# **TOSHIBA**

INSTRUCTION MANUAL MODE D'EMPLOI



PDR-M70

DIGITAL STILL CAMERA

# TOSHIBA INSTRUCTION MANUAL

To ensure that you use the Toshiba PDR-M70 Digital Still Camera safely and correctly, read this Instruction Manual carefully before you start using the camera. Once you have finished reading this Instruction Manual, keep it handy at all times.

# PDR-M70

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

Model No. PDR-M70 Serial No. \_\_\_\_\_\_

Please retain this information for future reference



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

#### **FCC Statement**

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

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **NOTE**

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

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

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

Getting Ready

Taking hotograp

Playing ack Image

Erasing Images

Handy Function:

Other Applications

Additional Information

#### **CAUTION**

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

## 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.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

# **Before Reading This Manual**

Thank you for purchasing the Toshiba PDR-M70 Digital Still Camera.

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

#### **Trademark Information**

- Macintosh and QuickTime are trademarks of Apple Computer. Inc.
- MS-DOS and Windows are registered trademarks of the Microsoft Corporation of the U.S. registered in the USA and other countries.
  - Windows is an abbreviated term referring to the Microsoft Windows Operating System.
- SmartMedia is a trademark of Toshiba Corporation.
- Other companies or product names are trademarks or registered trademarks of the respective companies.

#### Conventions Used In This Manual

#### IMPORTANT

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

#### Memo

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

There are various ways you can take photographs on the PDR-M70, by using the settings provided by the camera itself or by adjusting the settings to suit your particular photographic requirements.

In addition to photographic functions, the PDR-M70 is provided with other handy functions. We suggest that you look at the function map below before you start using the PDR-M70.

## Read these pages first.

Let's get ready to use the PDR-M70. (P.19 to P. 39)

## Let's learn about basic operation.

- Turning the Power ON (P. 39)
- Photography (P. 43)
- Playing Back Photographed Images (P. 81)
- Erasing Images (P. 90)

# Taking photographs.

STEP1 – Taking photographs. (P. 43)

STEP2 – Leaving camera settings up to your camera.

- Leaving camera settings up to your camera (Auto Select mode) (P. 48)
- Taking Portrait Shots (P. 49)
- Taking Landscape Shots (P. 50)
- Taking Shots of Moving Objects (P. 51)
- Taking Shots of Portraits at Night (P. 52)
- Taking Continuous Shots of Moving Objects (P. 53)

## STEP3 – Utilizing the various photography modes.

- Zoom Photography (P. 54)
- Close-up Photography (P. 56)
- Photography Using the Self-timer (P. 57)
- Making Movies (P. 64)
- Photography Using the Flash (P. 58)
- Taking Photography Continuously (P. 61)
- Long Exposure Photography (P. 68)
- Automatic Exposure Bracketing (AEB Photography) (P. 71)
- STEP4 Setting the modes in more detail to make your photographs turn out more as you intended.
  - Setting Image Size and Quality (P. 46)
  - Taking Shots with the Priority Given to Shutter Speed (P. 66)
  - Taking Shots with the Priority Given to Aperture (P. 65)
  - Setting White Balance, AF Position and Focus (P. 72)
  - Compensating Exposure (P. 69)

## Playing back your photographed images

STEP1 – Let's play back some images. (P. 80)

STEP2 — Selecting the various ways to play back images.

- Playing Back Movies (P. 81)
- Enlarging Photographed Images (P. 85)
- Auto Playback (P. 86)
- Simple Movie Playback (P. 87)
- · Displaying a List of Images (P. 84)
- Displaying Detailed Information of Images (P. 88)
- Switching LCD Monitor Display (P. 88)

## Setting the basic camera settings

- Setting the Date and Time (P. 115)
- Formatting SmartMedia™(P. 94)
- Adjusting the LCD Monitor Brightness (P. 119)
- Turning the LCD Monitor Display OFF (P. 79)
- Turning the Beep OFF (P. 115)
- Switching the Folder (P. 89)
- Setting the Color of Images (Color/Black and White/Sepia) (P. 77)
- Changing the Power OFF Time (P. 114)
- Changing the LCD Monitor Display Language (P. 116)
- Resetting the Frame No. (P. 116)

## **Erasing images**

STEP1 - Erasing Images (P. 90)

STEP2 - Other ways to erase images

- Erasing All Images in a Folder (P. 92)
- Erasing All Still Image Folders (P. 92)
- Formatting SmartMedia™ (P. 94)

## You can also do this

-The PDR-M70 also has lots of other features.-

- Protecting Images (P. 107)
- Changing the size of Images (P. 95)
- Compressing Images (P. 97)
- Copying Images to another SmartMedia<sup>™</sup>(P. 99)
- Print Information (P. 103)
- Displaying Detailed Information of Images (P. 88)
- Taking and Playing Back Photographs on a TV (P. 121)
- Recording and Playing Back Only Audio (P. 110)
- Using an External Flash (P. 75)

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Loading Images on a Personal Computer (P. 123), separate "Personal Computer Interface User's Manual"

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# **Safety Precautions**

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Additional nformation Read these safety precautions carefully before using the PDR-M70. These instructions contain valuable information on safe and proper use that will prevent harm and damage to the operator and other persons.

Make sure that you fully understand the following details (indications) before proceeding to the main descriptions in this manual.

# **Indication definitions**

Indication	tion Meaning	
<b>⚠ DANGER</b>	This indicates the existence of a hazard that could result in death or serious bodily injury, if the safety instruction is not observed.	
⚠WARNING	This indicates the existence of a hazard that could result in bodily injury, if the safety instruction is not observed.	
<b>△</b> CAUTION	This indicates the existence of a hazard that could result in bodily injury "1 or property damage "2.	

- \*1: "Bodily injury" means injuries, burns, and shock which does not require hospitalization or prolonged treatment.
- \*2: "Physical damage" means extended harm to home, household effects, domesticated animals, and pets.

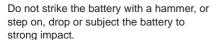
# **Graphic symbol definitions**

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

# **Exemption Clauses**

- Toshiba Corporation bears no responsibility in the case of damages arising from earthquakes, fire not liable to Toshiba Corporation, operating by third parties, other accidents, or use under abnormal conditions including erroneous or improper operation and other problems.
- Toshiba Corporation bears no responsibility for incidental damages (lost profit, work interruption, corruption or loss of the memory contents, etc.) arising from the use of or the inability to use this unit.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from not having followed the descriptions in this Instruction Manual.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from malfunctions arising from combination with equipment or software that is not related to Toshiba Corporation.

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



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

Use only the optional, recommended battery charger. Do not use any other battery charger.

Charging the battery by any other battery charger might cause it to rupture, ignite or heat up, resulting in fire or major injury.

Use the battery only for its originally intended purpose.

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

# ↑ DANGER (continued)

Do not carry the battery or store it together with other metallic objects such as a ballpoint pen or necklace.

This might short-circuit the battery's + and terminals. This might cause the battery to rupture, ignite or heat up, resulting in fire or major injury.





# **⚠ WARNING**

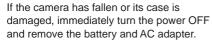
Should you ever notice smoke, a strange odor or excessive heat coming from the camera, immediately turn OFF the power and remove the battery and AC adapter.



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

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

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



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



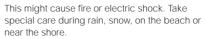
# **! WARNING** (continued)

Do not place the camera on wobbly, inclined or unstable surfaces.



This might cause the camera to fall or tilt over.

#### Do not use in areas near water.





Do not use the camera in the bath or shower.



This might cause a fire or electric shock.

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



This might cause a fire or electric shock. Do not open the SmartMedia™ cover, and insert or allow such objects to fall inside.



# **WARNING** (continued)

# **WARNING** (continued)

# Do not disassemble, change or repair the camera.

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



# \_

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

This might cause electric shock.



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

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



Use only the specified batteries or the specified AC adapter.

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



Keep the batteries out of the reach of children.

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



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.

Use the AC adapter only with the indicated power supply voltage (100 to 120V, 230V AC)



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

# **Safety Precautions (continued)**

# **A**CAUTION

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

Use of this camera is sometimes restricted due to potential radio interference.



# **CAUTION** (continued)

Before you move the camera, disconnect cords and cables.



cables, resulting in fire or electric shock.

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



Do not drop or subject the camera to strong impact.

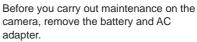


This might cause fire or electric shock.

as inside a car.



This might cause fire, electric shock or malfunctions.





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



Leaving these attached might cause electric shock



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





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



This might cause fire.

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

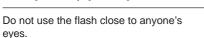


Inserting the battery with its polarities inverted might cause fire and injury, or damage the surrounding areas.

# CAUTION (continued)

Do not look at the sun through the camera viewfinder.

This may cause injury of the eyes.



This might cause temporary damage to the person's eyesight.

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

If you walk around with the camera hanging from your hand through the shoulder strap, the camera might bump into people or other objects, damaging the camera or causing an injury.

Before you store or dispose of used batteries insert them in their battery covers or tape the plus (+) and (-) terminals with insulating tape.

If stored or disposed of without doing this, the batteries may make contact with metal objects. resulting in fire or injury due to leaking of battery fluid, overheating or bursting of the battery.

# CAUTION (continued)

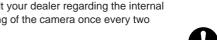
Do not subject the LCD monitor to impact.

If the status display is impacted, the glass on the screen may be broken and internal fluid may leak.

If the internal fluid enters your eyes or sticks to your body or clothes, immediately rinse with fresh water. If the internal fluid enters your eyes, immediately consult a physician to receive treatment.

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

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





Taking Photographs

Erasing Images



# Notes On Handling Your Camera

When you use your camera, carefully read and strictly observe the Safety Precautions from page 8 onwards and the notes described below.

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

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

#### Do not expose the camera to sand.

The PDR-M70 is particularly sensitive to sand. If the camera comes into contact with sand, not only will the camera become damaged, it will also no longer be repairable.

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

#### Notes On Condensation

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

## Carrying Out Maintenance on Your Camera

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

# **Notes On Handling Batteries**

The PDR-M70 camera uses a lithium-ion battery pack (PDR-BT2). (PDR-BT1 can also be used.) (This manual simply refers to this battery pack as the "battery".) Other batteries cannot be used.

When you use the battery, carefully read and strictly observe the Safety Precautions from page 8 onwards and the notes described below.

- \* The battery is not fully charged when you buy your camera. Be sure to charge the battery before you use your camera.
- \* Before you use a battery, be sure to remove the electrode cover.

#### **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. If you are using a heating pad, do not place the battery directly against the pad.
- · Always keep the terminals in a clean state.
- If the battery is used for a long time, the camera body and the battery itself will become warm. This is normal and not a malfunction.
- At normal temperatures, this battery can be recharged at least 300 times for use. 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

- 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.

- When the battery is not in use, be sure to remove it from the camera body or battery charger (sold separately). 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 overdischarge and the battery may no longer be useable.
- Store the battery in a cool place with the battery cover attached. We recommend a dry place with a surrounding temperature of +15°C (+59°F) to +25°C (+77°F). 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.
- The battery can be charged within this camera body using the AC adapter supplied with the PDR-M70 (O page 28). The battery takes about five hours to charge.
- If you use the battery charger (sold separately), the battery (PDR-BT2) can be charged in about 70 minutes.
- · This rechargeable 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 0°C (+32°F) and +40°C (+104°F), but should be charged between +10°C (+50°F) and +30°C (+86°F) to obtain maximum battery performance.
- · Do not recharge a fully charged battery.

## Caution when disposing a battery

Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA. Batteries are included with this product. When they are no longer useable, you should not throw them away. Instead, properly dispose of them as small chemical waste.



# Notes On Handling the AC Adapter

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

When you use the AC adapter, carefully read and strictly observe the Safety Precautions from page 8 onwards and the notes described below.

- Be sure that you do not allow the AC adapter to contact any other metal object as this might cause a short circuit.
- To connect the AC adapter, firmly insert the plug on the end of the cable into the DC IN 5V terminal. Do not insert the plug into other terminals. This might cause the camera to malfunction.
- Before you disconnect the connector cable, turn the camera OFF and then disconnect the cable holding it by its plug. Do not disconnect the connector cable by pulling the actual cable.
- Do not drop the AC adapter or subject it to strong impacts.
- Do not use the AC adapter in very hot and humid locations.
- Do not plug in the AC adapter while you are using the battery. Switch the camera OFF first.
- · The AC adapter is for indoor use only.
- Use only the specified AC adapter. Do not use other AC adapters.
- The AC adapter may sometimes become warm during use. This is normal and not a malfunction.
- Buzzing or whirring noises may come from inside the camera. This is normal and not a malfunction.
- Do not use the AC adapter near a radio as it could interfere with radio signal reception.
- If you remove the battery or AC adapter while the camera is in operation, the date may be lost from memory. If this happens, reset the date. ( Page 115)

# Accessories

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

Lithium-ion battery pack (1)









PDR-AC10 (for U.S.A. and Canada)

PDR-AC10E (for European Continent)

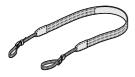
PDR-AC10U (for U.K.)

