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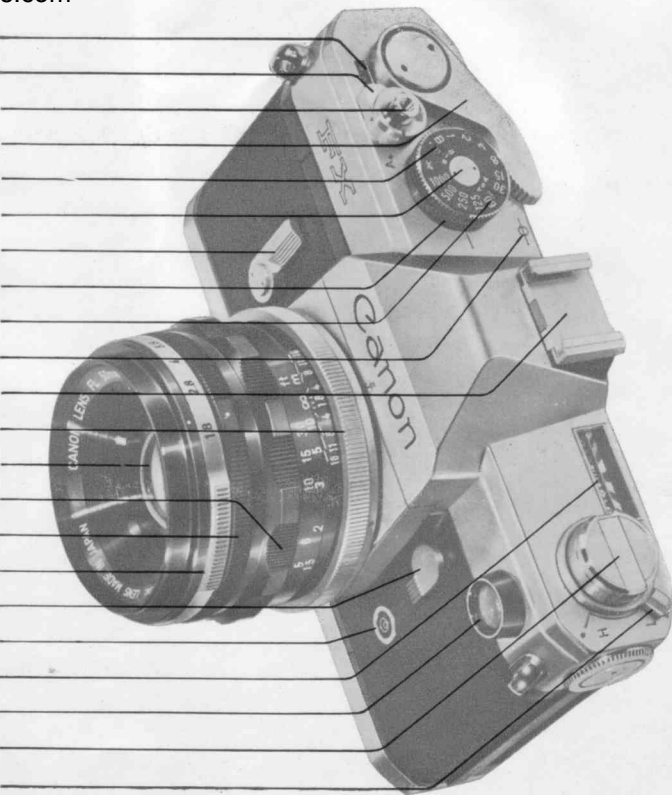
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- Film Counter
- T (Time) Lock and Safety Lock Lever
- Shutter Release Button
- Film Advance Lever
- DIN Film Speed Indicator Window
- Shutter Speed Dial
- Self-timer
- Film Speed Set Ring
- ASA Film Speed Indicator Window
- Film Plane Mark
- Accessory Shoe
- Bayonet Ring
- Lens
- Focusing Ring
- Manual Aperture Ring
- Pre-set Aperture Ring
- Mirror Lock Lever
- Synchro Flash Socket
- Light Meter Indicator & Mercury Battery Checker
- CdS Light Meter Window
- Film Rewind Crank
- Light Meter Sensitivity Shifting Lever



Mercury Battery Chamber

Light Meter Circuit Change Switch

Back Cover Opening Key

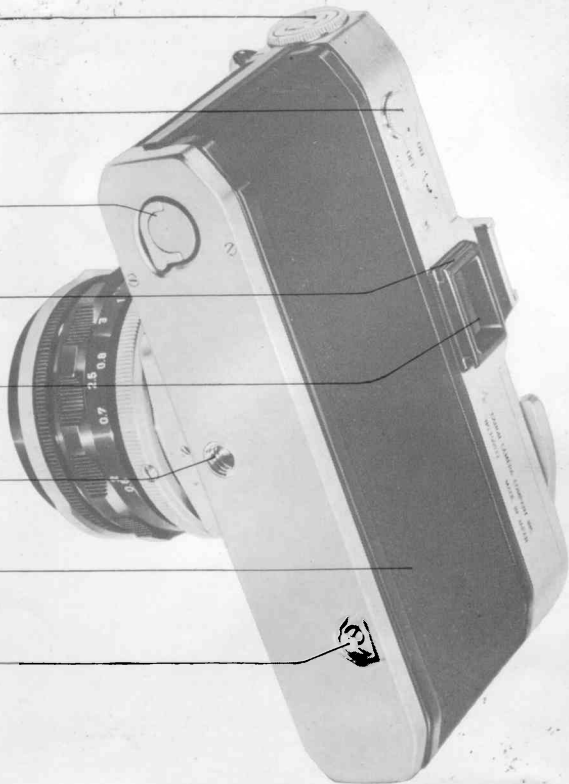
Eyesight Adjustment Eyepiece  
Adapter Attachment Groove

