Install this application on a computer meeting the following hardware and software requirements.

Item	Requirement
Processor	Intel Core 2 Duo 2 GHz or higher recommended
Memory	2 GB or more recommended
OS	Mac OS X 10.5.5 or higher

Installing the Application

Installing from the CD-ROM

1 Insert the bundled CD-ROM into the CD-ROM drive of your computer

2 Double clicked the disc icon

- Finder starts, and the contents of the CD-ROM appear.

3 Double click [JVC ProHD Clip Manager.dmg] in the [Software]➜[ClipManager]➜[MAC OS X] folder

- The installation screen appears. Follow the on-screen instructions to complete the installation.
- The End-User License Agreement screen will appear, click [Agree] to proceed with the installation.

To Uninstall the Application

Move the installation destination folder of the application (default: /Application/JVC ProHD Clip Manager) to the Trash.

Launching and Exiting the Application

Launching the Application

Use Finder to open the [JVC ProHD Clip Manager] folder in the [Applications] folder, and double click [JVC ProHD Clip Manager].

The application starts, and the operating windows (☞ Page 27) appear.

Exiting the Application

Do one of the following:

- Select [Quit JVC ProHD Clip Manager] from the JVC ProHD Clip Manager menu.
- Click the [×] (close) button in the upper left of the operating window.

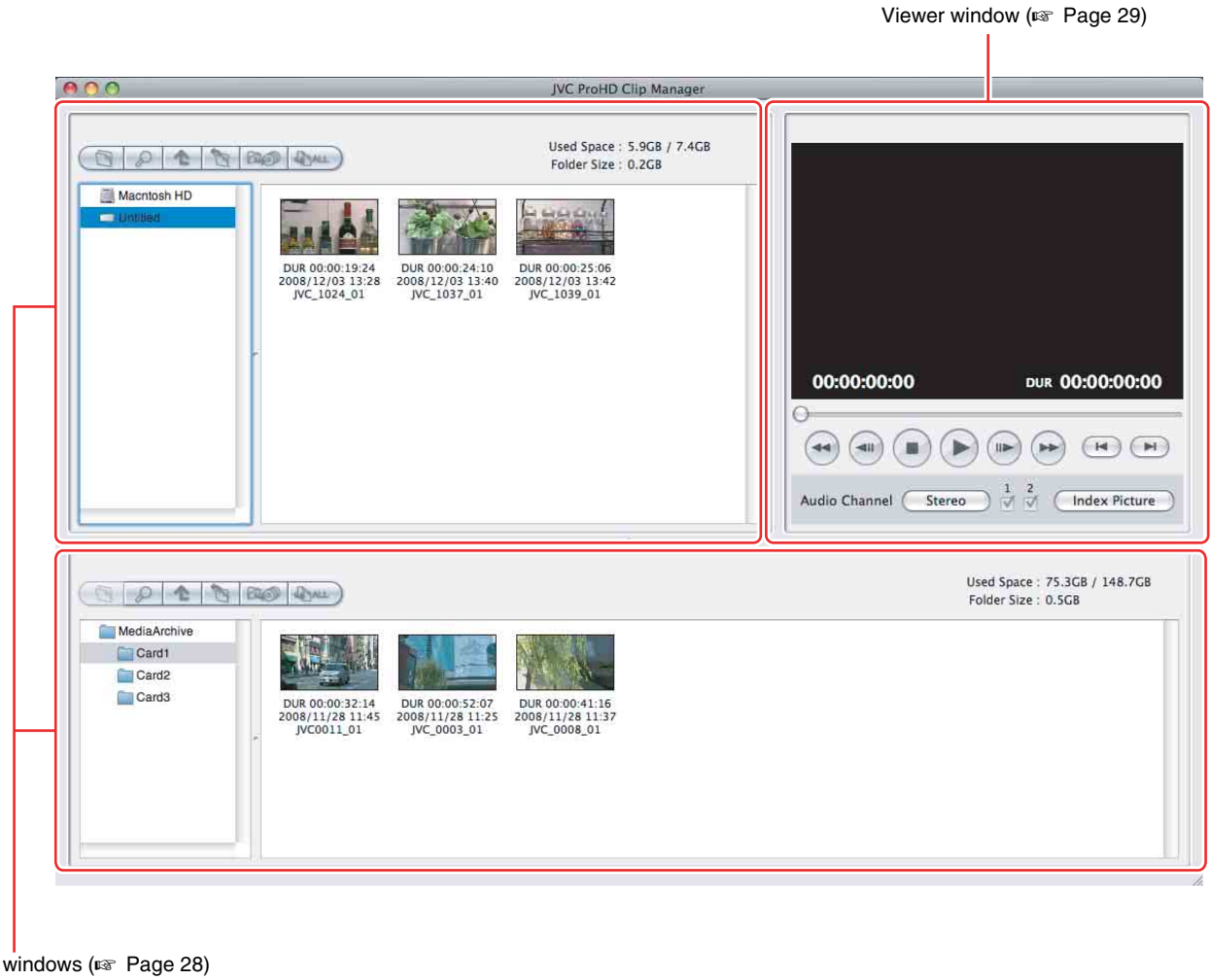
Note:

- Do not power off the computer while a file operation is still underway. Files may be corrupted. Wait until the operating finishes, or cancel the operation, before powering off.

