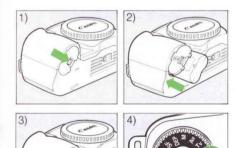


## 1. Battery Load and Check



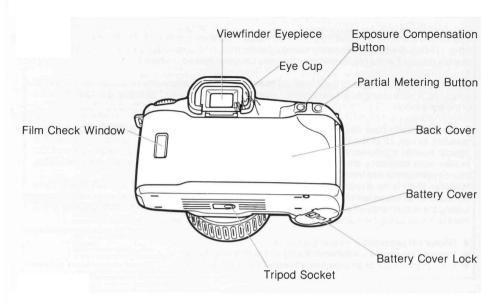


The camera operates on a 2CR5 lithium battery.

- Slide the battery cover lock down to open. The cover cannot be removed from the camera.
- 2) Insert the battery as shown with the terminals facing toward the shutter button.
- 3) Close the cover and hold it down until it locks with a click.
- 4) Turn the command dial to " P" or " to check the battery.

The battery check symbol ( ) in the LCD panel displays the remaining battery power as shown in the illustrations.

- If nothing is displayed in the LCD panel, the battery is probably inserted upside down. Remove the battery and re-insert it correctly.
- See p. 55 for other important battery information.



Battery Check Symbols in the LCD Panel



: Battery power sufficient.

Replace the battery.

(blinking): See p. 56.

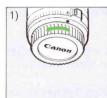
- When not using the camera, always be sure to <u>set the command dial to "L" to prevent battery drain</u> due to accidental pressing of the shutter button.
- Always check the battery condition before taking pictures.
- Carry a spare battery when going on trips or when planning to take many pictures.
- See p. 50 for shooting capacity.

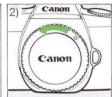
## Capacity

• Based on a new 2CR5 lithium battery using the EF 35-80 mm f/4-5.6 lens and 24-exp. film.

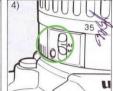
| Temperature   | Without Flash | With 50% Flash | With 100% Flash |
|---------------|---------------|----------------|-----------------|
| Normal (20°C) | 75 rolls      | 30 rolls       | 12 rolls        |
| Low (-10°C)   | 45 rolls      | 20 rolls       | 8 rolls         |

#### 2. Lens Attachment











- Remove the rear lens cap by turning it counterclockwise.
- Remove the body cap by turning it counterclockwise.

The lens may already be mounted on the camera when purchased.

- Align the lens' red dot to the camera's red dot and turn the lens clockwise until it stops and locks with a click.
  - To remove the lens, turn the lens counterclockwise while pressing the lens release button.
- 4) Set the lens' focus mode switch to AF.
- 5) Remove the front lens cap.
- The electronic contacts must be clean for proper connection. Do not touch these contacts.
- Do not set the lens on its rear end without the lens cap attached to prevent damage to the electronic contacts.

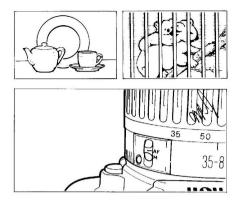
#### 3. Focusing



Before practicing, set the command dial to "  $\square$ " (Green Zone).

- 1) Look through the viewfinder and cover the subject with the focus mark ([2]).
- Press the shutter button halfway to start focus. When the subject is in focus, the green AF symbol "●" lights up in the viewfinder.
- Without letting up on the shutter button, press the shutter button completely to take the picture.
  - In low-light or backlit conditions, the shutter speed or the flash symbol
     '' \$ '' blink in the viewfinder. See p.
     15 when the shutter speed blinks or see p. 35 when the flash symbol
     '' \$ '' blinks.

## Difficult Subjects for Autofocus [Manual Focusing]



There are a few subjects that may be difficult for the camera to focus. The green AF symbol will blink in the viewfinder to warn you of this condition.

- Low-contrast subjects—misty scenes, light-colored or white objects.
- Subjects in extremely low-light situations—a dark room, night scenes.
- Subjects having generally horizontal patterns (window blinds).
- Subjects with an object in front of them—animals in a cage, subjects behind a wire fence.
- Strong, bright reflections—shiny metal, ice, surface of a lake.
- Fast-moving subjects—difficult to keep within the focus mark.

Focus these subjects by setting the lens' focus mode switch to "M" and turning the manual focusing ring until the image is sharp.



