

BASIC IMAGE RECORDING

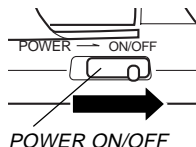
This section describes the basic procedure for recording an image.

Recording a Simple Snapshot

The camera's Program AE Mode (P Mode) is for simple snapshots. In this mode, the camera automatically sets the shutter speed and aperture for you in accordance with subject brightness.

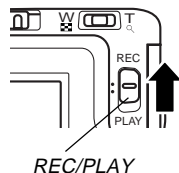
1. Before turning on the camera, remove its lens cap.

2. Slide the POWER ON/OFF switch to the right to turn on the camera.

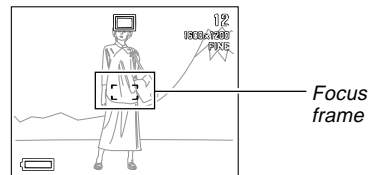


3. Slide the REC/PLAY selector to "REC".

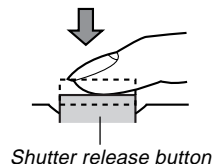
REC : REC mode for recording images
PLAY : PLAY mode for playing back images



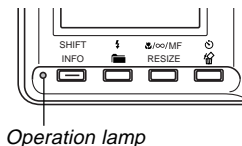
4. Compose the image on the monitor screen so the point on which you want to focus is inside the Focus frame.



5. Press the shutter release button about half way and hold it there to perform auto focus.

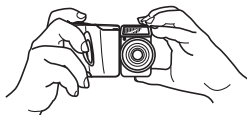


- You can find out the status of the Auto Focus operation by checking the color of the focus frame and the status of the operation lamp.

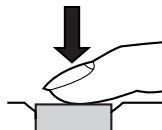


If you see this	It means this
Green focus frame and green operation lamp	The image is in focus.
Red focus frame and red operation lamp	The image is not in focus.

- Take care that you do not block the lens or the sensors with your fingers as you hold the camera.





- 6. After confirming that the image is in focus, press the shutter release button all the way down to record the image.**



- Recorded images are temporarily stored in a buffer, from which they are stored to the memory card installed in the camera. You can continue to store images as long as there is space available in the buffer.
- The number of images you can store in the camera depends on the storage medium and the image quality setting (page E-60) you are using.
- To avoid hand movement, press the shutter release button gently.
- Use of a tripod is recommended for slow shutter speeds and telephoto shots to avoid blurring of the image due to camera movement.

■ Camera Shake Indicator

The  (camera shake indicator) appears on the monitor screen when the zoom slider is set to T (telephoto) or when a slow shutter speed is being used.

- If the camera shake indicator  appears, use a tripod and the wired remote controller to avoid camera movement.

About the REC Mode Monitor Screen

- The image shown on the monitor screen in the REC mode is a simplified image for composing purposes. The actual image is recorded in accordance with the image quality setting currently selected on your camera. The image recorded on the memory card has much better resolution and detail than the REC mode monitor screen image.
- Certain levels of subject brightness can cause the response of the REC mode monitor screen to slow down, which causes some static noise in the monitor screen image.

About Auto Focus

Auto Focus tends not to work well with the following types of subjects. If you experience problems with obtaining good results with Auto Focus, try using manual focus (page E-58).

- Solid color walls or objects with little contrast
- Strongly backlit objects
- Polished metal or other brightly reflective objects
- Venetian blinds or other horizontally repeating patterns
- Multiple images that are varying distances from the camera
- Subjects in poorly lit areas
- Auto Focus also may not work properly when the camera is unsteady or shaking.

■ Fixed Focusing Distances

- The following are the fixed focusing distances when Auto Focus is unable to focus properly.

Well-lit Location: 1.5 meters minimum





With Flash : Approximately 2 meters




- Depending on actual conditions, a green operation indicator and focus frame do not necessarily guarantee that the image is in focus.



Recording Precautions

- Never open the battery compartment cover, disconnect the AC adaptor from the camera, or unplug the adaptor from the wall socket while the operation lamp is flashing green. Doing so will not only make storage of the current image impossible, it can also corrupt other image data already stored on the camera's memory card.
- Never remove batteries, unplug the AC adapter, or remove the memory card while the camera is saving images.
- Fluorescent lighting actually flickers at a frequency that cannot be detected by the human eye. When using the camera indoors under such lighting, you may experience some brightness or color problems with recorded images.

Image Recording when the Battery is Low

To protect against unexpected loss of image data, images are recorded one-by-one whenever the battery level is indicated as  or lower. The message “Press  to cancel save.” appears on the monitor screen during the save operation under this condition. As long as you do not press  , the save operation continues and takes a few seconds to complete. Be sure to replace all four batteries as soon as possible after this message starts to appear.

Pressing   while the “Press  to cancel save.” is on the monitor screen cancels the image save operation.

- If you have a microdrive loaded in the camera, the above message appears whenever the battery level is indicated as  or lower.
- The message “Press  to cancel save.” also appears momentarily during save operations in the Panorama Mode and Movie Mode. In this case, this message does not indicate that battery power is low.

Using Zoom

Your camera is equipped with both optical zoom and digital zoom capabilities.

Using Optical Zoom

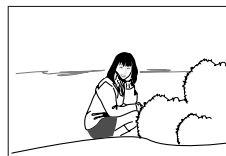
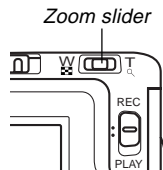
Optical zoom enlarges the image by changing the focal distance of the lens. The optical zoom range depends on your camera model.

- QV-2400UX: 1X to 3X
- QV-2900UX: 1X to 8X

1. Enter the REC mode.
2. Move the zoom slider towards T (telephoto) to zoom in on the subject, or W (wide-angle) to zoom out.

W (WIDE): Wide-angle

T (TELE): Telephoto



W (WIDE)



T (TELE)

NOTES

- Changing the optical zoom factor also affects the lens aperture value.
- The lens aperture value indicated on the camera is the aperture when optical zoom is 1X. Using a higher optical zoom setting results in a higher aperture value (smaller aperture).
- Use of a tripod is recommended for telephoto shots to avoid blurring of the image due to camera movement.

Using Digital Zoom

With digital zoom, you can enlarge the image on the monitor screen by zoom factors of 2X or 4X before storing it.

- 1. Enter the REC mode.**
- 2. Press MENU.**
- 3. Select “FUNCTION” → “Digital Zoom”, and then press the shutter release button.**


- 4. Select the setting you want, and then press the shutter release button to apply it.**

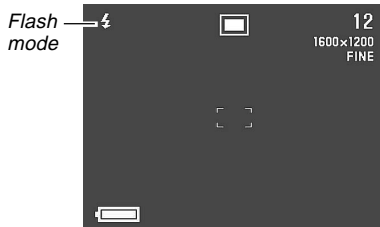
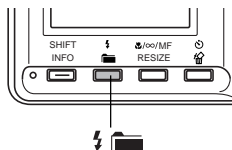
To do this	Select this
Turn off digital zoom	Off
Toggle between 2X and 4X digital zoom whenever the zoom slider is slid to the maximum T (telephoto) setting.	Auto
Always use 2X digital zoom	X2
Always use 4X digital zoom	X4


- A frame appears on the monitor screen whenever 4X digital zoom is in use. Only the area of the image within the frame is recorded, with the resulting image measuring 800 x 600 pixels.
- 4X digital zoom is not available in the Movie Mode and Panorama Mode.
- 2X and 4X digital zoom are disabled while the composition outline is displayed in the Best Shot Mode.




Using the Flash

The following describes various flash settings you can make to suit the type of image you are trying to record.