Name and Function of Parts

Operating Window Configuration

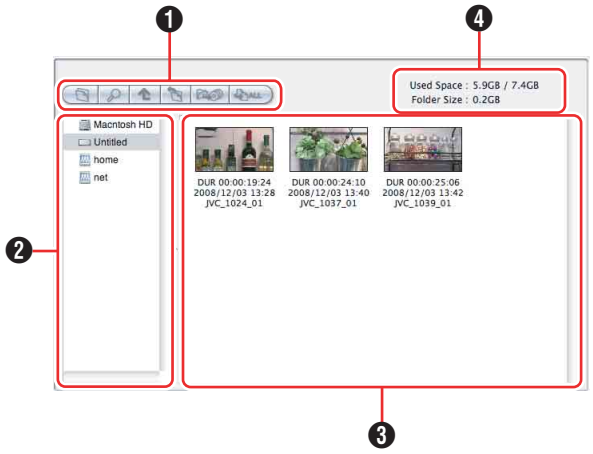
The following figure shows the default configuration of the operating windows.
Descriptions of this manual are based on screens with English display settings.



Name and Function of Parts (continue)

Info Windows

These windows display the clips in the media and folders. You can view, copy or delete the clips. The configuration of Info window is as follows:



❶ Tool buttons

Contains tool buttons for operations on clips and folders.

Tool buttons		Function	Reference
Icon	Name		
	Create New Folder	Creates a new folder in the currently selected location.	☞ Page 31
	Search	Opens the clip search screen, and allows you to search a clip by title or date.	☞ Page 40
	Up	Moves up to the next folder.	—
	Change Root Folder	Changes the root folder in the Tree View pane.	—
	Split	Splits a folder according to the size selected.	☞ Page 33
	Copy All	Copy all of the clips in the current media or folder.	☞ Page 34

❷ Tree View pane

Displays two levels of the tree structure of removal media or folders in the hard disk drive. A folder in the lower level can be double clicked to make it the root folder and display the level beneath that folder. When you click a media item or double click a folder, the clips in the media or folder appear in the List View pane.

❸ List View pane

Displays the clips in the media or folder that is selected in the Tree View pane.

A mark indicating the status of the clip is display on the thumbnail shown as follows.

View mode	Icon	Description
Thumbnails view		Normal clip
		Clip with OK status (as set on the recorder) ※1
		One of the smaller clips into which a longer recording has been split (a frame is displayed around it) ※2
		Imported MP4 clip
		Unregistered MP4 clip (clip that has not been imported)
		Abnormal clip ※3 ※4

※1 : Clips with OK status can be moved or deleted by this application.

※2 : A video that exceeds 4 GB will automatically be saved as multiple clips. These clips are parts of the complete recording and can be saved on multiple media. All of the original recorded video is not played back when a split clip is played back.

※3 : A clip that cannot be played or displayed properly by this application. The file may be corrupted, file links may be broken or changed, required files may be missing, or thumbnail creation may have failed.

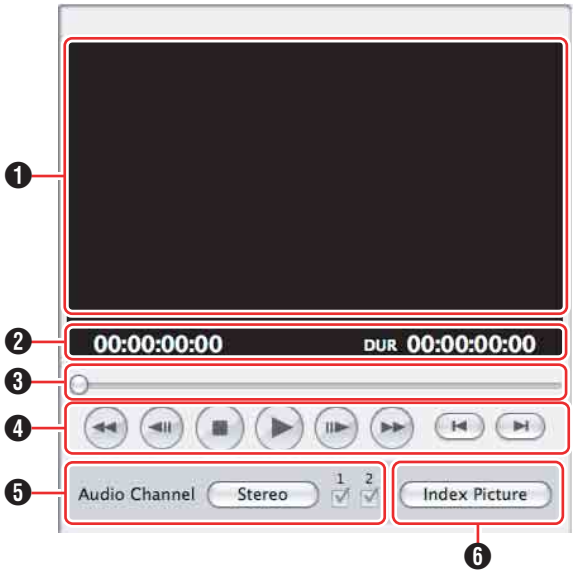
※4 : When another application is using the clip file.

❹ Used capacity

Displays the capacity used by clips and their related metadata in the currently selected media or folder.

Viewer Window

This window is where you preview clips. You can use the preview control buttons to playback, fast forward or fast rewind.



❶ Screen

Displays the playback video.

❷ Timecode

Displays the timecode of the position bar and the duration of the clip.

- The counter operates at 25 fps for unregistered clips.
- The count for import clips starts at 00:00:00:00.

❸ Position bar

Displays the current position in the clip. You can move to any position in the clip by dragging the knob or by clicking directly on the position bar.

❹ Preview control buttons

These are buttons for controlling clip previews. The buttons (starting from the leftmost button on the screen) and their functions are as follows:

Fast Rewind button
: Search back from the current position (rewind).

Single Frame Reverse button
: Step back 1 frame.

Stop button : Stop at the current position.

Play button : Start play.

Single Frame Forward button
: Step forward 1 frame.

Fast Forward button
: Search forward from the current position (fast forward).

Move to First Frame button
: Go to the first frame of the clip.

Move to Last Frame button
: Go to the last frame of the clip.

❺ [Audio Channel] (Audio channel) selection buttons

Click the [Stereo]/[Monaural] button to switch between the Stereo and Monaural modes. When [Stereo] is displayed, audio is output from both channels. When [Monaural] is displayed, audio can be output by selecting CH1 or CH2.

❻ [Index Picture] button

Sets the index picture of the current preview clip to a still image of the currently displayed frame. However, setting performed using this button will not be applied to the thumbnail display on the device.

Note:

- Playback in this window is preview playback. Note the following points:
  - Depending on the performance of your computer and the processing load, dropped frames may occur and timecode may differ from the actual values.
  - When the playback clip is defective, video breakup may occur and the playback may freeze.
  - All of the original recorded video is not played back when a split clip is played back.
  - It may not be possible to play clips created on devices other than the device you are using.
  - If the colors of the playback video are not normal, exit the software and try adjusting the color parameters in the Properties window of your desktop screen. It may be possible to restore normal colors.
  - Improper playback may occur if the screen properties of your computer are changed during playback. If this occurs, restart the application.
  - The video may not appear on both monitors when you try to display it on the computer's monitor and an external monitor, for example when using a laptop computer.

