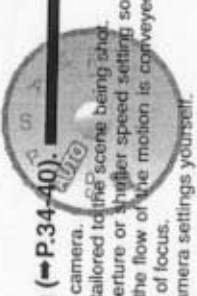


TAKING PICTURES -- SELECTING THE CAMERA SETTINGS

Consider the scene you are photographing and the sort of image you want to achieve when you specify the camera settings. A general guide to the procedure is given below.

- 1 Select the Mode Dial Setting (P.34-40):**

 Leaves all the settings to the camera.
 Selects photography modes tailored to the scene being shot.
 Allows you to change the aperture or shutter speed setting so that the action is frozen, so that the flow of the motion is conveyed, or so that the background is out of focus.
 Allows you to adjust all the camera settings yourself.
 Shoots a movie.

- 2 Specify the Required Photography Function Settings (P.41-48):**

 Use the flash for shots in dark locations or for backlit subjects, etc.
 Use these functions for close-up shots.
 Fixes the exposure settings.
 Using the AE exposure as a reference value of 0, this function brightens (+) or darkens (-) the shot.
 Selects either automatic focusing (AF) or manual focusing (MF).
 Allows you to take a series of continuous shots or to use auto bracketing (with exposure compensation).

- 3 Take the Photograph (check the exposure and focus → adjust the shot composition → press the shutter button down fully).**

- ★ **You can Use the Menus for More Detailed Settings (P.49-58).**
 The table below provides a number of sample settings. You can achieve any number of other effects by using the settings effectively. Try changing different settings to see what kind of shots you can take.

To achieve this result	Sample settings
To express the motion of the subject (the flow of time)	Set the Mode dial to "S" and select a slow shutter speed. (Use a tripod to avoid camera shake.)
To freeze the subject's movement	Set the Mode dial to "S" and select a fast shutter speed.
To make the subject stand out by having the background out of focus	Set the Mode dial to "A" and select a wide aperture setting.
To get a very large depth of focus	Set the Mode dial to "A" and select a narrow aperture setting.
To prevent the image having a red or blue cast due to the light source	Change the "White balance" setting in the photography menu.
To avoid missing snapshot opportunities	Take pictures in AUTO mode. (see "Basic Photography").
To prevent the subject from being overexposed or underexposed and to show the substance and features of the subject clearly.	Use exposure compensation. Select (+) if the background is pale and (-) if the background is dark.
To merge multiple images in an artistic composition	Use multiple exposures. For multiple exposures, exposure compensation is generally set to a negative value depending on the number of exposures. 2 exposures: -1.0 EV; 3 exposures: -1.5 EV; 4 exposures: -2.0 EV

■ List of Functions Available in Each Mode

Function	Macro	SP	Portrait	Landscape	Sports	Night Scene	Monochrome	P	S	A	M
Flash											
Auto Flash	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO
Red-Eye Reduction	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Forced Flash	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Slow Syncro	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Red-Eye + Slow	NO	NO	NO	NO	YES	NO	YES	YES	YES	YES	YES
Macro/AE Super Macro*	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
AE-L/AF-L Lock	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Exposure Compensation	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES
AF/MF Switching	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Frame (OFF)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Top 5-frame	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Auto Bracketing	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES
Final 5-frame	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Long-jointed leg to 4 frames	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO

* Flash cannot be used with Super Macro or Continuous Shooting.

■ List of Menu Options Available in Each Mode

Menu Options	Factory Default	Macro	SP	P	S	A	M
Self-timer	OFF	YES	YES	YES	YES	YES	YES
Sensitivity	200	NO	NO	YES	YES	YES	YES
White Balance	AUTO	NO	NO	YES	YES	YES	YES
(i) Photometry	MULTI	NO	NO	YES	YES	YES	YES
Auto Bracketing	1/3 EV	NO	NO	YES	YES	YES	YES
Sharpness	NORMAL	NO	NO	YES	YES	YES	YES
Multi-Exposure	OFF	NO	NO	YES	YES	YES	YES
Run-juggles adjustment	0	NO	NO	YES	YES	YES	YES
External Flash	OFF	NO	NO	YES	YES	YES	YES
Voice Memo	OFF	YES	YES	NO	NO	NO	NO

Other options you can try when aperture and shutter speed adjustments do not give the desired exposure compensation.

When the image is too bright
 Lower the sensitivity setting.
 Use an ND filter (Commercially available).

When the image is too dark
 Raise the sensitivity setting.
 Use flash or the brightness adjustment function.
 Use a tripod (Commercially available).

AUTO AUTO

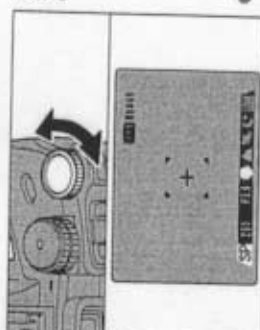


Set the Mode dial to "AUTO".
This is the easiest mode to use and can be used for most types of shot.

SP SCENE POSITION



Set the Mode dial to "SP".
This mode provides options tailored to different types of scene.



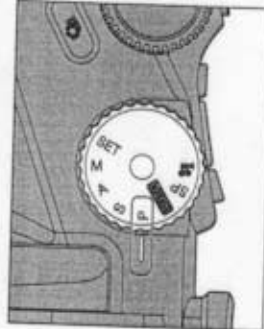
In "SP" mode, you can choose from 5 types of scene ("P" • "L" • "S" • "N" and "M"). Turn the command dial to select the scene.

In the "P" and "SP" modes, the sensitivity is set to ISO 200.

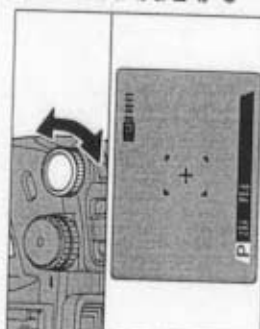
	Explanation	Available flash modes
Portrait	This is the best mode for shooting portraits. Skin tones are shown beautifully and the overall tone is soft.	A $\cdot$ • $\bullet$ • S • $\bullet$
Landscape	This is the best mode for shooting scenery in daylight and provides crisp, clear shots of scenery such as buildings and mountains.	Flash not available
Sports	This is the best mode for shooting sporting events. This mode gives priority to faster shutter speeds.	A $\cdot$ • S
Night Scene	This is the best mode for evening and night scenes. This mode allows you to take shots where priority is given to slow shutter speeds of up to 3 seconds.	S • $\bullet$
Monochrome	Use this mode to shoot pictures in black and white, regardless of the scene you are shooting.	A $\cdot$ • $\bullet$ • S • $\bullet$

Except for "M" Monochrome, Macro mode cannot be used with any of the SP modes.

PHOTOGRAPHY MODE P PROGRAMMED AUTO



Set the Mode dial to "P".
This is an automatic mode that allows you to specify any of the settings other than the shutter speed and aperture. This allows you to take shots relatively simply in the same way as the Shutter-priority Auto and Aperture-priority Auto modes (program shift).



Program Shift

By turning the command dial, this mode allows you to select different shutter speed and aperture setting combinations without changing the exposure setting. The shutter speed and aperture setting are displayed in yellow when the camera is in Program Shift mode. Program Shift can be cancelled by selecting another mode or switching the camera off.

