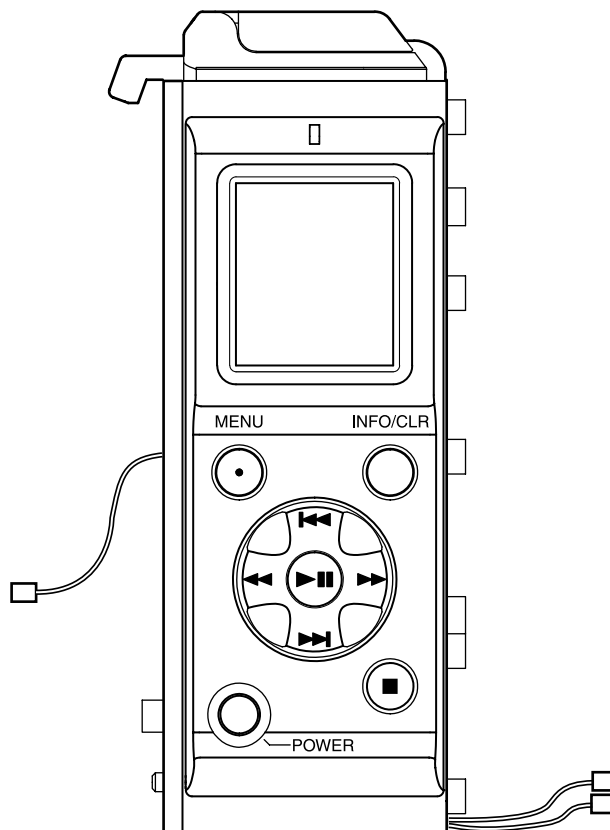




Memory Recorder

KA-MR100G

INSTRUCTIONS



Thank you for purchasing this JVC product. Before beginning to operate this unit, please read the instructions carefully to ensure the best possible performance.

For Customer Use:
Enter below the Serial No. which is located on the body. Retain this information for future reference.
Model No. : KA-MR100G
Serial No. : _____

Getting Started

FOR USA

These are general **IMPORTANT SAFEGUARDS** and certain items may not apply to all appliances.

IMPORTANT SAFEGUARDS

1. Read all of these instructions.
2. Save these instructions for later use.
3. All warnings on the product and in the operating instructions should be adhered to.
4. Unplug this appliance system from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
5. Do not use attachments not recommended by the appliance manufacturer as they may cause hazards.
6. Do not use this appliance near water - for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.
7. Do not place this appliance on an unstable cart, stand, or table. The appliance may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer, or sold with the appliance. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
8. Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to insure reliable operation of the appliance and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the appliance on a bed, sofa, rug, or other similar surface. This appliance should never be placed near or over a radiator or heat register. This appliance should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.
9. This appliance should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company. For appliance designed to operate from battery power, refer to the operating instructions.
10. For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
11. Do not allow anything to rest on the power cord. Do not locate this appliance where the cord will be abused by persons walking on it.
12. Follow all warnings and instructions marked on the appliance.
13. Do not overload wall outlets and extension cords as this can result in fire or electric shock.
14. Never push objects of any kind into this appliance through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the appliance.
15. Do not attempt to service this appliance yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
16. Unplug this appliance from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power cord or plug is damaged or frayed.
 - b. If liquid has been spilled into the appliance.
 - c. If the appliance has been exposed to rain or water.
 - d. If the appliance does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the appliance to normal operation.
 - e. If the appliance has been dropped or the cabinet has been damaged.
 - f. When the appliance exhibits a distinct change in performance - this indicates a need for service.
17. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
18. Upon completion of any service or repairs to this appliance, ask the service technician to perform routine safety checks to determine that the appliance is in safe operating condition.

PORTABLE CART WARNING
(symbol provided by RETAC)



S3125A

Safety Precautions

FOR USA AND CANADA



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION:

CHANGES OR MODIFICATIONS NOT APPROVED BY JVC COULD VOID USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

NOTE:

The rating plate (serial number plate) is on this unit.

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

POUR CANADA



ATTENTION

RISQUE D'ELECTROCUTION NE PAS OUVRIR



ATTENTION: POUR EVITER TOUT RISQUE D'ELECTROCUTION NE PAS OUVRIR LE BOITER. AUCUNE PIECE INTERIEURE N'EST A REGLER PAR L'UTILISATEUR. SE REFERER A UN AGENT QUALIFIE EN CAS DE PROBLEME.



Le symbole de l'éclair à l'intérieur d'un triangle équilatéral est destiné à alerter l'utilisateur sur la présence d'une "tension dangereuse" non isolée dans le boîtier du produit. Cette tension est suffisante pour provoquer l'électrocution de personnes.



Le point d'exclamation à l'intérieur d'un triangle équilatéral est destiné à alerter l'utilisateur sur la présence d'opérations d'entretien importantes au sujet desquelles des renseignements se trouvent dans le manuel d'instructions.

Ces symboles ne sont utilisés qu'aux Etats-Unis.

INFORMATION (FOR CANADA) RENSEIGNEMENT (POUR CANADA)

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Class A est conforme à la norme NMB-003 du Canada.

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

This unit should be used with 12V DC only. To prevent electric shocks and fire hazards, do NOT use any other power source.

NOTE:

The rating plate (serial number plate) is on the unit.

REMARQUE:

La plaque signalétique (plaque du numéro de série) est située sur le cadre inférieur de l'unité.

CAUTION:

To prevent electric shock, do not open the cabinet. No user serviceable parts inside. Refer servicing to qualified service personnel.

Due to design modifications, data given in this instruction book are subject to possible change without prior notice.

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed close to the apparatus.

AVERTISSEMENT:
POUR EVITER LES RISQUES D'INCENDIE OU D'ELECTROCUTION, NE PAS EXPOSER L'APPAREIL A L'HUMIDITE OU A LA PLUIE.

ATTENTION:

Ce magnétoscope ne doit être utilisé que sur du courant direct en 12V. Afin d'éviter tout risque d'incendie ou d'électrocution, ne pas utiliser d'autres sources d'alimentation électrique.

Safety Precautions (continued)

FOR EUROPE

This equipment is in conformity with the provisions and protection requirements of the corresponding European Directives. This equipment is designed for professional video appliances and can be used in the following environments:

- Controlled EMC environment (for example, purpose-built broadcasting or recording studio), and rural outdoors environments.

In order to keep the best performance and furthermore for electromagnetic compatibility we recommend to use cables not exceeding the following lengths:

	Cable	Maximum Cable Length
IEEE1394 CABLE	Shield Cable	0.2 m

Caution:

Where there are strong electromagnetic waves or magnetism, for example near a radio or TV transmitter, transformer, motor, etc., the picture and the sound may be disturbed. In such case, please keep the apparatus away from the sources of the disturbance.

Dear Customer,

This apparatus is in conformance with the valid European directives and standards regarding electromagnetic compatibility and electrical safety.

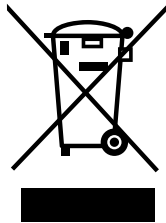
European representative of Victor Company of Japan, Limited is:
JVC Technical Services Europe GmbH
Postfach 10 05 04
61145 Friedberg
Germany

Sehr geehrter Kunde, sehr geehrte Kundin,

dieses Gerät stimmt mit den gültigen europäischen Richtlinien und Normen bezüglich elektromagnetischer Verträglichkeit und elektrischer Sicherheit überein.

Die europäische Vertretung für die Victor Company of Japan, Limited ist:
JVC Technical Services Europe GmbH
Postfach 10 05 04
61145 Friedberg
Deutschland

Information for Users on Disposal of Old Equipment
[European Union]



Attention:

This symbol is only valid in the European Union.

This symbol indicates that the electrical and electronic equipment should not be disposed as general household waste at its end-of-life. Instead, the product should be handed over to the applicable collection point for the recycling of electrical and electronic equipment for proper treatment, recovery and recycling in accordance with your national legislation.

By disposing of this product correctly, you will help to conserve natural resources and will help prevent potential negative effects on the environment and human health which could otherwise be caused by inappropriate waste handling of this product. For more information about collection point and recycling of this product, please contact your local municipal office, your household waste disposal service or the shop where you purchased the product. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

(Business users)

If you wish to dispose of this product, please visit our web page <http://www.jvc.eu> to obtain information about the take-back of the product.

[Other Countries outside the European Union]

If you wish to dispose of this product, please do so in accordance with applicable national legislation or other rules in your country for the treatment of old electrical and electronic equipment.

FOR USE IN CHINA ONLY

《电子信息产品污染控制管理办法》规定的表示内容

关于环保使用期限



环保使用期限

- 此图标表示了中国《电子信息产品污染控制管理办法》规定的环保使用期限。只要用户在使用本产品时遵守注意事项中的各项规定，从制造日期开始到此图标标出的期限为止（环保使用期限）既不会污染环境也不会产生对人体有害的物质。

关于产品中的有毒、有害物质

零件名称	有毒或有害物质、元素					
	铅 (Pb)	水银 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
线路板组件	×	○	○	×	○	○
机箱	×	○	○	×	○	○
液晶显示屏	×	○	○	×	○	○
其他附件	×	○	○	×	○	○

○：此零件中的每个均匀材料所含有毒、有害物质的量在SJ/T 11363-2006标准规定的范围之内。
×：此零件中至少有一种均匀材料含有有毒、有害物质的量超过了SJ/T 11363-2006标准的规定。

Features

This is a memory recorder to record and play back HD-format video images and audio signals on an SxS memory card via the IEEE1394 interface.

Use of SxS Memory Card

The use of MPEG-2 Long GOP compression format and SxS memory card enables long-duration recording and high-speed transfer as described below.

- Supports long-duration recording of HD images up to 180 minutes (when capacity is 32 GB and mode is set to 720p).
- Enables high-speed data transfer to a computer, thus enhancing workflow efficiency.

Attachment to Professional HD Camcorders

- This memory recorder can be attached to the GY-HD200/HD250 HD camcorder series to enhance shooting that requires a high level of mobility.
- Besides recording to SxS memory cards, hybrid recording and series recording through combined use with cassette tapes are also supported.

Use of MP4 File Format *1

- MP4 file format, compliant file format used on the "XDCAM EX".
- * Play back compatibility may be not guaranteed on the different type products, due to variation of supported recording mode.

*1: MP4 File Format

This format adopts the Professional Memory Card System Format licensed from Sony Corporation.

The following are included in the bundled CD-ROM.

<Softwares>

- SxS memory card device driver software for computers
- Computer application software (JVC ProHD Clip Manager)
- Plugin software for Final Cut Pro (JVC ProHD Log and Transfer Plugin) *1

*1: "Final Cut Pro" is a video editing software developed by Apple Inc.

<Documents>

- KA-MR100G instruction manual
(Japanese, English, German, French, Italian, Spanish, Russian, and Chinese versions)
- SxS memory card device driver software installation guide
- JVC ProHD Clip Manager user's guide/JVC ProHD Log and Transfer Plugin user's guide.
For procedures on how to install the application software on a computer, please refer to the user's guide or instruction manual.

Copyrights

- Broadcasting for profit or public viewing of the video and audio contents recorded using this product may infringe on authors' rights protected by copyright law.
- Recorded video and audio contents cannot be used without the consent of the right-holder under copyright law, except for personal enjoyment.

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How to Read this Manual

■ 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.

■ Contents of this manual

- JVC holds the copyright to this manual. Any part or all of this manual may not be reproduced without prior consent from the company.
- Product names of other companies described in this manual are trademarks or registered trademarks of the respective companies. Symbols such as ™, ® and © are omitted in this manual.
- Design, specifications and other contents described in this manual are subject to change for improvements without prior notice.
- XDCAM EX is Sony Corporation's brand name for its professional video camera series.
- Windows is a registered trademark of Microsoft Corporation in the U.S.
- Mac OS and Final Cut Pro are trademarks of Apple Inc., registered in the United States and other countries.

Precautions

Storage and Operating Environment

■ **Do not store this product in the following environments.**

Doing so may result in malfunction or failure.

- Hot or cold locations beyond the allowable operating temperature range of 0 °C to 40 °C.
- Locations beyond the allowable operating humidity range of 30 % RH to 80 % RH (no condensation)
- Near equipment that emits strong magnetic fields, such as transformers or motors
- Near equipment that emits radio waves, such as transceivers and mobile phones
- Locations with excessive dust and sand
- Locations that are subjected to strong vibrations
- Locations prone to moisture, such as window side
- Locations that are subjected to steam or oil, such as kitchens
- Locations that are subjected to radiation, X-rays, or corrosive gases

Precautions for Handling the Memory Recorder

- When connecting and recording with a camcorder other than GY-HD200/GY-HD250, the recording may not work properly.
- Playing back clips that are created on devices other than the KA-MR100G Memory Recorder may result in distorted images and choppy sound.
- Please do not use the battery that cannot be connected with this product.
- Make sure that the power switch is turned off before removing the battery. Failure to do so may result in malfunction of the memory recorder or SxS memory card.
- Do not unplug the IEEE1394 cable during recording or playback.
- When power is not supplied for a prolonged period of time (three months or longer), the initial setting screen appears when the power is next turned on.
- Do not place objects on the memory recorder.
- This product cannot be used by connecting the IEEE1394 terminal of the KA-UM100G adapter (sold separately) to the computer.
- Please contact our authorized dealers if inspection of the interior components or repair is required.

Fire Hazard, Electrical Shock and Injury

- Do not place this product on unstable surfaces as it may fall and lead to injuries or malfunction of the product. When this product is attached to a camcorder, carry it by holding the handle of the camcorder.
- Do not remove or modify the cover of this product. It might result in fire, electrical shock or malfunction of the product.
- Do not insert objects other than the memory card into the card slot. Inserting a metallic or flammable object may result in fire, electrical shock or malfunction of the product.

Accessories

■ **To use the ExpressCard slot on the computer, installation of the SxS memory card device driver software is required. The driver can be found in the bundled CD-ROM.**

■ **To copy a video clip to the computer, installation of the computer application software (JVC ProHD Clip Manager) is required. This program can be found in the bundled CD-ROM.**

■ **To load recorded video clips to Apple Inc.'s video editing software, Final Cut Pro, installation of the Final Cut Pro plugin software (JVC ProHD Log and Transfer Plugin) is required. This software can be found in the bundled CD-ROM.**

■ **For procedures on how to install the software, please refer to the user's guide and instruction manual in the bundled CD-ROM.**

Precautions for Handling SxS Memory Cards

■ **Make sure that the SxS memory card is formatted on this memory recorder. SxS memory cards that are formatted on another product cannot be used on this memory recorder.**

■ **Formatting an SxS memory card erases all clips that are stored on the card.**

■ **Make sure to close the card slot cover before using the memory card.**

■ **Do not operate the write-protect switch of the SxS memory card when it is inserted into the memory recorder.**

■ **For details, please refer to the instruction manual of the SxS memory card.**

Precautions for Handling Recorded Video Clips

■ **We do not guarantee against damage of the recorded video clips if the SxS memory card is removed from the slot while data is being accessed (e.g., during recording, playback or formatting). Remove the card only when the access lamp of the memory recorder lights up in green.**

■ **We do not guarantee against damage of the recorded video clips in the following cases:**

- when this product is used in places subject to static electricity or electrical noises;
- when the battery or IEEE1394 cable is removed while data is being accessed;
- when this product is used in sandy or dusty places, or when a dirty SxS memory card is used.

■ **The recovery feature does not guarantee successful recovery of the damaged files.**

JVC shall not be liable for any damage or loss of the recorded video clips. (We strongly recommend that you create a backup for important video clips.)