Procedures for Operating Clips Using Clip Manager

This section describes the procedures for operating clips that are recorded in the MP4 file format, which is supported by this software.

Note:

- Make sure that operations such as copying and deletion of clips are performed using this application. The recorded video/audio clips (MP4 files) come with other information files. Operating the clips via other means may therefore cause problems that prevent proper file management.

The basic procedures for operating the clips are as follows:

Step 1	**Selecting Work Media and Work Folders (☞ Page 30)** Select the media or folder in which the clips are stored, and display the corresponding Info window.

▼

Step 2	**Folder and Media Operations (☞ Page 31)** Select the folder to be manipulated, such as the folder to copy files to, or create a new folder. All clips inside a media/folder can be copied or backed up.

▼

Step 3	**Clip Operations (☞ Page 35)** Make use of the toolbar buttons and other buttons to perform the necessary operations, such as copying, moving, or deleting clips stored in a media/folder.

Selecting Work Media and Work Folders

This section explains how to select the media or folder that contains the clips you want to work with.

There are two ways to select them, by using the Tree View pane of an Info window, or by using the Change Root Folder dialog.

Memo:

- In this manual, “media” refers to the following media types:
  - SxS memory card
  - USB memory
  - SDHC memory card
  - Internal hard disk
  - Externally connected hard disk
  - CD-R
  - DVD-R
  - Blu-ray Disc

To Select in the Tree View Pane

1 In the Tree View pane of an Info window, double click the media or folder that you want to select

- The level beneath the double clicked media or folder appears. The Tree View pane displays two levels, consisting of the media or folder itself and the next lower level.
- When there are clips saved directly to the top level of the media, they appear in the List View pane.

2 Double click a lower-level folder

- The double clicked folder becomes the root folder, and its lower level folders appear.

■ To return to the next higher level

Select [Up] from the [View] menu, or click the Up button in the toolbar.

3 Repeat step *2* as required

- The contents of the selected folder appear in the List View pane.

To select in the Change Root Folder Dialog

1 Select [Change Root Folder] from the [View] menu, or click the Change Root Folder button

2 In the Tree View pane of the dialog, select a media item or folder

3 Click [OK]

- The Change Root Folder dialog closes, and the contents of the selected media or folder appear in the List View pane.

Note:

- When you select a media item, a message may appear saying that "The work folder or media needs to be repaired.", and that "Restore on the recording device". This message appears when the data is defective, typically because the recording device was powered off during recording, or because the media was ejected too soon. If this message appears, you should reinsert the media into the recording device and attempt to salvage it as soon as possible. The data may become unrecoverable if you continue to work with it without salvaging it.

Folder and Media Operations

Note:

- Always observe the following precautions during processing of folder and media operations.
  - Do not power off the computer or media drive before the operation completes.
  - Do not eject the media before the operation completes.

Clip Folders for MP4 File Format

The clips are stored together with a BPAV folder (☞ Page 42). (This folder does not appear in the Info windows, but it can be seen in Finder.)
Whenever you copy or move clips with this application, copy or move the BPAV folder along with the clips. You cannot work with clips separately from the BPAV folder.

Note:

- Simultaneous access to files may not be possible when you attempt to access the same folder at the same time from several computers over a network connection.

Creating Folders

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), select the media or open the folder where you want to create the folder, making it the root folder of the Tree View pane

2 With the root folder having the focus, select [Create New Folder] from the [File] menu, or click the [Create New Folder] button

- A new folder is created on the selected media or in the selected folder in step *1*.

■ Reasons why folder creation may fail

Folder creation operations may fail for the following reasons. In these cases, an error message appears and the folder is not created.

- You do not have write privileges for the media or folder selected in step *1*.
- The media or folder selected in step *1* is write protected.

Folder and Media Operations (continue)

Note:

- A new folder for storing files cannot be created in a folder where clips are already stored. Create a folder at a location that is at least two levels higher.
  Example: With the Archive folder as the root work folder, new folders can be created at the higher level for each media or administrative classification (Media1, Media2, etc.).
- Folders cannot be created when this is not allowed by the computer file system.
- Immediately after they are created, new folders are normal folders. But when even one clip is copied or moved to the new folder, the folder is formatted as an work folder with the same format as the device in use. (The required subfolders and metadata files are created automatically.)
- The name "BPAV" is reserved and cannot be specified.
- Characters forbidden by the operating system cannot be used in folder names.

■ To rename a folder

1 Select the newly created folder, and then select [Rename] from the [File] menu

- The [Rename] dialog appears.

2 Enter the new name in the edit box (up to 80 alphanumeric characters and symbols)

- The name "BPAV" is reserved and cannot be specified.
- Characters forbidden by the operating system cannot be used in folder names.

3 Click [OK]

■ To back up folders

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), select the folder that you want to back up

2 Select [Open Containing Folder] from the [File] menu

- Finder appears.

3 Perform your backup operations in Finder

When a folder is too large to save to your backup media

You can split the folder into smaller folders, which can be saved on separate discs. Split folders can later be combined to restore the original large folder.

Memo:

- For details, refer to "Splitting Folders" (☞ Page 33) and "Combining Folders" (☞ Page 34).

Deleting Folders

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), select the folder to delete

2 Press the delete key with the Command key held down, or select [Delete] from the [Edit] menu

■ Reasons why a folder deletion may fail

Folder deletion operations may fail for the following reasons. In these cases, an error message appears and the folder is not deleted.

- You do not have delete/write privileges for the selected folder.
- The selected folder is write protected.
- Clips or other folders exist beneath the folder. ※1

Note:

- Be careful when deleting folders, because all data in the folder is deleted.
- Deletions cannot be undone after they finish.

※1 : The following shows two situations in which a folder cannot be deleted.

