

Chapter 2

SHOOTING

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Basic Shooting

This section explains the general operation flow and basic shooting instructions.







Operation Flow

To record an image, follow the steps below.



Turn on the Camera

Press the power switch to turn the camera on. → (p.30)

Select a Shooting Mode

Select a shooting mode ( •  •  •  • ). For basic shooting, set the mode dial to  (Still Picture) mode. → (p.45)

Select the Recording Destination

Select internal memory () or SmartMedia memory card (). → (p.46)

Select an Image Quality Mode

Choose from nine image quality modes ( •  • ). → (p.47)

Check the Position of the Subject

Check the position of the subject in the viewfinder or on the LCD monitor. → (p.48)






Set the Size of the Subject


Use the zoom lever to select the size of the subject. → (p.50)

Shoot

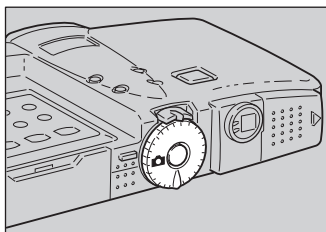
Press the shutter release button to record the image. (p.51)

Selecting a Shooting Mode

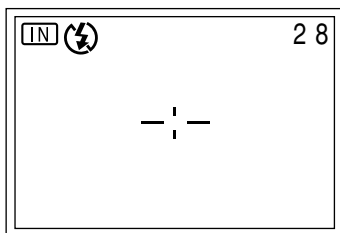
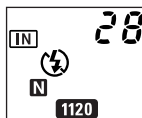
The camera offers five shooting modes ( •  •  •  • ). Select the mode best suited to your photographic needs.

The explanation below is based on  (Still Picture) mode.

1 Set the mode dial to [].



The recording setting will be displayed on the LCD panel and on the LCD monitor.



● Changing the LCD Monitor Display

You can change the display on the LCD monitor by pressing the DISPLAY button. The display changes in the following sequence each time the DISPLAY button is pressed: Simple Display → Detailed Data Display → Grid Display → No display.

See

- “How to Use the Mode Dial” (p.31).

See

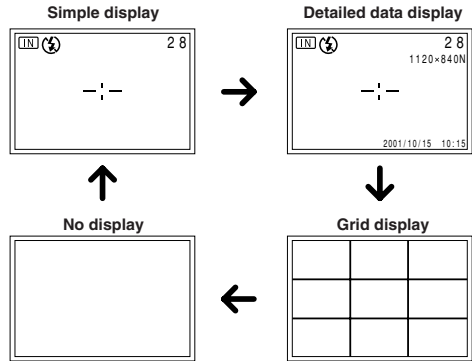
- LCD Monitor Display (Shooting mode) (p.46).

Tips



LCD Monitor Display (Shooting Mode)

Each time the DISPLAY button is pressed, the information displayed on the LCD monitor when recording an image, such as the shooting mode, image quality mode and recordable picture count, changes.

● In Still Picture Mode





You can use the grid as a guide when deciding the composition of the picture.


* If you are using Sound mode or Motion Picture mode ( , ) and the recordable time will appear on the initial display or detailed data display.

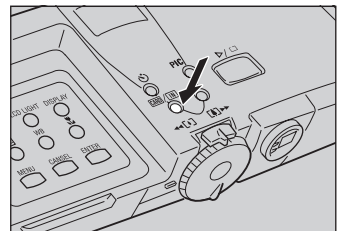
Selecting a Recording Destination

Select whether to record files in the internal memory or on the SmartMedia memory card mounted in the camera.

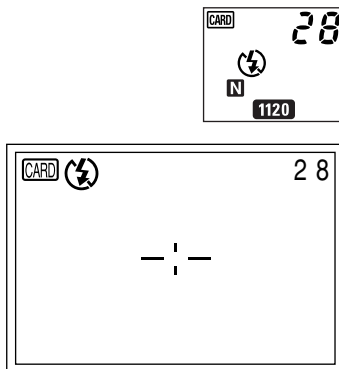
Display	Description
	Records to the internal memory
	Records to the SmartMedia memory card

1 Press the button and select the recording destination (•).

The recording destination changes each time the  button is pressed.



The selected recording destination will be displayed.



Selecting an Image Quality Mode

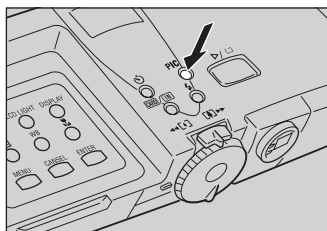
The camera offers the following image quality modes. Select the mode best suited to your photographic needs.

LCD Panel	LCD Monitor
2272 / F N E	2272 × 1704F, 2272 × 1704N, 2272 × 1704E
1120 / F N E	1120 × 840F, 1120 × 840N, 1120 × 840E
640 / F N E	640 × 480F, 640 × 480N, 640 × 480E

- The recordable picture count varies as you switch the image quality mode.
- The factory default setting is **1120 N**.

1 Press the PIC button and select an image quality mode.

The image quality mode changes each time you press the **PIC** button.



Note

- If a SmartMedia memory card is mounted in the camera when it is turned on, the **CARD** mark will be displayed. To set the internal memory as the recording destination, enable the keep settings mode. See "Keep Settings" (p.121).

Note

- To use the non-compressed mode (NC), set the mode on the shooting mode menu. See "Switching to Non-Compressed Mode" (p.84).

The selected image quality mode will be displayed.
The image quality mode setting will be saved even when the power is turned off.

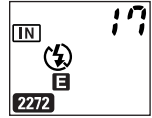
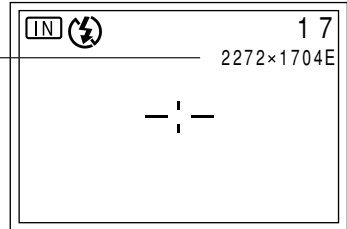


Image quality mode
Displayed when the
DISPLAY button is
pressed to display the
detailed data. See “LCD
Monitor Display
(Shooting Mode)” (p.46)



Note

- Image sizes are 2272 × 1704 pixels, 1120 × 840 pixels and 640 × 480 pixels. With this product and in this manual, the number of pixels is shown as **2272**, **1120** and **640**.
- For the number of recordable images by image quality mode, see “Recording Capacities” (p.142).

● Data Guide

Size (No. of Pixels)	Image Quality (Compression Rate)	F	N	E
		Fine	Normal	Economy
2272 2272 × 1704		Approx. 1.5 MB/image	Approx. 726 KB/image	Approx. 363 KB/image
1120 1120 × 840		Approx. 470 KB/image	Approx. 235 KB/image	Approx. 118 KB/image
640 640 × 480		Approx. 152 KB/image	Approx. 72 KB/image	Approx. 40 KB/image

Checking the Position of the Subject

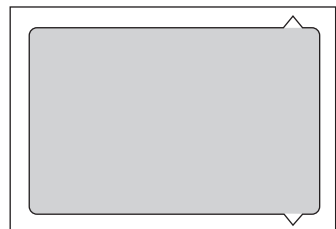
Check the position of your subject through the viewfinder or on the LCD monitor.

■ Viewing Through the Viewfinder

Aim the camera at the subject while looking through the viewfinder.

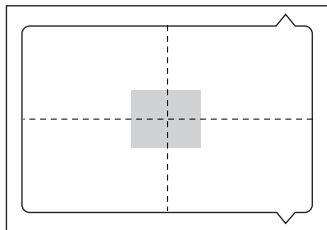
● Shooting Scope

Frame the subject within the viewfinder.



● Autofocus Field

Located in the center of the viewfinder and roughly corresponding to the area shown on the right, the autofocus field determines the focal distance.

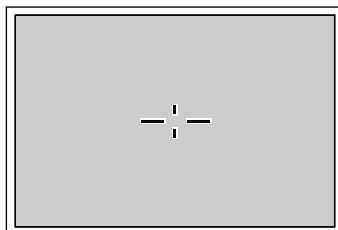


■ Viewing on the LCD Monitor

Aim the camera at the subject while looking at the LCD monitor.

