SONY

4-424-097-**12**(1)

Digital HD Video Camera Recorder

Operating Guide

Please also refer to :
http://www.sony.net/SonyInfo/Support/

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AVCHD Progressive

HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

HANDYCAM

LITHIUM ION G TYPE

MEMORY STICK

micro SD HC

NAVTEQ MAPS

Read this first

Before operating the unit, please read this manual thoroughly, and retain it for future reference.

WARNING

To reduce the risk of fire or electric shock,
1) do not expose the unit to rain or moisture.
2) do not place objects filled with liquids, such as vases, on the apparatus.

Do not expose the batteries to excessive heat such as sunshine, fire or the like.

CAUTION

Battery pack

If the battery pack is mishandled, the battery pack can burst, cause a fire or even chemical burns. Observe the following cautions.

- Do not disassemble.
- Do not crush and do not expose the battery pack to any shock or force such as hammering, dropping or stepping on it.
- Do not short circuit and do not allow metal objects to come into contact with the battery terminals.
- Do not expose to high temperature above 60°C (140°F) such as in direct sunlight or in a car parked in the sun.
- Do not incinerate or dispose of in fire.
- Do not handle damaged or leaking lithium ion batteries.
- Be sure to charge the battery pack using a genuine Sony battery charger or a device that can charge the battery pack.
- Keep the battery pack out of the reach of small children.
- Keep the battery pack dry.
- Replace only with the same or equivalent type recommended by Sony.
- Dispose of used battery packs promptly as described in the instructions.

Replace the battery with the specified type only. Otherwise, fire or injury may result.

AC Adaptor

Do not use the AC Adaptor placed in a narrow space, such as between a wall and furniture.

Use the nearby wall outlet (wall socket) when using the AC Adaptor. Disconnect the AC Adaptor from the wall outlet (wall socket) immediately if any malfunction occurs while using your camcorder.

Even if your camcorder is turned off, AC power source (mains) is still supplied to it while connected to the wall outlet (wall socket) via the AC Adaptor.

Note on the power cord (mains lead)

The power cord (mains lead) is designed specifically for use with this camcorder only, and should not be used with other electrical equipment.

Notice for customers in the United Kingdom

A moulded plug complying with BS 1363 is fitted to this equipment for your safety and convenience.

Should the fuse in the plug supplied need to be replaced, a fuse of the same rating as the supplied one and approved by ASTA or BSI to BS 1362, (i.e., marked with an ⓐ or ⓑ mark) must be used.
If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover.
If you should lose the fuse cover, please contact your nearest Sony service station.

FOR CUSTOMERS IN EUROPE

CE

Hereby, Sony Corporation, declares that this HDR-GW55VE Digital HD Video Camera Recorder is in compliance with the essential requirements and other relevant provisions of the Directive 1999/5/EC. For details, please access the following URL: http://www.compliance.sony.de/

Notice for the customers in the countries applying EU Directives

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

Attention

The electromagnetic fields at the specific frequencies may influence the picture and sound of this unit.

This product has been tested and found compliant with the limits set out in the EMC regulation for using connection cables shorter than 3 meters (9.8 feet).

Notice

If static electricity or electromagnetism causes data transfer to discontinue midway (fail), restart the application or disconnect and connect the communication cable (USB, etc.) again.



Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.



Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste.
On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead.
By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.
In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only.

To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment.
For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries.
For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

For the customers in the U.S.A.

If you have any questions about this product, you may call:
Sony Customer Information Center
1-800-222-SONY (7669)
The number below is for the FCC related matters only.

Regulatory Information

Declaration of Conformity
Trade Name: SONY
Model No.: HDR-GW77VE
Responsible Party: Sony Electronics Inc.
Address: 16530 Via Esprillo, San Diego, CA 92127 U.S.A.
Telephone No.: 858-942-2230

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Note

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.

The supplied interface cable must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

Battery pack

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

About language setting

- The on-screen displays in each local language are used for illustrating the operating procedures. Change the screen language before using the camcorder if necessary (p. 20).

On recording

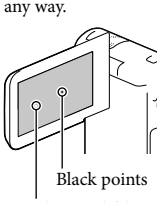
- Before starting to record, test the recording function to make sure the image and sound are recorded without any problems.
- Compensation for the contents of recordings cannot be provided, even if recording or playback is not possible due to a malfunction of the camcorder, recording media, etc.
- TV color systems differ depending on the country/region. To view your recordings on a TV, you need a PAL system-based TV.
- Television programs, films, video tapes, and other materials may be copyrighted. Unauthorized recording of such materials may be contrary to the copyright laws.

Notes on use

- Do not do any of the following. Otherwise, the recording media may be damaged, recorded images may be impossible to play back or may be lost, or other malfunctions could occur.
  – ejecting the memory card when the access lamp (p. 21) is lit or flashing
  – removing the battery pack or AC Adaptor from the camcorder, or applying mechanical shock or vibration to the camcorder when the (Movie)/ (Photo) lamps (p. 23, 24) or the access lamp (p. 21) are lit or flashing
- When the camcorder is connected to other devices through a USB connection and the power of the camcorder is turned on, do not close the LCD panel. The image data that has been recorded may be lost.
- Use the camcorder in accordance with local regulations. The GPS function of the camcorder is activated when [GPS Setting] (p. 33) is set to [On] even if the camcorder is not turned on. During takeoff and landing of an airplane, set [Airplane Mode] to [On] (HDR-GW55VE/GW77VE).

LCD Panel

- The LCD screen is manufactured using extremely high-precision technology, so over 99.99% of the pixels are operational for effective use. However, there may be some tiny black points and/or bright points (white, red, blue, or green in color) that appear constantly on the LCD screen. These points are normal results of the manufacturing process and do not affect the recording in any way.



About this manual, illustrations and on-screen displays

- The example images used in this manual for illustration purposes are captured using a digital still camera, and therefore may appear different from images and screen indicators that actually appear on your camcorder. And, the illustrations of your camcorder and its screen indication are exaggerated or simplified for understandability.
- Design and specifications of your camcorder and accessories are subject to change without notice.
- In this manual, the internal memory (HDR-GW77E/GW77VE) of the camcorder and the memory card are called “recording media.”

- In this manual, the DVD disc recorded with high definition image quality (HD) is called AVCHD recording disc.
- The model name is shown in this manual when there is a difference in specification between models. Confirm the model name on the bottom of your camcorder.

	Recording media	Capacity of internal memory
HDR-GW55VE*	Memory card only	—
HDR-GW77E	Internal memory + memory card	16 GB
HDR-GW77VE*		16 GB

The model with * is equipped with a GPS function.

Learning more about the camcorder ("Handycam" User Guide)

"Handycam" User Guide is an on-line manual. Refer to it for in-depth instructions on the many functions of the camcorder.



1 Access the Sony support page.

http://www.sony.net/SonyInfo/Support/

2 Select your country or region.

3 Search for the model name of your camcorder within the support page.

Check the model name on the bottom of your camcorder.

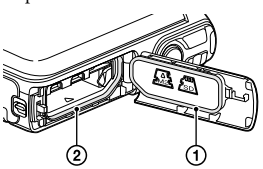
About water-proof, dust-proof, and shock-proof performance of the camcorder

This camcorder is equipped to be water-proof, dust-proof and shock-proof. Damage caused from misuse, abuse or failure to properly maintain the camcorder is not covered by the limited warranty.

- This camcorder is water-proof/dust-proof equivalent to IEC60529 IP58. The camcorder is operable up to a water depth of 5 m (16 feet) for 60 minutes.
- Do not subject the camcorder to pressurized water, such as from a tap.
- Do not use in hot springs.
- Use the camcorder in the recommended operating water temperature range of 0 °C to 40 °C (32 °F to 104 °F).
- Meeting MIL-STD 810F Method 516.5-Shock standards, this product has passed the required tests when dropped from a height of 1.5 m (4 feet) above a 5 cm (2 in.) -thick plywood board (with the LCD screen closed, facing toward the camcorder body)*.
  * Depending on use conditions and circumstances, no guarantee is made regarding damage to, malfunction of, or the water-proof performance of this camcorder.
- As for dust-proof/shock-proof performance, there is no guarantee that the camcorder will not become scratched or dented.
- Sometimes water-proof performance is lost if the camcorder is subjected to a strong shock such as from being dropped. We recommend the camcorder be inspected at an authorized repair shop for a fee.
- Accessories supplied do not meet water-proof, dust-proof, and shock-proof specifications.

Notes before using the camcorder under/near water

- Make sure that no foreign matter such as sand, hair, or dirt gets inside the battery/memory card/jack cover. Even a small amount of foreign matter may lead to water entering the camcorder.
- Confirm that the sealing gasket and its mating surfaces have not become scratched. Even a small scratch may lead to water entering the camcorder. If the sealing gasket or its mating surfaces become scratched, take the camcorder to an authorized repair shop to have the sealing gasket replaced for a fee.



① Sealing gasket
② The sealing surfaces of the sealing gasket

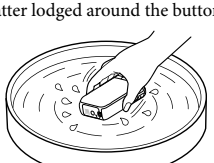
- If dirt or sand gets on the sealing gasket or its mating surfaces, wipe the area clean with a soft cloth that will not leave behind any fibers. Prevent the sealing gasket from becoming scratched by touching it while charging a battery or using a cable.
- Do not open/close the battery/memory card/jack cover with wet or sandy hands or near water. There is a risk this will lead to sand or water getting inside. Before opening the cover, perform the procedure described in "Cleaning after using the camcorder under/near water".
- Open the battery/memory card/jack cover with the camcorder completely dry.
- Always confirm that the battery/memory card/jack cover has been securely locked.

Notes on using the camcorder under/near water

- The touch panel may be activated by water splashes on the screen icons.
- The touch panel cannot be operated underwater. Use the buttons of the camcorder to perform shooting operations.
- Do not subject the camcorder to shock such as from jumping into water.
- Do not open and close the battery/memory card/jack cover while under/near water.
- This camcorder sinks in water. Place your hand through the wrist strap to prevent the camcorder from sinking.
- Faint, white, circular spots may appear in under-water flash photos due to reflections off of floating objects. This is not a malfunction.
- Select (Underwater) in Scene Selection to shoot underwater with less distortion (p. 44).
- If water drops or other foreign matter is present on the lens, you will not be able to record clear images.

Cleaning after using the camcorder under/near water

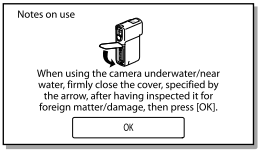
- Always clean the camcorder with water after use within 60 minutes, and do not open the battery/memory card/jack cover before cleaning is finished. Sand or water may get inside places where it cannot be seen. If not rinsed, water-proof performance will be degraded.
- Allow the camcorder to sit in pure water poured into a cleaning bowl for about 5 minutes. Then, gently shake the camcorder, press each button inside the water to clean away any salt, sand or other matter lodged around the buttons.



- After rinsing, wipe away water drops with a soft cloth. Allow the camcorder to dry completely in a shady location with good ventilation. Do not blow dry with a hair dryer as there is a risk of deformation and/or degraded water-proof performance.
- Wipe away water drops or dust on the battery/memory card/jack cover with a soft dry cloth.
- This camcorder is constructed to drain water. Water will drain from openings around the zoom buttons, etc. After removing from water, place the camcorder on a dry cloth for a while to allow water to drain.
- Bubbles may appear when the camcorder is placed under water. This is not a malfunction.
- The camcorder body may become discolored if it comes in contact with sunscreen or suntan oil. If the camcorder does come in contact with sunscreen or suntan oil, quickly wipe it clean.
- Do not allow the camcorder to sit with salt water inside or on the surface. This may lead to corrosion or discoloration, and degradation of water-proof performance.
- Iron sands may adhere to the frame around the LCD screen. If iron sands adhere to the camcorder, gently wipe them off with a soft cloth so that you will not scrape the camcorder case or the LCD screen.
- To maintain the water-proof performance, we recommend that once a year you take the camcorder to your dealer, or to an authorized repair shop, to have the sealing gasket of the battery/memory card/jack cover replaced for a fee.