Viewfinder Eyepiece

Tripod Socket

Back Cover

Film Rewind Release Button



www.orphancameras.com



**Canon**

**FX**

INSTRUCTIONS

English Edition

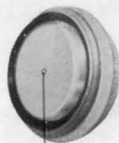
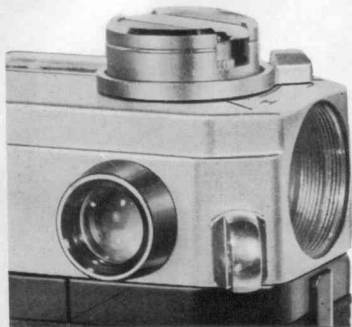
## Canon FX Specifications

- Type :** 35 mm single-lens reflex camera.
- Viewfinder :** Eye-level viewfinder using Pentagonal Dach Prism. Waist-Level Viewer 2 can be attached.
- Focusing Glass :** Highly efficient in resolving power, using Fresnel Lens, and built-in split-image rangefinder.
- Mirror :** Shock-proof quick return type. Mirror can be fixed "upward."
- Standard Lens :** FL 50 mm F 1.8, FL 50 mm F 1.4, FL 58 mm F 1.2
- Aperture :** Fully automatic pre-set aperture built-in. Pre-set release possible.
- Shutter :** 1/1000~1 second dial and B(T) X single pivot dial focal plane shutter.
- Built-in Meter :** Match needle type CdS meter coupled to shutter dial. With ASA 100 film, the high and low two-stage conversion system ranges between LV 1-10 and LV 9-18. Use ASA 10-800, and utilize one mercury battery MD Model 1.3 V.
- Battery Checker :** Built-in checker for mercury battery.
- Flash Synchronization :** Synchronizing possible for FP and X contacts and FP class, M class, F class and speedlight. Automatic time lag adjusting type, JIS B Model terminals.
- Built-in Self-timer :** Time adjusting type operated by shutter button.
- Winding Lever :** Single operation 160° winding lever, possible to wind with several short strokes.
- Film Rewinding :** Rewinding done by button and crank.
- Film Loading :** Back cover opening and closing using only cartridge.
- Interchangeable Lenses :** Automatic pre-set aperture of various types. FL lens system.
- Film Counter :** Self-resetting type.
- Size, Weight :** 141×90×43 mm/670 grams (body only).
- Other various safety devices, complete accessories, etc.

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## Mercury Battery Loading



Central Contact



Load the mercury battery (contained in a separate envelope) into the battery compartment. Since the mercury battery powers the built-in CdS meter, the meter will not function unless the battery is in position.

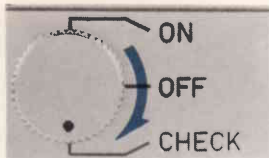
1. Press the finger against battery cover and turn to the left to remove.
2. Face the central contact of the mercury battery inwards and insert, then screw the cover back in.

When inserting, do not confuse the  $\oplus$   $\ominus$ . Not only will the meter fail to function in case of reverse insertion, but the cover cannot be screwed in properly.

\* For mercury battery, the National MD model or the Toshiba TH-MC is used—equivalent to the United States Mallory RM 625, Eveready E 625, General No. 625. Life of the battery in continuous use is about one year.

\* Do not soil with perspiration or fingerprints. Before insertion, clean mercury battery thoroughly with a dry cloth. Perspiration or finger marks may cause corrosion and may prove particularly harmful to center of contact. If unclean battery is inserted, camera contact point may be damaged. Proper use and maintenance of all your equipment will insure its usefulness.

\* When not in use for a long period, remove the mercury battery and keep in a dry place.



## Battery Check

Always check the new battery. It is always necessary to make a check of the voltage when making battery changes.

1. Turn the revolving switch to match the CHECK indicator.
2. Check the efficiency of the battery by reading the meter needle. Voltage is sufficient if the needle swings to the right side within the blue colored section. If the needle stops in the white section to the left side, the battery must be replaced.

## Before Using

FIRST, BECOME FAMILIAR with the workings of each section. Before loading the film, try out the winding lever and the use of the meter. Become thoroughly acquainted with the camera. By doing so, you will be able to operate the camera without confusion.

## READ THE INSTRUCTIONS

The camera being a machine, there is a proper way to handle it. Avoid unnecessary failures by reading the instructions first. As the very first step in handling the camera, explanations will begin with the film winding.



