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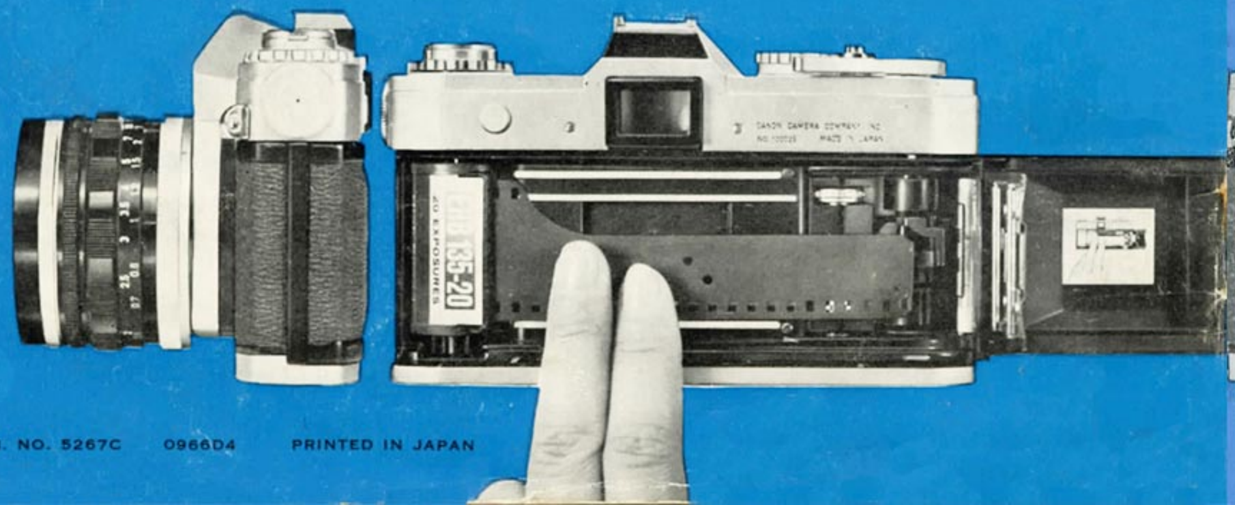

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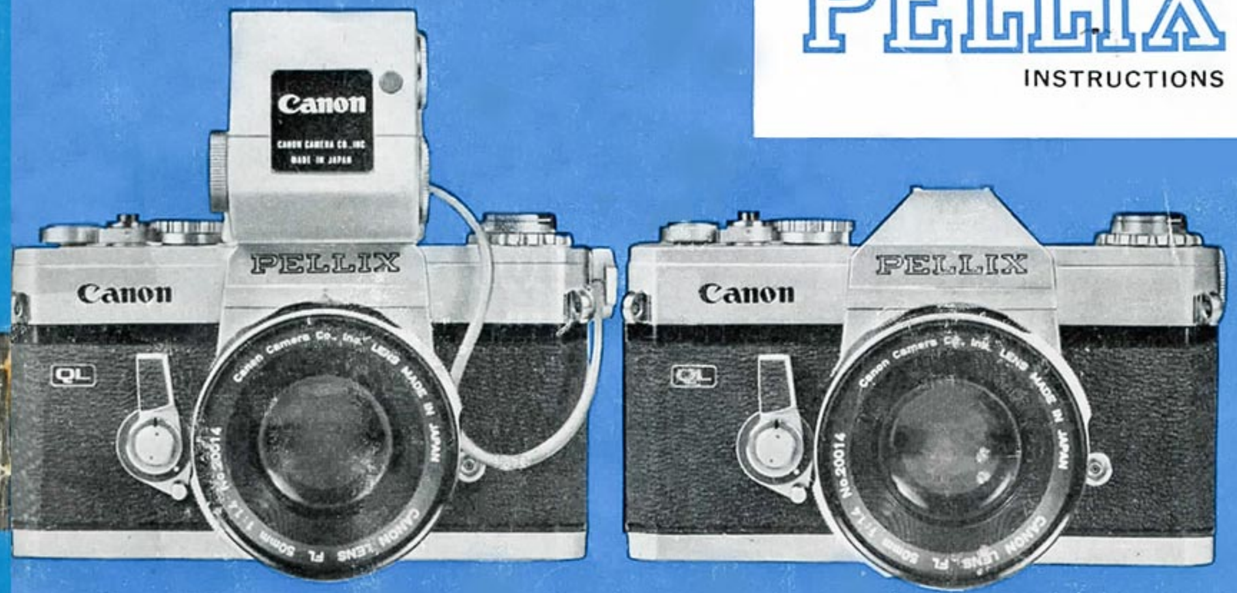
Canon QL PELLIX

INSTRUCTIONS



English Edition

We are highly gratified that you have selected the Canon PELLIX QL—a wise choice that promises you many delightful years of photographic experiences.