About the message displayed on the screen

The following message will appear on the LCD screen of the camcorder after you replace or charge the battery, or you set [Scene Selection] to [Beach], [Underwater], or [Snow].



This does not indicate a malfunction of the camcorder.
It displays a message that you should confirm before use to maintain the waterproof performances.
Touch the area the message is displayed in order to erase the message.

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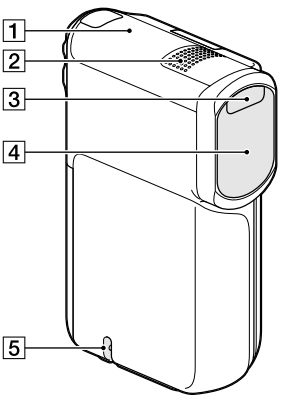
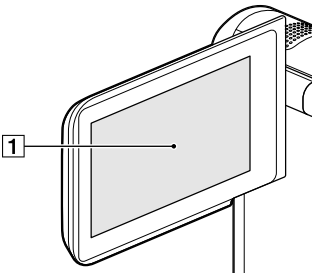
Parts and controls

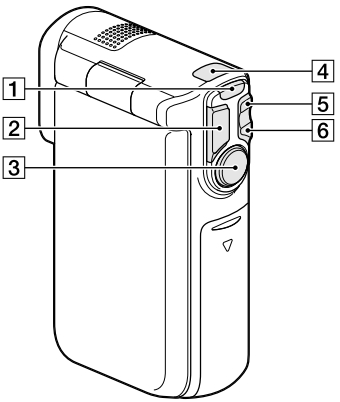
Figures in ( ) are reference pages.



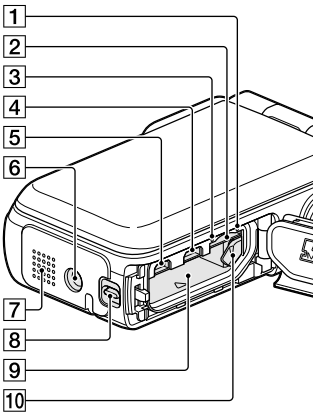
1 GPS antenna (HDR-GW55VE/GW77VE) (33)
2 Built-in microphone
3 Flash
4 Lens (G lens)
5 Loop for the Wrist strap



1 LCD screen/Touch panel (19, 20)
If you rotate the LCD panel 180 degrees, you can close the LCD panel with the LCD screen facing out. This is convenient during playback operations.



1 MODE button (23, 24)
2 PHOTO button (24)
3 START/STOP button (23)
4 (Movie)/ (Photo) lamp (23, 24)
5 W (Wide) zoom button (26)
6 T (Telephoto) zoom button (26)



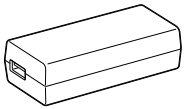
1 Memory card access lamp (21)
While the lamp is lit or flashing, the camcorder is reading or writing data.
2 Memory card slot (21)
3 CHG (charge) lamp (15)
4 (USB) jack (15, 38)
5 HDMI OUT jack (33)
6 Tripod receptacle
Attach a tripod (sold separately: the length of the screw must be less than 5.5 mm (7/32 in.)).
7 Speaker
8 Cover lock lever (14)
9 Battery slot (14)
10 Battery release lever (14)

Supplied items

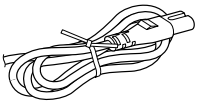
The numbers in ( ) are the supplied quantity.

Camcorder (1)

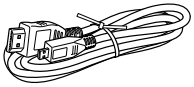
AC Adaptor (1)



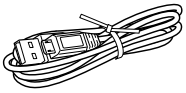
Power cord (Mains lead) (1)



HDMI cable (1)



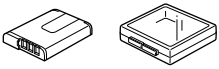
USB cable (Micro USB cable) (1)



Wrist strap (1)



Rechargeable battery pack NP-BG1/battery case (1)

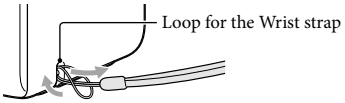


"Operating Guide" (This manual) (1)

Notes

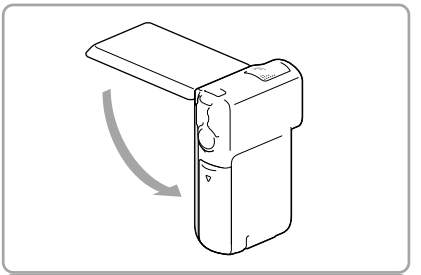
- The "PlayMemories Home" (Lite Version) software and "PlayMemories Home Help Guide" are pre-installed in this camcorder (p. 38, p. 41).
- "Expanded Feature" upgrade of the "PlayMemories Home" software can be downloaded from the web (p. 37).

To attach the Wrist strap



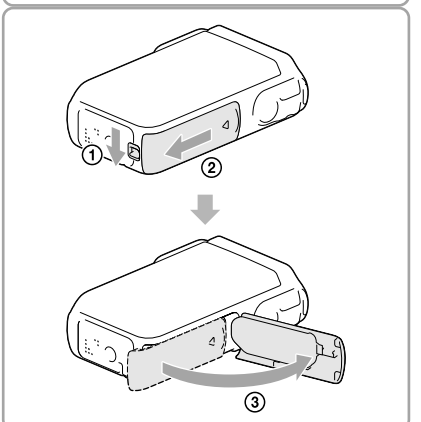
Charging the battery pack

1 Close the LCD screen.



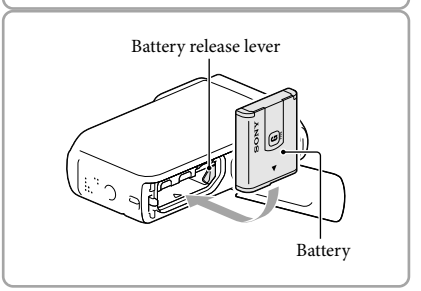
2 Open the battery/memory card/jack cover.

- To open the battery/memory card/jack cover, slide and hold the cover lock lever (①), then slide the cover down slightly (②) and flip it open (③).



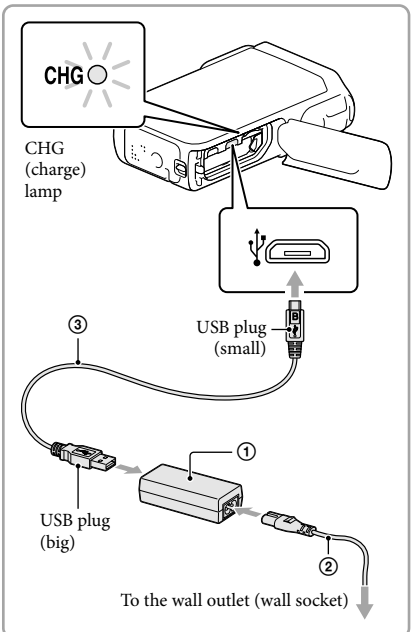
3 Insert the battery.

- Insert the battery while pressing and holding the battery release lever.



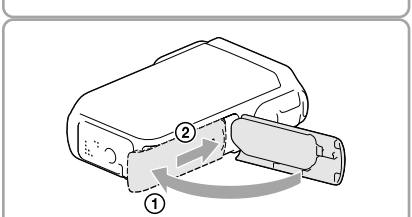
4 Connect the AC Adaptor (①), the power cord (mains lead) (②) and the USB cable (③) to your camcorder and the wall outlet (wall socket).

- The CHG (charge) lamp turns on.
- The CHG (charge) lamp turns off when the battery pack is fully charged. Disconnect the USB cable from the USB jack of your camcorder.



5 Close the battery/memory card/ jack cover.

- Flip the battery/memory card/jack cover back (①), then slide (②) and close the cover firmly until the yellow mark of the cover lock lever is hidden.

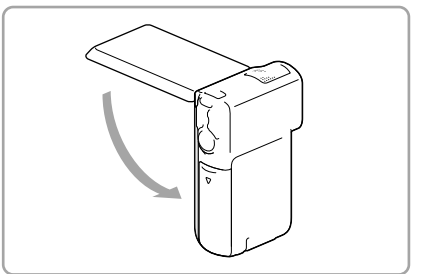


Notes

- You cannot insert any battery pack other than an NP-BG1 (supplied) or an NP-FG1 (sold separately) into your camcorder.
- You cannot use a Sony CP-AH2R, CP-AL, or AC-UP100 portable power supply device (sold separately) to charge the camcorder.
- In the default setting, the LCD screen turns dark if you do not operate the camcorder for about 1 minute, and the power turns off if you do not operate the camcorder for 2 minutes, to save battery power ([Power Save] p. 46).

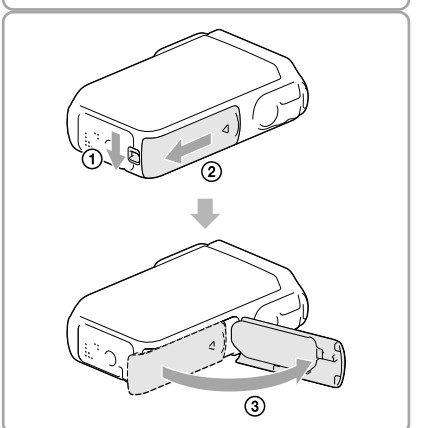
Charging the battery using your computer

1 Close the LCD screen.

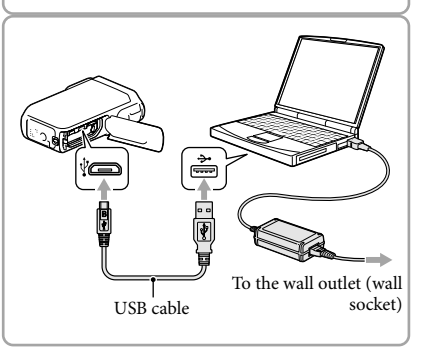


2 Open the battery/memory card/jack cover.

- To open the battery/memory card/jack cover, slide and hold the cover lock lever (①), then slide the cover down slightly (②) and flip it open (③).



3 Connect the camcorder to a running computer using the USB cable.



Charging time

Approximate time (min.) required when you fully charge a fully discharged battery pack.
Charging with AC Adaptor: 140 min
Charging with your computer: 200 min

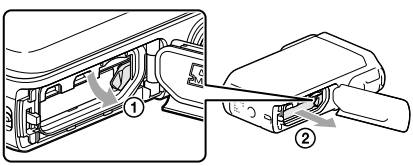
- The charging times shown above are measured when charging the camcorder at a temperature of 25 °C (77 °F). It is recommended that you charge the battery in a temperature range of 10 °C to 30 °C (50 °F to 86 °F).

To remove the battery pack

1 Close the LCD screen, then slide back and open the battery/memory card/jack cover while sliding and holding the cover lock lever.

2 Slide the battery release lever (①) and remove the battery pack (②).

- Make sure that the battery does not fall out.



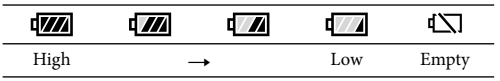
On the power supply

You can connect the USB cable to an AC Adaptor that is connected to a wall outlet (wall socket) so that the power can be supplied to the camcorder.
You can also connect your camcorder to a computer using the USB cable, so that the power will be supplied from the computer, then you do not have to worry about the amount of power remaining in the battery while copying images from the camcorder, etc.

- Insert the battery into the camcorder before connecting it to a power supply either by connecting the camcorder to the AC Adaptor or the computer.
- The recording mode can be selected only when the camcorder is connected to the AC Adaptor or a computer which is compatible with a 1,500 mA standard power supply.
- When you connect the camcorder to a computer using the USB cable during playback, the USB connection screen appears. It will turn to the Playback screen if you press [×] → [▶] (View Images).

To check the remaining battery power

An icon indicating the remaining battery power is displayed.



- It will take approximately 1 minute to display the correct remaining battery power.
- The remaining battery power may not be displayed correctly depending on ambient conditions and the environment in which you are using your camcorder.
- Your camcorder cannot display the remaining battery life in minutes using the “InfoLITHIUM” battery.

