

Step 4 Viewing and Deleting Pictures

Viewing Pictures (Playback Mode)

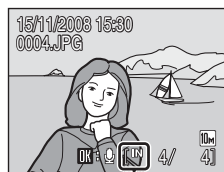
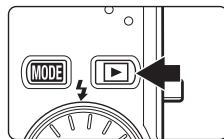
Press the button.

The last picture taken will be displayed in full-frame playback mode.

Rotate the rotary multi selector, or press , , , or , to view additional pictures (9).

Pictures may be displayed briefly at low resolution while being read from the memory card or internal memory.

Press the button to switch to shooting mode.

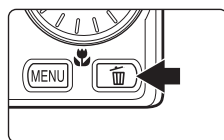


Internal memory indicator

When is displayed, pictures stored in the internal memory will be displayed. When memory card is inserted, is not displayed and pictures stored on the memory card will be displayed.

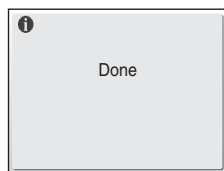
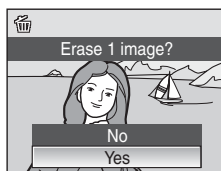
Deleting Pictures

1 Press the button to delete the picture currently displayed in the monitor.



2 Use the rotary multi selector to select **Yes** and press the button.

To exit without deleting the picture, select **No** and press the button.



Step 4 Viewing and Deleting Pictures

Options Available in Playback Mode

The following options are available in full-frame playback mode.

Option	Use	Description	
Playback zoom		Press the button to enlarge view of picture currently displayed, up to about 10x. Press the button to return to full-frame playback mode.	52
View thumbnails		Press the button to display 9, 16, or 25 picture thumbnails.	51
Record/play voice memo		Press the button to record or play back voice memos up to 20 seconds in length.	57
Switch to shooting mode		Press the button to switch to the shooting mode selected in the shooting-mode selection menu.	28

Pressing the Button to Turn On the Camera

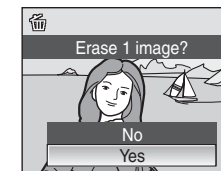
- When the camera is off, holding down the button will turn the camera on in playback mode. The lens will not extend.
- If the camera is turned off in voice recording mode (65) or sound file playback mode (67), pressing the button will turn the camera on in sound file playback mode.

Viewing Pictures

- Pictures stored in the internal memory can only be viewed if no memory card is inserted.
- When pictures in which a face was detected during shooting (93) are displayed in full-frame playback, the pictures may be automatically rotated for playback display, depending upon the orientation of the detected face.
- When the monitor has turned off in standby mode to save power, press the power switch or the shutter-release button to reactivate it (113).

Deleting the Last Picture Taken

In shooting mode, press the button to delete the last picture taken.



Deleting Multiple Pictures

Multiple pictures can be deleted by selecting **Delete** (99) from the playback menu (96) or the list by mode menu (60).

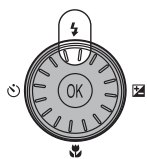
Using the Flash

The flash has a range of about #–# m (# in. –# ft.) when the camera is zoomed out all the way. With maximum optical zoom applied, the range is about #–# m (# in. –# ft.) (when **ISO sensitivity** is set to **Auto**). The following flash modes are available.

	Auto
Flash fires automatically when lighting is poor.	
	Auto with red-eye reduction
Reduces “red-eye” in portraits (P. 31).	
	Off
Flash will not fire even when lighting is poor.	
	Fill flash
Flash fires when a picture is taken. Use to “fill-in” (illuminate) shadows and backlit subjects.	
	Slow sync
Auto (auto) is combined with slow shutter speed. Flash illuminates main subject; slow shutter speeds are used to capture background at night or under dim light.	

Setting the Flash Mode

- 1 Press (flash mode).
The flash mode menu is displayed.

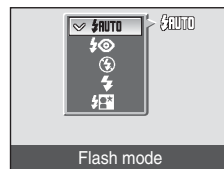


- 2 Use the rotary multi selector to choose the desired flash mode and press the button.

The icon for the selected flash mode is displayed at the top of the monitor.

will disappear after a few seconds, regardless of the **Photo info** option (P. 108).

If a setting is not applied by pressing the button within a few seconds, the selection will be cancelled.



Using the Flash

Shooting When Lighting is Poor and the Flash is Disabled (P. 31)

- Use of a tripod is recommended to stabilize the camera during shooting and avoid the effects of camera shake. Turn vibration reduction (P. 110) off when using a tripod.
- The indicator is displayed when the camera automatically increases sensitivity. Pictures taken when is displayed may be slightly mottled.
- When is displayed and higher sensitivity is applied, noise reduction may be automatically applied as pictures taken are recorded; results in increased recording times.

Note on Using the Flash

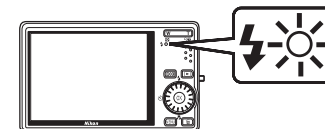
When using the flash at a wide-angle zoom position, reflections from dust particles in the air may appear as bright spots in pictures. To reduce these reflections, set the flash mode to (Off) or zoom in on the subject.

The Flash Lamp

The flash lamp indicates flash status when the shutter-release button is pressed halfway.

- **On:** Flash will fire when picture is taken.
- **Blinks:** Flash charging. Wait a few seconds and try again.
- **Off:** Flash will not fire when picture is taken.

If the battery is low, the monitor display will turn off, and remain off, until the flash is fully charged.



The Flash Mode Setting

The default flash mode setting varies with shooting mode.

- (auto) mode: Auto
- (scene): varies with the selected scene mode (P. 36)
- (scene auto selector): Auto. The camera selects the flash mode depending upon the selected scene mode it has automatically selected (P. 45).
- (active child): Off
- (smile): Auto

The flash mode setting applied in (auto) mode is stored in the camera's memory even after the camera is turned off, and reapplied the next time (auto) mode is selected.

Red-Eye Reduction

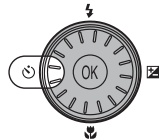
This camera uses advanced red-eye reduction (“In-Camera Red-Eye Fix”). The flash fires repeatedly at low intensity before the main flash, reducing red-eye. The camera then analyzes the picture; if red-eye is detected, the affected area will be processed to further reduce red-eye before the picture is saved. Note that because there is a slight lag between the shutter-release button being pressed and the picture being shot, this mode is not recommended when a quick shutter response is required. The time before the next picture can be shot also increases slightly. Advanced red-eye reduction may not produce the desired results in all situations. In extremely rare instances, areas not subject to red-eye may be affected by advanced red-eye reduction processing; in these cases, choose another mode and try again.

Taking Pictures with the Self-Timer

The camera is equipped with a ten-second and two-second timer for self-portraits. When using the self-timer, use of a tripod is recommended. Turn vibration reduction (V) 110) off when using a tripod.

1 Press (self-timer).

The self-timer menu is displayed.



2 Use the rotary multi selector to choose **10s** or **2s** and press the **OK** button.

10s (ten seconds): suited for important occasions (such as weddings)

2s (two seconds): suited for preventing camera shake

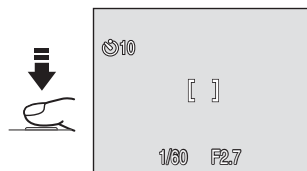
The mode selected for self-timer is displayed.

If a setting is not applied by pressing the **OK** button within a few seconds, the selection will be cancelled.



3 Frame the picture and press the shutter-release button halfway.

Focus and exposure will be set.

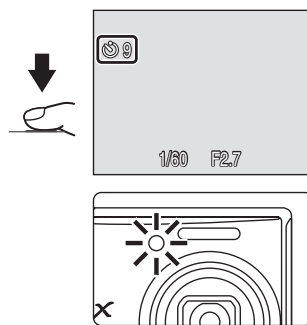


4 Press the shutter-release button the rest of the way down.

The self-timer starts and the number of seconds remaining until the shutter is released is displayed in the monitor. The self-timer lamp will blink. The lamp stops blinking one second before the picture is taken and remains lit until the shutter is released.

When the shutter is released, the self-timer turns off.

To stop the timer before a picture is taken, press the shutter-release button again.

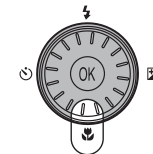


Macro Mode

Macro mode is used for taking pictures of objects as close as 3 cm (1.1 in.). Note that the flash may be unable to light entire subject at distances of less than 50 cm (1 ft. 7.6 in.).

1 Press (macro mode).

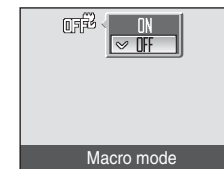
The macro mode menu is displayed.





2 Use the rotary multi selector to choose **ON** and press the **OK** button.

The macro mode icon () is displayed.

If a setting is not applied by pressing the **OK** button within a few seconds, the selection will be cancelled.



3 Press the **T** () button or the **W** () button to frame the picture.

The camera can focus at a distance of 3 cm (1.1 in.) at the zoom position at which  and the zoom indicator glow green (the zoom indicator is **before** )



Macro Mode

• If macro mode is turned on in scene modes indicated below, **Autofocus mode** () 94) will be automatically set to **Full-time AF**.

- **Close-up** (the macro mode setting is fixed at **On**)
- **Beach/snow**
- **Museum**
- **Copy**
- **Panorama assist**

• In **Full-time AF**, the camera automatically focuses continuously until focus and exposure are locked by pressing the shutter-release button halfway.

The Macro Mode Setting

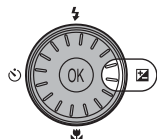
The macro mode setting applied in  (auto) mode is stored in the camera's memory even after the camera is turned off, and reapplied the next time  (auto) mode is selected.

Exposure Compensation

Exposure compensation is used to alter exposure from the value suggested by the camera to make pictures brighter or darker.

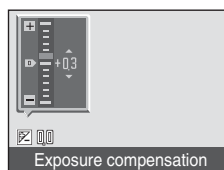
1 Press (exposure compensation).


The exposure compensation guide is displayed.




2 Use the rotary multi selector to adjust exposure and press the button.

- When the subject is too dark: adjust the exposure compensation to “+” side.
- When the subject is too bright: adjust the exposure compensation to “-” side.
- Exposure compensation can be set to values between -2.0 and +2.0 EV.





- If a setting is not applied by pressing the  button within a few seconds, the selection will be cancelled.