## Winding



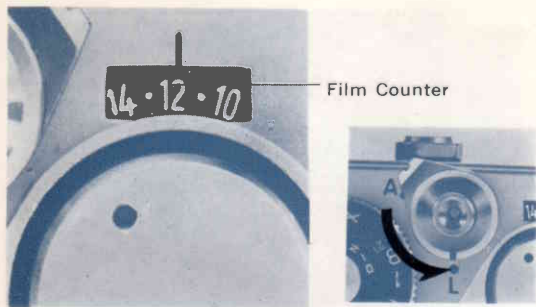
The turning of film advance lever operates the inner mechanism, such as the shutter and film winding, mirror and aperture charging, etc., to be carried out in one motion.

Single-stroke film advance lever advances the film, cocks the shutter, counts exposures all in one operation.

When the shutter button is pressed, the mirror swings up, simultaneously the lens closes down to the pre-selected position, and the shutter operates.

Immediately after the shutter operation, the advance lever is again in ready position.

- \* Winding is not possible unless the indicator of the shutter button safety lock is in "A" position.
- \* The winding may be done by moving the lever with several short strokes.
- \* Unless the winding is complete, even though the shutter button is pressed, the shutter will not actuate. In such a case, check the winding once more.
- \* After loading the film, since there is the possibility of the very first winding not catching, make another wind.

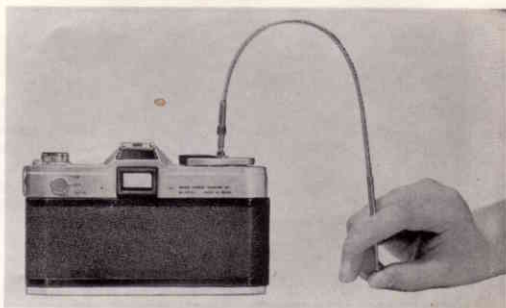


### Indication of the Number of Pictures Taken

Each winding of film will advance the number of the film counter, indicating the number of pictures taken. When the back cover is opened, the indicator automatically returns to the starting position "S."

### Safety Device for Shutter

When the safety lock around the shutter button is turned to the "L" position, the shutter is locked and will not move. This device may be used when camera is carried around in a wound condition.



### Attaching the Cable Release

A cable release can be attached to the shutter button. Although the safety lock lever is at "L" position, the shutter will operate by pressing the release. Please be careful.

## Shutter and Aperture Adjustment

Make reverse turn  
when it stops at X.

Make reverse turn  
when it stops at B.

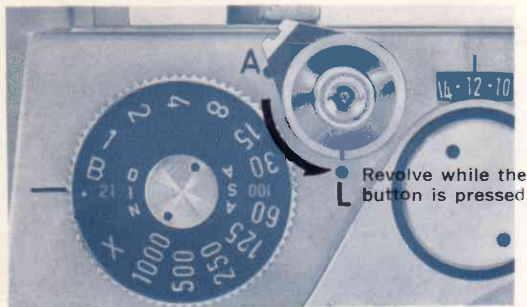


Exposure is the opening of the shutter to throw light on the film. The shutter and aperture adjust the exposure, with the shutter adjusting the exposure time and the aperture adjusting the amount of light. Since the Canon FX uses the coupled meter, it is simple to obtain the proper exposure. (Page13)

### Shutter Dial

By revolving the dial, it is possible to adjust the speed by turning it to the necessary index number. The index on the dial shows the denominators 1/1000 sec., 1/15 sec., etc.

- \* The index between X and B does not revolve.
- \* B means bulb exposure. The shutter remaining open during the pressing of the shutter button, it is employed when making exposures of more than one second.
- \* When it is necessary to make exposure over an extended time T (time), set it at B. Keep the shutter button pressed, and turn the T lock lever to indicator L. In this case, although the finger is removed, the exposure continues. When the lever is returned to A, the shutter closes.



- \* T exposure is possible also by using the lock-attached cable release.
- \* The X index is used for synchronizing a speedlight. Although the shutter speed is 1/60 sec., actually it is equivalent to a very short exposure during the flash time of the Speedlight.
- \* Set the index at the position where the click stop catches.  
Especially in case of B index, adjust it to the white dot just below the B index.