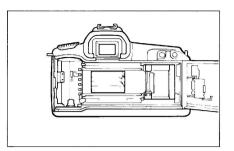


#### Focus Lock

This camera focuses on the subject covered by the focus mark in the center of the viewfinder. For off-center subjects, use focus lock to set the focus and then recompose the picture as desired.

- 1) Cover the subject with the focus mark and press the shutter button halfway.
- Keeping the shutter button pressed halfway, recompose the picture as desired and then press the shutter button all the way down to take the picture.

#### 1. Film Loading

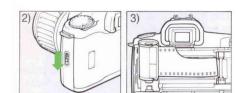


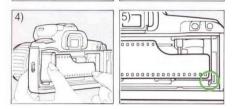
#### [2] Taking Pictures

- Always load film out of direct sunlight.
- Never touch the shutter curtain. Its precision design makes it sensitive to pressure. When loading film, be careful that the film tip does not touch the shutter curtain.

This camera uses a prewind system. When film is loaded, the camera first winds all of the film onto the take-up spool and then rewinds it back into the film cartridge one frame at a time as each picture is taken. The frame counter on the LCD panel decreases as pictures are taken, allowing you to always see at a glance the remaining frames.

For DX-coded film, the camera automatically sets the film speed when the film is loaded. (For manual film speed setting, see p. 48.)





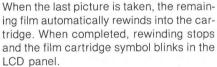


- 1) Make sure the command dial is not at L.
- 2) Open the back cover by sliding the latch down.
- 3) Insert the film as shown with the flat end of the cartridge on top.
- 4) Carefully pull the film tip across until it reaches the orange mark.
- 5) Make sure the film lies flat and close the back cover.

Film winding starts and the frame counter counts up. When the film is completely wound, the shutter is released once; however, no picture is taken. The film cartridge symbol and the number of available frames are displayed in the LCD panel.

- If the film cartridge symbol blinks, the film has not been loaded properly and the shutter will not release. Reload the film
- Film becomes soft and tears easily in high humidity. Keep it stored in its canister until loading.



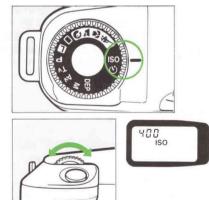


If you want to develop the film before the end of the roll, remove the lens and turn the command dial to "ISO". Press both the exposure compensation button and the partial metering button simultaneously.



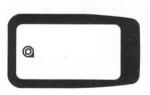
- If the back cover is opened before the end of the roll is reached and the film is forcefully pulled out of the camera without first being rewound according to the above procedure, be sure to close the back cover and release the shutter once before loading another roll of film.
- If a new roll of film is loaded without first closing the back and releasing the shutter, the film leader will be rewound completely into the cartridge when the back cover is closed.

## 5. Manual Film Speed Setting

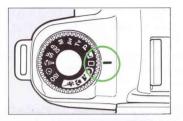


When using non DX-coded film or when you want to set the effective speed of a film determined from your own tests, you can manually set the film speed to any value from ISO 6-6400 in 1/3-step increments. The setting is canceled after the film is removed and replaced with another DX-coded film.

- 1) Set the command dial to ISO. "ISO" and a film speed appear in the LCD panel.
- 2) Turn the electronic input dial to set the desired film speed.



#### 2. Basic Picture Taking - Green Zone







This setting for basic operation allows you to begin shooting immediately without making any settings before taking pictures.

- 1) Set the command dial to " "
- - If you are using a zoom lens, turn the zoom ring to vary the size of the subject.
- 3) Press the shutter button halfway. When the subject is in focus, the green AF symbol, shutter speed and aperture value light up in the viewfinder. Press the shutter button all the way down to take the picture.
  - The shutter speed and aperture value are also displayed in the LCD panel.
  - In low light or backlit conditions, the
     " " mark blinks in the viewfinder.
     Switch to flash photography (see p. 35) or use a tripod.

## 3. Programmed Image Control (P.I.C.)

With P.I.C., focus and film wind settings as well as shutter speed and aperture value settings are made automatically for four types of pictures: portraits, landscapes, close-ups, and sports. This allows you to take pictures easily and concentrate on composition.

- If the " \$ " mark blinks in the viewfinder, switch to flash photography or use a tripod.
- If the shutter speed blinks to warn of camera shake, we recommend switching to flash photography or using a tripod.



Portrait Settings: One-shot AF/Continuous wind/Evaluative metering

Shallow depth of field is generally used to emphasize the subject, therefore large apertures (small numbers) are set. Focus on the subject's eyes. Continuous film wind helps keep up with the subtle changes in expression.

