





# OTHER RECORDING FUNCTIONS

## Recording a Single Image (1-Image)

With the 1-Image Mode, a single snapshot is recorded when you press the shutter release button.

1. Align the drive mode dial with  (1-Image).
2. Align the power/function switch with .
3. Press the shutter release button to record the image.

### IMPORTANT!

- In any of the following cases, the message “One moment please...” appears on the display after you record each image as it is saved to the memory card.
  - When you are recording TIFF (uncompressed) images (page E-95)
  - When you are recording a movie or panorama (pages E-91, 93)
  - When you are recording using certain Best Shot scene setups (page E-76)
  - When the  low battery indicator is on the display while you are using a CompactFlash card (page E-33)
  - When the  low battery indicator is on the display while you are using an IBM Microdrive (page E-33).

## Previewing the Last Image Recorded

Normally, you need to enter the PLAY mode (page E-109) to display an image on the camera's monitor screen. The following procedure lets you view the image you just recorded without leaving the REC mode.

### Press PREVIEW to display the last image recorded.


- You can also use PREVIEW in the Movie Mode to view the last frame you recorded.
- Pressing PREVIEW again returns to the REC mode screen.
- Turning off the camera or switching to the PLAY mode causes the preview image memory to be cleared. This means nothing appears on the monitor screen if you press PREVIEW immediately after you turn the camera on or re-enter the REC mode.

## Deleting the Last Image Recorded in the REC Mode

Normally, you need to enter the PLAY mode (page E-109) to delete an image. The following procedure lets you delete the image you just recorded without leaving the REC mode.

### IMPORTANT!

- Note that the image delete operation cannot be undone. Make sure you really do not need an image before you delete it.



1. In the REC mode, press PREVIEW to display the last image you recorded.
2. Press AE-L .
3. In response to the confirmation message that appears, select “Yes”.
  - Select “No” to cancel the delete operation without deleting anything.
4. Click the control button.
  - This deletes the image and returns to the REC mode screen.

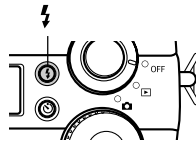
## Using the Flash


The following describes the flash settings you can make to suit a variety of lighting needs.




### Selecting the Flash Mode

Use the following procedure to select the flash mode.

1. Align the power/function switch with .
2. Press  to cycle through the available flash modes until the indicator for the one you want is on the monitor screen.



- Each press of  cycles through the available flash mode indicators on the monitor screen.

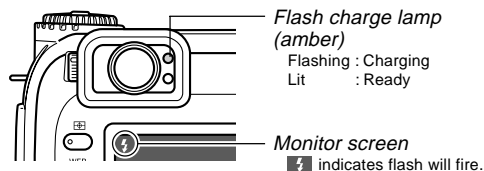
To do this:	Select this setting:
Have the flash fire automatically in accordance with subject brightness (Auto Flash).	No display
Always fire the flash, regardless of subject brightness (Flash On).	
Turn off the flash so it never fires, regardless of subject brightness (Flash Off).	
Fire a pre-flash followed by image recording with flash, reducing the chance of red-eye in the image (Red-eye Reduction). With this setting, flash fires automatically in accordance with subject brightness.	

### IMPORTANT!

- The flash always fires automatically in accordance with subject brightness when Full Auto is selected as the exposure mode (page E-82).
- When Best Shot is selected as the exposure mode (page E-76), the flash mode setting is determined by the flash setting of the currently selected Best Shot scene. You can change the flash mode setting in this case, but the Best Shot scene flash mode setting is restored when you change to another Best Shot scene or turn camera power off and then back on again.

## Flash Status Indicators


You can find out the current flash unit status by checking the monitor screen indicator and the flash charge lamp while the shutter release button is pressed about half way down.



### Flash charge lamp


When you press the shutter release button half way, the flash icon appears on the monitor screen and the flash charge lamp indicates the status of the flash as shown above.

### Monitor screen

When you have Auto Flash or Red-Eye Reduction selected as the flash mode, the indicator  appears on the display when you press the shutter release button about half way down to indicate that available light is insufficient and the flash will be fired.

## Adjusting the Flash Intensity

Use the following procedure to adjust the intensity of the flash when it fires.


1. Align the power/function switch with .
2. Press MENU.
3. Select “Flash Intensity” and then rock the control button to the right.
4. Select the setting you want, and then click the control button to apply it.

To do this:	Select this setting:
Fire the flash with strong intensity	Strong
Fire the flash with normal intensity	Normal
Fire the flash with weak intensity	Weak

5. Press MENU to exit the setting procedure.

## Changing the Sync Speed

You can use the following procedure to select a shutter speed when using the flash.

1. Align the power/function switch with .
2. Press MENU.
3. Select “Sync Speed” and then rock the control button to the right.
4. Select the setting you want, and then click the control button to apply it.

To do this:	Select this:
Shoot at a shutter speed of 1/125 second, which reduces blurring due to subject or hand movement. Use this setting when you want to record indoor images of children playing, etc. (High-speed sync)	Fast
Shoot at a shutter speed of 1/60 second.	Normal
Shoot at a shutter speed of 1/30 second, which makes the background lighter but increases the chance of blurring due to hand movement. (Slow sync)	Slow

5. Press MENU to exit the setting procedure.

**IMPORTANT!**

- In the Shutter Speed Priority AE Mode (S Mode) or Manual Exposure Mode (M Mode), the manually set shutter speed takes priority over the above setting.

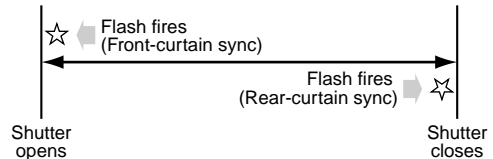
## Selecting a Flash Sync Setting

You can use the following procedure to change the timing of the flash. By using the flash sync setting, you can control blur produced by movement.

### ■ Front-curtain and Rear-curtain Sync

Front-curtain sync causes the flash to fire immediately after the shutter opens. Because of this, the blur created by movement appears in front of the moving object (creating the impression that the object is moving backwards).

Rear-curtain sync causes the flash to fire immediately before the shutter closes. In this case, the blur created by movement appears behind the moving object (creating the impression that the object is moving forward).



**Example 1** : To use front-curtain sync to record the image of cars running along a road at night


The images of the cars are recorded first when the flash fires, followed by the headlights, so the blur of movement extends from the front of the cars.



**Example 2** : To use rear-curtain sync to record the image of cars running along a road at night

The headlights are recorded first, followed by the images of the cars when the flash fires, so the blur of movement extends from the back of the cars.



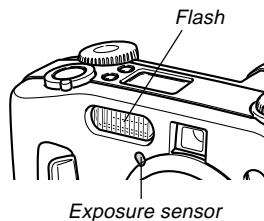
1. Align the power/function switch with .
2. Press MENU.
3. Select “Flash Setting” and then rock the control button to the right.
4. Select the setting you want, and then click the control button to apply it.



If you want to do this:	Select this setting:
Fire the flash immediately after the shutter opens	Front-curtain Flashsync
Fire the flash immediately before the shutter closes	Rear-curtain Flashsync


5. Press MENU to exit the setting procedure.

## Precautions when Using Flash

- Make sure that you do not touch or block the flash or the exposure sensor with your fingers. Doing so can soil these components and interfere with correct flash operation.



- Flash is best used for distances within the range of about 0.5 meters to 3.5 meters (fully open aperture). Flash does not work well outside this range.
- Depending on operating conditions (type of batteries being used, temperature, etc. ), it may take up to 40 seconds for the flash unit to charge.
- Flash is disabled in the Continuous Mode, AEB Mode, and Movie Mode. Disabled flash is indicated by  (Flash Off) on the monitor screen (pages E-88, 89, 93).
- The flash unit does not charge when battery power is too low to charge the flash. The  (Flash Off) indicator appears in order to warn you that the flash will not fire correctly, which may affect exposure of the image. Replace batteries as soon as possible when this happens.

