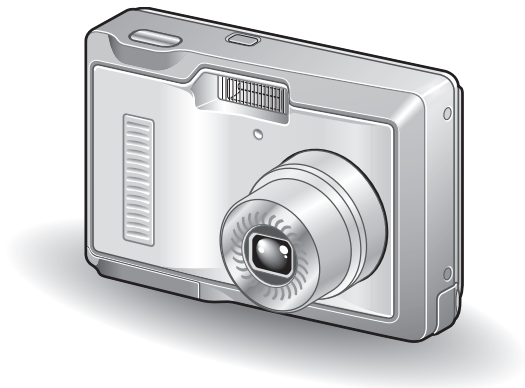


Uniden®

INSTRUCTION MANUAL

UDC-5M

Digital Camera



Congratulations on your purchase of the Uniden UDC-5M Digital Camera.

- Please be sure to read this Instruction Manual before you begin using your camera.
- Save this manual for future reference.
- Review the separate booklet "SAFETY MANUAL" before operating your camera.

Warning

TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

■ FOR AMERICAN USERS

The following advisory is included in accordance with the laws of the State of California (USA):

WARNING:

This product contains chemicals, including lead, known to the State of California to cause cancer, birth defects or other reproductive harm. **Wash hands after handling.**

- 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:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Declaration of Conformity

Model number: UDC-5M

Trade Name: Uniden Corporation

Address: 4700 Amon Carter Boulevard Ft. Worth TX, 76155 U.S.A

Telephone No.: 817-858-3300

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.

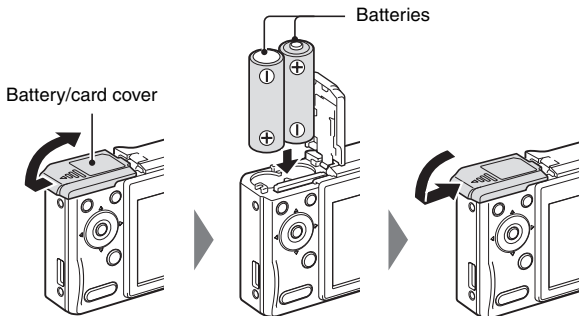
■ FOR CANADIAN USERS

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

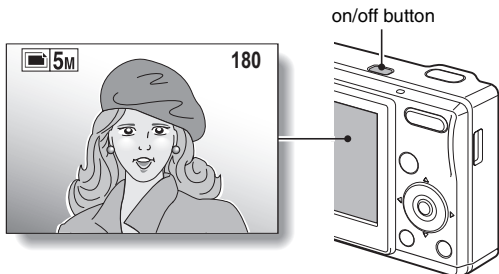
GETTING UP AND RUNNING

Install the battery

- 1** Open the battery/card cover, and insert the batteries.
- The battery/card cover is located on the bottom of the camera.

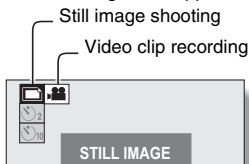


- 2** Press the on/off button to turn the camera on.
- The Shooting Screen appears.



Shooting

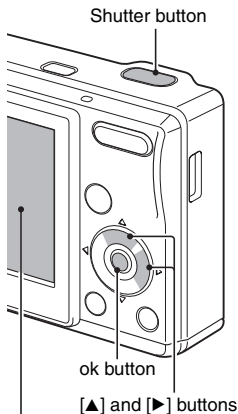
- 1 Press the [▲] button.**
- The display for selecting shooting mode appears.



- 2 Press the [◀] and [▶] buttons to select the shooting mode.**
- Still image shooting mode:**
Select [📷].
- Video clip recording mode:**
Select [📹].

- 3 Press the ok button.**
- The shooting mode is indicated by an icon in the upper left area of the monitor.

- 4 Press the shutter button.**
- Still image shooting mode:**
A still image is captured.
- Video clip recording mode:**
Recording begins. To stop recording, press the shutter button again.



- [📷]: Still image shooting mode
- [📹]: Video clip recording mode

CAUTION

This camera does not record sound.

- For video clip playback, only video data is played back.

Playback

■ Still image playback

1 Press the playback button [▶].

- The display switches to the Playback Screen.
- To view other images, press the [◀] or [▶] button.
- If the playback button [▶] is pressed, the display returns to the Shooting Screen.

■ Video clip playback

1 Press the playback button [▶].

- The display switches to the Playback Screen.
- Press the [◀] or [▶] button to display the video clip you wish to play back.
- Video clips are indicated by a video clip pattern along the top and bottom of the screen.

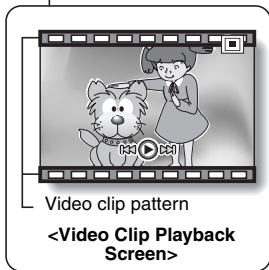
2 Press the ok button.

- Playback of the selected video clip begins.
- If the playback button [▶] is pressed again, the display changes to the Shooting Screen.

Playback button [▶]

ok button

[◀] and [▶] buttons



When you are finished taking pictures...

Press the on/off button to turn the camera off.

QUICK SEARCH BY OPERATION

Your camera has an abundance of convenient features and functions. From creating precisely the photo you want, to viewing images using various techniques, you can locate the exact operation for your purposes in the following table.

| | Basic operation | Convenient functions | Additional functions |
|--------------------|--|--|--|
| Shooting/recording | Getting started shooting <ul style="list-style-type: none">• "Shooting still images" on page 29• "Recording a video clip" on page 36 | Log the date and time of your photos <ul style="list-style-type: none">• "DATE AND TIME SETTINGS" on page 19• "DATE IMPRINTING ON STILL IMAGES" on page 57 Zoom in on the subject <ul style="list-style-type: none">• "USING THE ZOOM" on page 42 Close-up photography <ul style="list-style-type: none">• "FOCUS RANGE" (macro mode) on page 47 | Set the focus to a narrow range <ul style="list-style-type: none">• "FOCUS AREA SETTING" on page 52 |
| | Optimize the photo quality <ul style="list-style-type: none">• "RESOLUTION/VIDEO CLIP SETTING" on page 51 | | |
| | Capture fast-moving subjects <ul style="list-style-type: none">• "USING THE SCENE FUNCTION" (sports mode) on page 40 | | |

| | Basic operation | Convenient functions | Additional functions |
|--------------------|---|--|---|
| Shooting/recording | Shoot in dark conditions <ul style="list-style-type: none">• “EXPOSURE CORRECTION” on page 56• “FLASH SETTING” on page 43• “USING THE SCENE FUNCTION” (night view portrait mode) on page 40 | | |
| | Increase the camera’s sensitivity “ISO SENSITIVITY” on page 53 | | |
| | Photographing people <ul style="list-style-type: none">• “USING THE SCENE FUNCTION” (cosmetic mode/portrait mode/night view portrait mode) on page 40• “FLASH SETTING” (red-eye reduction) on page 43 | | |
| | Photographing landscapes <ul style="list-style-type: none">• “USING THE SCENE FUNCTION” (landscape mode) on page 40 | | |
| | Take a self-photo <ul style="list-style-type: none">• “SELF-TIMER” on page 45 | | |
| | | Make images lighter or darker <ul style="list-style-type: none">• “EXPOSURE CORRECTION” on page 56 | Adjust the camera’s sensitivity <ul style="list-style-type: none">• “ISO SENSITIVITY” on page 53 |
| | | Change the color of the images <ul style="list-style-type: none">• “USING THE SCENE FUNCTION” (monochrome/sepia) on page 40 | Make white appear natural <ul style="list-style-type: none">• “WHITE BALANCE” on page 54 |

| | Basic operation | Convenient functions | Additional functions |
|--------------------------|--|---|---|
| Playback | Getting started viewing images <ul style="list-style-type: none">• “Playing back the video clip” on page 37 | | |
| | <ul style="list-style-type: none">• “Viewing still images” on page 31 | Search for image data <ul style="list-style-type: none">• “9-image display playback” on page 32 Magnify an image <ul style="list-style-type: none">• “Magnifying (zooming in) the image” on page 33 | Change the angle of view <ul style="list-style-type: none">• “ROTATE IMAGE” on page 61 |
| | Slideshow playback <ul style="list-style-type: none">• “SLIDESHOW PLAYBACK” on page 70 | | |
| | Adjust the monitor brightness <ul style="list-style-type: none">• “ADJUST THE MONITOR BRIGHTNESS” on page 76 | | |
| | | | |
| Data managing/processing | Search for image data <ul style="list-style-type: none">• “9-image display playback” on page 32 | | |
| | Delete files <ul style="list-style-type: none">• “Erasing files” on page 34 | Protect images from accidental erasure <ul style="list-style-type: none">• “IMAGE PROTECT” on page 60 Format a card <ul style="list-style-type: none">• “INITIALIZING THE CARD MEMORY AND INTERNAL MEMORY” on page 84 | |
| | Specify the number of prints and date imprint <ul style="list-style-type: none">• “PRINT SETTINGS” on page 64 | | |
| | View the settings that were in effect when the data was recorded <ul style="list-style-type: none">• “DISPLAYING STILL IMAGE PROPERTIES” on page 71 | | |
| | | | |

CONTENTS

| | |
|---|----|
| QUICK SEARCH BY OPERATION | 1 |
| CONTENTS | 4 |
| CHECKING THE INCLUDED ACCESSORIES | 7 |
| GETTING THE MOST OUT OF YOUR CAMERA | 10 |
| SYSTEM MAP | 11 |

■ SETUP

| | |
|---|----|
| PARTS NAMES | 12 |
| INSTALLING THE BATTERIES AND CARD | 14 |
| TURNING THE CAMERA ON AND OFF | 17 |
| DATE AND TIME SETTINGS | 19 |

■ BASIC OPERATION

| | |
|---|----|
| BEFORE TAKING PICTURES | 22 |
| CAPTURING AND PLAYING BACK STILL IMAGES | 29 |
| VIDEO CLIP RECORDING AND PLAYBACK | 36 |
| USING THE SCENE FUNCTION | 40 |
| USING THE ZOOM | 42 |
| FLASH SETTING | 43 |
| SELF-TIMER | 45 |
| FOCUS RANGE | 47 |

■ SHOOTING

| | |
|---------------------------------------|----|
| ACCESSING THE RECORDING MENU | 48 |
| RESOLUTION/VIDEO CLIP SETTING | 51 |
| FOCUS AREA SETTING | 52 |
| ISO SENSITIVITY | 53 |
| WHITE BALANCE | 54 |
| EXPOSURE CORRECTION | 56 |
| DATE IMPRINTING ON STILL IMAGES | 57 |

CONTENTS

■ PLAYBACK

| | |
|---|----|
| DISPLAYING THE PLAYBACK MENU | 58 |
| IMAGE PROTECT | 60 |
| ROTATE IMAGE | 61 |
| COPY DATA | 62 |
| PRINT SETTINGS | 64 |
| SLIDESHOW PLAYBACK | 70 |
| DISPLAYING STILL IMAGE PROPERTIES | 71 |

■ OPTIONS

| | |
|---|----|
| DISPLAYING THE OPTION MENU | 72 |
| POST-VIEW SETTING | 75 |
| ADJUST THE MONITOR BRIGHTNESS | 76 |
| SCREEN LANGUAGE | 77 |
| TV SYSTEM SETTING | 78 |
| AUTO POWER OFF FUNCTION | 79 |
| FILE No. RESET FUNCTION | 81 |
| INITIALIZING THE CARD MEMORY AND INTERNAL MEMORY | 84 |
| RESETTING THE CAMERA SETTINGS | 86 |
| CHECKING THE REMAINING INTERNAL MEMORY AND CARD MEMORY | 87 |
| CHECKING THE REMAINING BATTERY CHARGE | 88 |

■ OTHER DEVICES AND CONNECTIONS

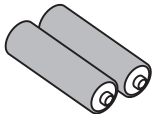
| | |
|--------------------------------|----|
| CONNECTING TO A TV | 90 |
| CONNECTING TO A COMPUTER | 91 |
| DIRECT PRINTING | 98 |

■ APPENDICES

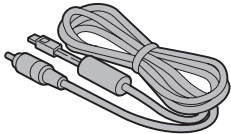
| | |
|---------------------------------|-----|
| COMMONLY ASKED QUESTIONS | 105 |
| TROUBLESHOOTING | 111 |
| SPECIFICATIONS | 117 |
| HINTS FOR TAKING PICTURES | 124 |

CHECKING THE INCLUDED ACCESSORIES

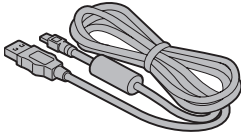
- AA Alkaline Batteries (2)



- Video Cable (1)



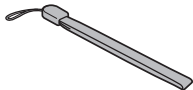
- USB Cable (1)



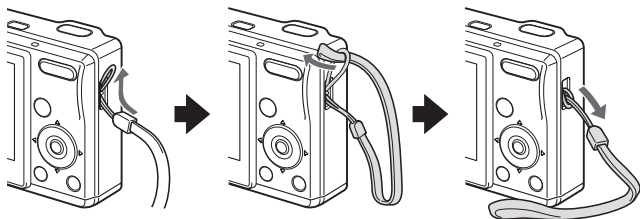
- “SAFETY MANUAL”
(safety precautions booklet)
Please read this booklet
carefully before using the
digital camera.



- Wrist Strap (1)



Attaching the Wrist Strap



Media cards that can be used with this camera

The types of card that can be inserted into and used with this camera are:

- SD Memory Card
- Multi Media Card

What “card” means in this manual

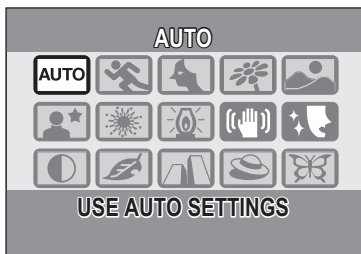
- In this manual, SD Memory Cards and Multi Media Cards that can be used in this digital camera are referred to as “card”.
- The cards in the illustrations in this manual are SD Memory Cards, but all installation, removal, and formatting procedures are the same for both SD Memory Cards and Multi Media Cards.

GETTING THE MOST OUT OF YOUR CAMERA

Your UDC-5M is loaded with lots of functions including an easy-to-understand display, a large screen, extensive scene functions, and more.

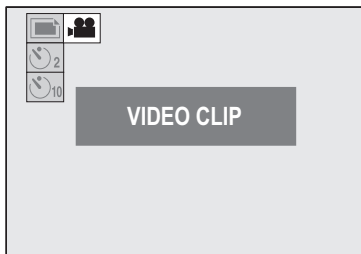
■ Abundant scene functions

You can select from a variety of preset modes (aperture, shutter speed, etc.) for specific shooting conditions.