### Lens Aperture

Turn the pre-set aperture ring to adjust the desired F stop to the index. By doing so, the adjust-



ment of the quantity of light and depth-of-field (page 37) are made.

### Pre-set Aperture

This is the mechanism for adjusting the size of the aperture which is automatically closed down. If this ring is turned and set the desired F stop to the index, the lens is closed down to the pre-selected aperture stop for the instant that the shutter is released.

Ordinarily, the diaphragm is full opening. In other words, the pre-set aperture ring is an adjusting ring which automatically pre-fixes the size of the lens aperture.

## Pre-Set Aperture Release (Manual Aperture)

Used in ordinary photography to check the depth-of-field or when fixing aperture with bellows attached. When turning the manual aperture ring, it is possible to fix the aperture up to the pre-set aperture, thus enabling the checking of the focus resulting from this condition.

Before taking a picture, always open the manual aperture.

### Do Not Turn the Manual Aperture Ring While the Pre-set Aperture Ring is full opening

\* In the case of the aperture, as the numerical value gets larger the amount of light reaching the film becomes correspondingly less. For each aperture, the light is reduced one-half. Accordingly, when the aperture is increased by one index point, the exposure is doubled, and when it is increased by two index points the exposure is quadrupled. Half-way points on the aperture index may also be used. Depending on the lens, there are instances when there is no relation to the lightness being halved between the



maximum diameter of the aperture and the next aperture reading. Canon FX, by using the built-in meter, can easily determine the lens aperture which sets the shutter speed.

\* The ratio between aperture and the amount of exposure, using F2 as the basis, is as follows:

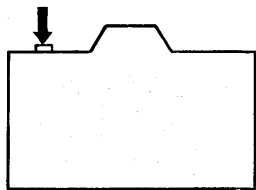
Lens Aperture

1.2 1.4 1.8 2 2.8 (3.5) 4 5.6 8 11 16 22

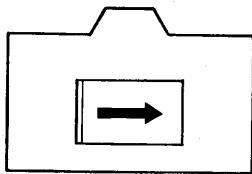
Exposure Ratio

1/3 1/2 1/1.25 1 2 (3) 4 8 16 32 64 128

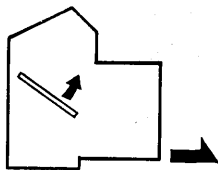
## Relation Between the Mirror, Diaphragm and Shutter



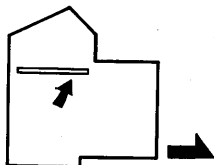
Press the shutter button



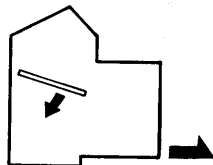
The shutter is clicked



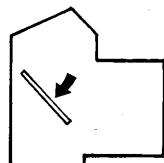
Mirror begins to snap up



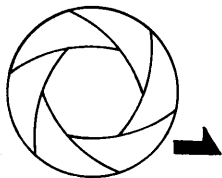
Mirror is up



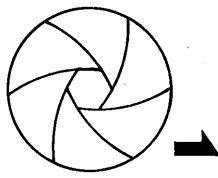
Mirror begins to return



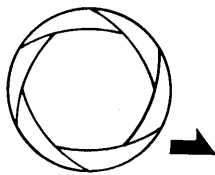
Mirror returns to former position



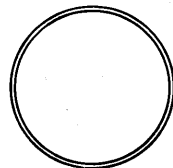
The diaphragm begins to close



Closed down to pre-set position



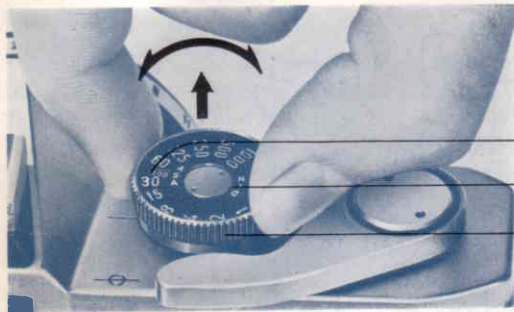
The diaphragm begins to open



The diaphragm is full opening

Press the shutter button. (1) The lens is closed. (2) The mirror snaps up. (3) The shutter is clicked. (4) The aperture opens, the mirror returns. Simultaneously.