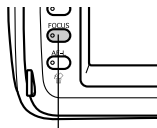
- Red-eye reduction  may not work well when the camera is not pointed directly at the subject or when the subject is far from the camera.
- White balance is fixed while the flash is being used, so sunlight, fluorescent lighting, or other sources of illumination in the immediate area may affect the coloring of the recorded image.

## Selecting the Focus Mode

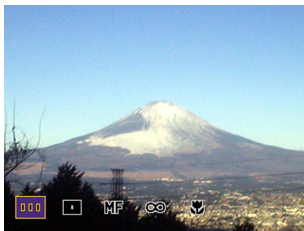
You can use the following procedure to select from among five different focus modes: Multi-area AF, Spot AF, Manual, Infinity, and Macro.

1. Align the power/function switch with .





2. Hold down FOCUS.



*FOCUS button*



3. Rotate the selector dial to select the focus mode, and then release FOCUS.

	Multi-area AF	page E-62
	Spot AF	page E-63
<b>MF</b>	Manual Focus	page E-64
	Infinity	page E-65
	Macro	page E-65



## Using Auto Focus (Multi-area Auto Focus)

As its name suggests, the Auto Focus Mode adjusts focus automatically. When you press the shutter release about half way, the camera measures three distances and automatically focuses on the nearest subject. The following is the focusing range for Auto Focus.

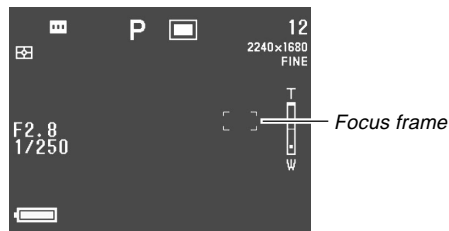
Focusing Range: 30 cm to ∞.

1. Use the selector dial to select “” as the focus mode.



2. Point the camera at the subject you want to record, and then press the shutter release button about half way.

- The camera automatically selects and displays the focus frame that is best suited to the subject that is closest to the camera.



- You can find out the status of the Multi-area Auto Focus operation by checking the color of the displayed focus frame and the status of the operation/card access lamp.

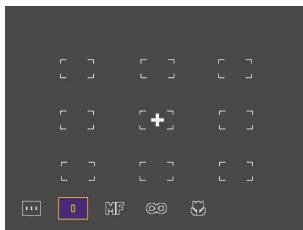
If you see this:	It means this:
Focus frame: Green	The image is in focus.
Operation/card access lamp: Green	
Focus frame: Red	The image is not in focus.
Operation/card access lamp: Red	

3. Press the shutter release button the rest of the way down to record the image.

## Using the Spot Auto Focus Mode

With Spot Auto Focus, you can select one of nine focus frames to suit the object on which you want Auto Focus to be performed.

1. Use the selector dial to select “**■**” as the focus mode.
2. Compose the image you want to record.
3. While holding down **FOCUS** to display all of the available focus frame positions, rock the control button left, right, up, or down to move the **[+]** mark to the focus frame location you want to use.
  - The currently selected focus frame is the one where the **[+]** mark is located.



## 4. After selecting the focus frame you want, release **FOCUS**.

- This makes the focus frame you selected the active focus frame.

### IMPORTANT!

- Note that you cannot change the focus frame position while a Best Shot Mode composition outline is on the display.
- The focus frame position you specify with the above procedure is also used as the area for focus area expansion (page E-67), and center-weighted and spot metering (page E-68).
- You can find out the status of the focus operation by checking the color of the focus frame and the status of the operation/card access lamp. See “Using Auto Focus (Multi-area Auto Focus)” on page E-62 for more information.

## Using the Manual Focus Mode

With Manual Focus, you make the required focus settings by hand. The following shows the relationship between the optical zoom factor and the focusing distance for the Manual Focus Mode.

Optical Zoom Factor	Focusing Distance
1X	6cm to ∞
3X	20cm to ∞

1. Use the selector dial to select “MF” as the focus mode.



2. While watching the image on the monitor screen, rock the control button up or down to focus.

If you want to do this:	Do this:
Move focus away from the subject	Rock the control button up.
Move focus towards the subject	Rock the control button down.

3. Press the shutter release button to record the image.

- As with Spot AF (page E-63), you can change the position of the focus frame for manual focus.

## Using the Infinity Mode

The Infinity Mode sets the focus near infinity. It is a good choice for scenery and other far-off subjects. Focus adjustment starts automatically whenever you press the shutter release button about half way down.

1. Use the selector dial to select “∞” as the focus mode.
2. Compose the image and record it.
  - See “Using the Spot Auto Focus Mode” on page E-63 for information about how to focus and record an image.
  - You can find out the status of the focus operation by checking the color of the focus frame and the status of the operation/card access lamp. See “Using Auto Focus (Multi-area Auto Focus)” on page E-62 for more information.

## Using the Macro Mode

The Macro Mode automatically sets the focus for close-up shooting. Focus adjustment starts automatically whenever you press the shutter release button about half way down. The following shows the relationship between the optical zoom factor and the focusing distance for the Macro Mode.

Optical Zoom Factor	Approximate Focusing Distance
1X	6cm to 50cm
2X	9cm to 50cm
3X	20cm to 50cm

- The above approximate focusing distances indicate the distance from surface of the lens protector to the subject.

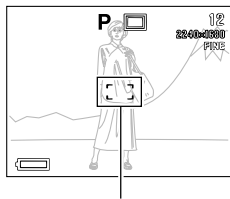
1. Use the selector dial to select “M” as the focus mode.
2. Compose the image and record it.
  - Focusing and image recording procedures are the same as that for Spot AF (page E-63).
  - You can find out the status of the focus operation by checking the color of the focus frame and the status of the operation/card access lamp. See “Using Auto Focus (Multi-area Auto Focus)” on page E-62 for more information.

## Using Focus Lock

Normally, Auto Focus automatically focuses on whatever is inside the focus frame. Focus lock is a technique you can use in the Spot AF (□), Infinity (∞), and Macro (M) modes to lock the focus on a subject and then move the camera so the focus frame is pointed at another subject when you record. This keeps the original subject in focus, even though a different subject is within the focus frame.

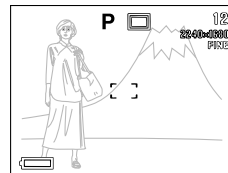
1. While watching the image on the monitor screen, press the shutter release button about half way.

- The focus frame turns green when the image is in focus.



*Focus frame*

2. While keeping the shutter release button depressed half way, move the camera and compose the image as you want.




3. Press the shutter release button the rest of the way down to record the image.

### NOTE

- Locking the focus also locks the exposure setting.

## Expanding the Focus Area




You can use the following procedure to expand the focus area used in all focus modes.

1. Align the power/function switch with .
2. Press MENU.
3. Select “Focus Expansion” and then rock the control button to the right.
4. Select the setting you want, and then click the control button to apply it.


If you want to do this:	Select this setting:
Expand the focus area	On
Leave the focus area at its normal (unexpanded) size	Off

5. Press MENU to exit the setting procedure.

## NOTES


- Pressing the shutter release button half way while the expanded focus area is turned on in the Multi-area AF () , Spot AF () , Infinity ( $\infty$ ), or Macro () mode, displays the enlarged focus area.
- In the Manual Focus (MF) mode, the expanded focus area is always displayed if it is turned on.

## Camera Shake Indicator

The  (camera shake indicator) appears on the monitor screen when all of the following conditions exist.