1. Enter the REC mode.
2. Press  to cycle through the available flash modes until the indicator for the one you want is on the monitor screen.

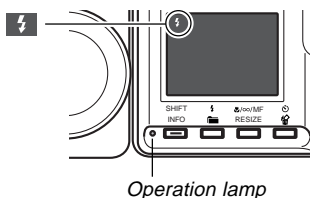


- Each press of  cycles through the available flash modes described below.

To do this	Select this setting
Have the flash fire automatically when required (Auto Flash)	No display
Turn off the flash (Flash Off)	
Always fire the flash (Flash On)	
Fire a pre-flash followed by image recording with flash, reducing the chance of red-eye in the image (Red-eye Reduction)	

Flash Status Indicators


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



■ Operation lamp

If the operation lamp is doing this	It means this
Flashing amber	Flash unit is charging
Flashing red	Flash unit cannot be charged for some reason

■ Monitor screen

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

Adjusting the Flash Intensity

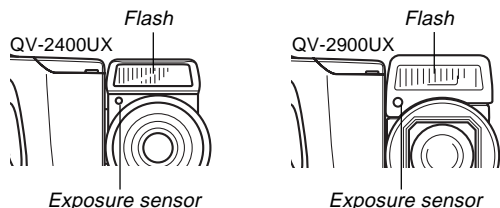
Use the following procedure to adjust the intensity of the flash when it fires.


1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “Flash Intensity”, and then press the shutter release button.
4. Select the setting you want, and then press the shutter release button to apply it.




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

Precautions when Using Flash

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




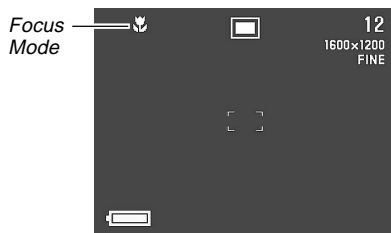
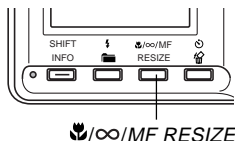
- The effective range for the built-in flash depends on your camera model.
 - * QV-2400UX: Approximately 0.5m to 2m (at full aperture)
 - * QV-2900UX: Approximately 0.5 to 2.5m (at full aperture)
 Note that you may not be able to obtain the desired flash result outside the ranges noted above.
- Depending on operating conditions (type of batteries being used, temperature, etc.), it may take up to 10 seconds for the flash unit to charge.
- The flash is disabled during movie recording, which is indicated by the  (Flash Off) icon on the monitor screen.


- The flash unit does not charge when battery power is too low to charge the flash. The  (Flash Off) indicator appears to warn you that the flash will not fire correctly, which may affect exposure of the image. Replace batteries as soon as possible when this happens.
- Red-eye reduction  may not work well when the camera is not pointed directly at the subject or when the subject is far from the camera.
- In the Red-eye Reduction Mode , the flash is fired automatically in accordance with exposure. Because of this, the flash does not fire if the subject is well-lit.
- White balance is fixed while the flash is being used, so sunlight, fluorescent lighting, or other sources of illumination in the immediate area may affect the coloring of the recorded image.




Selecting the Focus Mode

You can use the following procedure to select from among four different focus modes: Auto Focus, Macro, Infinity, and Manual Focus.

1. Enter the REC mode.
2. Press /∞/MF RESIZE to cycle through the available focus mode settings.




Each press of /∞/MF RESIZE cycles through the focus modes in the following sequence.

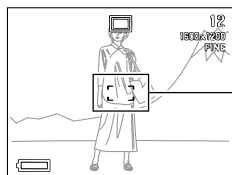
Auto Focus (no indicator) → Macro () → Infinity () → Manual Focus (MF ())

Using the Auto Focus Mode

As its name suggests, the Auto Focus Mode adjusts focus automatically whenever you press the shutter release button about half way down. The following shows the relationship between optical zoom factor and the focusing distance for Auto Focus.

	Optical Zoom Factor	Focusing Distance
QV-2400UX	1X	10cm to ∞
	3X	50cm to ∞
QV-2900UX	1X	40cm to ∞
	8X	1m to ∞

1. Press /∞/MF RESIZE to cycle through the focus mode settings until there is no focus mode indicator on the display. This indicates the Auto Focus Mode.
2. Compose the image to the object you want within the focus frame, and then press and hold the shutter release button about half way down.



Focus frame

- You can find out the status of the Auto Focus operation by checking the color of the focus frame and the status of the operation lamp.



If you see this	It means this
Green focus frame and green operation lamp	The image is in focus.
Red focus frame and red operation lamp	Auto Focus is not possible for some reason.

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

Using the Macro Mode

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

	Optical Zoom Factor	Focusing Distance
QV-2400UX	1X	1cm to 50cm
QV-2900UX	1 to 1.6X	1cm to 50cm

- Press /∞/MF RESIZE to cycle through the focus mode settings until the  indicator appears on the display. This indicates the Macro Mode.

- Compose the image and record it.

- See “Using the Auto Focus Mode” on page E-56 for information about how the camera focuses an image automatically.
- You can check the current status by looking at the operation lamp and focus frame. See “Using the Auto Focus Mode” on page E-56 for more information.

IMPORTANT!

- The focusing range is the distance from the lens surface to the subject.
- Optical zoom is disabled in the Macro Mode.

Using the Infinity Mode

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

1. Press /∞/MF RESIZE to cycle through the focus mode settings until the indicator appears on the display. This indicates the Infinity Mode.

2. Compose the image and record it.

- See “Using the Auto Focus Mode” on page E-56 for information about how the camera focuses an image automatically.
- You can check the current status by looking at the operation lamp and focus frame. See “Using the Auto Focus Mode” on page E-56 for more information.

Using the Manual Focus Mode

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

	Optical Zoom Factor	Focusing Distance
QV-2400UX	1X	1cm to ∞
	3X	50cm to ∞
QV-2900UX	1X	1cm to ∞
	8X	1m to ∞

1. Press /∞/MF RESIZE to cycle through the focus mode settings until the indicator appears flashing on the display. This indicates the Manual Focus Mode.

2. While the indicator is flashing, use [+] and [-] to focus the image.

- If you do not perform any focus operation for about three seconds, the indicator stops flashing.
- You can press /∞/MF RESIZE while the indicator is on the monitor screen to change to another focus mode, if you want.



3. Press the shutter release button to stop the MF indicator flashing and fix the image focus at its current level.

- After MF stops flashing, you can use [+] and [-] to adjust exposure compensation (EV).
- If MF stops flashing before you have a chance to focus, press /∞/MF RESIZE to make it flash again.

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

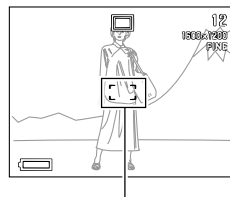
- The focus frame does not appear when you press the shutter release button half way down while in the Manual Focus Mode.

Using Focus Lock

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

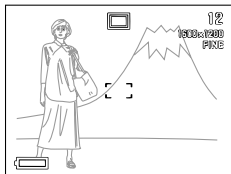
1. Align the focus frame with the subject you want to lock on and press the shutter release button half way down.

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



Focus frame

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



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

NOTE

- Locking the focus also locks the exposure setting.

Specifying Image Size and Quality

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

- Enter the REC mode.
- Press MENU.
- Select “FUNCTION” → “Size/Quality”, and then press the shutter release button.
- Select the size and quality setting you want, and then press the shutter release button.

