
Chapter 3. Shooting Settings

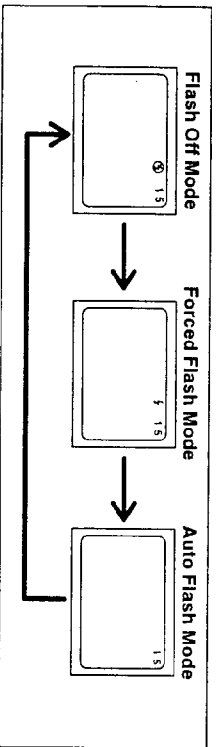
Changing Flash Settings	50
Flash Off Mode	51
Forced Flash Mode	52
Auto Flash Mode	53
Adjusting Exposure Compensation Settings	54
Adjusting White Balance Settings	56
Daylight Mode	57
Fluorescent Light Mode	58
Tungsten Light Mode	59
B&W Mode	59
Sepia Mode	60
Special Functions	61
Using the Self-timer	61
Interval Shooting	62
Focus Lock	64
Manual Focus	66
Macro Mode	67
S Mode	68

Changing Flash Settings

This section explains how to change the flash mode. You can switch between flash modes to meet your shooting requirements.

Switching between Modes

As you change the flash mode, the following symbols will display, in turn, on the LCD monitor.



The factory default setting is flash off mode.

Important Note:

- The light from the flash may appear red in pictures of subjects shot from less than 55 centimeters (21.7 inches) away. The subject may also be over-exposed and appear bleached out. To avoid this, switch to the flash off mode.

Note:

- The flash will not discharge in the following white balance modes: daylight, fluorescent light and tungsten light.
- The flash will not discharge when the lens unit is angled back toward the operator.
- If you notice that a subject is dark on the LCD monitor when you intend to take a flash picture, zoom the camera out to a wider angle to improve the focus. It is difficult for the camera to focus at the telephoto setting.
- Activate the save mode to save a flash mode setting. See Keep Settings (p. 88).

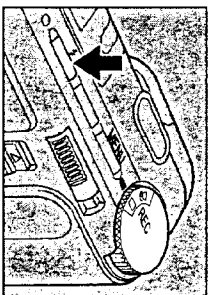
Effective Range of the Flash

The effective range of the flash is approximately 0.55 - 3.8m (1.8ft to 12.5ft.) for the telephoto setting and 0.55 - 4.5m (1.8ft to 14.8ft.) for the wide angle setting in daylight (daylight Syncro photography). If the flash does not adequately illuminate a subject in a shaded area, the subject will be darkened in the picture.

Flash Off Mode

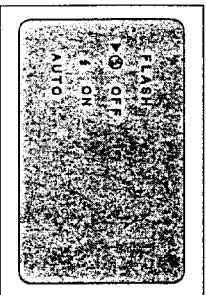
In this mode, the flash will not discharge, even in dark conditions. This mode is useful for taking pictures in areas where flashes are prohibited or there are other means of illumination.

1 Turn the mode dial to [REC].



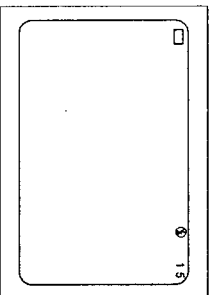
2 Press the flash button to select the [] icon.

The selection takes effect approximately 2 seconds after the flash button is pressed.



The current flash mode will display on the LCD monitor.

3 Press the shutter release button to shoot a picture without discharging the flash.



Important Note:

- The shutter speed automatically slows to compensate for shots taken in dark areas. To prevent camera shake, hold the camera as steady as possible or mount it on a tripod. Be particularly careful with telephoto shots at high zoom settings.

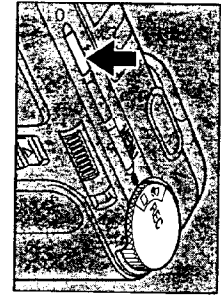
How to Switch Modes

To switch to an alternative mode, press the flash button.