- Monitor screen is turned on.
- Flash is turned off.
- Shutter speed is too slow.

## IMPORTANT!

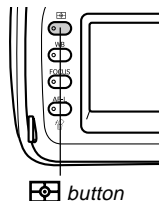
- When the camera shake indicator () appears, mount the camera a tripod to steady it or change exposure settings.


## Selecting the Metering Mode

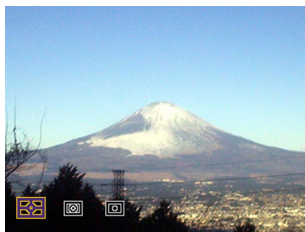
Use the following procedure to specify multi-pattern metering, spot metering, or center-weighted metering as the metering mode.


1. Align the power/function switch with .

2. Hold down .



 button




3. Rotate the selector dial to select the setting you want, and then release .

 Multi-pattern:

Multi-pattern metering divides the image into sections and measures the light in each section for a balanced exposure reading. The camera automatically determines shooting conditions according to the measured lighting pattern, and makes exposure settings accordingly. This type of metering provides error-free exposure settings for a wide range of shooting conditions.



 Center-weighted:

Center-weighted metering measures light concentrating on the center of the focus area. Use this metering method when you want to exert some control over exposure, without leaving settings totally up to the camera.



 Spot:


Spot metering takes readings at a very small area. Use this metering method when you want exposure to be set according to the brightness of a particular subject, without it being affected by surrounding conditions.

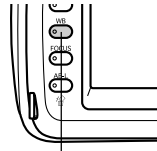


- You can specify the position of the focus area used for center-weighted and spot metering. See page E-63 for more information.

## Selecting White Balance

Different types of light sources (sunlight, light bulbs, etc.) emit light at various wavelengths, which can affect the color of the recorded image. White balance lets you make adjustments to help ensure that the colors of a subject appear most natural under the type of lighting that is available.





1. Align the power/function switch with .
2. Hold down WB.



WB button



3. Use the selector dial to select the setting you want, and then release WB.


To do this:	Select this:
Let the camera adjust white balance automatically	AWB (Auto)
Shoot outdoors	 (Daylight)
Shoot in shady conditions	 (Shade)
Shoot under incandescent (light bulb) lighting	 (Tungsten)
Shoot under fluorescent lighting	 (Fluorescent)
Adjust white balance normally for a particular light source	MWB (Manual)



## Adjusting White Balance Manually

Under some light sources, automatic white balance under the “Auto” setting can take a long time to complete. Also, the auto white balance range (color temperature range) is limited. Manual white balance helps to ensure that colors are recorded correctly for a particular light source.

Note that you must perform manual white balance under the same conditions you will be shooting under. You must also have a white piece of paper or other similar object on hand in order to perform manual white balance.




- 1. Align the power/function switch with .**
- 2. While holding down WB, align the selector dial with “MWB” (Manual White Balance).**
  - This causes the object you last used to adjust manual white balance to appear on the monitor screen. If you want to use the same manual white balance setting, release WB at this time. If you want to change the manual white balance setting, proceed with the next step 3.

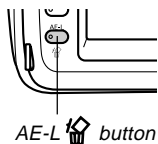
- 3. Point the camera at a piece of white paper or other similar object so it completely fills the monitor screen, and then click the control button.**
- 4. Release WB to return to the REC mode screen.**
  - Dark lighting or pointing the camera at a dark object can cause manual white balance to take a very long time to complete.

## Using AE Lock


When using any exposure modes besides the M (Manual) Mode, pressing the shutter release button half way focuses the image and fixes exposure settings. With AE lock, you can fix exposure settings and then compose and focus the image, which comes in handy in the following situations.

- When the subject you want to use for exposure settings is different from the subject on which you want to Auto Focus
- When you are using a flash but want to record using the pre-flash exposure (flash sync)

1. Align the power/function switch with .
2. Point the camera at the subject whose exposure you want to use.
3. Hold down AE-L  .
  - This fixes the exposure (shutter speed and aperture).
  - Releasing AE-L  cancels AE lock.
4. Press the shutter release button to record the image.



### NOTE

- AE lock is not canceled if you release AE-L  while holding the shutter release button half way.

## Exposure Compensation

Whenever the P Mode, A Mode, S Mode, or Best Shot Mode is selected as the exposure mode, you can adjust the exposure compensation value (EV value) within the range shown below in order to compensate for current lighting conditions. As a rule of thumb, you should use a positive value to compensate for a bright colored subject and a negative value for a dark colored subject.

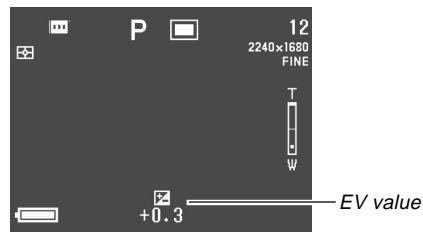
EV Value Range:  $-2EV$  to  $+2EV$

Steps:  $1/3EV$

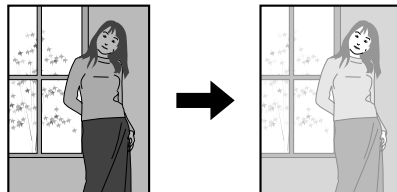
**1. Select P Mode, A Mode, S Mode, or Best Shot Mode as the exposure mode. See pages E-76, 82.**

**2. Rock the control button to the left or right to change the exposure compensation value (EV shift).**

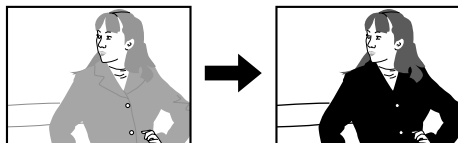
- The current EV value is shown on the monitor screen and indicator display.




- Rocking the control button to the right increases the EV value. A higher EV value is best for white and brightly colored subjects.



- Rocking the control button to the left decreases the EV value. A lower EV value is best for black and dark colored subjects.



- An EV value setting you make remains in effect until you change it. To cancel exposure compensation, use the control button to change the EV value to zero so the  indicator disappears.
- The camera uses the exposure compensation value in effect when the first image of a panorama is recorded for recording all of the other images of the panorama (page E-91) .

**3. After the EV value is the way you want, press the shutter release button to record the image.**

### IMPORTANT!

- You may not be able to obtain satisfactory results even after performing exposure compensation when shooting under very dark or very bright conditions.

## Using the Histogram

Using DISP to display the histogram on the monitor screen makes it possible for you to check exposure conditions as you record images (page E-24).



The histogram is a graph of pixel brightness levels in terms of the number of pixels. The vertical axis represents the number of pixels, while the horizontal axis represents brightness. The information on the histogram can be used when recording, correcting or editing an image to determine whether image details include enough shadows (left side), midtones (center), or highlights (right side).

If the histogram appears too lopsided in either direction, you should use exposure compensation (page E-72) to adjust the EV value before recording the image.


### IMPORTANT!

- Exposure conditions indicated by the histogram may not be accurate when using the flash, when using multi-pattern metering, or under certain other conditions.
- When using the Continuous Shutter Mode or AEB, the histogram appears for the first image only (pages E-88, 89).
- This histogram does not appear in the Movie Mode (page E-93).



## Using Digital Zoom

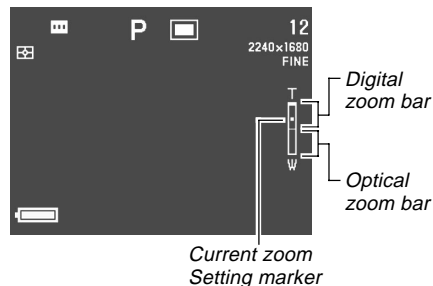
You can use digital zoom to enlarge the center portion of the screen. Note that digital zoom becomes available only after optical zoom reaches its maximum setting. The following shows the range that is available with digital zoom.

