JVC

EN
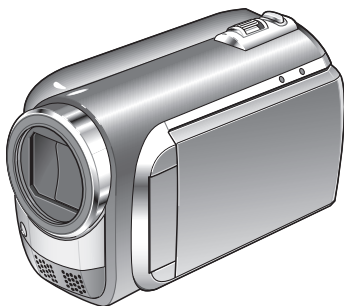
INSTRUCTIONS

CAMCORDER

GZ-MG680 AA
GZ-MG630 AA

Dear Customers

Thank you for purchasing this camcorder. Before use, please read the safety information and precautions contained in pages 6 and 7 to ensure safe use of this product.

HDD

microSDHC™

DOLBY DIGITAL STEREO CREATOR

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

ENGLISH

Easy Start Guide

Charge the battery before recording

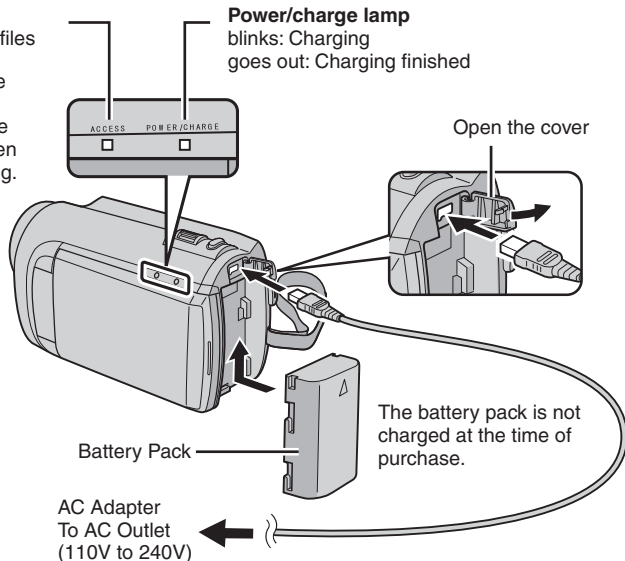Turn off the camcorder and attach the battery pack.

Access lamp
blinks: Accessing files

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

Power/charge lamp
blinks: Charging
goes out: Charging finished

ACCESS   POWER/CHARGE

Open the cover

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

Battery Pack

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

CAUTION
● **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.**
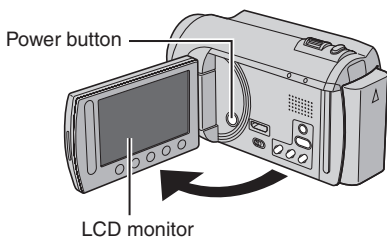
Grip Adjustment

Adjust the strap and fasten.

● Fasten the strap when you grip the camcorder.
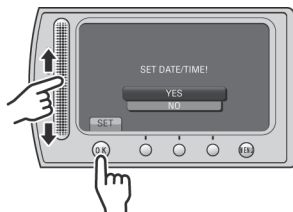● When carrying the camcorder, please be careful not to drop it.

Grip Strap

Fasten

Date/Time Setting
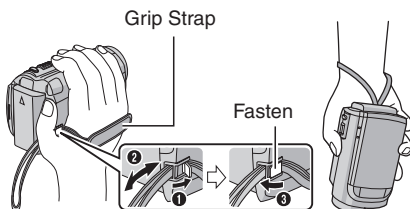
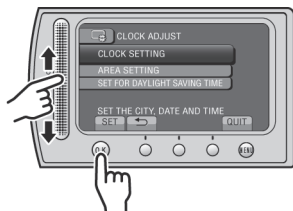### 1 Open the LCD monitor to turn on the camcorder

Power button

LCD monitor

2 Select [YES] within 10 seconds

Slide your finger up and down on the sensor. Then touch **OK**.
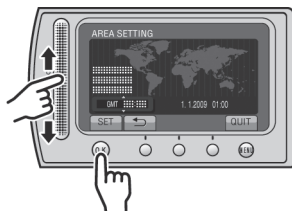
SET DATE/TIME!
YES
NO
SET

- 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.
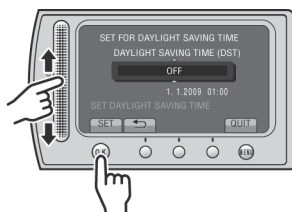
3 Select [CLOCK SETTING]

CLOCK ADJUST
CLOCK SETTING
AREA SETTING
SET FOR DAYLIGHT SAVING TIME
SET THE CITY, DATE AND TIME
SET   QUIT

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

AREA SETTING
GMT   1. 1.2009 01:00
SET   QUIT

5 Select [ON] if daylight saving time is effective

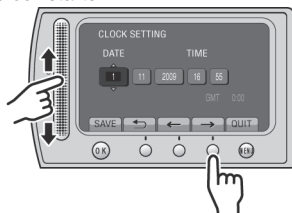SET FOR DAYLIGHT SAVING TIME
DAYLIGHT SAVING TIME (DST)
OFF
1. 1.2009 01:00
SET.DAYLIGHT SAVING TIME
SET   QUIT

6 Set the date and time

Touch sensor: Sets the date and time
→: Moves the cursor to the right
OK: Clock starts

CLOCK SETTING
DATE   TIME
1   11   2009   16   55
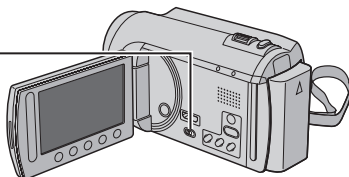GMT   0:00
SAVE   ←   →   QUIT

Video recording

CAUTION

Before recording an important scene, it is recommended to conduct a trial recording.
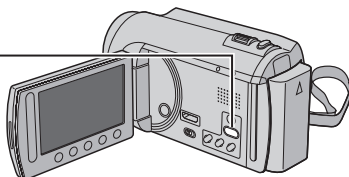
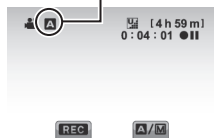### 1 Slide the mode switch to select ▟ (video) mode

2 Select recording mode

PLAY / REC

The mode changes when you press the button.

The auto recording indicator appears.

▟ Ⓐ   ⊞ [4 h 59 m]
            0 : 04 : 01 ●❚❚

REC   Ⓐ/Ⓜ

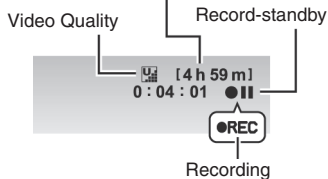### 3 Start recording

START /STOP

Press the **START/STOP** button to start recording, and press it again to stop.
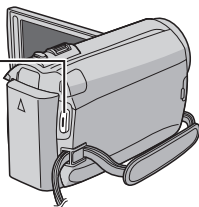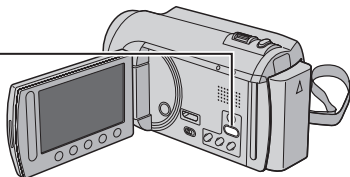
Remaining space on the hard disk

Video Quality   Record-standby

⊞ [4 h 59 m]
0 : 04 : 01 ●❚❚

●REC

Recording

Playing back

1 **Select playback mode**

PLAY / REC

The mode changes when you press the button.