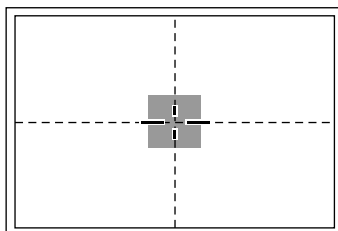
● Shooting Scope

Frame the subject within the LCD monitor screen.



● Autofocus Field

Located in the center of the LCD monitor screen and roughly corresponding to the area shown on the right, the autofocus field determines the focal distance.





Note

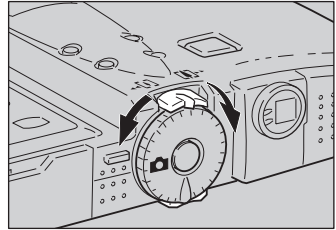
- The shaded area and dotted lines are shown for illustration purposes only and do not actually appear in the viewfinder or on the LCD monitor.

Setting the Size of the Subject (Zoom)

By moving the zoom lever, you can vary the size of the subject without changing the distance between yourself and the subject (zoom range is equivalent to 35 - 105mm in 35mm camera format).

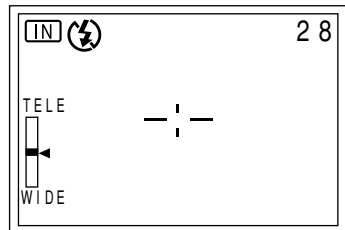
1 Move the zoom lever to or .

Move to  to increase the size of the subject (TELE), and move to  to decrease the size of the subject (WIDE).







The zoom indication bar will be displayed on the LCD monitor.

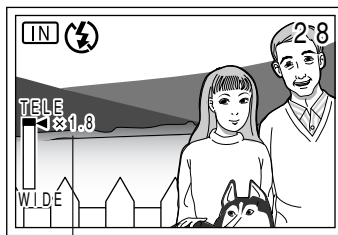
Adjust the subject to the desired size.



■ Digital Zoom Function

If you keep moving the zoom lever to  when the camera is set on  (Still Picture) mode and the Image quality mode is **640** and the lens is at the maximum telephoto position or the camera is in macro mode ( is displayed), the digital zoom function is triggered to magnify your shot 1.4 times, 1.8 times or 3.6 times.

To disable the digital zoom function, move the zoom lever to .



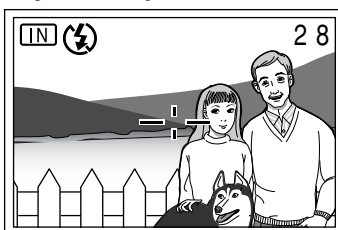
Magnification

Note

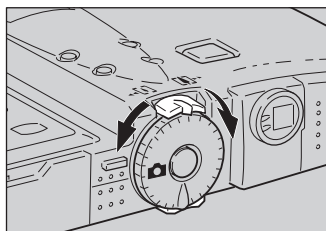
- The digital zoom function can be used when the Image quality mode is **640**. It cannot be used in the following situations:
 - when the shooting mode is set on (Sound), (Text), (Continuous Shooting) or (Motion Picture) mode
 - when the image quality mode is set on non-compressed (NC)
- When using the digital zoom function, decide the composition using the LCD monitor before shooting.

Shooting (Still Picture Mode)

Hold the camera correctly to keep it steady.

1 Aim the camera at your subject.**Note**

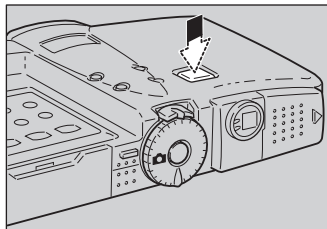
- Use macro mode to shoot subjects closer than 24 cm (9.4 inches). See "Close-up Shooting (Macro Mode)" (p.68).


2 Use the zoom lever to set the size of the subject.**See**

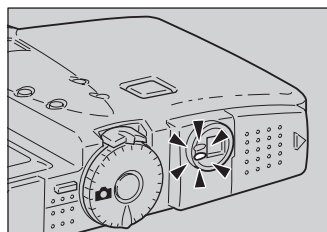
- "Checking the Position of the Subject" (p.48)
- "Setting the Size of the Subject (Zoom)" (p.50)

3 Press the shutter release button lightly with your fingertip.

The shutter release button works in a two-step action. When you press it lightly (halfway), the autofocus function is triggered to determine the focal distance. Keep the camera as steady as possible to prevent camera shake.

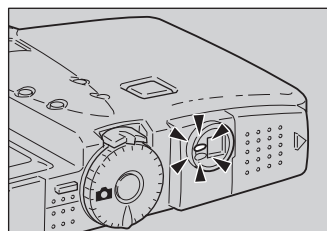


The AF LED (green) will light and the indicator  on the LCD monitor will turn to green when the subject is in focus. The focus, exposure and white balance settings are set at this point.




● Flash LED

The flash LED (red) lights when you press the shutter release button lightly in low light conditions.



Note

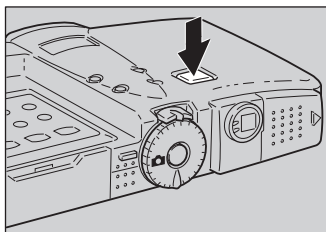
- The subject will be out of focus when the AF LED flashes and the indicator  on the LCD monitor turns red. Use the focus lock function. See “Focus Lock Shooting” (p.54).
- If the [SLOW SHUTTER] message is displayed, you are recommended to shoot with the flash or use S mode to avoid camera shake which tends to occur in this situation. See “Changing Flash Modes” (p.60) or “Increasing the Shutter Speed (S Mode)” (p.87).
- If the [!AE] message is displayed, the image is overexposed, but you can take the picture by pressing the shutter release button down fully.

Note


- The flash LED (red) blinks and the LCD monitor is cleared while the flash is charging. Pictures cannot be taken in this state.

4 Press the shutter release button down fully without removing your finger.

A beep will sound and the picture you have taken appears on the LCD monitor before it is recorded.



How to Cancel Recording

When you press down the shutter release button fully, the shot image will appear on the LCD monitor. To cancel recording, press the  button, and then press the shutter release button when the cancel confirmation message is displayed.



You can change the image confirmation time as desired. See “Changing LCD Confirmation Time” (p.122).

■ When Focusing is Difficult

You may experience difficulty focusing on the following subjects:



- Objects with little or no contrast (such as the sky, white walls, and car hoods)
- Flat two-dimensional objects with only horizontal lines and no significant protrusions or indentations
- Fast-moving targets
- Low brightness objects (in dark places)
- Strongly backlit objects and objects struck by strong reflected light
- Flickering objects (such as fluorescent lights)

Note

- Moving the camera before the beep sounds may result in a blurred image.
- You can incorporate sound into your recording. See “Still Picture/Text Shooting with Sound” (p.58).

Important Note

- Do not open the battery cover or card door or detach the AC adapter (optional) during recording.
- The AF LED and the flash LED will blink while the image is being recorded. Do not rotate the mode dial or turn off the power until recording has been completed.

It is not possible to use the  /  button or use the MENU button to display the menu screen while an image is being recorded.

Note

- The camera will turn off automatically (auto power off) to conserve the battery if it is left idle (no buttons operated) for a preset time. When you require more time to compose a shot, disable the auto power off feature. See “Auto Power Off Setting” (p.123).
- When using the camera for an extended period of time, have a spare battery or AC adapter (optional) handy.

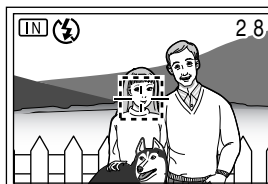
When shooting subjects like these, focus on another subject that is located at about the same distance and then aim at the target with that focus setting. See “Focus Lock Shooting” (p.54) “Setting the Focus” (p.70).



Focus Lock Shooting

Usually, the auto focus function focuses the camera on the subject that appears in the autofocus field on the LCD monitor or in the viewfinder. If the subject is located outside the autofocus field, it may appear blurred in the resulting shot. Use the focus lock to ensure accurate focusing on the subject.

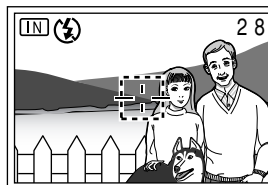
- 1. Bring the subject on which you wish to focus into the autofocus field.**



- 2. Press the shutter release button halfway and hold the button pressed when the AF LED lights green and the indicator -i- on the LCD monitor turns green.**






Focusing, exposure and white balance will be locked.