Program Shift is automatically cancelled in the following situations:

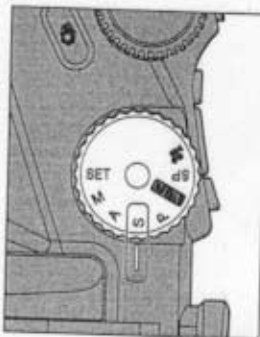
- When the photography mode is changed
- When the flash is popped up
- When "EXTERNAL FLASH" in the Main menu is set to "ON"
- When you switch to playback mode
- When the camera is switched off.

◆ The Shutter Speed and Aperture Setting Display ◆

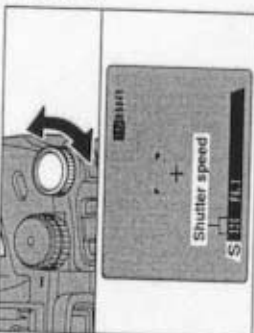
When the brightness of the subject is outside the camera's brightness metering range, "----" is displayed as the shutter speed and aperture setting on the screen.



S SHUTTER-PRIORITY AUTO



Set the Mode dial to "S". This is an automatic mode that allows you to set the shutter speed. You can use this mode for shots where you want to freeze a moving subject (fast shutter speed) or convey the impression of movement (slow shutter speed).



Setting the Shutter Speed

You can select the shutter speed by turning the command dial.

- Shutter speed settings
3 sec. to 1/1000 sec. in 1/3 EV steps

◆ The Shutter Speed and Aperture Setting Display ◆

In scenes that are extremely overexposed, the aperture setting (F11) is displayed in red. When this occurs, select a faster shutter speed (up to 1/1000 sec.).

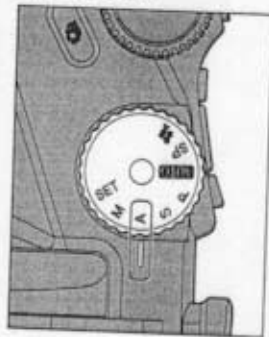


In scenes that are extremely underexposed, the aperture setting (F2.8) is displayed in red. When this occurs, select a slower shutter speed (down to 3 sec.).

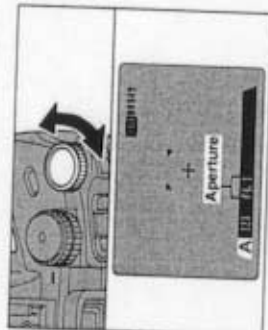


When the brightness of the subject is outside the camera's brightness metering range, "----" is displayed as the shutter speed setting. When this occurs, press the shutter button down halfway to measure the light level again and display a value.

A APERTURE-PRIORITY AUTO



Set the Mode dial to "A". This is an automatic mode that allows you to set the aperture. You can use this mode for shots where you want to have the background out of focus (large aperture) or have both near and far objects in focus at the same time (small aperture).



Setting the Aperture

You can select the aperture by turning the command dial.

- Aperture settings
F2.8 to F11 in 1/3 EV steps

◆ The Shutter Speed and Aperture Setting Display ◆

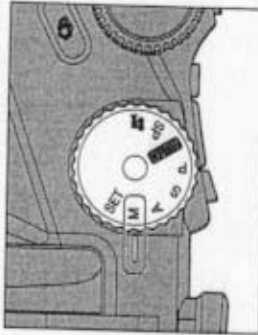
In scenes that are extremely overexposed, the shutter speed (1/1000 sec.) is displayed in red. When this occurs, select a larger aperture (up to F11.).



In scenes that are extremely underexposed, the shutter speed (3 sec.) is displayed in red. When this occurs, select a smaller aperture (down to F2.8.).



When the brightness of the subject is outside the camera's brightness metering range, "----" is displayed as the aperture setting. When this occurs, press the shutter button down halfway to measure the light level again and display a value.



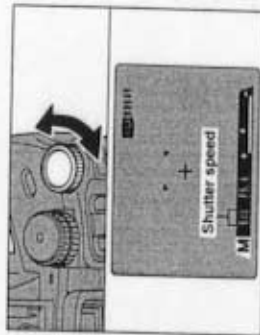
Set the Mode dial to "M".
Manual mode allows you to set any shutter speed and aperture settings.

- **Shutter speed settings**
15 sec. to 1/10000 sec. in 1/3 EV steps
- **Aperture settings**
F2.8 to F11 in 1/3 EV steps

See P.88 for information on EVs.

Setting the shutter speed

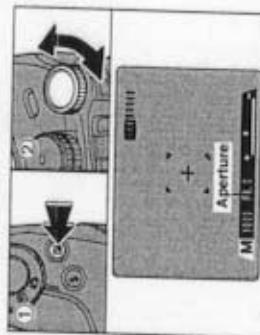
You can select the shutter speed by turning the command dial.



- In shots with long exposures, noise (dots) may appear on the image.
- If the shutter speed is set to a speed faster than 1/2000 sec., an error may occur (P.89).
- If the shutter speed is set to a speed faster than 1/1000 sec., the image may appear dark even if the flash is used.

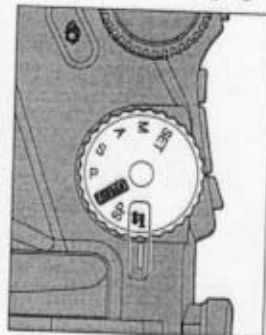
Setting the aperture

Select the aperture by holding down the "2" exposure compensation button ① and turning the command dial ②.



The exposure indicator

Use the exposure indicator on the screen as a guide when setting the exposure.
When the brightness of the subject is outside the camera's brightness metering range, the indicator moves to the (+) end to show that the image will be overexposed (the (+) turns yellow) or to the (-) end to show that the image will be underexposed (the (-) turns yellow).



Set the Mode dial to "MOVIE".
MOVIE mode allows you to shoot movies with sound.

- **Movie formats:** Motion JPEG (P.89)
VGA (640 x 480 pixels)
QVGA (320 x 240 pixels)
selectable
30 frames per second

With monaural sound

See P.87 for information on how to change the number of recorded pixels (image size).

Because sound is recorded concurrently with the images, ensure that you do not cover the microphone with a finger, etc. (P.89).

The available shooting time for a video may decrease depending on the amount of free space on the media.

Because a movie (video) is recorded onto the media as it is shot, it cannot be recorded correctly if the camera suddenly loses power (if you open the battery cover or slot cover or disconnect the AC power adapter).

It may not be possible to play back your movies on other cameras.

After shooting movie has been started by releasing the shutter button, "ZOOM" button cannot be used and "AF" function is inactivated. Please set the picture angle and focusing before shooting movie.

Standard Available Shooting Times for Different Media

Media capacity	VGA	QVGA
MG-45 (4 MB)	Approx. 3 sec.	Approx. 6 sec.
MG-85 (8 MB)	Approx. 6 sec.	Approx. 13 sec.
MG-165 (16 MB)	Approx. 13 sec.	Approx. 27 sec.
MG-325 (32 MB)	Approx. 27 sec.	Approx. 55 sec.
MG-645 (64 MB)	Approx. 55 sec.	Approx. 110 sec.
MG-125 (125 MB)	Approx. 110 sec.	Approx. 222 sec.
Moviefile 240 MB	Approx. 307 sec.	Approx. 609 sec.
Moviefile 1 GB	Approx. 925 sec.	Approx. 1853 sec.

* Available shooting times are for media formatted in the camera.

Advanced Features Photography

The available shooting time and "STANDBY" are displayed on the screen.