2 **Select the desired file**

Index screen

VIDEO PLAYBACK 1/2

HDD

DIGEST

01 11.2009 18:55

3 **Select ▶ (Touch OK)**

Playback screen

LASER TOUCH OPERATION

■ **To perform operations such as forward search or reverse search (☞ p. 22)**
■ **To view files on TV (☞ p. 25)**

CAUTION

Do not forget to make copies after recording!
● To copy files onto DVD discs (☞ p. 27)
● To dub files to a VCR/DVD recorder (☞ p. 34)
● To play back a created disc (☞ p. 28)
● To edit files on your computer (☞ p. 29)

Safety Precautions

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

CAUTIONS:

● If you notice smoke or a peculiar smell coming from the camcorder or AC Adapter, shut it down and unplug it immediately. Continue using the camcorder or AC Adapter under these conditions could lead to fire or electric shock. Contact your JVC dealer. Do not attempt to repair the malfunction yourself.

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

● When you are not using the AC adapter for a long period of time, it is recommended that you disconnect the power cord from AC outlet.

● In certain areas, use the conversion plug depending on the type of your AC wall outlet..

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.

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.

CAUTION:

The mains plug shall remain readily operable.

CAUTION:

To avoid electric shock or damage to the unit, first firmly insert the small end of the power cord into the AC Adapter until it is no longer wobbly, and then plug the larger end of the power cord into an AC outlet.
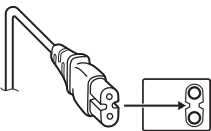
Caution on Replaceable lithium battery

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, 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.

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 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.

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
● Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.
● 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.
● iTunes, iMovie, iPhoto are trademarks of Apple Inc., registered in the U.S. and other countries.
● YouTube and the YouTube logo are trademarks and/or registered trademarks of YouTube LLC.
● Other product and company names included in this instruction manual are trademarks and/or registered trademarks of their respective holders.

Contents

How to use the Touch Sensor

After the menu is displayed on the LCD monitor:
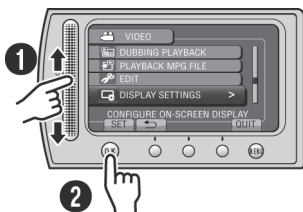
❶ Slide your finger up and down on the sensor.
❷ Select [SET]. (Touch **OK**.)
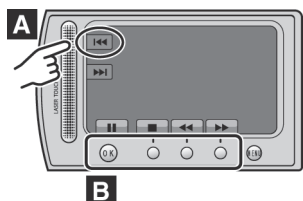
A To select an on-screen button appearing on the left side, touch the portion of the sensor next to the on-screen button.

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.

Read This First!

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

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.

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 consult your nearest JVC dealer
● 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].

Accessories
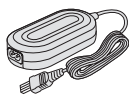
AP-V20M

AC Adapter

Power Cord

BN-VF808U

Battery Pack

AV Cable

USB Cable

RM-V751U

Remote Control

CR2025

Lithium Battery
Pre-installed in the
remote control.
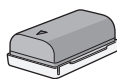
CD-ROM

Core Filter

NOTE

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

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
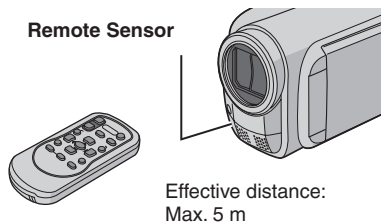
NOTE

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

**Lithium Battery
(CR2025)**
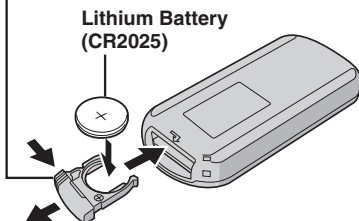
Attaching the Core Filter to the USB Cable

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**　　　　**Wind once.**
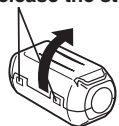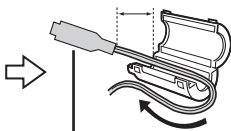
**To be connected to
the camcorder**

Index
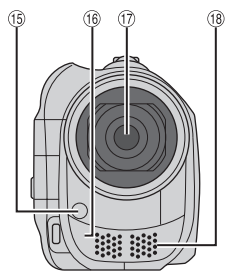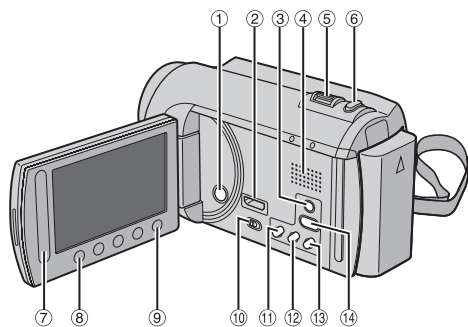
- Be careful not to cover ⑮, ⑯, ⑰, and ⑱ during shooting.
- The LCD monitor can rotate 270°.

180°

90°
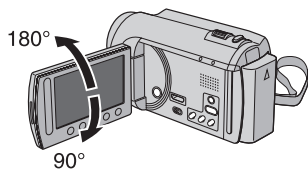
Camcorder

① Power Button
② GZ-MG680 HDMI Mini Connector (☞ p. 25)
③ **DISPLAY** Button (☞ p. 15)
④ Speaker
⑤ Zoom Lever (☞ p. 21)
　 Speaker Volume Control
⑥ **SNAPSHOT** Button (☞ p. 20)

⑦ Touch Sensor
⑧ **OK** Button
⑨ **MENU** Button

⑩ Mode Switch [🎥, 📷]
⑪ **UPLOAD** Button (☞ p. 36)
　 TITLE Button
⑫ **EXPORT** Button (☞ p. 35)
⑬ **DIRECT DVD** Button (☞ p. 28)
　 INFO Button (☞ p. 21)
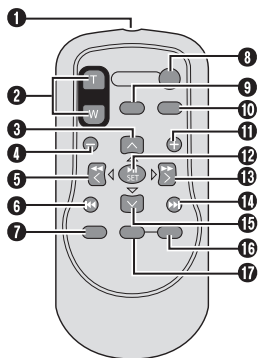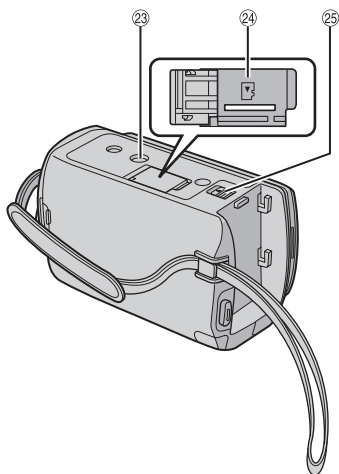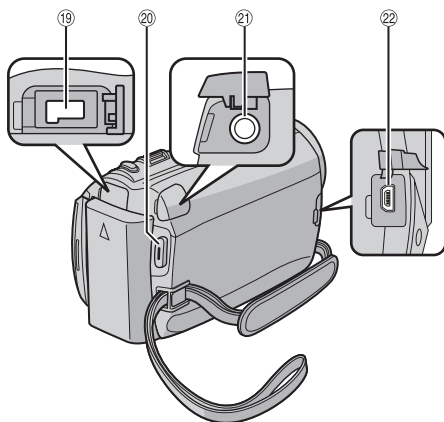⑭ **PLAY/REC** Button (☞ p. 19, 20, 22, 23)