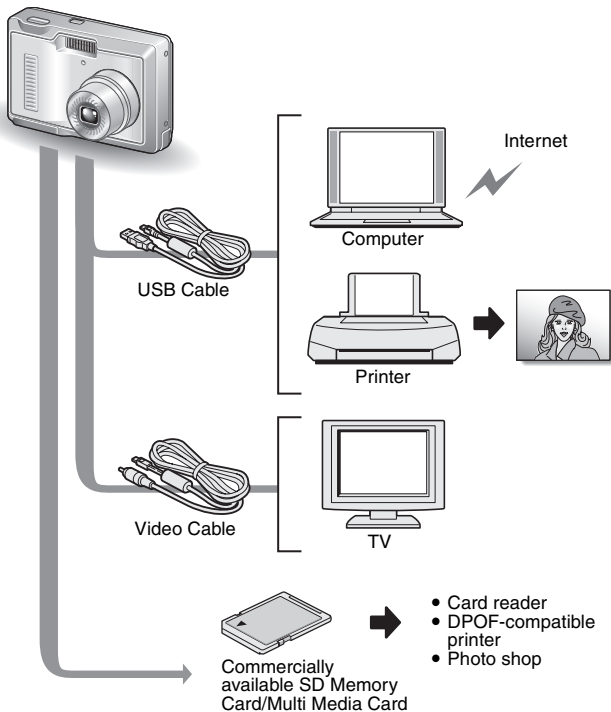
■ Speedy mode-switching

Switch from still image shooting to video clip recording with a single button.



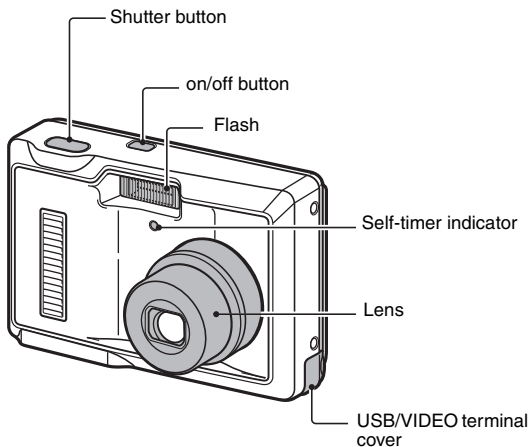
SYSTEM MAP

The included accessories can be used to connect your camera to a computer, printer or TV. By connecting the camera to your computer, you can, for example, copy your photos to the computer's hard disk. You can connect it to a printer for direct printing of your photos. Or take the card to a photo shop to have your photos printed there.



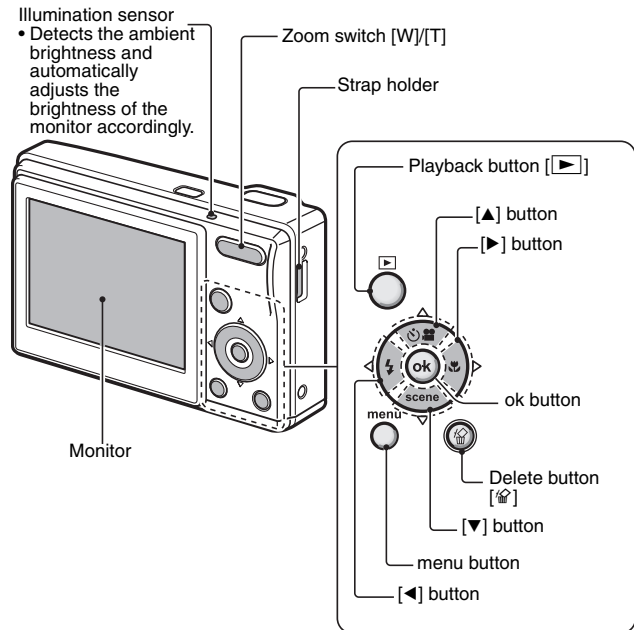
PARTS NAMES

Front

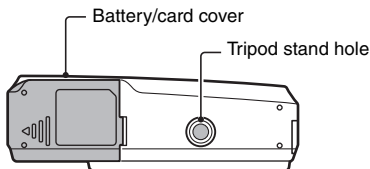


PARTS NAMES

Rear



Bottom



INSTALLING THE BATTERIES AND CARD

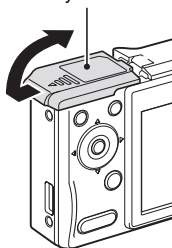
Your camera has an internal memory, which means that you can take photos even when no card is installed. By using a card, however, you will be able to take many more photos.

The card can be used after it has been formatted with the camera (page 84).

1 Open the battery/card cover.

- While gently pressing the battery/card cover, slide it open.

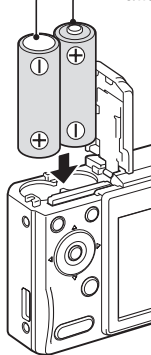
Battery/card cover



2 Insert the batteries.

- Make sure that the batteries' polarities (+ and -) are correct.

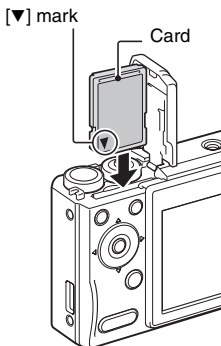
Batteries



INSTALLING THE BATTERIES AND CARD

3 Insert the card.

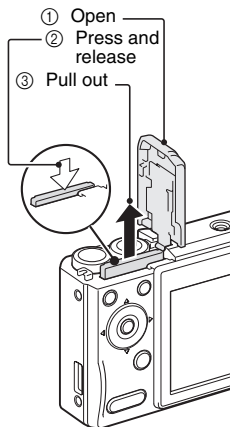
- Firmly insert the card until it clicks into place.



4 Close the battery/card cover.

When removing the card...

- To remove the card, press it down, and then release. The card will protrude slightly, and you can then pull it out.



Keep your finger on the card until it is completely inserted or released.

- If you remove your finger too soon, the card may spring out and become lost or hit someone in the eye.

CAUTION

Be careful when removing the card.

- Do not attempt to forcibly remove the card.
- Never remove the card when the camera is connected to a computer or printer, or when the self-timer indicator is flashing quickly. In doing so, you risk losing the data stored in the card.

Manganese batteries cannot be used.

- Not only do manganese batteries have a short battery life, but there is the danger of their overheating and causing damage to the digital camera.

Other batteries


- If you wish to use batteries other than the alkaline batteries (LR6), we recommend the following.
 - AA-size nickel metal hydride (NiMH) rechargeable batteries (SANYO eneloop HR-3UTG) × 2
 - AA-size Ni-Cd batteries (SANYO AA-size 2700 Series HR3-UG) × 2

Do not open the battery/card cover when the camera is turned on.

- If the battery/card cover is opened while the power is on, important data may be lost. Uniden Corporation shall not be held responsible for any losses that result from failure to comply with this warning.

HINT

Shooting without a card installed

- When a card is installed, images are recorded to and played back from the card. When no card is installed, images are recorded to and played back from the camera's internal memory. When the camera is turned on with no card installed, the internal memory icon  is shown on the monitor to let you know that the images you capture will be saved to the camera's internal memory.

About the internal backup battery

- This camera's internal battery serves to maintain the date and time settings, as well as the shooting settings. The backup battery will be fully charged when the batteries are kept in the camera continuously for about 2 days. In the fully charged state, the backup battery will maintain the camera settings for about 7 days.

When not using the camera for a long time, remove the batteries.

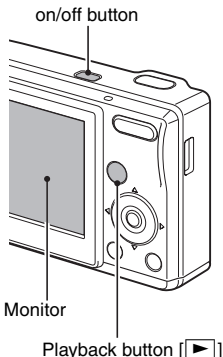
- A small amount of power is still used even if the camera is turned off, and it is therefore recommended that the batteries be removed from the camera if it is not going to be used for a long time. Note that when the batteries are removed for a long period, the time and date settings may be cleared. Before using your camera again, be sure to confirm that the camera settings are correct.

TURNING THE CAMERA ON AND OFF

Turning on the camera

In the shooting mode

- 1 **Press the on/off button.**
 - The camera turns on.
 - The camera turns on in the shooting mode that was active before it was last turned off.



In the playback mode

- 1 **Press the playback button [▶] for at least one second.**
 - The Playback Screen appears on the monitor (pages 31 and 37).

Turning off the camera

- 1 **Press the on/off button.**
 - The camera turns off.

<If the camera was turned on by pressing the playback button [▶]>

 - When the playback button [▶] or on/off button is pressed, the camera turns off.


About the auto power off function

In order to preserve battery power when, for example, the camera has accidentally been left on, the camera is furnished with an “auto power off” function by which the camera automatically turns off after a certain period of inactivity (about 1 minute during shooting or about 3 minutes during playback [factory default settings]).

- If the auto power save function has operated to turn the camera off, press the on/off button to turn it back on.
- You can change the setting for the time elapsed before the camera automatically turns off (page 79).
- When the camera is connected to a computer or printer using the USB Cable, the auto power save function is disabled, and the camera turns off after about 12 hours.

HINT

If the icon appears...

- When a picture is taken, the date and time it was captured is recorded with it. When the date and time cannot be recorded with the image because the date and time have not yet been set (page 19), the  icon appears. To have the date and time recorded with images, please make this setting before capturing images.

DATE AND TIME SETTINGS

The camera will record the date and time an image is captured so that you can display them during playback. Therefore, before capturing images, make sure the correct date and time are set.

Example: To set the clock to 7:30 p.m. on December 24, 2006

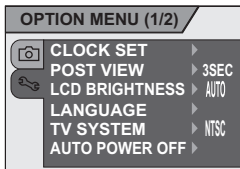
- 1** Press the on/off button to turn the camera on, and press the menu button.

- The Recording Menu appears (page 48).



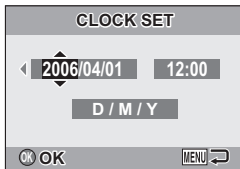
- 2** Press the [▼] button to select the  tab.

- The Option Menu appears.



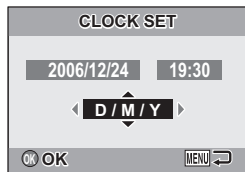
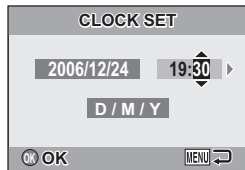
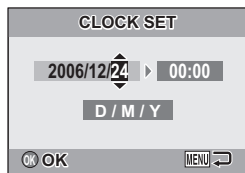
- 3** Press the [▶] button to select "CLOCK SET", and press the ok button or the [▶] button.

- The Clock Set Screen appears.
- The current date and time settings are shown.
- Follow the procedures below to enable or disable the date display during playback, to set the display format for the date, and to set the date and time.
- To return to the Option Menu, press the menu button.



4 Set the date and time.

- ① Press the [▲] or [▼] button to change the year indication.
 - Repeat these steps to select the month indication and day indication, and set the date to December 24, 2006.
- ② Press the OK button or the [▶] button to select the time indication.
- ③ Press the [▲] or [▼] button to change the time setting.
- ④ Press the [▶] button to select the M/D/Y indication.
- ⑤ Press the [▲] or [▼] button to change the displayed date order.



- Press the [▲] button to change the displayed date order as follows:

→ M / D / Y → Y / M / D → D / M / Y

- Press the [▼] button to change it in the reverse order.

DATE AND TIME SETTINGS

5 Press the ok button.

- The date and time setting is completed, and you are returned to the Option Menu.
- The Option Menu is canceled when the menu button is pressed.

HINT

- Under normal conditions, while the batteries are being replaced, an internal battery will maintain the date and time settings. However, there is a small chance the settings may be lost. (The backup will last for about 7 days.) It is recommended to check that the date and time settings are still correct after replacing the batteries and before shooting or recording of any type (follow steps **1** to **4**).

To correct the date and time settings

- In step **4**, select the indication that you want to change, and follow the procedure to change the indication.

BEFORE TAKING PICTURES

How to hold the camera

Hold the camera securely, keeping your elbows close to your body and making sure the camera is stable.

Correct hold



Incorrect hold



A finger is blocking the lens or flash.

Make sure that the lens and flash are not blocked by your fingers or the Wrist Strap.

HINT

- Images captured in the still image shooting mode can be rotated when they are played back (page 61).
- When the optical zoom is used or when the autofocus is operating, the image may appear to waver, but this is not a malfunction.

BEFORE TAKING PICTURES

Using the autofocus

The autofocus will work in almost all situations; however, there are certain conditions that may cause the autofocus function to not work properly.

■ Conditions that may cause incorrect focus

The following examples are some of the situations where the autofocus function may not work.

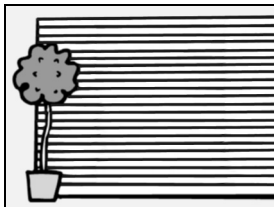
- **Subjects with low contrast, very bright subjects at the center of the image or dark subjects or locations**

Use the focus-lock function (page 29) to lock the focus on an object with contrast at the same distance as the desired subject.



- **Subjects without vertical lines**

Use the focus-lock function to lock the focus while framing the subject vertically, then re-orient the camera to compose a horizontally framed image.



The following examples are some of the situations where the autofocus function may work, but not as desired.

- **When both near and far objects are present**

Use the focus-lock function to lock the focus on an object at the same distance as the desired subject, then reposition the camera to compose the picture.



- **Fast-moving subjects**

Use the focus-lock function to lock the focus on an object at the same distance as the desired subject, then reposition the camera to compose the picture.



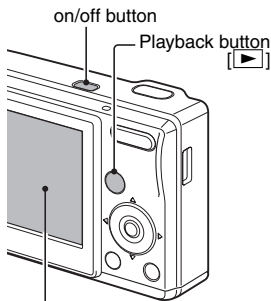
BEFORE TAKING PICTURES

Switching between the shooting mode and playback mode

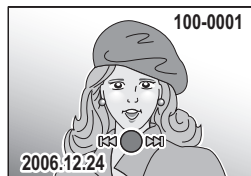
Switch between the shooting mode and the playback mode.

- 1 Press the on/off button to turn the camera on.

- 2 Press the playback button [▶].
 - Each time the playback button is pressed, the camera switches between the shooting mode and the playback mode.



<Shooting mode>



<Playback mode>

HINT

To turn the camera on in the playback mode

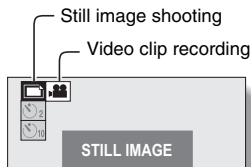
- Press the playback button [▶] for at least 1 second, and the camera will turn on in the playback mode.

How to switch the shooting mode

Your camera can capture single still photos (still image shooting mode) and record video clips (video clip recording mode).

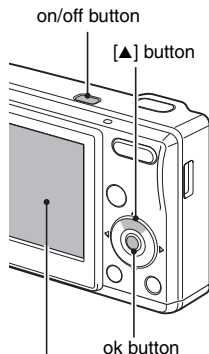
- 1 Press the on/off button to turn the camera on.**



- 2 Press the [▲] button.**
 - The screen to set the shooting mode and the self timer appears.