Notes on the AC Adaptor

- Do not short-circuit the USB jack or the battery terminal with a metallic object while the USB cable and the AC Adaptor are connected. This may cause a malfunction.
- When you disconnect the AC Adaptor from the power supply, hold both the camcorder and the USB plug firmly, and then disconnect the USB cable.

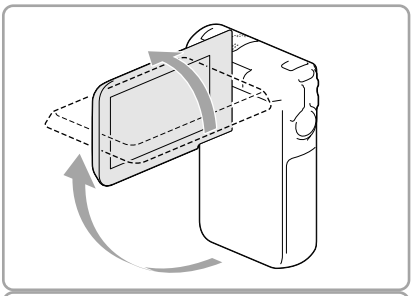
☞
- Recording time, Playing time (p. 49)

Charging the battery pack abroad

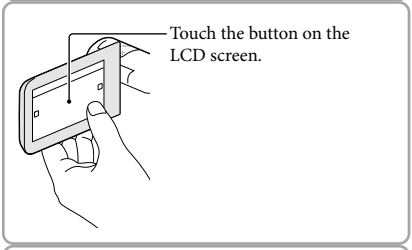
You can charge the battery pack in any countries/regions using the AC Adaptor supplied with your camcorder within the AC 100 V - 240 V, 50 Hz/60 Hz range. Do not use an electronic voltage transformer.

Turning the power on, and setting the date and time

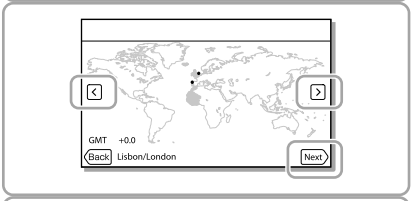
1 Open the LCD screen of your camcorder and turn the power on.



2 Select the desired language, then select [Next].

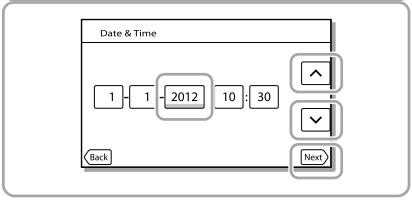


3 Select the desired geographical area with [<]/[>], then select [Next].



4 Set [Summer Time], select the date format and the date and time.

- If you set [Summer Time] to [On], the clock advances 1 hour.
- When you select the date and time, select one of the items and adjust the value with [^]/[v].
- When you select [OK], the date and time setting operation is complete.



Changing the language setting

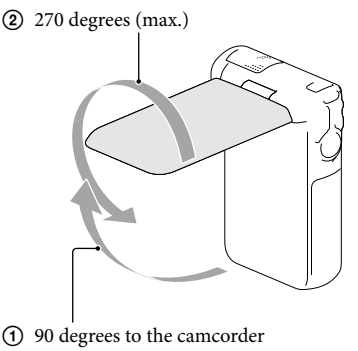
You can change the on-screen displays to show messages in a specified language.
Select MENU → [Setup] → [General Settings] → [Language Setting] → a desired language.

To turn off the power

Close the LCD screen.

To adjust the angle of the LCD panel

First open the LCD panel 90 degrees to the camcorder (①), and then adjust the angle (②).



To turn off the beep sound

Select MENU → [Setup] → [General Settings] → [Beep] → [Off].

Notes

- The recording date and time are recorded automatically on the recording media. They are not displayed during recording. However, you can check them as [Data Code] during playback. To display them, select MENU → [Setup] → [Playback Settings] → [Data Code] → [Date/Time].
- Once the clock is set, the clock time is automatically adjusted with [Auto Clock ADJ] and [Auto Area ADJ] set to [On]. The clock may not be adjusted to the correct time automatically, depending on the country/region selected for your camcorder. In this case, set [Auto Clock ADJ] and [Auto Area ADJ] to [Off] (HDR-GW55VE/GW77VE) (p. 46).

☞

- To set the date and time again: [Date & Time Setting] (p. 46)

Preparing the recording media

The recording media that can be used are displayed on the screen of your camcorder as following icons.

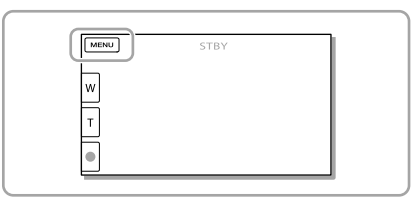
	Default recording medium	Alternative recording medium
HDR-GW55VE	Memory card	—
HDR-GW77E/GW77VE	Internal memory	Memory card

Notes

- You cannot select a different recording medium for movies and for photos.

Selecting a recording medium (HDR-GW77E/GW77VE)

Select MENU → [Setup] → [Media Settings] → [Media Select] → the desired medium.

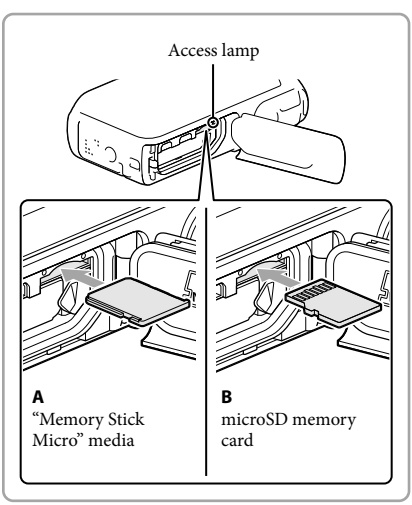


Inserting a memory card

Open the battery/memory card/jack cover, and insert the memory card until it clicks.

"Memory Stick Micro" (M2) media: Insert the memory card in the direction shown in figure A until it clicks.
microSD memory card: Insert the memory card in the direction shown in figure B until it clicks.

- The [Preparing image database file. Please wait.] screen appears if you insert a new memory card. Wait until the screen disappears.
- Insert the card squarely in the correct direction, otherwise it will not be recognized by the camcorder.



To eject the memory card

Open the cover and lightly push the memory card in once.

Notes

- To ensure stable operation of the memory card, it is recommended to format the memory card with your camcorder before the first use (p. 45). Formatting the memory card will erase all the data stored on it and the data will be irrecoverable. Save your important data on your computer, etc.
- If [Failed to create a new Image Database File. It may be possible that there is not enough free space.] is displayed, format the memory card (p. 45).
- Confirm the direction of the memory card. If you forcibly insert the memory card in the wrong direction, the memory card, memory card slot, or image data may be damaged.
- Do not insert any memory card other than those that fit into the memory card slot. If you do, it may cause a malfunction.
- When inserting or ejecting the memory card, be careful so that the memory card does not pop out and drop.

Types of memory card you can use with your camcorder

	SD Speed Class	Capacity (operation verified)	Described in this manual
"Memory Stick Micro" (Mark2) media	—	Up to 32 GB	"Memory Stick Micro" media
microSD memory card microSDHC memory card	Class 4 or faster	Up to 32 GB	microSD card

- Operation with all memory cards is not assured.

Notes

- The camcorder is guaranteed to operate within the temperature range of 0 °C to 40 °C (32 °F to 104 °F) but the guaranteed operation temperature range may differ depending on each type of memory card. See the operating instructions of the memory card for details.

☞

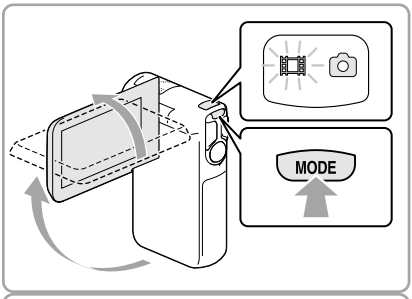
- Recording/playback/editing media: Screen indicators during recording (p. 25)
- Recording time of movies/number of recordable photos (p. 49)

Recording

In the default setting, movies and photos are recorded on the following media. Movies are recorded with high definition image quality (HD).
HDR-GW55VE: Memory card
HDR-GW77E/GW77VE: Internal memory

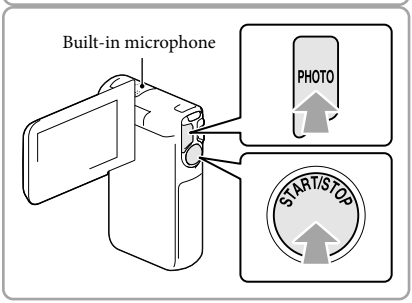
Recording movies

1 Open the LCD screen and press MODE to turn on the 🎞 (Movie) lamp.



2 Press START/STOP to start recording.

- To stop recording, press START/STOP again.
- You can record photos during movie recording by pressing PHOTO (Dual Capture).



Notes

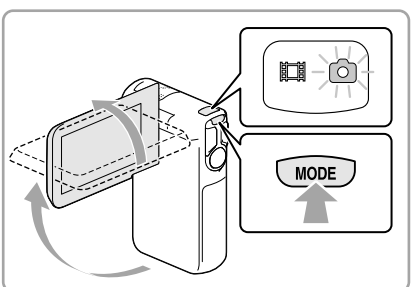
- If you close the LCD screen while recording movies, the camcorder stops recording.
- Do not touch the built-in microphone while recording.
- The maximum continuous recordable time of movies is about 13 hours.
- When a movie file exceeds 2 GB, the next movie file is created automatically.
- When [Frame Rate] is set to [50p], you cannot record photos during movie recording.
- The flash does not work while the 🎞 (Movie) lamp is lit.
- The following states will be indicated if data is still being written onto the recording media after recording has finished. During this time, do not apply shock or vibration to the camcorder, or remove the battery or AC Adaptor.
  – Access lamp (p. 21) is lit or flashing
  – The media icon in the upper right of the LCD screen is flashing

- The LCD screen of your camcorder can display recording images across the entire screen (full pixel display). However, this may cause slight trimming of the top, bottom, right, and left edges of images when played back on a TV which is not compatible with full pixel display. It is recommended you record images with [Guide Frame] set to [On] and using the outer frame of [Guide Frame] (p. 45) as a guide.

☞
- Recording time (p. 49)
- Recordable time, remaining capacity: [Media Info] (p. 45)
- [Media Select] (p. 21)

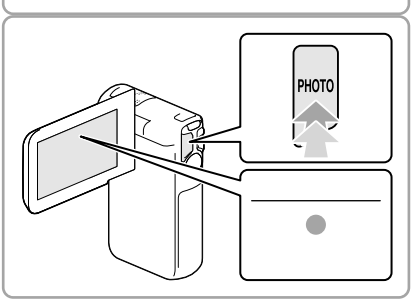
Shooting photos

1 Open the LCD screen and press MODE to turn on the 📷 (Photo) lamp.



2 Press PHOTO lightly to adjust the focus, then press it fully.

- When the focus is adjusted properly, AE/AF lock indicator appears on the LCD screen.



☞
- Recordable number of photos (p. 51)
- [Flash] (p. 44)
- To change the image size: [📷 Image Size] (p. 45)

To record clear images

- When the lens is dirty or dusty, clean the surface of the lens.

To display items on the LCD screen

Items on the LCD screen disappear if you do not operate the camcorder for a few seconds after you turn the camcorder on or switch between the movie recording and photo shooting modes.

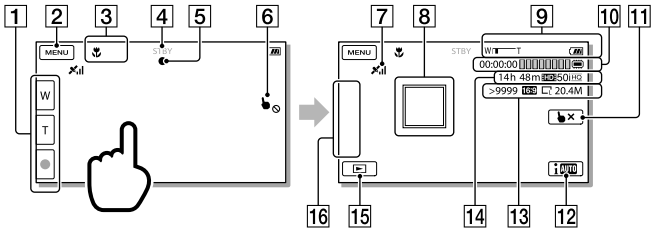
Touch anywhere except the buttons on the LCD screen to display information on icons with functions convenient for recording.

☞

- To display items on the LCD screen all the time: [Display Setting] (p. 45)

Screen indicators during recording

Described here are icons for both movie recording and photo recording modes. Refer to the page in ( ) for details.