⑮ LED Light (☞ p. 21)
⑯ Remote Sensor
⑰ Lens
⑱ Stereo Microphone

⑲ DC Connector
⑳ **START/STOP** Button (☞ p. 19)
㉑ AV Connector (☞ p. 25, 34)
㉒ USB Connector (☞ p. 27, 30)

㉓ Tripod Mounting Socket
㉔ microSD Card Slot
㉕ Battery Release Button

Remote Control

❶ Infrared Beam Transmitting Window
❷ **ZOOM** (**T/W**) Buttons (Zoom in/Out)
❸ Up Button
❹ Skip Backward Button

❺ Left Button
❻ Back Button
❼ **PLAYLIST** Button
❽ **START/STOP** Button

❾ **S.SHOT(SNAPSHOT)** Button
❿ **INFO** Button
⓫ Skip Forward Button
⓬ **PLAY/PAUSE/SET** Button

⓭ Right Button
⓮ Next Button
⓯ Down Button
⓰ **INDEX** Button*
⓱ **DISP** Button

---

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

🎥 mode:
Index Screen ←→ Group Index Screen
📷 mode:
Index Screen ←→ Date Index Screen

Tripod Mounting

Align the camcorder stud hole with the tripod stud, and the mounting socket with the screw, and then rotate the camcorder clockwise to mount it to the tripod.
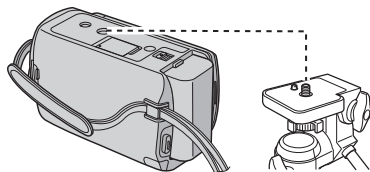
NOTE

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

Indications on LCD Monitor

During both Video and Still Image Recording
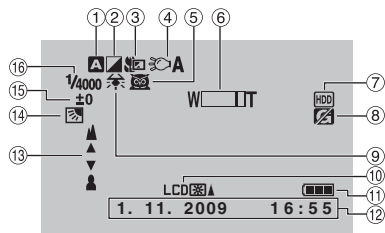
① Selected Recording Mode Indicator
   (☞ p. 24)
   A : Auto Mode
   M : Manual Mode
② Effect Mode Indicator
③ Tele Macro Mode Indicator
④ LED Light Indicator (☞ p. 21)
⑤ Scene Select Indicator
⑥ Zoom Indicator (☞ p. 21)
⑦ Recording Medium Indicator
⑧ Drop Detection Indicator (Appears when [DROP DETECTION] is set to [OFF].)
⑨ White Balance Indicator
⑩ Monitor Backlight Indicator
⑪ Battery Indicator
⑫ Date/Time (☞ p. 16)
⑬ Manual Focus Adjustment Indicator
⑭ Backlight Compensation Indicator (☞ p. 24)
⑮ Brightness Control Indicator
   🔲 : Photometry Area Control Indicator
⑯ Shutter Speed

During Video Recording Only
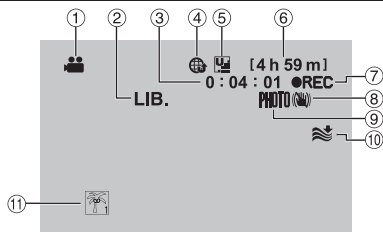
① Mode Indicator
② EXPORT Mode Indicator (☞ p. 35)
③ Counter
④ Upload Mode Indicator (☞ p. 36)
   ⬛ : **GZ-MG680** Analog Input Indicator
⑤ Video Quality: 🔳 (ULTRA FINE), 🔳 (FINE), 🔳 (NORMAL), 🔳 (ECONOMY)
⑥ Remaining Time
⑦ ●REC: (Appears during recording.)
   ●‖ : (Appears during record-standby mode.)
⑧ Digital Image Stabilizer (DIS) Indicator (Appears when [DIS] is set to [OFF].)
⑨ Shooting Indicator (☞ p. 19)
⑩ Wind Cut Indicator
⑪ Event Indicator

During Still Image Recording Only
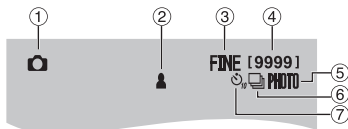
① Mode Indicator
② Focus Indicator (☞ p. 20)
③ Image Quality: FINE (fine) or STD (standard)
④ Remaining Number of Shots
⑤ Shooting Indicator (☞ p. 20)
⑥ Shutter Mode Indicator
⑦ Self-Timer Indicator

During Video Playback

① ② ③ ④ ⑤

⑩ — 1080p   P REVIEW ⬛ 1:55:01
           +4 ▶▶   — ⑥
              HDD
              ⬜

⑨ —
        ◁)) ▬▬▬▬▬ 8   ▭▭▭ — ⑦
        1. 11. 2009   16:55 — ⑧
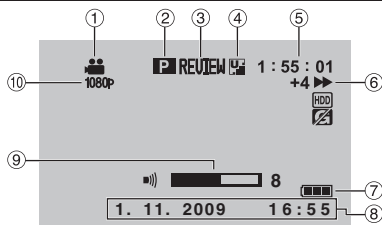
① Mode Indicator
② Playlist Playback Indicator (Appears when playing back a playlist.)
③ Quick Review Indicator (☞ p. 19)
④ Video Quality: ▦ (ULTRA FINE), ▦ (FINE), ▦ (NORMAL), ▦ (ECONOMY)
⑤ Counter
⑥ Playback Mode

> ▶ :   Playback
> ❚❚ :   Pause
> ▶▶:   Forward Search
> ◀◀:   Reverse Search
> ❚❚▶ : Forward Slow-Motion
> ◀❚❚ : Reverse Slow-Motion
> (The number on the left shows speed.)

⑦ Battery Indicator
⑧ Date/Time (☞ p. 16)
⑨ Volume Level Indicator
⑩ GZ-MG680 Output with 1080p

During Still Image Playback

① ② ③

⑦ — ◉ 1080p   REVIEW   101 - 0098
                            ▶   — ④
                       HDD
                       ⬜

                       ▭▭▭ — ⑤
        1. 11. 2009   16:55 — ⑥
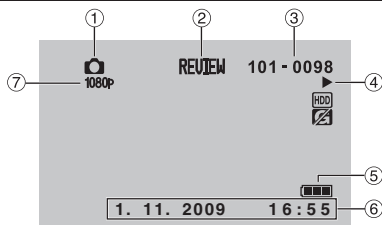
① Mode Indicator
② Quick Review Indicator (☞ p. 20)
③ Folder/File Number
④ Slide Show Playback Indicator
⑤ Battery Indicator
⑥ Date/Time (☞ p. 16)
⑦ GZ-MG680 Output with 1080p

Switching indication modes on LCD monitor
Each time you touch **DISPLAY**, indications on LCD monitor switch as shown below:

In recording mode:
All indications/Indications for selected functions
In playback mode:
All indications/Only date and time/No indications

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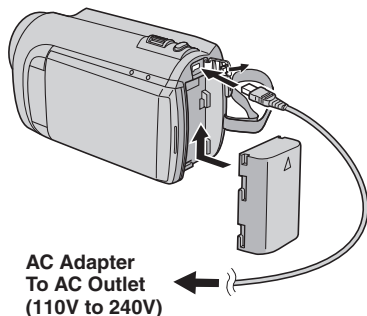
AC Adapter
To AC Outlet
(110V to 240V)

● 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 21.

