

JVC



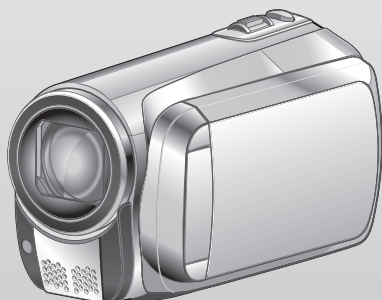
LYT1997-001A-M

ENGLISH

INSTRUCTIONS MANUAL DE INSTRUCCIONES

EN SP

HD MEMORY CAMERA VIDEOCÁMARA HD CON MEMORIA

GZ-HM200 U

Dear Customers

Thank you for purchasing this HD memory camera. Before use, please read the safety information and precautions contained on pages 2 and 3 to ensure safe use of this product.

For Future Reference:

Enter the Model No. (located on the bottom of the HD memory camera) and Serial No. (located on the battery pack mount of the HD memory camera) below.

Model No. _____**Serial No.** _____

Apreciado cliente

Gracias por la compra de esta videocámara HD con memoria. Antes de usarla, lea la información de seguridad y las precauciones contenidas en las páginas 2 y 3 para garantizar un uso seguro de este producto.

Para futuras consultas:

Escriba a continuación el número de modelo (situado en la base de la videocámara HD con memoria) y el número de serie (situado en el compartimiento de la batería de la videocámara HD con memoria).

Número de modelo. _____**Número de serie.** _____

Please read the instruction manual prior to connecting or operating this product.

Por favor, lea el manual de instrucciones antes de conectar u operar este producto.

For more details on the operations, refer to the GUIDEBOOK in the supplied CD-ROM.



Para obtener más información sobre las operaciones, consulte la GUÍA incluida en el CD-ROM suministrado.


**ENGLISH
CASTELLANO**

CASTELLANO

Safety Precautions



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.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

NOTES:

- The rating plate and safety caution are on the bottom and/or the back of the main unit.
- The serial number plate is on the battery pack mount.
- The rating information and safety caution of the AC adapter are on its upper and lower sides.

Caution on Replaceable lithium battery

The battery used in this device may present a fire or chemical burn hazard if mistreated.

Do not recharge, disassemble, heat above 100°C or incinerate.

Replace battery with Panasonic (Matsushita Electric), Sanyo, Sony or Maxell CR2025.

Danger of explosion or Risk of fire if the battery is incorrectly replaced.

- Dispose of used battery promptly.
- Keep away from children.
- Do not disassemble and do not dispose of in fire.

For USA-California Only

This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material – special handling may apply.

See www.dtsc.ca.gov/hazardouswaste/perchlorate

When the equipment is installed in a cabinet or on a shelf, make sure that it has sufficient space on all sides to allow for ventilation (10 cm (3-15/16") or more on both sides, on top and at the rear).

Do not block the ventilation holes.

(If the ventilation holes are blocked by a newspaper, or cloth etc. the heat may not be able to get out.)

No naked flame sources, such as lighted candles, should be placed on the apparatus.

When discarding batteries, environmental problems must be considered and the local rules or laws governing the disposal of these batteries must be followed strictly.

The apparatus shall not be exposed to dripping or splashing.

Do not use this equipment in a bathroom or places with water.

Also do not place any containers filled with water or liquids (such as cosmetics or medicines, flower vases, potted plants, cups etc.) on top of this unit. (If water or liquid is allowed to enter this equipment, fire or electric shock may be caused.)

Do not point the lens directly into the sun. This can cause eye injuries, as well as lead to the malfunctioning of internal circuitry. There is also a risk of fire or electric shock.

CAUTION!

The following notes concern possible physical damage to the camcorder and to the user.

Carrying or holding the camcorder by the LCD monitor can result in dropping the unit, or in a malfunction.

Do not use a tripod on unsteady or unlevel surfaces. It could tip over, causing serious damage to the camcorder.

CAUTION!

Connecting cables (Audio/Video, S-Video, etc.) to the camcorder and leaving it on top of the TV is not recommended, as tripping on the cables will cause the camcorder to fall, resulting in damage.

CAUTION:

The mains plug shall remain readily operable.

WARNING:

The battery pack, the camcorder with battery installed, and the remote control with battery installed should not be exposed to excessive heat such as direct sunshine, fire or the like.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
11. Unplug this apparatus during lightning storms or when unused for long periods of time.
12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



If this symbol is shown, it is only valid in the European Union.

Remember that this camcorder is intended for private consumer use only.

Any commercial use without proper permission is prohibited. (Even if you record an event such as a show, performance or exhibition for personal enjoyment, it is strongly recommended that you obtain permission beforehand.)

Trademarks

- AVCHD and AVCHD logotype are trademarks of Matsushita Electric Industrial Co., Ltd. and Sony Corporation.
- Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.
- x.v.Color™ is a trademark of Sony Corporation.
- HDMI is a trademark of HDMI Licensing, LLC.
- Windows® is either registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
- Macintosh is a registered trademark of Apple Inc.
- YouTube™ and the YouTube logo are trademarks and/or registered trademarks of YouTube LLC.
- iTunes, iMovie and iPhoto are trademarks of Apple Inc., registered in the U.S. and other countries.
- Other product and company names included in this instruction manual are trademarks and/or registered trademarks of their respective holders.

x.v.Color
HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

Charge the battery before recording

Turn off the camcorder and attach the battery pack.

Access lamp

blinks: Accessing files

Power/charge lamp

blinks: Charging

goes out: Charging finished

Do not remove the AC adapter, the battery pack or the SD card when the lamp is blinking.

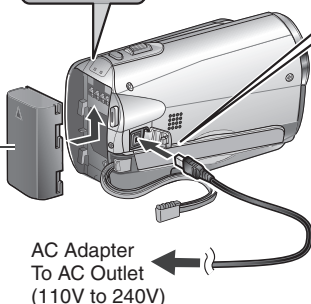


Open the cover



Battery Pack

The battery pack is not charged at the time of purchase.



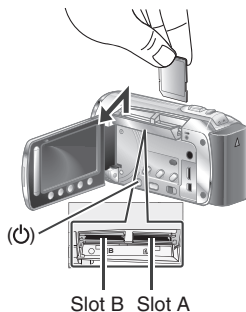
AC Adapter
To AC Outlet
(110V to 240V)

CAUTION

- Charge the battery pack before use. (p. 18)
- Be sure to use JVC battery packs. If you use any other battery packs besides JVC battery packs, safety and performance can not be guaranteed.

Insert the SD Card

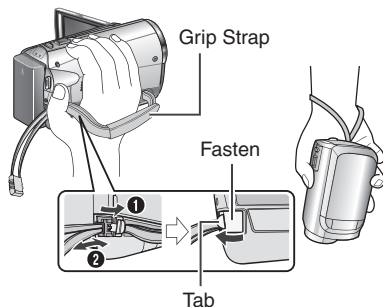
Press Power (P) button to turn off the camcorder.



- Insert and remove an SD card only while the power is turned off. Otherwise, data on the card may be corrupted.
- Format an SD card when using it for the first time (p. 21)

Grip Adjustment

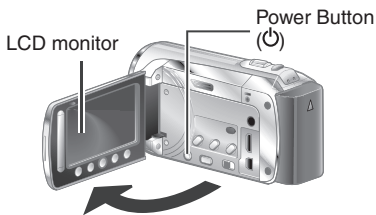
Adjust the strap and fasten.



- Do not pull the strap when you open the fasten. Please pull the tab to open it.
- Fasten the belt when you grip the camcorder.
- When carrying the camcorder, please be careful not to drop it.

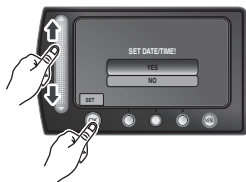
Date/Time Setting

- 1** Open the LCD monitor to turn on the camcorder



- 2** Select [YES] within 10 seconds

Slide your finger up and down on the sensor. Then touch OK.

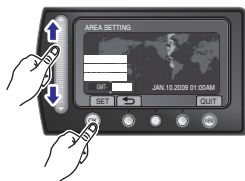


- When the message disappears, press the power button for at least 2 seconds to turn off the power, and then press it again for at least 2 seconds.
- Touch the sensors with your finger. The sensors do not function if you touch them with your finger nail or with gloves on.

- 3** Select [CLOCK SETTING]



- 4** Select the city closest to the area where you use the camcorder



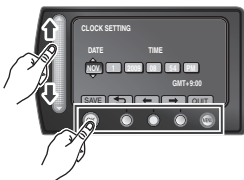
- 5** Select [ON] or [OFF]
Select [ON] if daylight saving time is effective.



ON: Clock is advanced 1 hour from the normal time which you set.

OFF: Deactivates the function.

- 6** Set the date and time
Touch sensor: Sets the date and time.
➡: Moves the cursor to the right.
OK: Clock starts.

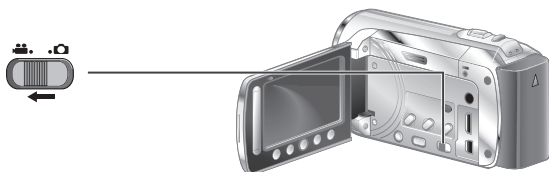


Video recording

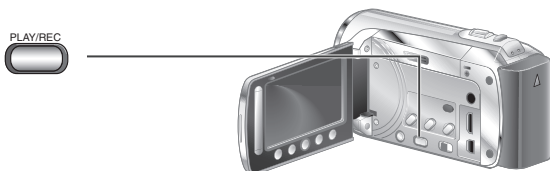
CAUTION

- This camcorder records video in accordance with the AVCHD format.
- Try recording with easy [AUTO] mode first.

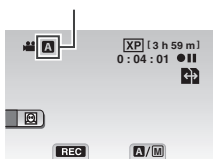
1 Select (video) mode



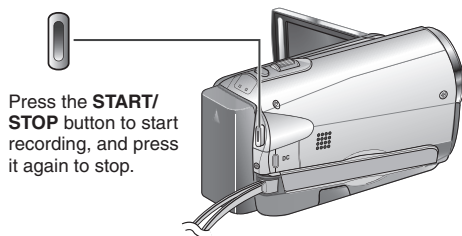
2 Select recording mode



The auto recording indicator appears.

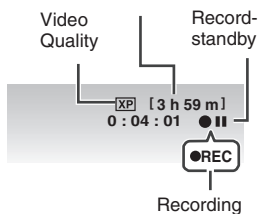


3 Start recording



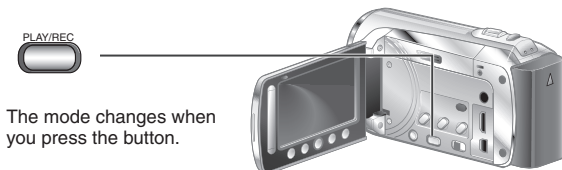
Press the **START/STOP** button to start recording, and press it again to stop.

Remaining space on the SD card.

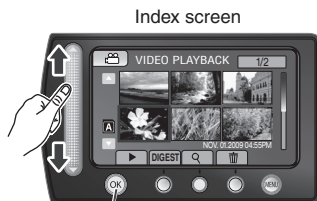


Playing back

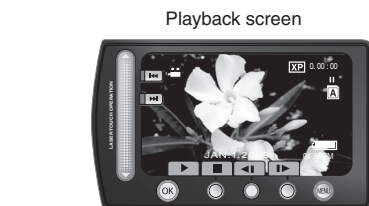
1 Select playback mode



2 Select the desired file



3 Select ► (Touch OK)



- To perform operations such as forward search or reverse search (➡ p. 28)
- To view files on TV (➡ p. 30)

CAUTION

Don't forget to make copies after recording!

