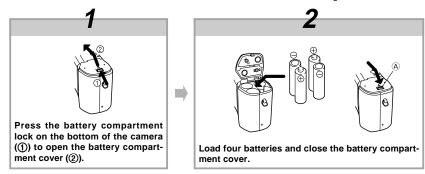


## **QUICK REFERENCE**

## Loading Batteries (page 31)

Be sure to load the four AA size batteries that come with the camera before using it.

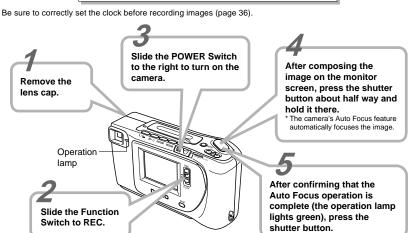


- Be sure to use alkaline, lithium or Ni-MH batteries. Never use manganese batteries.
- Press down on the battery compartment cover at the point marked (A) in the above illustration until the cover locks into place with a click.

2

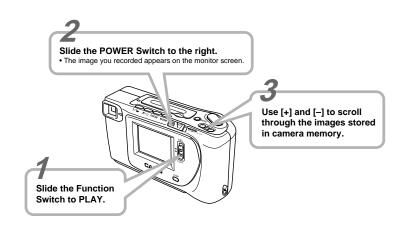


## **Recording Images (page 38)**

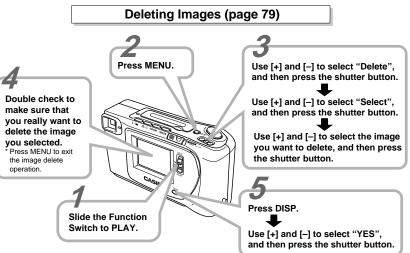


## **QUICK REFERENCE**

## Playing Back Images (page 65)







CONTEN

#### INTRODUCTION

Congratulations upon your selection of the QV-5500SX LCD Digital Camera.

To get the most out of the QV-5500SX, be sure to carefully read this manual and follow the instructions contained in it.

Manual Focus ..... Movie Recording .

Panorama Recording

Using Multiple Exposure.

Using AEB (Auto Exposure Bracketing) ...

Night Scene Mode .

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99 SPECIFICATIONS

#### CONTENTS

- CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss resulting from the use of this manual.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any loss or claims by third parties which may arise through the use of the QV-5500SX.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss caused by deletion of data as a result of malfunction, repairs, or battery replacement. Be sure to back up all important data on other media to protect against its loss.
- Windows is a registered trademark of Microsoft Corporation.
- Macintosh is a registered trademark of Apple Computer, Inc.
- COMPACTFLASH™ and logo are registered trademarks of SanDisk Corporation.
- Other company, product and service names used herein may also be trademarks or service marks of others.

## **FEATURES**

#### Quick Shutter

Hold down the shutter button to record high-resolution images at a rate of one image per 0.5 second.

#### Quick View

View high-resolution images on the built-in monitor screen at a rate of two frames per second.

#### Simple image management (page 91)

Images are stored on a large-capacity CompactFlash memory card. A new Card Browser feature produces thumbnails of all images on a card quickly and easily.



#### Movie and panorama images (pages 51, 53)

Movie Play includes a buffer that lets you capture images of events that occurred before you pressed the shutter release. A built-in function



lets you combine up to nine images into breathtaking panoramas.

#### Easy-to-understand graphic interface

All camera operations can be performed on graphic based interactive menu screens. CASIO high-resolution HAST LCD makes screen images clearer and more colorful than ever be-

#### CASIO original metering system

Light metering includes innovative multi-pattern metering.

#### Megapixel CCD

Images are recorded by a 1.31-megapixel CCD for amazing resolution and clarity.

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#### **FEATURES**







**Multiple Exposure** page 56





Timer page 58

page 54

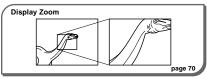
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#### **FEATURES**

#### **Date and Time Stamping**



page 36



#### Multi-image Screen



page 71



#### Slide Show



page 72

# Image Protection page 77

# **PRECAUTIONS**

#### **General Precautions**

Be sure to observe the following important precautions whenever using the QV-5500SX.

All references in this manual to "this camera" and "the camera" refer to the CASIO QV-5500SX Digital Camera.

- . Never try to take pictures or use the built-in display while operating a motor vehicle or while walking. Doing so creates the danger of serious accident.
- · Never try to open the case of the camera or attempt your own repairs. High-voltage internal components create the risk of electrical shock when exposed. Always leave maintenance and repair work up to authorized CASIO service providers.
- Never fire the flash in the direction of a person operating a motor vehicle. Doing so can interfere with the driver's vision and create the danger of accident.
- . Never fire the flash while it is too close to the subject's eyes. Intense light from the flash can cause eye damage if it is fired too close to the eyes, especially with young children. When using the flash, the camera should be at least one meter from the eyes of the subject.
- · Keep the camera away from water and other liquids, and never let it get wet. Moisture creates the danger of fire and electrical shock. Never use the camera outdoors in the rain or snow, at the seashore or beach, in the bathroom, etc.

- . Should foreign matter or water ever get into the camera, immediately turn power off, unplug the AC adaptor from the power outlet, and contact your dealer or nearest CASIO service provider. Using the camera under these conditions creates the danger of fire and electrical shock.
- . Should you ever notice smoke or a strange odor coming out of the camera, immediately turn power off and unplug the AC adaptor from the power outlet. Using the camera under these conditions creates the danger of fire and electrical shock. After making sure there is no more smoke coming from the camera, take it to your nearest CASIO service provider for repair. Never attempt your own maintenance.
- · If the camera's case should ever become cracked due to dropping it or otherwise subjecting it to rough treatment. immediately turn power off, unplug the AC adaptor from the power outlet, and contact your nearest CASIO service pro-
- · Never use the camera inside of an air craft or in any other areas where its use is prohibited. Doing so can result in an
- · Physical damage and malfunction of this camera can cause the image data stored in its memory to be deleted. Be sure to always keep backup copies of data by transferring them to personal computer memory.
- Never open the battery compartment cover, disconnect the AC adaptor from the camera or unplug it from the wall socket while recording images. Doing so will not only make storage of the current image impossible, it can also corrupt other image data already stored in camera memory.

#### PRECAUTIONS

#### Operating conditions

- This camera is designed for use in temperatures ranging from 0°C to 40°C.
- · Do not use or keep the camera in the following areas.
- In areas subject to direct sunlight
- In areas subject to high humidity or dust
- Near air conditioners, heaters, or other areas subject to temperature extremes
- Inside of a closed vehicle, especially one parked in the sun
- In areas subject to strong vibration

#### Condensation

- · When you bring the camera indoors on a cold day or otherwise expose it to a sudden change of temperature, there is the possibility that condensation can form on the exterior or on interior components. Condensation can cause malfunction of the camera, so you should avoid exposing it to conditions that might cause condensation.
- To keep condensation from forming, place the camera into a plastic bag before moving it into a location that is much warmer or colder than your current location. Leave it in the plastic bag until the air inside the bag has a chance to reach the same temperature as the new location. If condensation does form, remove the batteries from the camera and leave the battery compartment cover open for a few hours.

#### **PRECAUTIONS**

#### About the camera's backlight...

- . The camera is equipped with a fluorescent light source to provide the back lighting for its LCD.
- The normal service life of the backlight is approximately six years, when the camera is used for about two hours a day.
- Should the LCD image appear abnormally dark, take the camera to your dealer or an authorized CASIO service provider to have the light source replaced. Note that you will be charged for this replacement.
- · Under very cold conditions, the backlight may require more time than normal to light, or reddish bands may appear in the displayed image. These conditions do not indicate malfunction, and normal operation should return at higher temperatures.

#### Lens

- · Camera performance can be adversely affected by fingerprints or dirt on the lens surface. Never touch the lens surface with your fingers.
- . Should the lens become dirty, use a blower to blow off dirt and dust, or a soft, dry cloth to wipe off the lens.

#### **Monitor Screen**

#### Recording

The image shown on the monitor screen during recording is intended for composition purposes only, so its resolution does not match that of the image as it is recorded. The image is recorded in accordance with the resolution setting made with the procedure under "Resolution Settings" on page 45. Monitor screen refresh speed varies according to the relative brightness of the subject.

#### Playback

- · This camera is designed for high-speed scrolling of images during playback. Because of this, the playback image that initially appears on the monitor screen does not show the full resolution of the image as recorded. When you stop at the image you want, the monitor screen refreshes and shows the image in its full resolution.
- The message "PREVIEW" appears on a TV or CRT screen when a preview image is on the screen during output to the VIDEO OUT terminal

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#### PRECAUTIONS

#### GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THIS UNIT IN THE U.S.A. (not applicable to other areas).

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

This equipment has been tested and found to comply with the limits for a Class B peripheral, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### FCC WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the

Properly shielded cables with ferrite core must be used for connection to host computer and/or peripherals in order to meet FCC emission

> THE SPECIAL VIDEO CABLE THAT COMES WITH THE CAMERA ----- THE CAMERA TO A VIDEO IN TERMINAL OF A COMPUTER
> THE SPECIAL CONNECTION CABLE THAT COMES WITH QV-Link SOFTWARE
> ----- THE CAMERA TO A PROPER TERMINAL OF A COMPUTER

#### **Declaration of Conformity**

Model Number: QV-5500SX

CASIO COMPUTER CO.,LTD. Trade Name

Responsible party: CASIO INC.

570 MT. PLEASANT AVENUE, Address:

DOVER, NEW JERSEY 07801

Telephone number: 973-361-5400

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, in-

cluding interference that may cause undesired operation.

CASIO COMPUTER CO.,LTD. QV-5500SX



Tested To Comply With FCC Standards

FOR HOME OR OFFICE USE

## **UNPACKING**

Check to make sure that all of the items shown below are included with your camera.

If something is missing, contact your dealer as soon as possible.

Camera



Lens cap attached to the lens

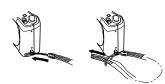






## Connecting the Strap

Pass the wrist strap through the hole on the side of the camera as shown in the illustration.



## Adjusting the Length of the Strap

Slide the stopper to adjust the length of the strap. This way you can make it a short hand strap, or a longer shoulder or neck strap.



#### UNPACKING

#### **▶** IMPORTANT! **(((**

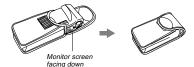
- Be sure to keep the strap around your wrist whenever using the camera to protect against accidentally dropping it.
- The supplied strap is intended for use with this camera only. Do not use for any other application.
- · Never swing the camera around by the strap.
- Allowing the camera to swing freely from your neck can result in damage to the camera due to its bumping against other objects. It also creates the danger of the camera becoming caught in a door or on other objects, resulting in personal injury.

#### Using the Lens Cap

Make sure the "CASIO" name on the lens cap is horizontal when you attach the cap to the lens. The cap does not fit securely and may fall off if attached with the "CASIO" name at an angle.

#### Using the Soft Case

Keep the camera in its soft case to protect it when not in use.



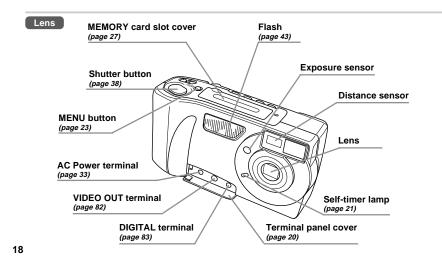


The soft case protects the camera against damage when it is dropped. Be sure to pass the strap through the loop on the soft case and keep the camera in its case when you are not using it.

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## **GENERAL GUIDE**

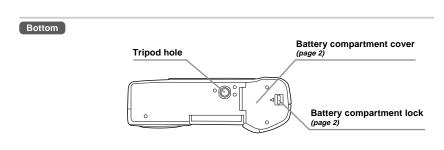
The following illustrations show the names of each component, button and switch on the camera.