Shoulder strap (1)

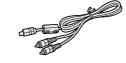
Strap attachment fitting

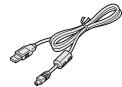
AV cable (1)

USB cable (1)









SmartMedia™ (16MB, 3.3V) (1)







Soft case

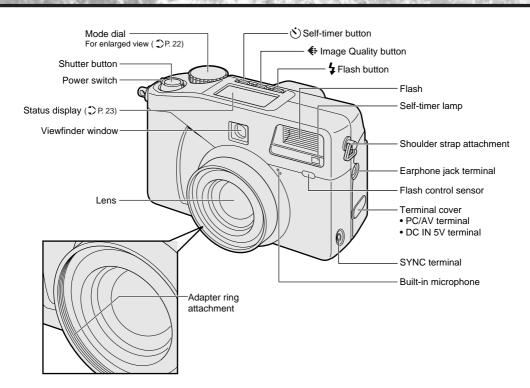


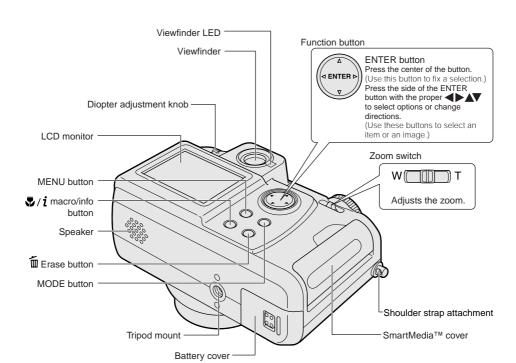




- Anti-static case (1)
- · Labels (2)
- Write-protect stickers (4)

- Instruction Manual (this manual) · Software Manual





Names of Parts (continued)

Mode dial

PC mode ( 1) P. 123) Transfers images to a PC. For details, refer to the Manual SET-UP mode ( ) P. 113) for the Software Application. Sets basic camera settings (AUTO POWER OFF, SOUND, TIME & DATE, OSD LANGUAGE, Playback mode (\$\frac{1}{2}\$ P. 80) VIDEO OUT, FRAME NUMBER, In this mode, you can select RESET). image playback, copy, size change, compression, protect mode, and writing of development (printing) Voice recorder mode ( ) P. 110) information. Records and plays back only voice data. Photography is not performed in this mode. Auto Photography mode ( P. 43, 48) This mode enables automatic photography according to the photographic conditions. Movie mode (\$\(\zeta\) P. 64)

Aperture-priority mode ( ) P. 65) Takes photographs with the priority given to aperture.

Takes photographs as

movies.

Shutter speed-priority mode ( P. 66) Takes photographs with the priority given to shutter speed.

In this mode, the exposure

facilitate photography.

(combination of shutter speed and

aperture) is automatically controlled to

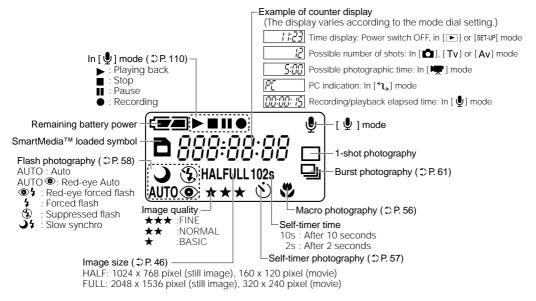
# Names of Parts (continued)

#### Status display

This display indicates the camera's status. You can verify the camera's status even if the LCD monitor is not on

The text, numbers and icons that are displayed in the status display vary according to the setting. The status display backlight lights for about five seconds in the following instances:

- When the shutter button is pressed
- · When one of the self-timer, image quality or flash buttons is pressed



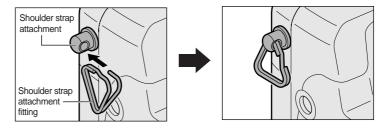
# **Attaching the Shoulder Strap**

This shoulder strap is handy for carrying your camera around.

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

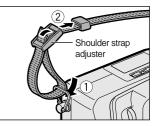


Attach the shoulder strap attachment fitting onto the shoulder strap attachment on both ends.





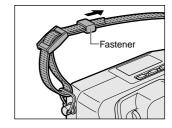
Pass the leading end of the shoulder strap through the shoulder strap attachment fitting  ${\tt 1}\,$  , and then pass through both ends of the shoulder strap adjuster  ${\tt 2}\,$  .



**Attaching the Shoulder Strap (continued)** 



Pass the leading end through the fastener and pull tight.



4)

Attach the shoulder strap in the same way on the shoulder strap attachment fitting on the opposite side of the camera.

This camera uses a lithium-ion battery pack (PDR-BT2). (PDR-BT1 can also be used.) Other batteries cannot be used. For details on handling batteries, be sure to read page 16.

# **Loading the Battery**

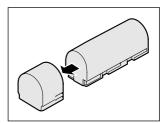
#### **IMPORTANT**

 Before you load or remove the battery, be sure to turn the camera OFF. If the battery is loaded or removed with the power ON, the date setting may return to its default or the camera settings may be reset (SET-UP Page 113, Manual Photography Page 72).

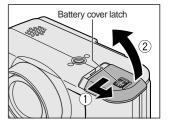


## Remove the battery cover from the battery.

Store the battery cover in a safe place to prevent it from becoming lost.



Slide the battery cover 1 while sliding the battery cover latch, and open 2.

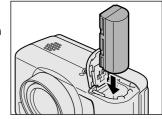


# **Preparing the Battery (continued)**



Load the battery in the battery compartment making sure that it is loaded in the correct direction as shown in the figure on the right.

Insert the terminal (metal-colored part) first when loading the battery.

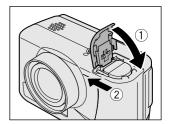




Close the battery cover  $\ensuremath{\mathtt{1}}$  , and slide the battery cover

2 •

Make sure that the battery cover is firmly closed.



# Removing the Battery

Reverse the procedure for "Loading the Battery" and remove the battery.

#### **IMPORTANT**

- When removing the battery, take care not to drop it by mistake.
- Store batteries with the electrode cover attached.

# **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. The following describes how to charge the battery in the camera body.



#### Set the Power switch to [OFF].



## Connect the AC adapter to the camera and to the power outlet.

While the battery is being charged, the viewfinder LED turns red. When the battery is fully charged, the LED turns green.

Generally, it takes about four hours to fully charge the battery.

#### **IMPORTANT**

If the viewfinder LED blinks red after eight hours have passed since charging started, the battery is
probably malfunctioning. Remove the battery from the camera body and stop charging. Replace the
battery with a new one.

# **Preparing the Battery (continued)**

# **Battery Wear**

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

LCD Monitor	Status Display	Remaining Battery Power
		Sufficient battery power
	<b>□</b>	Half battery power or less
	<b>C</b> □	Little battery power left (Power is cut.) Either recharge, or replace with a new battery.
No indication	『仁二』 Blinks twice	No battery power left (Power does not turn ON.) Either charge, or replace with a new battery.

#### Memo

- When you use the camera for the first time or if you have left the camera for a long time without the battery loaded, set the date (◆ Page 115).
- The battery can be charged in about 70 mimutes if the battery charger (sold separately) is used.
- The following shows the approximate number of images that can be photographed continuously using
  a fully charged battery (PDR-BT2) in room temperature with the flash used for half of the images. Note,
  however, that these figures vary according to the operating temperature of the camera and the detail of
  the image being photographed, or length of time viewing the images in play mode.

The number of photographs you can take is reduced when battery (PDR-BT1) is used.

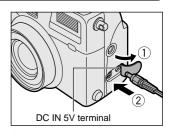
With the LCD monitor on: Approx. 110 images With the LCD monitor off: Approx. 165 images

# **Using the Power Outlet**

If you use the AC adapter provided with the camera in a room with a power outlet, you can take photographs for an extended period of time. This also prevents failed photographs due to battery wear or failed transfer of data to a PC. For details on handling the AC adapter, be sure to read page 18.

#### **IMPORTANT**

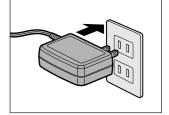
- Before you connect or disconnect the AC adapter, be sure to turn the camera OFF. If the AC adapter is
  connected or disconnected with the power ON, camera settings may be reset (SET-UP Page 113,
  Manual Photography Page 72) or the camera may malfunction.
- $\blacksquare$  Open the terminal cover  $_1\,$  , and insert the AC adapter connector plug into the DC IN 5V terminal on the camera  $_2\,$  .



Insert the AC adapter power plug into the power outlet. (The figure on the right for U.S.A. and Canada.)

When the camera's power is OFF, the viewfinder LED turns red, and

battery charging starts automatically.



# About SmartMedia™

"SmartMedia™" is a storage medium for saving images that you have photographed. Even if the camera's power is turned OFF, the images saved on the SmartMedia™ are not erased. SmartMedia™ can be repeatedly read and written.

SmartMedia<sup>™</sup> having the following storage capacity can be used on your camera. 2MB /4MB/8MB/16MB (standard accessory)/32MB/64MB (all 3.3 V types)

You can also connect the PC card adapter and floppy disk adapter (**P** Page 124) sold separately to transfer images to a PC.

# Notes on SmartMedia™

- Remove and insert SmartMedia<sup>™</sup> with the camera's power turned OFF.
- Recorded data may be erased (destroyed) in the situations listed below. Note that Toshiba Corporation
  accepts no responsibility whatsoever for the loss (destruction) of recorded data in these situations:
  - When the SmartMedia<sup>™</sup> is used incorrectly by the user or a third party
  - When the SmartMedia™ is exposed to static electricity or electrical noise
  - When the SmartMedia<sup>™</sup> is removed or the camera is then switched OFF during data recording, data erasing, frame advance when images are being played back or during formatting of the SmartMedia<sup>™</sup>.
- We recommend copying and saving important data onto another storage medium (floppy disk, hard disk, MO disk, etc.).
- Never remove the SmartMedia<sup>™</sup> or switch the camera OFF during data recording or during data erasing (SmartMedia<sup>™</sup> formatting). These actions might damage the SmartMedia<sup>™</sup>.
- Use only the SmartMedia<sup>™</sup> specified for use with the PDR-M70. The use of other SmartMedia<sup>™</sup> could damage the camera.
- SmartMedia<sup>™</sup> are precision electronic devices. Do not bend, drop, or subject SmartMedia<sup>™</sup> to
  excessive shocks. Also, do not carry SmartMedia<sup>™</sup> in locations such as a trouser pocket. This might
  subject the SmartMedia<sup>™</sup> to excessive force when you sit down, damaging the SmartMedia<sup>™</sup>.
- Do not use or store SmartMedia<sup>™</sup> in environments likely to be affected by strong static electricity or electrical noise.
- Do not use or store SmartMedia™ in very hot, humid or corrosive environments.

# About SmartMedia™ (continued)

- Take care not to touch the SmartMedia™'s electrodes (metal contacts) or allow the electrodes to become soiled. Use a dry lint-free cloth to wipe away any dirt.
- To avoid damage caused by static electricity during transportation or storage, always use the special static-free case provided.
- If you are not using the camera for a long period of time, remove the SmartMedia<sup>™</sup> and store it in a safe place.
- Inserting a SmartMedia<sup>™</sup> that is charged with static electricity into your camera may cause it to malfunction. If this occurs, switch the camera OFF and then ON again.
- The SmartMedia<sup>™</sup> may feel warm when it is removed from the camera after the camera is used for a long time. This is normal and not a malfunction.
- The SmartMedia<sup>™</sup> has a limited service life. If images can no longer be written or erased, buy a new SmartMedia<sup>™</sup>.
- Use the index labels provided with the camera. If you attach a commercially available label, it may
  cause a malfunction when the SmartMedia™ is loaded or removed.

# Loading SmartMedia™

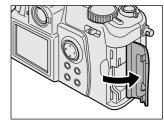


Set the Power switch to [OFF].

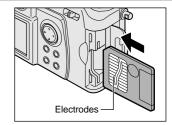
Turning the Power OFF © Page 39



Open the SmartMedia™ cover.

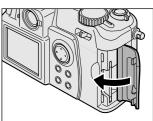


Gently insert the SmartMedia™ as far as it can go with the SmartMedia™ electrodes (metal contacts) facing the rear of the camera.



Close the SmartMedia™ cover.

Before you use a new SmartMedia™, be sure to format the SmartMedia™ (▶ Page 94).



# Removing SmartMedia™

#### **IMPORTANT**

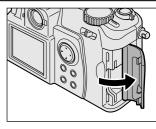
 Never open the SmartMedia<sup>™</sup> cover or remove the SmartMedia<sup>™</sup> while data is being recorded to the SmartMedia™ (viewfinder is lit red). This might damage the SmartMedia™ or corrupt the data on the SmartMedia™.



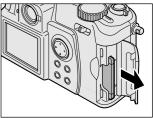
Set the Power switch to [OFF].

Turning the Power OFF Page 39

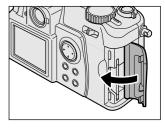
**2** Open the SmartMedia™ cover.



Hold the SmartMedia™ firmly with your fingers and pull the SmartMedia™ out of the camera.



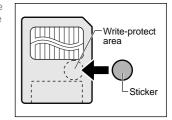
**4** Close the SmartMedia™ cover.