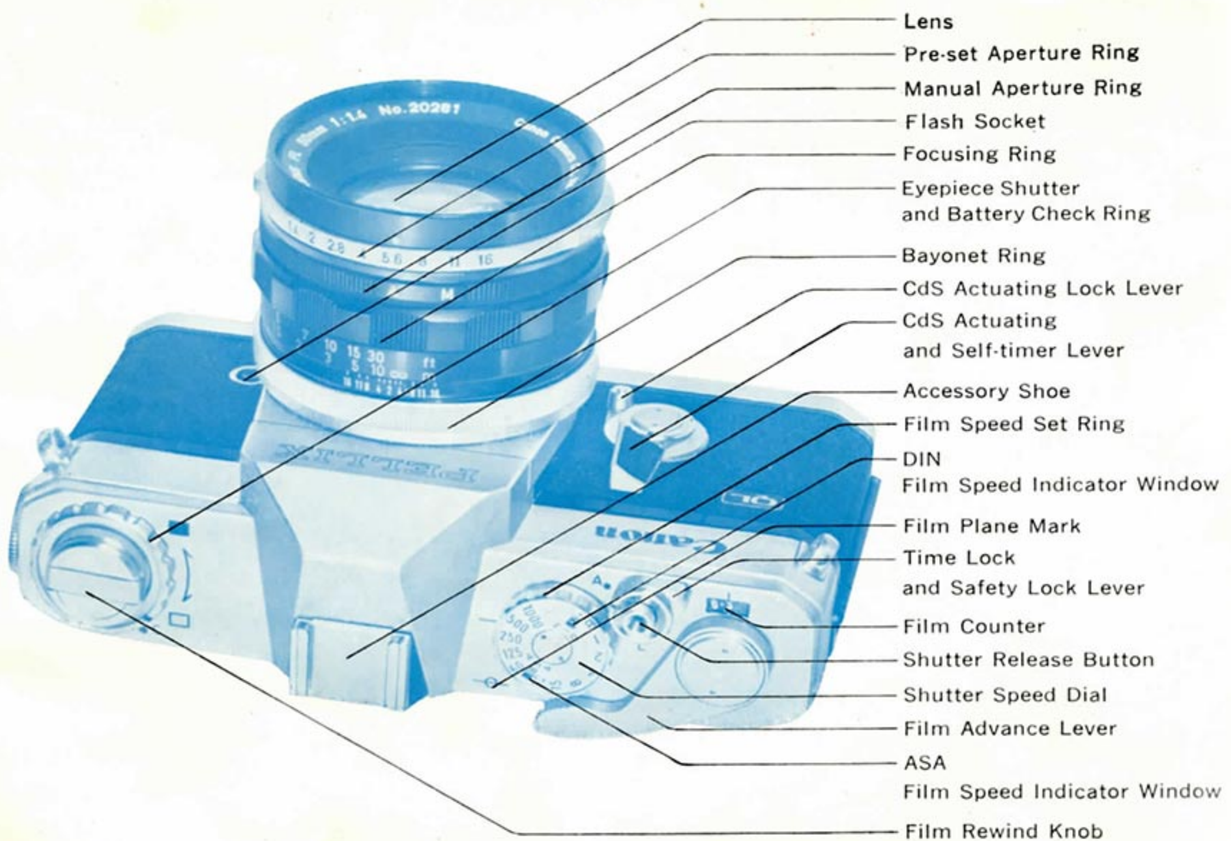
Canon is recognized the world over as the foremost pioneer in the development of photographic equipment of the highest quality and performance.

Whether it is for the home, laboratory, or traveling, make the most of your opportunities!

Before Using . . .

It is important for you to thoroughly know and to get accustomed to handling the Canon PELLIX QL. Please read this instruction booklet carefully, and master the manipulations of the various parts completely. If you are thoroughly versed in the correct handling of the camera, you can get the maximum performance out of the Canon PELLIX QL to your greatest satisfaction.

Canon Lens FL 85—300 mm F 5



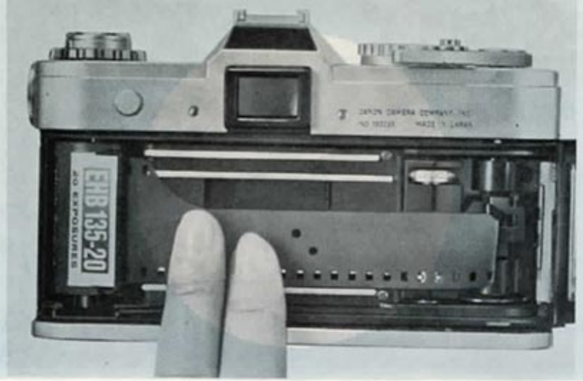
Canon Pellix QL Specifications

Type: 35mm single-lens reflex camera.
Viewfinder: Eye-level system using pentagonal prism. Waist-Level Viewer 2 can be attached.
Focusing Glass: Highly efficient in resolving power, using Fresnel lens and built-in prism screen rangefinder.
Mirror: The Canon Pellicle Mirror, a half transparent mirror.
Standard Lens: FL 50mm F1.8, FL 50mm F1.4, FL 58mm F1.2, FLP 38mm F2.8
Aperture: Fully automatic pre-set aperture built in. Pre-set release possible.
Shutter: 1/1000 - 1 sec. and B (T) X single pivot dial focal plane shutter.
Exposure Meter: Built-in.Zero-method type CdS meter coupled to shutter dial and aperture setting. TTLM system. EV0.5 (with ASA 100 film, F1.2 at 1 sec.)-EV18 (F16 at 1/1000 sec.) one stage system. ASA 25 - 2000. Powered by one 1.3V MD type (#625) mercury battery.
Photometry: Exposure meter functions with the CdS actuating lever. Continuous photometry is possible with the CdS actuating lock lever. Battery checker built-in.
Measuring of Ultra-Low Illumination: EV 1.5 1/2 sec. - EV−4.5 30 sec. at F1.2 can be measured with the attachment of the Canon Booster (auxiliary meter for extremely dim lighting).
Flash Synchronization: Synchronizing possible for FP and X contacts and FP class, M class, F class and speedlight. Automatic time lag adjusting type.
Self-timer: Built-in. Time adjusting type.
Film Rewinding: Done by button and crank.
Film Advance Lever: Single operation 174° winding lever, possible to wind with several short strokes.
Film Loading: Back cover opening and closing, using only cartridge. The Canon-developed QL mechanism makes possible simple and quick loading of film.
Interchangeable Lenses: Automatic pre-set aperture type FL series lens system.
Film Counter: Self-resetting type.
Size: 144 x 91 x 43 mm (5¾" x 3⅝" x 1¾")
Weight: 755 grams (1 lb. 10½ oz.)—body only.