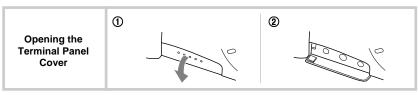


GENERAL GUIDE

#### Top and Display **♥** · ७ (MACRO · SELF-TIMER) button Power/card access lamp (pages 50, 57) (page 21) **ZOOM** button (page 49) Viewfinder (page 40) MODE button (page 22) Operation lamp (page 21) [+] ∮/ (FLASH/FOLDER) button CASIO (pages 43, 75) 9 LCD POWER switch (page 25) **Function switch DISP** button (page 38) (page 25)

**GENERAL GUIDE** 



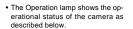


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#### GENERAL GUIDE

#### Lamps

- The power/card access lamp is lit whenever power is turned on, regardless of whether the monitor screen is on or off.
- The power/card access lamp flashes green while the memory card is being accessed. Never remove the memory card while the power/card access lamp is flashing.
- The Self-timer lamp flashes when the self-timer is performing a timer operation prior to releasing the shutter.









#### Operation lamp

#### Record Mode

Lamp Color	On	Flashing	
Green	Auto Focus operation complete	Please wait (after power on)	
		Image store operation in progress	
Amber	Exposure warning	Flash is charging	
Red	Cannot focus	Memory error	
	Memory full		
	Cannot charge the flash		

#### Playback Mode (when connecting video cable)

Lamp Color	On	Flashing
Green	Playing back	Please wait (after power on)
Red	Low battery	

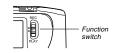
#### Low Battery Warning

Flashes for about 3 seconds, after which camera power turns off automatically.

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## SWITCHING BETWEEN THE REC AND PLAY MODES

Use the Function Switch to switch between the REC and PLAY Modes.  $\label{eq:play_problem} % \begin{subarray}{ll} \end{subarray} % \begin{subarr$ 



- Use the REC Mode to record still images, movies, and panorama images.
- · Use the PLAY Mode to view and edit images.

#### REC Mode Screen

Pressing the MODE button while in the REC Mode displays the Record Menu. Use [+] and [-] to bring the icon of the function you want to the bottom of the dial, and then press the shutter button.



#### **REC Mode Indicators**

•		SINGLE	page 38	AEB	AEB	page 55
Ç	_	CONTINUOUS	page 48	CUSTOM	сиѕтом	pages 35,64
100	3	MOVIE	page 51	<u>ق</u>	TIMER	page 58
	1	PANORAMA	page 53	*)	NIGHT SCE	NE page 54
Ę		MULTIPLE EXPOSURE	page 56			

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#### SWITCHING BETWEEN THE REC AND PLAY MODES

#### PLAY Mode Screen

Pressing the MENU button while in the PLAY Mode displays the Playback Menu.

- Use [+] and [-] to select the category you want, and then press the shutter button.
- 2. Use [+] and [-] to select the function you want, and then press the shutter button.



#### View Menu

Zoom	Zooms in on a specific area of an image.	page 70
4 Images	Displays 4 images on a single screen.	page 71
9 Images	Displays 9 images on a single screen.	page 71
Slide Show	Automatically scrolls through images.	page 72

#### **Tools Menu**

Protect	Protects an image against deletion.	page 77
Move	Moves an image to another folder.	page 75
Group	Groups images into a movie or panorama.	pages 67,69

#### SWITCHING BETWEEN THE REC AND PLAY MODES

#### Set Up Menu

Card Browser	Generates an HTML file.	page 89
Format	Formats a memory card.	page 29
Date	Stamps the date and time on an image.	page 36
Screen Saver	Protects the screen against image "burn in."	page 73
Video Out	Converts an image to a format for video output.	page 84
Language	Changes the screen text lan- guage.	page 26

#### Delete Menu

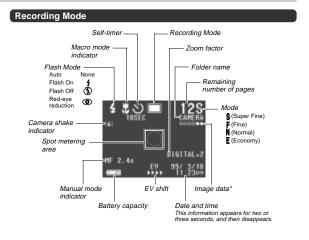
Select	Use these functions when delet-	2000
Folder	ing images.	page 79
All		

## **MONITOR SCREEN**

Pressing DISP causes various indicators to appear on the monitor screen. If the monitor screen is turned off, press DISP to turn on the monitor screen.

To turn off the monitor screen. press the DISP button the reauired number of times. You can then use the viewfinder to compose images. Turning off the monitor screen conserves battery power.





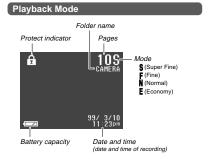
\* This area shows the movie length in seconds, the number of images making up a panorama or the buffer status when using Quick Shutter.

MONITOR SCREEN

Screen when shutter is pressed half way

Flash Mode ( 4 💿 ) Auto Focus Frame · Focusing complete: Green/White · Focusing failed:

Flash indicator appears to indicate that flash will be fired (when auto flash is selected).



#### Changing the Display Language

Use the following procedure to switch the display language between English and Japanese.

- 1. Slide the Function Switch to PLAY.
- 2 Press MENII
- 3. Select "Set Up" → "Language".
- 4. Select the display language you want.

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## **MEMORY CARDS**

This camera uses a memory card (CompactFlash cards) for image memory.

Use the procedure below to insert the memory card into the camera before you try to use it for the first time.

#### DDD IMPORTANT! 444

- . Make sure that the power of the camera is turned off before you insert or remove a memory card.
- . The power/card access lamp flashes green while the memory card is being accessed. Never remove the memory card while the power/card access lamp is flashing.
- When inserting a memory card into the camera, make sure that the card is oriented correctly. Make sure that the correct side of the card is facing up, and that you insert the correct end of the card into the camera.

#### To insert a memory card into the camera

1. Open the memory card slot cover.



Surface marked

2. As shown in the illustration, slide the memory card into the slot and push it in as far as it will go.



3. Close the memory card slot cover.



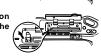
#### MEMORY CARDS

#### To remove a memory card from the camera

1. Open the memory card slot cover.



2. Press the elect button so it extends from the camera.



3. Press the eject button once again to eject the card.



4. Remove the memory card.



5. Close the memory card slot cover.



#### DDD IMPORTANT! ((()

- . Insert only memory cards into the memory card slot. Inserting any other type of card can cause malfunc-
- . Should water or any other foreign matter get into the memory card slot, immediately turn off power, unplug the AC adaptor, and contact your original retailer or nearest CASIO Service Provider.
- · Never eject the CompactFlash card while the card slot is facing downwards. Doing so creates the danger of the CompactFlash card falling, which can corrupt image data on the card.

#### MEMORY CARDS

#### Formatting a Memory Card

You can format a memory card to delete all of the data stored on it.

#### DDD IMPORTANT! 444

- Formatting a memory card deletes all images on the card, even if some or all of the images are protected.
- Data deleted by a memory card format operation cannot be recovered! Be sure to carefully check and confirm that you no longer need the data stored in a memory card before formatting it.

#### To format a memory card

- 1. Slide the Function Switch to PLAY.
- 2. Press MENU.
- 3. Select "Set Up" → "Format".
- In response to the confirmation message that appears, select "YES" to start formatting the card.

#### **Memory Card Precautions**

- Images cannot be recorded with this camera unless a memory card is installed in it.
- Be sure to use only CASIO brand CompactFlash cards (CF-4x/CF-8x/CF-15x/CF-30x/CF-48x). Proper operation with other memory cards is not guaranteed.
- Static electricity, electrical noise, and other electrical phenomena can cause corruption or even total loss of the data stored on a memory card. Because of this, you should always make backup copies of important images on other media (magnetic optical disk, floppy diskette, computer hard disk, etc.).
- Memory card problems can be corrected by reformatting the memory card (page 97). Reformatting a memory card deletes all images stored on the card, but you can use a computer to copy the images you want to keep to the computer's hard disk before reformatting your card. If you plan to be recording images where you do not have access to a computer, it is a good idea to take along an extra memory card or two just in case you experience an unexpected memory card problem.

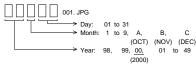
#### MEMORY CARDS

- Formatting is recommended for any memory card that you suspect contains corrupted image data (due to a DE-CODE ERROR, strange image colors, malformed images) or newly purchased memory cards.
- Before starting a format operation, load a full set of new batteries (alkaline or lithium) into the camera or connect the AC adaptor to power the camera. Interruption of camera power during the format operation results in improper formatting, making it impossible to use the memory card.

#### **Memory Card Folder Precautions**

- Folders (directories) are automatically created if the card you are using does not already have similarly named folders (page 75).
- Up to 250 images can be stored in a single folder. Though it is possible to put more than 250 images into a folder on your computer, the camera will not display images past 250.
- Image files in camera memory are assigned names made up of the date (first five characters) plus a three-digit number and the extension JPG/AVI. Names do not change when you move or delete folders.

#### < Example >



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## **POWER SUPPLY**

The camera features a two-way power supply that lets you use either batteries (AA-size alkaline, lithium or Ni-MH) or household AC current.

#### Using Batteries

See page 2 for details about how to load batteries into the

#### Standard Battery Life

This camera can be powered using AA-size alkaline, lithium or Ni-MH batteries.

The battery life reference values given below indicate the amount of time at standard temperature (25°C) until power automatically turns off due to battery failure. They do not guarantee that batteries will perform the amount of service indicated. Battery life is reduced by low temperatures and continued use.

Type of Operation	AA-size Alkaline Batteries LR6	AA-size Lithium Batteries FR6	AA-size Ni-MH			
Continuous Playback	110 minutes	210 minutes	130 minutes			
Continuous Recording	300 shots	840 shots	500 shots			

- · The above figures are approximations only.
- The above guidelines are based on the following battery types:

Alkaline: MX1500 (AA) DURACELL ULTRA Lithium: Energizer Ni-MH (Nickel-metal hydride): CASIO NP-H3

- · Battery life varies with brand.
- Figures are based on continuous recording under the following condition.
   Flash turned off

Regardless of use of the camera's flash, zoom function, turning on and off the POWER Switch, as well as other operating conditions may affect the above values.

#### About rechargeable batteries

- Use only the nickel-metal hydride batteries (NP-H3) that are available from your dealer as options for this camera.
   Proper camera operation is not guaranteed when other rechargeable batteries are used.
- Be sure to keep all four batteries together as a set at all times, for both charging and powering the camera. Mixing batteries from different sets can shorten overall battery life and cause malfunction of the camera.
- Rechargeable batteries cannot be charged while they are loaded in the camera.

Nickel-metal hydride Batteries (4-battery set)/Quick Charger Set BC-1HB4 Nickel-metal hydride Batteries (4-battery set) NP-H3P4

#### Tips for Prolonging Battery Life

Use the 4/ button to turn off the flash when you are not using it.

#### POWER SUPPLY

#### **Battery Handling Precautions**

Incorrect use or handling of batteries can cause them to leak or burst and seriously damage your camera. Be sure to note the following important precautions to avoid problems with batteries.

 Use only LR6 (AM-3) type alkaline or FR6 type lithium or Ni-MH (nickel-metal hydride) dry cell batteries with this camera. Never mix old batteries with new ones. Doing so can result in bursting or leaking of batteries, creating the danger of fire or personal injury.



- Always make sure that the positive (+) and negative (-) ends of the batteries are facing correctly, as noted by the markings on the camera itself. Improper loading of batteries can result in bursting or leaking of batteries, creating the danger of personal injury or soiling of objects nearby.
- Remove batteries from the camera if you do not plan to use it for more than two weeks.
- Never recharge batteries, never allow direct connection between two ends of a battery, and never try to take batteries apart
- Do not expose batteries to direct heat or dispose of them by burning. Doing so can create the danger of explosion.
- · Never mix batteries of different types.

- Dead batteries are susceptible to leakage, which can cause serious damage to your camera. Remove batteries from the camera as soon as you notice they are dead.
- The batteries that power this camera normally become warm when they lose power. This does not indicate malfunction.

#### Low Battery Indicator

The battery capacity indicator "" (shown only while the image information display is turned on) changes to "" whenever battery power goes low. If you continue to use the camera while "" is on the display, camera power will automatically turn off. If this happens, replace all four batteries with new ones as soon as possible.