- To copy files onto discs (➡ p. 33)
- To dub files using a VCR/DVD recorder (➡ p. 36)
- To edit files on your computer (➡ p. 38)

JVC Software Licence Agreement

JVC SOFTWARE LICENCE AGREEMENT

IMPORTANT

TO CUSTOMERS: PLEASE MAKE SURE TO READ THIS CAREFULLY BEFORE INSTALLING OR USING THE SOFTWARE PROGRAM NAMED "DIGITAL PHOTO NAVIGATOR" ("Program") ON YOUR PC.

The right to use the Program is granted by Victor Company of Japan, Limited ("JVC") to You only on the condition that You agree to the following. Should You not agree to the terms hereof, You may not install or use the Program. HOWEVER, INSTALLING OR USING THE PROGRAM INDICATES YOUR ACCEPTANCE OF THESE TERMS AND CONDITIONS.

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2 GRANT OF LICENCE

- (1) Subject to the conditions of this Agreement, JVC grants to You a non-exclusive right to use the Program. You may install and use the Program on a HDD or other storage devices incorporated in Your PC.
- (2) You may make one (1) copy of the Program solely for your personal backup or archival purposes.

3 RESTRICTION ON THE PROGRAM

- (1) You may not reverse engineer, decompile, disassemble, revise or modify the Program, except to the extent that expressly permitted by applicable law.
- (2) You may not copy or use the Program, in whole or in part, other than as expressly specified in this Agreement.
- (3) You have no right to grant a licence to use the Program, and may not distribute, rent, lease or transfer the Program to any third party or otherwise let them use the Program.

4 LIMITED WARRANTY

JVC warrants that any media in which the Program is embodied are free from any defects in materials and workmanship for a period of thirty (30) days from the date of Your purchasing any our products accompanying the Program. JVC's entire liability and your exclusive remedy in connection with the Program shall be replacement of such defective media. EXCEPT FOR THE EXPRESS WARRANTIES STATED HEREIN AND TO THE EXTENT PERMITTED BY APPLICABLE LAW, JVC AND ITS LICENSORS DISCLAIM ANY OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN REGARD TO THE PROGRAM AND THE ACCOMPANYING PRINTED MATERIALS. SHOULD THERE BE ANY PROBLEM ARISING FROM OR CAUSED BY THE PROGRAM, YOU SHOULD SETTLE ALL SUCH PROBLEM AT YOUR OWN COST AND EXPENSE.

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TO THE EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL JVC AND ITS LICENSORS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, REGARDLESS OF THE FORM OF ACTION WHETHER IN CONTRACT, TORT OR OTHERWISE ARISING OUT OF OR IN CONNECTION WITH THE USE OF OR INABILITY TO USE THE PROGRAM, EVEN IF JVC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. YOU WILL INDEMNIFY AND HOLD HARMLESS JVC FROM ANY LOSS, LIABILITY OR COST ARISING OUT OF OR IN ANY WAY CONNECTED TO CLAIMS FROM ANY THIRD PARTY RELATING TO THE USE OF THE PROGRAM.

6 TERM

This Agreement will become effective on the date when You install and use the Program on Your machine, and continue to be in effect until the termination under the following provision.

Should You breach any provision of this Agreement, JVC may terminate this Agreement without giving any notice to You. In this event, JVC may claim against You for any damages caused by Your breach. Should this Agreement be terminated, You must immediately destroy the Program stored in Your machine (including the erasing from any memory in Your PC), and no longer own such Program.

7 EXPORT CONTROL

You agree that You will not ship, transfer or export the Program or underlying information and technology to any countries to which Japan and other relevant countries have initiated an embargo on such goods.

8 U.S. GOVERNMENT USER

If You are an agency of the United States of America (the "Government"), You acknowledge JVC's representation that the Program is a "Commercial Item" as defined in Federal Acquisition Regulation (FAR) part 2.101 (g) consisting unpublished "Commercial Computer Software" as those items are used at FAR part 12.212 and is only licenced to You with the same use rights JVC grants all commercial end users pursuant to the terms of this Agreement.

9 GENERAL

- (1) No modification, change, addition, deletion or other alternation of or to this Agreement will be valid unless reduced to writing and signed by an authorized representative of JVC.
- (2) If any part of this Agreement is held invalid by or in conflict with any law having jurisdiction over this Agreement, the remaining provisions will remain in full force and effect.
- (3) This 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.

Victor Company of Japan, Limited

NOTE

If You acquired the Program in Germany, the provisions of Sections 4 (Limited Warranty) and 5 (Limited Liability) provided above will be replaced with those of the German version of this Agreement.

CAUTIONS:

- Operate this equipment according to the operating procedures described in this manual.
- Use only the provided CD-ROM. Never use any other CD-ROM to run this software.
- Do not attempt to modify this software.
- Changes or modifications not approved by JVC could void user's authority to operate the equipment.

How to handle a CD-ROM

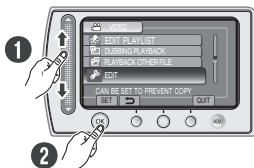
- Take care not to soil or scratch the mirror surface (opposite to the printed surface). Do not write anything or put a sticker on either the front or back surface. If the CD-ROM gets dirty, gently wipe it with a soft cloth outward from the center hole.
- Do not use conventional disc cleaners or cleaning spray.
- Do not bend the CD-ROM or touch its mirror surface.
- Do not store your CD-ROM in a dusty, hot or humid environment. Keep it away from direct sunlight.

You can find the latest information (in English) on the provided software program at our world wide web server at <http://www.jvc-victor.co.jp/english/global-e.html>

Read This First!

How to use the Touch Sensor

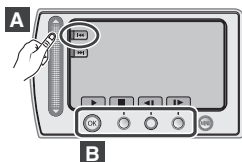
After the menu is displayed on the LCD monitor:



- 1 Slide your finger up and down on the sensor.
- 2 Select [SET]. (Touch OK.)

CAUTION

Touch the sensors with your finger. The sensors do not function if you touch them with your fingernail or with gloves on.



- A** To select an on-screen button appearing on the left side, touch the portion of the sensor next to the on-screen button.
- B** To select an on-screen button appearing at the bottom of the screen, touch the buttons underneath them.

Read these INSTRUCTIONS to enjoy your CAMCORDER. For more details on the operations, refer to the GUIDEBOOK in the supplied CD-ROM.

In order to view the GUIDEBOOK, Adobe® Acrobat® Reader™ or Adobe® Reader® must be installed. Adobe® Reader® can be loaded from Adobe's web site:
<http://www.adobe.com/>

NOTE

Select your desired language with a single click.

The model name is indicated on the bottom of your camcorder.



Make a backup of important recorded data
JVC will not be responsible for any lost data. It is recommended to copy your important recorded data to a disc or other recording media for storage. (p. 35)

Make a trial recording

Before the actual recording of important data, make a trial recording and play back the recorded data to check that the video and sound have been recorded correctly. We recommend you to use the same recording media when performing both the trial recording and the actual recording.

Reset the camcorder if it does not operate correctly

Close the LCD monitor and remove the power supply (battery pack or AC adapter) from the camcorder, then reattach it.

Precautions on handling batteries

- Be sure to use the JVC BN-VF808U/VF815U/VF823U battery packs. This product includes patented and other proprietary technology and is made to be used with the JVC battery and not with other batteries. JVC cannot guarantee safety or performance of this product when it is operated by other batteries
- If the camcorder is subjected to electrostatic discharge, turn off the power before using it again.

If a malfunction occurs, stop using the camcorder immediately and contact www.jvc.com or by phone at 1-800-252-5722
Recorded data may be erased while the camcorder is being repaired or inspected. Back up all data before requesting repairs or inspections.

Because camcorders may be used for demonstration in a shop, the demonstration mode is set to [ON] by default

To deactivate the demonstration mode, set [DEMO MODE] to [OFF].

When Using an SD Card

- Operations are confirmed on the following SD cards:
Class 4 or higher compatible SD or SDHC card. Panasonic, TOSHIBA, SanDisk, ATP SD card (256 MB to 2 GB) or SDHC card (4 GB to 32 GB)
For UXP mode, use Class 6 or higher.
- If other media are used, they may fail to record data correctly, or they may lose data that had already been recorded.
- MultiMediaCards are not supported.

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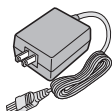
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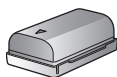
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Accessories



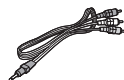
AC Adapter
AP-V21U



Battery Pack
BN-VF808U



Component Cable



Audio/Video Cable



USB Cable



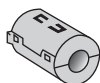
CD-ROM



Remote Control
RM-V751U



Lithium Battery
CR2025
Pre-installed in the
remote control unit.



(x 1)
(Component Cable)



(x 2)
(USB Cable and AC
Adapter)

Core Filter

NOTE

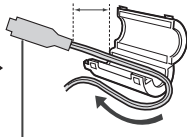
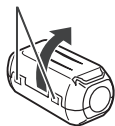
Make sure to use the provided cables for connections. Do not use any other cables.

Attaching the Core Filter

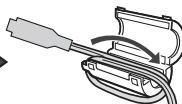
The core filter reduces interference caused when connecting to other devices. Connect the end of the cable with the core filter to the camcorder.

Release the stopper.

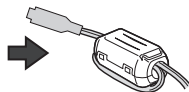
3 cm (1-3/16")



To be connected to the
camcorder.



Component cable and
USB cable: Wind once.
AC Adapter: Wind twice.

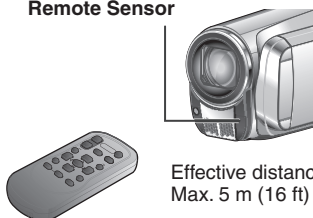


Preparing the Remote Control

A battery is included inside the remote control at the time of purchase.
Remove the insulation sheet before use.

Beam Effective Area

Remote Sensor



Effective distance:
Max. 5 m (16 ft)

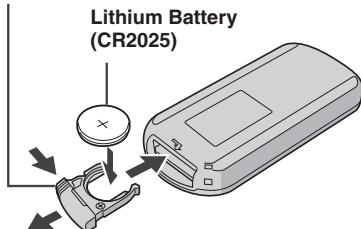
NOTE

The transmitted beam may not be effective or may cause incorrect operation when the remote sensor is directly exposed to sunlight or powerful lighting.

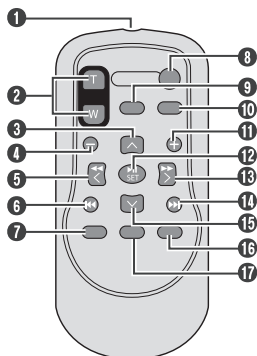
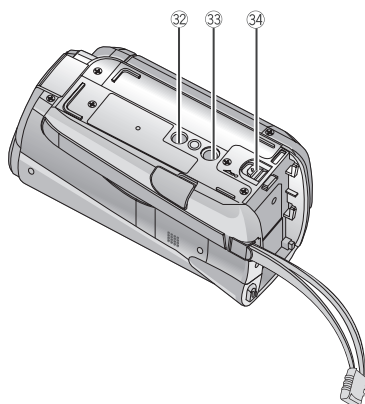
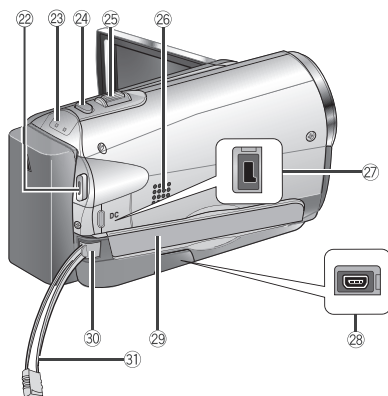
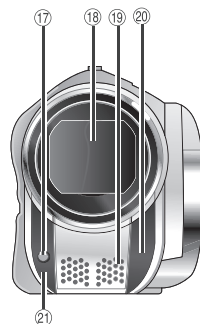
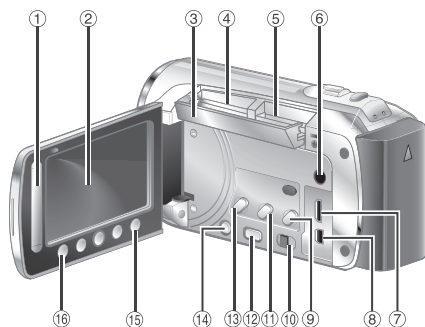
To Reinsert the Battery

Pull out the battery holder by pressing the lock tab.