- 3. Decide the composition of the shot by moving the camera with the shutter release button held, and then press the shutter release button down fully.**







Special Shooting Functions

This section explains the various shooting functions. Depending on which shooting mode you choose, the functions which can be used will vary. Refer to the following table.

Shooting Function \ Shooting Mode	 Still Picture	 Sound	 Text	 Continuous	 Motion Picture
With Sound p.58	○	×	○	×	×
Focus p.70	○	×	○	○	○
Flash strength p.61	○	×	○	×	×
Red-Eye Reduction Mode p.72	○	×	×	×	×
ISO SENSITIVITY p.73	○	×	○	○	×
Date Imprint p.74	○	×	○	○	×
Split Screen p.75	○	×	×	×	×
Sharpness Mode p.79	○	×	×	○	×
Monochrome Mode p.80	○	×	×	○	○
Negative p.81	○	×	×	○	○
Interval p.82	○	×	○	×	×
Auto Bracket p.83	○	×	×	×	×
Non-Compressed p.84	○	×	×	×	×
Photometry p.86	○	×	×	○	×
S Mode p.87	○	×	○	○	×
Time Exposure p.88	○	×	×	×	×

Text Shooting

This function enables you to record text. The text will be recorded under optimum conditions in two values, black and white. (The data can be recorded in less than one-third of the usual volume.) To produce a sharp, clear image, you can set the black/white contrast in five stages ( -2,  -1, 0 (no display),  +1,  +2).

1 Set the mode dial to [].

2 Press the  or  button to adjust the contrast of the black and white color.

If you select a minus value, the black color will become lighter, and if you select a plus value, it will become darker.

Note

- You can only select **2272** and **1120** image quality modes.
- To cancel recording, press the  button while the shot image is displayed on the LCD monitor. See “Shooting (Still Picture Mode)” (p.51)
- Sound can be incorporated in the recording. See “Still Picture/Text Shooting with Sound” (p.58).

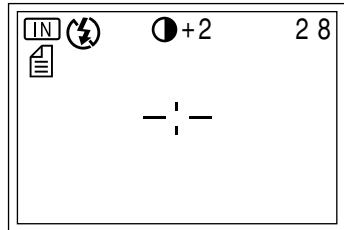
Important Note

- The microphone is located on the front of the camera. Adjust the direction of the microphone to the best position for recording.
- Please keep the camera at least 30 cm (11.8 inches) away from mobile phone to prevent interference.

Note

- When the recording/recordable time exceeds 100 minutes, the first digit of the seconds is not displayed on both the LCD monitor and the LCD panel.

3 Press the shutter release button.



The shot image appears on the LCD monitor before it is recorded.

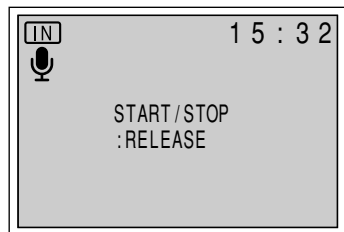
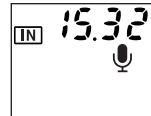
Sound Recording

In this mode sound can be recorded. The recordable time is displayed according to the available capacity in the recording destination.

1 Set the mode dial to [].

The recordable time is displayed on the LCD panel and on the LCD monitor.

2 Press the shutter release button.



Recording will start. The  mark blinks during recording and the recordable time is displayed.

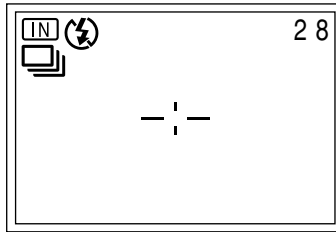
To stop recording, press the shutter release button again.

Continuous Shooting

This mode is for shooting a subject continuously while the shutter release button is depressed. This function is ideal for capturing special events.

1 Set the mode dial to [].

2 Press the shutter release button.



Shooting continues while the shutter release button is pressed.

Continuous shooting stops when you release the shutter release button.

● Maximum number of continuous pictures

The maximum number of pictures that can be taken continuously depends on the image quality mode.

Size (No. of Pixels)	Image Quality (Compression Rate)		
	F Fine	N Normal	E Economy
2272 2272 × 1704	Approx. 3	Approx. 7	Approx. 15
1120 1120 × 840	Approx. 11	Approx. 23	Approx. 45
640 640 × 480	Approx. 35	Approx. 67	Approx. 123

* The table shows the maximum number of pictures that can be taken continuously at one time. The number of pictures that can be taken continuously varies depending on the available space on the SmartMedia memory card or internal memory.

Motion Picture Recording

This mode is for recording motion pictures. The recordable time is displayed according to the available capacity in the recording destination. Sound is incorporated in the recording.



- The microphone is located on the front of the camera. Adjust the direction of the microphone to the best position for recording.
- Please keep the camera at least 30 cm (11.8 inches) away from mobile phone to prevent interference.
- Install QuickTime 4.1.2 or later version to play motion picture files on the PC.

Note

- The flash does not fire in Continuous Shooting mode.
- You cannot select non-compressed mode (NC) in continuous shooting mode.
- In Continuous Shooting mode, the focus, exposure and white balance are locked in the status in effect when you press the shutter release button.
- In Continuous Shooting mode, no image appears on the LCD monitor while pictures are being taken.
- Continuous shooting stops when the total number of files recorded reaches RIMG9999. In this case, format the SmartMedia memory card or internal memory to resume continuous shooting.

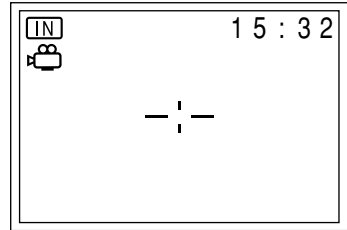
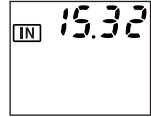
Note

- Zoom does not work in Motion Picture mode.
- The flash does not fire in Motion Picture mode.
- The focus, exposure compensation and white balance are locked in the state in effect when the shutter release button was pressed.

1 Set the mode dial to [].

The recordable time is displayed on the LCD panel and on the LCD monitor.

2 Press the shutter release button.



Shooting starts. The recording time is displayed on the LCD panel during shooting.

Press the shutter release button again to stop recording.

Still Picture/Text Shooting with Sound

This mode is for recording still pictures or text with 10 seconds of sound. This function is useful when you wish to add a comment or explain a situation.

Important Note

- The microphone is located on the front of the camera. Adjust the direction of the microphone to the best position for recording.
- Please keep the camera at least 30 cm (11.8 inches) away from mobile phone to prevent interference.

1 Set the mode dial to [] or [] and press the MENU button.

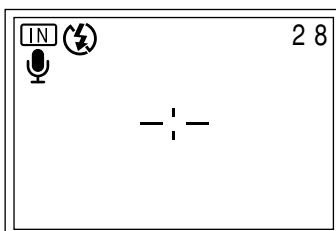
2 Press the \blacktriangle or \blacktriangledown button to select [IMAGE WITH SOUND].

3 Press the \blacktriangleleft or \blacktriangleright button to select [ON] and press the ENTER button.

SHOOTING MODE	▼ 1 / 4
IMAGE WITH SOUND	OFF
FOCUS	AF
FLASH STRENGTH	NORMAL
REDEYE REDUCTION	OFF
ISO SENSITIVITY	AUTO
SELECT: \blacktriangle \blacktriangledown	CHANGE: \blacktriangleleft \blacktriangleright
BACK: MENU	SEL.: ENTER

4 Press the MENU button.

5 Press the shutter release button.



About 10 seconds of sound can be recorded after the image has been displayed. The μ mark blinks during sound recording.

Note





- The focus, exposure and white balance are locked in the state in effect when the shutter release button was pressed.
- Sound recording starts after the image has been recorded. At this time, check that the μ symbol on the LCD monitor or LCD panel is blinking.
- Enable the keep settings mode to save the image with sound setting. See “Keep Settings” (p. 121).
- You can add a sound to a recorded file. See “Adding a Sound to a File being Played Back” (p. 94).