For effective background blur, separate the subject from the background as much as possible and use a telephoto lens or the telephoto setting on your zoom lens (80 mm on the EF 35-80 mm f/4-5.6).



# Blinking shutter speed (camera shake warning)

In Green Zone and Programmed Image Control modes, the shutter speed will blink on the LCD panel and in the viewfinder if the shutter speed is too slow to hand-hold. In this case, we recommend switching to flash photography or using a tripod.





Landscape Settings: One-shot AF/Single frame wind/Evaluative metering

Deep depth of field is usually the primary concern in landscape photography. This setting automatically sets small apertures (large numbers) for deep depth of field

Use a wide-angle lens or the wide-angle setting on your zoom lens to create a feeling of expansiveness and depth.

Close-up Settings: One-shot AF/Single frame wind/Partial metering

Move as close as possible to the subject for the maximum magnification.

When using a zoom lens, you can achieve maximum magnification by setting the lens to the telephoto position.



Sports Settings: Al focus AF/Continuous wind/Evaluative metering

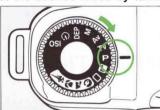
Faster shutter speeds are emphasized to help you keep up with all the action while Al servo tracks the subject's movement. Keep the focus mark on the subject.

 Continuous shooting is possible by holding the shutter button down.



The command dial's "Creative Zone" provides six shooting modes, enabling you to select the mode and values which best match your subject and photographic objectives. Also, with "Creative Zone" modes, you can use functions such as **exposure compensation** and **multiple exposure** (explained in the Applications section) to further expand your creativity.

Select the desired mode by turning the command dial.



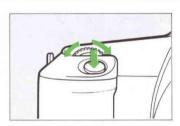
**P: Program AE** Settings: AI focus AF/Continuous wind/Evaluative metering The camera sets both aperture and shutter speed automatically, taking into account the lens in use.



## Checking the Exposure

If the exposure data blink, the exposure is not correct. Use a flash in low light situations or use an ND (neutral density) filter in bright situations.





## **Program Shift**

In Program AE mode, the automatically set shutter speed and aperture combination (program) can be changed while maintaining the same exposure.

To shift the program, press the shutter button halfway to display the exposure data and turn the electronic input dial to select the desired shutter speed or aperture value.

Program shift is not possible when using a flash.





**Tv: Shutter-priority AE** Settings: AI focus AF/Continuous wind/Evaluative metering

In this mode the user selects the shutter speed and the camera sets the aperture value for the lighting conditions. This mode is best for taking pictures of moving subjects by controlling the shutter speed. Faster shutter speeds freeze subject motion, while slower shutter speeds can produce artistic blur effects.

The initial shutter speed setting is always 125 (1/125). Turn the electronic input dial for the desired shutter speed.



## Checking the Exposure

Underexposure - The lens' maximum aperture starts blinking. Set a slower shutter speed until it stops blinking.

Overexposure - The lens' minimum aperture starts blinking. Set a faster shutter speed until it stops blinking.

In the Creative Zone, an exposure level scale and exposure level mark appear in the viewfinder and LCD panel in addition to the exposure data (shutter speed and aperture value). The exposure level mark indicates the amount of exposure compensation in the four AE modes.

#### Six-second Timer

Even if you release the shutter button after pressing it down halfway, the exposure data (shutter speed and aperture) in the viewfinder and LCD panel appear for about six seconds.











**Av: Aperture-priority AE** Settings: Al focus AF/Continuous wind/Evaluative metering

In this mode the user selects the aperture value and the camera sets the correct shutter speed for the lighting conditions. Use this mode for taking portraits, landscapes, and still life photography where depth of field is an important factor. Larger apertures produce a shallow depth of field appropriate for portraits, and smaller apertures produce a deep depth of field desirable for landscapes.

The initial aperture value setting is always 5.6 (f/5.6). Turn the electronic input dial for the desired aperture value.

#### Checking the Exposure

Underexposure - The shutter speed of 30" (30 sec.) blinks. Set a larger aperture until the shutter speed stops blinking.

Overexposure - The shutter speed of 2000 (1/2000 sec.) blinks. Set a smaller aperture until the shutter speed stops blinking.

Adjust the exposure according to the exposure indicator.



