# **TOSHIBA**



# **Digital Still Camera**Instruction Manual



# **Attention**

#### For customers in the U.S.A.

DIGITAL STILL CAMERA PDR-T20



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 will not occur in a particular installation. If this equipment does cause harmful interference to radio or televisions expension, 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
  - 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.
- If these suggestions don't help, consult your equipment dealer or experienced radio/TV technician for help.

#### 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.

### TOSHIBA AMERICA INFORMATION SYSTEMS, INC.

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

# For customers in Canada CAUTION

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

In the space provided below, please record the model and Serial No. of your camera.

Model No. PDR-T20

Serial No.

Please retain this information for future reference.



- Read these safety precautions carefully before using this product.
- These precautions provide valuable safety instructions that you must observe.
- The indications used for the precautions have the following meanings:

#### Indication definitions

Indication	Meaning	
▲ DANGER         Indicates the existence of an imminent hazard such that deal serious bodily injury (*1) may result from improper use.		
⚠ WARNING Indicates the existence of a hazard such that death or seriou injury (*1) may result from improper use.		
<b>⚠</b> CAUTION	Indicates the existence of a hazard such that bodily injury (*2) or property damage (*3) may result from improper use.	

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

www.54gg.com

### ■ 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 in the case of damages arising from earthquakes, fire, thunder, acts by third parties, other accidents, 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 product.
- Toshiba Corporation accepts no liability whatsoever for any damage arising from not having followed the descriptions in the Instruction Manual.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from malfunctions resulting 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 an unauthorized third party.
- Toshiba's liabilities shall not exceed the purchase price of the product in any circumstances.

# Safety Precautions (Continued)

### When using the product

### **WARNING**

Should you ever notice a strange odor. smoke, or excessive heat coming from the camera, turn the power off and remove the battery and AC adapter.



Do not use the camera in areas near water.

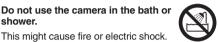
This might cause fire or electric shock. Take special care during rain, snow, on the beach, or near the shore.



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



shower. This might cause fire or electric shock.



If foreign objects or water have entered the camera, turn the power off and remove the battery and AC adapter.



Do not place the camera on inclined or unstable surfaces. This might cause the camera to fall or

tilt over, causing injury or malfunction.



Continued use in this state might cause fire or electric shock. Consult the store of purchase.

If the camera has fallen or its case has

been damaged, turn the power off and

remove the battery and AC adapter.



Do not disassemble, change, or repair the camera. This might cause fire or electric shock.



Continued use in this state might cause fire or electric shock. Consult the store of purchase.



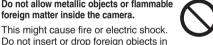
For repair or internal inspection, ask the store of purchase. Do not touch power cables during a



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

the battery/SD card slot, terminals,

other holes or openings.



This might cause electric shock.

thunderstorm.

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



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



# **CAUTION**

ears.

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



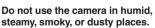
Do not play the supplied CD-ROM with a music CD player or a similar device.

This might damage the headphone or

speaker, and/or may damage your



Use of the camera is sometimes restricted because of potential radio interference.



This might cause fire or electric shock.



Do not drop or subject the camera to strong impact.



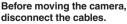
Do not leave the camera in places where the temperature may rise significantly, such as inside a car.

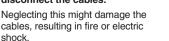


This might cause fire, electric shock, or malfunction.



This might adversely affect the case or the internal parts, 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.



#### Do not subject the LCD monitor to impact

This might damage the glass on the screen or cause the internal fluid to leak. If the internal fluid enters your eves or comes into contact with your body or clothes, rinse with fresh water. If the internal fluid has entered your eyes, consult a physician to receive treatment



#### Do not swing the camera while walking.

If you hold the strap and swing the camera, the camera might come into contact to other people or any object. resulting in injury or malfunction.



#### For the internal cleaning of the camera, consult the store of purchase every two years.

If dust accumulates inside the camera. this might result in fire or malfunction. Consult the store of purchase regarding the cleaning costs.



#### Before cleaning the camera, remove the battery and AC adapter.

Neglecting this might cause fire.



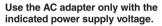
#### Do not fire the flash near the eyes.

This might cause temporary damage to the eyesight.



### About the AC adapter





Use with any other power supply voltage might cause fire or electric shock.



Do not place blankets over the AC adapter connected with the power source or place the adapter near a heater or on an electric (warm) carpet.



This might cause fire or malfunction.

#### Do not disassemble, modify, or repair the AC adapter.

This might cause fire or electric shock.



Do not damage, modify (e.g., to extend), or heat the AC adapter



- Do not pull the AC adapter cable, place something heavy on it, or pinch it. · Do not bend, twist, or bundle the AC
  - adapter cable with an excessive force.
  - These might cause fire or electric shock.

If dirt or dust has adhered to the plug on the AC adapter cable or the plug joints, remove the plug from the power source and clean it.

The insulation decrease of the plug might result in fire.



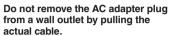
# Safety Precautions (Continued)



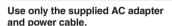
# **CAUTION**

#### Do not connect or disconnect the AC adapter plug with a wet hand.

This might cause electric shock.



This might damage the cable or plug, resulting in fire or electric shock. Make sure to hold the plug when removing it.



Use of an AC adapter other than specified might cause fire or malfunction.



If you plan not to use the camera for a long period of time, remove the AC adapter plug from a wall outlet.

Malfunction on the camera, if it happens, might result in fire.

Do not use the supplied AC adapter with another model or device.

This might cause fire or electric shock.



Firmly insert the AC adapter plug into a wall outlet.

Neglecting this might cause fire or electric shock.



#### **About battery**

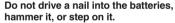


# **DANGER**

electrodes.

#### Use only the specified battery.

Use of a battery other than specified might cause fire or malfunction.



Electrode shorting (if happens) might cause the batteries to heat up, rupture, or ignite, resulting in fire or serious injury.

Do not connect the battery electrodes (plus and minus terminals) with any metal such as wire. Also do not carry or store the batteries with metal objects such as a necklace or hairpins.

Electrode shorting (if happens) might cause the batteries to rupture, ignite or heat up, resulting in fire or serious injury.

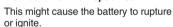


Do not heat, disassemble, or throw the batteries into fire or water.

This might cause the batteries to rupture, ignite or heat up, resulting in fire or serious injury.

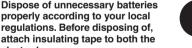


Do not charge the battery with the method other than specified.





Dispose of unnecessary batteries properly according to your local regulations. Before disposing of,





Electrode shorting (if happens) might cause the batteries to rupture or ignite resulting in fire or serious injury.



# Keep the batteries out of the reach of children.

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



If battery fluid enters the eyes, immediately rinse with fresh water and consult with a physician to receive treatment.



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



# **CAUTION**

Insert the battery with their electrodes correctly oriented.

If the battery are inserted improperly, this might cause rupture, fire, or injury.



When carrying or storing the batteries, place each battery in a separate plastic bag.



Neglecting this might cause shorting through any metal objects, resulting in liquid leak, ignition, rupture, burn, or injury.

### About the neck strap



# WARNING

Keep the neck strap away from infants and young children.

If the strap is mistakenly wrapped around the neck, suffocation and injury may result.



When you are using the neck strap, be careful not to get it caught in the doors of trains or cars etc.



Suffocation and injury may result.

#### **Getting Ready**

**Contents** 

o.ogoy	
Attention2	
Safety Precautions3	
Contents8	
Using Your Camera Correctly9	
Norts On Handling Battery11	
<ul> <li>Handling the AC Adapter Correctly12</li> </ul>	
<ul> <li>Handling the SD Card Correctly13</li> </ul>	
Names of the Parts14	
Using the Touch Panel16	
<ul><li>Inserting and removing the SD Card 18</li></ul>	
<ul> <li>Loading and Unloading the Battery19</li> </ul>	
Charging with the AC Adapter20	
Turning the Power On/Off22	
Opening and Closing the Lens Cover 23	
Setting the Date and Time24	
Switching between the photography and	
palyback modes24	
Taking Photographs	
Taking Photographs28	
Selecting the Scene Mode	
Selecting the Flash Mode	
Using the Self-timer	
Zooming Images to Be Photographed35	
<ul> <li>Changing the Photography Menu Settings 36</li> </ul>	
Preview	
White balance	
• Color	
• Quality 37	
• ISO	
LCD brightness	
• Setup 37	
Playing Back/ Deleting Photographed Images	
Playing Back Images40	
Displaying a List of Images	
(Thumbnail Display)41	
Enlarging Photographed Images	
(Zoom Playback)42	
<ul> <li>Playing Back Images Continuously</li> </ul>	
(Slideshow)43	
Drawing Images (Paint)44	
<ul><li>Protecting Images (PROTECT)46</li></ul>	
Erasing Images47	
<ul><li>Formatting the SD Card48</li></ul>	

### Connecting to the PC

•	
About Your Software	. 50
Connecting to the PC	. 51
Connecting to a Windows PC	. 52
Connecting to a Macintosh	. 54
Disconnecting the Camera from the PC	. 55
Using ACDSee™	. 56
File Structure	. 58
Other Useful Information	
Changing the System Settings	. 60
Auto Power Off	61
• Beep	61
Date and time	61
Language	
System information	
Setting the DPOF	
Warning Messages	
Troubleshooting	. 65
Frequently Asked Questions (FAQ)	. 66
Specifications	. 67

# **Using Your Camera Correctly**

Before using the camera, carefully read and strictly observe the Safety Precautions (page 3) and the notes described below:

### **Handing the Camera**

### 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 vibration
- · Places subject to smoke or steam
- Places subject to strong magnetic fields (near electric motors, transformers, magnets, etc.)
- Places contacting chemicals (such as pesticides), rubber or vinyl products for a long period of time
- Beach, sandy places, or places where sand is likely to be present
  If the camera comes into contact with sand, not only will the camera become damaged, it will also no longer be repairable.

# ■ Do not press the touch panel with excessive force or operate the panel with fingernails or hard pointed objects.

• This might damage the touch panels.