# About SmartMedia™ (continued)

## **Write Protection**

To prevent valuable data from being erased inadvertently, attach the write-protect sticker at the write-protect area. Data can no longer be recorded or erased from SmartMedia $^{\text{TM}}$ . To write or erase data from SmartMedia $^{\text{TM}}$ , peel off the sticker.

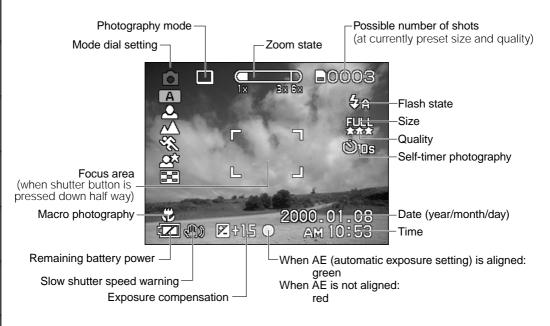


#### IMPORTANT

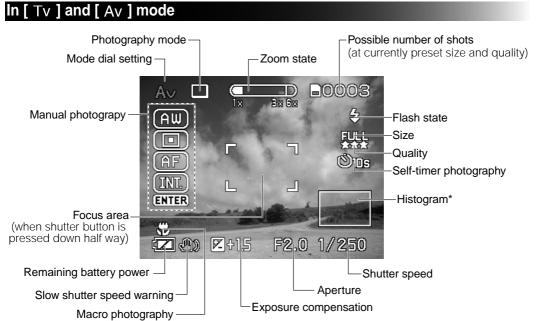
• The write protection may not function if the write-protect sticker becomes dirty. Use a soft dry cloth to wipe away any dirt. Once a sticker is peeled off it cannot be used again.

The text, numbers and icons that are displayed on the LCD monitor vary according to the current settings. The LCD monitor automatically turns ON if necessary even if it is set to OFF. For details on the [ ] playback mode, see page 88.

## In [ 🗖 ] mode

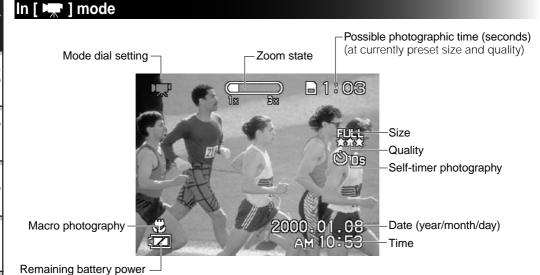


# LCD Monitor Display (during photography) (continued)



\* Histogram

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



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

# **Turning the Power ON/OFF**

## Turning the Power ON

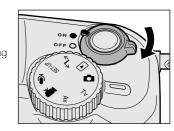


Make sure that the SmartMedia™ is correctly loaded. (♦ Page 32)



### Set the Power switch to [ON].

The default setting for the language display for this camera is English. To match the language in your Instruction Manual with the language in the camera, change the language display in the LCD monitor. ( Page 113)



### **IMPORTANT**

If no operation is carried out for a fixed amount of time (default: about 1 minute), the power is turned
OFF to prevent battery wear. This is called "Auto Power OFF". To return to the normal state, either
change the mode dial or press the shutter down half way ( Page 41).

About the Auto Power OFF Function Additional Information, "AUTO POWER OFF (page 114)"

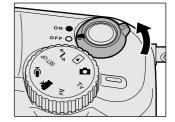
## **Turning the Power OFF**



### Set the Power switch to [OFF].

This turns the power OFF.

Attach the lens cap when you are not using the camera.



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

### Right

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

### Wrong

Fingers held over the lens





# **How to Press the Shutter Button**

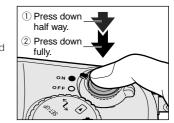
The shutter button can be pressed down in two stages: half way down and fully down. When pressed half way down, AF (auto-focus) and AE (auto exposure) are carried out. When pressed fully down, the camera takes a picture.



### Press the shutter button down half way 1.

AF (auto-focus) and AE (auto exposure) ( Additional Information, Glossary) start to function.

When AF or AE are locked, the beep tone (♠ Page 115) sounds and the viewfinder LED turns green.





### Press the shutter button down fully 2.

The camera takes a picture.

The viewfinder LED turns red while image data is being recorded onto the SmartMedia™

#### IMPORTANT

Never open the SmartMedia<sup>™</sup> cover or remove the SmartMedia<sup>™</sup> while an image is being recorded.
 This may corrupt the data on the SmartMedia<sup>™</sup> or damage the SmartMedia<sup>™</sup> itself.

- If the shutter button is pressed down fully and held, photographs cannot be taken until AF and AE are locked.
- The image in the LCD monitor sometimes darkens from the time that the shutter button is pressed down half way until the image becomes focused.
- To focus or expose a position outside the center of the screen frame, move the subject you are taking to the center of the screen frame, and press down the shutter button half way. Now, with the shutter button held down, return to the original picture that you composed and press the shutter button down fully.
- Moving the camera as you press the shutter button will result in a blurred image.
- The PDR-M70 uses an accurate auto focus mechanism. However, the PDR-M70 may have difficulty focusing or not be able to focus at all for subjects and situations such as the following:
  - Subjects moving at high speed

- When the subject is distant and dark
- Very shiny subjects such as a mirror or car bodyExtremely low contrast subjects
- 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 that have low contrast and merge into the background (such as white walls or subjects dressed in the same color as the background)
  - Subjects with little reflection, such as hair or furSubjects with no solidity, such as smoke or flames
  - Subjects viewed through glass
- If the image cannot be focused, the focus is automatically fixed to infinity. (When the flash is necessary
  at this time, it is simultaneously fixed to illuminate objects 1.5 meters (five feet) away. During macro
  photography, the flash is aligned with the wide position.)

Photography (Auto Photography)

This is the most commonly used photography mode.

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

## **Using the Viewfinder**



Get ready to take the photograph.



Set the Power switch to [ON].

□ Turning the Power ON Page 39



Set the mode dial to [ ].



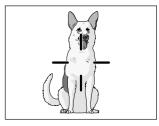


Turn the LCD monitor OFF. (C) Page 79)

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

5)

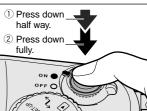
Look through the viewfinder to compose the picture.





# Press the shutter button down half way $_{\rm 1}\,$ , and press it down fully $_{\rm 2}\,$ .

- Pressing the shutter button down half way adjusts the exposure, and pressing the shutter button down fully takes the shot.
- If you shoot a still picture, when preview is set to ON ( Page 77), a preview image is displayed on screen for about two seconds.
- The viewfinder LED turns red while image data is being recorded onto the SmartMedia<sup>™</sup>.



## **Using the LCD Monitor**



## Get ready to take the photograph.

Load the battery (♠ Page 26) and the SmartMedia<sup>™</sup> (♠ Page 32) into the camera.



### Set the Power switch to [ON].



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

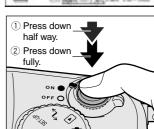
To adjust the brightness of the LCD monitor Page 119





# Press the shutter button down half way $_{\rm 1}\,$ , and press it down fully $_{\rm 2}\,$ .

- Pressing the shutter button down half way adjusts the exposure, and pressing the shutter button down fully takes the shot.
- When the focus and exposure are correctly adjusted, the viewfinder lamp lights (green), and the AF icon turns green.
- If you shoot a still picture, when preview is set to ON ( Page 77), a preview image is displayed on screen for about two seconds.
- The viewfinder LED turns red while image data is being recorded onto the SmartMedia™



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

**Setting the Image Size and Quality** 

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

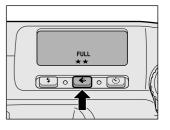


Set the mode dial to [  $\square$  ], [  $\neg$  ], [  $\neg$  ] or [  $\land$  V ].

Press the 

image quality button to set the required quality and size while viewing the image on the status display.

Pressing the image quality button displays the available qualities and sizes in order. Select from the available combinations of quality and size



\*\*\*FULL (default) -> \*\*\*\*FULL -> \*HALF -> \*\*\*HALF -> \*\*\*HALF -> \*FULL

<Quality>

[★★★] FINE : 1/5 (JPEG) compression ★★] NORMAL: 1/7.5 (JPEG) compression (still image)

★] BASIC : 1/15 (JPEG) compression

The more stars there are, the better image quality becomes. Higher quality images, however, take up more memory space, reducing the number of images that can be taken or

the possible photographic time.

<Size>

[FULL] 2048 x 1536 pixel (still image), 320 x 240 pixel (movie) [HALF] 1024 x 768 pixel (still image), 160 x 120 pixel (movie)

The FULL setting improves the quality of the image. Higher quality images, however, take up more space, reducing the number of images that can be taken or the possible photographic time.

For details on how to take photographs • Photograph

#### Memo

- To make the image smaller, it is more effective to reduce the size 1 and then reduce image quality 2.
- After you have taken a photograph, you can change its size ( Page 95) and quality ( Page 97).
- The memory size of the image varies according to the subject.
- The compression ratio is given for reference only.

Getting Ready

Taking hotographs

Playing Back Image

# Taking Photographs in [ ] Mode (Auto Select mode)

setting Ready

> Taking hotographs

This mode enables automatic photography according to the photographic conditions. Photographs can be taken easily in this mode as the camera automatically makes the setting suitable to the photographic conditions. The Auto Select mode has the following options. Choose the option to suit the image you want to photograph. For a detailed description of each option, refer to the following pages:

A ...... To take regular photographs (♠ Page 43)
 ▲ ...... To take portraits (♠ Page 49)
 ▲ ...... To take landscape shots (♠ Page 50)
 ★ ..... To take photographs of fast-moving subjects (♠ Page 51)

To take portraits at night (♠ Page 52)
 To take continuous shots of moving subjects
 ♠ Page 53)
 The 36 shots that you take in this mode are

The 36 shots that you take in this mode are saved as a single image.

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

Macro photography

Can be set.

Exposure compensation

About flash photography

A ...... Can be set as required.

♣ ..... Fixed to [ ♠ A ] red-eye auto

Fixed to [ \$ A ] auto

Flash photography is not possible.

About burst photography

Burst photography is not possible.



Set the mode dial to [ ].



Press  $\triangle$  or  $\nabla$  to select [  $\triangle$  ] while viewing the LCD monitor.

[ . ] in the LCD monitor is displayed in green.





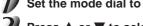
Compose the picture, press the shutter button down half way, and press it down fully. • Page 41

# Taking Photographs in the [ 🚣 ] Mode

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



Set the mode dial to [ ].



Press ▲ or ▼ to select [ ▲▲ ] while viewing the LCD monitor.

[ 🛕 ] in the LCD monitor is displayed in green.



Compose the picture, press the shutter button down half way, and press it down fully. C Page 41



Set the mode dial to [ ].



Press ▲ or ▼ to select [ 🎇 ] while viewing the LCD monitor.

[ in the LCD monitor is displayed in green.



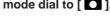


Compose the picture, press the shutter button down half way, and press it down fully. Page 41

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



Set the mode dial to [ ].



Press ▲ or ▼ to select [ ♣ ] while viewing the LCD monitor.

[ 2 ] in the LCD monitor is displayed in green.





Compose the picture, press the shutter button down half way, and press it down fully. O Page 41

# Taking Photographs in the [ == ] Mode (36-frame multi photography)

This mode takes 36 shots continuously at 0.07 second intervals (15 frames/second). The 36 photographed images are saved as one image (FULL size: 2048 x 1536 pixels).

This mode is effective for continuously photographing moving subjects.



Set the mode dial to [ ].



[ ] in the LCD monitor is displayed in green.





Compose the picture, press the shutter button down half way, and press it down fully. Page 41

The shutter is opened and closed 36 times.

- Though zoom playback is not possible, playback of multi image pictures ( Page 87) is possible.
- Photographs cannot be taken at HALF size. When HALF size is set before you set multi photography, the setting is automatically changed to FULL size. When multi photography is canceled, the setting returns to HALF size.

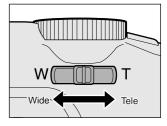
Zoom photography allows you to take zoom shots up to three times the size or wide-angle photography depending on the distance up to the subject. You can also enlarge the center of the screen and take photographs in the digital zoom mode with the focal distance apparently increased by a factor of two.



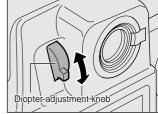
## Set the mode dial to [ $\square$ ], [ $\top$ V] or [ $\triangle$ V].

### Compose the picture using the Zoom switch key.

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



If the subject is not focused when you use the viewfinder, set the
lens to the maximum zoom position by pressing the Zoom switch to
the "T" mark until the lens stop, look through the viewfinder, and
move the Diopter adjustment knob so that the subject at a distance
of about three meters (10 ft) away from the camera is focused.



## **Zoom Photography (continued)**

### Digital Zoom Photography

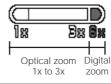
Set digital zoom as follows.

- 1 Press the MENU button.
- 2 Use ▲ or ▼ to select [DIGITAL ZOOM] and press ▶.
- Use ▲ or ▼ to select [APPROVED] and press ENTER.
- 4 Press the MENU button.
- 5 Pressing the Zoom switch towards the "T" to set the zoom to maximum, and continue to hold down the Zoom switch.
- The image size is fixed to 1024 x 768 pixels.
- The LCD monitor turns ON automatically. So, compose the picture while viewing the LCD monitor.