Forced Flash Mode

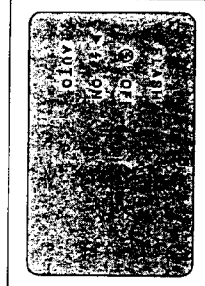
This mode is suited to shots in which the subject is backlit or shaded but surrounded by strong highlights. The flash will discharge regardless of the ambient light level.

- 1 Turn the mode dial to [REC].

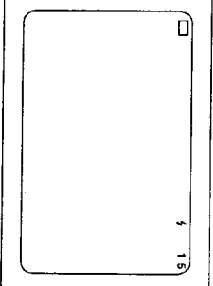


- 2 Press the flash button to select the [4] icon.
The selection takes effect approximately 2 seconds after the flash button is pressed.

The current flash mode will display on the LCD monitor.



- 3 Press the shutter release button to shoot a picture and discharge the flash. Pressing the shutter release button halfway will cause the flash LED to light.



Note:
• The flash LED will pulse while the flash is charging and the LCD monitor will momentarily blacken. You will not be able to shoot during this interval.

Important Note:

- Subjects shot from less than 55 centimeters (21.7 inches) away may be over-exposed and appear bleached out in the image. To avoid this, switch to the flash off mode.
- The shutter speed is automatically slowed down in dark places. To avoid blurring the picture, hold the camera especially steady or use a tripod. Be particularly careful to avoid blurring pictures when shooting at the [4] telephoto setting.

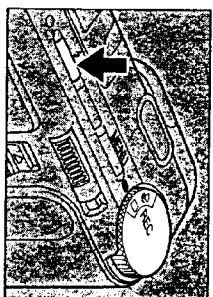
How to Switch Modes

To switch to an alternative mode, press the flash button.

Auto Flash Mode

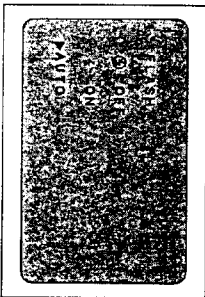
This mode automatically discharges the flash when it detects low ambient light or back-lighting. This mode allows you to respond appropriately to a wide range of standard shooting conditions.

- 1 Turn the mode dial to [REC].

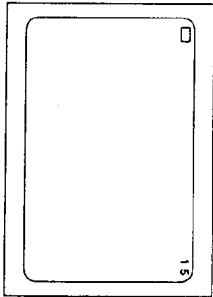


- 2 Press the flash button to select the auto flash icon.
The selection takes effect approximately 2 seconds after the flash button is pressed.

When the LCD monitor displays neither the [4] flash off or [4] forced flash icons, the auto flash mode is indicated.



- 3 Press the shutter release button to shoot a picture. The flash will discharge if the ambient light is low or the subject is backlit. In these conditions, pressing the shutter release button halfway will cause the flash LED to light.



Note:
• The flash LED will pulse while the flash is charging and the LCD monitor will momentarily blacken. You will not be able to shoot during this interval.

Important Note:

- Subjects shot from less than 55 centimeters (21.7 inches) away may be over-exposed and appear bleached out in the picture. To avoid this, switch to the flash off mode.

How to Switch Modes

To switch to an alternative mode, press the flash button.

Adjusting Exposure Compensation Settings

Under standard shooting conditions, the subject is centered in the picture and the camera can automatically adjust the exposure settings for backlighting. In situations where there is a sharp contrast between the subject and background, however, the subject may be under- or over-exposed, reproducing as a dark or bleached image. These situations, therefore, call for manual exposure compensation. In addition, you may wish to intentionally under- or over-expose an image.

Exposure Compensation Range

±2.0 EV (0.5 EV increments)

Backlit Conditions

If the background is much brighter than your subject, the subject will be under-exposed. To correct this, set the exposure compensation setting to a positive value.

Important Note:

In auto exposure compensation mode, the camera's sensors will not interpret a bright background and dark subject as a backlit situation if the subject is not centered in the composition. To prevent incorrect exposure, manually set the exposure compensation as described below.

White/Bright Subjects

A composition with large areas of white or bright colors may be under-exposed when the exposure compensation is set to auto mode. People and other subjects may appear dark and white subjects may appear gray. Set the exposure compensation to a positive (+) value to counteract this.