- When there is a file that is not linked to the object folder
- When there is another folder besides the object folder

In these cases, the file which is not linked to the object folder and any other folder must be deleted beforehand.

Splitting Folders

You can split large folders into smaller folders. This allows you to back up all of the clips in a large folder to media that is not large enough to save the entire folder without splitting. For example, you can split an 8 GB folder into two 4 GB folders in order to save them on 4 GB DVD-R media. Note that individual files in the large folder are not split.

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), select the folder to split

2 Select [Split Folder] in the [Edit] menu, or click the Split Folder button

- The [Split Folder] dialog appears.

Note:

- Note that individual files in the large folder are not split. Clips are assigned to the split folders in such a way that the split folders have the specified size. This means that it is not possible to specify a split folder size smaller than the largest file in the original folder.
- It is also not possible to specify a split folder size smaller than 4 GB.

3 Select the size of the split folders from the drop-down list

4 Click [Start]

- You can select from 4 GB to 60 GB in increments of 4 GB.
- The folder is split into the minimum number of folders that will produce the specified folder size, and clips are assigned to the smaller folders. The folders produced as a result of the split have the same name as the original folder, followed by serial numbers.

Note:

- Once it starts, a split operation cannot be canceled before it finishes.
- Split clips may be assigned to different folders. If you would prefer that split clips be assigned to other folders, you can move them manually after the folder split.

Folder and Media Operations (continue)

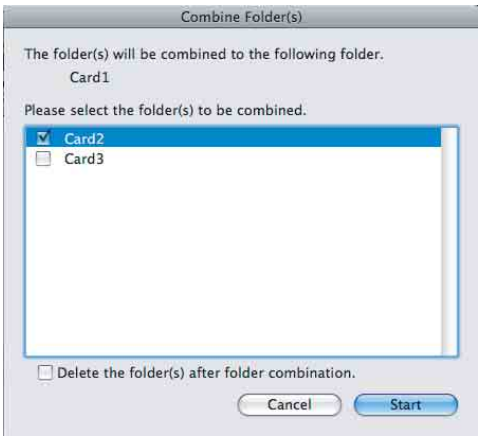
Combining Folders

You can combine specified folders into another folder. This allows you to restore the original folder from split folders.

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), select the destination folder into which the other folders will be combined

2 Select [Combine Folder] from the [Edit] menu

- The [Combine Folder] dialog appears.



3 Check the check boxes of the folders that you want to combine into the folder selected in step *1* Check the [Delete the folder(s) after folder combination.] check box if you want to delete the combined folders after the combine

Note:

- The combined folders are not deleted when:
  - They contain other folders.
  - You do not have delete/write privileges to the original folders.
  - The folders are write protected.

4 Click [Start]

- The folders selected in step ***3*** are combined into the destination folder specified in step ***1***. The clips in all of the folders are gathered into the destination folder.
- If any of the clips are split clips, they are automatically grouped, allowing them to be handled as a single clip.

■ Reasons why a folder combine operation may fail

Folder combine operations may fail for the following reasons. In these cases, an error message appears and the combine is not executed.

- There is not enough free capacity in the combine destination folder.
- You do not have write privileges to the source or destination folders.
- The source or destination folder is write protected.
- Multiple instances of the same clip exist.

Copying All the Clips in Media or Folders

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), select a copy source media or folder in one of the Info windows

2 In the other Info window, select a copy destination media or folder

3 Activate the copy source Info window, and select [Copy All] from the [Edit] menu or click the Copy All button

- The [Copy All] dialog appears.

4 Check [Copy to] and [Copy from :], and then click [OK] to execute the copy
Or click [Cancel] to cancel it

■ To change the copy destination

Click the [Copy from :] box to highlight it, and enter a folder name as the new copy destination.

- When the copying starts, a progress dialog appears to display the status of the copy task.

■ To cancel the copy

Click [Cancel] in the progress dialog.

■ Reasons why a copy operation may fail

Copy operations may fail for the following reasons. In these cases, an error message appears and the copy is not executed.

- There is not enough free capacity at the copy destination.
- A clip with the same name as one of the copied clips already exists at the copy destination. Even if the titles are different, clips are recognized as the same clip if they share they same ID (UMID).
- You do not have delete/write privileges to the source or destination media or folders.

Clip Operations

Note:

- Always observe the following precautions during processing of clip operations.
  - Do not power off the computer or media drive before the operation completes.
  - Do not use Finder or other file management tool to delete folders that contain the clips being processed.
  - Do not eject the media before the operation completes.
  - Locked files and folders cannot be moved, modified, or deleted.

Copying Clips

You can duplicate clips on your media or computer, and copy clips between the media and the computer.

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), display the clips that you want to copy in one of the Info windows

2 In the other Info window, select a copy destination media or folder

■ If you want to copy the clips to a new folder

- Create a new folder in the copy destination media or folder.

Memo:

- For details on how to create folders, please refer to "Creating Folders" (☞ Page 31).

3 Select the clips to copy in the copy source window

■ To select multiple clips

- Click the clips one after the other with the shift key held down.

Memo:

- Unregistered clips and abnormal clips can be selected, but they are not copied.

4 Do one of the following

- Drag the selected clips and drop them in the List View pane of the Info window of the copy destination media or folder.
- Select [Copy] from the [Edit] menu. Then click the Info window of the copy destination media or folder and select [Paste] from the [Edit] menu.

A message appears asking if you want to execute the copy.

5 Check [Copy to] and [Copy from :], and then click [OK] to execute the copy Or click [Cancel] to cancel it

When the copying starts, a progress dialog appears to display the status of the copy task.

Note:

- Once it has been completed, a copy cannot be undone.

■ To change the copy destination

Click the [Copy from :] box to highlight it, and enter a folder name as the new copy destination.

■ To cancel the copy

Click [Cancel] in the progress dialog.