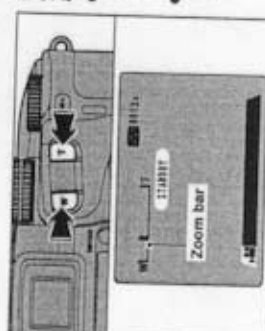


Press the zoom button to zoom in or out before you start shooting. You must zoom beforehand as you cannot zoom during shooting.

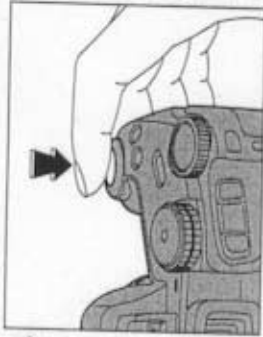
• **Focal length of the optical zoom (35 mm camera equivalent)**
Approx. 35 mm-210 mm

Max. zoom scale: 6x

• **Shooting distance**
Wide-angle: Approx. 50 cm (1.6 ft.) to infinity
Telephoto: Approx. 90 cm (3.0 ft.) to infinity



Press the shutter button down fully to start shooting.



- The brightness and color of the screen shown during movie shooting may differ from those shown before shooting begins.
- You do not need to hold down the shutter button.

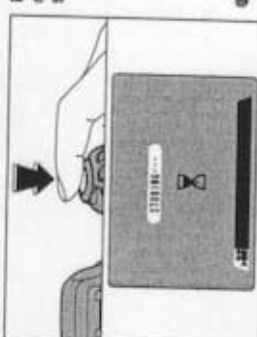
When you press the shutter button down fully, the focus and white balance are fixed, but the exposure is automatically adjusted to suit the scene being shot.

A counter displayed in the top-right corner of the screen during shooting shows the remaining time.



- If the brightness of the subject changes while you are shooting a movie, the sound of the aperture operating may be recorded in the movie.
- When the remaining time runs out, shooting automatically ends and the movie is recorded onto the media.

Pressing the shutter button during shooting ends movie shooting and the movie is recorded onto the media.



- If shooting is stopped immediately after it begins, only 1 second of movie is recorded onto the media.

When shooting long movies, it is recommended that you use a fully charged Ni-MH (nickel-metal hydride) batteries.

FLASH PHOTOGRAPHY

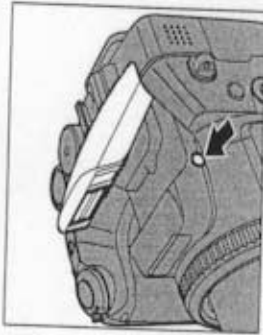
Press the Flash pop-up button to pop-up the flash. (EXCLUDING ▲) P S A

Press the Flash pop-up button to pop-up the flash.

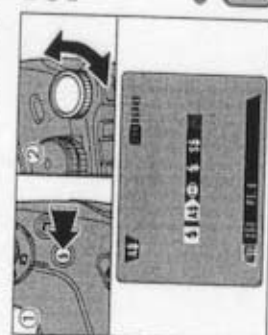
- Shooting distances for flash photography (Auto)

Wide-angle: Approx. 0.3 m to 5.4 m (1.0 ft. to 17.7 ft.)
Telephoto-angle: Approx. 0.9 m to 5.0 m (3.0 ft. to 16.4 ft.)

- If the shutter speed is set to a speed faster than 1/1000 sec., the image may appear dark even if the flash is used.
- If the flash popped up and was used to take a picture, the screen may go dark briefly while the flash is charging. At the same time, the indicator lamp flashes orange.



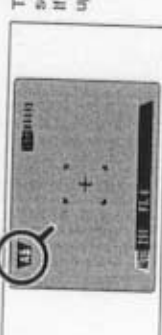
Hold down the "1/3" button ① and turn the command dial ② to select the flash mode setting.



- See P.56 for information on using an external flash.

The available flash modes are limited depending on the photography mode selected (P.53).

The "1/3" • ① • 1/3 • ② icons appear on the screen when the flash is used.
If the "②" icon appears when the flash is popped up, the flash cannot be used to take pictures.



Suppressed Flash



Pressing the flash down switches the camera to Suppressed Flash mode.
Use this mode for photography using indoor lighting, for shots taken through glass, and for photography in venues such as theaters or at indoor sporting events where the distance is too great for the flash to be effective. When you use Suppressed Flash, the Auto White Balance function (P.89) operates so that natural colors are captured along with the ambience of the available light.

- If you are shooting in Suppressed Flash mode in dark conditions, use a tripod to prevent camera shake.
- See P.24, 85 for information on the camera shake warning.





13 Auto Flash

Use this mode for ordinary shots. The flash fires automatically according to the photography conditions.



14 Red-Eye Reduction

Use this mode to ensure that the subject's eyes appear natural when photographing people in low-light conditions.

The flash fires a pre-flash just before the picture is taken and then fires again to take the actual picture.

• In the "M" and "SP" modes, the flash fires automatically according to the photography conditions.

◆ Red-Eye Effect ◆

When you use the flash to photograph people in low-light conditions, their eyes sometimes appear red in the picture. This is caused by the light of the flash reflecting off the inside of the eye. Use Red-Eye Reduction flash to effectively minimize the likelihood of the red-eye effect. Take the following measures to make Red-Eye Reduction more effective:

- Get the subjects to look at the camera.
- Get as close as possible to the subjects.



15 Forced Flash

Use this flash mode to photograph backlit scenes, such as a subject against a window or in the shade of a tree, or to obtain the correct colors when you are shooting under lighting such as fluorescent tubes. In this mode, the flash fires in bright as well as dark conditions.



16 Slow Synchro

This is a flash mode that uses a slow shutter speed. This allows you to take pictures of people at night that clearly show both your subjects and the nighttime backdrop.

17 Red-Eye Reduction + Slow Synchro

Use this mode for slow synchro shots with red-eye reduction.

- The image may be overexposed when you shoot bright scenes.
- Because a slow shutter speed is used, a tripod should be used to prevent camera shake.

To take a picture of a main subject at night with the background brightly lit, please use the "SP" mode "L" (Night Scene) settings (p. 34).

CONTINUOUS SHOOTING



Hold down ② the "C" button ① and turn the command dial to select the desired continuous shooting mode. Releasing the "C" button confirms your selection.

• When a Microdrive is used, the intervals between shots are longer due to the characteristics of Microdrives.



When you set the continuous shooting mode (except for "OFF"), the selected mode appears on the screen.

- Top 5-frame continuous shooting
- Auto bracketing
- Final 5-frame continuous shooting
- Long-period continuous shooting (up to 40 frames)

◆ Notes on Using the Continuous Shooting Modes ◆

- Shooting continues for as long as you hold down the shutter button. In Auto Bracketing mode however, just press the shutter button once to shoot 3 frames.
- If there is insufficient space on the media, as many frames are shot as can be recorded on the available space. For auto bracketing however, if there is insufficient space on the media to record 3 frames, no shots are taken.
- The focus is determined in the first frame and cannot be changed in mid-sequence.
- The exposure is determined in the first frame, but in Long-period continuous shooting (up to 40 frames) shooting the exposure is automatically adjusted for the scene being shot.
- The speed of continuous shooting varies depending on the shutter speed.
- The speed of continuous shooting does not change with the resolution and quality settings.
- The flash cannot be used as the flash mode is set to Suppressed Flash.
- Always check the photographed images after shooting. To select and record your images, preview them in "PREVIEW" in the SET-UP menu (p. 70).

CONTINUOUS SHOOTING

Top 5-frame Continuous Shooting



In this mode, you can shoot up to 5 frames at intervals as short as 0.2 seconds. When you take the shots, the photographed images are displayed (in sequence from the left) and automatically recorded.