Lock Tab

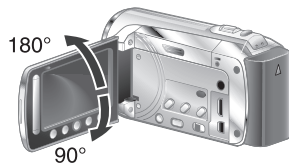


Index



NOTE

- Be careful not to cover 17, 18, 19, 20 and 21 during shooting.
- The LCD monitor can rotate 270°.



Camcorder

- ① Touch sensor
- ② LCD Monitor
- ③ SD Cover
- ④ SD Card Slot B (📄 p. 21)
- ⑤ SD Card Slot A (📄 p. 21)
- ⑥ Audio/Video Connector [AV] (📄 p. 30, 36)
- ⑦ HDMI Mini Connector [HDMI] (📄 p. 30)
- ⑧ Component Connector [COMPONENT] (📄 p. 30)
- ⑨ Direct Disc Button [DIRECT DISC] (📄 p. 35)/Information Button [INFO] (📄 p. 25)
- ⑩ Mode Switch [👤, 📷]
- ⑪ Export Button [EXPORT] (📄 p. 42)
- ⑫ Playback/Recording Mode Switching Button [PLAY/REC]
- ⑬ Upload Button [UPLOAD] (📄 p. 43)
- ⑭ Power Switch [🔌]
(You can turn off the camcorder by pressing and holding this button.)
- ⑮ Menu Button [MENU] (📄 p. 44)
- ⑯ OK Button [OK]
- ⑰ LED Light (📄 p. 24)
- ⑱ Lens Cover/Lens
- ⑲ Stereo Microphone
- ⑳ Remote Sensor
- ㉑ Camera Sensor
- ㉒ Video Recording Start/Stop Button [START/STOP] (📄 p. 22)
- ㉓ Access Lamp [ACCESS] (Blinks when you access files. Do not turn off the power or remove the battery pack/AC adapter while accessing files.)
Power/Charge Lamp [POWER/CHARGE] (Blinks when you charge the battery.)
- ㉔ Still Image Shooting Button [SNAPSHOT] (📄 p. 22, 23)
- ㉕ Zoom Lever [W 📺, T] (📄 p. 24)
Speaker Volume Control [-VOL+] (📄 p. 28)
- ㉖ Speaker
- ㉗ DC Connector [DC] (📄 p. 18)
- ㉘ USB Connector [🔌] (📄 p. 34, 38)
- ㉙ Grip Strap
- ㉚ Fasten
- ㉛ Belt Strap
- ㉜ Stud Hole
- ㉝ Tripod Mounting Socket (📄 p. 20)
- ㉞ Battery Release Button [BATT.] (📄 p. 18)


Remote Control


- ① Infrared Beam Transmitting Window
- ② ZOOM (T/W) Buttons
(Zoom in/out during playback.)
- ③ Up Button
- ④ Skip Backward Button
- ⑤ Left Button
- ⑥ Back Button
- ⑦ PLAYLIST Button
- ⑧ START/STOP Button
- ⑨ S.SHOT (Snapshot) Button
- ⑩ INFO Button
- ⑪ Skip Forward Button
- ⑫ PLAY/PAUSE/SET Button
- ⑬ Right Button
- ⑭ Next Button
- ⑮ Down Button
- ⑯ INDEX Button*
- ⑰ DISP Button

NOTE

You can move the zooming area with the up/down/left/right button during zoom in playback mode.

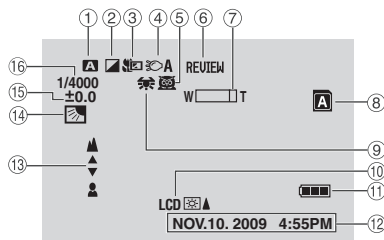
* Each time you press INDEX, the screen switches as shown below:

 **mode:**
Index Screen ↔ Group Index Screen

 **mode:**
Index Screen ↔ Date Index Screen

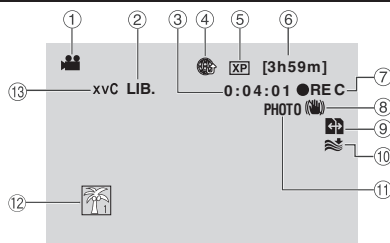
Indications on LCD Monitor

During both Video and Still Image Recording



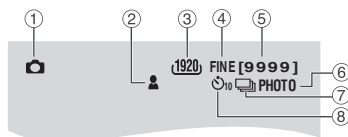
- ① Selected Operation Mode Indicator (p. 26)
A : Auto Mode
M : Manual Mode
- ② Effect Mode Indicator
- ③ Tele Macro Mode Indicator
- ④ LED Light Indicator (p. 24)
- ⑤ Scene Select Mode Indicator
- ⑥ Quick Review Indicator (p. 22)
- ⑦ Zoom Indicator (p. 24)
- ⑧ SD Card Slot Indicator (p. 21)
A : Slot A (Default Setting)
B : Slot B
- ⑨ White Balance Indicator
- ⑩ Monitor Backlight Indicator
- ⑪ Battery Indicator
- ⑫ Date/Time (p. 19)
- ⑬ Manual Focus Adjustment Indicator
- ⑭ **A** : Backlight Compensation Indicator
A : Face Detection Mode Indicator (p. 25)
- ⑮ Brightness Control Indicator
- ⑯ Photometry Area Control Indicator
- ⑰ Shutter Speed

During Video Recording Only



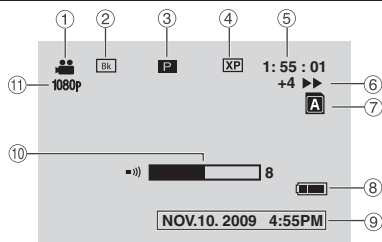
- ① Mode Indicator
- ② Export Mode Indicator (p. 42)
- ③ Counter
- ④ Upload Mode Indicator (p. 43)
- ⑤ Video Quality
- ⑥ Remaining Time
- ⑦ ● REC: (Appears during recording.)
● II: (Appears during record-standby mode.)
- ⑧ Digital Image Stabilizer (DIS) Indicator (Appears when [DIS] is set to [OFF].)
- ⑨ Auto Switch Rec Media Indicator
- ⑩ Wind Cut Indicator
- ⑪ Shooting Indicator (p. 22)
- ⑫ Event Indicator
- ⑬ x.v.Color™ Indicator

During Still Image Recording Only



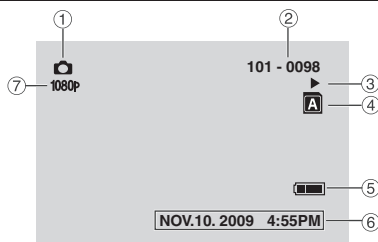
- ① Mode Indicator
- ② Focus Indicator (p. 23)
- ③ Image Size Indicator
- ④ Image Quality Indicator
- ⑤ Remaining Number of Shots
- ⑥ Shooting Indicator (p. 23)
- ⑦ Shutter Mode Indicator
- ⑧ Self-Timer Indicator

During Video Playback



- ① Mode Indicator
- ② Wipe/Fader Effect Indicator (➡ p. 29)
- ③ **P** : Playlist Playback Indicator (Appears when playing back a playlist.)
DIGEST: Digest Indicator (➡ p. 28)
- ④ Video Quality
- ⑤ Counter
- ⑥ Playback Mode (➡ p. 28)
 - ▶ : Playback
 - ⏸ : Pause
 - ⏭ : Forward Search
 - ⏮ : Reverse Search
 - ⏩ : Forward Slow-Motion
 - ⏪ : Reverse Slow-Motion
 (The number on the left shows speed.)
- ⑦ Card Slot Indicator
- ⑧ Battery Indicator
- ⑨ Date/Time (➡ p. 19)
- ⑩ Volume Level Indicator
- ⑪ Output with 1080p

During Still Image Playback



- ① Mode Indicator
- ② Folder/File Number
- ③ Slide Show Playback Indicator
- ④ Card Slot Indicator
- ⑤ Battery Indicator
- ⑥ Date/Time (➡ p. 19)
- ⑦ Output with 1080p

To display indication modes on LCD monitor

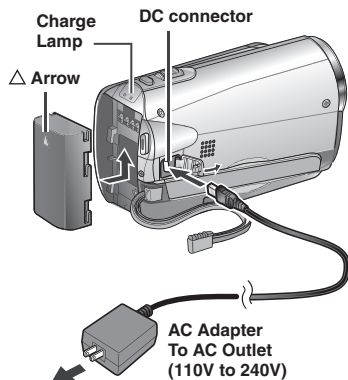
In playback mode:

- 1) Select [ON-SCREEN DISPLAY] from the MENU.
- 2) Select the desired setting:
No indications/All indications/Only date and time/Display date for 5 seconds

Necessary Settings before Use

Charging the Battery Pack

- 1 Close the LCD monitor to turn off the camcorder.
- 2 Attach the battery pack, then connect the AC adapter.
 - With the “△” (arrow) on the battery pack pointing at the correct direction, slide the battery pack until it locks in place.



- The power/charge lamp blinks to indicate charging has started.
- When the lamp goes out, charging is finished.

- **To check the remaining battery power**
See page 25.

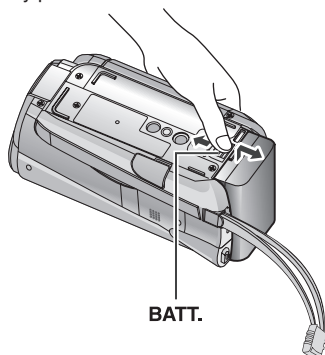
■ Required charging/recording time (approx.)

*When the LED light is off and the monitor backlight is set to [STANDARD] mode.

Battery pack	Charging time	Recording time
BN-VF808U (Provided)	1 hr. 50 min.	1 hr. 25 min.*
BN-VF815U	2 hr. 40 min.	3 hr.*
BN-VF823U	3 hr. 40 min.	4 hr. 30 min.*

■ To detach the battery pack

Slide and hold **BATT.**, then remove the battery pack.



NOTE

- You can also use the camcorder with just the AC adapter.
- The actual recording time may shorten depending on the recording environment, such as when recording scenes with fast moving subject.
- Please do not pull or bend the AC adapter plug and cable. This may damage the AC adapter.

Date/Time Setting

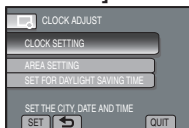
- 1 Open the LCD monitor to turn on the camcorder.
- 2 Touch MENU.
- 3 Select [DISPLAY SETTINGS].



- 4 Select [CLOCK ADJUST].