Zoom Factor Range: 3x to 9.6x  
(combination with optical zoom)

1. Align the power/function switch with .
2. Press MENU.
3. Select “Digital Zoom” and then rock the control button to the right.
4. Select “On” to enable digital zoom, and then click the control button.
  - Selecting “Off” disable digital zoom.
5. Press MENU to exit the setting procedure.

## 6. Push the zoom controller upwards towards (telephoto) to zoom in.

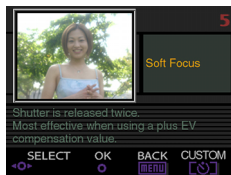
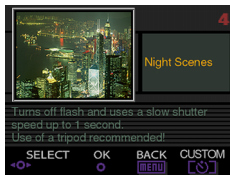
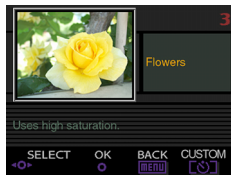
- The current zoom setting is indicated on the monitor screen by a zoom bar. The current zoom setting marker appears within the optical zoom bar when you are using optical zoom only, and within the digital zoom bar when you are using optical and digital zoom in combination.
- When the zoom setting marker reaches the top of the optical zoom bar (maximum optical zoom), it stops. Release zoom controller and then push it upwards towards  (telephoto)  again to move the zoom setting marker into the digital zoom bar.




## 7. Press the shutter release button to record the image.

## Instant Setup Using the Best Shot Mode

The camera has five built-in Best Shot Mode scenes that you can use for automatic set up the camera with the configuration required to record the selected scene.



1. Align the exposure mode dial with **BS** (Best Shot).
2. Align the power/function switch with .

3. Rock the control button to the left or right, or rotate the selector dial to select the scene you want to use.
4. Press the shutter release button or click the control button to select the currently displayed scene.
5. Press the shutter release button to record the image.

**NOTES**



- Best Shot Mode scenes are not images recorded using this camera. They are intended for reference purposes only.
- The actual conditions that are present when you record your image may make it impossible to correctly obtain all of the effects of the Best Shot scene you select.
- After setting up the camera by selecting a Best Shot scene, you can change the settings if you want. However, changing to another Best Shot scene or turning the camera power off and then back on again restores the Best Shot scene settings.
- Selecting Best Shot Mode in the Movie Mode enters the Full Auto Movie Mode (page E-93). Selecting Best Shot Mode in the Panorama Mode enters the Full Auto Panorama Mode (page E-91).

**Copying a Scene from the CD-ROM Best Shot Library**

The CD-ROM that comes bundled with the camera has 100 Best Shot scene files that you can copy to a memory card and use in the camera's Best Shot Mode.

- See the catalog of Best Shot library scenes on the CD-ROM (page E-78) for information about the types of scenes that are available.

**1. Set up to access the memory card contents from your computer. You can use either of the following two methods to setup for memory card access.**

- **Connect the camera to the USB port of your computer (page E-138)**
- **Read the images directly from the memory card (page E-140)**
- Best Shot scene files are stored in a memory card folder named "Scene", so make sure that there is a folder named "Scene" on the memory card.
- To create a "Scene" folder on a new memory card, load the card into the camera, and then select  or  with the power/function switch.



**2. Place the bundled CD-ROM into your computer's CD-ROM drive.**

- If you are running Windows, this causes a CD-ROM menu to start up automatically.

**3. If you are running Windows, perform the following steps.****(1) Click the "BESTSHOT" button on the left side of the CD-ROM menu, select "View list", and then click OK.**

- This starts up your Web browser and displays a catalog of Best Shot library scenes.

**(2) Select "Open Folder" on the right side of the CD-ROM menu and then click OK.**

- This opens the folder that contains the Best Shot Library files.

**(3) Select "Open camera" on the right side of the CD-ROM menu and then click OK.**

- This opens the "Scene" folder that is on the memory card loaded in the camera.

**(4) Copy the Best Shot scene file you want to save to the memory card's "Scene" folder.**

- Best Shot scene files are registered in file name sequence.

**4. If you are running a Macintosh, perform the following steps.****(1) Open "CASIO" → "BestShot Library" → "QV4000", and then double-click the file named "index\_english.htm".**

- This starts up your Web browser and displays a catalog of Best Shot library scenes.

**(2) Double-click the "English" folder, which is located inside of the "QV4000" folder.**

- This opens the folder that contains the Best Shot Library files.

**(3) Double click "untitled" → "Scene".**

- This opens the "Scene" folder that is on the memory card loaded in the camera.

**(4) Copy the Best Shot scene file you want to save to the memory card's "Scene" folder.**

- Best Shot scene files are registered in file name sequence.

5. Load the memory card into the camera.
6. Specify either “Built-in + CF” or “CF” as the location of the Best Shot scenes on page E-81.
7. Use the same procedure as that on page E-76 to select a copied Best Shot scene and use it to record an image.

**IMPORTANT!**

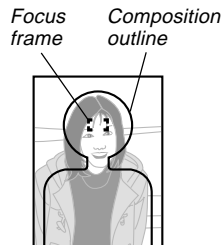
- When viewing Best Shot scenes on the camera, the camera’s built-in scenes appear first, followed by scenes copied from the CD-ROM, and then Best Shot scenes registered by you.
- Formatting a memory card deletes all Best Shot scene files stored on it. After formatting the card, you have to re-copy the Best Shot scene files you want to the memory card (page E-39).

**NOTE**

- To delete a Best Shot scene copied to a memory card from the CD-ROM, simply delete the scene file from the memory card’s “Scene” folder (page E-142).

**■ Composition Outline**

With certain Best Shot Mode images, a composition outline appears on the monitor screen to aid you when composing your image. The focus frame is also adjusted on the monitor screen, so it is in the appropriate location to suit the composition outline.



*Example: Face and Chest*

**IMPORTANT!**

- Focus area expansion is disabled while a composition outline for a Best Shot portrait (one person or more) scene is on the monitor screen (page E-67).

## Registering Your Own Best Shot Scenes

You can register the settings of any image recorded with a CASIO QV-4000 camera as a “user setup” for the Best Shot Mode. After you register a user Best Shot scene, you can recall it and use its setup just as you do with other Best Shot scenes.

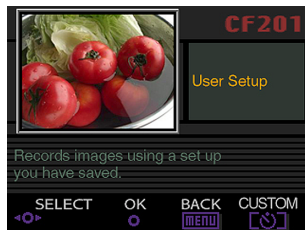
### IMPORTANT!

- You must have either “Built-in + CF” or “CF” specified as the Best Shot scene location in order to record an image using a user Best Shot scene (page E-81).

- Align the exposure mode dial with **BS** (Best Shot).
- Align the power/function switch with **☑**.
- Press **☺**.
- Rock the control button to the left or right, or rotate the selector dial to display the scene you want to import.

### 5. Click the control button.

- This completes scene registration.



### 6. Click the control button.


- This returns to the normal REC mode. Now you can use the procedure on page E-76 to select the user Best Shot scene you registered and use it for recording another image.

## NOTES

- Registering a user Best Shot scene stores the following settings: focus mode, EV shift, filter, metering mode, white balance, color enhancement, flash intensity, sharpness, saturation, contrast, flash mode, flash setting, sync speed, digital zoom.
- You can use only images recorded with the CASIO QV-4000 to register a user setup.
- You can register up to 250 Best Shot scenes, including those copied from the bundled CD-ROM.
- You can check the settings of a particular Best Shot scene by using the menu to view the applicable setting screens.
- User Best Shot scenes are automatically assigned file names using the format: U4000nnn.jpe. “nnn” represents a sequential number in the range of 001 to 999.
- To delete a user Best Shot scene, simply delete the scene file from the memory card’s “Scene” folder (page E-142).