■ Size/Quality Setting and Image Capacity (JPEG images only)


Image size (pixels)	Quality	File size	Number of images		
			8MB memory card	64MB memory card	340MB Microdrive
1600	FINE	850KB	8	71	401
x	NORMAL	600KB	11	99	562
1200	ECONOMY	350KB	19	167	943
800	FINE	200KB	33	282	1587
x	NORMAL	150KB	43	365	2054
600	ECONOMY	120KB	53	443	2494

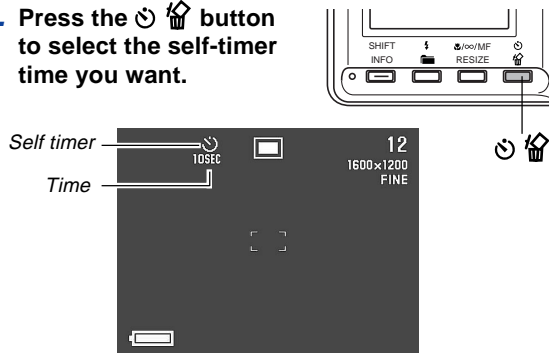
IMPORTANT!

- The values in the table below are all approximate, and are affected by the types of images you record and other factors.
- Saving two versions of an image in JPEG and TIFF formats creates a file that is very large, and greatly reduces storage capacity (page E-92).
- To determine the number of images that can be stored on a memory card of a different capacity, multiply the capacities in the table below, by the appropriate value.
- Note that the maximum number of images that can be stored in a single folder is 250. Because of this, even if you are using a card that allows storage of more than 250 images, the camera's monitor screen will show its capacity for up to 250 images only.
- The number of images that can be recorded may differ from the values shown above when you use Card Browser (page E-140).


Using the Self-timer



You can set the self-timer to either one of two starting times.

- 1. Enter the REC mode.**
- 2. Press the  button to select the self-timer time you want.**



Self-timer Time Settings:

Each press of  cycles through the available self-timer settings described below.

To do this	Select this setting
Turn the self-timer off	No display
Record 10 seconds after the shutter release button is pressed	
Record two seconds after the shutter release button is pressed	

3. Press the shutter release button to start the self-timer countdown.

- The seconds are counted down on the monitor screen.
- To stop a countdown part way through, press the shutter release button.

NOTE

- You can rotate the lens mechanism so the lens points in the same direction as the camera's monitor screen. This makes it possible for you to watch the self-timer countdown on the monitor screen.

Exposure Compensation

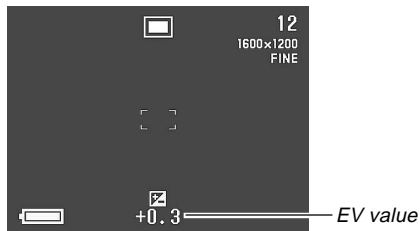
Whenever program AE, shutter speed priority AE, or aperture priority AE is selected as the exposure mode, you can adjust the exposure compensation value (EV value) within the range shown below in order to compensate for current lighting conditions. This setting can be used to obtain better results when shooting with backlighting, indirect indoor lighting, a dark background, etc.

EV Value Range: -2EV to +2EV

Steps: 1/3EV

1. **Select program AE, shutter speed priority AE, or aperture priority AE as the exposure mode. See page E-78.**
2. **Use [+] and [-] to change the exposure compensation value (EV shift).**

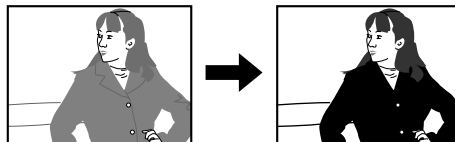
- The current EV value is shown on the monitor screen.



[+]: Increases the EV value. A higher EV value is best for light colored subjects and backlit subjects.




[-]: Decreases the EV value. A lower EV value is best for dark color subjects and for shooting outdoors on a clear day.



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

IMPORTANT!

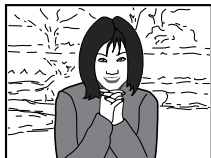
- When shooting under very dark or very bright conditions, you may not be able to obtain satisfactory results even after performing exposure compensation.
- An EV value setting you make remains in effect until you change it. To reset the EV value to zero, use [+] and [-] to return the display value to zero, which is indicated when  is not on the monitor screen. Note that turning off the camera also resets the EV value to zero.
- In the Panorama Mode, the exposure compensation setting you make for the first image of the panorama is fixed for all the other images.

OTHER RECORDING FUNCTIONS

This section describes more advanced recording operations that are also provided by this camera.

Shooting Portraits

The Portrait Mode blurs the background slightly, which makes the foreground subject stand out better.



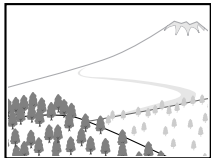
NOTE

- You can blur the background even more by using the zoom slider adjust to maximum telephoto.

1. Enter the REC mode.
2. Press MENU.
3. Select “PORTRAIT” (Portrait Mode), and then press the shutter release button.
4. Press the shutter release button to record the image.

Shooting Landscapes

The Landscape Mode brings everything from distant scenery to close foreground objects into focus.



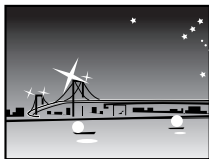
1. Enter the REC mode.
2. Press MENU.
3. Select “LANDSCAPE” (Landscape Mode), and then press the shutter release button.
4. Press the shutter release button to record the image.

NOTES

- You can add more depth from the foreground to background, and also create a greater feeling of horizontal expanse by using the zoom slider to adjust to maximum wide-angle.
- Using the Landscape Mode indoors, in a shaded location, or in any other areas where lighting is dim can result in distant objects being out of focus.

Shooting Night Scenes

The Night Scene Mode uses longer exposure to produce beautiful night scene images.



1. Enter the REC mode.
2. Press MENU.
3. Select “NIGHT SCENE” (Night Scene Mode), and then press the shutter release button.
4. Press the shutter release button to record the image.

NOTE

- You can use the Night Scene Mode in combination with flash for slow sync shooting of people against a twilight or night scene background.

IMPORTANT!

- The shutter speed is quite slow in the Night Scene Mode, so be sure to use a tripod to hold the camera steady.
- Auto Focus is difficult in the dark. If you experience problems, use manual focusing (page E-58). There may be some blurring of the image in cases where the subject is moving quickly.
- Slow shutter speed also causes slow monitor screen refresh. Because of this, the image recorded may be slightly different from the image that was on the monitor screen when you pressed the shutter release button.
- The contrast of Night Scene Mode images is not affected by changes made in contrast settings (page E-92).

Instant Setup Using the Best Shot Mode

The Best Shot Mode comes with a library of 28 different images. Simply select the image whose effects are the one you want, and the settings of the camera automatically change to the same setup that was used to record the selected image.

Instant Setup Using the Best Shot Mode



Sunset

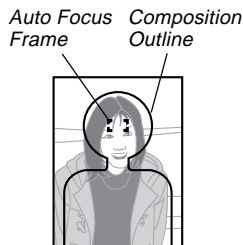


Night Scene

See the "Best Shot scene List" that comes with the camera for a list of scenes.

Composition Outline

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



Example: Face and Chest

- Images you record using a Best Shot Mode image whose composition outline is in portrait orientation (so the sides of the image are longer than its top and bottom), are automatically rotated accordingly when displayed on your computer screen using Photo Loader.

1. Enter the REC mode.
2. Hold down MENU until the sample scene selection screen appears.

- Instead of holding down MENU, you could display the sample selection screen by pressing MENU, selecting "BEST SHOT," and then pressing the shutter release button.