1 Zoom button (W: Wide/T: Telephoto), START/STOP button (in movie recording mode), PHOTO button (in photo recording mode)

2 MENU button (42)

3 Status detected by Intelligent Auto

4 Recording status ([STBY]/[REC])

5 AE/AF (automatic exposure/automatic focus) lock (24)

6 Touch pad deactivated (Underwater)

7 GPS triangulating status* (33)

8 Tracking focus: the camcorder tracks the subject that you select. Touch the subject on the LCD screen.

9 Zoom, Remaining battery

10 Counter (hour: minute: second), Capturing a photo, Recording/playback/editing media (21)

11 Tracking focus cancel button

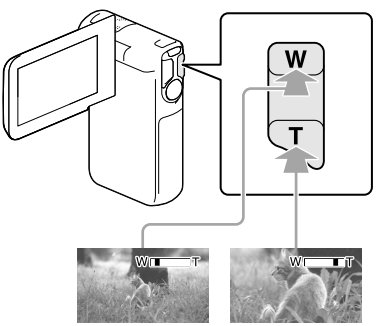
12 Intelligent Auto button: the camcorder detects the surrounding conditions automatically when recording images.
13 Approximate number of recordable photos, Aspect ratio (16:9 or 4:3), Photo size (L/M/S)
14 Estimated recording remaining time, Recording image quality (HD/STD), Frame rate (50p/50i) and recording mode (PS/FX/FH/HQ/LP) (31)
15 View Images button (28)
16 My Button (you can assign your favorite functions to icons displayed in this area) (45)

* HDR-GW55VE/GW77VE

To zoom the subjects

Press and hold the power zoom button (W or T) to magnify or reduce the size of the image.

W (Wide angle): Wider range of view
T (Telephoto): Close view



- You can magnify images up to 17 times (Extended Zoom) the original size with the power zoom button.
- You can switch the zoom speed between high and low, by changing the pressure on the power zoom button.
- Be sure to keep your finger on the power zoom buttons. If you move your finger off the power zoom button, the operation sound of the power zoom button may also be recorded.
- You cannot change the zoom speed with the W/T button on the LCD screen.
- The minimum possible distance between camcorder and subject while maintaining sharp focus is about 1 cm (about 13/32 in.) for wide angle and about 80 cm (about 31 1/2 in.) for telephoto.
- You can magnify images up to 10 times using optical zooming in the following cases:
  – When [SteadyShot] is set to other than [Active]
  – When the (Photo) is lit

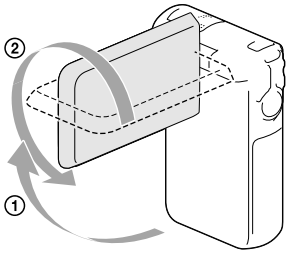
☞
- Further zooming: [Digital Zoom] (p. 44)

To record in mirror mode

Open the LCD panel 90 degrees to the camcorder (①), then rotate it 270 degrees to the lens side (②).

A mirror-image of the subject appears on the LCD screen, but the image will be normal when recorded.

- Using [Self-portrait 1 Person] or [Self-portrait 2 People] of the [Self-Timer] setting will reduce camera shake when shooting photos in mirror mode (p. 44).

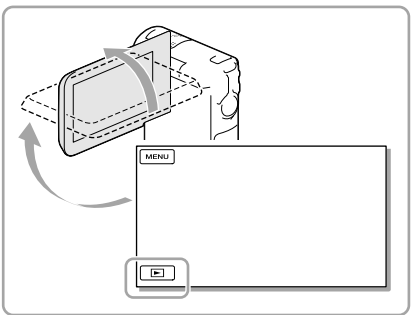


Playback

You can search for recorded images by date and time of recording (Event View) or location of recording (Map View) (HDR-GW55VE/GW77VE).

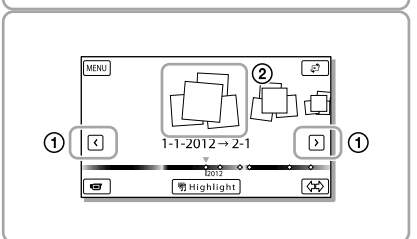
1 Open the LCD screen and select (View Images) on the LCD screen to enter the playback mode.

- You can display the Event View when the LCD screen is folded with the reverse (screen) side facing out.



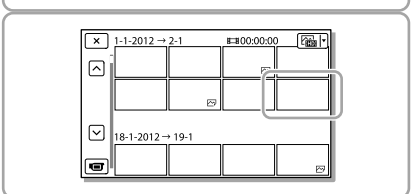
2 Select / to move the desired event to the center (①) and then select it (②).

- The camcorder displays recorded images as an event automatically, based on the date and time.

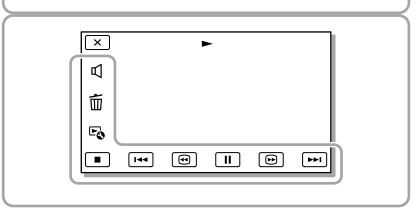


3 Select the image.

- The camcorder plays from the selected image to the last image in the event.



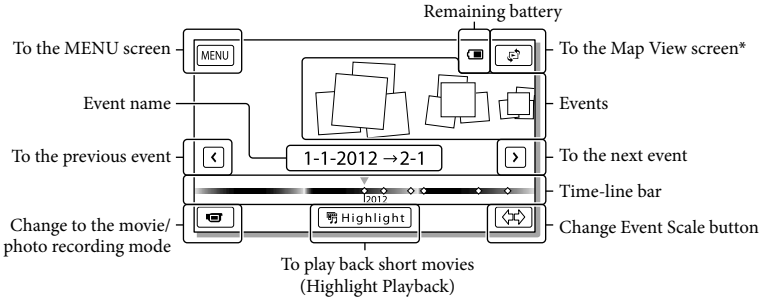
4 Select the appropriate buttons on the LCD screen for various playback operations.



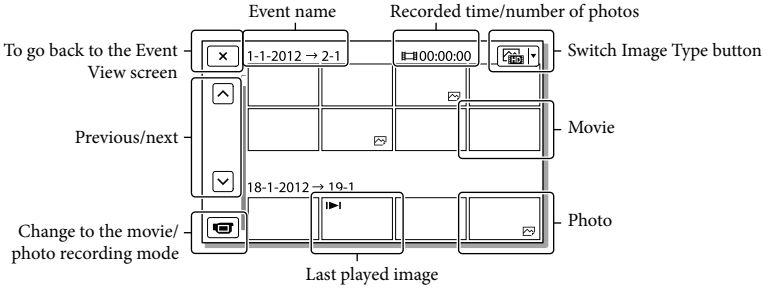
	Volume	/	Previous/Next
	Delete	/	Fast-reverse/fast-forward
	Context	/	Play/Pause
	Stop		Play/stop short movies

- Some buttons described above may not appear, depending on the image being played back.
- As you repeat selecting / during playback, movies are played as fast as about 5 times → about 10 times → about 30 times → about 60 times.
- Select / during pause to play movies slowly.
- To repeat Slideshow, select → [Slideshow Set] when is selected with the Switch Image Type button.

Screen display on the Event View screen



* HDR-GW55VE/GW77VE



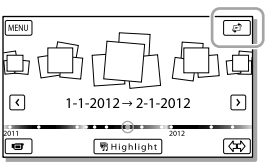
- Reduced-size images which enable you to view many images at the same time on an index screen are called “thumbnails.”

Notes

- To prevent your image data from being lost, save all your recorded images on external media periodically. (p. 37)

Playing movies and photos from the Map View (HDR-GW55VE/GW77VE)

Switch to the Map View by touching → [Map View].



- When you use the map data for the first time:
  A message appears asking you to confirm whether you agree with the terms of the license agreement of the map data. You can use the map data by touching [Yes] on the screen after agreeing to the terms of the license agreement (p. 57).
  You cannot use the map data if you touch [No]. However, when you try to use the map data for the second time, the same message will appear on the screen, and you can use the map data by touching [Yes].

To play back images with other devices

- You may not be able to play back normally images recorded on your camcorder with other devices. Also, you may not be able to play back images recorded on other devices with your camcorder.
- Standard definition image quality (STD) movies recorded on SD memory cards cannot be played on AV equipment of other manufacturers.

Recording images with various settings

Selecting the image quality of movies (Recording mode)

You can switch the recording mode to select the movie quality when recording high definition image quality (HD) movies. The recording time (p. 49) or the type of media device to which the images can be copied may change, depending on the recording mode selected.

1 Select MENU → [Image Quality/Size] → [REC Mode].

2 Select the desired recording mode.

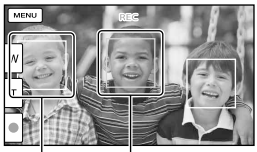
Recording mode and the media devices to which the images can be copied

Types of media	PS*1	FX	FH/HQ/LP
On this camcorder			
Internal memory*2	✓	✓	✓
Memory card	✓	✓	✓
On external devices			
Blu-ray discs	✓	✓	✓
AVCHD recording discs	—	—	✓

*1 [50p Quality PS] can be set only when the [Frame Rate] is set to [50p] (p. 45).
*2 HDR-GW77E/GW77VE

Capturing smiles automatically (Smile Shutter)

A photo is recorded automatically when the camcorder detects the smile of a person during movie recording (p. 44). ([Dual Capture] is the default setting.)



The camcorder is detecting a face.

The camcorder is detecting a smile (orange).

Notes

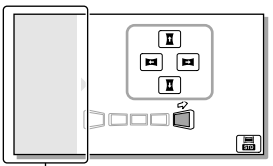
- When the frame rate and the recording mode are set to [50i]/[Highest Quality FX] or [50p]/[50p Quality PS], you cannot use the Smile Shutter function while recording movies.
- Smiles may not be detected depending on recording conditions, subject conditions, and the setting of your camcorder.

Shooting panoramic photos

You can make a panoramic photo by taking multiple photos as you sweep the camcorder around, and then combine them into one.

1 MENU → [Shooting Mode] → [iSweep Panorama].

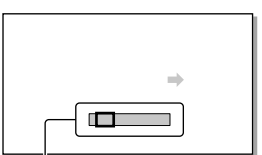
2 Align the camcorder with the end of the subject to be shot and press PHOTO.



This part will not be recorded.

- You can select the direction in which you move the camcorder by touching / / on the LCD screen.

3 Sweep the camcorder to the end of the guide, following the indication on the screen.

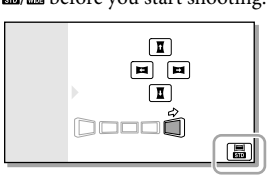


Guide

- You can play back panoramic photos using the built-in "PlayMemories Home" software.

To select the image size of the photo taken by iSweep Panorama

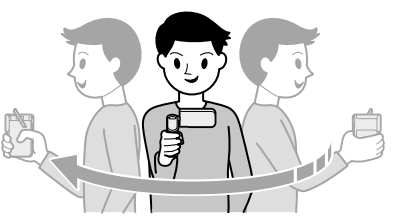
Select / before you start shooting.



- [Standard] (the default setting)
  Horizontal: 4,912 × 1,080
  Vertical: 3,424 × 1,920
- [Wide]
  Horizontal: 7,152 × 1,080
  Vertical: 4,912 × 1,920

Tips on shooting panoramic photos

Sweep the camcorder around you at a slow and steady speed (about 5 seconds for 180 degrees). A message will alert you if the speed is too fast or too slow. It is recommended that you practice the sweeping movement in advance, before you take a panoramic photo.



- For taking good panoramic photos, it is also important to keep sufficient distance between the subject and the background or to shoot in bright places such as outdoors.

Recording information on your location (GPS) (HDR-GW55VE/GW77VE)

When you set [GPS Setting] to [On] (the default setting), the GPS triangulating icon will appear on the screen and the camcorder will start searching for GPS satellite signals. The icon displayed will vary according to the intensity of the signal received. The GPS function is available when , or are displayed.

The following features are available if you use the GPS (Global Positioning System) function.