3 The setting is applied.

The value is displayed with the  icon in the monitor.



Exposure Compensation Value

The exposure compensation value applied in  (auto) mode is stored in the camera's memory even after another shooting mode is selected or the camera is turned off, and reapplied the next time  (auto) mode is selected.

Using Exposure Compensation

The camera tends to lower exposure when the frame is dominated by brightly lit objects and to increase exposure when the frame is mostly dark. Positive compensation may therefore be required to capture the brilliancy of very bright objects that fill the frame (for example, sunlit expanses of water, sand, or snow) or when the background is much brighter than the main subject. Negative compensation may be called for when large areas of the frame contain very dark objects (for example, a swath of dark green leaves) or when the background is much darker than the main subject.

Shooting Suited for the Scene

Shooting in Scene Mode

Camera settings are automatically optimized for the selected subject type. The following scene modes are available.

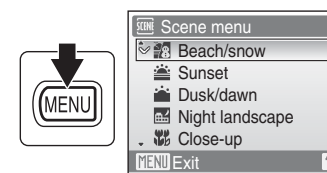
 Portrait	 Party/indoor	 Night landscape	 Fireworks show
 Landscape	 Beach/snow	 Close-up	 Copy
 Sports	 Sunset	 Food	 Backlight
 Night portrait	 Dusk/dawn	 Museum	 Panorama assist

Setting the Scene Mode

1 Enter scene mode by pressing the button in shooting mode, selecting (use the rotary multi selector), and then pressing the button.




2 Press the button to display the scene menu screen, and choose the desired scene and press the button.

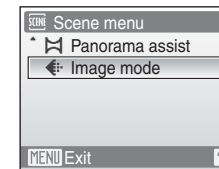


3 Frame the subject and take the picture.



Image Mode

Image mode ( 84) can be set in the scene menu. Changes made to the image mode setting apply to all shooting modes (except those available from the movie menu).



Shooting in Scene Mode

Features

Portrait



Use this mode for portraits in which the main subject stands out clearly. Portrait subjects exhibit smooth, natural-looking skin tones.

- The camera detects and focuses on a face looking toward the camera (Shooting with Face Priority → 93).
- If the camera detects multiple faces, the camera focuses on the face closest to the camera.
- If no face is recognized, the camera will focus on the subject in center of frame.
- Digital zoom is not available.



			Off*		Off		0.0*
--	--	--	------	--	-----	--	------

* Other settings can be selected.

Landscape



Use this mode for vivid landscapes and cityscapes.

- Camera focuses at infinity. When the shutter-release button is pressed halfway, the **focus area or focus indicator** (6) always **lights green**; however, focus may not be set for near subjects, while the camera focuses at infinity.
- The AF-assist illuminator does not light, regardless of the AF assist setting (111).



			Off*		Off		0.0*
--	--	--	------	--	-----	--	------

* Other settings can be selected.

Sports

Use this mode for dynamic action shots that freeze the action in a single shot and record motion in a series of pictures.

- The camera focuses continuously until focus is locked by pressing the shutter-release button halfway.
- While the shutter-release button is held down, pictures are taken at rate of up to about # frames per second (fps) when image mode is set to **Normal (3648)**. Shooting ends when the shutter-release button is released, or ten shots have been taken with the shutter-release button held down.
- The maximum frame rate with continuous shooting may vary depending upon the current image mode setting and the memory card used.
- The AF-assist illuminator does not light, regardless of the AF assist setting (111).



			Off		Off		0.0*
--	--	--	-----	--	-----	--	------

* Other settings can be selected.

: Pictures taken in scene modes utilizing may be processed to reduce noise and therefore take longer to record.

Icons Used for Descriptions

The following icons are used for descriptions in this section: flash mode (30); self-timer (32); macro mode (33); exposure compensation (34).

Shooting in Scene Mode

Night portrait



Use this mode to achieve a natural balance between the main subject and background lighting in portraits taken at night.

- The camera detects and focuses on a face looking toward the camera (Shooting with Face Priority → 93).
- If the camera detects multiple faces, the camera focuses on the face closest to the camera.
- If no face is recognized, the camera will focus on the subject in center of frame.
- Digital zoom is not available.



			Off ²		Off		0.0 ²
--	--	--	------------------	--	-----	--	------------------

¹ Fill flash with slow sync and red-eye reduction.

² Other settings can be selected.

Party/indoor



Captures the effects of candlelight and other indoor background lighting.

- Camera focuses on subject in center of frame.
- Hold the camera steadily as pictures are easily affected by camera shake. When shooting under low lighting, use of a tripod is recommended. Set **Vibration reduction** (110) to **Off** when using a tripod.



			Off ²		Off		0.0 ²
--	--	--	------------------	--	-----	--	------------------

¹ Fill flash with slow sync and red-eye reduction. Other settings can be selected.

² Other settings can be selected.

Beach/snow



Captures the brightness of such subjects as snowfields, beaches, or sunlit expanses of water.

- Camera focuses on subject in center of frame.



			Off*		Off*		0.0*
--	--	--	------	--	------	--	------

* Other settings can be selected.

: For those scene modes with , use of a tripod is recommended. Set **Vibration reduction** (110) to **Off** when using a tripod.

: Pictures taken in scene modes utilizing may be processed to reduce noise and therefore take longer to record.

Shooting in Scene Mode

Sunset



Preserves the deep hues seen in sunsets and sunrises.

- Camera focuses at infinity. When the shutter-release button is pressed halfway, the **focus area or focus indicator** (6) always **lights green**; however, focus may not be set for near subjects, while the camera focuses at infinity.
- **The AF-assist illuminator does not light, regardless of the AF assist setting (111).**

			Off*		Off		0.0*
--	--	--	------	--	-----	--	------

* Other settings can be selected.

Dusk/dawn



Preserves the colors seen in the weak natural light before sunrise or after sunset.

- Camera focuses at infinity. When the shutter-release button is pressed halfway, the **focus area or focus indicator** (6) always **lights green**; however, focus may not be set for near subjects, while the camera focuses at infinity.
- **The AF-assist illuminator does not light, regardless of the AF assist setting (111).**

			Off*		Off		0.0*
--	--	--	------	--	-----	--	------

* Other settings can be selected.

Night landscape



Slow shutter speeds are used to produce stunning night landscapes.

- Camera focuses at infinity. When the shutter-release button is pressed halfway, the **focus area or focus indicator** (6) always **lights green**; however, focus may not be set for near subjects, while the camera focuses at infinity.
- **The AF-assist illuminator does not light, regardless of the AF assist setting (111).**

			Off*		Off		0.0*
--	--	--	------	--	-----	--	------

* Other settings can be selected.

: For those scene modes with , use of a tripod is recommended. Set **Vibration reduction** (110) to **Off** when using a tripod.

: Pictures taken in scene modes utilizing may be processed to reduce noise and therefore take longer to record.

Shooting in Scene Mode

Close-up



Photograph flowers, insects, and other small objects at close range.

- Macro mode (33) will be turned on and the camera automatically zooms to the position at the closest distance at which the camera can focus.
- The camera can focus at distances as close as **3 cm (1.1 in.)** at the wide-angle zoom position at which glows green (the zoom indicator is **before**). The closest distance at which the camera can focus varies depending upon zoom position.
- **AF area mode** is set to **Manual** (91). When the button is pressed, camera focuses on subject in active focus area.
- The camera focuses continuously until focus is locked by pressing the shutter-release button halfway.
- As pictures are easily affected by camera shake, check the **Vibration reduction** (110) and **Motion detection** (111) settings and hold the camera steadily.

			Off*		On		0.0*
--	--	--	------	--	----	--	------

* Other settings can be selected. Note that when shooting with the flash, the flash may be unable to light entire subject at distances of less than **50 cm (1 ft. 7.6 in.)**

Food



Use when shooting cuisines. See "Taking Pictures in Food Mode" (41) for details.

- **AF area mode** is set to **Manual** (91). When the button is pressed, camera focuses on subject in active focus area.

			Off*		On		0.0*
--	--	--	------	--	----	--	------

* Other settings can be selected.

Museum



Use indoors where flash photography is prohibited (for example, in museums and art galleries) or in other settings in which you do not want to use the flash.

- Camera focuses on subject in center of frame.
- **BSS** (Best Shot Selector) (89) is used when shooting.
- As pictures are easily affected by camera shake, check the **Vibration reduction** (110) and **Motion detection** (111) settings and hold the camera steadily.
- **The AF-assist illuminator does not light, regardless of the AF assist setting (111).**

			Off*		Off*		0.0*
--	--	--	------	--	------	--	------

* Other settings can be selected.

: For those scene modes with , use of a tripod is recommended. Set **Vibration reduction** (110) to **Off** when using a tripod.

Shooting in Scene Mode

 Fireworks show



Slow shutter speeds are used to capture the expanding burst of light from a firework.

- Camera focuses at infinity. When the shutter-release button is pressed halfway, the focus indicator (ⓧ 26) glows green; however, focus may not be set for near subjects, while the camera focuses at infinity.



- **Motion detection** (ⓧ 111) is set to **Off**.
- The AF-assist illuminator does not light, regardless of the AF assist setting (ⓧ 111).



 Copy



Provides clear pictures of text or drawings on a white board or in print.

- Camera focuses on subject in center of frame.
- Use macro mode (ⓧ 33) to focus at short ranges.
- Colored text and drawings may not show up well.



* Other settings can be selected.



 Backlight

Use when light is coming from behind your subject, throwing features or details in shadow. The flash fires automatically to "fill in" (illuminate) shadows.

- Camera focuses on subject in center of frame.



* Other settings can be selected.

: For those scene modes with , use of a tripod is recommended. Set **Vibration reduction** (ⓧ 110) to **Off** when using a tripod.

: Pictures taken in scene modes utilizing  may be processed to reduce noise and therefore take longer to record.

Shooting in Scene Mode

 Panorama assist





Use when taking a series of pictures that will later be joined to form a single panorama using the supplied Panorama Maker software. See "Taking Pictures for a Panorama" (ⓧ 43) for details.



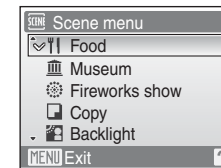
* Other settings can be selected.



Taking Pictures in Food Mode


Use this mode to take pictures of food.

