TOSHIBA INSTRUCTION MANUAL



To ensure that you use the Toshiba PDR-4300 Digital Still Camera safely and correctly, read this Instruction Manual carefully before you start using the camera. Once you have finished reading this Instruction Manual, keep it handy at all times.

DIGITAL STILL CAMERA

PDR-4300

In the space provided below, please record the n	nodel and Serial No. of your camera.
Model No. PDR-4300	Serial No.
Diagon ratain this information for future reference	

Please retain this information for future reference.

Attention

数码说明书之家 2005.08.20 www.54gg.com

For customers in the U.S.A.

DIGITAL STILL CAMERA PDR-4300



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

FCC Statement

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.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- © Change the direction of the radio or TV antenna.
 - Move the equipment or the radio or TV. For example, if the equipment is to the right of the TV, move it to the left of the TV.
 - Or, move the equipment farther away from the radio or TV.
- Plug the equipment into a different outlet. Don't plug your radio or TV into the same circuit as your equipment.
- © Ensure that all expansion slots (on the back or side of the equipment) are covered. Also, ensure that all metal retaining brackets are tightly attached to the equipment.
- lf these suggestions don't help, consult your equipment dealer or experienced radio/TV technician for help.

Getting Ready

Taking Photographs

Playing Back images

Erasing Images

Handy Functions

Other Applications

Additional Information Getting Ready

Taking Photographs

Playing Back Images

Erasing Images

Handy Functions

Other Applications

Additional Information

CAUTION

If you modify the camera in any way, without getting approval from Toshiba Corporation, your camera may violate FCC regulations. Violation of FCC regulations may cause the FCC to void your right to use the modified camera.

数码说明书之家

TOSHIBA AMERICA INFORMATION SYSTEMS, INC.

Imaging Systems Division 9740 Irvine Boulevard, Irvine, California 92618-1697 Phone Number: (800)288-1354

www.54gg.com

For customers in Canada CAUTION

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

Thank you for purchasing the Toshiba PDR-4300 Digital Still Camera.

To ensure that you use this camera safely and correctly, read this Instruction Manual carefully before you start using the camera. Once you have finished reading this Instruction Manual, keep it handy at all times.

Trademark Information

- Macintosh is a trademark of Apple Computer, Inc.
- Microsoft and Windows are registered trademarks of the Microsoft Corporation of the U.S. registered in the USA and other countries.
- SD is a trademark



Other companies or product names are trademarks or registered trademarks of the respective companies.

Conventions Used In This Manual

IMPORTANT

 Indicates items or details that you should observe to prevent loss of data, malfunction and impaired performance. Also indicates information relating to specifications and functions.

МЕМО

- · Indicates extra useful information.
- Indicates another page to refer to for extra information.

Notes on Copyright

Images taken with digital still cameras are for personal enjoyment only and should not be used, indicated, distributed or exhibited, etc. otherwise without the permission of the copyright holder as per copyright aws. Note that photographing some performances, exhibitions, etc., is restricted, even when photographs are taken for personal enjoyment. In addition, the transfer of memory cards (SD memory cards, etc.) containing copyrighted images and files is limited to purposes within the range permitted by copyright laws.

Software version upgrade

For better use, the firmware of the camera may be upgraded after shipment. The methods of version upgrade are available in our website.

Global Contacts . page 134.

Getting Ready

Taking Photographs

Playing Back Images

Erasing Images

Handy Functions

Other Applications

Additional Information

Safety Precautions

Getting Ready

Taking Photographs

Playing Back Images

Erasing Images

Handy Functions

Other Applications

Additional Information Read these safety precautions carefully before using the PDR-4300. These instructions contain valuable information on safe and proper use that will prevent harm and damage to the operator and other persons. Make sure that you fully understand the following details (indications) before proceeding to the main descriptions in this manual.

Indication definitions

Indication	Meaning
⚠ DANGER	This indicates the existence of an imminent hazard that death or catastrophic bodily injury*1 may result from improper use.
∆WARNING	This indicates the existence of a hazard that death or catastrophic bodily injury*1 may result from improper use.
△ CAUTION	This indicates the existence of a hazard that bodily injury*2 or property damage*3 may result from improper use.

- *1 "Catastrophic bodily injury" means loss of eyesight, burns (high and low temperatured), shock, fracture, poisoning, etc. which leaves a sequela and require hospitalization or prolonged treatment.
- *2 "Bodily injury" means injuries, burns, and shock which does not require hospitalization or prolonged treatment.
- *3 "Property damage" means extended harm to home, household effects, domesticated animals, and pets.

Graphic symbol definitions

Graphic symbol	Meaning
\Diamond	Indicates a prohibited action that must not be carried out. The actual prohibited action is indicated in the symbol or nearby graphically or described in text.
	Indicates a necessary action that must be carried out. The actual necessary action is indicated in the symbol or nearby graphically or described in text.

Exemption Clauses

- Toshiba Corporation bears no responsibility for any damages or losses arising from earthquakes, fire or any other act of God, acts by third parties, misuse by the user or use under extreme operating conditions
- Toshiba Corporation bears no responsibility for incidental damages (lost profit, suspension of business activities, corruption or loss of the memory contents, etc.)arising from the use of or the inability to use this unit.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from the incorrect use not in compliance with instructions in this instruction manual.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from malfunctions arising from combination with equipment or software that is not related to Toshiba Corporation.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from repair or modifications made by the user or cause to be made by the user and carried out by an unauthorized third party.
- Toshiba's liability, with the exception of a deliberate act or gross negligence by Toshiba, shall not exceed the purchase price of the product in any circumstances.

A DANGER

Do not heat, disassemble or throw the batteries into fire or water.

Doing might cause them to rupture, ignite or heat up, resulting in fire or major injury.



Do not strike the batteries with a hammer, or step on, drop or subject the batteries to strong impact.



Doing so might cause them to rupture, ignite or heat up, resulting in fire or major injury.

Use the batteries only for its originally intended purpose.

Using the batteries for any other purpose might cause it to rupture, ignite or heat up, resulting in fire or major injury.



Getting Ready

Taking Photographs

Playing Back Images

Erasing Images

> Handy Functions

Other Applications

Additional Information

Getting Ready

Taking Photographs

Playing Back Images

Handy Functions

Additional Information

⚠ WARNING

Should you ever notice smoke, a/ strange odor or excessive heat coming from the camera, immediately turn OFF the power andw.54 remove the batteries and AC adapter.

数码说明书之家 2005.08.29

Continued use in this state might cause fire, electric shock or burns. For details on repair, consult the store of purchase, or please contact the technical support number.

If foreign objects or water have entered the camera, immediately turn the power OFF and remove the batteries and AC adapter.



store of purchase, or please contact the technical support number. If the camera has fallen or its case is

damaged, immediately turn the power OFF and remove the batteries and AC adapter.

Continued use in this state might cause fire or electric shock. For details on repair, consult the store of purchase, or please contact the technical support number.

WARNING(continued)

Do not place the camera on inclined or unstable surfaces.



This might cause the camera to fall or tilt over.

Do not use in areas near water.

This might cause fire or electric shock. Take special care during rain, snow, on the beach or near the shore



Do not use the camera in the bath or shower.

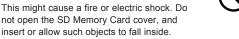


This might cause a fire or electric shock.

Do not allow metallic objects or other flammable foreign matter inside the camera.



not open the SD Memory Card cover, and



WARNING(continued)

Do not disassemble, change or repair the camera.

This might cause fire or electric shock. For details on repair and internal inspection, consult the store of purchase, or please contact the technical support number.



Keep the batteries out of the reach of children.

If a child swallows a battery, this might result in poisoning. If a child swallows a battery, immediately consult a physician.

⚠ WARNING(continued)



Do not touch power or TV antenna cords during a thunderstorm.

This might cause electric shock.



If left untreated, damage to the eye could be permanent.

immediately rinse with fresh water

If battery fluid enters the eyes,

and consult with a physician to

receive treatment.



Do not use the camera while you are walking, driving or riding a motorcycle.



This might cause you to fall over or result in a traffic accident

Use power supply that applies to the rating indicated on the AC cord.

Use of power supply other than the rating indicated on the AC cord might cause fire or electric shock.



Use only the specified batteries or the specified AC adapter.

Use of a battery or AC adapter other than specified, might cause fire, defects or malfunctions.



Getting Ready

Taking Photographs

Playing ack Images

Handy Functions

Other Applications

Getting Ready

Taking Photographs

Playing Back Images

rasing nages

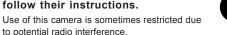
Handy Functions

Other Applications

Additional Information

A CAUTION

If you want to use the camera on an airplane, consult with the airline and follow their instructions.



Do not use the camera in humid, steamy, smoky or dusty places.

This might cause fire or electric shock.

Do not leave the camera in places where the temperature may rise significantly, such as inside a car.

This might adversely affect the case or the parts inside, resulting in fire.

Do not wrap the camera or place it in cloth or blankets.

This might cause heat to build up and deform the case, resulting in fire. Use the camera in a well-ventilated place.

CAUTION(continued)

Before you move the camera, disconnect cords and cables.

Failure to do this might damage cords and cables, resulting in fire or electric shock.



Do not drop or subject the camera to strong impact.

This might cause fire, electric shock or malfunctions.



Before you carry out maintenance on the camera, remove the battery and AC adapter.

Leaving these attached might cause electric shock.



Remove the batteries and AC adapter if you plan not to use the camera for a long time.



This might cause fire.

Insert the batteries paying careful attention to the polarity (+ or -) of the terminals.



Inserting the batteries with its polarities inverted might cause fire and injury, or damage the surrounding areas.

CAUTION(continued)

Do not charge the supplied batteries.

Doing so might cause them to rupture, ignite or heat up, resulting in fire or major injury.



Do not look at the sun through the camera viewfinder.

CAUTION(continued)

This may cause injury of the eyes.



Do not use the flash close to anyone's eyes.

This might cause damage to the person's evesight.



Do not leave dead or exhausted batteries in the camera.

Doing so might cause them to rupture, ignite or heat up, resulting in fire, major injury or damaging the camera



Do not subject the LCD monitor to impact.

If the LCD monitor is impacted, the glass on the screen may be broken and internal fluid may leak. If the internal fluid enters your eyes or comes into contact with your body or clothes, immediately rinse with fresh water. If the internal fluid enters your eyes, immediately consult a physician to receive treatment.



Do not use different types of batteries together, or mix old and new batteries.

Doing so might cause them to rupture, ignite or heat up, resulting in fire or major injury or damaging the camera.



Do not walk around with the camera swinging from the shoulder strap.

If you walk around with the camera hanging from your hand through the shoulder strap, the camera might come into contact to other people and cause injury, or damage to the camera or other objects.



Consult your dealer regarding the internal cleaning of the camera once every two years.

If dust is allowed to accumulate inside the camera for a long time, this might result in fire or defects. Consult your dealer regarding the cleaning costs.



Getting Ready

Taking Photographs

Playing Back Images

Erasing Images

> Handy Functions

Other Applications

> Additional Information

Additional Information

Notes On Handling Your Camera

When you use your camera, carefully read and strictly observe the Safety Precautions from page 4 onwards and the notes described below

•Avoid using or storing the camera in the following places:

- @ Places subject to humidity, dust and dirt
- @ Places subject to direct sunlight
- @ Places subject to high or low temperature
- @ Places filled with highly flammable gas
- @ Places near gasoline, benzene or paint thinner
- Places subject to strong vibrations
- Places subject to smoke or steam
- Places subject to strong magnetic fields (such as electric motors, transformers or magnets)
- @ Places contacting chemicals such as pesticides or next to rubber or vinyl products for long periods

Do not expose the camera to sand or dust.

The PDR-4300 is particularly sensitive to sand and dust. If the camera comes into contact with sand or dust, not only will the camera become damaged, it will also no longer be repairable.

Pay special attention when using the camera at the beach or where sand or dust is likely to be present.

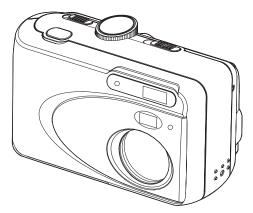
Notes On Condensation

Due to a sudden change in temperature, such as when you move the camera from a cold location to a warm one, water droplets (condensation) may form on the inside of the camera or on the lens. When this occurs, switch the camera OFF, and wait an hour before using the camera. Condensation may also form on the SD Memory Card. If this happens, remove the SD Memory Card, wipe off any condensation and wait a short time before using it again.

Using Your Camera Correctly (continued)

Carrying Out Maintenance on Your Camera

- To prevent the lens, surface of the LCD monitor or viewfinder from being scratched, blow off any dust from these parts with a blower brush and lightly wipe with a soft dry cloth.
- © Clean the body of the camera with a soft dry cloth. Do not use volatile liquids such as paint thinner, benzene or insecticide, as these may react with the camera body and cause deformation or remove the coating.



Getting Ready

Notes On Batteries

- To extend the use of the camera, we strongly recommend that you only use the following types of batteries:
- Nickel Metal Hydride [NiMh] (Extended Life, Rechargeable)
- · Lithium (Extended Life, Not Rechargeable)
- ®Battery performance in general (especially Alkaline) may vary depending on individual brand, length of storage since manufacture, temperature, and operating mode of the digital camera, such as play back using LCD and strobe. Low temperatures (50 degrees Fahrenheit/10 degrees Celsius or below) can also affect the performance of the battery and decrease the number of pictures taken when compared to picture taking in warmer conditions.
- The supplied Alkaline batteries are only for operation check when you buy your camera, so the battery life may be short.
- The use of manganese type batteries is not suitable for this product due to the low number of pictures that can be taken with this type of battery.
- When the camera is not in use for an extended period, please remove the batteries from the camera to extend battery life, and to prevent damage such as battery leakage. (Once the batteries have been removed from the camera, you will need to re-set the date and time within the SETUP MENU.)

Using Your Camera Correctly (continued)

Notes On Handling Batteries

! WARNING

When you use the battery, carefully read and strictly observe the warnings and cautions indicated on the battery.

Failure to do this might cause battery to rupture, ignite or heat up, resulting in fire, major injury or damaging the camera.

About Battery Use

- @ Do not use batteries other than that specified.
- O Do not insert batteries in the wrong direction.
- @ Do not charge, heat, open, or short-circuit the batteries. Do not throw batteries into fire.
- On not charge the supplied batteries.
- When using rechargeable batteries, follow the instructions for the batteries and the charger for safe handling.
 (This camera can not charge the rechargeable batteries.)
- On not leave dead or exhausted batteries in the camera.
- © Do not use different types of batteries together, or mix old and new batteries.
- © Do not remove the batteries immediately after a prolonged use of the camera, as they may have become heated.

Neglecting the above may cause battery leakage and corrosion, resulting in burns or injury.

If your fingers or clothes come into contact with the battery acid, wash them immediately. If your eyes come in contact with battery acid, wash them and immediately consult your doctor.