Battery pack	Charging time
BN-VF808U (Provided)	1 h 50 m
BN-VF815U	2 h 40 m
BN-VF823U	3 h 40 m

■ **To detach the battery pack**
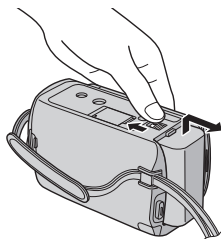
NOTE

● 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].

CLOCK ADJUST
CLOCK SETTING
AREA SETTING
SET FOR DAYLIGHT SAVING TIME
SET THE CITY, DATE AND TIME
SET ↰   QUIT

6 Select the city closest to the area where you use the camcorder.

Selected area is highlighted

Principal city of the selected area

Time difference to GMT

AREA SETTING
GMT ▦▦▦   1.11.2009 16:55
SET ↰   QUIT

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

SET FOR DAYLIGHT SAVING TIME
DAYLIGHT SAVING TIME (DST)
OFF
1.11.2009 16:55
SET DAYLIGHT SAVING TIME
SET ↰   QUIT
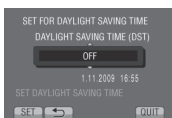
8 Set the date and time.
Change the setting by using the touch sensor and select [→] to set.

CLOCK SETTING
DATE   TIME
1   11   2009   16   55
GMT   0:00
SAVE ↰   ←   →   QUIT

9 Select [SAVE].
To reset the setting, select [QUIT].

Setting the clock to local time when traveling

After performing steps 1-4 (☞ p. 16)

5 Select [AREA SETTING].
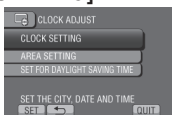
CLOCK ADJUST
CLOCK SETTING
AREA SETTING
SET FOR DAYLIGHT SAVING TIME
SET WHEN IN ANOTHER COUNTRY
SET ↰   QUIT
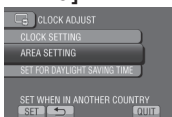
6 Select the city closest to the area you are traveling.

AREA SETTING
GMT ▦▦▦   1.11.2009 16:55
SET ↰   QUIT
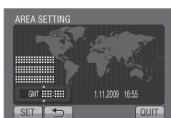
■ **To return to the previous screen**
Select ↰.

■ **To quit the screen**
Select [QUIT].

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].

VIDEO
GAIN UP   A
SELECT ASPECT RATIO   16:9
WIND CUT   ON
DISPLAY SETTINGS   >
CONFIGURE ON-SCREEN DISPLAY
SET ↰   QUIT

4 Select [LANGUAGE].

DISPLAY SETTINGS
LANGUAGE
CLOCK ADJUST
DATE DISPLAY STYLE
MONITOR BRIGHT
ON-SCREEN DISPLAY LANGUAGE
SET ↰   QUIT

5 Select the desired language.

■ **To return to the previous screen**
Select ↰.

■ **To quit the screen**
Select [QUIT].

Other Settings

Using a microSD Card

The camcorder is programmed to record on the built-in hard disk when it is shipped from the factory. You can change the recording medium to microSD card.

- Operations are confirmed on the following microSD cards.
  - Panasonic
  - TOSHIBA
  - SanDisk
  - ATP

  Video recording:
  Class 4 or higher compatible microSDHC card (4 GB to 8 GB)
  Still image recording:
  microSD card (256 MB to 2 GB) or microSDHC card (4 GB to 8 GB)
- 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.

Insert a microSD card

Preparation:
Close the LCD monitor to turn off the camcorder.

1 **Open the microSD card cover.**

2 **Firmly insert the card with its clipped edge first.**
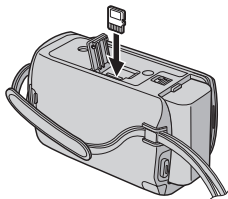
3 **Close the microSD card cover.**

■ To remove a microSD card
Push the microSD card once.
After the card comes out a little, pull it out.

NOTE

- Insert and remove the microSD 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

Set [REC MEDIA FOR VIDEO] and [REC MEDIA FOR IMAGE] to [SD].

Format a microSD card when using it for the first time

Select [FORMAT SD CARD] to format the card.

Recording Files

Video Recording
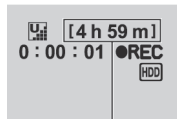
1 **Slide the mode switch to select 🎥 (video) mode.**

SNAPSHOT

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

PLAY/REC

📹 [4 h 59 m]
0 : 00 : 00 ⏸
HDD

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

START/STOP

📹 [4 h 59 m]
0 : 00 : 01 ●REC
HDD

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 **START/STOP** again.

■ **To view the last recorded scene**
Select ⏎ while recording is paused. Selecting 🗑 during playback deletes that scene.

■ **To record a still image during video recording**
Press **SNAPSHOT**.

■ **To change the video quality**
Change the settings in [VIDEO QUALITY].

■ **To change the aspect ratio of the image (16:9/4:3)**
Change the settings in [SELECT ASPECT RATIO].

NOTE
● The video recording mode is automatically selected when you turn off the camcorder and then turn on again.
● If the camcorder is not operated for 5 minutes while the power is on, it turns itself off automatically to conserve power.
● Do not move or shake the camcorder suddenly during recording.
  If you do so, the driving sound (hum) of the hard disk may be recorded.

Recording Files (Continued)

Still Image Recording

1 Slide the mode switch to select 🗗 (still image) mode.
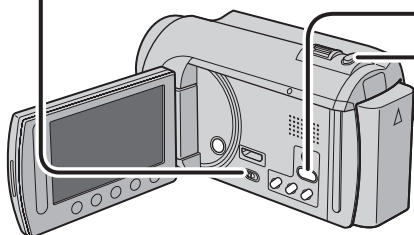
2 Press PLAY/REC to select the recording mode.

PLAY/REC

FINE [9999]

3 Press and hold SNAPSHOT halfway.

FINE

The 🔺 indicator becomes green when the captured image is focused.

4 Press SNAPSHOT fully to take a still image.

FINE [9999]
PHOTO

■ **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].

■ **To record still images continuously**
Set to [CONTINUOUS SHOOTING] in [SHUTTER MODE].

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.

Zooming

Preparation:
● Select 🎥 or 📷 mode.
● Select the recording mode.

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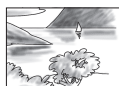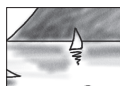
W: Wide angle   **T**: Telephoto
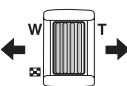
You can also zoom out/zoom in by selecting [W] or [T] on the LCD monitor. (On-screen zoom control)

Zoom ratio (factory-preset)

🎥 mode	📷 mode
[70X/DIGITAL]	[35X/OPTICAL]

■ **To change the maximum zoom ratio (🎥 mode only)**
Change the settings in [ZOOM].

NOTE

Macro shooting is possible as close as approx. 5 cm 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.