- 3 Press the [▶] button to select the shooting mode.**

- 4 Press the ok button.**
 - The selected shooting mode is set.
 - An icon in the upper left area of the monitor indicates the active shooting mode setting.



-  : Still image shooting mode
 : Video clip recording mode

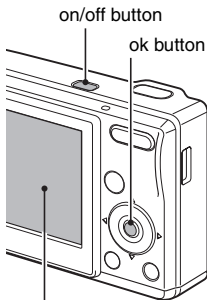
BEFORE TAKING PICTURES

Switching the display mode

In the shooting mode, you can select the either the “settings display mode” which allows you to confirm the shooting settings on the monitor while you shoot, or the “normal display mode” in which the setting indications are turned off, providing a full view of the subject.

- 1 Press the on/off button to turn the camera on.

- 2 Press the ok button.
 - Each time the ok button is pressed, the camera switches between the settings display mode and the normal display mode.



Hints for taking pictures

Where is the image data saved?

- All the image data is recorded in the camera's internal memory or on the card installed in the camera.
- When a card is installed in the camera, the data is recorded on the card. If no card is installed, the data is recorded in the camera's internal memory.

Taking pictures in backlight conditions...

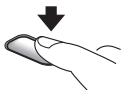
- When taking pictures with the light coming from behind the subject, due to the characteristics of the CCD, light lines or ghost patterns (flare phenomenon) may appear in the captured image. In this situation, it is recommended that you avoid taking pictures with the subject lit from behind.

CAPTURING AND PLAYING BACK STILL IMAGES

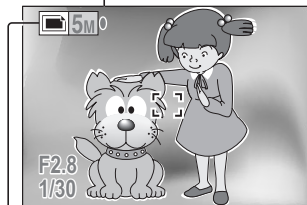
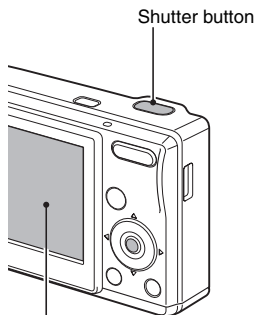
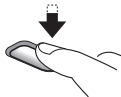
Shooting still images

- 1 Set the camera to the still image shooting mode (page 26).**

- 2 Press the shutter button halfway.**
 - Engage the autofocus by pressing the shutter button halfway (focus lock).



- 3 Continue to gently press the shutter button all the way.**
 - Press the shutter button gently, taking care not to move the camera.
 - The image that was captured appears on the monitor as long as the shutter button is kept pressed (post view).



Still image shooting icon

<Still Image Shooting Screen>

4 Release your finger from the shutter button.


- The captured image is recorded.

HINT

What is focus lock?

- When the shutter button is pressed halfway, the camera focuses on the subject, and as long as the shutter button is kept pressed halfway, the focus is fixed (locked) at the same distance. This is called "focus lock". After focusing on the subject, you can then reorient the camera while keeping the shutter button pressed halfway to compose the picture you like.

What is the camera focusing on?

- A target mark  on the monitor shows the area the camera is focusing on.
- The camera automatically determines the correct focus by measuring from 9 different focus points within the shooting area. If the target mark is at a position that is different from the point you wish to focus on, you can refocus, for example, by changing the shooting angle.
- The large target mark appears when the camera focuses on a wide area in the center of the screen.


About the focus indicator

- A green focus indicator appears when the subject is successfully focused, or a red focus indicator when the camera was not able to focus the subject.

The shutter speed and aperture are displayed

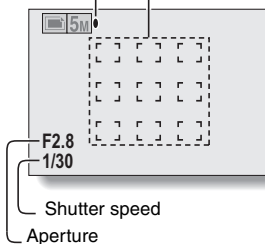
- When the camera focuses and the target mark appears, at the same time, the shutter speed and aperture settings are also displayed. You can use them as a reference when shooting.

If the motion alert icon appears...

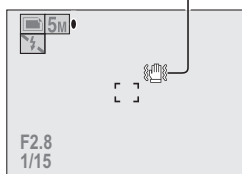
- During still image shooting, if the shutter speed is slow and the possibility that the image may be blurred due to camera shake becomes high, the motion alert icon may appear on the monitor. In this case, use a tripod to stabilize the camera when shooting, or set the flash operation mode to automatic (page 43).
- When shooting with the scene function set to the fireworks  mode, the motion alert icon always appears, but this is normal.

Focus indicator

Target mark



Motion alert icon



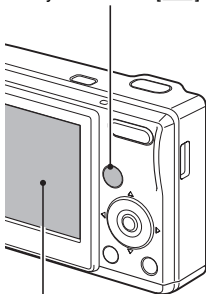
CAPTURING AND PLAYING BACK STILL IMAGES

Viewing still images

5 Press the playback button [▶].

- If the playback button [▶] was pressed to turn the camera on, however, press the playback button [▶] for at least 1 second.
- The image most recently captured appears on the monitor.

Playback button [▶]

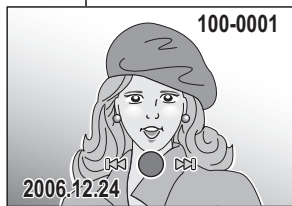


6 View other images.

- Press the [◀] or [▶] button to display the previous or next image.
To display the previous image:
Press [◀].
To display the next image:
Press [▶].
- To return to Shooting Screen, press the playback button [▶].

<If the camera was turned on by pressing the playback button [▶]>

- When the playback button [▶] or on/off button is pressed, the camera turns off.





When you are finished viewing images...

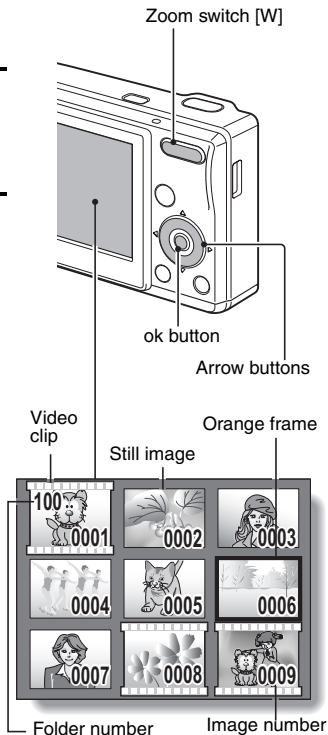
- Press the on/off button to turn the camera off.

9-image display playback

- 1 Press the playback button
[▶].

- 2 Press [W] ([) on the zoom switch.
 - The 9-image display appears.

- 3 Select the image to play back.
 - Press the arrow buttons to move the orange frame to the desired image, and press the ok button. Instead of pressing the ok button, you can press [T] ([) on the zoom switch to show the image full screen.



CAPTURING AND PLAYING BACK STILL IMAGES

Magnifying (zooming in) the image

1 Display the image that you want to magnify.

2 Press [T] ([🔍]) on the zoom switch.

- Magnification is enabled.
- The image is magnified, and the central portion of image is displayed.
- Press the arrow buttons to view different parts of the magnified image.

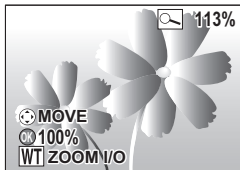
To magnify:

Magnification increases with each press of [T] ([🔍]) on the zoom switch.

To return to normal size:

Magnification decreases with each press of [W] ([🔲]) on the zoom switch.


- Press the ok button to return to the normal (100%) view.



Erasing files

You can erase files if you no longer need them. You can erase the files one at a time, or all at once.

- 1** To erase data from the card, perform the delete procedure with the card installed in the camera. To erase data from the camera's internal memory, remove the card before performing the delete procedure.

- 2** Set the camera to the playback mode, and press the delete [] button.

- The Delete Screen appears.

DELETE ALL:

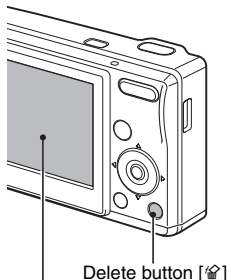
Erases all the data.

DELETE SINGLE:





Erases one file at a time.

EXIT:

Returns to the Playback Screen.



- 3** Delete the files.
<To delete all the files>

- ① Use the [] and [] buttons to view the images and check if it is OK to delete all the files.
- ② Press the [] or [] button to select "DELETE ALL".
- ③ Press the ok button.
 - The Delete Confirmation Screen appears. To erase the files, select "YES", and press the ok button. When the file delete is completed, "NO IMAGE" is shown.

CAPTURING AND PLAYING BACK STILL IMAGES

<To delete one file>

- ① Use the [◀] and [▶] buttons to display the file you wish to delete.
- ② Press the [▲] or [▼] button to select "DELETE SINGLE".
- ③ Press the ok button.
 - The currently displayed file is deleted.
 - To delete other files, repeat steps ① to ③.

CAUTION

About protected images

- Files that are protected from accidental erasure cannot be deleted. To erase protected files, set the protect setting for the file to off (page 60), and then follow the file delete procedure.

HINT

To quickly delete a still image immediately after capturing it (direct delete)

- If you press the delete button [🗑] while the post-view image is displayed (page 75), the image is immediately deleted (still images only).
 - ① While the post-view image is being displayed, press the delete button [🗑].
 - The screen to confirm the deletion appears.
 - ② Select "YES", and press the ok button.
 - The currently shown image is deleted, and the display returns to the Shooting Screen.
 - If you do not wish to delete the image, select "NO" and press the ok button.

VIDEO CLIP RECORDING AND PLAYBACK

Recording a video clip

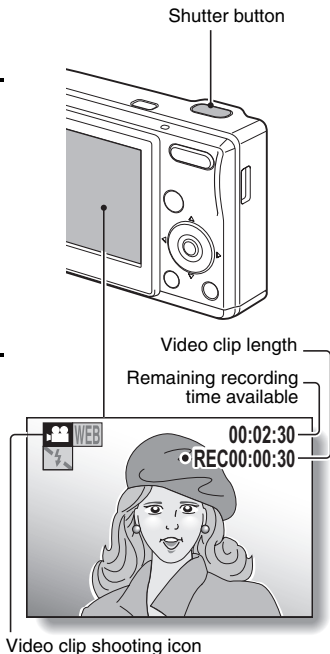
- 1 Set the camera to the video clip recording mode (page 26).**

- 2 Press the shutter button.**

- Video clip recording begins. During recording, the video clip length and the remaining recording time available are shown on the monitor.
- It is not necessary to continue pressing the shutter button while shooting.

- 3 End the recording.**

- Press the shutter button again to stop recording and save the video clip.



CAUTION

- This camera records video signals only; it does not record sound.

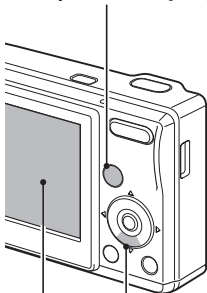
VIDEO CLIP RECORDING AND PLAYBACK

Playing back the video clip

4 Press the playback button [▶].

- If the playback button [▶] was pressed to turn the camera on, however, press the playback button [▶] for at least 1 second.
- The video clip just recorded appears on the monitor.
- Video clips are indicated by a video clip pattern along the top and bottom of the screen.

Playback button [▶]



5 Press the ok button.

- Video clip playback begins.
- To stop playback, press the [▼] button.

[▼] button



Video clip pattern

Outline of playback operation

| To do this... | | Do this |
|--|-------------------------|---|
| Stop playback | | During playback, press the [▼] button. |
| Pause | | During playback, press the ok button. During accelerated playback, press the [▲] button. |
| To extract a still image | | While playback is paused, press the shutter button. |
| To play back one image at a time (single-frame step) | During forward playback | While playback is paused, press the [▶] button. |
| | During reverse playback | While playback is paused, press the [◀] button. |
| Slow playback | During forward playback | While playback is paused, press and hold the [▶] button. |
| | During reverse playback | While playback is paused, press and hold the [◀] button. |
| To accelerate playback | Forward playback | During forward playback, press the [▶] button. * The playback speed changes each time the [▶] button is pressed, as follows: Normal playback → 2x → 5x → 10x → 15x Press the [◀] button to resume normal playback speed. |
| | Reverse playback | During forward playback, press the [◀] button. * The playback speed changes each time the [◀] button is pressed, as follows: 15x ← 10x ← 5x Press the [▶] button to resume normal playback speed. |
| Return to normal playback speed | | Press the ok button. |

When you are finished viewing video clips...

- Press the on/off button to turn the camera off.

VIDEO CLIP RECORDING AND PLAYBACK

CAUTION

If no audio is heard...

- Audio cannot be played back.

The data for a video clip is very large.

- Therefore, be aware that if the video clip is uploaded to a computer to be played back, the computer may not be able to play back the video fast enough, making it appear jerky. (The video will always be displayed properly on the camera monitor.)

If video clip recording stops even when there is card memory remaining...

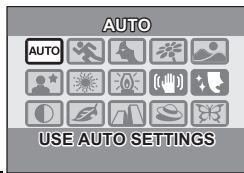
- Depending on the card you are using, recording may stop even if there is remaining memory in the card.
- For video clip recording, it is recommended that a high-speed memory card be used.

USING THE SCENE FUNCTION

You can select from a variety of preset settings (aperture, shutter speed, etc.) for specific shooting conditions.

- 1 Set the camera to the shooting mode (page 25), and press the [▼] button.**







- The screen to select the settings suitable for the scene (shooting conditions) appears.



- 2 Use the arrow buttons to select the desired setting.**










<Example: In the still image shooting mode>

<Features of each setting>

| Scene setting | Features |
|--|---|
|  Auto | The camera uses the optimum settings. |
|  Sports | Capture a split-second image of a fast-moving subject. |
|  Portrait | Enhance the three-dimensional feel of the subject by blurring the background. |
|  Flowers | Capture the vivid colors of flowers. |
|  Landscape | For beautiful shots of distant scenery. |
|  Night view portrait | Photograph the subject while keeping the background night scenery. |

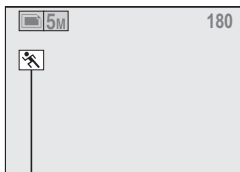
(continued on next page)


USING THE SCENE FUNCTION

| Scene setting | Features |
|---|---|
|  Fireworks | For capturing fireworks at night. |
|  Lamp | For shooting in very dark conditions. |
|  Camera-shake reduction | Increases shutter speed and ISO sensitivity to reduce blurred image due to camera shake (still image shooting mode only). |
|  Cosmetic | Skin tones are enhanced in close-up shots. |
|  Monochrome | Create monochrome (black-and-white) photos. |
|  Sepia | Create sepia-tone photos. |
|  Sharpness | Accentuates the outlines in the image. |
|  Contrast | Accentuates the light and dark areas in the image. |
|  Vivid | Image colors are more brilliant. |

3 Press the ok button.

- This completes the scene function setting.
- The display returns to the Shooting Screen.
- The scene function setting is shown on the monitor.



Scene function setting
(No icon displayed for  mode)

USING THE ZOOM

Your camera has two zoom functions: optical zoom and digital zoom.