Black/Dark Subjects

A composition with large areas of black or dark colors may be over-exposed when the exposure compensation is set to auto mode. People and other subjects may appear bleached out while black subjects appear gray. Set the exposure compensation to a negative (-) value to counteract this. Apply the same principles as those used to photograph a person under a bright spotlight.

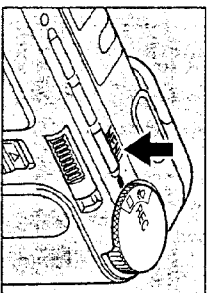
Adjusting the Exposure Compensation Settings

- 1 Turn the mode dial to [REC] and press the menu button.

The record menu will display.

Note:

- To cancel the operation, press the menu button a second time.

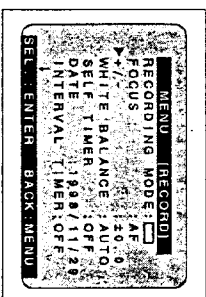


- 2 Slide the zoom button to select the [Exposure Compensation] option (+/-) and press the enter button.

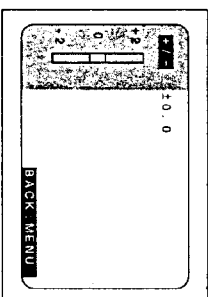
The exposure compensation (+/-) settings menu will display.

Note:

- To cancel the operation and return to the record menu, press the menu button a second time.



- 3 Slide the zoom button to change the exposure compensation value.



Advancing the Setting by an Increment of 0.5 EV

Slide the zoom button up toward the [▲]/FWD mark to advance the exposure setting by 0.5 EV.

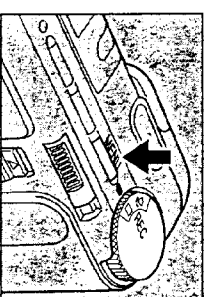
Reducing the Setting by an Increment of 0.5 EV

Slide the zoom button down toward the [▼]/REV mark to reduce the exposure setting by 0.5 EV.

- 4 Press the menu button.

The selected exposure compensation value will be effective and the record menu will display. Press the menu button a second time to clear the record menu.

- 5 Press the shutter release button to shoot the picture.



Canceling the Setting

Repeat the steps above to return the setting to ±0.0.

Note:

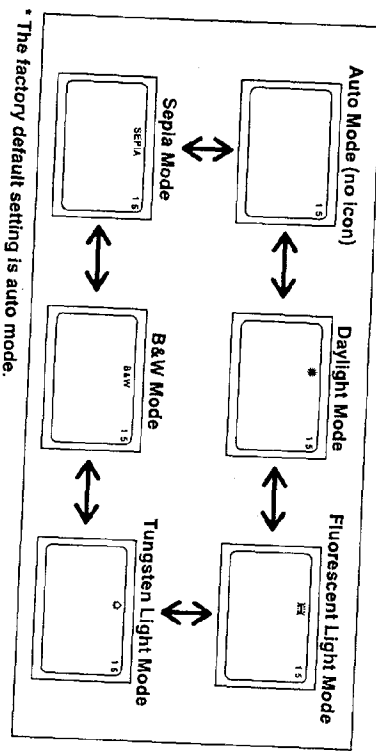
- Unless the save mode is active, the exposure compensation setting will be lost when the camera power is shut off. To save the settings, see *Keep Settings* (p. 88).

Adjusting White Balance Settings

The white balance function adjusts the camera settings so that image tones appear natural regardless of the light source. The auto mode is appropriate for shooting under normal conditions. In auto mode, the camera's sensors automatically use the white hues in an image as the basis for calibrating the remaining colors, thereby reproducing whites as whites regardless of the type of light present. In cases where the subject has few white or light tones and is dark overall, it may be difficult for auto mode to properly calibrate the tones. In these cases, the white balance mode should be manually set as described below.

Switching Between Modes

As you change the white balance mode, the following symbols will display in turn on the LCD monitor.