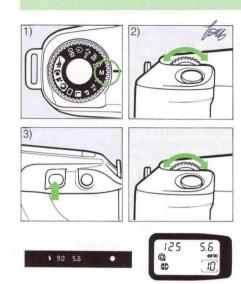
Overexposure: Close the aperture or set a faster shutter speed until correct exposure is obtained.

**Underexposure:** Open the aperture or set a slower shutter speed until correct exposure is obtained.

## X-sync Shutter Speed and Aperture Value

| Shooting mode        | X-sync shutter speed  | Aperture value   |
|----------------------|---|--|
| Program AE           | Automatically set to 1/90 sec.  | Flash aperture value automatically set according to existing lighting and TTL program.     |
| Shutter-priority AE  | Manually set to any desired shutter speed of 1/90 sec. or slower*.  | Aperture value automatically set according to the set shutter speed and existing lighting. |
| Aperture-priority AE | Automatically set between 30" and 1/90 sec. according to the set aperture value and existing lighting.  Manually set to any desired avalue. |  |
| Manual               | Manually set to any desired shutter speed of 1/90 sec. or slower*.  Manually set to any desired ape value.                                  |  |

<sup>\*</sup> If the shutter speed is set to a value faster than 1/90 sec., the camera will automatically lower it to 1/90 sec.



**M: Manual Exposure** Settings: Al focus AF/Continuous wind/Center-weighted average metering.

This creative mode allows you to completely control exposure by setting both the shutter speed and aperture value.

The initial setting is always 1/125 sec. at f/5.6

- Set the command dial to "M" and turn the electronic input dial to set the desired shutter speed.
- While pressing the exposure compensation button, turn the electronic input dial to set the desired aperture value.
- 3) Press the shutter button halfway and check the exposure data.
  - 4, 4b or b is displayed in the viewfinder and LCD panel to indicate the exposure.





**DEP: Depth-of-Field AE** Settings: One-shot AF/Single frame wind/Evaluative metering

Depth-of-Field AE mode places everything between user set points in the foreground and background in focus. The points are set using the focus mark in the viewfinder.

The camera sets the necessary aperture value and shutter speed to obtain the best possible results under the existing lighting.

\* This mode cannot be used with flash.





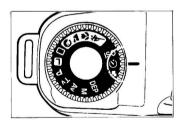
- 1) Set the command dial to "DEP".
- 2) Place the focus mark on the first point (a) and press the shutter button halfway.
  - Remove your finger when the green AF symbol and "dEP 1" light up in the viewfinder.
- 3) Repeat step #2 for the second point (b); "dEP 2".
- 4) Recompose the picture and press the shutter button halfway. After the AF symbol and exposure data light up, press the shutter button completely to take the picture.

80 18 -2-1-8-1-2\*

- If the minimum aperture value of the lens in use blinks, clear the focus points by turning the command dial to another position and returning it to DEP. Move back from the subject or switch to a wide-angle lens or zoom lens' wide-angle setting and repeat steps #2 through 4. When the aperture value stops blinking, the distance range will be sharply focused and correct exposure will be obtained.
- If both the shutter speed and the aperture value blink, the exposure is not correct. Use an ND filter in bright situations. The flash can not be combined with this mode.

- To cancel Depth-of-Field AE in midoperation, set the command dial to another position.
- When using a zoom lens, do not change the focal length after setting the first point. Always set the focal length first.
- Wide-angle lenses are best used in this mode for maximum depth-of-field effect.
   Lenses with a focal length longer than 200 mm are not recommended for deep depth of field.
- This mode can also be used to minimize depth of field by focusing on the same point both times. A telephoto lens gives portraits the best shallow depth-of-field effect.
- If the focus points are extremely near and far, the shutter speed may be very slow. We recommend using a tripod.

#### 2. 8 : Self-timer

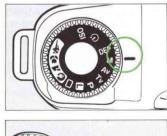


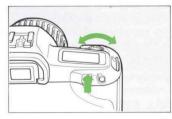
**Self-timer** Settings: One-shot AF/Evaluative metering

Use the self-timer function to delay shutter release for 10 seconds and include yourself in the picture. Place the camera on a tripod, table, or other steady surface.

- Shooting mode is automatically set to Program AE.
- 1) Set the command dial to " 🕉 ".
- 2) Compose the picture and press the shutter button to start the timer while looking into the viewfinder. A beeper tone sounds to monitor the countdown. Two seconds before the picture is taken, the beeper tone sounds rapidly.
  - Be careful not to stand in front of the camera when you press the shutter button.
  - To cancel the self-timer, turn the command dial to another position.