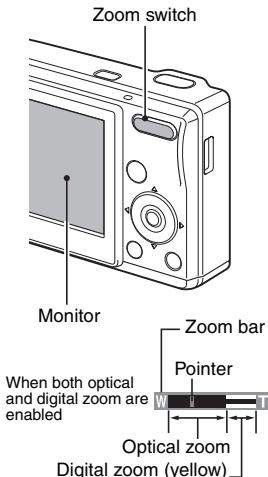
- 1** Set the camera to the shooting mode (page 25), and point the camera lens at the subject.
-

- 2** Press the zoom switch to compose the desired image.

[T]: Zoom in on the subject.

[W]: Zoom out.

- When the zoom switch is pressed, the zoom bar appears on the monitor.
- When the optical zoom factor is at maximum, zooming stops temporarily. When [T] on the zoom switch is pressed again, the mode changes to the digital zoom mode and zooming continues.



- 3** Take the picture.
-

HINT

Can't access the optical zoom?

- During video clip recording, only the digital zoom is available, and the optical zoom cannot be used.

FLASH SETTING

The flash is used for taking pictures where there is insufficient light and when the subject is in shade or in backlight conditions. Your camera's flash has four modes of operation (automatic flash mode, forced flash mode, flash off mode and red-eye reduction mode). Select the flash mode that is appropriate for the surrounding conditions. The flash works only when capturing images in the still image shooting mode.

1 Set the camera to the still image shooting mode (page 26), and press the [◀] ([⚡]) button.

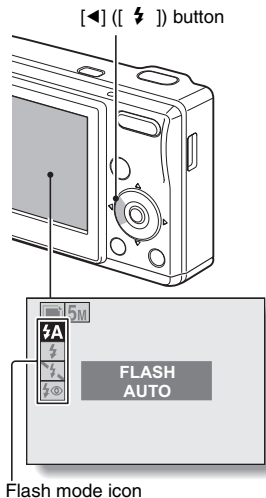
- The flash setting appears on the monitor.

[⚡A]: The camera will detect the subject brightness and use the flash only when required. In a backlight situation, if only the center of the image is very dark, the flash will operate to compensate (auto flash).

[⚡]: The flash will operate with every image captured regardless of the conditions. Use this setting under backlight conditions, when the subject is in shade, under fluorescent lighting conditions, etc. (forced flash).

[⚡]: The flash will not operate even in dark situations. Use this setting when capturing an image in a location where flash photography is prohibited, or when shooting a night landscape scene (flash off).

[⚡Ⓞ]: The digital camera will detect the subject brightness and use the flash only when required. At this time the flash will operate in a manner that reduces the red reflection ("red-eye") in the subject's eyes (red-eye reduction).





-
- 2** Press the [▲] or [▼] button to select the desired flash mode, and press the ok button.
-

- 3** Press the shutter button.
- The picture is snapped and the flash operates according to the selected mode.
-

HINT

In the automatic flash mode...



- The  icon indicating the flash setting is not shown on the Shooting Screen.
- In the automatic flash mode, when the subject is in focus, a  icon appearing on the monitor indicates that the flash will operate.

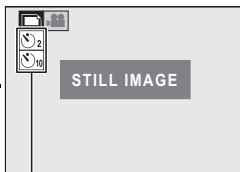
SELF-TIMER

Self-timer photography is available in the still image shooting mode.

-
- 1** Set the camera to the shooting mode (page 25), and press the [▲] button.

- 2** Use the [▲] and [▼] buttons to select the self-timer setting.

- : The image is captured about 2 seconds after the shutter button is pressed.
- : The image is captured about 10 seconds after the shutter button is pressed.




Self-timer menu

-
- 3** Press the ok button.
- This completes the self-timer setting.

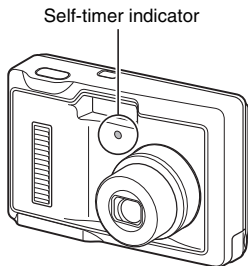
HINT

To pause or cancel the self-timer function...

- If the shutter button is pressed again before the shutter is released, the self-timer countdown temporarily stops. Press the shutter button one more time to restart the self-timer.
- To cancel self-timer photography, set the self-timer setting to off .
- After the self-timer picture is snapped, the self-timer is automatically reset to off.

When is selected...

- When the shutter button is pressed, the self-timer indicator flashes for approximately 10 seconds, after which shooting begins.
- About 3 seconds before shooting, the self-timer indicator flashes faster.




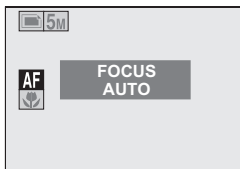
FOCUS RANGE

1 Set the camera to the shooting mode (page 25), and press the [▶] button.

- The screen to set the focus range appears.

AF: The camera automatically focuses on the subject within a range of 10 cm (3.94 in.) (Wide end) or 40 cm (15.75 in.) (Tele end) to infinity (autofocus).

: You can focus on a subject within a range of 5 cm (1.97 in.) (Wide end) or 40 cm (15.75 in.) (Tele end) to 70 cm (27.56 in.) (macro).



2 Press the [▲] or [▼] button to select the desired focus range, and press the ok button.

- The specified focus range is set, and the camera returns to the Shooting Screen.

HINT

- When the focus range is set to macro , the zoom is set to the wide end.

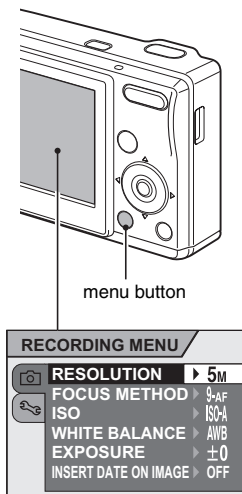
ACCESSING THE RECORDING MENU

Detailed shooting settings are accessed from the Recording Menu.

- 1 Set the camera to a shooting mode (page 26).**

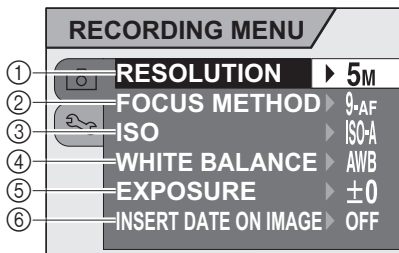
- 2 Press the menu button.**

- The Recording Menu corresponding to the shooting mode set in step 1 appears.
- The Recording Menu can be canceled by pressing the menu button.



ACCESSING THE RECORDING MENU

Overview of the Recording Menu



① **Resolution menu/video clip mode menu (page 51)**

<Still image shooting mode>

5M: Shoot at 2,592 × 1,944 pixels

3M: Shoot at 2,048 × 1,536 pixels

1M: Shoot at 1,024 × 768 pixels

0.3M: Shoot at 640 × 480 pixels

<Video clip recording mode>

WEB: Shoot at 320 × 240 pixels

TV: Shoot at 640 × 480 pixels

② **Focus mode menu (page 52)**

9-AF: 9-point focus mode

S-AF: Spot focus mode

③ **ISO sensitivity menu (page 53)**

ISO-A: Sets the ISO sensitivity automatically (corresponds to ISO64 to 400).

64: Corresponds to ISO64

100: Corresponds to ISO100


200: Corresponds to ISO200

400: Corresponds to ISO400

800: Corresponds to ISO800


④ **White balance menu (page 54)**


AWB: The camera will determine the setting automatically.

: For photography in fair weather (sunny) conditions

: In overcast conditions

: Under fluorescent lighting

: Under incandescent lighting

: For setting the most accurate white balance

⑤ **Exposure correction menu (page 56)**

- Change the brightness of the image.

⑥ **Date imprint menu (page 57)**

- Imprint the date on still images when shooting (still image shooting mode only).

- When you specify multiple functions that cannot be simultaneously enabled, the function which was last set becomes the active setting, and the other settings accordingly change automatically.

RESOLUTION/VIDEO CLIP SETTING

By setting the image resolution (pixels) to a higher setting, image detail is enhanced for a smoother, finer picture. However, the file size also becomes large and uses more memory. Select the resolution setting that suits your purpose.

1 Display the Recording Menu (page 48).

2 In the still image shooting mode select "RESOLUTION", or in the video clip recording mode select "VIDEO CLIP QTM", and press the ok button.

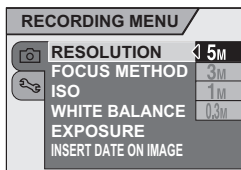
- The resolution menu or video clip mode menu appears.

<Still image shooting mode>

- 5M**: Shoot image at 2,592 × 1,944 pixels
- 3M**: Shoot image at 2,048 × 1,536 pixels
- 1M**: Shoot image at 1,024 × 768 pixels
- 0.3M**: Shoot image at 640 × 480 pixels

<Video clip recording mode>

- TV**: Shoot at 640 × 480 pixels
- WEB**: Shoot at 320 × 240 pixels




<Example: In the still image shooting mode>

3 Select the desired icon, and press the ok button.

- The selected resolution setting or video clip mode setting is set.

FOCUS AREA SETTING

You can choose from the following 2 types of autofocus when shooting still images:


9-point range finder focus: The correct focus is determined from 9 different focus points within the shooting area visible on the monitor. When the image is focused, a target mark  appears.


Spot focus: The camera focuses on the subject in the center of the monitor.

1 Display the Recording Menu (page 48).

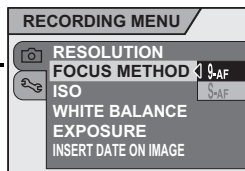
2 Select "FOCUS METHOD" and press the ok button.

- The focus mode menu appears.

: 9-point range finder focus is selected.

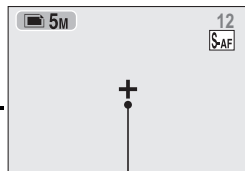
: Spot focus is selected.

- When the spot focus setting is selected, the focus mark + appears in the center of the monitor.



3 Select the desired icon, and press the ok button.

- The focus area is set.



Focus mark

ISO SENSITIVITY

With the initial settings, the ISO sensitivity is automatically set according to the brightness of the subject. However, the ISO sensitivity can be set to a fixed setting.

1 Display the Recording Menu (page 48).

2 Select "ISO" and press the ok button.

- The ISO sensitivity menu appears.

[ISO-A]: Sets the ISO sensitivity automatically (equivalent to ISO64 to 400 [video clip recording mode: ISO256 to 800]).

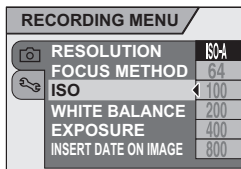
[64]: Sets the sensitivity to ISO64 equivalent (video clip recording mode: ISO256).

[100]: Sets the sensitivity to ISO100 equivalent (video clip recording mode: ISO400).

[200]: Sets the sensitivity to ISO200 equivalent (video clip recording mode: ISO800).

[400]: Sets the sensitivity to ISO400 equivalent (video clip recording mode: ISO1,600).

[800]: Sets the sensitivity to ISO800 equivalent (video clip recording mode: ISO3,200).



3 Select the desired icon, and press the ok button.

- The ISO sensitivity is set.

HINT

- By setting a higher ISO sensitivity, you can set higher shutter speeds and capture images in darker locations, but noise in the captured images may increase.

CAUTION

Does the image appear to flicker when recording a video clip?

- If recording a video clip under fluorescent lights with the ISO sensitivity set to **[800]**, a noticeable flicker may appear in the image.

WHITE BALANCE


This camera automatically adjusts the white balance under most lighting conditions. However, if you want to specify the lighting conditions or change the overall tone of the image, the white balance can be manually set.

1 Display the Recording Menu (page 48).


2 Select “WHITE BALANCE” and press the ok button.


- The white balance menu appears.


[AWB]: The camera will make the white balance adjustment automatically based on the natural and artificial light conditions. This is the setting used in the auto mode.

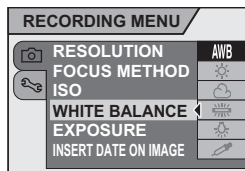
: For shooting outside on a sunny day.

: For shooting outside on a cloudy day.

: For shooting inside under fluorescent lighting.


: For shooting inside under incandescent lighting.

: For more accurate adjustment or when the light source cannot be specified (one-push).



WHITE BALANCE

3 Select the desired icon, and press the ok button.

- If the  icon was selected, fill the entire screen with white paper, and press the ok button.
- This completes the white balance setting.

HINT

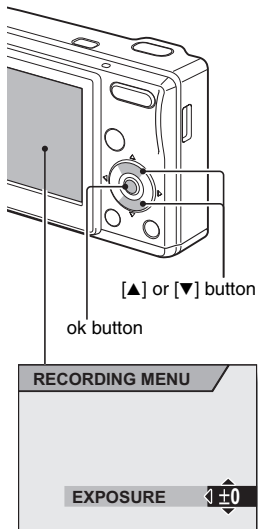
To cancel the white balance setting

- Perform step 1, select **[AWB]**, and then press the ok button.

EXPOSURE CORRECTION

When capturing images, you can make the image lighter or darker.

- 1** Point the camera lens at the subject, and display the Recording Menu (page 48).
- 2** Select “EXPOSURE” and press the ok button.
 - The screen to adjust the exposure appears.
- 3** Press the [▲] or [▼] button to select the exposure numerical value, and press the ok button.
 - The specified exposure is set, and you are returned to the Recording Menu.



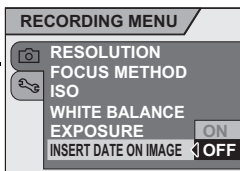
HINT

- The exposure correction setting returns to ± 0 after the camera is turned off.

DATE IMPRINTING ON STILL IMAGES

When shooting still images, you can have the date the image was captured imprinted on the image.

1 Display the Recording Menu (page 48).



2 Select "INSERT DATE ON IMAGE", and press the ok button.

- The date imprint menu appears.

OFF: The date of the capture is not imprinted on the image.

ON: The date of the capture is imprinted on the image.

3 Press the [▲] or [▼] to select the desired setting, and press the ok button.

- The date imprint mode is set, and you are returned to the Recording Menu.

HINT

If the imprinted date is shown as [- - - - . - - . - -] ...

- The date and time settings have not yet been completed. Set the camera to the correct date and time (page 19).

DISPLAYING THE PLAYBACK MENU

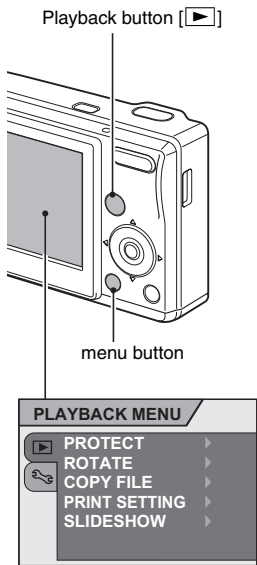
The Playback Menu is used to adjust your camera's playback settings.

1 Press the playback button [▶].

- The display changes to the Playback Screen.