Subjects Difficult to Calibrate in Auto Mode

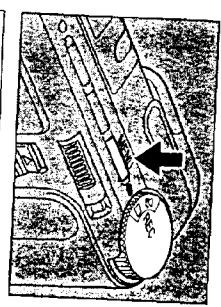
- Monochrome objects
- Objects lit by multiple, contrasting light sources.

- Note:**
- Attempting to shoot subjects with few or no white tones in auto mode may produce poor results. To improve the shot, add a white object to the composition and rerecord.
 - While balance settings can only be adjusted in recording mode. The settings can not be adjusted in play mode.
 - The flash will not discharge in the following white balance modes: daylight, fluorescent light and tungsten light.
 - Activate the save mode to save a white balance setting. See Keep Settings (p. 89).

Displaying the Settings Menu

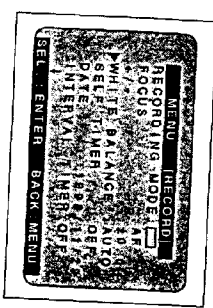
- 1 Turn the mode dial to [REC] and press the menu button. The record menu will display.

- Note:**
- To cancel the operation, press the menu button a second time.



- 2 Slide the zoom button to select the [Write Balance] option and press the enter button. The settings menu will display.

- Note:**
- To cancel the operation and return to the record menu, press the menu button a second time.



How to Switch between White Balance Modes

The white balance settings are selected from the settings menu by the preceding steps. See the following descriptions for each mode below.

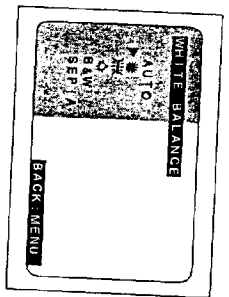
- Daylight Mode (this page)
- Fluorescent Light Mode (p. 58)
- Tungsten Light Mode (p. 59)
- B & W Mode (p. 59)
- Sepia Mode (p. 60)

Daylight Mode

This mode is used to shoot subjects outdoors in conditions difficult for the auto mode to process.

- Note:**
- Select this mode from the settings menu. See Displaying the Settings Menu (p. 57).

- 1 Slide the zoom button to select the [*] icon and press the menu button. The daylight mode will be selected and the record menu will display. Press the menu button a second time to clear the record menu.

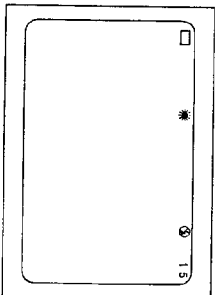


The LCD monitor will display the selected white balance setting.

- 2 Press the shutter release button to shoot the picture.

Important Note: _____

- The coloration of the same subject shot under different weather conditions, such as bright or cloudy conditions, will vary.



Canceling the Setting

Use the zoom button to select the auto mode in the settings menu.

Note:


- The flash will not discharge in the daylight mode.

Fluorescent Light Mode

This mode is used to shoot subjects illuminated by fluorescent lights that reproduce poorly using the auto mode setting.

Note:

- Select this mode from the settings menu. See *Displaying the Settings Menu* (p. 57).

- 1 Slide the zoom button to select the [] icon and press the menu button.

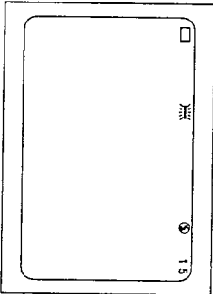
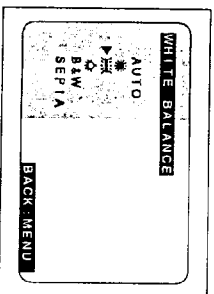
The fluorescent light mode will be selected and the record menu will display. Press the menu button a second time to clear the record menu.

The LCD monitor will display the selected white balance setting.

- 2 Press the shutter release button to shoot the picture.

Important Note: _____

- The coloration of the same subject shot with different types of fluorescent lights will vary.



Canceling the Setting

Use the zoom button to select the auto mode in the settings menu.

Note:


- The flash will not discharge in the fluorescent light mode.