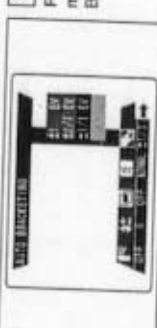
Auto Bracketing



This mode automatically shoots 3 continuous frames that bracket the selected setting so that one image is correctly exposed (A), one is overexposed (B) and one is underexposed (C). The settings (exposure range) can be changed in the photography menu.

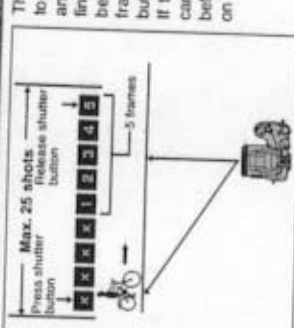
- Auto Bracketing settings (3)
±1/3 EV, ±2/3 EV, ±1 EV

- If the underexposed or overexposed frame is outside the camera's control range, the shot is not taken with the specified setting increments.
- Auto Bracketing cannot be used in "SP" or "SP" mode.



Changing the setting (exposure range)
Press the "MENU/OK" button to display the menu and change the setting in the "AUTO BRACKETING" menu option.

Final 5-frame Continuous Shooting



This mode allows you to release the shutter up to 25 times (at intervals as short as 0.2 seconds) and record the last 5 frames. If you take your finger off the shutter button before 25 shots have been taken, the camera records the final 5 frames shot before you released the shutter button.
If there is insufficient space on the media, the camera records as many of the shots taken just before the shutter button was released as will fit on the media.

Long-period Continuous Shooting with 1280 x 960-pixel mode

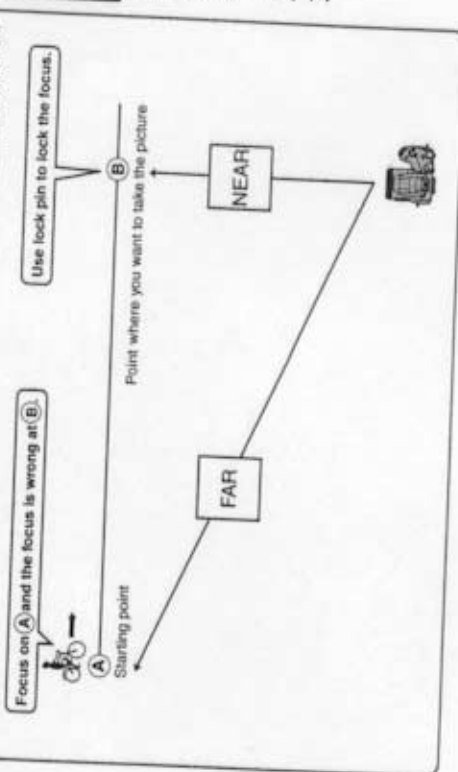


This mode allows you to take up to 40 continuous shots (at intervals as short as 0.6 seconds). In Long-period Continuous Shooting, the image resolution is automatically set to "1280" (1280 x 960 pixels). You can select NORMAL or FINE as the quality setting (→P.67).

- If you cancel Long-period Continuous Shooting with 1280 x 960-pixel mode, the resolution setting remains at "1280".
- Long-period Continuous Shooting with 1280 x 960-pixel mode cannot be used in the "SP" + "P" + "A" or "M" modes.
- Due to the properties of Microdrives, the intervals between shots taken using a Microdrive are longer.

Focusing on a Moving Subject

If you press the shutter button down halfway to focus on the subject at the starting point (A), the subject may no longer be in focus when it reaches point (B) where you want to take the shot. In such situations, use AF lock or manual focusing to focus on point (B) beforehand and then lock the focus so that it does not shift (lock pin). The lock pin feature is also useful for photographing fast-moving subjects that are difficult to focus on.



Use lock pin to lock the focus.

Point where you want to take the picture

Starting point

Focus on (A) and the focus is wrong at (B)

EXPOSURE COMPENSATION

Use this function for shots where you cannot obtain the optimum brightness (exposure), such as shots with extremely high contrast between the subject and the background.

- Exposure compensation cannot be used in the "M" or "SP" or "M" modes.
- Exposure compensation is disabled in the following situations:
 - When "S" (Forced Flash) or "P" (Flash-Eye Reduction) mode is used and the scene photographed is dark.

Subjects for Which Exposure Adjustment is Particularly Effective

- Exposure indicator moved towards "+" (plus)
 - Copying of printed text (black characters on white paper) +4 steps (+1.3 EV)
 - Backlit portraits +2 to +4 steps (+0.7 EV to +1.3 EV)
 - Very bright scenes (such as snowfields) and highly reflective subjects +3 steps (+1 EV)
 - Shots made up predominantly of sky. +3 steps (+1 EV)
- Exposure indicator moved towards "-" (minus)
 - Spotlit subjects, particularly against dark backgrounds -2 steps (-0.7 EV)
 - Copying of printed text (white characters on black paper) -2 steps (-0.7 EV)
 - Scenes with low reflectivity, such as shots of pine trees or dark foliage -2 steps (-0.7 EV)

See P.88 for more information on EVs.



To select the Exposure Compensation setting, hold down the "Q" button ① and turn the Command dial ②. The "Q" symbol also turns yellow while exposure compensation is being set and then turns blue after setting is completed.

- Compensation range: -2 EV to +2 EV, in 1/3 EV steps

This setting is retained when the mode is switched or the camera is switched off. (The "Q" icon is displayed). Set the exposure compensation to "0" unless compensation is required.

AE-L USING AE LOCK/ MACRO (CLOSE-UP) PHOTOGRAPHY

AE-L USING AE LOCK

Use this function when you want to take pictures with the exposure fixed for a particular subject. Frame the shot so that the subject occupies most of the center of the screen and then press the "AE-L" button.
The "Q" icon appears on the screen and the exposure is locked while you hold down the "AE-L" button.

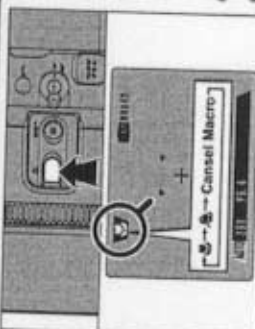
- This function cannot be used in "M" photography mode or for MEGA continuous shooting.

With the "AE-L" button held down, press the shutter button down halfway to focus the shot and then compose the shot again.

- Once you press the shutter button down halfway, the exposure remains locked even if you release the "AE-L" button.
- When the AE lock is applied, pressing the shutter button down halfway only sets the focus.

Advanced Features Photography

MACRO (CLOSE-UP) PHOTOGRAPHY

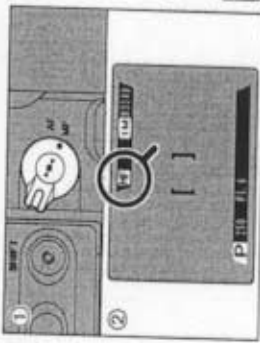


Selecting Macro mode allows you to take close-up shots. The Macro mode setting changes each time you press the "Q" button.

- Macro mode is automatically cancelled in the following situations:
 - When the photography mode is changed to "SP" (excluding "S" or "SET")
 - When you switch to playback mode
 - If the camera is switched off
 - If the flash is too bright, use flash brightness adjustment (-FP.56)
 - A tripod should be used to avoid camera shake.