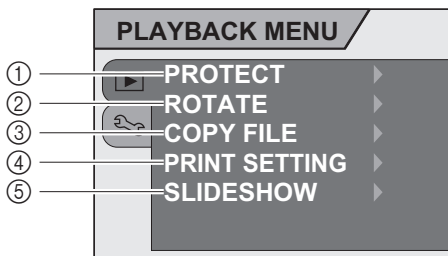
2 Press the menu button.

- The Playback Menu appears.
- The Playback Menu is canceled when the menu button is pressed.



DISPLAYING THE PLAYBACK MENU

Overview of the Playback Menu



- | | |
|---|---|
| <p>① [Protect] (page 60)</p> <ul style="list-style-type: none">• Protect data from accidental erasure (write protect). <p>② [Rotate image] (page 61)</p> <ul style="list-style-type: none">• Rotate still images. <p>③ [Copy file] (page 62)</p> | <p>④ [Print setting] (page 64)</p> <ul style="list-style-type: none">• Specify the print settings. <p>⑤ [Slideshow] (page 70)</p> <ul style="list-style-type: none">• Play back the images in a slideshow format. |
|---|---|

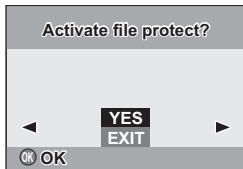
IMAGE PROTECT

Prevent accidental erasure of data.


- 1** Display the data that you want to protect from accidental erasure, and display the Playback Menu (page 58).

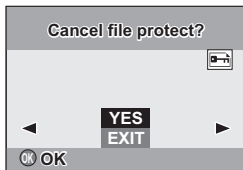
- 2** Select “PROTECT” and press the ok button.

- The screen to set the protect setting appears.



- 3** Select “YES” and press the ok button.

- The protect mode is set for the data.
- The protect mark  indicates that the data is locked.



CAUTION

- Even if the protect mode is set for certain data files, they will be erased if the card is reformatted (page 84).

HINT

To select a different image in steps 2 and 3...

- Press the [◀] or [▶] button.

To cancel the protect mode for an image...

- Display the desired data and repeat steps 1 to 3.

ROTATE IMAGE

Captured still images can be rotated to the correct orientation for viewing.

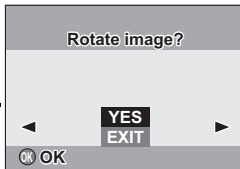
1 Display the image you wish to rotate, and display the Playback Menu (page 58).

2 Select “ROTATE” and press the ok button.

- The screen to rotate the image appears.

3 Select “YES” and press the ok button.

- Each time the ok button is pressed, the image is rotated another 90 degrees.



HINT

- On the 9-image display playback, rotated images are shown in their original orientation.
- An image for which the protect (locked) mode has been set cannot be rotated.

COPY DATA

Images recorded in the camera's internal memory can be copied to the card, and likewise from the card to the internal memory.

1 Insert the card in the camera (page 14).

2 Display the Playback Menu (page 58).

3 Select "FILE COPY" and press the **OK** button.

- The screen to copy files appears.

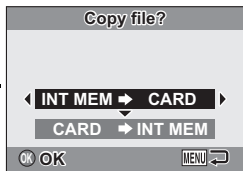
4 Select the copy direction.

INT MEM ➡ CARD:

Copy image data from the internal memory to the card.

CARD ➡ INT MEM:

Copy image data from the card to the internal memory.



* If no card is set in the camera, you cannot copy data.

COPY DATA

5 Press the ok button.

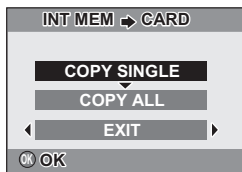
- The screen to select the type of copy appears.
- The copy source is shown in the background on the screen.

COPY SINGLE:

Copy the data for one image.

COPY ALL:

Copy all the data from the copy source to the copy destination.



6 Select the desired type of copy.

<When selecting “COPY SINGLE”>

- ① Press the [◀] or [▶] button to display the image you wish to copy.
- ② Press the [▲] or [▼] button to select “COPY SINGLE”.

<When selecting “COPY ALL”>

- ① Press the [▲] or [▼] button to select “COPY ALL”.

7 Press the ok button.

- The files are copied.

PRINT SETTINGS

In addition to using your printer to print out still images captured with your camera, as with conventional film, you can have prints made at shops offering digital print services. Moreover, this camera is DPOF-compatible, so you can use the camera to specify the number of prints, whether or not the date is displayed on the print, and also to specify an index print.

Display the screen to set the print settings

1 Display the Playback Menu (page 58).

2 Select “PRINT SETTING” and press the **OK** button.

- The screen to set the print settings appears.

EACH IMAGE:

The print settings are specified for each individual image.

ALL IMAGES:

The specified print settings apply to all the still images on the card.

ALL CLEAR:

Clear all the print settings.



PRINT SETTINGS

HINT

About the DPOF format

- DPOF (Digital Print Order Format) is a print order format. You can connect your camera to a DPOF-compatible printer to produce your prints. You can also set the print settings (page 102) for the desired images, and then have the reserved images printed automatically.

About the finished prints

- Images that have been rotated will be printed in their original orientation.
- The quality of the print output will differ depending on the print service and printer used.

CAUTION

- It is not possible to set the print settings when there are 10,000 or more files saved on the card.

Specifying date imprinting and number of prints

You can specify print settings for each individual image (EACH IMAGE), or apply the print settings to all the images on the card (ALL IMAGES).

1 Display the screen to set the print settings (page 64).

2 Select "EACH IMAGE" or "ALL IMAGES".

EACH IMAGE:

The set print settings are applied only to the image currently displayed.

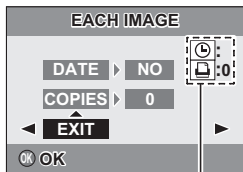
ALL IMAGES:

The set print settings are applied to all the still images on the card.



3 Press the ok button.

- The Date/Copies Print Screen appears.
- If "EACH IMAGE" was selected, press the [◀] or [▶] button to display the desired image to print.
- The print settings for the currently displayed image are shown in the upper right area of the monitor. You can press the [◀] or [▶] button to confirm the print settings for each image.



Print settings status

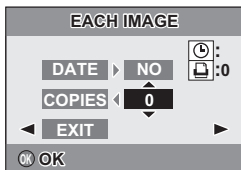
PRINT SETTINGS

4 Specify the number of prints and whether the date is imprinted.

- Please specify the number of prints before setting the date imprint setting. The date imprint setting cannot be set until the number of prints has been entered.

<Specifying the number of prints>

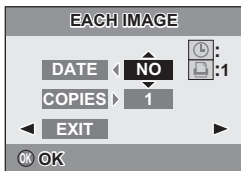
- ① Press the [▲] or [▼] button to select "COPIES".
- ② Press the ok button.
 - The Print Number Screen appears.
- ③ Press the [▲] or [▼] button to specify the number of prints.
 - Press the [▲] or [▼] button until the desired number of prints is displayed.
- ④ Press the ok button.
 - You are returned to the Date/Copies Print Screen.



<Specifying dated prints>

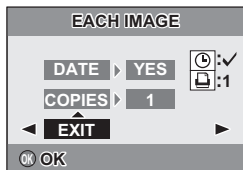
- ① Press the [▲] or [▼] button to select "DATE".
- ② Press the ok button.
 - The Print Date Screen appears.
- ③ Press the [▲] or [▼] button to select the desired option.

YES: Print the date.
NO: Do not print the date.
- ④ Press the ok button.
 - You are returned to the Date/Copies Print Screen.



5 Select “EXIT”, and press the ok button.

- You are returned to the display in step 2.



CAUTION

- When printing images that were captured with the date imprint function (page 57) set to ON, do not set the “DATE” print setting to “YES”. Images that were captured with the date imprint function set to ON will be always be printed with the date displayed. If the “DATE” print setting for such images is set to “YES”, the date will appear on the photo print twice.

PRINT SETTINGS

Clearing all the print settings

Delete the print settings for all images.

1 Display the screen to set the print settings (page 64).

2 Select "ALL CLEAR".



3 Press the ok button.

- The Confirm All Clear Screen appears.

YES: Clear the print settings for all images.

EXIT: Cancel the clear procedure and return to the screen to set the print settings.

4 Select "YES", and press the ok button.

- All the print settings are cleared and you are returned to the screen to set the print settings.

SLIDESHOW PLAYBACK

1 Display the Playback Menu (page 58).

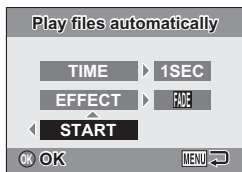
2 Select "SLIDESHOW" and press the ok button.

- The screen to set the slideshow appears.

TIME: Adjust the transition speed (the period that an image is displayed before it changes to the next image).

EFFECT: Select a transition effect as an image changes to the next image.

START: Begin slideshow playback.



<Changing the transition speed or transition effect>

- ① Select "TIME" or "EFFECT", press the ok button.
- ② Press the [▲] or [▼] button to change the setting.
- ③ Press the ok button.

3 Select "START", and press the ok button.

- Slideshow playback starts.
- To stop slideshow playback, press the ok button or menu button.

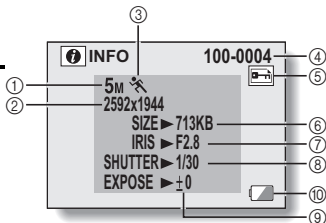
DISPLAYING STILL IMAGE PROPERTIES

The settings that were active when a still image was captured can be displayed (Information Screen).

1 Display the desired still image.

2 Press the ok button.

- The Information Screen appears.
- If the ok button is pressed again, the Information Screen is canceled.



- ① Resolution setting
- ② Resolution
- ③ Scene function setting
- ④ Image number
- ⑤ Protect setting
- ⑥ File size
- ⑦ Aperture value
- ⑧ Shutter speed
- ⑨ Exposure correction setting
- ⑩ Remaining battery power

DISPLAYING THE OPTION MENU

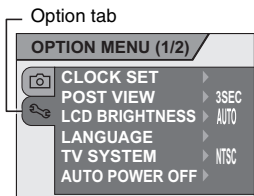
The Option Menu is used to adjust various camera settings.

1 Display the Recording Menu or Playback Menu.

- Recording Menu, see page 48
- Playback Menu, see page 58

2 Press the [▲] or [▼] button to select the option tab .

- The Option Menu appears.



To exit the Option Menu

To return to the Shooting Screen or Playback Screen

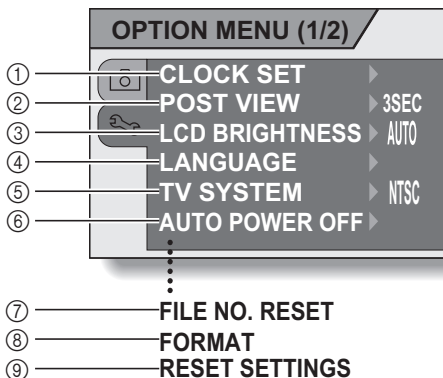
→ Press the menu button.

To return to the Recording Menu or the Playback Menu

→ With the option tab  selected, press the [▲] or [▼] button.

DISPLAYING THE OPTION MENU

Overview of the Option Menu



- ① **[Date and time setting] (page 19)**
 - Set the camera's internal clock.
- ② **[Post-view] (page 75)**
 - Specify how long a still image is displayed on the monitor after it is captured.
- ③ **[LCD brightness] (page 76)**
 - Adjust the brightness of the monitor.
- ④ **[Screen language] (page 77)**
 - Select the language in which the monitor messages are displayed.
- ⑤ **[TV system setting] (page 78)**
 - Select the type of TV signal that is output from the camera's USB/VIDEO terminal.
- ⑥ **[Auto power off] (page 79)**
 - Specify the time elapsed before the auto power off function operates to turn the camera off.
- ⑦ **[File number reset] (page 81)**
 - Set the file number reset function to ON or OFF.
- ⑧ **[Format] (page 84)**
 - Reformat the camera's internal memory or the card installed in the camera.
- ⑨ **Reset camera settings (page 86)**
 - Reset the camera to the factory-preset settings.

- Icons ⑦ through ⑨ are displayed when you press the [▲] or [▼] button to scroll.

POST-VIEW SETTING

Specify the duration that the captured image appears on the monitor (post-view) after the shutter button is pressed.

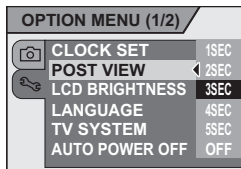
1 Display the Option Menu (page 72).

2 Select “POST VIEW” and press the ok button.

- The Post View Menu appears.

3 Select the desired setting, and press the ok button.

- This completes the post-view setting.



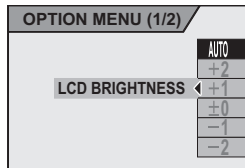
ADJUST THE MONITOR BRIGHTNESS

The brightness of the monitor is adjustable. Adjust the brightness to the optimum readability in the ambient light.

1 Display the Option Menu (page 72).

2 Select "LCD BRIGHTNESS" and press the ok button.

- The Monitor Brightness Menu appears.
- When set to "AUTO", the illumination sensor (page 13) detects the ambient brightness and automatically adjusts the brightness of the monitor accordingly.



3 Select the desired setting, and press the ok button.

- This completes the monitor brightness setting.

SCREEN LANGUAGE

You can set the monitor of your camera to display the messages in any one of several languages.

1 Display the Option Menu (page 72).

2 Select “LANGUAGE” and press the **ok** button.

- The screen to select the display language appears.
-

3 Select the desired language, and press the **ok** button.

- The selected display language is set.



TV SYSTEM SETTING

Specify the type of image signal that is output from your camera's USB/VIDEO terminal.

1 Display the Option Menu (page 72).

2 Select "TV SYSTEM" and press the **ok** button.

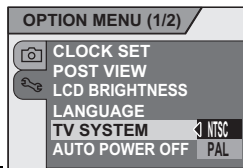
- The TV System Menu appears.

NTSC:

Outputs NTSC video signals.

PAL:

Outputs PAL video signals.



3 Select the desired setting, and press the **ok** button.

- The selected TV system is set.

HINT

If no image appears on the TV...

- If the TV system setting is not correct for the connected equipment, no image will appear on the TV.

AUTO POWER OFF FUNCTION

Your camera has an “auto power off” function whereby the power automatically turns off after a specified period of inactivity. The auto power off function works to conserve the battery power when the camera is not being used, or to prevent the batteries from dying if the camera has accidentally been left on. You can specify the elapsed time (standby time) before the auto power off function operates to turn the camera off.

1 Display the Option Menu (page 72).

2 Select “**AUTO POWER OFF**” and press the **ok** button.

- The screen to set the standby time appears.

RECORDING:

Set the standby time for the shooting mode.

PLAYBACK:

Set the standby time for the playback mode.



3 Select the desired option, and press the ok button.

- The Standby Time Menu appears.