#### POWER SUPPLY

#### **Auto Power Off** (Battery Powered Operation Only)

Power automatically turns off whenever you do not perform any camera operation for a specific period. See page 35 for details about how you can specify the Auto Power Off time.

. To restore power, simply slide the POWER Switch again.

#### DDD IMPORTANT! 444

The Auto Power Off function does not operate under the following conditions.

- During Slide Show (page 72)
- While the camera is being operated from a computer or printer over a cable connection (pages 82, 83).
- Whenever the AC adaptor is connected to the camera.

#### Using AC Power

Use the optional AC adaptor (AD-C620) to power the camera from standard AC power.



#### AC Adaptor precautions



- · Never use an electrical outlet whose voltage is outside the rating marked on the AC adaptor. Doing so can create the danger of fire or electrical shock. Use only the optional AC adaptor specified for this camera.
- Should the cord of the AC adaptor become damaged (exposed internal wiring), request a replacement from an authorized CASIO service provider. A damaged AC adaptor cord creates the danger of fire or electrical shock.

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#### POWER SUPPLY

· Always be sure to use the AD-C620 AC adaptor only. Using any other AC adaptor can cause damage to the camera not covered by the war-



- When unplugging the AC adaptor from the wall socket, be sure to grasp the adaptor (not the
- Avoid any undue bending, pulling, and twisting of the AC adaptor's cord, and never try to lengthen the cord by splicing it with other wire.
- · Be sure to turn power off before connecting or disconnecting the adaptor.
- Always turn camera power off before disconnecting the AC adaptor, even if the camera has batteries installed. If you don't, the camera will turn off automatically when you disconnect the AC adaptor. Even so, you run the risk of damaging the camera whenever you disconnect the AC adaptor without first turning power off.
- . The AC adaptor may become warm to the touch after extended periods of use. This is normal and is not cause for
- After use turn off the POWER Switch of the camera and unplug adaptor from the AC outlet.
- · The camera automatically switches over to AC adaptor powered operations whenever the AC adaptor is plugged into the camera.
- Always use the AC adaptor to power the camera whenever it is connected to a computer.

#### **Power Save Settings**

The settings described below let you specify sleep and auto power off trigger times that help to conserve valuable battery

SLEEP ..... The monitor screen enters a sleep state if no operation is performed for a specified amount of time in the Record Mode. Full power is restored when you press the shutter button. You can specify 30 seconds, 1 minute, or 2 minutes before the sleep state is triggered, or you can turn off this setting entirely.

#### AUTO

POWER OFF ...... Auto Power Off turns off camera power if no operation is performed for a specified amount of time. You can specify 2 minutes, 5 minutes, or 10 minutes before AUTO POWER OFF is triggered, or you can turn off this setting entirely.

· AUTO POWER OFF takes priority when both SLEEP and AUTO POWER OFF are both set for a 2-minute trigger time. This means camera power turns off if no operation is performed after two minutes.

#### POWER SUPPLY

#### To set SLEEP and AUTO POWER OFF trigger times

- 1. Slide the Function Switch to REC.
- 2. Press the MODE button and then select QUSTOM.



- 3. Select "Power Save".
- 4. Use [+] and [-] to select "Sleep" or "Auto Power Off".
- 5. Select the trigger time you want to set.
- 6. When the settings are the way you want them, press MENU.

## **Initializing Power Save Trigger Times**

Use the following procedure to return SLEEP and AUTO POWER OFF trigger time settings to their initial factory defaults (SLEEP: 1 minute, AUTO POWER OFF: 2 minutes).

#### DDD IMPORTANT! 444

Note that performing the following procedure to initialize the power save trigger time settings also initializes mode memory (page 64).

To initialize power save trigger times

- 1. Slide the Function Switch to REC.
- 2. Press the MODE button and then select @USTOM.
- 3. Select "Restore".

## **SETTING THE CURRENT DATE AND TIME**

Use the following procedures to set the current date and time, and to select the date format.

When you record an image, the time and date the image was shot is registered in accordance with data from the camera's built-in clock. You can even use the TIME STAMP function to "stamp" the date and time inside the image.

#### DDD IMPORTANT! 444

- · If you do not set the camera's built-in clock to the current date and time, all images are recorded with the default date and time, which probably is not your correct current date and time. Be sure to correctly set the clock before you use the camera.
- . A flashing time display of 0:00 indicates that the time and date (clock) settings have been cleared. Use the procedure on this page to make the correct time and date settings.

#### To set the date and time

- 1. Slide the Function Switch to PLAY.
- 2. Press MENU.
- 3. Select "Set Up" → "Date" → "Adjust".



- 4. Set the current date and time.
  - . Use [+] and [-] to select the setting that is highlighted on the monitor screen, and then press the shutter button to advance to the next setting. Repeat this for all of the settings on the monitor screen.
- 5. After making all the settings on the monitor screen, press MENU to register them.

#### SETTING THE CURRENT DATE AND TIME

#### To select the date format

Example: May 12, 1999

You can select any one of the following formats for the above date: 99/5/12, 12/5/99, 5/12/99.

- 1. Slide the Function Switch to PLAY.
- 2. Press MFNU.
- 3. Select "Set Up" → "Date" → "Style".



4. Use [+] and [-] to select the date format you want, and then press the shutter button.

#### Using the Shutter Button

RECORDING

The following steps describe how to operate the shutter button so that Auto Focus has a chance to focus the image.

- 1. Press the shutter button about half way.
  - The Auto Focus feature automatically focuses the image.



2. Press the shutter button as far as it will go to record the image.



#### Basic Recording Operation

The following describes the basic operation for recording images.

1. Slide the Function Switch to REC.



2. Slide the POWER Switch in the direction indicated by the



- The POWER Switch returns to its original position when you release it.
- If power turns off, slide the POWER Switch again to turn it back on.
- After composing the image on the monitor screen, press the shutter button about half way and hold it there.



 The camera's Auto Focus feature automatically focuses the image

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#### RECORDING

- The operation lamp lights green when the Auto Focus operation is complete.
- . Take care to avoid blocking the lens with your fingers.
- If you plan to use the viewfinder to compose the image, press DISP several times until the monitor screen turns off.
- After confirming that the Auto Focus operation is complete, press the shutter button all the way down to record the image.
  - Images you record are stored in the CAMERA folder.
     See page 75 for information about how you can change to another folder to store images.
  - After you record an image, the camera takes a few seconds to store it in memory. If you try to change to the Playback Mode while a save operation is in progress, the message "Press DISP to cancel save" appears on the monitor screen. Pressing DISP at this time cancels the save operation.

#### DDD CAUTION 444

Never open the battery compartment cover, disconnect the AC adaptor from the camera, or unplug the adaptor from the wall socket while the operation lamp is flashing green. Doing so will not only make storage of the current image impossible, it can also corrupt other image data already stored in camera memory.

 Fluorescent lighting actually flickers at a frequency that cannot be detected by the human eye. When using the camera indoors under such lighting, you may experience some brightness or color problems with recorded images.

#### DDD IMPORTANT! 444

Auto Focus tends not to work well with the following types of subjects.

- Solid color walls or objects with little contrast
- Strongly backlit objects
- · Polished metal or other brightly reflective objects
- Venetian blinds or other horizontally repeating patterns
- Multiple images that are varying distances from the camera
- · Subjects in poorly lit areas
- 4X zoom images

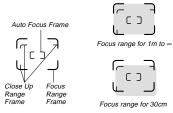
These cases may make it impossible for Auto Focus to focus properly, which is indicated by the red operation lamp. When this happens switch to the Manual Mode for focusing (page 50). The following are the fixed focusing distances when Auto Focus is unable to focus.

Well-lit Location: 1.5 meters (4.9') minimum With Flash: 1 to 2 meters (3.3' to 6.6')

#### RECORDING

#### Using the Viewfinder for Recording

The illustrations below show what you see when you look through the viewfinder to compose an image for recording.



#### **Focus Range Frame**

This frame shows the focus range when the distance from the lens to the subject is 1 meter (3.3') to infinity.

#### Close Up Range Frame

This frame shows the focus range when the distance from the lens to the subject is 30 cm (11.8"). You can use the viewfinder for distances from 30 cm (11.8") to infinity. When using Auto Focus, compose the subject so it is within the Auto Focus Frame.

Press  $\textcircled{\bullet}$   $\textcircled{\circ}$  to enter the Macro Mode or use the Manual Mode for distances less than 30 cm (11.8°).

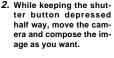
Entering the Macro Mode automatically turns on the monitor screen. Use the monitor screen to compose images in the Macro Mode.

#### RECORDING

#### Using Focus Lock

Normally, Auto Focus automatically focuses on the object that is inside the Auto Focus Frame. Focus lock is a technique that lets you lock the focus on a subject and then move the camera so the Auto Focus Frame is pointed at another subject when you record. This keeps the original subject in focus, even though a different object is within the Auto Focus Frame

- The Auto Focus Frame is shown on the monitor screen only while the shutter button is being held half way down.
- Locking the focus also locks the exposure setting.
- 1. Align the Auto Focus Frame with the subject you want to lock on and press the shutter button half way down.
  - The Auto Focus frame turns green or white when the image is in focus.





Press the shutter button all the way down to record the image.

#### RECORDING

#### Using Quick Shutter

Pressing the shutter button sequentially records images at 0.5-second intervals (when flash is turned off). You can use quick shutter for recording up to six normal images or five Night Scene Mode images.

#### **▶** IMPORTANT! **《《**

- Note that you can use the viewfinder only (monitor screen turned off) when recording images at a 0.5second interval. The interval is about one second when the monitor screen is turned on.
- The power/card access lamp flashes while data is being written to the memory card. Never remove the memory card from the camera while this lamp is flashing.
- Do not perform an image record operation while the low battery indicator "□□" is displayed. Doing so may result in failure of part of the image to be recorded.
- It takes about 60 seconds for six images to be stored in memory.

1. Slide the Function Switch to REC.

- On the Record menu (page 59), select "Record Options 1" and then turn on "Quick Shutter".
  - Turning on "Quick Shutter" causes "OOOOO" to appear under the image folder name.

#### Press the shutter button.

- The marks sequentially change to marks as images are recorded.
- Initially, images you record using quick shutter are stored in a buffer. Any of the following conditions causes images to be transferred from the buffer to the memory card.
  - Sliding the function switch to PLAY
- Pressing MODE or MENU
- When camera memory becomes full
- When the buffer becomes full (six images)

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#### RECORDING

#### Using the Flash

You can use the built-in flash unit to provide illumination during recording.

## 1. Slide the Function Switch to REC.

#### 2. Press 4/ =.

 Each press of 1 / 1 cycles through the flash mode in the following sequence: Auto → On → Off → Redeye Reduction.



4 / im butto

Indicator	Flash Mode	Description
None	Auto Flash	Flash is automatically enabled and disabled in accordance with exposure conditions.
4	Flash On	Flash is always fired, regardless of exposure conditions.
■	Flash Off	Flash is never fired, regardless of exposure conditions.
•	Red-eye Reduction	Fires a pre-flash followed by re- cording with flash, which reduces the chance of red-eye.

 The monitor screen goes blank and the operation lamp flashes amber while the flash unit is charging.



#### Camera Shake Indicator

- If the camera shake indicator {\(\begin{array}{c} \begin{array}{c} \begin{arra
- Note that the camera shake indicator \$₩\$ does not appear in the Night Scene Mode (page 54).

#### Flash Indicator

When you press the shutter button half way, the flash icon appears on the monitor screen to indicate that the flash will fire when shutter button is pressed the rest of the way down.

#### RECORDING

#### DDD IMPORTANT! 444

- Never use the flash in areas where combustible or explosive gas is present. Doing so creates the danger of fire and explosion.
- Never fire the flash in the direction of a person operating a motor vehicle. Doing so can interfere with the driver's vision and create the danger of accident.
- Never fire the flash while it is too close to the subject's eyes. Intense light from the flash can cause eye damage if it is fired too close to the eyes, especially with young children. When using the flash, the camera should be at least one meter from the eyes of the subject.
- Make sure that you do not touch or block the flash or light sensor with your fingers. Doing so can soil these components and interfere with correct flash operation.
- Flash should be used for distances within the range of about 0.7 meters to 2 meters (2.3' to 6.6'). Flash does not work well outside this range.
- Depending on operating conditions (type of battery being used, temperature, etc.), it may take up to 10 seconds for the flash unit to charge.
- The flash is disabled during movie, continuous, and AEB recording. The indicator flashes to indicate this condition.