Note

- To cancel still picture/text shooting with sound, select [OFF].

Changing Flash Modes

The camera offers four flash modes. Select the flash mode best suited to your photographic needs.

Display	Mode name	Description
	Flash Off	The flash is disabled even in dark conditions. Use this mode for shooting where use of the flash is prohibited or where adequate room illumination is available.
	Auto	The flash fires automatically when it detects low ambient light or backlighting.
	Forced Flash	When you take a picture against the light or under strong light, the subject's face may appear in the shade in the resultant shot. Use forced flash to reduce this effect. In this mode, the flash will fire regardless of the ambient light level.
	Slow Synchro	Slows down the shutter release speed when the flash is activated so that the subject is illuminated and the background is captured too. If you use this mode when you want to take a clear picture of your subject and capture the background atmosphere, such as at a party, it reduces the effect of only the background being darkened when the flash fires.

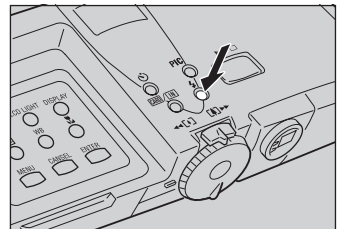
* The factory default setting is  (Flash Off) mode.

Effective Range of the Flash

When you shoot with the flash activated, the flash has an effective range of about 0.6 – 2.5 m (23.7 – 98.5 inches). The subject will appear dark in the picture if the light from the flash fails to reach it.


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

2 Press the  button to select the flash mode (, , , ).

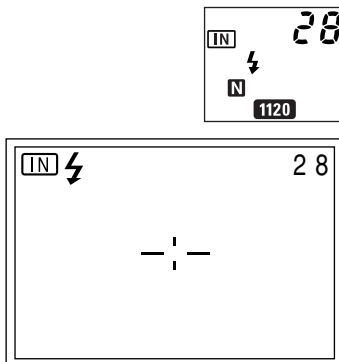


The flash mode switches each time you press the button.

The selected flash mode will be displayed.

In Auto mode, the  mark appears only on the LCD monitor and not on the LCD panel.

3 Press the shutter release button.



When the flash is activated, the flash LED (red) lights when you press the shutter release button lightly.

The flash LED blinks while the flash is charging and the LCD monitor is cleared. You cannot shoot during this time.

Note

- The flash will not fire in the following situations:
 - when the shooting mode is set on (Sound), (Continuous Shooting) or (Motion Picture) mode
 - when the white balance mode is set on (daylight), (overcast), (tungsten light) or (fluorescent light)
 - when in macro mode ()
 - when using auto bracket
- Enable the keep settings mode to save the flash mode setting. See “Keep Settings” (p.121).
- When shooting a subject with the flash activated, if the subject appears dark on the LCD monitor, switch to a wider angle. The subject may be difficult to focus on with the telephoto setting.
- Shooting in the red-eye reduction mode will lessen the red-eye phenomenon in the resultant picture. See “Red-Eye Reduction Mode” (p.72).

■ Adjusting the Strength of the Flash

When shooting with the flash activated (, , , you can adjust the strength of the flash.

1 Set the mode dial to [] or [] and press the MENU button.

2 Press the or button to select [FLASH STRENGTH].

Important Note

- When you shoot a subject located closer than about 0.6m (23.7 inches) with the flash activated, light from the flash may appear red in the resultant picture. The subject may also appear white due to overexposure. To avoid this, switch to Flash Off mode.
- The shutter speed slows automatically when you shoot in dark places. To prevent camera shake, hold the camera steady or mount it on a tripod. Take care to avoid camera shake particularly when using the telephoto setting ().

Note

- Enable the keep settings mode to save the flash strength setting. See “Keep Settings” (p.121).

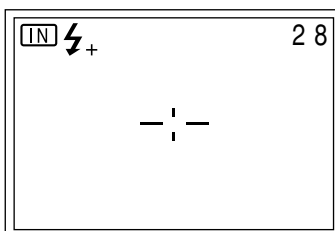
- 3** Press the ◀ or ▶ button to select the desired strength (NORMAL, STRG or SOFT) and press the ENTER button.

SHOOTING MODE	▼ 1 / 4
IMAGE WITH SOUND	OFF
FOCUS	AF
FLASH STRENGTH	STRG
REDEYE REDUCTION	OFF
ISO SENSITIVITY	AUTO
SELECT : ▲▼	CHANGE : ◀▶
BACK : MENU	SEL. : ENTER

- 4** Press the MENU button.

If you select [STRG], + is displayed on the LCD monitor, and if you select [SOFT], – is displayed. There is no display when you select [NORMAL].

- 5** Press the shutter release button.



Setting the Exposure Compensation

As long as the subject is centered in the shooting range, you can take the picture normally as the camera will automatically adjust the exposure compensation for backlighting. If there is a significant difference in brightness between the background and subject, however, the subject tends to be underexposed (dark) or overexposed (white). Exposure compensation is useful in this situation. You can also use exposure compensation to produce intentionally under- or over-exposed images.

● Exposure Compensation Range

± 2.0 EV (in 0.25 EV steps)

● Shooting Against the Light

The bright background will make the subject appear underexposed. Set the exposure compensation level to a positive (+) value to adjust the exposure.

● Shooting a White Image

If you shoot an image that appears generally white, the shot will be underexposed as a whole, with people appearing dark and white objects appearing gray. Set the exposure compensation level to a positive (+) value to adjust the exposure.

● Shooting a Black Image

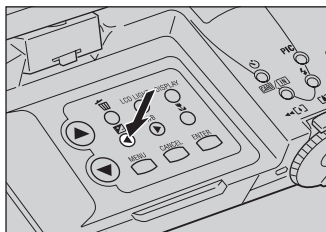
If you shoot an image that appears generally black, the shot will be overexposed as a whole, with people appearing white and black objects appearing gray. Set the exposure compensation level to a negative (-) value to adjust the exposure. Follow the same procedure when shooting a person under a spotlight, for example.

Important Note

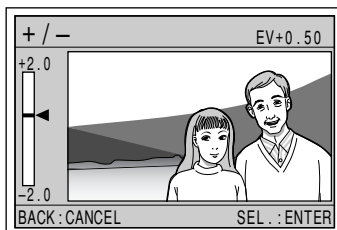
- If the subject is not centered in the shooting range when taking a picture against the light, the camera will not assume that the subject is in a backlit state. Exposure compensation is required in this situation.

1 Set the mode dial to one of the following:

[ •  • ] and press the  button.



2 Press the or button to change the exposure compensation value and press the ENTER button.



Continuously pressing the button changes the level continuously.

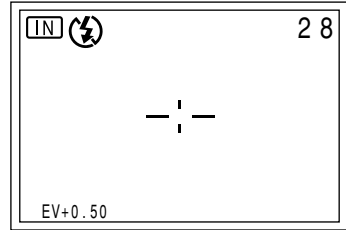
Note

- Enable the keep settings mode to save the exposure compensation level setting. See “Keep Settings” (p.121).
- You can take 3 frames in succession at exposure compensation levels of -0.5 EV, 0, and +0.5 EV based on the preset compensation level. See “Auto Bracket Shooting” (p.83).

Note

- Enable the keep settings mode to save the white balance mode setting. See “Keep Settings” (p.121).





3 Press the shutter release button.



Changing the White Balance

The white balance mode adjusts the white balance so that you can capture your subject in its natural colors regardless of the light source. The AUTO mode will suffice in most situations.

The AUTO mode automatically adjusts the white balance based on the white areas, ensuring that white is reproduced as white regardless of the light source. Consequently, a subject that lacks in white tones as a whole or that is dominated by dark tones may not achieve an appropriate white balance. Change the white balance mode to shoot such subjects.

Display	Mode name	Description
AUTO	Auto	The camera automatically adjusts the white balance.
	Daylight	This mode is used to shoot subjects outdoors where an appropriate white balance is difficult to achieve.
	Overcast	This mode is used to shoot subjects outdoors under cloudy skies or in shade where the appropriate white balance is difficult to achieve.
	Tungsten Light	This mode is used to shoot subjects under tungsten light (light ball) where an appropriate white balance is difficult to achieve.
	Fluorescent Light	This mode is used to shoot subjects under fluorescent light where an appropriate white balance is difficult to achieve.
M	Manual White Balance	You can set the optimum white balance or adjust the setting to the desired color.

