

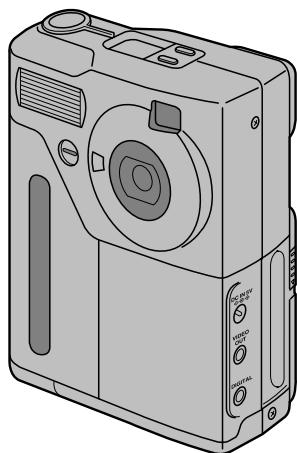
JVC



DIGITAL STILL CAMERA

GC-S5

ENGLISH



DSC
DIGITAL
STILL CAMERA

INSTRUCTIONS

Safety precautions

IMPORTANT (For Customers in U.K.)

Connection to the mains supply in the United Kingdom.

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

BE SURE to replace the fuse only with an identical approved type, as originally fitted, and to replace the fuse cover.

If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If this product is not supplied fitted with a mains plug then follow the instructions given below:

DO NOT make any connection to the Larger Terminal coded E or Green.

The wires in the mains lead are coloured in accordance with the following code:



If these colours do not correspond with the terminal identifications of your plug, connect as follows:

Blue wire to terminal coded N (Neutral) or coloured black.

Brown wire to terminal coded L (Live) or coloured Red.

If in doubt — consult a competent electrician.

WARNING:

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

CAUTION:

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

NOTES:

- The rating plate (serial number plate) and safety caution are on the bottom and/or the back of the main unit.
- The rating plate (serial number plate) of the AC Power Adapter is on its bottom.

This camera is designed to be used with PAL-type colour television signals. It cannot be used for playback with a television of a different standard. However, shooting and LCD monitor playback are possible anywhere.



Gebruikte batterijen
Niet weggooien, maar
inleveren als KCA.



Some do's and don'ts on the safe use of equipment

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

- DO** read the operating instructions before you attempt to use the equipment.
- DO** ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.
- DO** consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.
- DO** be careful with glass panels or doors on equipment.
- DON'T** continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way — switch off, withdraw the mains plug and consult your dealer.
- DON'T** remove any fixed cover as this may expose dangerous voltages.
- DON'T** leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off using the switch on the equipment and make sure that your family knows how to do this. Special arrangements may need to be made for infirm or handicapped people.
- DON'T** use equipment such as personal stereos or radios so that you are distracted from the requirements of road safety. It is illegal to watch television whilst driving.
- DON'T** listen to headphones at high volume, as such use can permanently damage your hearing.
- DON'T** obstruct the ventilation of the equipment, for example with curtains or soft furnishings. Overheating will cause damage and shorten the life of the equipment.
- DON'T** use makeshift stands and NEVER fix legs with wood screws — to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.
- DON'T** allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL

- NEVER let anyone especially children push anything into holes, slots or any other opening in the case
 - this could result in a fatal electrical shock;
- NEVER guess or take chances with electrical equipment of any kind — it is better to be safe than sorry!

Contents

If you want to start using your new camera right away, refer to “Quick Start Guide” (➔P.12).

Safety Precautions	2
Contents	4
Important Information	6
Accessories	7
Features	8
Nomenclature	9
LCD Panel.....	10
Viewfinder Display	10
Using the Hand Strap	11
Attaching the Hand Strap.....	11
Using the Hand Strap.....	11
Quick Start Guide	12

Loading the Battery	16
Charging the Battery	17
About the Battery	18
Notes on Handling the Battery	18
Notes on Using the Battery	19
Number of Shots Available	19
Remaining Battery Capacity	19
Using a Domestic Power Outlet	20
Switching On and Switching Off	21
Switching On.....	21
Switching Off.....	21
SmartMedia	22
Compatible SmartMedia	22
Write-Protection	22
Using a New SmartMedia	22
Notes on Using SmartMedia	23
Loading and Removing SmartMedia	24
Loading the SmartMedia.....	24
Removing the SmartMedia	25
How to Hold the Camera	26
Pressing the Shutter Button	27
Mode Dial	28
LCD Monitor, Indicator Lamps and Beeps	29

📷 Normal (Auto) Mode	30
Taking Pictures Using the Viewfinder.....	31
Taking Pictures Using the LCD Monitor	33
Taking Pictures and Viewing Images on a TV.....	35
SELECT Button	36
Quality	36
File Size.....	37
Colour.....	37

Telephoto Photography	38
Macro (Close-Up) Mode	39
Flash Mode	40
Playback	42
Single-Frame Playback	43
Playback Zoom	44
Automatic Playback (Playback)	45
Sepia	46
Smooth	47
Resize	49
Copy	50
Multi-Frame Playback	53
Erasing Images	55
Erasing a Single Frame	56
Erasing All Frames	58
Formatting (Initialisation)	59

SETUP Setup	60
Quality	61
File Size	61
Sharpness	61
Colour	62
Frame No. Memory	62
Beep Volume	63
Quick Select	63
Date and Time	64
Reset	65
Self-Timer Mode	66
Manual Mode	67
Setting the White Balance	69
Setting the Brightness (Adjusting the Exposure)	71
Setting the Flash Power	73
Continuous Shots (16-Cont)	74
Protect Mode (Protecting Your Images)	76
Protecting a Single Frame	76
Removing Protection from All Frames	78
PC-Mode (Downloading Images to a PC)	79

Accessories Guide	81
Notes on Using Your Camera Correctly	82
Safety Notes	84
Warning Displays	91
Troubleshooting	92
Specifications	94
Index	96

Important Information

■ Test Shots Prior to Photography

For particularly important photographs (such as weddings and overseas trips), always take a test photograph to check that the camera is functioning normally.

- JVC accepts no liability for any incidental losses (such as the costs of photography or the loss of income from photography) incurred as a result of faults with this product.

■ Notes on Copyright

Under copyright laws, images recorded using your digital camera cannot be used without the consent of the owner, unless intended only for personal use. Note that some restrictions apply to the photographing of stage performances, entertainments and exhibits, even when intended purely for personal use. Users are also asked to note that the transfer of memory cards (SmartMedia) containing images or data protected under copyright laws is only permissible within the restrictions imposed by those copyright laws.

■ Power Supply

In order to use the GC-S5 Digital Still Camera, you will need the BN-V101 Rechargeable Battery (supplied with the camera) or the AA-V101 AC Power Adapter supplied.

■ AC Power Adapter

Use only the AA-V101 AC Power Adapter (supplied with the camera) with your GC-S5 Digital Still Camera. The use of an AC adapter other than the AA-V101 could result in damage to your GC-S5 Digital Still Camera.

■ Compatible SmartMedia

Use only JVC image memory cards (SmartMedia). Either 3.3-volt or 5-volt SmartMedia can be used with the GC-S5.

■ Handling Your Digital still Camera

This camera contains precision electronic components. To ensure that images are recorded correctly, do not subject the camera to impacts or shocks while an image is being recorded (while the viewfinder lamp is orange).

■ Cleaning the Lens Surface

For optimum digital camera performance, make sure that the lens surface is free from dust, fingerprints, and other soiling. Gently wipe the lens surface clean with a soft dry cloth.

■ Data that Can Be Played Back on Your Camera

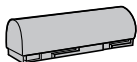
The GC-S5 Digital Still Camera can be used to play back recorded image data or image data transferred from a personal computer (file names DSC00001.JPG to DSC99999.JPG (Exif-JPEG format) with file sizes up to 1.2MB). See P.54 for additional information.

Accessories

Check that you have the items shown below before using your camera.

BN-V101 Battery Pack (Rechargeable Battery) (1)

Supplied with Operating Instructions (1)



AA-V101 AC Power Adapter (1)

Supplied with Operating Instructions (1)

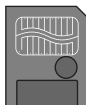
The shape of the plug on the AC power adapter depends on the country of use.



VU-V108 SmartMedia (8MB, 3.3V) (1)

Supplied with:

- Anti-static case (1)
- Index labels (1 set)
- Write-protect stickers (1 set)
- Operating Instructions (1)



Hand Strap (1)



VU-V101 Floppy Disk Adapter (1)

Supplied with:

- Setup Disk (1)
- CR2016 button cell (2)
- Operating Instructions (1)



Video Cable (approx. 1.5m (4.9 ft.), mini-plug (3.5mm dia.) to pin-plug cable) (1)



Owner's Manual (this manual) (1)

■ Explanation of Terms

ATA Card: A PC card (Type II) that conforms to the ATA PC Card Standard.

JPEG (Joint Photographics Experts Group) format:

A file format stipulated by the ITU-T (formerly The International Telegraph and Telephone Consultative Committee (CCITT)) and the International Organization for Standardization (ISO) as the international standard for the compression and storage of color images. The compression ratio can be selected, but the higher the compression ratio, the poorer the quality of the expanded (restored) image.

PC Card: A generic term for cards that meet the PC Card Standard.

PC Card Standard: A standard for PC cards determined by the PCMCIA.

PCMCIA: Personal Computer Memory Card International Association (US).

SmartMedia: The name given to a new recording medium determined by the SSFDC forum. By using a commercially available PC Card Adapter, a SmartMedia card can be used as a PC card (Type II).

● High Quality Images

The 1.5 million pixel primary-colour CCD gives high-quality, high-resolution (1280 x 1024 pixels) images and video at a horizontal resolution of 480 lines or better (playback).

● 2-inch Low-Temperature Polysilicon LCD (Liquid Crystal Display) Screen

The camera's LCD monitor allows you to check the picture you have taken and show it to your friends immediately.

● Compact and Light weight

Size: 80 x 101 x 33 mm

Weight: 245 g (not including accessories, battery or SmartMedia)

● Extensive Focusing Range (with macro function)

- Normal: Approx 50 cm to infinity
- Macro: Approx. 9 cm to 50 cm

● Easy-to-Use Fixed-Focus Lens with Auto-Focus

Equivalent to 35 mm lens on a 35 mm camera
Automatic aperture selection (F3.2/F8)

● Flash

Auto-flash with flash control sensor.

Flash modes: Auto (in low light), Red-Eye Reduction, Forced Flash and Suppressed Flash

● Support for SmartMedia

Uses compact, lightweight, fast and low-cost SmartMedia.

● Choice of Quality/File Size

- Image Quality: FINE, NORMAL or BASIC
- File Size: 1280 x 1024 pixels or 640 x 480 pixels

● JPEG (Exif) Format

JPEG-format images can be imported directly into applications running on a personal computer. The VU-V101 Floppy Disk Adapter (FlashPath) and a commercially available PC Card Adapter allow even easier interaction with personal computers.

● PC-Mode

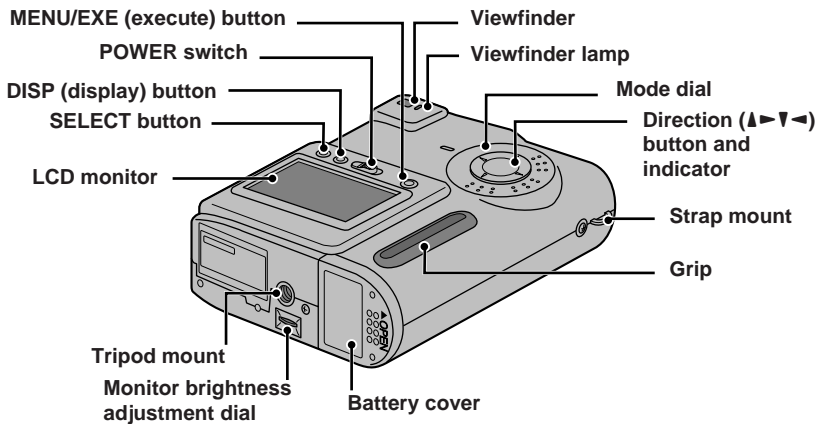
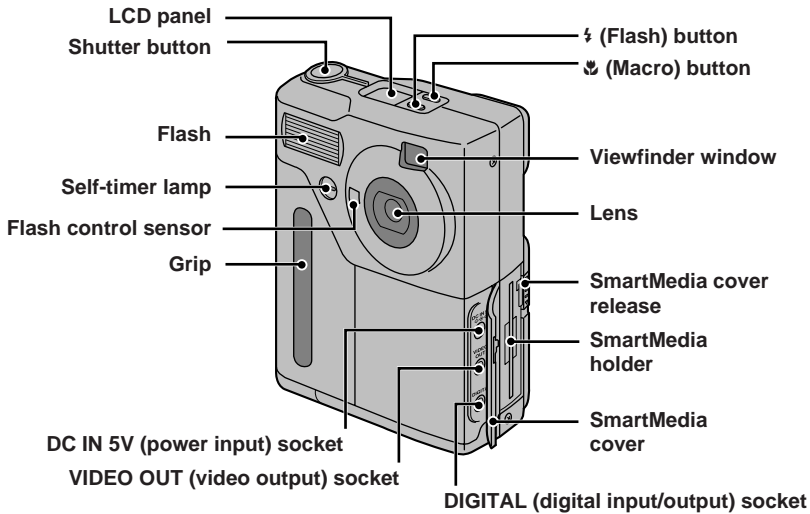
The HS-V12 PC and Macintosh® Connection Kit (optional) allows image data to be transferred to and from a personal computer.

● Date and Time Recording/Playback Function

The date and time of shooting are automatically recorded and displayed on the LCD monitor.

● Unparalleled ease of operation

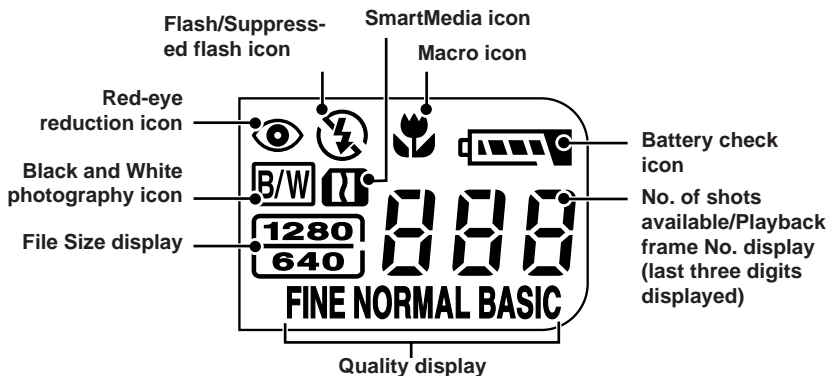
Nomenclature



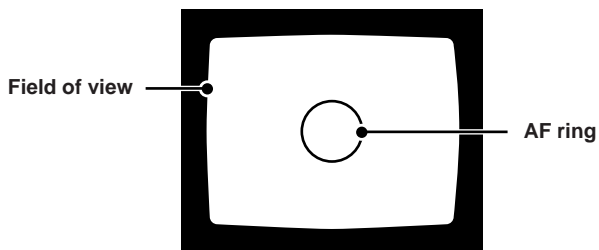
Nomenclature

LCD Panel

For the purposes of explanation, this figure shows all the icons displayed on the LCD panel. In normal operation, only some of these icons are displayed concurrently.



Viewfinder Display

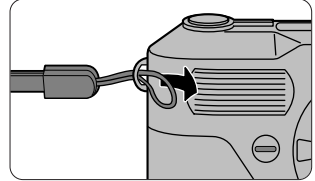


Using the Hand Strap

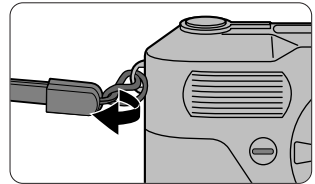
Use the hand strap to avoid dropping the camera during shooting.

Attaching the Hand Strap

- 1** Pass the end of the strap through the strap mount on the camera.

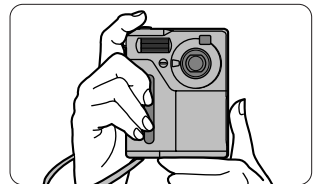


- 2** Pass the other end of the strap through the loop and pull the strap tight.



Using the Hand Strap

- 1** Wear the strap around your wrist.
 - To avoid dropping the camera while shooting, loop the hand strap over your wrist and then hold the camera by the grip.

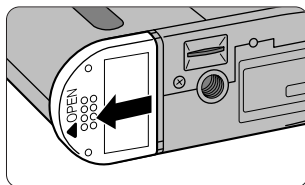


Quick Start Guide

- Use the procedure given here if you want to start using your new camera right away.
- For more detailed information on how to use the camera, refer to the page indicated (→P.XX).