- Recording location information on movies or photos ([On] is the default setting.)
- Playing movies and photos by searching for them from a map (Map View, p. 30)
- Displaying a map of your current location

If you do not want to record location information

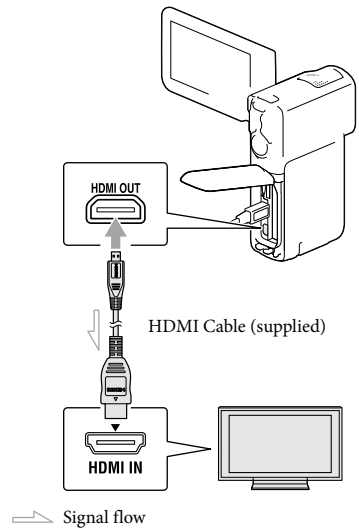
Select MENU → [Setup] → [General Settings] → [GPS Setting] → [Off].

Notes

- It may take a while before the camcorder starts triangulating.
- Use the GPS function outdoors and in open areas, as the radio signals can best be received in such areas.
- The map always displays the north at the top.

Playing images on a TV

Connect the camcorder to a TV using the HDMI cable.



1 Switch the input on the TV to HDMI IN.

2 Connect the camcorder to a TV using the HDMI cable.

3 Play a movie or a photo on the camcorder (p. 28).

Notes

- Refer to the instruction manuals of the TV as well.
- Connect the camcorder to the wall outlet (wall socket) using the supplied AC Adaptor and the USB cable (p. 17).
- When movies are recorded with standard definition image quality (STD), they are played back in standard definition image quality (STD) even on a high definition TV.

On “Photo TV HD”

This camcorder is compatible with the “Photo TV HD” standard. “Photo TV HD” allows for highly-detailed, photo-like depiction of subtle textures and colors. By connecting Sony’s Photo TV HD-compatible devices using an HDMI cable*, a whole new world of photos can be enjoyed in breathtaking HD quality.

* The TV will automatically switch to the appropriate mode when displaying photos.

Editing on your camcorder

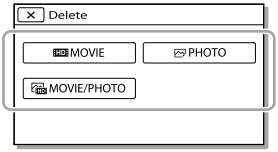
Notes

- Some basic editing operations can be done on the camcorder. If you want to perform advanced editing operations, install the “Expanded Feature” for the built-in “PlayMemories Home” software.
- You cannot restore images once they are deleted. Save important movies and photos in advance.
- Do not remove the battery pack or the AC Adaptor from your camcorder while deleting or dividing the images. It may damage the recording media.
- Do not eject the memory card while deleting or dividing images from the memory card.
- If you delete or divide movies/photos that are included in saved scenarios, the scenarios will also be deleted.

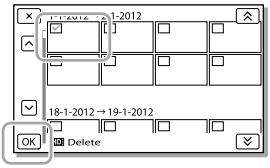
Deleting movies and photos

1 Select MENU → [Edit] (HDR-GW55VE) or [Edit/Copy] (HDR-GW77E/GW77VE) → [Delete].

2 Select [Multiple Images], and then select the type of image you want to delete.



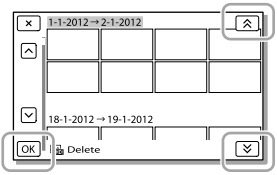
3 Add check marks ✔ to the movies or photos to be deleted and select OK.



To delete all movies/photos in the selected date at one time

1 In step 2, select [All In Event].

2 Select the date you want to delete using /, and then select OK.



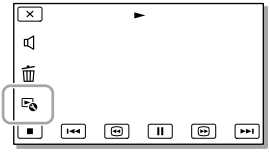
To delete a part of a movie

You can divide a movie and delete it.

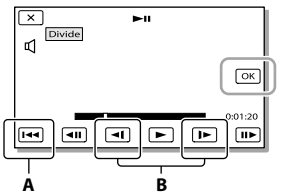
☞
- Release protection: [Protect] (p. 45)
- [Format] (p. 45)

Dividing a movie

1 Select → [Divide] on the movie playback screen.



2 Select the point where you want to divide the movie into scenes using ▶/II, and then select OK.



A: Returns to the beginning of the selected movie
B: Adjusts the dividing point with more precision

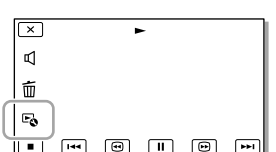
Notes

- A slight difference may occur from the point where you select and the actual dividing point, as your camcorder selects the dividing point based on about half-second increments.

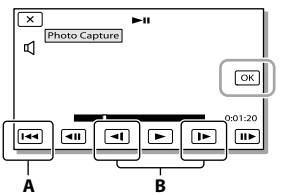
Capturing a photo from a movie (HDR-GW77E/GW77VE)

You can capture images from movies recorded in the internal memory.

1 Select → [Photo Capture] that appears on the playback screen of a movie.



2 Select the point where you want to capture a photo using ▶/II, and then select OK.



A: Returns to the beginning of the selected movie
B: Adjusts the capturing point with more precision

If the movie was recorded with one of the following image quality levels, the image size will be set as shown below.

- High definition image quality (HD): [2.1 M] (16:9)
- Wide aspect ratio (16:9) with standard definition image quality (STD): [0.2 M] (16:9)
- 4:3 aspect ratio with standard definition image quality (STD): [VGA (0.3 M)] (4:3)

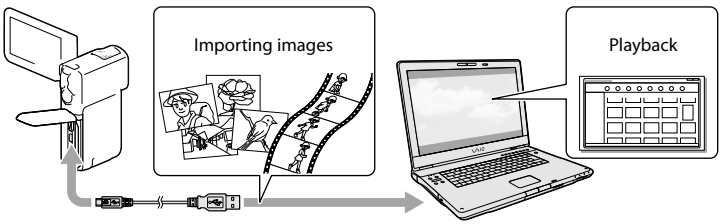
On recording date and time of captured photos

- The recording date and time of captured photos are the same as the recording date and time of the movies.
- If the movie you are capturing from has no data code, the recording date and time of the photo will be the date and time you captured from the movie.

Useful functions available when connecting the camcorder to your computer

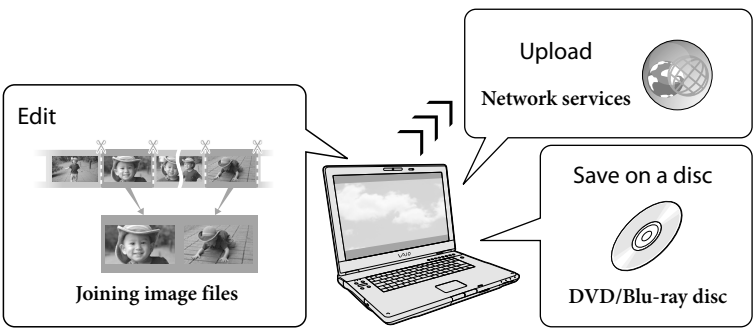
For Windows

The built-in "PlayMemories Home" (Lite Version) software allows you to import images in the camcorder to your computer and play them on the computer easily.



To use the "Expanded Feature" upgrade for the "PlayMemories Home" software

On the computer that is connected to the Internet, you can download the "Expanded Feature" upgrade which allows you to use various expanded functions.



For Mac

The built-in "PlayMemories Home" software is not supported with Mac computers.
To import images from the camcorder to your Mac and play them, use the appropriate software on your Mac. For details, visit the following URL.
http://www.sony.co.jp/imsoft/Mac/

Preparing a computer

(Windows)

Step 1 Checking the computer system

OS*1
Microsoft Windows XP SP3*2/Windows Vista SP2*3/Windows 7 SP1
CPU*4
Intel Core Duo 1.66 GHz or faster, or Intel Core 2 Duo 1.66 GHz or faster (Intel Core 2 Duo 2.26 GHz or faster is required when processing FX or FH movies, and Intel Core 2 Duo 2.40 GHz or faster is required when processing PS movies.) However, Intel Pentium III 1 GHz or faster is sufficient for the following operations: – Importing the movies and photos to the computer – Creating a Blu-ray disc/AVCHD recording disc/DVD-video (Intel Core Duo 1.66 GHz or faster is required when creating a DVD video by converting high definition image quality (HD) to standard definition image quality (STD).) – Processing only the movies with standard definition image quality (STD)
Memory
Windows XP: 512 MB or more (1 GB or more is recommended) Windows Vista/ Windows 7: 1 GB or more
Hard disk
Disk volume required for installation: Approximately 500 MB (10 GB or more may be necessary when creating AVCHD recording discs. 50 GB maximum may be necessary when creating Blu-ray discs.)
Display
Minimum 1,024 × 768 dots
Others
USB port (this must be provided as standard, Hi-Speed USB (USB 2.0 compatible)), Blu-ray disc/DVD burner Either NTFS or exFAT file system is recommended as the hard disk file system.

*1 Standard installation is required. Operation is not assured if the OS has been upgraded or in a multi-boot environment.

*2 64-bit editions and Starter (Edition) are not supported. Windows Image Mastering API (IMAPI) Ver.2.0 or newer is required to use disc creation function, etc.

*3 Starter (Edition) is not supported.

*4 Faster processor is recommended.

Notes

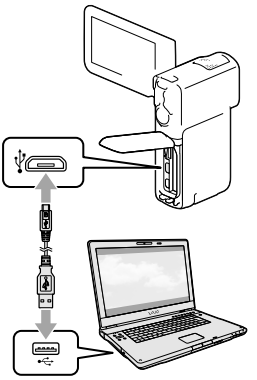
- Operation with all computer environments is not assured.

Step 2 Installing the built-in "PlayMemories Home" software

1 Turn on the computer.

- Log on as an Administrator for installation.
- Close all applications running on the computer before installing the software.

2 Connect the camcorder to the computer using the USB cable, then select [USB Connect] on the LCD screen of the camcorder.



- When using Windows 7: The Device Stage window opens.
- When using Windows XP/Windows Vista: The AutoPlay wizard is displayed.

3 On Windows 7, select [PlayMemories Home] on the Device Stage window. On Windows XP/Windows Vista, select [Computer] (on Windows XP, [My Computer]) → [PMHOME] → [PMHOME.EXE].

4 Follow the instructions that appear on the computer screen to continue the installation.

When the installation completes, "PlayMemories Home" starts up.

- If the "PlayMemories Home" software is already installed on your computer, register your camcorder with the "PlayMemories Home" software. Functions that can be used with this camcorder will then be available.
- If the "PMB (Picture Motion Browser)" software is installed on your computer, it will be overwritten by the "PlayMemories Home" software. In this case, you cannot use some functions that were available with "PMB" with this "PlayMemories Home" software.
- Instructions for installing the "Expanded Feature" upgrade appear on the computer display. Follow the instructions and install the expansion files.
- The computer has to be connected to the Internet to install the "Expanded Feature" upgrade. If you did not install the file the first time you started the "PlayMemories Home" software, the instructions appear again when you select a function of the software that can be used only when the "Expanded Feature" upgrade has been installed.
- For details on "PlayMemories Home," select "PlayMemories Home Help Guide" on the software or visit the PlayMemories Home support page (http://www.sony.co.jp/pmh-se/).

Notes

- Make sure to set [USB LUN Setting] to [Multi] when you install the "PlayMemories Home" software.
- If the "Device Stage" does not start up when you are using Windows 7, click [Start] → [Computer], then double click the camera icon for this camcorder → the Storage media icon → [PMHOME.EXE].
- Operation is not guaranteed if you read or write video data from or to the camcorder using software other than the built-in "PlayMemories Home" software. For the information on the compatibility of the software you are using, consult the manufacturer of the software.
- There may be some types of discs or media devices on which movies cannot be saved, depending on the [REC Mode] setting selected when you record the movie (p. 31). Movies recorded with [REC Mode] set to [50p Quality PS] or [Highest Quality FX] can be saved on Blu-ray discs only.

To disconnect your camcorder from the computer

1 Click the icon at the bottom right of the desktop of the computer → [Safely remove USB Mass Storage Device].



2 Select → [Yes] on the camcorder screen.

3 Disconnect the USB cable.

- If you are using Windows 7, the  icon may not appear on the desktop of the computer. In this case, you can disconnect the camcorder from your computer without following the procedures described above.