## 4. Bulb (Long Exposure)





bulb 8.0 @ 20 Use bulb for exposures longer than 30 seconds, such as for fireworks or night scenes. The exposure continues as long as the shutter button is held down. Make sure the camera does not move during exposure by placing it on a tripod or other steady surface.

- 1) Set the command dial to "M".
- 2) Turn the electronic input dial until "buLb" (after 30") is displayed.
- Set the aperture value by turning the electronic input dial while pressing the exposure compensation button.
- 4) Press the shutter button completely to take the picture.
- Bulb can be combined with the multiple exposure function.

## 3. Flash Photography with the Built-in Flash

When the " 4" mark blinks in the viewfinder, pull the built-in flash up manually for flash photography.



#### Notes

- 1) Always pull the flash up **gently** by grasping the flash tabs.
- When not in use or when using an external flash, push the built-in flash down gently to retract. An external flash cannot be used together with the built-in flash.
- 3) For flash photography, do not press the shutter button completely until the " \$ " mark lights steadily in the viewfinder.

Flash Shooting Distance Range (when using the EF 35-80mm f/4-5.6)

| - florid | WIDE             |               | TOTAL THEORY OF TELE |               |
|----------|------------------|---------------|----------------------|---------------|
| ISO      | Color Print Film | Slide Film    | Color Print Film     | Slide Film    |
| 100      | 0.7 - 5 m        | 1 - 3.5 m     | 0.7 - 3.5 m          | 1 - 2.5 m     |
|          | 2.3 - 16.4 ft    | 3.3 - 11.5 ft | 2.3 - 11.5 ft        | 3.3 - 8.2 ft  |
| 400      | 0.7 - 10 m       | 1.5 - 7 m     | 1 - 7 m              | 1.5 - 5 m     |
|          | 2.3 - 33 ft      | 4.9 - 23 ft   | 3.3 - 23 ft          | 4.9 - 18.1 ft |

## Flash Photography and the Red-eye Reduction Function

The subject's eyes may appear red in flash photos due to light reflected from the retina. This phenomenon is called "red eye." To minimize red eye, this camera automatically activates its builtin red-eye reduction function in **৩** (Self-and (Portrait) mode when using flash in a situation where red-eye is likely to occur. In this mode, a lamp in the flash lights momentarily to reduce the size of the subject's pupils before the flash fires. When the shutter button is pressed halfway, the viewfinder display blinks for 2 seconds and the redeye reduction lamp lights. When the viewfinder display stops blinking, press the shutter button all the way to take the picture.

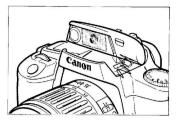


Entire viewfinder display blinks. (Internal viewfinder display)

- •The red-eye reduction lamp lights continuously while the shutter button is pressed halfway.
- Have the subject look at the red-eye reduction lamp for best effect. The red-eye reduction effect differs depending on the subject and shooting conditions.
- •The red-eye reduction lamp goes out if you remove your finger from the shutter button without taking a picture.

Light from the built-in flash will be blocked by the lens barrel at distances between 0.37 m (the closest shooting distance of the EF 35-80mm f/4-5.6 lens) and 0.7 m.

When using flash, always keep at least 0.7 m away from the subject.



| LENS                      |            | EF 35-80 mm<br>f/4-5.6  |  |
|---------------------------|------------|---|--|
| Angle of<br>View          | Diagonal   | 63° - 30°   |  |
|                           | Vertical   | 38° - 17°   |  |
|                           | Horizontal | 54° - 25°   |  |
| Optical Construction      |            | 8 elements in<br>8 groups   |  |
| Minimum Aperture          |            | 22-32   |  |
| Shooting Distance         |            | 1.2 ft/0.37 m-infinity  |  |
| Maximum<br>Magnification  |            | 35 mm<br>0.12 (200 × 300mm)<br>7-78" × 11-13/16"<br>80 mm<br>0.25 (96 × 144mm)<br>3-3/4" × 5-11/16" |  |
| Filter Size               |            | 52 mm   |  |
| Hood                      |            | EW-62   |  |
| Case (hard/snap)          |            | LH-C13/ES-C9  |  |
| Length × Max.<br>Diameter |            | 2-3/8'' × 2-11/16''<br>61 × 68.6 mm   |  |
| Weight                    |            | 6.3 oz. (180 g)   |  |