■ Reasons why a copy operation may fail

Copy operations may fail for the following reasons. In these cases, an error message appears and the copy is not executed.

- There is not enough free capacity at the copy destination.
- A clip with the same name as one of the copied clips already exists at the copy destination. Even if the titles are different, clips are recognized as the same clip if they share they same ID (UMID).
- You do not have delete/write privileges to the copy destination media or folders.
- The copy destination media or folder is write protected.

Clip Operations (continue)

Moving Clips

You can move clips on your media or computer, and move clips between the media and the computer.

Note:
- Clips with OK status can be moved by this application.

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), display the clips that you want to move in one of the Info windows

2 In the other Info window, select a move destination media or folder

■ If you want to move the clips to a new folder

Create a new folder in the move destination media or folder.

Memo:
- For details on how to create folders, please refer to "Creating Folders" (☞ Page 31).

3 Select the clips to move in the move source window

■ To select multiple clips

Click the clips one after the other with the shift key held down.

Note:
- Unregistered clips and abnormal clips can be selected, but they are not moved.

4 Do one of the following

- Drag the selected clips with the Ctrl key held down and drop them in the List View pane of the Info window of the move destination media or folder.
- Select [Cut] from the [Edit] menu. Then click the Info window of the move destination media or folder and select [Paste] from the [Edit] menu.

A message appears asking if you want to execute the move.

5 Check [Move from :] and [Move to :], and then click [OK] to execute the move
Or click [Cancel] to cancel it

Note:
- Once it has been completed, a move cannot be undone.
- Do not exit this application during the move. Doing so can break the links between clips and their metadata. The link information for split clips can be lost, causing them to become abnormal clips. We recommend that you move important clips by copying them and then deleting the copy sources.

■ To change the move destination

- Click the [Move to:] box to highlight it, and then enter the name of the folder that you want to use as the move destination.
- A dialog illustrating the progress of the move appears when the move starts.

■ To cancel the move operation

Click [Cancel] in the progress dialog.

■ Reasons why a move operation may fail

Move operations may fail for the following reasons. In these cases, an error message appears and the move is not executed.

- There is not enough free capacity at the move destination folder.
- A clip with the same name as one of the copied clips already exists at the move destination. Even if the titles are different, clips are recognized as the same clip if they share they same ID (UMID).
- You do not have delete/write privileges to the source or destination media or folders.
- The source or destination media or folder is write protected.

Deleting Clips

Note:
- Clips with OK status can be deleted by this application.

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), display the clips to delete

2 Select the clips to delete by clicking them

■ To select multiple clips
- Click the clips one after the other with the shift key held down.

3 Do one of the following

- Press the delete key with the Command key held down.
- Select [Delete] from the [Edit] menu.

A message appears asking if you are sure you want to delete the clips.

4 Click [OK] to execute the deletion
Or click [Cancel] to cancel it

Note:
- Deletions cannot be undone after they finish.

■ Reasons why a delete operation may fail

Folder deletion operations may fail for the following reasons. In these cases, an error message appears and the folder is not deleted.

- You do not have delete/write privileges to media or folder where the clips are stored.
- The media or folder where the clips are stored is write protected.

Grouping Split Clips

When you have split clips created as a result of an extended recording session, and those clips are saved on separate media, you can group those clips by collecting them in a single location. Grouped clips can be handled as a single clip.

■ Procedures for grouping the split clips

1 Move or copy the media where the split clips are stored to folders with different names (Media1, Media2, Media3, etc.)

- Create each of the folders in the same root folder.

2 Combine Media2 and Media3 to the Media1 folder according to the procedures for "Combining Folders" (☞ Page 34)

3 The split clips are virtually combined in the Media1 folder, and displayed as a single thumbnail

Memo:

For details on the operation, please refer to the following:
- "Copying Clips" (☞ Page 35)
- "Moving Clips" (☞ Page 36)
- "Combining Folders" (☞ Page 34)

Note:
- Split clips which are not continuous along the time axis are not grouped.
- Unregistered clips and abnormal clips are not grouped.
- Grouping is performed on the basis of the UMIDs of split clips, and not on the basis of their file names. Clips with altered UMIDs are not grouped.

Clip Operations (continue)

Importing Clips

This application does not recognize MP4 files that do not contain the necessary file information. You can import these MP4 files (unregistered clips) and register them as clips that can be handled by this application.

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), select the media or folder that contains the MP4 files to be imported

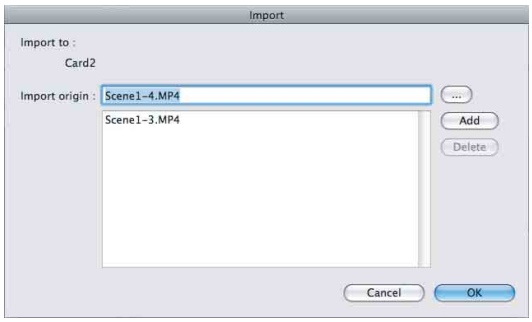
2 Do one of the following to select the MP4 files to be imported

■ Select unregistered clips (MP4 files) in the List View pane

- Select unregistered clips in the List View pane, and then select [Import] from the [File] menu.
- The Import dialog opens with the selected clips already entered in the import list.
- Proceed to step *6*.

■ Select unregistered clips in the Import dialog

- Select [Import] from the [File] menu.
- The Import dialog appears.
- Proceed to step *3*.



3 Click the [...] button to open a folder browsing window and specify the MP4 file to import in that window

- The specified file appears in the [Import origin] edit box.

Note:

- Files over 4 GB in size cannot be imported.

4 Click the [Add] button to add the file to the list

5 Repeat steps *3* and *4* until you have selected all the files you want to import

■ To delete a file from the list

Select the file to delete and click [Delete].