### Press the shutter button down half way, and press it down fully. Page 41

- The Zoom switch setting is automatically canceled by either turning the camera OFF or by activation of the Auto Power OFF function.
- You can check the zoom status in the LCD monitor.



# Close-up Photography (Macro Photography)

The macro photography mode is used when the distance to the subject is between 9 cm (0.3 ft) (WIDE side setting) to 80 cm (2.6 ft).

This camera cannot focus on subjects within 9 cm (0.3 ft) (WIDE side setting) to 80 cm (2.6 ft) unless in the macro photography mode. Though photographs can be taken even at a distance of about 80cm (2.6 ft) or more in the macro photography mode, it may take time for the camera to focus.

In the macro photography mode, the LCD monitor automatically turns ON. Take the photograph while viewing the LCD monitor

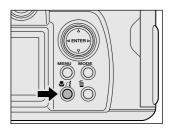


Set the mode dial to [  $\square$  ], [  $\neg$  ], [  $\neg$  ] or [  $\land$  V ].



Press the \( \mathbb{/} i \) macro/info button.

) is displayed on the LCD monitor and the status display.





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



Press the shutter button down half way, and press it down fully. Page 41



To cancel macro photography, press the  $\sqrt[4]{i}$  macro/info button again.

- Macro photography is not canceled even if the camera is turned OFF or the Auto Power OFF function is activated.
- Only the [ (2) ] Suppressed Flash and [ 4 ] Forced Flash modes can be set for flash photography.

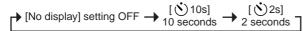
D

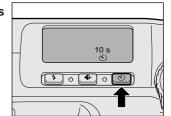
Set the mode dial to [  $\square$  ], [  $\neg$  ], [  $\neg$  ] or [  $\land$  V ].



Press the  $\dot{\Sigma}$  self-timer button while viewing the status display area.

When you press the self-timer button, the following are displayed on the LCD monitor and status display area in the following order:







### Compose the picture.



Press the shutter button down half way, and press it down fully. Page 41

The self-timer LED lights red, and then flashes. The photograph is then taken after the preset time (two or ten seconds).

When photographs are taken using the LCD monitor, the count down is displayed.

To cancel photography midway, press ▼.

- · Burst photography is not possible.
- To stop making movies, press the shutter button down fully.
   If this operation is not performed, photography is automatically stopped when the SmartMedia™ runs out of free space or when the size of a single picture has reached the maximum recordable size of 16 MB.

In the default setting, the flash will be automatically set to function in dark places. No special setting is needed to set off the flash. The flash firing mode can be set to suit the conditions where the flash is to be fired. The effective firing distance of the flash is approximately 0.8 m (2.62 ft) to 4.0 m (13.12 ft) (WIDE side setting).



Set the mode dial to [  $\square$  ], [  $\top_V$  ] or [  $A_V$  ].

In the [ 1 mode, flash photography can be selected when [ 1 is selected.



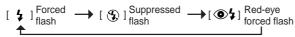
Press the flash button to set to the desired mode while viewing the image on the LCD monitor or the status display.

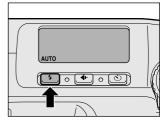
Pressing the flash button displays the available flash modes in order. The icon for the mode that you selected is displayed in the LCD monitor or the status display.

In the [ 🗖 ] mode:



In the [ Tv ] or [ Av ] mode:







Compose the picture.



Press the shutter button down half way, and press it down fully. Page 41

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

## **Photography Using the Flash (continued)**

### [ **4** A ] Auto

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

### [ ●A ] Red-Eye Auto/[ ● 1 Red-Eye Forced Flash

Use this mode to avoid the red-eye effect ( Additional Information, Glossary) when photographing people in low-light conditions.

In the [ •A ] Red-Eye Auto mode, the flash fires according to the photographic conditions. When firing is set to automatic, the flash fires twice.

In the [ • 1 Red-Eye Forced Flash mode, the flash always fires twice.

Red-eye is reduced more effectively if the subject looks directly towards the camera. Effectiveness is also increased if the distance between the subject and camera is kept as short as possible.

### [ 4 ] Forced Flash

In this mode, the flash always fires. Use the Forced Flash mode when the subject is backlighted, or in artificial light (fluorescent lighting, etc.).

The flash also fires during macro photography.

### [ 🚱 ] Suppressed Flash

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

### [ 🍑 🕻 ] Slow Synchro

The flash is fired at a slower shutter speed.

This flash mode is effective when shooting pictures so that not only the subject but also the background are both clearly reproduced in artificial light (backlighting, fluorescent lighting, etc.) or with people against the night as a background scene.

- If you take a photograph in the [ ◆ ] Slow Synchro mode at a place with a dark background or in the [ ♠ ] Suppressed Flash mode at a dark place, the shutter speed slows down, and the slow shutter speed warning is displayed. (When the shutter is pressed half way down, the viewfinder LED blinks green and the slow shutter speed mark [ ♠) ] is displayed in the LCD monitor.) We recommend using a tripod to keep the camera stable and prevent distorted images.
- The flash setting is not canceled even if the camera is turned OFF in the [ Tv ] or [ Av ] modes. (The [ 🗖 ] mode always becomes the [AUTO] mode when the power is turned ON.)
- Using the flash during burst photography, multi photography, bulb photography and movie photography is not
  possible.
- When [ \$ ] forced flash or [ ●\$ ] red-eye forced flash modes are set in the [ ¬v ] mode, the shutter speed is limited to between 1/2 second and 1/250 second.
- If a mode other than the [ 🚷 ] suppressed flash mode is set when the shutter speed is set to 1/350 sec. or slower, the shutter speed is automatically changed to 1/250 sec.
- If the [ 4 ] forced flash or [ ②4 ] red-eye forced flash modes are set when the shutter speed is set to a speed of 1 sec. or more, the shutter speed is automatically changed to 1/2 second.

# **Taking Photographs Continuously**

In this mode, photographs are taken continuously at a maximum speed of 0.8 second intervals (five images per 4 seconds).

The maximum number of photographs that can be taken continuously is eight photographs. Images are not recorded directly to SmartMedia™ but are stored temporarily within the buffer memory. After photography is finished, check the images and record the selected ones to SmartMedia™.



Set the mode dial to [ ], [ Tv ] or [ Av ].

Burst photography is not possible when [ \* ] or [ ] is selected in the [ ] mode.



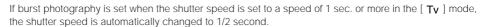
### Press the MODE button, and select burst photography.

Each press of the MODE button switches the photography mode as follows:

In the [ $\square$ ] mode: [ $\square$ ] 1-shot  $\longleftrightarrow$  [ $\square$ ] burst

In the [ Tv ] or [ Av ] mode:





is displayed in the LCD monitor or the status display.

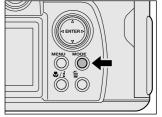


### Compose the picture, press the shutter button down half way, and press it down fully. Page 41

The shutter opens and closes up to a maximum of eight times.

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

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



Press ◀ or ▶ to verify the image.

You will be allowed to choose which image to save before it is recorded to the SmartMedia $^{\text{TM}}$ .

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

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





### Use ▲ or ▼ to select the recording method.

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

: This setting is for saving and erasing the selected image.

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

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

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

Press ENTER.

All images are selected, and all images with  $\tilde{\mathbf{w}}$  turns into a red  $\checkmark$ . This item cannot be selected if there is not enough space on the

SmartMedia™.

3 [  $\Box$   $\bullet$  : This setting is for erasing all images.

Press ENTER.

 $_{\rm 1}~$  to  $_{\rm 3}~$  can be combined regardless of their order to set saving and erasing of images.

## **Taking Photographs Continuously (continued)**



### Use ▼ to select [ → 📄 ] and press ENTER.

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

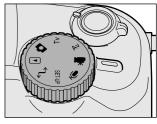
- · You can also carry out steps 5 and 6 while verifying the image in step 4.
- Even if photography is terminated midway before capturing eight images by releasing the shutter button, images already photographed can be saved and erased by the above method.
- The photography time varies according to the photographic conditions.
- · Self-timer photography and flash photography are not possible.
- The burst photography setting is canceled by the power being turned OFF or the auto power OFF function working, and the photography mode returns to the 1-shot photography mode.

Make a movie of moving images. Audio can also be recorded.



Set the mode dial to [ 🐙 ].





Compose the picture, press the shutter button down half way, and press it down fully. O Page 41

Photography begins.

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

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

If you do not do this, photography is automatically stopped when there is no more free space on the SmartMedia<sup>™</sup>, or when the maximum size (16 Mbytes) that a single movie can be recorded is reached.

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

# Photography in the Aperture-priority Mode

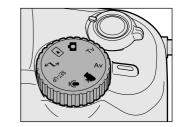
In this mode, photographs are taken with the priority given to aperture. The camera automatically sets the shutter speed according to the aperture.

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

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



Set the mode dial to [ Av ].





### Press ▲ or ▼ to adjust the aperture value.

The setting range is as follows: F8 / F5.6 / F4 / F2.8 / F2.3 / F2.0 The aperture value and the shutter speed corresponding to that value are displayed on the LCD monitor. If the appropriate combination cannot be set even if the shutter speed is adjusted to its limit, the shutter speed is displayed in red. Photography, however, is possible in this state.

Press ▲ to reduce aperture size. Press ▼ to increase aperture size. Note: The larger the F value, the smaller the aperture size become and vice versa.

Exposure compensation (♠ Page 69) using ◀ or ▶, and manual setting (♠ Page 72) or film speed setting (♠ Page 78) using ENTER are also possible.





Compose the picture, press the shutter button down half way, and press it down fully. Page 41

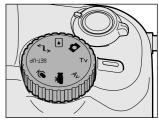
# Photography in the Shutter speed-priority Mode

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

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



Set the mode dial to [ Tv ].





### Press ▲ or ▼ to adjust the shutter speed.

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

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

Press  $\blacktriangle$  to increase shutter speed. Press  $\blacktriangledown$  to decrease shutter speed.

Exposure compensation (♠ Page 69) using ◀ or ▶, and manual setting (♠ Page 72) or film speed setting (♠ Page 78) using ENTER are also possible.



Aperture value Shutte

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Compose the picture, press the shutter button down half way, and press it down fully. O Page 41

- When the shutter speed is set to a speed of 1 sec. or slower, burst photography is not possible as photographs are taken at a long exposure ( Page 68).
- In AEB photography ( Page 71), the shutter speed cannot be set at 1 second or longer.
- If a mode other than [ 🚯 ] suppressed flash mode is set in flash photography, the shutter speed is limited to between 1/2 second and 1/250 second.
- If the shutter speed is set to 1/350 second or less, the shutter speed is automatically changed to 1/250 second if the flash setting is changed to the [ \$ ] forced flash mode or [ ②\$ ] red-eye forced flash mode
- If the [4] forced flash or [ 34] red-eve forced flash mode is set in flash photography when the shutter speed is set to a speed of 1 sec. or more, the shutter speed is automatically changed to 1/2 second.

# Long Exposure Photography (Bulb Photography)

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



Set the mode dial to [  $T_V$  ].



Use  $\blacktriangle$  or  $\blacktriangledown$  to display the shutter speed to [1sec] or more

[ ) is displayed on the LCD monitor.



Compose the picture, press the shutter button down half way, and press it down fully. Page 41

The camera takes the picture at the set exposure time.

During the exposure, the viewfinder LED turns orange.

It takes about twice the set time to complete taking the photograph due to processing of the captured image.

#### Memo

· Flash photography and burst photography are not possible.

ng aphs

Erasing Images

Handy

Orner pplications

Additional

# **Exposure Compensation**

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



## 

In the [ ] mode, exposure compensation is possible at the [ ] setting.



### Press ◀ or ▶ to adjust the exposure.

The setting range is as follows. A larger value lightens the exposure, and a smaller value darkens the exposure.

The value that you set is displayed on the LCD monitor.

Press ► to increase (brighten) exposure, and ◀ to decrease (darken) exposure.



Exposure Setting Value

► (to + side)

-1.5 / -1.2 / -0.9 / -0.6 / -0.3 / 0 (default) / +0.3 / +0.6 / +0.9 / +1.2 / +1.5



√ (to – side)

# Compose the picture, press the shutter button down half way, and press it down fully. O Page 41

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

In this case, press the shutter button, and check the brightness in the preview image (photographed still image). (PREVIEW • Page 77)

### **Effective Subjects and Set Values**

- Positive (+) Compensation
  - Copying of printed text (black characters on white paper) (+1.5)
  - Backlit portraits (+0.6 to +1.5)
  - Very bright scenes (such as snowfields) and highly reflective subjects (+0.9)
  - Shots made up predominantly of sky (+0.9)
- Negative (–) Compensation
  - Spotlit subjects, particularly against dark backgrounds (-0.6)
  - Copying of printed text (white characters on black paper) (-0.6)
  - Scenes with low reflectivity, such as shots of green or dark foliage (-0.6)

The exposure is automatically switched in three stages (-0.3/0/+0.3) when taking photographs.



### Set the mode dial to either of [ $T_V$ ] or [ $A_V$ ].

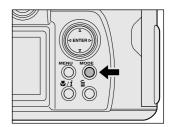


Press the MODE button, and select AEB photography.