Checking the Remaining Battery Power

🎥 mode:
Press INFO twice or INFO and then select 🔋.

📷 mode:
Press INFO.

■ **To quit the 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 INFO.

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

■ **To change the video quality**
1) Select the video quality.
2) Select [SET].

■ **To quit the screen**
Select [QUIT].

Playing Back Files

Video Playback

1 Slide the mode switch to select 🎥 (video) mode.

2 Press PLAY/REC to select the playback mode.
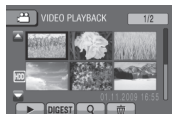
PLAY / REC

VIDEO PLAYBACK 1/2

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 the beginning of each video**
Touch [DIGEST].

NOTE
● In some cases, parts of video other than the beginning may be played back.
● Some video may not be played back at all.

■ **To delete a video**
Select 🗑 when playback is stopped.
■ **To change the number of thumbnails (6 thumbnails/20 thumbnails)**
Move the zoom lever to [W].

■ **Operations during Video Playback On-screen buttons**

|◀◀ : Return to the first scene of the file
▶▶| : Go to the first scene of the next file
■ : Return to the index screen
◀◀ : Reverse search (during playback)
◀❙ : Frame-by-frame playback in reverse direction (during pause)*
▶ : Playback
❙❙ : Pause
▶▶ : Forward search (during playback)
❙▶ : Frame-by-frame playback in forward direction (during pause)*

* Slow playback starts when you keep touching the sensor button under ◀❙ / ❙▶ for a while.
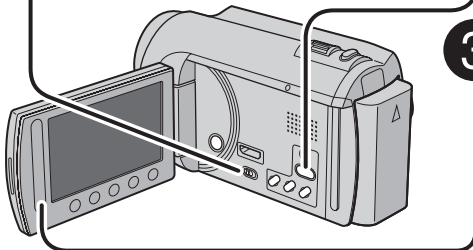
■ **Speaker volume**

— : Turn down the volume

– VOL. +

W   T
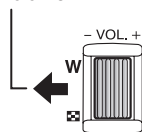
➕ : Turn up the volume

Still Image Playback

1 Slide the mode switch to select ⬛ (still image) mode.

2 Press PLAY/REC to select the playback mode.

PLAY/REC

The index screen appears.

3 Select the desired file.

■ **To move to the previous or next page**
Touch [▲] or [▼] for over a second.

■ **To delete a still image**
Select 🗑.

■ **To change the number of thumbnails (6 thumbnails/20 thumbnails)**
Move the zoom lever to [W].

■ **Operations during Still Image Playback On-screen buttons**

◄ : Change playback order of slide show in reverse direction
► : Change playback order of slide show in forward direction
■ : Return to the index screen
I◄◄ : Display the previous file
► : Start the slide show
II : End the slide show
►►I : Display the next file

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 A indicator appears.

Backlight Compensation

Backlight compensation brightens the subject by increasing the exposure.

In the manual recording mode:

Select 🔆.

■ To cancel backlight compensation
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.

Manual Setting in Menu

In the manual recording mode:

1 Touch MENU.

2 Select [MANUAL SETTING].

> VIDEO
> MANUAL SETTING >
> LIGHT
> REGISTER EVENT
> VIDEO QUALITY
> USE DETAIL SETTINGS BASED

3 Select the desired menu.

> VIDEO
> SCENE SELECT
> FOCUS A
> ADJUST BRIGHTNESS A
> SHUTTER SPEED A
> THE BRIGHTNESS OF THE

4 Select the desired setting.

> VIDEO
> ● A AUTO
> M MANUAL
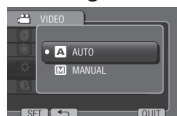
Depending on the kind of settings you select, you can set the value by using the touch sensor.

■ To return to the previous screen
Select ⤺.

■ To quit the screen
Select [QUIT].

Viewing Files on TV

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

Connection with TV

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

■ To connect using the AV connector

Preparation:
● GZ-MG680 Set [SWITCH TO ANALOG I/O] to [OUTPUT].
● Turn off all units.

AC Adapter
DC Connector
AV Connector
To AC Outlet
AV Cable
AV Input Connector
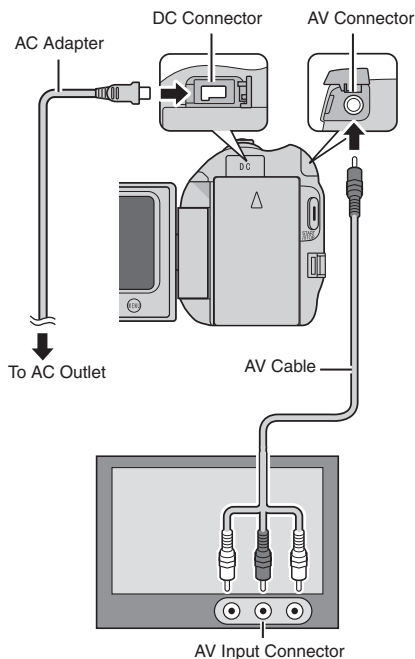
■ GZ-MG680 To connect using the HDMI mini connector
We recommend using the Category 2 HDMI cable (High Speed cable).

Preparation: Turn off all units.

HDMI Mini Connector
DC Connector
AC Adapter
HDMI Cable (optional)
(Mini to full-sized HDMI cable)
To AC Outlet
HDMI Connector
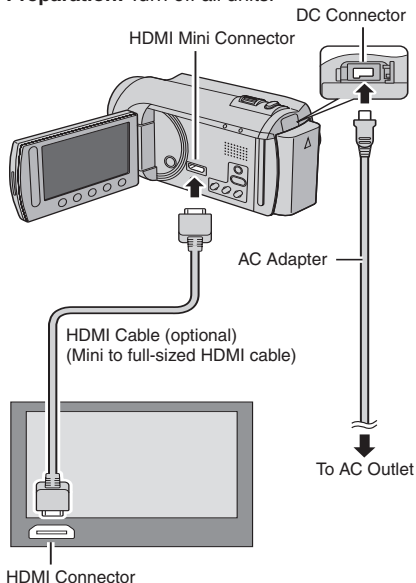
NOTE
● When connecting to the HDMI cable, the image or sound may not appear on the TV properly depending on the TV connected. In such cases, perform the following operations.
  1) Disconnect the HDMI cable and connect it again.
  2) Turn off and on the camcorder again.

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. 22, 23)**

Managing Files

CAUTION

Do not remove the recording medium 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 640 x 360 (if the video was recorded in 16:9) or 640 x 480 (if the video was recorded in 4:3). The image can be elongated in the horizontal or vertical directions depending on the 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].
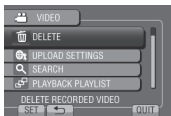
3 Select [CURRENT].
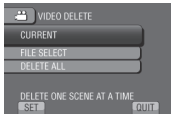
4 Select [YES].

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 HDD and microSD card with this camcorder alone.
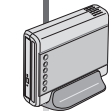
DVD Burner (CU-VD50/CU-VD3)
You can copy files recorded on this camcorder onto DVD discs.

PC
You can copy files from the camcorder to a DVD using a PC.

VCR/DVD Recorder
You can dub video recorded on this camcorder onto VCR/DVD recorder.