- 4) " \$ " will not blink in the "Creative Zone".
- In low-light conditions, the built-in AF auxiliary light is emitted automatically if necessary when the shutter button is pressed halfway.
- 6) Using the following large-diameter lenses may cause shading at the lower part of flash photos:

EF 200 mm f/1.8 L

EF 300 mm f/2.8 L

EF 20-35 mm f/2.8 L

EF 28-80 mm f/2.8-4 L

EF 80-200 mm f/2.8 L

EF 50-200 mm f/3.5-4.5

E FO 200 mm 1/0 F 4.5

EF 50-200 mm f/3.5-4.5 L

- Using a lens of a focal length shorter than 35 mm may cause shading around the edges of flash photos.
- 8) To prevent shading, do not use a lens hood when using the built-in flash.

## Viewfinder Information When Using Flash

| Shooting mode            | Warning display   | Condition                       | Note  |
|--------------------------|---|---------------------------------|---|
| (P) Program AE           | During daylight fill-in flash photography, the lens' minimum aperture value blinks. | The background is overexposed.  | The subject is correctly exposed.   |
| (Tv) Shutter-priority AE | The lens' minimum aperture value blinks.  | The background is overexposed.  | The subject is correctly exposed. Blinking may stop if a faster shutter speed is set. |
|                          | The lens' maximum aperture value blinks.  | The background is underexposed. | The subject is correctly exposed. Blinking may stop if a slower shutter speed is set. |
| (Av) Aperture-priority   | The fastest possible x-<br>sync shutter speed 90<br>(1/90 sec.) blinks.             | The background is overexposed.  | The subject is correctly exposed. Blinking may stop if a smaller aperture is set.     |
|                          | The slowest shutter speed 30" (30 sec.) blinks.                                     | The background is underexposed. | The subject is correctly exposed. Blinking may stop if a larger aperture is set.      |

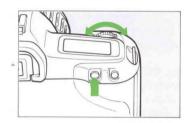
#### 1. Partial Metering



The main light metering system used in this camera is called "evaluative metering." It evaluates the entire picture area by dividing it into three zones to determine the best exposure taking into consideration differences in brightness between the subject and background and the size of the subject. With a backlit subject, for example, the camera automatically compensates to obtain correct exposure for the main subject.

Partial metering, on the other hand, reads only 9.5% of the center of the picture area. This is particularly suited for photography in theaters and other situations when there is a significant difference in brightness between the main subject and background. The exposure setting is automatically locked in partial metering mode, allowing you to freely recompose the picture after metering.

## 2. Exposure Compensation





recommend setting depending on the number of exposures.

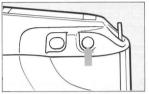
| Number of exposures | Exposure compensation amount |
|---------------------|------------------------------|
| Two                 | -1.0                         |
| Three               | - 1.5                        |
| Four                | -2.0                         |

Use exposure compensation for intentionally underexposed or overexposed pictures. The compensation range is up to  $\pm I - 2$  stops in half-stop increments. While pressing the exposure compensation button, turn the electronic input dial until the exposure level mark is set to the desired exposure compensation amount.

- Exposure compensation remains active until canceled.
- To cancel exposure compensation, repeat the above procedure to return the value to 0, or set the command dial to the green zone or to any of the P.I.C. modes.
- If you set an exposure compensation value before going into manual exposure mode, the manual exposure metering system will indicate the compensated value as the correct exposure.



Partial Metering Area Mark



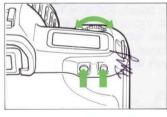


- Compose the picture and focus the subject, then remove your finger from the shutter button.
- 2) Place the partial metering circle in the viewfinder on the subject you want metered and press the partial metering button. The partial metering mark " \* " appears in the viewfinder. After " \* " appears, press the shutter button halfway.
- While pressing the shutter button halfway, recompose the picture if desired and press the shutter button completely.

#### Note:

You may remove your thumb from the partial metering button if you press the shutter button halfway after " \* " appears in the viewfinder.

## 3. Multiple Exposures





Try this function for creative and dramatic effects. Up to nine exposures can be made on the same frame with minimal operation.

- Press the exposure compensation button and the partial metering button together to display "ME" in the LCD panel.
- 2) Turn the electronic input dial to set the desired number of exposures.
- 3) Press the shutter button to start.
- "ME" blinks in the LCD panel during multiple exposure operation.
- The film winds to the next frame after the set number of exposures have been taken.
- To clear preset exposures, repeat steps #1 and 2 to set the number of exposures to 1.