4 Press the [▲] or [▼] button to select the standby time.

5 Press the ok button.

- The auto power off function is set.
- To return to the Option Menu, press the [◀] button.



<Example: When
“RECORDING” is selected>

FILE No. RESET FUNCTION

If a newly formatted (page 84) card is used, the file name (image number) of the captured image automatically begins from 0001. If the card is subsequently reformatted, or if a different reformatted card is used, the file names again begin from 0001. This is because the file number reset function is set to "ON", and consequently it results in more than one card containing images with the same numbers. By setting the file number reset function to "OFF", even if the card is reformatted or the card is replaced with another card, the consecutive numbering of file names continues from the last number recorded by the camera.

<File number reset function "ON">

| | File name (image number) |
|--------|----------------------------|
| Card A | 0001, 0002..... 0012, 0013 |

:
Replace card
↓

| | |
|--------|----------------------------|
| Card B | 0001, 0002..... 0012, 0013 |
|--------|----------------------------|

<File number reset function "OFF">

| | File name (image number) |
|--------|----------------------------|
| Card A | 0001, 0002..... 0012, 0013 |

:
Replace card
↓

| | |
|--------|---------------------------|
| Card B | 0014, 0015.....0025, 0026 |
|--------|---------------------------|

- If Card B already has image data in it when it replaces Card A, file names are assigned as follows.

When the highest image number on Card B (before replacing) is lower than the highest image number on Card A: the file name of the next recorded image continues from last file name recorded on Card A.



When the highest image number on Card B (before replacing) is higher than the highest image number on Card A: the file name of the next recorded image continues from last file name recorded on Card B.



HINT

What about the internal memory?

- The file number reset function works the same for the internal memory.

FILE NO. RESET FUNCTION

1 Display the Option Menu (page 72).

2 Select “FILE NO. RESET” and press the ok button.

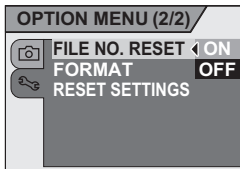
- The File Number Reset Menu appears.

ON:

The file number reset function is “ON”.

OFF:

The file number reset function is “OFF”.



3 Select “OFF”, and press the ok button.

- The file number reset function was set to “OFF”.

HINT

- Until the file number reset function is turned “ON”, consecutive file names are assigned. It is recommended that the file number reset function be returned to “ON” at the end of each photography session.

INITIALIZING THE CARD MEMORY AND INTERNAL MEMORY

A card must be formatted with this camera:

- After purchasing, when used for the first time, or
- If it was formatted using a personal computer or another digital camera.

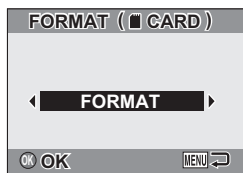
The card cannot be reformatted if the lock switch is set to the "LOCK" position. Proceed with the reformat procedure after setting the lock switch to the unlocked position.

1 To reformat a card, install it in the camera. To reformat the camera's internal memory, remove the card from the camera.

2 Display the Option Menu (page 72).

3 Select "FORMAT" and press the ok button.

- The screen to begin formatting appears.



<Example: With card installed>

INITIALIZING THE CARD MEMORY AND INTERNAL MEMORY

-
- 4 Press the ok button.**
- The Confirm Format Screen appears.

-
- 5 Select “YES”, and press the ok button.**
- Formatting begins.
 - During formatting, “FORMATTING” and “DO NOT POWER OFF” are shown on the monitor.

CAUTION

Caution during reformatting

- Please do not turn off the camera or insert/remove the card while the card is being formatted.

Reformatting erases the data

- When the card or internal memory is initialized, all the recorded data is erased. Protected data is also erased, so before reformatting a card, any data you want to keep should be copied to your personal computer's hard disk or other storage medium.

Caution regarding disposing/transferring the card (recovering data from a reformatted card)

- If a card is reformatted or the data is erased from the card using the camera or a computer, the card's control data may be merely modified and the data itself may not be completely erased from the card.
- If you are disposing of a card or are transferring the card to someone else, it is recommended that you physically destroy it, or use commercially available software for erasing card data.

HINT

To cancel reformatting

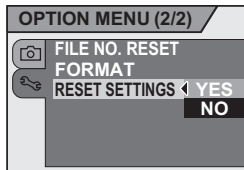
- In step 5, select “EXIT”, and press the ok button.

RESETTING THE CAMERA SETTINGS

Reset the camera to the factory-preset settings.

1 Display the Option Menu (page 72).

-
- ## 2
- Select **"RESET SETTINGS"** and press the **ok** button.
- The Reset Settings Menu appears.
YES:
Reset to the factory-preset settings.
NO:
Do not change the settings, and return to the Option Menu.



-
- ## 3
- Select **"YES"**, and press the **ok** button.
- The camera settings are reset to the factory-preset settings.

HINT

- Note that the following settings do not change with this procedure:
Date and time setting
Language setting
TV system setting
File No. reset setting

CHECKING THE REMAINING INTERNAL MEMORY AND CARD MEMORY

You can check the possible number of images and video clip recording time remaining on the card. For a table showing the maximum number of images and recording time for the internal memory and for a specific card, please see "Possible Number of Images/Video Recording Time" on page 122.

1 Press the on/off button to turn the camera on.

<To check the remaining number of still images>

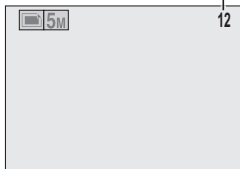
Set the shooting mode to the still image shooting mode (page 26).

<To check the remaining video clip recording time>

Set the shooting mode to the video clip recording mode (page 26).

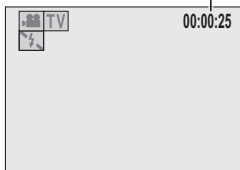
- The remaining recording time is shown on the monitor.
- The remaining number of images and video recording time will differ depending on the resolution setting.

Remaining number of images



<Still Image Shooting Screen>

Remaining recording time



<Video Clip Recording Screen>


HINT

- When the remaining number of images or the remaining video recording time is "0", you cannot capture any more images. To capture more images, either install a new card, or save the images to a computer and then erase them (page 34) from the card.
- When the remaining number of images or the remaining video recording time is "0", it may be possible to capture a few more images by changing the resolution setting or video clip mode setting (page 51).
- The maximum number of images is 9,999, and the maximum video recording time is 99:59:59. Note that if a large-capacity card is used, the remaining number of images or recording time may not be correctly displayed.

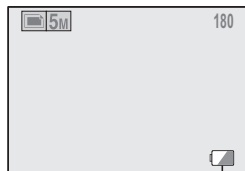
CHECKING THE REMAINING BATTERY CHARGE

The remaining battery charge can be checked on the monitor. Make sure to check this indicator before capturing an image. For an indication of the possible length of time for battery operation, see page 121.





1 Press the on/off button to turn the camera on.

- The battery remaining charge indicator appears in the lower right corner of the monitor.
- Due to the battery characteristics, when the ambient temperature is low,  may appear early for an incorrect indication of the remaining charge.

Also, depending on the conditions of use of the camera or the ambient conditions (temperature, etc.), the indicated remaining charge may change. Therefore, this indication can only be used as a general approximation of the remaining charge.



Battery remaining charge indicator

| Battery remaining charge indicator | Battery remaining charge |
|---|--|
| No indication | Nearly full. |
|  | Approx. full. (This indicator appears only in certain operation modes.) |
|  | Power is low. |
|  | It will soon be impossible to capture or play back images. |
|  | If this icon flashes when the shutter button is pressed, images cannot be captured. Replace the batteries. |

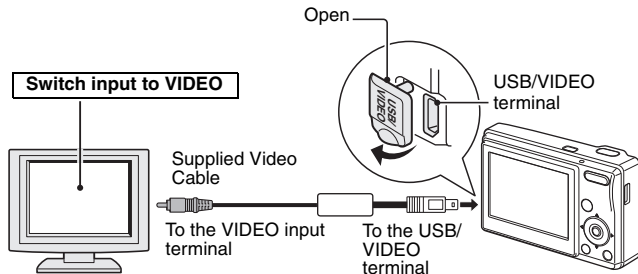
CHECKING THE REMAINING BATTERY CHARGE

HINT

- If any data is present, you can also check the remaining battery charge on the Information Screen (page 71).
- Battery life may differ even among batteries of the same type.
- Depending on the usage of the camera (such as the number of times the flash is used, etc.) or the ambient temperature (temperatures below 10°C [50°F]) the number of images that can be saved on fully charged batteries will vary greatly.
- It is recommended that you prepare extra batteries when taking pictures at a wedding or while traveling, for example, so you don't miss capturing images of important moments due to the battery power running out. The same is recommended for taking photos in cold environments. (In a ski area, for example, the batteries can be kept warm in your pocket until ready to use.)

CONNECTING TO A TV

Connect the supplied Video Cable from the USB/VIDEO terminal on the digital camera to the VIDEO input terminals on the TV.



Playback

- After connecting the digital camera to the television, set the TV input switch to VIDEO input.
- When a Video Cable is connected, no image appears on the camera's monitor.
- The playback method is the same as when viewing images on the camera's monitor.

CAUTION

Insert and pull out the cable carefully.

- When connecting the cables, make sure that the cable plugs are correctly oriented and that they match the shapes of the terminal sockets on the devices. Push the plugs in straight when connecting them. If undue force is used to connect a cable, it may permanently damage the connector pins in the terminal socket.
- Do not use excessive force when connecting and disconnecting cables.

CONNECTING TO A COMPUTER

The camera can be used as a card reader if it is connected to a computer.

Cautions when mounting your camera as a removable disk

- Do not alter files or folders in your camera in any way. Doing so may result in your camera not recognizing that data.
If you want to edit files, first copy them to your computer's hard drive.
- Cards formatted on your computer cannot be used by your camera. Format all cards to be used by your camera with your camera.

Operating environment

Windows

A computer with a standard-equipped USB port, and preinstalled with Windows ME, 2000, XP or later is required. Correct operation cannot be guaranteed for models that have been upgraded.

Macintosh

A model with a standard-equipped USB port, and preinstalled with Mac OS 9.0, 9.1, 9.2, Mac OS X 10.1 or later is required.

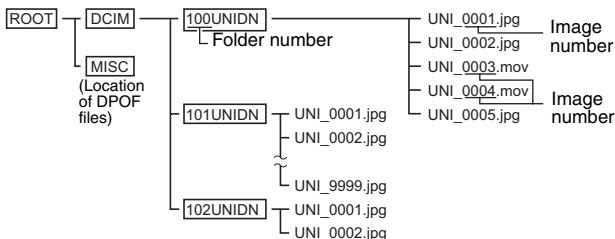
Data file formats

The format of the files saved on the card and the method in which the file names are determined are explained below.

| Type of data | Data format | File name structure |
|--|--------------------|--|
| Still image/ sequential shots data | JPEG | File name begins with UNI_. Extension is ".jpg". UNI_****.jpg |
| Video clip data | QuickTime Movie | File name begins with UNI_. Extension is ".mov". UNI_****.mov* |

* Consecutive numbers assigned in the order the data was saved.

Configuration of directories in the card



* Up to 9,999 files can be stored in folder 100UNIDN. If more image files are made, a folder named 101UNIDN is created, and they will be stored in there. New folders will then be named in sequence, i.e., 102UNIDN, 103UNIDN, etc.

HINT

About video clip data recorded with this camera

- You can use Apple's QuickTime 3 or later version to play back video clips on a computer.
- QuickTime can be downloaded free of charge from the Apple Computer website.
<http://www.apple.com/quicktime/download/win.html>
(The website URL may change.)

About file names when the card is replaced...

- If the file number reset function is set to off, even when the card is replaced, consecutive numbering of folder numbers and file names continues from the previously installed card (page 81).

CAUTION

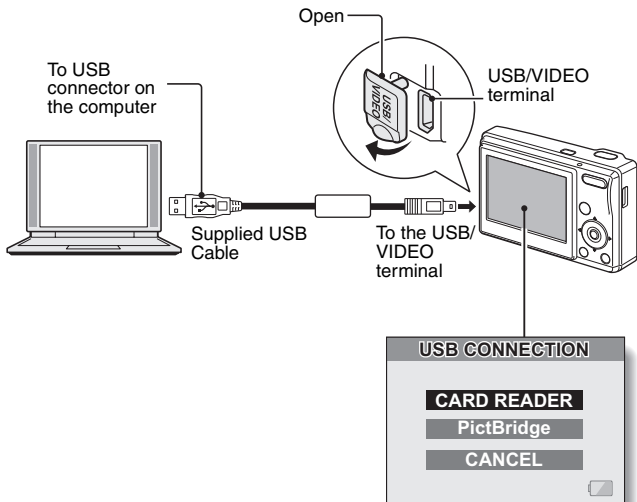
If you intend to view the images on the camera, do not use a computer to rewrite the card data.

- If the folders, file names, or their configuration is modified using a personal computer, it will be impossible to play back the data using the camera, and the camera may not operate properly.

CONNECTING TO A COMPUTER

Setting to the card reader mode

- 1 **Start your computer, use the supplied USB Cable to connect your camera to the computer, and turn the camera on.**
 - Connect the camera's USB/VIDEO terminal to the computer's USB connector.
 - The USB Connection Screen appears on the camera's LCD monitor.



2 Select “CARD READER”, and press the ok button.

CAUTION

Insert and pull out the cable carefully.

- When connecting the cables, make sure that the cable plugs are correctly oriented and that they match the shapes of the terminal sockets on the devices. Push the plugs in straight when connecting them. If undue force is used to connect a cable, it may permanently damage the connector pins in the terminal socket.
- Do not use excessive force when connecting and disconnecting cables.
- Please connect the USB Cable to your computer's USB connector. Do not connect it to the USB port on your monitor or keyboard, or to the USB hub.

CONNECTING TO A COMPUTER

For Windows XP users

Mounting your camera

- 1 Set the camera to the card reader mode (page 93).**
 - The message [Found New Hardware] appears in the task tray, showing that the camera is recognized as a drive.
 - The card is recognized (mounted) as a disk, and the [Removable disk (E:)] window opens.
 - * The drive name (E:) may be different on your computer.
-

- 2 Select an action.**
 - Select the desired procedure from the [UDC-5M (E:)] window.
-

Dismounting the camera

CAUTION

- To disconnect your camera, be sure to follow the procedure below. Failure to follow this procedure may cause faulty operation of your computer or loss of card data.
-

- 1 Left-click on the icon for safely removing hardware.**
 - A list appears showing the devices connected to the computer's USB connector.
-

- 2 Left-click on the camera drive (E:).**
 - The camera can now be disconnected.
 - * The drive name (E:) may be different on your computer.
-

For Windows Me/Windows 2000 users

Mounting your camera

- 1 Set the camera to the card reader mode (page 93).**
 - The camera is recognized as a drive, and [Removable disk (E:)] appears in the [My Computer] window.
 - * The drive name (E:) may be different on your computer.
 - The card is recognized (mounted) as a disk.
 - Double-click on the [Removable disk (E:)] icon in [My Computer], and you can process the files in the camera's card or internal memory exactly like you would the data in the other computer drives.