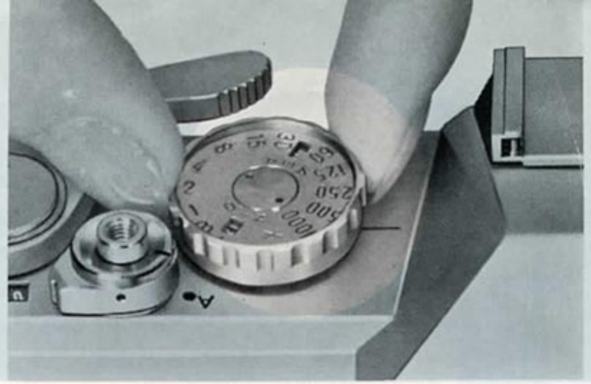
Specifications are subject to change without notice.

Contents

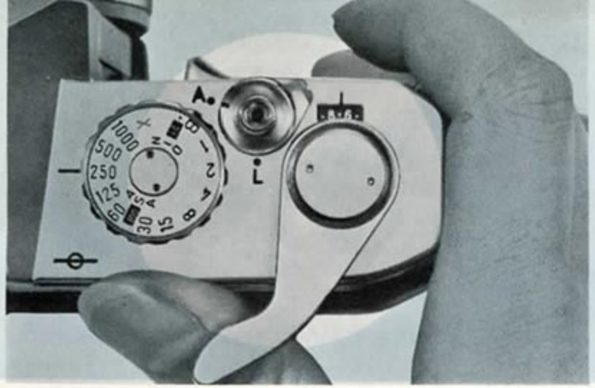
Mercury Battery Loading 8
Film Winding 10
Shutter and Aperture Adjustment 12
How to Use Built-in Exposure Meter 16
Exposure Setting 1—Shutter Speed Priority Method 18
Exposure Setting 2—F Stop Priority Method 19
How to Use the Canon Booster 21
Focusing 25
Holding the Camera 27
Film Loading 29
Film Rewinding 32
Photography Using Self-timer and Eyepiece Shutter 33
Flash Synchronization 34
Uses of Lenses 35
Double Exposure 40
Filters 41
Proper Care of the Canon PELLIX QL 42
Interchangeable Lenses and Accessories 44
Acceptable Range of Built-in Exposure Meter 47



1 Load the film.



2 Set the film speed.

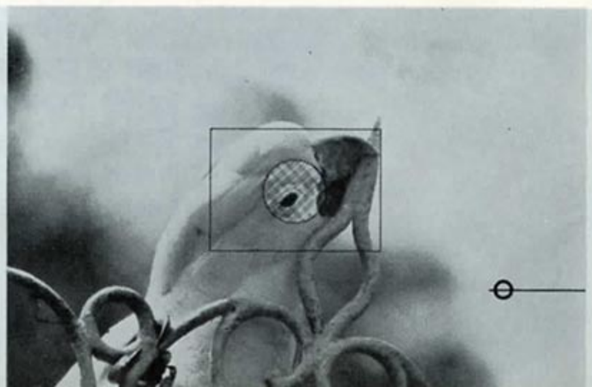


3 Wind the film advance lever.

4 Remove the lens cap.

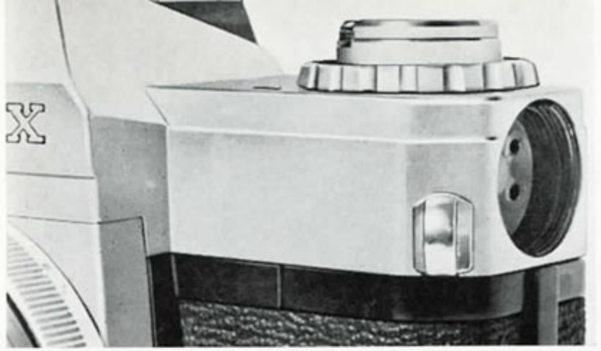
5 Look through the viewfinder.

6 Focus and compose the picture.



7 Determine the exposure with built-in meter.

8 Press the shutter release button.



Central Contact

Mercury Battery Loading

Load the mercury battery into the battery compartment. The mercury battery powers the built-in CdS exposure meter, and the meter will not function unless the battery is in position.

1 Press the finger against the battery cover and turn to the left to remove.

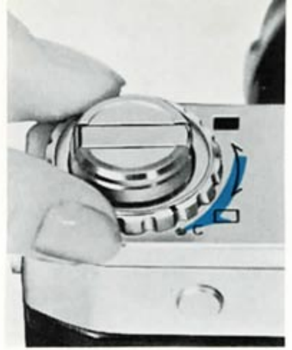
2 Face the central contact of the mercury battery inwards and insert, then screw the cover back in.

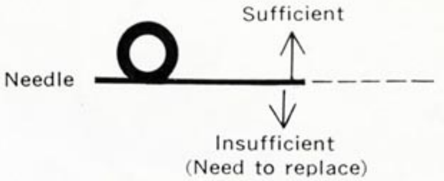
➧ Before insertion, clean mercury battery thoroughly with a dry cloth. Perspiration or finger marks may cause corrosion and may prove particularly harmful to center of contact. Unclean battery may also damage the contact point of the camera.

➧ For mercury battery, National M-1D or Toshiba TH-MC is used—equivalent to Mallory RM-625R, Eveready E625, GE #625. Life of the battery in continuous use is over one year.

➧ When inserting, do not confuse the ⊕ ⊖. Not only will the meter fail to function in case of reverse insertion, but the cover cannot be screwed in properly.

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





Battery Check

Check the mercury battery after loading it. Especially when loading a new battery, be sure to check the voltage.