	Shooting distance	Shooting distance with Flash	Optical zoom focal length (35 mm camera equivalent)
Macro	Approx. 10 cm-80 cm (3.9 in.-26 in.)	Approx. 30 cm-80 cm (11.0 in.-26 in.)	Approx. 35 mm-80 mm Max. zoom scale 2.3x
Super Macro	Approx. 1 cm-20 cm (0.4 in.-7.9 in.)	Flash cannot be used.	Optical zooming cannot be used.

SETTING THE MANUAL FOCUS



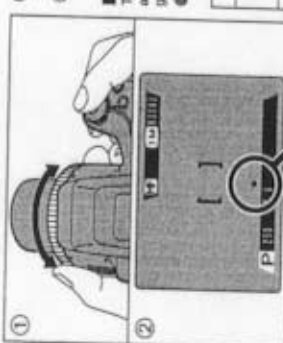
Use manual focus for subjects that are not suitable for Auto Focus or where you want the focus fixed for a shot.

- Set the focus mode selector switch to "MF".
- The "MF" icon appears on the screen.

Manual focus cannot be used in the "AF" photography mode.

Using Manual Focus Effectively

Because the shot may go out of focus if the camera is moved, a tripod should be used.



- Turn the focusing ring to focus on the subject in the AF frame.
- A focusing indicator mark appears on the screen. Adjust the focus until "MF" appears.

Focusing Indicator Marks

The focusing mark appears when you move the focus a set amount (close to the focused position). Use the mark as a guide to focusing.

- If the "MF" (focused) mark appears when the shot is not in focus, try using the One-touch AF function.

●	The shot is focused.
◀	The focus is set too close. Turn the focusing ring clockwise.
▶	The focus is set too distant. Turn the focusing ring counter-clockwise.



One-touch AF Function

Use this function to focus your shot quickly. When you press the "AF-ON" button, the camera uses the autofocus function to focus on the subject.

The focus indicator is not displayed in one-touch AF mode.



Focus Check Function

Use this function when it is difficult to see whether the image is focused. When you press the "AF-ON" (Focus Check) button, the central portion of the image is shown enlarged and you can focus using the enlarged image. Take the picture or press the "AF-ON" button again to return to normal display.

The focus checking function does not operate in the following situations:

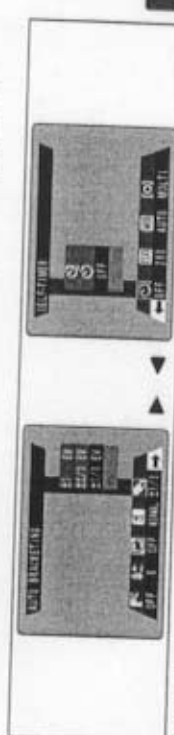
- When "AF" is selected as the QUALITY setting.
- When "AF" is selected as the QUALITY setting and the digital zoom (telephoto) is used.
- When AF AREA is specified.

PHOTOGRAPHY MENU

PHOTOGRAPHY MENU OPERATION

- Press the "MENU/OK" button to display the menu.
- Use "←" to select a menu option and then press "→" to change the setting.
- Press the "MENU/OK" button to confirm the setting.

You cannot specify menu settings in "AF" mode.

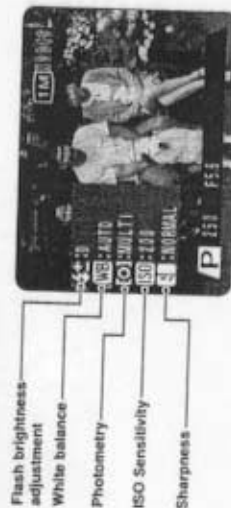
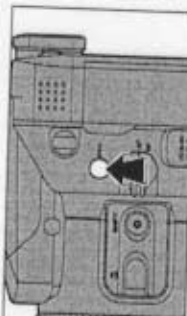


Pressing "←" moves to the next or previous menu page as indicated by "←" at the end of the page.

Photography Information

If you cannot recall the current photography settings, you can check them by holding down the "INFO" button.

- The photography information is not displayed in "AF" or "AF" mode.
- You can only use the function to check the settings, not to change them.



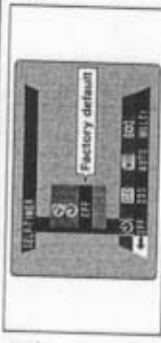
Flash brightness adjustment
White balance
Photometry
ISO Sensitivity
Sharpness

1 SELF-TIMER PHOTOGRAPHY

When you select the self-timer function, the self-timer icon appears on the screen.

- Q: The shot is taken after 10 seconds.
- Q: The shot is taken after 2 seconds.

- The self-timer function is automatically cancelled in the following situations:
 - When a self-timer shot has been taken
 - When the Mode dial is moved to another setting
 - When the camera is switched to Playback mode
 - When the camera is switched off



2 Using the 2-second self-timer

This is useful when you have the camera on a tripod and you want to avoid camera shake.

- Position the AF frame over the subject.
- Press the shutter button down halfway to focus the shot.
- Without releasing the shutter button, press the button all the way down (fully pressed) to start the self-timer.



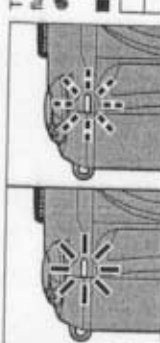
- You can also use the AF/AE lock (P.25).
- Take care not to stand in front of the lens when you press the shutter button as this can prevent the correct focus or brightness (exposure) being obtained.

The self-timer lamp lights and then starts flashing until the picture is taken.

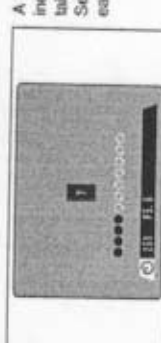
- To stop the self-timer, once it has started running, press the "BACK" button.

Self-timer Lamp Display

Q	Flashing for 2 seconds
Q	Lt for 5 seconds → Flashing for 5 seconds



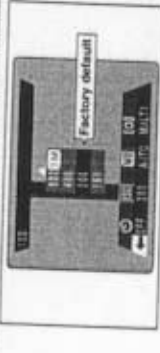
A countdown is displayed on the screen indicating the time remaining until the picture is taken. Self-timer mode is automatically cancelled after each shot.



30 SETTING THE ISO SENSITIVITY

Use this setting if you want to take bright shots in low light conditions (such as indoors) without using the flash, or if you want to use a faster shutter speed (to avoid camera shake, etc.).

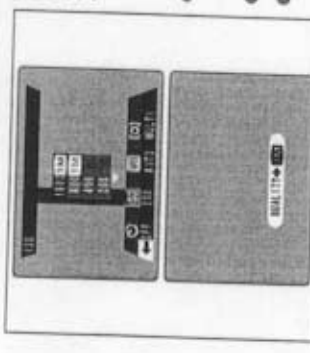
- Settings: 160, 200, 400, 800, 1600



Setting the Mode dial to "M" or "S" or "SET" cancels high-sensitivity photography and resets the camera to ISO 200. However, the resolution is still set to "HD" and "NORMAL".

High-sensitivity Photography (ISO 800/1600)

If you select a high sensitivity setting (ISO 800 or 1600), the resolution is automatically set to "HD" and "NORMAL".

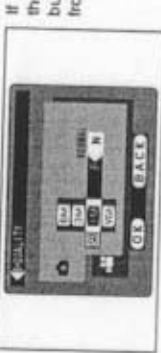


- High-sensitivity photography is automatically cancelled in the following situations:
 - When playback mode is selected
 - When the camera is switched off
 - The digital zoom cannot be used for high-sensitivity shots.
 - While higher sensitivity settings are more suited to dark situations, the amount of noise appearing on the image increases. Use the appropriate setting for your shot.