Maintenance

■ **Turn off the power before performing maintenance.**

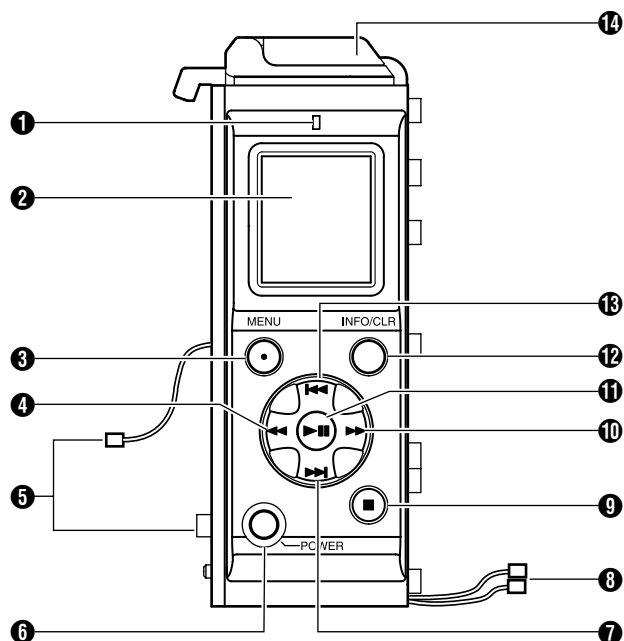
■ **Wipe this product using a soft cloth. Wiping with thinner or benzene may melt or tarnish its surface. For tough stains, wipe using a cloth that is dipped into a neutral detergent diluted with water, followed by wiping with a dry cloth.**

■ **Contact with rubber or plastic products over an extended period of time may cause the outer surface of the product to deteriorate or the paint to peel off.**

Saving Energy

■ **If this product is not to be used for a long time, turn off the power of the system for safety and energy conservation reasons.**

Name and Function of Parts



1 Access lamp

Displays the status of the SxS memory card.

Light off : SxS memory card is not inserted

Green light : Data in the card is not being accessed

Red light : Data is currently being accessed (e.g., recording, playback or formatting in progress)

- Before removing the SxS memory card, make sure that the access lamp lights up in green color.

2 LCD panel

Displays the status, clip selection and menu screens. (☞ Page 5, 10, 11)

Memo:

- The contrast and backlight settings of the LCD panel can be specified on the [LCD] setting screen of the menu screen.

"LCD panel contrast and backlight settings" (☞ Page 12)

3 [MENU] button

Displays the menu screen. Press this button again to restore the original screen display.

4 [REV]button

- Fast reverses the selected clip.
- When the Time Code, Date/Time or Clip Name setting screen is displayed, use this button to select a setting.

5 Camcorder connector

To connect the memory recorder with a camcorder, connect this connector to the memory recorder connector of the KA-UM100G adapter (sold separately).

6 [POWER]button

Turns On/Off the power of the memory recorder. To do so, press and hold the button for at least one second.

7 [NEXT] button

- Skips the currently selected clip to the next clip.
- When the clip selection screen is displayed, use this button to select a clip to play back.
- When the menu screen is displayed, use this button to select a menu item or setting value.

8 Battery connector

For connecting to the battery adapter connector of the camcorder.

9 [STOP] button

- Stops recording or playback.
- When the menu screen is displayed, press this button to return to the menu screen without altering the settings.

10 [FWD] button

- Fast forwards the selected clip.
- When the Time Code, Date/Time or Clip Name setting screen is displayed, use this button to select a setting.

11 [PLAY/STILL]button

- Pauses or starts playback.
- When the menu screen is displayed, press this button to confirm an item or setting value selection.

12 [INFO/CLR] button

- Switches the clip information display. (☞ Page 5)
- When the utility execution screen is displayed, use this button to execute a process. On other setting screens, pressing this button restores the default settings.

13 [PREV] button

- Skips to the beginning of the selected clip or the previous clip.
- When the clip selection screen is displayed, use this button to select a clip to play back.
- When the menu screen is displayed, use this button to select a menu item or setting value.

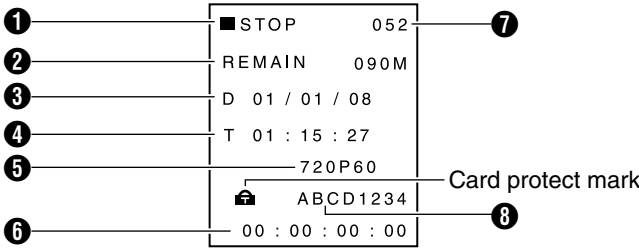
14 Card slot

Open the cover and insert the SxS memory card. (☞ Page 8)

LCD Panel Displays

During Recording or Stop Mode

Displays the status screen.



1 Modes

---	SxS memory card is not inserted
■ STOP	Stop
● REC	Recording
STBY	Standby (pause)

2 Remaining capacity

Displays the remaining time (minutes) of the SxS memory card.

3 Date

Shows the date of the built-in clock. The month/day/year display format can be specified on the [CLOCK2]-[DATE STYLE] screen of the menu screen.

“Setting the Date/Time” (Page 7, 13)

4 Time

Shows the time of the built-in clock. The time display format (12-hour/24-hour) can be specified on the [CLOCK2]-[TIME STYLE] screen of the menu screen.

“Setting the Date/Time” (Page 7, 13)

5 Video format

Shows the video format selected on the [SYSTEM] screen of the menu screen.

“Video format settings” (Page 12)

6 Time code/User bit

Displays the time code or user bit to be recorded. Press the [INFO/CLR] button to toggle the display.

00:00:00:00 : Time code

0F 0F 0F 0F : User bit

Memo:

- The time code display differs depending on whether non drop frame or drop frame mode has been selected in the [DROP FRAME] setting.

Non drop frame mode	00:00:00:00
Drop frame mode	00:00:00:00

7 Total number of clips

Displays the total number of clips recorded in the SxS memory card.

8 Clip name

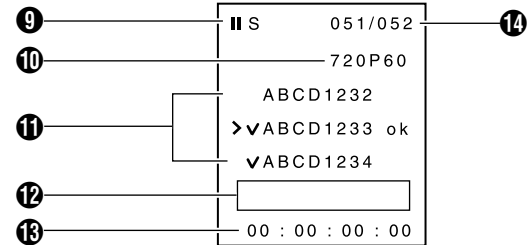
Displays the name of the clip that is going to be recorded. The clip name can be specified on the [CLIP NAME] screen of the menu screen. “Changing clip name or resetting the clip number” (Page 13)

Memo:

- A “NO CARD” message is shown when an SxS memory card is not inserted.
- A “CARD PROTECT” mark (lock icon) is shown before the clip if the write-protect switch of the SxS memory card is turned on.

During Playback Mode

Displays the clip selection screen.



9 Modes

S	Still	▶ P	Playing
▶▶ F1	Fast forward (low speed)	◀◀ R1	Fast reverse (low speed)
▶▶ F2	Fast forward (high speed)	◀◀ R2	Fast reverse (high speed)

10 Video format

Displays the video format of the selected clip.

“Video format settings” (Page 12)

11 Clip name

- The clip indicated by the cursor (>) is the selected clip.
- A “NO CLIP” message is shown when no clip is found.

v mark	A check mark (v) appears before clips that are playable.
ok mark	Appears after the clip name. You can specify the “ok mark” on the [OK CLIP] screen of the menu screen. “Menu screen’s [OK CLIP] settings” (Page 12)

12 Playback position bar

Displays the progress of the currently played clip in the form of a bar.

“Memory recorder’s time code settings” (Page 12)

13 Clip information

Displays various information related to the selected clip. Press the [INFO/CLR] button to toggle the clip information display.

00:00:00:00 : Playback time code

0F 0F 0F 0F : Playback user bit

RD 09/07/08: Date on which clip is recorded (month/day/year)

RT 11:11:11 : Time on which clip is recorded (hour:minute:second)

Dr 00:10:00 : Clip length (duration) (hour:minute:second)

Note:

- The playback time code value is not an accurate representation. Use it as a guide for the playback position.

14 Selected clip/Total number of clips

Attaching the Memory Recorder to a Camcorder

Check the IEEE1394 connection method before attaching the memory recorder to the camcorder.

For details, please refer to "Connecting IEEE1394"

(Page 7)

Note:

- The KA-MR100G adapter (sold separately) is required to attach the memory recorder to a camcorder.

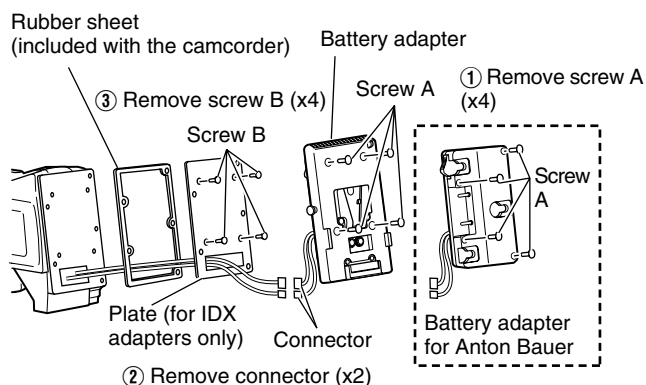
Memo:

- Two different types of battery adapters, manufactured by IDX and Anton Bauer respectively, are available, depending on the country/region where the camcorder is purchased.

1 Remove the battery from the camcorder

2 Remove the battery adapter from the camcorder

Follow the steps illustrated in ① ~ ③ below to remove the battery adapter, followed by the plate (for IDX adapters only) and rubber sheet from the camcorder.

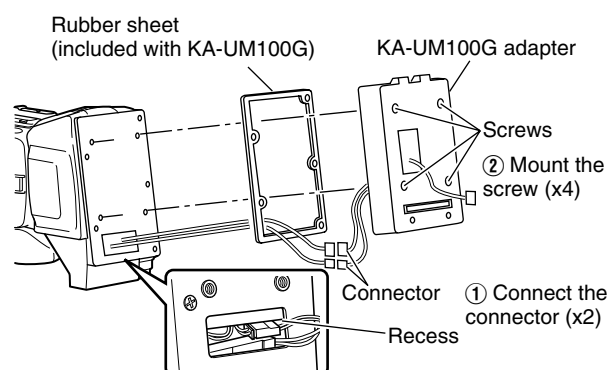


Memo:

- Battery adapters manufactured by Anton Bauer do not come with a plate.

3 Attach the KA-UM100G adapter (sold separately) to the camcorder

Align the screw holes at the back of the camcorder with the holes on the rubber sheet. Next, follow the steps illustrated in ① ~ ② to attach the KA-UM100G adapter.

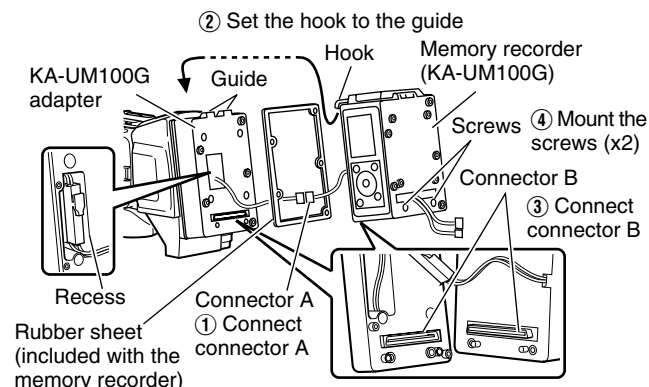


Note:

- Store the connection wires and connectors properly so that they do not protrude from the groove or recess.

4 Attach the memory recorder to the KA-UM100G adapter

Align the screw holes at the back of the KA-UM100G adapter with the holes on the rubber sheet. Next, follow the steps illustrated in ① ~ ④ to attach the memory recorder.

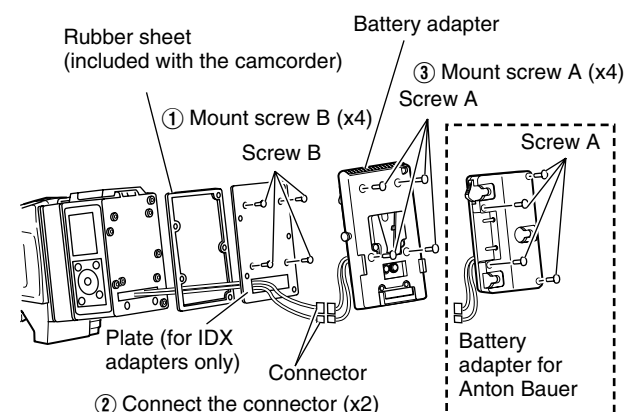


Note:

- Store the connection wires and connectors properly so that they do not protrude from the groove or recess.

5 Attach the battery adapter to the memory recorder

Align the screw holes at the back of the memory recorder with the holes on the rubber sheet. Next, follow the steps illustrated in ① ~ ③ to attach the rubber sheet, plate (for IDX adapters only) and battery adapter.



Note:

- Store the connection wires and connectors properly so that they do not protrude from the groove or recess.

Memo:

- Battery adapters manufactured by Anton Bauer do not come with a plate.

6 Attach the battery to the camcorder

Note:

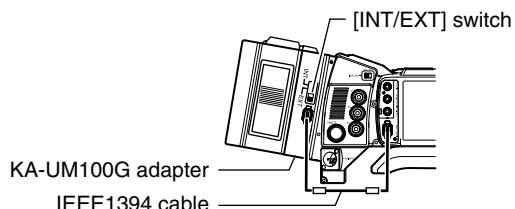
- Do not use the battery that cannot be connected with this product. For details, please refer to the instruction manual of the camcorder.

Connecting IEEE1394

There are 2 ways to connect the IEEE1394.

Connecting via IEEE1394 Cable

- Connect the IEEE1394 cable to the KA-UM100G adapter and the IEEE1394 terminal of the camcorder.
- Set the [INT/EXT] switch to "EXT".



Memo:

- When the switch is set to [INT], signal input and output is disabled.
- For information on where to purchase an IEEE1394 cable, please consult our authorized dealers.

Connection via Internal Wiring

Changes need to be made to the internal wire connections of the camcorder.

Memo:

- When making a connection with the switch set to [INT], it is necessary to alter the internal wire connections of the camcorder. For details, please consult our authorized dealers.
- When making a connection with internal wiring, the IEEE1394 terminal of the adapter is disabled.

[INT/EXT] Switch	Description
INT	<ul style="list-style-type: none"> • For recording data to or playing data from the SxS memory card. • When the switch is set to [INT], the IEEE1394 terminal on the camcorder is disabled.
EXT	<ul style="list-style-type: none"> • For connecting the IEEE1394 terminal on the camcorder to a computer or other devices. • When the switch is set to [EXT], the internal connection between the memory recorder and the camcorder is disabled.

Turning On/Off the Power

Turning On the Power

- 1 Set the [POWER] switch of the camcorder to "On"
- 2 Press and hold down the [POWER] button of the memory recorder for at least one second

- The power of the memory recorder turns on. After a message indicating "KA-MR100 POWER ON" appears on the LCD panel for several seconds, the status screen is displayed.

Memo:

- It is necessary to set the built-in clock immediately after purchasing this product or when it has not been used for a prolonged period of time (three months or longer). After the power of the memory recorder turns on, a message indicating "CLOCK SETUP MENU" appears for several seconds. Next, the [CLOCK1] setting screen is automatically displayed. "Setting the Date/Time" (Page 7)

Turning Off the Power

- 1 Press and hold down the [POWER] button of the memory recorder for at least one second

- The power of the memory recorder turns off.