### About recycling of rechargeable battery

- Dispose of unnecessary battery properly according to your local regulations.
- Before disposing of the battery, attach insulating tape to both the electrodes.



Li-ion

### 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. If condensation form on the SD card, remove the SD card,
wipe off any condensation and wait a short time before using it again.

### Cleaning the Camera

- To prevent the lens and the surface of the LCD monitor from being scratched, blow off any dust from them 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 because these may react with the camera body and cause deformation or remove the coating.

# **Using Your Camera Correctly (Continued)**

### **Trademark information**

- MS-DOS and Windows are trademarks registered in the U.S. and other counties by the U.S. Microsoft Corporation.
  - Windows is an abbreviated term referring to the Microsoft Windows Operating System.
- Macintosh is a registered trademark of Apple Computer, Inc.
- ACDSee is a registered trademark of ACD Systems Co.
- SD™ is a trademark.
- Other company or product names are trademarks or registered trademarks of the respective companies.



### **Copyright Notice**

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 laws.

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 cards, etc.) containing copyrighted images and files is limited to purposes within the range permitted by copyright laws.

### **Software and Instruction Manual**

- Copying or duplication of the supplied software applications or Instruction Manual in part or in whole is not allowed without the prior permission of Toshiba Corporation.
- Use of the supplied software applications and Instruction Manual is allowed only on one personal computer.
- Toshiba Corporation is not liable whatsoever for any damages to the user or a third party as
  a result of use of a device with the supplied software applications and Instruction Manual.
- The personal computer screens shown in this Instruction Manual are examples and may differ from actual screens. Toshiba Corporation is not liable whatsoever for any compensation arising from errors in this Instruction Manual.

### 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 68.

# **Notes On Handling Battery**

When you use the battery, carefully read and strictly observe the SAFETY PRECAUTIONS and the notes described below.

\* The battery is not fully charged when you buy your battery. Be sure to charge the battery before use.

### **About Battery Use**

- The battery gradually discharges even when not used. Charge the battery one or two days before use.
- To maximize the battery life, switch the camera OFF as often as possible when it is not being used.
- In cold locations, the number of frames that can be taken decreases. Take along a spare
  fully charged battery. You can also increase the amount of power produced by putting the
  battery in your pocket or another warm place to heat it and then loading it into the
  camera just before you take a picture.
- · Always keep the terminals in a clean state.
- If the battery is used for a long time, the battery itself will become warm. This is normal
  and not a malfunction.
- At normal temperatures (+77°F <+25°C>), this battery can be recharged for use about 300 times. If the battery runs out quickly, this indicates that the battery has reached the end of its effective life and should be replaced.

### When Not Using the Battery for a Long Time

- When the battery is not in use, be sure to remove it from the camera body. If the battery
  is left attached to the camera body or battery charger, a minute current will flow even if
  the power is turned OFF. This will result in over discharge and the battery may no longer
  be useable.
- If the battery is not to be used for a while, store it after there is no power left. If the battery is stored for a long time in a fully charged state, its performance may be impaired.
- When the battery is to be stored for a long time, fully charge the battery and then use the battery until there is no power left once every year and then store it.
- Store the battery in a cool place. We recommend a dry place with a surrounding temperature of +59°F <+15°C> to +77°F <+25°C>. Avoid storing the battery in extremely hot or cold places.

### **Charging the Battery**

- When you use the battery for the first time or when the battery has not been used for a long time, be sure to charge the battery before use.
- · Use only the specified battery charger.
- This battery does not need to be fully discharged or exhausted before being charged.
- The battery may feel warm after it has been charged or immediately after being used.
   This is normal and not a malfunction.
- The battery can be charged at temperatures between +41°F <+5°C> and +104°F <+45°C>, but should be charged between +50°F <+10°C> and +86°F <+30°C> to obtain maximum battery performance.
- Do not recharge a fully charged battery.

### **Specifications**

### Lithium-ion battery (PDR-BT3)

Nominal voltage : 3.7V Nominal capacity : 1035 mAh

Operating Temperature: +41°F (5°C) to +104°F (+40°C)

Dimensions : 1-3/8" (35.2 mm) (W) x 2-1/6" (53.0 mm) (H) x 9/32" (7.0 mm) (D)

Weight : Approx. 0.99 oz (28g)

# **Handling the AC Adapter Correctly**

Be sure to use only the specified AC adapter. Using a different AC adapter might cause the camera to malfunction.

Before using the AC adapter, carefully read and strictly observe the Safety Precautions (page 3) and the notes described below:

- Do not allow the connectors on the AC adapter to contact any other metal object because this might cause a short circuit.
- To connect the AC adapter, fully insert the plug on the AC adapter into the DC IN 5V terminal on the camera.
- When removing the AC adapter cable, turn the camera off, then disconnect the cable while holding its plug. Do not disconnect the cable by pulling the actual cable.
- Do not drop the AC adapter or subject it to strong impacts.
- Do not use the AC adapter in very hot and humid places.
- Do not insert the plug on the AC adapter while the battery is being used. Switch the camera
  off first.
- · The AC adapter is for indoor use only.
- Do not connect the supplied AC adapter to a device other than this camera.
- The AC adapter may sometimes become warm during use. This does not designate malfunction.
- Buzzing noises may come form inside the camera. This does not designate malfunction.
- Do not use the AC adapter near a radio because it could interfere with the radio.
- If you remove the battery or AC adapter while the camera is in operation, the date may be lost from the memory. If this happens, reset the date.

### **Specifications**

### AC adapter (CEX0107A)

Input : 100 to 240 V AC, 50/60 Hz

Rated input capacity : 100 V AC, 33 VA

Rated output : 5 V DC, 3 A

Operating temperature :  $32^{\circ}F$  (0°C) to +104°F (40°C) Storage temperature :  $-4^{\circ}F$  (-20°C) to +149°F (65°C)

Dimensions : 1-9/16" (40 mm) x 1-3/16" (30.5 mm) x 3-5/8" (94.2 mm) (W x H x D)

Weight : Approx. 5.29 oz (150 g) AC cable length : Approx. 6' 6-3/4 (2 m)

# **Handling the SD Card Correctly**

In this Instruction Manual, the SD memory card is called an SD card. Read and observe the following when handling the supplied SD card.

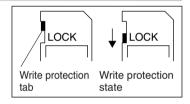


### **Cautions**

- The SD card includes a non-volatile semiconductor memory (NAND Flash EEP-ROM).
   Under normal use data saved in the SD card is not damaged or lost. If used improperly, however, the data may be damaged or lost. Please be aware that Toshiba Corporation will accept no responsibility whatsoever for damaged or lost data, regardless of the type or cause of the problem or damage.
- The SD card uses part of the memory as its system area. The actually usable memory capacity is therefore lower than the indicated capacity.
- The supplied SD card has been already formatted for image storage. Always use this
  camera when reformatting the card to erase images or folders. Formatting the SD card on
  other devices (PC, etc.) may result in problems such as inability to read or write data.
- · We strongly recommend that you make backups of important data.
- When the SD card comes to the end of its life, it does not allow image data to be written or deleted. If this happens, purchase a new SD card.

#### Write Protection

To prevent valuable data from being erased accidentally, switch the write protect tab at the side of the SD card to "LOCK." To save, edit, or erase data in the card, cancel the write protection state.



### **Specifications**

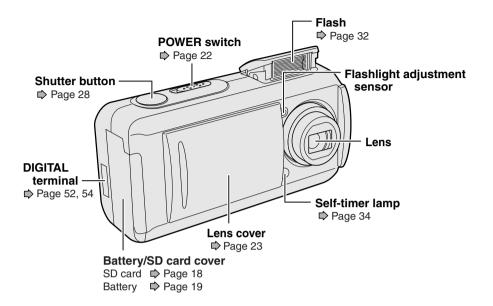
Memory type : NAND Flash memory

Operating temperature :  $0^{\circ}$ C to +55°C Storage temperature :  $-20^{\circ}$ C to +65°C

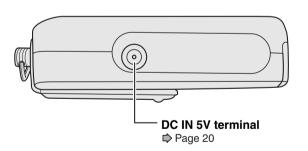
Operating/Storage humidity: 30% to 80% (no condensation)

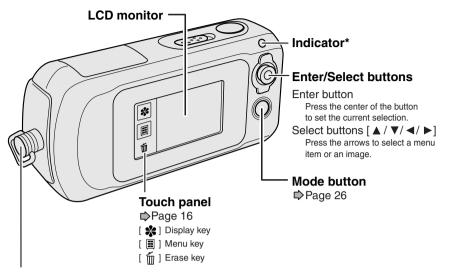
Dimensions : 24.0 mm x 32.0 mm x 2.1 mm (W x H x D)

Weight : Approx. 2g



**Names of the Parts** 



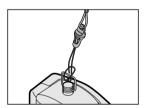


### Strap attachment

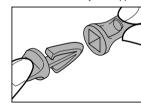
Attach the strap as shown.

For a neck strap equipped with a stylus, attach a buckle as shown, so that you can use the stylus.

When you want to close the buckle, insert it firmly until you hear a click. If it is not firmly inserted, it may release and the camera may be dropped.







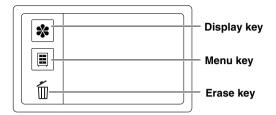
#### \* Indicator

Lights and blinks depending on the current status.

Color	Status	When the power is off	When taking photographs	When playing back images	When the PC is in connection
Green	lights	Battery charging completed	Auto focusing properly locked (no unsteady hold warning)	_	PC mode (when in connection)
	blinks	_	Auto focusing properly locked (unsteady hold warning given)	_	_
Red	lights	Battery charging in progress	SD card access in progress	SD card access in progress	SD card access in progress
	blinks	Battery charging error	Auto focusing failure	_	-
Orange	lights	-	Flash charging in progress	-	Not mounted other statuses
	blinks	-	Malfunction on the camera		_

# **Using the Touch Panel**

You can use the keys on the touch panel besides the Select and Mode (hard) buttons to perform various operations. For the individual functions, see the reference pages.