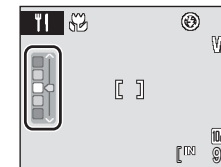
- 1 Use the rotary multi selector to choose  **Food** in the scene menu and press the  button (ⓧ 35).

Macro mode (ⓧ 33) will be turned on and the camera automatically zooms to the position at the closest distance at which the camera can focus.















- 2 Press the rotary multi selector  or  to choose white balance.

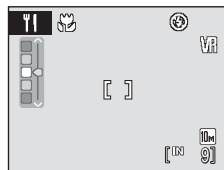
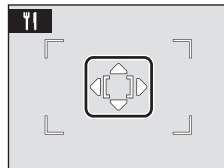
- Press  to increase the amount of red, or  to increase the amount of blue.



Shooting in Scene Mode



3 Frame the picture.

- The camera can focus at distances as close as 3 cm (1.1 in.) at the wide-angle zoom position at which  and the zoom indicator glow green (the zoom indicator is before ). The closest distance at which the camera can focus varies depending upon zoom position.
- As pictures are easily affected by camera shake, check the **Vibration reduction** ( 110) setting and hold the camera steadily.
- AF area mode** is set to **Manual** ( 91). Press the  button to move the focus area. Press the rotary multi selector , , , or  to select a focus area and press the  button again to activate the selected focus area.
- Self-timer ( 32) and exposure compensation ( 34) settings can be adjusted while the focus area is locked.


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

- Focus is locked when the shutter-release button is pressed halfway, and a picture is taken when the shutter-release button is pressed the rest of the way down.
- When the camera is unable to focus, the focus area blinks red. Change the composition and press the shutter-release button halfway again.

✓ **Notes on Food Mode**

- Flash mode is disabled. Macro mode setting ( 33) is fixed at **Off**.
- The AF-assist illuminator does not light, regardless of the AF assist setting ( 111).




✓ **White Balance Setting in Food Mode**


- Increasing the amount of red or blue will decrease illumination effects.
- Changing white balance in food mode will not affect white balance in the shooting menu ( 86).
- The white balance setting applied in food mode is stored in the camera's memory even after the camera is turned off, and reapplied the next time food mode is selected.

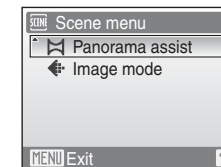

Shooting in Scene Mode













Taking Pictures for a Panorama

The camera focuses on the subject in the center of frame. Use a tripod for best results. Set **Vibration reduction** ( 110) to **Off** when using a tripod to stabilize the camera during shooting.

1 Use the rotary multi selector to choose  **Panorama assist** in the scene menu and press the  button ( 35).

- The  icon is displayed to show the direction in which pictures will be joined.

**2** Use the rotary multi selector to choose the direction and press the  button.

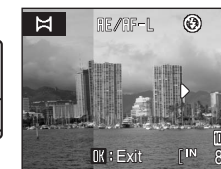
- Select how pictures will be joined together in the completed panorama; right () , left () , up () or down () .
- The yellow panorama direction icon () will move to the direction pressed and press the  button to choose the direction. A white panorama direction icon () will be displayed in the chosen direction.
- Apply flash mode ( 30), self-timer ( 32), macro mode ( 33) and exposure compensation ( 34) settings with this step, if necessary.
- Press the  button to reselect the direction.

**3** Shoot the first picture.

- The picture taken will be displayed in 1/3 of the monitor.

**4** Shoot the second picture.

- Compose the next picture so that it overlaps the first picture.
- Repeat until you have taken the necessary number of pictures to complete the scene.



Shooting in Scene Mode

5 Press the **OK** button when shooting is completed.

The camera returns to step 2.



Shooting Suited for the Scene

✓ **Panorama Assist**

Flash mode, self-timer, macro mode and exposure compensation settings cannot be adjusted after the first picture is taken. Pictures cannot be deleted, nor can zoom or image mode setting (84) be adjusted until the series is finalized.

The panorama series is terminated if the camera enters standby mode with the auto off function (113) during shooting. Setting the time allowed to elapse before the auto off function is enabled to a longer setting is recommended.

🔍 **The AE/AF-L Indicator**

AE/AF-L is displayed to indicate that white balance, exposure, and focus have been locked at the values set with the first shot. All pictures taken in a panorama series have the same focus, exposure, and white-balance settings.

**📁** **Panorama Maker**

Install Panorama Maker from the supplied Software Suite CD-ROM. Transfer pictures to a computer (71) and use Panorama Maker (74) to join them in a single panorama.

🔍 **More Information**

See "Image/Sound File and Folder Names" (118) for more information.

Shooting in the Scene Mode Selected by the Camera (Scene Auto Selector)

By simply framing a picture, the camera automatically selects the optimum scene mode for simpler shooting.

When the camera is aimed at a subject in **SCN** scene auto selector mode, the camera automatically selects one of the following scene modes:

- **Auto** (22)
- **Portrait** (36)
- **Landscape** (36)
- **Night portrait** (37)
- **Night landscape** (38)
- **Close-up** (39)
- **Backlight** (40)

For more information regarding details of these scene modes, see the reference pages indicated above.

Taking Pictures in Scene Auto Selector Mode

- 1 Enter scene auto selector mode by pressing the **MODE** button in shooting mode, selecting **SCN** (use the rotary multi selector), and then pressing the **OK** button.



The camera enters scene auto selector mode.

- 2 Frame the subject and take the picture.

When the camera automatically selects a scene mode, the shooting mode icon changes to that for the scene mode currently enabled.

- Auto**: Auto
- Portrait**: Portrait
- Landscape**: Landscape
- Night portrait**: Night portrait
- Night landscape**: Night landscape
- Close-up**: Close-up
- Backlight**: Backlight



Press the shutter-release button halfway to set focus and exposure.

Press the shutter-release button the rest of the way down to take the picture.


✓ **Notes on Scene Auto Selector Mode**

Depending upon shooting conditions, the camera may not select the desired scene mode. Should this occur, switch to **Auto** (auto) mode (22) or select the desired scene mode manually (35).




Shooting in the Scene Mode Selected by the Camera (Scene Auto Selector)

 **Flash Mode in Scene Auto Selector Mode**

 **FLASH** (Auto) (default setting) and  (Off) flash mode settings can be applied ( 30).

- When  **FLASH** (Auto) is applied, the camera automatically selects the optimum flash mode setting for the scene mode it has selected.
- When  (Off) is applied, the flash does not fire, regardless of shooting conditions.

 **Functions Restricted in Scene Auto Selector Mode**


- When the **MENU** button is pressed in scene auto selector mode, only the **Image mode** menu is displayed. Changes made to the image mode setting in this mode apply to all shooting modes (except those available from the movie menu).
- Digital zoom is not available.
- Macro mode ( 33) is disabled.
- The **AF area mode** setting ( 91) is set to **Auto** in  (Close-up) mode.

Shooting Suited for the Scene



Focusing on a Moving Subject in Active Child Mode

Active Child Mode

Use this mode to shoot moving subjects. Once the subject has been selected, the focus area will automatically follow the subject.

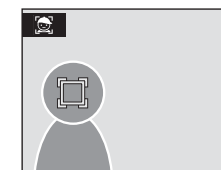
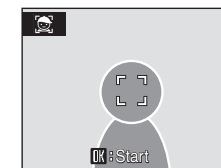
- 1 Enter active child mode by pressing the **MODE** button in shooting mode, selecting  (use the rotary multi-selector), and then pressing the **OK** button.**



- A white border is displayed in the center of the monitor.
- Flash mode ( 30) is set to  (Off).

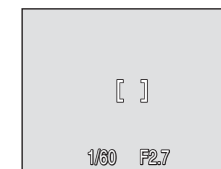
- 2 Select a subject.**

- Frame the subject in the center of the border and press the **OK** button.
 - The subject is selected and will be framed by a yellow double border.
 - When the camera is unable to focus on the subject, the single border will glow red. Change the composition and try again.
- Once the selected subject is not visible on the monitor, the double border will disappear and the selection will be cancelled. Select the subject again.



- 3 Press the shutter-release button halfway.**

- The camera focuses on the subject framed by the double border. The double border will glow green and focus will be locked.
- When the camera is unable to focus, the double border will blink. Press the shutter-release button halfway again and focus.



Focusing on a Moving Subject in Active Child Mode

Active Child Mode

4 Press the shutter-release button the rest of the way down.

- The picture will be recorded to the memory card or internal memory.



✓ Active Child Mode

- Flash mode and exposure compensation settings cannot be adjusted after selecting the subject. If any setting is adjusted after selection of the subject, the selection of the subject will be cancelled. Deleting pictures, adjusting zoom or image mode settings (88 84) will also cancel the selection of the subject.
- In some situations, such as when the subject is moving rapidly, the camera may be unable to track the selected subject.
- If the shutter-release button is pressed while the double border is not displayed, the camera focuses on the subject at the center of the frame.
- In some rare cases shooting subjects with which autofocus may not perform as expected (88 27), the subject may not be in focus despite the fact that the double border glows green. Should this occur, switch to (auto) mode and set **AF area mode** to **Manual** or **Center**, refocus on another subject positioned at the same distance from the camera as the actual portrait subject, and use focus lock (88 92).

✍ Options Available in Active Child Mode

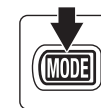
- Digital zoom is not available.
- Flash mode (88 30) and exposure compensation (88 34) settings can be adjusted.
- When the **MENU** button is pressed in active child mode, only the **Image mode** menu (88 84) is displayed. Changes made to the image mode setting in this mode apply to all shooting modes (except those available from the movie menu).

Automatic Shooting of a Smiling Face

Shooting in Smile Mode

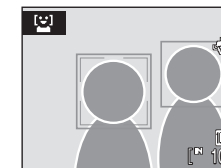
The camera detects a smiling face to shoot the face automatically.

- Enter smile mode by pressing the **MODE** button in shooting mode, selecting (use the rotary multi-selector), and then pressing the **OK** button.



- Frame a picture.

- Point the camera at the subject.
- When the camera detects a face looking toward the camera, the focus area containing the face will be displayed with a yellow double border. The camera focuses on the face framed by the double border. The double border will glow green and focus will be locked.
- When the camera detects more than one face, the closest face is framed by a double border and the others by single borders. Up to three faces can be detected.



- The shutter is automatically released.

- If the camera detects that the face framed by the double border is smiling, the shutter is automatically released.
- The camera will continue to release the shutter whenever it detects a smiling face.