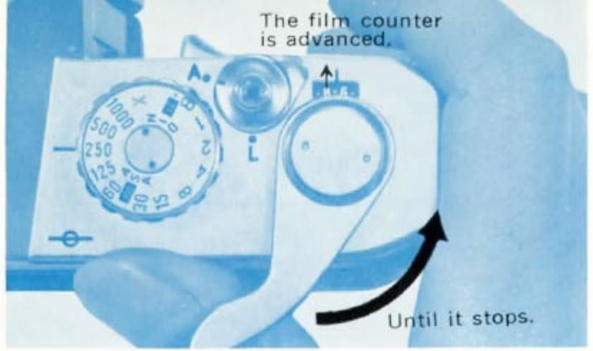
1 Set the film speed graduation of the shutter dial at ASA 100 and set "X" at the index mark. Lift up the outer sensitivity ring of the shutter dial and turn. (See page 16.)

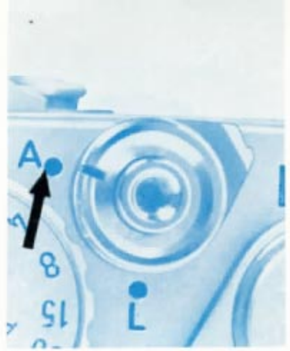
➧ An accurate check cannot be made if settings other than those mentioned above are used.

2 Turn the check ring on the outer side of the film rewind knob and set "C" at the index mark.

3 If the meter needle inside the viewfinder swings up to or over the o index, it means there is sufficient voltage. If the needle stays below the edge of the o index, voltage is insufficient and the battery must be replaced.

➧ In the Canon PELLIX QL, the electric current flows only when the CdS actuating lever is pressed.





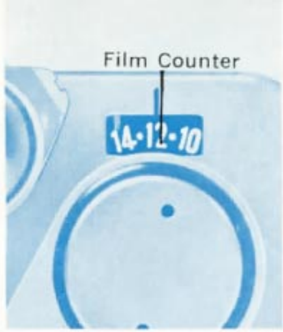
Film Winding

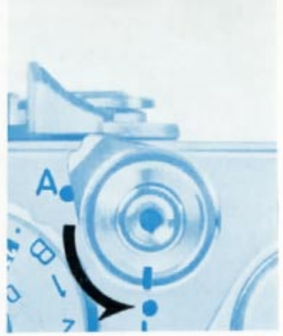
1 The turning of the film advance lever cocks the shutter, film winding and aperture charging in one motion.

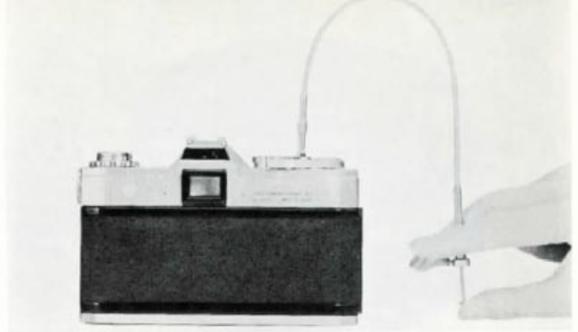
2 When the shutter button is pressed, the diaphragm simultaneously closes down to the pre-selected F stop and the shutter operates.

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.
- After loading the film, make another wind, since there is the posibility of the very first winding not catching.
- Unless the winding is completed, the shutter will not be actuated, even though the shutter button is pressed. In such a case, check the winding once more.







Film Counter

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 starting position "S".

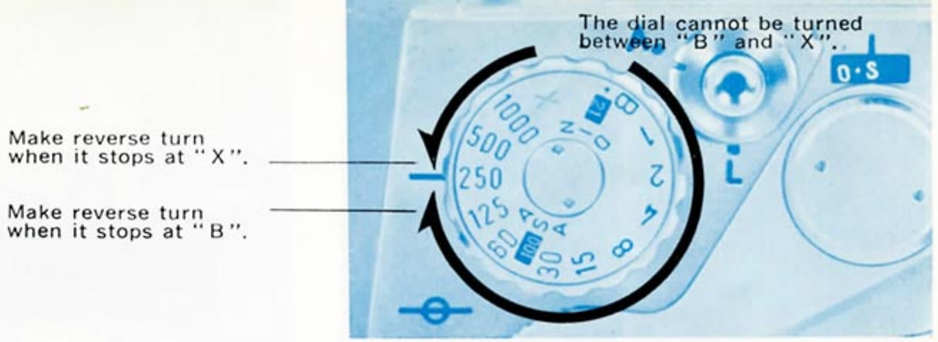
Safety Device for Shutter

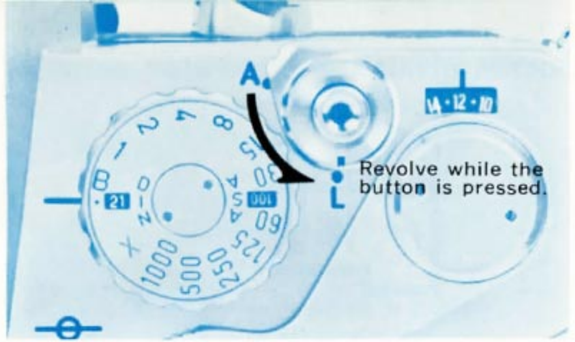
When the safety lock lever around the shutter button is turned to "L" position, the shutter is locked and will not move. This device may be used when the camera is carried in a wound condition.

Attaching the Cable Release

A cable release can be attached to the shutter button. Even if the safety lock lever is at "L" position, the shutter will operate by using the release.

When using the cable release, be sure to close the eyepiece shutter before shooting. Refer to instructions on page 33.





Shutter and Aperture Adjustment

The shutter and aperture adjust the exposure, with the shutter adjusting the exposure time and the aperture adjusting the amount of light. The Canon PELLIX QL uses the zero-method coupled meter, and it is very simple to get the proper exposure.

Shutter Speed 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 of 1/1000 sec., 1/15 sec., etc.

➧ The shutter speed dial does not revolve between the indexes "X" and "B".

➧ Set the index at the position where the click stop catches.

➧ "B" means bulb exposure. The shutter, which remains open during the pressing of the shutter button, is employed when making exposures of more than one second.
In case of "B" index, adjust it to the white dot just below the "B" index.