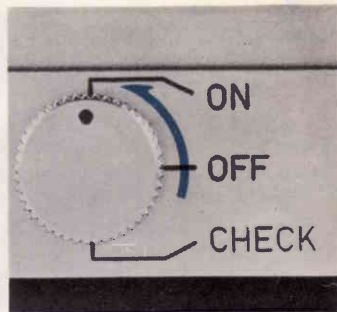
## How to Use Built-in Light Meter



ASA Film Speed Window

DIN Film Speed Window

Lift up the outer sensitivity set-ring and turn



The Canon FX Meter, which is the match-needle type, is coupled to the shutter dial. The exact exposure may be easily determined according to the brightness of the subject to be photographed. Although there are two ways of determining the exposure—either by first selecting the shutter speed or by first selecting the lens aperture—in any case, it is most important that the essentials are mastered.

### Preparations

1. Show the film speed of the film used in the small window. To do this, hold up and turn the sensitivity set-ring around the shutter dial. If the film is ASA 100, for example, make cor-

rect setting by showing 100 in the ASA window.

- \* When ASA 10 appears in the small window, this is as far as it will turn to the left. The right turn extremity reads 800.

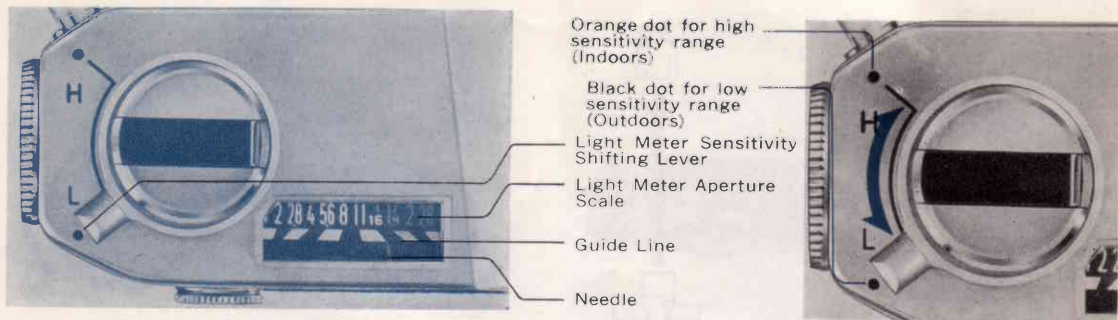
- \* The following film speeds may be used:

	(12)	(20)	(32)	(40)	(64)	(80)	(125)	(160)	(250)	(320)
ASA	10	16	25	50	100	200	400			
DIN	11	13	15	18	21	24	27			
	(12)	(14)	(16)	(17)	(19)	(20)	(22)	(23)	(25)	(26)
	(500)	(640)								
						800				
						30				
	(28)	(29)								

Figures in brackets represent intermediate film speeds.

- \* Explanations of the film speed are shown either on the film box cover or in the explanatory sheet.