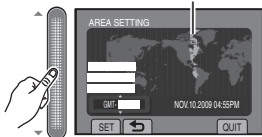


- 5 Select [CLOCK SETTING].



- 6 Select the city closest to the area where you use the camcorder.
Select the area by using the touch sensor.

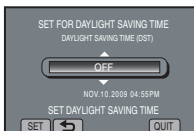
Selected area is highlighted



- 7 Select [ON] if daylight saving time is effective.

ON: Clock is advanced 1 hour from the normal time which you set.

OFF: Deactivates the function.



- 8 Set the date and time.

Select the item by using the touch sensor and select [→] to set.



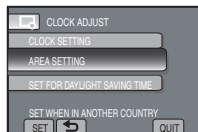
- 9 Select [SAVE].

To reset the setting, select [QUIT]

Setting the clock to local time when traveling

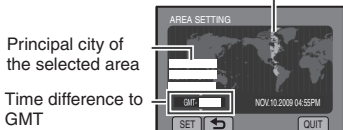
After performing steps 1 - 4

- 5 Select [AREA SETTING].



- 6 Select the city closest to the area you are traveling.

Selected area is highlighted



- To return to the previous screen

Select [←].

- To quit the screen

Touch the MENU button.

Other Settings

Language Setting

The language on the display can be changed.

- 1 Open the LCD monitor to turn on the camcorder.
- 2 Touch MENU.
- 3 Select [DISPLAY SETTINGS].



- 4 Select [LANGUAGE].

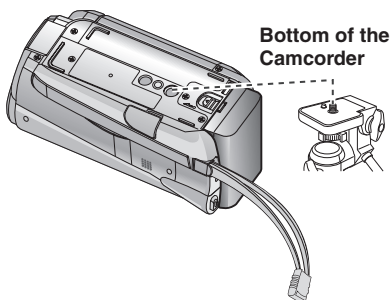


- 5 Select the desired language.

- To return to the previous screen
Select [↩].
- To quit the screen
Select [QUIT]

Tripod Mounting

Align the camcorder stud hole with the tripod stud, and the mounting socket with the screw, and lock it in place.



NOTE

Do not use a tripod on unsteady or unlevel surfaces. It could tip over, causing serious damage to the camcorder.

Using an SD Card

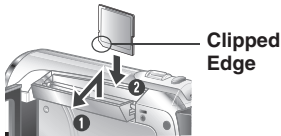
- Operations are confirmed on the following SD cards:
Class 4 or higher compatible SD or SDHC card.
Panasonic, TOSHIBA, SanDisk, ATP SD card
(256 MB to 2 GB) or SDHC card (4 GB to 32 GB)
For UXP mode, use Class 6 or higher.
- If other media are used, they may fail to record data correctly, or they may lose data that had already been recorded.
- MultiMediaCards are not supported.
- Cards used to record video on this camcorder cannot be played back on other devices.
- Some card readers (including internal card readers in PCs) may not be able to support SDHC format. If you use an SDHC card for recording and encounter any reading error, the card reader you are using, might be a non-SDHC supported device. Please use the camcorder or other SDHC compatible devices to access the card.
- Video data may not be recorded onto the SD cards on which video data have already been recorded using the devices from other manufacturers.

Insert an SD card

Preparation:

Press Power (⏻) button to turn off the camcorder.

- Open the SD card cover.**
Push the cover up gently, to open it.
- Firmly insert the card with its clipped edge first.**



- Close the SD card cover.**

To remove an SD card

Push the SD card once.
After the card comes out a little, pull it out.

NOTE

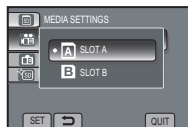
- Insert and remove the SD card only while the power is turned off. Otherwise, data on the card may be corrupted.
- Do not touch the terminal on the reverse side of the label.

Change the recording medium

The camcorder is programmed to record in [SLOT A] when it is shipped from the factory. You can change the recording medium to [SLOT B].

From the MENU.

Set [VIDEO SLOT SELECTION] and [IMAGE SLOT SELECTION] to [SLOT A] or [SLOT B].



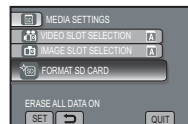
INFORMATION

- Recording media switches automatically from Slot A to Slot B and vice versa after the card in the selected slot is full.
- You can conveniently record your video and shoot still image in separate SD cards by selecting the card slot (A or B) for each purpose.

Format an SD card when using it for the first time

From the MENU.

Select [FORMAT SD CARD] to format the card.




Recording Files

Video Recording

Preparation:

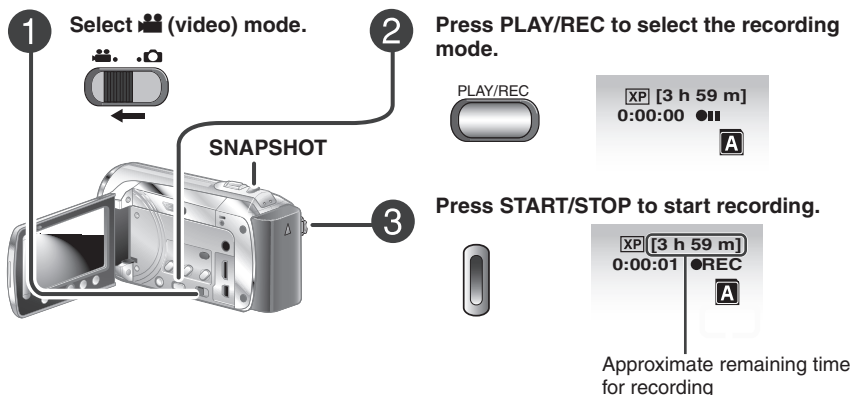
- Open the LCD monitor to turn on the camcorder.
- Insert an SD card.

1 Select  (video) mode.

2 Press **PLAY/REC** to select the recording mode.

3 Press **START/STOP** to start recording.

Approximate remaining time for recording





You can also start/stop recording by selecting [REC] on the LCD monitor (On-screen recording control).

■ To stop recording

Press the **START/STOP** button or select [REC] again.

■ To view the video you just recorded

Select  while recording is paused. Selecting  during playback deletes that scene.

■ To change the video quality

Change the settings in [VIDEO QUALITY] from the MENU.

■ To record a still image during video recording

Press **SNAPSHOT**.

■ To record a video clip (approx. 10 minutes)

See page 43.

■ To turn on the face detection mode

See page 25.









NOTE

- The video recording mode is automatically selected when you turn the camcorder's power off and then on again.
- If the camcorder is not operated for 5 minutes while the power is on, it turns itself off automatically to conserve power. To turn the camcorder on again when using the battery pack, close the LCD monitor and open it again. When using the AC adapter, perform any operation such as zooming.
- After recording video for 12 consecutive hours, recording stops automatically. To ensure continuous recording, set the [AUTO SWITCH REC MEDIA] to [ON] before you start recording.
- A new file will be created for every 4 GB of continuous shooting.



Still Image Recording

Preparation:

- Open the LCD monitor to turn on the camcorder.
- Insert an SD card.

- 1 Select  (still image) mode.**

 - 2 Press PLAY/REC to select the recording mode.**

 - 3 Press and hold SNAPSHOT halfway.**


- The  indicator becomes green when the captured image is focused.
- 4 Press SNAPSHOT fully to take the picture.**



■ To view the last recorded image

Select  after shooting.
 Selecting  during playback deletes that image.

■ To change the image quality

Change the settings in [IMAGE QUALITY] from the MENU.

■ To record still images continuously

Set to [CONTINUOUS SHOOTING] in [SHUTTER MODE] from the MENU.

■ To change the aspect ratio of the image

Change the settings in [IMAGE SIZE] from the MENU.

■ To turn on the face detection mode

See page 25.



NOTE

- DIS (Digital Image Stabilizer) does not function during still image recording.
- If the camcorder is not operated for 5 minutes while the power is on, it turns itself off automatically to conserve power. To turn on the camcorder again when using the battery pack, close the LCD monitor and open it again. When using the AC adapter, perform any operation such as zooming.

Recording Files (Continued)

Zooming

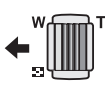
Preparation:

- Select  or  mode.
- Select the recording mode.

Zoom out



W: Wide angle



Zoom in



T: Telephoto

You can also zoom out/zoom in by selecting [W] or [T] on the LCD monitor. (On-screen zoom control)

Maximum zoom ratio: 20X/OPTICAL (Factory-preset)

■ To change the maximum zoom ratio (for mode only)



Change the settings in [ZOOM] from the MENU.

NOTE

Macro shooting is possible as close as approx. 5 cm (2") to the subject when the zoom lever is set all the way to **W**.

LED Light

Preparation:

- Select  or  mode.
- Select the recording mode.

1 Touch MENU.

2 Select [LIGHT].

3 Select the desired setting.

ON

The LED light remains on regardless of the surrounding conditions.

AUTO

The LED light turns on automatically when shooting in insufficient light conditions.

OFF

Deactivates this function.

Turning on the Face Detection Mode

If you set this mode on, the camcorder detects the faces and adjust brightness and focus so that the faces are recorded clearly.

Preparation:

- Select  or  mode.
- Select the recording mode.


Select .



To turn off the face detection mode

Select  again.

NOTE


- If the LCD monitor is turned upside down,  is not displayed. Change the setting when the LCD monitor is in the normal position.
- Depending on the condition, faces may not be detected.
- If the face detection does not work correctly, turn off the mode before recording.

Checking the Remaining Battery Power

Preparation:

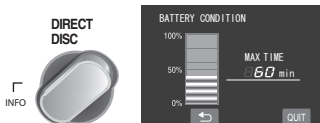
- Disconnect the AC adapter from the camcorder.
- Attach the battery pack.
- Select the recording mode.

For  mode:

Press **INFO** three times or **INFO** and then select .

For  mode:

Press the **INFO** button.



To return to the normal screen


Select [QUIT] or press **INFO**.

NOTE

The recordable time display should only be used as a guide. It is displayed in 10-minute units.

Checking the Remaining Space on the Recording Media

Preparation:

- Select  mode.
- Select the recording mode.

Press the **INFO** button once (Slot A) or twice (Slot B).



The maximum recording time is displayed for each picture quality mode.

To change the video quality

- 1) Select the video quality.
- 2) Select [SET].

To change the recording media

- 1) Press **INFO** to select SLOT A or SLOT B.
- 2) Select [SET].

To quit the screen

Select [QUIT].

Manual Recording

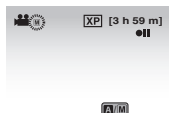
Manual recording mode enables you to set the focus and screen brightness, etc. manually.

Changing to Manual Recording Mode

Preparation:

- Select or mode.
- Select the recording mode.

Select [A/M] twice.



■ To return to the auto recording mode

Select [A/M] so that the indicator appears.

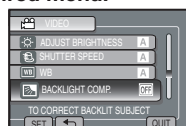
Manual Setting in Menu

In the manual recording mode;

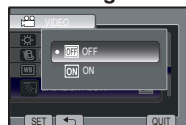
- 1 Touch MENU.
- 2 Select [MANUAL SETTING].



- 3 Select the desired menu.



- 4 Select the desired setting.



Depending on the kind of settings you select, you can set the value by using the touch sensor.

■ To return to the previous screen

Select .

■ To quit the screen

Select [QUIT].

Scene Select/Effect

Scene Select

You can record videos or still images with optimum brightness by adjusting the exposure and shutter speed to suit your surroundings or the subject.

Effect

You can record videos or still images with special effects.

After performing steps **1** - **2** on left column.