➧ When it is necessary to make an exposure over an extended time, first set it at "B". Keep the shutter button pressed, turn the time lock lever to indicator "L". In this case, even if the finger is removed, the exposure continues. When the lever is returned to "A", the shutter closes.

➧ Time 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.

Lens Aperture

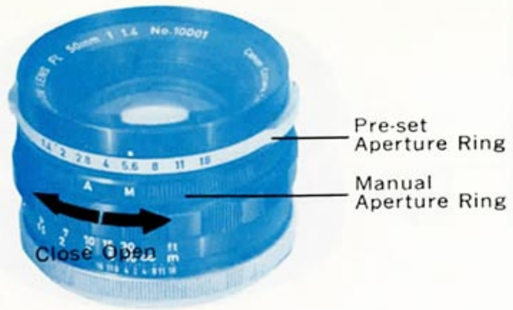
The adjustment of the quantity of light and depth-of-field are made by turning the pre-set aperture ring to adjust the desired F stop to the index.

➧ As the numerical value of the F stop gets larger, the amount of light reaching the film becomes correspondingly less. For each F stop 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.

➧ The aperture ring can also be set to intermediate values.

Pre-Set Aperture Ring

When the pre-set aperture ring is turned and the desired F stop is set to the index, the diaphragm is closed down to the pre-selected F stop for the instant that the shutter is released. Except for that instant, the diaphragm is fully opened. In other words, the pre-set aperture ring is an adjusting ring which automatically pre-fixes the size of the lens aperture.



Confirming the Condition of the Pre-Set F Stop by the Manual Aperture Ring

The manual aperture ring is used to confirm the depth-of-field at the time of photography. When turning the manual aperture ring in the direction of close, the aperture is fixed to F stop of the pre-set lens aperture. In order to return to the condition of pre-set aperture, return the manual aperture ring to its former position.

➧ Do not turn the manual aperture ring while the pre-set aperture ring is fully opened.

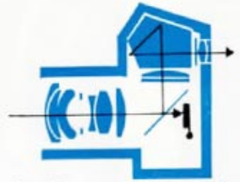
In the cases of FL 50mm F 1.4, FL 50mm F 3.5 (Macro) and FL 19mm F 3.5R lenses, the aperture can be either opened or closed freely by turning the manual aperture ring to "M" position. Returning to the condition of pre-set aperture, turn the manual aperture ring to "A" position.

➧ Depending on the lens, there are instances where there is no relation to the lightness being halved between the maximum diameter of the aperture and the next aperture reading.

➧ The ratio between aperture and the amount of exposure, using F 2 as the basis, is as follows:

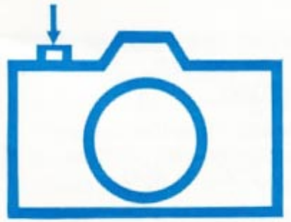
Lens Aperture	1.2	1.4	1.8	2	2.8	3.5	4	5.6	8	11	16	22
Exposure Ratio	1/3	1/2	1/1.25	1	2	3	4	8	16	32	64	128

Relation Between the Pellicle Mirror, CdS, Diaphragm and Shutter



Determine the exposure by pressing the CdS actuating lever.

Release the CdS actuating lever.



Press the shutter button.

The shutter is clicked.

The diaphragm is fully opened.

The diaphragm begins to close.

Closed down to pre-set position.

The diaphragm begins to open.

How to Use Built-in Exposure Meter

Exposure of the Canon Pellix Meter, which is of the zero method type, is coupled to the shutter dial and aperture ring. The exact exposure is easily determined according to the brightness of the subject to be photographed. There are two ways of determining the exposure—either by first selecting the shutter speed or first selecting the F stop.

Film Speed Setting

Show the film speed of the film used in the small window. To do this, hold up and turn the film speed set ring around the shutter dial. If the film is ASA 100, for example, make correct setting by showing 100 in the ASA window.

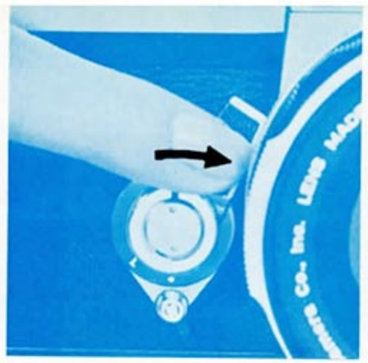
➧ When ASA 25 appears in the small window, this is as far as it turns to the left. The right turn extremity reads · (2000).

➧ The following film speeds may be used:

(32) (40) (64) (80) (125) (160) (250) (320) (500) (640)
ASA 25 · · 50 · · 100 · · 200 · · 400 · ·
DIN 15 · · 18 · · 21 · · 24 · · 27 · ·
(16) (17) (19) (20) (22) (23) (25) (26) (28) (29)
(1000) (1250) (2000)
800 · · 1600 ·
30 · · 33 ·
(31) (32) (34)

Figures in parentheses represent intermediate film speeds.

➧ The film speeds are shown either on the film box cover or on the explanatory sheet.



CdS Actuating Lever

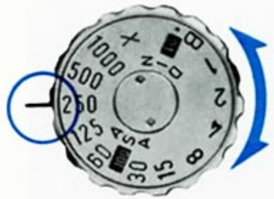
The exposure meter can be set into measuring condition by turning the CdS actuating lever towards the lens.

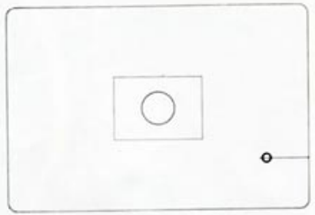
The CdS actuating lever can be fixed by turning it towards the lens after setting the lock lever at "L" position. If the lock lever is returned to its original position (· index) the CdS actuating lever will also return to its original position.

➧ The shutter cannot be released while the CdS actuating lever is being turned or when it is locked with the lock lever.