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.

Using a DVD Burner

Supported discs: 12cm DVD-R, DVD-RW

● Regarding DVD-R discs, only unused DVD-R discs can be used. Regarding DVD-RW discs, used DVD-RW discs can also be used, but they need to be formatted before recording. Formatting a disc deletes all content recorded on the disc up until that time.
● Dual-layer discs cannot be used.

Regarding finalization after copying

The disc is automatically finalized so that it can be played on other devices. After finalizing, the disc is a play-only disc, so no more files can be added.

Connection with a DVD Burner

Preparation:
Turn on the camcorder first, then turn on the DVD burner.

DC Connector

USB Connector

AC Adapter

USB Cable*

To AC Outlet

DVD Burner

USB Connector
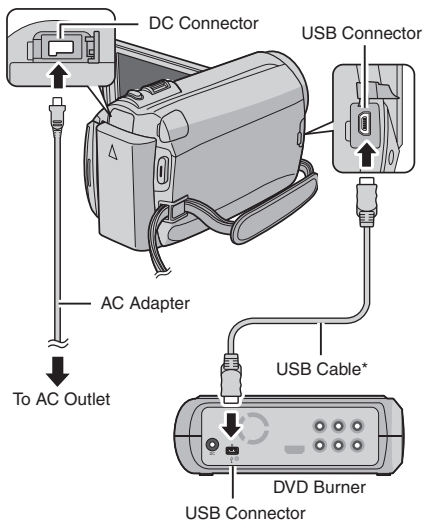
NOTE

● Refer also to the optional DVD burner's instruction manual.
* Use the USB cable that came with the DVD burner.

Copying Files (Continued)

Backup All Files

Preparation:
- Connect the camcorder to the DVD burner.
- Select 📹 mode.

1 Select [CREATE FROM ALL].

> CREATE DVD
> CREATE FROM ALL
> SELECT AND CREATE
> CREATE DUPLICATE
> PLAYBACK
> COPY RECORDED VIDEOS
> SET

2 Select the desired menu.

> CREATE FROM ALL
> ALL SCENES
> UNSAVED SCENES
> COPY ALL VIDEOS TO DVD
> SET
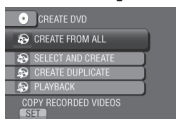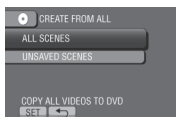
- **[ALL SCENES]:**
  All files in the recording medium are copied.
- **[UNSAVED SCENES]:**
  Files that have never been copied to a DVD disc are automatically selected and copied.

3 Select the desired disc number.

> DVD CREATION LIST
> ALL (TOTAL: 3)
> DVD1
> DVD2
> DVD3
> SET CHECK QUIT

- If you select [ALL], all discs in the list are created.
- To preview scenes, select [CHECK].
- 🔘 mark shows that the disc is created already.

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 DVD discs are automatically selected and copied.

1 Open the LCD monitor to turn on the camcorder.

2 Press DIRECT DVD.

DIRECT DVD
/INFO

3 Select [EXECUTE].

> UNSAVED SCENES
> READY TO CREATE
> DVD-R
> EXECUTE
> RETURN
> SET QUIT

- The DVD 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 DVD creation, select [CANCEL].

■ **To quit the screen**
  1) Select [QUIT].
  2) When [QUIT?] appears, select [YES].

■ **To play back the created disc using the camcorder**
  1) Connect the camcorder to the DVD burner.
  2) Turn on the camcorder first, then turn on the DVD burner.
  3) Select [PLAYBACK].
  4) Select the desired folder.
  5) Select the creation date of the disc.
  6) Select the desired file. To return to the previous screen, select ⤺.

Creating a DVD using a PC

Please read the "JVC SOFTWARE LICENCE AGREEMENT" in the CD-ROM instruction before you install software.
You can copy the data from the camcorder and create a DVD using a PC.

❶ Installing the software to the PC

System Requirements

Windows Vista

OS:	Windows Vista® Home Basic (SP1) Home Premium (SP1) (32-bit, pre-installed)
CPU:	Either one of the following: ● Intel® Pentium® 4, 1.6 GHz or higher ● Intel® Pentium® M, 1.4 GHz or higher ● Intel® Core™ Duo, 1.5 GHz or higher
RAM:	At least 1 GB

Windows XP

OS:	Windows® XP Home Edition (SP2/SP3) Professional (SP2/SP3) (pre-installed)
CPU:	Either one of the following: ● Intel® Pentium® 4, 1.6 GHz or higher ● Intel® Pentium® M, 1.4 GHz or higher ● Intel® Core™ Duo, 1.5 GHz or higher
RAM:	At least 512 MB

■ **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 DVD drive.
● If your system does not meet the requirements, it is recommended to copy files using the DVD burner. (☞ p. 27)
● 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].
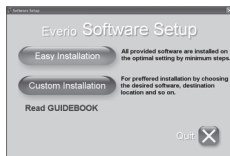
Follow the on-screen instructions.

2 Click [Next].

3 Click [Finish].
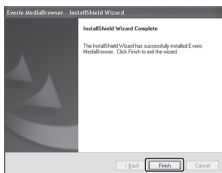
Everio MediaBrowser icon is created on the desktop.
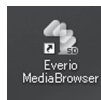
■ **To see the Instruction Guide for Everio MediaBrowser**
1) Double-click the icon of Everio MediaBrowser.
2) Click [Help], and click [MediaBrowser Help].

Click   Click
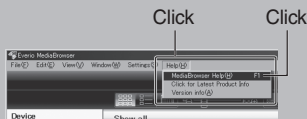
Copying Files (Continued)

❷ **Making Backup on the PC**

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

USB Connector

USB Cable

USB Connector
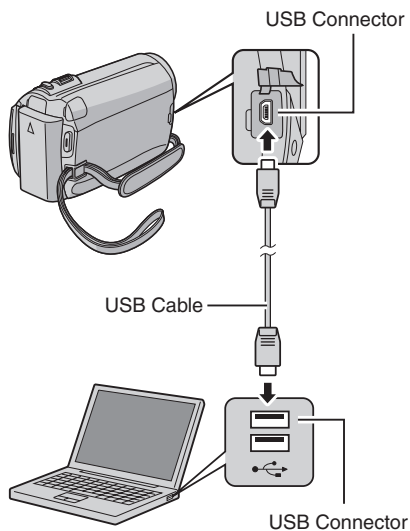
1 Open the LCD monitor to turn on the camcorder.

2 Select [BACK UP].

USB MENU
- CREATE DVD
- UPLOAD
- EXPORT TO LIBRARY
- BACK UP

SAVE RECORDED VIDEO / STILL

SET   QUIT
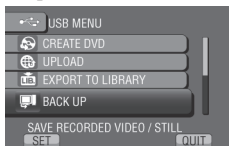
Everio MediaBrowser starts on the PC.
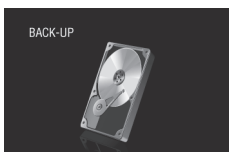
BACK-UP

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.

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.
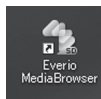
2 Select [Movies only].
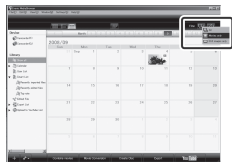
3 Click [+].