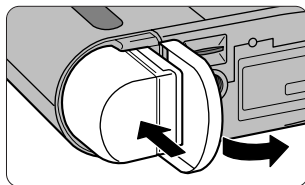
Getting Ready (loading the battery and SmartMedia and formatting the SmartMedia)

1 Slide the battery cover in the direction of the arrow (→P.16).

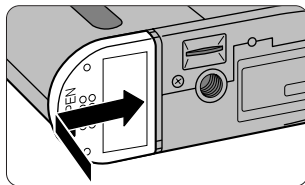


2 Load the battery.

- Load the battery so that the [▶] mark on the battery is foremost.
- Push the battery in until it stops.



3 Close the battery cover.



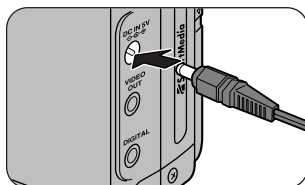
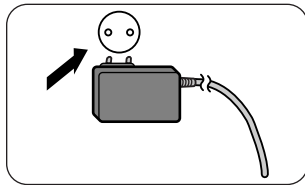
4 Plug the AC power adapter in the power outlet.

NOTES

- Use an easily accessible outlet that is close to the camera.
- The shapes of the plug and the outlet vary, depending on the country of use.

5 Plug the AC power adapter into the DC IN 5V socket on the camera. (→P.17)

- Battery charging begins automatically.
- The viewfinder lamp turns orange while the battery is charging and goes off when charging is completed.

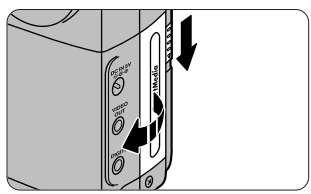


NOTES

- A fully exhausted battery takes roughly 5 hours to charge.
- To use the camera immediately, use the camera while it is connected to the AC power adapter.

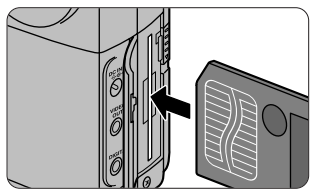
6 Open the SmartMedia cover (→P.24).

- Slide the SmartMedia cover release in the direction of the arrow and then release.



7 Insert the SmartMedia.

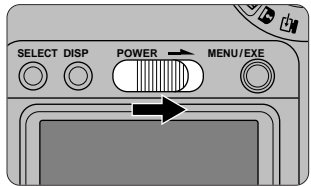
- Slide the SmartMedia in slowly so that the contact area faces the gold line on the SmartMedia holder (towards the front of the camera) and push the SmartMedia in fully.



8 Close the SmartMedia cover.

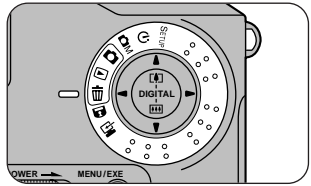
9 Slide the POWER switch to the right (→P.21).

- Slide the switch in the direction of the arrow and then release it after about one second.
- The direction indicator flashes and rotates.



10 Set the Mode dial to [] (→P.59).

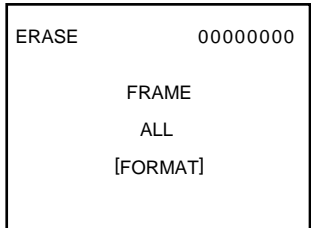
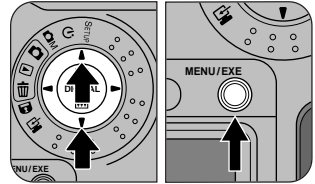
- The menu screen appears.
- Format the SmartMedia.



Quick Start Guide

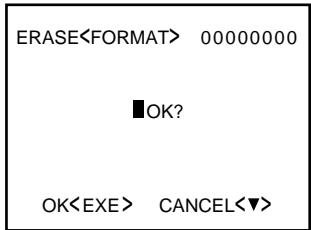
11 Use the [▲] or [▼] button to select “FORMAT” and press the [MENU/EXE] button.

- The confirmation screen appears.



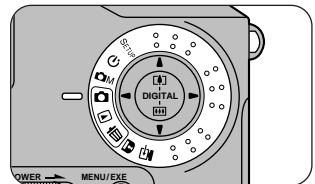
12 Press the [MENU/EXE] button.

- The SmartMedia is formatted and the menu screen reappears.



Taking Pictures (Normal (Auto) Mode)

1 Set the Mode dial to [📷] (→P.31).



2 Look through the viewfinder, position the AF ring over the subject and compose the picture.

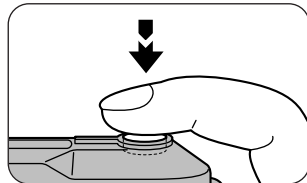


To View the Image on the LCD Monitor

Press the [DISP] button (→P.33).

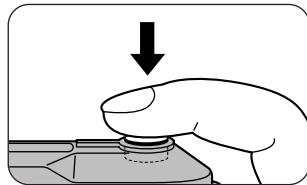
3 Press the shutter button down halfway.

- The camera automatically sets the focus and the exposure. Once the focus is set, the viewfinder lamp turns green.



4 Without releasing the shutter button, press it down fully.

- The electronic beep sounds and the picture is taken.
- The viewfinder lamp turns orange while the image data is being recorded onto the SmartMedia. You cannot take any pictures while the lamp is orange.
- When recording finishes, the electronic beep sounds and the number of shots available shown on the LCD panel decreases by 1.



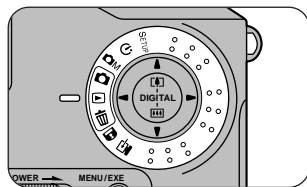
CAUTION

Never remove the SmartMedia while data is being recorded onto the card as this can corrupt the data on the SmartMedia or damage the SmartMedia itself.

Viewing Images (Single-Frame Playback)

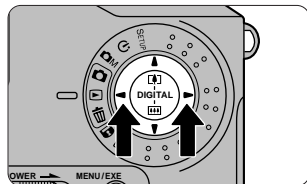
1 Set the Mode dial to [▶] (→P.43).

- The last frame recorded is displayed.



2 Use the [◀] or [▶] button to move to the desired frame.

- [▶]: Moves one frame forward
- [◀]: Moves one frame back



Viewing Images on a TV (→P.35)

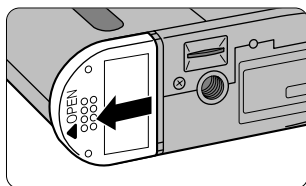
Loading the Battery

This section describes how to load the BN-V101 Rechargeable Battery.

CAUTIONS

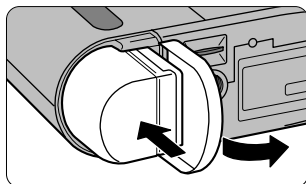
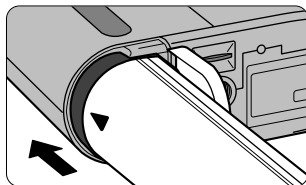
- The battery is not fully charged at shipment. Always charge the battery before you use the camera.
- Always switch off the camera before you replace the battery.
- If you remove the battery without switching off the camera, the date and time will revert to the initial settings (⇒P.64).
- Check the date and time settings after you replace the battery (⇒P.64).
- Do not use the provided BN-V101 Rechargeable Battery with other devices.

1 Slide the battery cover in the direction of the arrow.



2 Load the battery.

- Load the battery so that the [▶] mark on the battery is foremost.
- Push the battery in until it stops.




3 Close the battery cover.

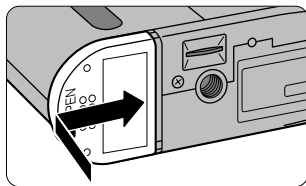
Number of Consecutive Shots Using a Fully Charged Battery

➔ See P.19.

When to Replace the Battery

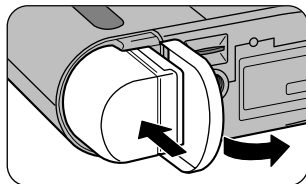
When the battery is exhausted, the battery check icon "  " on the LCD panel flashes. Load a charged battery as soon as possible.

Use the AA-V101 AC Power Adapter (supplied) to charge the battery.



Charging the Battery

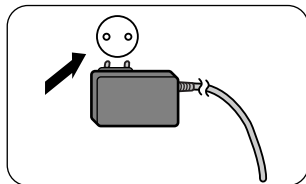
- 1 Load the battery into the camera.



- 2 Plug the AC power adapter in the power outlet.

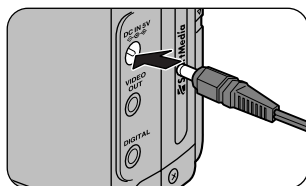
NOTES

- Use an easily accessible outlet that is close to the camera.
- The shapes of the plug and the outlet vary, depending on the country of use.



- 3 Plug the AC power adapter into the DC IN 5V socket on the camera.

- After about 8 seconds the viewfinder lamp turns orange and battery charging begins automatically.
- The viewfinder lamp remains orange while the battery is charging and goes off when charging is completed. For more information on the viewfinder lamp displays, see “LCD Monitor, Indicator Lamps and Beeps” (►P.29).
- A fully exhausted battery takes roughly 5 hours to charge.



CAUTIONS

- The battery will not charge unless the AC power adapter plug is correctly inserted into the camera.
- A battery that is almost fully charged cannot be charged. This is not a fault.
- In temperatures above +50°C (+122°F), as may occur in a sunlit vehicle, a safety feature operates to prevent charging. This is not a fault.

AC Power Adapter

Use only the AA-V101 AC Power Adapter (supplied) with your GC-S5 Digital Still Camera.

The use of an AC power adapter other than the AA-V101 could result in damage to your GC-S5 Digital Still Camera.

About the Battery

Note the points listed below when you use the rechargeable battery. Take particular care to read the Safety Notes to ensure that you use the battery correctly.

Notes on Handling the Battery

The GC-S5 camera uses a lithium ion rechargeable battery. Note the points below when using the rechargeable battery.

* When shipped, the BN-V101 is not fully charged. Always charge the battery before using it.

■ Battery Features

- The battery gradually loses its charge even when not used. Use a battery that has been charged recently (in the last day or two) to take pictures.
- In cold locations, the number of frames that can be shot decreases. Take along a spare fully charged battery.

■ Charging the Battery

- The battery can be charged using the AA-V101 AC Power Adapter supplied with the GC-S5.
A fully exhausted battery takes approximately 5 hours to charge.
- This rechargeable battery does not need to be fully discharged or run flat before being charged.
- The battery may feel warm after it has been charged or immediately after being used. This is perfectly normal.
- The battery can be charged at temperatures between 0°C and +40°C (+32°F and +104°F), but should be charged between +10°C and +30°C (+32°F and +86°F) to obtain maximum battery performance.
- Do not recharge a fully charged battery.

■ Battery Life

- At normal temperatures, this battery can be used at least 300 times. If the time for which the battery provides power shortens markedly, this indicates that the battery has reached the end of its effective life and should be replaced.

■ Handling the Battery

To avoid injury or damage, observe the following:

- Do not allow the metal portions of the battery to touch other metal objects.
- Do not bring the battery close to a flame or throw it into a fire.
- Do not attempt to disassemble or modify the battery.

To avoid damaging the battery or shortening its life, observe the following:

- Do not drop the battery or otherwise subject it to strong impacts.
- Do not immerse the battery in water.

To ensure that you obtain optimum battery performance, observe the following:

- Always keep the battery terminals clean.
- Store the battery in a cool, dry place. Storing the battery for long periods in a hot location can shorten the battery life.

Notes on Using the Battery

If you use the battery for a long period, the camera body and the battery itself will become warm. This is normal and is not a malfunction. Use the AC power adapter supplied with the camera if you are taking pictures or viewing images for a long period of time.

Number of Shots Available

■ Reference

Number of Consecutive Shots Available

	LCD Monitor On	LCD Monitor Off
Battery (BN-V101)	Approx. 80 frames *	Approx. 250 frames *

* With the battery fully charged.

- The above figures are a guide to the number of consecutive shots that can be taken when the flash is used 50% of the time at room temperature. However, the actual number of available shots varies depending on the ambient temperature when the camera is used and the amount of charge in the battery.
- To avoid wasting battery charge, switch the camera off promptly when it is not being used.
- To increase the time for which your battery can be used in cold locations, warm the battery by placing it in your pocket and then load it into the camera just before you take pictures. If you are using a heating pad, take care not to place the battery directly against the pad.

Remaining Battery Capacity

To avoid unexpected failures, load a fully charged battery into the camera before you start shooting. Check the remaining battery charge displayed on the LCD panel.

① Ready to shoot.



② The battery is almost low. When the battery warning indicator flashes, charge or replace the battery immediately.



* If you continue to use the camera when the warning indicator is flashing, the camera may not function normally.

③ The battery is exhausted and the camera is automatically turned off.



Replace or charge the battery.

Using a Domestic Power Outlet

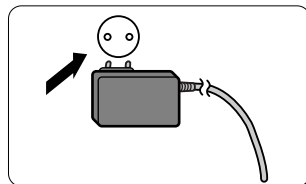
In locations where a power outlet is accessible (usually indoors), you can use the AA-V101 AC Power Adapter supplied with the GC-S5 to take pictures or view images.

You should also use the AC power adapter when you connect your GC-S5 to a personal computer to avoid data transfer interruptions caused by an exhausted battery.

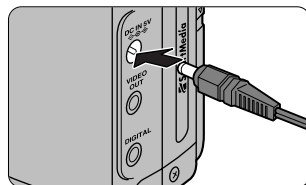
1 Plug the AC power adapter into the power outlet.

NOTES

- Use an easily accessible outlet that is close to the camera.
- The shapes of the plug and the outlet vary, depending on the country of use.



2 Insert the AC power adapter into the DC IN 5V socket on the camera.



CAUTIONS

- Ensure that you do not touch the AC power adapter against any other metal object as this could cause a short circuit.
- Do not plug the AC power adapter into the DIGITAL socket as this could damage your camera.
- Do not plug in the AC power adapter while you are using the battery. Switch the camera off first.
- Do not load the battery while you are using the AC power adapter. Switch the camera off first.
- If you disconnect the AC power adapter while there is no battery loaded in the camera, the date and time information will be lost. In this event, reset the date and time. (→P.64)
- If you plug in the AC power adapter when there is no battery loaded in the camera, the viewfinder lamp may flash red. This does not indicate a fault, however.

AC Power Adapter

Use only the AA-V101 AC Power Adapter (supplied) with your GC-S5 Digital Still Camera.

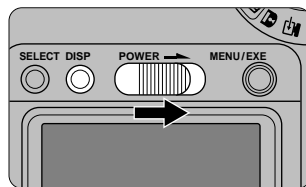
The use of an AC Power Adapter other than the AA-V101 could result in damage to your GC-S5 Digital Still Camera.

Switching On and Switching Off

Switching On

1 Slide the POWER switch to the right.

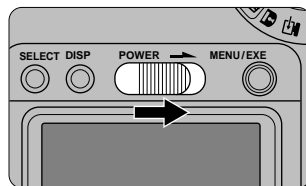
- Slide the switch in the direction of the arrow and then release it after about one second.
- The direction indicator flashes and rotates.



Switching Off

1 Slide the POWER switch to the right.

- Slide the switch in the direction of the arrow and then release.



CAUTIONS

- Remove the battery if the camera will not be used for a long period.
- Do not put the camera in a bag or pocket while it is switched on.

Auto Power Off Function

If the camera is not used in any way for two minutes or more, the Auto Power Off function switches the camera off. This is to prevent battery depletion and to avoid excessive power usage when the camera is connected to the AC power adapter.

- The Auto Power Off function does not operate during automatic playback (➔P.45) or in PC-mode (➔P.79).
- To disable the Auto Power Off function, hold down the [MENU/EXE] button as you switch the camera on. To re-enable the Auto Power Off function, switching the camera off and then on again. If you operate the camera in live video mode (the video image shown before a picture is taken) or continuous playback mode for a long period, the camera body may become quite warm. This is not a fault.
- Note that if the camera has been left switched on but unused for 2 minutes or more, the flash may not operate when a photograph is taken and you may not obtain the correct image.