3. Use [+] and [-] to display the sample scene you want, and then press the shutter release button.

- You can also store your own setups. (page E-71)

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

NOTES

- Best Shot Mode images are not images recorded using this camera. They are intended for reference purposes only.
- The actual conditions that are present when you record your image may make it impossible to correctly obtain all of the effects of the Best Shot Mode image you select.
- After selecting an image in the Best Shot Mode, you can adjust camera settings manually as you normally do.
- Press BEST SHOT to display the last sample scene you selected.

Specifying the Location of Best Shot Mode Scene Images

You can use the following procedure to specify the location of the Best Shot Mode scene images.

1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “Best Shot setting” and then press the shutter release button.
4. Select the setting you want, and then press the shutter release button.

To have this appear when you scroll through sample scenes	Select this
28 built-in sample scenes, followed by sample scenes on the memory card	Built-in+CF
28 built-in sample scenes only	Built-in
Sample scenes on the memory card only	CF

NOTES

- If there are no Best Shot Mode sample images on the memory card, you will be able to select from among the 28 built-in sample images only, even when the Built-in+CF or CF option is selected.
- See page E-71 for information about storing sample images on a memory card.

Registering Your Own Scene Setups

You can register the settings of any image recorded with a CASIO QV-2400UX or QV-2900UX camera as a “user setup” for the Best Shot Mode. After you register a user setup, you can recall it just as you do with other scenes in the Best Shot Mode.

■ User Setup Parameters

Focus mode, aperture (A and M only), shutter speed (S and M only), exposure compensation, sensitivity, filter setting, exposure mode, metering mode, white balance, enhancement, flash intensity, sharpness, saturation, contrast, flash mode

■ Supported Camera Models

- QV-2400UX user setups can be registered using images recorded with a QV-2400UX only.
- QV-2900UX user setups can be registered using images recorded with a QV-2900UX only.

■ Number of User Setups

You can register up to 250 user setups (including images imported from the bundled CD-ROM to the memory card).

1. Enter the REC mode.
2. Press MENU.
3. Select “Best Shot” and then press the shutter release button.
4. Press .
5. Use [+] and [-] to select the image you want to import, and then press the shutter release button.



6. The camera returns to the REC mode after registration is complete. Now you can use the procedure on page E-68 to select a scene and record an image.

NOTES

- When you enter the Best Shot Mode, the first scene that appears is the last one you were viewing when you last exited the Best Shot Mode.
- After you select a Best Shot Mode image, you can see the camera setup by displaying the various menus you normally use when setting up the camera manually.
- To delete a user setup, use your computer to navigate to the memory card's "SCENE" folder, and then delete the user setup file (page E-72, E-137).

Importing a Scene from the Best Shot Library on the CD-ROM

You can import sample scene images from the CD-ROM that comes bundled with the camera to the camera's memory card, and then use the imported scenes in the Best Shot Mode. There is a total of 64 scenes.

- See the "Best Shot Scene List" that comes with the camera for a list of scenes.

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

- (1) Connect the camera to the USB port of your computer (page E-133)**
- (2) Read the images directly from the memory card (page E-135)**
 - Sample images are stored in memory card folder named "SCENE", so make sure that there is a folder named "SCENE" on the memory card.
 - To create a "SCENE" folder on a new memory card, load the card into the camera, and then turn on the camera.

2. Set the bundled CD-ROM into your computer's CD-ROM drive.
3. If you are running Windows, Click “My Computer” and then open the CD-ROM drive's window.
 - This step is not required if you are using a Macintosh.
4. Click “CASIO” → “BestShot Library” → “XXXXXXXX”* → “English”, and then copy the sample image files you want to import into the “SCENE” folder of the memory card.
 - * For “XXXXXXXX,” select the folder whose name corresponds to your camera model.
 - If your camera is set up for German-language screen text, select “German” in place of “English” in the above step.
5. Load the memory card into the camera.
6. Specify either “Built-in + CF” or “CF” as the storage location of Best Shot Mode scene images on page E-69.
7. Use the same procedure as that on page E-68 to select an imported sample image file and record the image you want.

IMPORTANT!

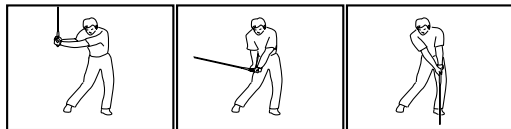
- Sample images appear on the Best Shot image selection screen in the same sequence they are registered on the memory card.
- Formatting a memory card deletes all Best Shot Mode scene sample images stored on it. After deleting the card, you have to import the scenes you want to the memory card (page E-41).

NOTE

- To delete a sample scene imported to the memory card from the CD-ROM, use your computer to navigate to the memory card's “SCENE” folder, and then delete the sample scene file (page E-137).

Recording a Movie

You can record movies that are approximately 16 seconds long. There are two movie recording modes: past and normal. The past mode lets you capture images of events that occurred before you pressed the shutter release button while the normal mode records what happens after you press the shutter release button.



■ File Format: AVI

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

■ Size: 320 x 240 pixels

■ Movie Memory Requirements

Approximately 300KB/second

■ Maximum Movie Length

16 seconds

To record a movie using the normal mode

1. Enter the REC mode.
2. Press MENU.
3. Select “MOVIE” (Movie Mode), and then press the shutter release button.
4. Point the camera at the subject, and then press the shutter release button about half way down.
 - Auto Focus continues to adjust the focus as the subject moves.
5. Press the shutter release button all the way down to start recording.
 - Recording continues for 16 seconds.
 - To record a movie that is shorter than 16 seconds, press the shutter release button again when you want to stop recording.

To record a movie using the past mode

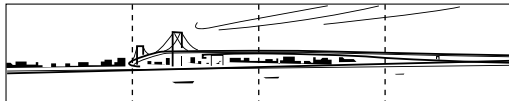
1. Enter the REC mode.
2. Press MENU.
3. Select “MOVIE (PAST)” (Movie Past Mode), and then press the shutter release button.
4. When you are ready to record, press the shutter release button all the way down.
 - Auto Focus continues to adjust the focus as the subject moves.
5. Follow the subject with the camera, and press the shutter release button all the way down when you want to record.
 - Pressing the shutter release button the second time records everything that went on in front of the lens during the 16-second period before you pressed the shutter release button the first time in step 4.
 - Pressing the shutter button before 16 seconds have passed after you pressed the shutter release button the first time in step 4 records everything that went on in front of the lens during the period from when you pressed the shutter release button the first time, up to the point when you pressed it the second time.

IMPORTANT!

- Flash is disabled during movie recording.
- To view an AVI file on your computer, install QuickTime from the CD-ROM disc that comes bundled with the camera.

Shooting Panoramas

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

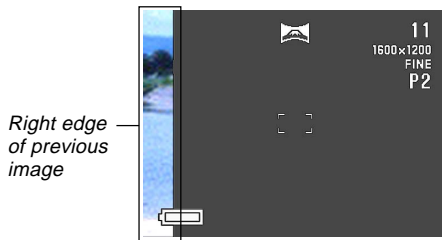


1. Enter the REC mode.
2. Press MENU.
3. Select “PANORAMA” (Panorama Mode), and then press the shutter release button.



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

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



5. Shoot the other images that will make up the panorama, each time using the right edge of the previous image to compose the next image correctly.
6. After recording the images you want, press MENU.
 - You can group up to 10 images into a panorama.

NOTE

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

Shooting at Fixed Intervals

The Interval Mode lets you specify the number of images you want to shoot, the interval between shots, and the time to start shooting. It provides you with the following three types of interval shooting.