- Exit smile mode by pressing the **MODE** button.

- Switch to another shooting mode.
- The camera will stop shooting if the internal memory or memory card becomes full.



✍ Smile Mode

The auto off function (88 113) will be activated and the camera will turn off if no operations are performed in any of the following situations in smile mode.

- The camera is unable to detect one or more faces.
- The camera has detected one or more faces, but is unable to detect a smiling face.

Shooting in Smile Mode

Face Priority and Smiling Face Detection Features

When the camera is pointed at a face looking toward the camera in smile mode, the face is automatically recognized and the smiling face of the recognized one is detected.

- In some shooting conditions, Face priority will not take effect and smiling face cannot be detected.
- See "Shooting with Face Priority" (P.93) for more information about Face Priority.

Operation of the Shutter-Release Button

Press the shutter-release button to take pictures.

- When Face priority takes effect, the focus is locked to the recognized face and the shutter-release button is released.
- If no face is detected, the camera focuses on the subject in center of frame.
- When the shutter-release button is pressed halfway and then released with the face-priority function enabled, the camera will detect the face again.

Options Available in Smile Mode

- Flash mode (P.30) and exposure compensation (P.34) settings can be adjusted.
- Digital zoom is not available.
- When the MENU button is pressed in smile mode, only the **Image mode** menu (P.84) is displayed. Changes made to the image mode setting in this mode apply to all shooting modes (except those available from the movie menu).

Automatic Shooting of a Smiling Face

More on Playback

Viewing Multiple Pictures: Thumbnail Playback

Press the **W** (P.28) button in full-frame playback mode (P.28) to display pictures in "contact sheets" of thumbnail images.



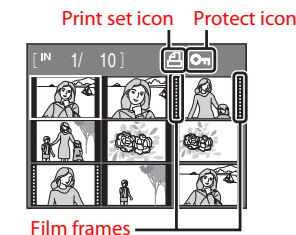
The following operations can be performed while thumbnails are displayed.

To	Use	Description	
Choose pictures		Rotate the rotary multi selector, or press ◀, ▶, ▲, or ▼, to choose pictures.	9
Increase number of picture thumbnails displayed	W (P.28)	Press the W (P.28) button to increase number of picture thumbnails displayed: 9 → 16 → 25	-
Decrease number of picture thumbnails displayed	T (P.28)	Press the T (P.28) button to decrease number of picture thumbnails displayed: 25 → 16 → 9	
Return to full-frame playback		Press the OK button.	28
Switch to shooting mode		Press the ▶ button to return to the last shooting mode selected.	28

More on Playback

Thumbnail Playback Mode Display

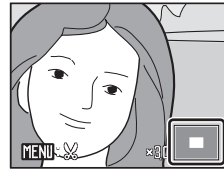
When **print set** (P.81) and **protected pictures** (P.99) are selected in thumbnail playback mode, the icon shown at right is displayed with them. Movies are displayed as film frames in all thumbnail playback modes.



Taking a Closer Look: Playback Zoom

Pressing the **T** (Q) button during full-frame playback mode (M 28) zooms the current picture, with the center of the picture displayed in the monitor.

The guide at lower right shows which portion of the picture is enlarged.



The following operations can be performed while pictures are zoomed in.

To	Use	Description	M 28
Zoom in	T (Q)	Zoom increases each time the T (Q) button is pressed, to a maximum of 10x.	-
Zoom out	W (R)	Zoom decreases each time the W (R) button is pressed. When the magnification ratio reaches 1x, the display returns to full-frame playback mode.	-
Move the display area		Press the rotary multi selector ▲, ▼, ◀, or ▶ to move the display area to other areas of the picture.	9
Return to full-frame playback	OK	Press the OK button.	28
Crop picture	MENU	Press the MENU button to crop current picture to contain only the portion visible in the monitor.	55
Switch to shooting mode		Press the button to return to the last shooting mode selected.	28

Pictures Taken Using the Face-Priority Function

When zooming in (playback zoom) on a picture taken using the face-priority function, the picture will be enlarged with the face detected with shooting at the center of the monitor.

- If more than one face was detected, the picture will be enlarged with the face on which focus was acquired at the center of the monitor. Press the rotary multi selector ▲, ▼, ◀, or ▶ to display other faces that were detected.
- When the **T** (Q) or **W** (R) button is pressed to adjust the zoom ratio, the center of the picture (normal playback zoom display), rather than the face, is displayed at the center of the monitor.



Editing Pictures

Use this camera to edit pictures in-camera and store them as separate files (M 118).

Editing function	Description
D-Lighting (M 54)	Create a copy of the current picture with enhanced brightness and contrast, brightening dark portions of the picture.
Crop (M 55)	Enlarge the image or refine the composition and create a copy containing only the portion visible in the monitor.
Small picture (M 56)	Create a small copy of pictures suitable for use on web pages or as e-mail attachments.

Picture Editing

- Pictures taken at an image mode setting of **16:9 (3584)** or **16:9 (1920)** (M 84) cannot be edited.
- This camera's editing functions **cannot** be available for pictures taken with another make or model of camera.
- If a copy created using this camera is viewed on another make or model of camera, the picture may not be displayed or may not be transferred to a computer.
- Editing functions are not available when there is not enough free space in the internal memory or on the memory card.

Restrictions on Picture Editing

(✓: available, -: not available)

1st editing	2nd editing		
	D-Lighting	Crop	Small picture
D-Lighting	-	✓	✓
Crop	-	-	-
Small picture	-	-	-

- Pictures cannot be edited twice with the same editing function.
- The D-Lighting should be done first while the restricted use of combination exists.

Original Pictures and Edited Copies

- Copies created with editing functions are not deleted if the original pictures are deleted. The original pictures are not deleted if copies created with editing functions are deleted.
- Edited copies are stored with the same recording date and time as the original.
- Edited copies are not marked for printing (M 81) or protecting (M 99) as the original.

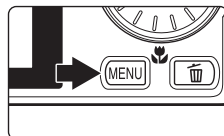
Editing Pictures

Enhancing Brightness and Contrast: D-Lighting

D-Lighting can be used to create copies with enhanced brightness and contrast, brightening dark portions of a picture. Enhanced copies are stored as separate files.

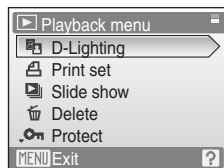
- 1 Select the desired picture from full-frame (F) 28) or thumbnail (F) 51) playback mode and press the **MENU** button.

The playback menu will be shown.



- 2 Use the rotary multi selector to choose **D-Lighting** and press the **OK** button.

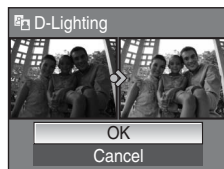
The original version will be shown on the left and the edited version will be shown on the right.




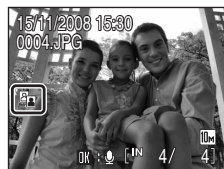
- 3 Choose **OK** and press the **OK** button.

A new copy with enhanced brightness and contrast is created.

To cancel D-Lighting, choose **Cancel** and press the **OK** button.



D-Lighting copies can be recognized by the  icon displayed during playback.

 **More Information**

See "Image/Sound File and Folder Names" (F) 118) for more information.

Editing Pictures

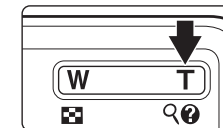
Creating a Cropped Copy: Crop

Create a copy containing only the portion visible in the monitor when **MENU** (F) 52) is displayed with playback zoom (F) 52) enabled. Cropped copies are stored as separate files.

- 1 Press the **T** (Q) button in full-frame playback mode to zoom in on the image.

To crop a picture displayed in "tall" (portrait) orientation, zoom in on the picture until the width of the picture is greater than that of the display.

To crop the picture in its current "tall" (portrait) orientation, **without changing the composition**, first rotate the picture so that it is displayed in landscape orientation, using the **Rotate image** (F) 100) option in the playback menu, before enlarging the picture for cropping.



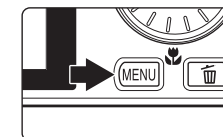
- 2 Refine copy composition.

Press the **zoom buttons**, the **T** (Q) or **W** (E) button, to adjust the zoom ratio.

Press the rotary multi selector **▲**, **▼**, **◀**, or **▶** to scroll the picture until only the portion you want to copy is visible in the monitor.



- 3 Press the **MENU** button.





- 4 Use the rotary multi selector to choose **Yes** and press the **OK** button.

A new picture, containing only the portion visible in the monitor, is created.

To cancel creating a cropped copy, choose **No** and press the **OK** button.

 **Image Size**

As the area to be saved is reduced, the image size (pixels) of the cropped copy is also reduced. When the size of the cropped copy is 320 x 240 or 160 x 120, the small picture icon  or  is displayed on the left of the screen in full-frame playback mode.




 **More Information**

See "Image/Sound File and Folder Names" (F) 118) for more information.

Editing Pictures

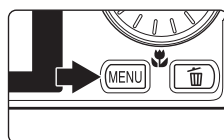
Resizing Pictures: Small Picture

Create a small copy of the current picture. Small copies are stored as JPEG files with a compression ratio of 1:16. The following sizes are available.

Option	Description
 640x480	Suited to television playback.
 320x240	Suited to display on web pages.
 160x120	Suitable for e-mail attachments.

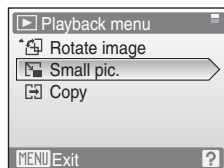
- 1 Select the desired picture from full-frame ( 28) or thumbnail ( 51) playback mode and press the **MENU** button.

The playback menu is displayed.

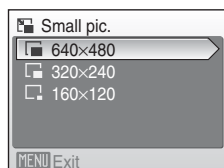


- 2 Use the rotary multi selector to choose **Small pic.** and press the **OK** button.

To cancel creating a small copy and return to shooting mode, press the **MENU** button.



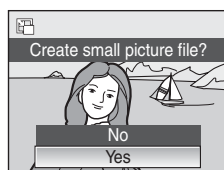
- 3 Choose the desired copy size and press the **OK** button.



- 4 Choose **Yes** and press the **OK** button.




A new, smaller copy is created.

To cancel creating a small copy, choose **No** and press the **OK** button.

**More Information**


See "Image/Sound File and Folder Names" ( 118) for more information.