Each press of the MODE button switches the photography mode as follows:



If AEB photography is selected when the shutter speed is set to a speed of 1 sec. or more, the shutter speed becomes 1/2 sec. [
[ ] is displayed on the LCD monitor and [ ] will flash on and off on the status display.





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

Page 41

The shutter operates three times, and one image is saved for each shutter operation.

#### Memo

- AEB photography is not possible when the shutter speed is set to 1 sec. or more in the [ Tv ] mode.

You can manually adjust settings such as white balance, AF/AE area (auto-focus/ exposure positions), focus (focal distance) and external flash setting (in [ Av ] mode only), and take photographs at these settings. Settings made in this mode are saved even if the camera is turned OFF.

#### IMPORTANT

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



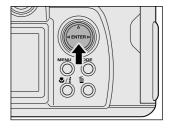
## Set the mode dial to [ $T_V$ ] or [ $A_V$ ].

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



#### Press ENTER.

The manual setting items are displayed.





4)

# Press ▶, press ▲ or ▼ to select options and press ENTER.

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

⟨W.B.] White balance → Page 74
[AREA] AF/AE area → Page 74
[FOCUS] Focus → Page 75
[FLASH] Strobe → Page 75

Set values



### Press ENTER.

The camera is ready to take photographs.



# Compose the picture, press the shutter button down half way, and press it down fully. Page 41

The camera takes the picture.

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## White Balance (W.B.)

The camera determines the white balance by averaging the various kinds of light that actually enters the lens. This setting allows you to set in advance the white balance when taking photographs under specific lighting conditions.

[AW]: Automatic adjustment (default)

[ \* ] : Photography outdoors

[ 🖒 ] : Photography in cloudy conditions

[ 찍] : Photography in bluish fluorescent light [ 찧] : Photography in reddish fluorescent light

[ 🚊 ] : Photography in incandescent light

## AF/AE area (AREA)

This setting allows you to set which part of the screen to focus to when the shutter button is pressed half way to activate AF and AE ( Additional Information, Glossary).

The area set to the LCD monitor [ ] is displayed when the shutter button is pressed down half way.

[ ] : Center (default)

[🛅] : Up

[ ] : Down

. Left

[ 🖪] : Right

Sets the focusing method.

[AF] : Automatically adjusts the focus. (default)

[ ∞ ] : Fixes the focus at infinity.

## Strobe (FLASH)

Change this setting when an external flash (sold separately) is to be used. This setting is displayed in the [Av] mode. When [EXT.] is set, the built-in flash does not fire.

When an external flash is used, the camera's shutter speed is fixed to 1/125 sec.

Referring to the instruction manual for the external flash you are using, adjust the camera's aperture and take photographs with the distance up to the subject adjusted.

[INT.] : Built-in flash is used (default)

[EXT.]: External flash is used

Changing the Preset Conditions (RECORDING MENU)

This menu is for setting the basic settings to be used for photography in the [ 🗖 ], [ 📭 ], [ Tv ] or [ Av ] photography modes.

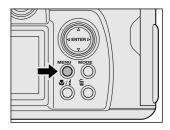


Set the mode dial to one of [  $\square$  ], [  $\neg$  ], [  $\neg$  ] or [  $\land$  V ].



Press the MENU button.

The RECORDING MENU is displayed.





Use  $\blacktriangle$  or  $\blacktriangledown$  to select the desired item 1 and press .

The options 2 are displayed.

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

CONTRAST Page 78 ISO Page 78

COLOR Page 77 SHARPNESS Page 78 DIGITAL ZOOM ◆ Page 79

LCD X Page 79 LCD DISPLAY Page 79





Use  $\blacktriangle$  or  $\blacktriangledown$  to select the desired setting from the tab menu 2, and press ENTER. This saves the settings, and returns the display to the RECORDING MENU.



To quit the RECORDING MENU, press the MENU button.

The camera is now ready to take photographs.

This setting allows you to display a photographed image on the LCD monitor for two seconds immediately after you have taken the shot.

This allows you to check the composition and brightness of the photographed image.

Note, however, that detailed areas are sometimes not sharp as the resolution of preview images is low. To check detailed areas and focus, check it in the [▶] playback mode (♦ Page 80).

To cancel preview, press the shutter button half way down again.

The three images that you took are displayed for about two seconds each in the AEB photography mode ( $\triangleright$  Page 71)

[OFF] : Do not display preview (default)

[ON] : Display preview

## **COLOR**

Set the color of the image to be photographed.

[STANDARD] : Standard color (default)

[VIVID] : Vivid color

[MONOCHROME] : Black and white

[SEPIA] : Sepia

## Changing the Preset Conditions (RECORDING MENU) (continued)

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## ISO

Sets the color mode and photographic sensitivity at which the image is to be recorded.

Warning: Noise increases when the ISO is changed to higher settings.

[NORMAL] : Equivalent to color ISO100 (default)

[2X] : High-sensitive photography equivalent to color ISO200 (\*)
[4X] : High-sensitive photography equivalent to color ISO400 (\*)

The ISO setting will be automatic between ISO100 and ISO200. During [4X], ISO will be automatic between ISO100 to ISO400.

## **SHARPNESS**

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

[NORMAL] : Normal sharpness (default)

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

## CONTRAST

Sets the contrast of the image to be photographed.

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

[STRONG] : Strong contrast [SOFT] : Soft contrast

## **DIGITAL ZOOM**

Enlarges the center of the screen and takes photographs with apparent effect that the focal distance is set to twice the distance.

[ON] : Enables digital zoom photography.

[OFF] : Disables digital zoom photography. (default)

### **LCD DISPLAY**

Sets whether or not to display images on the LCD monitor.

The LCD monitor automatically turns ON in macro photography, digital zoom photography and movie photography.

[ON] : Display (default) [OFF] : Do not display

## LCD **※**

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

[-5] to [+5]

To adjust the brightness of the LCD monitor ▶ Page 119

Play back photographed still images one image at a time.



#### Set the mode dial to [ ].

The last recorded image appears on the LCD monitor.

To adjust the brightness of the LCD monitor ♠ Page 119
Changing the LCD monitor display ♠ Page 88



#### Memo

• When the mode dial setting is changed to [ ] immediately after taking a moving image, press the MODE button to change the selection of the folder to play back. If the image is played back without the folder selection changed, the images of the movie folder are displayed. Each press of the MODE button toggles the selection of the folder to play back between still image folder and movie folder.



#### Press ◀ or ▶ to move forward and reverse.

▶ to advance to next frame/ d to go back one frame Holding down d or p moves forward or reverse continuously.

#### Memo

 Pressing ► at the last image displays the first image, and pressing ◄ at the first image displays the last image.

# **Playing Back Movies**

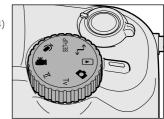
Play back movies that you have recorded. Audio can also be played back.



### Set the mode dial to [►].

Movies are displayed as thumbnails on the LCD monitor. (♠ Page 84)

To adjust the brightness of the LCD monitor ♠ Page 119



#### IMPORTANT

When the mode dial setting is changed to [ ] immediately after taking a still image, press the MODE button to change the selection of the folder to play back. If the image is played back without the folder selection changed, the images of the still image folder are displayed. Each press of the MODE button toggles the selection of the folder to play back between still image folder and movie folder.
 For details of folder to play back ( Page 89)



## Press $\blacktriangle$ , $\blacktriangledown$ , $\blacktriangleleft$ or $\blacktriangleright$ to select the movie to play back.

The cursor is at the image surrounded by the green frame.

Pressing the buttons continuously moves the cursor continuously.



#### Press ENTER.



Playback of the movie begins.

The user can control playback by pressing various buttons during playback or during a pause.



	During playback	During pause
•	2x-speed playback • 2x-speed playback is performed for the duration that ▶ is held down.	1-frame feed     Each press of ▶ feeds the image by one frame.     1-frame feed is continued for the duration that ▶ is held down.
•	Reverse playback  • Playback becomes 2x-speed reverse playback for the duration that   ■ is held down.	Reverse 1-frame feed  • Each press of ◀ feeds the image in reverse by one frame.  • 1-frame feed is continued for the duration that ◀ is held down.
<b>A</b>	Pause • Playback is paused in any playback state.	Canceling pause  • After pause is cancelled, playback resumes at the last state that was active before the pause.
▼	Stop Playback returns to the start of the movie.	
ENTER	Stop The display returns to thumbnail playback.	
Pressing the Zoom switch to "T"	Increases the volume.	
Pressing the Zoom switch to "W"	Decreases the volume.	



## To play back another movie, press ENTER.

The LCD monitor returns to the thumbnail display.

#### Memo

• The image size displayed on the LCD monitor becomes Full (320 x 240) or HALF (160 x 120). So, the image is not displayed on the entire LCD monitor but in the center of the screen.

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

This feature is useful, for example, when there are many images recorded in the SmartMedia™. After you have displayed the thumbnail display, you can select the desired image and display it in the regular display. In the movie playback mode, the thumbnail display is the standard display. (♠ Page 81)



## Set the mode dial to [ ].

The last image frame appears on the LCD monitor.



#### Press ENTER.

Nine images are displayed simultaneously.



# Use $\blacktriangle$ , $\blacktriangledown$ , $\blacktriangleleft$ or $\blacktriangleright$ to move the cursor to select the image to be displayed at regular size.

The cursor is at the image surrounded by the green frame. Pressing the buttons continuously moves the cursor continuously.





#### Press ENTER.

The selected image is displayed at its regular size.

When the selected image is a movie, see "Playing Back Movies" ( Page 81).

enlargement

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

Enlarges selected portions of images being played back 1.6 times or 3.2 times actual size. Images can be displayed enlarged when being played back one image at a time.

Movies and images photographed in the multi mode (▶ Page 53) cannot be displayed using the zoom playback feature



## Set the mode dial to [ ].

The last image frame appears on the LCD monitor.



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

You can also select the image by the same operation as for thumbnail playback ( Page 84).



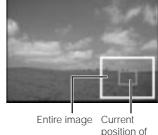
#### Adjust the zoom ratio by the Zoom switch.

Pressing the Zoom switch to the "T" will enlargen the image initially to 1.6X and to 3.2X when pressed again.

To return to normal magnification, press the Zoom switch towards "W".

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

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





### Use $\blacktriangle$ , $\blacktriangledown$ , $\blacktriangleleft$ or $\blacktriangleright$ to select the area to enlarge.

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



#### To return to the regular display, press ENTER.

#### Memo

The scale applied during zoom playback is the scale applied when the photograph is taken on this
camera. When you play back an image taken on another camera, the scale to be applied may vary.

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



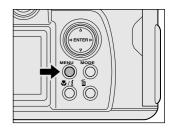
### Set the mode dial to [ ].

The last image frame appears on the LCD monitor.



#### Press the MENU button.

The PLAYBACK MENU is displayed.





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

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

When a movie folder is selected for playback, an error message is displayed, and the screen returns to the PLAYBACK MENU.

Selecting Folders ( Page 89)





## To quit the slideshow, press ENTER.

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

#### Memo

• The Auto Power OFF function does not operate during automatic playback.

# **Playback of Multi Image Pictures**

Automatically plays back the 36 images photographed in the multi photography mode like an animation.



Set the mode dial to [ ].

The last image frame appears on the LCD monitor.



Use ◀ or ▶ to select the images photographed in the multi photography mode. You can also select the image by the same operation as for thumbnail display (◆ Page 84).



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

Automatic playback begins.

# **Switching Displays/Displaying Image Information**

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



Set the mode dial to [ ].

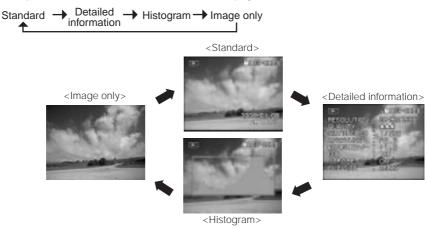


Press ◀ or ▶ to select the image.



Press the **3**/*i* macro/info button.

Each press of the macro/info button switches the display format as follows:



Memo

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

Images photographed on this camera are recorded to the [100TOSHI] folder in the case of still images and to the [1] folder in the case of moving images (movies). You cannot set which folder to store images to as you like. The [100TOSHI] folder is created when you have photographed still images, and the [1] folder is created when you have photographed moving images.

In the case of still images, when the images number reaches the largest number (9999), a new folder [101TOSHI] is created. When there are two or more [xxxTOSHI] folders, the playback folder default is the folder assigned the largest "xxx" value.

When a SmartMedia<sup>™</sup> that is formatted or contain images taken with another camera is used on this camera, [xxxTOSHI] or [ \(\mathbb{L}^{\mathbb{I}}\_{\mathbb{I}}\)] is created, and the data of the photographed images is recorded to this folder.

#### [xxxTOSHI]

Indicates the folder used by this camera.

The largest number is automatically assigned according to the status of the existing folders.

To view images photographed on this camera, select [xxxTOSHI] or [ ].

#### Memo

• To play back images photographed by another camera, select the desired [xxxAAAA] folder.

Same as above Varies according to camera brand

The folder [xxxAAAA] is created for each camera.

- Images currently recorded to these folders can only be played back.
- Sometimes the size of the image prevents it from being played back.
- Images cannot be played back unless the file name and folder name are set correctly.