Notes On Handling the AC Adapter

Be sure to use only the specified AC adapter (PDR-AC20) (sold separately). Using a different AC adapter might cause the camera to malfunction.

When you use the AC adapter, carefully read and strictly observe the Safety Precautions from page 4 onwards and the notes described below.

- ® Be sure that you do not allow the AC adapter to contact any other metal object as this might cause a short circuit.
- To connect the AC adapter, firmly insert the plug on the end of the cable into the DC IN 5V terminal. Do not insert the plug into other terminals. This might cause the camera to malfunction.
- ® Before you disconnect the connector cable, turn the camera OFF and then disconnect the cable holding
 it by its plug. Do not disconnect the connector cable by pulling the actual cable.
- On not drop the AC adapter or subject it to strong impacts.
- @ Do not use the AC adapter in very hot and humid locations.
- On not plug in the AC adapter while you are using the battery. Switch the camera OFF first.
- The AC adapter is for indoor use only.
- © Use only the specified AC adapter. Do not use other AC adapters.
- ® The AC adapter may sometimes become warm during use. This is normal and not a malfunction.
- © Buzzing or whirring noises may come from inside the camera. This is normal and not a malfunction.
- © Do not use the AC adapter near a radio as it could interfere with radio signal reception.
- If you remove the battery or AC adapter while the camera is in operation, the date may be lost from memory. If this happens, reset the date.

IMPORTANT

- Use the power supply indicated on the supplied AC cord. When using power supply other than the displayed voltage in other countries/region, please purchase the AC cord that applies to the standard of the country/region.
- The AC adapter can be used with 100V to 240V.

The Function Map

There are various ways you can take photographs on the PDR-4300, by using the settings provided by the camera itself or by adjusting the settings to suit your particular photographic requirements. In addition to photographic functions, the PDR-4300 is provided with other handy functions. We suggest that you look at the function map below before you start using the PDR-4300.

Read these pages first

Let's get ready to use PDR-4300(P.19-P.40)

Let's learn about basic operation

- Turning the Power ON(P.36)
- · Photography(P.44)
- Playing back photography images(P.88)
- Erasing Images(P.95)

Taking Photographs

STEP 1 - Taking photography(P.44)

STEP 2 – Leaving camera setting up to your camera (P.50)

- The camera automatically adjusts the focus and exposure settings.(P.51)
- Taking Portrait Shots(P.53)
- Taking Landscape Shots(P.53)
- Taking Shots of Portraits at Night(P.54)
- Taking Continuous Shots of Moving Objects(P.55)

STEP 3 – Utilizing the various photography modes

- Zoom Photography(P.56)
- Focus Photography(P.58)
- Photography Using the Self-timer(P.59)
- Photography Using the Flash(P.60)
- Making movies(P.81)

STEP 4 – Setting the modes in more detail to make your photographs turn out more as you intended

- Setting Image Size and Quality(P.47)
- Taking Shots with the Priority Given to Aperture (P.69)
- Taking Shots with the Priority Given to Shutter Speed(P.71)
- Extended Exposure Photography(P.74)
- Compensation Exposure(P.75)
- Automatic Exposure Bracketing (AEB Photography)(P.77)
- Taking Photos Continuously(P.78)
- Setting White Balance(P.64)

Playing back your photographed images

STEP 1 – Let's playback some images(P.88)

STEP 2 – Selecting the various ways to play back images

- Playing back movies(P.89)
- Enlarging Photographed Images(P.92)
- Auto Playback(P.93)
- Simple Movie Playback(P.94)
- · Displaying Detailed Information of Images(P.117)

Erasing images

STEP 1 - Erasing Images(P.95)

STEP 2 - Other ways to erase images

- Erasing Folders(P.97)
- Formatting SD Memory Card(P.99)

Setting the basic camera settings

- Setting the Date and Time(P.113)
- Formatting SD Memory Card(P.99)
- Adjusting the LCD Monitor Brightness(P.86)
- Switching LCD Monitor Display (P.118)
- Turning the LCD Monitor Display OFF (P.118)
- Turning the Beep OFF (P.112)
- Setting the Color of Images(Color/Black and White/Sepia)(P.84)
- Changing the Power OFF Time(P.112)
- Changing the LCD Monitor Display Language(P.113)

You can also do this

- -The PDR-4300 also has lots of other features-
- Protecting Images (P.108)
- Changing the size of Images(P.100)
- Compressing Images(P.102)
- Print Information (P.104)
- Displaying Detailed Information of Images (P.117)
- Switching LCD Monitor Display(P.118)
- Taking and Playing Back Photographs on a TV(P.119)

Loading images on a personal computer

Loading images on a personal computer, separate "Software Manual"

MEMO

• All OSD images used in this Instruction Manual are in English.

Contents

The name in parentheses () is the function name on the PDR-4300 Preface

Preface
Getting Ready
Taking Photographs
 ⊜ How to Hold Your Camera

Taking Photographs in a Variety of Modes	
([SCENE] Mode)	51
© Zoom Photography	56
© Changing the Focus	58
Self-timer Photography	59
Photography Using the Flash	60
Manual Settings	62
Exposure control (EXP.)	64
White Balance (W.B.)	64
Metering system (A.E.)	65
Single, continuous or AEB	
photography mode (S/C)	65
Focus Mode	67
Photography in the Program Mode	68
Photography in the Aperture-priority Mode	69
Photography in	
the Shutter Speed-priority Mode	71
Photography in the Full Manual Mode	73
Extended Exposure Photography	
(Bulb Photography)	74
©Exposure Compensation	75
Taking Shots with the Automatic	
Exposure Bracketing (AEB Photography)	77
Taking Photographs Continuously	
(Burst Photography)	78
Making Movies	81
Changing the Preset Conditions	
(RECORDING MENU)	8
PREVIEW	84
COLOR	84
ISO	8
SHARPNESS	86
CONTRAST	86
DIGITAL ZOOM	86

	CD (*)	TIME & DATE
	(Zoom Playback)	(In Photography Mode)
	© Erasing Images (Erase Frame)95 © Erasing Folders (All Images in a Folder/All Folders)97 © Formatting the SD Memory Card99	Additional Information
1 (Handy Functions	Warnings and Messages Displayed on
	© Reducing the Image Size(Resize)	LCD Monitor
	Other Applications	
	Basic Settings (★ mode)111 AUTO POWER OFF112	

SOUND112

TIME & DATE OSD LANGUAGE VIDEO OUT QUALITY FRAME NUMBER SYSTEM INFO	··· 113 ··· 114 ··· 114 ··· 115
(In Playback Mode) ©DISP Button and LCD Monitor Display	
(In Photography Mode)	119 120 121 122
Additional Information	
Specifications AC Adapter Specifications Warnings and Messages Displayed on LCD Monitor Troubleshooting Glossary	····128 ····129 ····131

Make sure that you have all of the items below before you start using your camera.

Alkaline batteries (4) (size AA)



Video cable (1)



USB cable (1)



Strap (1)



Camera case (1)



Software application (1) (CD-ROM)



SD Memory Card (1)



IR Remote Controller (1)



AC Adapter (Sold Separately)

Names of Parts

Setting

Taking Photographs

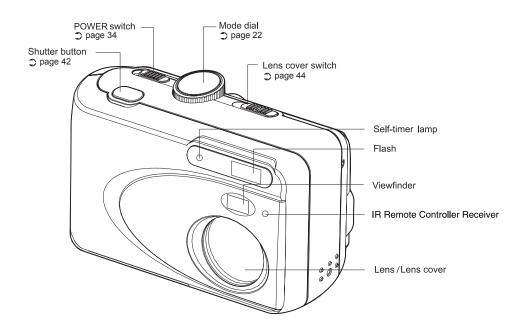
Playing Back Images

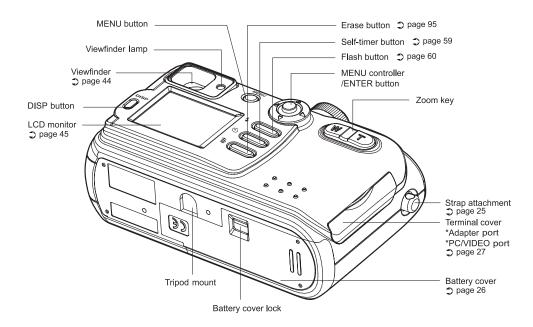
Erasing Images

Handy Functions

Other Applications

Additional Information

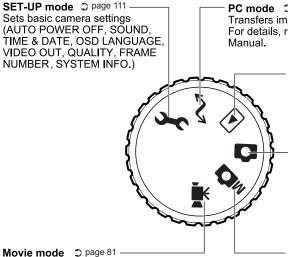




Takes short Movies for playback

on camera or computer.

Mode dial



PC mode ⊃ page 120
Transfers images to a PC.
For details, refer to the Software Manual.

Playback mode ⊃ page 88 In this mode, you can select image playback, size change, compression, protect mode, and writing of development (printing) information.

Auto Photography mode ⊃ page 44
This mode enables automatic photography in accordance with the photographic conditions. In this mode, the exposure (combination of shutter speed and aperture) is automatically controlled to facilitate photography.

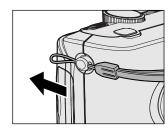
Manual Photography mode ⊃ page 62 Manually sets white balance, exposure, aperture value, shutter speed and AE (auto-exposure) position.

This strap is handy for carrying your camera around.

To prevent your camera from dropping during photography, hang the strap around your wrist.

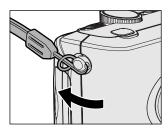


Pass the end of the strap through the strap attachment on the camera.



2)

Pass the strap through the loop and pull.



IMPORTANT

• When the camera is not in use, be sure to close the lens by sliding the lens cover switch to close position. Turn off the power to retract the lens unit before closing the lens cover.

Getting

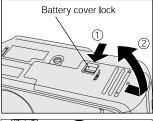
laking notographs This camera uses four size AA batteries. For details on handling batteries, be sure to read page 12.

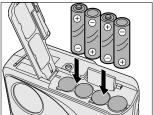
Loading the Batteries

IMPORTANT

- Before you load or remove the batteries, be sure to turn the camera off.
- If the battery is loaded or removed with the power on, the date setting may return to its default or the camera settings may be reset.
- The camera may not start normally if you load batteries not on the power off status. In this case, turn off, then turn on again.
- Unlock the battery cover lock ① .
- Pull open the battery door in the direction of the open arrow @
 - Load batteries in the battery compartment.

 Make sure they are loaded in their polarity as shown inside the battery compartment.



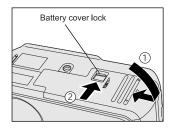


Installing the batteries(continued)



Close the battery door 1 and move the battery cover lockswitch in the direction of the Lock arrow 2.

Make sure that the battery cover is firmly closed.



Note:

If "CARD COVER LOCK IS RELEASED" message popped out on the LCD monitor, please check the battery cover lock switch. Make sure it is locked in the direction of the Lock arrow

Removing the Batteries

Reverse the procedure for "Loading the Batteries" and remove the batteries .

IMPORTANT

• When removing the batteries, take care not to drop the camera of the batteries by mistake.

Getting Ready

Battery Wear

When the power is ON, the remaining battery power is displayed on the LCD monitor.

LCD Monitor	Remaining Battery Power	
	[FULL] Sufficient battery power, or the AC adapter is connected	
	[HALF] Half battery power or less	
	[LITTLE] Little battery power left	
	[EMPTY] No battery power left. Replace with new batteries	

МЕМО

- When you use the camera for the first time or if you have left the camera for a long time without the battery loaded, set the date.
- If the batteries are exhausted and need replacement, do not connect the AC adapter. It may cause an incorrect display of remaining battery power.
- Battery power measure is based on amount of power required for camera LCD, flash, photography and playback.
- · About the battery duration time

The following shows the number of frames/time capable of continuous photographing and playback on condition of using new alkaline batteries.

The battery duration time may vary depending on environmental temperature, image size, image quality or using frequency of zoom.

In photography mode (using strobe every time in a normal temperature)

When LCD monitor is ON approx. 240 frames

When LCD monitor is OFF approx. 300 frames

In playback mode (slideshow approx. 110 min. continuous playback time)

Using the Power Outlet

If you use the AC adapter(sold separately) in a room with a power outlet, you can take photographs for an extended period of time. This also prevents failed photographs due to battery wear or failed transfer of data to a PC. For details on handling the AC adapter, be sure to read page 14.

IMPORTANT

- Before you connect or disconnect the AC adapter, be sure to turn the camera off. If the AC
 adapter is connected or disconnected with the power ON, the camera may malfunction or
 recorded data may be erased (destroyed) even if the batteries are loaded.
- The camera may not start normally if you load batteries not on the power off status. In this case, slide the Power knob to turn off the power, then turn on again.
- Insert the AC adapter connector plug into the DC IN 5V terminal on the camera.



Insert the AC adapter power plug into the power outlet.

IMPORTANT

- When the AC adapter is connected after the batteries have been installed, the power turns off immediately. Please turn on the power again to resume operation.
- Use the power supply indicated on the supplied AC cord. When using power supply
 other than the displayed voltage in other countries/region, please purchase the AC cord
 that applies to the standard of the country/region.

The AC adapter can be used with 100V to 240V.

About SD Memory Card

SD Memory Card is a storage medium for saving images that you have photographed. Even if the camera's power is turn OFF, the images saved on the SD Memory Card are not erased. SD Memory Card can be repeated read and written.

SD Memory Card having the following storage capacity can be used on your camera:

8MB/16MB/32MB/64MB/128MB/256/512MB

It is recommended to use SD Memory Card produced by TOSHIBA.

This camera uses SD Memory Card version 1.01.

Notes on SD Memory Card

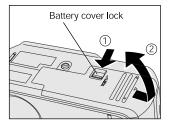
- Remove and insert SD Memory Card with the camera's power turned off.
- Recorded data may be erased (destroyed) in the situations listed below.
- When the SD Memory Card is used incorrectly by the user or a third party.
- When the SD Memory Card is exposed to static electricity or electrical noise.
- When the SD Memory Card is removed or the camera is then switched OFF during data recording, data erasing, frame advance when images are being played back or during formatting of the SD Memory Card.
- We recommend copying and saving important data onto another storage medium (floppy disk, harddisk, MO disk, etc.).
- Never remove the SD Memory Card or switch the camera OFF during data recording or during data erasing (SD Memory Card formatting). These actions might damage the SD Memory Card.
- Use only the SD Memory Card specified for use with the camera. The use of other SD Memory Card could damage the camera.
- SD Memory Card are precision electronic devices. Do not bend, drop, or subject SD Memory Card to
 excessive shocks. Also, do not carry SD Memory Card in locations such as a trouser pocket. This might
 subject the SD Memory Card to excessive force when you sit down, damaging the SD Memory Card.
- Do not use or store SD Memory Card in environments likely to be affected by strong static electricity or electrical noise.
- Do not use or store SD Memory Card in very hot, humid or corrosive environments.
- Take care not to touch the SD Memory Card's electrodes (metal contacts) or allow the electrodes to become soiled. Use a dry lint-free cloth to wipe away any dirt.
- To avoid damage caused by static electricity during transportation or storage, always use the special static-free case provided.
- If you are not using the camera for a long period of time, remove the SD Memory Card and store it in a safe place.