3 Select [SCENE SELECT] or [EFFECT].

4 Select the desired setting.






■ To cancel scene select/effect

Select [OFF].

■ Items for scene select setting

-  **NIGHT:**
Records with more sensitivity in dim locations by adjusting the shutter speed automatically.
-  **TWILIGHT:**
Makes evening scenes look more natural.
-  **PORTRAIT:**
The subject in the foreground is accentuated by blurring the background.
-  **SPORTS:**
Records fast moving subjects clearly.
-  **SNOW:**
Compensates for subjects that may appear too dark when shooting in extremely bright surroundings, such as in snow.
-  **SPOTLIGHT:**
Select this when a spotlight makes a subject appear too bright.

■ Items for effect setting

-  **SEPIA:**
The image is given a brownish tint like an old photo.
 -  **MONOTONE:**
This effect skips frames to give images of an old movie atmosphere.
 -  **CLASSIC FILM*:**
The image is given an old movie atmosphere by the effect of skipping frames.
 -  **STROBE*:**
The image looks like a series of consecutive snapshots.
- *  mode only.

Playing Back Files

Video/Still Image Playback

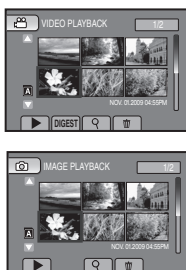
Preparation:

- Open the LCD monitor to turn on the camcorder.
- Insert an SD card.

- 1 Select (video) or (still image) mode.



- 2 Press the **PLAY/REC** button to select playback mode.



The index screen appears.

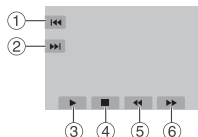
- 3 Select the desired file.



- **To move to the previous or next page**
Touch [▲] or [▼] for over a second.
- **To play back a few seconds from each select scene of the recorded videos**
Touch [DIGEST].
- **To delete a video/still image**
Select when playback is stopped.
- **To change the number of thumbnails (6 thumbnails / 12 thumbnails)**
Move the zoom lever to [T] or [W].
- **To adjust the sound volume of videos.**



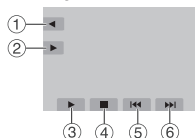
Operations during Video Playback



- ① : Return to the first scene of the file
- ② : Go to the first scene of the next file
- ③ : Playback
- ④ : Pause
- ⑤ : Return to the index screen
- ⑥ : Reverse search (during playback)
- ⑦ : Frame-by-frame playback in reverse direction (during pause)*
- ⑧ : Forward search (during playback)
- ⑨ : Frame-by-frame playback in forward direction (during pause)*

* Slow playback starts when you keep touching the sensor button under / for a while.

Operations during Still Image Playback




- ① : Change playback order of slide show in reverse direction
- ② : Change playback order of slide show in forward direction
- ③ : Start the slide show
- ④ : End the slide show
- ⑤ : Return to the index screen
- ⑥ : Display the previous file
- ⑦ : Display the next file

Playback with Special Effects

Wipe or fader effects

Add effects at the beginning and end of videos. These effects cannot be set for still images.

Preparation:

- Select  mode.
- Select the playback mode.

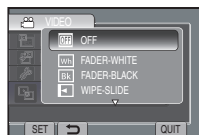
1 Touch MENU.

2 Select [WIPE/FADER].



3 Select a desired effect.

For details on each effect, see the right column.



4 Select the file you want to play back.







■ To turn off the effect

Select [OFF] in step 3.

■ To quit the screen

Select [QUIT].

■ Items for WIPE/FADER setting

-  **FADER-WHITE:**
Fades in or out with a white screen.
-  **FADER-BLACK:**
Fades in or out with a black screen.
-  **WIPE-SLIDE:**
Wipes in from right to left, or wipes out in the opposite way.
-  **WIPE-DOOR:**
Wipes in as the two halves of a black screen which open to the left and right revealing the scene, or wipes out in the opposite way.
-  **WIPE-SCROLL:**
Wipes in from the bottom to the top of a black screen, or wipes out in the opposite way.
-  **WIPE-SHUTTER:**
Wipes in from the center of a black screen toward the top and bottom, or wipes out in the opposite way.

NOTE

No effect will be applied on files with a play time shorter than 7 seconds.

Viewing Files on TV

This camcorder is designed to be used with high-definition or NTSC-type color television signals. It cannot be used with a television of a different standard.

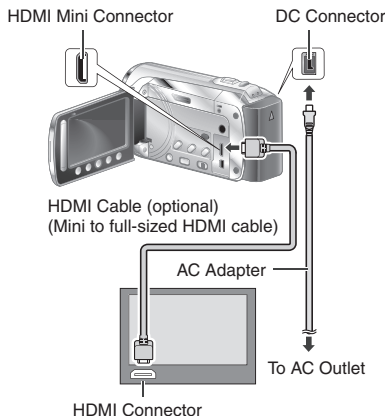
Connection with TV

You can output videos from the HDMI mini connector, COMPONENT connector, or AV connector.

We recommend using the Category 2 HDMI cable (High Speed cable) for viewing in higher picture quality.

Preparation: Turn off all units.

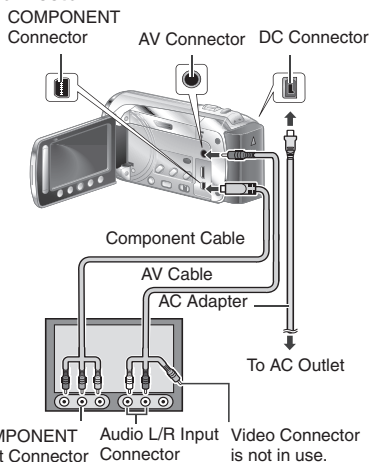
■ To connect using the HDMI mini connector



NOTE

- When connecting to the HDMI cable, the image or sound may not appear on the TV properly depending on the TV connected. In such cases, perform the following operations.
 - 1) Disconnect the HDMI cable and connect it again.
 - 2) Turn off and on the camcorder again.

■ To connect using the COMPONENT/AV connector



NOTE

- From the MENU, change the settings in [COMPONENT OUTPUT] according to the connection.
- From the MENU, change the settings in [VIDEO OUTPUT] to suit the screen size of your television.

Playback Operation

After the connection with TV is completed

- 1 Turn on the camcorder and the TV.
- 2 Set the TV to its VIDEO mode.
- 3 (Only when connecting the camcorder to the VCR/DVD recorder)
Turn on the VCR/DVD recorder, and set the VCR/DVD recorder to its AUX input mode.
- 4 Start playback on the camcorder. (p. 28)

■ To display camcorder's on-screen display on TV

Set [DISPLAY ON TV] to [ON] from the MENU.

NOTE

When the video was recorded with x.v.Color™ set to [ON], change the x.v.Color™ setting on TV. For details, refer to the TV's instruction manual.

Operating Together with TV via HDMI

Connecting the camcorder to an HDMI-CEC*-enabled TV using the HDMI cable allows you to utilize the following convenient functions.

* HDMI-CEC (Consumer Electronics Control) is an industry standard that enables interoperability between HDMI-CEC compliant devices that are connected via HDMI cables.

NOTE

- Not all HDMI-control devices comply with the HDMI-CEC standard. The HDMI control function of the camcorder will not work when connected to these devices.
- The camcorder is not guaranteed to operate with all HDMI-CEC-enabled devices.
- HDMI-CEC does not function immediately after inserting the AC adapter to the AC outlet. Open the LCD monitor to turn on the camcorder.

Preparation:

- Connect an HDMI cable between the camcorder and the TV. (➡ p. 30)
- Turn on the TV and set the HDMI-CEC related setting to on. (For details, refer to the instruction manual of the TV.)
- Turn on the camcorder and set [HDMI CONTROL] to [ON] from the MENU.

■ Playback on TV

Select the playback mode.

The TV automatically switches to the HDMI input. (Turn on the TV beforehand.)

■ Switching off TV and Camcorder

Turn off the TV.

The camcorder turns off automatically.

■ Switching Display Language

Depending on the TV connected, the display language of the camcorder will automatically switch to the language that is used for the TV when the camcorder is turned on.

(This is applicable only if the camcorder supports the language selected for the TV.) To use the camcorder with a language that differs from the display language of the TV, set [HDMI CONTROL] to [OFF] from the MENU.

NOTE

- The display language of the TV will not switch automatically, even if the display language of the camcorder is changed.
- These functions may not work correctly when devices such as amplifier and selector are connected. Set [HDMI CONTROL] to [OFF] from the MENU.
- If HDMI-CEC does not work properly, turn off and on the camcorder again.

Managing Files

CAUTION

Do not remove the recording medium (SD cards) or perform any other operation (such as turning off the power) while accessing files. Also, be sure to use the provided AC adapter, as the data on the recording medium may be corrupted if the battery becomes exhausted during operation. If the data on the recording medium becomes corrupted, format the recording medium to use the medium again.

Capturing a Still Image from a Video

You can capture the desired scene from a recorded video, and store it as a still image.

Preparation:

- Select mode.
- Select the playback mode.

Press SNAPSHOT when playback is paused.

SNAPSHOT



NOTE

- Captured still images are stored at a resolution of 1920 x 1080. The image can be elongated in the horizontal or vertical directions depending on the picture quality of the source video file.
- The continuous shooting function cannot be used to capture images.
- You cannot capture video during playback.

Deleting Files

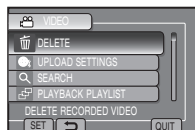
- Protected files cannot be deleted. To delete them, release the protection first.
- Once files are deleted, they cannot be restored. Check files before deleting.

Preparation:

- Select or mode.
- Select the playback mode.

1 Touch MENU.

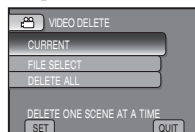
2 Select [DELETE]



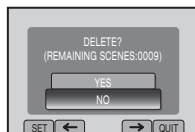
Deleting the Currently Displayed File

After performing steps 1 - 2

3 Select [CURRENT].



4 Select [YES].



You can select the previous or next file by selecting or .

■ To quit the screen

Select [QUIT].

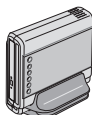
Copying Files

Types of Copying and Connectable Device



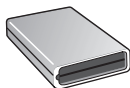
The Camcorder

You can copy files between the SD cards with this camcorder alone.



DVD Burner (CU-VD50 / CU-VD3)

You can copy files recorded on this camcorder onto discs. (p. 35)



BD Burner LaCie Model No. 301828

You can copy files recorded on this camcorder onto discs. (p. 34)



USB External Hard Disk Drive

You can copy files recorded on this camcorder onto a usb external hard disk drive.



PC

You can copy files from the camcorder to a disc using a PC. (p. 40)



VCR/DVD Recorder

You can dub video recorded on this camcorder onto VCR/DVD recorder. (p. 36)

NOTE

- It is recommended to use the JVC DVD burner (CU-VD50/CU-VD3). When using CU-VD20 or CU-VD40, the recording time may take approx. 2 times longer than the time that is described in the instruction manual of DVD burner.
- Recommended USB external hard disk drive

Seagate	FreeAgent™ Desk series
LaCie	Design by Neil Poulton series

- USB external hard disk drive with the capacity over 2 TB cannot be used.

Copying/Moving Files

Preparation:

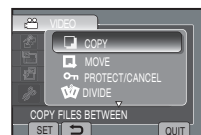
- Select or mode.
- Select the playback mode.
- Make sure that SD card is inserted in the SD Slot.
- Make sure that enough free space is left in the copy/move destination medium.