### ■ [ \* ] Display key (ppages 29 and 40)

Tapping this key switches between display and non-display of the icons. A different set of icons appears depending on the mode.

Mode	Icon	Item	Description	Page
Photography	Ω <sub>A</sub>	Scene mode	Select a situation in which photographs are taken.	30
	ŽÁ	Flashing	Select how the flash should function.	32
	ව OFF	Self-timer	Select the time for the self-timer.	34
Playback	Zooming		Enlarges and plays back a single image.	42
	×	Thumbnail display	Reduces and simultaneously displays multiple images.	41

### **■** [ **■** ] Menu key (**□** pages 36 and 60)

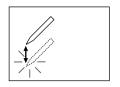
Tapping this key switches between display and non-display of the menu screen. A different set of menu appears depending on the mode. The Setup menu is selectable through each of the two modes.

Mode	Icon	Item	Description	Page
Photography	graphy Preview Select an image display method for post-ph		Select an image display method for post-photography confirmation.	37
	AUTO	White balance Select a color correction mode.		37
		Color	Select a color mode for photography.	37
	## #	Quality	Select the image size and quality.	37
	200	ISO	Select an ISO sensitivity level.	37
	LCD brightness Select a brightness level for the LCD monitor.		37	
	æ	Setup	Customize the system settings.	60
Playback		Slideshow Continuously displays photographed images.		43
		Paint	Paint Allows handwriting on the current image.	
	i	Information	Shows information such as the photography date and size of the current image.	-
	Protect Protects important images.		Protects important images.	46
	D	DPOF	Allows DPOF settings.	62
		LCD brightness	Select a brightness level for the LCD monitor.	37
	3C	Setup	Customize the system settings.	60

# ■ [ أ ] Erase key (ເ⇒pages 47 and 48)

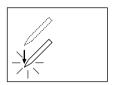
Use this key to delete photographed images or initialize the SD card.

### You can operate the touch panel using the following methods:



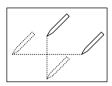
#### Tapping:

Tap an icon or other items on the touch panel for a short moment. Perform this operation to select an icon or a message, for example.



#### Tapping and holding:

Tap and hold an icon or other items on the touch panel. Perform this operation to change the brightness of the LCD monitor, for example.

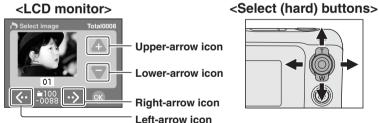


#### Dragging:

Tap and then move in any direction on the panel. Perform this operation to move a slider, for example.

To select an icon on the touch panel, you may highlight it using the Select buttons  $[ \blacktriangle / \blacktriangledown / \blacktriangleleft / \blacktriangleright ]$  and then press the Enter button.

e.g.





- The icons other than [♣], [■], and [ □] differ depending on the current status.
- Operating the touch panel with the supplied stylus will reduce operation errors while it can be operated with the finger.
- Dragging too guickly may cause the panel to give no response.

### Setting up the touch panel

If the touch panel does not correctly respond according to tapped positions, use the touch panel setup function in the Setup menu. For the detailed procedures, see "Changing the System Settings" page 61.

# **Inserting and Removing the SD Card**

Images photographed with this camera will be stored in the SD card. Without inserting the SD card, you cannot take photographs using the camera.

### Before starting

Before inserting or removing the SD card, make sure that the power to the camera is off.



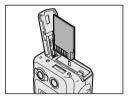
### Open the battery/SD card cover.



Slide the battery/SD card cover in the arrow direction 1, then open it 2.

# 2

# Insert the SD card in the correct orientation shown.



Hold the SD card with its metal surface facing the touch panel side, then insert the card as far as it can go.

# 3

# Close the battery/SD card cover.



Close the battery/SD card cover 1, then slide it in the arrow direction 2.

Make sure that the cover is firmly closed.

### To remove the SD card

Open the battery/SD card cover, push the card once so that the card is slightly ejected, then remove the card slowly.

### Important !

- Never open the battery/SD card cover or remove the battery while the SD card is being recorded (the indicator is lit red). Neglecting this could damage the SD card or the data in the SD card.
- This camera is incompatible with the MultiMediaCard™.

# **Loading and Unloading the Battery**

This camera must be used with dedicated rechargeable lithium-ion battery (PDR-BT3). This battery is merely called battery in this Instruction Manual. You cannot use other types of battery. Charge the battery before using the camera.

### Before starting

Confirm that the power of the camera is off. Removing the battery with the power on could cause malfunction and/or damage the saved image data.



### Open the battery/SD card cover.



Slide the battery/SD cover in the arrow direction ①, then open it ②.

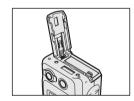
# 2

# Insert the battery in the correct orientation shown.



Tilt the battery lock lever toward the touch panel and then insert the battery with care that the orientation of the arrow on the battery's label matches the arrow on the camera.

#### **Battery lock lever**



You should insert the battery as far as they go.

# 3

### Close the battery/SD card cover.



Close the battery/SD card cover ①, then slide it in the arrow direction ②.

Make sure that the cover is firmly closed.

### To remove the battery

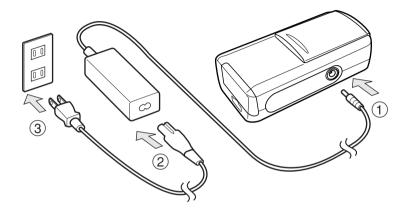
Open the battery/SD card cover and then release the battery lock lever. After the battery is slightly ejected, pull out the battery slowly.

# **Charging with the AC adapter**

You may also use the AC adapter when using the camera indoors for a long period of time or when transferring images to a personal computer, for example.

### Before starting

Confirm that the power to the camera is off and then load the battery.



- Insert the plug from the adapter into the DC IN 5V terminal.
- Insert the appropriate end of the AC cable into the AC adapter.
- Insert the AC plug on the AC cable to an AC wall outlet.

The indicator lights red when charging is started and turns green when charging is completed. It blinks red when a charging error occurs.

### Important !

- If any problem occurs during charging, remove the battery from the camera and replace them with new ones.
- Before connecting or disconnecting the AC adapter, make sure to turn the camera off.
   Neglecting this could cause malfunction and/or damage the saved image data even with the battery loaded.
- When using the AC adapter after incorrectly terminating the camera, the camera may not be correctly initiated. If this happens, turn the power off, then turn it on again.
- If the camera has been used at high temperatures, for example, under the blazing sun, charging may not start immediately because heat piled up inside the camera causes the internal sensor to operate. If this happens, wait until the camera cools off and then perform charging.



- Charge the battery when using this camera for the first time. To charge the battery, load them in the battery compartment of this camera. It takes approximately 4 hours to complete charging.
- When loading the battery after incorrectly terminating the camera, the camera may not be correctly initiated. If this happens, turn the power off, then turn it on again.
- The battery must be charged when the ambient temperature is in the range from 10°C to 30°C.

### Battery Wear

When the power is turned on, the camera shows the remaining battery power on the LCD monitor.

Display			()	
Meaning	Sufficient amount left	Fairly consumed	Nearly exhausted	Completely exhausted

### **About battery wear**

The battery wear may vary depending on length of storage since manufacture of the battery, temperature of the camera and battery, and operating condition such as flash. Moreover, if the polarities of the battery (+ or –) and the terminal of the camera that come in contact with the electrodes are contaminated, electricity will not flow properly and the camera will decide that the battery are exhausted. When removing and loading the battery, be careful not to tap these parts. If the parts are contaminated, clean with a dry cloth. When using the supplied PDR-BT3 Lithium-ion battery pack, the number of photographs that can be taken are shown as below.

Conditions: 25°C, Flash use rate 50%

Photography interval: 1 frame every 30 seconds

Possible number of shots: 120 shots

\* The number of frames shown above is a reference value.

### Using the battery efficiently

- This camera consumes electricity even with the power off while the amount is extremely small. We therefore recommend that the battery be removed when not using the camera for a long period of time. If the camera is left without battery about a week, the date, time and other settings may be reset to the factory defaults. If this happens, set the correct date and time again before using the camera.
- When using the camera in cold areas, keep the camera and battery warm by holding them inside your outer cloth.

Battery performance lowered through low temperature will return to normal when a normal temperature is restored.

# **Turning the Power On/Off**

When the power is turned on, the camera is initiated with a different mode depending on whether the lens cover has been opened or closed.

### Before starting

Load the battery and insert the SD card. See "Inserting and Removing the SD Card" 

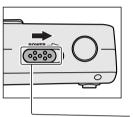
page 18. and "Loading and Unloading the Battery" 

page 19 and "Charging the Battery" 

page 20

### Turning the power on

#### Slide the POWER switch in the arrow direction.



The indicator is lit orange and the camera is initiated.

The initial mode after the power is turned on differs depending on the following situation:

With the lens cover opened : photography mode

With the lens cover closed : playback mode

**POWER switch** 

### Notes

- If no operation is performed for the preset period of time with the power on, the power will be automatically turned off. For Auto Power Off, see page 61.
- After the power is turned on, it may take several seconds to charge the flash. While the
  flash is being charged, the indicator blinks orange. The camera is not yet ready for
  photography during this period. Start photography after charging is completed.

### **■** To turn the power off

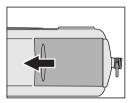
With the power is on, slide the POWER switch.

# **Opening and Closing the Lens Cover**

Open the lens cover when taking photographs. When not taking photographs, keep the cover closed to protect the lens.

### Opening the lens cover

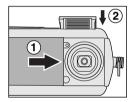
#### Slide the lens cover in the arrow direction.



Sliding the lens cover will allow the flash to pop up. Opening the lens cover fully and turning the power on causes the lens to extend and the camera to be initiated with the **photography mode**.