Memo:

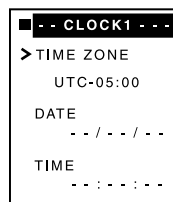
- You can turn off the power of the memory recorder using the [POWER] switch of the camcorder by setting [DR-HD100 A.OFF] on the OTHERS[2/2] menu screen of the GY-HD200/HD250 series camcorder to "On".

Note:

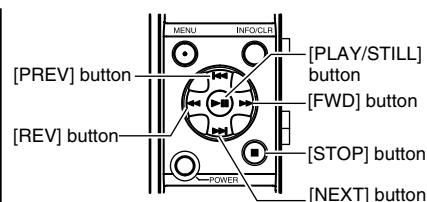
- Make use of a battery to supply power to the memory recorder. Power cannot be supplied from the DC INPUT terminal of the camcorder.

Setting the Date/Time

Set the time of the built-in clock on the [CLOCK1] setting screen of the menu screen.



<[CLOCK1] Setting Screen>



<Buttons to use>

- 1 Select the item to set ("TIME ZONE", "DATE" or "TIME")

- Press the [PREV] or [NEXT] button to select an item.
- After making a selection, press the [PLAY/STILL] or [FWD] button to confirm.

- 2 Set the respective items

Set the items listed in the table below.

Memo:

- Be sure to set the "TIME ZONE" before setting the "DATE" and "TIME".
- The memory recorder does not support daylight savings time.

Item	Description
TIME ZONE	For setting the time difference with the UTC (Universal Time Coordinate). The values of the "DATE" and "TIME" items will be automatically adjusted when this item is altered. "UTC Time Difference Chart by Region" (Page 17)
DATE	For setting the date (month/day/year).
TIME	For setting the time (hour:minute:second).

- Press the [PREV] or [NEXT] button to select a value, followed by using the [PLAY/STILL] button to confirm the selection.
- When setting DATE, press the [FWD] or [REV] button to jump between month, day, and year. When setting TIME, press the same button to jump between hour, minute and second.

- 3 Press the [MENU] button to return to the status screen

Inserting/Removing the SxS Memory Card

Note:

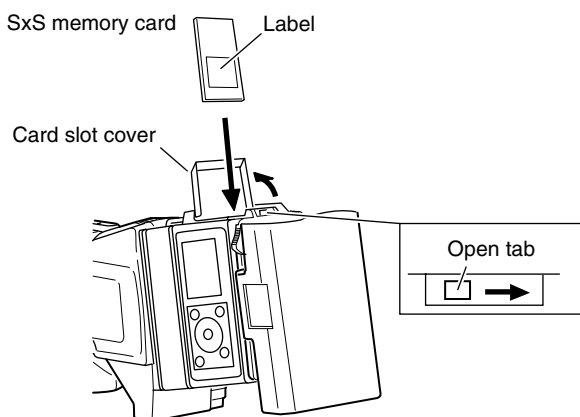
- This product does not support the USB interface ExpressCard. Use a recommended SxS memory card. ("Specifications" Page 16)
- Do not insert the SxS memory card in the reverse direction. The card slot is designed such that the card cannot be inserted in the reverse direction. Do not force the card into the card slot as this will cause malfunction.

Inserting the SxS memory card

1 Slide the tab of the card slot cover horizontally to open the cover

2 Insert the SxS memory card into the card slot

- Insert the card with the label facing you as illustrated below.
- The access lamp lights up in red. When the card is ready to be used, the light turns green.



3 Close the card slot cover

Memo:

- If a "FORMAT" message appears on the LCD panel, make sure to format (initialize) the card using the memory recorder. ("Menu screen's [MEDIA]-[FORMAT] settings" Page 13)

Note:

- SxS memory cards that are formatted using another product cannot be used on this memory recorder.

Write-protect Switch of SxS Memory Card

To disable recording or deletion of video clips to or from the SxS memory card so as to protect the recorded clips, set the write-protect switch at the side of the SxS memory card to "WP". When using a write-protected SxS memory card, a message indicating "WRITE PROTECT!" will appear on the status screen of the LCD panel for about three seconds. For details, please refer to the instruction manual of the SxS memory card.

Note:

- Do not operate the write-protect switch of the SxS memory card when it is inserted into the memory recorder.

Removing the SxS Memory Card

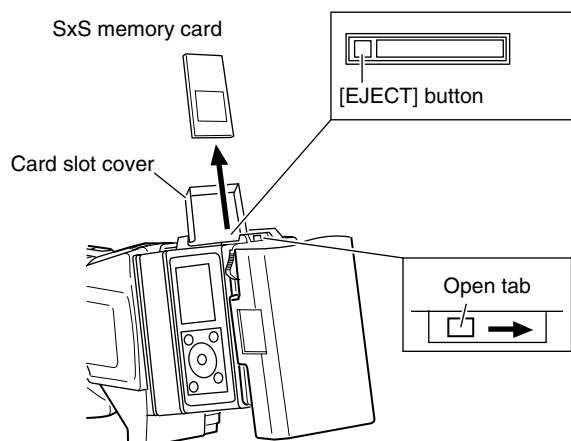
Note:

- Do not remove the SxS memory card when the memory recorder lights up in red. Before removing the card, make sure that the access lamp lights up in green color.

1 Slide the tab of the card slot cover horizontally to open the cover

2 Press the [EJECT] button at the side of the slot to unlock

3 Press [EJECT] button again, and remove the SxS memory card



4 Close the card slot cover

Maximum Recording Time of SxS Memory Card

The maximum recording time of an SxS memory card varies according to the format of the input signals as shown in the table below.

When using a 32 GB SxS memory card

Mode	Video Format	Max. Recording Time
HD1	720 (50p/25p/60p/30p/24p)	Approx. 180 mins
HD2	1080 (50i/60i)	Approx. 140 mins

Memo:

- The values in the table are for reference and are not guaranteed values. These are not the maximum possible duration during continuous recording. The maximum duration for continuous recording when the battery is fully charged varies according to the battery type.

Recording Video Images of the Camcorder Using the Memory Recorder

To record video images of the camcorder using the memory recorder, operate using the REC trigger button on the camcorder. Each time a recording is started and stopped, a clip is created in the SxS memory card.

Settings Prior to Recording

Before recording, it is necessary to configure the camcorder and memory recorder settings.

■ Camcorder settings

1 Set to the "CAM" mode using the [CAM/VTR] button

2 Set the [IEEE1394] switch to the "HDV" end

- The memory recorder does not support the DV format.

3 Set the video format (e.g., 720/60p)

- Set according to the video format settings of the memory recorder.

Memo:

- The GY-HD200 (B) series camcorders can record in the 1080 format. Check the name plate on the camcorder.

4 Select a method for recording to the SxS memory card

- Select the method to record to the SxS memory card from the [1394 REC TRIGGER] item of the OTHERS[2/2] menu screen.

Setting	Recording Method
OFF	Records only to the cassette tape of the camcorder. ※ Data is not recorded in the SxS memory card.
SYNCRO	For hybrid recording
SPLIT	Records only to the SxS memory card
SERIES	For series recording

※ For details, please refer to the instruction manual of the camcorder.

■ Memory recorder settings

For procedures to set the menu screen, refer to page 11.

1 Set the video format according to the camcorder setting

- Set the RESOLUTION and FRAME/RATE under the [SYSTEM] settings on the menu screen. (Page 12)

2 Set the time code recording method for the SxS memory card

- Set the three items below on the [TC SET1] setting screen of the menu screen. (Page 12)

Setting item	Description
TC SOURCE	For setting the source of the time code
GENERATOR	For setting the run mode of the time code generator of the memory recorder.
DROP FRAME	For selecting either "NON DROP" or "DROP" frame (enabled only when the frame rate is set to 60 or 30.)

Set the preset time code and user bit values on the [TC SET2] setting screen of the menu screen. (Page 13)

Recording to the SxS Memory Card

- When the memory recorder is in the play mode, press the [STOP] button to stop playback.
- There are three REC trigger buttons on the camcorder (on the lens, at the side, and on the handle). The REC trigger button to enable recording to the SxS memory card varies according to the [1394 REC TRIGGER] settings.
- A "TRIGGER TO HDV" message is shown on the camcorder panel display when the REC trigger button is pressed.

■ Hybrid recording with cassette tape (when the "SYNCRO" setting is enabled)

For recording data to both the cassette tape of the camcorder and the memory recorder.

1 Press any one of the REC trigger buttons on the lens, at the side, or on the handle of the camcorder to start recording to the SxS memory card

2 Press the REC trigger button of the camcorder to switch between the recording and standby modes

3 Press the [STOP] button on the memory recorder to stop recording

Memo:

- When a cassette tape is not inserted into the camcorder, data will only be recorded to the SxS memory card.

■ Recording only to the SxS memory card (when the "SPLIT" setting is enabled)

For recording to the SxS memory card by pressing the REC trigger button at the side of the camcorder.

1 Press the REC trigger button at the side of the camcorder to start recording to the SxS memory card

2 Press the REC trigger button of the camcorder to switch between the recording and standby modes

3 Press the [STOP] button on the memory recorder to stop recording

■ Series recording (when the "SERIES" setting is enabled)

Recording to the SxS memory card starts automatically when the remaining capacity of the cassette tape falls below three minutes.

1 Press any one of the REC trigger buttons on the lens, at the side, or on the handle of the camcorder to start recording to the cassette tape

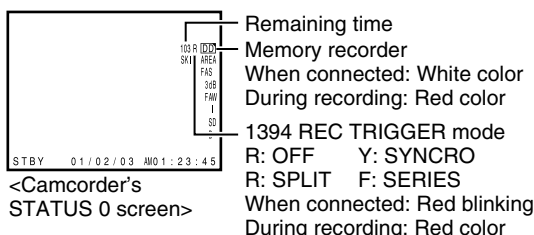
- Recording to the SxS memory card starts automatically when the remaining capacity of the cassette tape falls below three minutes.

2 Press the [STOP] button on the memory recorder to stop recording

Memo:

- When there is no remaining space left on the SxS memory card, a "CARD FULL!" message will appear for about three seconds.

Camcorder Panel Display



Playing Video Images Recorded in the Memory Recorder

To play back video images recorded by the memory recorder, select a clip from the clip selection screen on the LCD panel of the memory recorder. The selected video clip is played back on the LCD monitor and viewfinder of the camcorder.

Memo:

- Before playing back video images recorded by the memory recorder, stop the playback of the cassette tape in the camcorder.
- Images on the LCD monitor and viewfinder of the camcorder may be distorted when in the Still and Fast forward/Fast reverse modes.

Settings Prior to Playback

Before playing, it is necessary to configure the camcorder and memory recorder settings.

■ Camcorder settings

1 Set to the "VTR" mode using the [CAM/VTR] button

2 Set the [IEEE1394] switch to the "HDV" end
■ Memory recorder settings

For procedures to set the menu screen, refer to page 11.

1 Set the video format

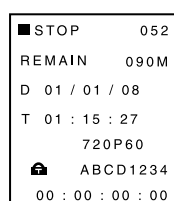
- Set the RESOLUTION and FRAME/RATE under the [SYSTEM] settings on the menu screen. (☞ Page 12)

Note:

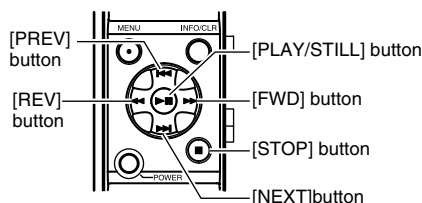
- Set according to the format settings of the camcorder. Playback cannot be executed if the camcorder and memory recorder settings are different from each other.

Playing a Clip from the SxS Memory Card

If the memory recorder is in the standby mode, press the [STOP] button on the recorder to switch to the stop mode.



<LCD Panel>



<Buttons to use>

Normal playback

1 Press the [PLAY/STILL] button

Memo:

- Playable clips are indicated by a check mark (✓) at the front of their names.
- The clip indicated by the cursor (➤) is the selected clip. "LCD Panel Displays" (☞ Page 5)

2 Press the [NEXT] or [PREV] button to select a clip to play

- Select a clip that has a check mark.
- To play back a clip without a check mark, it is necessary to configure the camcorder and memory recorder according to the video format settings, which are displayed when the clip is selected.

3 Press the [PLAY/STILL] button to start playback

- The video clip is played back on the LCD monitor and viewfinder of the camcorder.
- The progress bar on the LCD panel of the memory recorder moves to indicate the current playback position.
- Press the [PLAY/STILL] button during playback to switch to the still mode. Press the button again to resume playback.

Memo:

- When multiple video clips are stored in the SxS memory card, the playable clips are played back continuously in sequence. Playback switches to the still mode at the end of the last clip.

4 Press the [STOP] button to stop playback of the clip

The LCD panel display switches to the status screen.

Fast forward/Fast reverse

Fast forwards or fast reverses the selected clip. It will switch to still mode at the end or beginning of the selected clip. To switch to the still mode during fast forward or fast reverse, press the [PLAY/STILL] button.

■ Pressing the [FWD] button in the still mode, during playback or fast reverse

Switches to the low speed fast forward (F1) mode. Press the [FWD] button again to switch to the high speed fast forward (F2) mode.

■ Pressing the [REV] button in the still mode, during playback or fast forward

Switches to the low speed fast reverse (R1) mode. Press the [REV] button again to switch to the high speed fast reverse (R2) mode.

Skip

Skips to the next or previous playable clip.

■ Pressing the [NEXT] button in the still mode or during fast reverse

Doing so switches automatically to the still mode after skipping to the beginning of the next clip. Pressing the button twice switches to the still mode after skipping to the beginning of the second clip from the current one.

■ Pressing the [PREV] button in the still mode or during fast reverse

Pressing this button during playback of the clip switches automatically to the still mode after skipping to the beginning of the selected clip. Pressing the button again skips to the beginning of the previous clip and remains in the still mode.

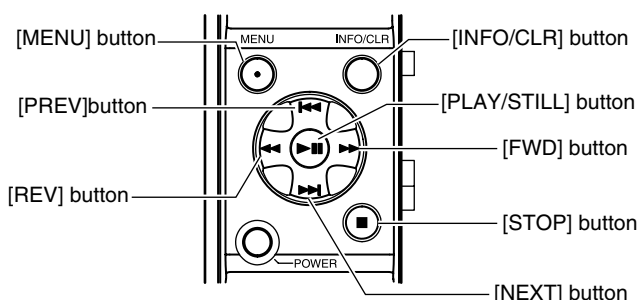
■ Pressing the [NEXT] button during playback or fast forward

Pressing the button starts playback automatically from the beginning of the next clip. Pressing the button twice starts playback from the beginning of the second clip from the current one.

■ Pressing the [PREV] button during playback or fast forward

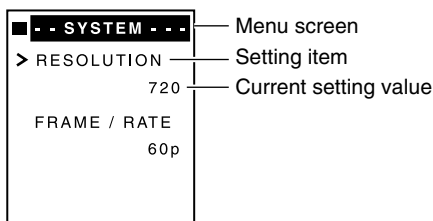
Pressing this button during playback of the clip starts playback automatically from the beginning of the selected clip. Pressing the button at the beginning of the clip starts playback from the beginning of the previous clip.