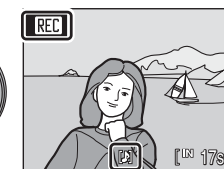
Voice Memos: Recording and Playback

Use the camera's built-in microphone to record voice memos for pictures marked with   in full-frame playback mode ( 28).



**Recording Voice Memos**

A voice memo, up to 20 seconds in length, will be recorded while the **OK** button is held down.



- Do not touch the built-in microphone during recording.
- During recording, **REC** and  blink in the monitor display.

**Playing Voice Memos**

Press the **OK** button while a picture with a voice memo attached is displayed in full-frame playback mode to play voice memo. Playback ends when the voice memo ends or the **OK** button is pressed again.

- Pictures with voice memos can be recognized by the   icon.
- Use the zoom buttons, the **T** or **W** button, to adjust playback volume.

**Deleting Voice Memos**

Select a picture with a voice memo attached and press the  button. Use the rotary multi selector to choose  and press the **OK** button. Only the voice memo will be deleted.

Voice Memos

- When a picture with a voice memo attached is deleted, both the picture and its voice memo are deleted.
- If a voice memo already exists for the current picture, a new voice memo cannot be recorded. To modify the existing voice memo, delete only the existing voice memo and then record a new voice memo.
- This camera cannot be used to attach voice memos to pictures taken with another make or model of camera.

More Information

See "Image/Sound File and Folder Names" ( 118) for more information.

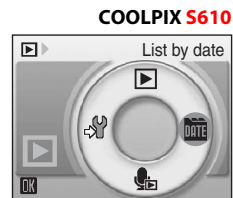
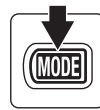
Viewing Pictures by Date

In list by date mode, pictures taken on a specified date can be displayed. In full-frame playback mode, just as with playback mode, picture display can be enlarged, pictures can be edited, voice memos can be recorded or played back, and movies can be played back. When the **MENU** button is pressed, the list by date menu is displayed, and all pictures taken on a specified date can be selected for deletion, printing, and protection.

Selecting a Date in List by Date Mode

- 1 Enter list by date mode by pressing the **MODE** button in playback mode, selecting **DATE** (use the rotary multi selector), and then pressing the **OK** button.

Dates for which pictures exist will be listed.

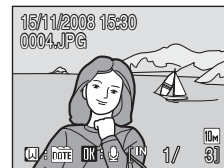
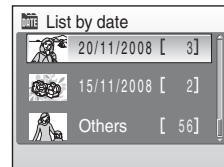


- 2 Choose the desired date and press the **OK** button.

Camera lists up to 29 dates. If pictures exist for more than 29 dates, all pictures recorded earlier than most recent 29 dates will be listed together as **Others**.

The first picture for that date will be displayed full-frame playback mode.

Press the **W** button in full-frame playback mode to return to the date list.



Viewing Pictures by Date

Using List by Date Mode

The following operations are possible from the date selection screen.

To	Use	Description	Page
Select date		Rotate the rotary multi selector, or press ▲ or ▼ , to select a date.	9
Switch to full-frame playback	OK	Press the OK button to display the first picture taken on the selected date. Press the W button in full-frame playback to return to the date selection screen.	29
Delete picture		Press the button after selecting a date, and a confirmation dialog will be displayed. Choose Yes and press the OK button to delete all pictures taken on the selected date.	28
View list by date menu	MENU	Press the MENU button to display the list by date menu.	60
View playback mode menu	MODE	Press the MODE button to display the playback-mode selection menu.	8
Switch to shooting mode		Press the button to return to the last shooting mode selected.	28

Notes on List by Date Mode

- Only the most recent 9,000 pictures can be displayed in list by date mode.
- Pictures taken with no date stamp are not listed in this mode.

Viewing Pictures by Date

List by Date Menus

Press the **MENU** button in list by date mode to display the following menus for only the pictures taken on the specified date.

D-Lighting*	54
Print set	81
Slide show	98
Delete	99
Protect	99
Rotate image*	100
Small picture*	56

* During full-frame playback mode only

When the **MENU** button is pressed in the date selection screen (58), options can be applied to all pictures taken on the same date, or all pictures taken on the same date can be deleted. To apply options to individual pictures, or to select individual pictures for deletion, display a picture full-frame and press the **MENU** button.

More on Playback

Print Set

When print marking already exists for pictures taken on dates other than that specified, a confirmation dialog **Save print marking for other dates?** will be displayed. Select **Yes** to add the new print marking to the existing marking. Select **No** to remove the existing print marking and leave only the new marking.

60

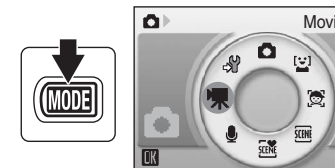
Movies

Recording Movies

To shoot movies with sound recorded via the built-in microphone, select shooting mode and follow the steps below.

- 1 Enter movie mode by pressing the **MODE** button in shooting mode, selecting (use the rotary multi-selector), and then pressing the **OK** button.

Exposure count display shows maximum total length of movie that can be recorded.



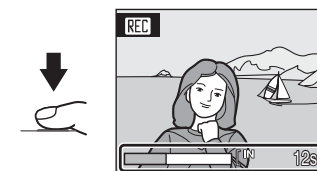
- 2 Press the shutter-release button all the way down to start recording.

The camera focuses on the subject in center of frame.

A progress bar at the bottom of the monitor shows the amount of recording time remaining.

To end recording, press the shutter-release button all the way down a second time.

Recording stops automatically when the internal memory or memory card becomes full, recording time reaches 30 minutes, or movie file size reaches 2 GB.

**Shooting Movies**

- Flash mode (30), self-timer (32), and exposure compensation (34) cannot be applied or changed. Macro mode (33) is available.
- Macro mode setting cannot be applied or changed while movies are being recorded. Apply or change setting as necessary before movie recording begins.
- Optical zoom cannot be adjusted once movie recording begins. Digital zoom cannot be applied before movie recording begins. However, digital zoom (up to 2X) can be applied while movies are being recorded.

Notes on Recording Movies

When the last frame of a movie is displayed in the monitor as a still picture, the movie is being recorded. Do not open the battery-chamber/memory card slot cover while movies are being recorded. Turning the camera off or removing the memory card while movies are being recorded could result in loss of data or in damage to the camera or card.

Changing Movie Settings

Movie options and autofocus mode settings can be changed in the movie menu (62).

61



The Movie Menu

Movie options and **Autofocus mode** (63) settings can be changed in the movie menu.

Press the **MENU** button in movie mode to display the movie menu and use the rotary multi selector to modify and apply settings.



Selecting Movie Options

The movie menu offers the options shown below.

Option	Image size and frame rate
 TV movie 640 (default setting)	Image size: 640 × 480 pixels Frame rate: 30 frames per second
 Small size 320	Image size: 320 × 240 pixels Frame rate: 30 frames per second

Movies

Movie Options and Maximum Movie Length

Option	Internal memory (approx. # MB)	Memory card (# MB)
 TV movie 640 (default setting)	# s	Approx. # m # s
 Small size 320	# m # s	Approx. # m

* All figures are approximate. The maximum recording time may vary with make of memory card.

This camera can record movies up to 30 minutes in length or a file size of up to 2 GB. The amount of recording time remaining (up to 30 minutes or 2 GB) is displayed during recording.

More Information



See "Image/Sound File and Folder Names" (118) for more information.

62

The Movie Menu

Autofocus Mode

Choose how the camera focuses in movie mode.

Option	Description
 Single AF (default setting)	Camera focuses when shutter-release button is pressed halfway and locks at this position during shooting.
 Full-time AF	Camera focuses continuously until focus is acquired and locked. To prevent sound of camera focusing from interfering with recording, use of Single AF is recommended.

Movies

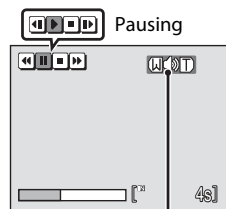
63

Movie Playback

In full-frame playback mode (28), movies are recognized by the movie mode icons. To play a movie, display it in full-frame playback mode and press the **OK** button.

Use the zoom buttons, the **T** or **W** button, to adjust playback volume.

Playback controls appear at the top of the monitor. Press the rotary multi selector or to choose a control, then press the **OK** button to perform the selected operation. The following operations are available.

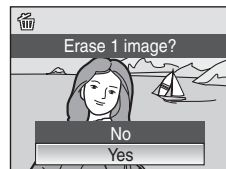


During playback
Volume indicator

To	Select	Description
Rewind		Rewind movie. Playback resumes when the OK button is released.
Advance		Advance movie. Playback resumes when the OK button is released.
Pause		Pause playback. The following operations can be performed while playback is paused.
		Rewind movie by one frame. Rewind continues while the OK button is pressed.
		Advance movie by one frame. Advance continues while the OK button is pressed.
		Resume playback.
End		End playback and return to full-frame playback.

Deleting Movie Files

Press the button when displayed in full-frame playback mode (28) or when selected in thumbnail (51) playback mode. A confirmation dialog is displayed. Select **Yes** and press the **OK** button to delete the movie, or select **No** to exit without deleting the movie.



Voice Recordings

Making Voice Recordings

Audio voice recordings can be recorded over the built-in microphone and played back over the built-in speaker.

- 1 Enter voice recording mode by pressing the **MODE** button in shooting mode, selecting (use the rotary multi selector), and then pressing the **OK** button.



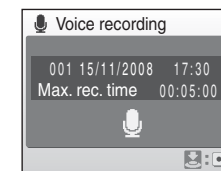
The length of recording that can be made will be displayed.

- 2 Press the shutter-release button all the way down to start recording.

The indicator lamp lights during recording.

If no operations are performed for about 30 seconds after voice recording begins, the camera's auto off function is enabled and the monitor turns off.

See "Operations During Recording" (66) for more information.



- 3 Press the shutter-release button all the way down a second time to end recording.

Recording will end automatically if the internal memory or memory card becomes full, or after 120 minutes of recording on the memory card.

More Information

See "Image/Sound File and Folder Names" (118) for more information.

Making Voice Recordings

Operations During Recording



To	Press	Description
Reactivate the monitor		If the monitor has turned off, press the ▶ button to reactivate.
Pause/resume recording		Press once to pause recording; indicator lamp will blink.
End recording		Press the shutter-release button all the way down a second time to end recording.

Voice Recordings

The files transferred to a computer can be played back using QuickTime or any other WAV-compatible audio player.