1 Touch MENU.

2 Select [EDIT].



3 Select [COPY] or [MOVE].



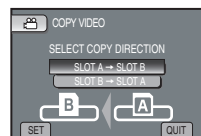
- **[COPY]:**

Files are copied to the destination medium while leaving original files in the source medium.

- **[MOVE]:**

Files are moved to the destination medium while deleting original files (except read-only files) in the source medium.

4 Select the direction. [SLOT A → SLOT B] or [SLOT B → SLOT A]



Copying Files (Continued)

5 Select the desired menu.



• [COPY ALL]/[MOVE ALL]:

Select this to transfer all files in the recording medium.

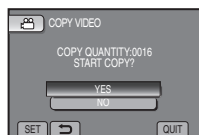
When the size of all files in one SD card is larger than the free space of the other SD card, only the files that can be contained in the free space will be copied.

• [SELECT AND COPY]/[SELECT AND MOVE]:

Select when you want to transfer the selected files.

- 1) Select the desired file, and touch **OK**.
The **✓** mark appears on the file. To select other files, repeat this step.
- 2) Select [EXEC].

6 Select [YES].



File transfer starts. When [COPYING COMPLETED]/[MOVING COMPLETED] appears, touch **OK**.

■ To quit the screen

Select [QUIT].

■ To stop the file transfer

- 1) Select [STOP].
- 2) When [QUIT?] appears, select [YES].

Using a BD/DVD Burner

The files in the camcorder can be backed up to a disc using a BD/DVD burner.

- Use one of the following methods to view the disc. (If you try to play back the disc with incompatible player, the disc may not be ejected.)

- Playback the disc using the camcorder.
- Playback the disc using a BD/DVD burner.*
- Playback on a PC.*
- Playback the disc using a BD/DVD player that supports BD-MV and AVCHD.*

* The disc must first be finalized on the camcorder.

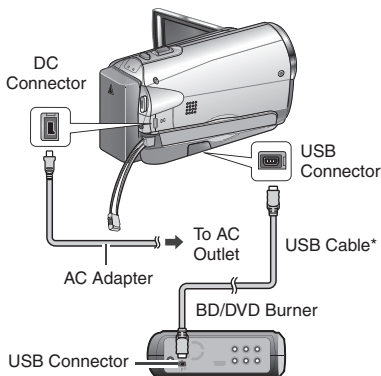
- Discs other than the created BD/DVD using a BD/DVD burner cannot be played.

- When connecting a DVD burner (CU-VD50) to a TV, you can play back the created disc without using the camcorder. When playing back, disconnect the USB cable.

Connection with a BD/DVD Burner

Preparation:

Turn on the camcorder first, then turn on the BD/DVD burner.



NOTE

Refer also to the optional BD/DVD burner's instruction manual.

*

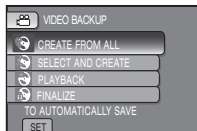
- When connecting to a DVD burner, use the USB cable that came with the DVD burner.
- When connecting to a BD burner, use a USB cable with Mini-A(Male) and B(Male) connectors. JVC's QAM0852-001 (optional) is recommended. Refer to page 41 for details.

Backup All Files

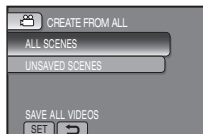
Preparation:

- Connect the camcorder to the BD/DVD burner.
- Select or mode.
- Make sure that SD card is inserted in the SD Slot.
- When using a BD burner, select [CHANGE REC. MEDIA] and select the disc type.

- 1 Select [CREATE FROM ALL] (mode) or [SAVE ALL] (mode).



- 2 Select the desired menu.



- mode: [ALL SCENES]
 mode: [ALL IMAGES]
 All files in the recording medium are copied.
- mode: [UNSAVED SCENES]
 mode: [UNSAVED IMAGES]
 Files that have never been copied are automatically selected and copied.

- 3 Select [EXECUTE].



- 4 Select [YES] or [NO].

- [YES]: Displays the thumbnails by group.
- [NO]: Displays the thumbnails by date.

- 5 Select [EXECUTE].

- The files are copied on the disc. When [COMPLETED] appears, touch **OK**.
- When [INSERT NEXT DISC PRESS [STOP] TO EXIT CREATE] appears, change the disc. Remaining files are copied on the second disc.
- To cancel copying, select [STOP].

Copying Video Files that Have Never Been Copied

Files that have never been copied to the discs are automatically selected and copied.

- 1 Open the LCD monitor to turn on the camcorder.

- 2 Press **DIRECT DISC**.



- 3 Select [YES] or [NO].

- [YES]: Displays the thumbnails by group.
- [NO]: Displays the thumbnails by date.

- 4 Select [EXECUTE].



- The disc begins to be created. When [COMPLETED] appears, touch **OK**.
- When [INSERT NEXT DISC PRESS [STOP] TO EXIT CREATE] appears, change the disc. Remaining files are copied on the second disc.
- To cancel the disc creation, select [STOP].

To quit the screen

- 1) Select [QUIT].
- 2) When [QUIT?] appears, select [YES].

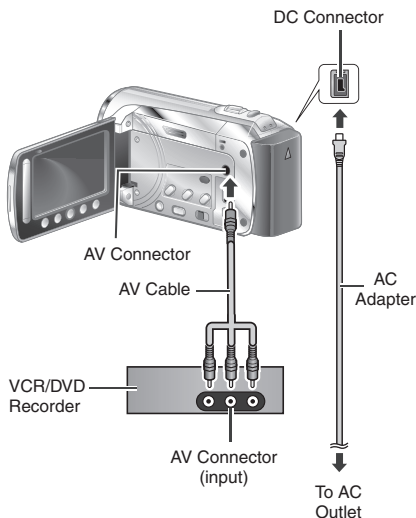
Copying Files (Continued)

Dubbing Files to a VCR/DVD Recorder

Preparation:

- Create a playlist.
- Turn off all units.

■ To connect using the AV connectors (analog dubbing)



1 Open the LCD monitor to turn on the camcorder.

2 Set the VCR/DVD recorder to its **AUX input mode**.

Check that the images from the camcorder are input correctly to the VCR/DVD recorder.

3 Play back playlists on the camcorder.

- 1) Touch **MENU**.
- 2) Select [DUBBING PLAYBACK].
- 3) Select the desired playlist.
- 4) Select [YES]. (A black screen is displayed for 5 seconds at the first and the last scene.)

4 At the point you want to start dubbing, start recording on the VCR/DVD recorder.

Refer to the VCR/DVD recorder's instruction manual.

■ To stop dubbing

Stop recording on the VCR/DVD recorder.

■ To hide the date or icons on the screen

Change the settings in [DISPLAY ON TV] from the MENU.

Creating a Disc using a PC

Creating a Disc using a PC

You can copy the data from the camcorder and create a disc using a PC.

1 Installing the software to the PC

System Requirements

Windows Vista

OS:	Windows Vista® Home Basic (SP1) Home Premium (SP1) (32-bit, pre-installed)
CPU:	Intel® Core™ Duo, 1.66 GHz or higher (Intel® Core™ 2 Duo 2.13 GHz or higher recommended.)
RAM:	At least 2 GB

Windows XP

OS:	Windows® XP Home Edition (SP2/SP3) Professional (SP2/SP3) (pre-installed)
CPU:	Intel® Core™ Duo, 1.66 GHz or higher (Intel® Core™ 2 Duo 2.13 GHz or higher recommended.)
RAM:	At least 1 GB

To check the PC specification

Right-click on [Computer] (or [My Computer]) in the [Start] menu and select [Properties].

NOTE

- Make sure your PC has a recordable BD/DVD drive.
- If your system does not meet the requirements, it is recommended to copy files using the BD/DVD burner. (▶ p. 35)
- Macintosh users may use the software included with their Macintosh (iMovie '08, iPhoto) to copy files to their computer.

Preparation:

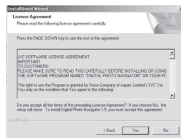
Load the provided CD-ROM into the PC. In Windows Vista, the auto play dialog box appears.

1 Click [Easy Installation].



Follow the on-screen instructions.

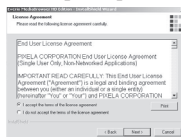
2 Click [Yes].



3 Select the desired language and click [Next].

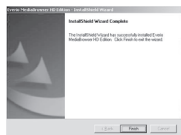


4 Click [Next].



Creating a Disc using a PC (Continued)

5 Click [Finish].

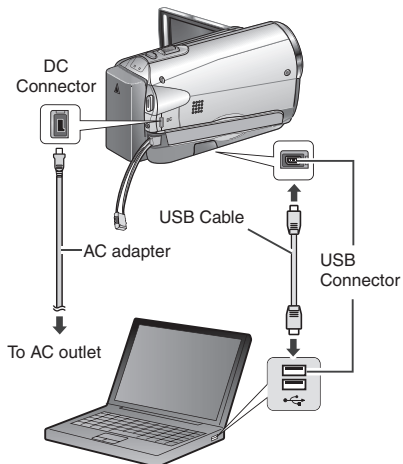


Everio Media Browser icon is created on the desktop.



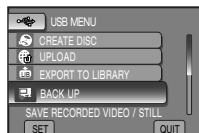
INFORMATION

Everio MediaBrowser video editing capability is available for files copied from the camcorder to the PC.



1 Open the LCD monitor to turn on the camcorder.

2 Select [BACK UP].

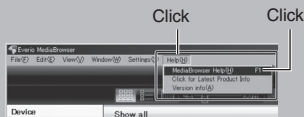


Everio MediaBrowser starts on the PC.



To see the Instruction Guide for Everio MediaBrowser

- 1) Double-click the icon of Everio MediaBrowser.
- 2) Click [Help], and click [MediaBrowser Help].



2 Making Backup on the PC

Preparation:

- Install the software to the PC.
- Make sure that enough free space is left in the PC's harddisk.
- Close the LCD monitor to turn off the camcorder.

3 Click [All volume in camcorder] and click [Next].



4 Click [Start].



Backup starts.

■ To disconnect the camcorder from the PC

- 1) Right-click the icon (Safely Remove Hardware) on the task bar and select [Safely remove USB Mass Storage Device].
- 2) Follow the on-screen instructions and make sure that the device can be safely removed.
- 3) Disconnect the USB cable and close the LCD monitor.

NOTE

It takes time to back up many videos.

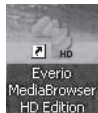
③ Making User Lists to Arrange the Files

You can make a user list of a certain subject (such as Travel, Athletic meet) and put the files related to the subject into the user list.

Preparation:

Make backup on the PC.

1 Double-click the icon and open the calendar.



2 Select [Movies only].



3 Click [+].



4 Input the name of the new user list and click [OK].



5 Click the recording date.



The files recorded on the day are displayed.

6 Drag the file and drop into the user list.



To add other files into the user list, repeat steps 5 and 6.

Creating a Disc using a PC (Continued)

❶ Copying Files to a disc

Everio MediaBrowser supports 3 disc formats. Select the one that suits your purpose.

DVD-Video disc: Suitable if you will give the disc to your friends and relatives.

AVCHD disc: Suitable for high quality video.

BD: Suitable for high quality video with long recording time.

❷ Select the user list and click [Create Disc].



❸ Select the disc type and click [Next].



❹ Click [Select files individually] and click [Next].

To add all the files onto discs, click [Select all files displayed], then go to step 5.



❺ Drag the file, and drop into the part at the bottom and click [Next].



❻ Input the disc name, select the top menu style and click [Next].



❼ Click [Start].