## Specifying the Location of Best Shot Mode Scenes

Use the following procedure to specify the location you want to use when selecting scenes in the Best Shot Mode.

1. Align the power/function switch with .
2. Press MENU.
3. Select “Bestshot Setting” and then rock the control button to the right.
4. Select the setting you want, and then click the control button to apply it.

To have this appear when you scroll through scenes:	Select this:
Built-in scenes and memory card scenes	Built-in+CF
Built-in scenes only	Built-in
Memory card scenes only	CF

5. Press MENU to exit the setting procedure.

**NOTES**

- See page E-77 for information about copying Best Shot scenes to a memory card.
- If there are no Best Shot scene files or user Best Shot scenes on the memory card, you will be able to select from among the built-in scenes only, even when the “Built-in+CF” or “CF” option is selected.


**Specifying the Exposure Mode**

You can use the exposure mode dial to select from among the exposure modes listed below. The exposure mode determines the aperture and shutter speed used when you record images.

- A** Mode : Full Auto
- P Mode : Program AE
- A Mode : Aperture priority AE
- S Mode : Shutter speed priority AE
- M Mode : Manual Exposure

**Full Auto**

In the **A** (Full Auto) Mode, the camera automatically adjusts shutter speed, aperture, flash intensity, and other settings in accordance with the brightness of the image and other shooting conditions.


1. Align the exposure mode dial with **A** (Full Auto).
2. Align the power/function switch with .
3. Press the shutter release button to record the image.

**NOTE**

- Recording images in the Full Auto Mode causes a number of camera settings to be made automatically in accordance with shooting conditions. See “Full Auto Mode Settings” on page E-154 for more information.

**Program AE**

In the P (Program AE) Mode, the camera automatically adjusts shutter speed and aperture in accordance with the brightness of the image and other shooting conditions.

- Align the exposure mode dial with **P (Program)**.
- Align the power/function switch with .
- Make other settings if you want (page E-94)
- Press the shutter release button to record the image.

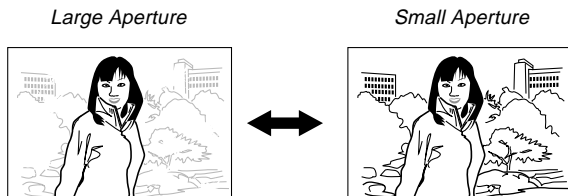
**■ Program AE vs Full Auto**

With both Program AE and Full Auto, the camera automatically adjusts shutter speed and aperture settings. The table below shows which other settings can be made for each mode.

Setting	Program AE Mode	Full Auto Mode
Flash (on, off, red eye reduction)	Yes	No
Exposure compensation	Yes	No
Metering	Yes	No
White Balance	Yes	No
Focus mode	Yes	No
AE lock	Yes	No
Menu screen display	Yes	No
Monitor screen switching with DISP	4 patterns	2 patterns

## Aperture Priority AE


The A Mode (aperture priority AE) is the opposite of the S Mode. It lets you specify an aperture setting and the camera automatically adjusts shutter speed accordingly. A larger aperture decreases depth of field, which is the zone of sharp focus in a scene. Conversely, a smaller aperture increases depth of field.



- Note that a smaller number indicates a larger aperture, and a larger number indicates a smaller aperture.

### ■ Aperture Settings

Aperture	Larger ↔ Smaller F2.0 • F2.3 • F2.8 • F4.0 • F5.6 • F8.0
Brightness	Brighter ↔ Darker
Focus	Shallower ↔ Deeper

1. Align the exposure mode dial with A (Aperture Priority).
2. Align the power/function switch with .
3. Rotate the selector dial to select the aperture value you want.



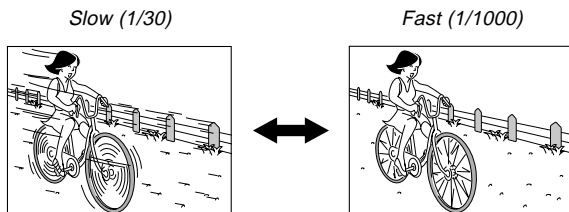
4. Press the shutter release button to record the image.

### IMPORTANT!

- It is often difficult to obtain proper brightness when shooting a subject that is very dark or very light. In such a case, try different aperture settings to find the one that produces the best results.


## Shutter Speed Priority AE

The S Mode (shutter speed priority AE) lets you specify a shutter speed setting and the camera automatically adjusts aperture accordingly.



### ■ Shutter Speed Settings

Shutter Speed	Slow ↔ Fast BULB, 60 seconds to 1/1000 second
Brightness	Brighter ↔ Darker
Movement	Blur ↔ Stop

1. Align the exposure mode dial with S (Shutter Speed Priority).
2. Align the power/function switch with .
3. Rotate the selector dial to select the shutter speed you want.



4. Press the shutter release button to record the image.



**IMPORTANT!**


- It is often difficult to obtain proper brightness when shooting a subject that is very dark or very light. In such a case, try different shutter speed settings to find the one that produces the best results.
- When shutter speed is set to “BULB”, exposure continues as long as you depress the shutter button. Because of this, use of the optional remote shutter release is recommended whenever using the “BULB” setting (page E-103).
- The slowest shutter speed when “BULB” is selected is 60 seconds.
- Note that using a slower shutter speed increases the chance of static being present in your image, and the amount of static visible in an image is inversely proportional to the shutter speed.
- At shutter speeds of one second or slower, the camera automatically performs internal data processing intended to limit image static, so the image record operation takes longer at slow shutter speeds. At shutter speeds of one second or greater, doubling the shutter speed setting tells you about how long it takes for an image to be recorded. For example, image recording with a shutter speed of one second takes about two seconds.

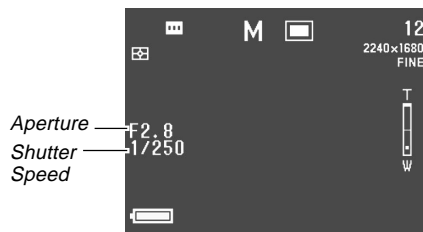
- A shutter speed slower than 1/8 second can cause the brightness of the image on the monitor screen to be different from the brightness of the image that is recorded.
- Note that the shutter speed used when actually recording an image is slightly off from the shutter speed value you specify.

## Manual Exposure

The M Mode (Manual Exposure) lets you make the shutter speed and aperture settings you want.

- The shutter speed settings you can make are the same as those for shutter speed priority AE (page E-85).
- The aperture settings you can make are the same as those for aperture priority AE (page E-84).

1. Align the exposure mode dial with **M (Manual)**.
2. Align the power/function switch with .
3. Rock the control button to the left or right to specify the shutter speed, and rotate the selector dial to select the aperture you want.



4. Press the shutter release button to record the image.




### IMPORTANT!

- Shutter speed and aperture values appear on the monitor screen in amber if the image is overexposed or underexposed.
- It is often difficult to obtain proper brightness when shooting a subject that is very dark or very light. In such a case, try different shutter speed settings to find the one that produces the best results.
- When shutter speed is set to “BULB”, exposure continues as long as you depress the shutter button. Because of this, use of the optional remote shutter release is recommended whenever using the “BULB” setting (page E-103).
- The slowest shutter speed when “BULB” is selected is 60 seconds.
- Note that using a slower shutter speed increases the chance of static being present in your image, and the amount of static visible in an image is inversely proportional to the shutter speed.