- Inserting a SD Memory Card that is charged with static electricity into your camera may cause it to malfunction. If this occurs, switch the camera OFF and then ON again.
- The SD Memory Card may feel warm when it is removed from the camera after the camera is used for a long time. This is normal and not a malfunction.
- The SD Memory Card has a limited service life. If images can no longer be written or erased, buy a new SD Memory Card.
- It is recommended to format SD Memory Card via camera, not by other devices.

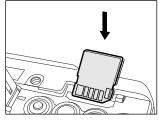
Loading SD Memory Card

- 1 Slide the POWER switch to OFF position, to turn the power off.
- 2 Unlock the battery cover lock switch.

 Pull open the battery door in the direction of the open arrow.



Firmly insert the SD Memory Card as far as it can go with the SD Memory Card electrodes (metal contacts) facing the front of the camera.



About SD Memory Card (continued)

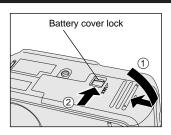


Close the battery door and move the battery cover lock switch in the direction of the Lock arrow.

Make sure that the battery cover is firmly closed.

Note:

- If "CARD COVER LOCK IS RELEASED" message popped out on the LCD monitor, please check the battery cover lock switch. Make sure it is locked in the direction of the Lock arrow.
- ® Before you use the new SD Memory Card for the first time, be sure to format the SD Memory Card.



Getting Ready

Taking hotograph

Playing Back Images

Erasing Images

Handy Functions

> Other Applicatio

Additional Information

Removing SD Memory Card

IMPORTANT

 Never open the battery cover door or remove the SD Memory Card while data is being recorded to the SD Memory Card (viewfinder lamp flashes). This might damage the SD Memory Card or corrupt the data on the SD Memory Card.

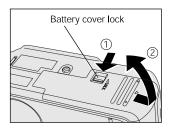


Slide the POWER switch to OFF position, to turn the power off.

МЕМО

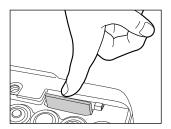
Unlock the battery cover lock switch.

Pull open the battery door in the direction of the open arrow.



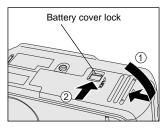
Push the SD Memory Card in as far as it can go, and pull it out with your fingers.

If you push SD Memory Card once in as far as it can go, it will protrude slightly. Pull it out with your fingers.

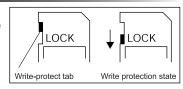


Close the battery door and move the battery cover lock switch in the direction of the Lock arrow.

Make sure that the battery cover is firmly closed.



To prevent valuable data from being erased, move the write-protect knob to the lock arrow direction on the SD Memory Card. Data can no longer be recorded or erased from SD Memory Card. To write or erase data from SD Memory Card, unlock the write-protect knob to unlock direction.



IMPORTANT

• If no operation is carried out for a fixed amount of time (default: 1 minute), the power is turned off to prevent battery wear. This is called "Auto Power OFF".

Turning the Power ON



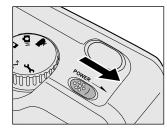
Slide the lens cover switch toward open direction .

2 Slide the POWER switch to ON position, to turn on the power.

In the photography modes (, M or 🐙),

When the camera is turned on, set the mode dial to the desired mode.

the lens extends from the camera body.
When the camera is turned ON, the Auto Power OFF function starts to work.



Turning the Power OFF



Slide the POWER switch to OFF position, to turn off the power.

The power is turned off, and the lens returns to its original position in the body. Close the lens by sliding the lens cover switch to close position •.

Using the IR Remote Controller

Notes on IR Remote Controller Main Unit

Usable Range
Distance:Within 5 meters
Angle:Within 30°right and left



Point the IR Remote Controller toward the light receptor unit of the camera to use.

- · Do not drop, shake, or subject to physical shock.
- · Do not spill water on or place on moist areas.
- · Do not disassemble.
- Do not place near or on areas subject to high temperatures.
- Do not expose the remote controller light receptor unit to bright light.

Photography Using the IR Remote Controller

On [and [Ma] mode

Recording is possible with the self-timer.

Recording will begin 2 seconds after pressing the IR Remote Controller button.

(Recording will also begin after 2 seconds when the self-timer is set to 10 seconds.)

On [🕒] mode

The next image will be shown.

Notes on Remote Controller Battery

Battery: Coin Cell Lithium Battery CR2025

Slide out the lower area of the IR Remote Controller when changing the battery as shown in the diagram.



Be sure to confirm the position of the + and - poles when inserting the battery.

Replace the battery when the remote controller is operating poorly or when the distance for operation of the remote controller becomes limited.

Remove the battery when not using the remote controller for prolong periods.

The battery of the remote controller cannot be recharged.

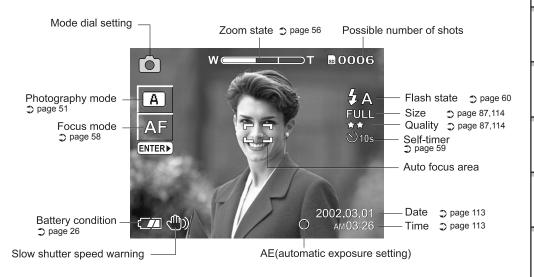
If liquid should ever leak from the battery, wipe the liquid completely from the remote controller case before replacing with a new battery.

- O not use anything other than the designated battery.
- O Do not insert with the + and poles reversed.
- O not recharge, heat, disassemble, short circuit, or place in fire.
- O not leave exhausted battery in the remote controller.
- O Do not place in reach of infants and small children.

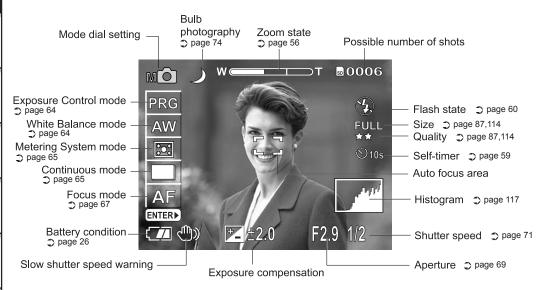
LCD Monitor Display

The text, numbers and icons that are displayed on the LCD monitor vary according to the current settings. The LCD monitor automatically turns ON if necessary even if it is set to OFF.

In [🗖] Mode



In [M] Mode

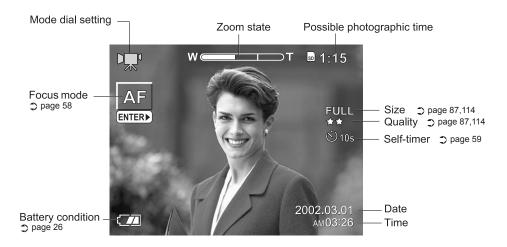


Histogram:

A histogram is a graphic representation of the tones of the subject. The horizontal axis of the histogram shows the brightness (increasing brightness from left to right) and the vertical axis shows the number of pixels at each brightness level.

LCD Monitor Display(continued)

In [• ™] Mode



МЕМО

- The size of the data to be recorded varies according to the amount of detail in the subject image. So, the number of images that can be photographed after an image is recorded sometimes does not decrease.
- The display is momentarily disrupted after recording an image or the mode is switched.
 This does not affect photography.

In [🕒] Mode



How to Hold Your Camera

When taking a photograph, hold the camera firmly and prevent your finger or strap from covering the lens, flash or flash sensor.

Right

Camera held with both hands with your arms firmly held against the sides of your chest



Wrong

Fingers held over the lens



Ready

lakıng ⊃hotographs

Playing

Erasing

Handy Functions

Application:

Additional Information The shutter button can be pressed down in two stages: half way down and fully down. When pressed half way down, AF (auto-focus) and AE (auto exposure) are carried out. When pressed fully down, the camera takes a picture.

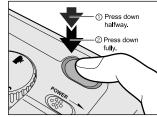


Press the shutter button down half way ①. AF (auto-focus) and AE (auto exposure) start to function. When AF or AE are locked, the beep tone sounds and the viewfinder lamp lights (turns green).



Press and hold the shutter button down fully ② . The camera takes a picture.

The viewfinder lamp flashes while image data is being recorded onto the SD Memory Card.



IMPORTANT

 Never open the battery door or remove the SD Memory Card while an image is being recorded.

This may corrupt the data on the SD Memory Card or damage the SD Memory Card itself.

МЕМО

- The image in the LCD monitor sometimes darkens from the time that the shutter button is pressed down halfway until the image becomes focused.
- To set the focus or exposure for a subject outside the center of the intended image, point the camera directly at the subject or desired exposure (lighting), press and hold the shutter button halfway. Now, with the shutter button still held halfway down, you can turn the direction of the camera and frame your image with the focus and exposure locked. Press the shutter button down fully to complete capturing of the image.
- Moving the camera as you press the shutter button will result in a blurred image.
- The PDR-4300 uses an accurate auto focus mechanism. However, the PDR-4300 may have difficulty focusing or not be able to focus at all for subjects and situations such as the following:
- When the subject is distant and dark
- When there are objects in front of or behind the subject (such as an animal in a cage or a person in front of a tree)
- Subjects with little reflection, such as hair or fur
- Subjects with no solidity, such as smoke or flames
- Subjects viewed through glass
- Subjects moving at high speed
- Very shiny subjects such as a mirror or car body
- Extremely low contrast subjects
- Subjects that have low contrast and merge into the background (such as white walls or subjects dressed in the same color as the background)
- If the image cannot be focused, the focus is automatically fixed to infinity. (When the flash is necessary at this time, it is simultaneously fixed to illuminate objects 1.5 meters (five feet) away. During macro photography, the flash is aligned with the wide position.)

Setting

laking hotographs

Playing Back Images

Erasing

Handy Functions This is the most commonly used photography mode.

In this mode, exposure (combination of shutter speed and aperture) is automatically controlled to facilitate photography. There are two ways of taking photographs in this mode: using the viewfinder and using the LCD monitor.

Using the Viewfinder



Get ready to take the photograph.

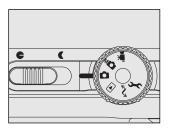
Load the batteries and the SD Memory Card into the camera.

2

Slide the power switch to ON position, to turn on the power.

Slide the lens cover switch to open direction beforehand \(\ \extstyle \).

Set the mode dial to [a].

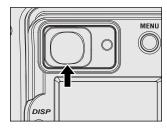




Turn the LCD monitor OFF.

To reduce the amount of battery wear, we recommend turning the LCD monitor display OFF, and using the viewfinder to take photographs.

S Look through the viewfinder to compose the picture.



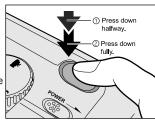
Additional Information

Photography (Auto Photography)(continued)



Press the shutter button down half way \bigcirc , and press it down fully \bigcirc .

- Pressing the shutter button down half way adjusts the exposure, and pressing the shutter button down fully takes the shot.
- When the focus and exposure are adjusted, the viewfinder lamp lights.
- If you shoot a picture, when preview is set to ON, a preview image is displayed on screen for about two seconds.
- The viewfinder lamp flashes while image data is being recorded onto the SD Memory Card.



Getting Ready

Taking Photographs

> Playing Back Image

> > Erasing Images

Handy Functions

Other Applications

Additional Information

Using the LCD Monitor



Get ready to take the photograph.

Load the batteries and the SD Memory Card into the camera.



Slide the power switch to ON position, to turn on the power.

Slide the lens cover switch to open direction \(\bigcup \) beforehand.



Set the mode dial to [a].



Look at the image on the LCD monitor to compose the picture.



Ready

lakilig Photographs

Playing Back Images

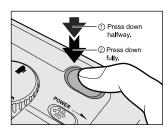
rasing

Handy

Other

Additional Information Press the shutter button down half way ①, and press it down fully ②.

- Pressing the shutter button down half way adjusts the exposure, and pressing the shutter button down fully takes the shot.
- When the focus and exposure are adjusted, the viewfinder lamp lights.
- If you shoot a picture, when preview is set to ON, a preview image is displayed on screen for about two seconds.
- The viewfinder lamp flashes while image data is being recorded onto the SD Memory Card.



MEMO

- The LCD monitor sometimes displays bright, dark or colored spots at all times. This is not a malfunction. These spots do not appear in the photographed image.
- The image is not displayed on the LCD monitor while the shutter button is pressed down fully.

Setting the Image Size and Quality

Set the size (number of pixels) and quality (compression ratio) of the image to be photographed. Change the setting according to how the image is to be used and the remaining amount of space in the SD Memory Card.

In [🗖], [м🗖], or [🐙] Mode

- 1 Press the Menu button.
- Press the ▼ button until the QUALITY is highlighted, and press the ▶ button.

The LCD shows the QUALITY menu.

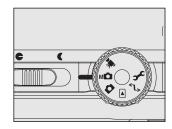
Press the ▲ or ▼ button to select STILL/MOVIE, and press the ▶ button.

The size item is highlighted.

- Press the ▲ or ▼ button to select the size setting user desired to set, and press the ENTER button.

 The QUALITY item is highlighted.
- Press the ▲ or ▼ button to select the quality setting user desired to set, and press the ENTER button.
- Press the ▲ or ▼ button until the OK is highlighted, and press the ENTER button.

These combinations are set and the LCD monitor returns to previous mode.





Getting Read

Taking Photographs

Playing Back Images

> Erasing Images

Handy Functions

Other Applications

Additional Information In [🖍] Mode

- Set the mode dial to [SETUP MENU appears.
- Press the ▲ or ▼ button until the QUALITY is highlighted, and press the ▶ button.

Press the ▲ or ▼ button to select STILL/MOVIE, and press the ▶ button.

The size item is highlighted.

- Press the ▲ or ▼ button to select the size setting user desired to set, and press the ENTER button.
 - The QUALITY item is highlighted.

The LCD shows the QUALITY menu.

- Press the ▲ or ▼ button to select the quality setting user desired to set, and press the ENTER button.
- Press the ▲ or ▼ button until the OK is highlighted, and press the ENTER button.

These combinations are set and the LCD monitor returns to SETUP MENU.



Setting the Image Size and Quality(continued)

МЕМО

- To make the image smaller, it is more effective to reduce the size first and then reduce image quality.
- After you have taken a photograph, you can reduce its size and quality.
- The memory size of the image varies according to the subject.
- The compression ratio is given for reference only.
- In movie mode, the size setting cannot be set to SMALL.

Getting Ready

hotographs

Playing Back Images Setting Ready

> laking hotographs

Playing 3ack Images

Erasing

Handy

Other Applications

Additional Information This mode enables automatic photography according to the photographic conditions. Photographs can be taken easily in this mode as the camera automatically makes the setting suitable to the conditions. The Auto Select mode has the following options. Choose the option to suit the image you want to photograph.