Erases images one image at a time.

Note: Images cannot be erased when they are protected (▶ Page 107) or the SmartMedia™ is write-protected (▶ Page 35).



Set the mode dial to [ ], [ ], [ TV ] or [ AV ].

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



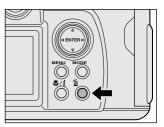
When [▶] is selected, use ◀ or ▶ to select the image to be erased.

When [ 1 ], [ 1 or [ Av ] is selected, only the last recorded image can be erased.



Press the merase button.

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





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

This erases the image and returns to the previous mode. To cancel erasing of image data, select [ 5 ].



# **Erasing Images (Erase Frame) (continued)**



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

#### Memo

- When [PROTECTED] is displayed on the LCD monitor, cancel the protection (▶ Page 109) or remove DPOF write-protection (▶ Page 103).
- If you take a photograph after erasing an image, a number continuing from the last photographed image is assigned as the image number.
- Images can also be erased in the thumbnail mode. In this case, the camera enters the single frame playback (frame playback) mode, and enters the thumbnail playback mode after the image is erased.

# **Erasing Folders (All Images in a Folder/All Still Images)**

setting Ready

> ıaklırığ notographs

Playing Back Image Erases images in image folders currently recorded to the SmartMedia™ loaded on your camera. There are two ways of erasing images, by individual folders or by all folders (still images only).

Note: Images cannot be erased when they are protected (◆ Page 107) or when the SmartMedia™ is write-protected (◆ Page 35).

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

[ ] : Folder of images currently being played back

[ 🖛 ] : 🖵 folder

[ , ], [ Tv ], [ Av ] : Folder of images currently being photograph About Folders Page 89



Set the mode dial to  $[ \triangleright ]$ ,  $[ \bullet ]$ ,  $[ \land V ]$  or  $[ \land V ]$ .

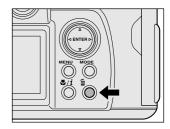
Set the mode dial to the type of folder you want to erase.

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



Hold down the  $\tilde{\mathbb{I}}$  erase button for two seconds.

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



# Erasing Folders (All Images in a Folder/All Still Images) (continued)

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

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

[ ] : Erases all still image folders.

The images or folders are erased, and the camera returns to the respective mode.

To cancel erasing of image data, select [ 5].

When [ ▶] is selected, [NO IMAGE] is displayed after the images are erased (unless the SmartMedia<sup>™</sup> contains protected images).



#### Memo

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

Getting Ready

Taking hotograph

Playing ack Images Formatting erases all images currently recorded on the SmartMedia™ loaded on your camera. Protected images (▶ Page 107) are also erased. SmartMedia<sup>™</sup> cannot be formatted if it is write-protected (▶ Page 35).

#### **IMPORTANT**

The SmartMedia<sup>™</sup> must be formatted on the camera before use.



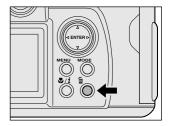
Set the mode dial to [ ], [ ], [ ], [ Tv ], [ Av ] or [ ].

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



Hold down the  $\tilde{\mathbb{I}}$  erase button for two seconds.

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



- Use ▲ or ▼ to select [ ☐ ], and press ENTER. To cancel formatting, select [5]
- To reset the image number, use ▲ or ▼ to select [EXECUTE], and press ENTER.

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



# Reducing the Image Size (Resize)

Changes the size of FULL size (2048 x 1536 pixels) images to half the size (1024 x 768 pixels) in the horizontal and vertical directions, and overwrites the old FULL size image with the new size image. This is called "resizing" in this manual.

Resizing a previously saved image when the SmartMedia<sup>™</sup> has run out of storage space during photography increases space on SmartMedia<sup>™</sup> so that you can continue taking photographs.

The following images cannot be resized:

- HALF size images
- · Images taken with another camera
- Images taken in the multi photography mode
  - Protected images ( Page 107)
  - Movies
- Images cannot also be resized when the SmartMedia™ is write-protected.



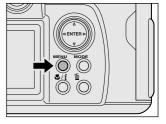
## Set the mode dial to [ ].

The last image frame appears on the LCD monitor.



#### Press the MENU button.

The PLAYBACK MENU is displayed.



3)

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

The RESIZE menu is displayed.

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

Selecting Folders (▶ Page 89)





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

This fixes the image to be displayed, and [  $\square 4$ ] is displayed under the image.

To cancel the selection, press ENTER again.

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

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





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

The screen indicating that the image is being resized appears. To quit resizing, select [CANCEL].

When resizing ends, the screen returns to the PLAYBACK MENU. To quit the PLAYBACK MENU, press the MENU button.

# **Compressing Images (Quality)**

Compresses images to half their size, and overwrites the old size image with the new compressed image. Compressing a previously saved image when the SmartMedia™ has run out of storage space during photography increases space on SmartMedia™ so that you can continue taking photographs.

The following images cannot be compressed:

- [★] (BASIC) image quality images
- Images taken with another camera
- Protected images ( Page 107)
- Movies
- Images cannot also be compressed when the SmartMedia<sup>™</sup> is write-protected.



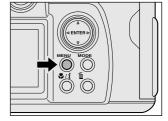
### Set the mode dial to [ ].

The last image frame appears on the LCD monitor.



### Press the MENU button.

The PLAYBACK MENU is displayed.



3)

### Use ▲ or ▼ to select [QUALITY], and press ▶.

The SET-UP menu is displayed.

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

Selecting Folders (▶ Page 89)





# Use ◀ or ▶ to select the image, and press ENTER to set the compression ratio.

The current compression ratio (quality) is displayed under the image. Each press of ENTER changes the number of stars as follows:

- ★★ [NORMAL]
- ★ [BASIC]

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

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



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

The screen indicating that the image is being compressed appears. To quit compression, select [CANCEL].

When compression ends, the screen returns to the PLAYBACK MENU. To guit the PLAYBACK MENU, press the MENU button.



Copies images stored on the SmartMedia $^{\text{TM}}$ . This feature is useful when you want to copy an image from one SmartMedia $^{\text{TM}}$  to another.



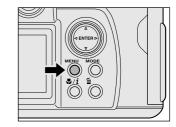
Set the mode dial to [ ].

The last image frame appears on the LCD monitor.



Press the MENU button.

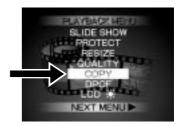
The PLAYBACK MENU is displayed.



3)

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

The COPY menu is displayed.



4)

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

This fixes the image to be copied, and [  $\Box$  ] is displayed under the image.

To cancel a selection, press ENTER again.

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

The bar at the bottom of the screen indicates the amount of buffer memory used to store the date of the images which have been selected, and the remaining memory space. The amount of memory space consumed is indicated in green.

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



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

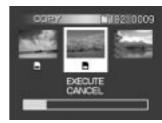
The screen indicating that the image is being read appears.



### Load the SmartMedia $^{\text{TM}}$ for copying the image to.

The message [EXCHANGE CARD] is displayed.

- Remove the SmartMedia™.
- 2 Replace it with another SmartMedia™.



## **Copying Images (continued)**

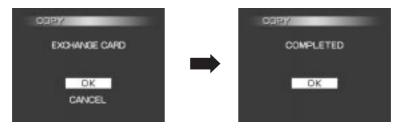


#### Use ▲ or ▼ to select [OK], and press ENTER.

The screen indicating that the image is being copied appears.

To guit copying, select [CANCEL].

If the SmartMedia<sup>™</sup> has insufficient memory space, [CARD FULL] appears on the screen. Replace the SmartMedia<sup>™</sup> with another one.



When copying is completed, the above screen is displayed.

When this screen is displayed, you can swap the SmartMedia™ with the original SmartMedia™. The camera need not be turned OFF for this operation.

#### **IMPORTANT**

 Do not remove the SmartMedia<sup>™</sup> or turn the camera OFF while images are being copied. This might damage the SmartMedia<sup>™</sup>.



#### Press ENTER.

The screen returns to the PLAYBACK MENU. To quit the PLAYBACK MENU, press the MENU button.

#### The image No. for copying

When images are copied, the frame No. is not copied. The frame No. becomes:

- · Still images:
- When the SmartMedia<sup>™</sup> at the copy destination contains the folder [xxxTOSHI], a
- folder having the largest number of "xxx" incremented by 1 is created.
  - Example: When there are folders [101TOSHI] and [102TOSHI], the folder [103TOSHI]
    - is created.
  - When there is no [xxx TOSHI] folder, a new folder is created.
  - In each case, the frame No. is assigned from 0001.
- Moving images: When the copy destination SmartMedia<sup>™</sup> contains a [□□] folder, the image No. is assigned to the image taking the number following the largest No. in the [ ] folder.

  - created, and the image No. is assigned to the image from 0001.

The number of prints or the image date can be set in a DPOF (Digital Print Order Format) file for images to be printed (developed). (♠ Additional Information, Glossary.) This feature applies to still images only. Printing can be done easily if you just take the SmartMedia<sup>™</sup> containing the images and DPOF file to the photo lab.

1

Set the mode dial to [►].

2

Press the MENU button.

The PLAYBACK MENU is displayed.



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



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



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5)

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

[SELECT]: Sets one image at a time. [ALL]: Sets all images at once.





Set the number of prints and date.

1 Press 

or 

to select the image, and press 

or 

to set the number of copies.

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

- When you have finished this setting, press ENTER. The DATE&TIME SETTING screen is displayed.
- 3 Press ▲ or ▼ to select [YES], and press ENTER. If you do not want to set the date, select [NO]. The message "CREATE DPOF FILE?" is displayed.





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

To continue setting, select [CHANGE SETTINGS]. To guit setting without creating a DPOF file, select [CANCEL].

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





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

To cancel confirmation of settings, proceed to step 9.





#### Select the desired operation.

[CONFIRM]: Press this to confirm the settings.

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

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

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

Taking Photographs

#### Memo

- When the SmartMedia™ already contains a DPOF information file, the message "RECREATE DPOF FILE?" is sometimes displayed. Note that if you select [YES], the file is overwritten, and the information of the existing DPOF information file is erased. The same also applies when the DPOF information file is overwritten on a personal computer and values not supported by this camera were set.
- Images set in the DPOF format are automatically protected. Write-protection cannot be removed by regular methods ( Page 109)
- You can specify up to 99 prints or up to 999 frames in a single SmartMedia<sup>™</sup>. The maximum number of prints you can specify in a single SmartMedia<sup>™</sup> is limited to 10000.

# **Protecting Images**

This feature prevents images from being erased.

#### IMPORTANT

- Formatting erases all the images on a SmartMedia<sup>™</sup>, regardless of whether they are protected or not.
- To protect the entire SmartMedia<sup>™</sup>, see "Write Protection" ( Page 35).

# **Protecting an Image**



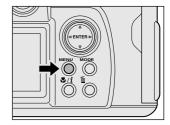
Set the mode dial to [ ].

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



Press the MENU button.

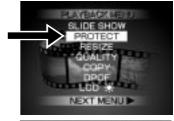
The PLAYBACK MENU is displayed.



3)

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

The PROTECT menu is displayed.





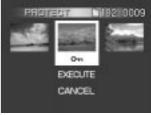
# Use $\triangle$ or $\nabla$ to select the desired image to protect, and press ENTER.

This fixes the image to be protected, and [  $\bigcirc \neg \neg \neg$ ] is displayed under the image.

To cancel the selection, press ENTER again.

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

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





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

To quit write-protection, select [CANCEL].

When write-protection ends, the screen returns to the PLAYBACK MENU. To quit the PLAYBACK MENU, press the MENU button.

#### Memo

- When the PROTECT setup screen is displayed again, [ ] is displayed under protected images.
- To cancel write-protection for an image, write-protection is simultaneously canceled if set at step 4.

# Removing the Protection



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



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

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

To unprotect an image, press ENTER again.

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





# Carry out step 5 in "Protecting An Image".

#### Memo

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

This item is for recording or playing back audio only. This is a handy function, for example, to record messages instead of noting them down.



# Set the mode dial to [ 🛡 ].

The file information of the largest track number is displayed on the LCD monitor.

If there are no recorded files, the value "0" is displayed.

Set the mode dial to [  $\P$  ] and then perform the following procedures as required.



# **Recording Audio**



### Press the shutter button down fully.

This starts recording.

During recording, [  $\cline{lack}$  ], elapsed recording time and remaining recording time are displayed in the LCD display area.



# To stop recording, either press the shutter button down fully again, or press ENTER.

If this operation is not performed, recording is automatically stopped when the SmartMedia $^{\text{TM}}$  runs out of free space.

If recording is stopped when the LCD monitor is OFF, the LCD monitor automatically turns ON, and the last recorded file can be played back.

Press ◀ or ▶ to select the file.

Press .

Playback starts. Buttons and keys function as follows when pressed.