Setting the Menu Screen



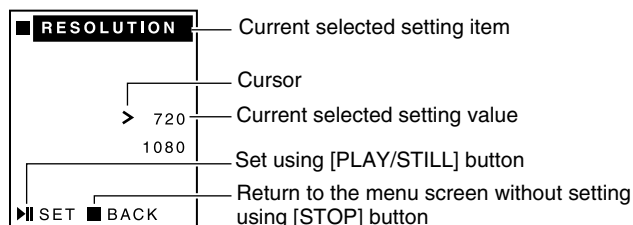
Procedures for Setting Values

1 Press the [MENU] button



2 Move the cursor (>) to the item to be set by pressing the [NEXT] or [PREV] button

3 Press the [PLAY/STILL] or [FWD] button



4 Move the cursor (>) to the value to be set by pressing the [NEXT] or [PREV] button

5 Press the [PLAY/STILL] button to confirm the setting

- The menu screen appears after the setting is changed.

Memo:

- When the setting screen is displayed, pressing the [STOP] or [REV] button returns the display to the menu screen without altering the setting value.

6 Press the [MENU] button to exit the menu screen display

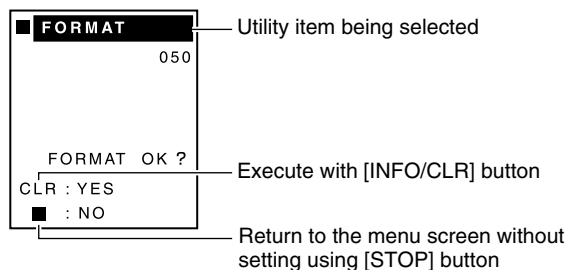
Procedures for Executing the Utilities

1 Select a menu item to display the execution screen of the corresponding utility

The different utility items are shown below.

- [NOW CLIP] and [ALL CLIP] of the [DELETE] setting screen
- [ALL OK] and [ALL NONE] of the [OK CLIP] setting screen

- [NUMBER] of the [CLIP NAME] setting screen
- [FORMAT] and [RESTORE] of the [MEDIA] setting screen
- [ALL RESET] of the [OTHERS] setting screen



2 Press the [INFO/CLR] button to execute the selected item

- When [FORMAT] or [RESTORE] is completed, "COMPLETE" appears on the LCD display.
- When [FORMAT] or [RESTORE] is in progress, "EXECUTE" appears on the LCD display. If failure occurs, "ERROR" is displayed.
- After the execution message appears, the display returns to the menu screen.
- All operations are disabled during execution of a utility.

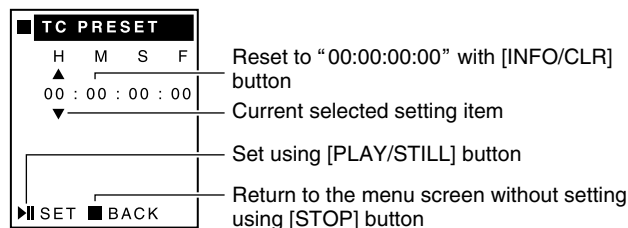
Memo:

- Press the [STOP] button to return to the menu screen without executing the selected item.

Procedures for Setting Time Code/ User Bit Preset, Clip Name and Date/Time

1 Select a menu item from Time Code/User Bit Preset, Clip Name and Date/Time

- Time Code Preset/User Bit Preset : [TC PRESET]/[UB PRESET] of the [TC SET2] setting screen
- Clip Name setting : [PREFIX] of the [CLIP NAME] setting screen
- Date/Time setting : [DATE]/[TIME] of the [CLOCK1] setting screen



Memo:

- During setting of the time code, user bit or time, pressing the [INFO/CLR] button sets all digits to "00". In the clip name setting, the default clip name is shown.

2 Press the [FWD] or [REV] button to select the item to set

3 Alter the value of the selected item by pressing the [NEXT] or [PREV] button

4 Press the [PLAY/STILL] button to confirm the new value

- The menu screen appears after the setting is changed.

Memo:

- When the setting screen is displayed, pressing the [STOP] button returns the display to the menu screen without altering the setting value.

Menu Screen Configurations and Functions

Values indicated in parentheses in the table below are default settings.

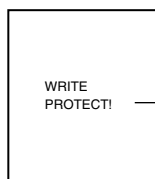
Setting Item	Setting Values	Functions
SYSTEM		For setting the format of the video to be recorded or played back. Make sure that the settings are consistent with those of the camcorder. Otherwise, recording and playback cannot be executed.
RESOLUTION	(720), 1080	For setting the resolution.
FRAME/RATE	RESOLUTION: When 720 is set (60p), 30p, 50p, 25p, 24p	For setting the frame rate. The configurable frame rate may vary according to the [RESOLUTION] setting.
	RESOLUTION: When 1080 is set (60i), 50i	
LCD		For setting the contrast and backlight of the memory recorder's LCD panel.
CONTRAST	MAX, +4, +3, +2, +1, (0), -1, -2, -3, -4, MIN	For adjusting the contrast.
BACKLIGHT	OFF (ON) AUTO	OFF : Backlight is turned off at all times. ON : Backlight is turned on at all times. AUTO: Backlight turns on when the buttons are operated. Light turns off automatically about five seconds after the buttons are operated.
DELETE		For deleting a clip. ● This function is disabled when recording is in progress. ● Clips indicated with an "ok mark" cannot be deleted.
NOW CLIP	NO YES	Deletes the currently selected clip when in the play mode. Deletes the clip that is last recorded when in the stop or standby mode. YES : Delete clips. (Press the [INFO/CLR] button.) NO : Do not delete clips. (Press the [STOP] button.)
ALL CLIP	NO YES	Deletes all clips. YES : Delete clips. (Press the [INFO/CLR] button.) NO : Do not delete clips. (Press the [STOP] button.)
OK CLIP		For important clips or clips that you do not want to delete, specify them as "OK clip". Upon specifying a clip as an "OK clip", an "ok mark" will appear to the right of the clip name on the clip selection screen.
NOW CLIP	NONE OK	For specifying a selected clip as an "OK clip" when in the playback mode. For specifying the clip that is last recorded as an "OK clip" when in the stop or standby mode. NONE: Do not specify an "OK clip". (Press the [PLAY/STILL] button.) OK : Specify an "OK clip". (Press the [PLAY/STILL] button.)
ALL OK	NO YES	For specifying all clips as "OK clips". YES : Specify as "OK clips". (Press the [INFO/CLR] button.) NO : Retain current settings. (Press the [STOP] button.)
ALL NONE	NO YES	Cancels all "OK clip" specifications. YES : Cancel "OK clip" specifications. (Press the [INFO/CLR] button.) NO : Retain current settings. (Press the [STOP] button.)
TC SET1		For configuring settings related to the time code of the memory recorder.
TC SOURCE	(INT) EXT	For selecting the source of the time code. INT : The time code runs according to the value of the memory recorder's time code generator. EXT : The time code runs according to the value of the time code from the camcorder. When [EXT] is selected, make sure to set the [TC GENE.] switch of the camcorder to "FREE".
GENERATOR	FREE (RECRUN) REGEN	For selecting the run mode of the time code generator. ● Setting is enabled when [TC SOURCE] is set to "INT". FREE : The time code runs according to the preset value in the free run mode. RECRUN : The time code runs according to the preset value when in the recording mode. REGEN : The time code runs continuously according to the last time code on the SxS memory card.
DROP FRAME	(NON DROP) DROP	For selecting the non drop frame or drop frame mode. ● Setting is enabled when [TC SOURCE] is set to "INT". ● Setting is enabled when the frame rate is set to 60 or 30. NON DROP : Non drop frame mode DROP : Drop frame mode

Menu

Setting Item	Setting Values	Functions					
TC SET2		For presetting the time code generator of the memory recorder.					
TC PRESET	(00:00:00:00) ~ 23:59:59:29 or (00:00:00:00) ~ 23:59:59:24	The number of frames that can be specified are as shown below, depending on the setting of the frame rate. (e.g., when the frame rate is 60, you can specify the number of frames up to a value of 58.)					
		Frame rate	60	50	30	25	24
		Number of frames	58	48	29	24	23
UB PRESET	(00:00:00:00) ~ FF FF FF FF	For presetting the user bit. (8 digits)					
CLIP NAME		For specifying the first four characters of the clip name before recording, or resetting the clip number. <ul style="list-style-type: none">An eight-digit clip name is automatically configured.Serial numbers are automatically appended as the last four digits whenever a clip is created. Serial numbers are automatically appended even when SxS memory card is replaced or after changing the first four characters of the clip name at "PREFIX".					
PREFIX	(Last three digit of the serial number + K)	For specifying the first four characters of the clip name. (Usable characters: A to Z, a to z, 0 to 9, -, _) The default clip name is set as the "last three digits of the serial number + K". Example: If the serial number is 00001234, then the default clip name is 234K.					
NUMBER RESET	YES NO	You can reset the clip number (0001) after changing the clip name at "PREFIX". If clips already exist on the SxS memory card, the smallest available number will be used. Example: If 0001 exists on the SxS memory card, then 0002 will be used. YES : Reset clip number. (Press the [INFO/CLR] button.) NO : Do not reset clip number. (Press the [STOP] button.)					
CLOCK1		For configuring settings related to the clock of the memory recorder.					
TIME ZONE	UTC-12:00 ~ (UTC-05:00) ~ UTC+14:00	For setting the time difference with the UTC (Universal Time Coordinate). "UTC Time Difference Chart by Region" (☞ Page 17) When the setting of this item is altered, the [DATE]/[TIME] values below will be automatically adjusted.					
DATE	(--/--/--)	For setting the date (month/day/year). The last two digits of the western calendar is used. Press the [INFO/CLR] button to display the default setting.					
TIME	(--:--:--)	For setting the time (hour:minute:second). Press the [INFO/CLR] button to display the default setting.					
CLOCK2		For setting the date or time display mode.					
DATE STYLE	YY/MM/DD (MM/DD/YY) DD/MM/YY	For specifying the display style of the date. <ul style="list-style-type: none">Altering the setting of this item also changes the [DATE] display mode on the [CLOCK1] setting screen. YY/MM/DD : Year/Month/Day MM/DD/YY : Month/Day/Year DD/MM/YY : Day/Month/Year					
TIME STYLE	12 (24)	For specifying the display style of the time. <ul style="list-style-type: none">Altering the setting of this item also changes the [TIME] display mode on the [CLOCK1] setting screen. 12 : 12-hour display (AM/PM display) 24 : 24-hour display					
MEDIA		For setting processes related to the SxS memory card.					
FORMAT	YES NO	Starts the formatting (initialization) of the SxS memory card. <ul style="list-style-type: none">When formatting is performed, all clips stored inside the SxS memory card will be cleared. YES : Format. (Press the [INFO/CLR] button.) NO : Do not format. (Press the [STOP] button.)					
RESTORE	YES NO	Scans the SxS memory card and makes attempts to restore damaged clips. <ul style="list-style-type: none">However, success of the restore process is not guaranteed. YES : Execute. (Press the [INFO/CLR] button.) NO : Do not execute. (Press the [STOP] button.)					
OTHER		For configuring settings related to the control buttons and menus of the memory recorder.					
OPERATION	(UNLOCK) LOCK	You can disable the button control of the memory recorder to avoid misoperations during shooting. UNLOCK: Enables all buttons. LOCK : Button control is disabled, with the exception of the following. <ul style="list-style-type: none">Record/Standby (REC trigger button of the camcorder)Menu screen display ([MENU] button)Power On ([POWER] button)					
ALL RESET	YES NO	For resetting the menu settings of the memory recorder to the default values. YES : Restore default settings. (Press the [INFO/CLR] button.) NO : Do not restore default settings. (Press the [STOP] button.)					

Warning Messages

When warning messages appear on the LCD panel, take the following actions.



Warning Messages

Message	Description
CLOCK SETUP MENU	Appears when the clock is not set. Action: Set the clock when the [CLOCK1] setting screen appears.
WRITE PROTECT!	Appears when the write-protect switch of the SxS memory card is set to the "WP" end. Action: Set the write-protect switch to "Off" before recording or deleting a clip.
CARD FULL!	Appears when there is no more space left on the SxS memory card. Action: Take any of the following actions. <ul style="list-style-type: none"> ● Use an SxS memory card with sufficient space. ● Delete unwanted clips or format the card to create space.
OPERATION LOCK !	Appears when buttons other than the [MENU] button is pressed with the [OPERATION] menu set to "LOCK". Action: Change the [OPERATION] menu setting to "UNLOCK".

Error Messages

Battery and Signal Error Messages

An error message appears at the first line of the LCD panel display when the battery is weak or when there is an input signal error. When an error message appears, take the following actions.

Message	Description
BAT. ALARM !	Appears when the remaining battery level is insufficient. Action: Charge the battery.
SHUT DOWN !	Appears immediately before the battery runs out completely. The memory recorder will shut down a few seconds after the message is displayed. Action: Charge the battery.
NO SIGNAL ! (*1)	Appears when there is no signal input. Action: Check the connection of the IEEE1394 cable and the camcorder settings.
Other SIGNAL (*1)	Appears when the format of input signals is different from that of the memory recorder. Action: Make sure that the memory recorder settings are consistent with those of the camcorder. (Page 9)

(*1) Appears during the recording or stop mode.

Card Error Messages

When an SxS memory card incompatible with the memory recorder is detected, an "ERROR CARD!" message and a message indicating the cause of the card error will appear alternately at the first line of the LCD panel display. (For approximately two seconds) When an error message appears, take the following actions.

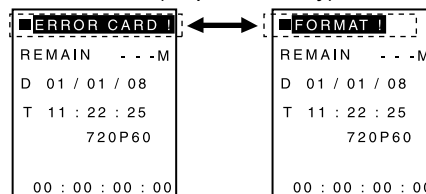
Message	Description
NO SUPPORT!	Appears when a media not supported by the memory recorder is inserted. Action: Replace it with a recommended SxS memory card.
FORMAT!	Appears when the card has already been formatted by another device. Action: Execute "FORMAT" using this memory recorder. "Menu screen's [MEDIA]->[FORMAT] settings" (Page 13)
CARD CHANGE	Appears when errors are found in the clip. Action: Execute "RESTORE" or "FORMAT" using this memory recorder. If doing so does not eliminate the error, it may be due to malfunction of the SxS memory card. Replace the SxS memory card.
RESTORE !	Appears when the clip may be damaged. Action: Execute "RESTORE" using this memory recorder.

Card error message appears when the following operations are performed.