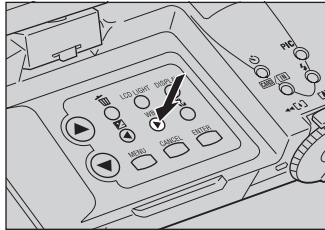
* The factory default setting is AUTO mode.

Subjects Difficult to Correct in Auto Mode

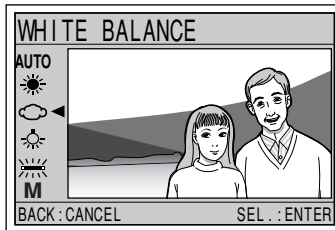
- Monochrome subjects
- Subjects lit by multiple light sources

■ Selecting Auto (AUTO), Daylight (☀), Overcast (☁), Tungsten Light (💡) or Fluorescent Light (💡)

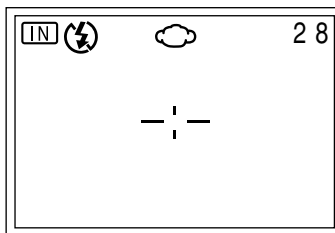
- 1** Set the mode dial to one of the following: [📷 • 📺 • 📷] and press the WB button.



- 2** Press the ▲ or ▼ button to select the white balance (AUTO • ☀ • ☁ • 💡 • 💡) and press the ENTER button.



- 3** Press the shutter release button.



Important Note

- The color tones of a subject will vary depending on weather conditions or light source (tungsten light or fluorescent light).

Note

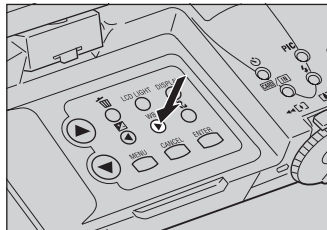
- In AUTO mode, subjects lacking in white tones may not achieve an appropriate white balance. When shooting such subjects, add a white object to the composition.
- The flash will not fire in the following white balance modes: ☀ (daylight), ☁ (overcast), 💡 (tungsten light), and 💡 (fluorescent light).



Note

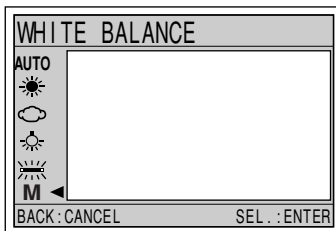
- You cannot use the flash to take a picture in manual white balance mode.

■ Selecting Manual White Balance (M)

- 1** Set the mode dial to one of the following: [ •  • ] and press the WB button.

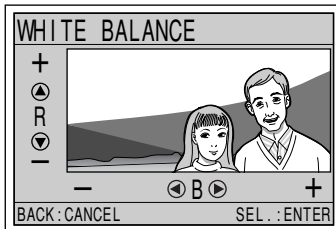


- 2** Press the  or  button to select Manual White Balance (M), aim the camera so that a white subject fills the screen and press the ENTER button.











The optimum white balance is set at this point.

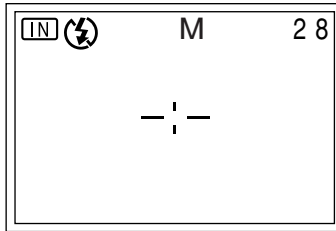
- 3** If you are satisfied with the white balance that has been set, press the ENTER button.



- To finely adjust the white balance or change the color

Press the , ,  or  button before pressing the ENTER button. Adjusting is available until “ R   B ” on the screen disappears.

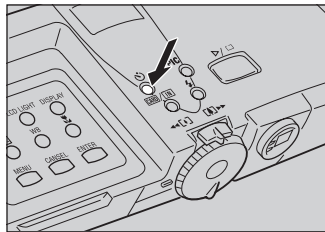
- 4** Press the shutter release button to take the picture.



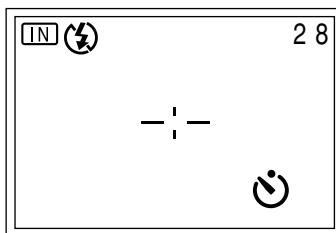
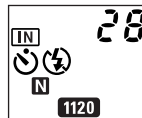
Using the Self-Timer

The self-timer offers a convenient way to take group pictures with the photographer included. Mount the camera on a tripod or set it on a flat surface to shoot pictures with the self-timer.

- 1** Set the mode dial to [] or [] and press the button.



The self-timer is now set.
The mark will be displayed on the LCD panel and on the LCD monitor.



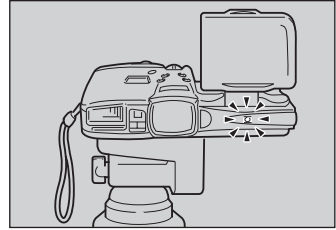
Note

- The self-timer setting is canceled when you press the button again, when you set the mode dial to another mode, or when you turn the camera off.

Note

- If the flash is charging, the self-timer will start when charging is completed.
- The focus is locked at the point when the shutter release button is pressed.

2 Decide the composition of the picture, position the camera securely, and press the shutter release button.



The self timer lamp lights and the self-timer starts. The shutter is released after a delay of approximately 10 seconds. The self timer lamp starts to flash about 2 seconds before the shutter is released and the beep sound is heard. The self-timer mode is automatically canceled when the shutter is released.

Tips


Remote Control

To operate the camera from a remote position or when the camera is fixed in one spot, use the optional remote control unit.

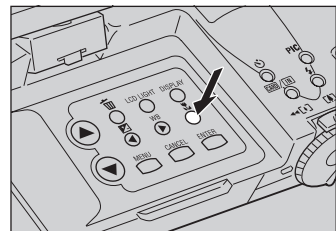
Close-up Shooting (Macro Mode)

Macro photography allows you to take a close-up picture of a subject. Macro mode is recommended for taking pictures at a distance of less than 24cm (9.5 inches) from the subject.

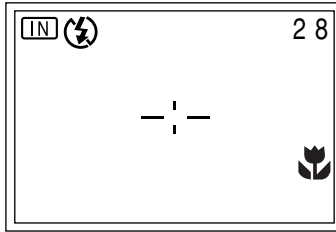
Note

- Macro shooting is canceled when you press the  button again, when you set the mode dial to another mode, or when you turn the camera off.

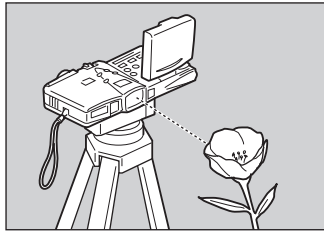
1 Set the mode dial to one of the following:] and press the button.



The  mark will be displayed on the LCD monitor.



- 2 Bring the camera close to the subject and decide the composition of the picture. Press the shutter release button lightly to set the focus.**



- 3 Press the shutter release button.**

Important Note

- The focusing range is so small in macro mode that the focus can be lost if the camera is moved. Make sure the camera is firmly positioned by mounting it on a tripod, for example, to keep it steady when shooting.
- As there is a wide margin between the field of view through the viewfinder and the shooting range, check the shooting range on the LCD monitor or with the camera connected to a TV.

Tips

Shutter release button

The optional remote control unit is convenient for when the camera is mounted on a tripod or similar device and the shutter release button is difficult to press.

Note

- The flash will not fire in macro mode.

Note

- Enable the keep settings mode to save the focus mode setting. See "Keep Settings" (p.121).

Setting the Focus

The camera has four focus settings.

Display	Mode name	Description
AF	Auto	The camera sets the focus automatically.
MF	Manual	You can set the focus manually.
2.5 m	2.5m	You can focus on a subject at a distance of about 2.5 m.
∞	Infinity	You can focus on a subject that is far away, such as a landscape.