Button	During Playback	During Stop
<b>A</b>	Pauses playback.	Playback audio file.
▼	Stops playback (returns to the beginning	of the playback file).
<b>•</b>	Fast forwards the playback file (for	Proceeds to the next file.
	duration that button is held down).	
<b>■</b>	Rewinds the playback file (for duration	Goes back to the previous file.
	that button is held down).	
ENTER	A list of recorded files is displayed after	A list of recorded files is displayed.
	a stop.	
macro/info button	Switches the LCD monitor ON and OFF.	
Pressing the Zoom	Increases the volume.	
switch to "T"		
Pressing the Zoom	Decreases the volume.	
switch to "W"		

#### Memo

· You can also listen to files on the earphone connected to the earphone jack terminal.

# **Erasing Files**

Files can be erased in either of two ways, either one file at a time or all files at once in folder units.

#### To Erase One File At a Time



Press ◀ or ▶ to select the file to erase.



Press the  $\tilde{\mathbb{I}}$  erase button.

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



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

The selected file is erased. To cancel this operation, select [  $\supset$  ].

#### To Erase All Files At Once



Hold down the we erase button for about two seconds.

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



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

All files in the entire folder are erased. To cancel this operation, select [  $\supset$  ].

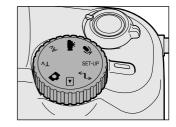
# **Basic Photographic Settings (SET-UP mode)**

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

AUTO POWER OFF/SOUND/TIME & DATE/OSD LANGUAGE/VIDEO OUT/FRAME NUMBER/RESET

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







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

SOUND Turns on and off the sound (P. 115)

TIME & DATE • Setting the Time and Date (P. 115)

OSD LANGUAGE • Selecting the Monitor Display Language (P. 116)

VIDEO OUT Setting Video Output (P. 116)

FRAME NUMBER • Resetting the Frame No. (P. 116)
RESET • Returning Settings to the Defaults (P. 118)



3 Press ▶.

The tab menu is displayed.

For details on how to reset the frame number ( Page 116)



Use  $\triangle$  or  $\blacktriangledown$  to change the setting in the tab menu, and press ENTER.

To cancel changing of settings, press ◀.





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

## **AUTO POWER OFF**

If no operation is carried out for a fixed amount of time (default: about one minute), power consumption is set to its minimum state (power almost turned OFF) to prevent battery wear. This is called the Auto Power OFF. This setting allows you to set the time when the camera turns off automatically. This function is not activated during automatic playback ( Page 86) or in the PL PC mode or

[ ] voice record mode (recording/playing back). To return to the normal state after the Auto Power OFF was executed, either change the mode dial or press the shutter down half way for at least two seconds (Page 41).

[1 MINUTE] (default)

[2 MINUTES]

[3 MINUTES]

# Basic Photographic Settings (SET-UP mode) (continued)

# SOUND

Sets whether or not to sound the beep tone.

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

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

### TIME & DATE

Sets the date and time. Seconds cannot be set.



Using ◀ or ▶ to select the item you want to set, and use ▲ or ▼ to set the value for each item.

Pressing ▶ advances the selection in the following order:

YEAR → MONTH → DAY → Hour → Minute → OK → CANCEL





Select [OK] and press ENTER.

To quit setting, select the [CANCEL] button.

# **Basic Photographic Settings (SET-UP mode) (continued)**

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# **OSD LANGUAGE**

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

All descriptions in this Instruction Manual are for when the display language is set to [ENGLISH].

### **VIDEO OUT**

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

[NTSC]: NTSC system (♠ Additional Information, Glossary)

[PAL]: PAL system (♠ Additional Information, Glossary)

# **FRAME NUMBER**

Sets whether or not to reset the image number when you take photographs.

When the frame No. is selected, the message "RESET FRAME NUMBER" is displayed.

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

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

To reset movie image numbers, you must delete the entire folder ( Page 92).

[CANCEL]: Does not reset the image number.

[RESET]: Reset the image number.

# **Basic Photographic Settings (SET-UP mode) (continued)**

#### **About Still Image Numbers and Folder Numbers**

- When the image number is reset, a number starting from 0001 is assigned to an empty folder having the smallest number of the SmartMedia™ that is inserted.
  - The folder number varies according to the state of the inserted SmartMedia<sup>™</sup>. To also reset the folder number, format the SmartMedia<sup>™</sup> first and reset the image number.
- A running number continuing from the last photographed image is assigned as the image number regardless of whether or not only one image or all images were erased. A folder is assigned as a running number in the same way.
- The largest image number is 9999. When this number is reached, a new folder is created, and the image number is assigned starting from 0001.
   Selecting the FOLDER ♠ Page 89
- The largest folder number is 999. When the folder number reaches 999, format the SmartMedia™.
- When you use SmartMedia<sup>™</sup> that was used for taking photographs on another camera, or swap between two or more SmartMedia<sup>™</sup>, the data held by this camera is given priority as the image number The folder number is assigned according to the state of your camera or the SmartMedia<sup>™</sup>.

#### **About Image Numbers and Folders**

- The image number assigned to the [ 🖵 ] of the inserted SmartMedia™ starting from 0001.
- The image number is assigned as a continuous number from the next number following the largest number in the [ □□ ] folder.
- The largest image number is 9999. When this number is reached, format the SmartMedia™.
- All moving image data is recorded to the [ 🖵 ] folder.
- When you use SmartMedia<sup>™</sup> that was used for taking photographs on another camera, or swap between two or more SmartMedia<sup>™</sup>, the image number is assigned according to the state of the SmartMedia<sup>™</sup>.

# **RESET**

Sets whether or not to return the settings in the SETUP MENU to their defaults.

The settings of TIME&DATE, OSD LANGUAGE and VIDEO OUT cannot be changed.

[CANCEL] : Does not return settings to their defaults.

[EXECUTE]: Returns settings to their defaults.

# **Adjusting the LCD Monitor Brightness**

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

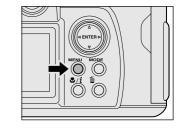


Set the mode dial to  $[ \triangleright ]$ ,  $[ \bullet ]$ ,  $[ \bullet ]$ , [ Tv ] or [ Av ].



Press the MENU button.

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





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

The image and the LCD menu are displayed.



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

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

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

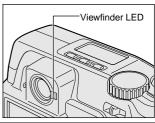




Press ENTER.

This returns the camera to the previous mode.

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



Viewfinder LED		Meaning	
Color	State	wearing	
Green	ON	[ , ], [ Tv ] or [ Av ] AE or AF are locked with the shutter button held half down. [ , ] Standby mode [Power OFF] Charging of battery is completed (with AC adapter connected).	
Flashing		[ 🗖 ], [ 🐙 ], [ Tv ] or [ Av ] Self-timer in operation at a handshake alarm 쏈.	
Red	ON	[Power ON] Writing to SmartMedia™ in progress Photographs can be taken, however, do not turn the power OFF.  [	
	Flashing	[  ], [  ], [ Tv ] or [ Av ] When the image is not in focus. [Power OFF] Battery error	
Orange	ON	Signal processing in progress after photography     Charging of flash in progress     (Photography is not possible.)	

Taking and Playing Back Photographs on a TV

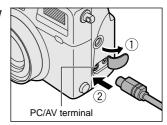
Television sets can be used to compose images for photography or playback. To do this, the camera must first be connected to the TV. We recommend using the AC adapter on an indoor power outlet when available.

#### IMPORTANT

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



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





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

#### Memo

 Switch to the video output system, NTSC or PAL, according to the TV or country in which your camera is used.

For details on how to switch the system Page 116

Take photographs or play them back.

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

How to play back images ▶ Page 80

#### Memo

- The image before the photograph is taken is slightly less clear than playback images. (This is because they are displayed at a lower resolution.)
- · The display unit varies according to the output system.

With the NTSC system, images can be displayed simultaneously on the LCD monitor and TV during photography and playback.

With the PAL system, images cannot be displayed simultaneously. During photography, images are displayed only on the LCD monitor, and during playback, images are displayed only on the TV.

# **Transferring Images to a PC**

You can transfer images photographed on your camera to a PC using the packaged CD-ROM and USB cable. Images recorded on SmartMedia™ can also be transferred to a PC using the PC card adapter (sold separately) or floppy disk adapter (sold separately, PDR-FLP2). (▶ Page 124)

To transfer images to a PC, software must be installed and special cables connected.

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

### Using SmartMedia™ on a PC

- When you use SmartMedia<sup>™</sup>, do not change or erase folders or file names (image data) on the SmartMedia<sup>™</sup>. Doing so might prevent the SmartMedia<sup>™</sup> from being used on the camera.
- Format the SmartMedia<sup>™</sup> only on your camera.
- To edit image data, copy the image data to hard disk on the PC, and edit the copied image data.

The following items are also available as separately sold items.

Relationship between your camera and accessories 

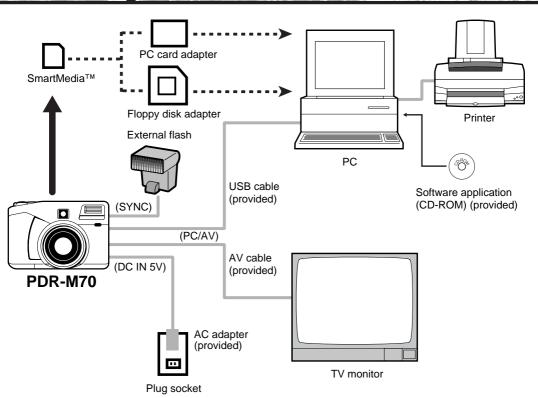
Connecting to Other Devices (page 125)

For details on these accessories, refer to the Instruction Manual for the accessory you are using. (information current as of March 2000)

- SmartMedia<sup>†M</sup> (3.3 V)
   8MB(PDR-NSM8)/16MB (PDR-SM16)/32MB (PDR-SM32)/64MB (PDR-SM64)
- Lithium-ion battery pack (PDR-BT2)
- Battery charger (PDR-CG1, PDR-CG1E, PDR-CG1U)
   This charger is connected to a household power outlet and charges the lithium-ion battery pack (PDR-BT2) in a short time (approx. 70 minutes).
- Adapter ring (PDR-AR52)
   This adapter is used to attach a commercially available standard
   52 mm optical filter or lens to your camera.
- Floppy Disk Adapter PDR-FLP2 (FlashPath)
  This adapter allows SmartMedia™ to be used as 3.5" floppy disk.
  This adapter is inserted into the floppy disk drive on your PC, allowing images recorded on the SmartMedia™ to be transferred to the PC.



# **Connecting to Other Devices**



Getting Ready

Taking Photographs

> Playing Back Images

> > Erasing

Handy Function

Other /
plications In

- 125 -

In the Demo Mode, you will have the ability to temporarily take/save a limited number of images without the SmartMedia $^{\text{TM}}$  card in place. The playback and downloading functions will be operational the same as in the normal mode.

# How to enter the Demo Mode



Set the mode dial to "SET-UP".



Return the settings in the SET-UP menu to their defaults. (RESET 🗘 Page 118)



Press the  $\sqrt[4]{i}$  button while pressing the shutter button.

The LCD monitor displays the message "Changed to Demo Mode", and the power is automatically turned OFF.



Power ON the camera again, and set the mode dial to the desired mode.

"DEMO" is displayed on the LCD monitor.

Images that you photograph in the Demo Mode are lost when you turn the power OFF.

### How to return to the Normal Mode



Follow steps 1 to 3 in the above procedure again.

The LCD monitor displays the message "Changed to Normal Mode", and the power is automatically turned OFF.



Power ON the camera again.

#### Memo

- Images cannot be saved to the SmartMedia<sup>™</sup>, and will be erased from the camera's memory when the
  power is turned off.
- When taking photographs by Burst Photography in the Demo Mode, there is a limit to the number of photographs you can take. You can take up to eight photographs in the Normal Mode.