4 Input the name of the new user list and click [OK].
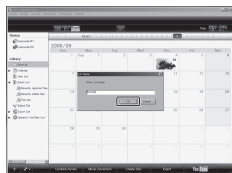
5 Double-click the recording date.
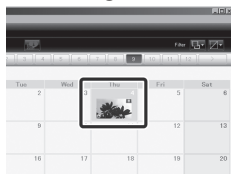
The files recorded on the day are displayed.

6 Drag the file and drop into the user list.
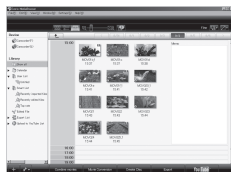
To add other files into the user list, repeat steps **5** and **6**.

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Copying Files (Continued)

⓿ Copying Files to a DVD

Preparation:
Use a recordable DVD disc. (It is recommended to use a DVD-R disc.)

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

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

To add all the files onto DVD discs, click [Select all files displayed], then go to step **4**.

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

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

5 Click [Start].

NOTE

● 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. 33)

Folder Structure and Extensions

Recording medium   **X = number**

```
├── [DCIM] ································· Contains the still image folders.
│       └── [XXXJVCSO]
│              ⋮
├── [SD_VIDEO] ························· Contains the video file folders.
│       ├── [MGR_INFO] ·············· Management information* for the media as a whole
│       ├── [PRGXXX]
│       │      ├── [PRGXXX.PGI] ······ Management information*
│       │      ├── [MOVXXX.MOD] ···· Video file
│       │      └── [MOVXXX.MOI] ····· Management information* for the video files
│       │             ⋮
│       └── [PRGXXX]
├── [EXTMOV]
│       ├── [MOV_XXX.MOD] ········· Video file which management information is corrupted.
│       │
│       └── [DEM_XXX.MPG] ········· Demo video file
│
└── [PRIVATE] ·························· Contains management information files of event and/or DVD
                                        creation information for the files taken with the camcorder.
```

* Information such as the date and time of recording, recorded with the video file.

Customer Support Information

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

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/German/French/Spanish	+800-1532-4865 (toll-free)
Other Countries in Europe	English/German/French/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/mediabrowser/e/
Please check our website for latest information and downloading.

Copying Files (Continued)

Dubbing Files to a VCR/DVD Recorder

Preparation:
- Create a playlist.
- GZ-MG680 Set [SWITCH TO ANALOG I/O] to [OUTPUT].
- Turn off all units.

■ **To connect using the AV connectors (analog dubbing)**

DC Connector   AV Connector

AC Adapter

To AC Outlet

AV Cable

VCR/DVD Recorder

AV Connector (Input)
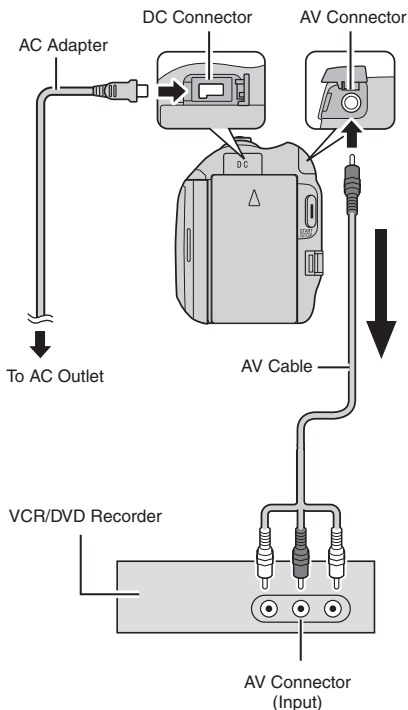
1 Open the LCD monitor to turn on the camcorder.

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].

Switching indication modes on LCD monitor
Each time you touch **DISPLAY**, indications on LCD monitor switch as shown below:

In recording mode:
All indications/Indications for selected functions
In playback mode:
All indications/Only date and time/No indications

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.

■ **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.

2 Select the file and set [LIB.].
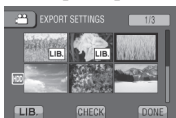
● To check the content of the file, select [CHECK].

3 Select [DONE].

■ **To cancel the export setting**
Select the file and select [**LIB.**] again.

■ **To quit the screen**
1) Select [DONE].
2) Select [YES].

■ **To confirm the export setting**
Press **EXPORT** on the index screen.

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.

■ **If you 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.

Uploading Files to Websites

Turning on the Upload Mode

You can upload the file to video sharing websites (YouTube™) quickly after recording.

Preparation:
● Select ▓ mode.
● Select the recording mode.

Press UPLOAD twice.

UPLOAD
/TITLE

ON
UPLOAD REC

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].**

USB MENU
PLAYBACK ON PC
CREATE DVD
UPLOAD
EXPORT TO LIBRARY
EASY UPLOAD TO VIDEO
SET   QUIT
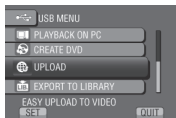
■ **If you cannot upload the file to YouTube™**
  ● You need your YouTube™ account to upload files to YouTube™. Create your account.
  ● Refer to "Q&A", "Latest Information", "Download Information", etc. in [Click for Latest Product Info] in the help of the provided Everio MediaBrowser software.

Changing the Menu Settings

1 Touch MENU.

2 Select the desired menu.

3 Select the desired setting.

■ **To return to the previous screen**
  Select ⮐.

■ **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
Power	**No power is supplied.**	● Connect the AC adapter correctly. ● Recharge the battery pack.
Display	**The remaining battery display is not correct.**	● Fully charge the battery pack, 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 pack is repeatedly charged, the amount of remaining battery may not be displayed correctly.
	The LCD monitor is difficult to see.	● The LCD monitor may be difficult to see if used in bright areas such as under direct sunlight.
Recording	**Recording cannot be performed.**	● Slide the mode switch to select the desired mode (🎥 or 📷).
	Recording stops by itself.	● If the camcorder temperature increases, REC flashes in the LCD monitor and recording stops automatically to protect the HDD. Turn off the camcorder, wait for a while, and start recording again. ● Move away from a place where the camcorder is affected by excessive sound or vibration (such as a concert hall). ● A malfunction may occur in the HDD of the camcorder. In this case, record to a microSD card. ● Insert a commercially available microSD card, and set each of the [REC MEDIA FOR VIDEO] and [REC MEDIA FOR IMAGE] to [SD]. ● Recording stops automatically after 12 hours of continuous recording.

Troubleshooting (Continued)

Trouble	Action
Playback — Sound or video are interrupted.	● Sometimes playback is interrupted at the connecting section between two scenes. This is not a malfunction.
Playback — Cannot find a recorded video.	● Select [PLAYBACK MPG 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 [REC MEDIA FOR VIDEO] or [REC MEDIA FOR IMAGE]. (Files on other media are not displayed.)
Other problems — The lamp does not flash during battery pack charging.	● Check the remaining battery pack charge. (When the battery pack 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 pack is being recharged outside the permitted temperature range, recharging may stop to protect the battery pack.)
Other problems — GZ-MG680 When connecting to the HDMI cable, the image or sound does not appear on the TV properly.	● 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.
Other problems — GZ-MG680 HDMI-CEC functions do not work properly, and the TV does not work in conjunction with the camcorder.	● 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].
Other problems — Cannot upload the file to YouTube™ / 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.