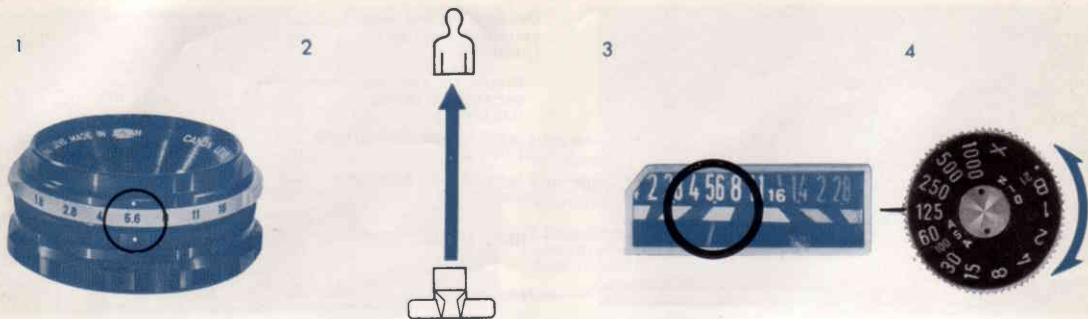




2. Turn the switch to ON.
  3. Determine the meter sensitivity.  
In ordinary brightness outdoors, turn the sensitivity shifting lever to match the black dot "L" for low sensitivity use. Make adjustments to the orange dot for indoors or outdoors just before sunset.
  4. For low sensitivity, use the white figure of the aperture reading; when using high sensitivity, follow the orange figures.
- \* The sensitivity of the meter is based on a two-stage high and low system. For high sensitivity (dark subject) using ASA 100 film, the setting should be LV 1—10 (F 1.4 1 sec.—F 16 1/4 sec.); for low sensitivity (bright subject) the setting should be LV 9—18 (F 1.4 1/250 sec.—F 16 1/1000 sec.)



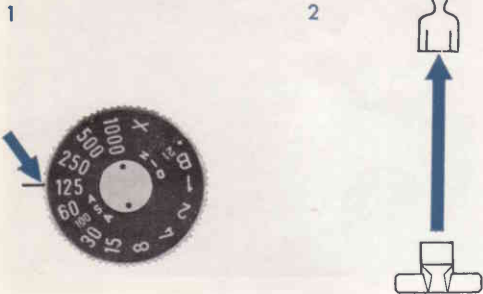
## Exposure Setting-1



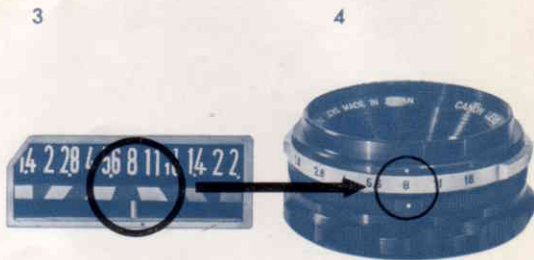
1. Set the lens aperture.
2. Facing the camera towards the subject, the position of the meter needle is determined.
3. Turn the shutter dial and adjust the same figure as the lens aperture to the guide line where the needle stops.
4. Set the shutter dial to the click stop position. The exact exposure has now been set.

- \* When measuring the brightness, be careful not to cover the light meter window with your hand. Since the light meter acceptance angle is  $40^\circ$ , it is possible to measure the principal subject without being hindered by excessive light. (Light other than that reflected from the subject).
- \* No attention is needed to the B or X index of the shutter dial.
- \* Reading of the aperture stop is made according to the guide line.
- \* During the use of the meter, there are instances of the movement of the needle becoming slack, owing to changes in the degree of light, but this is due to the peculiar characteristics of the CdS.

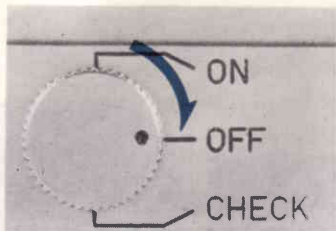
## Exposure Setting-2



1. Set the desired shutter speed.
2. Turn the camera towards the subject to be photographed.



3. Read the aperture stop to which the needle is pointing, and set the lens aperture.



- \* Intermediate positions on the shutter dial scale are unusable, but since any aperture may be utilized, the shutter speed should first be determined when strictly considering the exposure. It is most practical to adjust the aperture according to this.
- \* When the camera is not to be used for a long time, always turn the switch to "OFF". Also, make a battery check before using again.

When taking portraits against such bright backgrounds as the sky, cloud or sea, there is the possibility of the subject being under-exposed.

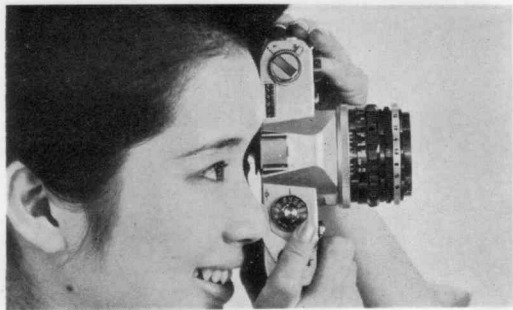
This is due to the fact that the meter has been over-sensitized to the brightness of the background, thus failing to produce the correct reading for the subject. In such a case, make the measurement near the subject. Be especially careful when the picture is being taken against the light.