6 Click [shift] to start the import

- Before you start importing, check to make sure that the import destination indicated in the dialog is correct.
- When the import finishes, the unregistered clips are converted to normal clips.
- An ← mark is displayed for imported clips. (☞ Page 28)

■ Reasons why an import operation may fail

File import operations may fail for the following reasons. In these cases, an error message appears and the files are not imported.

- You do not have delete/write privileges for the import destination media or folder.
- The import destination media or folder is write protected.

Memo:

- What are unregistered clips?

  The file format supported by this application contains files for managing the clip's registration information. Unregistered clips are MP4 files that are not registered on this file. Clips cannot be registered manually via other means. Make sure that this is done using the import feature of this application.
- How to display the unregistered clips in the List View pane?

  If a BPAV folder is found in the media or folder at the import destination, and MP4 files are located in the CLPR folder under the BPAV folder, a ? mark appears beside the clip icon, and the clips can be displayed. If the clips are located in a folder other than CLPR, they cannot be listed.

Note:

- The properties of import clips are set automatically.
- The timecode of import clips starts from 00:00:00:00.
- The import clips may not be playable on your device.

Previewing Clips

You can preview clips in the Viewer window.

You can also display the clips on the computer in full-screen mode.

Memo:

- Several limitations apply to playback in the Viewer window. For details, please refer to "Viewer Window" (☞ Page 29).

■ To display clips in the Viewer window

Display the clip that you want to preview in the List View pane of an Info window, and then double click it.

- Playback of the clip begins in the Viewer window.
- To stop the playback, click the Stop button.
- The timecode of the clip's current position (or a counter value) and the duration of the clip (DUR) appear at the bottom of the screen.

■ To control the preview

You can use the following methods to control playback and searches in the Viewer window.

- Use the preview control buttons (☞ Page 27) in the Viewer window.
- Select [Play Control] from the [Viewer] menu, and then select the command you want to use.
- Drag the knob on the position bar.

■ To select full-screen playback

- With a clip displayed in the View screen, select [View]➔[Full Screen] from the [Viewer] menu.
- To return the screen to its original size, double click on the screen or press the Esc key.

Changing the Index Picture of a Clip

You can change index pictures during clip previews.

1 Play a clip, and display the frame you want to use as the index picture

2 Click the [Index Picture] button, or select [Edit]➔[Index Picture] from the [Viewer] menu

- The currently displayed frame becomes the clip's index picture.

Note:

- If you are previewing a clip that is stored on removable media, do not eject the media until the operation finishes.
- Do not power the computer off until the operation finishes.
- On the recorder or camcorder, a frame near the specified frame may be displayed as the index picture, instead of the specified frame itself.

Clip Operations (continue)

Searching for Clips

If you cannot find the clip you want to play, you can search for it by title, comment or date of shooting.

1 Do one of the following

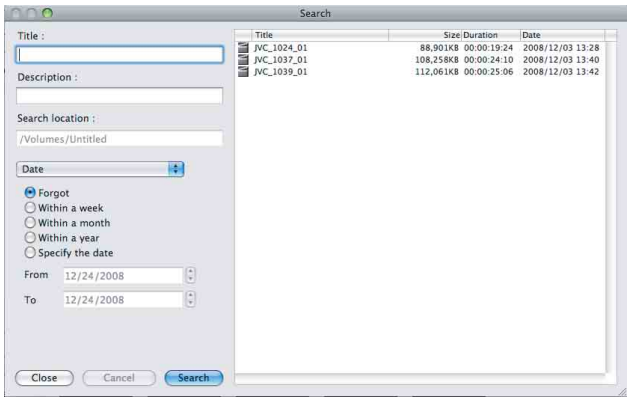
- In the Tree View pane of an Info window, select the media or folder where you think the clip is located.
- Open the Change Root Folder dialog by selecting [Change Root Folder] from the [View] menu, or by clicking the Change Root Folder button, and then select the media or folder where you think the clip is located.

A list of the clips in the selected media or folder appears in the List View pane.

2 Do one of the following

- Select [Search] from the [View] menu.
- Click the Search button ( ).

The Search dialog appears. It appears with the path of the currently selected folder displayed in the [Search location] box.



3 Specify at least one of the following search conditions

- Enter all or part of a title in the [Title] box.
- Enter all or part of a comment in the [Description] box.
- Use the [DATE] buttons or list box to specify a range of dates.

4 Click [Search]

- A list of clips meeting the conditions specified in step ***3*** appears in the Search dialog.
- Double click the clip you want to preview to display it in the Viewer window and start playback.
- And a list of the clips stored in the same folder as the preview clip appears in the List View pane of an Info window.

Note:

- Always observe the following precautions during a search.
  - Do not delete a target folder.
  - Do not eject the media before the operation completes.

Viewing Clip Properties

You can display a Properties window to view the properties of a clip.

Note:

- Information in Info windows does not display properly if the selected font does not support the character code set used in the software operating environment. Select an appropriate font before displaying information in the Properties window.

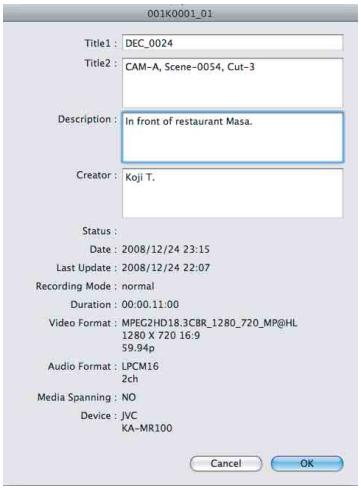
■ To display the Properties window

1 Referring to "Selecting Work Media and Work Folders" (☞ Page 30), display the media or folder that contains the clip whose properties you want to check

2 Select the clip you want to check

3 Select [Properties] from the [Edit] menu

- The clip [Properties] appears.