A : Automatically adjusts the focus and exposure settings

: Portrait shot

: Landscape shot

: Sports shot

: Night shot

: 16 multi-photography shot

In the Auto Select mode, there are some settings that cannot be changed as the camera makes the settings automatically. These settings vary according to the mode.

Focus photography

A 🚨 🛕 💸 🚅 : Can be set

Exposure compensation

A 🚣 🕰 🛠 🍱 : Cannot be specified (set automatically)

About flash photography

A : Flash can be set as required in this mode

: Automatically fixed to red-eye auto
: Automatically fixed to slow synchro

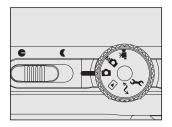
: Flash photography is not possible

Taking Photographs in a Variety of Modes ([SCENE >] Mode)

Set the appropriate scene mode from: [A] automatically adjusts the focus and exposure settings, [A] portrait, [A] landscape, [X] sports, [A] multi photography mode options.



Set the mode dial to [🗖].



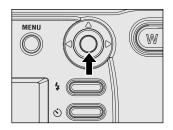






Press ENTER.

[SCENE] is displayed on the LCD monitor.







Getting Ready

Taking Photographs

Playing

Erasing

Handy

Other Applications

Additional Information Press ▶ to display option menu, press ▲ or ▼ to select options and press ENTER.

Pressing ENTER selects the setting. To cancel, press ◀.

[A] : Automatically adjusts the focus and exposure settings

[🚣] : Portrait

] : Landscape

→] : Night

]:16-frame multi





Press ENTER.

The icon of the selected mode is displayed on the upper left side of the LCD monitor. The camera is ready to take photographs.



Compose the picture, press the shutter button down halfway, and press it down fully.

The camera takes the picture.

MEMO

 Optimum print effect for a selected scene is available by using a PRINT Image Matching compatible printer.

Taking Photographs in a Variety of Modes ([SCENE▶] Mode) (continued)

[A] Automatically adjusts the focus and exposure settings

The camera automatically adjusts the focus and exposure settings to take photographs.

[🕰] Portrait

Select this option to make people stand out with the background out-of-focus.



Landscape

Select this option to take photographs of distant scenery or landscapes.



Getting Ready

Taking Photograph:

Playing Back Images

> Erasing Images

Handy Functions

Other Applications

> Additional Information

[🤻] Sports

Select this option to take photographs of fast-moving subjects.



[🛂] Night

Select this option to take photographs of people against a dusk or night-time background.

МЕМО

- When the Night mode is selected, the flash mode is fixed to Slow Synchro (the flash is fired at a slower shutter speed.)
- If you take a photograph with a dark background or at a dark place, the shutter speed slows down, and the slow shutter speed warning is displayed. (When the shutter is pressed halfway down, the viewfinder lamp blinks green and the slow shutter speed mark [()] is displayed in the LCD monitor.) To prevent distorted image, we recommend using a tripod to keep the camera stable.



Taking Photographs in a Variety of Modes ([SCENE▶] Mode) (continued)

[==] 16-frame multi

This mode takes 16 shots continuously at 0.13 second intervals (7.5 frames/second). The 16 photographed images are saved as one image (FULL size: 2400 x 1600 pixels).

This mode is effective for continuously photographing moving subjects.



MEMO

- Though zoom playback is not possible, playback of multi image pictures is possible.
- · Digital zoom photography is not possible.
- Photographs cannot be taken at HALF size or SMALL size. When HALF size or SMALL size is set before you select multi photography, the setting is automatically changed to FULL size. When multi photography is canceled, the setting returns to HALF size or SMALL size.

Setting Ready

Taking hotographs

Playing Back Images

Erasing

Handy Functions

Other Application

Additional Information Zoom photography allows you to take zoom shots up to 2.8 times the size or wide-angle photography depending on the distance up to the subject. You can also enlarge the center of the screen and take photographs in the digital zoom mode with the focal distance increased by a factor of 2.2.

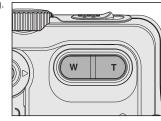


Set the mode dial to [] or [M].



Compose the picture using the Zoom key.

- Pressing the Zoom key towards the "T" zooms in on the subject, and enlarges the subject on the LCD monitor.
- Pressing the Zoom key towards the "W" provides a wider angle picture.
- The lens position moves according to the Zoom key setting.



Digital Zoom Photography

To set the digital zoom:

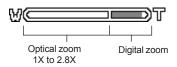
- Press the MENU button.
- (2) Use ▲ or ▼ to select [DIGITAL ZOOM] and press ▶.
- ③ Use ▲ or ▼ to select [ON] and press ENTER.
- 4 Press the MENU button.
- ⑤ To activate digital zoom, press the Zoom key completely towards the "T" and hold it until the image on the LCD expands.



Press the shutter button down halfway, and press it down fully.

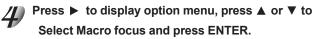
МЕМО

- The digital zoom photography is canceled by pressing the DISP button to turn the LCD monitor off. On the LCD monitor display off status, the digital zoom photography is not possible as well.
- The digital zoom photography is not possible in the 16-frame multi mode.
- The Zoom switch setting is automatically canceled by either turning the camera OFF or by activation of the Auto Power OFF function.
- · You can check the zoom status in the LCD monitor.











[🚜] Macro Focus

[1m] The camera will focus on subjects in a distance of 1m to take photos

[3m] The camera will focus on subjects in a distance of 3m to take photos

 ∞ The camera will focus on subjects in a distance of ∞ to take photo



Press the shutter button halfway down, and press it down fully.

МЕМО

• The macro photography mode is used when the distance to the subject is between 10 cm at wide to infinity. In the macro photography mode, the LCD monitor automatically turns ON. Take the photograph while viewing the LCD monitor.

■0006

\$A

(a) SCENE >

FOCUS>

- · Macro photography is not canceled even if the camera is turned off or the Auto Power OFF function is activated.
- · Once macro photography is selected in Focus mode, it will remain in the same mode either in [🗖], [м🗗], or [🐙].

Self-timer Photography

When the self-timer is used, the camera automatically takes a picture after the preset time (2 or 10 seconds).

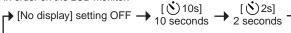


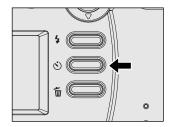
Set the mode dial to [🗖] [M🗖] or [🐙].



Press the (S) self-timer button.

When you press the self-timer button, the following are displayed in order on the LCD monitor.







Compose the picture.



Press the shutter button down halfway, and press it down fully.

The self-timer lamp lights red, and then flashes. The photograph is then taken after the preset time (2 or 10 seconds).

When photographs are taken using the LCD monitor, the count down is displayed. To cancel photography midway, press \blacktriangledown .

MEMO

- · Burst photography is not possible.
- In movie mode, press the shutter button down fully to stop recording.
 If this operation is not performed, photography is automatically stopped when the SD card™ runs out of free space or when the size of a single picture has reached the maximum recordable size.
- If using IR Remote Controller, the photograph taken will be delayed 2 seconds after getting IR controller signal(no matter the preset time 2 or 10 seconds).
- If using shutter button, the self-timer mode will automatically turn off after the image captured.
- If using IR Remote Controller after the image captured, the self-timer mode will remain in the same mode until you manually press self-timer button once again to exit from this mode.

Ready

Taking Photographs

> Playing Back Images

=rasing mages

> Handy Functions

Other Applications

Additional Information In the default setting, the flash will be automatically set to function in dark places. No special setting is needed to set off the flash. The flash firing mode can be set to suit the conditions where the flash is to be used

The effective firing distance of the flash is approximately 0.5 m (1.6 ft) to 2.9 m (9.51 ft) (WIDE side setting, ISO setting: [2X]).



Set the mode dial to [or [M].

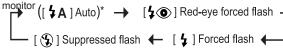
In the [🗖] mode, flash photography can be set when [🛕] is selected.

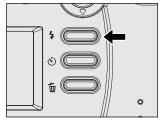


Press the 4 flash button to set to the desired mode while viewing the LCD monitor .

When you press the $\mbox{\ensuremath{\mbox{\boldmath 4}}}$ flash button, the available flash modes are displayed in the following order.

The icon for the mode that you selected is displayed in the LCD monitor (





4Α

[] Auto can be set when [A] is selected in the [1] mode. It can not be set in the [1] mode.



Compose the picture.



Press the shutter button down halfway, and press it down fully.

When you are using the flash, the flash icons on the LCD monitor are displayed in yellow when the shutter button is pressed halfway down.

[**4 A**] Auto

In this mode, the flash fires automatically according to the photography conditions. This mode is ideal for general photography where you are not trying to achieve any particular effect. However the auto mode can not set in the Manual photography mode.

[4] Red-Eye Forced Flash

The camera fires pre-flash lighting once before the main flash in order to reduce the red eye problem. In Portrait mode, flash photography is fixed to red-eye auto. Red-eye is reduced mode effectively if the subject looks directly towards the camera. Effectiveness is also increase if the distance between the subject and camera is kept as short as possible.

[4] Forced Flash

The flash is forced to fire regardless of the brightness of subjects. Use the Forced Flash mode when the subject is backlit, or in artificial light (fluorescent light, etc). The flash also fires during macro photography.

[③] Suppressed Flash

The flash never fires regardless of the brightness of subjects. Use the Suppressed Flash mode when you are taking pictures in indoor lightning at distances too great for the flash to have any effect, such as theater performances or indoor sporting events.

МЕМО

- In [🚣], [🤻] or [📰] mode, flash photography is not possible.
- In [🕰] mode, flash photography is fixed to red-eye auto.
- In [*] mode, flash photography is fixed to slow synchro.
- In the flash photography mode, the flash always fires twice. A picture is taken at the second firing.

Getting Ready

> Taking Photographs

Playing Back Images

Erasing

Handy

Getting Ready

> Taking hotographs

Playing Back Images

Erasing Images

Handy Functions You can manually adjust settings such as exposure control, white balance, metering system, continuous photography mode, and take photographs at these settings. These are called "Manual settings", which are saved even if the camera is turned off

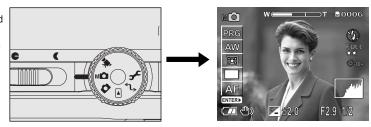
IMPORTANT

Do not remove or load the batteries or disconnect or connect the AC adapter while the camera is on.
 This might return the manual settings to their defaults. If this happens, manually set the conditions again.



Set the mode dial to [M].

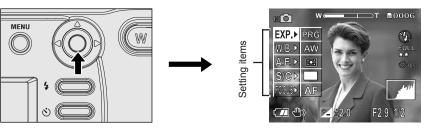
The manual setting values are displayed on the left of the LCD monitor screen.





Press ENTER.

The manual setting items are displayed.



Manual Settings (continued)

3)

Press ▲ or ▼ to select the setting item.

4)

Press ▶ to display option menu, press ▲ or ▼ to select options and press ENTER.

Pressing ENTER selects the setting. To cancel, press ◀.

[EXP.] : Exposure control [W.B.] : White balance [A.E.] : Metering system

[S/C] : Single, continuous or AEB mode

[Focus]: Focus mode setting



Set values



Press ENTER.

The camera is ready to take photographs.



Compose the picture, press the shutter button down halfway, and press it down fully.

The camera takes the picture.

Getting Ready

Taking Photographs

Playing Back Images

Erasing Images

Handy

Other

Additional Information Exposure Control (EXP.)

[PRG] : program mode (default)
[Av] : aperture-priority mode
[Tv] : shutter speed-priority mode

[M] : full manual mode

White Balance (W.B.)

The camera determines the white balance by averaging the various kinds of light that actually enters the lens. A user can set in advance the white balance when taking photographs under specific lighting conditions.

[AV] : Automatic white balance mode (default)

[★] : Day light mode [△] : Cloudy mode

[딱] : bluish Fluorescent light mode [딸] : reddish Fluorescent light mode

[🚊] : Incandescent light mode

Metering System (A.E.)

The camera calculates the exposure level before a photograph is taken.

[: Multi metering mode can be set (default)

[•] : Spot metering mode can be set

Multi metering mode

The exposure is measured and calculated for the entire area of the screen. By dividing the entire area of the screen, the exposure level for each unit is calculated. A well balanced exposure can be obtained

Spot metering mode

[ABB]

The exposure is measured in a very small area at the center of the screen. It is possible to calculate the exposure of a subject without being affected by the surrounding environment.

Single, continuous or AEB photography mode (S/C)

[] : 1 shot mode can be set (default)

[🖳] : Burst mode can be set

: Automatic Exposure Bracketing

Automatic Exposure Bracketing (AEB)

In this mode, the camera takes three consecutive pictures in the order of standard exposure, overexposure (-0.5) and underexposure (+0.5) compensation.

Continuous image capturing (Burst)

In this mode, photographs are taken continuously at a maximum speed of 0.8 second intervals.

The maximum number of photographs that can be taken continuously is 3 photographs.

Images are not recorded directly to storage media but are stored temporarily within the buffer memory. After photography is finished, check the images and record the selected ones to storage media.

By pressing "Enter" button when "Focus" icon is highlight the "Focus setting" selected. A user can select in the following order.

[AF]: Normal Focus

[🕷]: Macro Focus

[1m] : The camera will focus on subjects in a distance of 1m to take photos

[3m] : The camera will focus on subjects in a distance of 3m to take photos

[∞] : The camera will focus on subjects in a distance of ∞ to take photo

MEMO

Setting Ready

Taking hotographs

Playing Back Images

Erasing

Handy Functions The camera automatically adjusts the shutter speed and the aperture value according to the brightness of an object. This mode enables carefree photographing similarly to selecting [A] in [A] mode. It is possible to change the white balance and the metering system in program mode.

- Set the mode dial to [wa].

 The manual setting values are displayed on the left of the LCD monitor screen.
- Press ENTER.
 The manual setting items are displayed.
- Press ▲ or ▼ to select [EXP.].
- Press ► to display option menu, press ▲ or ▼ to select [PRG] and press ENTER.
 Pressing ENTER selects the setting.
- **5** Press ENTER. The camera is ready to take photographs.
- Compose the picture, press the shutter button down halfway, and press it down fully.
 The camera takes the picture.



MEMO

Difference between [RG] and [A] [PRG] and [A] are the same as to combinations of the automatically determined shutter speeds and aperture values. However, their operation capability is different as shown in the right table.

Function	[PRG]	[A]
Continuous photography	0	Х
Exposure Compensation	0	Х
AEB	0	Х
Spot metering	0	Х
White balance setting	0	Χ

(O : possible X : not possible)

Photography in the Aperture-priority Mode

In this mode, photographs are taken with the priority given to aperture. The camera automatically sets the shutter speed according to the aperture.

A small aperture value produces a portrait photo with an out-of-focus background. The smaller the aperture value, the more out-of-focus the background becomes.

A large aperture value produces sharp images on both close objects and distant objects like landscapes. The larger the aperture value, the larger the area for sharp images.

Set the mode dial to [Ma].

The manual setting values are displayed on the left of the LCD monitor screen.