Notes

- Do not format the internal memory of the camcorder using a computer. If you do this, the camcorder will not operate correctly.
- Do not insert AVCHD recording discs that have been created using the built-in "PlayMemories Home" software to DVD players or recorders, as these devices do not support the AVCHD standard. If you do, you may not be able to remove the disc from these devices.
- When you access the camcorder from the computer, use the built-in "PlayMemories Home" software. Do not modify the files or folders on the camcorder from the computer. The image files may be damaged or may not be played back.
- Operation is not guaranteed, if you operate the data on the camcorder from the computer.
- The camcorder automatically divides an image file that exceeds 2 GB and saves the parts as separate files. All image files may be shown as separate files on a computer, however, the files will be handled properly by the import function and the playback function of the camcorder or the "PlayMemories Home" software.
- Use the built-in "PlayMemories Home" software when you import long movies or edited images from the camcorder to a computer. If you use other software, the images may not be imported correctly.
- When you delete image files, follow the steps on page 35.

To create a Blu-ray disc

You can create a Blu-ray disc with a high definition image quality (HD) movie previously imported to a computer.

To create a Blu-ray disc, the "BD Add-on Software" must be installed.

Visit the following URL to install the software.
http://support.d-imaging.sony.co.jp/BDUW/

- Your computer must support the creation of Blu-ray discs.
- BD-R (unrewritable) and BD-RE (rewritable) media are available for creating Blu-ray discs. You cannot add contents to either type of disc after creating the disc.
- To play back a Blu-ray disc that has been created with a movie that was recorded in [50p Quality PS] image quality, you need a device that complies with the AVCHD Ver. 2.0 format.

The devices on which the created disc can be played back

Blu-ray discs
Blu-ray disc players such as a Sony Blu-ray disc player or a PlayStation®3

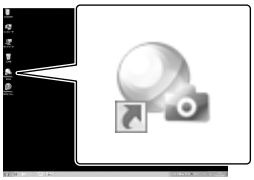
DVDs with high definition image quality (HD)
AVCHD format playback devices, such as a Sony Blu-ray disc player or a PlayStation®3

Notes

- The AVCHD recording disc can be played back only on AVCHD format compatible devices.
- Discs with high definition image quality (HD) images recorded should not be used in DVD players/recorders. Because DVD players/recorders are not compatible with the AVCHD format, DVD players/recorders may fail to eject the disc.
- Always maintain your PlayStation®3 to use the latest version of the PlayStation®3 system software. The PlayStation®3 may not be available in some countries/regions.

Starting the "PlayMemories Home" software

1 Double-click the "PlayMemories Home" icon on the computer screen.



The "PlayMemories Home" software starts up.

2 Double-click the "PlayMemories Home Help Guide" short-cut icon on the computer screen to see how to use "PlayMemories Home."



- If the icon is not displayed on the computer screen, click [Start] → [All Programs] → [PlayMemories Home] → the desired item.

Downloading the dedicated software for the camcorder

Installing software for a Mac

For details on the software for Mac computers, refer to the following URL.
http://www.sony.co.jp/imsoft/Mac/

- You can access the URL noted above by clicking [FOR_MAC.URL] in [PMHOME] while your camcorder is connected to the computer. When you connect the camcorder to the computer, set [USB LUN Setting] to [Multi].

Notes

- The software that can be used with your camcorder will differ, depending on the countries/regions.

Using menus

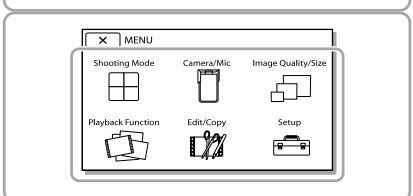
The camcorder has various menu items under each of 6 menu categories.

Shooting Mode (Items for selecting a shooting mode) → p. 44
Camera/Mic (Items for customized shooting) → p. 44
Image Quality/Size (Items for setting up image quality or size) → p. 45
Playback Function (Items for playback) → p. 45
Edit (HDR-GW55VE) or Edit/Copy (HDR-GW77E/GW77VE) (Items for editing images such as protect) → p. 45
Setup (Other setup items) → p. 45

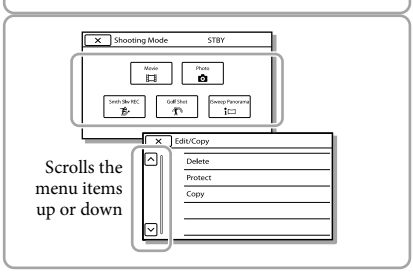
1 Select MENU.



2 Select a category.



3 Select your desired menu item.

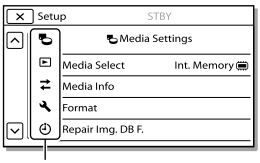


Notes

- Select ✕ to finish setting the menu or to return to the previous menu screen.

To find a menu item quickly

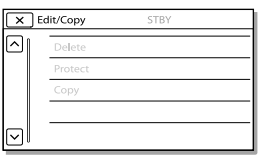
The [Camera/Mic] and [Setup] menus have sub-categories. Select the sub-category icon so that the LCD screen displays the list of menus in the sub-category selected.



Sub-category icons

When you cannot select a menu item

Grayed out menu items or settings are not available.
When you select the grayed out menu item, your camcorder displays the reason why you cannot select the menu item or the instruction of under which condition you can set the menu item.



Menu lists

Shooting Mode

- Movie ..... Records movies.
- Photo ..... Shoots photos.
- Smth Slw REC ..... Records smooth slow-motion movies.
- Golf Shot ..... Divides two seconds of fast movement into frames which are then recorded as a movie and photos. Keep the subject in the white frame in the center of the screen when recording.
- iSweep Panorama ..... Takes a panoramic photo (p. 31).

Camera/Mic

Manual Settings

- White Balance ..... Adjusts the color balance to the recording environment.
- Spot Meter/Fcs ..... Adjusts the brightness and focus for the selected subject simultaneously.
- Spot Meter ..... Adjusts the brightness of images to a subject you touch on the screen.
- Spot Focus ..... Adjusts the focus on a subject you touch on the screen.
- Exposure ..... Adjusts the brightness of movies and photos. If you select [Manual], adjust the brightness (exposure) using [+]/[−].
- Focus ..... Adjusts the focus manually. If you select [Manual], select [AF] to adjust the focus for a nearby subject and [MF] to adjust the focus for a distant subject.
- Low Lux ..... Records bright color images in the dim.

Camera Settings

- Scene Selection ..... Selects an appropriate recording setting according to the type of scene, such as night view or beach.
- Fader ..... Fades scenes in or out.
- Self-Timer ..... Sets the self-timer when your camcorder is in photo recording mode.
- Tele Macro ..... Focuses on the subject with its background blurred.
- SteadyShot ..... Automatically corrects the camera-shake correction when shooting with zooming not only when shooting with wide-angle.
- SteadyShot ..... Sets the SteadyShot function when shooting photos.
- Digital Zoom ..... Sets the maximum zoom level of the digital zoom.
- Auto Back Light ..... Adjusts the exposure for backlit subjects automatically.

Face

- Face Detection ..... Automatically detects faces.
- Smile Shutter ..... Automatically takes a shot whenever a smile is detected (p. 31).
- Smile Sensitivity ..... Sets the smile detection sensitivity for the Smile Shutter function.

Flash

- Flash ..... Sets how the flash is activated when shooting photos.
- Flash Level ..... Sets the brightness of flash.
- Red Eye Reduction ..... Prevents redeye when shooting with flash.

Microphone

- Blt-in Zoom Mic ..... Records movies with vivid sound appropriate to the zoom position.
- Wind Noise Reduct. ..... Reduces the wind noise recorded from the built-in microphone.
- Micref Level ..... Sets the microphone level for recording.

Shooting Assist

- My Button ..... Assigns functions to My Buttons.
- Guide Frame ..... Displays frames as a guide to make sure the subject is horizontal or vertical.
- Display Setting ..... Sets the duration that icons or indicators are displayed on the LCD screen.

Image Quality/Size

- REC Mode ..... Sets the mode to record movies (p. 31).
- Frame Rate ..... Sets the frame rate to record movies.
- HD / STD Setting ..... Sets the image quality for recording (high definition image quality (HD) or standard definition image quality (STD)).
- Wide Mode ..... Sets the horizontal to vertical ratio when recording movies with standard definition image quality (STD).
- x.v.Color ..... Records a wider range of colors. Set this item when you watch images with a TV which is compliant with x.v.Color.
- Image Size ..... Sets the photo size.

Playback Function

- Event View ..... Starts playing images from the Event View display.
- Map View*1 ..... Starts playing the images from the Map View display.
- Highlight Movie ..... Starts playing Highlight Playback scenes or Highlight Scenarios saved with standard definition image quality (STD).
- Scenario ..... Starts playing the scenarios that were saved by Highlight Playback.

Edit*2 / Edit/Copy*3

- Delete ..... Deletes movies or photos (p. 35).
- Protect ..... Protects movies or photos to avoid deleting.
- Copy*3 ..... Copies images.

Setup

Media Settings

- Media Select*3 ..... Selects the type of recording media (p. 21).
- Media Info ..... Displays information on the recording media.
- Format ..... Deletes and formats all data on the recording media.
- Repair Img. DB F. ..... Repairs the image database file on the recording media (p. 49).
- File Number ..... Sets how to assign the file number to photos.

Playback Settings

- Data Code ..... Displays information that was recorded automatically at the time of recording.
- Volume ..... Adjusts the volume of playback sound.

Connection

- TV Type ..... Converts the signal depending on the TV connected (p. 33).
- HDMI Resolution ..... Selects the output image resolution when connecting your camcorder to a TV with an HDMI cable.

CTRL FOR HDMI ..... Sets whether or not the TV's Remote Commander is to be used when the camcorder is connected to a "BRAVIA" Sync compatible TV with the HDMI cable.

USB Connect ..... Select this item when no instructions appear on the LCD screen when you connect your camcorder to an external device via USB.

USB Connect Setting ... Sets the connection mode when the camcorder is connected to a computer or a USB device.

USB Power Supply ..... Supplies power to the camcorder using a USB cable.

USB LUN Setting ..... Sets the camcorder to improve the compatibility of a USB connection by restricting some USB functions.

Disc Burn ..... Saves images that have not yet been saved onto a disc.

General Settings

Beep ..... Sets whether the camcorder sounds operation beeps or not.

LCD Brightness ..... Adjusts the brightness of the LCD screen.

Your Location*1 ..... Displays the current location on a map.

Airplane Mode*1 ..... Settings to be used when you are on board an airplane.

GPS Setting*1 ..... Receives the GPS signal (p. 33).

Language Setting ..... Sets the display language (p. 20).

Power Save ..... Sets the LCD screen and the power so that they turn off automatically.

Initialize ..... Initializes all the settings to the default settings.

Demo Mode ..... Sets playback of the demonstration movie about the functions of the camcorder.

Clock Settings

Date & Time Setting ..... Sets the date and time (p. 19).

Area Setting ..... Adjusts for a time difference without stopping the clock (p. 19).

Auto Clock ADJ *1 ..... Adjusts the clock automatically by acquiring the time from the GPS system.

Auto Area ADJ*1 ..... Corrects time differences automatically by acquiring the current location information from the GPS system.

---

*1 HDR-GW55VE/GW77VE

*2 HDR-GW55VE

*3 HDR-GW77E/GW77VE

Troubleshooting

If you run into any problems using your camcorder, follow the steps below.

① Check the list (p. 47 to 49), and inspect your camcorder.

↓

② Disconnect the power source, attach the power source again after about 1 minute, and turn the camcorder on.

↓

③ Touch MENU → [Setup] → [General Settings] → [Initialize]. If you press RESET, all settings, including the clock setting, are reset.

↓

④ Contact your Sony dealer or local authorized Sony service facility.