Compatible SmartMedia

You can use the following SmartMedia with your GC-S5:

- 2 MB, 5 V • 4 MB, 5 V • 8 MB, 5 V • 16 MB, 5 V • 2 MB, 3.3 V
- 4 MB, 3.3 V • 8 MB, 3.3 V • 16 MB, 3.3 V

By using a commercially available PC Card Adapter, these SmartMedia can be used as PC Card Standard ATA-compliant PC cards (PCMCIA 2.1 Type II).

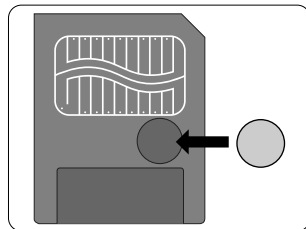
⚠ CAUTION

Always refer to the Operating Instructions for the SmartMedia also.

Write Protection

To prevent the inadvertent erasing of important data, stick a write-protect sticker over the write-protect area on the SmartMedia. (Ensure that the sticker is firmly pressed down flush with the write-protect area and will not peel off.) This sticker makes it impossible to record data to or erase data from the SmartMedia.

To record or erase data, remove the sticker.



⚠ CAUTIONS

- The write protection may not function if the sticker becomes soiled. Use a dry lint-free cloth to wipe away any soiling.
- The SmartMedia write-protect feature does not operate when the SmartMedia is used in the VU-V101 Floppy Disk Adapter (FlashPath).

Using a New SmartMedia

■ Formatting (Initialising) the SmartMedia

To record data on a new SmartMedia, you must first initialise the SmartMedia using the GC-S5 (➔P.59).

Formatting

Formatting a SmartMedia refers to the process of overlaying a format on the SmartMedia so that data can be recorded (written) onto the SmartMedia.

⚠ Notes on Using SmartMedia with Personal Computers (➔P.80)

Notes on Using SmartMedia

■ Storing Data

- In the situations listed below, recorded data may be erased (destroyed). Please note that JVC accepts no responsibility whatsoever for the loss (destruction) of recorded data.
 - When the SmartMedia is used incorrectly by the owner or a third party
 - When the SmartMedia is exposed to static electricity or electrical noise
 - When the SmartMedia cover is opened or the SmartMedia is removed and the camera is then switched off during data recording, during data erasing (SmartMedia formatting) or during frame advance when images are being played back.
- Back up important data onto another medium (MO disk, floppy disk, hard disk, etc.).

■ Notes on Handling SmartMedia

- Never remove the SmartMedia or switch the camera off during data recording, during data erasing (SmartMedia formatting) or during frame advance when images are being played back. These actions could result in damage to the SmartMedia.
- Use only the SmartMedia specified for use with the GC-S5. The use of other SmartMedia could damage the camera.
- SmartMedia are precision electronic devices. Do not bend, drop, or subject SmartMedia to excessive shocks.
- Do not use or store SmartMedia in environments likely to be affected by strong static electricity or electrical noise.
- Do not use or store SmartMedia in very hot, humid or corrosive environments.
- Take care not to touch the SmartMedia's contact area or allow the area to become soiled. Use a dry lint-free cloth to wipe away any soiling that does occur.
- To avoid damage caused by static electricity, always use the special static-free case provided during transportation or storage, or keep the SmartMedia in a storage case if available.
- Do not carry SmartMedia in locations such as a trouser pocket. This could subject the SmartMedia to excessive force when you sit down, thereby damaging the SmartMedia.
- The SmartMedia may feel warm when it is removed from the camera after extended periods of picture taking or image viewing. This is normal and does not indicate a fault.
- Inserting a SmartMedia that is charged with static electricity into your camera may result in a camera malfunction. If this occurs, switch the camera off and then on again.

Loading and Removing SmartMedia

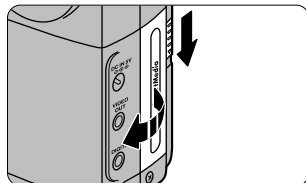
Always switch off the camera before removing or loading a SmartMedia.

Loading the SmartMedia

The GC-S5 records photographed images onto a SmartMedia card.

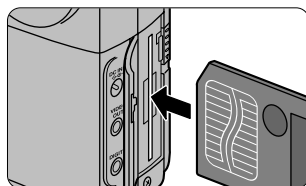
1 Open the SmartMedia cover.

- Slide the SmartMedia cover release in the direction of the arrow and then release.



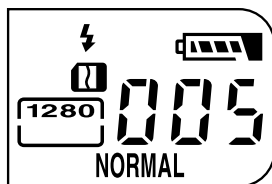
2 Insert the SmartMedia.

- Slide the SmartMedia in slowly so that the contact area faces the gold line on the SmartMedia holder (towards the front of the camera) and push the SmartMedia in fully.



3 Close the SmartMedia cover.

- When you switch on the camera, the SmartMedia icon "SM" appears on the LCD panel on the top of the camera.
- When the viewfinder lamp is flashing red, a warning appears on the LCD monitor. Refer to P.91.



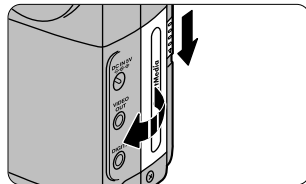
CAUTIONS

- When you are using a new SmartMedia, always use the camera to format the SmartMedia before use (⇒ P.59).
- See also "SmartMedia" (⇒P.22).
- If any of the following occur, switch the camera off, clean the contact area on the SmartMedia, and then reload the SmartMedia.
 - "▲CARD ERROR" appears on the LCD monitor.
 - The images recorded on the SmartMedia are not displayed.
 - "-- --" appears in the No. of shots available field on the LCD panel.

Removing the SmartMedia

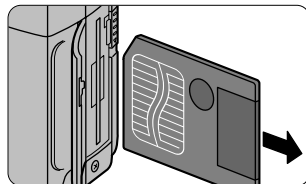
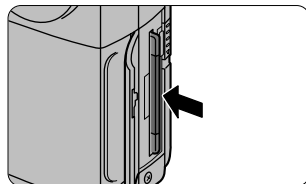
1 Open the SmartMedia cover.

- Slide the SmartMedia cover release in the direction of the arrow and then release.



2 Remove the SmartMedia.

- Push the SmartMedia slowly all the way in and then pull it out.



3 Close the SmartMedia cover.

CAUTIONS

- Never remove the SmartMedia while data is being recorded onto or read from the card as this can corrupt the data on the SmartMedia or damage the SmartMedia itself.
- Remove the SmartMedia if the camera will not be used for a long period.
- If you are copying images to another SmartMedia (→P.50), leave the camera switched on while you remove and load the SmartMedia.

How to Hold the Camera

To prevent camera shake (blurred images), hold the camera firmly so that it does not move when you take a picture.

Upright

Hold the camera with both hands and brace your elbows firmly against your sides.



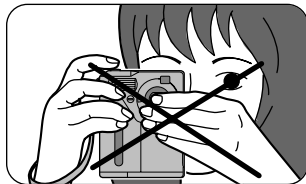
On its Side

Hold the camera so that the flash is above the viewfinder window.



CAUTION

Take care that your fingers or the hand strap do not obscure the lens or flash.

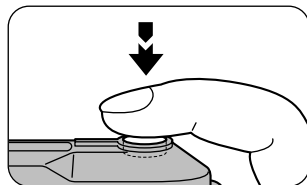


Pressing the Shutter Button

The shutter button on the GC-S5 has **two positions**. If you press the shutter button lightly, it stops halfway down. Pressing the button beyond this point activates the shutter and takes a picture.

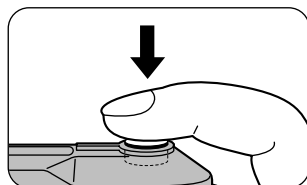
1 Pressing halfway (pressing lightly):

- AF (auto focus) and AE (auto exposure) operation begins.
- The AF and AE settings are locked.
- The viewfinder lamp turns green.



2 Pressing fully (pressing the button further down from the halfway position):

- **The electronic beep sounds and the picture is taken.**



GETTING
READY

CAUTIONS

- **Moving the camera as you press the shutter button will result in a blurred image.**
- **Hold the camera firmly in both hands.**

AF and AE Lock

On the GC-S5, the focus and exposure settings are locked (AF and AE lock) when you press the shutter button down halfway. If you want to focus on a subject that is not centered in the frame or change the picture composition after the exposure is set (to photograph a backlit subject, for example), you can obtain good results by changing the composition after the AF and AE settings are locked.

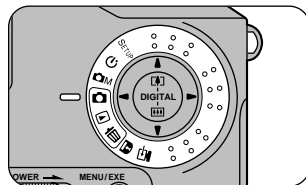
Subjects Not Suitable for Autofocus

The GC-S5 uses an accurate auto focus mechanism. However, the GC-S5 may have difficulty focusing or not be able to focus at all for subjects and situations such as the following:

- Subjects moving at high speed.
- Very shiny subjects such as a mirror or car body.
- When there is very little contrast.
- Subjects that do not reflect well, such as hair or fur.
- Subjects with no solidity, such as smoke or flames.
- Subjects viewed through glass.
- Subjects that merge into the background (such as white walls or subjects dressed in the same color as the background).
- When the subject is distant and dark.
- When there are objects in front of or behind the subject (such as an animal in a cage or a person in front of a tree).

Mode Dial

The Mode dial settings and the corresponding camera operations are listed below.



[SETUP]: Setup Mode (⇒P.60)

In this mode, you can set the quality (image quality), file size (number of pixels), sharpness, color, frame no., beep volume and date and time settings. SETUP can also be used to set the [SELECT] button.

[⌚]: Self-Timer Mode (⇒P.66)

This mode allows you to use a 10-second timer for self-timer shooting.

[⏻]: Manual mode (⇒P.67)

Manual mode allows you to check the photographed image before it is recorded. This mode also allows you to select the brightness, flash brightness and white balance settings and to select 16-Cont mode (continuous shots).

[📷]: Normal (Auto) mode (⇒P.30)

This is a simple and convenient photography mode in which the camera automatically selects the exposure (a combination of shutter speed and aperture setting) and the focus to suit the shooting conditions. This mode is ideal for general photography where you are not trying to achieve any particular effect.

[▶]: Playback mode (⇒P.42)

Playback mode allows normal single-frame playback, multi-frame playback, automatic playback, playback zoom and copying of recorded images. You can also use this mode to smooth images, resize images (change the number of pixels in the image) and produce sepia-tone images.

[🗑️]: Erase mode (⇒P.55)

In Erase mode, you can erase one frame, erase all frames or format (initialise) a SmartMedia card.

[🔒]: Protect mode (⇒P.76)

Protect mode allows you to protect one frame or to remove the protection from one frame or all the frames.

[💻]: PC-mode (⇒P.79)

In PC-mode, you can transfer your images to a personal computer or use a personal computer to record or erase images on a SmartMedia.

LCD Monitor, Indicator Lamps and Beeps

The LCD monitor display (on-screen display) changes each time you press the [DISP] button, as shown below.

Mode Dial Setting	LCD Monitor Display (On-Screen Display)
Self-timer mode	<p>* Live image refers to the video image shown before a picture is taken.</p>
Manual mode	
Normal mode	
Playback mode	
Erase mode Protect mode	
PC-mode	

GETTING
READY

The appearance of the viewfinder lamp and the electronic beep made by the camera differ for different operations, as shown below.

Viewfinder Lamp		Meaning	Beep Tone
Color	Status		
Green	Lit	Ready to shoot (AF and AE completed)	————
	Flashing	Warning (eg. Camera shake warning)	————
Orange	Lit	Image being recorded onto the SmartMedia	————
		Battery charging	————
		Preview image displayed (➔P.68)	————
	Flashing	Flash charging	————
Red	Flashing	SmartMedia warning * Warning details can be checked on the LCD monitor (➔P.91).	Series of rapid beeps when shutter button is pressed halfway.
		For other warnings, "Err" appears in the No. of shots available field on the LCD panel (➔P.91).	
		The AC power adapter was plugged into the camera when there was no battery in the camera (➔P.20).	————

Normal (Auto) Mode

Normal Photography

Set the Mode dial to Normal mode [📷].

Switch the camera on.

Direction indicator flashes.
(Opening menu appears.)
Viewfinder lamp flashes orange (flash charging).

P.21

Viewfinder lamp goes off. Ready to shoot.

Taking Pictures Using
the LCD Monitor.

P.33

Taking Pictures Using
the Viewfinder.

P.31

Press the [DISP] button to show the live image (the video image shown before a picture is taken).

Use the monitor brightness adjustment dial to adjust the brightness so that the image on the LCD monitor is clear.

Press the shutter button.

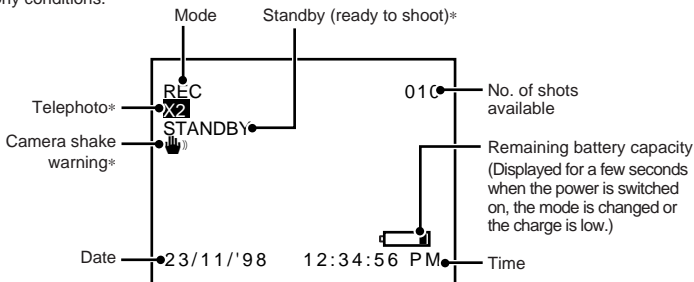
P.27

The still image just photographed appears on the LCD monitor and is recorded onto the SmartMedia. The camera cannot be used during this period.

The image is recorded onto the SmartMedia. The camera cannot be used during this period.

[Example of LCD Monitor Text Display]

Asterisks indicate items that may not be displayed depending on the camera mode and photography conditions.



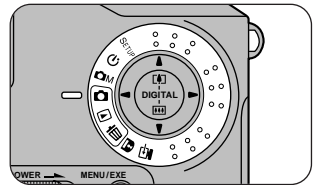
Normal mode is a simple and convenient photography mode in which the camera automatically selects the exposure (a combination of shutter speed and aperture setting) and the focus to suit the shooting conditions. This mode is ideal for general photography where you are not trying to achieve any particular effect.

To avoid depleting the battery, you should use the viewfinder rather than the LCD monitor when taking pictures.

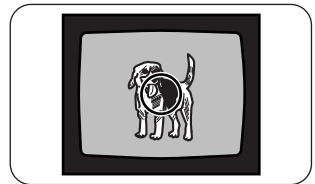
However, note that the field of view in the image seen through the viewfinder may not match that of the image photographed. To precisely determine the actual field of view, use the LCD monitor when you take the picture.

Taking Pictures Using the Viewfinder

1 Set the Mode dial to [□].

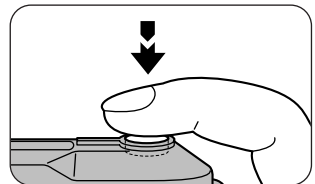


2 Look at the subject through the viewfinder, position the AF ring over the subject and compose the picture.



- If you do not want the subject in the center of the frame, use the AF lock (→P.27).
- Press the [SELECT] button to change the settings used to take the picture (→P.36).

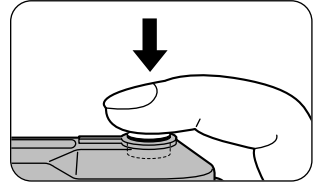
3 Press the shutter button halfway.



- The camera automatically adjusts the focus and exposure. When the camera is focused, the viewfinder lamp turns green.
- The camera focuses on a subject at a distance of between roughly 50 cm and infinity. To focus on subjects closer than 50 cm, use Macro (close-up) mode (→P.39).
- See P.27 for more information on using the shutter button.

4 Without lifting your finger off, press the shutter button down fully.

- The electronic beep sounds and the picture is taken.
- While the image data is being recorded onto the SmartMedia, the viewfinder lamp turns orange. You cannot take pictures while the lamp is orange (approx. 5 seconds).
- When recording is completed, the electronic beep sounds and the number of shots available shown on the LCD panel decreases by 1.



NOTES

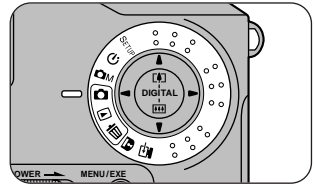
- The amount of time for recording the image data (while the viewfinder lamp is orange) varies depending on the quality, file size (number of pixels) and on whether the LCD monitor is on or off. When the quality is NORMAL, file size is 1280 × 1024 pixels and the LCD monitor is off, the recording time is approximately 5 seconds.
- The amount of image data recorded is not fixed and varies depending on factors such as the level of detail in the image. As a result, in some cases the number of shots available may not decrease, or may decrease by 2 when recording ends.