- The flash unit will not charge when battery power is low. The (1) indicator flashes red to warn you that the flash will not fire correctly, which may affect exposure of the image. Replace batteries as soon as possible when this happens.
- Red-eye reduction may not work well when the camera is not pointed directly at the subject or when the subject is far from the camera.
- In the Red-eye Reduction Mode, the flash is fired automatically in accordance with exposure. Because of this, the flash will not fire in a well-lit area.
- White balance is fixed while the flash is being used, so the coloring of the recorded image may be affected by sunlight, fluorescent lighting, or other sources of illumination in the immediate area.

#### RECORDING

#### Resolution Settings

The camera has four resolution modes: Super Fine (§), Fine (F), Normal (N), Economy (E).

- To determine the number of images that can be stored on a memory card of a different capacity, multiply the capacities in the table by the appropriate value.
- The actual number of images that can be stored in memory cannot be specified precisely because the amount of memory required for storage of each image differs according to image contents.

Setting Indicator	S	F	N	E
Resolution	Super Fine	Fine	Normal	Economy
Number of Images 8MB memory card	14	19	33	55
Number of Images 48MB memory card (option)	88	123	207	342
File Size (per image)	500KB	352KB	200KB	112KB
Computer Output image	1280 x 960 pixels	1280 x 960 pixels	1280 x 960 pixels	640 x 480 pixels

- The figures in the left are approximations only. The actual number of images depends on image subject matter.
   Use the procedure under "Record Menu" on page 59 for details on changing the resolution modes.
- Note that the maximum number of images that can be stored in a single folder is 250. Because of this, even if you are using a card that allows storage of more than 250 images, the camera's monitor screen will show capacity for up to 250 images only. You will be able to store the additional images by changing to another folder.
- The number of images that can be recorded may differ when you use card browser (page 89).

#### RECORDING

#### Exposure Compensation

This camera features an program AE function that automatically changes shutter speed and aperture in accordance with available light. In addition, you can also manually adjust the exposure to compensate for backlighting, indirect indoor lighting, dark backgrounds, and other special conditions.

#### To manually adjust the exposure

If the monitor screen is turned off, press the DISP button to turn it on

- 1. Set the Function Switch to REC.
- 2. Use [+] and [-] to perform exposure compensa-
  - Pressing [+] or [-] displays an EV indicator that shows the current exposure compensation setting.
  - Pressing [+] makes the image on the monitor screen brighter. Use it to adjust for dim indoor lighting and backlighting.
  - Pressing [–] makes the image on the monitor screen darker. Use it to adjust for bright sunlight.
  - The EV indicator turns red whenever the compensation value is at its limit.







After adjusting the exposure, press the shutter button to record the image.

#### DDD NOTES ((()

- Exposure compensation is generally expressed in terms of an exposure compensation (EV) value. The exposure compensation value is always set to zero whenever you turn on the camera.
- Each press of [+] or [-] changes the exposure compensation value by 0.5EV. A change in either direction is indicated on the monitor screen by arrows pointing left (negative correction) or right (positive correction).
- The normal maximum range for exposure compensation is –2EV to +2EV. Under certain conditions, however, the camera may impose lower maximum values when exposure compensation would result in an image that is too dark or too light.

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#### RECORDING

The exposure compensation value automatically reverts to zero whenever the shutter button is pressed. You can manually reset the exposure compensation value by using [+] and [-] to change the value back to zero, which is indicated when the EV indicator disappears from the monitor. EV value is fixed during panorama recording.

## **OTHER RECORDING FUNCTIONS**

This section describes more advanced recording operations that are also provided by this camera.

Use the monitor screen for zoom, macro, movie, panorama, manual, timer and multiple exposure recording operations.

#### Continuous Recording

Holding down the shutter button records up to six images at 0.5-second intervals.

#### DDD IMPORTANT! 444

- The flash unit is disabled while Continuous Recording is being used.
- Note that you can use the viewfinder only (monitor screen turned off) when recording images at a 0.5second interval. The interval is about one second when the monitor screen is turned on.
- The power/card access lamp flashes while data is being written to the memory card. Never remove the memory card, batteries or AC adaptor from the camera while this lamp is flashing.
- Do not perform an image record operation while the low battery indicator "——" is displayed. Doing so may result in failure of part of the image to be recorded.
- It takes about 60 seconds for six images to be stored in memory.

- 1. Slide the Function Switch to REC.
- 2. Press MODE, and then select [ (CONTINUOUS).

Continuous Recording Mode



3. Compose the image and then record it.

#### Using the Zoom Feature

The zoom feature lets you move in closer on subjects that are located far from the camera. You can select either 2X or 4X zoom. In both cases, images are Economy "E" resolution [VGA size (640 x 480 pixels)].

- 1. Slide the Function Switch to REC.
- Press ZOOM to display the current zoom setting in the lower right of the monitor screen.
  - Press ZOOM again to cycle through the zoom settings until the one you want is on the monitor screen.



3. Compose the image and then record it.

#### DDD IMPORTANT! 444

 The focus range for Auto Focus depends on the digital zoom setting as shown below.

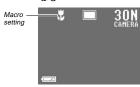
Digital Zoom	Focus Range
OFF	0.3m to ∞ (1.0′ to ∞)
2X	0.5m to ∞ (1.6′ to ∞)
4X	0.8m to ∞ (2.6' to ∞)

 The camera may not be able to focus on an image within the Auto Focus frame if the subject is closer than the distances noted above. In such a case, the Auto Focus frame changes to white when you press the shutter button half way. OTHER RECORDING FUNCTIONS

#### Using the Macro Feature

With the macro feature, you can record close up images of subjects locate only 10cm (3.9 $^{\circ}$ ) from the lens.

- Auto Focus is disabled while the Macro feature is in use.
- With the macro feature, use the monitor screen to compose the image. Do not use the viewfinder.
- 1. Slide the Function Switch to REC.
- Press ♥.♥ to display the macro setting you want to use.
  - Each press of ▼·O cycles through the macro and self-timer settings in the following sequence: SELF-TIMER "O" → MACRO "▼" → MACRO + SELF-TIMER "Φ/O"



After composing the image on the monitor screen, press the shutter button all the way down to record the image.

#### Manual Focus

Manual Focus lets you manually adjust the focus of an image.

- 1. Slide the Function Switch to REC.
- 2. Use the Record Menu (page 59) to change the "Focus" (Record Options 1) setting to "Manual".



- Manually measure the distance to the subject, and then press [+] or [-].
  - This causes the current focus distance to appear on the screen.

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#### OTHER RECORDING FUNCTIONS

Use [+] and [-] to increase or decrease the distance value on the monitor screen, until the one closest to distance you measured in step 3 is displayed.

#### Press the shutter button.

 The operation lamp and the Auto Focus frame do not appear while manual focus is in use.

#### Movie Recording

You can record movies that are approximately 3.2, 6.4, or 9.6 seconds long. You can also specify the file format (JPEG or AVI), and the image size (320 x 240 pixels or 160 x 120 pixels). For details, see "Record Menu" on page 59.

There are two types of movie recording: PAST and NOR-MAL. PAST lets you capture images of events that occurred before you pressed the shutter button while NORMAL records what happens after you press the shutter button. See "Record Menu" on page 59 for details on how to select the movie lenath.

- AVI files can be displayed and saved on a computer that is set up to support use of CompactFlash cards. For such a computer, install QuickTime 3, which comes bundled with the camera.
- AVI format movies cannot be displayed or saved on a computer using the bundled PC link software.

#### NORMAL

- 1. Slide the Function Switch to REC.
- 2. Press MODE and then select (MOVIE).

#### OTHER RECORDING FUNCTIONS



- 3. Compose the image and then record it.
- Auto Focus automatically adjusts in accordance with the movement of the subject.
- See "Playing Back a Movie" on page 66 for details on playing back a movie.

#### PAST

- 1. Slide the Function Switch to REC.
- 2. Use the Record Menu (page 59) to change the "Mode" (Movie) setting to "Past".
- 3. Press MODE and then select (MOVIE).

- Compose the image on the monitor screen and then press the shutter button about half way.
  - Auto Focus automatically adjusts in accordance with the movement of the subject.
  - The message "STAND BY" remains on the monitor screen for a period that is equal to the movie length you select (3.2, 6.4, or 9.6 seconds).
     Recording is not performed if you press the shutter button while this message is on the monitor screen.



- Keep the camera pointed at the action you want to record, and press the shutter button all the way down when you want to end recording.
  - If you selected a movie length of 9.6 seconds, for example, pressing the shutter button records everything that went on in front of the lens from about 9.6 seconds ago up to the point you pressed the shutter button.

#### DDD IMPORTANT! 444

- · Flash is disabled during movie recording.
- . Movie images that are uploaded to a personal computer and then download back to the camera cannot be played back as a movie. Uploading a movie image to a computer ungroups it, so you will not be able to play it back when you download it back to the camera unless you re-group them using the procedure on page 67.

#### DDD NOTE 444

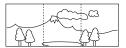
Movie Length and Number of Images

Length 320 x 240		160 x 120		
File Format: JPEG				
3.2 seconds	6 sets (1088KB)	27 sets (272KB)		
6.4 seconds 3 sets (2176KB)		13 sets (544KB)		
9.6 seconds	2 sets (3264KB)	9 sets (816KB)		
File Format: AVI				
3.2 seconds	8 sets (896KB)	30 sets (224KB)		
6.4 seconds	4 sets (1792KB)	16 sets (448KB)		
9.6 seconds	3 sets (2100KB)	10 sets (672KB)		

\* When using 8MB CF card.

#### Panorama Recording

With panorama recording you record a series of images and then link them to create a single panoramic effect.



- 1. Slide the Function Switch to REC.
- Press MODE and then select (PANORAMA).



## OTHER RECORDING FUNCTIONS

#### 3. Compose the image and then record it.

- · The right edge of the previous image you recorded remains on the monitor screen, so you can align it correctly with the next image.
- · From the second image onwards, aim the camera further to the right and overlap the next image with the previous one on the monitor screen.
- · Up to nine images can be grouped into a panorama. Press MENU when you want to stop a panorama recording operation.
- Aperture setting and white balance settings are locked when you record the first image of a panorama, and these settings are applied to all subsequent images in that panorama.
- · If you want to link more than 9 images into a panorama, upload the images to a computer and use your computer application to link them.
- See "Panorama Playback" on page 68 for details on playing back panoramas.

#### Night Scene Mode

The Night Scene Mode is for recording images in dark areas. When recording images of people on a twilight or night time background, you can use the flash in combination with the Night Scene Mode for slow synchro recording.



- 1. Slide the Function Switch to REC.
- 2. Press MODE and then select \*) (NIGHT SCENE).



3. Compose the image and then record it.

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#### OTHER RECORDING FUNCTIONS

#### DDD IMPORTANT! 444

- . The shutter speed is quite slow in the Night Scene Mode, so you should be sure to use a tripod to hold the camera steady. Note that the camera shake indicator does not appear in the Night Scene Mode.
- · Slow shutter speed also causes slow monitor screen refresh. Because of this, the image recorded may be slightly different from the image that was on the monitor screen when you pressed the shutter button.
- Auto Focus is difficult in the dark. If you experience problems, use manual focusing (page 50). There may be some blurring of the image if the subject is fast
- . In the Night Scene Mode, Quick Shutter records up to five consecutive shots.
- . The contrast of Night Scene Mode images is not affected by changes made using the Record Menu's Contrast (Record Settings) settings.

#### Using AEB (Auto Exposure Bracketing)

When AEB is turned on, the same image is recorded using three different exposure settings.

- This feature records three images at exposures of -0.5EV,  $\pm 0EV$ , and  $\pm 0.5EV$ .
- 1. Slide the Function Switch to REC.
- 2. Press MODE, and then select AEB.