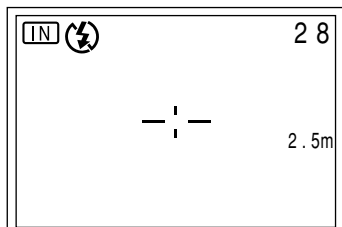
■ Setting Auto Focus (AF), 2.5 m or Infinity (∞)

- 1 Set the mode dial to one of the following:**
[• • • •] and press the MENU button.
- 2 Press the or button to select [FOCUS].**
- 3 Press the or button to select [AF, 2.5m or ∞] and press the ENTER button.**









SHOOTING MODE	▼ 1 / 4
IMAGE WITH SOUND	ON
FOCUS	2.5m
FLASH STRENGTH	NORMAL
REDEYE REDUCTION	OFF
ISO SENSITIVITY	AUTO
SELECT :	CHANGE :
BACK : MENU	SEL. : ENTER





- 4 Press the MENU button.**
"2.5 m" or "∞" will be displayed on the LCD monitor.
If you select [AF], there is no display.

- 5 Press the shutter release button.**



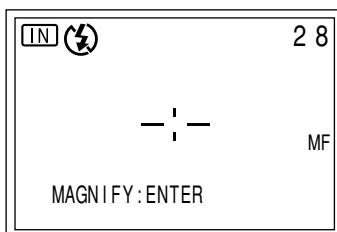
■ Setting Manual Focus (MF)

- 1** Set the mode dial to one of the following: [ •  •  • ] and press the MENU button.
- 2** Press the  or  to button select [FOCUS].
- 3** Press the  or  button to select [MF] and press the ENTER button.

SHOOTING MODE	▼ 1 / 4
IMAGE WITH SOUND	ON
FOCUS	MF
FLASH STRENGTH	NORMAL
REDEYE REDUCTION	OFF
ISO SENSITIVITY	AUTO
SELECT:  	CHANGE:  
BACK: MENU	SEL.: ENTER

- 4** Press the MENU button.
“MF” will be displayed on the LCD monitor.

- 5** Press the  or  button to focus on the subject and press the shutter release button.



To change the size of the subject, press the zoom lever.

You can enlarge the center of the subject to facilitate focus adjustment by pressing the ENTER button.


Red-Eye Reduction Mode

If you shoot a subject in a dark place with the flash activated, the eyes of the subject may appear red in the resultant picture. In red-eye reduction mode, the flash will fire several times before the shutter releases to lessen the red-eye phenomenon.

Note

- To cancel the red-eye reduction mode, select [OFF].





Note

- You cannot use the redeye reduction mode when the flash mode is set on  (Flash Off).
- Enable the keep settings mode to save the red-eye reduction mode setting. See “Keep settings” (p. 121).


1 Set the mode dial to [] and press the MENU button.

2 Press the  or  button to select [REDEYE REDUCTION].

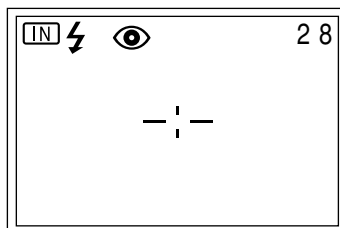
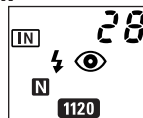
3 Press the  or  button to select [ON] and press the ENTER button.

SHOOTING MODE	▼ 1 / 4
IMAGE WITH SOUND	ON
FOCUS	AF
FLASH STRENGTH	NORMAL
REDEYE REDUCTION	ON
ISO SENSITIVITY	AUTO
SELECT :  	CHANGE :  
BACK : MENU	SEL. : ENTER

4 Press the MENU button.

 will be displayed on the LCD panel and on the LCD monitor.

5 Press the shutter release button.



When you press the shutter release button, the flash will fire several times in succession preliminarily before firing when the shutter releases.



- The shutter takes about 1 second to release after you press the shutter release button. Hold the camera steady meanwhile to shoot the picture.

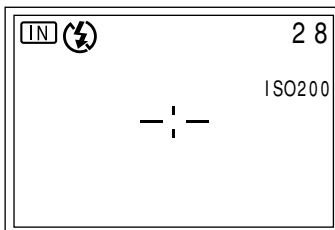
Changing the ISO Setting

You can change the ISO sensitivity.

- 1 Set the mode dial to one of the following:** [• •] and press the MENU button.
- 2 Press the or button to select [ISO SENSITIVITY].**
- 3 Press the or button to select the desired ISO setting (AUTO • 200 • 400 • 800) and press the ENTER button.**

SHOOTING MODE	▼ 1 / 4
IMAGE WITH SOUND	ON
FOCUS	AF
FLASH STRENGTH	NORMAL
REDEYE REDUCTION	OFF
ISO SENSITIVITY	200
SELECT:	CHANGE:
BACK: MENU	SEL.: ENTER

- 4 Press the MENU button.**
The ISO setting will be displayed on the LCD monitor. There is no display when the setting is on AUTO.
- 5 Press the shutter release button.**



- Enable the keep settings mode to save the ISO setting. See "Keep Settings" (p.121).

Date Imprinting

Use this mode to record images imprinted with the date.

Note

- This function is only available if the date has been set in the settings menu, so set the date first. The date is displayed in the style selected on the date setting menu. See “Setting the Date and Time” (p.37).

Note

- To cancel the date imprint mode, select [OFF].





Note

- Enable the keep settings mode to save the date imprint setting. See “Keep Settings” (p.121).

1 Set the mode dial to one of the following: [ •  • ] and press the MENU button.

2 Press the  or  button to select [DATE IMPRINT].

3 Press the  or  button to select [DATE] or [DT/TM] and press the ENTER button.

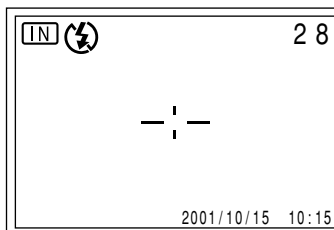
SHOOTING MODE	◆ 2 / 4
DATE IMPRINT	DT/TM
SPLIT-SCREEN	→
SHARPNESS	OFF
MONOCHROME MODE	OFF
NEGATIVE	OFF
SELECT :  	CHANGE :  
BACK : MENU	SEL. : ENTER

If you select [DT/TM], the date and time are displayed (e.g. 2001/10/15 10:15), and if you select [DATE], the time is displayed (e.g. 2001/10/15).

4 Press the MENU button.

If the date imprint mode has been selected, the date will appear in brackets on the LCD monitor.

5 Press the shutter release button.







Split-Screen Mode

The screen is divided into two either vertically or horizontally, and the image is recorded in two shootings.





- **NEW :** The image is recorded in two steps by dividing the screen in two. You can record only one half if desired.
- **ADD :** You can recall the recorded half and add the other half. This image is saved as a separate file.

Note

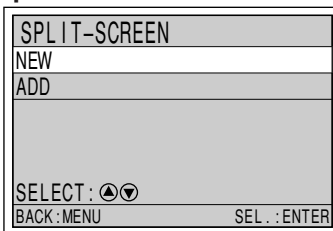
- Use the LCD monitor when taking split images.
- You cannot use the split-screen mode in the following cases:
 - when the shooting mode is set to  (Sound),  (Text),  (Continuous Shooting) or  (Motion Picture) mode.
 - when the image quality mode is **2272** (2272 × 1704) or when in non-compressed (NC) mode
 - when shooting with sound
- You cannot set digital zoom mode, auto bracket mode or manual focus mode, or adjust the white balance or exposure compensation after setting split shooting mode.

1 Set the mode dial to [] and press the **MENU** button.

2 Press the  or  button to select [SPLIT-SCREEN] and press the **ENTER** button.

SHOOTING MODE	◆ 2 / 4
DATE IMPRINT	DATE
SPLIT-SCREEN	➡
SHARPNESS	OFF
MONOCHOME MODE	OFF
NEGATIVE	OFF
SELECT :  	CHANGE :  
BACK : MENU	SEL. : ENTER

- 3** Press the ▲ or ▼ button to select the desired item and press the ENTER button.



Operation differs depending on the item selected.

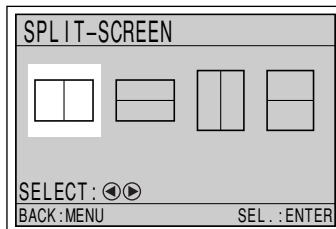
See "NEW" (p.76)

See "ADD" (p.77)

■ NEW

- 1** Select [NEW] from the Split Shooting menu and press the ENTER button.