Tungsten Light Mode

This mode is used to shoot subjects illuminated by tungsten lights that reproduce poorly using the auto mode setting.

Note:

- Select this mode from the settings menu. See *Displaying the Settings Menu* (p. 57).

- 1 Slide the zoom button to select the [] icon and press the menu button.

The tungsten light mode will be selected and the record menu will display. Press the menu button a second time to clear the record menu.

The LCD monitor will display the selected white balance setting.

- 2 Press the shutter release button to shoot the picture.

Important Note: _____

- The coloration of the same subject shot with different types of tungsten lights will vary.

Canceling the Setting

Use the zoom button to select the auto mode in the settings menu.

Note:


- The flash will not discharge in the tungsten light mode.

B&W Mode

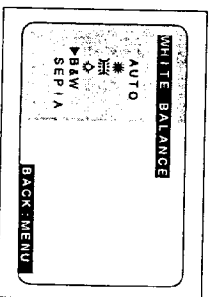
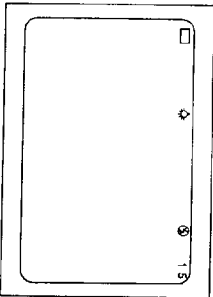
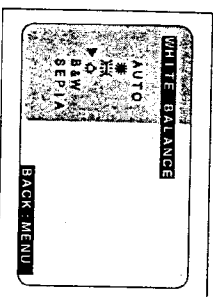
This mode is used to shoot and record subjects in black and white.

Note:

- Select this mode from the settings menu. See *Displaying the Settings Menu* (p. 57).

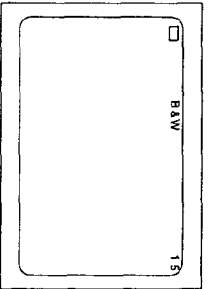
- 1 Slide the zoom button to select the [] icon and press the menu button.

The B&W mode will be selected and the record menu will display. Press the menu button a second time to clear the record menu.



The LCD monitor will display the selected white balance setting.

- 2 Press the shutter release button to shoot the picture.



Canceling the Setting

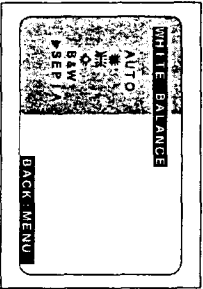
Use the zoom button to select the auto mode in the settings menu.

Sepia Mode

This mode is used to shoot and record subjects in sepia, which gives an image the "old time brown" color.

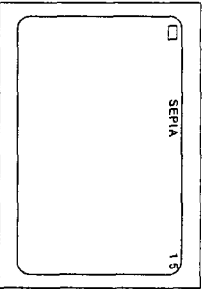
Note:
Select this mode from the settings menu. See *Displaying the Settings Menu* (p. 57).

- 1 Slide the zoom button to select the [Sepia] icon and press the menu button.



The LCD monitor will display the selected white balance setting.

- 2 Press the shutter release button to shoot the picture.



Canceling the Setting

Use the zoom button to select the auto mode in the settings menu.

Special Functions

This section explains the numerous special functions incorporated in the RDC-4200.

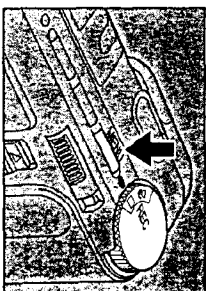
Using the Self-timer

The self-timer is a convenient function for taking group pictures that include the photographer. Mount the camera on a tripod or a flat, secure surface to shoot pictures with the self timer.

- 1 Turn the mode dial to [REC] and press the menu button.

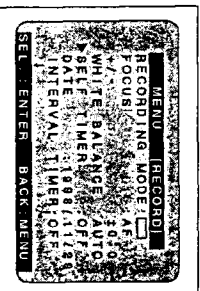
The record menu will display.

Note:
To cancel the operation, press the menu button a second time.



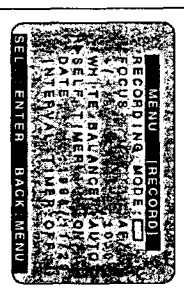
- 2 Slide the zoom button to select the [Self Timer] option.