- 3. Compose the image and then record it.
  - · Since the same image is recorded three times, the record operation takes a bit longer than normal.

#### OTHER RECORDING FUNCTIONS

#### Using Multiple Exposure

Multiple exposure lets you record an image over another one. You can record over an existing image already in memory, or you can record two new images. You can also use the Record Menu (page 59) to specify the brightness of the combined images.









To record a new image over an existing image

- 1. Slide the Function Switch to REC.
- 2. Press MODE, and then select (MULTIPLE) EXPOSURE).



- 3. Use [+] and [-] to move the image over which you want to record another image to the center of the monitor screen, and then press the shutter button.
- 4. Use the semi-transparent image to compose the new image, and then record it.

To record two new images

- 1. Perform steps 1 through 2 under "To record a new image over an existing image".
- 2. Use [+] and [-] to move "Recording" to the center of the monitor screen, and then press the shutter button.
- 3. Record the first image.
  - · This causes a semi-transparent version of the image to remain on the monitor screen.
- 4. Use the semi-transparent image to compose the new image, and then record it.

#### Using the Self-timer

You can use the self-timer for either of the two following recording operations.

10-second recording .... Records about 10 seconds after the shutter button is pressed. Use this method when you want to be included in the image that is recorded.

2-second recording ...... Records about two seconds after the shutter button is pressed. Use this method to avoid camera movement caused when the shutter button is pressed.

- 1. Slide the Function Switch to REC.
- 2. Use the Record Menu (page 59) to set the selftimer trigger time (Record Options 2).

#### 

 Each press of ♥.① cycles through the macro and self-timer settings in the following sequence: SELF-TIMER "♥" → MACRO "♥" → MACRO + SELF-TIMER "♥/"



#### 4. Compose the image and then record it.

- The self-timer lamp indicates the seconds as they are counted down. In the case of 10-second recording, the monitor screen automatically goes blank when the countdown is started. The screen will turn back on after image recording is complete.
- To cancel ongoing Self-Timer operation, press the shutter button.

#### OTHER RECORDING FUNCTIONS

#### Using the Timer

You can use the timer to perform any one of the following operations.

· Interval Recording

Use this method to record a series of images at fixed time intervals.

Timer Recording

Use this method to record a single image after passage of a fixed amount of time.

Interval Timer Recording
 Use this method to record a

Use this method to record a series of images at fixed time intervals, starting after passage of a fixed amount of time.

- 1. Slide the Function Switch to REC.
- 2. Press MODE, and then select ( (TIMER).
- Specify the number of images (Shots), the interval between shots (Interval), and the record start time (Start time).
  - Shots ......... 250 maximum
  - Interval ...... 1 to 60 minutes
  - . Start time .... Current time to current time plus 24
- The Interval cannot be specified when 1 is specified for Shots.

#### 4. Compose the image and then record it.

- When the start time you set is reached, the operation lamp lights and image recording starts.
- The monitor screen of the camera turns off between shots of a timer operation. If you turn on camera power during this time, the message "TIMER CAN-CEL" appears and the timer operation is cancelled.

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#### OTHER RECORDING FUNCTIONS

der currently available light

(page 62).

#### Record Menu

Use the Record Menu to make image quality, white balance, movie length, and other settings.

	Record Settings
Quality	Use this setting to specify the quality of the image.  Choices: Super Fine, Fine, Normal, Economy (See page 45).
Sharpness	Use this setting to control the outline of a person's face when recording a portrait.  ■ Choices: Hard, Normal, Soft Hard Hard outline Soft Soft outline
Saturation	Use this setting to control the depth of the colors of an image. ■ Choices: High, Normal, Low High High color saturation Low Low color saturation
Contrast	Use this setting to control the brightness of image colors. Night Scene images are not affected by contrast settings. ■ Choices: High, Normal, Low High High color brightness

Low ...... Low color brightness

#### Record Options 1 Quick Use this item to toggle Quick Shutter recording on Shutter and off. When turned on, you can take a series of shots at 0.5 second intervals. Focus Use this item to toggle between Auto and Manual. Use this setting to select the metering method. Metering ■ Choices: Multi, Center, Spot Multi...... Takes readings across the entire image, and provides balanced exposure settings. Center ... Takes reading at the center of the im-. Takes reading at a very limited spot at the center of the image. Peripheral lighting does not affect this reading, so exposure is based on the subject alone. White Use this item to select the white balance setting that makes the colors of the subject appear most Balance natural. ■ Choices: Auto, Day Light, Shade, Tungsten, Fluorescent, Manual Day Light ...... Outdoors Shade ...... Blue tinted sunlight Tungsten ...... Red tinted incandescent light Fluorescent .... Green tinted fluorescent light . Sets up the camera for recording of a white sheet of paper un-

OTHER RECORDING FUNCTIONS Color Use this setting to select the basic coloring of the ■ Choices: Color, B/W, Sepia Record Options 2 Self-timer Use this item to set the self-timer trigger time as either 10 seconds or 2 seconds. Grid Use this setting to toggle a display grid on and off. The grid can be helpful when composing an im-Time Stamp Use this setting to toggle date and time stamping of images on and off. Note that the date and time cannot be deleted from an image once it is stamped Folder Use this item to specify the folder where recorded images should be stored. Multiple Use this setting to specify the brightness of two images combined using multiple exposure. Exposure Choices: Bright, Dark, Average Bright uses the brightness of the brighter of the two images. Dark uses the brightness of the darker of the two

images.

Average uses the average brightness of the two

Movie File Format Use this setting to specify the file format of movies. ■ Choices: AVI. JPG Size Use this setting to specify the size of each movie frame. Choices: Normal Small Normal ... 320 x 240 pixels Small ..... 160 x 120 pixels Length Use this setting to specify the length of a movie. ■ Choices: 3.2, 6.4, 9.6 seconds Mode Use this setting to specify the movie mode. ■ Choices: Normal, Past

#### To make Record Menu settings

- 1. Slide the Function Switch to RFC.
- 2. Press MFNU.
- Use [+] and [-] to select the category you want to set.



4. Use [+] and [-] to select the item you want to set.



Customizing Record Mode Power On Set-

save in mode memory. Note that the procedure described

here only lets you select ON (save current setting in mode

memory) or OFF (use the camera's preset default setting). The procedures for changing current settings can be found

on the pages noted in the table.

#### Make the setting.

- If you want to change other settings, repeat steps 4 and 5.
- After you make the Record Menu settings you want, select EXIT.
- For the Focus, Metering, and White Blance settings, you can use the procedure under "Customizing Record Mode Power On Settings" on page 63 specify whether or not settings should be retained when camera power is turned off. All other settings are retained when power is turned off.

#### OTHER RECORDING FUNCTIONS

#### **Performing Manual White Balance**

Certain lighting conditions can cause Auto white balance to take a very long time or can result in a limitation of the adjustable range (color temperature). If you suspect your current lighting conditions are causing problems, try performing manual white balance. This sets white balance to a level that can be used under any lighting conditions.

The following procedure describes how to perform manual white balance using a white piece of paper. For optimum results, you should use a special reflective plate that should be commercially available from a local camera equipment shop.

- 1. Slide the Function Switch to RFC.
- 2. Press MENU.
- Select "Record Options 1" → "White Balance" → "Manual".

- Keeping the camera pointed at the white sheet of paper, press DISP to make the manual white balance settings.
  - Pressing the shutter button at this time returns the camera to the white balance setting that was obtained the last time you performed this manual white balance procedure.
- The manual white balance procedure stops automatically when it is done.
  - If the manual white balance procedure does not end automatically, press the shutter button to interrupt it.
- After the camera finishes making the white balance setting, it returns to the screen in step 3 above. Select "Exit" to exit the manual white balance procedure.

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#### - 6

# OTHER RECORDING FUNCTIONS

To turn power on default settings on and off

- 1. Slide the Function Switch to REC.
- 2. Press MODE, and then select CUSTOM.
- 3. Select "Mode".



- Select the item whose setting you want to change.
- 5. Select "On" or "Off".
  - · Repeat steps 4 and 5 for other items if you want.
  - After you are finished making the settings you want, press MENU.

#### Initializing Mode Memory

Use the following procedure to initialize the mode memory.

#### DDD IMPORTANT! 444

Note that performing the following procedure to initialize mode memory also initializes power save trigger time settings (page 35).

- 1. Perform steps 1 through 2 under "To turn power on default settings on and off".
- 2. Select "Restore".
  - The following table shows the mode memory status of each item following the above procedure.

Item	Initialized Setting
Recording Mode	Off
Flash	On
Focus	Off
Metering	Off
White Balance	Off

- An item that is "On" stores its current setting in mode memory when camera power is turned off, and restores the setting when power is turned back on again.
- An item that is "Off" uses the camera's preset power on default setting.

#### OTHER RECORDING FUNCTIONS

(camera preset)

Single

Auto

Auto

Multi

ON

balance setting (page 59).

Recording Recording Mode when power is turned off. Mode A power on setting is one that is set by the camera automatically whenever you turn it on. Normally, the camera uses its Flash Current flash mode setting own built-in power on default settings. With the procedure (page 43) described here, however, you can tell the camera to save the Focus Current focus mode setting: camera's current Recording Mode, Flash, Focus, Metering Auto Focus, Manual Focus and White Balance settings in mode memory when it is (page 50), or Macro Mode turned off, and to restore the setting when power is turned on (page 50). again. Settings stored in mode memory override the Current Manual Mode meter-Metering camera's preset defaults. ing setting (page 59). The following table shows the items whose settings you can Current Manual Mode white White Balance

## **PLAYBACK**

The following describes the different techniques that you can use to playback recorded images.

#### Basic Playback Operation

The built-in monitor screen of the camera lets you play back recorded images without connecting an external monitor.

 Slide the Function Switch to PLAY.



- Use [+] and [-] to scroll through the images stored in camera memory.
  - Press [+] to scroll forward and [-] to scroll back. Holding down either button scrolls at high speed.











#### DDD NOTES 444

- Sliding the Function Switch to PLAY immediately after recording an image displays the image you just recorded first.
- Pressing the shutter button while a movie or panorama image is on the monitor screen starts playback of the movie or panorama .
- The image that initially appears on the monitor screen in the PLAY mode is a preview image. The full of image appears after a few seconds.

#### **PLAYBACK**

#### Playing Back a Movie

Use the following operation to play back a movie that was recorded using the operation under "Movie Recording" on page 51.

- 1. Slide the Function Switch to PLAY.
- Use [+] and [-] to select the movie you want to play back.



- Press the shutter button to start playing back the movie.
  - You can use [+] (forward) and [-] (reverse) while playing back a movie to change the playback direction.

- To enlarge the movie image so it fills the entire monitor screen, press DISP. Pressing the DISP again returns the image to its original small size.
- Pressing the shutter button during movie play pauses playback. Press the shutter button again to resume playback.
- While movie playback is paused, you can use [+] (forward) and [-] (reverse) to move frame-by-frame through the movie.
- 4. After the movie is complete, press MENU.

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#### PLAYBACK

## **Regrouping Movie Images**

When you record a movie, the camera automatically groups images that make up the movie. Transferring a movie to a personal computer causes its images to become ungrouped. If you download the movie back to the camera, you will be unable to play it back as a movie unless you use the following procedure to re-group the images.

- Only images recorded while "JPEG" is selected for the Record Menu (page 60) "File Format (Movie)" item can be ground.
- Only images recorded using Economy Mode resolution can be grouped.
- Non-movie from a computer or other source are grouped at a size of 160 x 120 pixels.

#### To re-group movie images

- 1. Slide the Function Switch to PLAY.
- Use [+] and [-] to display the first of the four images that make up the movie you want to regroup.
- 3. Press MENU.
- 4. Select "Tools" → "Group" → "Movie".

- 5. Use [+] and [-] to scroll through the other images that make up the movie until the one you want to use as the final image is on the display.
- Press the shutter button to re-group the movie images.
  - The movie playback screen (page 66) appears after the re-grouping operation is complete.

#### To ungroup movie images

#### DDD IMPORTANT! 444

AVI format movie files stored in the AVI folder cannot be ungrouped.