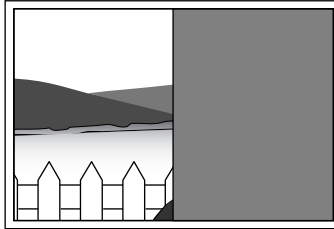
- 2** Press the ◀ or ▶ button to select the desired format and press the ENTER button.



To take the picture normally (horizontal shooting), choose from the two types on the right, and to hold the camera vertically to take the picture (vertical shooting), choose from the two types on the left.

- 3** Press the ▲, ▼, ◀ or ▶ button to select the shooting position.

4 Press the shutter release button.



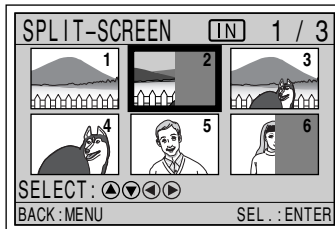
Take the second shooting in succession.

■ ADD

1 Select [ADD] from the split shooting menu and press the ENTER button.

The recorded images will be displayed as a multi-image display.

2 Press the ▲, ▼, ◀ or ▶ button to select the image to which you want to add a second shot and press the ENTER button.



The image inside the frame is the selected image.

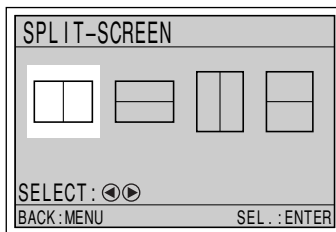
Note

- If you press the CANCEL button after taking the first half of the image, the shot will be recorded and you can take the other half in add mode. See "ADD" (p.77)

Note

- Files that cannot be used for split shots are indicated in black on the multi-image display.
- You cannot add images that have been taken in text mode or non-compressed (NC) mode.

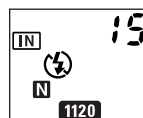
- 3** Press the ◀ or ▶ button to select the format and press the ENTER button.



The selected image will be displayed in half of the divided screen.







- 4** Press the ▲, ▼, ◀ or ▶ button to select the shooting position.



- 5** Press the shutter release button.



Sharpness Mode

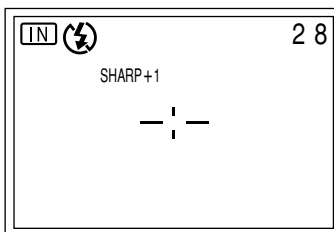
This mode enables you to adjust the sharpness of the contours of the subject in three stages (-1, 0 and +1).

- 1 Set the mode dial to [] or [] and press the MENU button.
- 2 Press the  or  button to select [SHARPNESS].
- 3 Press the  or  button to select [-1] or [+1] and press the ENTER button.

SHOOTING MODE	◆ 2 / 4
DATE IMPRINT	OFF
SPLIT-SCREEN	⇒
SHARPNESS	+ 1
MONOCHROME MODE	OFF
NEGATIVE	OFF
SELECT : 	CHANGE : 
BACK : MENU	SEL. : ENTER

If you select [-1], the image will be recorded with soft contours. If you select [+1], the image will be recorded with sharp contours.

- 4 Press the MENU button.
- 5 Press the shutter release button.



Note

- Enable the keep settings mode to save the sharp mode setting. See "Keep Setting" (p.121)

Note

- To cancel the sharpness mode, select [OFF].

Monochrome Mode

Use this mode to shoot subjects in monochrome or sepia.

1 Set the mode dial to one of the following: [📷 • 📺 • 📷] and press the MENU button.

2 Press the ▲ or ▼ button to select [MONOCHROME MODE].

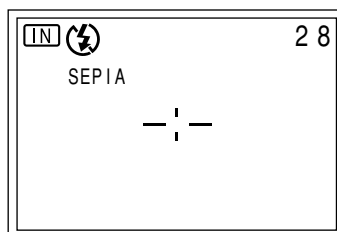
3 Press the ◀ or ▶ button to select [B&W] or [SEPIA] and press the ENTER button.

SHOOTING MODE	◆ 2 / 4
DATE IMPRINT	OFF
SPLIT-SCREEN	⇒
SHARPNESS	OFF
MONOCHROME MODE	SEPIA
NEGATIVE	OFF
SELECT : ▲▼	CHANGE : ◀▶
BACK:MENU	SEL.:ENTER

Select [B&W] to shoot in black and white images or [SEPIA] to shoot in sepia images.

4 Press the MENU button.

5 Press the shutter release button.



Note

- To cancel the monochrome mode, select [OFF].

Note

- The monochrome mode cannot be set when the negative mode is set on [ON].
- The white balance mode does not function when you choose monochrome mode.
- Enable the keep settings mode to save the monochrome mode setting. See "Keep Settings" (p.121).

Negative Mode

By using a light box (available at a camera shop), you can photograph negatives from a developed 35mm film and convert the negative images into positive images.

1 Set the mode dial to one of the following: [• •] and press the MENU button.

2 Press the or button to select [NEGATIVE].

Note

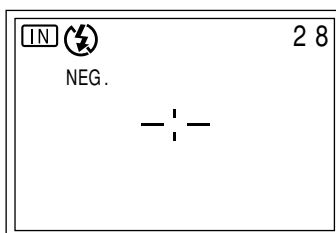
- Enable the keep settings mode to save the negative mode setting. See “Keep Settings” (p.121)

3 Press the or button to select [ON] and press the ENTER button.

SHOOTING MODE	◆ 2 / 4
DATE IMPRINT	OFF
SPLIT-SCREEN	→
SHARPNESS	OFF
MONOCHROME MODE	OFF
NEGATIVE	ON
SELECT:	CHANGE:
BACK: MENU	SEL.: ENTER

4 Press the MENU button.

5 Press the shutter release button.



If necessary, you can correct the image using M (manual white balance) or exposure compensation.

Important Note

- The surroundings may be reflected in the light from the light box and included in the shot. Cover the area around the negative with something black.

Note

- To cancel the negative mode, select [OFF].

Important Note

- If the camera is powered by the battery, the battery may run out during interval shooting. It is therefore recommended to use an AC adapter (optional) for interval shooting.
- Check the remaining number of pictures that can be stored on the SmartMedia memory card or internal memory before starting interval shooting.
- The auto power off function will be activated 24 hours after the start of interval shooting, even if the camera is powered by the AC adapter.

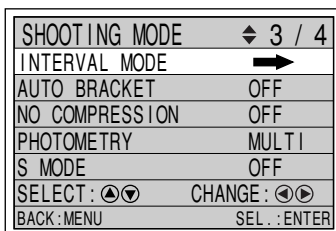
Interval Shooting

The camera can be set to take pictures automatically at preset intervals. The intervals can be set in steps of 30 seconds in the range of 30 seconds to 3 hours.

For example, if you set an interval of 1 hour, the shutter will be released every hour, taking pictures continuously until the internal memory or SmartMedia memory card runs out of available memory.

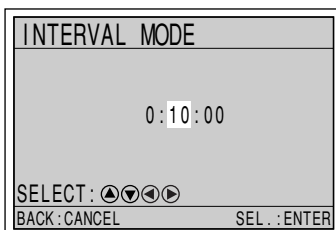
1 Set the mode dial to [] or [] and press the MENU button.

2 Press the or button to select [INTERVAL MODE] and press the ENTER button.



3 Press the or button until the digit you want to set starts to flash.

4 Press the or button to change the value of the flashing digit.



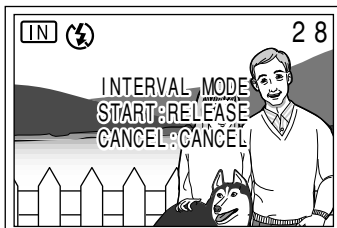
Press the button to increase the value, and press the button to decrease the value. Pressing the button continuously increases the speed at which the digit changes.

Repeat steps **3** and **4** above to set the desired interval in steps of 30 seconds.

5 Press the ENTER button again after setting the digit for the seconds.

The interval timer is now enabled.

6 Press the shutter release button.



The camera will take the first shot and then proceed to shoot at the preset interval.