Dismounting the camera

CAUTION

- To disconnect your camera, be sure to follow the procedure below. Failure to follow this procedure may cause faulty operation of your computer or loss of card data.

-
- 1 Left-click on [Unplug or Eject Hardware] in the task tray.**
 - A list appears showing the devices connected to the computer's USB connector.
-
- 2 Left-click on the camera drive (E:).**
 - * The drive name (E:) may be different on your computer.
 - The [Safe to Remove Hardware] dialog box will open.
-
- 3 Click on the [OK] button.**
 - You can now disconnect the camera.
-

CONNECTING TO A COMPUTER

For Mac OS 9.xx users

Mounting your camera

-
- 1 Set the camera to the card reader mode (page 93).**
 - The camera is recognized as a drive and appears as an icon named [Untitled] on the Desktop.
 - Double-click on the [Untitled] icon, and you can process the contents of the card installed in your camera exactly like you would the data in the other computer drives.

Dismounting the camera

CAUTION

- To disconnect your camera, be sure to follow the procedure below. Failure to follow this procedure may cause faulty operation of your computer or loss of card data.

-
- 1 Drag the [Untitled] icon for your camera on the Desktop to the trashcan.**
 - The [Untitled] icon disappears from the Desktop.
 - You can now disconnect your camera.

For Mac OS X users

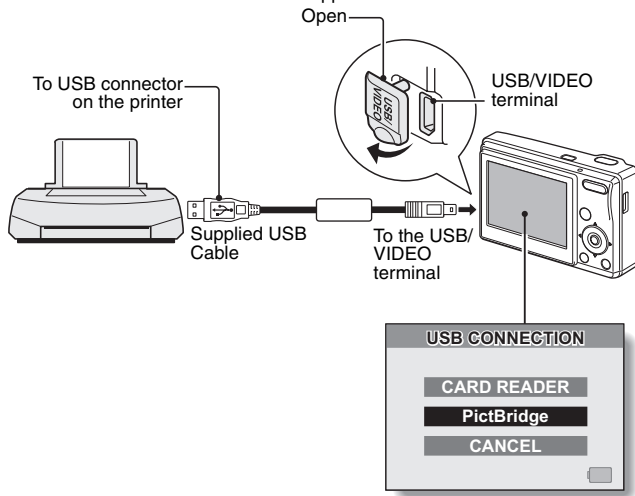
Use the same mounting and dismounting procedure as for the Mac OS 9.xx. However, if an application which automatically recognizes camera images is installed, it will be activated.

DIRECT PRINTING

Your camera supports the PictBridge function. By connecting the camera directly to a PictBridge-enabled printer, the camera's monitor can be used to select images and initiate printing (PictBridge printing).

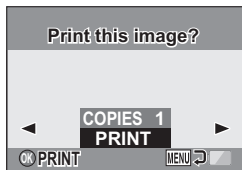
Print preparations

- 1 Insert the card containing the images you wish to print in the camera.
- 2 Turn the printer on, use the supplied USB Cable to connect the camera to the printer, and turn the camera on.
 - Connect the camera's USB/VIDEO terminal to the printer's USB connector.
 - The USB Connection Screen appears on the camera's monitor.



DIRECT PRINTING

- 3** Select “PictBridge”, and press the **ok** button.
- The screen to select the images to print appears.



CAUTION

Caution when connecting a printer.

- If the power to the printer is turned off while it is connected, the camera may not operate correctly. If the camera does not operate correctly, disconnect the USB Cable, turn off the camera, and then reconnect the cable.
- During PictBridge printing, the camera's button operation response is slower.
- Make sure that the remaining battery charge is sufficient.

Insert and pull out the cable carefully.

- When connecting the cables, make sure that the cable plugs are correctly oriented and that they match the shapes of the terminal sockets on the devices. Push the plugs in straight when connecting them. If undue force is used to connect a cable, it may permanently damage the connector pins in the terminal socket.
- Do not use excessive force when connecting and disconnecting cables.

To select one image and print it (print selected image)

Procedure to select one still image and print it.

1 Complete the printing setup (page 98).

2 Press the [◀] or [▶] button.

- Specify the image to print.



3 Specify the number of prints.

- ① Select "COPIES", and press the ok button.
- ② Press the [▲] or [▼] button to specify the number of prints.
- ③ Press the ok button.



4 Select "PRINT", and press the ok button.

- Printing begins.

HINT

To cancel printing

- ① During printing, press the [▼] button.
 - The Confirm Cancel Printing Screen appears.
- ② Select "YES", and press the ok button.
 - If "EXIT" is selected and the ok button is pressed, printing resumes.

DIRECT PRINTING

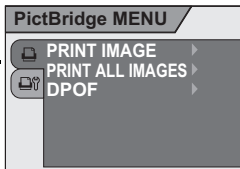
To print all the images (all images)

Print all of the still images.

1 Complete the printing setup (page 98).

2 Press the menu button.

- The PictBridge Menu appears.



3 Select "PRINT ALL IMAGES", and press the ok button.

- The Print All Images Screen appears.

4 Select "PRINT", and press the ok button.

- Printing begins.



CAUTION

Printing is not possible if there are more than 999 still images in the card.

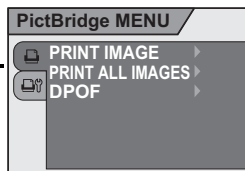
- Delete unwanted images before printing.

To print the images that are set to print (print reserved images)

Procedure to print all the still images that are set to print.

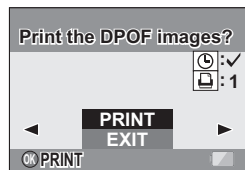
- 1 Make the print settings (page 64), and complete the printing setup (page 98).**

- 2 Press the menu button.**
 - The PictBridge Menu appears.



- 3 Select "DPOF", and press the ok button.**
 - The Print Scheduled Images Screen appears.

- 4 Select "PRINT", and press the ok button.**
 - Printing begins.
 - Printing begins about 1 minute after the ok button is pressed.



HINT

- In step 3, if you press the [◀] or [▶] button, you can confirm the images that are set to print and their DPOF settings.

CAUTION

- Reserved images printing is not possible if a printer is used that does not support your camera's DPOF function.

DIRECT PRINTING

To change the printer settings and print images (change printer settings)

Images are printed according to settings specified by the camera, such as paper type, size, layout, printing quality, etc.

1 Complete the printing setup (page 98).

2 Select the printer settings tab , and press the ok button.

- The Printer Settings Menu appears.

DATE STAMP:

Print the date the photo was taken.

MEDIA TYPE:

Specify the type of paper used for printing.

PAPER SIZE:

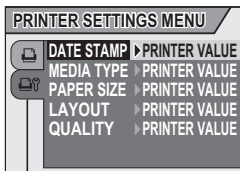
Specify the size of paper used for printing.

LAYOUT:

Specify how the images are to be arranged on the paper.

QUALITY:

Select the print quality for the images.



Printer Settings tab

3 Adjust the printer settings.

- ① Use the arrow buttons to select a printer setting parameter, and press the ok button.
 - The screen to set the selected parameter appears.
 - ② Press the [▲] or [▼] button to adjust the setting, and press the ok button.
 - The selected parameter is set, and you are returned to the Printer Settings Menu.
 - Follow the same procedure to adjust the other parameters, as desired.
 - The contents of the settings that can be made for each parameter will differ depending on the printer.
- <When “PRINTER VALUE” is selected>
- The images will be printed according to the settings specified on the printer side.

4 Select “EXIT”, and press the ok button.


- You are returned to the Printing Mode Screen.


HINT

- The parameters that are displayed on the Printer Settings Menu will differ depending on the printer that is connected.
- To use printer functions which do not appear on your camera's Printer Settings Menu, select “PRINTER VALUE”.
- If a function set by the camera is not available in the printer, the camera's printer settings will automatically change to “PRINTER VALUE”.

COMMONLY ASKED QUESTIONS

If you have a question about the camera operation, you might find the answer in this compilation of commonly asked questions.

| | Question | Answer | Action |
|-----------------|---|---|--|
| Power | Why doesn't the power turn on? | Due to cold temperatures, the batteries temporarily lost their power. | Place the camera in your pocket to warm it up before using it. |
| | Why are the batteries consumed so quickly? | The ambient temperature is very low. | Keep the batteries in an environment of 10 to 40°C (50 to 104°F). |
| | | The battery life has expired. | Replace with new batteries. |
| | Why does the  icon appear? | The remaining battery power is low. | Replace the batteries with new ones. |
| Shooting | Why doesn't the flash operate? | The camera has determined that the image is bright enough and the flash is not necessary. | Not a malfunction. Capture the image; the camera will determine when the flash is necessary. |
| | Are the settings retained even after the camera is turned off? | — | All settings except the self-timer and the exposure correction are retained even after the camera is turned off. |

| | Question | Answer | Action |
|----------|---|--------|--|
| Shooting | Which resolution setting should I use? | — | <p>Select the resolution setting according to the intended use:</p> <p>[5M]: Appropriate for printing letter-size or larger, and for printing a close-up of part of a photo (trimming).</p> <p>[3M]: For printing standard photo (photo service) sizes.</p> <p>[1M] [0.3M]: For photos displayed on a web page, or sent as e-mail attachments.</p> |
| | What is the difference between the digital zoom and the optical zoom? | — | <p>Because shooting with the optical zoom uses the optics of a physical lens, you can shoot without losing minute details in the image. The digital zoom, on the other hand, works by magnifying a portion of the image that hits the CCD sensor and may produce a coarser image.</p> |
| | How can I get the distant view into focus? | — | <p>Set the scene function to the landscape  mode when photographing.</p> |

COMMONLY ASKED QUESTIONS

| | Question | Answer | Action |
|----------------|---|---------------------------------------|--|
| Monitor | When used in cold weather, why does the image seem to leave traces as it moves? | Condition due to the liquid crystals. | Not a malfunction. Spots that appear in the monitor only appear in the monitor and will not be recorded with the images. |
| | Why does the displayed image contain some red, blue and green dots, or why are black spots visible? | | |

| | Question | Answer | Action |
|-----------------------|-------------------------------------|---|---|
| Viewing images | Why is the image too bright? | The subject was too bright. | When capturing an image, devise a way to compensate for a bright subject, for example, by changing the shooting angle. |
| | Why is the image out of focus? | The focus is not locked properly. | Hold the camera correctly, and when the image is locked in focus, gently press the shutter button all the way to capture the image. |
| | Why is there no image (□ is shown)? | This may happen when trying to play back images stored on a card from a different digital camera. | Images that were captured using a different camera cannot be guaranteed to successfully play back on this camera. |
| | Why do vertical stripes appear? | If a bright subject is shot in the video clip recording mode, vertical stripes may appear on the monitor or in the image. | Not a malfunction. |

COMMONLY ASKED QUESTIONS

| | Question | Answer | Action |
|-----------------------|--|---|--|
| Viewing images | Why isn't the magnified image clear? | Due to the characteristics of the camera, magnified images appear less clear. | Not a malfunction. |
| | Why isn't the captured image clear? | The image was captured using the digital zoom. | Not a malfunction. Zoom in only within the optical zoom range when shooting. |
| | Can I play back image data that I edited using my computer? | — | We cannot guarantee the accurate playback of data that has been edited using a computer. |
| Printing | Why does a message appear during PictBridge printing? | There is a problem with the printer. | Please refer to the instruction manual for your printer. |
| Misc. | Why does the "CARD FULL" or "INTERNAL MEMORY FULL" message appear? | There is no more available memory on the card or in the camera's internal memory. | Erase unnecessary data, or use a card that has more memory available. |
| | Why does the "CARD IS PROTECTED" message appear? | The lock switch on the card is in the locked (protect) position. | Move the lock switch to the unlocked position. |


| | Question | Answer | Action |
|--------------|---|--|--|
| Misc. | Why can't the camera be operated? | A temporary internal circuitry problem may be the cause. | Remove the batteries from the camera, wait a few minutes, then reinstall the batteries and try again. |
| | Why does the "SYSTEM ERROR" message appear? | A problem has occurred within the camera or card. | <p>Check the following items:</p> <ul style="list-style-type: none"> ① Remove the card and then install it again. ② Remove the batteries and then install them again. ③ Install a different card. <p>If "SYSTEM ERROR" still appears after performing the above steps, then please contact Uniden customer support.</p> |

TROUBLESHOOTING

Before calling customer support, check the following table for a possible solution to the problem.

CAMERA

| | Problem | Cause | Action | Reference page |
|----------|--|--|--|----------------|
| Power | No power. | The batteries are dead. | Insert new batteries. | 14 |
| | | The batteries have not been inserted correctly. | Reinsert the batteries, making sure to orient them correctly. | |
| | | The battery/card cover is not completely closed. | Close the battery/card cover completely. | |
| | The camera turns off by itself. | The power save function is operating. | Not a malfunction. | 18 |
| Shooting | An image is not captured when the shutter button is pressed. | The power is not turned on. | <ul style="list-style-type: none">• If the auto power off function was activated, turn the camera on before shooting.• If the camera was turned off, press the on/off button to turn it on. | 18 |

| | Problem | Cause | Action | Reference page |
|-----------------|--|--|--|----------------|
| Shooting | An image is not captured when the shutter button is pressed. | The maximum number of images that can be captured or the maximum video clip recording time has been reached. | Install a new card. | 14 |
| | | | Erase the images that are not necessary. Save the images to separate media, then erase all the images from the card. | 34, 91 |
| | The flash does not operate. | The flash off mode is selected. | Set the flash to automatic flash mode or forced flash mode. | 43 |
| | | The batteries are dead. | Insert new batteries. | 14 |
| | When zooming in or out, the zoom movement stops momentarily. | The optical zoom has moved to the maximum magnification position. | Not a malfunction. Release the zoom switch, and press it again. | 42 |
| | There is noise in the captured image. | The ISO sensitivity setting is too high. | Set the ISO sensitivity to a lower setting. | 53 |
| Monitor | When recording a video clip under fluorescent lights, a noticeable flicker appears in the image. | This occurs when the shutter speed is too fast. | Set the ISO sensitivity to 800 or less. | 53 |
| | No playback image appears. | The playback mode is not active. | Press the playback button  . | 25 |