- Perform steps 1 through 3 under "To re-group movie images".
- 2. Select "Tools" → "Group".
- 3. Press the shutter button.

#### PLAYBACK

#### Panorama Playback

Use the following operation to playback panoramas recorded using the operation under "Panorama Recording" on page 53.

- 1. Slide the Function Switch to PLAY.
- Use [+] and [-] to select the panorama you want to play back.



- Press the shutter button to start panorama playback.
  - You can change the direction of a panorama that is playing back by pressing [+] or [-].

- To enlarge the panorama image so it fills the entire monitor screen, press DISP. Pressing the DISP again returns the image to its original small size.
- Pressing the shutter button during panorama play pauses playback. Press the shutter button again to resume playback.
- While panorama playback is paused, you can use [+] (forward) and [-] (reverse) to move frame-by-frame through the panorama.



4. Press MENU to stop panorama playback.

#### PLAYBACK

#### Regrouping Panorama Images

Transferring a panorama to a personal computer causes its images to become ungrouped. If you download the panorama back to the camera, you will be unable to play it back as a panorama unless you use the following procedure to regroup the images.

#### To re-group panorama images

#### DDD IMPORTANT! 444

- · You cannot group movie images or images of different quality into a panorama.
- · You can group up to nine images.
- 1. Slide the Function Switch to PLAY.
- 2. Use [+] and [-] to display the first of the images that make up the panorama you want to regroup.
- 3. Press MENU.

4. Select "Tools" → "Group" → "Panorama".



- 5. Use [+] and [-] to scroll through the other images that make up the panorama until the one you want to use as the final image is on the dis-
- 6. Press the shutter button to re-group the panorama images.
  - . The panorama playback screen (page 68) appears after the re-grouping operation is complete.

#### **PLAYBACK**

#### To ungroup panorama images

- 1. Perform steps 1 through 3 under "To re-group panorama images" on page 69.
- 2. Select "Tools" → "Group".
- 3. Press the shutter button.

#### Usina Zoom

The following operation lets you magnify an image to twice its normal size. Note that you can zoom only a single still

#### **▶** IMPORTANT! **《《**

Movie and panorama images cannot be zoomed.





- 1. Slide the Function Switch to PLAY.
- 2. Use [+] and [-] to select the image you want to zoom.
- 3. Press MENU.
- 4. Select "View" → "Zoom".

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#### PLAYBACK

#### Specify the area.

- · The portion of the selected area appears on the display at twice its normal size.
- · Pressing ZOOM at this time increases the displayed image to four times its normal size. Each press of ZOOM toggles the image between two times and four times its normal size.
- · Use [+] and [-] to move the area selection frame left and right. Use \$/ i and ♥ · to move it up and
- 6. To return the image to its normal size, press any button besides [+], [-], ﴿/ ( , ♥ · ்), ZOOM and DISP.

#### Displaying Multiple Images

The following operation lets you simultaneously view either four or nine images on the same screen. This capability is especially useful when playing back to the screen of a connected TV, and can be used to display a catalog of products,

. The multi-image screen shows all 16 images of a movie on a single screen.





- 1. Slide the Function Switch to PLAY.
- 2. Press MENU.
- 3. Select "View" → "4 Images" or "9 Images".
  - . The first image of the set is the image that was on the screen when you performed step 2 of this operation. The other images are those that sequentially follow the first one.

#### PLAYBACK

- 4. Use [+] and [-] to scroll through images stored in memory.
  - · To view a particular image in normal size, press DISP. This causes an image number to appear in the upper left corner of the monitor screen. Use [+] and [-] to change to the number of the image you want to view and then press the shutter button to display the image.

1	2	[+] —	5	6	[+]	9	10
3	4	<u>←</u> [-]	7	8	<u>←</u> [-]	11	

5. After you are finished, press any button besides [+], [-], or DISP return to the normal single-image display.

#### Slide Show

Slide Show automatically scrolls through the images stored in memory. You can also specify how much time should be allowed between each image.







#### DDD IMPORTANT! 444

Auto Power Off (page 33) is disabled whenever Slide Show is being used. This means you should not leave Slide Show running when using batteries to power the camera. Doing so can rundown batteries. Be sure to stop Slide Show and turn off the camera after you are finished.

#### PLAYBACK

- 1. Slide the Function Switch to PLAY.
- 2. Press MENU.
- 3. Select "View" → "Slide Show".
- To stop Slide Show, press any button besides MENU.
  - Pressing MENU while a Slide Show is in progress displays a screen that lets you change the interval within the range of 5 to 30 seconds.
  - Note that all buttons are disabled while an image change is in progress. Wait until an image is stopped on the monitor screen before performing a button operation, or hold down the button until the image stops.
  - Slide Show shows only the images contained in the current folder.

#### Screen Saver

The screen saver function automatically activates Slide Show (which automatically scrolls through images) whenever you do not perform any operation for about five minutes in the Playback Mode. This protects the camera's monitor screen and the screen of a connected TV against "burn in" of a static image that is left displayed too long.

#### DDD IMPORTANT! (()

- The screen saver is enabled only when the camera is being powered by its optional AC adaptor. If you do not perform any operation for five minutes under battery power, camera power automatically turns off (Auto Power Off).
- The screen saver displays protected images only. The screen saver is disabled if there are no protected images in memory.
- PC Link will not send images between the camera and a personal computer while the screen saver is turned on. Make sure you turn off the screen saver before trying to perform any image transfer operation. Note that the screen saver is turned on when you purchase the camera.

#### **PLAYBACK**

#### To turn the screen saver on and off

- 1. Slide the Function Switch to PLAY.
- 2. Press MENU.
- 3. Select "Set Up" → "Screen Saver" → "On".
- To turn off the screen saver, perform the above procedure and select "Off".
- The screen saver activates if you do not perform any operation for about five minutes in the Playback Mode.
- · Press any key to exit the screen saver.
- When changing between images, the screen saver uses the interval that is specified for Slide Show (page 72).

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## **USING FOLDERS**

Folders help you to group your images into any arrangement you like. You can use folders, for example, to keep your personal images separate from images you need for business. There are six folders from which to choose. Any image you record is automatically placed into the currently selected folder.

#### DDD NOTE 444

You cannot create additional folders.

#### Recording an Image in a Specific Folder

Images you record are normally stored in the folder named CAMERA. Movies recorded when AVI is selected as the movie file format are always stored in the folder named AVI. See "Record Menu" on page 59 for information about how you can change to another folder to store images.

• Up to 250 images can be stored in a single folder.

#### Selecting a Folder to Playback Images

- 1. Slide the Function Switch to PLAY.
- Each press of 4/ sequentially selects available folders.

## To Move a Single Image from One Folder to Another

#### DDD IMPORTANT! 444

Make sure the folder that contains the image you want to move is currently selected before you start the following procedure.

- 1. Slide the Function Switch to PLAY.
- 2. Press MENU.
- 3. Select "Tools" → "Move".
- Select the folder to which you want to move the image.

#### USING FOLDERS

5. Select "Select".



- 6. Select the image you want to move.
- Selected images are indicated by ★.
- · Repeat step 6 to select other images if you want.
- 7. After all the images you want to move are selected, press DISP to move them.

# To Move All the Contents in One Folder to Another Folder

#### DDD IMPORTANT! 444

Select the folder whose images you want to move before starting the following procedure.

- Perform steps 1 through 4 under "To Move a Single Image from One Folder to Another" on page 75.
- 2. Select "Folder".

## **IMAGE PROTECTION**

Use the following operations when you want to protect images against accidental deletion. A protected image cannot be deleted until it is unprotected. You can protect and unprotect a single specific image, all the image in a particular folder, or all images currently on the memory card.

#### DDD IMPORTANT! 444

Formatting a memory card (page 29) deletes all images on the card, even if some or all of the images are protected.

#### To Protect and Unprotect a Single Image

- 1. Slide the Function Switch to PLAY.
- 2. Press MENU.
- 3. Select "Tools" → "Protect".
- 4. Select "Select".



- 5. Select the image you want to protect.
  - Selected images are indicated by ...
  - · Repeat step 5 to select other images if you want.
- After all the images you want to protect are selected, press DISP to protect them.

#### IMAGE PROTECTION

#### To Protect and Unprotect Folders

#### DDD IMPORTANT! (()

Select the folder whose images you want to protect before starting the following procedure.

- 1. Perform steps 1 through 3 under "To Protect and Unprotect a Single Image" on page 77.
- 2. Select "Folder".
- 3. Select "Protect" or "Unprotect".
  - The indicator that is shown in the upper left corner of the images when image information is turned on (page 77) indicates they are protected.
  - The ☐ indicator does not appear when images are not protected.

# To Protect and Unprotect All Images on the Memory Card

- 1. Perform steps 1 through 3 under "To Protect and Unprotect a Single Image".
- 2. Select "All".
- 3. Select "Protect" or "Unprotect".
  - The indicator that is shown in the upper left corner of the images when image information is turned on (page 77) indicates they are protected.
  - The ☐ indicator does not appear when images are not protected.

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## **DELETING IMAGES**

Use the following operations when you want to delete images. You can delete a single specific image, all the images in a particular folder or all images currently on the memory card.

#### DDD IMPORTANT! 444

- Image deletion cannot be undone. Before deleting an image, make sure you no longer need it or you have a back-up copy saved on you computer, on diskette, or on some other medium.
- Be especially careful with "To Delete All Unprotected Images" operation, which deletes all unprotected images in memory.
- A protected image cannot be deleted. See "Image Protection" on page 77 for details on protecting and unprotecting images.

#### To Delete a Single Image

- 1. Slide the Function Switch to PLAY.
- 2. Press MENU.
- 3. Select "Delete".
- 4. Select "Select".



- 5. Select the image you want to delete.
- Protected images are not displayed.
- Selected images are indicated by \$\infty\$.
- Repeat step 5 to select other images if you want.

#### DELETING IMAGES

- After all the images you want to delete are selected, press DISP to delete them.
- 7. Select "YES" to delete selected images.
- DDD NOTE (((

The camera does not maintain open spaces in its memory. Deleting an images causes all images following the deleted image to be shifted up.



## To Delete All the Images in a Folder

- Press 1/ and then specify the folder whose images you want to delete.
- 2. Perform steps 1 through 3 under "To Delete a Single Image" on page 79.
- 3. Select "Folder".



- Select "YES" to delete the contents of the folder, or "NO" to abort the delete operation without deleting anything.
  - When the above procedure is performed while there are protected images in memory, the first of the protected images appears on the monitor screen after the unprotected images are deleted.

#### DELETING IMAGES

#### To Delete All Unprotected Images

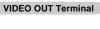
- 1. Perform steps 1 through 3 under "To Delete a Single Image" on page 79.
- 2. Select "All".



- Select "YES" to delete all unprotected images, or "NO" to abort the delete operation without deleting anything.
  - When the above procedure is performed while there are protected images in memory, the first of the protected images appears on the monitor screen after the unprotected images are deleted.

## CONNECTIONS

This camera is equipped with VIDEO OUT terminal for connection to a television or video deck, and a DIGITAL terminal for connection to a computer or other equipment.



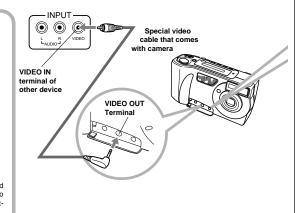
• Television (page 84)



Video Deck, Video Printer



You can connect to a video tape deck and record image to tape. Or you can connect to a video printer to produce hard copy printouts of your images.



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## CONNECTIONS

# DIGITAL Terminal Terminal The type of cable you should use depends on the type of equipment to which you are connecting.

#### DDD IMPORTANT! 444

- Be sure to turn off both the camera and other equipment before making any connections.
- Check the documentation that comes with your other equipment for information you may need to know when making connections.
- Leaving the same image displayed on a television or computer display screen for very long periods can cause the image to be "burned in" on the screen. When this happens, a faint after-image remains on the screen, even after you disconnect the camera. To avoid this, you should not leave the same image displayed on such a screen for very long periods.
- This camera does not support cable transfer of data with other CASIO digital cameras.