- At shutter speeds of one second or slower, the camera automatically performs internal data processing intended to limit image static, so the image record operation takes longer at slow shutter speeds. At shutter speeds of one second or greater, doubling the shutter speed setting tells you about how long it takes for an image to be recorded. For example, image recording with a shutter speed of one second takes about two seconds.
- A shutter speed slower than 1/8 second can cause the brightness of the image on the monitor screen to be different from the brightness of the image that is recorded.

### Using the Continuous Shutter Mode

Holding down the shutter release button continuously records images.

1. Align the drive mode dial with  (Continuous Recording).
2. Align the power/function switch with .
3. Press the shutter release button to record the image.
  - Continuous shutter recording is not possible in the following cases.
    - When the shutter speed setting is 1 second or slower
    - When “BULB” is selected for the shutter speed (page E-85)
    - When the battery capacity indicator shows  (page E-33)
    - When the camera is set up using a Best Shot Mode soft focus scene
    - When recording TIFF (uncompressed) format images (page E-95)


- Note that the flash does not fire during continuous shutter recording.
- You cannot use the self-timer in combination with the Continuous Shutter Mode.

### Using the AEB (Automatic Exposure Bracketing) Mode

The AEB Mode automatically records three or five images when you press the shutter button. You can select from among four different exposure value bracketing steps:  $\pm 1/3\text{EV}$ ,  $\pm 1/2\text{EV}$ ,  $\pm 2/3\text{EV}$ ,  $\pm 1\text{EV}$ .



### To configure AEB Mode settings

1. Align the power/function switch with .
2. Press MENU.

3. Select “AEB Setting” and then rock the control button to the right.




4. Select “EV Shift” or “Number of Exposures” and then rock the control button to the right.
5. Make the setting you want, and click the control button.
  - EV Shift : 1/3, 1/2, 2/3, or 1.
  - Number of Exposures : 3 or 5.
6. Press MENU to exit the setting procedure.

### IMPORTANT!

- Specifying three exposures causes images to be recorded in the following sequence:  
Optimum Exposure → Minus Shift Exposure → Plus Shift Exposure.
- Specifying five exposures causes images to be recorded in the following sequence:  
Optimum Exposure → Minus Shift x 1 Exposure → Plus Shift x 1 Exposure → Minus Shift x 2 Exposure → Plus Shift x 2 Exposure.


## To record an image using AEB

1. Align the drive mode dial with AEB (Auto Exposure Bracketing).
2. Align the power/function switch with .
  - This causes the “AEB” indicator to appear on the monitor screen.

### 3. Compose the image and then press the shutter release button to record it.

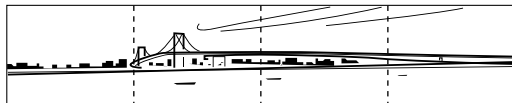
- Keep the shutter release button depressed to record the specified number of images.
- Releasing the shutter release button before all the images are recorded stops recording at that point.



#### IMPORTANT!

- You cannot use AEB in the following cases.
  - When the shutter speed setting is 1 second or slower
  - When “BULB” is selected for the shutter speed (page E-85)
  - When the battery capacity indicator shows  (page E-33)
  - When the camera is set up using a Best Shot Mode soft focus scene
  - When recording TIFF (uncompressed) format images (page E-95)
- Note that the flash does not fire while you are using AEB.
- You cannot use the self-timer in combination with the AEB Mode.

## Creating a Panorama

The Panorama Mode lets you digitally stitch together multiple images to create a sweeping panorama.

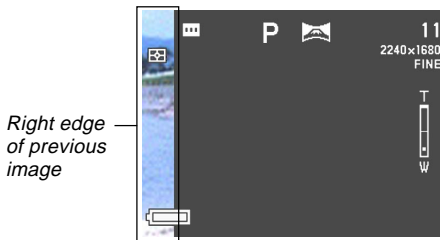


1. Align the drive mode dial with  (Panorama).
2. Align the power/function switch with .



### 3. Press the shutter release button to record the first image.

- The right edge of the first image remains on the left side of the monitor screen to help you compose the second image of the panorama.



### 4. Shoot the other images that will make up the panorama, each time using the right edge of the previous image to compose the next image correctly.

### 5. After recording the images you want, press MENU.

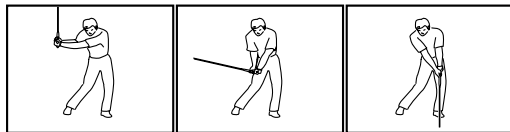
- You can group up to 10 images into a panorama.

#### NOTE

- The camera uses the same exposure, white balance, and focus mode settings in effect when the first image of the panorama is recorded for recording all of the other images of the panorama.

## Recording a Movie

You can record movies that are approximately 30 seconds long.



### ■ File Format: AVI

AVI format is the Motion JPEG format standard advocated by the Open DML Consortium. Note, however, that this camera does not record audio.



### ■ Size: 320 x 240 pixels

### ■ Movie File Size

File Size : Approximately 300KB/second

### ■ Maximum Movie Length

30 seconds

1. Align the drive mode dial with  (Movie).
2. Align the power/function switch with .
3. Point the camera at the subject and then press the shutter release button about half way down.
4. Press the shutter release button all the way down to start recording.
  - Recording continues for 30 seconds.
  - To record a movie that is shorter than 30 seconds, press the shutter release button again when you want to stop recording.

### IMPORTANT!

- Flash is disabled during movie recording.
- You cannot change the focus mode while in the Movie Mode (page E-61).
- Digital zoom is disabled in the Movie Mode (page E-75).
- To view an AVI file on a computer running Windows 2000 or 98, install QuickTime from the CD-ROM that comes bundled with the camera.
- Windows Me users can play back AVI files using MediaPlayer.




## REC Mode Camera Settings

The following are the settings you can make in the REC mode when recording an image.

- Image size and quality
- Color enhancement
- Color filter
- Saturation
- Contrast
- Sharpness
- Screen grid on/off
- Time and date stamping
- Setup memory

## Specifying Image Size and Quality

You can specify the image quality and image size to suit the type of image you are recording.

- 1. Align the power/function switch with .**
- 2. Press MENU.**
- 3. Select “Size” or “Quality” and then rock the control button to the right.**
- 4. Select the size or quality setting you want, and then click the control button to apply it.**
- 5. Press MENU to exit the setting procedure.**

## ■ Size/Quality Setting and Image Capacity


Image size (pixels)	Quality	File size	Number of images		
			16MB memory card	64MB memory card	1GB Microdrive
2240 X 1680	FINE	1.8MB	7 images	30 images	513 images
	NORMAL	1.2MB	10 images	43 images	730 images
	ECONOMY	0.72MB	15 images	60 images	1026 images
	TIFF	11.025MB	1 image	5 images	87 images
2256 X 1504 (3:2)	FINE	1.6MB	8 images	33 images	566 images
	NORMAL	1.1MB	12 images	50 images	842 images
	ECONOMY	0.66MB	19 images	77 images	1314 images
	TIFF	9.99MB	1 image	5 images	97 images
1600 X 1200	FINE	0.85MB	15 images	60 images	1026 images
	NORMAL	0.6MB	19 images	77 images	1314 images
	ECONOMY	0.35MB	30 images	124 images	2053 images
	TIFF	5.625MB	2 images	10 images	171 images
1280 X 960	FINE	0.5MB	22 images	88 images	1493 images
	NORMAL	0.35MB	30 images	124 images	2053 images
	ECONOMY	0.2MB	51 images	207 images	3285 images
	TIFF	3.6MB	3 images	15 images	269 images
640 X 480	FINE	0.15MB	77 images	311 images	4693 images
	NORMAL	0.09MB	101 images	415 images	6571 images
	ECONOMY	0.06MB	154 images	622 images	8213 images
	TIFF	0.9MB	15 images	62 images	1026 images

## ■ IMPORTANT!

- The values in the table are all approximate, and are affected by the types of images you record and other factors.
- To determine the number of images that can be stored on a memory card of a different capacity, multiply the capacities in the table by the appropriate value.
- The maximum number of stored images that can be indicated on the camera's display is 999. Depending on the memory card capacity, more images can be stored, but only up to 999 are indicated on the display.
- The number of images that can be recorded may differ from the values shown above when you use Card Browser (page E-145).
- It takes longer to store a TIFF (uncompressed) image than a JPEG (compressed) image.
- When you record a TIFF image, a JPEG format ECONOMY version of the same image is also stored. The ECONOMY version is the one that appears on the camera's monitor screen when you display the image in the PLAY mode.
- You cannot transfer a TIFF image to a computer using the bundled Photo Loader application (page E-138).