TROUBLESHOOTING










| | Problem | Cause | Action | Reference page |
|----------------|------------------------|--|---|----------------|
| Viewing images | The image is too dark. | The flash was blocked by a finger or other object. | Hold the camera correctly, and make sure the flash is not obstructed. | 22 |
| | | The subject was too far away. | Capture the image in the range of operation of the flash. | 120 |
| | | The subject was lit from behind. | Use the forced flash mode. | 43 |
| | | | Use the exposure correction function. | 56 |
| | | There is not enough light. | Adjust the ISO sensitivity setting. | 53 |

| | Problem | Cause | Action | Reference page |
|----------------|--|---|---|----------------|
| Viewing images | The image is too bright. | The forced flash mode is selected. | Select a different flash mode. | 43 |
| | | The subject was too bright. | Use the exposure correction function. | 56 |
| | | The ISO sensitivity setting is incorrect. | Set the ISO sensitivity to ISO-A . | 53 |
| | The image is not in focus. | The subject is too close to the camera. | Select the correct focus setting for your needs. | 29, 47 |
| | | The focus setting is not correct. | | |
| | | The camera moved when the shutter button was pressed. | Hold the camera correctly and press the shutter button correctly. | 22, 29 |
| | | The focus is not locked properly. | | |
| | | The lens is dirty. | Clean the lens. | — |
| | The colors of the images captured indoors are not correct. | This is due to ambient lighting. | Capture the image using the forced flash mode. | 43 |
| | | The white balance setting is incorrect. | Set the white balance setting correctly. | 54 |



TROUBLESHOOTING



| | Problem | Cause | Action | Reference page |
|-----------------------|---|---|---|----------------|
| Viewing images | A part of the image is missing. | The Wrist Strap or a finger was blocking the lens or lens opening. | Hold the camera correctly, and make sure the lens is not obstructed. | 22 |
| | "NO IMAGE" is shown. | There is no image stored in the installed card or the internal memory. | Play back after capturing images. | 29, 31 |
| Image editing | You cannot edit or rotate an image. | The protect mode is set. | Cancel the protect mode. | 60 |
| Misc. | The "PROTECTED" message appears and the data cannot be erased. | You have attempted to erase data that is protected from accidental erasure. | Set the protect setting for the data to OFF. | 60 |
| | The recording capacity is less than that indicated in the section "Possible No. of Images/Video Recording Time" (page 122). | The recording capacity is less than the value specified for the card. | Depending on the card, the capacity may be less than the specified value. Please refer to the instructions that accompanied the card. | 122 |

Notes regarding the scene function

| | |
|---|---|
|  | The macro  focus range setting is not available. |
|  | |
|  | The resolution is fixed at 0.3M . The flash is disabled. |
|  | The macro  focus range setting is not available. |
|  | |
|  | The macro  focus range setting is not available. The flash is disabled. |

About the camera-shake reduction/fireworks scene functions and the ISO sensitivity setting

If you change the ISO sensitivity setting while the camera-shake reduction  or fireworks  scene function is selected, the scene function setting will automatically change to full-auto **AUTO**.

Likewise, if you set the scene function to camera-shake reduction  or  when the ISO sensitivity is set to a setting other than ISO-A, the ISO sensitivity setting will automatically change to **ISO-A**.


SPECIFICATIONS

Camera

| | |
|-----------------------------------|--|
| Type | CCD digital camera (recording and playback) |
| Recording system | Digital recording |
| Image file format | Still images: JPEG format (DCF, DPOF, Exif 2.2 compliant) Note: Designed mainly by the Japan Electronics and Information Technology Industries Association (JEITA), DCF (Design rule for camera file system) is standard for digital still camera image files to provide interoperability between digital photography devices for the images stored on removable memory cards. However, it is not guaranteed that all devices will support the DCF standard. Video clips: QuickTime Movie (Photo-JPEG) (video only; audio is not recorded) |
| Data storage media | Internal memory: Approx. 26 MB External memory: SD Memory Card, Multi Media Card |
| Camera effective number of pixels | Approx. 5.08 million pixels (5.08 megapixels) |
| Image sensor | 1/2.5-inch (10.16 mm) CCD Virtual number of pixels: Approx. 5.25 million pixels (5.25 megapixels), interlace scan, primary color filter |

| | | |
|-----------------------|---|---|
| Recording resolution | <Still image shooting mode> 5M : 2,592 × 1,944 pixels 3M : 2,048 × 1,536 pixels 1M : 1,024 × 768 pixels 0.3M : 640 × 480 pixels <Video clip recording mode> TV : 640 × 480 pixels, 30 frames/second WEB : 320 × 240 pixels, 15 frames/second | |
| White balance | Full-auto TTL, manual setting possible | |
| Lens | 3.0× optical zoom lens | f=5.8 mm to 17.4 mm (35 mm film camera conversion f=35 mm to 105 mm) Autofocus, 5 groups, 6 elements (2 with aspheric surfaces), internal ND filter |
| Aperture | Open F=2.8 (Wide) to 4.9 (Tele) Alternative ND filter | |
| Exposure control type | Programmable AE Exposure correction available from the Recording Menu (0±2.0EV in 1/3EV steps) | |
| Light-measuring modes | Multi-section measuring | |

SPECIFICATIONS

| | |
|---------------|--|
| Range | Normal photography: 10 cm (3.94 in.) to ∞ (Wide), 40 cm (15.75 in.) to ∞ (Tele) Macro photography: 5 cm (1.97 in.) to 70 cm (27.56 in.) (Wide), 40 cm (15.75 in.) to 70 cm (27.56 in.) (Tele) |
| Digital zoom | For shooting: 1x to 4x For playback: 1x to 16.2x (varies with resolution) |
| Shutter speed | Still image shooting mode: 1/2 to 1/1,500 sec. (Maximum approx. 2 seconds when the scene function is set to fireworks  etc.) (During flash: 1/30 to 1/1,500 sec.) Video clip recording mode: 1/30 to 1/10,000 sec. |
| Sensitivity | Still image shooting mode: Auto (equivalent to ISO64 to 400)/equivalent to ISO64, ISO100, ISO200, ISO400, and ISO800 (switchable from Recording Menu) Video clip recording mode: Auto (equivalent to ISO256 to 800)/equivalent to ISO256, ISO400, ISO800, ISO1,600, and ISO3,200 (switchable from Recording Menu) |
| Monitor | 2.5-inch (6.35 cm) TFT color LCD Approx. 115,000 pixels (Frame coverage: Approx. 100%) Brightness adjustment: 5-step, auto |

| | | |
|---------------------|-------------|--|
| Flash working range | | GN = 6.0 Approx. 40 cm (15.75 in.) to 3.0 m (9.84 ft.) (Wide) Approx. 40 cm (15.75 in.) to 1.7 m (5.58 ft.) (Tele) |
| Flash modes | | Auto-flash, forced flash, flash off, red-eye reduction |
| Focus | | TTL-type AF (9-point range finder/spot focus) |
| Self-timer | | Approx. 2-second delay, 10-second delay |
| Ambient environment | Temperature | 0 to 40°C (32 to 104°F) (operation), -20 to 60°C (-4 to 140°F) (storage) |
| | Humidity | 30 to 85% (operating, no condensation) 10 to 90% (storage, no condensation) |
| Power supply | Batteries | AA-size alkaline batteries × 2 Longer life AA-size nickel metal hydride rechargeable batteries can also be used. <Recommended batteries> · SANYO eneloop HR-3UTG × 2 · SANYO AA-size 2700 Series HR-3UG × 2 * AA-size manganese batteries cannot be used. |
| Dimensions | | 88.7(W) × 59.7(H) × 23.1(D) mm 3.49" (W) × 2.35" (H) × 0.91" (D) (excluding protuberances, at the narrowest dimension) |
| Weight | | Approx. 123 g (4.34 oz.) (without batteries and card) |

SPECIFICATIONS

Camera connectors

| | | |
|---|--------------------------|---|
| USB/VIDEO (communication and image output) terminal | Dedicated regrouped jack | |
| | Video output | 1.0 Vp-p, 75 Ω unbalanced, sync negative, composite video, NTSC color TV system/PAL TV system (switchable from the Option Menu) |
| | USB | USB 2.0 Full Speed |

Battery life

| | Alkaline batteries (supplied) | Nickel metal hydride (SANYO) | |
|----------------------------|-------------------------------------|------------------------------|-------------------------|
| | | eneloop (HR-3UTG) | 2700 Series (HR-3UG) |
| Possible No. of Images* | 300 images | 550 images | 600 images |
| Maximum playback time** | 700 min. | 750 min. | 900 min. |

* According to the CIPA standard (when using a Matsushita Electric Industrial Co., Ltd. 64MB SD Memory Card).

** With continuous playback when using the monitor.

NOTE

- Approximate time until batteries run out, based on test conditions at room temperature (25°C [77°F]).
- The battery operation time may vary depending on the conditions of the batteries and the conditions of use. Especially when used at temperatures below 10°C (50°F), the battery operation time is drastically reduced.

Possible Number of Images/Video Recording Time

The table shows the possible number of captured images and the possible recording time for the camera's internal memory and for the commercially available 128MB and 1GB SD Memory Cards.

| Shooting mode setting | Resolution setting | Internal memory | SD Memory Card | |
|---------------------------|--------------------|-----------------|----------------|-----------------|
| | | | 128 MB | 1 GB |
| Still image shooting mode | 5M | 15 images | 75 images | 581 images |
| | 3M | 25 images | 120 images | 930 images |
| | 1M | 127 images | 602 images | 4,650 images |
| | 0.3M | 330 images | 1,560 images | 9,990 images |
| Video clip mode | TV | 25 sec. | 1 min. 58 sec. | 15 min. 15 sec. |
| | WEB | 1 min. 22 sec. | 6 min. 31 sec. | 50 min. 22 sec. |

- Even with cards of the same capacity, the amount of data that can actually be stored may differ depending on the card brand, etc.
- The continuous shooting time will differ depending, for example, on the card type, capacity, performance, etc.

SPECIFICATIONS

Others

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- All images and illustrations given in this manual are for explanation purposes and may differ slightly from that of the actual product. Also, actual specifications are subject to change without prior notice and therefore may differ from the contents of this manual.
- Uniden Corporation shall not be held responsible for any problems resulting from the use of this camera.
- Uniden Corporation declines all responsibility for damages due to improper use of the camera, failure to adhere to the instructions given in this manual, or repairs or changes done by those other than a technician authorized by the manufacturer.
- Uniden Corporation shall not be held responsible for any damage caused by optional devices or consumable items used with the camera other than those supplied with the camera or those specified by Uniden Corporation.
- Uniden Corporation shall not be held responsible for any losses or loss of revenue resulting from the loss of data caused by the malfunction, or the repairing of a malfunction, of the camera.
- The images captured with this camera will differ in quality from pictures taken with a standard film camera.

HINTS FOR TAKING PICTURES

Taking great pictures in difficult surroundings is easier than you might think. By keeping a few points in mind and choosing the correct settings, you can create photos that you'll be proud to display and share.

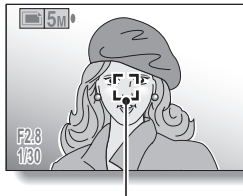
Basic photography

If images are blurred even when the autofocus is used

Your camera employs an autofocus function. When you snap a picture using the autofocus, the camera automatically adjusts the settings so that the image will be in focus. If you are getting blurred images even when using the autofocus, one or more of the following might be the reason.

■ How the autofocus works

The autofocus is activated when the shutter button is pressed halfway. Press the shutter button slightly, and the target mark will appear on the monitor to indicate that the autofocus has been activated. Next, continue to gently press the shutter button all the way to snap the picture. This two-step method is the way to ensure that your photos are perfectly focused.



Target mark

■ Reasons for unfocused images

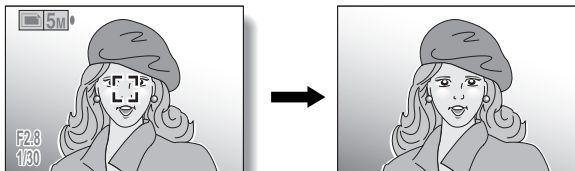
- ① The shutter button was pressed fully in one motion.
- ② After the image was focused, the subject moved.
 - Even if camera focuses the subject once, if the distance between the camera and the subject is changed, the subject may become out of focus.
- ③ The focus setting is not set for the correct distance.
 - If you shoot a close-up subject with the camera set to the normal focus mode, or if you shoot a subject at normal distance with the camera set to the macro (close-up) mode (page 47), the image will not be in focus.

HINTS FOR TAKING PICTURES

■ Preventing blurred images

- ① Confirm that the camera is set to the correct focus mode for your subject.
- ② Hold the camera correctly, and press the shutter button halfway.
- ③ Wait for the target mark to appear in the monitor, and holding the camera steady, gently continue to press the shutter button all the way down.

Following these steps for a gentle but firm pressing of the shutter button will ensure that you get beautifully focused photos.



Shooting with the scene function

Shooting portraits (portrait mode)

Points:

- Choose a background that doesn't detract from your subject.
- Move in close to your subject.
- Pay attention to lighting and how it affects your subject.



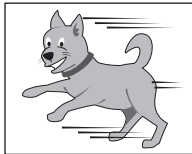
NOTE

- If the background is distracting, it will not show your subject to his best advantage. Move in closer to your subject or zoom in so that the background does not compete with the subject.
- In portrait photography your subject is clearly the central figure, so try techniques that allow the subject to stand out.
- If light is coming from behind your subject (backlit), his face will appear dark. You can get a better picture by using the flash, for example, or changing the exposure setting.

Photographing moving subjects (sports mode)

Points:

- Match the camera's movement with that of the subject.
- Set the zoom to the Wide end (wide-angle).
- Don't be too hesitant to press the shutter button, or you'll miss the action.



NOTE

- Tips to not missing those great action shots:
Make sure you're holding the camera correctly. Keep the subject in the lens at all times, moving the camera with him while waiting for the right shot. Move your whole body—not just your arms—with the camera while shooting.
- Blurred images are more likely when the zoom is set to the Tele end than the Wide end. Set the zoom as close as possible to the Wide end.
- Learn to press the shutter button quickly yet smoothly the instant your photo chance occurs.

Night photography (night view portrait mode)

Points:

- Avoid camera shake.
- Increase the ISO sensitivity.



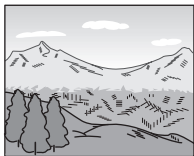
NOTE

- Camera shutter speed during night photography is considerably slower, so there is a much greater chance that your photographed images will be blurry. Use a tripod whenever possible, or if a tripod is not available, you can lean against a wall or pillar to help stabilize the camera.
- You can photograph your subject with the night scene in the background by using the flash. Be careful not to shoot too close to the subject or your subject's face will appear too bright.
- After the flash operates, keep the camera and the subjects motionless for about 2 seconds.

Photographing scenery (landscape mode)

Points:

- Shoot using a high resolution.
- For zoom photography, use the optical zoom.
- Pay attention to picture composition.



NOTE

- When shooting with a wide-angle setting, or if you intend to enlarge the photo, the higher the resolution, the better.
- To zoom in on distant scenery, it's better to use the optical zoom. Using the digital zoom produces a coarser image. Hold the camera securely, keeping your elbows close to your body and making sure the camera is stable. Using a tripod or other means of stabilizing the camera will increase the likelihood of getting a clear photo.
- Don't forget to pay attention to picture composition; note perspective and be aware of how the placement of objects affects the scene.

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