#### **DIGITAL Terminal**

 Computer (page 85)



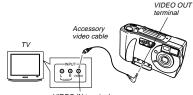
 QV Color Printer (page 85)



## **CONNECTING TO OTHER EQUIPMENT**

#### To Connect to a Television

You can playback images in camera memory on the screen of a connected television.



VIDEO IN terminal

- Connect one end of the video cable to the camera and the other end to the television.
- 2. Set up the television for video input.
  - See the documentation that comes with the television for information about how to do this.
- Use the operations under "Playback" on page 65 to playback images on the television screen.

#### DDD IMPORTANT! ((()

- A television must have a video input terminal like the one shown in the illustration to connect to this camera.
- Battery capacity (page 31) and other displays that normally appear on the camera's monitor screen are also displayed on the television screen.
- The monitor screen goes blank as soon as you connect the video cable to the camera.

#### Selecting the Video Output Signal Mode

You can select either of two common video output modes: NTSC or PAL.

The video system you should use depends on the country where you plan to use the output signal. In the United States or Japan, for example, you should use NTSC, but in Europe you need to use PAL.

Check with your local video or TV retailer if you are unsure about which video mode you should use in your country.

- 1. Slide the Function Switch to PLAY.
- 2. Press MENU.
- 3. Select "Set Up" → "Video Out".
- 4. Select the video mode you want to use.

DINNECTIONS

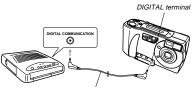
. .

#### CONNECTING TO OTHER EQUIPMENT

#### To Connect to a QV Color Printer

You can use a QV Color Printer to produce printouts of your image data.

Supported Printer Models: DP-300, DP-8000



Data communication cable (Comes with the QV Color Printer.)

- See the documentation that comes with the QV Color Printer for details.
- Performing a print operation for a movie prints the individual frames that make up the movie.
- Printing a panorama prints the individual images that make up the panorama.
- Movie images contained in an AVI folder cannot be printed on a QV Printer.

#### Connecting to a Personal Computer

#### PC Link Software

Special PC Link software available from CASIO makes image data transfers with a personal computer quick and easy. The software is also designed to minimize loss of image quality due to data transfer.

For details on how to connect to a personal computer and exchange data, see the documentation that comes with the PC Link software.

LK-22S for Windows and Macintosh

#### DDD IMPORTANT! ((()

- This camera does not fully support the software that comes with the LK-1, LK-10, LK-10V, LK-11 connection kits for Windows, and the LK-2, LK-2A, LK-2V, LK-21 connection kits for the Macintosh. Never try to use the software that comes with these connections kits with this camera.
- When you download files from your computer to the camera (using the Send To Camera or Send Files pull-down menu command), the following message appears on your computer screen: "are converted to the CAM format". This message does not apply to images downloaded to the QV-5500SX, and images are transferred in JPEG format.
- AVI format movies cannot be displayed or saved on a computer using the bundled PC link software.

## **USING CompactFlash CARDS WITH YOUR COMPUTER**

# Setting Up to Access CompactFlash Card Contents From Your Computer

You can use any of the three methods described below to access the contents of a memory card with your computer. If you use your computer to change the fixed names of the folders created by this camera, the camera will no longer display the renamed folders.

#### CompactFlash Memory Card Slot

If your computer has a CompactFlash Memory Card Slot, insert the camera's memory card into the slot.

#### PC Card Slot

In this case you need an optionally available CASIO CA-10 PC Card Adaptor. See the instructions that come with the PC Card Adaptor and the documentation that comes with your computer for details on using this type of configuration.

#### Other Desktop Computer Configurations

Some desktop computers require a separately available PC card reader/writer and the optionally available CASIO CA-10 PC Card Adaptor to read memory card contents. See the instructions that come with the PC card reader/writer and the PC Card Adaptor for details on using this type of configuration.





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#### USING CompactFlash CARDS WITH YOUR COMPUTER

## CompactFlash Card Precautions

#### CompactFlash Card Directory Tree

QVCAM.QVS ...... (Management file) INDEX.HTM ...... (Card Browser main files) HTML (Card Browser folder) CAMERA (Image folder) - CAMERA.QVS ..... (Folder management files) PREVIEW (Preview image folder)
yymdd001.JPG (Preview image files)
yymdd002.JPG (Preview image files) HTML (Card Browser folder) INDEX.HTM (Folder HTML files) FOLDER A (Image folder) FOLDER B (Image folder) FOLDER C (Image folder) FOLDER D (Image folder) FOLDER E (Image folder) AVI (Movie folder) AVI.QVS (Folder management files) PREVIEW (Preview image folder) yymdd001.JPG (Preview image files) yymdd002.JPG (Preview image files) HTML\* (Card Browser folder) INDEX.HTM (Folder HTML files)
DATA.HTM (Folder HTML files) yymdd001.AVI (Movie files)

#### Management File

These files contain data about folder management and image sequence.

#### CAMERA Folders

These folders are for storing image data. There are seven CAMERA folders: CAMERA, FOLDER A, FOLDER B, FOLDER C, FOLDER D, FOLDER E, AVI.

#### Image File

These JPEG files are images recorded by the camera. See page 30 for details on how file names are generated.

#### PREVIEW Folder

This folder is for storing preview images.

#### · Preview Image File

A preview image JPEG file is created whenever an image is recorded. Preview images are used when scrolling through images on the camera's monitor screen and in the HTML image lists displayed on your computer's screen.

#### HTML Files (INDEX)/(MENU)/(DATA)

These files are for displaying lists of images in camera memory using a Web browser.

#### USING CompactFlash CARDS WITH YOUR COMPUTER

#### Image Files Supported by the Camera

- Image files recorded with the CASIO QV-5500SX Digital Camera
- JPEG files stored using QV-LINK 2.6 (LK-22S) (1280 x 960 pixels or 640 x 480 pixels JPEG file)
- JPEG files stored using QV-CRAFT
   (1280 x 960 pixels or 640 x 480 pixels JPEG file)

#### **Personal Computer**

- This camera uses management files to manage the sequence and attributes of image files. Because of this, adding files, deleting files, changing management file contents, or changing file sequence and attributes with your computer can cause movie and panorama images to become ungrouped. It can also result in slower image scrolling on the camera.
- When transferring CompactFlash card contents to a hard disk, floppy diskette, MO disk, or other external storage, keep everything in the QVIMG02 folder together. Changing the name of the QVIMG02 folder to a date is a good way to keep track of your images. However, be sure to change the name of this folder back to QVIMG02 if you ever copy it back to the memory card for playback on the camera. This camera does not recognize any folder name besides QVIMG02.

- The above is also true about the names of folders inside the QVIMG02 folder. These folders must be returned to the names assigned to them by the camera (CAMERA, FOLDER A, etc.) whenever you copy the QVIMG02 folder back to the memory card for playback on the camera.
- · Never delete or modify the QVS file in any way.
- We also strongly recommend that after transferring data from a CompactFlash card to other external storage that you re-format the card and delete its contents before using it to record more images.

#### **Macintosh Precautions**

 Initializing a CompactFlash card with this camera initializes it to ATA format. Under ATA format, Apple Macintosh computers recognize files on the card as text files. Use PC EX-CHANGE to associate the files on the card with QV-LINK or some other application that can open JPEG files.

#### USING CompactFlash CARDS WITH YOUR COMPUTER

#### Card Browser

Card Browser makes it possible to use a browser application to view images recorded with the QV-5500SX.

- The HTML file generated by this camera is best viewed using Microsoft Internet Explorer 3.0 or later, or Netscape Navigator 2.0 or later. It cannot be viewed using QV-LINK.
- QuickTime 3 is required to play back AVI movie files.
- 1. Slide the Function Switch to PLAY.
- 2. Press MENU.
- 3. Select "Set Up" → "Card Browser".



#### 4. Specify the format.

There are three Card Browser formats.

- TYPE 1 ..... This is a powerful format that provides detailed information about each image and also includes a Slide Show feature.
- TYPE 2 .....This format is a viewer with a Slide Show
- TYPE 3 ..... This format provides basic image viewing. Since it is the simplest option, you should be able to use it with just about any browser, regardless of version.

#### **▶** IMPORTANT! **《《**

- Note that the TYPE 1 and TYPE 2 formats use Java Script, so their use requires Microsoft Internet Explorer 4.01 or later, or Netscape Communicator 4.5 or later.
- In the case of TYPE 1 and TYPE 2, Slide Show displays Economy (640 x 480) and other image resolutions (1280 x 960) images in the same size, so image details may appear relatively coarse.
- Turning on Card Browser causes an HTML file to be generated whenever you turn off camera power.
- Selecting "OFF" in step 4 of the above procedure turns off Card Browser.
- Creation of an HTML file causes an INDEX.HTM file and other files to be added to the QVIMG02 folder.

DDD IMPORTANT! 444

Though the camera's monitor screen goes blank when you turn off power, the operation lamp continues to flash for some time as the camera internally generates a Card Browser file (when Card Browser is turned on). Performing any of the operations while the operation lamp is flashing not only stops generation of the Card Browser file, it can also result in corruption of the image data on the CompactFlash Card.

USING CompactFlash CARDS WITH YOUR COMPUTER

- Note that a Card Browser file may be corrupted if batteries are low or if the CompactFlash Card becomes full during file generation.
- If the CompactFlash card in the camera has a large number of files on it, it may take quite a bit of time for the camera to generate the required HTML files and actually turn off after you slide the POWER switch towards OFF

Because of this, we recommend that you normally leave Card Browser turned off, except when you actually want to generate HTML files.

• This camera generates a Card Browser file whenever you turn off power. When the card in the camera contains a large number of files, it may take some time for the file generation operation to be performed. You can turn off the Card Browser feature if you do not want a file generated each time you turn off camera power.

- If you perform a timer operation while Card Browser is turned on, files are not generated until the number of shots specified for the timer's SHOTS setting are recorded. If you want to generate files for images recorded by a timer operation that is not yet complete, turn the camera off, wait for the files to be generated, and then turn the camera back on again. Note, however, that this also cancels the ongoing timer opera-
- The Card Browser's Slide show feature may produce mosaic images and vertical lines on a system with the following configuration.
- \* Browser: Microsoft Internet Explorer 4.0
- \* Color palette (Display Properties): High Color (16 hit)
- \* Desktop area (Display Properties): 800 by 600 pixels

When this happens, try changing to the following preferred settings.

- \* Browser: Netscape Communicator 4.5
- \* Color palette (Display Properties): True Color
- \* Desktop area (Display Properties): 1024 by 768 pixels

Note that changing the Display Properties Desktop area setting to 1024 by 768 pixels may cause part of the screen contents to moves outside the display area.

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#### USING CompactFlash CARDS WITH YOUR COMPUTER

#### How to use the HTML file

#### Viewing HTML File Contents

Load the CompactFlash card into a card slot of your computer (page 86). Now drop the INDEX.HTM file (in the QVIMG02 folder) onto your Web browser to display a list of all images contained on the CompactFlash card.



Folder name

Image File name

Clicking on a folder name displays the following data about the images contained in the folder.

#### USING COMPACTERS I CARDS WITH TOUR COMPUTER



#### Image Information

File size (KB)
Resolution (pixels)
Quality
Recording mode
AE
Light metering
Shutler speed
Aperture stop
Exposure comp
Focusing mode
Flash mode
Sharpness
Saturation
Contrast
Multiple Exposure
White balance
Digital zoom
Date

Click Index to return to the image list.

## USING CompactFlash CARDS WITH YOUR COMPUTER

#### Saving an HTML File

- When transferring CompactFlash card contents to a hard disk, floppy diskette, MO disk, or other external storage, keep everything in the QVIMG02 folder together. Changing the name of the QVIMG02 folder to a date is a good way to keep track of your images. However, note that you should never delete or modify the QVIMG02 file in any way.
- Before using the CompactFlash card again (after storing its images on other media), delete all its current files or reformat the card.