- Your camcorder may be required to initialize or change the current internal memory (HDR-GW77E/GW77VE) of your camcorder, depending on the problem. In the event of this, the data stored on the internal memory will be deleted. Be sure to save the data on the internal memory on other media (backup) before sending your camcorder for repair. We will not compensate you for any loss of internal memory data.
- During repair, we may check a minimum amount of data stored on the internal memory in order to investigate the problem. However, your Sony dealer will neither copy nor retain your data.
- See the "Handycam" User Guide (p. 6) for details on the symptoms of your camcorder, and "PlayMemories Home Help Guide" (p. 41) on connecting your camcorder to a computer.

The power does not turn on.

- Attach a charged battery pack to the camcorder (p. 14).
- The plug of the AC Adaptor has been disconnected from the wall outlet (wall socket). Connect it to the wall outlet (wall socket) (p. 15).

The camcorder does not operate even when the power is set to on.

- It takes a few seconds for your camcorder to be ready to shoot after the power is turned on. This is not a malfunction.
- Disconnect the AC Adaptor from the wall outlet (wall socket) or remove the battery pack, then reconnect the AC Adaptor or insert the battery pack again after about 1 minute. If the functions still do not work, touch MENU → [Setup] → [General Settings] → [Initialize]. (If you touch [Initialize], all settings, including the clock setting, are reset.)

Your camcorder gets warm.

- Your camcorder may become warm during operation. This is not a malfunction.

The power abruptly turns off.

- Use the AC Adaptor (p. 17).
- In the default setting, when about 2 minutes have elapsed while you do not operate your camcorder, the camcorder automatically turns off. Change the setting of [Power Save] (p. 46), or turn on the power again.
- Charge the battery pack (p. 14).

Pressing START/STOP or PHOTO does not record images.

- The playback screen is displayed. Press MODE to turn on the (Movie) or (Photo) lamp (p. 23, 24).
- Your camcorder is recording the image you have just shot on the recording media. You cannot make new recording during this period.
- The recording medium is full. Delete

unnecessary images (p. 35).
- Total number of movie scenes or photos exceeds the recordable capacity of your camcorder (p. 49). Delete unnecessary images (p. 35).

The camcorder stops operating.

- The camcorder may stop recording if the camcorder is subject to continuous vibration.

"PlayMemories Home" cannot be installed.

- Check the computer environment or installation procedure required to install "PlayMemories Home."

"PlayMemories Home" does not work correctly.

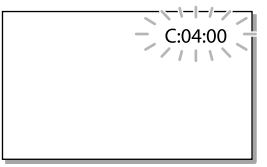
- Quit "PlayMemories Home" and restart your computer.

The camcorder is not recognized by the computer.

- Disconnect devices from the USB jack of the computer other than the keyboard, mouse, and your camcorder.
- Disconnect the USB cable from the computer and your camcorder, and restart the computer, then connect the computer and your camcorder again in the correct order.

Self-diagnosis display/Warning indicators

If indicators appear on the LCD screen, check the following.
If the problem persists even after you have tried to fix a couple of times, contact your Sony dealer or local authorized Sony service facility. In this case, when you contact them, give them all the numbers of the error code beginning with C or E.
You may hear a melody when some warning indicators appear on the screen.



C:06:□□

- The battery pack temperature is high. Change the battery pack or place it in a cool place.

C:13:□□ / C:32:□□

- Remove the power source. Reconnect it and operate your camcorder again.

E:□□:□□

- Follow the steps from ② on page 47.

- The battery pack is nearly used up.

- The battery pack temperature is high. Change the battery pack or place it in a cool place.

- No memory card is inserted (p. 21).
- When the indicator flashes, there are not enough free spaces for recording images.

Delete unnecessary images (p. 35), or format the memory card after storing the images on other media (p. 45).
- The image data base file may be damaged. Check the data base file by selecting MENU → [Setup] → [Media Settings] → [Repair Img. DB F.] → the recording medium (HDR-GW77E/GW77VE).

- The memory card is damaged.
- Format the memory card with your camcorder (p. 45).

- Incompatible memory card is inserted (p. 22).

- Access to the memory card was restricted on another device.

- There is something wrong with the flash.

- The amount of lights is not sufficient, so camera-shake easily occurs. Use the flash.
- The camcorder is unsteady, so camera-shake easily occurs. Hold the camcorder steady with both hands and record images. However, note that the camera-shake warning indicator does not disappear.

- The recording medium is full.
- Photos cannot be recorded during processing. Wait for a while, then record.
- When [REC Mode] is set to [Highest Quality FX] or [50p Quality PS], you cannot capture photos while recording movies.

Recording time of movies/number of recordable photos

"HD" stands for high definition image quality, and "STD" stands for standard definition image quality.

Expected time of recording and playback with each battery pack

Recording time

Approximate time available when you use a fully charged battery pack.

(unit: minute)

Battery pack	Continuous recording time		Typical recording time	
Image quality	HD	STD	HD	STD
NP-BG1 (supplied)	90	100	45	50
NP-FG1	90	100	45	50

- Each recording time is measured when the camcorder is recording high definition image quality (HD) movies with [REC Mode] set to [Standard HQ].
- Typical recording time shows the time when you repeat recording start/stop, switching the MODE lamp, and zooming.
- Times measured when using the camcorder at 25 °C (77 °F). 10 °C to 30 °C (50 °F to 86 °F) is recommended.
- The recording and playback time will be shorter when you use your camcorder in low temperatures.
- The recording and playback time will be shorter depending on the conditions under which you use your camcorder.

Playing time

Approximate time available when you use a fully charged battery pack.

(unit: minute)

Battery pack		
Image quality	HD	STD
NP-BG1 (supplied)	185	185
NP-FG1	185	185

Expected recording time of movies

Internal memory (HDR-GW77E/GW77VE)

High definition image quality (HD) in h (hour) and min (minute)

Recording mode	HDR-GW77E	HDR-GW77VE
[50p Quality PS]	1 h 15 min (1 h 15 min)	1 h (1 h)
[Highest Quality FX]	1 h 30 min (1 h 30 min)	1 h 15 min (1 h 15 min)
[High Quality FH]	2 h 5 min (2 h 5 min)	1 h 40 min (1 h 40 min)
[Standard HQ]	3 h 45 min (2 h 50 min)	3 h (2 h 15 min)
[Long Time LP]	6 h 30 min (5 h 20 min)	5 h 15 min (4 h 20 min)

Standard definition image quality (STD) in h (hour) and min (minute)

Recording mode	HDR-GW77E	HDR-GW77VE
[Standard HQ]	3 h 55 min (3 h 35 min)	3 h 10 min (2 h 55 min)

- You can record movies of a maximum of 3,999 scenes with high definition image quality (HD), and 9,999 scenes with standard definition image quality (STD).
- The maximum continuous recording time of movies is approximately 13 hours.
- Your camcorder uses the VBR (Variable Bit Rate) format to automatically adjust image quality to suit the recording scene. This technology causes fluctuations in the recording time of the media. Movies containing quickly moving and complex images are recorded at a higher bit-rate, and this reduces the overall recording time.

Notes

- The number in ( ) is the minimum recordable time.

Memory card

High definition image quality (HD)

(unit: minute)

	2 GB	4 GB	8 GB	16 GB	32 GB
PS	9 (9)	15 (15)	35 (35)	75 (75)	150 (150)
FX	10 (10)	20 (20)	40 (40)	90 (90)	180 (180)
FH	10 (10)	25 (25)	60 (60)	120 (120)	245 (245)
HQ	25 (15)	50 (40)	105 (80)	215 (165)	440 (330)
LP	45 (35)	90 (75)	185 (155)	380 (310)	770 (630)

Standard definition image quality (STD)

(unit: minute)

	2 GB	4 GB	8 GB	16 GB	32 GB
HQ	25 (25)	55 (50)	110 (100)	225 (210)	460 (420)

- When using a Sony memory card.

Notes

- The recordable time may vary depending on the recording and subject conditions and [REC Mode] and [Frame Rate] (p. 45).
- The number in ( ) is the minimum recordable time.

Expected number of recordable photos

Internal memory (HDR-GW77E/GW77VE)

You can record the maximum 40,000 photos.

Memory card

	16:9 20.4M
2 GB	230
4 GB	465
8 GB	940
16 GB	1850
32 GB	3800

- When using a Sony memory card.
- The number of recordable photos of memory card shown is for the maximum image size of your camcorder. The actual number of recordable photos is displayed on the LCD screen during recording (p. 25).
- The number of recordable photos of memory card may vary depending on the recording conditions.

Notes

- The unique pixel array of Sony's ClearVid and the image processing system of Sony's BIONZ allows still image resolution equivalent to the sizes described.

On bit-rate and recording pixels

- The bit-rate, pixels and aspect ratio of each recording mode for movies (movie + audio, etc.)
  - – High definition image quality (HD):
    PS: Max. 28 Mbps 1,920 × 1,080 pixels/16:9
    FX: Max. 24 Mbps 1,920 × 1,080 pixels/16:9
    FH: Approx. 17 Mbps (average) 1,920 × 1,080 pixels/16:9
    HQ: Approx. 9 Mbps (average) 1,440 × 1,080 pixels/16:9
    LP: Approx. 5 Mbps (average) 1,440 × 1,080 pixels/16:9
  - – Standard definition image quality (STD):
    HQ: Approx. 9 Mbps (average) 720 × 576 pixels/16:9, 4:3
- The photo recording pixels and the aspect ratio.
  - – Photo recording mode, Dual capture:
    6,016 × 3,384 dots/16:9
    4,512 × 3,384 dots/4:3
    4,224 × 2,376 dots/16:9
    2,592 × 1,944 dots/4:3
    1,920 × 1,080 dots/16:9
    640 × 480 dots/4:3
  - – iSweep Panorama:
    4,912 × 1,080 dots/[Standard], horizontal
    3,424 × 1,920 dots/[Standard], vertical
    7,152 × 1,080 dots/[Wide], horizontal
    4,912 × 1,920 dots/[Wide], vertical
  - – Capturing a photo from a movie:
    1,920 × 1,080 dots/16:9
    640 × 360 dots/16:9
    640 × 480 dots/4:3

About handling of your camcorder

On use and care

- Do not hold the camcorder by the following parts.

LCD Screen



Battery/memory card/jack cover



- Do not aim at the sun. Doing so might cause your camcorder to malfunction. Take images of the sun only in low light conditions, such as at dusk.
- Use the camcorder in accordance with local regulations.
- Do not use or store the camcorder and accessories in the following locations:
  - Anywhere extremely hot, cold or humid. Never leave them exposed to temperatures above 60 °C (140 °F), such as under direct sunlight, near heaters or in a car parked in the sun. They may malfunction or become deformed.
  - Near strong magnetic fields or mechanical vibration. The camcorder may malfunction.
  - Near strong radio waves or radiation. The camcorder may not be able to record properly.
  - Near tuner devices such as TVs or radio. Noise may occur.
  - On a sandy beach or anywhere dusty. If sand or dust gets in your camcorder, it may malfunction. Sometimes this malfunction cannot be repaired.
  - Near windows or outdoors, where the LCD screen or the lens may be exposed to direct sunlight. This damages the inside of the LCD screen.
- Operate your camcorder on DC 3.6 V (battery pack) or DC 5.0 V (USB jack).
- For DC or AC operation, use the accessories recommended in these operating instructions.
- If any solid object or liquid gets inside the casing, unplug your camcorder and have it checked by a Sony dealer before operating it any further.
- Avoid rough handling, disassembling, modifying, physical shock, or impact such as hammering, dropping or stepping on the product. Be particularly careful of the lens.
- Keep the LCD screen closed when you are not using your camcorder.
- Do not wrap your camcorder with a towel, for example, and operate it. Doing so might cause heat to build up inside.
- When disconnecting the power cord (mains lead), pull it by the plug and not the cord.
- Do not damage the power cord (mains lead) such as by placing anything heavy on it.
- Do not use a deformed or damaged battery pack.
- Keep metal contacts clean.
- If the battery electrolytic liquid has leaked:
  - Consult your local authorized Sony service facility.
  - Wash off any liquid that may have contacted your skin.
  - If any liquid gets in your eyes, wash with plenty of water and consult a doctor.