### Closing the lens cover

### Slightly slide the lens cover in the arrow direction.



Following an alarm the lens will be automatically returned to the original position and the **playback mode** will be selected. Wait until the lens is completely returned, then close the lens cover by sliding it. ① Because the flash is not automatically returned, gently push the flash down until the latch clicks. ②

### **Important**

 Do not move the lens cover while the lens is moving. Neglecting this may cause product damage.



- With the lens cover opened, you cannot lock the flash down. To return the flash to the original position, close the lens cover first.
- If the camera has been connected to the PC using a USB cable, the camera is initiated with the PC mode no matter whether the lens cover has been opened or closed.

# **Setting the Date and Time**

The screen shown in step 4 appears after a message when using this camera for the first time or when turning the power on after leaving the camera without battery for an extended period of time.

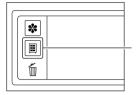
### Before starting

Load the battery, insert the SD card, then turn the power on.



### Tap the [ 🗏 ] key.

The menu screen appears.



Menu key

2 Tap the [ ≠ ] icon.



Setup icon

3 Tap the [ □ ] icon.

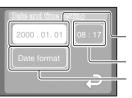


The date and time setting screen appears.

Date setting icon



### Tap the item to be set.



The setting screen appears.

Set year, month, and day.

Set time

Select the date display format.

You can select the format from among 3 patterns.



# Select the item, then tap the [ 🛕 ] or [ 🔻 ] icon.



Each time the buttons are tapped, the numeric value changes.

You may also use the Select (hard) buttons [ $\triangle/\nabla$ ] or perform tap and hold operation to change the selection.

Upper-arrow icon

Lower-arrow icon



# Tap the [ 💿 ] icon.



The setting screen appears.

OK icon



# Tap the [ ] icon.



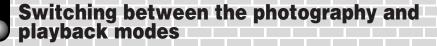
The selected item is set and the initial screen is restored.

You can also restore the initial screen by selecting  $[ \bigcirc ]$  with the Select (hard) buttons  $[ \triangle / \nabla / \blacktriangleleft / \blacktriangleright ]$  then pressing the ENTER (hard) button.

Return icon



- You need to set the date and time when:
  - The camera is used for the first time.
  - The camera is left without battery for about a week (in case where the battery has been charged using the AC adapter for more than approximately one hour).



There are two ways of switching between the photography and playback modes.

### Using the lens cover

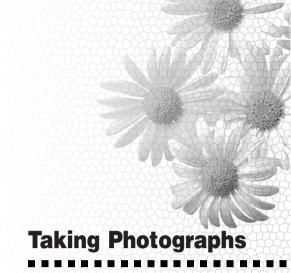
Each time the lens cover is opened or closed, the photography and playback modes are switched.

### Using the mode button

Each time the mode button is pressed, the photography and playback modes are switched.



 With a USB cable connected to the camera, you cannot switch between the photography and playback modes using the lens cover or the mode button.



Taking Photographs
Selecting the Scene Mode
Selecting the Flash Mode
Using the Self-timer
Zooming Images to Be Photographed
Changing the Photography Menu Settings



# **Taking Photographs**

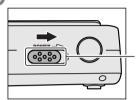
You can take photographs while looking through the LCD monitor.

### Before starting

Load the battery, insert the SD card, then open the lens cover.



### Turn the power on.



POWER switch



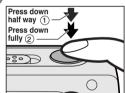
### Use the LCD monitor to compose the picture.

The LCD monitor shows an image captured through the lens. If the LCD monitor is not bright enough, adjust the brightness of the monitor. See "LCD brightness" 

page 37.



# Press the shutter button down halfway ①.



Pressing the shutter button down halfway starts auto focus and exposure adjustments. When the adjustments are completed properly, the indicator lights or flashes green (Auto focus normal locked).



# From the half-pressed position, fully press the shutter button down ②.

The photographed image is saved in the SD card.



• If the focus and exposure cannot be set to proper values, the indicator blinks red following an error beep. (Auto focus error) In this case, the focus is locked to infinity (1.5 meters when using the flash) and the exposure is locked to the closest value. When the flash does not fire with the Macro selected as the scene mode (□ see page 31), the focus is locked at a point between 10 cm (Wide edge) and 27 cm (Tele edge).

### Important 9

- When taking photographs, be careful not to interfere the lens, flash, or flashlight adjustment sensor with the strap or fingers.
- The indicator lights red while the SD card is being recorded. Never open the battery/SD card cover during this period. Neglecting this could damage the SD card or the data in the SD card.

### Switching between Display and Non-display of the Display Screen

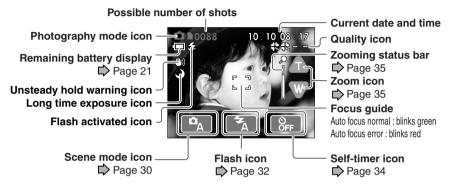
The Display shows the current photography mode settings.

### Tap the [ 🗱 ] key in the photography mode.

Display and non-display of the Display screen are switched.

The Display screen automatically disappears when no operation is performed for a certain period of time.

e.g.



# Notes

- Taking a single photograph may not decrease the possible number of shots or may decrease it by 2 because a different amount of data is recorded depending on subjects.
- You may always find bright, dark, or colored spots on the LCD monitor. This, however, does not designate malfunction. These spots will not appear in the photographed images.

### ■ File size per image

The table provides you with references about the maximum number of images recordable on the SD card.

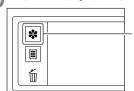
Quality	High quality	Standard	€€€€ Economy	<b>8</b> € -   VGA
Image size	1600 x 1200	1600 x 1200	1024 x 768	640 x 480
Compression mode	High	Standard	Standard	Standard
File size per image (Max.)	960 KB	480 KB	256 KB	128 KB
8MB	6	13	25	51
16MB	15	30	56	112
32MB	31	63	118	236
64MB	64	129	242	484
128MB	130	261	489	978
256MB	260	520	975	1950

# **Selecting the Scene Mode**

This camera automatically makes the optimum settings according to the types of subjects such as portrait, landscape, and night view.



### Tap the [ 🗱 ] key in the photography mode.



The Display screen appears.

Display key



# Tap the [ 🖳 ] icon.



A list of scene mode icons is displayed.

#### Currently set scene mode icon.

A list of scene mode icons will appear by tapping the icon.



### Tap the icon to be selected.



For the details of the scene mode, ⇒see page 31.

The selected scene mode is set and the Display screen is restored.

Tapping this icon causes the Display screen to be restored.



• The setting still remains after the power is turned off manually or by Auto Power Off.

### Details about the scene mode

Select the scene mode suitable for the occasion or situation:

### [ 🖳 ] Auto

Select this option to leave all adjustments to the camera and to take photographs casually.

Flash mode: all options selectable

### [ 🖪 ] Portrait

Select this option to photograph people.

Flash mode: Auto [ 🛐 ]

### [ 🛐 ] Portrait + Landscape

Select this option to focus on both portrait and landscape.

Flash mode: Auto [ 🚮 ]

### [ \sqrt{\sq}}}}}}}}} \end{\sqrt{\sq}}}}}}}}} \end{\sqrt{\sq}}}}}}}}} \end{\sqrt{\sq}}}}}}}}} \end{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}} \end{\sqrt{\sqrt{\sq}}}}}}} \end{\sqrt{\sqrt{\sq}}}}}}} \end{\sqntitendant\signt{\sqrt{\sqrt{\sq}}}}}}} \end{\sqrt{\sqrt{\sqrt{\s

Select this option to take photographs of distant scenery or landscapes. Also select this option to take photographs of distant scenery or landscape at night. The focus is locked to infinity.

Flash mode: Suppressed Flash [ [ ]

### [ 🔲 ] Macro

Select this option to take photographs within a distance of 50 cm.

The camera can be focused within the following distances.

Wide (wide-angle): 10 cm ~ infinity Tele (telephoto): 27 cm ~ infinity

Flash mode: all options selectable

### [ 🖸 ] Sports

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

Flash mode: Suppressed Flash [ [ ]

### [ 🔁 ] Night scene

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

Flash mode: Forced Flash [ [ ]

### [ III ] Multi

Select this option to continuously take 16 photographs of a moving subject. The 16 photographed images are saved as a single image. The quality level is locked to [ ]. Flash mode: Suppressed Flash [ ].



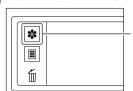
 The above descriptions about the scene mode are provided as reference. You may make a final choice based on your preference.

# **Selecting the Flash Mode**

You can select a flash mode according to the situation.



### Tap the [ 🛠 ] key in the photography mode.



The Display screen appears.

Display key



# Tap the [ 😭 ] icon.



A list of flash icons is displayed.

Currently set flash mode icon



### Tap the icon to be selected.



For the details of the flash modes, see page 33. The selected flash mode is set and the Display screen is restored.

Tapping this restores the Display screen.

### Notes

- The effective firing distance of the flash is 0.5m to 2.8m (with ISO200 and wide edge selected).
- After a photograph is taken with the flash, it may take several seconds to charge the flash.
   While the flash is being charged, the indicator lights orange. The camera is not yet ready for photography during this period. Start photography after charging is completed.
- Some scene modes do not allow you to change the flash mode. See page 31.

### Details about the flash mode

The flash function has the following 4 options:



The flash fires automatically according to the photographic situation.

### [ 2 ] Forced flash

The flash always fires. Select this option when the subject is backlit, or in artificial light (fluorescent lighting, etc.).

### [ 🔯 ] Suppressed flash

The flash does not fire. Select this option when taking photographs in sufficient indoor lighting or at distances too great for the flash to have any effect (theater performances, indoor sporting events, etc.).

### [ [ ] Red-Eye Reduction

When photographed in dark places with a flash, peoples' eyes in photographs are sometimes red. This "red-eye" effect is caused by the light of the flash reflecting the eyes. With this option selected, the flash fires before and when photographs are taken, so that the red-eye effect is reduced. To reduce the effect, you may also ask the subject to look directly towards the camera or you may photograph from as close as possible.