- When an SxS memory card is inserted
- When power is turned on with an SxS memory card inserted

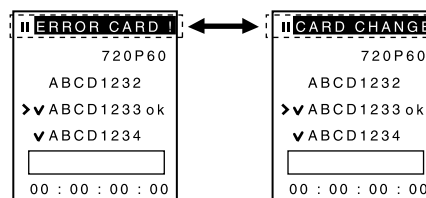
■ When in the stop, standby or still mode

Status screen (stop or standby)



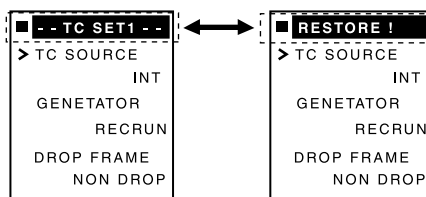
<LCD Panel>

Clip selection screen (still)



<LCD Panel>

■ When in the menu screen display



<LCD Panel>

Troubleshooting

Symptom	Cause(s)	Actions	Refer to
Power does not turn on	Power is supplied from the DC INPUT terminal of the camcorder.	Attach the battery. The power of the memory recorder cannot be supplied from the DC INPUT terminal of the camcorder.	Page 7
	Only the power of the camcorder is turned "On".	It is necessary to turn on the power of the memory recorder at the same time.	Page 7
	Remaining battery level is insufficient.	Charge the battery.	Page 14
Unable to record or play clip	The IEEE1394 cable is not connected.	Connect a GY-HD200/HD250 series camcorder to the KA-UM100G adapter using an IEEE1394 cable.	Page 7
	The [INT/EXT] switch setting of the KA-UM100G adapter is inappropriate.	<ul style="list-style-type: none"> Set to "EXT" during normal use. (When IEEE1394 connection is made internally without the use of an external cable, set to "INT".) If the "NO SIGNAL" message does not disappear even if the setting is correct, set the switch again. If the message remains displayed, turn off and on the power again. 	Page 7
	The video formats of the camcorder and memory recorder are not consistent with each other.	Ensure that the video format of the camcorder and memory recorder are consistent with each other.	Page 9
	The [IEEE1394] switch of the camcorder is set to the "DV" end.	Set the [IEEE1394] switch to the "HDV" end. If the "NO SIGNAL" message does not disappear even after setting to "HDV", set the switch again. If the message remains displayed, turn off and on the power again.	Page 9 Page 10
Recording does not start	The camcorder is set to the "VTR" mode.	Set to the "CAM" mode using the [CAM/VTR] button.	Page 9
	The [1394 REC TRIGGER] item on the OTHERS[2/2] menu screen of the camcorder is set to "OFF" or "SERIES".	Set [1394 REC TRIGGER] to "SYNCRO" or "SPLIT". When this is set to "SERIES", recording starts when the remaining capacity of the cassette tape falls below three minutes.	Page 9
	The memory recorder is set to the playback mode.	Press the [STOP] button to stop playback.	Page 9
	The write-protect of the SxS memory card is enabled.	Set the write-protect switch to "Off" before recording or deleting a clip.	Page 14
	There is no space left on the SxS memory card.	Use an SxS memory card that has sufficient space.	Page 14
Unable to play clip	The camcorder is set to the "CAM" mode.	Set to the "VTR" mode using the [CAM/VTR] button.	Page 10
	The cassette tape is currently being played back.	Stop playback of the cassette tape before playing back data on the SxS memory card.	Page 10
	A clip without the check mark (v) is selected.	Set the camcorder and memory recorder according to the video format displayed when a clip is selected.	Page 10
	The memory recorder is in the recording or standby mode.	Press the [STOP] button to stop playback.	Page 10
	The clip may be damaged.	Execute "RESTORE" using this memory recorder.	Page 14
No response when a button is pressed	The [OPERATION] menu is set to "LOCK".	Change the [OPERATION] menu setting to "UNLOCK".	Page 14
	A multiple number of buttons are pressed at the same time, or the same button is hit repeatedly.	Insert a short pause between each button operation.	—
Access lamp does not turn on	The SxS memory card is not completely inserted into the card slot.	Make sure that the SxS memory card is fully inserted into the slot.	Page 8
	The SxS memory card is inserted with the label facing the opposite direction.	Identify the face of the SxS memory card with the label, and make sure that the card is correctly oriented before inserting.	Page 8
SxS memory card cannot be used	A SxS memory card that is formatted by another device is used.	Execute "FORMAT" using this memory recorder.	Page 13
	A media that is not supported is inserted.	Replace it with a recommended SxS memory card.	Page 14
	The clip is faulty.	Execute "RESTORE" or "FORMAT" using this memory recorder. If doing so does not eliminate the error, replace it with a recommended SxS memory card.	Page 14
Error message appears on the camcorder panel display	"DR-HD100 POWER ?" appears when the memory recorder is not powered on or is not connected.	Connect and turn on the power of the memory recorder.	Page 6 Page 7
	"HDD NO 1394 SIGNAL" appears if the camcorder is set to the "CAM" mode when the memory recorder is in playback mode.	Set the camcorder to the "VTR" mode.	Page 10
	"HDD SPACE LOW" appears when the space on the SxS memory card is insufficient or an SxS memory card is not inserted.	Use an SxS memory card that has sufficient space.	—

Specifications

Media slot

Supported media	SxS memory card
Number of slot	1 slot
Interface	ExpressCard/34-compliant (supports only PCI Express, USB is not supported)

Video format

Recording format	MP4
Recording time	HD1 mode: Approx. 180 mins HD2 mode: Approx. 140 mins (recording time when using a 32 GB card)
File system	FAT32 (SxS format)
Maximum file size	4 GB
OS compatibility	Windows XP/Vista/Mac OS/X

Input signal format

Video	<HD1 mode> MPEG-2 (MP@H-14) 720/50p/25p/60p/30p/24p (8 bit 19.5 Mbps CBR) <HD2 mode> MPEG-2 (MP@H-14) 1080/50i/60i (8 bit 25 Mbps CBR)
Audio	16 bit/48 kHz 2ch, 384 kbps (MP2)
Time code signal	Compliant with SMPTE/EBU standard

Overall

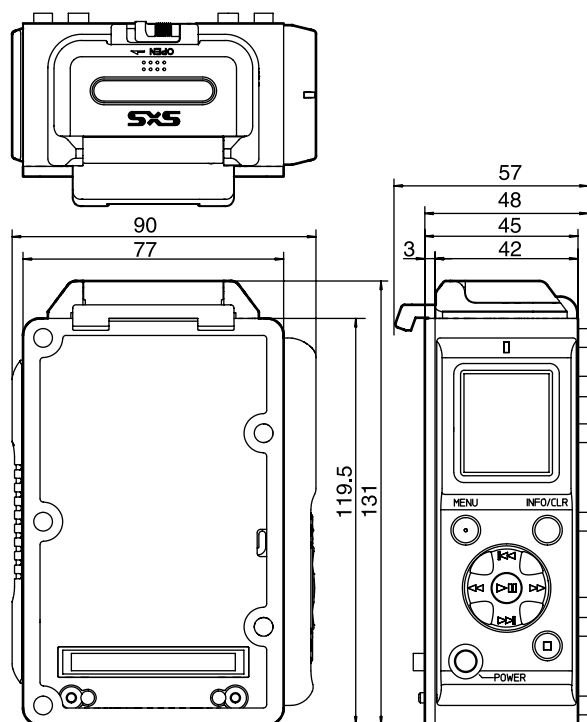
Power supply	DC 12 V (DC 10.5 V to 17 V)
Power consumption	6 W
External dimensions	90 mm x 57 mm x 131 mm (W x D x H)
Weight	0.42 kg
Operating temperature	0 °C to 40 °C
Operating humidity	30 % to 80 % RH
Storage temperature	-20 °C to 60 °C
Storage humidity	85 % RH and below

Others

Accessories	Instruction manual × 1, Rubber sheet × 1, Warranty (USA and CANADA only) × 1, CD-ROM × 1,
Connectable HD camcorders	GY-HD200 and GY-HD250 series
Optional products	KA-UM100G adapter (Mount kit for connecting a GY-HD200/GY-HD250 series HD camcorder to a memory recorder.)
Recommended products	<SxS memory card> SBP-8 (8 GB), SBP-16 (16 GB) and SBP-32 (32 GB) <IEEE1394 cable> CFS-6R016R09-07 etc. Please consult your authorized dealers.

Dimension [Unit: mm (inch)]

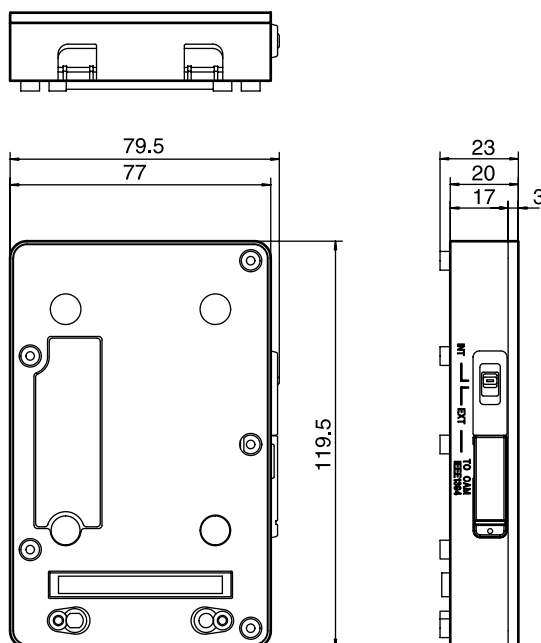
KA-MR100G



KA-UM100G adapter (sold separately)

Weight: 0.145 kg

- Power, temperature, humidity and environment conforming to KA-MR100G.



* Specifications and appearance of this memory recorder and related products are subject to change for further improvement without prior notice.

UTC Time Difference Chart by Region

Setting Values	Time Zone	Setting Values	Time Zone
UTC+14:00		UTC 00:00	Greenwich
UTC+13:30		UTC-00:30	
UTC+13:00		UTC-01:00	Azores
UTC+12:30		UTC-01:30	
UTC+12:00	New Zealand	UTC-02:00	Mid-Atlantic
UTC+11:30	Norfolk Island	UTC-02:30	
UTC+11:00	Solomon Islands	UTC-03:00	Buenos Aires
UTC+10:30	Lord Howe Is.	UTC-03:30	Newfoundland
UTC+10:00	Guam	UTC-04:00	Halifax
UTC+09:30	Darwin	UTC-04:30	
UTC+09:00	Tokyo	UTC-05:00	New York
UTC+08:30		UTC-05:30	
UTC+08:00	Beijing	UTC-06:00	Chicago Denver
UTC+07:30		UTC-06:30	
UTC+07:00	Bangkok	UTC-07:00	Denver
UTC+06:30	Rangoon	UTC-07:30	
UTC+06:00	Dhaka	UTC-08:00	Los Angels
UTC+05:30	Bombay	UTC-08:30	
UTC+05:00	Islamabad	UTC-09:00	Alaska
UTC+04:30	Kabul	UTC-09:30	Marquesa Islands
UTC+04:00	Abu Dhabi	UTC-10:00	Hawaii
UTC+03:30	Tehran	UTC-10:30	
UTC+03:00	Moscow	UTC-11:00	Midway Island
UTC+02:30		UTC-11:30	
UTC+02:00	Eastern Europe	UTC-12:00	Kwajalein
UTC+01:30			
UTC+01:00	Central Europe		
UTC+00:30			

JVC



JVC ProHD Clip Manager

User's Guide

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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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- ④ The Agreement shall be governed by and interpreted under the laws of Japan. The Tokyo District Court has jurisdiction over all disputes which may arise with respect to the execution, interpretation and performance of this Agreement.

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.

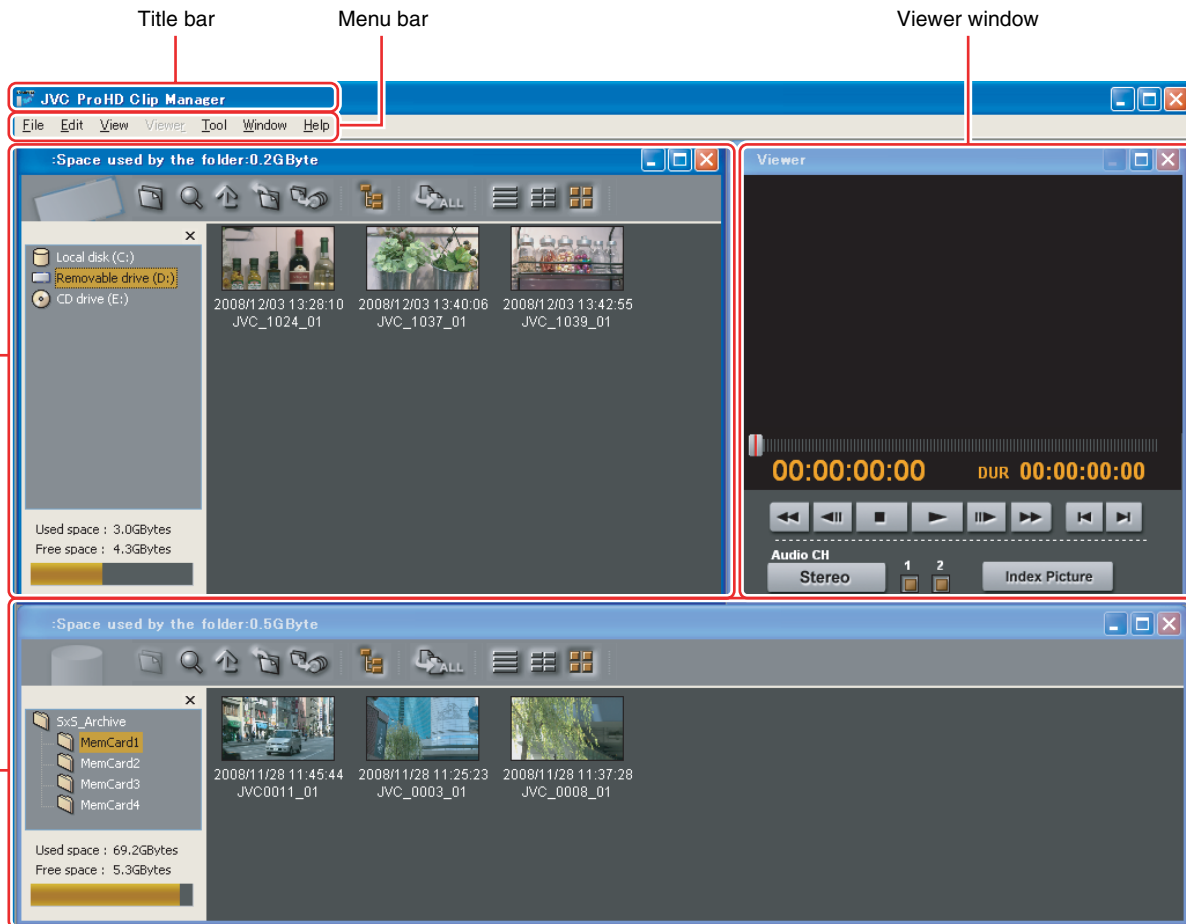
Note :

- 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”)



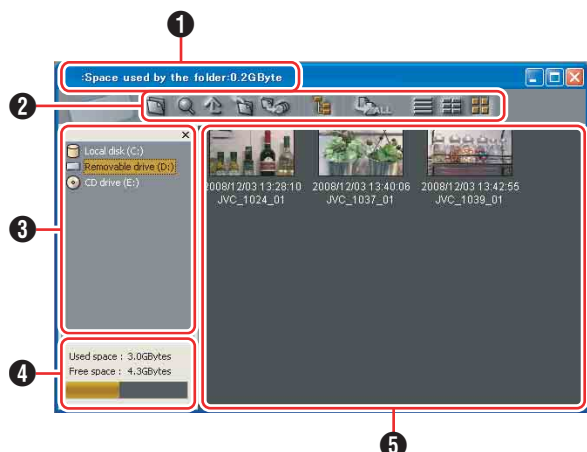
Info windows

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).

1 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.

2 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.	—

Tool buttons		Function	Reference
Icon	Name		
	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	—

3 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.

4 Capacity






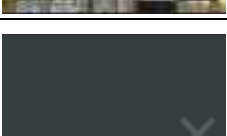
Displays the total capacity and remaining capacity of the media selected in the Tree View pane. The remaining capacity is shown as a numeric value and as a bar graph. The orange bar grows longer as more of the media's capacity is used.

Name and Function of Parts (continue)

5 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 2 Toolbar:  Details,  List and  Thumbnail.