Press ENTER.

The manual setting items are displayed.

Press ▲ or ▼ to select [EXP.].

Press ▶ to display option menu, press ▲ or ▼ to select [Av] and press ENTER.

Pressing ENTER selects the setting.

Press ENTER.

The camera is ready to take photographs.

Press \triangle or ∇ to adjust the aperture value.

The setting range is as follows:

F8 / F6 8 / F5 6 / F4 8 / F4 0 / F3 4 / F2 9

The aperture value and the shutter speed corresponding to that value are displayed on the LCD monitor. If the appropriate combination cannot be set even if the shutter speed is adjusted to its limit, the shutter speed is displayed in red. Photography. however, is possible in this state.

Press A to reduce aperture size. Press V to increase aperture size. Note: The larger the F value, the smaller the aperture size becomes and vice versa

Exposure compensation using \triangleleft or \triangleright to change exposure value.

Getting Ready

Erasing Images

Handy Functions

Other Applications





⊃T **■**0006

MÔ

EXP.▶ PRG

Αv

Tν

М

7

Compose the picture, press the shutter button down halfway, and press it down fully.

The camera takes the picture.

МЕМО

- If the aperture value is set to F2.9 (maximum aperture size), the increased shutter speed is restricted to 1/750 second.
- The aperture value set differ to the actual value according to the position of the zoom lens.

Photography in the Shutter Speed-priority Mode

In this mode, photographs are taken with the priority given to shutter speed. The camera automatically sets the aperture value according to the shutter speed.

A fast shutter speed produces a photograph that looks as if a moving subject is still. A slow shutter speed produces as photograph that makes you feel that it is flowing.

1

Set the mode dial to [Ma].

The manual setting values are displayed on the left of the LCD monitor screen.



Press ENTER.

The manual setting items are displayed.

3)

Press ▲ or ▼ to select [EXP.].



Press ▶ to display option menu, press ▲ or ▼ to select [Tv] and press ENTER.

Pressing ENTER selects the setting.



Press ENTER.

The camera is ready to take photographs.



Press ▲ or ▼ to adjust the shutter speed.

The setting range is as follows: 1/1000, 1/750, 1/500, 1/350, 1/250, 1/180, 1/125, 1/90, 1/60, 1/45, 1/30, 1/20, 1/15, 1/10, 1/8, 1/6, 1/4, 1/3, 1/2, 0"7, 1", 1"5, 2", 3", 4", 6", 8", 10", 15"

The shutter speed and the aperture value corresponding to the shutter speed are displayed on the LCD monitor. If the appropriate combination cannot be set even if the aperture is adjusted to its limit, the aperture value is displayed in red. Photography, however, is possible in this state.



Getting Ready

Taking Photographs

> Playing Back Image

Erasing Images

Handy Functions

Other Application

Additional

Press ▲ to increase shutter speed. Press ▼ to decrease shutter speed.

Exposure compensation using \blacktriangleleft or \blacktriangleright , and manual setting or film speed setting using ENTER are also possible.



Compose the picture, press the shutter button down halfway, and press it down fully.

The camera takes the picture.

MEMO

- When the shutter speed is set to a speed of 0.7 second or slower, photographs are taken as extended exposures.
- In AEB photography or burst photography, the shutter speed cannot be set to 0.7 second or longer.
- If a mode other than [No flash] suppressed flash mode is set in flash photography, the shutter speed is limited to between 1/2 second and 1/250 second.
- If the shutter speed is set to 1/350 second or less, the shutter speed is automatically changed to 1/250 second if the flash setting is changed to the [flash] forced flash mode or [red-eye] red-eye forced flash mode.
- If the [flash] forced flash or [red-eye] red-eye forced flash mode is set in flash photography when the shutter speed is set to a speed of 0.7 second or more, the shutter speed is automatically changed to 1/2 second.
- If the shutter speed value is set to 1/1000 second, the aperture value is limited to between F8 and F3.4.

Photography in the Full Manual Mode

Set the aperture and shutter speed values separately before taking a photograph.

Set the mode dial to [Ma].

The manual setting values are displayed on the left of the LCD monitor screen.

Press ENTER.

The manual setting items are displayed.

Press ▲ or ▼ to select [EXP.].

Press ▶ to display option menu, press ▲ or ▼ to select [M] and press ENTER.

Pressing ENTER selects the setting.

Press ENTER.

The camera is ready to take photographs.

Press ▲ or ▼ to adjust aperture value, and press ▲ or ▼ to set the shutter speed value separately are also possible.



Compose the picture, press the shutter button down halfway, and press it down fully.

The camera takes the picture.

MEMO

- When pressing sort in the full manual mode, the shutter speed is adjusted, but the exposure compensation setting is not possible. However the exposure value is displayed on the LCD monitor. When the exposure value is displayed in red, it shows over- or under-exposure. It is recommended that the shutter speed and the aperture value be adjusted to obtain the proper level of exposure.
- If the aperture value is set to F2.9 (increased aperture size), the shutter speed 1/1000 second is not available.

Getting Ready

Playing Back Image

⊃T ■0006

4

MÔ

EXP.▶ PRG

Other Applications

Additional Information

73

Getting Ready

Taking notographs

Playing Back Images

Erasing

This mode is used for taking subjects that require several seconds to photograph such as firework displays at night. When using this mode, be sure to use a tripod to keep the camera stable and prevent distortion of images.



Set the mode dial to [Ma].

The manual setting values are displayed on the left of the LCD monitor screen.



Press ENTER.

The manual setting items are displayed.



Press ▲ or ▼ to select [EXP.].

4)

Press ▶ to display option menu, press ▲ or ▼ to select [M] or [Tv] and press ENTER.

Pressing ENTER selects the setting.

Press ENTER to set the shutter speed to 0.7 second or longer,[) is displayed on the LCD monitor.



Compose the picture, press the shutter button down halfway, and press it down fully.

The camera takes the picture at the set exposure time. During the exposure, the viewfinder lamp turns orange. It takes about twice the set time to complete taking the photograph due to processing of the captured image.



МЕМО

- Flash photography and burst photography are not possible.
- The image taken in the exposure photography mode may be blurred.

This setting allows you to intentionally lighten or darken the entire image. Use this setting when the optimum brightness (exposure) cannot be obtained, for example, when the brightness between the subject and the background is not balanced or when the subject to photograph occupies only an extremely small part of the screen.



Set the mode dial to [M].



Press ◀ or ▶ to adjust the exposure.

The setting range is as follows. A larger value lightens the exposure, and a smaller value darkens the exposure. The value that you set is displayed on the LCD monitor. Press ▶ to increase (brighten) exposure, and ◀ to decrease (darken) exposure.



Exposure Setting Value



Compose the picture, press the shutter button down halfway, and press it down fully.

The ideal brightness sometimes cannot be obtained even if a large exposure value is set in dark photographic conditions.

In this case, press the shutter button, and check the brightness in the preview image (photographed still image).

Getting Ready Effective Subjects and Set Values

Positive (+) Compensation

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

Negative (-) Compensation

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

MEMO

When [M] is selected on the [EXP.] option menu, pressing

or

makes the shutter speed setting possible, but does not make the exposure compensation possible. However the exposure value is displayed on the LCD monitor.

Taking Shots With the Automatic Exposure Bracketing (AEB Photography)

When it is difficult to determine the necessary exposure compensation, this mode will automatically set the camera to photograph three consecutive pictures in -0.5, 0, and +0.5 compensation.



Set the mode dial to [MD].

The manual setting values are displayed on the left of the LCD monitor screen.



Press ENTER.

The manual setting items are displayed.



Press ▲ or ▼ to select [S/C].



Press ▶ to display option menu, press ▲ or ▼ to select [AEB] and press ENTER.

Pressing ENTER selects the setting.



Press ENTER.

The camera is ready to take photographs.



Compose the picture, press the shutter button down halfway,

and press it down fully.

The camera will automatically take a picture in -0.5 compensation, 0 compensation, and +0.5 compensation.

MEMO

- If burst AEB is selected when the shutter speed is set to a speed of 0.7 second or longer, the shutter speed is automatically changed to 1/2 second.
- The camera takes three consecutive pictures in the order of standard exposure, overexposure (+0.5) and underexposure (-0.5) compensation.

Getting Ready

> Taking Photographs

Playing Back Image

⊃T ■0006

MÔ

S/C >

Erasing Images

Handy

Other Applications

Additional Information

77

Setting Ready

> Taking hotographs

Playing Back Images

Erasing

In this mode, photographs are taken continuously at a maximum speed of 0.8 second intervals. The maximum number of photographs that can be taken continuously is three photographs.

Images are not recorded directly to SD Memory Card but are stored temporarily within the buffer memory. After photography is finished, check the images and record the selected ones to SD Memory Card.



Set the mode dial to [Ma].

The manual setting values are displayed on the left of the LCD monitor screen.



Press ENTER.

The manual setting items are displayed.

Press ▲ or ▼ to select [S/C].



Press ▶ to display option menu, press ▲ or ▼ to select [🔄]and press ENTER.

Pressing ENTER selects the setting.



Press ENTER.

The camera is ready for burst photography. If burst photography is set when the shutter speed is set to a speed of 0.7 second or more in the [Tv] mode, the shutter speed is automatically changed to 1/2 second.



Compose the picture, press the shutter button down halfway, and press it down fully.

The maximum number of photography that can be taken continuously is three.

If you release the shutter button before the camera captures three images, the camera will stop taking pictures at that point.

After photography is finished, the LCD monitor automatically turns ON.

Taking Photographs Continuously(Burst Photography)(continued)



Press ✓ o ✓ to verify the image.

You will be allowed to choose which image to save before it is recorded to the SD Memory Card.

The number of photographs stored in the memory is displayed at the bottom right of the screen, and the number in green is the image currently displayed.

The green indication also moves as you move the image to be displayed.



Use ▲ or ▼ to select the recording method.

The camera is set to erase all images immediately after photography.

 $\bigcirc[\square \checkmark]$: This setting is for saving and erasing the selected image.

Press ◀ or ▶to select the image, and press ENTER.

The red ✓ mark appears under the selected image. To cancel selection of the image, press ENTER again.

②[♣✓]: This setting is for saving all images.

Press ENTER.

All images are selected, and all images with turns into a red ✓.

This item cannot be selected if there is not enough space on the SD Memory

Card.

③[🖳 📆] : This setting is for erasing all images.

Press ENTER.

① to ③ can be combined regardless of their order to set saving and erasing of images.



Use ▼ to select [] and press ENTER.

The image is saved or erased, and the camera is then ready to take photographs.

Getting Ready

Taking

Playing Back Images

Erasing Images

Handy Functions

Other Applications

Additional

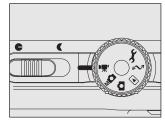
мемо

- You can also carry out step 9 while verifying the image in step 8.
- Even if photography is terminated midway before capturing three images by releasing the shutter button, images already photographed can be saved and erased by the above method.
- The length of time to capture images varies according to the photographic conditions.
- · Self-timer photography and flash photography are not possible.

Making Movies

By dialing the MODE switch to " " " position, the camera can take moving image without voice recording. The camera shows the preview image on the LCD monitor. (In the " " mode, the LCD monitor can not be turned off.)

¶ Set the mode dial to [•].



2

Compose the picture, press the shutter button down halfway, and press it down fully.

Photography begins.

The maximum photography time (seconds) appears on the LCD monitor.

3)

To stop making movies, press the shutter button down fully again.

If you do not do this, photography is automatically stopped when there is no more free space on the SD Memory Card, or when the maximum size that a single movie can be recorded is reached.

Shutter button

Lightly pressing this button in " 🜹" mode, compose the picture. Once the button is deeply pressed, photography begins. Photography is automatically stopped when there is no more free space on the SD Memory Card, or when the maximum size that a single movie can be recorded is reached. Press the shutter button down fully to stop making movies.

When making a movie, flash photography is not possible.

Getting Ready

Taking Photographs

Playing Back Images

Erasing Images

Handy Functions

Other Applications

Additional Information

Self Timer button

In " 🐙 " mode, the camera can select self timer mode among "off (default)", "10-second" and "2-second" in this order cyclically. Press the shutter button down fully to stop recording.

IR Remote Controller

In " " mode, the IR Remote Controller is not possible.

МЕМО

- · Flash photography is not possible.
- The image size displayed on the LCD monitor becomes FULL (320 x 240) or HALF (160 x 120). The movie made in FULL size is displayed on the entire LCD monitor, and that made in HALF size is displayed in the center of the screen.

Changing the Preset Conditions (RECORDING MENU)

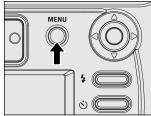


Set the mode dial to [🗖], [M 🗖] or [🐙].



Press the MENU button.

The RECORDING MENU is displayed.





Use ▲ or ▼ to select the desired item

1 and press ▶.

The options ② are displayed.

Note: The image appearing through the lens will be displayed for [LCD **★**].

[PREVIEW]
[COLOR]
[ISO]
[SHARPNESS]
[CONTRAST]
[DIGITAL ZOOM]
[LCD *

[QUALITY]





Use \blacktriangle or \blacktriangledown to select the desired setting from the tab menu 2, and press ENTER.

This saves the settings, and returns the display to the RECORDING MENU.

Getting Ready

Taking Photographs

Playing Back Images

Erasing Images

Handy Functions

Other Applications

Additional Information 5

To guit the RECORDING MENU, press the MENU button.

The camera is now ready to take photographs.

PREVIEW

Set to display a photographed image on LCD monitor immediately after you have taken the shot.

[OFF]: Do not display preview. (default)

[ON] : Display preview.

A photographed image is displayed on the LCD monitor for two seconds. By lightly pressing "Shutter" button, preview is canceled.

The three images that you took are displayed for about two seconds each in the AEB photography mode.

In case of burst photography, the LCD monitor automatically turns on and display image after photography is finished.

In case of 16 multi-photography shot, 16 photography images are displayed as one image.

COLOR

Set the color of the image to be photographed.

[STANDARD] : Standard color (default)

[VIVID] : Vivid color [MONOCHROME] : Black and white

[SEPIA] : Sepia

Changing the Preset Conditions (RECORDING MENU) (continued)

ISO [🗖]

Sets the color mode and photographic sensitivity at which the image is to be recorded. Warning: Noise increases when the ISO is changed to higher settings.

[NORMA] : Equivalent to color ISO100

[2X] : High-sensitive photography equivalent to color ISO200 (default)

[4X] : High-sensitive photography equivalent to color ISO400

During [2X], the ISO will be automatically set between ISO100 and ISO200. During [4X], ISO will be automatically set between ISO100 and ISO400.Default is [2X].

ISO [Ma]

Sets the color mode and photographic sensitivity at which the image is to be recorded. Warning: Noise increases when the ISO is changed to higher settings.

[NORMA] : Equivalent to color ISO100 (default)

[2X] : High-sensitive photography equivalent to color ISO200 [4X] : High-sensitive photography equivalent to color ISO400

During [2X], the ISO will be automatically set to ISO200. During [4X], ISO will be automatically set to ISO400.