CAUTION

Never remove the SmartMedia while data is being recorded as this can corrupt the data on the SmartMedia or damage the SmartMedia itself.

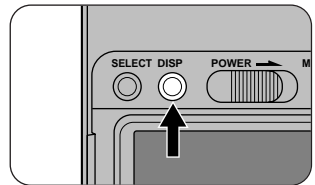
Taking Pictures Using the LCD Monitor

1 Set the mode dial to [📷].

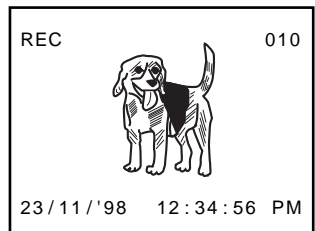


2 Press the [DISP] button.

- The live image (the video image shown before a picture is taken) appears on the LCD monitor.
- See P.29 for more information on using the [DISP] button.
- You can change the photography settings by pressing the [SELECT] button (→P.36).

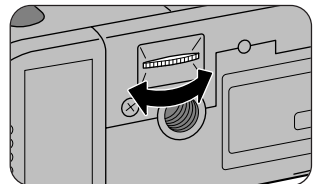


3 Look at the LCD monitor to compose the picture.




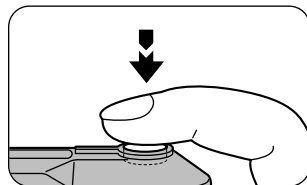
NOTES

- If the LCD monitor is difficult to see, use the LCD monitor brightness adjustment dial on the bottom of the camera to adjust the brightness of the image on the LCD monitor.
 - * The LCD monitor brightness adjustment dial does not affect the brightness of the recorded image.
- Minute specks may appear on the LCD monitor. This is not a fault and you can continue using the camera.



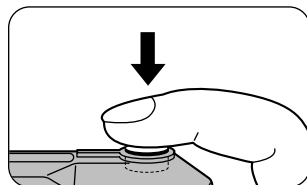
4 Press the shutter button down halfway.

- The camera automatically adjusts the focus and exposure. While this is happening, the image on the LCD monitor disappears briefly and “STANDBY” appears on the LCD monitor. When the camera is focused, the image reappears and the viewfinder lamp turns green.
- The camera focuses on a subject at a distance of between roughly 50 cm and infinity. To focus on subjects closer than 50 cm, use Macro (close-up) mode (→P.39).
- See P.27 for more information on using the shutter button.
- If the camera shake icon “” appears, repeat this step.



5 Without lifting your finger off, press the shutter button down fully.

- The electronic beep sounds and the picture is taken.
- While the image data is being recorded onto the SmartMedia, the viewfinder lamp turns orange. You cannot take pictures while the lamp is orange.
- When recording is completed, the electronic beep sounds and the number of shots available shown on the LCD monitor decreases by 1.



NOTES

- Using the viewfinder to take pictures uses less battery power and allows you to take pictures longer.
- If you check the photographed image and it is not properly focused, lock the auto focus on a subject with strong contrasts (→P.27) and take the picture again.
- Look at the LCD monitor from directly in front.
- Hold the camera firmly to avoid camera shake (blurred images).
- The amount of image data recorded is not fixed and varies depending on factors such as the level of detail in the image. As a result, in some cases the number of shots available may not decrease, or may decrease by 2 when recording ends.

CAUTION

Never remove the SmartMedia while data is being recorded as this can corrupt the data on the SmartMedia or damage the SmartMedia itself.

Taking Pictures and Viewing Images on a TV

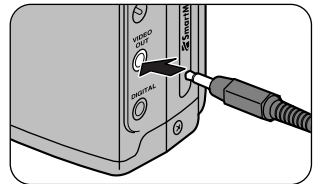
To use a television to take pictures and view images, first connect the camera to the television.

Use the AA-V101 AC Power Adapter supplied with the camera if you have access to a power outlet (usually indoors).

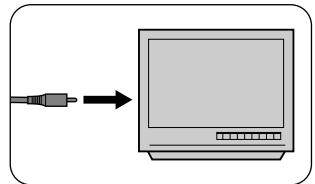
CAUTION

Always switch all devices off before connecting them together.

- 1** Switch the camera off and insert the small plug on the video cable (supplied) into the VIDEO OUT socket on the camera.



- 2** Plug the other end of the video cable (large plug) into the video input socket on the television.



- 3** Take a picture (or view an image).

- See P.30 for information on how to take pictures and P.42 for information on how to view images.
- To display the live image (the video image shown before a picture is taken) in [CAM], [VIEW] or [LIVE] mode, press the [DISP] button.

NOTE

The live image (the video image shown before a picture is taken) is not as clear as the image shown in playback mode (The resolution is lower.).

SELECT Button

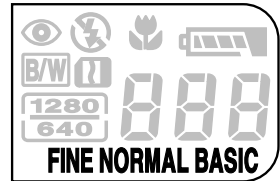
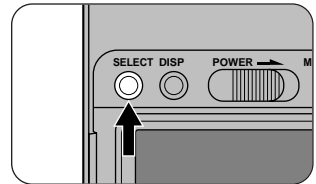
By specifying "QUICK SELECT" in [SETUP] mode in advance, you can switch the function settings to your customised specifications simply by pressing the [SELECT] button when you take the picture (➡P.63).

Quality

You can select FINE, NORMAL or BASIC as the image quality (➡P.61).

1 Press the [SELECT] button.

- "FINE", "NORMAL" or "BASIC" appears on the LCD panel as designated in your QUICK SELECT settings.

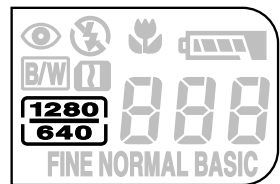
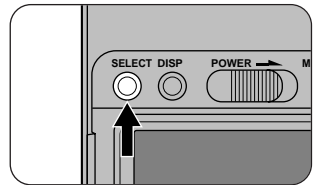


File Size

You can select 1280 or 640 as the file size (number of pixels) (➔P.61).

1 Press the [SELECT] button.

- “1280” (1280 × 1024 pixels) or “640” (640 × 480 pixels) appears on the LCD panel as designated in your QUICK SELECT settings.

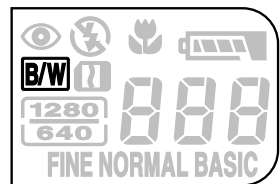
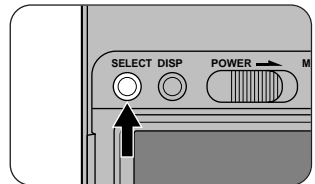


Color

You can select colour or black and white (➔P.62).

1 Press the [SELECT] button.

- If you select black and white, “B/W” appears on the LCD panel.



/ Telephoto Photography

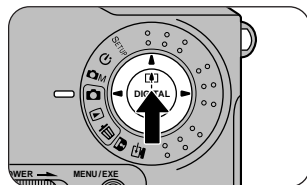
By using the digital telephoto function, you can enlarge the central area of the image to twice its normal size and thereby double the apparent focal length of the lens (to the equivalent of roughly 70 mm on a 35 mm camera).

NOTE

The telephoto function is only available when you are using the LCD monitor to take pictures (→P.33).

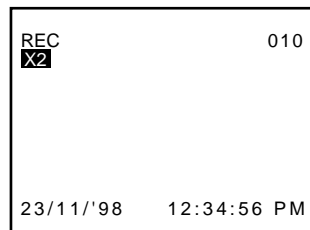
1 Press the **[▲]** () button.

- “X2” appears on the LCD monitor and the central part of the image doubles in size.



2 Look at the image on the LCD monitor to compose the shot, and then take the picture.

- See P.33 for information on how to take the picture.



To Exit Telephoto Mode

Press the **[▼]** () button.


NOTES

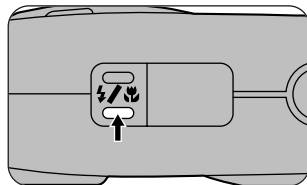
- The file size is fixed at 640 × 480 pixels. Because the central part of the image is enlarged, the image quality is lower. However, the file size (number of pixels) displayed on the LCD panel does not change.
- The telephoto function is automatically switched off when you switch the camera off, press the [DISP] button to switch the LCD monitor off, or if the Auto Power Off function is triggered.

Macro (Close-Up) Mode

Using the Macro (close-up) function, you can take pictures of subjects at distances of between 9 cm and 50 cm from the camera.

1 Press the [] (Macro) button.


- The live image (the video image shown before a picture is taken) appears on the LCD monitor.
- “” appears on the LCD panel.



2 Look at the image on the LCD monitor to compose the shot, and then take the picture.

- See P.33 for information on how to take the picture.

To Exit Macro Mode

Press the [] (Macro) button.

NOTES

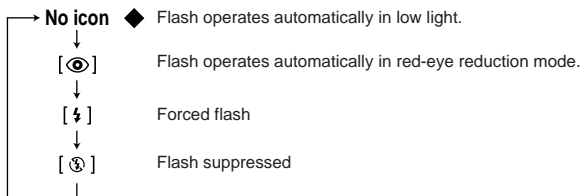
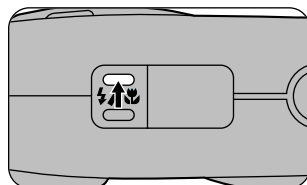
- The flash only operates when Forced flash mode (➔P.40) is specified.
- The Macro function is automatically switched off when you switch the camera off, press the [DISP] button to switch the LCD monitor off, or if the Auto Power Off function is triggered.
- The image displayed changes each time you press the [DISP] button (➔P.29).

⚡ Flash Mode

The GC-S5 allows you to use or suppress the flash to suit the conditions for the image you want to photograph. The **◆** mark indicates the default setting.

1 Press the [⚡] Flash button.

- The icons shown on the LCD panel change as shown below.



Auto Flash

The flash operates automatically in dark or backlit conditions.

[👁️] Red-Eye Reduction

Use this mode to avoid the "red-eye effect" when photographing people in low-light conditions.

The flash emits a pre-flash right before the picture is taken and then flashes again to take the actual picture.

Red-Eye Effect

When you use the flash to photograph people in low-light conditions, their eyes sometimes appear red in the picture. This is caused by the light of the flash reflecting off the inside of the eye. To minimise the likelihood of the red-eye effect, take the following precautions when you take the picture:


1. Use Red-Eye Reduction mode.
2. Get the subjects to look at the camera.
3. Get as close as possible to the subjects.

[] Forced Flash

In this mode, the flash always operates.

Use Forced Flash to shoot pictures in backlit conditions or artificial light (fluorescent lighting, etc.), to shoot portraits against night scenes, or in Macro mode.


NOTES

- When you shoot a portrait in Forced Flash mode against a night scene, the shutter speed is slower (slow-synchro photography) and the camera shake warning is displayed. Use a tripod to prevent camera shake if the viewfinder lamp flashes green, the camera shake icon “” appears if the LCD monitor is ON, when the shutter button is pressed.
- In Macro mode, the flash only operates when Forced Flash (➡P.39) is specified.

[] Suppressed Flash

Use Suppressed Flash mode when you are taking pictures in indoor lighting at distances too great for the flash to have any effect, such as theatre performances or indoor sporting events.

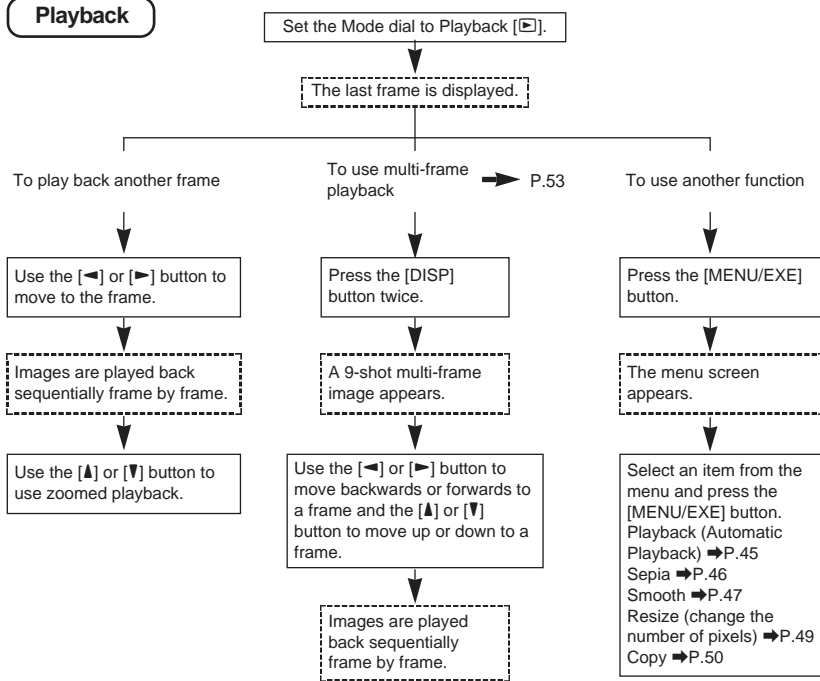
This mode stops the flash from operating.

- * If you use Suppressed Flash mode in dark conditions, the shutter speed is slower and the camera shake warning is displayed. Use a tripod to prevent camera shake if the viewfinder lamp flashes green, the camera shake icon “” appears if the LCD monitor is ON, when the shutter button is pressed halfway.

NOTE

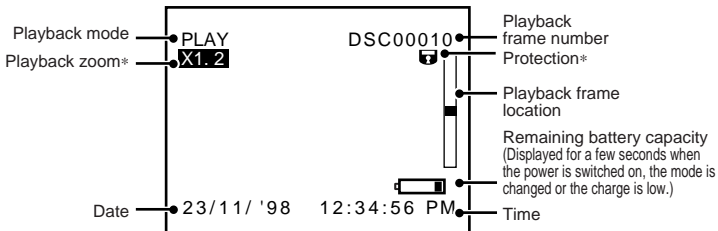
When the camera is set to Red-Eye Reduction, Forced Flash, or Suppressed Flash mode, the flash mode automatically reverts to Auto when you switch the camera off or if the Auto Power Off function is triggered.

Playback



[Example of LCD Monitor Text Display]

- Asterisks indicate items that may not be displayed depending on the camera mode and photography conditions.



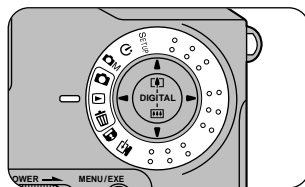
- Use the AA-V101 AC Power Adapter supplied with the camera if you have access to a power outlet (usually indoors).
- See P.35 for information on how to view images on a TV.

Single-Frame Playback

The GC-S5 automatically determines the quality of images played back. You can move forwards or backwards through the frames one frame at a time.

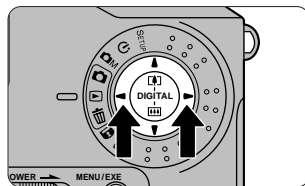
1 Set the mode dial to [▶].

- The last recorded frame is displayed.



2 Use the [◀] or [▶] button to move to the desired frame.

- [▶]: Moves forwards one frame.
- [◀]: Moves backwards one frame.
- Frames with no recorded image are skipped during playback.
- If there are no recorded images in any of the frames, "DSC00000" is displayed.



NOTE

Pressing the [DISP] button changes the type of playback and switches display of the current frame number on and off.

▶ Playback

You can use the six functions shown below during single-frame playback. Items 2 to 6 are specified from the menu screen.

1. Playback zoom
2. Automatic play (Playback)
3. Sepia
4. Smooth
5. Resize
6. Copy

⚙ CAUTIONS

- The **Sepia**, **Smooth** and **Resize** functions will not operate if all the frames on the SmartMedia contain recorded images.
- The **Sepia**, **Smooth** and **Resize** functions do not operate during multi-frame playback.

Playback Zoom

Playback zoom allows you to enlarge images up to 400% and can be used during single-frame playback.

1 During single-frame playback, select the image to be enlarged.

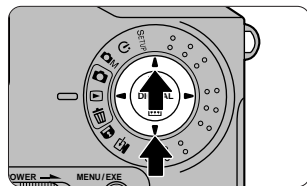
- See P.43 for information on how to use single-frame playback.

2 Use the [▲] or [▼] button to enlarge or reduce the image.

[▲]: Enlarge

[▼]: Reduce

- You can move the location zoomed by holding down the [SELECT] button and pressing the direction buttons [▲▶▼◀].