How to Measure the Average Brightness

The exposure meter on the Canon PELLIX QL is of the spot reading type which accurately measures any special spot of the subject. Therefore, when measuring a subject with greatly differing dark and bright parts, take two measurements, one each of the dark and bright parts. Then obtain the average value and set the F stop or shutter speed accordingly.





Exposure Setting 1—Shutter Speed Priority Method

1 Set the shutter at a desired speed.

2 Face the camera towards the photographic subject, look into the viewfinder, and press the CdS actuating lever fully.

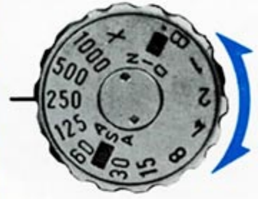
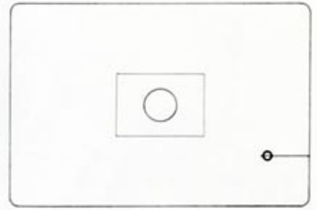
3 Either keep pressing the lever or lock the lever and turn the aperture ring.

4 Set the meter needle at the o index within the viewfinder for correct exposure.

➧ Canon's TTLM system has been adopted in the PELLIX QL which provides the most accurate photometry. Under this system, the CdS photocell of the built-in meter is placed in the closest position to the film on the back side of the pellicle mirror.

➧ The rectangular frame on the outside of the prism screen within the viewfinder is the same size as the light receiving area of the CdS photocell. Place the center of the photographic subject within this frame and measure the intensity of light. In this way the photographer can decide the best exposure for his photographic needs. The TTLM system makes possible the measuring of exposures in counter-light conditions.

➧ Measurement at "B" and "X" indexes of the shutter dial is not possible with the exposure meter because "B" is used for long exposures over one second and "X" is used for speedlight.

Exposure Setting 2—F Stop Priority Method

1 Set the lens aperture at the desired F stop.

2 Face the camera towards the photographic subject, look into the viewfinder, and press the CdS actuating lever.

3 While pressing or locking the CdS actuating lever, turn the shutter dial.

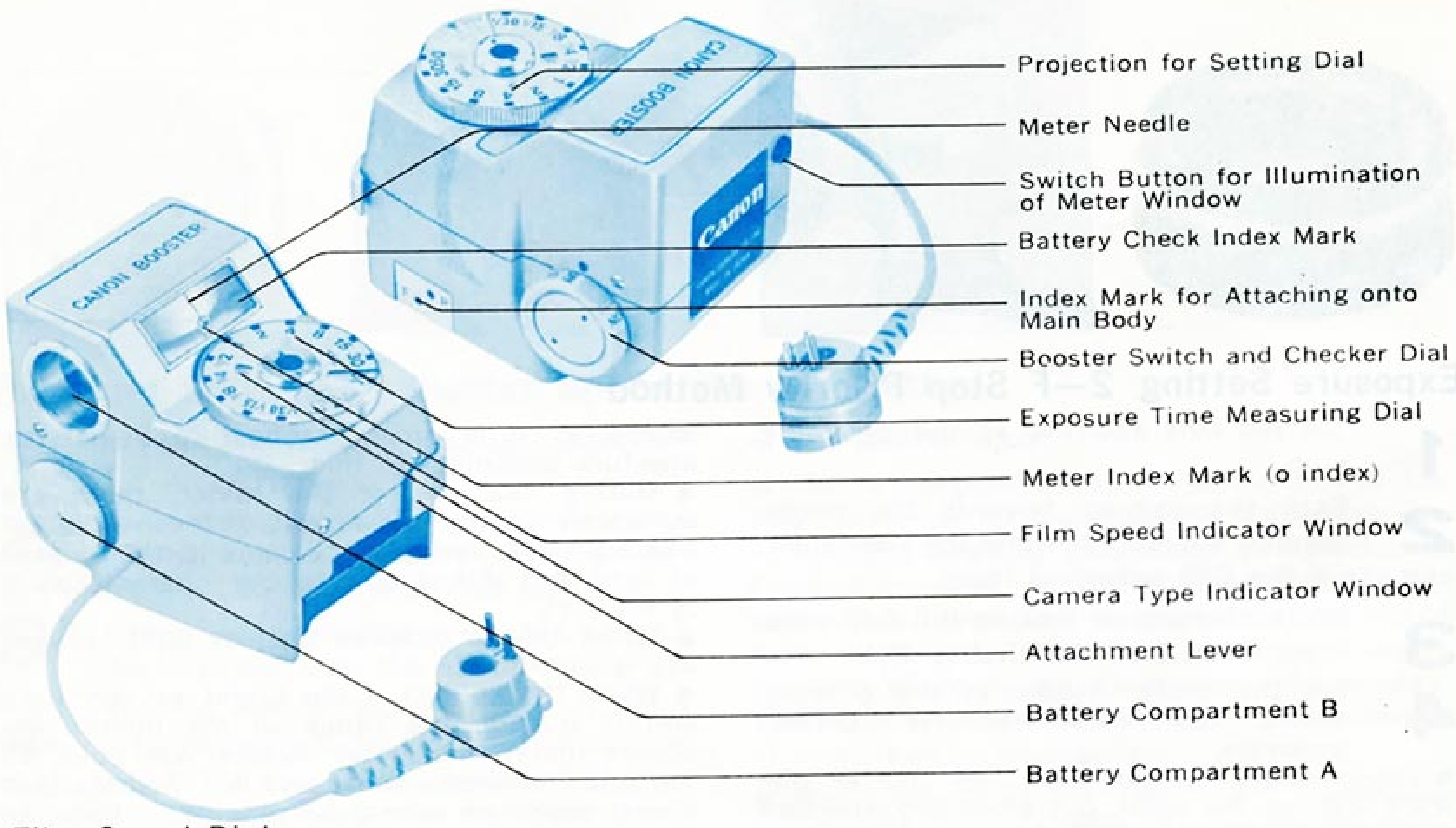
4 Set the meter needle at the o index within the viewfinder for correct exposure.