The “INTERVAL MODE” message flashes on the LCD monitor while interval shooting is in progress. Shooting will continue until the internal memory or SmartMedia memory card runs out of available memory.

Note

- To cancel interval shooting, press the CANCEL button during shooting (while [INTERVAL MODE] is flashing).
- You can take normal shots by pressing the shutter release button while interval shooting is in progress. The preset interval will not be affected.
- The actual interval between shots may be longer than the preset time depending on the image quality and flash mode settings.

Auto Bracket Shooting

Auto bracket shooting allows you to take 3 frames in succession at exposure compensation values of -0.5 EV, 0 and $+0.5$ EV, based on the exposure compensation value set in “Setting the Exposure Compensation” (p.62).

To prevent camera shake, mount the camera on a tripod or set it on a flat surface when taking the pictures.

1 Set the mode dial to [] and press the MENU button.

Note

- The interval shooting mode is canceled when you press the CANCEL button, when you set the mode dial to another mode, or when you turn the camera off while the “INTERVAL MODE” message is lit on the LCD monitor.

Note

- To cancel the auto bracket mode, select [OFF].

2 Press the ▲ or ▼ button to select [AUTO BRACKET].

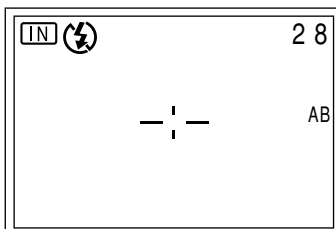
3 Press the ◀ or ▶ button to select [ON] and press the ENTER button.

SHOOTING MODE	◆ 3 / 4
INTERVAL MODE	➡
AUTO BRACKET	ON
NO COMPRESSION	OFF
PHOTOMETRY	MULTI
S MODE	OFF
SELECT : ▲▼	CHANGE : ◀▶
BACK : MENU	SEL. : ENTER

4 Press the MENU button.

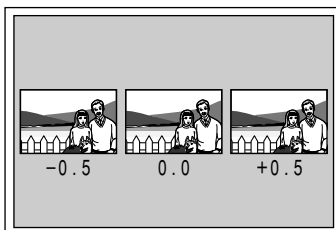
“AB” will be displayed on the LCD monitor.

5 Press the shutter release button.

**Note**

- You cannot use the auto bracket function when the image quality mode is set on non-compressed (NC) or when [IMAGE WITH SOUND] is set to [ON].
- The flash does not fire in auto bracket mode.

When you press the shutter release button, 3 frames are shot in succession at -0.5 EV, 0.0 and $+0.5$ EV, based on the preset exposure compensation value.



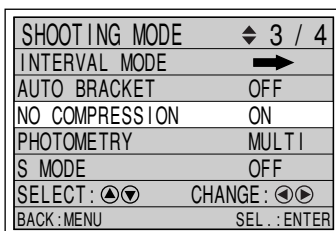
Switching to Non-compressed Mode

In normal image quality mode, the data is compressed at the time of recording. To record without compressing the data, set [NO COMPRESSION] to [ON] to switch the image quality mode.

1 Set the mode dial to [] and press the **MENU** button.

2 Press the  or  button to select [**NO COMPRESSION**].

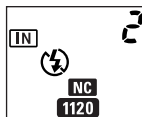
3 Press the  or  button to select [**ON**] and press the **ENTER** button.



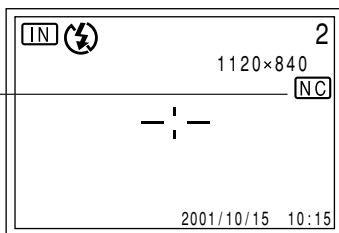
4 Press the **MENU** button.

NC will be displayed on the LCD panel and on the LCD monitor.

5 Press the shutter release button.



Non-compressed mode will be displayed when the **DISPLAY** button is pressed to show the detailed data. See “LCD Monitor Display (Shooting Mode)” (p.46).



● Data Guide

Size (No. of Pixels)	NC
2272 2272 × 1704	Approx. 7.7 MB/image
1120 1120 × 840	Approx. 1.8 MB/image
640 640 × 480	Approx. 614 KB/image

Note

- Enable the keep settings mode to save the non-compressed mode setting. See “Keep Settings” (p.121)

Note

- To cancel the non-compressed mode, select [OFF].






Changing the Exposure Metering System (Photometry)





Note

- Enable the keep settings mode to save the exposure metering system setting. See “Keep Settings” (p. 121).

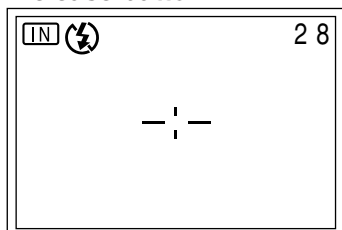
You can change the exposure metering system to record images.

Mode name	Description
MULTI	Multi-metering is performed by splitting the LCD monitor in several parts. This mode is also suitable for shooting the backlighted subject.
CTR WGHT	The middle of the LCD monitor is the focal point, and the light is measured uniformly over the whole screen.
SPOT	Exposure metering is performed on a part of the frame in the middle of the LCD monitor. This mode is used when the subject is exposed to strong light, such as a backlight.

- 1 Set the mode dial to [] and press the MENU button.
- 2 Press the  or  button to select [PHOTOMETRY].
- 3 Press the  or  button to select the desired exposure metering system (MULTI • CTR WGHT • SPOT) and press the ENTER button.








SHOOTING MODE	◆ 3 / 4
INTERVAL MODE	➔
AUTO BRACKET	OFF
NO. COMPRESSION	OFF
PHOTOMETRY	CTR WGHT
S MODE	OFF
SELECT :  	CHANGE :  
BACK : MENU	SEL. : ENTER





- 4 Press the MENU button.
- 5 Press the shutter release button.



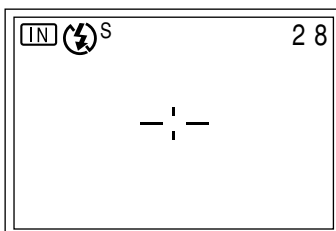
Increasing the Shutter Speed (S Mode)

S mode reduces the risk of camera shake when taking pictures in dark surroundings without using the slow shutter function.

- 1 Set the mode dial to one of the following: [ •  • ] and press the MENU button.
- 2 Press the  or  button to select [S MODE].
- 3 Press the  or  button to select [ON] and press the ENTER button.

SHOOTING MODE	◆ 3 / 4
INTERVAL MODE	⇒
AUTO BRACKET	OFF
NO COMPRESSION	OFF
PHOTOMETRY	MULTI
S MODE	ON
SELECT :  	CHANGE :  
BACK : MENU	SEL. : ENTER

- 4 Press the MENU button.
“S” will be displayed on the LCD monitor.
- 5 Press the shutter release button.



Slow Shutter

The slow shutter function is activated when you take a picture in dark surroundings. The shutter speed is reduced to ensure that sufficient light is captured. [SLOW SHUTTER] is displayed on the LCD monitor when the shutter release button is pressed lightly.



- Images taken in S mode may appear dark.



- Enable the keep settings mode to save the S mode setting. See “Keep Settings” (p.121)



- To cancel the S mode, select [OFF].

Setting the Time Exposure Mode

The time exposure mode is used when photographing bright subjects such as fireworks and cars in a dark place.



- Mount the camera on a tripod, etc., when using the Time Exposure mode.



- To cancel the time exposure mode, select [OFF].

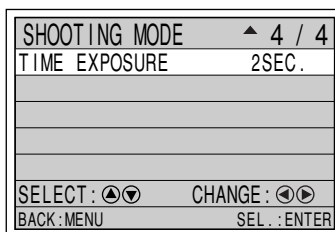


- The time exposure mode cannot be set in the auto bracket mode.
- Enable the keep settings mode to save the time exposure mode setting. See “Keep Settings” (p.121).

1 Set the mode dial to [] and press the MENU button.

2 Press the or button to select [TIME EXPOSURE].

3 Press the or button to select the exposure time (1 SEC., 2 SEC., 4 SEC., 8 SEC.) and press the ENTER button.



4 Press the MENU button.

Time exposure mode display will be displayed on the LCD monitor.

5 Press the shutter release button.