To Exit Playback Zoom

Press the [◀] or [▶] button to move to another frame.

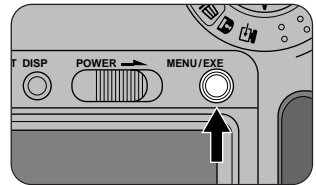
Automatic Playback (Playback)

"Playback" plays back successive images (approx. 3 seconds per frame).

1 During single-frame playback, select the frame at which automatic playback is to begin.

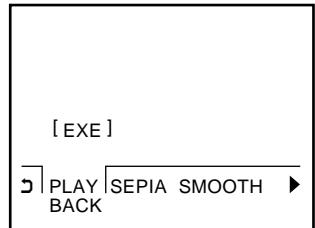
- See P.43 for information on how to use single-frame playback.

2 Press the [MENU/EXE] button to bring up the menu screen.



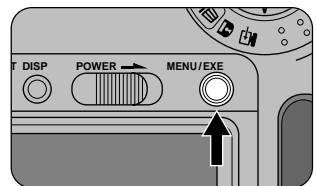
3 Press the [◀] or [▶] button to select "PLAYBACK".

- To return to single-frame playback, select "⏪" and press the [MENU/EXE] button.



4 Press the [MENU/EXE] button.

- Automatic playback begins.



To Exit Auto Play

During automatic playback, press the [MENU/EXE] button.

NOTES

- Auto Play can also be used during multi-frame playback (⇒P.53). In multi-frame playback, playback begins at the selected frame.
- The Auto Power Off function does not operate during Auto Play.

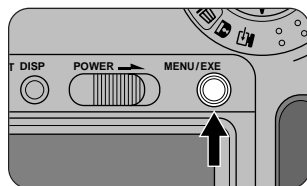
Sepia

This function displays an image in sepia tones during single-frame playback.

1 During single-frame playback, select the frame to viewed in sepia tones.

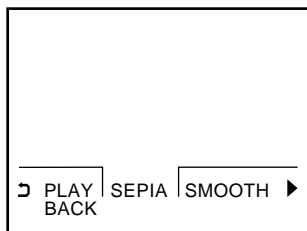
- See P.43 for information on how to use single-frame playback.

2 Press the [MENU/EXE] button to bring up the menu screen.



3 Press the [◀] or [▶] button to select "SEPIA".

- To return to single-frame playback, select "◀" and press the [MENU/EXE] button.



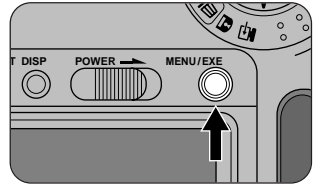
4 Press the [MENU/EXE] button.

- A screen is displayed showing the sepia-tone image to allow you to confirm whether the sepia-tone image should be recorded.
- To return to the menu screen without recording the image, press the [▼] button.



5 Press the [MENU/EXE] button.

- The sepia-tone image is recorded in the last frame. The original image is left unchanged.



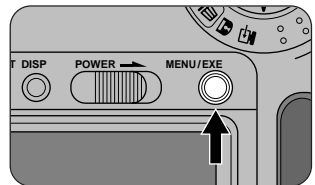
Smooth

The smooth function allows you to make the lighter areas of an image look smoother during single-frame playback.

1 During single-frame playback, select the frame whose lighter areas you want to look smoother.

- See P.43 for information on how to use single-frame playback.

2 Press the [MENU/EXE] button to bring up the menu screen.



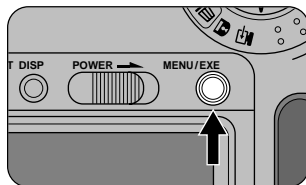
3 Press the [◀] or [▶] button to select "SMOOTH".

- To return to single-frame playback, select "↶" and press the [MENU/EXE] button.



4 Press the [MENU/EXE] button.

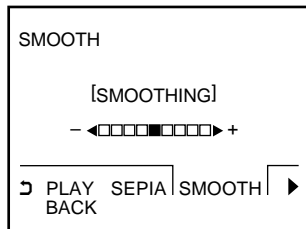
- A screen is displayed which is used to set the [SMOOTHING] levels.



5 Press the [◀] or [▶] button to set the level of the [SMOOTHING] effect.

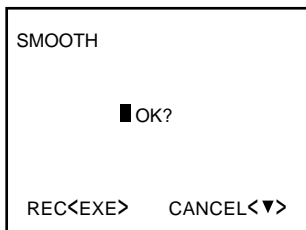
[◀]: Sharpens the lighter areas of the image.

[▶]: Smooths the lighter areas of the image.



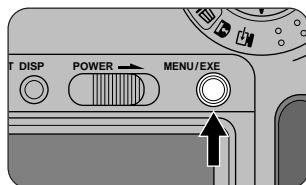
6 Press the [MENU/EXE] button.

- An image appears showing the results of the settings specified in step 5.
- To return to the menu screen without recording the image, press the [▼] button.



7 Press the [MENU/EXE] button.

- The enhanced image is recorded in the last frame. The original image is left unchanged.



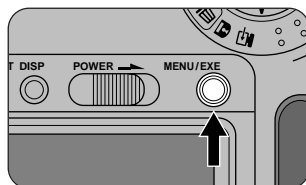
Resize

The Resize function converts a 1280 × 1024 pixel image to a 640 × 480 pixel image during single-frame playback.

1 During single-frame playback, select the frame you want to resize.

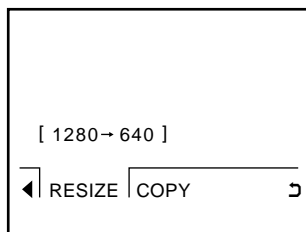
- See P.43 for information on how to use single-frame playback.

2 Press the [MENU/EXE] button to bring up the menu screen.



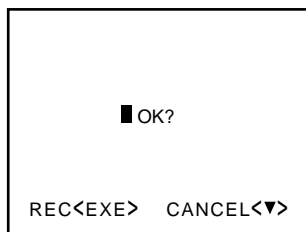
3 Press the [◀] or [▶] button to select "RESIZE".

- A 640 × 480 pixel image cannot be resized. "▲640" is displayed for such images.
- To return to single-frame playback, select "↵" and press the [MENU/EXE] button.



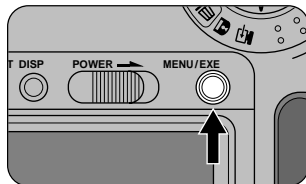
4 Press the [MENU/EXE] button.

- A screen is displayed to allow you to confirm whether the resized image should be recorded.
- To return to the menu screen without recording the image, press the [▼] button.



5 Press the [MENU/EXE] button.

- The image size is changed.
- The resized image is recorded in the last frame. The original image is left unchanged.



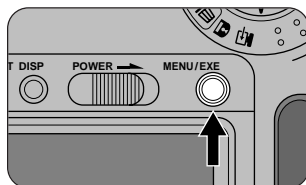
Copy

This function allows you to copy images onto another SmartMedia. Images can be copied during both single-frame and multi-frame playback.

1 Set the camera to single-frame or multi-frame playback.

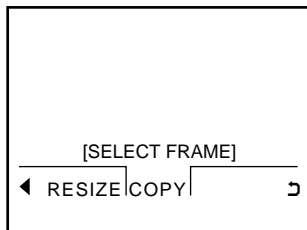
- See P.43 for information on how to use single-frame playback.
- See P.53 for information on how to use multi-frame playback.

2 Press the [MENU/EXE] button to bring up the menu screen.

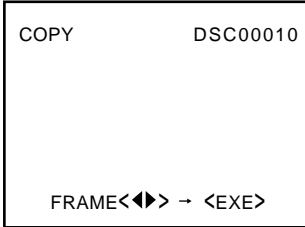


3 Press the [◀] or [▶] button to select "COPY" and press the [MENU/EXE] button.

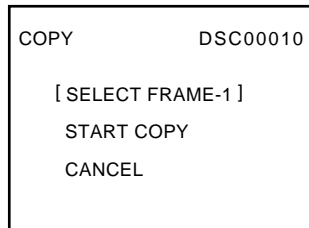
- To return to the playback screen, select "↵" and press the [MENU/EXE] button.



- 4** Press the [◀] or [▶] button to select the image to be copied and press the [MENU/EXE] button.



- 5** To copy multiple images, use the [▲] or [▼] button to select "SELECT FRAME-1" and press the [MENU/EXE] button.



- The screen in step 4 reappears. Repeat steps 4 and 5 for each image you want to copy.
- Up to 9 images can be copied simultaneously.

CAUTION

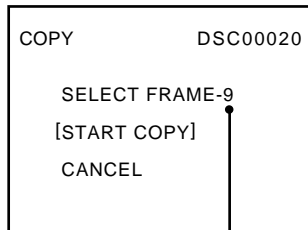
Depending on the image quality and the file size, it may not be possible to copy all 9 images.

To Cancel Copying

- Select "CANCEL" and press the [MENU/EXE] button. The menu screen reappears.
- To return to the playback screen, select "⏪" from the menu and press the [MENU/EXE] button.

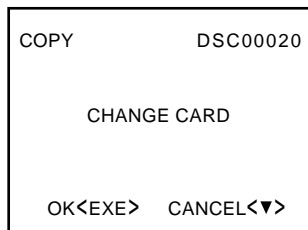
6 Use the [▲] or [▼] button to select “START COPY” and press the [MENU/EXE] button.

- Copying begins.



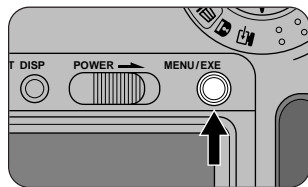
Number of frames selected

7 When the “CHANGE CARD” message appears, remove the SmartMedia without switching off the camera and insert the SmartMedia onto which the images are to be copied.



8 Press the [MENU/EXE] button.

- Copying is completed and the menu screen reappears.
- To return to the playback screen, select “⏪” from the menu and press the [MENU/EXE] button.



⚠ CAUTIONS

- Never remove the SmartMedia during copying (while the hourglass icon “⌚” is displayed). This could damage the SmartMedia or the data on the SmartMedia.
- Images copied onto the same SmartMedia are recorded in the last frames.

📝 NOTES

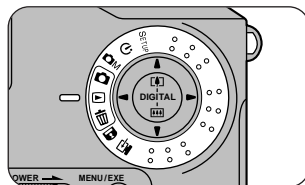
- The Auto Power Off function does not operate during copying.
- If an error occurs during copying, no data is copied and the playback screen reappears.

Multi-Frame Playback

Multi-frame playback allows you to view 9 images at once.

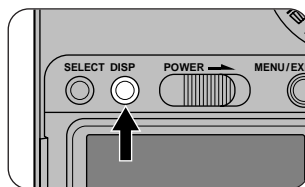
1 Set the Mode dial to [▶].

- The last recorded frame appears.



2 Press the [DISP] button twice.

- The 9-shot multi-frame playback screen appears.
- Frames with no recorded images are shown in black.



3 Use the [◀], [▶], [▲] and [▼] buttons to move to the frame you want to view.

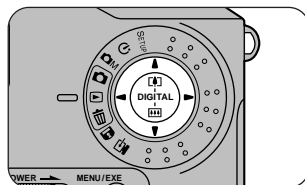
[◀]: Go back one frame

[▶]: Advance one frame

[▲]: Go back 3 frames

[▼]: Advance 3 frames

- A white frame appears around the selected frame.



NOTE

Pressing the [DISP] button changes the type of playback and switches display of the current frame number on and off.

To Revert to Single-Frame Playback

- During on-screen display, press the [DISP] button twice.
- Otherwise, press the [DISP] button once.

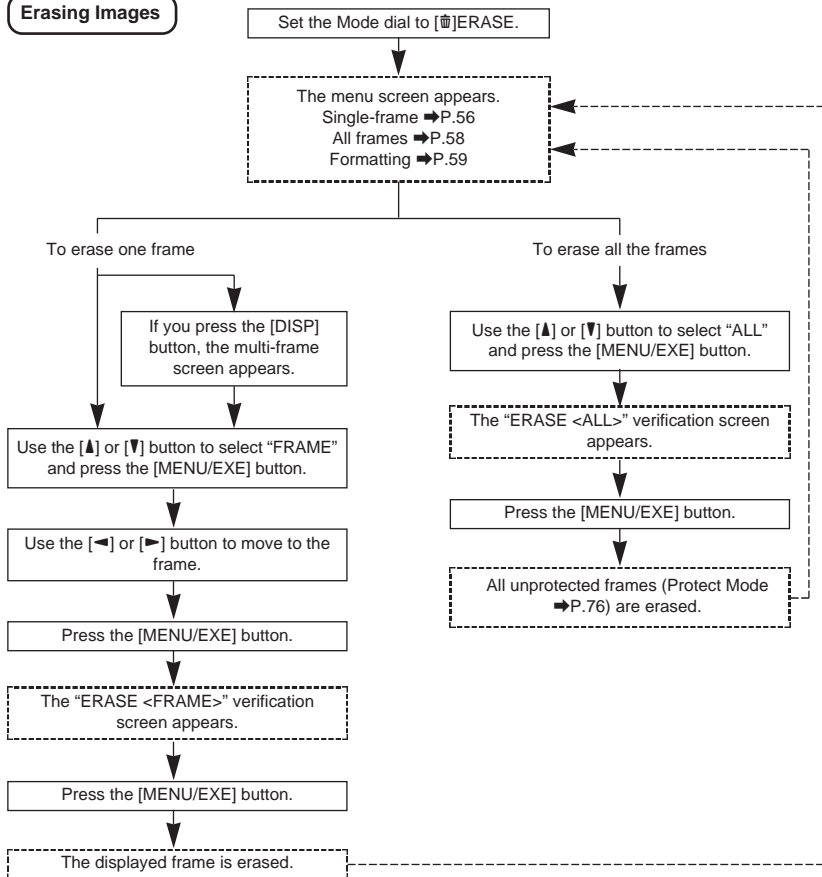
CAUTION

In some cases, you may not be able to view image data recorded using the GC-S5 if the data has been processed or edited on a personal computer and then transferred back to the camera and recorded.

Data can only be exchanged between the GC-S5 and a personal computer using Exif-JPEG-format files with the file names DSC00001.JPG to DSC99999.JPG. While it is sometimes possible to exchange files with other names, this should be avoided since it could cause problems with the camera's playback and recording functions. In some cases, you may not be able to view an image file with one of the above file names if the data has been processed or edited on a personal computer and then transferred back to the camera and recorded.

Erasing Images

Erasing Images



Erasing Images

You can use the GC-S5 Digital Still Camera to erase single frames, to erase all the frames on a SmartMedia, or to format a SmartMedia. If you are using a new SmartMedia, you must first format the SmartMedia.

CAUTIONS

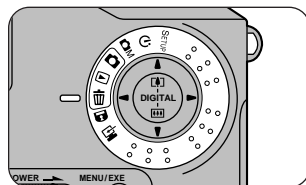
- You cannot erase protected frames (Protect Mode →P.76).
- Formatting a SmartMedia erases all the frames on the card, regardless of whether they are protected (→P.76).
- You cannot erase images from or format a write-protected SmartMedia (→P.22).

Erasing a Single Frame

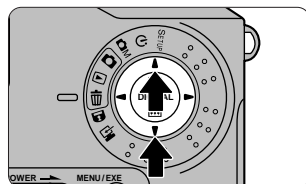
This method erases the selected frame.

1 Set the Mode dial to .

- The menu screen appears.



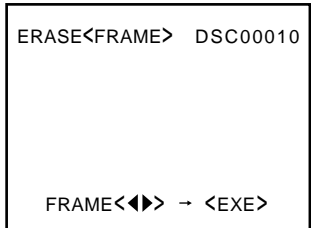
2 Use the [] or [] button to select "FRAME" and press the [MENU/EXE] button.



ERASE	DSC00010
[FRAME]	
ALL	
FORMAT	

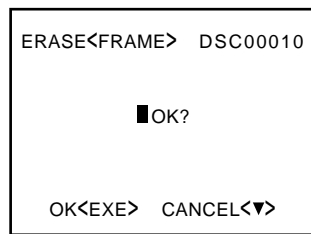
3 Use the [◀] or [▶] button to select the image to be erased and press the [MENU/EXE] button.