Note:
To cancel the operation and return to the record menu, press the menu button a second time.



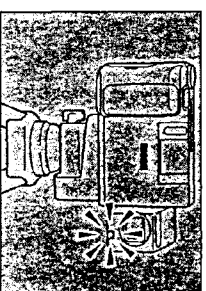
- 3 Press the enter button to select the [On] option and press the menu button.

The self-timer function is now active.



- 4 Compose the picture, secure the camera and press the shutter release button.

The self-timer LED will flash and the self timer will start. Approximately 10 seconds later the shutter will activate. The LED will stop flashing and shine steadily approximately 2 seconds before the shutter activates. The self-timer mode automatically ends after the shutter activates.



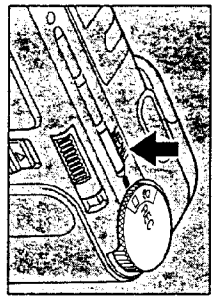
- Note:**
- If the shutter release button is pushed while the flash is charging, the self-timer will only start after the flash finishes charging.
 - Switching from the recording mode or operating the power switch will cancel the self-timer mode.

Tip: Remote Control
 An optional remote control unit is available to make it easier to operate the camera from remote positions or to fix the camera in one spot and move around yourself.

Interval Shooting

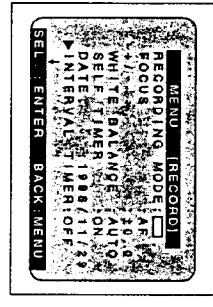
The camera can be set to take pictures automatically at specified intervals. The intervals are available in 30-second increments starting at 30 seconds and ending at 3 hours. When the interval is set to 1 hour, for example, the camera will automatically take a picture every hour until the SmartMedia memory card is full.

- 1 Turn the mode dial to [REC] and press the menu button. The record menu will display.



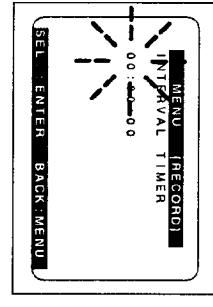
- Note:**
- To cancel the operation, press the menu button a second time.

- 2 Slide the zoom button to select the [Interval Timer] option and press the enter button. The interval timer settings menu will display.



- Note:**
- To cancel the operation and return to the record menu, press the menu button a second time.

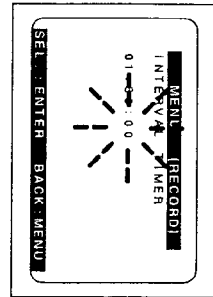
- 3 Press the enter button to select hours, minutes or seconds. The selected item will flash.



- Note:**
- The selection will advance successively from hours to seconds each time the enter button is pressed.

- 4 Slide the zoom button to change the value of the flashing time unit.

Repeat steps 3 and 4 until the required interval is set. Intervals can be set in increments of 30 seconds.



Advancing the Values

Slide the zoom button up toward the [M]/FWD mark to advance the value of the flashing time unit. Hold the zoom button up continuously to advance the values quickly.

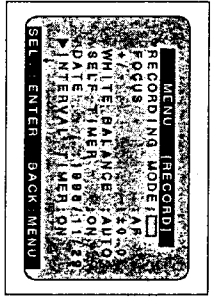
Reducing the Values

Slide the zoom button down toward the [M]/REV mark to reduce the value of the flashing time unit. Hold the zoom button down continuously to advance the values quickly.

- Note:**
- To cancel the operation and return to the record menu, press the menu button a second time.

- 5 Press the enter button again.

The interval timer is now set and the record menu will display.



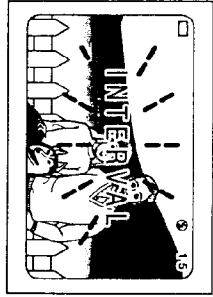
- 6 Press the menu button.

The record menu will close and INTERVAL will show on the display.



- 7 Press the shutter release button.

The camera will record the first picture and thereafter record pictures at the specified interval.