# Notes

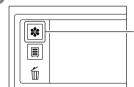
- When taking photographs indoors or in dark places, you may experience slower shutter speed and see [ (m)) (unsteady hold warning)] icon on the LCD monitor. We recommend you place the camera on a stable surface in order to avoid unsteady camera hold.
- When taking photographs of night view or other dark scenes, [ (long time exposure)] icon may appear on the LCD monitor together with [ (long time exposure)] icon. This designates that it takes twice longer than usual at least because of a special processing in progress. Because the shutter speed will become slower than usual, place the camera on a stable surface to take photographs.
- The setting still remains after the power is turned off manually or by Auto Power Off.

# **Using the Self-timer**

The self-timer allows you to be in a picture with other people in your group.



### Tap the [ 🛠 ] key in the photograph mode.



The Display screen appears.

Display key



# Tap the [ 📭 ] icon.



A list of self-timer icons is displayed.

Currently set self-timer icon



### Tap the icon to be selected.



The selected option is set and the Display screen is restored.

- [ ]: Approx. 10 seconds after the shutter button is pressed
- [ 2]: Approx. 2 seconds after the shutter button is pressed
- [ ]: Self-timer off

Tapping this restores the Display screen.



# Press the shutter button down halfway, then press it down fully.

The self-timer lamp will first light up, then will start flashing. The camera automatically takes a photograph when the preset time passes.

To interrupt photography, press the [▼] button.



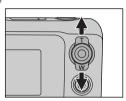
 The self-timer setting is automatically cleared each time a photograph is taken. It is also automatically cleared when the power is turned off manually or by the Auto Power Off or when the mode is changed.

# **Zooming Images to Be Photographed**

You can enlarge the subject on the LCD monitor up to a ratio of 4 times.



# Determine how much the image is to be zoomed.



Pressing the Select button towards the "T" (Tele) increases the zooming ratio.

Pressing the Select button towards the "W" (Wide) decreases the zooming ratio.

You may also tap and hold the zoom icons [  $\triangle$  /  $\boxed{w}$  ] on the screen to change the zooming ratio.

The zooming ratio is switched from 1X to 2X using the optical zoom and from 2X to 4X using the digital zoom.



Tapping and holding increases the zooming ratio.

Tapping and holding decreases the zooming ratio.

Optical zoom

Digital zoom



# Press the shutter button down halfway, then press it down fully.



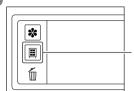
- Using the digital zoom decreases the image quality while it allows a greater image enlargement on the screen.
- The selected zoom ratio is not automatically cancelled when an image is photographed and saved.
- The selected zoom ratio is automatically cancelled when the power is turned off or when the Auto Power Off is activated.

# **Changing the Photography Menu Settings**

You can customize various settings for photography.



### Tap the [ ■ ] key in the photography mode.



The menu screen appears.

Menu key

2

# Tap the icon of the menu item to be changed.



For the details of the menu items, see the next page.

3

# Tap the icon of the parameter to be selected.

e.g. When setting the Preview



The selection is set and the menu screen is restored. For the details of the selectable parameters, see the next page.

To change more than one menu item, repeat steps 2 and 3.



# Tap the [ 🔁 ] icon.

The photography mode is restored.



- Tapping the [ ] key with the menu screen in display also restores the photography mode.
- The setting still remains after the power is turned off manually or by Auto Power Off.

## Photography menu items

## [ 🕒 ] Preview

Specify whether or not the image just recorded is to be displayed immediately on the LCD monitor for approximately 2 seconds.

[ 🕒 ] : Display on [ 🔊 ] : Display off

#### [ Auto ] White balance

The human eye adapts to changes in light so that white objects still appear white when the light changes. With cameras, however, the color balance must be adjusted according to the colors of the light surrounding the subject. This color adjustment is called "white balance adjustment." This menu item allows you to select an appropriate white balance setting according to the lighting conditions.

### [ 🔳 ] Color

Select the color in which photographs are taken.

[ ■ ] : Color [ 🖼 ] : Monochrome [ 🗟 ] : Sepia

## [ 🔝 ] Quality

Select a combination of image size and quality. Selecting a larger image size and/or high image quality increases the amount of data per image, reducing the possible number of shots.

[ ∰ ]: High quality
1600 x 1200 pixels, high quality
1600 x 1200 pixels, standard quality
1600 x 1200 pixels, standard quality
1024 x 768 pixels, standard quality
1024 x 480 pixels, standard quality

### [ 200 ] ISO

Select the photographic ISO to be used when a photograph is taken. The higher the ISO sensitivity value, the greater the sensitivity, but the greater the noise. With a higher sensitivity selected, bright photographs can be taken with less light.

[ ]: Sensitivity equivalent to ISO100 [ ]: Sensitivity equivalent to ISO200

[ 🔤 ] : Sensitivity equivalent to ISO400

# Note

 For or to, the sensitivity values are not fixed and are automatically selected in the range ISO100 to ISO200 or ISO100 to ISO400.

# [ [ ] LCD brightness

You can select the brightness of the LCD monitor by moving the slider in the vertical direction or pressing the  $\triangle$ / $\bigcirc$  icons. This menu item is also selectable in the playback mode.

### [ 🗲 ] Setup

Make various system settings for this camera. This menu item is also selectable in the playback mode. For the details, see "Changing the System Settings" ⇒ page 60.



Playing Back Images
Displaying a List of Images
(Thumbnail Display)
Enlarging Photographed Images
(Zoom Playback)
Playing Back Images Continuously
(Slideshow)
Drawing Images (Paint)
Protecting Images (PROTECT)
Erasing Images
Formatting the SD Card

# **Playing Back Images**

You can review photographed images on the LCD monitor.

#### Before starting

Insert the SD card, then close the lens cover.



### Turn the power on.

Initiating the camera with the playback mode (page 22) causes it to show the last image recorded.

If no image has been saved, a message that indicates the absence of images appears on the black screen.



## Tap the [ ${ life}$ ${ life}$ ${ life}$ ${ life}$ ${ life}$ icons to switch images.



Each time the [  $\langle\!\langle \cdot \rangle\!\rangle$  ] icon is pressed, images are switched.

Pressing the  $[\ _\circ\ ]$  icon with the last image in display causes the first image to be recalled. Similarly, pressing the  $[\ _\odot\ ]$  icon with the first image in display causes the last image to be recalled.

Image change



 You can also switch images by pressing the direction key [ ◀/▶] or by dragging on the LCD monitor from the left to the right or from the right to the left.

## Switching between display and non-display of the Display screen

### Tap the [ \* ] key in the playback mode.

Display and non-display of the Display screen are switched.

To quit the Display screen, touch the [ \* ] key again.

Playback mode icon

Playback mode icon

Date and time photographed

Quality

Page 37

Zoom icon

Page 42

Thumbnail icon

Page 41

# Displaying a List of Images (Thumbnail Display)

Reduced multiple images are simultaneously displayed on the LCD monitor. This feature is useful to quickly find the desired image in such a situation where many images have been saved.

# Tap the [ ] icon.



Multiple images are simultaneously displayed.

Thumbnail icon



If there are more than 6 images, tap  $[ \triangle / \heartsuit ]$  to scroll the screen and display the other images. You also may drag the slider in the vertical direction to scroll the screen.

Slider



When in the playback mode, multiple images are also simultaneously displayed by
pressing the Select (hard) button [▼] or dragging on the LCD monitor from the top to the
bottom.

### ■ To display one desired image in a regular size

In order to display the desired image in a regular size, tap the image to highlight, then tap it again; or press the Select (hard) buttons [ $\triangle/\sqrt{4}/\triangleright$ ] to highlight the image, then press the Enter (hard) button.

# **Enlarging Photographed Images** (Zoom Playback)

You can select a photographed image to enlarge on the screen. For images photographed in the 16-frame mode, simple continuous playback (motion picture display) will be performed.

## Tap the [ ] icon.



The image is enlarged.

The enlargement ratios differ depending on the original image sizes; for example,

1600 x 1200 images will be enlarged 2 1/2 times. 1024 x 768 images: will be enlarged 3 1/5 times. 640 x 480 images: will be enlarged 2 times.

#### Zoom icon



A white frame and a black frame are displayed at the top left of the screen. The black frame shows the entire image while the white frame shows the location of the currently enlarged area.

In order to change the area to be displayed, drag on the screen or press the Select buttons.

# **Note**

 You may also press the Select buttons [ ▲ / ▼ / ▼ / ▶ ] to change the area to be displayed on the screen in zoom playback.

### ■ To restore a regular size

Tap the [ ] icon. The [ ] icon does not appear while dragging is being performed.



Tapping restores the original image size.

# Note

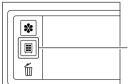
- With an enlarged image in display, pressing the ENTER button also restores the original image size.
- Images photographed using a different model may not be enlarged.



This feature continuously plays back images one by one.



## Tap the [ 🗏 ] key in the playback mode.



The menu screen appears.

Menu key

# licon.



#### Slideshow icon

The slideshow starts and displays the next image every three seconds (approx.).

### To interrupt the slideshow

Pressing the ENTER key or tapping on the touch panel quits slideshow.



- The Auto Power Off does not operate during slideshow.
  - "Auto Power Off" page 61

# **Drawing Images** (Paint)

Using the color pen tool you can paint letters and/or illustrations on recorded images.

In the playback mode select an image to be processed, then tap the [ 🗏 ] key.

The Menu screen appears.

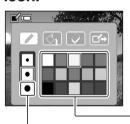
2 Tap the [  $\Box$  ] icon.



A palette appears.

Paint icon

Select the pen thickness and color by tapping the [ ] icon.



[ ] : pen icon

[ 🔄 ] : fill icon

[ ]: eraser icon

[ 🔁 ] : saving icon

Color palette

# Tap the [ \* ] key, then make a drawing by dragging on the screen.



The palette disappears. Letters and/or illustrations that you draw on the drawing screen will be added to the image as they are.