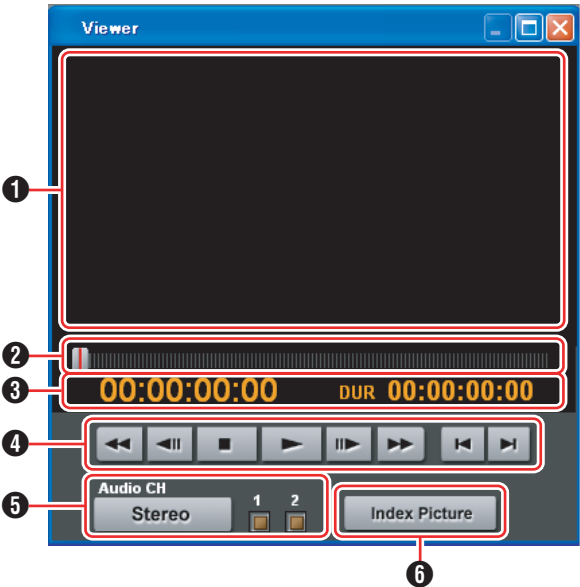
A mark indicating the status of the clip is display on the thumbnail shown as follows. This also applies to List/Details view.

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.



1 Screen

Displays the playback video.

2 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.

3 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.

4 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.

5 [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.

6 [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.

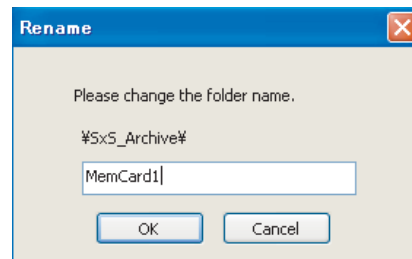
Note:

- 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 a 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.

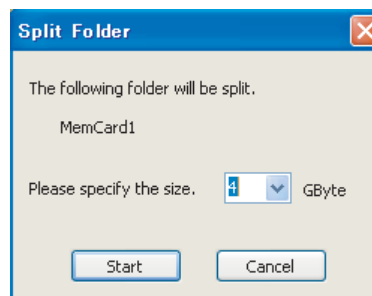
Splitting Folders

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.

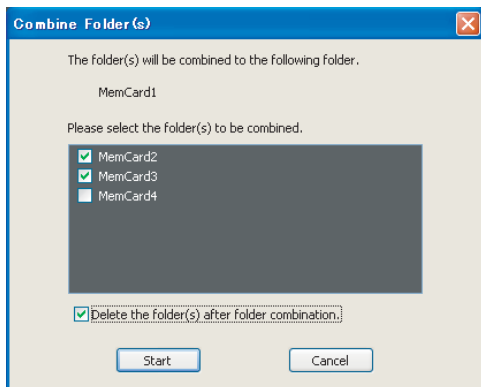
Combining Folders

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.

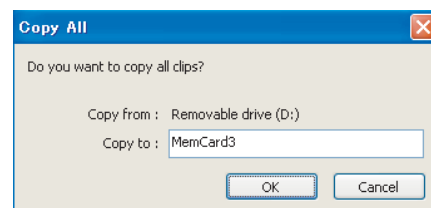
Copying All the Clips in Media or Folders

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 the 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

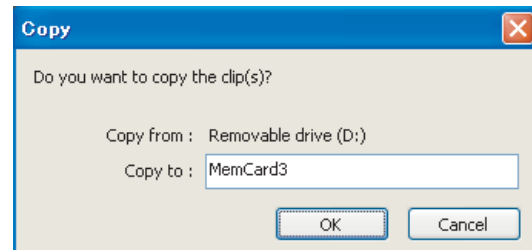
Note:

- 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 the 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 the 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

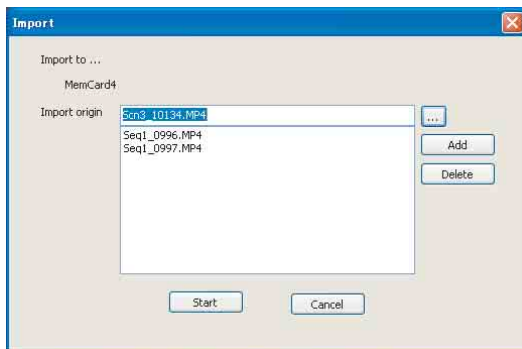
2 Do one of the following to select the MP4 files to be imported

■ **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

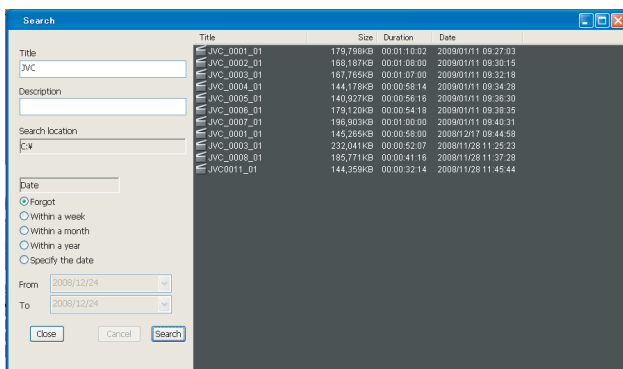
- In the Tree View pane of an Info window, select the media or folder where you think the clip is located.
- Open the [Change Root Folder] dialog by selecting [Change Root Folder] from the [View] menu, or by clicking the Change Root Folder button in the toolbar, and then select the media or folder where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

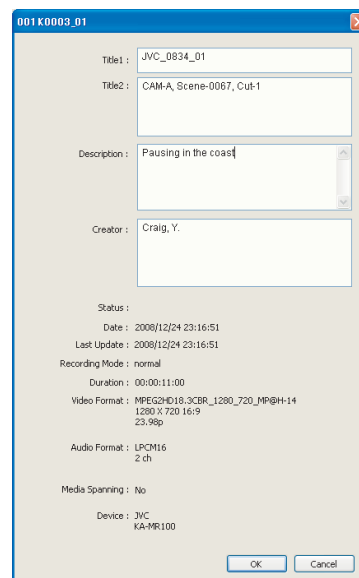
■ To display the Properties window

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.

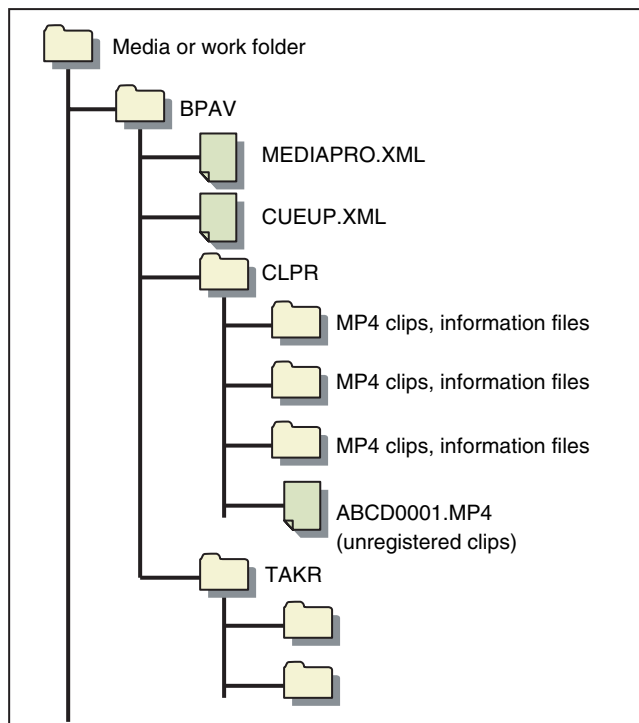
Note:

- 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

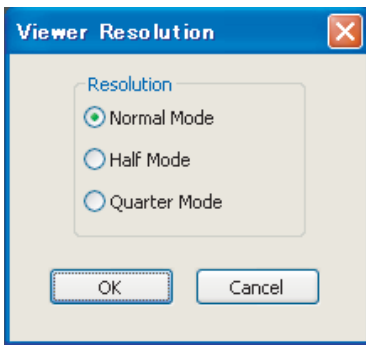
The Options dialog allows you to configure the options of this application.
To open the Options dialog, select [Options]→[Manage] from the [Tool] menu.



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 :

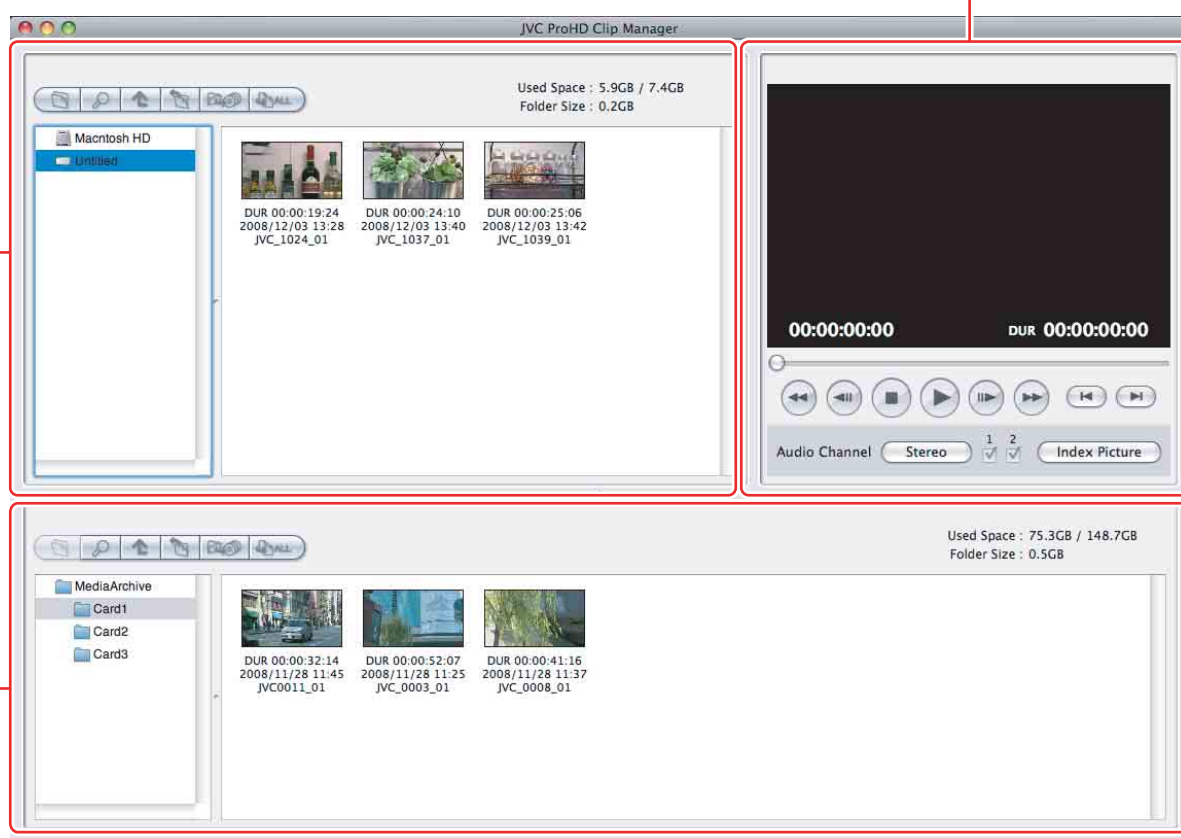
- Do not power off the computer while a file operation is still underway. Files may be corrupted. Wait until the operating finishes, or cancel the operation, before powering off.

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.

Viewer window (☞ Page 29)

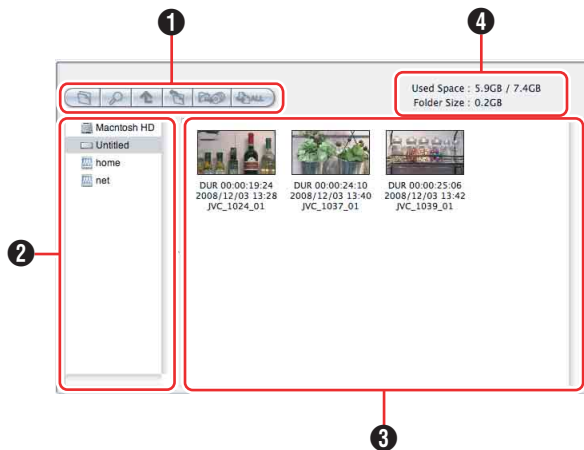


Info windows (☞ Page 28)

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:



1 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

2 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.

3 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.

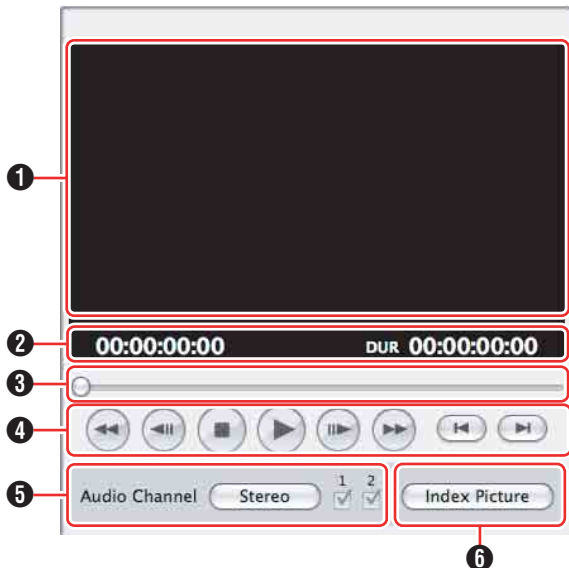
※4 : When another application is using the clip file.

4 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.



1 Screen

Displays the playback video.

2 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.

3 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.

4 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.

5 [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.

6 [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 a 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.

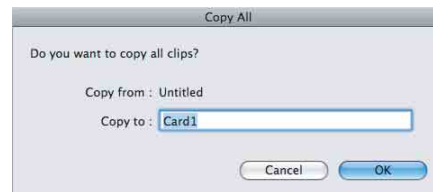
Copying All the Clips in Media or Folders

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 the 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 the 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.

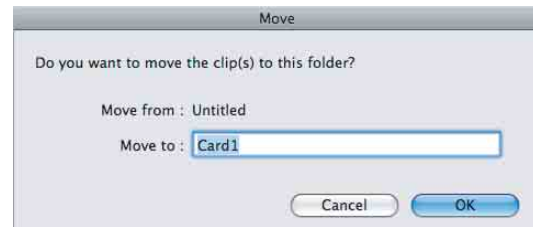
Note: _____

- 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 the 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

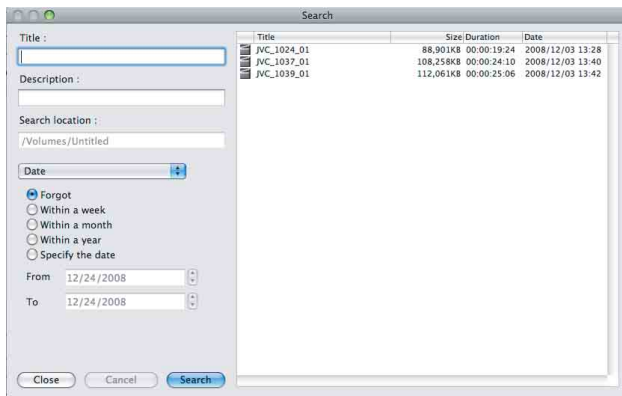
- In the Tree View pane of an Info window, select the media or folder where you think the clip is located.
- Open the Change Root Folder dialog by selecting [Change Root Folder] from the [View] menu, or by clicking the Change Root Folder button, and then select the media or folder where you think the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

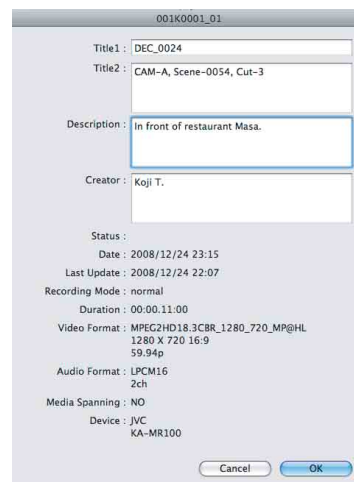
■ To display the Properties window

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.