- Interval Shooting: Multiple shots at fixed intervals starting from now
- Timer Shooting: Single shot at a specific time
- Interval + Timer Shooting: Multiple shots at fixed intervals starting at a specific time

1. Enter the REC mode.
2. Press MENU.
3. Select “INTERVAL” (Interval Mode), and then press the shutter release button.



4. Specify a value for “Shots” and then press the shutter release button.

- You can skip this step if you want to shoot only a single image.
- Select “MAX shots” when you want the camera to keep recording images until its memory card becomes full.

5. Specify the “Interval” in minutes, and then press the shutter release button.

- You can specify an interval value within the range of 1 minute to 60 minutes, in one-minute steps.

6. Specify the “Hour” part of the “Start Time” setting, and then press the shutter release button.

- The “Start Time” specifies the time when shooting begins.
- You can specify a time that is within 24 hours of your current time (as kept by the camera’s built-in clock).
- If you want the image shooting to begin immediately when you press the shutter release button, select “Now” and continue from step 8.

7. Specify the “Minutes” part of the “Start Time” setting, and then press the shutter release button.

8. Make exposure mode, metering mode, white balance, and other image settings you want.

9. Compose the image so the subject is in the focus frame, and press the shutter release button all the way down.

- When the time you set in steps 6 and 7 is reached, the operation lamp lights and shooting begins.
- If you selected “Now” in step 6, shooting starts as soon as you press the shutter release button in step 9.

IMPORTANT!

- The “BULB” shutter speed setting is automatically disabled in the Interval Mode. If “BULB” is selected, entering the Interval Mode automatically switches over to a shutter speed setting of 1 second.
- When the shutter speed is set to 20 seconds or longer, the camera may not be able to record at 1-minute intervals in the Interval Mode.

Canceling an Interval Mode Timer Operation

Sliding the POWER ON/OFF switch to the right to turn on the camera while an Interval Mode timer operation is being performed cancels the operation, which is indicated by the message “Interval operation cancelled” on the monitor screen.

Specifying the Exposure Mode

You can select from among the four exposure modes listed below. You can change the shutter mode setting while in any of the record modes.

- P Mode : Program AE
- A Mode : Aperture priority AE
- S Mode : Shutter speed priority AE
- M Mode : Manual

Program AE

In the P Mode (program AE), shutter speed and aperture settings are made automatically in accordance with the brightness of the subject.

- 1. Enter the REC mode.**
- 2. Press MENU.**
- 3. Select “FUNCTION” → “Exposure Mode”, and then press the shutter release button.**
- 4. Select “P” (Program), and then press the shutter release button.**
- 5. Press the shutter release button to record the image.**

Aperture Priority AE

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

Large Aperture



Small Aperture

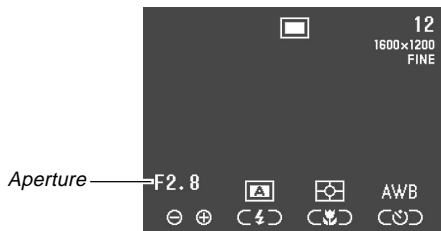


- Note that a smaller number indicates a larger aperture, and a larger number indicates a smaller aperture.

■ Aperture Settings

Aperture	Larger	↔	Smaller
QV-2400UX	F2.8	•	F5.6
QV-2900UX	F3.2	• F4.8 •	F8

1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “Exposure Mode”, and then press the shutter release button.
4. Select “A” (Aperture priority), and then press the shutter release button.
5. While holding down SHIFT INFO, use [+] and [-] to select the aperture value you want.



To do this	Press this button
Decrease aperture	[+]
Increase aperture	[-]

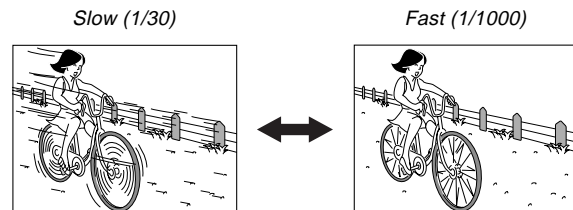
6. Press the shutter release button to record the image.

IMPORTANT!

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

Shutter Speed Priority AE

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

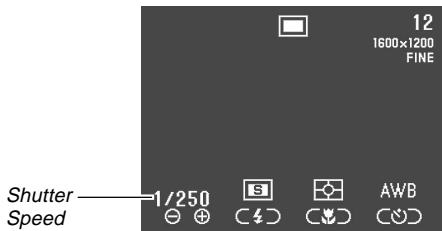


Shutter Speed Settings

Shutter Speed	Slow ↔ Fast
	BULB, 60 seconds to 1/2000 second

- Enter the REC mode.
- Press MENU.

3. Select “FUNCTION” → “Exposure Mode”, and then press the shutter release button.
4. Select “S” (Shutter speed priority), and then press the shutter release button.
5. While holding down SHIFT INFO, use [+] and [-] to specify the shutter speed.



To do this	Press this button
Increase shutter speed	[+]
Decrease shutter speed	[-]

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

IMPORTANT!

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

- A shutter speed slower than 1/8 second can cause the brightness of the image on the monitor screen to be different from the brightness of the image that is recorded. Slower speeds can also cause exposure of the image to be outside the AE range, making it impossible to achieve a proper aperture setting.

Manual Exposure

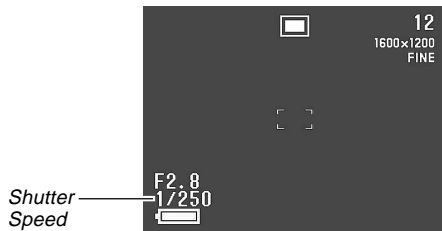
The M Mode (manual) lets you make the shutter speed and aperture settings you want.

- The shutter speed settings you can make are the same as those for shutter speed priority AE (page E-80).
- The aperture settings you can make are the same as those for aperture priority AE (page E-79).

1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “Exposure Mode”, and then press the shutter release button.

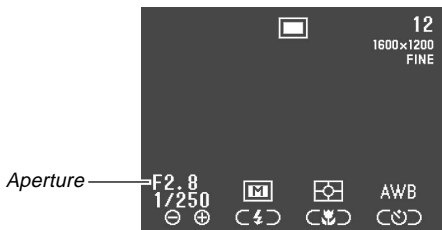
4. Select “M” (Manual), and then press the shutter release button.

5. Use [+] and [-] to specify the shutter speed.



To do this	Press this button
Increase shutter speed	[+]
Decrease shutter speed	[-]

- 6. While holding down SHIFT INFO, use [+] and [-] to select the aperture value you want.**



To do this	Press this button
Decrease aperture	[+]
Increase aperture	[-]






- 7. Press the shutter release button to record the image.**

IMPORTANT!

- A shutter speed slower than 1/8 second can cause the brightness of the image on the monitor screen to be different from the brightness of the image that is recorded.

Quick Exposure Mode Selection

You can also use the following procedure to change the exposure mode, without going through the menu.

- 1. Enter the REC mode.**
- 2. While holding down SHIFT INFO, press  to cycle through the exposure mode icons on the monitor screen in the sequence shown below.**
 -  (program AE) →  (aperture priority AE) →  (shutter speed priority AE) →  (manual)

Selecting the Metering Mode

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

1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “Metering”, and then press the shutter release button.
4. Select the metering mode you want and then press the shutter release button.

Multi:

This mode takes readings across the entire image, and provides balanced exposure settings.



Center:

This mode takes readings at the center of the image.







Spot:

This mode takes readings at a very limited spot at the center of the screen. It is not affected by light around the outer periphery of the image, which means that exposure can be set according to the illumination of a particular subject.



Quick Metering Mode Selection

You can also use the following procedure to change the metering mode, without going through the menu.