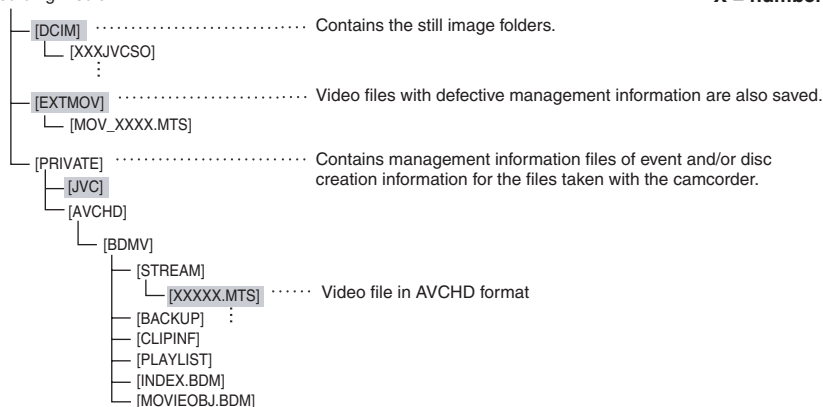
NOTE

- When copying video recorded in UXP recording mode to create an AVCHD disc, the video needs to be converted to XP recording mode before copying. Therefore, it may take longer time than copying video recorded in other modes.
- Use Everio MediaBrowser Player to playback the disc. Refer to the help of the provided Everio MediaBrowser software to operate.
- For detail on operating Everio MediaBrowser, click [Help] and refer to [MediaBrowser Help].
- Adobe® Reader® must be installed to read [MediaBrowser Help]. Adobe® Reader® can be loaded from Adobe's web site: <http://www.adobe.com>
- For assistance in operating the provided software, refer to the support information. (p. 41)

Folder Structure and Extensions

Recording medium

X = number



Customer Support Information

Use of this software is authorized according to the terms of the software licence.

JVC

When contacting the nearest JVC office or agency in your country (refer to the JVC Worldwide Service Network at <http://www.jvc-victor.co.jp/english/worldmap/index-e.html>) about this software, please have the following information ready.

- Product Name, Model, Problem, Error Message.
- PC, (Manufacturer, Model (Desktop/Laptop), CPU, OS, Memory (MB), Available Hard Disk Space (GB)).

Please note that it may take some time to respond to your questions, depending on their subject matter. JVC cannot answer questions regarding basic operation of your PC, or questions regarding specifications or performance of the OS, other applications or drivers.

Pixela

Region	Language	Phone #
USA and Canada	English	+1-800-458-4029 (toll-free)
Europe (UK, Germany, France and Spain)	English/Germany/France/Spanish	+1-800-1532-4865 (toll-free)
Other Countries in Europe	English/Germany/France/Spanish/ Italian/Dutch	+44-1489-564-764
Asia (Philippines)	English	+63-2-438-0090
China	Chinese	+86-21-5385-3786

Homepage: <http://www.pixela.co.jp/oem/jvc/e/index.html>


Please check our website for latest information and downloading.

Using with a Portable Media Player

Turning on the Export Mode

You can easily transfer videos recorded in export mode to iTunes®. All the files with the export setting turned on are transferred to PC. For details on transferring, refer to the operation guide of MediaBrowser in the CD-ROM.

Preparation:

- Select  mode.
- Select the recording mode.

Press EXPORT twice.

EXPORT




■ To turn off the export mode

Press **EXPORT** twice.

Changing the Export Setting

You can set the recorded videos to the export setting.

Preparation:

- Select  mode.
- Select the playback mode.

1 Press EXPORT.

EXPORT



2 Select the file and select [LIB.].



- To check the content of the file, select [CHECK].

3 Select [DONE].

■ To cancel the export setting

Select the file and press **LIB.** again.

■ To quit the screen

- 1) Select [DONE].
- 2) Select [YES].

Transferring the Files to PC

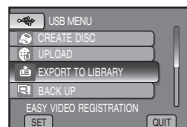
Preparation:

Install iTunes® on a PC.

<http://www.apple.com/itunes/>

1 Connect the camcorder to the PC with the USB cable.

2 Select [EXPORT TO LIBRARY].



All the files with the export setting turned on are transferred to PC.

■ Cannot export the file to iTunes®.

Refer to "Q&A", "Latest Information", "Download Information", etc. in [Click for Latest Product Info] in the help of the provided Everio MediaBrowser software.

Turning on the Upload Mode

You can upload the file to video sharing websites (YouTube™) quickly after recording. For more information on YouTube™, visit YouTube™ web site: <http://youtube.com/>

Preparation:

- Select mode.
- Select the recording mode.

Press **UPLOAD** twice.

UPLOAD



If you record a file with the upload mode set on, the recording stops automatically 10 minutes after the recording is started. The remaining time is displayed on the LCD monitor.

NOTE

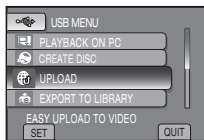
The upload mode turns off each time recording is finished.

Uploading Files

For details on uploading files, refer to the operation guide of MediaBrowser in the CD-ROM.

1 Connect the camcorder to the PC with the USB cable.

2 Select **[UPLOAD]**.



■ Cannot upload the file to YouTube™

- You need your YouTube™ account to upload files to YouTube™. Create your account.
- Refer to “Q&A”, “Latest Information”, “Download Information”, etc. in [Click for Latest Product Info] in the help of the provided Everio MediaBrowser software.

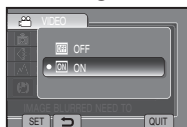
Changing the Menu Settings

1 Touch MENU.

2 Select the desired menu.



3 Select the desired setting.



■ To return to the previous screen

Select [SET].

■ To quit the screen

Select [QUIT].

Troubleshooting

Before requesting service, consult the following chart. If the solutions indicated in the chart do not solve the problem, consult your nearest JVC dealer or JVC service center for instructions.

Refer also to the FAQ of new products on JVC's website.

The following phenomena are not malfunctions.

- The camcorder heats up when it is used for a long time.
- The battery heats up during charging.
- When playing back a video, the image stops momentarily or the sound is interrupted at junctions between scenes.
- LCD monitor momentarily become red or black when sunlight is recorded.
- Black spots, or red, green, or blue spots appear on the LCD monitor.
(The LCD monitor contains 99.99% effective pixels, but 0.01% of fewer pixels may be ineffective.)

Trouble		Action
Card	Cannot insert the SD card.	<ul style="list-style-type: none">• Check that the SD card is facing the right direction.
Power	No power is supplied.	<ul style="list-style-type: none">• Connect the AC adapter correctly.• Recharge the battery.
Recording	Recording cannot be performed.	<ul style="list-style-type: none">• SD card is full. Delete unnecessary files or replace the SD card.
	Recording stops by itself.	<ul style="list-style-type: none">• Insert a commercially available SD card, and set each of the [VIDEO SLOT SELECTION] and [IMAGE SLOT SELECTION] to [SLOT A] or [SLOT B].• Recording stops automatically after 12 hours of non-stop recording. To ensure continuous recording, set [AUTO SWITCH REC MEDIA] to [ON] before you start recording.
	Vertical lines appear on recorded images.	<ul style="list-style-type: none">• Such a phenomenon occurs when shooting a subject illuminated by bright light. This is not a malfunction.

Trouble		Action
Display	The LCD monitor is difficult to see.	<ul style="list-style-type: none"> The LCD monitor may be difficult to see if used in bright areas such as under direct sunlight.
	The remaining battery display is not correct.	<ul style="list-style-type: none"> Fully charge the battery, run it down, and then recharge it again. If the camcorder is used for long periods of time in high or low temperatures, or if the battery is repeatedly charged, the amount of remaining battery may not be displayed correctly.
Playback	Sound or video are interrupted.	<ul style="list-style-type: none"> Sometimes playback is interrupted at the connecting section between two scenes.
	Cannot find a recorded video/image.	<ul style="list-style-type: none"> Select [PLAYBACK OTHER FILE] then search the video on the index screen. (Video files that have damaged management information can be played back.) Cancel group display and date search functions. Change the setting in [VIDEO SLOT SELECTION] or [IMAGE SLOT SELECTION]. (Files on other media are not displayed.) Slide the mode switch to select the desired mode (📷 or 📹).
Other problems	The camcorder operates slowly when switching between video mode and still image mode, or when switching the power on or off.	<ul style="list-style-type: none"> If there are many files (such as video) in the camcorder, it takes time for the camcorder to respond. It is recommended that you copy all files from the camcorder onto your computer, and erase the files from the camcorder.
	The lamp does not flash during battery charging.	<ul style="list-style-type: none"> Check the remaining battery charge. (When the battery is fully charged, the lamp does not flash.) When recharging in either a hot or cold environment, ensure that battery is being charged within the permitted temperature range. (If the battery is being recharged outside the permitted temperature range, recharging may stop to protect the battery.)
	When connecting to the HDMI cable, the image or sound does not appear on the TV properly.	<ul style="list-style-type: none"> When connecting to the HDMI cable, the image or sound may not appear on the TV properly depending on the TV connected. In such cases, perform the following operations. <ol style="list-style-type: none"> 1) Disconnect the HDMI cable and connect it again. 2) Turn off and on the camcorder again.
	HDMI-CEC functions do not work properly, and the TV does not work in conjunction with the camcorder.	<ul style="list-style-type: none"> TVs may operate differently depending on the specifications, even if they are HDMI-CEC compliant. Therefore, the HDMI-CEC functions of the camcorder cannot be guaranteed to operate in combination with all the TVs. In such cases, set [HDMI CONTROL] to [OFF].

Troubleshooting (Continued)

Trouble		Action
Other problems	Cannot upload the file to YouTube™	<ul style="list-style-type: none"> You need your YouTube™ account to upload files to YouTube™. Create your account. Refer to "Q&A", "Latest Information", "Download Information", etc. in [Click for Latest Product Info] in the help of the provided Everio MediaBrowser software.
	Cannot export the file to iTunes®	<ul style="list-style-type: none"> Refer to "Q&A", "Latest Information", "Download Information", etc. in [Click for Latest Product Info] in the help of the provided Everio MediaBrowser software.

■ To reset the camcorder when it does not operate normally

- Close the LCD monitor and remove the power supply (battery pack or AC adapter) from the camcorder, then reattach it.
- Execute [FACTORY PRESET].

Warning Indications

Indication	Action
SET DATE/TIME!	<ul style="list-style-type: none"> Set the clock. If the message still appears after setting the clock, the battery for the clock has been depleted. Consult your nearest JVC dealer.
COMMUNICATING ERROR	<ul style="list-style-type: none"> Be sure to use JVC battery packs.
CANNOT USE IN VIDEO MODE	<ul style="list-style-type: none"> Replace the SD card. (Files recorded with other devices that support AVCHD cannot be played back on this camcorder.)
NOT FORMATTED	<ul style="list-style-type: none"> Select [OK] and select [YES] to perform formatting.
FORMAT ERROR!	<ul style="list-style-type: none"> Check the operating procedure, and perform once again. Turn off the camcorder, and turn it on again.
DATA DELETION ERROR	
MEMORY CARD ERROR!	<ul style="list-style-type: none"> Turn off the camcorder, and turn it on again. Remove and re-insert the SD card. (MultiMediaCard cannot be used.) Remove any dirt from the SD card terminals. Insert the SD card before switching the power on. If the problem persists, back up all data, and then perform formatting. All data is deleted.
CANNOT TAKE MORE STILL IMAGES AT THE MOMENT	<ul style="list-style-type: none"> Stop video recording, and then record a still image. (If an SD card is removed or inserted during video recording, a still image cannot be recorded.)
RECORDING CANCELLED	<ul style="list-style-type: none"> Insert a new or formatted SD card. Set [VIDEO SLOT SELECTION] to different slot, then record to an SD card in [SLOT A] or [SLOT B]. Turn off the camcorder and turn it on again.