- The confirmation screen appears.
- In step 1, press the [DISP] button to select the image to be erased in the same way as in 9-shot multi-frame playback (➔P.29, 53).



4 Press the [MENU/EXE] button.

- The image is erased and the menu screen reappears.



CAUTIONS

- If "▲PROTECTED FRAME" is displayed, the image cannot be erased.
 - To remove the protection on that image: Switch to Protect mode (➔P.76) to remove the protection.
 - To erase other images: In Playback mode (➔P.42), select the images to be erased and then go back into Erase mode to erase the frames.
- * Note that using any buttons other than the Mode dial when "▲PROTECTED FRAME" is displayed can cause a malfunction.

To Cancel Single-Frame Erase

In step 4, press the [▼] button before you press [MENU/EXE] button.

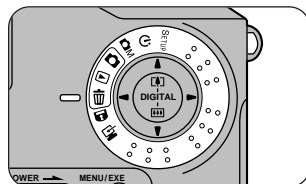
5 To erase another frame, repeat the procedure from step 2.

Erasing All Frames

This operation erases all the unprotected frames (Protect Mode ➔P.76) on a SmartMedia.

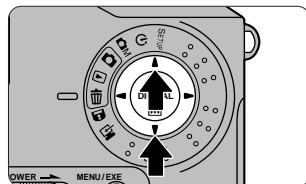
1 Set the Mode dial to [🗑️].

- The menu screen appears.



2 Use the [▲] or [▼] button to select "ALL" and press the [MENU/EXE] button.

- The confirmation screen appears.



```
ERASE          DSC00010

                FRAME
                [ALL]
                FORMAT
```

3 Press the [MENU/EXE] button.

- The images are erased and the menu screen reappears.

```
ERASE<ALL>    DSC00010

                ■OK?

                OK<EXE>  CANCEL<▼>
```

To Cancel All-Frame Erase

In step 3, press the [▼] button before you press [MENU/EXE] button.

Formatting (Initialisation)

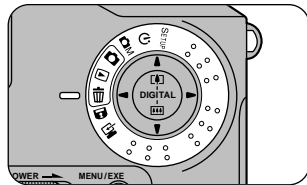
This feature erases all the frames on the SmartMedia card, including any protected frames (Protect Mode →P.76), and formats the SmartMedia.

CAUTION

Always use the camera to format a SmartMedia.

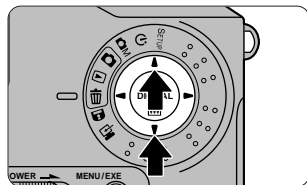
1 Set the Mode dial to [🗑️].

- The menu screen appears.



2 Use the [▲] or [▼] button to select "FORMAT" and press the [MENU/EXE] button.

- The confirmation screen appears.



ERASE DSC00010
FRAME
ALL
[FORMAT]

3 Press the [MENU/EXE] button.

- The SmartMedia is formatted and the menu screen reappears. The playback frame number changes to "DSC00000"

ERASE<FORMAT> DSC00010
■OK?
OK<EXE> CANCEL<▼>

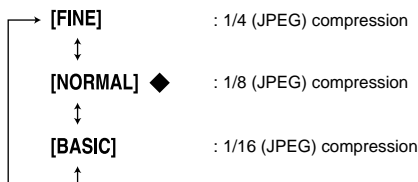
To Cancel Formatting

In step 3, press the [▼] button before you press [MENU/EXE] button.

Quality

You can select one of three levels of quality (image compression ratios), depending on the type of shot. The number of shots available (➔P.94) varies depending on the image quality you select. [FINE], [NORMAL] or [BASIC] appears on the LCD panel to indicate the image quality setting. Select [FINE] when you want better image quality and [BASIC] when you want to fit more images on the SmartMedia.

[LCD Monitor Display Sequence]



File Size

You can select either of two file size (number of pixels) settings depending on the type of shot. The number of shots available (➔P.94) varies depending on the file size setting you select. [1280] or [640] appears on the LCD panel to indicate the file size.

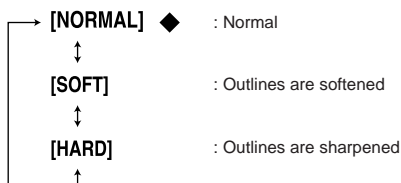
[LCD Monitor Display Sequence]



Sharpness

The Sharpness setting allows you to sharpen or soften the outlines in an image.

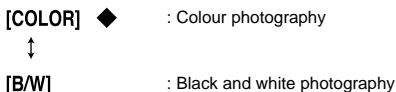
[LCD Monitor Display Sequence]



Color

Use this setting to select whether an image is recorded in colour or in black and white. Black and white photography is ideal for monochrome subjects and as a way of recording documents. When black and white is selected, the “**B/W**” icon appears on the LCD panel.

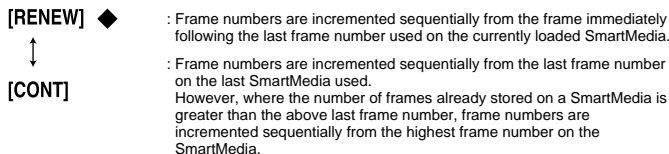
[LCD Monitor Display Sequence]



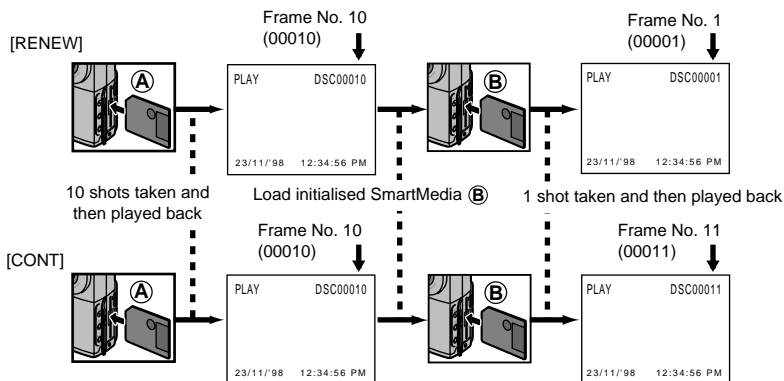
Frame No. Memory

Use this setting to select the type of increment for recorded image frame numbers (file numbers).

[LCD Monitor Display Sequence]



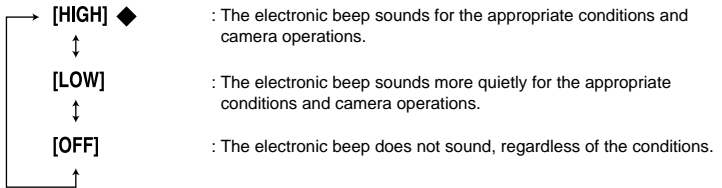
- * The maximum number of frames is 99999.
- * Once the limit of 99999 frames has been reached, set [FRAME NO.] to [RENEW], then use the SmartMedia after deleting the images stored on it.



Beep Volume

You can set the beep volume to [HIGH], [LOW] or [OFF] as desired.

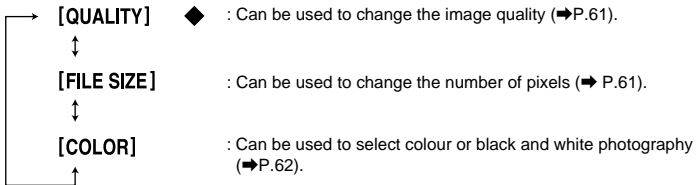
[LCD Monitor Display Sequence]



Quick Select

By specifying [QUICK SELECT] settings in [SETUP] mode in advance, you can switch the function settings to your customised specifications simply by pressing the [SELECT] button when you take the picture (➔P.36).

[LCD Monitor Display Sequence]



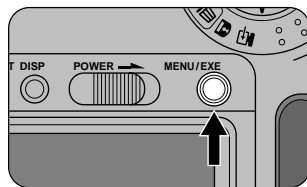
Date and Time

This setting specifies the date and time. If you remove the battery for more than 5 minutes at a time, the date and time setting reverts to the initial setting ('98.01.01 12:00:00 AM). You must then reset the date and time.

Date: Automatic calendar (two-digit display)

Time: 12-hour format (noon shown as 12:00:00 PM)

- 1 In the SETUP screen, select "DATE/TIME" and press the [MENU/EXE] button.**

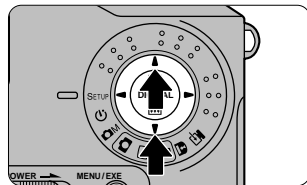


- 2 Press the [▶] button until the digits you want to set start flashing.**

- Each time you press the [▶] button, the flashing digits change as follows:
Year → Month → Day → Hour → Minute.

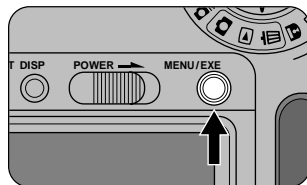


- 3 Use the [▲] or [▼] button to set the number.**



- 4 When you have repeated steps 2 and 3 and have set the seconds, press the [MENU/EXE] button.**


- This completes the date and time settings.
- The time display begins counting from zero "00" seconds.
- The "SETUP" screen reappears.



CAUTION

If you disconnect the AC power adapter when there is no battery in the camera, the date and time setting reverts to the initial setting ('98.01.01 12:00:00 AM).

Reset

This function resets all the [SETUP] settings to the default values (indicated by .

1 Press the [MENU/EXE] button.

- The settings are reset and the "SETUP" screen reappears.

NOTE

The date and time setting is not reset.



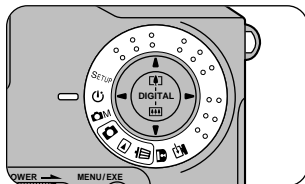
To Cancel Reset

Press the [] button. The SETUP screen reappears.

🕒 Self-Timer Mode

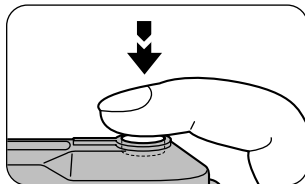
1 Set the Mode dial to [🕒].

- The camera switches to self-timer mode.
- When you press the [DISP] button, “SELF-TIMER” appears on the LCD monitor.



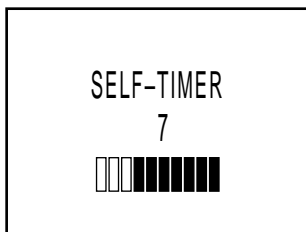
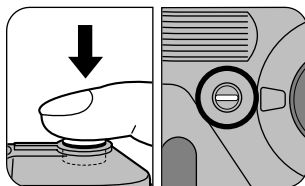
2 Compose the picture and press the shutter button down halfway.

- The camera automatically sets the focus and the exposure. Once the focus is set, the viewfinder lamp turns green. “STANDBY” appears on the LCD monitor.



3 Without lifting your finger off, press the shutter button down fully.

- The self-timer lamp on the front of the camera lights. The shutter operates after 10 seconds. (The self-timer lamp lights for the first 5 seconds and then flashes for the last 5 seconds, and the electronic beep sounds 3 seconds before the shutter operates.)
- If you are viewing the image on the LCD monitor, the countdown is also displayed on the monitor. If you are not using the LCD monitor, the countdown appears in the No. of shots available field on the LCD panel.



To Interrupt the Self-Timer

Press the [MENU/EXE] button or set the Mode dial to a setting other than [🕒].

Manual Mode

This mode allows you to view a shot you have taken on the LCD monitor (or on a TV) and then decide whether to record the shot.

This mode also allows you to select the W.B. (white balance), EV (brightness/exposure compensation) and FLASH (flash brightness) settings and to select 16-CONT (continuous shots) mode.

CAUTION

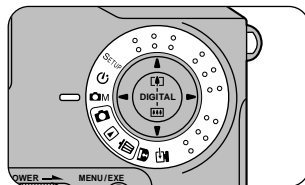
All the settings revert to their default values once the camera is switched off.

1 Set the Mode dial to [M].

- See Pages 69 to 75 for information on each of the settings.

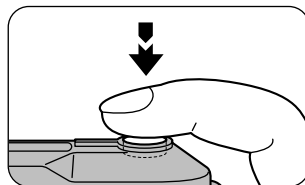
NOTE

When you press the [DISP] button, the live video image (the video image shown before a picture is taken) appears on the LCD monitor.



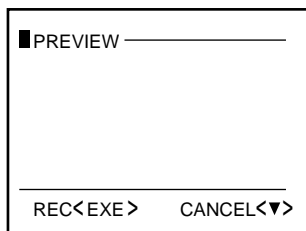
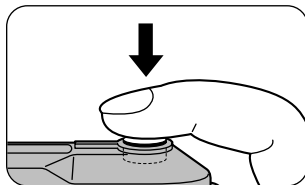
2 Compose the picture and press the shutter button down halfway.

- The camera automatically sets the focus and the exposure. Once the focus is set, the viewfinder lamp turns green and "STANDBY" appears on the LCD monitor. If the viewfinder lamp flashes green, refer to P.29.



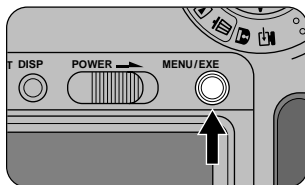
3 Without lifting your finger off, press the shutter button down fully.

- The electronic beep sounds and the preview image (photographed still image) appears on the LCD monitor. The viewfinder lamp turns orange.
- If you do not want to record the image onto the SmartMedia, press the [▼] button. The live image reappears on the LCD monitor.



4 Press the [MENU/EXE] button.

- The viewfinder lamp turns orange while the image data is being recorded onto the SmartMedia. You cannot take any pictures while the lamp is orange.
- When recording finishes, the electronic beep sounds and the number of shots available decreases by 1.



CAUTION

Never remove the SmartMedia while data is being recorded onto or read from the card as this can corrupt the data on the SmartMedia or damage the SmartMedia itself.

Setting the White Balance

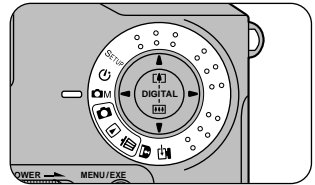
You can select one of five white balance settings: Outdoor, Shade, Fluorescent 1, Fluorescent 2 and Incandescent. The Outdoor setting is normally used. Use the other settings to set the white balance when you are shooting in shadow or in special lighting.

NOTES

- The default setting is [*] (Outdoor).
- This setting does not apply when the flash is used.

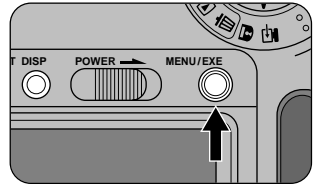
1 Set the Mode dial to [M].

- If the LCD monitor is switched off, press the [DISP] button.

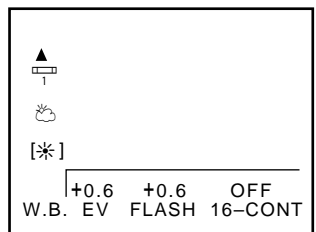


2 Press the [MENU/EXE] button.



- The menu screen appears.

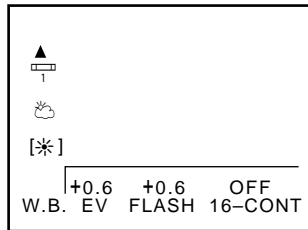


3 Use the [◀] or [▶] button to select [W.B.].



4 Use the [▲] or [▼] button to select the white balance setting.

- [*]: Shooting outdoors (fine weather)
- [☁]: Shooting in shade (cloudy weather)
- []: Shooting in fluorescent light (in bluish light)
- []: Shooting in fluorescent light (in reddish light)
- [☀]: Shooting in incandescent light



5 Use the [◀] or [▶] button to confirm the setting.

- Press the [MENU/EXE] button to return to the original screen.

What is White Balance?

When the brightness of the light changes, the human eye adapts so that a white object still looks white. On the other hand, devices such as Digital Still Cameras see a white subject as white by first adjusting the balance to suit the color of the ambient light around the subject. This adjustment is called matching the white balance.

Setting the Brightness (Adjusting the Exposure)

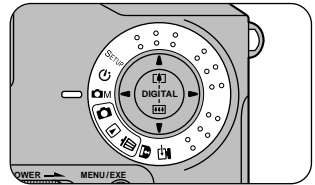
Use this setting to achieve the optimum image brightness (exposure) when the subject is very small in the picture or when the subject is much brighter or darker than the background.