When taking pictures against the light, it is important to place the emphasis on the background, or the subject. Determine the exposure while paying due consideration beforehand to the results desired.

Be careful also of the tendency to tilt the camera upwards when reading the meter needle.

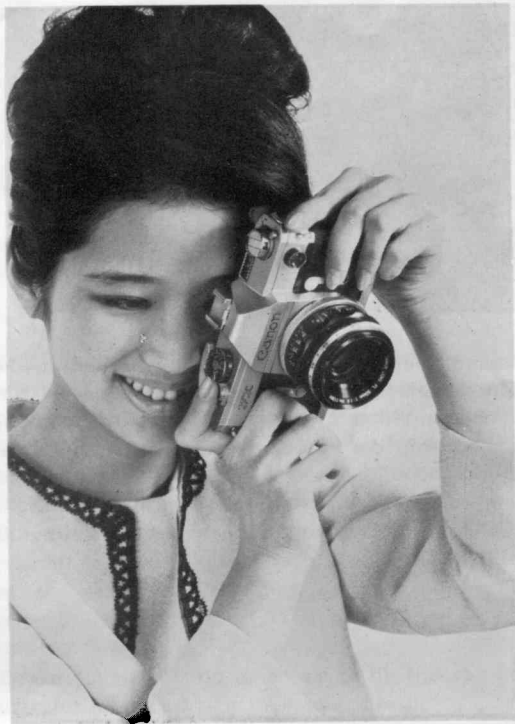
## Holding the Camera

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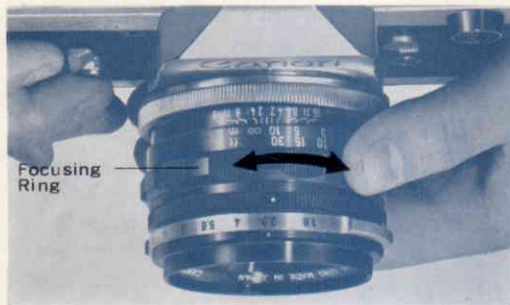
Holding the camera firmly is very important if you want to take a clearly focused picture. Hold the camera in either a vertical or horizontal position, as shown in the photographs. Look through the finder, and adjust the focus while determining the composition. Then, gently press the shutter button. At this time, it is important to consider the following points.





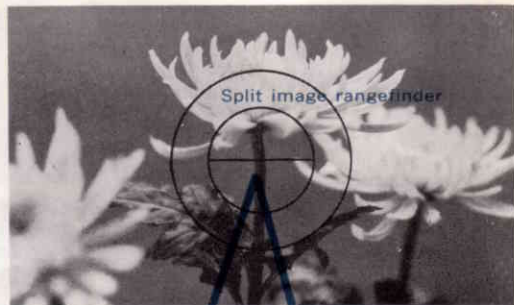
1. Hold the camera with both hands as firmly as possible.
  2. Stabilize the camera by pressing it against the cheek or forehead.
  3. When the camera is in a horizontal position, both elbows should be firmly against the body, and at least one elbow should be resting against the body when in a vertical position.
- \* Rough pressing of the shutter button, causing camera movement, is one cause of picture distortion.
  - \* It is advisable to use the tripod and cable release. Particularly recommended when using a slow shutter speed below 1/30 sec.

## Focusing

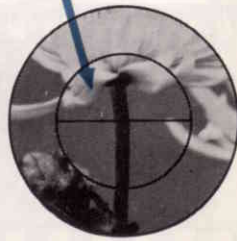
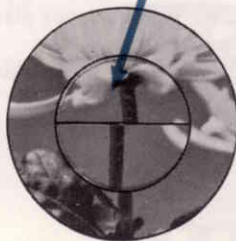


Remove the lens cap. While looking through the viewfinder, rotate focusing ring.

## Viewfinder range



It is out of focus when the image within the circle in the center of the viewfinder does not coincide. It is in focus when the top and bottom images coincide.