MEMO

In movie mode, ISO will be automatically set between ISO100 and ISO400 regardless of its setting.

Getting Ready

> lakıng Photographs

Playing Back Images

mages

Handy Functions Getting Ready

> Taking hotographs

Playing 3ack Images

Erasing Images

Handy unctions

Other Applications

Additional Information

SHARPNESS

Sets the sharpness at which the image is to be recorded.

[NORMAL] : Normal sharpness (default)

[SOFT] : Soft effect [HARD] : Hard effect

CONTRAST

Sets the contrast of the image to be photographed.

[NORMA] : Automatic (standard) setting (default)

[SPONG] : Strong contrast [SDFT] : Soft contrast

DIGITAL ZOOM

Enlarges the center of the screen and takes photographs with the focal distance increased by factor of 2.2.

[ON] : Enables digital zoom photography. (default)

[OFF] : Disables digital zoom photography.

LCD *

Adjusts the brightness of the LCD monitor. This adjustment does not adjust the brightness of the image to be recorded.

[-5] to [+5]

© To adjust the brightness of the LCD monitor.

Changing the Preset Conditions (RECORDING MENU) (continued)

QUALITY

Set the size (number of pixels) and quality (compression ratio) of the image to be photographed. Change the setting according to how the image is to be used and the remaining amount of space in the SD Memory Card.



Press the ▼ button until the QUALITY is highlighted, and press the ▶ button.

The LCD shows the QUALITY menu.

Press the ▲ or ▼ button to select STILL/MOVIE, and press the ▶ button.

The size item is highlighted.

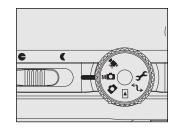
Press the ▲ or ▼ button to select the size setting user desired to set, and press the ENTER button.

The QUALITY item is highlighted.

Press the ▲ or ▼ button to select the quality setting user desired to set, and press the ENTER button.

Press the ▲ or ▼ button until the OK is highlighted, and press the ENTER button.

These combinations are set and the LCD monitor returns to previous mode.





Getting Ready

> Taking Photographs

Playing Back Image

> Erasing Images

Handy Functions

Other Applications

Additional Information Getting Ready

Taking otographs

Playing ack Images

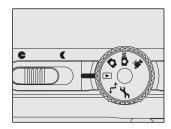
Frasing

Play back photographed still images one image at a time.



Set the mode dial to [].

The last recorded image appears on the LCD monitor.





Press ◀ or ▶ to move forward and reverse.

Press ENTER, nine images are displayed simultaneously.

МЕМО

- Pressing

 at the last image displays the first image, and pressing
 at the first image displays the last image.
- Images can be rotated by pressing ▲ or ▼ during playback.
 Pressing ▲ rotates an image counterclockwise, and pressing ▼ rotates it clockwise.
- IR Remote Controller works as forward(▶) button in Playback mode to change picture to next one.

Playing Back Movies

Play back movies that you have recorded. The movies made in FULL size are displayed on the entire LCD monitor, and those made in HALF size are displayed in the center of the screen.



Set the mode dial to [].

The last recorded image appears on the LCD monitor.



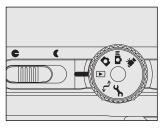
Press ◀ or ▶ to select the movie to play back.



Press .

Playback of the selected movie begins.

The user can control playback as shown on the table of the next page by pressing various buttons during playback, a pause or stopping.





Ready

! Taki

Taking

Playing Back Images

Erasing Images

Handy Functions

Other Application

Additional

A user can control playback movie file as the following table.

	During playback	During pause	During stopping
•	2x-speed playback	1-frame feed © Each press of ▶ feeds the image by one frame. © 1-frame feed is continued for the duration that ▶ is held down.	
•	Reverse playback, 2xspeed playback ⊚The press of ◀ starts a reverse playback. ⊚Playback becomes 2x-speed reverse playback for the duration that ◀ is held down.	Reverse 1-frame feed ©Each press of ◀ feeds the image in reverse by one frame. ©1-frame feed is continued for the duration that ◀ is held down.	
A	Pause © Playback is paused.	Canceling pause Sample After pause is cancelled, playback resumes at the last state that was active before the pause.	Ray back
▼	Sop Playback returns to the start of the movie.		
ENTER	Sop The display returns to thumbnail playback.		

МЕМО

The image size displayed on the LCD monitor becomes FULL (320 x 240) or HALF (160 x 120). The
movies made in FULL size is displayed on the entire LCD monitor, and those made in HALF size is
displayed in the center of the screen.

Displaying a List of Images (Thumbnail Display)

Nine reduced images are simultaneously displayed on the LCD monitor. This manual calls this display "thumbnail display."

This feature is useful, for example, when there are many images recorded in the SD Memory Card. After you have displayed the thumbnail display, you can select the desired image and display it in the regular display.



Set the mode dial to [].

The last image frame appears on the LCD monitor.



Press ENTER.

Nine images are displayed simultaneously.



Use \triangle , ∇ , \triangleleft or \triangleright to move the cursor to select the image to be displayed at regular size.

The cursor selected image is displayed with green frame. Pressing the buttons continuously moves the cursor continuously.



4)

Press ENTER.

The selected image is displayed at its regular size.

In the thumbnail display mode,
 | =] icon is displayed for the movie data.

МЕМО

Getting Ready

Taking Photograph

Playing Back Image

Erasing Images

Handy

Other Application

Additional Information Getting Ready

> Taking otographs

Playing sack Images

rasing

Handy Functions

Other Application

Additional Information Ap Enlarges selected portions of images being played back at two levels. Images can be displayed enlarged when being played back one image at a time.

Movies and images photographed in the multi mode cannot be displayed using the zoom playback feature.



Set the mode dial to [].

The last image frame appears on the LCD monitor.



Use **◄** or **▶** to select the frame you want to enlarge.

You can also select the image by the same operation as for thumbnail playback



Adjust the zoom ratio by the Zoom switch.

Pressing the Zoom switch to the "T" will enlarge the image. To return to normal magnification, press the Zoom key towards "W".

The image is displayed enlarged, and a white frame and green frame are displayed on the LCD monitor.

The white frame indicates the entire image, while the green frame shows the location of the currently enlarged area.



Use \triangle , ∇ , \triangleleft or \triangleright to select the area to enlarge.

Adjust the display area to enlarge while viewing the white and green frames.



To return to the regular display, press ENTER.



Entire image

Current position of enlargement

Auto Playback (Slideshow)

Automatically play back one image at a time in order. This feature is not supported in the movie mode.



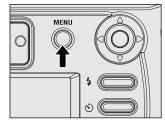
Set the mode dial to [].

The last image frame appears on the LCD monitor.



Press the MENU button.

The PLAYBACK MENU is displayed.



3

Use ▲ or ▼ to select [SLIDE SHOW] and press ▶.

The slideshow begins and [\prod] is displayed on the LCD monitor. The next image is displayed every three seconds.



4)

To quit the slideshow, press ENTER.

The LCD monitor displays the image when ENTER is pressed. The slideshow is repeated until ENTER is pressed.

МЕМО

- The Auto Power OFF function does not operate during automatic playback.
- · Auto playback is available for images in all folders.
- Movies are not played back during automatic playback.

Getting

Taking Photographs

Playing Back Images

Erasing Images

> Handy Functions

Other Application

> Additional Information

Automatically plays back the 16 images photographed in the multi photography mode in quick succession.



Set the mode dial to [].

The last image frame appears on the LCD monitor.



Use ◀ or ▶ to select the images photographed in the multi photography mode. You can also select the image by the same operation as for thumbnail display.



Press the Zoom key towards "T" to begin playback.

Automatic playback begins.

Erasing Images (Erase Frame)

Erases images one image at a time.

Note: Images cannot be erased when they are protected or the SD Memory Card is write-protected.

- 1 Set the
 - Set the mode dial to $[\ lue{}\ \]$, $[\ lue{}\ \ \]$, $[\ M \ lue{}\ \ \]$ or $[\ \ \ \ \ \ \ \ \ \ \ \]$.

When [] is selected, the last image frame or the thumbnail display appears on the LCD monitor.

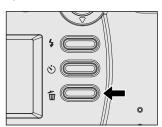
2

When [▶] is selected, use ◀ or ▶ to select the image to be erased.

When [▲], [м] or [➡] is selected, only the last recorded image can be erased.

- 3)
- Press the merase button.

The erase icon is displayed at the left of the screen.



4

Use ▲ or ▼ to select [☐], and press ENTER.

This erases the image and returns to the previous mode. To cancel erasing of image data, select [\triangleright] and press ENTER.



Getting Ready

> Taking Photograph

Playing Back Images

> Erasing Images

Handy Function

Other Applications

> Additional Information

5)

To continue erasing images, repeat the above procedure from step 2.

MEMO

- When [PROTECTED] is displayed on the LCD monitor, cancel the protection or remove DPOF writeprotection.
- If you take a photograph after erasing an image, a number continuing from the last photographed image is assigned as the image number.
- Images can also be erased in the thumbnail mode. In this case, the camera enters the single frame playback (frame playback) mode, and enters the thumbnail playback mode after the image is erased.

Erases selected folders and all contents currently recorded to the SD Memory Card loaded on your camera. There are two ways of erasing images, by individual folders or by all folders.

Note: Images cannot be erased when they are protected or when the SD Memory Card is write-protected .

The folder to be erased differs according to the position of the mode dial.

 $\begin{tabular}{ll} \hline [\begin{tabular}{ll} \blacksquare \end{tabular} & : Folder of images currently being played back \\ [\begin{tabular}{ll} \blacksquare \end{tabular}] or [\begin{tabular}{ll} \blacksquare \end{tabular}] : Folder of images currently being photographed \\ \hline \end{tabular}$



Set the mode dial to [ightharpoonup], [ightharpoonup] or [ightharpoonup].

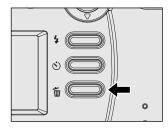
Set the mode dial to the type of folder you want to erase.

When [] is selected, the last image frame or the thumbnail display appears on the LCD monitor.



Hold down the $\mbox{\'m}$ erase button for two seconds.

The erase icon is displayed at the left of the screen.



Getting Ready

> Taking Photographs

Playing Back Images Use ▲ or ▼ to select [☐] or [☐] and press

 $[\; \ \,]$] : Erases images in the currently selected folder and folders.

[] : Erases all folders recorded on the SD Memory Card. The images or folders are erased, and the camera returns to the respective mode.

To cancel erasing of image data, select [$\begin{cal} \bigcirc \end{cal}$] and press ENTER.

When [] is selected, [NO IMAGE] is displayed after all folders have been erased (unless the SD Memory Card contains protected images).



MEMO

· When all images in a folder are erased, that folder itself is also erased.

Formatting the SD Memory Card

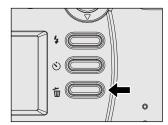
Formatting erases all images and reformats the SD Memory Card loaded in your camera. Protected images are also erased. SD Memory Card cannot be formatted if it is write-protected .

Set the mode dial to [lacksquare], [lacksquare], [Mlacksquare] or [$\bf m$].

When [] is selected, the last image frame or the thumbnail display appears on the LCD monitor.

Hold down the werase button for two seconds.

The erase icon is displayed at the left of the screen.



Use ▲ or ▼ to select [], and press ENTER.

To cancel formatting, select [] and press ENTER.

To reset the image number, use ▲ or ▼ to select [EXECUTE], and press ENTER.

To cancel resetting of image numbers, select [CANCEL].



Handy Function

Ready

aking ographs

Playing ack Images

Erasing

Handy

Other

Additional Information Changes FULL size (2400 x 1600 pixels) images to HALF size (1200 x 800 pixels), and further to SMALL size (720 x 480 pixels), and overwrites an old FULL size image with the new size image. This is called "resizing" in this manual.

Resizing a previously saved image when the SD Memory Card has run out of storage space during photography increases space on SD Memory Card so that you can continue taking photographs.

The following images cannot be resized:

- SMALL size images
- @Images taken with another camera
- @Images taken in the multi photography mode
- @Protected images
- Movies
- @Images cannot be resized when the SD Memory Card is write-protected



Set the mode dial to [].

The last image frame appears on the LCD monitor.



Press the MENU button.

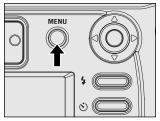
The PLAYBACK MENU is displayed.



Use \triangle or \bigvee to select [RESIZE] and press \triangleright .

The RESIZE menu is displayed.

If there are no images that can be resized, or if a movie folder is selected, a message appears on screen and the screen returns to the PLAYBACK MENU.





Reducing the Image Size (Resize)(continued)



Use **◄** or **▶** to select the image and press ENTER to set image size.

To cancel the selection, press ENTER again.

If you want to resize two or more images, repeat the procedure for the necessary number of images. When the Zoom key is pressed toward "T" during image selection, the image is displayed to fit the entire screen. To redisplay the original image, move the Zoom key towards the "W".



Use ▲ or ▼ to select [EXECUTE], and press ENTER.

The screen indicating that the image is being resized appears. To quit resizing, select [CANCEL] and press ENTER. When resizing ends, the screen returns to the PLAYBACK MENU. To quit the PLAYBACK MENU, press the MENU button.

МЕМО

- It is possible to reduce the size of an image. It is not possible to increase the size of an image, or to restore size after it has been decreased.
- It is possible to play back any images in all folders by pressing \blacktriangleleft or \blacktriangleright during playback.

Getting Ready

Taking Photographs

> Playing Back Images

> Erasing

Handy

Other Application

Additional

etting Ready

> raking otograph

Playing sack Images

Erasing

Handy

Compresses images down to half of their size or more, and overwrites an old size image with a newly compressed image.

Compressing a previously saved image when the SD Memory Card has run out of storage space during photography increases space on SD Memory Card so that you can continue taking photographs. The following images cannot be compressed:

- ⊚ *(BASIC) image quality images
- @Images taken with another camera
- @Protected images
- Movies
- @Images cannot be compressed when the SD Memory Card is write-protected.



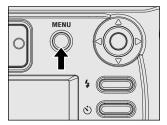
Set the mode dial to [].

The last image frame appears on the LCD monitor.



Press the MENU button.

The PLAYBACK MENU is displayed.





Use \blacktriangle or \blacktriangledown to select [QUALITY], and press \blacktriangleright .

The SET-UP menu is displayed.

If there are no images that can be compressed, or if a movie folder is selected, a message appears on screen and the screen returns to the PLAYBACK MENU.



Compressing Images (Quality)(continued)



Use **◄** or **▶** to select the image, and press ENTER to set the compression ratio.

The current compression ratio (quality) is displayed under the image.

Each press of ENTER changes the number of stars as follows:

[NORMAL] ** [BASIC] *

If you want to compress two or more images, repeat the procedure for the necessary number of images.

When the Zoom switch is pressed toward "T" during image selection, the image is displayed to fit the entire screen. To redisplay the original image, move the Zoom switch towards the "W".