When you use a high sensitivity setting, "ISO" appears on the screen.



If you hold down the "SHIFT" button and press the "MENU/OK" button, the menu is displayed but the QUALITY setting cannot be changed from "HD" and "NORMAL".



WB SETTING THE WHITE BALANCE

Change the white balance setting when you want to take a picture with the white balance fixed for the surroundings and lighting when the picture is taken.

In Auto mode, the correct white balance may not be obtained for subjects such as close-ups of people's faces and shots taken under a special light source. In such situations, select the correct white balance for the light source. See P.89 for more information on the white balance.



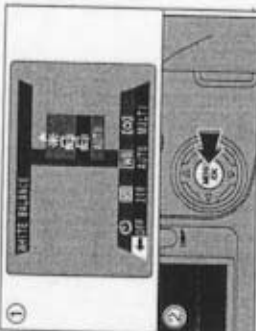
- ☑ : Shooting under "Daylight" fluorescent lamps
- ☑ : Shooting under "Warm White" fluorescent lamps
- ☑ : Shooting under "Cool White" fluorescent lamps
- ☑ : Shooting in incandescent light

* The white balance setting (unless it is a Custom White Balance setting) is ignored when you use the flash. To achieve the desired effect in your shot, press the flash back down to suppress flash operation (P.41).

Custom White Balance

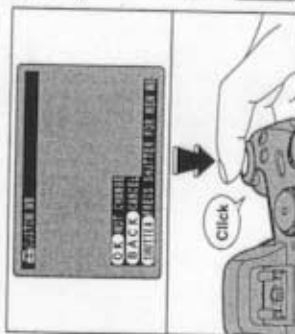
Use this function when you want to set the white balance for the ambient natural or artificial lighting in your shots. You can also use this function to achieve special effects.

- ① Select custom white balance "B" or "G".
- ② Press the "MENU/OK" button.



Example
You can deliberately change the white balance for a photographed image by using colored paper instead of white paper.

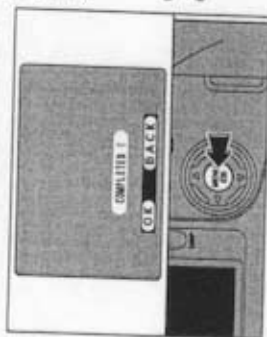
Under the light source you want to set the white balance for, hold a piece of white paper so that it fills the screen and press the shutter button to set the white balance.



The white balance setting does not affect the image shown on the screen.

To use the white balance set previously, press the "MENU/OK" button without pressing the shutter button.

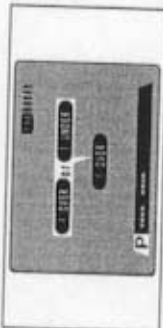
3



When the correct exposure is measured, "COMPLETE" is displayed. Press the "MENU/OK" button to confirm the setting.

- The specified custom white balance is retained until it is reset.
- After you take the picture, you should check the "Color (White Balance)" setting for the image.
- Set "IMAGE DISPLAY" in the SET-UP menu to "PREVIEW" (P.70).
- Set Power switch to "E" (P.18).

If "COVER" or "CLINGER" is displayed, the white balance was not measured at the correct exposure. Reset the white balance.



3

Advanced Features Photography

[O] PHOTOMETRY



Use this mode for scenes where the brightness of the subject and background differ markedly so that the Multi setting is unlikely to achieve the desired result.

AVERAGE: Light metering where an average value for the entire image is used.

SPOT : Light metering where the exposure is optimized for the center of the image.

MULTI : Light metering where the camera automatically assesses the scene and selects the optimum exposure.

● In the "SP" and "MULTI" modes, light metering is fixed at the "MULTI" setting and cannot be changed.

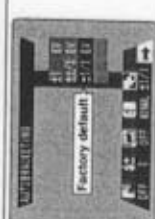
● The Light Metering Modes are Effective for the Following Subjects ●

● AVERAGE
The advantage of this mode is that the exposure tends not to change for different compositions and subjects. This mode is particularly effective for shots of people wearing black or white clothing and shots of scenery.

● SPOT
This mode is useful for subjects with strongly contrasting light and dark areas where you want to achieve the correct exposure for a particular feature.

● MULTI
In this mode, the camera uses automatic scene recognition to analyze the subject and provide optimum exposure in a wide range of shooting conditions. This mode should be used for everyday photography.

[P] AUTO BRACKETING



Use this feature to photograph the same image with different exposure settings. Auto bracketing automatically shoots 3 consecutive frames, one of which is correctly exposed while the remaining two are underexposed and overexposed respectively by a set amount.

● The three available settings are $\pm 1/3$ EV, $\pm 2/3$ EV and ± 1 EV. See P.89 for more information on EVs.

● If the underexposed or overexposed frame is outside the camera's control range, the shot is not taken with the specified setting increments.

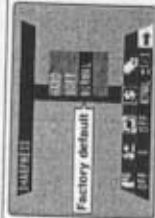
● Flash photography cannot be used.

● This feature always takes 3 shots. However, if there is insufficient space on the Media for 3 shots, no picture will be taken.

After you select Auto Bracketing, hold down the "Q" button ① and turn the command dial ② to select "A".



[S] SHARPNESS



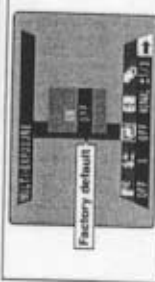
Use this setting to soften or emphasize outlines or to adjust the image quality.

HARD : Emphasizes the outlines.
Best for shots of subjects such as buildings or text where you want sharp images.

SOFT : Softens the outlines.
Best for shots of subjects such as people, where a softer image is desirable.

NORMAL: Best for ordinary photography.
Provides edge sharpness that is ideal for ordinary shots.

[E] MULTI-EXPOSURE



Multiple-exposure provides a way of overlaying photographed images on top of each other to give a final image that cannot be obtained through normal photography.

- If the photographed image is overexposed, use negative compensation in the Brightness (exposure compensation) setting to correct the exposure (P.46).
- Only the optical zoom can be used for multi-exposure shots. The digital zoom (P.26) does not function.
- This mode is automatically cancelled when you switch the camera off.

- Continuous shooting and Auto bracketing are disabled when MULTI-EXPOSURE is selected.
- You cannot change the photography menu settings or the FILE SIZE/QUALITY setting during shooting.
- There is no limit on the number of multiple exposures.

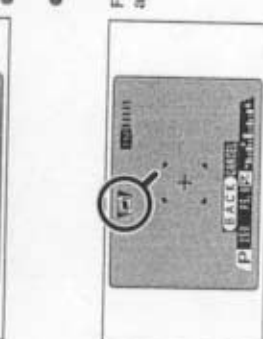
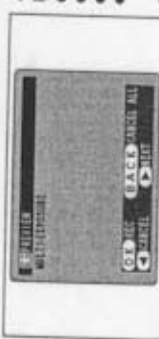
Advanced Features Photography

A preview screen appears when you take a picture.

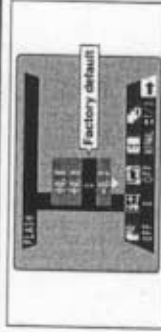
- To overlay more images: Press "A".
- To record the image: Press the "MENU/OK" button.
- To return to the previous image: Press "A".
- To stop without recording any images: Press the "BACK" button.