+1.5



0



-2.5



-4(diopter)

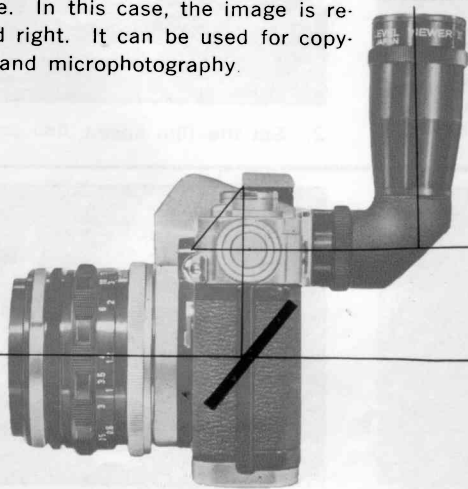
- \* The viewfinder is equipped with eyesight adjustment lenses. When attached, they let you take pictures without glasses for those who are far-sighted or near-sighted.
- \* The central circular section is not a focus glass. Use it only as a rangefinder.
- \* When focusing on the surface of the focus glass, do this outside the central circular section.



## Composition and Viewfinder

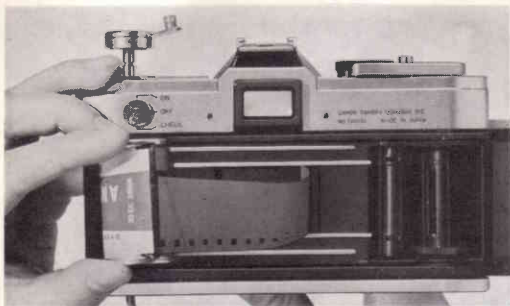
The picture to be recorded on the film can be seen on the surface of the focus glass. There is no parallax error. It is possible to determine the composition exactly according to the viewfinder.

\* The Waist-Level Viewer Model 2 can be attached to the eyepiece. In this case, the image is reversed left and right. It can be used for copying, enlarging and microphotography.

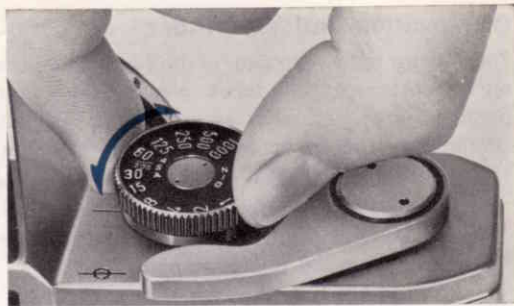




## Preliminary Steps in Photography



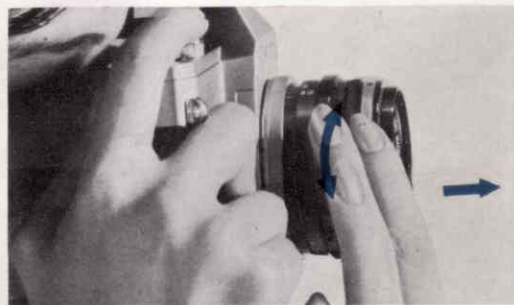
1. Load the film.



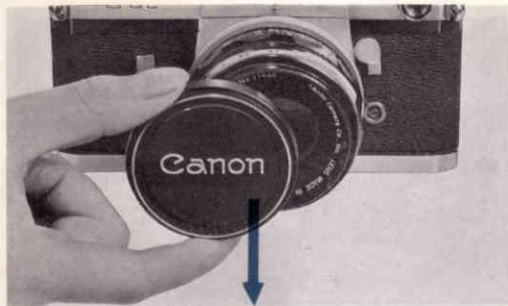
2. Set the film speed.



5. Determine the exposure with built-in meter.



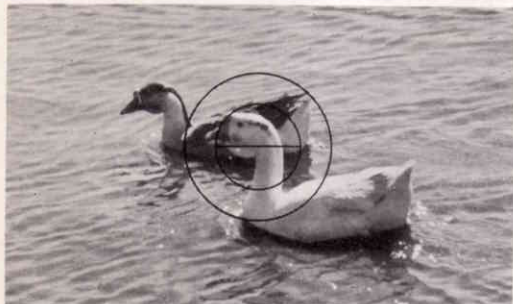
6. Look through the viewfinder.



3. Remove the lens cap.



4. Wind the film advance lever.



7. Focus and compose the picture.



8. Press the shutter release button.