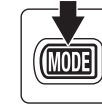
More Information

See "Image/Sound File and Folder Names" (📖 118) for more information.

Playing Voice Recordings

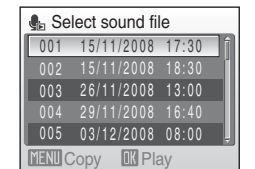
- 1 Enter **sound file** playback mode by pressing the **MODE** button in playback mode, selecting (use the rotary multi selector), and then pressing the **OK** button.

Voice recordings can also be played back by pressing the **▶** button in voice recording mode (📖 65) to display the sound file selection screen.



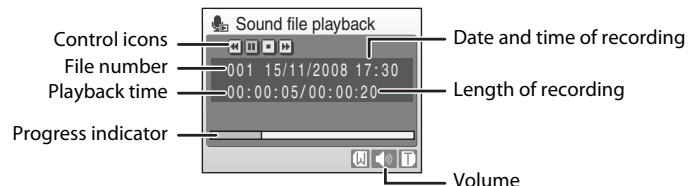
- 2 Choose the desired sound file and press the **OK** button.

The selected sound file will be played back.



Playing Voice Recordings

Operations During Playback

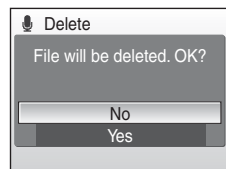


Use the zoom buttons, the **T** or **W** button, to adjust playback volume. Playback controls appear at the top of the monitor. Press the rotary multi selector ◀ or ▶ to choose a control, then press the **OK** button to perform the selected operation. The following operations are available.

To	Press	Description
Rewind	⏮	Rewind voice recording. Playback resumes when the OK button is released.
Advance	⏭	Advance voice recording. Playback resumes when the OK button is released.
Pause	⏸	Pause playback.
	⏪	Resume playback that has been paused.
End	⏹	End playback and return to the sound file selection screen.

Deleting Sound Files

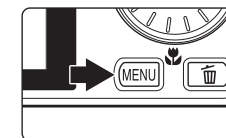
Press the **DEL** button during playback or after selecting a sound file from the sound file selection screen. A confirmation dialog is displayed. To delete the file, select **Yes** and press the **OK** button. To exit without deleting the sound file, select **No**.



Copying Voice Recordings

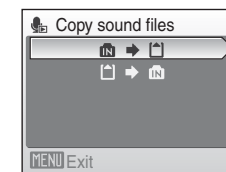
Copy voice recordings between the internal memory and a memory card. This option is available only when a memory card is inserted.

- 1 Display the sound file selection screen shown in step 2 on page 67 and press the **MENU** button.



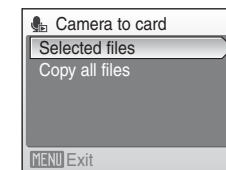
- 2 Use the rotary multi selector to choose the option and press the **OK** button.

- ◀ → ◻: Copy recordings from internal memory to memory card
- ◻ → ▶: Copy recordings from memory card to internal memory



- 3 Choose the copy option and press the **OK** button.

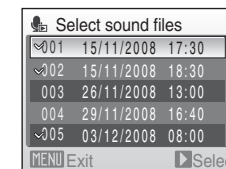
- Selected files:** Proceed to step 4
- Copy all files:** Proceed to step 5



- 4 Choose the desired file.

Press the rotary multi selector ▶ to select the file (✓). Press the rotary multi selector ▶ again to cancel the selection.

- Multiple files can be selected.
- Press the **OK** button to finalize file selection.



- 5 When a confirmation dialog is displayed, choose **Yes** and press the **OK** button.

Copying starts.

✓ Voice Recordings

This camera may be unable to play or copy sound files created with another make or model of camera.

✍ No sound file. Message

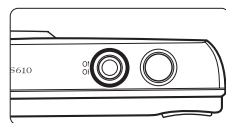
If there are no sound files stored on the memory card when **MC** is selected (67, step1), the message, **No sound file.**, will be displayed. Press the **MENU** button to display the copy sound files screen, and copy the sound files stored in the camera's internal memory to the memory card.

Connecting to Televisions, Computers, and Printers

Connecting to a TV

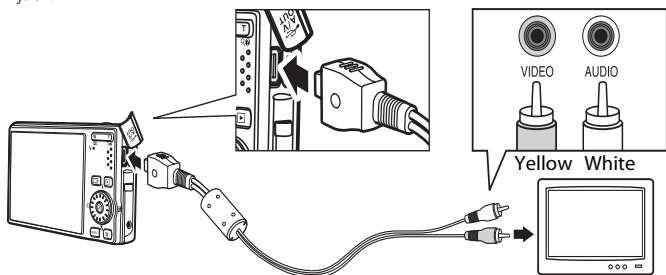
Connect the camera to a television using the supplied audio/video cable to play back pictures on the television.

1 Turn off the camera.



2 Connect the camera to the TV using the supplied audio/video cable.

Connect the yellow plug to the video-in jack on the TV, and the white plug to the audio-in jack.



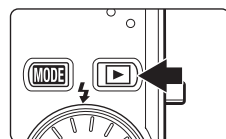
3 Tune the television to the video channel.

See the documentation provided with your television for details.

4 Hold down the button to turn on the camera.

The camera enters playback mode, and pictures recorded to the internal memory, or memory card, will be displayed on the television.



While connected to the TV, the camera monitor will remain off.



Connecting an Audio/Video Cable

When connecting the audio/video cable, be sure that the camera connector is oriented correctly. Do not use force when connecting the audio/video cable to the camera. When disconnecting the audio/video cable, do not pull the connector at an angle.

Video Mode

Be sure that the camera's video mode setting conforms to the standard used by your television. The video mode setting is an option set in the setup menu ( 102)>**Video mode** ( 114).

Connecting to a Computer

Use the supplied USB cable to connect the camera to a computer, and copy (transfer) pictures to a computer with the supplied Nikon Transfer software.

Before Connecting the Camera

Install the Software

Before connecting the camera to a computer, software, including Nikon Transfer and Panorama Maker for creating panorama images, must be installed from the supplied Software Suite CD. For more information on installing the software, refer to the *Quick Start Guide*.

Operating Systems Compatible with the Camera

Windows

Preinstalled versions of 32-bit Windows Vista Service Pack 1 (Home Basic/Home Premium/Business/Enterprise/Ultimate editions), Windows XP Service Pack 3 (Home Edition/Professional)

Macintosh


Mac OS X (version 10.3.9, 10.4.11, 10.5.2)

Refer to the Nikon website for the latest information on operating system compatibility.

Note on Power Source

When connecting the camera to a computer or printer, use a fully charged battery to prevent the camera from turning off unexpectedly.

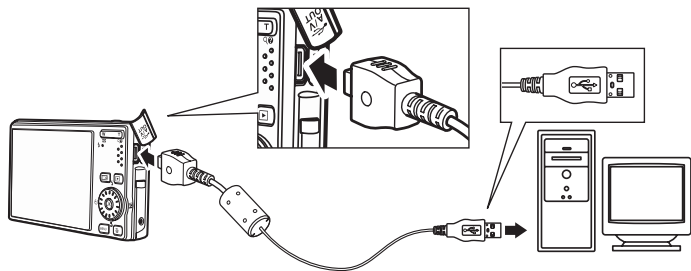
If You Are Using Windows 2000 Professional

- Do not connect the camera to the computer.
- Use a card reader or similar device to transfer pictures stored on the memory card to the computer ( 74).
- If the camera has been connected to the computer, the Found New Hardware Wizard dialog is displayed. Select **Cancel** to close the dialog and disconnect the camera from the computer.

Connecting to a Computer

Transferring Pictures from a Camera to a Computer

- 1** Start the computer to which Nikon Transfer was installed.
- 2** Turn off the camera.
- 3** Connect the camera to the computer using the supplied USB cable.



- 4** Turn on the camera.
The power-on lamp will light.

Windows Vista

When the AutoPlay dialog is displayed, click **Copy pictures to a folder on my computer using Nikon Transfer**. Nikon Transfer will start. To bypass this dialog in the future, check **Always do this for this device**.

Windows XP

When the AutoPlay dialog is displayed, select **Nikon Transfer Copy pictures to a folder on my computer**, and click **OK**. Nikon Transfer will start. To bypass this dialog in the future, check **Always use this program for this action**.

Mac OS X

Nikon Transfer will start automatically if **Yes** was selected in the Auto-Launch setting dialog when Nikon Transfer was first installed.

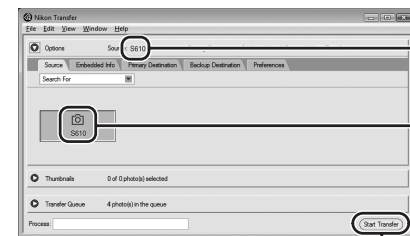
Connecting the USB Cable

- When connecting the USB cable, be sure that the connectors are oriented correctly. Do not use force when connecting the USB cable. When disconnecting the USB cable, do not pull the connector at an angle.
- Connection may not be recognized when the camera is connected to a computer via a USB hub.

Connecting to a Computer

- 5** Transfer pictures when Nikon Transfer has finished loading.

Click **Start Transfer** in Nikon Transfer. At the default setting, all pictures are transferred to the computer.



S610 or S610c is displayed.

Start Transfer button

At the Nikon Transfer default setting, the folder to which pictures are transferred is automatically opened when transfer is complete.

If ViewNX has been installed, ViewNX will start automatically and transferred pictures can be viewed.

For more information on using Nikon Transfer, refer to help information contained in Nikon Transfer.

- 6** Disconnect the camera when transfer is complete.
Turn the camera off and disconnect the USB cable.

Connecting to a Computer

Using a Card Reader

The pictures stored on the memory card inserted into a card reader or similar device can also be transferred to the computer using Nikon Transfer.

- If the memory card has a capacity greater than 2 GB, or is SDHC-compliant, the intended device must support these features of the memory card.
- At the Nikon Transfer default settings, Nikon Transfer will start automatically when a memory card is inserted into the card reader or similar device. See step 5 of "Transferring Pictures from a Camera to a Computer" (83 73).
- To transfer pictures stored in the camera's internal memory to the computer, the pictures must first be copied to a memory card using the camera (83 69, 101).