Viewing Clip Properties (continue)

■ Information displayed in the [Properties] window

The following table lists the information displayed in the Properties window. You can change the [Title1], [Title2], [Description] properties.

Item	Description
Title1 (title)	Displayed as the clip title in the List View pane. (Unless [Title2] has been set, in which case [Title2] is displayed.) Title1 can consist of up to 63 alphanumeric characters and symbols (carriage returns not allowed). Valid symbols: Space, –, +, #
Title2 (subtitle)	Displayed as the clip title in the List View pane. The information can be up to 127 bytes in length. (Multi-language titles are supported.) Information consisting of alphanumeric characters only can be up to 127 characters in length. UTF-8 encoding is used for multi-language information. (The number of bytes required to encode UTF-8 characters varies. Normally it is between 1 and 3 bytes per character.)
Description (comment)	A free comment about the clip. The comment can be up to 2047 bytes in length. (Multi-language comments are supported.) Information consisting of alphanumeric characters only can be up to 2047 characters in length. UTF-8 encoding is used for multi-language information. (The number of bytes required to encode UTF-8 characters varies. Normally it is between 1 and 3 bytes per character.)
Creator	Information about the creator of the clip. The information can be up to 127 bytes in length. (Multi-language comments are supported.) Information consisting of alphanumeric characters only can be up to 127 characters in length. UTF-8 encoding is used for multi-language information. (The number of bytes required to encode UTF-8 characters varies. Normally it is between 1 and 3 bytes per character.)
Status	[OK] is displayed when the clip status is OK. Nothing is displayed when the status is anything else. (☞ Page 28)
Date (creation date)	Date and time when the clip was created.
Last Update	Date of the most recent modification to the clip. This date is updated whenever the clip is copied, moved, or grouped, and when its title, description, or index picture is changed.
Recording Mode	Operating mode of the device when it recorded the clip. Normal : Normal recording mode Slow&QuickMotion : Slow & Quick Motion mode **Memo:** ● For details on each mode, please refer to the “INSTRUCTIONS” of your device.
Duration	Duration of the clip in hours:minutes:seconds:frame format.
Video Format	Detailed information about the video format.
Audio Format	Detailed information about the audio format.
Media Spanning (splitting the media)	[Yes] appears for split clips, and [No] appears for clips which are not split.
Device	Information about the recording device.

■ To save changes to the displayed content

- Click [OK] to save the changes.
- Click [Cancel] to discard the changes.

Appendix

Recording Format and Recording Folders

■ Recording format

This application software supports MP4 file format. This format has the following specifications. This format has the following specifications.

- Folder names and the folder configuration are as shown in the following figure.
- Files contain link information pertaining to links between files and folders.

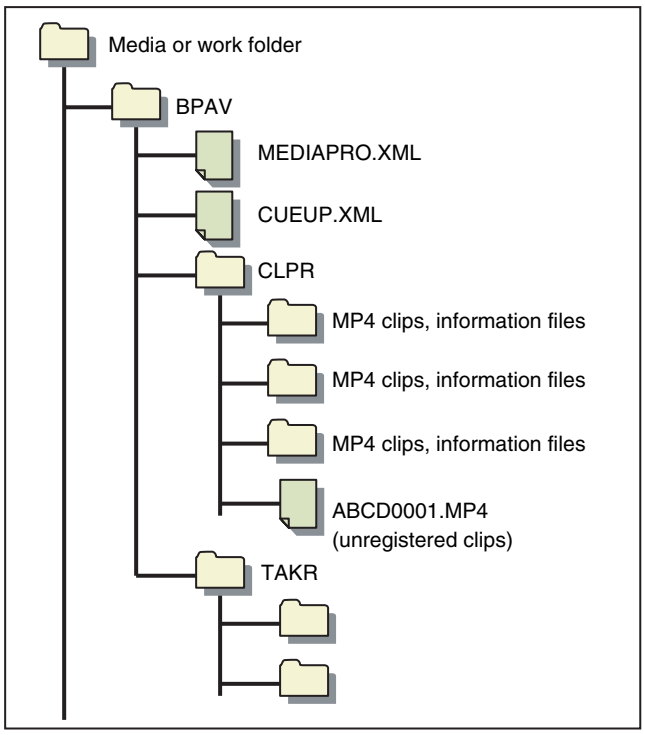
Note:

- Do not use applications other than the JVC ProHD Clip Manager to edit the files, delete, move, or rename the files and folders. Unless the format specifications are observed, files can become unreadable by ProHD series devices and by this application.

■ Recording folders

The configuration of video and metadata folders is as shown in the following figure.

The data beneath the BPAV folder is handled as a single set of data.



Memo:

- One BPAV folder exists when a work folder is opened in Finder.
- To copy and backup your data, select the folders beneath the BPAV folder.
- When a work folder is selected in a Tree View pane of this application, a list of clips registered in the BPAV folder appears in the corresponding List View pane. AV data is saved in the folders beneath the CLPR folder.
- On the SxS memory card used by the recorder (KA-MR100G), the BPAV folder is created beneath the root folder of the media.
- On the SDHC memory card used by the recorder, the BPAV folder is created in the PRIVATE/JVC/ folder beneath the root folder of the media.
- MP4 files can be copied to beneath the CLPR folder. When this is done, they appear in a List View pane as unregistered MP4 clips when the BPAV folder to which the CLPR folder belongs is displayed in Thumbnails View or List View mode.
- The unregistered clips of MP4 files beneath the CLPR folder can be imported. When this is done, new folders are created beneath the CLPR folder, and the MP4 files are moved to those folders.
- The unregistered clips of MP4 files can also be imported from other folders. When this is done, new folders are created beneath the CLPR folder, and the imported clips are copied to those folders. Folder names are assigned automatically.
- Up to 600 clips can be saved in one recording folder.