Use ▲ or ▼ to select [EXECUTE], and press ENTER.

The screen indicating that the image is being compressed appears.

To quit compression, select [CANCEL] and press ENTER. When compression ends, the screen returns to the PLAYBACK MENU.

To quit the PLAYBACK MENU, press the MENU button.



мемо

- It is possible to compress an image and decrease quality. It is not possible to uncompress an image to increase quality, or to restore an image after it has been compressed.

Getting Ready

Taking Photographs

> Playing Back Image

Erasing Images

Handy Functions

Other Application

Additional Information Getting Ready

Taking Photographs

> Playing 3ack Image:

Erasing

Handy

The number of prints or the image date can be set in a DPOF (Digital Print Order Format) file for images to be printed (developed). This feature applies to still images only. Printing can be done easily if you just take the SD Memory Card containing the images and DPOF file to the photo lab.



Set the mode dial to [].



Press the MENU button.

The PLAYBACK MENU is displayed.



Press ▲ or ▼ to select [DPOF] and press ▶.







Print Information (continued)



Press ▲ or ▼ to select [SELECT] or [ALL], and press ENTER.

[SEECT] : Sets one image at a time.

[ALL] : Sets all images at once.



Set the number of prints and date.

① Press ◀ or ▶ to select the image, and press ▲ or ▼ to set the number of copies.

Up to 99 copies can be set for a single image. When the Zoom key is pressed toward "T" during image selection, the image is displayed to fit the entire screen. To redisplay the original image, move the Zoom key towards the "W"

②When you have finished this setting, press ENTER. The DATE screen is displayed.

The date of the image can be printed in the lower right corner of the picture.

③ Press ▲ or ▼ to select [YES] or [NO], and press ENTER. If you want to print the date, select [YES] and press ENTER. If you do not want to print the date, select [NO] and press ENTER.

The message "CREATE DPOF FILE?" is displayed.

МЕМО

- It is possible to play back any images in all folders by pressing

 ✓ or

 ✓ during playback.
- The date printed in the picture will depend on the date set into the camera. For the correct date to be printed onto the picture, please check the date set into your camera before the image is photographed.







Getting Ready

> Taking Photograph

Playing Back Images

Erasing Images

Handy Functions

Other Applications

> Additional Information

Getting Ready

Taking าotograph

Playing Back Images

Erasing

Handy

7

Press ▲ or ▼ to select [EXECUTE], and press ENTER.

The DPOF information file is created, and the screen returns to the initial display when the operation ends.

To continue setting, select [CHANGE SETTINGS]. To quit setting without creating a DPOF file, select [CANCEL] and press ENTER.





To end setting, press ▲ or ▼ to select [END], and press ENTER.

To cancel confirmation of settings, proceed to step 9.



Print Information (continued)



Select the desired operation.

[CONFIRM]: Press this to confirm the settings.

- Press ▲ or ▼ to select [CONFIRM], and press ENTER.
- (2) After confirming the settings, press ENTER.
- (3) Select [END] and press ENTER.

[CLEAR ALL]: Press this button to clear all settings.

- Press ▲ or ▼ to select [CLEAR ALL], and press ENTER.
- ② To clear all settings, select [EXECUTE] and press ENTER. To cancel [CLEAR ALL], select [CANCEL] and press ENTER.
- ③ To remove the write-protection, select [YES] and press ENTER.
- (4) Select [END] and press ENTER.

МЕМО

- When the SD Memory Card already contains a DPOF information file, the message "RECREATE DPOF FILE?" is sometimes displayed. Note that if you select [YES], the file is overwritten, and the information of the existing DPOF information file is erased. The same also applies when the DPOF information file is overwritten on a personal computer and values not supported by this camera were set.
- Images set in the DPOF format are automatically protected. Write-protection cannot be removed by regular methods.
- You can specify up to 99 prints or up to 999 frames in a single SD Memory Card. The maximum number of prints you can specify in a single SD Memory Card is limited to 10000.

Ready

Getting Ready

notographs

Playing Back Images

Erasing

Handy

Other

Additional Information This feature prevents images from being erased.

IMPORTANT

- Formatting erases all the images on a SD Memory Card, regardless of whether they are protected or not.
- To protect the entire SD Memory Card, see "Write Protection" (page 35).

Protecting an Image



Set the mode dial to [].

The last image frame or the thumbnail display appears on the LCD monitor.



Press the MENU button.

The PLAYBACK MENU is displayed.



Use \blacktriangle or \blacktriangledown to select [PROTECT] and press \blacktriangleright .

The PROTECT menu is displayed.



Protecting Images (continued)



Use ▲ or ▼ to select the desired image to protect, and press ENTER.

This fixes the image to be protected, and [O____] is displayed under the image. To cancel the selection, press ENTER again.

To write-protect two or more images, repeat this procedure for the necessary number of images.

When the Zoom key is pressed toward "T" during image selection, the image is displayed to fit the entire screen. To redisplay the original image. move the Zoom key towards the "W".



МЕМО

It is possible to play back any images in any folders by pressing

or

during playback.



Use ▲ or ▼ to select [EXECUTE], and press ENTER.

To guit write-protection, select [CANCEL] and press ENTER. When write-protection ends, the screen returns to the PLAYBACK MENU. To guit the PLAYBACK MENU, press the MENU button.

мемо

- To cancel write-protection for an image, write-protection is simultaneously canceled if set at step 4.

Getting Ready

Taking Photographs

Playing Back Images

Erasing Images

Removing the Protection



Carry out steps 1 to 3 in "Protecting An Image".



Use ◀ or ▶ to select the image to unprotect, and press ENTER.

This fixes the images whose protection is to be removed, and [O] under the image changes to [O].

To unprotect an image, press ENTER again.

To remove the protection from two or more images, repeat this procedure for the necessary number of images.



3)

Carry out step 5 in "Protecting An Image".

МЕМО

- To write-protect another image, write-protection can be simultaneously carried out if set at step 2.
- [🖺] is displayed for images that are specified in the DPOF format, and write-protection cannot be removed. To remove write-protection, cancel the DPOF format setting .

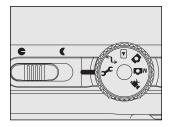
Basic Settings (F mode)

This feature allows you to set up the default settings for using your camera in addition to image-related settings. This is called "setup". The following items can be changed in the SET-UP mode:

AUTO POWER OFF/SOUND/TIME & DATE/OSD LANGUAGE/VIDEO OUT/QUALITY/FRAME NUMBER/SYSTEM INFO.

The details set here are held in memory even if the camera is turned OFF.





Use ▲ or ▼ to select the item you want to set.

[AUTO POWER OFF] : Selects the time for automatic power off

[SOUND] : Turns on and off the sound [TIME & DATE] : Setting the Time and Date

[OSD LANGUAGE] : Selecting the Monitor Display Language

[VIDEO OUT] : Setting Video Output

[QUALITY] : Setting image quality and size

FRAME NUMBER] : Resetting Frame Number

[SYSTEM INFO.] : Returning Settings to the Defaults



Getting Ready

Taking Photograph

> Playing Back Images

Erasing Images

Handy Functions

Other Application

> Additional Information

Getting Ready

Taking Photographs

Playing ick Images Back

Erasing Images

Handy Functions

Additional Information

Press The tab menu is displayed.



Use ▲ or ▼ to change the setting in the tab menu, and press ENTER.

To quit the SETUP MENU, change the mode dial setting.

To cancel changing of settings, press





AUTO POWER OFF

If no operation is carried out for a fixed amount of time (default: about one minute), power consumption is set to its minimum state (power almost turned off) to prevent battery wear. This is called the Auto Power OFF. This setting allows you to set the time when the camera turns off automatically. This function is not activated during automatic playback or in the [🖈] PC mode. To return to the normal state after the Auto Power OFF has been executed, press the POWER button to turn the power on again.

[1 MINUTE :If no operation is carried out for 1 minute, Ato power off is activated. (Default)

[2 MINUTES] :If no operation is carried out for 2 minutes, Ato power off is activated. [3 MINUTES]

:If no operation is carried out for 3 minutes, Ato power off is activated.

SOUND

Sets whether or not to sound the beep tone.

:Sounds the beep tone according to the operating state or operation. (default) [ON]

[OFF] :Does not sound the beep tone in any state.

Basic Settings (Fmode) (continued)

TIME & DATE

Sets the date and time. Seconds cannot be set.

- 1 A
- After pressing the ▶ button while the TIME & DATE is highlighted, the TIME&DATE set mode can be executed.

Then LCD indicates Year/Month/Day/Hour/Minute on the screen.

- 2
- Using ◀ or ▶ button to select the item to set, and use ▲ or ▼ button to set the value for each item.

Pressing advances the selection in the following order:

 $\begin{array}{c} \mathsf{YEAR} \xrightarrow{\bullet} \mathsf{MONTH} \xrightarrow{\bullet} \mathsf{DAY} \xrightarrow{\bullet} \mathsf{Hour} \xrightarrow{\bullet} \mathsf{Minute} \xrightarrow{\bullet} \mathsf{OK} \xrightarrow{\bullet} \mathsf{CANCEL} \\ \xrightarrow{\bullet} & \mathsf{I} \end{array}$



3

Afterward pressing ENTER button when OK is highlighted, date time data is updated and return to the previous main menu.

To quit setting, select the [CANCEL] button and press ENTER.

OSD LANGUAGE

Set the display language of menus displayed on the LCD monitor.

[ENGLISH] :English (default)

[JAPANESE] :Japanese [FRANCE] :French [DEUTSCH] :German [SPANISH] :Spanish Getting Ready

> Taking Photograph:

Playing Back Images

Erasing Images

Handy Functions

VIDEO OUT

Sets the video output system according to the country in which your camera used.

[NTSC] :NTSC system [PAL] :PAL system

The default setting is different depending on destination country/area.

QUALITY

Set the size (number of pixels) and quality (compression ratio) of the image to be photographed. Change the setting according to how the image is to be used and the remaining amount of space in the SD Memory Card.

- Set the mode dial to [].

 SETUP MENU appears.
- Press the ▲ or ▼ button until the QUALITY is highlighted, and press the ▶ button.

 The LCD shows the QUALITY menu.
- Press the ▲ or ▼ button to select STILL/MOVIE, and press the ▶ button. The size item is highlighted.
- Press the ▲ or ▼ button to select the size setting user desired to set, and press the ENTER button.

The QUALITY item is highlighted.

- Press the ▲ or ▼ button to select the quality setting user desired to set, and press the ENTER button.
- Press the A or button until the OK is highlighted, and press the ENTER button.
 These combinations are set and the LCD monitor returns to SETUP MENU.

Basic Settings (& mode) (continued)

FRAME NUMBER

Sets whether or not to reset the image number when you take photographs. When the frame number is selected, the message "RESET FRAME NUMBER" is displayed.

Press ▲ or ▼ to select [EXECUTE], and press ENTER.

(Frame number. Default reset, folder number is 100 and file number is 0001).

Resetting of images is supported only for the still image mode.

To reset movie images numbers, you must delete the entire folder.

[CANCEL] :Does not reset the image number

[RESET] :Reset the image number

SYSTEM INFO.

Sets whether or not to return the settings in the SETUP MENU to the original factory settings. (TIME&DATE and OSD LANGUAGE will not be reset.)



After pressing the ▶ button while the SYSTEM INFO is highlighted, the SYSTEM INFO menu is displayed.





Press ▲ or ▼ button to select the item and press ENTER.

[FIRMWARE VER.] :Displays the firmware version of this camera [CARD INFO.] :Displays the SD Memory Card information

[RESET] :Returns to their default settings.

Getting Ready

Taking Photographs

Playing Back Images

Erasing Images

> Handy Functions

Other Applications

Additional Information This adjustment adjusts the brightness of the LCD monitor and not the brightness of the recorded image.

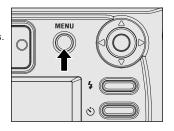


Set the mode dial to [▶], [♠], [м♠] or [喇].



Press the MENU button.

The RECORDING MENU or PLAYBACK MENU is displayed. You can set the LCD monitor brightness in either of these menus.



3)

Use ▲ or ▼ to select [LCD] and press ▶.

The image and the LCD menu are displayed.



Use **◄** or **▶** to adjust the brightness.

Press \blacktriangleleft to darken (-) the LCD monitor, or \blacktriangleright to lighten (+) the LCD monitor.

The LCD monitor can be adjusted within the range [-5] to [+5]. (Default is 0.)



Press ENTER.

This returns the camera to the previous mode.



DISP Button and LCD Monitor Display (In Playback Mode)

This item switches the display on the LCD monitor when playing back photographed images. You can switch the display to show a list of detailed information (size, compression ratio, shutter speed, aperture, etc.) or you can display histograms, etc.



Set the mode dial to [🕞].

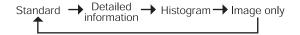


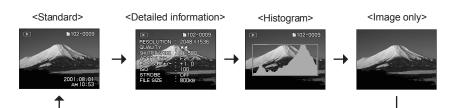
Press ◀ or ▶ to select the image.

3)

Press the DISP button.

Each press of the **DISP** button switches the display format as follows:





МЕМО

• When playing back movie images, switching is between standard and image only.

Getting Ready

Taking Photographs

Playing

Erasing

Handy Functions

Other Applications

Additional Information Getting Ready

> iaking Photographs

This item switches the display on the LCD monitor when taking photographs.



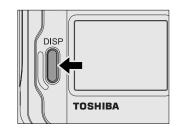
Set the mode dial to [· □], [· □] or [· □].

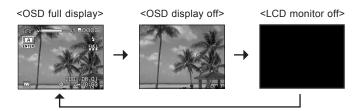


Press the DISP button.

Each press of the **DISP** button switches the display format as follows:

OSD full display → OSD display off → LCD monitor off





МЕМО

- When any button is pressed while OSD display is off, the monitor displays the alteration on the screen for two seconds.
- When the LCD monitor is off, the digital zoom function is forcibly canceled.
- In the movie mode or macro photography mode, the LCD monitor can not be turned off.
- When the LCD monitor is off, any setting for manual, exposure compensation, aperture value, shutter speed value or focus is not possible.

Taking and Playing Back Photographs on a TV

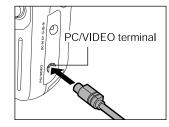
Television sets can be used to compose images for photography or playback. To do this, the camera must first be connected to the TV. We recommend using the AC adapter on an indoor power outlet when available.

IMPORTANT

 Before you connect your camera to other equipment, be sure to turn all other connected equipment OFF. If you connect your camera to other equipment with the power still ON, the screen may flicker or the image may not be displayed normally.



Connect the plug of the AV cable (provided) to the PC/VIDEO terminal on the camera.



2

Connect the plug of the VIDEO cable to the video input terminal on the TV.



Take photographs or play them back.