1. Enter the REC mode.
2. While holding down SHIFT INFO, press /∞/MF RESIZE to cycle through the metering mode icons on the monitor screen in the sequence shown below.
 -  (multi) →  (center) →  (spot)

Setting the Sensitivity Level

Use the following procedure to specify the sensitivity level.

1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “Sensitivity”, and then press the shutter release button.
4. Select the setting you want, and then press the shutter release button.

If you want to set sensitivity at this level	Select this
ISO 80 equivalent	ISO 80
ISO 160 equivalent	ISO 160
ISO 320 equivalent	ISO 320

IMPORTANT!

- Higher sensitivity can increase the chance of noise in the image.
- Higher sensitivity can make it difficult to obtain proper focus using Auto Focus. It does not change the minimum brightness required for Auto Focus.
- Regardless of the setting you make here, a sensitivity setting of ISO 80 is used automatically whenever you shoot with flash and whenever the S Mode (shutter speed priority AE) is selected.

Using the Filter Function

The camera's filter function lets you filter the image with one of a selection of different colors.

- 1. Enter the REC mode.**
- 2. Press MENU.**
- 3. Select "FUNCTION" → "Filter", and then press the shutter release button.**
- 4. Select the setting you want, and then press the shutter release button.**
 - Available filter settings are: Off, B/W, Sepia, Red, Green, Blue, Yellow, Pink, Purple

NOTES

- The filter function produces the same effect as if a piece of colored cellophane paper were held in front of the lens of the camera. Color enhancement (page E-85), on the other hand, alters the characteristics of the image to enhance specific color components.
- If color enhancement (page E-89) and the filter function are both turned on at the same time, the filter function is given priority (color enhancement is not performed).

Selecting White Balance

Selecting the right type of white balance can help to make the colors of a subject appear most natural under the type of lighting that is available.

1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “White Balance”, and then press the shutter release button.
4. Select the type of white balance you want, and then press the shutter release button.

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

NOTE

- Use “Daylight” for shooting in the Night Scene Mode. You can also use manual white balance if the “Daylight” setting does not produce the desired results.


Adjusting White Balance Manually

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

Note that manual white balance requires you to point the camera at a piece of white paper or other similar object so it completely fills the monitor screen.

1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “White Balance”, and then press the shutter release button.
4. Select “Manual”, and then press the shutter release button.

5. Point the camera at a piece of white paper or other similar object so it completely fills the monitor screen, and then press the shutter release button.

- This performs white balance adjustment and returns to the REC mode screen.
- Pressing  without pressing the shutter release button first restores the setting obtained the last time you performed manual white balance.
- Dark lighting or pointing the camera at a dark object can cause manual white balance to take a very long time to complete. Avoid such conditions when performing manual white balance adjustment.

NOTE





- Even if you turn off the camera or change its white balance back to “Auto” or another white balance setting, the last value obtained by manual white balance is retained in memory and restored the next time you select “Manual” for the white balance. The last value obtained by manual white balance is retained, regardless of the mode memory setting (page E-93).

Quick White Balance Selection

You can also use the following procedure to change the white balance, without going through the menu.

1. Enter the REC mode.

2. While holding down SHIFT INFO, press to cycle through the white balance icons on the monitor screen in the sequence noted below.

- **AWB** (Auto) →  (Daylight) →  (Shade) →  (Tungsten) →  (Fluorescent) → **MWB** (Manual)
- For manual white balance, display the **MWB** icon, point the camera at a white piece of paper, hold down SHIFT INFO, and press the shutter release button.

Enhancing Certain Colors

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

1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “Enhancement”, and then press the shutter release button.
4. Select the setting you want, and then press the shutter release button.

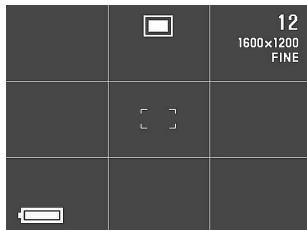
To do this	Select this
Turn off color enhancement	Off
Enhance reds	Red
Enhance greens	Green
Enhance blues	Blue
Enhance flesh tones	Flesh Tones

NOTES

- The filter function (page E-86) produces the same effect as if a piece of colored cellophane paper were held in front of the lens of the camera. Color enhancement, on the other hand, alters the characteristics of the image to enhance specific color components.
- If color enhancement and the filter function (page E-86) are both turned on at the same time, the filter function is given priority (color enhancement is not performed).

Turning the On-screen Grid On and Off

You can display gridlines on the monitor screen to help you compose your images before recording them.



1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “Grid”, and then press the shutter release button.

4. Select the setting you want, and then press the shutter release button.

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

Specifying Outline Sharpness

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

1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “Sharpness”, and then press the shutter release button.
4. Select the setting you want, and then press the shutter release button.

To do this	Select this
Make outlines sharp	Hard
Leave outlines as they are	Normal
Make outlines soft	Soft

Specifying Color Saturation

Use the following procedure to control the saturation of image colors.

1. Enter the REC mode.
2. Press MENU.
3. Select “FUNCTION” → “Saturation”, and then press the shutter release button.
4. Select the setting you want, and then press the shutter release button.

To do this	Select this
Make colors more intense	High
Leave colors as they are	Normal
Make colors less intense	Low

Specifying Contrast

Use the following procedure to control the difference between the light areas and dark areas of the image.

1. Enter the REC mode.
2. Press MENU.
3. Select "FUNCTION" → "Contrast", and then press the shutter release button.
4. Select the setting you want, and then press the shutter release button.

To do this	Select this
Increase contrast	High
Leave contrast as it is	Normal
Decrease contrast	Low

NOTE

- The contrast setting you make is not used in the Night Scene Mode.

Saving Uncompressed Images (TIFF Mode)

Normally, the camera stores images in JPEG format only. The TIFF Mode stores two versions of the same image: a JPEG (compressed) version and a TIFF (uncompressed) version. Compressing an image causes a slight loss of image quality, while saving an image in TIFF format retains all the quality of the image you record.

1. Enter the REC mode.
2. Press MENU.
3. Select "FUNCTION" → "TIFF mode", and then press the shutter release button.
4. Select the setting you want, and then press the shutter release button.

To do this	Select this
Store images in JPEG (compressed) format only	Off
Save both JPEG (compressed) and TIFF (uncompressed) versions of images	On

IMPORTANT!

- The TIFF format image save operation takes more time than the JPEG format save operation.
- Turning on the TIFF Mode causes both JPEG and TIFF versions of the image to be saved. This causes image files to be very large, and greatly reduces storage capacity (page E-60).

● **TIFF Format File Sizes**

Format	Image size (pixels)	File size
TIFF	1600 x 1200	5.5MB
	800 x 600	1.4MB

- Deleting the JPEG version of an image saved using the TIFF Mode also causes the TIFF version to be deleted.
- You cannot delete the TIFF version of an image alone. To delete the TIFF version, you must also delete the JPEG version.
- TIFF images cannot be transferred to a computer using the Photo Loader application (page E-132) that comes bundled with the camera.

Specifying Power On Default Settings

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

- 1. Enter the REC mode.**
- 2. Press MENU.**
- 3. Select "FUNCTION" → "Mode Memory", and then press the shutter release button.**
- 4. Select the item whose mode memory status you want to change, and then press the shutter release button.**
- 5. Select the setting you want, and then press the shutter release button.**

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

■ Mode Memory Items and Settings

Item	Memory Mode Status	
	On	Off
Recording Mode	Setting at power off.	Normal
TIFF mode		Normal
Sensitivity		ISO 80
Exposure Mode		P (Program AE)
Metering		Multi
White Balance		Auto
Flash		Auto
Focus		Auto
Digital Zoom		Auto
Flash Intensity		Normal

6. Press  .

Resetting the Camera

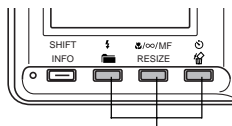
Use the following procedure to reset all of the camera's settings to their initial defaults as shown under "Camera Menus" on page E-146.