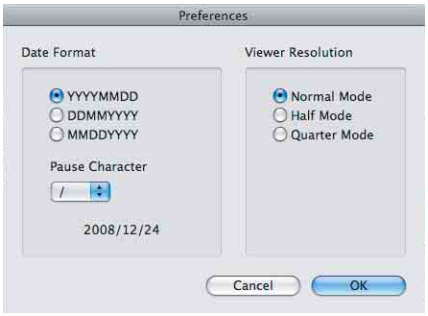
Note:

- Folder and file names are linked to metadata files. Do not change them.

Option Settings

The [Manage] dialog allows you to configure the options of this application.

To open the [Manage] dialog, select [Manage] from the [XDCAM EX Clip Browser] menu.



Date Format	For selecting the display format. YYYY represents the calendar year, MM the month, and DD the day. You can also specify a delimiter character for use between years, months, and days by selecting it from the [Pause Character] list box. The date below the list box shows the current date formatted with the selected character.
Viewer Resolution	Set the playback resolution. Video quality is lower at "Half Mode" and "Quarter Mode", but playback response is better because these resolutions lower the burden on the decoder. These resolutions are recommended if your computer is not powerful enough to deliver smooth playback at Normal resolution.

Note:

- On the Macintosh, language switching is handled by the operating system.

Appendix (continue)

Shortcut Key List

This application supports keyboard shortcuts for many operations.

The following tables show keyboard shortcuts by menu. In the “Operation” column, the notation “command + N” indicates operations in which one key (in this case the Command key) is held down while pressing another key (in this case the N key).

■ Notation for special keys

This manual uses the following notation to indicate special keys on the keyboard.

Symbol	Notation in this manual	Symbol	Notation in this manual
⌘	command	^	control
⇧	shift	↩	return
⌥	option		

■ JVC ProHD Clip Manager menu

Command	Operation	Function	Reference
Preference	command + ,	Open the Options dialog of this application.	☞ Page 43
Hide JVC ProHD Clip Manager	command + H	Show or hide this application.	—
Hide Other	option + command + H	Show or hide other applications.	—
Quit JVC ProHD Clip Manager	command + Q	Exit this application.	☞ Page 26

■ File menu

Command	Operation	Function	Reference
Rename	option + command + R	Rename the selected folder.	☞ Page 32
Create New Folder	shift + command + N	Create a new folder in the selected media or folder.	☞ Page 31
Open Containing Folder	command + N	Start Finder and open the currently selected folder.	☞ Page 32
Import	shift + command + M	Import MP4 file (unregistered clip).	☞ Page 38

■ Edit menu

Command	Operation	Function	Reference
Copy All	option + command + C	Copy all of the clips in the current media or folder.	☞ Page 34
Cut	command + X	Cut the selected clip.	☞ Page 36
Copy	command + C	Copy the selected clip.	☞ Page 35
Paste	command + V	Paste a cut or copied clip.	☞ Page 35 ☞ Page 36
Delete	command + delete	Delete the selected clip.	☞ Page 37
Select All	command + A	Select all of the clips in the current media or folder.	—
Properties	command + I	Open the Properties window of the selected clip.	☞ Page 40
Split	shift + command + W	Split the selected folder into smaller folders of a specified size.	☞ Page 33
Combine	shift + command + J	Combine specified folders into another folder.	☞ Page 34
Special Characters	option + command + T	Open the Character Palette so that you can enter special characters and symbols.	—

■ View menu

Command	Operation	Function	Reference
Change Root Folder	shift + option + command + W	Change the root folder of the Tree View pane.	☞ Page 31
Up	command + ↑	Moves up to the next folder.	☞ Page 30
Sort By>Title	shift + option + command + N	Sort the clips in the List View pane in ascending or descending order by title.	☞ Page 28
Sort By>Size	shift + option + command + S	Sort the clips in the List View pane in ascending or descending order by size.	
Sort By>Duration	shift + option + command + D	Sort the clips in the List View pane in ascending or descending order by duration.	
Sort By>Date	shift + option + command + C	Sort the clips in the List View pane in ascending or descending order by date and time.	
Search	command + F	Search for a clip.	☞ Page 40

■ Viewer menu

Command	Operation	Function	Reference
Play Control>Play	5 or L	Start play.	☞ Page 29
Play Control>Stop	Space or K	Stop at the current position.	
Play Control>Fast Forward	S	Search in the forward direction (fast forward).	
Play Control>Rewind	A	Search in the reverse direction (rewind).	
Play Control>Jump To Head	Q	Move to the first frame of the clip.	
Play Control>Jump To End	W	Move to the last frame of the clip.	
Play Control>Next Frame	4	Step 1 frame forward.	
Play Control>Previous Frame	3	Step 1 frame back.	
View>Full Screen	command + return	Display in full-screen mode.	☞ Page 39

■ Window menu

Command	Operation	Function	Reference
Minimize	command + M	Minimize the active window.	—
Play Control>Stop	option + command + E	Return the operating window to its default position and size.	☞ Page 28

For MAC OS

This product uses software subject to the GNU Lesser General Public License (LGPL).
Library name: FFMPEG

Thank you for your purchase of this product.
This product uses the following software, which is subject to the LGPL. You have the right to obtain, modify and distribute the source code to this software.

FFMPEG
- avcodec-51.dll
- avformat-51.dll
- avutil-49.dll

The source code is contained in the /Software/ClipManager/SRC folder of the bundled CD-ROM.
It may also be downloaded from the following web site.
http://www.jvc-victor.co.jp/download/lnx/06jvc_pro/jvc_pro_linux_download_page.html

Please note that we cannot respond to inquiries regarding the content of the source code.

FFmpeg is a trademark of Fabrice Bellard, originator of the FFmpeg project.

JVC ProHD Clip Manager

JVC

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