 $\label{eq:definition} \mbox{Details of operation are the same as taking photographs and playing them back on the LCD monitor.}$

MEMO

- The image before the photograph is taken is slightly less clear than playback images. (This is because television displays images at a lower resolution.)
- · The display unit varies according to the output system.
- With the NTSC system, images can be displayed simultaneously on the LCD monitor and TV during photography and playback.
- With the PAL system, images cannot be displayed simultaneously. When a cable is connected, only TV display is available.
- · With the PAL system, images are played back with a black frame surrounded.

Getting Ready

Taking Photograph

Playing Back Ima

Erasing Images

Handy Functions

Applica

Additional Information

119

Getting Ready

Taking Photographs

Playing 3ack Images

Erasing

Handy Functions

Additional Information You can transfer images photographed on your camera to a PC using the packaged CD-ROM and USB cable. Images recorded on SD Memory Card can also be transferred to a PC using the PC card adapter (sold separately) To transfer images to a PC, software must be installed and special cables connected.

For details, refer to the User's Guides for your PC and the Software Manual.

Using SD Memory Card on a PC

- © Format the SD Memory Card only on your camera.
- To edit image data, copy the image data to hard disk on the PC, and edit the copied image data.

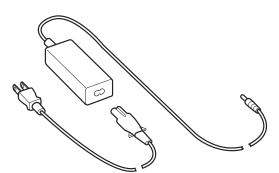
Separately Sold Accessories

The following items are also available as separately sold items.

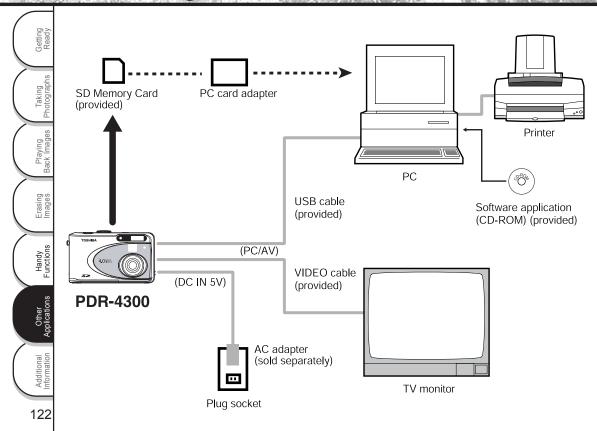
• \$D Memory Card

32MB :SD-M3201M 64MB :SD-M6401M 128MB :SD-M1280M

 AC Adapter PDR-AC20



Connecting to Other Devices



The color of the viewfinder lamp indicates the state of the camera. The meaning of the lamp color may differ according to the mode dial setting.

Viewfinder Lamp

Color	State	Meaning				
		Photography mode	Setup mode	PC mode		
Green	On	AE or AF is locked with the shutter button held half down	In standby mode.	In communication to PC. (SD Memory Card is in.)		
	Flashing	Self-timer in operation at a handshake alarm				
Red	On	Writing to SD Memory Card in progress	Accessing of SD Memory Card in progress	In connecting to PC (SD Memory Card is in.)		
	Flashing	When the image is not in focus.				
Orange	On	Charging of flash in progress.		Disconnect. (SD Memory Card is in.)		
	Flashing			SD Memory Card is not in.		

Self-timer Lamp

The flash of self-timer lamp indicates the state of self-timer.

Color	State	Meaning			
		2seconds timer	10seconds timer		
Red	On		After press "Shutter" button down fully.		
	Flashing	Shot after 2seconds / Getting IR controller signal	Shot after 3seconds / Getting IR controller signal		

IR Remote Controller

The camera provides IR Remote Controller, which works as the function of shutter release button in Capture mode. In case of self-timer is active, the picture taken will be delayed 2 seconds after getting IR Remote controller signal. It will remain the same mode until you manually press Self-Timer button once again to exit from the mode. (Burst photography is not possible.) IR Remote controller works as forward button in Playback mode to change picture to next one.

Specifications

Camera body

Model	Toshiba Digital Still Camera PDR-4300									
Recording medium	SD Memory Card 8/16/32/64/128/256/512 MB compatible									
Compression system	JPEG – compliant									
Image file format	Exif ve	Exif ver. 2.1, AVI								
<still image="" mode=""></still>	SD FULL		HALF		SMALL					
FULL size: 2400x1600 pixels	Memory Card	***	**	*	***	**	*	***	**	*
HALF size:	8MB	4	6	12	13	20	41	34	51	102
1200x800 pixels	16MB	9	14	28	30	45	90	75	112	225
'	32MB	19	29	59	63	94	189	157	236	473
SMALL size:	64MB	40	60	121	129	193	387	322	484	968
720x480 pixels	128MB	81	122	244	261	391	783	652	978	1957
	256MB	164	246	492	524	787	1574	1312	1968	3937
	512MB	327	490	981	1047	1570	3141	2618	3927	7854
<movie image="" mode=""></movie>	Qua	ality	Compr	ession	Image	Size	Frame	e Size	Photo	graphy
Standard movie	Mo			atio					Time	(secs)
photography time	FINE			10	FU		16	KB	_	30
FULL size:	**			/7	HA			KB	_	00
320x240 pixels	NOR			14	FU			KB		5
HALF size:	*			10	HA			KB		20
160x120 pixels	BAS			19	FU			(B	_	60
	*	:	1/	14	HA	LF	3ł	KB	1	80

Conversion rules	DCF Ver. 1.0 – compliant			
Pickup elements	1/1.8" CCD sensor			
	Total pixels: 4.2Megapixels			
	Effective pixels: 4.0Megapixels			
Sensitivity	Equivalent to ISO 100/200/400			
Lens	2.8 X optical zoom lens F2.9–F4.8			
Focal length	f=7.25mm-20.3mm(equivalent to 35mm-100mm on a 35mm			
Viourfindor	camera)			
Viewfinder	Real image type zoom finder			
Auto-focus	TTL system AF, focus adjusting range: approximately 0.10 m			
	(0.33 ft) to infinity (WIDE side setting)			
	Detection system: Contrast detection system (frame rate during			
	detection: 30 Hz)			
Exposure control	Metering system Spot metering, multi metering			
	Control system Program AE , aperture-priority AE, shutter-priority AE			
	Exposure –2.0 EV to +2.0 EV (in 0.5 EV increments)			
	compensation			
Shutter speed	1/2 to 1/1000 sec. (mechanical shutter)			
White Balance	Auto selected			
	Manual setting possible (5 modes)			

^{*} The LCD monitor on your digital camera is manufactured using advanced high-precision technology. Though fine spots may appear on the LCD monitor, this is not a malfunction. The LCD monitor can be used as it is

AC Adapter (PDR-AC20)					
Input	100 to 240V AC, 50/60Hz				
Output	5V DC 3A				
Operating temperature	0°C to +40°C				
Storage temperature	-20°C to +65°C				
Maximum Outer Dimensions	40 x 30.5 x 94.2mm (W x H x D)				
Weight	Approx. 150g				
Cord Length	Approx. 1.5m				
Accessories	Instruction Manual , AC cord				

These specifications are subject to change without notice.

Warnings and Messages Displayed on LCD Monitor

The following warnings, messages and icons are displayed on the LCD monitor and the status display.

Display	Meaning					
LCD monitor	Patteries are partially used					
	Batteries are partially used.					
<u></u>	Battery power is nearly exhaustion.					
	Batteries are completely exhausted. Camera will not					
	turn on.					
CARD ERROR	The SD Memory Card is damaged.					
	An unsupported SD Memory Card is loaded.					
CARD LID OPEN	The battery cover not on the lock position.					
CARD FULL	No more space on the SD Memory Card.					
	Recording is not possible.					
NO CARD	No SD Memory Card is loaded.					
	SD Memory Card is loaded incorrectly.					
CARD ISN'T	The SD Memory Card is not initialized.					
FORMATTED	The SD Memory Card format is incorrect.					
FORMAT CARD?	The SD Memory Card is not formatted (initialized).					
The SD Memory Card format is incorrect.						
FRAME NUMBER	The frame number has reached 999-9999.					
FULL	ULL					
PROTECTED	The image is write-protected.					
NO IMAGE	The image to apply the quality or other function does not					
	exist.					
CARD FULL	There is not enough space on the SD Memory Card					
	to copy image data to.					
FORMAT ERROR	The format of the SD Memory Card					
	to copy image data to is incorrect.					

CARD PROTECTED	The SD Memory Card is write-protected.
FOLDER ERROR	There are no free folders on the SD Memory Card to copy image data to.
RECREATE DPOF FILE?	There is a parameter that is not supported in the DPOF setting file.
FRAME NUMBER FULL	The maximum number of images (999 frames) that can be set is exceeded when setting DPOF setting files.
NO IMAGE AVAILABLE	No images are recorded to the SD Memory Card.
DPOF ERROR	There is a parameter that is not supported in the DPOF setting file.
DPOF PROTECT OFF	This is a confirmation for checking whether or not to remove DPOF write-protection when clearing DPOF settings.
	You tried to play back an image not supported on this camera.
ERROR ***	A camera problem has occurred. Contact a Support Center.
(III)	Poor lighting conditions. Image will be vulnerable to vibrations.
TOO MANY IMAGES	Image files is over 16348 pieces.
THIS CARD CAN'T NOT BE USED	Existing SD Memory Card capacity is over 256 MB.

The flash will not charge	The camera is set to Suppressed Flash mode.	Set the flash to Auto, Red-eye Reduction or Forced Flash mode.		
	The batteries are exhausted.	Replace with new batteries		
The playback image is too dark even though I used the flash	The subject is too far away.	Move closer to the subjects. (about 0.8m ~ 3.0m- WIDE setting)		
The playback image is blurred	The lens is not clean	Clean the lens.		
	The image is out of focus	Set the FOCUS photography according to the distance up to the subject.		
I cannot format the SD Memory Card	The SD Memory Card is write-protected.	Remove the write-protection.		
I cannot erase all the frames.	The frame is protected.	Remove the write-protection. Cancel the DPOF setting.		
	The SD Memory Card is write-protected.	Remove the write-protection.		
Nothing happens when I use the buttons and switches	Camera malfunction.	Turn the power off and remove the batteries once, and try again.		
	The mode dial is not at the correct position.	Set the mode dial to the correct setting.		
	The camera is in the Auto Power OFF mode.	Press the POWER button again to turn the camera on.		
Nothing is displayed even through the LCD monitor is set to ON.	The camera is in the PC mode.	Change the camera to the photography or playback mode.		
The set date and time disappears.	Both the battery and AC adapter are removed with the power still on.	Set the date and time again.		

AF (auto-focus) ··· A function for automatically focusing your camera.

AE ··· A function for automatically setting your camera's exposure.

AF/AE lock ··· Locking of the focus and exposure settings.

DPOF (Digital Print Order Format)

A standard for directly writing print information to the SD Memory Card. Files in this format can be printed easily by printers or photo print service bureaus that support this format.

●DCF (Design rule for Camera File System)

A file system standard defined by the JEIDA (Japan Electronic Industry Development Association) that is required for exchanging data between digital still cameras or a digital camera and a printer. This standard defines the hierarchy and file names used when storing image files on memory cards or other recording medium.

● Exif File Format (Exchangeable Image File Format)

A color still image format for digital still cameras approved by the JEIDA (Japan Electronic Industry Development Association). JPEG-compliant, this format is compatible with TIFF and JPEG and can be used in image processing software for most personal computers.

JPEG

A file format used for compressing and saving color images. The compression ratio can be selected, but the higher the compression ratio, the worse image quality becomes. This format is widely used in the paint software for PCs and on the Internet.

●NTSC (National Television System Committee)

Method of television transmission in use in Japan and North America.

●PAL (Phase Alternate Line)

Method of television transmission in use in the United Kingdom, Germany and other western European Countries.

●PC Card

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

Ready

Taking Photographs

> Playing Back Image

Erasing Images

Handy Functions

Other Applications

●Red-Eye Effect

The phenomenon where people's eyes sometimes appear red in the picture when you use a flash to photograph them in low-light conditions. This is caused by the light of the flash reflecting off the inside of the eye.

White Balance

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

●SD Memory Card

The Secure Digital (SD) Memory Card is a flash memory storage device designed by the consortium of Matsushita Electronic (Panasonic), SanDisk and Toshiba to meet the security, capacity, performance and environmental requirements inherent in emerging audio and video consumer electronics devices. This recording medium can be used over and over again.

Formatting

Transforming the contents of the SD Memory Card to a recordable state. (This is sometimes called "initialization".)

Exposure Compensation

When the screen contains an extremely bright or dark object, the camera automatically adjusts the brightness, resulting in the subject being reproduced darker or lighter. Exposure compensation adjusts for this.

●PRINT Image Matching

The PRINT Image Matching system prints the image of a digital still camera (with PRINT Image Matching function) in high quality using a PRINT Image Matching compatible printer.

When taking a photograph, the image data is added with PRINT Image Matching print command which enable the printer to print in an optimum color.

Company name Region		Phone number	e-mai l	Website		
Canada Toshiba America Information Systems, Inc.		(800) 829- 8318	dsc.support@tais.toshiba.com	www.toshiba.com/taisisd		
China Hong Kong	Toshiba Hong Kong Ltd.	2956-0222	NA	www.toshiba.com.hk		
France	Toshiba Systems (France)	08 92 35 01 92	consommateur@toshiba-tsf.com	www.toshiba.fr/produits/video/index.htm		
Germany	Toshiba Europe Gmbh	(02131) 15801	consumer@toshiba-teg.com	www.toshiba.de/consumer		
Italy	Toshiba Europe Gmbh Sede Secondaria in Italia	(039) 6099311	toshiba.italia@toshiba-tuk.com	www.toshiba-italia.com/		
Mexico	Toshiba de Mexico, S.A. de C.V.	(800) 712-6764	NA	www.toshiba.com.mx		
Singapore	Toshiba Singapore Pte.	6270-7776	servicecentre.cp@toshiba.com.sg	www.toshiba.com.sg		
Switzerland	Toshiba Europe Gmbn Swiss Sales Branch	01-908 56 56	info@toshiba.ch	www.toshiba.ch/		
United Kingdom	Toshiba Information Systems (U.K.) Ltd.	(01932) 828828	enquiries@toshiba-tuk.com	www.toshiba.co.uk		
United States	Toshiba America Information Systems, Inc.	(800) 829-8318	dsc.support@tais.toshiba.com	www.toshiba.com/taisisd		

For customers in the United States and Canada Register your product On-Line.

There are many advantages to being a member of the Toshiba Digital Camera community. Toshiba provides free firmware upgrades for applicable models, allowing you to get the latest technology and enhancement for your camera direct from the web site. There are links, updates and notices for special options available at the Toshiba Digital Community, like special adapter mounts for Tele-photo, Wide-angle, and other filters and lenses designed specifically for your digital camera. There are frequent discounts and promotions on printing services, carrying cases, service plans, and digital camera accessories. To find out more, visit the Toshiba Digital Community at www.toshiba.com/taisisd

Inquiries about the Supplied ACDSee[™]Software

ACD Systems Online Support: http://www.acdsystems.com/English/Support/index.htm