When not using your camcorder for a long time

- To keep your camcorder in optimum state for a long time, turn it on and let it run by recording and playing back images about once a month.
- Use up the battery pack completely before storing it.

Note on the camcorder/battery pack temperature

- When the temperature of the camcorder or battery pack becomes extremely high or extremely low, you may not be able to record or play back on the camcorder, due to the protection features of the camcorder being activated in such situations. In this case, an indicator appears on the LCD screen.

Notes on charging through the USB cable

- Operation with all computers is not assured.
- If you connect the camcorder to a laptop computer that is not connected to a power source, the battery of the laptop computer will continue to use up its charge. Do not leave the camcorder connected to a computer in this manner.
- Charging with a personally assembled computer, with a converted computer, or through a USB hub are not guaranteed. The camcorder may not function correctly depending on the USB device which is used with the computer.
- While the camcorder is connected to your computer, do not turn on, restart, wake up from sleep mode, or shut down the computer. These operations may cause the camcorder to malfunction. Disconnect the camcorder from the computer before you attempt one of these operations.

When the camcorder is connected to a computer or accessories

- Do not try to format the recording media of the camcorder using a computer. If you do so, your camcorder may not operate correctly.
- When connecting the camcorder to another device with communication cables, be sure to insert the connector plug in the correct way. Pushing the plug forcibly into the terminal will damage the terminal and may result in a malfunction of the camcorder
- When the camcorder is connected to other devices through a USB connection and the power of the camcorder is turned on, do not close the LCD panel. The image data that has been recorded may be lost.

Notes on optional accessories

- We recommend using genuine Sony accessories.
- Genuine Sony accessories may not be available in some countries/regions.

LCD screen

- Do not apply excessive pressure on the LCD screen, as it may cause uneven color and other damage.
- If your camcorder is used in a cold place, a residual image may appear on the LCD screen. This is not a malfunction.
- While using your camcorder, the back of the LCD screen may heat up. This is not a malfunction.

On handling the casing

- If the casing is soiled, clean the camcorder body with a soft cloth lightly moistened with water, and then wipe the casing with a dry soft cloth.
- Avoid the following to avoid damage to the finish:
  - Using chemicals such as thinner, benzene, alcohol, chemical cloths, repellent, insecticide and sunscreen
  - Handling the camcorder with above substances on your hands
  - Leaving the casing in contact with rubber or vinyl objects for a long period of time

On handing the LCD screen and the light-emitting part of flash

If fingerprints or dust make dirty, it is recommended that you use a soft cloth to clean it.

About care and storage of the lens

- Wipe the surface of the lens clean with a soft cloth in the following instances:
  – When there are fingerprints on the lens surface
  – In hot or humid locations
  – When the lens is exposed to salty air such as at the seaside
- Store in a well-ventilated location subject to little dirt or dust.
- To prevent mold, periodically clean the lens as described above.

On charging the pre-installed rechargeable battery

Your camcorder has a pre-installed rechargeable battery to retain the date, time, and other settings even when the LCD screen is closed. The pre-installed rechargeable battery is always charged while your camcorder is connected to the wall outlet (wall socket) via the AC Adaptor or while the battery pack is attached. The rechargeable battery will be fully discharged in about 3 months if you do not use your camcorder at all. Use your camcorder after charging the pre-installed rechargeable battery.
However, even if the pre-installed rechargeable battery is not charged, the camcorder operation will not be affected as long as you are not recording the date.

How to charge the pre-installed rechargeable battery

Connect your camcorder to a wall outlet (wall socket) using the supplied AC Adaptor, and leave it with the LCD screen closed for more than 24 hours.

Note on disposal/transfer of the camcorder (HDR-GW77E/GW77VE)

Even if you delete all movies and still images, or perform [Format] (p. 45), data on the internal memory may not be completely erased. When you transfer the camcorder, it is recommended that you select MENU → [Setup] → [Media Settings] → [Format] → [Empty] to prevent the recovery of your data. Also, when you dispose of the camcorder, it is recommended that you destroy the actual body of the camcorder.

Note on disposal/transfer of the memory card

Even if you delete data in the memory card or format the memory card on your camcorder or a computer, you may not delete data from the memory card completely. When you give the memory card to somebody, it is recommended that you delete data completely using data deletion software on a computer. Also, when you dispose of the memory card, it is recommended that you destroy the actual body of the memory card.

Specifications

System

Signal format: PAL color, CCIR standards
HDTV 1080/50i, 1080/50p specification

Movie recording format:
HD: MPEG-4 AVC/H.264 AVCHD format Ver.2.0 compatible
STD: MPEG2-PS

Audio recording system:
Dolby Digital 2ch
Dolby Digital Stereo Creator

Photo file format:
DCF Ver.2.0 Compatible
Exif Ver.2.3 Compatible
MPF Baseline Compatible

Recording media (Movie/Photo):
Internal memory
HDR-GW77E/GW77VE: 16 GB

"Memory Stick Micro" (Mark2) media
Micro SD card (Class 4 or faster)
The capacity that a user can use:
HDR-GW77E*1: Approx. 15.8 GB
HDR-GW77VE*2: Approx 12.8 GB

*1 1 GB equals 1 billion bytes, a portion of which is used for system management and/or application files.

*2 1 GB equals 1 billion bytes, 2.8 GB is used for pre-installed map and another portion is used for data management functions.

Image device:
4.6 mm (1/3.91 type) CMOS sensor
Recording pixels (photo, 16:9):
Max. 20.4 mega (6 016 × 3 384) pixels*1
Gross: Approx. 5 430 000 pixels
Effective (movie, 16:9)*2:
Approx. 5 020 000 pixels
Effective (photo, 16:9):
Approx. 5 020 000 pixels
Effective (photo, 4:3):
Approx. 3 760 000 pixels

Lens:
G lens
10 × (Optical)*2, 17 × (Extended, while recording movies)*3, 120 × (Digital)
F1.8 ~ F3.4
Focal length:
f= 3.2 mm ~ 32.0 mm (5/32 in. ~ 1 5/16 in.)
When converted to a 35 mm still camera
For movies*2: 29.8 mm ~ 298.0 mm (1 3/16 in. ~ 11 3/4 in.) (16:9)
For photos: 29.8 mm ~ 298.0 mm (1 3/16 in. ~ 11 3/4 in.) (16:9)

Color temperature: [Auto], [One Push], [Indoor] (3 200 K), [Outdoor] (5 800 K)

Minimum illumination:
6 lx (lux) (in default setting, shutter speed 1/50 second)
3 lx (lux) ([Low Lux] is set to [On], shutter speed 1/25 second)

*1 The unique pixel array of Sony's ClearVid and the image processing system (BIONZ) allow still image resolution equivalent to the sizes described.

*2 [SteadyShot] is set to [Standard] or [Off].

*3 [SteadyShot] is set to [Active].

Input/Output connectors

HDMI OUT jack: HDMI micro connector

USB jack: micro-B (output only)

LCD screen

Picture: 7.5 cm (3.0 type, aspect ratio 16:9)

Total number of pixels:
921 600 (1 920 × 480)

General

Power requirements: DC 3.6 V (battery pack), DC 5.0 V (USB jack)

USB Charging: DC 5 V 500 mA/600 mA

Average power consumption:

During camera recording using LCD screen at normal brightness:
HD: 2.3 W STD: 2.1 W

Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)

Storage temperature: −20 °C to +60 °C (−4 °F to +140 °F)

Dimensions (approx.):
32.2 mm × 105.5 mm × 70.2 mm (1 5/16 in. × 4 1/4 in. × 2 7/8 in.) (w/h/d) including the projecting parts
32.2 mm × 105.5 mm × 70.2 mm (1 5/16 in. × 4 1/4 in. × 2 7/8 in.) (w/h/d) including the projecting parts, and the supplied rechargeable battery pack attached

Mass (approx.):
188 g (6.6 oz) main unit only
220 g (7.8 oz) including the supplied rechargeable battery pack

Water-proof/dust-proof performance:
Equivalent to IEC60529 IP58 (the camcorder is operable up to a waterdepth of 5 m for 60 minutes.)

Shock-proof performance:
Meeting MIL-STD 810F Method 516.5-Shock standards, this product has passed the required tests when dropped from a height of 1.5 m (4 feet) above a 5 cm (2 in.) -thick plywood board (with the LCD screen closed, facing toward the camcorder body).
Water-proof, dust-proof, and shock-proof performance is based on standard testing by Sony.

AC Adaptor AC-UD10

Power requirements: AC 100 V - 240 V, 50 Hz/60 Hz

Current consumption: 0.2 A

Power consumption: 11 W

Output voltage: DC 5.0 V, 1 500 mA

Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)

Storage temperature: −20 °C to +60 °C (−4 °F to +140 °F)

Dimensions (approx.): 78 mm × 22 mm × 36 mm (3 1/8 in. × 7/8 in. × 1 7/16 in.) (w/h/d) excluding the projecting parts

Mass (approx.): 45 g (1.6 oz) excluding the power cord (mains lead)

Rechargeable battery pack NP-BG1

Maximum output voltage: DC 4.2 V

Output voltage: DC 3.6 V

Maximum charge voltage: DC 4.2 V

Maximum charge current: 1.44 A

Capacity:
Typical: 3.4 Wh (960 mAh)
Minimum: 3.3 Wh (910 mAh)
Type: Li-ion

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Add further enjoyment with your PlayStation 3 by downloading the application for PlayStation 3 from PlayStation Store (where available.)

The application for PlayStation 3 requires PlayStation Network account and application download.
Accessible in areas where the PlayStation Store is available.

END-USER LICENSE AGREEMENT FOR MAP DATA FOR VIDEO CAMERA RECORDER PRODUCTS (HDR-GW55VE/GW77VE)

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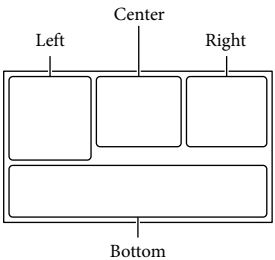
Screen indicators

The following indicators appear when you change the settings. See page 25 and 28 also for the indicators that appear during recording or playing.



Left

Indicator	Meaning
MENU	MENU button (42)
	Self-timer recording (44)
	GPS triangulating status (33)
	[Airplane Mode] set to [On]
4:3	Wide Mode (45)
	Fader (44)
	[Face Detection] set to [Off] (44)
	[Smile Shutter] set to [Off] (44)
	Manual focus (44)
	Scene Selection (44)
	White Balance (44)
	SteadyShot off (44)
	Tele Macro (44)
(COLOR)	x.v.Color (45)
	Intelligent Auto (face detection/scene detection/ camera-shake detection/ sound detection) (25)

Center

Indicator	Meaning
	Slideshow Set
	Warning (48)
	Playback mode (28)

Right

Indicator	Meaning
HD 50i HQ	Recording image quality (HD/STD), frame rate (50p/50i) and recording mode (PS/FX/FH/HQ/LP) (31)
	Recording/playback/ editing media (21)
0:00:00	Counter (hour:minute: second)
00min	Estimated recording remaining time
16:9 L 20.4M	Photo size
101	Playback folder
100/112	Current playing movie or photo/Number of total recorded movies or photos
	Touch pad deactivated

Bottom

Indicator	Meaning
	[Micref Level] low (44)
	[Wind Noise Reduct.] (44)
	Blt-in Zoom Mic (44)
	Low Lux (44)
	Spot Meter/Fcs (44)/Spot Meter (44)/ Exposure (44)
AUTO	Intelligent Auto (25)
101-0005	Data file name
	Protect (45)
	Flash (44)/Red Eye Reduction (44)

- Indicators and their positions are approximate and may differ from what you actually see.
- Some indicators may not appear, depending on your camcorder model.

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You will find the menu lists on pages 44 to 46.

HANDYCAM

GB

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http://www.sony.net/

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