Using Standard OS Operations to Open Image/Sound Files

- Navigate to the folder on the computer's hard disk to which pictures were saved and open a picture in the viewer supplied with your operating system.
- Sound files copied to the computer can be played back using QuickTime or any other WAV-compatible audio player.

Panorama Creation with Panorama Maker

- Use a series of pictures taken using the **Panorama assist** option in scene mode (83 43) to create a single panorama photo with Panorama Maker.
- Panorama Maker can be installed to a computer using the supplied Software Suite CD. After installation is complete, follow the procedure described below to start Panorama Maker.

Windows

Open **All Programs (Programs)** under Windows 2000) from the **Start** menu>**ArcSoft Panorama Maker 4>Panorama Maker 4**.

Macintosh

Open Applications by selecting **Applications** from the **Go** menu, and double-click the **Panorama Maker 4** icon.

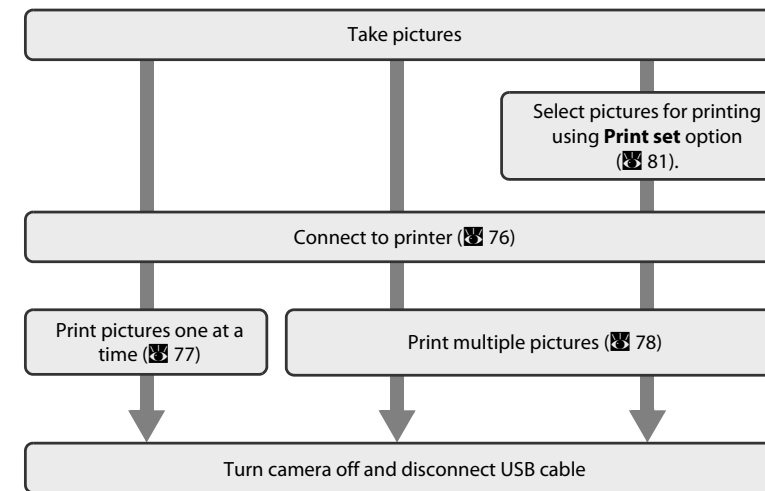
- For more information on using Panorama Maker, refer to the on-screen instructions and help information contained in Panorama Maker.

Image File Names and Folder Names

See, "Image/Sound File and Folder Names" (83 118) for more information.

Connecting to a Printer

Users of PictBridge-compatible (83 134) printers can connect the camera directly to the printer and print pictures without using a computer.



Note on Power Source

When connecting the camera to a printer, use a fully charged battery to prevent the camera from turning off unexpectedly.

Printing Pictures

In addition to printing pictures transferred to a computer from your personal printer and printing over a direct camera-to-printer connection, the following options are also available for printing pictures:

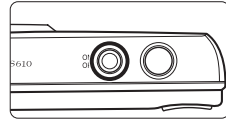
- Insert a memory card into a DPOF-compatible printer's card slot
- Take a memory card to a digital photo lab

For printing using these methods, specify the pictures and the number of prints each using your camera's print set menu (83 81).

Connecting to a Printer

Connecting the Camera and Printer

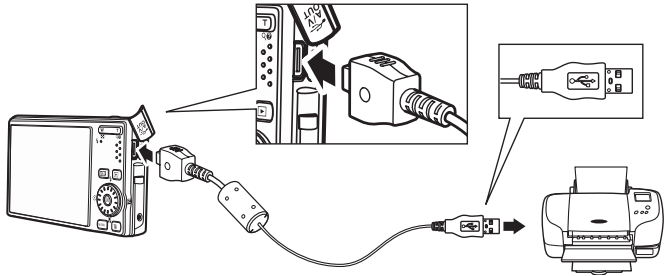
1 Turn off the camera.



2 Turn on the printer.

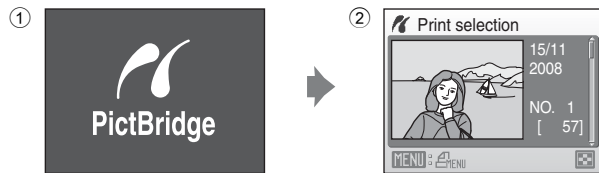
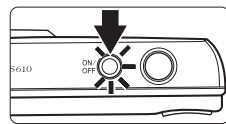
Check printer settings.

3 Connect the camera to the printer using the supplied USB cable.



4 Turn on the camera.

When connected correctly, the PictBridge start-up screen (1) will be displayed in the camera monitor. Then the print selection screen will be displayed (2).



Connecting the USB Cable

When connecting the USB cable, be sure that the connectors are oriented correctly. Do not use force when connecting the USB cable. When disconnecting the USB cable, do not pull the connector at an angle.

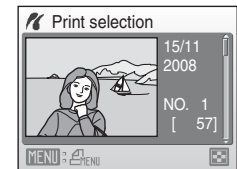
Connecting to a Printer

Printing Pictures One at a Time

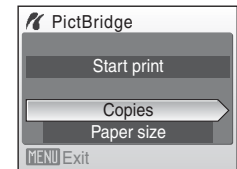
After connecting the camera to the printer correctly (76), print pictures by following the procedure below.

1 Use the rotary multi selector to choose the desired picture and press the **OK** button.

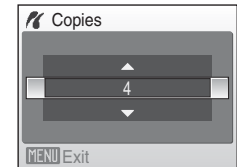
Press the **W** button to display 12 thumbnails, and the **T** button to switch back to full-frame playback.



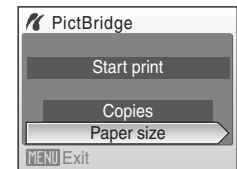
2 Choose **Copies** and press the **OK** button.



3 Choose the number of copies (up to nine) and press the **OK** button.

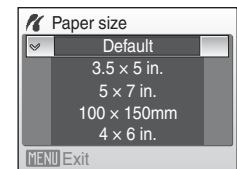


4 Choose **Paper size** and press the **OK** button.



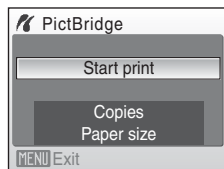
5 Choose the desired paper size and press the **OK** button.

To specify paper size using printer settings, choose **Default** in the paper size menu.



Connecting to a Printer

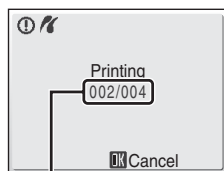
6 Choose **Start print** and press the **OK** button.



7 Printing starts.

Monitor display returns to that shown in step 1 when printing is complete.

To cancel before all copies have been printed, press the **OK** button.



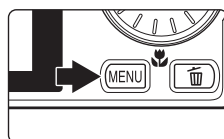
Current print/
total number of prints

Printing Multiple Pictures

After connecting the camera to the printer correctly (76), print pictures by following the procedure below.

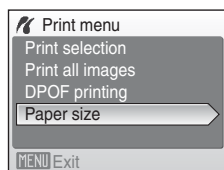
1 When the print selection screen is displayed, press the **MENU** button.

The print menu is displayed.



2 Use the rotary multi selector to choose **Paper size** and press the **OK** button.

To exit the print menu, press the **MENU** button.

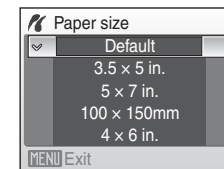


Connecting to Televisions, Computers, and Printers

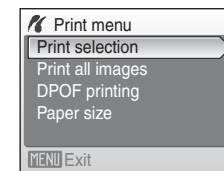
Connecting to a Printer

3 Choose the desired paper size and press the **OK** button.

To specify paper size using printer settings, choose **Default** in the paper size menu.

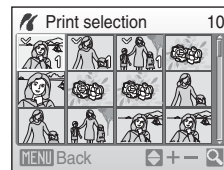


4 Choose **Print selection**, **Print all images** or **DPOF printing** and press the **OK** button.



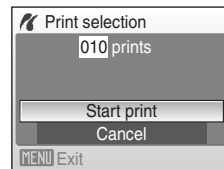
Print selection

Choose the pictures (up to 99) and number of copies (up to nine) of each. Rotate the rotary multi selector, or press ◀ or ▶, to select pictures, and press ▲ or ▼ to set the number of copies for each. Pictures selected for printing can be recognized by the check mark (✓) and the numeral indicating the number of copies to be printed. A check mark is not displayed with pictures for which no copies have been specified and these pictures will not be printed. Press the **T** (Q) button to switch to full-frame playback. Press the **W** (R) button to switch back to thumbnail display. Press the **OK** button when setting is complete.



To print, choose **Start print** from the menu displayed and shown at right, and press the **OK** button.

Choose **Cancel** and press the **OK** button to return to the print menu.



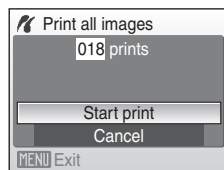
Connecting to Televisions, Computers, and Printers

Connecting to a Printer

Print all images

All pictures stored in the internal memory, or on the memory card, are printed one at a time. To print, choose **Start print** from the menu displayed and shown at right, and press the **OK** button.

Choose **Cancel** and press the **OK** button to return to the print menu.

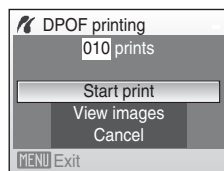


DPOF printing

Print pictures for which a print order was created in **Print set** (81).

To print, choose **Start print** from the menu displayed and shown at right, and press the **OK** button.

Choose **Cancel** and press the **OK** button to return to the print menu.



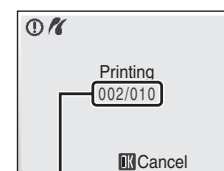
To view the current print order, choose **View images** and press the **OK** button. To print pictures, press the **OK** button again.



5 Printing starts.

Monitor display returns to the print menu (step 2) when printing is complete.

To cancel before all copies have been printed, press the **OK** button.



Current print/
total number of prints

Paper Size

The camera supports the following paper sizes: **Default** (the default paper size for the current printer), **3.5 x 5 in.**, **5 x 7 in.**, **100 x 150mm**, **4 x 6 in.**, **8 x 10 in.**, **Letter**, **A3**, and **A4**. Only sizes supported by the current printer will be displayed.

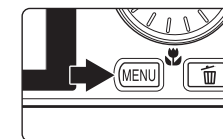
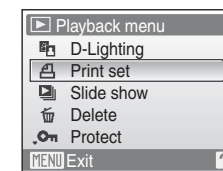
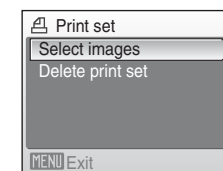
Creating a DPOF Print Order: Print Set

The **Print set** option in the playback menu is used to create digital "print orders" for printing on DPOF-compatible devices (83 134).