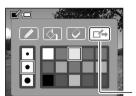
Each time the [ \* ] key is tapped, display and non-display of the palette are switched.

Drawing screen

Tapping the [ | | key on the drawing screen cancels one previous operation.



# Tap the [ 🔼 ] icon on the palette, after a save confirmation screen appears, tap the [ 🖸 ] icon.



A copy of the original image is made then combined with your drawing. The processed image is saved as another image and the original image is kept as an unprocessed image. The size of all processed images will be 640 x 480 pixels.

Save icon



 Tapping the [ ] key causes the menu screen to be restored. A save confirmation screen appears if the processed image is not saved.

#### ■ To correct letters or illustrations

- 2) Tap the [ \* ] key, then correct the drawing by dragging on the screen.

The portion that you trace is erased.



• Once a processed image is saved, it cannot be processed again.

#### ■ To fill in a desired area

- 1) Tap the [ ] icon on the palette, then select the pen thickness and pen color.
- 2) Tap the [ \* ] key, then enclose the desired area by dragging.





The start and end points of your drawing must be jointed.

Correct

Incorrect

- 3) Tap the [ \* ] key, then tap the [ ] icon and the filling-in color on the palette.
- 4) Tap the [ \*] key, then tap any point inside the enclosed area.

  The enclosed area is filled in with the selected color.

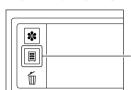
  If the start and end points of your drawing have not been jointed, the entire picture will be painted into one color.

# **Protecting Images (PROTECT)**

This feature prevents images from being deleted accidentally (PROTECT).



## Tap the [ 🗏 ] key in the playback mode.



The Menu screen appears.

Menu key

2

# 🙎 Tap the [ 📵 ] icon.

The setting screen appears.



Protection setting icon

3

# 



A key mark [ 1 ] is displayed under the protected image.

To protect another image, repeat this step.

**Protection icon** 

Protection cancel icon



# Tap the [ 🚳 ] icon.

The settings is saved.

#### Important !

- Be aware that formatting the SD card will also erase the protected images.
- You will see DPOF marks [ > ] under images saved in the DPOF format. Images with
  these marks are automatically protected in such a way that you cannot cancel the
  protection. For details of the DPOF, see "Setting the DPOF" in page 62.

### To cancel protection

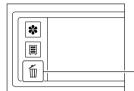
On the setting screen select an image to be unprotected, then tap the [ 😈 ] icon.



You can erase recorded images. Erasing unnecessary images will increase free space in the SD card.



# In the playback mode select an image to be erased, then tap the [ $\stackrel{\leftarrow}{\text{m}}$ ] key.



The erase mode screen appears.

When in the playback mode: Select an image to be erased, using the Select (hard) button [ $\blacktriangleleft$ / $\blacktriangleright$ ]. When in the photography mode: The last image photographed is displayed.

Erase key



# Tap the [ 📳 ] icon.



[ [ ] : Erases all the images in the SD card other than the protected ones.

[ ] : Erases the currently displayed image.

A confirmation screen appears.

Tapping this restores the Display screen.



# Tap [ 🔚 ] icon.



The selected image is erased.

Tapping [ ] icon restores the previous screen.

To erase another image, repeat steps 1 to 3.

#### Important

- Erased images cannot be restored. Before erasing images, make sure that the images are unnecessary.

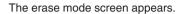
- Images saved in the DPOF format cannot be erased. In order to erase them, first clear their DPOF settings page 62.

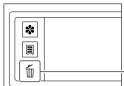
# Formatting the SD Card

Formatting the SD card will erase all the images on the SD card. This camera may not allow an SD card formatted with another device (e.g., PC) to be used properly. You can use such an SD card properly on this camera by formatting it with the camera.



# Tap the [ $\stackrel{\leftarrow}{\mathbb{I}}$ ] key.





Erase key

# 2

# Tap the [ 👩 ] icon.



Format icon

# 3

# In the confirmation screen, tap [ 🔘 ] icon.



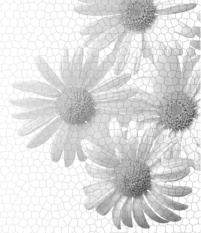
The SD card is formatted.

After formatting has been completed, such a message appears that asks if the frame numbers are to be reset. To reset the frame numbers, select [ ] icon.

Tapping this cancels formatting and restores the previous mode screen.

#### Important !

- The locked SD card cannot be formatted. Unlock the SD card first.  $\square$  See page 13.
- Formatting the SD card also erases the protected images. All data other than images are also erased. Before formatting the card, make sure that all the images are unnecessary.
- An SD card having any problem cannot be properly formatted.



# **Connecting to the PC**

About Your Software
Connecting to the PC
Connecting to a Windows PC
Connecting to a Macintosh
Disconnecting the Camera from the PC
Using ACDSee™
File Structure



# **About Your Software**

This Instruction Manual describes how to install the supplied software applications and provides a brief explanation of how to use them. For the detailed methods of using them, consult the Help files of the individual applications.

For the basic details on your personal computer, see the instruction manuals that come with the computer and the operating system.

# **About the Supplied Software**

The supplied CD-ROM includes the following software applications:

- ACDSee<sup>™</sup> (image viewing software)
- Toshiba Corporation will not assure operation of ACDSee<sup>™</sup> when installed on a device other than this camera. For installation and operation on a different device, contact the Online Support of ACD Systems.

ACD Systems Online Support:

http://www.acdsystems.com/English/Support/index.htm

- DirectX (video playback software)
  - Install this software when video images captured with a digital video camera cannot be played back using Windows Media Player. (This camera does not have a video function.)
- USB driver (for Windows® 98 only)
   Install this software when connecting this camera to the PC using the supplied USB cable. This driver is exclusively used for Windows® 98. If using Windows® 2000, Windows® ME, Windows® XP, or a Macintosh, use the standard driver supplied with it. Installing the USB Driver □ Page 52
- Service & Support file

This file includes information on service and support. We recommend that you save this file in your PC in case you lose this manual.

Grobal Contacts ₽ Page 68

#### **About the Used Terms**

Windows 98 refers to Microsoft® Windows® 98 Operating System-English version Windows 2000 refers to Microsoft® Windows® 2000 Operating System-English version Windows ME refers to Microsoft® Windows® Millennium Edition Operating System-English version

Windows XP refers to Microsoft® Windows® XP Operating System-English version

# **Connecting to the PC**

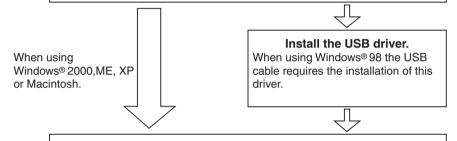
By connecting this camera to the PC, you can transfer images recorded on SD card to the PC in order to modify or send to another person through the Internet.

#### **Connection Flow**

For the operations of Windows or Macintosh, see the subsequent pages.



Install ACDSee $^{\text{TM}}$  is a software application for viewing photographed images on a PC. Use the supplied CD-ROM to install in the PC.



#### Connect this camera to the PC.

Use the supplied USB cable to make this connection.

## **Minimum System Requirements**

A PC to be connected with this camera must satisfy the following requirements. Before making a connection, check that all the items have been satisfied.

	Windows PC	Macintosh		
CPU	Pentium® processor or higher	Power PC G3 processor 266 MHz or higher		
os	Windows® 98/ 2000/ ME/ XP Pre-installed PC	Mac OS 9 or later (Mac OS 9.2 or later recommended) Mac OSX 10.1 or later (Mac OS 10.1.3 or later recommended)		
Memory	64 MB or more			
Free space on	20 MB or more			
hard disk	(Additional space necessary to store images.)			
Color monitor	256 colors, 800 x 600 dots min., 32,000 colors or more			
Necessary devices	CD-ROM drive, USB port			

When using Mac OS 9 or 9.1, you need to install CarbonLib 1.3 or later.

You can download the program from the web site of Apple Computer, Inc.

\*This does not assure that all PCs with the minimum requirements will connect properly.

# **Connecting to a Windows PC**

The PC must have Windows® 98, 2000, ME, or XP installed. Be careful that how to install the USB driver differs depending on the Windows versions.



# Insert the supplied CD-ROM into the CD-ROM drive.



The language selection window appears.

2

Click the [ • ENGLISH ] icon.

3

# Click the [ ACDS



### ] icon.



Follow the shown instructions to install  $ACDSee^{TM}$ .

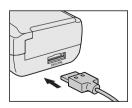
When the installation is completed, the ACDSee™ icon appears on the desktop.

### With using Windows® 98

Click the [ ] icon from the supplied CD-ROM, and follow the on-screen instructions to perform the installation.



# While the PC and camera are on, connect the USB cable.



Connect one end of the USB cable to the USB port on the PC, and the other end to the DIGITAL terminal on this camera.

When connecting the USB cable, be careful with that the PUSH mark on the cable plug faces toward the touch panel.



# Installing USB driver

Follow the on-screen instructions to install the standard driver of each OS. Restart your PC after installing.



- When the USB cable is connected, this camera is displayed on the PC as a removable disk and automatically enters the PC mode.
- With the USB driver installed, simply reconnecting the USB cable causes the PC to automatically identify this camera so that images can be transferred.
- To connect the USB cable smoothly and properly, pay attention to the shapes of the connectors on the cable.
- When in connection with the PC, Auto Power Off does not operate.

# **Connecting to a Macintosh**

The Macintosh must have Mac OS 9.0 or later installed. Because this camera supports the USB Mass Storage Class, a Macintosh with Mac OS 9.0 or later does not require the installation of the USB driver.



# Insert the supplied CD-ROM into the CD-ROM drive.



The language selection window appears.

2

Click the [ • ENGLISH ] icon.

3

## Click the



#### ] icon.



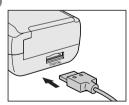
Setting up is started.

Follow the shown instructions to install  $ACDSee^{TM}$ .