During interval shooting, INTERVAL will flash on the display. The mode will automatically turn off when the SmartMedia memory card is full.

Note:

- The actual interval between shots may be slightly longer depending upon the PiC mode and flash settings.
- Powering the camera with the separately sold AC adapter is recommended for interval shooting. See *Using an AC Power Source* (p. 29).
- After 24 hours passes, the auto power off function will shut down the camera.

Canceling the Setting

The following procedures can be used to turn off interval shooting when INTERVAL is shown on the display.

- Follow the steps above to set the interval to [00:00:00].
- Slide the power switch.
- Turn the mode dial to a different setting

Stopping Shooting

The following procedures can be used to stop interval shooting when INTERVAL flashes on the display.

- Slide the power switch.
- Turn the mode dial to a different setting.
- Press the shutter release button (the camera will take one picture and cease shooting).

Focus Lock

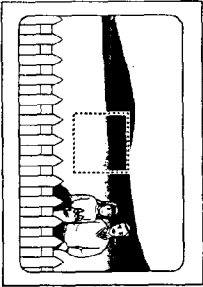
The autofocus function measures the focal distance to the subject appearing in the center portion of the LCD monitor. If your subject does not fall within the autofocus field, it may be out of focus. To avoid this, use the focus lock function.

Note:

- See *How to View Images in the LCD monitor* (p. 45).

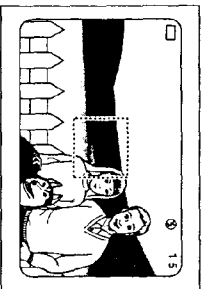
When to Use the Focus Lock

Use the focus lock when a subject is outside the autofocus field. For example, the person to one side in the foreground in this scene will be out of focus because the camera will focus on the background.

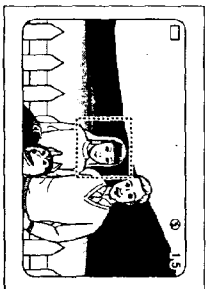


How to Use the Focus Lock

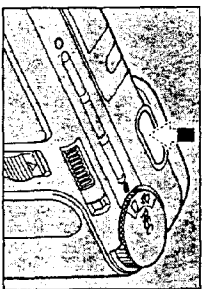
- 1 Slide the zoom button to select a zoom setting.



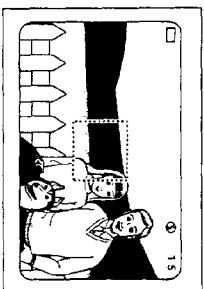
- 2 Aim the autofocus field (LCD monitor center) directly at the subject on which you wish to focus.



- 3 Press the shutter release button halfway down and hold it. The camera will lock the focus.



- 4 Continuing to hold the shutter release button halfway down, re-aim the camera to frame the desired composition, and gently push the shutter release button all the way down to take the picture.



Note:

- You can focus the camera manually. See *Manual Focus* (p. 66).

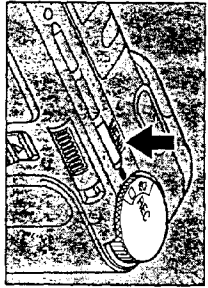
Manual Focus

The manual focus function can be used to manually adjust the focal setting for subjects difficult to bring into focus with autofocus.

- 1 Turn the mode dial to [REC] and press the menu button. The record menu will display.

Note:

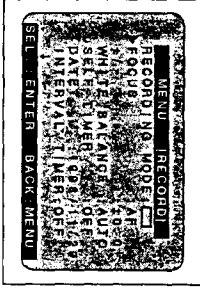
- To cancel the operation, press the menu button a second time.



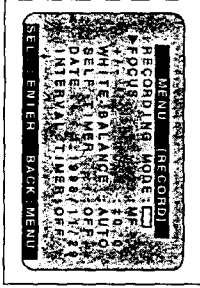
- 2 Slide the zoom button to select the [Focus] option.

Note:

- To cancel the operation and return to the record menu, press the menu button a second time.



- 3 Press the enter button to switch the setting to [MF] and press the menu button. The manual focus function is now active.