## Enhancing Certain Colors

Use the following procedure when you want to enhance a particular color in your recorded image.

1. Align the power/function switch with .
2. Press MENU.
3. Select “Enhancement” and then rock the control button to the right.
4. Select the setting you want, and then click the control button to apply it.

To do this:	Select this:
Turn off color enhancement	Off
Enhance reds	Red
Enhance greens	Green
Enhance blues	Blue
Enhance flesh tones	Flesh Tones


5. Press MENU to exit the setting procedure.

### NOTES

- Enhancing a color produces the same effect as attaching a color enhancer lens filter to the lens.
- If color enhancement and the filter function (page E-97) are both turned on at the same time, the filter function is given priority (color enhancement is not performed).

## Using the Filter Function

The camera's filter function lets you alter the tint of an image when you record it.


1. Align the power/function switch with .
2. Press MENU.
3. Select "Filter" and then rock the control button to the right.
4. Select the setting you want, and then click the control button to apply it.
  - Available filter settings are: Off, B/W, Sepia, Red, Green, Blue, Yellow, Pink, Purple
5. Press MENU to exit the setting procedure.

### NOTES

- Using the camera's filter feature produces the same effect as attaching a color filter to the lens.
- If color enhancement (page E-96) and the filter function are both turned on at the same time, the filter function is given priority (color enhancement is not performed).

## Specifying Color Saturation

Use the following procedure to control the intensity of the image you are recording.


1. Align the power/function switch with .
2. Press MENU.
3. Select "Saturation" and then rock the control button to the right.
4. Select the setting you want, and then click the control button to apply it.

To get this:	Select this:
Maximum color saturation (intensity)	+2
High color saturation (intensity)	+1
Normal color saturation (intensity)	0
Low color saturation (intensity)	-1
Minimum color saturation (intensity)	-2

5. Press MENU to exit the setting procedure.

## Specifying Contrast

Use this procedure to adjust the relative difference between the light areas and dark areas of the image you are recording.


1. Align the power/function switch with .
2. Press MENU.
3. Select “Contrast” and then rock the control button to the right.
4. Select the setting you want, and then click the control button to apply it.

To get this:	Select this:
Maximum contrast	+2
Relatively high contrast	+1
Normal contrast	0
Relatively low contrast	-1
Minimum contrast	-2

5. Press MENU to exit the setting procedure.

## Specifying Outline Sharpness

Use the following procedure to control the sharpness of image outlines.

1. Align the power/function switch with .
2. Press MENU.
3. Select “Sharpness” and then rock the control button to the right.
4. Select the setting you want, and then click the control button to apply it.


To get this:	Select this:
Maximum sharpness	+2
Relatively high sharpness	+1
Normal sharpness	0
Relatively low sharpness	-1
Minimum sharpness	-2

5. Press MENU to exit the setting procedure.

## Turning the On-screen Grid On and Off

You can display gridlines on the monitor screen to help you compose images and ensure that the camera is straight when recording.



1. Align the power/function switch with .
2. Press MENU.
3. Select “Grid” and then rock the control button to the right.

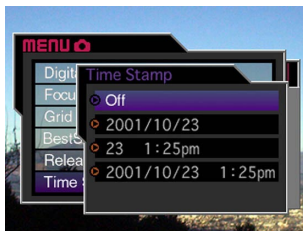
4. Select the setting you want, and then click the control button to apply it.


To do this:	Select this:
Turn the grid off	Off
Turn the grid on	On

5. Press MENU to exit the setting procedure.

## Inserting a Time Stamp into an Image

When it is turned on, the time stamp function digitally stamps the recording date and time in the lower right corner of each image as it is recorded. Note that once an image is stamped, the date and time cannot be deleted.



1. Align the power/function switch with .
2. Press MENU.
3. Select “Time Stamp” and then rock the control button to the right.

4. Select the setting you want, and then click the control button to apply it.

Example:

Date: October 23, 2001

Time: 1:25pm

Off : No time stamping

2001/10/23 : Year/Month/Day


23 1:25pm : Day Hour:Minutes

2001/10/23 1:25pm : Year/Month/Day Hour:Minutes

5. Press MENU to exit the setting procedure.

## Specifying Power On Default Settings

Configuring the camera's "mode memory" controls power on default settings. Turning a mode memory item on specifies that the current setting of the item when the camera is turned off should be restored when the camera is turned back on again. Turning a mode memory item off specifies that its factory default setting should be used whenever the camera is turned on.

1. Align the power/function switch with .
2. Press MENU.
3. Select "Mode Memory" and then rock the control button to the right.
4. Select the item you want to change, and then rock the control button to the right.
5. Select the setting you want, and then click the control button to apply it.

To do this when the camera is turned on:	Select this:
Restore the item's last setting when power was turned off	On
Restore the item's factory default setting	Off

### 6. Press MENU to exit the setting procedure.

#### ● Mode Memory Items and Settings

Item	Memory Mode Status	
	On	Off (Initial Default)
Flash	Setting at power off.	Auto
White Balance		Auto
Metering		Multi
Focus		Spot
Digital Zoom		On
EV Shift		None



#### ● Resetting Mode Memory

In step 4 of the above procedure, select "Reset" → "Yes" and then click the control button. This returns the mode memory settings to their initial defaults.



## Resetting the Camera

Use the following procedure to reset all of the camera's settings to their initial defaults as shown under "Camera Menus" on page E-150.

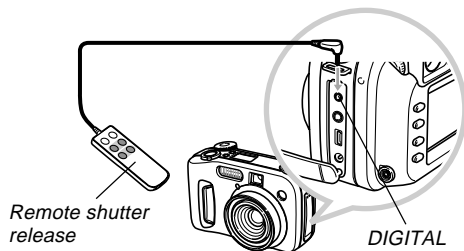
1. Align the power/function switch with  or .
2. Press MENU.
3. Select "Reset" and then rock the control button to the right.
4. In response to the confirmation message that appears, rock the control button up or down to select "Yes" to reset or "No" to exit and click the control button.


## Using the Remote Shutter Release

You can use an optionally available remote shutter release (WR-3C) to release the shutter without touching the camera. By mounting the camera on a tripod and using the remote shutter release, you can eliminate the chance of blurred images due to accidental hand movement. For full details, see the instructions that come with the remote shutter release.

Supported Remote Shutter Release: WR-3C (option)  
Cable Length: Approximately 1 meter

1. Turn off the camera and connect the remote shutter release to the camera's DIGITAL port (shutter release terminal).



2. Align the power/function switch with .
3. Press MENU.
4. Select “Release Setting” and then rock the control button to the right.
5. Select “On” and then click the control button.
  - Selecting “Off” disables the remote shutter release.
6. Press MENU to exit the setting procedure.
7. Now you can use the remote shutter release to record an image.

### NOTE

- The remote shutter release can perform the following camera operations: shutter release button half and full press, zoom controller operation, control button left or right rock.

## Using an External Flash

Use of a commercially available flash unit makes it possible to obtain a higher level of brightness (guide number) than you get when using the built-in flash alone. An external flash also makes it possible to extend the effective range of flash photography.