NOTES

- The default setting is "0".
- The brightness of the live image (the video image shown before a picture is taken) does not change. Press the shutter button and check the brightness of the preview image (photographed still image).

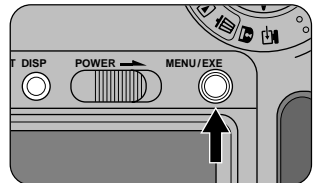
1 Set the Mode dial to [M].

- If the LCD monitor is switched off, press the [DISP] button.

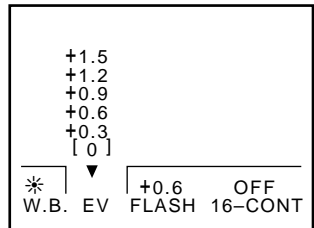


2 Press the [MENU/EXE] button.

- The menu screen appears.



3 Use the [◀] or [▶] button to select [EV].

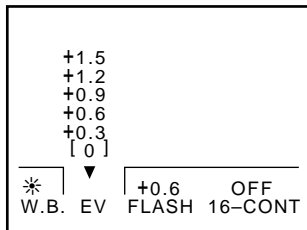


4 Use the [▲] or [▼] button to select the brightness (exposure compensation).

[▲]: Brightens the image.

[▼]: Darkens the image.

- There are 9 compensation levels (-0.9 to +1.5EV in approx. 0.3EV steps).



CAUTION

In some shooting conditions, pressing the [▲] button may not make the image brighter.

5 Use the [◀] or [▶] button to confirm the setting.

- Press the [MENU/EXE] button to return to the original screen.

Exposure Compensation

The camera's AE (automatic exposure control) function sets the shutter speed and the aperture setting so that the overall brightness level of the image being photographed is in the middle range. This process eliminates any low-key (overly dark) and high-key (overly bright) points. However, this can produce actual background colors that are too bright or too dark overall. When this problem arises, shooting with uncompensated AE will not capture the true image. To obtain an image that is close to the actual image you see, you need to use exposure compensation.

Exposure compensation is required in the following situations:

Positive (+) Compensation

- Copying of printed text (black characters on white paper) (+1.5 EV)
- Backlit portraits (+0.6 to +1.5 EV)
- Very bright scenes (such as snowfields) and highly reflective subjects (+0.9 EV)
- Shots made up predominantly of sky. (+0.9 EV)

Negative (-) Compensation

- Spotlight subjects, particularly against dark backgrounds (-0.6 EV)
- Copying of printed text (white characters on black paper) (-0.6 EV)
- Scenes with low reflectivity, such as shots of green or dark foliage (-0.6 EV)

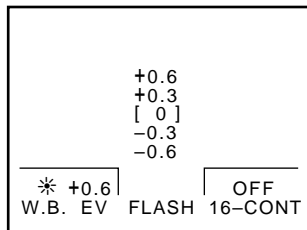
OM Manual Mode

4 Use the [▲] or [▼] button to set the flash brightness.

[▲]: Increases the flash brightness.

[▼]: Decreases the flash brightness.

- There are 5 compensation levels (-0.6 to +0.6EV in approx. 0.3EV steps).



CAUTION

If you are shooting in dark conditions or if the subject is too far, pressing the [▲] button may not produce a brighter picture.

5 Use the [◀] or [▶] button to confirm the setting.

- Press the [MENU/EXE] button to return to the original screen.

Continuous Shots (16-Cont)

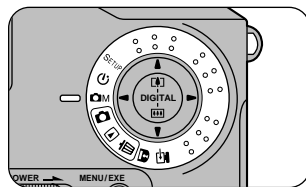
16-Cont (continuous shots) allows you to take 16 continuous photographs of the subject on one frame at either of two speeds. Use this mode to photograph subjects such as a friend's golf swing or a sporting event.

NOTE

The default setting is "OFF".

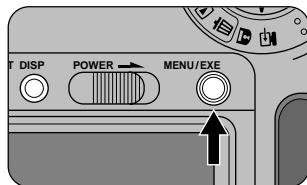
1 Set the Mode dial to [OM].

- If the LCD monitor is switched off, press the [DISP] button.

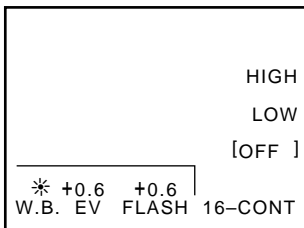


2 Press the [MENU/EXE] button.

- The menu screen appears.



3 Use the [◀] or [▶] button to select [16-CONT].

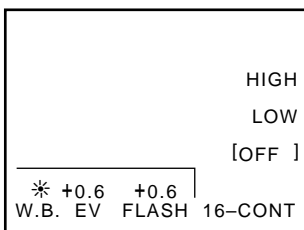


4 Use the [▲] or [▼] button to set the continuous shot speed.

[HIGH]: Takes 16 shots in approximately 2 seconds.

[LOW]: Takes 16 shots in approximately 4 seconds.

[OFF]: No continuous shots are taken.



5 Use the [◀] or [▶] button to confirm the setting.

- Press the [MENU/EXE] button to return to the original screen.

CAUTION

Because the flash is suppressed in Continuous Shots mode, the flash settings (Forced Flash and Red-Eye Reduction) and flash power adjustment do not function (even though they appear on the LCD panel).

Protect Mode (Protecting Your Images)

This feature assigns the read-only attribute to image data to prevent the images from being inadvertently erased.

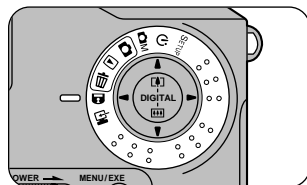
CAUTIONS

- Read-only data is also erased when you format (initialise) a SmartMedia card (➔P.59).
- To protect the entire SmartMedia, refer to "Write Protection" (➔P.22).

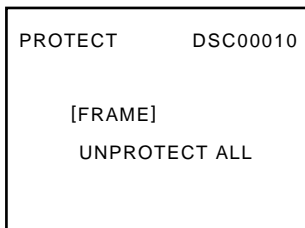
Protecting a Single Frame

1 Set the Mode dial to .


- The menu screen appears.

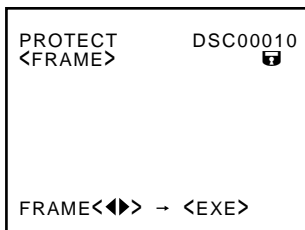


2 Use the or button to select "FRAME" and press the button.



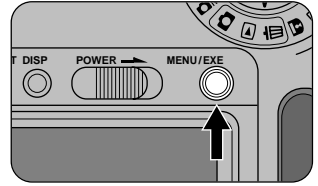
3 Use the or button to select the frame to be protected and press the button.

- In step 1, press the [DISP] button to select the image to be erased in the same way as in 9-shot multi-frame playback (➔P.29, 53).
- The read-only attribute is assigned to the frame displayed and the  icon appears under the frame number.



To Remove Single-Frame Protection

- 1** Perform steps 1 and 2 in “Protecting a Single Frame” on page 76.
- 2** Use the [◀] or [▶] button to select the protected frame and press the [MENU/EXE] button.
 - The “🔒” icon goes off.



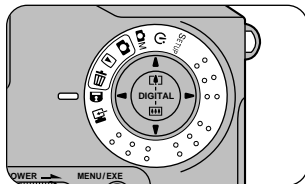
Protect Mode (Protecting Your Images)

Removing Protection from All Frames

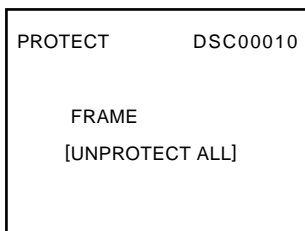
This procedure removes the protection from all protected frames.

1 Set the Mode dial to .

- The menu screen appears.

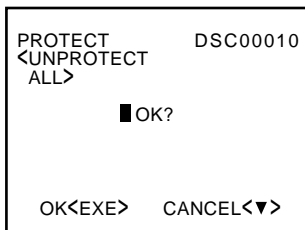


2 Use the or button to select [UNPROTECT ALL].




3 Press the [MENU/EXE] button.

- The confirmation screen appears.

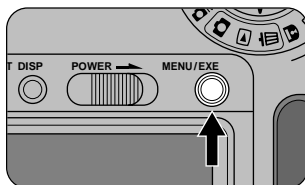


To Cancel Removal of Protection from All Frames

Press the  button. The menu screen reappears.

4 Press the [MENU/EXE] button.

- The protection is removed from all the frames and the menu screen reappears.



PC-Mode (Downloading Images to a PC)

NOTE

The HS-V12 PC and Macintosh® Connection Kit is NOT included with the GC-S5 Digital Still Camera.

In PC-mode, you can connect the camera to a Windows® or Macintosh® computer using the serial cable supplied with the PC and Macintosh® Connection Kit (optional). You can then transfer image data in either direction or control photography from your computer.

In this mode, you should use the AA-V101 AC Power Adapter supplied with the GC-S5 to avoid data transfer interruption caused by an exhausted battery.

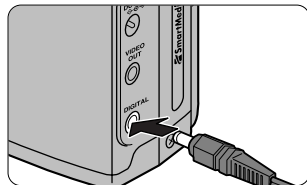
CAUTIONS

- Always switch all the devices off before you connect them together.
- Install the PC and Macintosh® Connection Kit on your personal computer before you connect the camera and computer together.

- 1 Switch the camera off and plug one end of the supplied serial cable into the DIGITAL socket on the camera.**

CAUTION

Do not plug anything other than the supplied serial cable into the DIGITAL socket as this could cause a fault. Check also that the plug is inserted fully into the socket.



- 2 Connect the other end of the connection cable to the personal computer.**

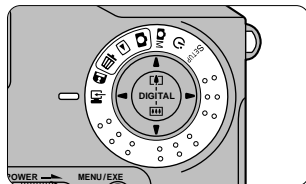
Windows® : Serial port (RS-232C)

Macintosh® : Modem or printer port (RS-422)

- 3 Switch on the personal computer.**

4 Switch on the camera and set the Mode dial to [P].

- “PC-MODE” appears on the LCD monitor. Perform all subsequent operations from your personal computer.
- Refer to the install manual supplied with the PC and Macintosh® Connection Kit for detailed information.



CAUTIONS

- Image data can only be exchanged between the GC-S5 and a personal computer using Exif-JPEG format files with the file names DSC00001.JPG to DSC99999.JPG.
- The Auto Power Off function does not operate in PC-mode.
- If the power is switched off during data transmission, the image data will not be received correctly.
- To switch the camera to another mode after using PC-mode, switch the camera off, select the new mode and then switch the camera back on.

NOTE

For information on using the Floppy Disk Adapter (provided) or a PC Card Adapter (commercially available), refer to their respective manuals.

Notes On Using SmartMedia With Personal Computers

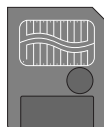
- Initialise the SmartMedia in the camera.
- When a SmartMedia is initialised in the camera, a folder (directory) called “IMFIDX10” is automatically created. Image data is then recorded in this folder. Do not change or delete the folder (directory) names or file names on the SmartMedia from the personal computer as this will make it impossible to use the SmartMedia in the camera.
- Always use the camera to delete image data on a SmartMedia.
- To edit image data, copy the image data to the computer’s hard disk and then edit the copied data.
- To record image data from the personal computer onto a SmartMedia card, use the PC and Macintosh® Connection Kit (optional). Refer to the manual supplied with the PC and Macintosh® Connection Kit for details.

Accessories Guide (As of April 1998)

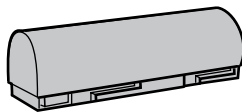
These optional accessories (sold separately) can make taking pictures and viewing images with the GC-S5 even easier. For information on how to attach and use these accessories, refer to the instructions provided with the accessory used.

VU-V108 SmartMedia

Memory capacity: 8 MB
Operating voltage: 3.3 V



BN-V101 Battery Pack (Rechargeable Battery)



CB-V12 Soft Case

This case can be used when carrying the camera to protect it from dust, dirt and mild impacts (made from real leather).

HS-V12 PC and Macintosh® Connection Kit

Use this software to transfer image data between the GC-S5 and a Windows® or Macintosh® computer.

Notes on Using Your Camera Correctly

Be sure to read this information in conjunction with "Safety Notes" (➔P.84) to ensure that you use your camera correctly.

● Places to Avoid

Do not use or store the camera in the following types of locations:

- Very humid, dirty or dusty places
- In very warm places, such as in direct sunlight or in a closed car in summer, or in very cold places
- Places subject to strong vibrations
- Places affected by smoke or steam
- Places subject to strong magnetic fields (such as places near motors, transformers or magnets)
- For long periods in contact with chemicals such as pesticides or next to rubber or vinyl products

● Do not expose the camera to sand.

The GC-S5 is particularly adverse to the effect of sand. In sandy locations such as beaches or deserts, or in locations where there is windborne sand, ensure that the camera is not exposed to sand. This can cause faults that may be irreparable.

● Notes on Condensation

If the camera is carried suddenly from a cold location into a warm place, water droplets (condensation) may form on the inside of the camera or on the lens. When this occurs, switch the camera off and wait one hour before using the camera. Condensation may also form on the SmartMedia card. In this event, remove the SmartMedia and wait a short time before using it again.

● When the Camera is Unused for Long Periods

If you do not intend to use the camera for a long period, remove the battery and the SmartMedia card before storing the camera.

● Cleaning Your Camera

- Use a blower brush to remove dust from the lens, the surface of the LCD monitor and the optical viewfinder, then wipe lightly with a soft, dry cloth.
- Take care not to scrape the LCD monitor with hard objects as the surface scratches easily.
- Clean the body of the camera with a soft dry cloth. Do not use volatile substances such as thinners, benzene or insecticide, as these may react with the camera body and cause deformation or remove the coating.

● Using the Camera Overseas

- To view the images on a TV monitor, the TV monitor must be the same format (PAL) and have a Video In port. You will also need a video cable.
- When travelling overseas, do not place your camera in your check-in baggage. Luggage handling at airports may subject baggage to violent shocks, and the camera may be damaged internally even when no external damage is visible.

■ SmartMedia

- When you are carrying or storing SmartMedia, always keep the SmartMedia in the anti-static case provided to ensure that the SmartMedia is not adversely affected by static electricity.
- Inserting a SmartMedia that is charged with static electricity into your camera may result in a camera malfunction. If this occurs, switch the camera off and then on again.

■ Liquid Crystal

- If the LCD monitor or LCD panel is damaged, take particular care with the liquid crystal in the monitor or panel. If any of the following situations arise, take the urgent action indicated.
- If liquid crystal comes in contact with your skin
Wipe the area with a cloth and then wash thoroughly with running water and soap.
- If liquid crystal gets into your eye
Flush the affected eye with clean water for at least 15 minutes and then seek medical assistance.
- If liquid crystal is swallowed
Flush your mouth thoroughly with water. Drink large quantities of water and induce vomiting. Then seek medical assistance.

■ Notes on Electrical Interference

Do not use this device in aircraft or hospitals.
The use of this device in an aircraft or hospital can cause malfunctions in the control devices used in the aircraft or hospital.

Safety Notes

- Ensure that you read this Owner's Manual carefully before you use your GC-S5 camera so that you use your camera correctly.
Also, always read the Manual, and particularly the Safety Notes, for any connected devices, such as the AC power adapter or other accessories, to ensure that you also use these devices correctly.
- After reading this Owner's Manual, always keep it close at hand for easy reference.

About the Icons

A number of icons are displayed both in this Owner's Manual and on the product. These icons are intended to facilitate safe and correct use of the product, to prevent injury to yourself or anyone else, and to prevent damage to equipment or other objects. These icons and their meanings are explained below. Ensure that you fully understand these warnings before you read this manual.

WARNING

Indicates that, if this warning is ignored, improper handling of the product may cause death or serious injury.

CAUTION

Indicates that, if this warning is ignored, improper handling of the product may cause personal injury or material damage.

Examples of Icons



Triangular icons notify the user of information requiring attention. Specific details of the information are indicated graphically inside the icon. (The icon at left indicates that the user must beware of electric shocks.)



Circular icons with a diagonal bar notify the user that the action indicated is prohibited. Specific details of the prohibited action are indicated graphically in or beside the icon. (The icon at left indicates that the device must not be disassembled.)



Filled circles notify the user that an action must be performed. Specific details of the required action are indicated graphically in the icon. (The icon at left indicates that the device must be unplugged from the power socket.) Always observe these instructions.