- 4 Aim the camera at your subject, slide the zoom button to adjust the focus to your satisfaction and press the shutter release button to record the picture.

To change the zoom setting with manual focus active, keep the shutter release button pressed halfway while you slide the zoom button.



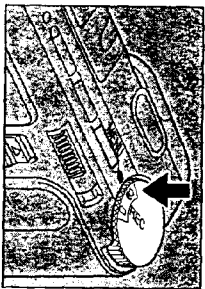
How to Switch Modes

To switch back to autofocus mode, repeat steps 1 to 3 above and switch the setting to [AF] from [MF].

Macro Mode

Macro mode is used for close-up, detailed shots.

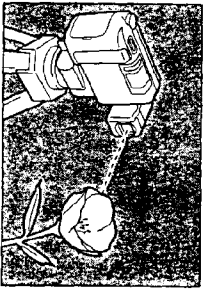
- 1 Turn the mode dial to the [M] macro setting.



- 2 Bring the camera close to the subject and compose the picture. Press the shutter release button halfway to lock the focus.

Note:

- To activate the digital zoom, slide the zoom button upward the [1]/[WD] mark and hold it there for 2 seconds.
- The standard zoom function will not operate in this mode.



- 3 Gently press the shutter release button all the way down to shoot the picture.

Important Note:

- In macro mode, you are advised to mount the camera on a tripod or other fixed device because the area covered by the autofocus field is small and the focus is easily lost if the camera is moved.
- The light from the flash may appear red in pictures shot in the forced flash mode. The subject may also be over-exposed and appear bleached out.
- The flash will not discharge in macro mode when set to the auto flash mode.

Tips: Preparing to Macro Mode
The focal range of the macro mode is between 10cm and 1m (4 inches to 32 inches) in.

Tips: Range control device
The optional range control device, which is a tripod or other fixed device, is required to shoot in macro mode. It is difficult to press the shutter release button without shaking the camera.

S Mode

This mode sets the shutter speed to faster settings for shooting in dark areas. Camera shake is greatly reduced if you use this mode after [Slow Shutter] displays in the LCD monitor when you aim at a poorly illuminated subject and press the shutter release button halfway.

- 1 Turn the mode dial to [REC] and press the menu button.
The record-menu will display.

Note:

- To cancel the operation, press the menu button a second time.

- 2 Slide the zoom button to select the [S Mode] option.

Note:

- To cancel the operation and return to the record menu, press the menu button a second time.

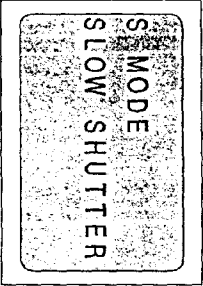
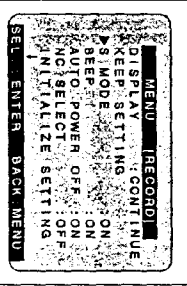
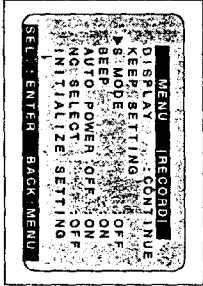
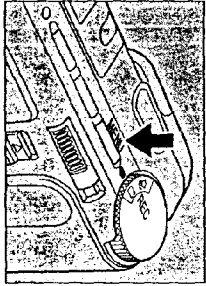
- 3 Press the enter button to switch the setting to [On] and press the menu button.
The S mode is now active.

- 3 Press the shutter release button to take the picture.

The camera automatically gauges whether it will actually shoot the picture in S mode by measuring the amount of light reflected off the subject. If you press the shutter release button halfway and [S Mode Slow Shutter] displays, the shot will be taken in S mode.

Note:

A blurred picture may result if the camera is moved before the beep after the shutter release button has been pressed.



How to Switch Modes

To switch S mode off, repeat steps 1 to 3 above and switch the setting to [Off] from [On].

Note:

Activate the save mode to save an S mode setting. See Keep Settings (p. 88). Images shot in S mode may occasionally include minimal amounts of noise.