- A preview image is always shown, regardless of the IMAGE DISPLAY setting. However, note that the Preview Zoom function cannot be used (P.70).
- Changing the photography mode exits multi-exposure mode without recording the images.

From the 2nd shot onwards, the yellow "A" icon appears on the screen.



FLASH BRIGHTNESS ADJUSTMENT



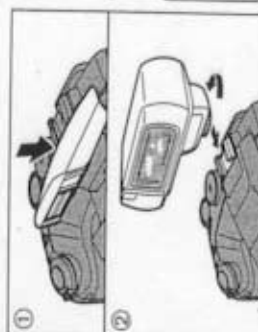
Brightness adjustment allows you to change just the amount of light emitted by the flash to suit the photography conditions or to achieve a desired effect.

- **Adjustment range:** ± 2 steps, -0.6 EV to $+0.6$ EV in approx. 0.3 EV increments (total: 5 levels selectable). See P.89 for information on EVs.
- Depending on the type of subject and the shooting distance, brightness adjustment may have no effect.
- The image may appear dark when the shutter speed is set to speeds higher than 1/1000 sec.



Select "ON" in this setting when you are using an external flash unit. Synchronized shutter speeds up to 1/1000 sec. can be used.

- The image may appear dark when the shutter speed is set to speeds higher than 1/1000 sec.
- Set the white balance ($\Rightarrow$ P.52) to AUTO or Custom White Balance ($\Rightarrow$ P.57).



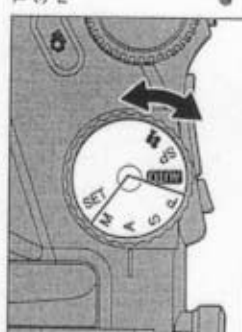
1 Close the built-in flash.
2 Mount the external flash on the camera's hot shoe and tighten the locking screw.

- Built-in and external flash units cannot be used at the same time.

Compatible Flash Units

Flash units that can be used with this camera must meet the following 3 conditions:

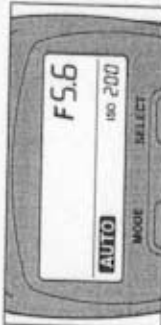
- The aperture can be set.
- External flash synchronization can be used.
- The sensitivity can be set.



The mode can be set to "P", "S", "A", "M" ($\Rightarrow$ P.35, 36, 37) or "M" ($\Rightarrow$ P.38), but the use of "A" or "M" is recommended.

- Flash photography cannot be used when continuous shooting ($\Rightarrow$ P.43) or auto bracketing ($\Rightarrow$ P.44) is selected.

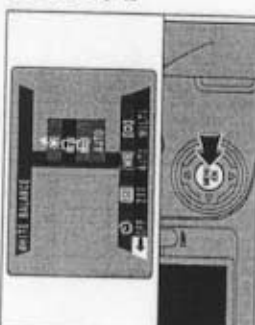
4



External Flash Settings

For external flash, refer to the user's manual for the flash and specify the settings as described below.

- Select External Flash mode (TTL mode cannot be used).
- Match the settings to the camera aperture setting. In "P", "S" mode, match the settings to the aperture measured by the camera.
- Match the sensitivity setting ($\Rightarrow$ P.51) to the setting on the camera.



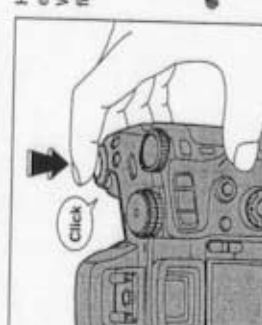
When the White Balance is Incorrect

Adjust the white balance to match the external flash. In "P", "S" mode, match the settings to the aperture measured by the camera. Press the "MENU/OK" button.

3

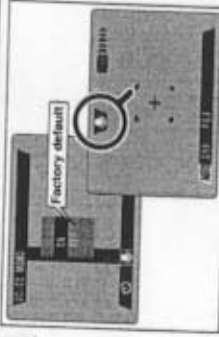
Advanced Features Photography

Hold a sheet of white paper so that it fills the entire screen. When you press the shutter button, the flash fires and the white balance is set.



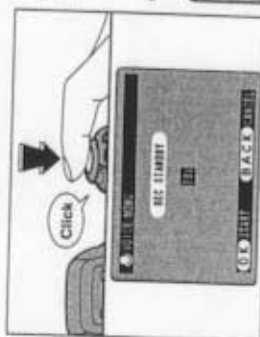
- After you take the picture, you should check the "Color (White Balance)" setting for the image.
- In SET-UP, set IMAGE DISPLAY ($\Rightarrow$ P.70) to "ON".
- Set Power switch to "E" ($\Rightarrow$ P.18).

VOICE MEMO



If you set voice memo to ON, "S" appears on the screen. This function allows you to add a voice memo up to 30 seconds long to an image immediately after you take the picture. Note that this function cannot be used with continuous shooting.

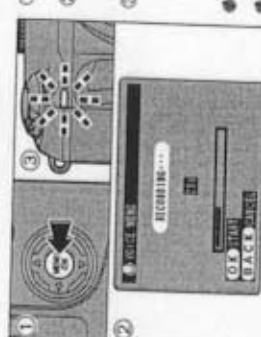
- **Audio recording format:**
WAVE (= P.89) PCM recording format, monaural sound.
- **Audio file size:**
Approx. 240 KB (30 seconds recording)



Take the picture as usual.
After you take the picture, "REC START" appears on the screen.

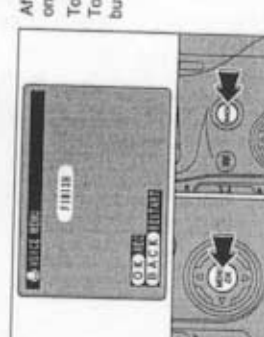
If you do not want to record a caption, press the "BACK" button. Note that the image is still recorded.

Face the microphone (= P.9) on the front of the camera to record your comment. Hold the camera roughly 20 cm (7.9 in.) away for the best results.



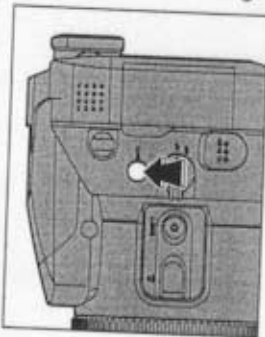
- Press the "MENU/OK" button to begin recording.
- The remaining recording time is displayed during recording and the self-timer lamp flashes.
- When the remaining time reaches 5 seconds, the self-timer lamp starts flashing more quickly.

The recording time may be shorter, depending on the amount of space available on the media.
To end recording mid-way, press the "MENU/OK" button.



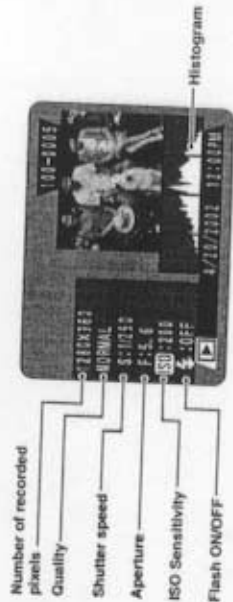
After 30 seconds of recording, "FINISH" appears on the screen.
To end recording: Press the "MENU/OK" button.
To record the comment again: Press the "BACK" button.

PLAYBACK INFORMATION



This function allows you to check the photography information. Hold down the "INFO" button to check the information.