WARNING

- Do not use this camera when it is emitting smoke, is unusually hot to the touch, is emitting any unusual odor or noise, or is in any other abnormal state. Use of the camera in any of these situations can cause a fire or electric shock. Stop using the camera immediately, switch the camera off, and then disconnect the power supply (battery or AC power adapter). (If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.) After checking that smoke is no longer being emitted, contact your JVC dealer or your local authorised JVC service facility and request repairs. Never attempt to repair the camera yourself as this is dangerous.



Unplug from power outlet.

- Do not use the camera if any water has entered the camera. Switch the camera off, and then disconnect the power supply (battery or AC power adapter). (If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.) Then contact your JVC dealer or your local authorised JVC service facility. Do not continue to use the camera as this can cause a fire or electric shock.



- Do not use the camera if any foreign objects have entered the camera. Switch the camera off, and then disconnect the power supply (battery or AC power adapter). (If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.) Then contact your JVC dealer or your local authorised JVC service facility. Do not continue to use the camera as this can cause a fire or electric shock.



Safety Notes

WARNING

- If the camera has been dropped or the camera case has been damaged, switch the camera off, and then disconnect the power source (battery or AC power adapter). (If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.) Then contact your JVC dealer or your local authorised JVC service facility. Do not continue to use the camera as this may cause a fire or electric shock.



- Do not place the camera in unstable locations such as on a wobbly table or sloping surface where the camera may fall or tip over and cause injury.



- Do not insert or drop metallic or inflammable foreign objects into the camera through access points such as the SmartMedia card slot. This may cause a fire or electric shock.



- Do not attempt to modify this camera. This may cause a fire or electric shock.



- Do not remove the camera casing. This may cause an electric shock. Internal inspection, maintenance and repairs should be carried out by your JVC dealer or local authorised JVC service facility.



Do not disassemble.

WARNING

- Do not use this camera in the bathroom or shower.

This may cause a fire or electric shock.

Take care that the camera is not exposed to moisture and that water does not get into the camera. Take particular care when it is raining or snowing or when you are using the camera at the beach or near water.

Water in the camera may cause a fire or electric shock.



Do not use in wet areas.

- Do not touch the power plug during a thunderstorm if you are using the AC power adapter.

This may cause an electric shock.



Do not touch.

- Never use this camera, look through the viewfinder, or watch the LCD (liquid crystal display) while you are operating a moving car, motorcycle or bicycle.

This may cause a traffic accident.



- Do not carry or store a battery with objects such as metal pens, necklaces, coins or hairpins. This could short-circuit the positive ⊕ and negative ⊖ poles of the battery.

This may cause the battery to split or leak, resulting in fire or injury.



- Do not heat or attempt to disassemble the battery, and do not place the battery in water or in a fire.

Any of these may cause the battery to split or leak, causing fire or injury.



Safety Notes

WARNING

● Do not subject the battery to strong impacts, such as hitting it with a hammer, stepping on it or dropping it. Any of these may cause the battery to split or leak, causing fire or injury.



● Use only the specified battery or AC power adapter specially made for use with this equipment. The use of other power sources may cause a fire.



CAUTION

● Do not place this camera in a damp or dusty location. This could cause a fire or electric shock.



● Do not place this camera in a location affected by oil fumes or steam, such as near a cooking stove or humidifier. This could cause a fire or electric shock.



● Do not leave this camera in places subject to extremely high temperatures, such as in a closed vehicle or in direct sunlight. Exposure to high temperatures could adversely affect the camera case and internal components and cause a fire.



● Do not cover or wrap the camera or the AC power adapter with a cloth or quilt. This could cause heat to build up and distort the case or cause a fire. Always use the camera and its accessories in well-ventilated locations.



CAUTION

- Do not move the camera while it is switched on. (If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have switched off the camera.) Then ensure that any connector cords or cables to other devices are disconnected before moving the camera. Failure to do so may damage the cords or cables and cause a fire or electric shock.



- Take care that the camera is not bumped when it is being moved. This may cause the camera to malfunction.



- When cleaning the camera, always unplug it from the power source (battery or AC power adapter) for safety. (If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.) Failure to do so could result in an electric shock.



- When leaving the camera unused for long periods, such as during a vacation, always unplug the camera from the power source (battery or AC power adapter) for safety. (If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.) Failure to do so could result in a fire.



Safety Notes

CAUTION

- Contact your JVC dealer or local authorised JVC service facility to request cleaning of the interior of the camera every two years. Allowing dust to accumulate in the camera for long periods without cleaning the camera interior may cause a fire or electric shock.



- Do not use any battery other than that specified for use with your camera.
The use of an unsuitable battery may result in the battery splitting or leaking and causing a fire, injury, or soiling of the battery compartment.



- Do not operate the flash unit close to people's eyes.
This may cause temporary visual impairment.



- When children use the camera, ensure that they are given full instructions on the correct use of the camera.
Incorrect use of the camera may cause injury.















- Remove the battery if the camera will not be used for an extended period of time. The battery may leak and cause a fire, injury or soiling of the battery compartment.
If the battery leaks, clean and wipe the battery compartment carefully and install a new battery.
Wash your hands carefully if you touch the battery fluid.



Warning Displays

- The table below lists the warnings that are displayed on the LCD monitor.

Warning Displayed	Status	Explanation
	Flashing	The camera battery is low on charge (➔P.19).
 NO CARD	▲Flashing	No SmartMedia is loaded, or it is loaded incorrectly (➔P.24).
 CARD NOT INITIALIZED	▲Flashing	The SmartMedia is not formatted (➔P.59).
 CARD ERROR	▲Flashing	The SmartMedia is damaged. The SmartMedia format is incorrect.
 CARD FULL	▲Flashing	All the frames on the SmartMedia contain recorded images.
 FILE LIMIT	▲Flashing	The frame number has reached 99999.
 PROTECTED CARD	▲Flashing	The SmartMedia is write-protected (➔P.22).
 FRAME ERROR	▲Flashing	An attempt was made to play back incorrectly recorded data.
 PROTECTED FRAME	▲Flashing	A protected frame was erased (➔P.57).
 READ ERROR	▲Flashing	An attempt was made to play back a frame not recorded on this camera. The SmartMedia was removed during recording, playback, erasing or copying.
	Flashing	The flash is set to Suppressed Flash mode or Forced Flash mode, so the shutter speed is slow and there is a strong likelihood of camera shake (➔P.41).
 AF	▲Flashing	The AF (auto focus) cannot operate properly because there is very little contrast in the subject (➔P.27).

- If "Err" appears in the No. of available shots field on the LCD panel and the viewfinder lamp flashes red, or "SYSTEM ERROR" appears on the LCD monitor, switch the camera off and leave it for about one hour before switching it on again. If the camera still fails to operate normally, contact your JVC dealer or your local authorised JVC service facility and request repairs.

Troubleshooting

- Before you decide the camera is faulty, check the following once more:

Problem	Cause	Remedy
No power.	<ul style="list-style-type: none"> • The battery is exhausted. • The AC power adapter plug has come out of the power outlet. • The Mode dial is set incorrectly. 	<ul style="list-style-type: none"> • Use the camera to charge the battery. • Load a new battery. • Plug the adapter back in. • Move the Mode dial to the correct setting.
Power cuts out during operation.	<ul style="list-style-type: none"> • The battery is exhausted. 	<ul style="list-style-type: none"> • Use the camera to charge the battery. • Load a new battery.
Battery runs out quickly.	<ul style="list-style-type: none"> • You are using the camera in extremely cold conditions. • The terminals are soiled. 	<ul style="list-style-type: none"> • Put the battery in your pocket or another warm place to heat it and then load it into the camera just before you take a picture. • Wipe the battery terminals with a clean, dry cloth.
No photograph is taken when the shutter button is pressed.	<ul style="list-style-type: none"> • No SmartMedia is loaded. • The SmartMedia is loaded the wrong way round or upside down. • All the frames on the SmartMedia contain recorded images. • The SmartMedia is write-protected. • The SmartMedia is not formatted. • The SmartMedia is damaged. • The Auto Power Off function has switched the camera off. • The battery is exhausted. 	<ul style="list-style-type: none"> • Load a SmartMedia. • Load the SmartMedia correctly. • Load a new SmartMedia or erase a frame. • Remove the write-protection. • Format the SmartMedia. • Load a new SmartMedia. • Switch the camera on. • Replace the battery. • Use the camera to charge the battery.

Problem	Cause	Remedy
No photograph is taken when the shutter button is pressed.	<ul style="list-style-type: none"> • The Mode dial has been moved to another setting. 	<ul style="list-style-type: none"> • Set the Mode dial to the correct setting.
I can't use the flash to take pictures.	<ul style="list-style-type: none"> • The flash is set to Suppressed Flash mode. • You pressed the shutter button while the flash was charging. 	<ul style="list-style-type: none"> • Set the flash to Auto, Red-Eye Reduction or Forced Flash mode. • Wait until charging is completed before pressing the shutter button.
The flash will not charge.	<ul style="list-style-type: none"> • No compatible SmartMedia is loaded. • The camera is set to Suppressed Flash mode. • The battery is exhausted. 	<ul style="list-style-type: none"> • Load a new SmartMedia, erase a frame, or remove the write-protection. • Set the flash to Auto, Red-Eye Reduction or Forced Flash mode. • Load a new battery.
The playback image is too dark even though I used the flash.	<ul style="list-style-type: none"> • The subject is too far away. 	<ul style="list-style-type: none"> • Move closer to the subject.
The playback image is blurred.	<ul style="list-style-type: none"> • The lens is dirty. 	<ul style="list-style-type: none"> • Clean the lens.
I cannot format the SmartMedia.	<ul style="list-style-type: none"> • The SmartMedia is write-protected. 	<ul style="list-style-type: none"> • Remove the write-protection.
I cannot erase all the frames.	<ul style="list-style-type: none"> • The frame is protected. 	<ul style="list-style-type: none"> • Remove the frame protection.
Nothing happens when I use the camera buttons and switches.	<ul style="list-style-type: none"> • Camera malfunction. 	<ul style="list-style-type: none"> • Use the [POWER] switch to switch the camera on again. • Remove the battery, then reinsert it and try again.

Specifications

System

Model
Pickup Elements
Resolution
File format
Storage media
Number of frames recorded
(Number of shots available)

*The number of frames recorded may vary depending on the type of subject in the images.

Viewfinder
Lens

Apertures
Focus distance

Focus
Exposure control

Sensitivity
White balance
Electronic shutter
Flash

LCD monitor
Video output
Horizontal resolution
Self-Timer
Erase modes

Digital Still Camera
1/1.7-inch square-pixel CCD (1.5 million pixels)
1280 × 1024 or 640 × 480 pixels
JPEG-compliant (Exif Ver. 2.0)
SmartMedia (3.3 V or 5 V)

Quality Mode	Compression Ratio	File Size*	2MB	4MB	8MB	16MB
FINE	1/4	Approx. 650 KB	2	5	11	23
		Approx. 150 KB	11	23	47	94
NORMAL	1/8	Approx. 325 KB	5	11	22	45
		Approx. 75 KB	21	43	87	175
BASIC	1/16	Approx. 160 KB	11	22	44	88
		Approx. 38 KB	38	77	155	310

* Top: 1280 × 1024 pixels
* Bottom: 640 × 480 pixels

Real image, optical; Frame coverage: Approx. 80%
TV-Fujinon lens
f = 7.6 mm (equivalent to 35 mm on a 35 mm camera)
F3.2/F8 (auto-selected)
Normal: 50 cm to infinity
Macro: 9 cm to 50 cm
Automatic (CCD-AF)
TTL 64-zone metering, program AE (exposure compensation available in Manual mode)
Equivalent to ISO 100
Fixed at 5500K, or Manual (4 modes)
Variable-speed, 1/4 to 1/1000 sec.
Auto-flash using flash control sensor
Effective range: Approx. 0.3 m to 2.5 m
Flash modes: Auto, Red-Eye Reduction, Forced Flash, Suppressed Flash
2-inch, low-temperature polysilicon TFT, 110,000 pixels
PAL
480 lines or better
10 sec. timer
Single-frame erase; all-frame erase; SmartMedia formatting

Input/Output Terminals

Video Output	Mini pin-jack (3.5 mm dia.) (1), 1 Vp-p, 75 Ω , unbalanced, synchronized negative
Digital (RS-232C/RS-422)	Stereo mini-jack (2.5 mm dia.) (1) for image data transfer to and from a personal computer
DC Input	Socket for connecting AA-V101 AC Power Adapter

Power Supply and Others

Power supply	BN-V101 rechargeable battery (supplied and sold separately) or AA-V101 AC Power Adapter (supplied)
No. of available frames	See P.19.
Operating conditions	Temperature: 0°C to +40°C 80% humidity or less (no condensation)
Camera dimensions (W/H/D)	80 × 101 × 33 mm (not including accessories and attachments)
Camera mass (Weight)	Approx. 245 g (not including accessories, battery or SmartMedia)
Camera mass (Weight) for shooting	Approx. 295 g (including battery and SmartMedia)
Accessories	See P.7.
Optional Accessories (sold separately)	See P.81.

* These specifications are subject to change without notice.

NOTE

Static electricity or strong radio interference (strong electric fields) may cause operation errors (such as power on/off, etc.). This is not a malfunction of the GC-S5.

Index

16-Cont (continuous shots).....74

A

AC Power Adapter17, 20
Accessories7
Accessories guide81
AF and AE lock27
ATA card7
Auto flash mode40
Automatic playback45
Auto power off function21

B

Battery
 About18
 Charging17
 Loading16
 Remaining capacity19
Beep63
Brightness71
Beep volume63
Beep tones29

C

Color37, 62
Continuous shots (16-Cont)74
Copy50

D

Date and time64
DISP button29
DSC6, 54, 80

E

Erasing all frames58
Erasing images55
Erasing a single frame56
EV71, 74
Exposure Compensation71
 About72

F

File size37, 61
Flash73
Flash Correction73
Flash mode40
FlashPath22
Floppy Disk Adapter7, 22
Forced flash41
Formatting (initialisation)61
Frame no. memory62

H

Hand strap11
How to hold the camera26

I

Images that can be viewed on this camera ...54
Indicator lamps29

J

JPEG7

L

LCD monitor display29, 30, 42
Live video21, 29, 30, 33, 35, 39, 67

M

Macro (close-up) mode39
Manual mode67
Mode dial28
Multi-frame playback53

N

Nomenclature9
Normal (Auto) mode30
Notes on using your camera correctly ...82
Number of pixels37, 61
Number of shots available19, 94

O	
On-screen display	29
Opening screen	21

P	
PC card	7
PC Card Adapter	22
PC card standard	7
PC-mode (downloading images to a PC)	79
PCMCIA	7
Playback	42, 45
Playback zoom	44
Pressing the shutter button	27
Pressing the shutter button down fully	27
Pressing the shutter button down halfway	27
Preview image	68, 71, 73
Protect mode (protecting your images)	76
Protecting a single frame	76

Q	
Quality	36, 61
Quick Start Guide	12
Quick Select	46, 63

R	
Red-eye effect	40
Red-eye reduction	40
Removing protection from all frames	78
Reset	65
Resize (changing the number of pixels)	49

S	
Safety notes	84
Self-timer mode	66
Sepia	46
SELECT button	36
Setting the brightness (adjusting the exposure)	71
Setting the date and time	64
Setting the flash power	73

Setting the white balance	69
Setup	60
Sharpness	61
Single-frame erase	56
Single-frame playback	43
Single-frame protect	76
Slow-synchro photography	41
SmartMedia	7
About	22
Loading	24
Removing	25
Smooth	47
Smoothing	48
Specifications	94
Standby	34, 66, 67
Subjects not suitable for autofocus	27
Suppressed flash	41
Switching off	21
Switching on	21

T	
Taking pictures and viewing images on a TV	35
Taking pictures using the LCD monitor	33
Taking pictures using the viewfinder	31
Telephoto photography	38
Troubleshooting	92

U	
Using a domestic power outlet	20

V	
Viewfinder lamp	29

W	
Warning displays	91
White balance	70
Write protection	22

OTHER

Memo

A series of horizontal dashed lines for writing.

A series of horizontal dashed lines for writing.

EN

GC-S5

JVC

VICTOR COMPANY OF JAPAN, LIMITED



Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>