➧ Intermediate positions on the shutter dial scale cannot be used, 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.

➧ 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 characteristics of the CdS.

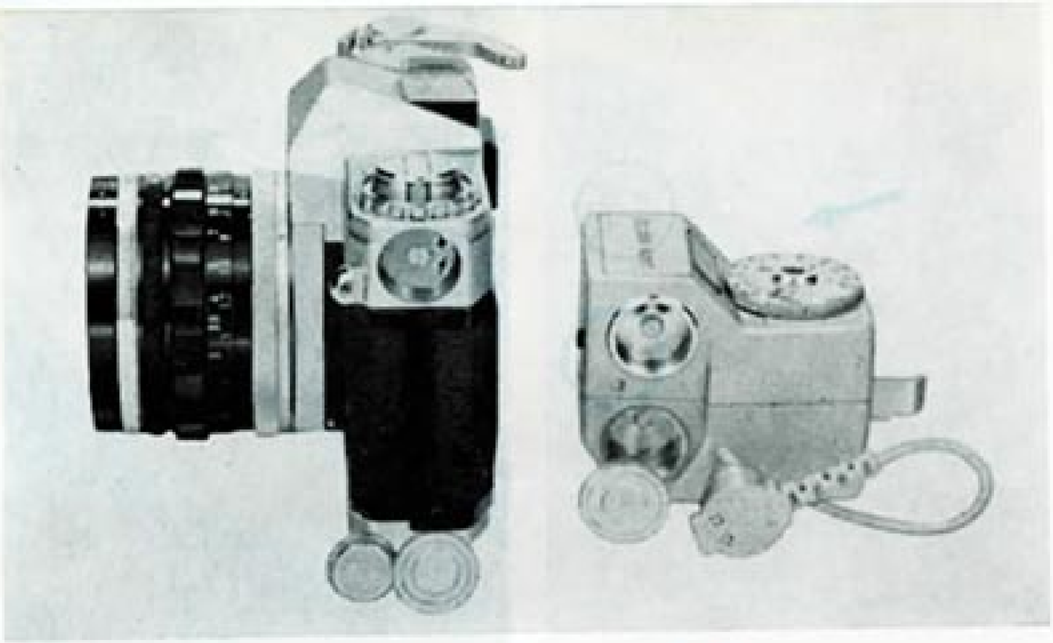
➧ When taking pictures against light, always use a lens hood.

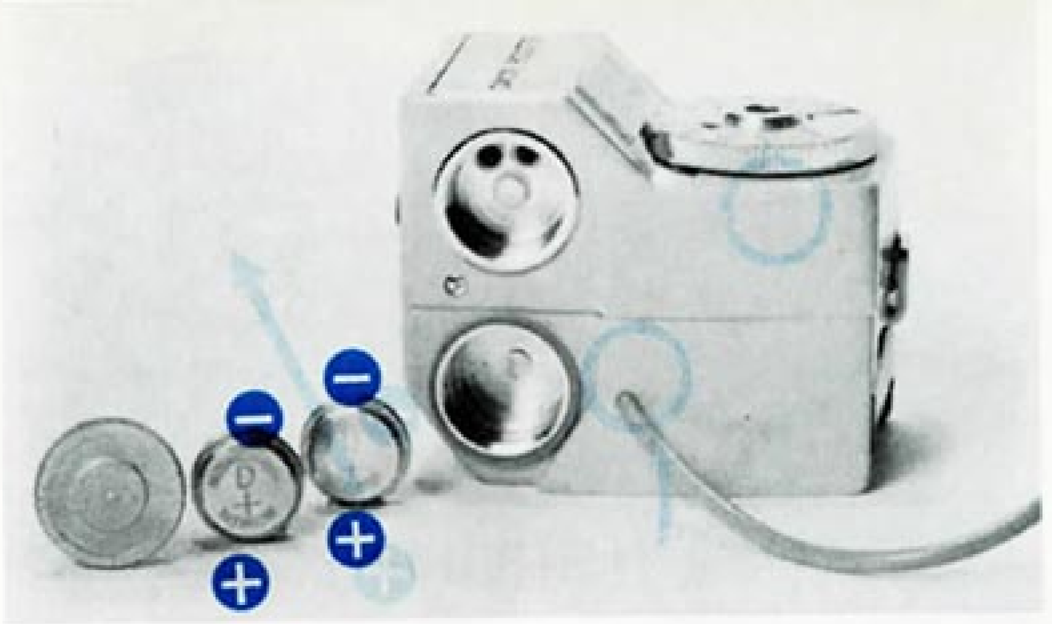
➧ When the subject is too bright or too dark and is outside the range of the built-in exposure meter, the meter needle will point to the top or bottom zones and will indicate that proper exposure cannot be obtained. Refer to "Acceptable Range of Built-in Exposure Meter" on page 47.



Film Speed Dial

ASA	20	25	32	40	50	64	80	100	125	160	200	250	320	400	500	640	800	1000	1250	1600	2000	2500	3200	4000	5000	6400	8000	10000	1280
DIN	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42





How to Use the Canon Booster

The Canon Booster is an auxiliary meter that is attached to the PELLIX QL and FT QL for measuring the subjects under extremely dim lighting conditions.