When the installation is completed, the ACDSee™ icon appears on the desktop.



# Connect the USB cable to the PC and this camera.



Connect one end of the USB cable to the USB port on the PC, and the other end to the DIGITAL terminal on this camera.

When connecting the USB cable, be careful with that the PUSH mark on the cable plug faces toward the touch panel.

# **Notes**

- When the camera is connected with the USB cable, it is displayed as an "untitled" disk on the desktop and automatically enters the PC mode.
- With the USB driver installed, simply reconnecting the USB cable causes the PC to automatically identify this camera so that images can be transferred.
- To connect the USB cable smoothly and properly, pay attention to the shapes of the connectors on the cable.
- When in connection with the PC, Auto Power Off does not operate.
- When another USB drive is used at the same time, the SD card in this camera may not be mounted on the desktop. If this happens, connect only this camera to the PC.



#### With Windows® 98 installed:

Turn off the power to the camera, then remove the USB cable form the PC and the camera.

#### With Windows® 2000, ME or XP installed:

Click the [ 🐇 ] icon on the task tray located at the bottom right of the PC and then perform operations according to the displayed instructions. After finishing the operations, remove the USB cable from the PC and the camera.

#### With Macintosh installed:

On the desktop drag and drop the folder (untitled) of this camera over the trash icon, then remove the USB cable from the PC and this camera.



• When disconnecting the USB cable from the PC, pull it slowly while pressing the PUSH button on the plug.

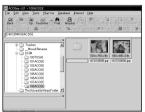
# **Using ACDSee™**

Installing ACDSee<sup>™</sup> allows you to view a list of images photographed with this camera and transfer images processed on the PC to the camera.

## Copying Photographed Images to the PC



## Connect this camera to the PC using a USB cable.



 $\mathsf{ACDSee}^\mathsf{TM}$  is automatically started and a list of images recorded on the SD card is displayed.



# Select an image to be copied, then click "Copy" in the Edit menu.





# Select a copy destination, then click "Paste" in the Edit menu.

The image is copied and then displayed in the selected destination.

### Important !

- The data saved to the SD card may be damaged if the power to the camera is turned off during image transfer. We recommend that you use the AC adapter when connecting the camera to the PC.
- If connecting the camera to the PC does not start ACDSee™

#### When using a Windows® PC:

Double-click the ACDSee icon on the desktop.

#### When using a Macintosh:

Open the ACDSee folder on the hard disk, then double-click the ACDSee icon.

## **Copying Images to This Camera**

You can process images photographed with this camera on the PC and then send them back to the camera. You can also make copies of images other than those photographed with this camera.

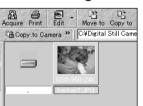


# Connect this camera to the PC using a USB cable.

ACDSee™ is automatically started.



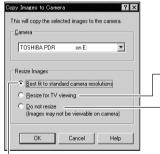
# Select an image to be copied, then select "Copy to Camera."



When using a Macintosh, drag and drop an image to be copied onto copy destination folder. After a confirmation message appears, select "Yes."



# Select a post-conversion image size, then click "OK."



The image is named "ACDSXXXX.jpg" and is copied to the XXXACDSE folder on the SD card in the camera.

When copies are made, images are always converted to 640 x 480-pixel images.

Resultant image sizes differ depending on the original sizes of images to be copied.

Images are copied with the original sizes unchanged.

640 x 480 or larger

: The image will be converted to 1024 x 768 size. For an image smaller than 1024 x 768, it will be surrounded by a black frame in Windows and enlarged in Macintosh.

640 x 480 or smaller

: The image will be converted to 640 x 480 size. For an image smaller than 640 x 480, it will be surrounded by a black frame in Windows and enlarged in Macintosh.

# Notes

- With "no size change" selected, this camera may not properly display images, depending on their sizes.
- Images copied from a Macintosh to this camera do not allow image list display (Thumbnail Display) no matter which size is selected. This attributes to a relational issue with a Macintosh and does not designate malfunction.
- For details of ACDSee<sup>™</sup>, consult its Help.
- Images taken on other camera types and copied to this camera sometimes cannot be displayed.

# File Structure

When connected with a PC, images photographed with this camera are displayed as shown to the right. (When being displayed in Windows)

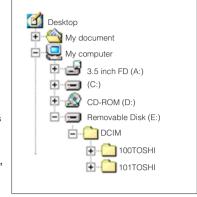
#### [XXXTOSHI]

Designates an image photographed with this camera.

A folder number in the range 100 to 999 is assigned according to the situations.

The files are given such names as "PDR\_XXXX.jpg" where XXXX is a number from 0001 to 9999.

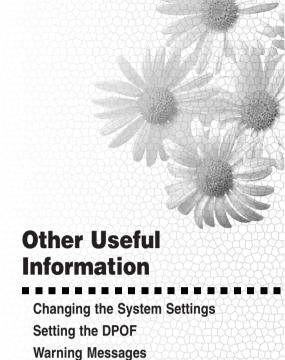
The extension ".jpg" indicates that the file is in JPEG format.



"JPEG" is a file format for storing color images in compressed form. The compression rate is selectable. The higher the compression rate, the greater the reduction in image quality. With this camera, the compression rate is determined by the image quality setting.

JPEG is a file format commonly used for image processing applications and on the Internet.

Images photographed with this camera are saved in EXif format. "Exif" is the abbreviation of "Exchangeable Image File Format," and is a color still image format (for digital still cameras) approved by the Japan Electronics and Information Technology Industries Association (JEITA). An Exif file consists of JPEG data and includes thumbnail image (list of images) and photography setting information. The Exif format is compatible with TIFF (another image format) and JPEG formats and can be used with ordinary image processing applications.



Changing the System Settings
Setting the DPOF
Warning Messages
Troubleshooting
Frequently Asked Questions (FAQ)
Specifications
Service Information
Index

# **Changing the System Settings**

You can customize various system settings.



#### Tap the [ 🗏 ] key.



The menu screen appears.

Menu key

2

# Tap the [ 🖍 ] icon.

Example: when in the photography mode



The setup screen appears.

Setup icon



# Tap the icon of the item to be changed.



For the changeable items, see page 61.



## Tap the icon of the parameter to be selected.

Example: When setting Auto power off



For the selectable parameters, see page 61.

To change more than one item, repeat steps 3 and 4.

Tapping this restores the previous screen.



## Tap the [ 🗏 ] key.

The selection is set and the playback or photography mode is restored.

# **Setup Menu Items**

#### **Auto Power Off**

If no operation is performed for a specific period of time, the power to the camera is automatically turned off. This feature is useful to reduce battery wear.

[ 1... ]: 1 minute (approx.)

[ 3 ]: 3 minutes (approx.)
[ 5 ]: 5 minutes (approx.)



• Auto Power Off does not operate during Slideshow or when in the PC mode.

#### Beep

Specify whether or not beeps are to be generated when buttons or icons are touched.

[ • ]) : Beeps are generated.

[ N ]: Beeps are not generated.

#### Date and time settings

Set the current date and time.

For the setting method, see "Setting the Date and Time" in page 24.

#### Language

Specify in which language menus and messages are to displayed on the LCD monitor.

[ 😭 ] : English

[ O ]: Japanese

[ 🚱 ] : Spanish

[ ]: Simplified Chinese [ ]: Traditional Chinese

### **System information**

[ 🔄 ] : Shows the firmware version on this camera.

[ ] : Shows the amount of empty space in the SD card.

[ [ ] ]: Reset the frame No. If you tap [ [ ] icon, the frame No. of image the next time you photograph will start from 0001.

[ [ ] ]: Returns the settings other than date, time, and language to the factory defaults.

[ ]: Corrects the positional misalignment of the touch panel. After the correction screen appears, slowly tap the center of the [X] mark to perform adjustment. When two points are tapped, the setting is saved and the setup screen is restored.

# **Setting the DPOF**

DPOF is the standard for recording printing information directly on SD cards and other media. Files saved in the DPOF format can be printed using compatible printers or through laboratory printing services.



## Tap the [ ] key in the playback mode.

The menu screen appears.



# Tap the [ 🕟 ] icon.



The DPOF screen appears.

**DPOF** icon

3

# Tap the [ ] icon.



Image Select icon Setting Confirmation icon

All clear icon

4

# Tap the [ 🔳 ] icon.



The selection screen appears.

[ ] : One image at a time

[ ] : All images at once

All-image Select icon

Single-image Select icon



# Select an image, then select the number of prints.



With the [ ] icon selected, you cannot select an image in this step.

[  $\mbox{\@scale}_{\circ}$  ] / [  $\mbox{\@scale}_{\circ}$  ] : Each time you tap, images switch.

[ ] / [ ] : Each time you tap, the number of prints changes.

To select multiple images, go back to step 3 to 5. After selecting the number of prints, tap the [ 8 ] icon.



# Tap [ 🕟 ] or [ 🔊 ] to make selection for printing date.

[ ]: Adds the date of photography to the print(s).

[ [ ] : Does not add the date of photography to the print(s).



Тар [ 🕞 ].



A DPOF file is created, and restores the screen in step 3.

Tapping this restores the screen in step 3 without creating a DPOF file.

# Notes

- The maximum number of prints that you can select is 99 per image. The total number of prints that you can set is 9999.
- The total number of images selectable for printing is 999.
- The date of photography is printed in the bottom right of the image.
- Images saved in the DPOF format are automatically protected. In order to cancel the protection, clear their DPOF settings.

### ■ To confirm the current settings

Tap the [ ] icon on the screen in step 3. The screen that shows the currently set number of prints appears. You cannot change the number of prints on this screen. To change the number of prints, tap the [ ] icon on the screen in step 3 and perform setting again.

### ■ To clear the current settings

- Tap the [ ] icon on the screen in step 3.
   A confirmation screen appears.
- 2) Tap [ 🗐 ].

All the settings will be cleared and a confirmation screen for protection cancel will appear.

To cancel clearing, tap [ [ ].