Indication	Action
RECORDING FAILURE	<ul style="list-style-type: none"> ● Remove and re-insert the SD card. (MultiMediaCard cannot be used.) ● Remove any dirt from the SD card terminals. ● Insert the SD card before switching the power on.
PLAYBACK FAILED	
USE AC ADAPTOR	<ul style="list-style-type: none"> ● Use the AC Adapter as power supply.
POWER IS OFF, OR USB DEVICE IS UNSUPPORTED	<ul style="list-style-type: none"> ● Turn on the power of the connected USB device. ● Connect the AC adapter to the BD/DVD burner.
DVD-RW DISC HAS BEEN ALREADY USED	<ul style="list-style-type: none"> ● Replace the disc of the BD/DVD burner with another disc.
FINALIZATION FAILED	<ul style="list-style-type: none"> ● Replace the disc of the BD/DVD burner with another disc.
NO FILES	<ul style="list-style-type: none"> ● Slide the mode switch to select the desired mode (👤 or 📷).
VIDEO MANAGEMENT FILE IS DAMAGED, RECOVERY IS REQUIRED TO RECORD/PLAYBACK, RECOVER?	<ul style="list-style-type: none"> ● Select [OK] to restore.
NO EVENT REGISTERED SCENES	<ul style="list-style-type: none"> ● Register events to the files before you start recording.
CANNOT DETECT FACE	<ul style="list-style-type: none"> ● Turn the face detection mode on before you perform recording or snapshot.

Cleaning

Before cleaning, turn off the camcorder and remove the battery pack and AC adapter.

■ To clean the camcorder

Wipe the camcorder gently with a soft cloth. If the camcorder is particularly dirty, dip the cloth into diluted mild soap and wring it out well. After wiping with the wet cloth, wipe again with a dry cloth.

■ To clean the LCD monitor

Wipe the monitor gently with a soft cloth. Be careful not to damage the monitor.

■ To clean the lens

Wipe gently with lens cleaning paper.

NOTE

- Avoid using strong cleaning agents such as benzine or alcohol.
- Mold may form if the lens is left dirty.
- When using a cleaner or chemically treated cloth, refer to the cautions for each product.

Specifications

Camcorder

■ For general

Power supply

- DC 11 V (Using AC adapter)
- DC 7.2 V (Using battery pack)

Power consumption

Approx. 3.3 W*

* When the LED light is off and the monitor backlight is set to [STANDARD] mode.

Rated Current Consumption:

1A

Dimensions (W x H x D)

54.5 mm x 65 mm x 112.5 mm
(2-3/16" x 2-9/16" x 4-7/16")

Weight

Approx. 260 g (0.57 lbs)
Approx. 310 g (0.68 lbs) (incl. battery and grip belt)

Operating temperature

0°C to 40°C (32°F to 104°F)

Operating humidity

35% to 80%

Storage temperature

-20°C to 50°C (-4°F to 122°F)

Pickup

1/4" (2,800,000 pixels) progressive CMOS

Lens

F 1.9 to 3.2,
f = 2.9 mm to 58.0 mm,
20:1 power zoom lens

Filter diameter

ø30.5 mm

LCD monitor

2.7" diagonally measured,
LCD panel/TFT active matrix system

LED Light

Within 1.5 m (4.9 ft)
(recommended shooting distance)

■ For video/audio

Recording/Playback format

Video: MPEG-4 AVC/H.264
Audio: Dolby Digital (2ch)

Signal format

1080i/60

Recording mode (video)

- UXP: 1920 x 1080 pixels, average of 24 Mbps (VBR)
- XP: 1920 x 1080 pixels, average of 17 Mbps (VBR)
- SP: 1920 x 1080 pixels, average of 12 Mbps (VBR)
- EP: 1920 x 1080 pixels, average of 5 Mbps (VBR)

Recording mode (audio)

48 kHz, 256 kbps

■ For still image

Format

JPEG

Image size

1920 x 1080
1440 x 1080
640 x 480

Picture quality

FINE / STANDARD

■ For connectors

HDMI

HDMI™ (V.1.3 with x.v.Color™)

Component output

Y, Pb, Pr component output
Y: 1.0 V (p-p), 75 Ω
Pb/Pr: 0.7 V (p-p), 75 Ω

AV output

Video output: 1.0 V (p-p), 75 Ω
Audio output: 300 mV (rms), 1 kΩ

USB

Mini USB type A and type B,
USB 2.0 compliant

AC Adapter

Power requirement

AC 110 V to 240 V , 50 Hz/60 Hz

Output

DC 11 V ——— , 1 A

Remote Control

Power supply

DC 3 V

Battery life

Approx. 1 year

(depending on the frequency of use)

Operating distance

Within 5 m (16.4 ft)

Operating temperature

0°C to 40°C (32°F to 104°F)

Dimensions (W x H x D)

42 mm x 14.5 mm x 91 mm

(1-11/16" x 5/8" x 3-5/8")

Weight

Approx. 30 g (0.07 lbs)

(incl. battery)

Design and specifications are subject to change without notice.

Approximate recording time (for video)

h: hour/m: minute

Recording medium Quality		SD or SDHC Card			
		4 GB	8 GB	16 GB	32 GB
AVCHD	UXP	20 m	40 m	1 h 20 m	2 h 40 m
	XP	30 m	1 h	2 h	4 h
	SP	44 m	1 h 28 m	2 h 56 m	5 h 52 m
	EP	1 h 50 m	3 h 40 m	7 h 20 m	14 h 40 m

Approximate number of storable images (for still image)

Recording medium Image size/Quality		SD or SDHC Card						
		512 MB	1 GB	2 GB	4 GB	8 GB	16 GB	32 GB
16:9	1920 x 1080 / FINE	510	1030	2100	4140	8330	9999	9999
	1920 x 1080 / STANDARD	810	1620	3210	6310	9999	9999	9999
4:3	1440 x 1080 / FINE	680	1360	2770	5450	9999	9999	9999
	1440 x 1080 / STANDARD	1070	2140	4360	8570	9999	9999	9999
	640 x 480 / FINE	3330	6670	9999	9999	9999	9999	9999
	640 x 480 / STANDARD	5990	9999	9999	9999	9999	9999	9999

The recordable time and the number of still images are approximate and may differ depending on the recording environment, the condition of the SD card, or the remaining battery power.

Cautions

AC Adapter

When using the AC adapter in areas other than the USA

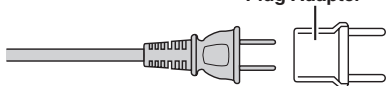
The provided AC adapter features automatic voltage selection in the AC range from 110 V to 240 V.

USING HOUSEHOLD AC PLUG ADAPTER

In case of connecting the unit's power cord to an AC wall outlet other than American National Standard C73 series type use an AC plug adapter, called a "Siemens Plug", as shown.

For this AC plug adapter, consult your nearest JVC dealer.

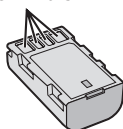
Plug Adapter



Battery Packs

The supplied battery pack is a lithium-ion battery. Before using the supplied battery pack or an optional battery pack, be sure to read the following cautions:

Terminals



● To avoid hazards

- ... **do not** burn.
- ... **do not** short-circuit the terminals. Keep it away from metallic objects when not in use. When transporting, make sure the provided battery cap is attached to the battery. If the battery cap is misplaced, carry the battery in a plastic bag.
- ... **do not** modify or disassemble.
- ... **do not** expose the battery to temperatures exceeding 60°C (140°F), as this may cause the battery to overheat, explode or catch fire.
- ... use only specified chargers.

● To prevent damage and prolong service life

- ... do not subject to unnecessary shock.
- ... charge within the temperature range of 10°C to 35°C (50°F to 95°F). This is a chemical reaction type battery — cooler temperatures impede chemical reaction, while warmer temperatures can prevent complete charging.
- ... store in a cool, dry place. Extended exposure to high temperatures will increase natural discharge and shorten service life.
- ... fully charge and then fully discharge the battery every 6 months when storing the battery pack over a long period of time.
- ... remove from charger or powered unit when not in use, as some machines use current even when switched off.

ATTENTION:



The product you have purchased is powered by a rechargeable battery that is recyclable.

Please call 1-800-8-BATTERY for information on how to recycle this battery.

Recording Medium (SD Card)

- **Be sure to follow the guidelines below to prevent corruption or damage to your recorded data.**
 - Do not bend or drop the recording medium, or subject it to strong pressure, jolts or vibrations.
 - Do not splash the recording medium with water.
 - Do not use, replace, or store the recording medium in locations that are exposed to strong static electricity or electrical noise.
 - Do not turn off the camcorder power or remove the battery or AC adapter during shooting, playback, or when otherwise accessing the recording medium.
 - Do not bring the recording medium near objects that have a strong magnetic field or that emit strong electromagnetic waves.
 - Do not store the recording medium in locations with high temperature or high humidity.
 - Do not touch the metal parts.

LCD Monitor

- **To prevent damage to the LCD monitor, DO NOT**
 - ... push it strongly or apply any shocks.
 - ... place the camcorder with LCD monitor on the bottom.
- **To prolong service life**
 - ... avoid rubbing it with coarse cloth.

Main Unit

● For safety, DO NOT

- ... open the camcorder's chassis.
- ... disassemble or modify the unit.
- ... allow inflammables, water or metallic objects to enter the unit.
- ... remove the battery pack or disconnect the power supply while the power is on.
- ... leave the battery pack attached when the camcorder is not in use.
- ... place naked flame sources, such as lighted candles, on the apparatus.
- ... expose the apparatus to dripping or splashing.
- ... leave dust or metal objects adhered to the power plug or an AC wall outlet.
- ... insert any objects in the camcorder.

● Avoid using the unit

- ... in places subject to excessive humidity or dust.
- ... in places subject to soot or steam such as near a cooking stove.
- ... near appliances generating strong magnetic or electric fields (speakers, broadcasting antennas, etc.).
- ... in places subject to extremely high (over 40°C or 104°F) or extremely low (under 0°C or 32°F) temperatures.

● DO NOT leave the unit

- ... in places of over 50°C (122°F).
- ... in places where humidity is extremely low (below 35%) or extremely high (above 80%).
- ... in direct sunlight.
- ... in a closed car in summer.
- ... near a heater.
- ... in high places such as on a TV. Leaving the unit in high places while a cable is connected may result in a malfunction if the cable is caught and the unit falls onto the floor.

● To protect the unit, DO NOT

- ... allow it to become wet.
- ... drop the unit or strike it against hard objects.
- ... subject it to shock or excessive vibration during transportation.
- ... keep the lens directed at extremely bright objects for long periods.
- ... expose the lens to direct sunlight.
- ... swing it excessively when using the hand strap.
- ... swing the soft camcorder case excessively when the camcorder is inside it.
- ... place the camcorder in dusty or sandy areas, such as on a beach.

● To prevent the unit from dropping,

- Fasten the grip belt securely.
 - When using the camcorder with a tripod, attach the camcorder to the tripod securely.
- If the camcorder drops, you may be injured and the camcorder may be damaged.
When a child uses the unit, there must be parental guidance.

Declaration of Conformity

Model Number : GZ-HM200U

Trade Name : JVC

Responsible party : JVC AMERICAS CORP.

Address : 1700 Valley Road Wayne, N. J. 07470

Telephone Number : 973-317-5000

This device complies with Part 15 of 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 undesired operation.

Changes or modifications not approved by JVC could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

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

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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