- The guide number of the internal flash is 6.5 (ISO 100/m).

## External Flash Unit Requirements

Any external flash unit you use with this camera must satisfy the following requirements.

- Variable flash intensity (AUTO)
- Flash Duration: Less than 1/1000 sec.
- Coverage Angle: Coverage of 33mm equivalent 35mm focal length lens (without wide conversion lens)

### IMPORTANT!

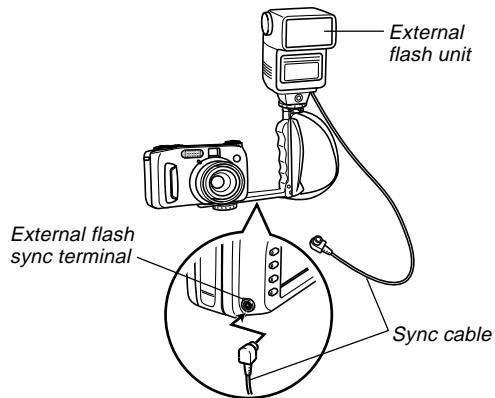
- Some flash performance may be lost when using a ring flash or other type of unit with a long flash time.
- The aperture values and ISO sensitivity available with some flash units may not match the values supported by your camera. In such a case, make adjustments in the aperture setting of the external flash and the camera until proper brightness is achieved.

## Attaching an External Flash Unit

### IMPORTANT!


- Always make sure that the external flash unit is turned off before attaching it to or detaching it from the camera. Leaving the flash unit on can cause it to fire unexpectedly.

1. Attach the flash unit's sync cable to the camera's external flash sync terminal.



- When attaching an external flash unit to the camera, you should also purchase and install a gripped bracket that can be secured to the camera's tripod hole.


## 2. Turn on camera power and make the required camera settings.

- Exposure Mode: M (Manual Exposure)
- Shutter Speed: Around 1/60 (Actual setting should be in accordance with aperture setting.)
- For maximum brightness of areas that are not reached by flash illumination, use the camera's maximum aperture opening (F2.0).
- White Balance: Sunlight
- Flash Mode:  (Off)

## 3. Turn on the external flash unit, and set it up for the camera's aperture (F) value (page E-84) and sensitivity (ISO 100 equivalent) value.

- Depending on shooting conditions, proper exposure may not be obtained even if you properly set the auto aperture (F) value and ISO sensitivity of the flash unit to match those of the camera. If this happens, adjust the auto aperture (F) value, ISO sensitivity, or other settings of the flash unit. Also try adjusting the aperture of the camera.

### IMPORTANT!

- The external flash connected to the external flash sync terminal always fires. To record an image without using external flash, disconnect the sync cable from the terminal or turn off external flash unit power.
- After recording an image, check it on the monitor screen. If it is not what you expected, use the controls on the external flash unit to adjust flash intensity, and adjust the aperture and ISO sensitivity settings on the camera. Note that you cannot control external flash unit intensity using camera settings.
- Close up images often tend to be overexposed. If you are having overexposure problems, try adjusting the aperture and ISO sensitivity settings of the external flash unit and the camera. You can also try using the camera's built in flash to correct for overexposure.
- Note that the camera's built in flash fires whenever its Flash Mode setting is something other than  (Off).
- Camera aperture (F) values are based on the widest optical zoom (1X). Using telephoto can cause slight lens darkness. Adjust the aperture and ISO sensitivity settings of the external flash unit and the camera as required when using optical zoom.
- When using a zoom flash, a coverage angle for a focal distance of 33mm or less for the flash unit is recommended.

## Attaching a Conversion Lens, Close-up Lens, or Filter

Threads in the camera's lens allow connection of an optionally available Conversion Lens Adaptor (LU-35A). After installing the adaptor, you can attach one of the recommended converter lenses, the recommended close-up lens, or an optionally available filter.

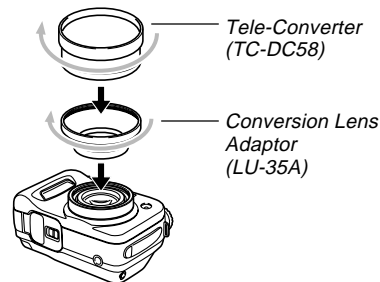
### Installing a Conversion Lens or Close-up Lens

Installing a conversion lens lengthens the focal distance for improved telephoto capabilities or shortens the focal distance for wider angle shots. Installing the close-up lens provides macro imaging.

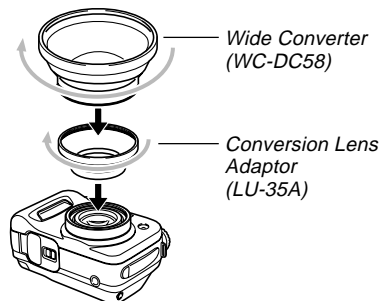
#### IMPORTANT!

- The following Canon Inc. converter and close-up lenses are recommended for use with this camera.
- These lenses may not be available in some geographic areas.

- Canon Inc. Tele-Converter TC-DC58  
Focal Distance: Digital camera focal distance x 1.5

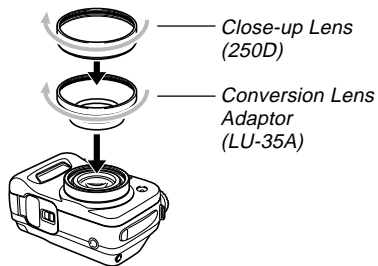


- Canon Inc. Wide Converter WC-DC58  
Focal Distance: Digital camera focal distance x 0.8




- Canon Inc. 58mm Close-up Lens 250D

Focal Distance: In the Macro Mode, 5 cm to 14 cm from the surface of the close up lens to the subject (when zoom is set to maximum wide angle); 7 cm to 14 cm in other modes



### IMPORTANT!

- Be sure to use the Conversion Lens Adaptor (LU-35A) whenever you install a conversion lens or 58mm close-up lens. If you don't, the lens will come into contact with the conversion lens or 58mm close-up lens when it extends from the camera, resulting in malfunction.

- Be sure to use the monitor screen to compose images while a conversion lens or close-up lens is installed on the camera. Do not use the viewfinder, because its image is not changed by the lens you are using. Also, a conversion lens or close-up lens can cause shadows in the viewfinder.
- Using the camera's built-in flash while a conversion lens or close-up lens is attached can cause shadows around the periphery of images.
- Setting the camera to wide-angle while the tele-converter lens is installed causes shadows around the periphery of the image due to light being blocked by the frame of the attached lens. Because of this, you should always set the camera to telephoto whenever you are using the tele-converter lens.
- The effects of camera movement are always magnified while the tele-converter lens is being used. Whenever you are using a conversion lens, install the cushion that comes with it and mount the camera on a tripod so it is secure.
- Due to certain characteristics of the wide converter lens, you may notice some slight distortion in images you record with it.
- You should keep the camera's zoom setting at maximum wide-angle whenever you are using the wide converter lens.
- When using the close-up lens, make sure to set the camera's focus mode to  (Macro Mode) (page E-65). Proper focus of a close-up image is not possible with any other focus mode.

## Using a Filter

This camera supports use of commercially available 58mm filters.

### IMPORTANT!

- Be sure to use the Conversion Lens Adaptor (LU-35A) whenever you install a filter. If you don't, the lens will come into contact with the filter when it extends from the camera, resulting in malfunction.
- The designs of some filters can cause shadows around the periphery of the image.
- Auto focus and flash may not produce desired results while a filter is on the lens.
- Filters do not produce exactly the same results as those obtained with a film-based camera.
- Do not use multiple filters in combination.
- Use of a commercially available lens hood causes shadows around the periphery of images.