■ **If a malfunction occurs in the HDD**
  ① Perform [FORMAT HDD]. (All data is deleted.)
  ② If this does not solve the problem, contact the JVC customer service for repairs.

■ **To reset the camcorder when it does not operate normally**
  ① Close the LCD monitor and remove the power supply (battery pack or AC adapter) from the camcorder, then reattach it.
  ② Execute [FACTORY PRESET].

Warning Indications

Indication	Action
SET DATE/TIME!	● 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	● Be sure to use JVC battery packs.
CANNOT USE IN VIDEO MODE	● Set [REC MEDIA FOR VIDEO] to [HDD]. ● Replace the microSD card.
NOT FORMATTED	● Select [OK] and select [YES] to perform formatting.
FORMAT ERROR!	● Check the operating procedure, and perform once again. ● Turn off the camcorder, and turn it on again.
DATA DELETION ERROR	
HDD ERROR!	● Perform formatting. (All data is deleted.) ● Turn off the camcorder, and turn it on again.
MEMORY CARD ERROR!	● Perform formatting. (All data is deleted.) ● Remove and re-insert the microSD card. (MultiMediaCard cannot be used.) ● Remove any dirt from the microSD card terminals. ● Insert the microSD card before switching the power on. ● Turn off the camcorder, and turn it on again.
CANNOT TAKE MORE STILL IMAGES AT THE MOMENT	● Stop video recording, and then record a still image. (If a microSD card is removed or inserted during video recording, a still image cannot be recorded.)
DROP DETECTION WORKED AND THE POWER IS TURNED OFF	● Set [REC MEDIA FOR VIDEO] to [SD], then record to a microSD card. ● Turn off the camcorder and turn it on again. ● Prevent the camcorder from vibration and shock.
RECORDING CANCELLED	
RECORDING FAILURE	**microSD card:** ● Remove and re-insert the microSD card. (MultiMediaCard cannot be used.) ● Remove any dirt from the microSD card terminals. ● Insert the microSD card before switching the power on. **HDD:** ● Do not allow the camcorder to be subject to impact/vibrations.
PLAYBACK FAILED	

Specifications

■ General

Power supply
DC 11 V (Using AC adapter)
DC 7.2 V (Using battery pack)

Power consumption
Approx. 2.3 W*
* When the LED light is off and the monitor backlight is set to [STANDARD] mode.

Dimensions (W x H x D)
53 mm x 68 mm x 113 mm

Weight
Approx. 305 g
Approx. 350 g (incl. battery pack)

Operating temperature
0°C to 40°C

Storage temperature
–20°C to 50°C

Operating humidity
35% to 80%

■ Camera/LCD monitor

Pickup
1/6" (800,000 pixels) CCD

Lens
F 1.8 to 4.0, f = 2.2 mm to 77.0 mm,
35:1 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
(recommended shooting distance)

■ Connectors

AV input/output
Video input*: 0.8 V (p-p) to 1.2 V (p-p), 75 Ω
Video output: 1.0 V (p-p), 75 Ω
Audio input*: 300 mV (rms), 50 kΩ
Audio output: 300 mV (rms), 1 kΩ
* GZ-MG680 only

GZ-MG680 **HDMI**
HDMI Mini Connector

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

Operating temperature
0°C to 40°C

Dimensions (W x H x D)
42 mm x 14.5 mm x 91 mm

Weight
Approx. 30 g (incl. battery)

■ Still image

Format
JPEG

Image size
832 x 624

Image quality
FINE / STANDARD

■ Video

Signal format
PAL standard

Recording/Playback format
Video: MPEG-2
Audio: Dolby Digital (2ch)

Recording mode (video)
ULTRA FINE: 720 x 576 pixels, 8.5 Mbps (VBR)
FINE: 720 x 576 pixels, 5.5 Mbps (VBR)
NORMAL: 720 x 576 pixels, 4.2 Mbps (VBR)
ECONOMY: 352 x 288 pixels, 1.5 Mbps (VBR)

Recording mode (audio)
ULTRA FINE: 48 kHz, 384 kbps
FINE: 48 kHz, 384 kbps
NORMAL: 48 kHz, 256 kbps
ECONOMY: 48 kHz, 128 kbps

Design and specifications subject to change without notice.

h: hour/m: minute

Approximate recordable time (for video)

Recording medium / Quality	HDD		microSD Card	
	GZ-MG630 60 GB	**GZ-MG680** 120 GB	4 GB	8 GB
ULTRA FINE	14 h 20 m	28 h 40 m	57 m	1 h 54 m
FINE	21 h 20 m	42 h 40 m	1 h 25 m	2 h 50 m
NORMAL	28 h 10 m	56 h 20 m	1 h 53 m	3 h 46 m
ECONOMY	75 h 00 m	150 h 00 m	4 h 58 m	9 h 56 m

Approximate number of images (for still image)
The HDD can record up to 9999 still images in either mode.

Recording medium / Image size/Quality	microSD Card					
	256 MB	512 MB	1 GB	2 GB	4 GB	8 GB
4:3 — 832 x 624 / FINE	990	1960	3980	7600	9999	9999
4:3 — 832 x 624 / STANDARD	1490	2940	5970	9999	9999	9999

h: hour/m: minute

Required charging/recording time (approx.)

| Battery pack	Charging time	Recording time
BN-VF808U (Provided)	1 h 50 m	2 h 5 m*
BN-VF815U	2 h 40 m	4 h 15 m*
BN-VF823U	3 h 40 m	6 h 25 m*

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

Cautions

Battery Pack

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
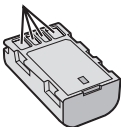
- **To avoid hazards**
... **do not** burn.
... **do not** short-circuit the terminals. Keep it away from metallic objects when not in use. When transporting, make sure the provided battery cap is attached to the battery. If the battery cap is misplaced, carry the battery in a plastic bag.
... **do not** modify or disassemble.
... **do not** expose the battery to temperatures exceeding 60°C, 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. Cooler temperatures require longer charging time, or in some cases stop charging at all. Warmer temperatures prevent complete charging, or in some cases stop charging at all.
... 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.

Recording Medium

- **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.
- When formatting or erasing data using the camcorder, only the file administration information is changed. The data is not completely erased from the hard disk. If you want to completely erase all of the data, we recommend either using commercially available software that is specially designed for that purpose, or by physically destroying the camcorder with a hammer etc.

Hard Disk

- Do not use the unit where it is subject to vibrations or loud sounds.
- If you move the unit suddenly, the drop detection function may operate and the power may be turned off.

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.
... in places subject to excessive shock or vibration.
... near a television set.
... near appliances generating strong magnetic or electric fields (speakers, broadcasting antennas, etc.).
... in places subject to extremely high (over 40°C) or extremely low (under 0°C) temperatures.
... in places where air pressure is low (more than 3000 m above the sea level).
● **DO NOT leave the unit**
... in places of over 50°C.
... 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.

Terms

JVC

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http://emailbydomain.com

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TV manuals search

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