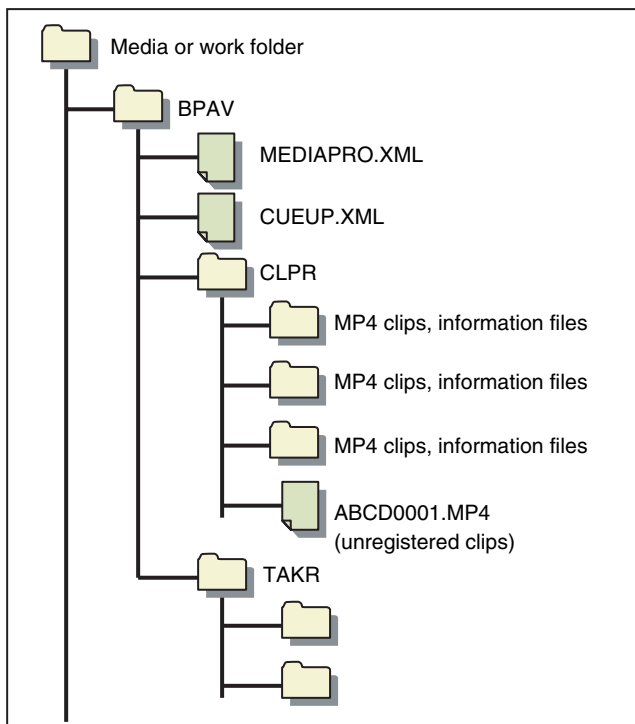
Note:

- 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.

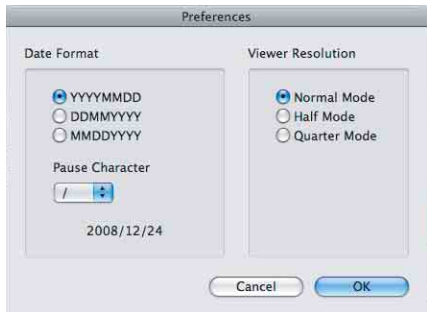
Note:

- 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	<p>For selecting the display format. YYYY represents the calendar year, MM the month, and DD the day.</p> <p>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.</p>
Viewer Resolution	<p>Set the playback resolution.</p> <p>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.</p>

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.	🔍 Page 39
View>Full Screen	command + return	Display in full-screen mode.	

■ 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 Log and Transfer Plugin

User's Guide

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

■ JVC ProHD Log and Transfer Plugin software

JVC ProHD Log and Transfer Plugin is a software for loading MP4 format clips recorded using recorder devices that make use of JVC's ProHD memory cards onto Apple's


Final Cut Pro (*1) video editing software. This software is installed as a plugin for Log and Transfer on Final Cut Pro, which enables a recorded clip to be loaded to the clip bin while converting it to a QuickTime (*2) movie file at the same time.

*1 : Final Cut Pro is the trademark of Apple Inc., registered in the United States and other countries.

*2 : QuickTime is the trademark of Apple Inc., registered in the United States and other countries.

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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- ④ The Agreement shall be governed by and interpreted under the laws of Japan. The Tokyo District Court has jurisdiction over all disputes which may arise with respect to the execution, interpretation and performance of this Agreement.

Operating Environment

The following computer environment is required to use the JVC ProHD Log and Transfer Plugin software.
Computer (supported only in Mac environment)

Item	Requirement
Processor	Intel Core 2 Duo 2 GHz, Intel Core 2 Xeon 2 GHz and above (recommended)
Memory	2 GB and above
Free hard disk space	10 MB and above during installation Note: — <ul style="list-style-type: none">• A sufficient amount of free hard disk space is required for video editing.
OS	Mac OS X 10.5.6 or later versions
QuickTime player	7.5.5 or later versions
Final Cut Pro	6.0.5 or later versions

Note:

- The operating environment above is intended as a reference to facilitate the use of the software, and not a guarantee of its operation.
- In order to use an SxS memory card by inserting it directly into the ExpressCard/34 slot of the computer, the SxS memory card driver needs to be installed. For more details, refer to the [Installation Guide] for [SxS Device Driver Software] in the bundled CD-ROM.

Installation

Installing the Software

- 1 Open the bundled CD-ROM using Finder
- 2 Double-click the [JVC ProHD Log and Transfer Plugin.dmg] in the [Software] folder → [Log and Transfer] folder → [MAC OS X] folder, extract the disc image file and run it
- 3 Follow the instructions on the screen to install the software

Preparations for Loading Video/Still Picture Materials

Loading Recorded Materials Directly from the Memory Card

■ SxS memory card

If an Express Card slot is available on the computer, the card icon is automatically mounted on the desktop when the card is inserted.

If the card is to be read from SxS memory card USB reader/writer, the icon is automatically mounted on the desktop when the USB card reader/writer is connected to the computer.

■ Other memory cards

When a USB card reader/writer is connected to the computer, the icon is automatically mounted on the desktop.

Note:

- For more details on the USB connection to the computer, refer to the [INSTRUCTIONS] of the recorder you are using.

Loading Materials that are Archived in Advance on the Computer Hard Disk

It is recommended that all materials recorded on a memory card using the recorder be backed up in advance and made easily retrievable in future by copying them to the hard disk of the computer.

Make use of the supplied [JVC ProHD Clip Manager] software to copy materials from the memory card.

Memo:

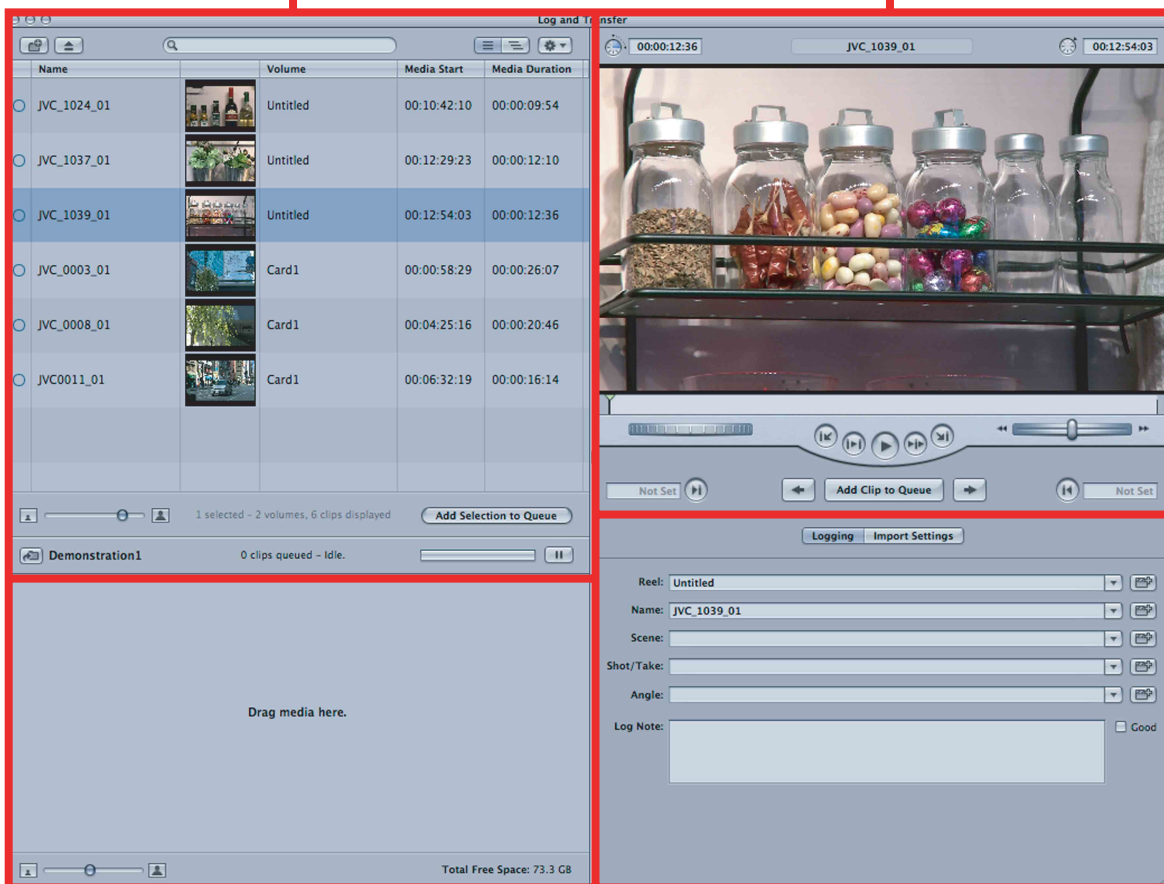
- The following procedures are recommended to ensure that materials on the memory card are safely copied.
 - ① Create a new folder for each memory card in advance
 - ② Copy all materials on the memory card to the folder created in ①
 - ③ To copy materials from another memory card, create a new folder, and copy the materials to it

Screen Descriptions

- Start up Final Cut Pro and select [File]→[Log and Transfer] in the menu. The following screen appears.
- When a memory card containing video/still picture materials is connected, a search will start automatically and the data and thumbnails are displayed. If each folder structure containing the materials is stored at different locations, such as different hard disks, the corresponding folder can be specified.
- [Log and Transfer] comprises four functions.

[Browser] (🖱️ Page 6)

[Preview] (🖱️ Page 7)



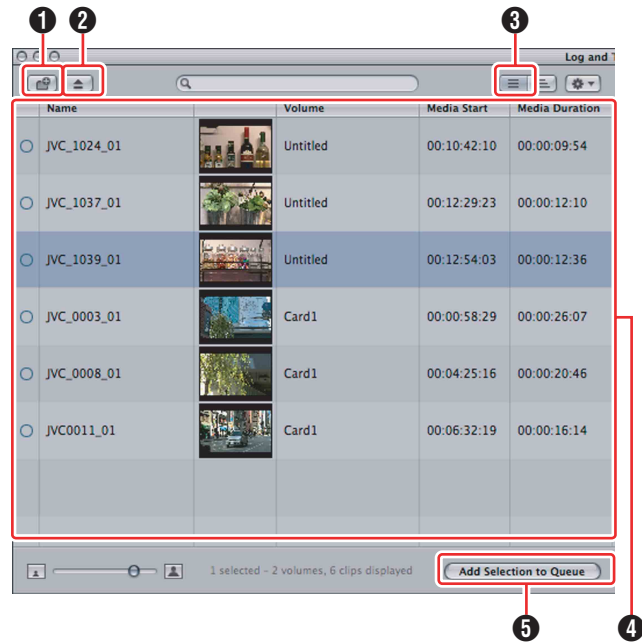
[Ingest] (🖱️ Page 8)

[Logging] (🖱️ Page 8)

Using the Functions

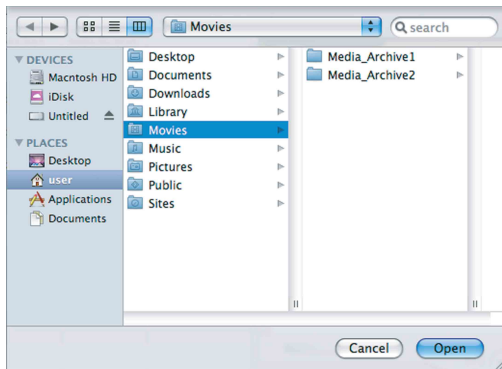
Browser

Clips stored on the mounted memory card or folder added using the ❶ Add Folder button are listed on the Browser screen, with information such as thumbnails and meta data displayed.



❶ Add Folder button

Clicking the button opens the window shown below. You can add folders in which the materials are stored.



❷ Eject Volume (media unmount) button

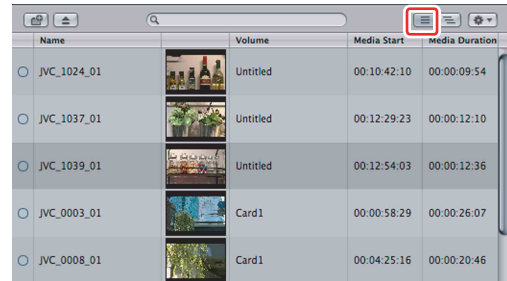
Clicking this button unmounts the mounted memory card or folder containing recorded materials that is selected on the Browser screen.

❸ Show items in a hierarchical or flat list (display toggle) button

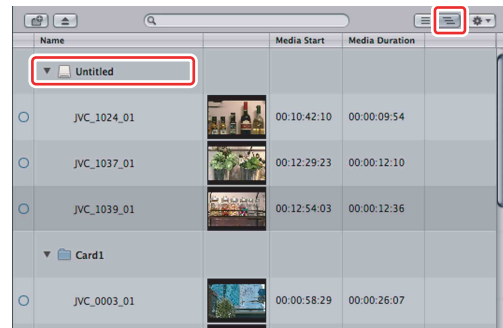
Click this button to toggle between the flat list and hierarchical list display as shown below.

- The list is ordered according to the mounted volume.
- The volume name is displayed.

❶ Flat list



❷ Hierarchical list



❹ List of materials

- Materials are displayed according to the clips they are saved in.
- Name indicates the clip name.
- Volume indicates the volume name of the media on which the clip is stored.
- Media Start indicates the time when the recording starts.
- Media Duration indicates the time duration of the recording.

5 [Add Selection to Queue] button


Upon selecting a clip, click this button to start transferring the file. One or more clips can be selected at a time. The transferred file is stored in the clip bin of the project to be edited in Final Cut Pro, allowing it to be edited. After transferring, the clip is converted into a QuickTime file format.

The display changes as follows after the transfer is completed.

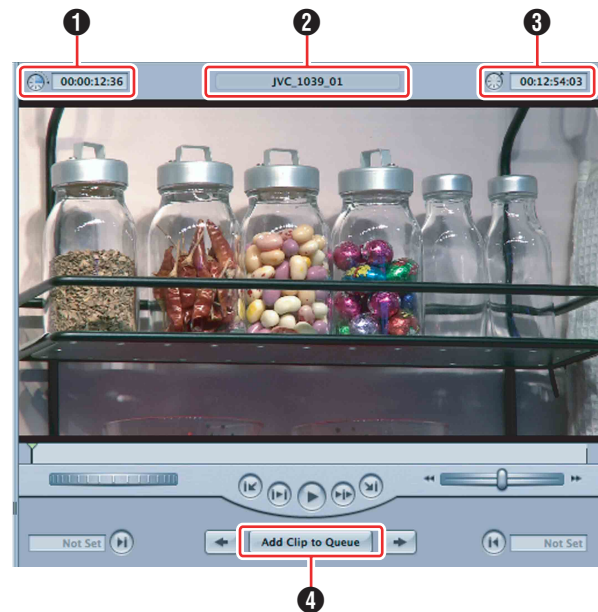
■ Before transfer

Name		Media Start	Media Duration
▼ Untitled			
JVC_1024_01		00:10:42:10	00:00:09:54
JVC_1037_01		00:12:29:23	00:00:12:10

■ After transfer

Name		Media Start	Media Duration
▼ Untitled			
JVC_1024_01		00:10:42:10	00:00:09:54
JVC_1037_01		00:12:29:23	00:00:12:10

Preview



1 Duration label

Displays the clip length in time format.