# **Specifications**

### Camera Body

Recording medium	SmartMedia™ (3.3V) 2/4/8/16/32/64MB compatible								
Compression system	JPEG-compliant								
Image file format	Exif Ver.2.1	-compliant							
<still image="" mode=""></still>	Quality	Compression	Image		File Size	8ME	16MB	32MB	64MB
Number of frames	Mode	Ratio	Size	<u>'</u>	i ile Size	OIVIE	TOIVID	SZIVID	04IVID
FULL size:	FINE	1/5	FULL	App	prox. 1.2MB	6	13	26	53
2048 x 1536 pixels	***		HALF	App	prox. 300KB	27	55	110	221
HALF size:	NORMAL	1/7.5	FULL	Ар	prox. 800KB	9	19	39	79
1024 x 768 pixels	**		HALF	App	prox. 200KB	41	82	166	332
	BASIC	1/15	FULL	App	prox. 400KB	19	39	79	159
	*		HALF	App	prox. 100KB	82	165	332	665
<movie image="" mode=""></movie>	Quality	Compression	Imag	je	Frame Siz	e F	hotograpl	ny Time	(secs)
Standard movie	mode	Ratio	Size	9			16ME	or more	e
photography time	FINE	1/10	FUL	L	16KB			60	
FULL size:	***	1/7	HAL	F	6KB			150	
320 x 240 pixels	NORMAL	1/14	FUL	L	11KB			90	
HALF size:	**	1/10	HAL	F	4.5KB			200	
160 x 120 pixels	BASIC	1/19	FUL	L	8KB			120	
	*	1/4	HAL	F	3KB			300	
Conversion rules	DCF Ver. 1	.0-compliant							

Picku	Pickup elements		1/1.8" CCD sensor (total number of pixels: approx. 3.37 million)			
Sensit	Sensitivity		Equivalent to ISO 100/200/400			
Lens			3X optical zoom lens F2 – F2.5			
Focal	length		f=7.0 mm - 21 mm (equivalent to 35 mm - 105 mm on a 35 mm			
			camera)			
Viewfi	nder		Real image type zoom finder			
Auto-f	ocus		TTL system AF, focus adjusting range: approximately 0.09 m (0.3 ft) to			
			infinity (WIDE side setting)			
			Detection system: Contrast detection system (frame rate during			
			detection: 30 Hz)			
_	Met	tering system	Split metering			
Expos	ure Cor	ntrol system	Program AE, aperture-priority AE, shutter-priority AE			
Contro	Control Exposure compensation		-1.5 EV to +1.5 EV (in 0.3 EV increments)			
Apertu	Aperture		F2.0 to F8 automatic selection, manual selection possible			
Shutte	r speed		1/2 to 1/1,000 sec. (electronic shutter and mechanical shutter)			
White	balance	<u> </u>	Auto selected			
			Manual setting possible (5 modes)			
Focal	rongo	Standard	Approx. 80 cm (31") to infinity			
FUCAI	range	Macro	Approx. 9 cm (4") to infinity (WIDE side setting)			
			Approx. 20 cm (8") to infinity (TELE side setting)			
Self-Ti	Self-Timer		2 seconds/10 seconds selectable			
	Built-in Modes		Auto, Red-eye reduction forced flash, Red-Eye Auto, Forced Flash,			
Built-in			Suppressed Flash, Slow Synchro			
flash	Flash ir	ntensity control	Automatic			
	Effective range		Approx. 0.8 m (2.6 ft) – 4.0 m (13 ft) (WIDE side setting)			
			•			

# **Specifications (continued)**

Date/Time		Simultaneously recorded to image data (Exif file format)		
Automatic ca	alendar function	Automatically adjusted until the year 2030		
LCD monitor (*1)		1.8" wide viewing angle, low-temperature polysilicon TFT (113,578 pixels)		
	DC IN 5V terminal	DC 5 V		
	PC/AV terminal	Selectable Audio/Video cable or USB cable connections.		
I/O terminai	Earphone jack terminal	3.5 mm diameter monaural		
	SYNC terminal	Sync terminal for connection of external flash		
Power suppl	у	Rechargeable Lithium-ion battery pack (PDR-BT1, PDR-BT2) or AC adapter provided (PDR-AC10, PDR-AC10E or PDR-AC10U)		
Operating Temperature		+5°C (+41°F) to +40°C (+104°F) (during operation)/–20°C (-4°F) to +60°C (+140°F) (during storage)		
conditions Humidity		30 to 80% (during operation) no condensation		
Camera dimensions		116 mm (4.6") (W) x 76 mm (3") (H) x 62 mm (2.4") (D) (excluding protrusions)		
Weight		Approx. 340 g (12 oz) (excluding accessories, battery and SmartMedia <sup>™</sup> )		

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

#### AC adapter (PDR-AC10)

Power supply	AC100V - 120V 50/60Hz
Rated Input Capacity	29VA
Rated Output	DC5.0V 2A
Operating temperature	0°C (+32°F) ~ +40°C (+104°F)
Storage temperature	-20°C (-4°F) ~ +70°C (+158°F)
Dimensions	70 mm (2.8") (W) x 30 mm (1.2") (H) x 50 mm (2") (D)
Weight	Approx. 120 g (4.2 oz)
Connector Cable Length	Approx. 2 m (6.6 ft)

#### AC adapter (PDR-AC10U)

Power supply	AC230V 50Hz
Rated Input Capacity	170 mA
Rated Output	DC5.0V 2A
Operating temperature	0°C (+32°F) ~ +40°C (+104°F)
Storage temperature	-20°C (-4°F) ~ +70°C (+158°F)
Dimensions	49.9 mm (2.0") (W) x 60.4 mm (2.4") (H) x 75 mm (3.0") (D)
Weight	Approx. 150 g (5.3 oz)
Connector Cable Length	Approx. 2 m (6.6 ft)

#### AC adapter (PDR-AC10E)

Power supply	AC230V 50Hz
Rated Input Capacity	170 mA
Rated Output	DC5.0V 2A
Operating temperature	0°C (+32°F) ~ +40°C (+104°F)
Storage temperature	-20°C (-4°F) ~ +70°C (+158°F)
Dimensions	36 mm (1.4") (W) x 66.5 mm (2.6") (H) x 75 mm (3.0") (D)
Weight	Approx. 140 g (4.9 oz)
Connector Cable Length	Approx. 2 m (6.6 ft)

Lithium-ion battery pack (PDR-BT2)

Nominal voltage	3.7V
Nominal capacity	1300mAh
Operating temperature	0°C (+32°F) ~ +40°C (+104°F)
Dimensions	19.8 mm ( <sup>7</sup> / <sub>9</sub> ") (W) x 20.4 mm ( <sup>4</sup> / <sub>5</sub> ") (H) x 55.5 mm (2- <sup>1</sup> / <sub>6</sub> ") (D)
Weight	Approx. 40 g (1.4 oz)
High-speed charging	Approx. 70 minutes
	* Battery charger (PDR-CG1, PDR-CG1E or PDR-CG1U) used

#### SmartMedia™

Туре	Image memory card for digital cameras (SmartMedia™)	
Type of memory	NAND flash memory	
Operating voltage 3.3V		
Operating conditions	Temperature 0°C (+32°F) ~ +40°C (+104°F)	
	Humidity 80% or less (no condensation)	
Dimensions	37 mm (1- <sup>4</sup> /9") (W) x 0.76 mm ( <sup>3</sup> /100") (H) x 45 mm (1- <sup>7</sup> /9") (D)	
Accessories	Anti-static case (x1), index labels (x2), write-protect stickers (x4)	

These specifications are subject to change without notice.

# **Warnings and Messages Displayed on LCD Monitor**

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

	Display	Meaning
LCD monitor	Status display	Moaning
	<b>_</b>	Remaining battery power half or less
	にコ/゛にコ゛(Flashing)	No battery power left
CARD ERROR	Flashing	The SmartMedia™ is damaged.
		An unsupported SmartMedia™ is loaded.
CARD LID OPEN		The SmartMedia™ cover is open.
CARD FULL	Display 0	No more space on the SmartMedia™.
		Recording is not possible.
NO CARD		No SmartMedia™ is loaded
		SmartMedia™ is loaded incorrectly
CARD ISN'T FORMATED		The SmartMedia™ is not initialized.
		The SmartMedia <sup>™</sup> format is incorrect.
FORMAT CARD?		The SmartMedia™ is not formatted (initialized).
		The SmartMedia™ format is incorrect.
FRAME NUMBER FULL		The frame number has reached 999-9999.
PROTECTED		The image is write-protected.
NO IMAGE		The image to apply the resize, quality or other
		function does not exist.
CARD FULL		There is not enough space on the
		SmartMedia™ to copy image data to.
FORMAT ERROR		The format of the SmartMedia™ to copy image
		data to is incorrect.
CARD PROTECTED		The SmartMedia™ is write-protected.
FOLDER ERROR		There are no free folders on the SmartMedia™
		to copy image data to.
RECREATE DPOF FILE?		There is a parameter that is not supported in
		the DPOF setting file.
CLOSE THE CARD LID		The SmartMedia <sup>™</sup> cover must be closed.

Setting Ready

mages Pl

Erasing Images

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Applicatio

Additional

Ε	Display	Meaning		
LCD monitor	Status display			
FRAME NUMBER FULL		The maximum number of images (999 frames) that can be set is exceeded when setting DPOF setting files.		
NO IMAGE AVAILABLE		No images are recorded to the SmartMedia™.		
DPOF ERROR		There is a parameter that is not supported in the DPOF setting file.		
DPOF PROTECT OFF		This is a confirmation for checking whether or not to remove DPOF write-protection when clearing DPOF settings.		
NO FILE AVAILABLE		The data to be played back in the [ •] mode does not exist.		
$\Lambda$		The zoom lens cannot be correctly set up. Is the lens cap still attached to the lens? Check the lens cap, and turn the power ON again.		
$\boxtimes$		You tried to play back an image not supported on this camera.		
ERROR***		A camera problem has occurred. Contact a Support Center.		
(h))		Poor lighting conditions. Image will be vulnerable to vibrations.		

First check the warning displayed on the LCD monitor ( Page 132) and the color of the viewfinder LED ( Page 120). Then check the following items.

Problem	Causes	Remedy	See Page
No power supply	The battery is exhausted.	Charge the battery.     Load a fully charged battery.	P.26
	The AC adapter plug has come out of the power outlet.	Plug the adapter back in.	P.30
The camera turns OFF during operation.	The battery is exhausted.  • Charge the battery • Load a fully charged battery.		P.26
The battery runs out quickly.	You are using the camera in extremely cold conditions.	Put the battery in your pocket or another warm place to heat it and then load it into the camera just before you take a picture.	P.16
	The terminals are dirty.	Wipe the battery terminals with a clean, dry cloth.	-
	The battery has reached its effective life.	Load a fully charged battery.	P.26
No photograph is taken when the shutter button is pressed.	No SmartMedia™ is loaded.	Load a SmartMedia™.	P.32
	The SmartMedia™ is loaded incorrectly.	Load the SmartMedia™ correctly.	P.33
	Not enough space on the SmartMedia™	Load a new SmartMedia™.     Erase photographed images or change the size and quality to increase space on the SmartMedia™.	P.32 P.95 P.97
	The SmartMedia™ is write- protected.	Remove the write-protection or replace with a new SmartMedia™.	P.35
	The SmartMedia <sup>™</sup> is not formatted.	¹ is not formatted. Format the SmartMedia™.	
	The SmartMedia™ is damaged.	Load a new SmartMedia™.	P.32
	The Auto Power OFF function is activated.	Either press the shutter button half way down for at least two seconds, or change the mode dial setting.	P.114

Additional

Problem	Causes	Remedy	See Page
Nothing is displayed even through the LCD monitor is set to ON.	The camera is in the PC mode.	Change the camera to the photography or playback mode.	P.43 P.64~66 P.80
The set date and time disappears.	Both the battery and AC adapter are removed with the power still ON.	Set the date and time again.	P.115

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

camera's exposure.

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

#### DPOF (Digital Print Order Format)

A standard for directly writing print information to the SmartMedia<sup>™</sup>. Files in this format can be printed easily by printers or photo print service bureaus that support this format.

#### DCF (Design rule for Camera File System)

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

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

#### JPFG

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

 NTSC (National Television System Committee) Method of television transmission in use in Japan and North America

#### PAL (Phase Alternate Line)

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

#### PC Card

A generic term for cards that meet the PC Card Standard

#### Red-Eye Effect

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

#### White Balance

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

Taking Photographs

Playing Back Images

Handy Functions

■ SmartMedia<sup>™</sup>

Name of a recording medium defined by the SSFDC Forum. This recording medium can be used over and over again.

Formatting

Transforming the contents of the SmartMedia $^{\text{TM}}$  to a recordable state. (This is sometimes called "initialization".)

Exposure Compensation

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

### **Contact Numbers**

Country	Company name	Phone number for inquiry	e-mail address for inquiry	website
United Kingdom	Toshiba (UK) Ltd.	(01932) 828828	NA	www.toshiba.co.uk
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/
France	Toshiba Systems (France)	01 47 28 28 50	consommateur@toshiba-tsf.com	www.toshiba.fr/produits/video/index.htm
Switzerland	Toshiba Europe Gmbh Swiss Branch	01-946 07 77	info@toshiba.ch	www.toshiba.ch/
Singapore	Toshiba Singapore Pte	270-7776	NA	www.cp.toshiba.com.sg
Hong Kong	Toshiba Hong Kong Ltd	2956-0222	NA	www.toshiba.com.hk

## Numéros à appeler

Pays	Nom de la compagnie	Numéro de téléphone pour toute demande	Addresse e-mail pour toute demande	Site Web
Royaume-Uni	Toshiba (UK) Ltd.	(01932) 828828	NA	www.toshiba.co.uk
Allemagne	Toshiba Europe Gmbh	(02131) 158 01	consumer@toshiba-teg.com	www.toshiba.de/consumer
Italie	Toshiba Consumer Products (Italia)	(039) 6099342	toshiba.italia@toshiba-tuk.com	www.toshiba.it/
France	Toshiba Systems (France)	01 47 28 28 50	consommateur@toshiba-tsf.com	www.toshiba.fr/produits/video/index.htm
Suisse	Toshiba Europe Gmbh Swiss Branch	01-946 07 77	info@toshiba.ch	www.toshiba.ch/
Singapour	Toshiba Singapore Pte	270-7776	NA	www.cp.toshiba.com.sg
Hong Kong	Toshiba Hong Kong Ltd	2956-0222	NA	www.toshiba.com.hk

# PDR-M70

DIGITAL STILL CAMERA



For customers in the U.S.A.

For technical support, please contact: (800)829-8318

5:00 a.m. to 5:00 p.m. PST, Monday to Friday except holidays, or e-mail us at: dsc.support@tais.toshiba.com

Toshiba America Information Systems, Inc. Imaging Systems Division

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