# **TROUBLESHOOTING**

	Symptom	Probable Cause	Action
ylo	No power	Batteries not loaded correctly.     Dead batteries     Wrong AC adaptor	Correctly load batteries (page 2).     Replace all four batteries with a set of new ones (page 2).     Use only recommended AC adaptor .
Power Supply	Sudden power failure	Auto Power Off     Low battery power     Use of manganese batteries.	Turn power back on.     Replace all four batteries with a set of new ones (page 2).     Replace manganese batteries with alkaline, lithium or Ni-MH batteries.
	Battery life is too short	Use of the camera in cold temperatures.	Very cold temperatures can shorten battery life.
	No recording when shutter button is pressed	Function Switch set to PLAY.     Flash unit is charging.     The message "MEMORY FULL" is on the monitor screen.     Insufficient memory card capacity or no memory card loaded in camera.	Set Function Switch to REC.     Wait until flash unit charging is finished.     Delete images you no longer need from camera memory.     Load a memory card.
Recording	Auto Focus cannot focus the image.	Lens or distance sensor is dirty.     The object you want to focus is not in the focus frame.     Conditions make it impossible to obtain proper focus.	Clean off the lens or distance sensor.     Aim the camera so the object you want to focus is in inside the focus frame.     Switch to the Manual Mode and focus manually.
	Power failure during self- timer operation	Low battery power	Replace all four batteries with a set of new ones (page 2).

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## TROUBLESHOOTING

Symptom	Probable Cause	Action
Colors of recorded image are different from those on the display when image was composed.	Reflection from sunlight or light from another source     Image quality setting	Reorient the camera so that light is not shining directly into lens.     Use the Recording Menu to change to a higher image quality for recording.
No +/- button operation during multi-page display	Button operation during page change	Wait until an image is on the monitor screen before performing a button operation.
Cannot find an image.	Wrong folder     Memory card images recorded using a QV-7000SX camera	Change to the folder that contains the image (page 75).     Use another memory card. The file management system of the QV-7000SX is different from the one used by this camera, so cards recorded with the QV-7000SX cannot be read.
Cannot use multi-page dis- play.	No images in selected folder	Check other folders for images.
Camera is connected to a TV, but LCD monitor contents do not appear on TV screen.	Incorrect camera-TV connection     Wrong TV set up     Wrong video mode is selected.	Connect correctly using the video cable (page 84).     Set up the TV correctly.     Change the video mode.
Images cannot be displayed when downloaded back the camera from a computer.	The images were on a memory card when they were opened on the computer for editing and then resaved back to the memory card.	Use the QV-LINK application to download edited images back to the camera.
	Colors of recorded image are different from those on the display when image was composed.  No +/- button operation during multi-page display  Cannot find an image.  Cannot use multi-page display  Camera is connected to a TV, but LCD monitor contents do not appear on TV screen.  Images cannot be displayed when downloaded back the	Colors of recorded image are different from those on the display when image was composed.  No +/- button operation during multi-page display  Cannot find an image.  Button operation during page change  1. Wrong folder  2. Memory card images recorded using a QV-7000SX camera  No images in selected folder  1. Incorrect camera-TV connection  TV, but LCD monitor contents do not appear on TV screen.  Images cannot be displayed when downloaded back the

## TROUBLESHOOTING

	Symptom	Probable Cause	Action
	Monitor screen image is out of focus.	Failure to focus the image while the camera is in the Manual Mode.     Camera is in the Macro Mode.      Camera is in the Normal Mode while the subject is too close.	Focus the image before recording it.     Use the Normal Mode for scenery and group shots.     Use the Macro Mode for close ups.
	Poor color and brightness when indoors	Indoor fluorescent lighting	Shoot under incandescent or other non-fluorescent lighting (page 39).
Recording	Part of the image is missing.	Blocking of the lens when recording.     Failure to correctly center the object when aiming through the viewfinder.	Hold the camera correctly, making sure that your finger or the wrist strap is not blocking the lens.     Take particular care under the following conditions, which can cause the recorded image to be slightly different from the image that appears in the viewfinder.     Macro photography     For more precise image composition, use the LCD monitor screen instead of the viewfinder.     Alming at an angle that is diagonal to the viewfinder's optical axis.     It is best to point the lens directly at the subject, and not at an angle.
	Cannot perform movie recording.	Movie Record Mode is not selected.     Insufficient camera memory capacity.	Select the Movie Record Mode (page 51).     Delete images you no longer need from camera memory.
	Recorded image is not saved.	Loss of power before image is stored in memory	Replace all four batteries with a set of new ones (page 2).

#### TROUBLESHOOTING

	Symptom	Probable Cause	Action
Deletion	Delete operation does not operate.	All images are protected.	Unprotect the images you want to delete (page 77).
	Cannot select items in the Playback Menu.	Some functions are not available for playback of certain types of images.	Select a different function or change to the Record Mode.
	All buttons and switches do not operate.	Malfunction due to static electrical charge or strong impact.     Camera is connected to a computer or QV Color Printer.	Remove batteries and disconnect the AC adaptor if you are using one. Restore power and turn the camera on. If this does not work, contact your dealer or an authorized CASIO service provider.
Other	Slide Show starts even though it is not selected.	Activation of the screen saver.	Turn off screen saver (page 73).
	Nothing appears on the monitor screen.	Monitor screen is turned off.     Video cable connected to the VIDEO OUT terminal.	Press the DISP button to turn on the monitor screen.     Disconnect the video cable. The monitor screen is disabled while it is connected.
	0:00 flashing on the time display.	The time and date (clock) settings have been cleared for same reason.	Use the procedure on page 36 to set the time and date.

## **MESSAGES**

CF ERROR

this camera.

before using it with

FORMAT→MENU

Perform the following procedure whenever a You must format the memory card starts to behave abnormally. CompactFlash card

#### Important!

The procedure described below deletes all images stored in the memory card. Make sure all of your important images are backed up onto a computer hard disk or other storage medium before performing this procedure.

#### To reformat a memory card

- 1. Connect the AC adaptor to the camera and switch to AC power or load a new set of batteries into the camera.
- · Power failure while a format operation is being performed aborts the reformat operation
- Press MENU.



- 3. Use [+] and [-] to select "YES", and then press the shutter button.
- Select MENU if you want to abort the reformat procedure without deleting anything.
- · Completion of the format operation is indicated by the message "NO IMAGE" appearing on the monitor screen. This message also indicates that the memory card was formatted successfully.

Insert memory card!	There is no memory	card installed in the camera.

The JPEG image file you are trying to display is ei-This camera cannot display the image ther corrupted or is a format that is not compatible you selected! with this camera.

The folder you are trying to use is full. This folder is full! Delete some images you no longer need. Note that each folder can contain up to 250 images.

MEMORY FULL Delete unneeded images.

· Not enough memory for further recording. Delete some images from memory card (page 79).

QVIMG02 folder or other file (page 88) cannot be created due to insufficient memory when downloading data from a computer to the memory card. Use your computer to delete unneeded images to free up memory card space for the images you are downloading. You could also press the MENU button and format the memory card in the camera, but doing so deletes all image files currently stored on the memory card.

.. f/2.8; f = 5.47mm (equivalent to 36mm

exposure, night scene, single-image,

self-timer, movie, panorama, macro

NO FORMAT The memory card is not formatted. Format the memory card before trying to use it (page 29).

There are no images No images are stored in memory card. on this memory card!

#### MESSAGES

#### RECORD ERROR This message appears when the image you are trying to record cannot be compressed for some reason. Try changing the angle of the camera to the MEMORY FULL Not enough memory for recording in the current resolution mode. Change to another resolution Change quality or mode, or delete some images from the memory card delete unneeded (nages 45, 79) images.

That file name is already used. Delete the existing file or save the new file in a different folder.

The folder to which you are trying to move an image file already contains another image file with the same name. Change to another folder and try again.

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## **SPECIFICATIONS**

Recorded	Image

File Format Static, Panorama: JPEG standard: Movie: AVI/JPEG (for recording to CompactFlash card)

Recording Medium ...... CompactFlash card

Standard Memory Capacity, Number of Image Files, Computer Output Image Size

ı	Static				
	S (1280 x 960) / 14 (500KB/image) F (1280 x 960) / 19 (352KB/image) N (1280 x 960) / 33 (200KB/image) E (640 x 480) / 55 (112KB/image)				
	Movie: File Format AVI				
3.2seconds (320x240) / 8sets (896KB) 6.4seconds (320x240) / 4sets (1792KB) 9.6seconds (320x240) / 3sets (2100KB) 3.2seconds (160x120) / 30sets (224KB) 6.4seconds (160x120) / 16sets (448KB) 9.6seconds (160x120) / 10sets (672KB)					
	Movie: File Format JPEG				
	3.2seconds (320x240) / 6sets (1088KB) 6.4seconds (320x240) / 3sets (2176KB) 9.6seconds (320x240) / 2sets (3264KB) 3.2seconds (160x120) / 27sets (272KB) 6.4seconds (160x120) / 13sets (544KB)				

\* When using 8MB CF card.

9.6seconds (160x120) / 9sets (816KB)

•	Single image; all images in a folder; all images in memory (with image protection)
	1/3-inch CCD (Total Pixels: 1.31 mil-

lion, Effective Pixels; 1.25 million)

iens ior somm min)
. Digital 2x, 4x
External Phase Difference Auto Focus; manual focus with macro mode and focus lock
.0.3m to $\infty$ (1.0′ to $\infty$ ) for Normal focus; 10cm for macro (approximately 10cm to $\infty$ (3.9″ to $\infty$ ) with manual focus), from surface of protective lens filter
. Multi-pattern, center point, spot by CCD Program AE
2EV to +2EV (1/2EV units)
.CCD electronic shutter; mechanical shutter, 1/8 to 1/500 second (1 second in Night Scene Mode)
.f/2.8, 4, 5.6, 8, 11, 16 auto
Automatic, fixed (4 modes), manual switching
.10 seconds, 2 seconds
AUTO, ON, OFF, Red eye reduction Approximately 0.7 to 2 meters (2.3' to 6.6')

#### SPECIFICATIONS

	(122,100 pixels, 555 x 220)
Viewfinder	Monitor or optical viewfinder
Clock	Built-in quartz digital timepiece for time and date recording and storage with im- age data; auto calendar up to 2049
Input/Output Terminals	DIGITAL IN/OUT, AC adaptor connector, VIDEO OUT (NTSC, PAL)
***	Four AA-size alkaline or lithium batteries Four AA-size nickel-hydrogen re- chargeable batteries (NP-H3) AC adaptor (AD-C620)

Monitor......1.8" TFT, low-glare color HAST LCD

#### **Battery Life**

The values noted below indicate the number of hours before battery failure under normal operating temperature (25°C). These values are for reference only, and do not guarantee that any particular set of batteries actually will provide the service life indicated. Low temperatures shorten battery life.

Type of	AA-size Alkaline	AA-size Lithium
Operation	Batteries LR6	Batteries FR6
Continuous	Approximately	Approximately
Playback	110 minutes	210 minutes
Continuous	Approximately	Approximately
Recording	300 shots	840 shots

- . The above guidelines are based on the following battery types: Alkaline: MX1500 (AA) DURACELL ULTRA Lithium: Energizer
- · Battery life varies with brand
- Continuous recording values show the number of shots without using the flash. The number of shots depends on use of the flash and whether flash is turned on or off.

Power Consumption ....... Approximately 7.3W ..... 131(W) x 69(H) x 43(D) mm (5.2"(W) X 2.7"(H) X 1.7"(D)) .... Approximately 250g (8.8oz.) (excluding batteries) Standard Accessories ...... Strap; soft case; lens cap; video cable; Owner's Manual

- \* This camera does not have a separate battery to power its clock. Clock settings are cleared whenever power to the camera is cut off (by batteries going dead while the camera is not connected to an AC power outlet with the AC adaptor) for about 12 hours. After power is resumed, either by loading fresh batteries or connecting to an AC power outlet, you will have to set the correct time and date
- \* The liquid crystal panel built into this camera is the product of precision engineering, with an effective pixel rate of 99.99%. This also means, however that 0.01% of the pixels can be expected to fail to light or to remain lit at all times.

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