2 Title label

Displays the title of the clip (corresponds to Name on the Browser screen).

3 Time Code label

Displays the current position of the clip in time format.

4 [Add Clip to Queue] button

Starts the file transfer of the clip selected using Preview.

Memo:

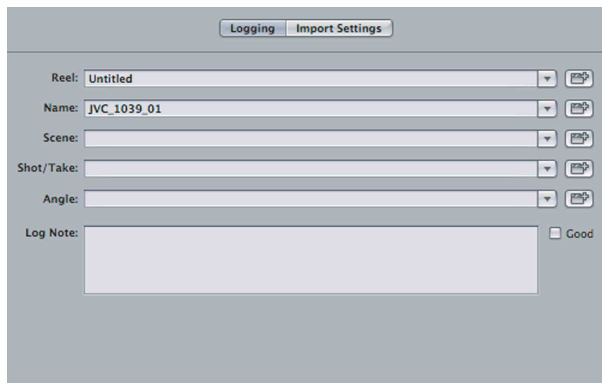
- This button has the same functions as the [Add Selection to Queue] button under the Browser function. For more details, see the section on the latter button. (Page 7)

Screen Descriptions (continue)

Logging

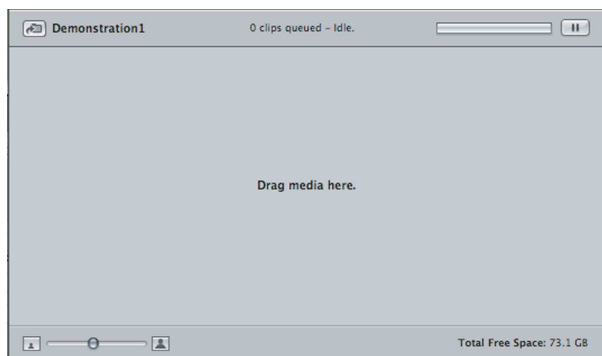
■ Logging window

You can enter comments or other text data in the fields displayed on the Logging window. Data entered here will be transferred together to the clip bin of Final Cut Pro.



Ingest

Pressing the [Add Clip to Queue] or [Add Selection to Queue] button adds the material to be converted. The video conversion status is displayed. (☞ Page 7)
Progress of the video conversion process is indicated by the progress bar located at the top right corner of the Ingest screen.



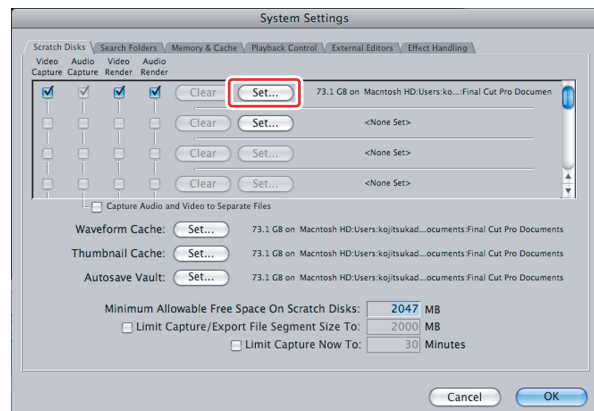
Memo:

- The above procedure can also be done by dragging and dropping the selected clip from the Browser window to the Ingest window.

Others

Setting the Location for Storing the Converted QuickTime Movie Files

You can use the Setting button illustrated below ([Final Cut Pro] menu→[System Settings]→[Scratch Disks]) to specify the location for storing the converted QuickTime movie files.



Operating Spanned Clips

If a clip is recorded continuously by the device you are using to more than one memory card, or when the file size exceeds the limit of 4 GB within a single memory card, it may be split into multiple clips. This software enables such split clips to be previewed or transferred as a single clip.

Memo:

- When a recorded clip spans across multiple cards, archive in advance the data of all the cards such as in the hard disk of a computer. Combine the folders on each of these cards using the JVC ProHD Clip Manager and mount the combined folder. (☞ Page 4, "Preparations for Loading Video/Still Picture Materials")





SxS Memory Card Device Driver Software

User's Guide

- This device driver is for customer who owns the (KA-MR100G) memory recorder that uses SxS memory.

You can operate on the SxS memory card by installing the SxS memory card device driver to a computer equipped with an ExpressCard slot.

Proceed as follows to install the SxS Device Driver Software on your computer.

Note:

- Do not insert an SxS memory card into the ExpressCard slot before installing this software.
- The SxS memory card is supported on a computer that is equipped with either a standard ExpressCard/34 or ExpressCard/54 slot.

Installing on Windows

1 Open the bundled CD-ROM using My Computer and run the installer located in the following folders

- [Software] folder → [SxS DeviceDriver] folder → [Windows] folder
- Name of installer: SxS_Driver_Installer.exe
- Follow the instructions that appear on the screen to complete the installation.

2 Restart your computer after the installation is completed

3 After the installation completes, insert an SxS memory card into the ExpressCard slot

- The SxS memory card is recognized as a removable drive.

Installing on Mac OS

1 Open the bundled CD-ROM using Finder and run the installer located in the following folders

- [Software] folder → [SxS DeviceDriver] folder → [Mac OS X] folder
- Name of installer: SxS_Device_Driver_XXXXX.dmg ("XXXXX" shows the software version information.)
- The [SxS DeviceDriver] screen appears.
- Follow the instructions that appear on the screen to complete the installation.

2 Restart your computer after the installation is completed

3 After the computer restarts, insert an SxS memory card into the ExpressCard slot

- The SxS memory card is recognized as a removable drive.

■ Copyrights

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Additional Information for Users of KA-MR100G (A)

Connectable Camcorders

In addition to the GY-HD200/HD250 series camcorders, the KA-MR100G (A) memory recorder can also be connected to the GY-HM700 series camcorders to record and play back HD-format video images and audio signals on an SxS memory card.

The memory recorder that can be connected to the GY-HM700 series camcorders is KA-MR100G (A). Check the nameplate on the memory recorder.

Input Signal Format

When the memory recorder is connected to a GY-HM700 series camcorder, recording and playback are possible in the conventional SP modes (HD1 and HD2 modes), as well as the HQ mode. The video format specifications and estimated maximum recording time for each mode (when using a 32 GB SxS memory card) are as shown in the table below.

Mode	Video Format	Max. Recording Time
HQ	MPEG-2 (MP@HL) 1080/60i/30p/50i/25p/24p 720/60p/30p/50p/25p/24p (8 bit 35 Mbps VBR)	Approx. 100 mins
SP(HD1)	MPEG-2 (MP@HL / MP@H-14) 720/60p/30p/50p/25p/24p (8 bit 18.3 Mbps CBR)	Approx. 180 mins
SP(HD2)	MPEG-2 (MP@H-14) 1080/60i/50i (8 bit 25 Mbps CBR)	Approx. 140 mins

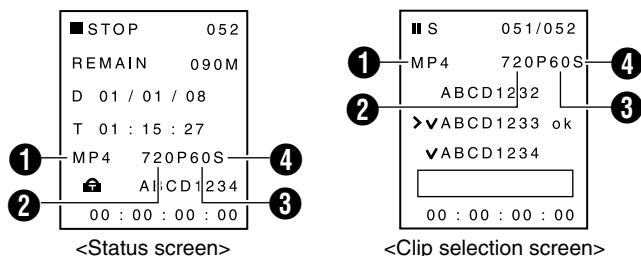
Changes in the Menu Setting Items

Following the addition of the HQ mode, the setting values for [RESOLUTION] and [FRAME/RATE] under the [SYSTEM] item are as shown in the table below.

Values indicated in parentheses in the table below are default settings.

Setting Item	Setting Values
SYSTEM	
RESOLUTION	(1920x1080)/ 1440x1080/ 1280x720
FRAME/RATE	RESOLUTION: When 1920x1080 is set (60i HQ/ 30p HQ/ 50i HQ/ 25p HQ/ 24p HQ RESOLUTION: When 1440x1080 is set (60i SP/ 50i SP RESOLUTION: When 1280x720 is set (60p HQ/ 60p SP/ 30p HQ/ 30p SP/ 50p HQ/ 50p SP/ 25p HQ/ 25p SP/ 24p HQ/ 24p SP

The settings are shown on the LCD panel as illustrated below.



1	MP4	File format of the clip (cannot be altered)
2	720	Displays the resolution (RESOLUTION)
3	P60	Displays the frame rate (FRAME/RATE)
4	S	Displayed as "S" during the SP mode, and "H" during the HQ mode

Procedures for Attaching to the GY-HM700 Series

Follow the procedures below to attach this memory recorder to a GY-HM700 series camcorder.

Attachment of the KA-UM100G adapter (sold separately) and connection of an IEEE1394 cable are not required.

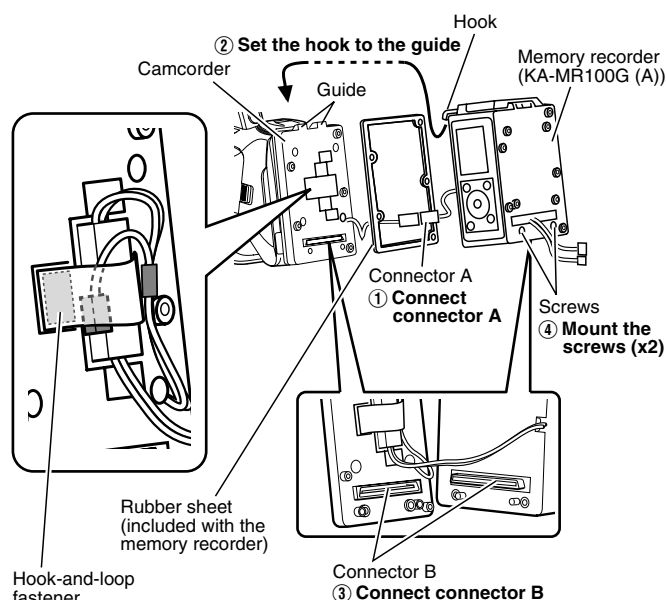
For procedures to attach or remove the battery and battery adapter, please refer to the instruction manual of this memory recorder.

1 Remove the battery from the camcorder

2 Remove the battery adapter from the camcorder

3 Attach the memory recorder to the camcorder

Align the screw holes at the back of the camcorder with the holes on the rubber sheet. Next, follow the steps illustrated in ① ~ ④ to attach the memory recorder.



Note:

- Wire the connection wire as illustrated above while avoiding the screw holes; and fasten using a hook-and-loop fastener to prevent the connector from protruding out of the recess.

4 Attach the battery adapter to the memory recorder

5 Attach the battery to the camcorder

6 Set the switch of the camcorder

Set the [HD/DV] switch of the camcorder to "HD", and the [INT/EXT] switch to "INT". For details, please refer to the instruction manual of the camcorder.

Note:

- Make sure that the attachment and setting of switches are performed with the power turned off.

Other Additional Information

■ Using the GY-HM700 series camcorders

- Some of the switches and buttons of the GY-HM700 series, as well as names of compatible media are different from those of the GY-HD200/HD250 series. When reading the instruction manual for this memory recorder, please replace the terms according to the table below.

GY-HD200/HD250 Series	GY-HM700 Series
[CAM/VTR] button "VTR" mode	[CAM/MEDIA] button "MEDIA" mode
[IEEE1394] switch "HDV" end	[DV/HD] switch "HD" end
Cassette tape	SDHC memory card
"HD1" mode, "HD2" mode	"SP" mode

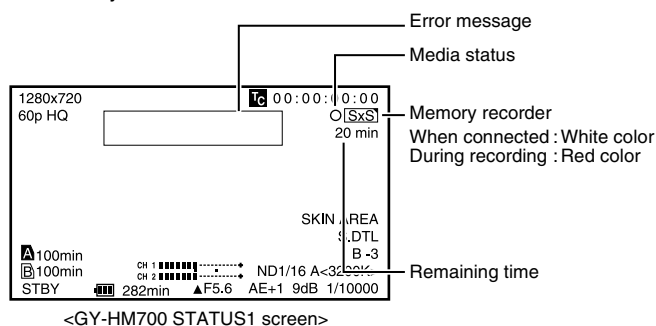
- When this memory recorder is connected to a GY-HM700 series camcorder, the power of the memory recorder is turned on or off automatically in accordance with the [POWER] switch operation on the camcorder. It is also possible to supply power to the memory recorder from the DC INPUT terminal of the camcorder. (When the battery is used simultaneously, power supply from the DC INPUT terminal is given priority.)
- When recording images using the memory recorder with it connected to a GY-HM700 series camcorder, set the method to record to the SxS memory card in the [1394 REC TRIGGER] item under the [OTHERS] menu on the camcorder. After setting the [CAM/MEDIA] button to the "CAM" mode, press the REC trigger button (available at three locations: at the side, on the handle and on the lens) to set it to the record or standby mode. For details, please refer to the instruction manual of the camcorder.

Setting	Recording Method
Off	Records only to the SDHC memory card of the camcorder
Ext	Records only to the SxS memory card
Series	For series recording
Synchronize	For hybrid recording
Split	Records to the SxS memory card or the SDHC memory card of the camcorder ※ To record to the SxS memory card, operate using the REC trigger button at the side.

- There are three operation modes for the GY-HM700 series: "CAM" mode, "MEDIA" mode (SD card mode) and "MEDIA" mode (IEEE1394 mode). You can set the required mode using the [CAM/MEDIA] button.

To play back the recorded video images using the memory camcorder, set the camcorder to the "MEDIA" mode (IEEE1394 mode) when playback on the camcorder is stopped (and the thumbnail screen is displayed). For details, please refer to the instruction manual of the camcorder.

- Below are screen displays of the GY-HM700 series that are related to the memory recorder.



- ※ For the remaining time display, "0 min" is indicated even if an SxS memory card is not inserted.
- ※ If [DD] is displayed in place of the [SxS] indicator, set the [HD/DV] switch of the camcorder to "HD".

List of media status displays (during "CAM" mode only)

Mode	Display				
	Off	Ext	Series	Synchronize	Split
Record	R Red color	R Red color	F Red color	Y Red color	R Red color
Standby/Stop	R Red blinking	R Red blinking	F Red blinking	Y Red blinking	R Red blinking
Playback	P White color				
Still (in the middle of a clip)	P White blinking				
Still (beginning of a clip)	S White color				

※ When an SxS memory card is not inserted, "S" appears in white color.

List of error messages

Message	Description
EXT RECORDER NO 1394 SIGNAL	The camcorder is set to the "CAM" mode when the memory recorder is in the playback mode. Action: Set the camcorder to "MEDIA" mode or stop the playback of the memory recorder.

■ Additional information for both GY-HM700 and GY-HD200/HD250 series

- When connecting and recording with a camcorder other than GY-HD200/HD250/HM700 series, the recording may not work properly. Playing back clips that are created on devices other than this memory recorder may result in distorted images and choppy sound.
- When connected to a GY-HD200/HD250 series, the memory recorder cannot be used by connecting the IEEE1394 terminal of the KA-UM100G adapter (sold separately) to the computer. Improper connection may cause the device to malfunction.
- Thin vertical lines may appear on the LCD panel depending on the environment of use.
- Under specific conditions, update of the time code display may be delayed during recording, or the time code displays during end of playback and beginning of recording may appear discontinuous. However, the actual time code recorded to the SxS memory card is continuous.
- If recording is stopped by pressing the Stop button on the memory recorder after recording starts, the recording operation may resume depending on the timing of the button operation.

JVC