This function cannot be used during multi-frame playback (= P.27).



Histograms

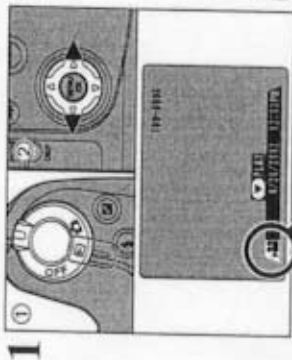
A histogram is a chart showing the distribution of brightness in an image (horizontal axis: brightness; vertical axis: pixels).

- **Optimal exposure:** There is an ample distribution of pixels overall with a peak in the middle range.
- **Over exposed:** The number of highlight pixels is high with the distribution sloping upwards to the right.
- **Under exposed:** The number of shadow pixels is high with the distribution sloping upwards to the left.



The shape of the graph will vary depending on the subject.

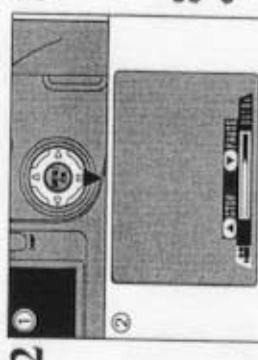
PLAYING BACK MOVIES



- 1 Set Power switch to "CAM".
- 2 Use "◀" or "▶" to select the movie file.

3 Movies cannot be played back using multi-frame playback. Use the "DISP" button to select single-frame playback.

Indicated by the "▶" icon.



- 1 Press "▶" to play the movie.
- 2 The playback time is displayed on the screen along with a progress bar.

3 Take care not to block the speaker.
4 If the sound is difficult to hear, adjust the volume (p. 21).
5 If the subject of the movie is very bright, white streaks may appear on the image during playback. This is normal and is not a fault.

■ Playing Back Movies

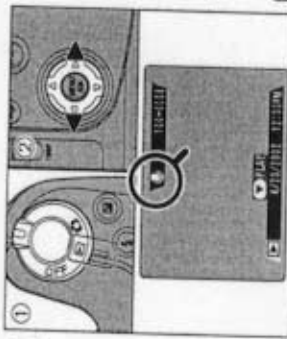
Control	Description
	The movie automatically stops when playback ends.
	Pauses the movie during playback. Press this button again to resume playback.
	Stops playback. * Press "◀" or "▶" while movie playback is stopped to go back to the previous file or advance to the next file respectively.
	Press these during playback to skip forwards or backwards through the movie. * Each time you press "◀" or "▶" when the movie is paused, the movie advances or goes back one frame. * Hold down the button to move through the frames quickly.
	When paused

* Refer to the Software Quick Start Guide (provided) for information on playing back movies on your PC.

◆ Compatible Movie Files ◆

The FinePix S602 ZOOM can play back movie files shot on a FinePix S602 ZOOM or movie files recorded on a 3.3 V SmartMedia or Microdrives using FUJIFILM digital cameras.

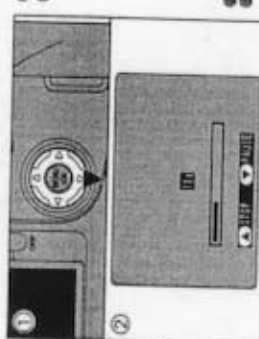
PLAYING BACK VOICE MEMOS



- 1 Set Power switch to "CAM".
- 2 Use "◀" or "▶" to select an image file that has a voice memo.

3 You cannot play back voice memos using multi-frame playback. Use the "DISP" button to select single-frame playback.

The "▶" icon is displayed.



- 1 Press "▶" to play the voice memo.
- 2 The playback time and a progress bar are displayed on the screen.

3 Take care not to block the speaker.
4 If the sound is difficult to hear, adjust the volume (p. 21).

■ Playing Back Voice Memos

Control	Description
	The voice memo automatically stops when playback ends.
	Pauses the voice memo during playback. Press this button again to resume playback.
	Stops playback. * Press "◀" or "▶" while voice memo playback is stopped to go back to the previous file or advance to the next file respectively.
	Press these during playback to skip forwards or backwards through the voice memo. * These buttons do not function while playback is paused.
	When paused

* Refer to the Software Quick Start Guide (provided) for information on playing back voice memos on your PC.

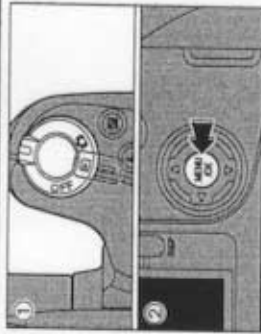
◆ Compatible Voice Memo Files ◆

The FinePix S602 ZOOM can play voice memo files recorded on a FinePix S602 ZOOM and voice memo files up to 30 seconds long that were recorded on FUJIFILM digital cameras and stored on a 3.3 V SmartMedia or Microdrives.

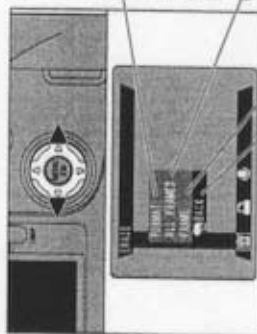
PLAYBACK MENU

ERASING SINGLE FRAME • ALL FRAMES/FORMATTING

- ① Set Power switch to "E".
- ② Press the "MENU/OK" button to display the menu screen.



Use "←" and "→" to select "ERASE".



FORMAT

Formatting erases all the files.
Initialize the media for use in the camera.
Copy any files that you want to keep to your PC beforehand.

ALL FRAMES

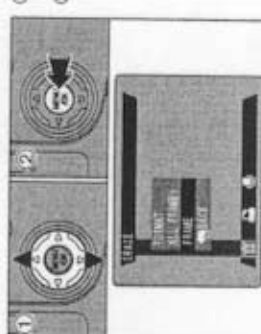
Formatting erases all the files.
Copy any files that you want to keep to your PC beforehand.

FRAME

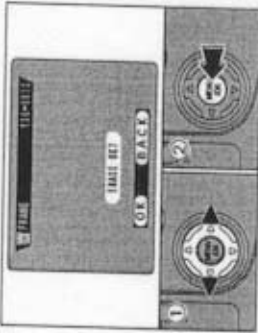
Erase only the selected file.

BACK

Returns to the previous menu without erasing any images.



- ① Use "←" and "→" to select "FRAME", "ALL FRAMES" or "FORMAT".
- ② Press the "MENU/OK" button.



FRAME

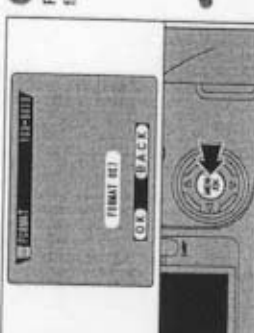
- ① Use "←" and "→" to select the file to be erased.
 - ② Press the "MENU/OK" button to erase the currently displayed file.
- To erase another image, repeat steps ① and ②. When you have finished erasing images, press the "BACK" button.



ALL FRAMES

Pressing the "MENU/OK" button erases all the files.

If the "CONFIRMED: ERASE ALL FILES" message appears, press the "MENU/OK" button again to erase the files.



FORMAT

Pressing the "MENU/OK" button erases all the files and initializes the media.

If the "CLEAN IMAGE" or "WRITE ERROR" or "CLEAN IMAGE" or "CLEAN IMAGE" message appears, refer to P.84 before formatting the media and take the appropriate measures.

Advanced Features Playback