1. Enter the REC mode or PLAY mode.
2. Press MENU.
3. Select "Restore" using one of the following two key operations, and then press the shutter release button.

If you are here	Select this on the menu screen
REC mode	"FUNCTION" → "SET UP" → "Restore"
PLAY mode	"SET UP" → "Restore"
4. In response to the confirmation message that appears, use [+] and [-] to select "Yes" to reset or "No" to exit, and then press the shutter release button.

Using the Camera's Shortcut Features

The shortcut features of the camera help to make it quicker and easier to obtain the REC mode setup you want. There are three shortcut procedures that you can use.



Shortcut buttons

■ Changing specific REC mode FUNCTION menu settings using the shortcut buttons

The shortcut buttons are the three buttons to the right of the SHIFT INFO button below the monitor screen. You can cycle through REC mode FUNCTION menu settings by holding down SHIFT INFO and pressing the shortcut buttons. See this page.

■ Direct access to the FUNCTION menu

This shortcut lets you display the FUNCTION menu with the press of a button. See page E-98.

■ Cycling through settings on the FUNCTION menu

This shortcut lets you cycle through the settings of the currently selected FUNCTION menu item, without advancing to the item's setting screen.

Changing REC mode FUNCTION Menu Settings Using the Shortcut Buttons

Changing REC mode FUNCTION Menu settings is normally a multi-step process: Press MENU, use [+] and [-] to select "FUNCTION", press the shutter release button, use [+] and [-] to select the item, and then use [+] and [-] to change the setting. This shortcut lets you change the settings of specific REC mode FUNCTION menu items without displaying the FUNCTION menu.

To change settings using the shortcut buttons

1. Enter the REC mode.

2. Hold down SHIFT INFO.

- This causes icons that identify the FUNCTION menu items assigned to the shortcut buttons to appear on the monitor screen above each button.

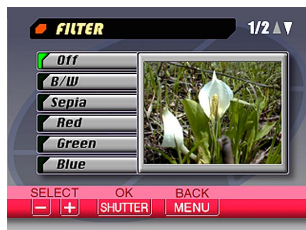
3. While holding down **SHIFT INFO**, press one of the shortcut buttons to cycle through the settings of the item assigned to the button. The current setting of each button is indicated by an icon above the button.

Button	REC mode FUNCTION Menu Item	Icon	Setting
	Exposure Mode (page E-83)		Program AE
			Aperture Priority AE
			Shutter Speed Priority AE
			Manual
	Metering (page E-85)		Multi
			Center
			Spot
	White Balance (page E-88)		Auto
			Daylight
			Shade
			Tungsten
			Fluorescent
			Manual

To assign REC mode FUNCTION menu items to shortcut buttons

1. Enter the REC mode.
2. Press MENU.
3. Use [+] and [-] to select “FUNCTION”, and then press the shutter release button.
4. Use [+] and [-] to select the item you want to assign to a shortcut button and then press the shutter release button to display its setting screen.

- The following example shows the Filter setting screen.



- You can assign any of the items marked with “○” in the table under “Camera Menus” on page E-146 to a shortcut button.

5. While holding down SHIFT INFO, press the shortcut button to which you want to assign the item you selected in step 4.

- This assigns the item and returns to the REC mode screen.
- You can assign only one menu item to each of the three shortcut buttons.

- Assigning a menu item to a shortcut button changes the icon that appears above the button when SHIFT INFO is pressed in the REC mode as shown below.

Button	Default Setting Icon	Icon After Assignment
		SET 1
RESIZE		SET 2
	 	SET 3

- Repeat the above procedure when you want to restore the default shortcut button assignments. You need to assign the following items to the shortcut buttons indicated to restore the default assignments.

Button	Assigned Item (Default)
	Exposure Mode
RESIZE	Metering
	White Balance

- Default shortcut button assignments are also restored automatically by a Camera Reset (page E-94).

Directly Accessing the REC mode FUNCTION Menu

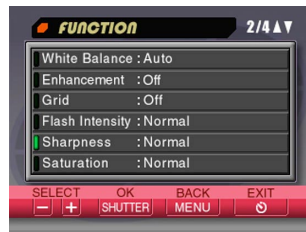
When in the REC mode, you can hold down SHIFT INFO and press MENU to display the FUNCTION menu.


Cycling through REC mode FUNCTION Menu Settings

You can use this shortcut to cycle through the settings of REC mode FUNCTION menu items without displaying the setting screen for the item.

1. Enter the REC mode.
2. Display the FUNCTION menu and select the item whose setting you want to change.

3. While holding down SHIFT INFO use [+] (forward) and [-] (back) to cycle through the settings of the currently selected item.



4. Repeat steps 2 and 3 for other items.
5. When everything is the way you want, press  to exit the FUNCTION menu.

You can use the camera's built in monitor screen to play back recorded images.

Basic Playback Operation

Use the following procedure to scroll through recorded images stored in the camera's memory.

1. Slide the REC/PLAY selector to "PLAY".

PLAY: PLAY mode for playing back images

2. Use [+] and [-] to scroll through the images on the monitor screen.

To do this	Press this button
Scroll forward	[+]
Scroll backward	[-]



NOTES

- Holding down [+] or [-] scrolls images at high speed.
- In order to allow for faster playback image scrolling, the image that initially appears on the monitor screen is a preview image, which is of somewhat lower quality than the actual display image. The actual display image appears about three seconds after the preview image. This does not apply to images copied from another digital camera.

Playing a Movie

Use the following procedure to play back a movie recorded in the Movie Mode.

1. Enter the PLAY mode.
2. Use [+] and [-] to scroll through the images on the monitor screen until the movie you want to play is displayed.



*Movie
Mode icon*

3. Press the shutter release button to start playing the movie.

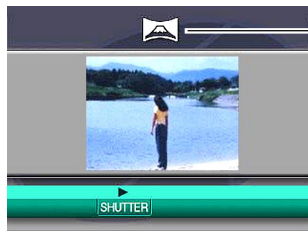
- The following describes operations that are available during movie playback.

If you want to do this	Press this button
Toggle the movie between full screen and quarter screen view	SHIFT INFO
Playback forward	[+]
Playback in reverse	[-]
Pause playback	Shutter release button
Skip to the next frame while playback is paused	[+]
Skip to the previous frame while playback is paused	[-]
Exit movie playback	MENU

Playing a Panorama

Use the following procedure to play back a panorama recorded in the Panorama Mode.

1. Enter the PLAY mode.
2. Use [+] and [-] to scroll through the images on the monitor screen until the panorama you want to play is displayed.



Panorama
Mode icon


3. Press the shutter release button to start playing the panorama.

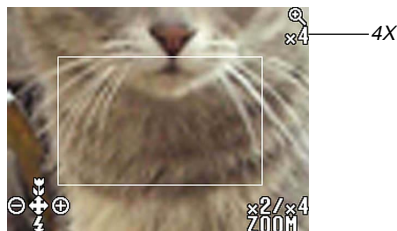
- The following describes operations that are available during panorama playback.

If you want to do this	Press this button
Toggle the panorama between full screen and compressed view	SHIFT INFO
Scroll forward	[+]
Scroll back	[-]
Pause playback	Shutter release button
Skip to the next image while playback is paused	[+]
Skip to the previous image while playback is paused	[-]
Exit panorama playback	MENU

Enlarging the Playback Image

Use the following procedure to enlarge the playback image on the screen. You can select either 2X or 4X enlargement.