When the camera is connected to a PictBridge-compatible printer, pictures can be printed from the printer according to the DPOF print order you have created for pictures on the memory card. If the memory card is removed from the camera, you can create the DPOF print order for pictures in the internal memory and print pictures according to the DPOF print order.

1 Press the **MENU** button in playback mode.

The playback menu is displayed.

2 Use the rotary multi selector to choose **Print set** and press the **OK** button.3 Choose **Select images** and press the **OK** button.

4 Choose the pictures (up to 99) and number of copies (up to nine) of each.

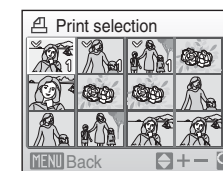
Rotate the rotary multi selector, or press **◀** or **▶**, to select pictures, and press **▲** or **▼** to set the number of copies for each.

Pictures selected for printing can be recognized by the check mark (✓) icon and the numeral indicating the number of copies to be printed. A check mark is not displayed with pictures for which no copies have been specified and these pictures will not be printed.

Press the **T** (Q) button to switch to full-frame playback.

Press the **W** (E) button to switch back to thumbnail display.

Press the **OK** button when setting is complete.



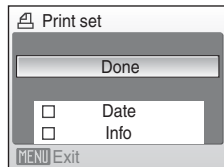
Creating a DPOF Print Order: Print Set

5 Choose whether or not to also print shooting date and photo information.

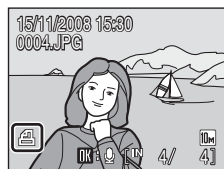
Choose **Date** and press the **OK** button to print date of recording on all pictures in the print order.

Choose **Info** and press the **OK** button to print photo information (shutter speed and aperture) on all pictures in the print order.

Choose **Done** and press the **OK** button to complete the print order and exit.



Pictures selected for printing are recognized by the icon displayed with playback.



Notes on Printing Shooting Date and Photo Information

When the **Date** and **Info** options are enabled in the **Print set** menu, shooting date and photo information are printed on pictures when a DPOF-compatible (134) printer which supports printing of shooting date and photo information is used.

- Photo information cannot be printed when the camera is connected directly to a printer, via the supplied USB cable, for DPOF printing (80).
- **Date** and **Info** are reset each time the print set menu is displayed.

Deleting All Print Orders

Choose **Delete print set** in step 3 and press the **OK** button. Print orders for all pictures will be deleted.

Note on the Print Set Date Option

The date and time printed on pictures with DPOF printing when **Date** in the print set menu is enabled, are those recorded with the picture as it was taken. Date and time printed using this option are not affected when the camera's date and time setting are changed from the setup menu after pictures are recorded.



Date Imprint

When date and time of recording are imprinted on pictures using the **Date Imprint** option (109) in the setup menu, pictures with the date and time imprinted on them can be printed from printers that do not support printing of the date and time on pictures. Only the **Date Imprint** date and time on pictures will be printed, even if **Print set** is enabled with **Date** selected in the print set screen.

Connecting to Televisions, Computers, and Printers

Shooting, Playback, and Setup Menus

Shooting Options: The Shooting Menu

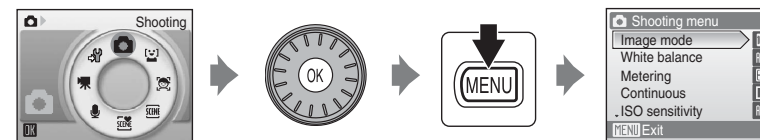
The shooting menu of **(auto)** mode contains the following options.

	Image mode*		84
Choose image size and quality.			
	White balance		86
Match white balance to the light source.			
	Metering		88
Choose how the camera meters exposure.			
	Continuous		89
Change settings for Continuous or BSS (best shot selector).			
	ISO sensitivity		90
Control camera's sensitivity to light.			
	Color options		90
Apply color effects to pictures as they are recorded.			
	AF area mode		91
Choose where the camera focuses.			
	Autofocus mode		94
Choose how the camera focuses.			

* The **Image mode** setting is also available from other shooting menus (except the movie menu).

Displaying the Shooting Menu

Enter **(auto)** mode by pressing the **MODE** button in shooting mode and then selecting **(auto)**. Press the **MENU** button to display the shooting menu.



- Use the rotary multi selector to choose and apply settings (9).
- To return to the shooting mode from the shooting menu, press the **MENU** button.

Functions that Cannot Be Applied Simultaneously

Some functions cannot be enabled in conjunction with others (95).

Shooting, Playback, and Setup Menus

Shooting Options: The Shooting Menu

Image Mode

Choose an image mode, which is the combination of image size and image quality (compression), according to how you plan to use the picture and the capacity of the internal memory or memory card. The larger the image, the larger the size at which it can be printed or displayed without becoming noticeably "grainy," limiting the number of pictures that can be recorded.

Option	Size (pixels)	Description
High (3648★)	3,648 × 2,736	Highest quality, suitable for enlargements or high-quality prints. The compression ratio is approximately 1:4.
Normal (3648) (default setting)	3,648 × 2,736	Best choice in most situations. The compression ratio is approximately 1:8.
Normal (3072)	3,072 × 2,304	
Normal (2592)	2,592 × 1,944	
Normal (2048)	2,048 × 1,536	Smaller size allows more pictures to be stored. The compression ratio is approximately 1:8.
PC screen (1024)	1,024 × 768	Suited to display on computer monitor. The compression ratio is approximately 1:8.
TV screen (640)	640 × 480	Suited to full-screen display on a television or distribution by e-mail or the web. The compression ratio is approximately 1:8.
16:9 (3584)	3,584 × 2,016	Pictures with an aspect ratio of 16:9 can be taken. 16:9 (1920) is suited display on high-definition televisions (HDTV). 16:9 (3584) is a larger image, suited to printing at larger sizes. The compression ratio for both image sizes is approximately 1:8.
16:9 (1920)	1,920 × 1,080	

The icon for the current setting is displayed in the monitor in shooting and playback modes (6, 7).

Image Mode

Changes made to the image mode setting apply to all shooting modes (except those available from the movie menu).

Shooting Options: The Shooting Menu

The Number of Exposures Remaining

The following table lists the approximate number of pictures that can be stored in internal memory and on a 256 MB memory card. Note that the number of pictures that can be stored will differ depending on the composition of the picture (due to JPEG compression). In addition, this number may differ depending on the make of memory card, even if the capacity for the memory card is the same.

Setting	Internal memory (approx. ## MB)	Memory card ¹ (256 MB)	Print size ² (cm/in.)
High (3648★)	##	50	31 × 23/12.2 × 9
Normal (3648)	##	90	31 × 23/12.2 × 9
Normal (3072)	##	120	26 × 19.5/10.2 × 7.6
Normal (2592)	##	170	22 × 16.5/8.6 × 6.4
Normal (2048)	##	270	17 × 13/6.7 × 5.1
PC screen (1024)	##	850	9 × 7/3.5 × 2.7
TV screen (640)	##	1700	5 × 4/1.9 × 1.5
16:9 (3584)	30	120	30.5 × 17/12 × 6.6
16:9 (1920)	##	425	16 × 9/6.3 × 3.5






¹ If the number of exposures remaining is 10,000 or more, the number of exposure remaining display shows **9999**.

² Print size at an output resolution of 300 dpi. Print sizes are calculated by dividing the number of pixels by printer resolution (dpi) and multiplying by 2.54 cm (1 in.). However, at the same image size, pictures printed at higher resolutions will print smaller than the size indicated, and those printed at lower resolutions will print larger than the size indicated.

Shooting Options: The Shooting Menu

WB White Balance

The color of light reflected from an object varies with the color of the light source. The human brain is able to adapt to changes in the color of the light source, with the result that white objects appear white whether seen in the shade, direct sunlight, or under incandescent lighting. Digital cameras can mimic this adjustment by processing images according to the color of the light source. This is known as "white balance." For natural coloration, choose a white balance setting that matches the light source before shooting. Although the default setting, **Auto**, can be used under most types of lighting, you can apply the white balance setting suited to a particular light source to achieve more accurate results.

Auto	Auto (default setting)
	White balance automatically adjusted to suit lighting conditions. Best choice in most situations.
PRE	Preset manual
	Neutral-colored object used as reference to set white balance under unusual lighting conditions, see "Preset Manual" (87) for details.
	Daylight
	White balance adjusted for direct sunlight.
	Incandescent
	Use under incandescent lighting.
	Fluorescent
	Use under most types of fluorescent lighting.
	Cloudy
	Use when shooting under overcast skies.
	Flash
	Use with the flash.

The effects of the selected option can be previewed in the monitor. At settings other than **Auto**, the icon for the current setting is displayed in the monitor (36).

Flash Mode

At white-balance settings other than **Auto** or **Flash**, turn the flash off (30).

Shooting Options: The Shooting Menu

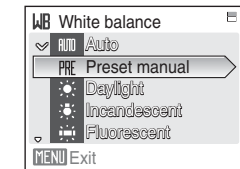
Preset Manual

Preset manual is used with mixed lighting or to compensate for light sources with a strong color cast (for example, to make pictures taken under a lamp with a red shade look as though they had been taken under white light).

- 1 Place a white or gray reference object under the lighting that will be used during shooting.

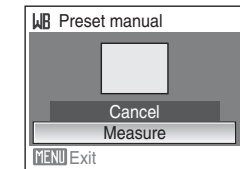
- 2 Use the rotary multi selector to choose **PRE Preset manual** in the white balance menu, and press the **OK** button.

The camera zooms in.

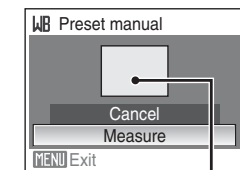


- 3 Choose **Measure**.

To apply the most recently measured value for preset manual, choose **Cancel** and press the **OK** button.



- 4 Frame the reference object.



Reference object frame

- 5 Press the **OK** button to measure the white balance value.

The shutter is released and the new white-balance value is set.

No pictures are recorded.

Note on Preset Manual

Regardless of the flash mode selected, the flash will not fire when the **OK** button is pressed in step 5. Therefore, the camera cannot measure a value for preset manual for when the flash is used.