3) Tap the [ 1 ] icon to cancel the protection.

The protection is canceled.

#### Important !

• The cleared settings cannot be restored. Keep this in mind when starting to execute.

The following warning messages are displayed on the LCD monitor.

**Warning Messages** 

Message	Meaning
	The battery power is less than half.
	The battery power has been nearly exhausted.
	The battery power has been completely exhausted.
No card	No SD card is present.
Card full	There is no empty space in the SD card. Photography cannot be performed.
Card error	The SD card has been damaged. The SD card has not been properly formatted.
Card protected	The SD card has been locked so photography cannot be performed.
Card isn't formatted	The SD card has not been formatted. (Switches to the format execution screen.)
Frame number full	Folder No. and file No. have reached the maximum values.
Cover lid open	The battery/SD card cover is open.
[⊠]	This image cannot be played on this camera.
No image	The SD card does not contain JPEG images.
Protected	An attempt was made to erase a protected image.
DPOF error	The DPOF information is abnormal.
Lens cover is closed	The lens cover has not been completely opened.
Lens error	The lens was subject to an excessive force or the lens has any problem.
The strobe is closed	The flash has not been projected.
[ 📆 ]	Poor lighting conditions. Image will be vulnerable to vibrations.
[9]	Lighting conditions are extremely poor. The shutter speed will be extremely slow.
The date and time setting is not completed.	The settings of date and time have not yet been completed. (Switches to the date & time set screen.)
Error	This camera may have some problems. Contact the support center; see the end of this manual.

# **Troubleshooting**

When the camera does not operate properly, check the following items besides the warning messages (➡page 64) and the indicator colors (➡page 15)

Problem	Cause	Remedy	Page
The power cannot be turned on.	The batteries have been exhausted.	Recharge the batteries.	20
	The AC adapter plug has been disconnected from a wall outlet.	Plug the adapter into the wall outlet.	20
	The batteries in incorrectly have been loaded.	Load the batteries in the correct direction.	19
The batteries run out quickly.	You are using the camera in extremely cold conditions.	Put the batteries in your pocket or another warm place to warm it, then load it into the camera just before taking a photograph.	11
	The battery terminals are dirty.	Wipe the battery terminals with a clean, dry cloth.	21
	The batteries have reached the effective life.	Replace with new battery.	19
No photograph is taken when the	No SD card has been inserted.	Insert the SD card.	18
shutter button is taken.	There is not enough space in the SD card.	Insert a new SD card. Erase saved images to increase free space.	18 47
	The SD card has been write-protected.	Cancel the write-protection. Replace with a new SD card.	13 18
	The SD card has not been formatted.	Format the SD card.	48
	The SD card has been damaged.	Insert a new SD card.	18
	Auto Power Off is functioning.	Turn the power on.	22
The flash cannot be used.	Suppressed Flash has been selected.	Select another flash type.	32
	You pressed the shutter button while the flash was charging.	Wait until charging is completed before pressing the shutter button.	28
The played-back image is too dark even though the flash fired.	The subject is too far away.	Move closer to the subject.	32
The played-back image is blurred.	The lens is not clean.	Clean the lens.	9
	The image is out of forcus.	Perform Macro photography according to the distance up to the subject.	31
	The image has been shot in a handshake state.	Place the camera on a stable surface when taking photographs to prevent handshake.	33
The SD card cannot be formatted.	The SD card has been write-protected.	Cancel the write-protection.	13
A single image cannot be erased.	The image has been protected.	Cancel the protection of the image.	46
	The SD card has been write-protected.	Cancel the write-protection.	13
	The image has been set with DPOF.	Cancel the DPOF setting.	62
The settings including date and time have been cleared.	Without batteries, the camera has been left for a long period time.	Set date and time again.	19 24

# Frequently Asked Questions (FAQ)

The following are some frequently asked questions.

# Q: Pressing the shutter button does not cause the camera to immediately take a photograph. Why does this happen?

A: Are you using the "half-shutter" function (pressing the shutter button down halfway)? This camera adjusts the focus and exposure when the shutter button is pressed down halfway. If you fully press the shutter button down, the camera first tries to adjust the focus and exposure. After finding the appropriate values for these, it takes a photograph, resulting in a time lag between the time when the shutter button is pressed and when a photograph is actually taken.

#### Q: Why can't I focus the camera properly?

A: While this camera has a precise auto focus mechanism, this mechanism may not work well under the conditions and with the subjects described below:

- · Subjects moving at high speed
- · Very shiny subjects such as a mirror or car body
- Subjects with extremely low contrast (such as subjects dressed in the same color as the background)
- 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

In addition, on this camera the focus is usually set on the center of the frame. The focus is, however, set on the background if the subject is not at the center, for example, when shooting two people standing side by side. In such cases, you may try the following:

- 1) Point the camera so that one of the persons is at the center of the viewfinder.
- 2) Press the shutter button half way down. (The camera is focused on the person.)
- While keeping the shutter button in the half-way position, point the camera to compose a desired image, then fully press the shutter button down.

If the focus cannot be adjusted properly, it is locked to infinity (1.5 meters when using the flash).

# **Specifications**

Pickup elements 1/2.7" CCD sensor (number of effective pixels: approx. 2.01

million)

Sensitivity Equivalent to ISO 100/200/400Lens  $2 \times 2000 = 2.8 \text{ (W) } 4 \text{ (T)}$ 

Focal length F = 5.8-11.6 mm (equivalent to 38-76 mm on a 35 mm camera)

Auto-focus TTL method AF, focus adjusting range: 10 cm to infinity (Wide edge), 27 cm to infinity (Tele edge) detection system: contrast

detection method

Metering system TTL metering by pickup method Exposure control method Program automatic exposure

Shutter speed 1/2 to 1/1000 sec. (For landscape mode, 4 to 1/1000 sec.)

White balance Auto/manual setting

Focal range Standard: approx. 50 cm to infinity, macro: approx. 10cm(W)/

approx. 27cm(T) to infinity

Self-timer 2 sec./10 sec. changeable

Flash Auto/ Forced Flash/ Suppressed Flash/ Red-Eye Reduction

Flash adjusting method: automatic adjustment

Effective range: approx. 0.5 m to 2.8 m (ISO 200, when wide

edge)

Date/Time Recorded with image data (Exif file format)

Automatic calendar function Automatically adjusted until 2037 LCD monitor 1.5" TFT Color LCD (118000 pixels)

I/O terminal DC IN 5V terminal: 5 V DC, PC terminal: USB

Power supply Lithium-ion battery or AC adapter

Storage medium SD memory card, 8/16/32/64/128/256 MB compatible

Compression method JPEG-compliant
Image file format Exif Ver.2.2-compliant
Conversion rule DCF Ver.1.0-compliant

Operating conditions Operating temperature: +5°C to +40°C, storage temperature:

-20°C to +60°C

Humidity: 30 to 70% (no condensation)

Dimensions 54 mm x 108 mm x 29.5 mm (W x H x D, projections excluded)
Weight Approx. 170 g (excluding accessories, batteries, and SD card)

# **Supplied Accessories**

Strap with stylus ...... 1

AC adapter	1	SD card 1	
Lithium-ion battery	1	USB cable 1	
Software CD-ROM	1	Instruction manual (this book) 1	
Soft case	1		

- The design and specification is subject to change without notice for the purpose of important.
- The illustrations in this manual are exaggerated and simplified for ease of viewing, so there can be slight differences between them and the actual product.

# **Global Contacts**

Country/Region	Company name	Phone number	e-mail	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)	01 47 28 28 50	consommateur@toshiba-tsf.com	www.toshiba.fr/produits/ video/index.htm
Germany	Toshiba Europe GmbH	(02131) 158 01	consumer@toshiba-teg.com	www.toshiba.de/consumer
Italy	Toshiba Consumer Products (Italia)	(039) 6099342	toshiba.italia@toshiba- tuk.com	www.toshiba.it/
Mexico	Toshiba America Information Systems, Inc.	(800) 829-8318	dsc.support@tais.toshiba.com	www.toshiba.com/taisisd
Singapore	Toshiba Singapore Pte.	270-7776	NA	www.cp.toshiba.com.sg
Switzerland	Toshiba Europe Gmbh Swiss Branch	01-946 07 77	info@toshiba.ch	www.toshiba.ch/
United Kingdom	Toshiba (UK) 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

In the supplied CD-ROM, a file containing information regarding service and support is recorded, we recommend saving the file to your PC in case you lose the instruction manual.

To open the file, insert the CD-ROM into the CD-ROM drive and click "English" on the language selection screen, then click "service & support".

#### 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<sup>TM</sup> software ACD Systems Online Support:

http://www.acdsystems.com/English/Support/index.htm

# Index

#### Alphabetic order

AC adapter	18 33
Battery	?1 81
Color3	37
Date & time settings       2         DC IN 5V terminal       14, 2         DCF       6         DIGITAL terminal       14, 52, 5         Display key       15, 1         DPOF       6         Drag       1	20 37 34 6 82
ENTER button	17
File structure       5         Flame No.       40, 48, 6         Flash       32, 3         Forced flash       3         Formatting       4	31 33 33
Protection         4           Indicator         1           ISO         3	5
JPEG 5	8
LANGUAGE       6         LCD monitor       15, 29, 4         LCD monitor brightness       16, 3         Lens cover       14, 23, 2	10 37
Menu key       15, 1         Mode button       15, 2         Mode change       23, 2	26
PC mode       22, 2         Preview       3         Photography menu       16, 3         Photography mode       22, 2         Playback menu       1         Playback mode       22, 2         POWER switch       14, 2         Press down full       2         Press down halfull       2	37 23 6 23 22 28
Quality3	37

Red-Eye Reduction	33
Scene mode SD card Select buttons Self-timer Shutter button Slideshow Strap Suppressed flash System System setting	13, 18 15 28 43 15 33
Thumbnail display	17 17 .16, 17, 61
USB driver	52
Warning message	
Zoom playback	