1. Enter the PLAY mode.
2. Use [+] and [-] to display the image you want to enlarge.
3. Slide the zoom slider towards T(TELE)  to zoom in on the image.
 - Operating the zoom slider sometimes causes a cropping boundary (page E-108) to appear in the image.
4. Each operation of the zoom slider change the zoom factor as follows: 1X → 2X → 4X.



- The following describes operations that are available while an enlarged image is on the playback screen.

If you want to do this	Do this
Display on-screen guidance messages	Press SHIFT INFO.
Shift the view right	Press [+].
Shift the view left	Press [-].
Shift the view upwards	Press /∞/MF RESIZE.
Shift the view downwards	Press /MF.
Change the zoom factor: 1X ↔ 2X ↔ 4X	Operate the zoom slider.
Return the image to normal size	Press the shutter release button.

IMPORTANT!

- You cannot enlarge movie or panorama images.

NOTE

- Sliding the zoom slider towards W (WIDE) while a normal size (1X) image is on the display switches to the 9-image view.

Displaying the 9-image View

The following procedure displays nine images on the monitor screen at the same time.

- Enter the **PLAY** mode.
- Slide the zoom slider towards **W (WIDE)** .

- This displays the 9-image view, starting with the last image you recorded.

1	2	3	[+]	10	11	12	[+]	19	20	21
4	5	6	→	13	14	15	→	22	23	24
7	8	9	←	16	17	18	←	25		
			[-]				[-]			

- The following describes operations that are available while the 9-image view is on the monitor screen.

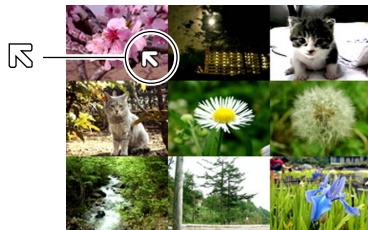
To do this	Press this button
Scroll forward	[+]
Scroll backward	[-]
Display the selection pointer (See following section.)	SHIFT INFO
Exit the 9-image view	Any button other than the above three.

Selecting a Specific Image in the 9-image View

1. Display the 9-image view.

2. Press SHIFT INFO.

- This causes a pointer to appear in the upper left corner of the monitor screen.



3. Use [+] and [-] to move the pointer to the image you want to select, and then press the shutter release button.

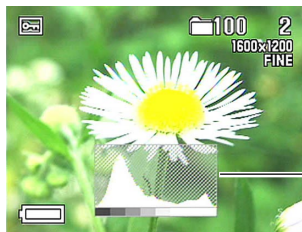
- This displays the single-image view of the selected image.



Displaying the Histogram

The following procedure displays a histogram of an image's luminance components. The histogram is a tool you can use to check the exposure of an image.

1. Enter the **PLAY** mode.
2. Use **[+]** and **[-]** to display the image whose histogram you want to view.
3. Press **SHIFT INFO** a number of times until the histogram appears.
 - See "Changing the Contents of the Monitor Screen" on page E-27 for information about how the monitor screen contents change when you press the **SHIFT INFO** button.



Histogram

4. Use **[+]** and **[-]** to scroll to another image if you want.
5. To exit the histogram, press **SHIFT INFO** a number of times.

IMPORTANT!

- The histogram does not appear during movie playback (page E-100) or panorama image scrolling (page E-101).
- In the case of a panorama image (page E-101), the histogram is displayed for the first image of the panorama only.
- Use of the flash or multi-metering, as well as certain shooting conditions can cause the histogram to indicate exposure that is different from the actual exposure of the image when it was recorded.

■ About the histogram...

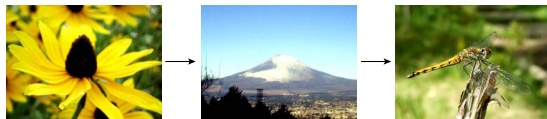
The histogram is a graph of pixel luminance levels in terms of the number of pixels. The vertical axis represents the number of pixels, while the horizontal axis represents luminance. The information on the histogram can be used when correcting or editing the image to determine whether image details include enough shadows (left side) midtones (center), or highlights (right side). The histogram also makes it easy to visualize the color tone range of an image, which makes it a valuable reference tool when touching up the image.

NOTE

- If the histogram appears too lopsided in either direction, you should try recording the image again after correcting the exposure (EV) value (page E-62), adjusting the aperture priority AE aperture value (page E-79), adjusting the manual exposure shutter speed or aperture value setting (page E-82).

Using the Slide Show Feature

Slide Show automatically plays back images in sequence at a fixed interval.



1. Enter the **PLAY** mode.
2. Press **MENU**.
3. Select **"SLIDE SHOW"**, and then press the shutter release button.
 - This starts the slide show.
 - Pressing **MENU** at this point displays a screen for setting the interval between image changes within the range of three to 30 seconds.
4. To stop Slide Show, press any button besides the shutter release button.


IMPORTANT!

- Auto Power Off (page E-37) is disabled whenever Slide Show is being used. This means you should not leave Slide Show running when using batteries to power the camera. Doing so can rundown batteries. Be sure to stop Slide Show and turn off the camera after you are finished.
- Note that all buttons are disabled while an image change is in progress. Wait until an image is stopped on the monitor screen before performing a button operation, or hold down the button until the image stops.
- Images copied from another digital camera or a computer may take longer time to appear than the Slide Show interval time you select.

Resizing an Image

You can use the following procedure to change an image to VGA size (640 x 480 pixels).

- VGA is the optimum image size for attachment to e-mail messages or incorporation into Web pages.




- 1. Enter the PLAY mode.**
- 2. Use [+] and [-] to display the image you want to resize.**
- 3. Press /∞/MF RESIZE.**
- 4. In response to the confirmation message that appears, use [+] and [-] to select “Yes”.**
 - Select “No” to exit the procedure without resizing the image.
- 5. Press the shutter release button.**

IMPORTANT!

- The resized version of the image is saved as a new file.
- The original, pre-resized image is also retained in memory.
- Images smaller than 640 x 480 pixels cannot be resized.
- Movie Mode, Panorama Mode, and TIFF (uncompressed) images cannot be resized.
- Resizing of an image cannot proceed if the message "MEMORY FULL Delete unneeded images" appears during the above procedure.

Cropping an Image

Use the following procedure when you want to crop a portion of an enlarged image and use the remaining part of the image as an e-mail attachment, Web page image, etc.

- 1. Enter the PLAY mode.**
- 2. Use [+] and [-] to display the image you want to crop.**
- 3. Slide the zoom slider towards T(TELE)  to zoom in on the image.**
 - Operating the zoom slider causes a cropping boundary to appear in the image. You cannot crop an image if the cropping boundary does not appear.
- 4. Use [+], [-],  / ∞ / MF RESIZE and  to enclose the area you want to cut out within the cropping boundary.**



5. Press the shutter release button.
6. In response to the confirmation message that appears, use [+] and [-] to select "Yes".
 - Select "No" to exit the procedure without cropping the image.
7. Press the shutter release button.

IMPORTANT!

- The cropped version of the image is saved as a new file.
- The original, pre-cropped image is also retained in memory.
- Movie Mode, Panorama Mode, and TIFF (uncompressed) images cannot be cropped.
- Cropping of an image cannot proceed if the message "MEMORY FULL Delete unneeded images" appears during the above procedure.

NOTE

- The table below shows how cropping affects image size.

Uncropped Image size (pixels)	Cropped 2 × Zoomed Image (pixels)	Cropped 4 × Zoomed Image (pixels)
1600 × 1200	640 × 480	320 × 240
800 × 600	320 × 240	Cannot be cropped