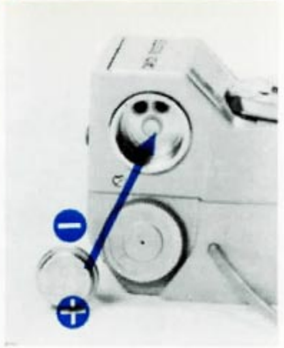
Specifications

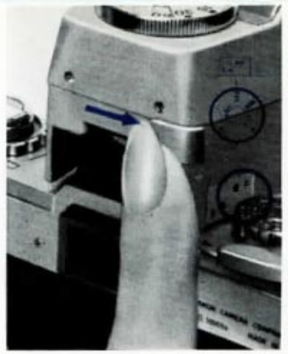
Light Measuring Range: Using ASA 100 film; EV 1.5 1/2 sec. - EV−4.5 30 sec. at F 1.2.
Measuring Method: Zero-method direct reading type.
Photocell: Utilizes CdS semiconductor.
Exposure Time Dial: In the case of PELLIX QL; 60, 30, 15, 8, 4, 2, 1, 1/2, 1/4, 1/8, 1/15, 1/30 sec.
Power Sources: For operating meter, use two 1.3V MD type (#625) mercury batteries.

For illumination of meter indicator window, use one 1.3V MD type mercury battery (use the battery removed from the camera).
Battery Check: Can be checked by the switch.
Size: 65 x 54 x 39 mm (2½" x 2⅛" x 1½")
Weight: 180 grams (6 oz.)

Preparations and Attachment

1 Open the battery compartment A by turning its cover to the left, insert two 1.3V MD type mercury batteries according to the diagram on the bottom of the compartment, and close the cover.





➧ After the mercury batteries have been loaded, turn the booster switch to "C" and check the voltage. If the meter needle is completely within the blue index mark, it means the batteries have sufficient voltage. If the meter needle is pointing to the edge of the blue index mark, replace both of the mercury batteries for new ones.

2 Remove the mercury battery from the camera and insert it into the battery compartment B (the connecting cord plug should be removed from the compartment) and close it with the battery compartment cover of the camera. This mercury battery is the power source for the illumination of the meter indicator window.

3 For PELLIX QL, set the "P" mark on the right side of the booster to the shutter speed index mark on the camera.
Attach the booster onto the accessory shoe of the camera with the use of the main body attachment lever and tighten into place.

4 Insert the connecting cord plug into the socket inside the mercury battery compartment on the camera.

5 Hold the transparent plate on the meter dial, turn the projection and show the camera type in the camera type indicator window. "P" indicates PELLIX QL, and "F" indicates FT QL.

6 Hold the outer ring of the dial, turn the projection and show the film speed of the film being used in the indicator window.

CdS Measurement

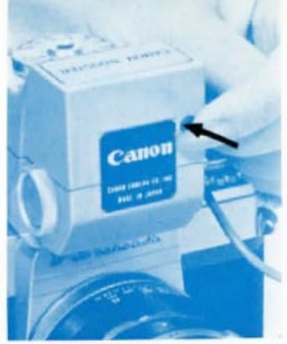
1 Set a desired F stop on the lens.

2 Set the CdS actuating lock lever on the camera to "L" position.

3 Press the CdS actuating lever and lock the lever.

4 Aim the camera at the subject and turn on the booster switch.

5 The meter needle will begin to move. After 5 seconds have passed, turn the exposure time measuring dial and set it to the o index.

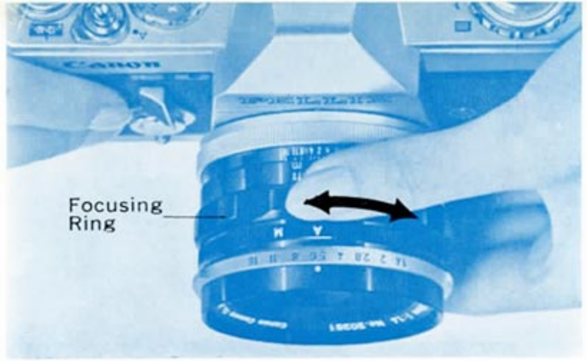


6 Read the exposure time aligned with the o position and transfer it to the shutter dial on the camera side.

➧ The exposure time which has been obtained at this moment is within a deviation of the 1/2 F stop. As the meter needle will move with the passage of time, readjustment enables more accurate photometry.

➧ For speeds slower than 1 sec., set the dial to "B" and release the shutter with the cable release.

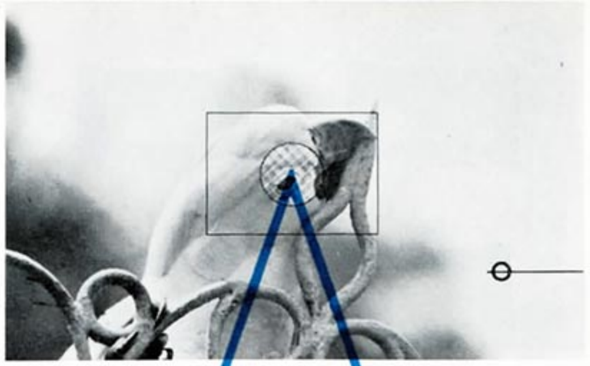
➧ There will be many cases in which it will be difficult to set the meter needle against the o index because it must be performed under dark conditions.
In such cases, press the illumination switch located in front of the meter and illuminate the indicator window.

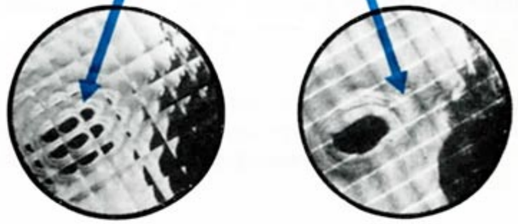


Focusing

While looking through the viewfinder, rotate the focusing ring.
It is out of focus when the image within the circle in the center of the viewfinder is unclear. It is in focus when the images coincide and the unclear images become clear.

➧ The center of the viewfinder (circular section) is the prism screen type rangefinder for focusing made up of microscopic prisms.





Out of focus In focus

➧ Eyesight adjustment lenses are available as optional attachment. When an eyesight adjustment lens is attached to the eyepiece, those who are far-sighted or near-sighted can take pictures without glasses. Four different diopters of +1.5, 0, −2.5, and −4 are available.

Composition and Viewfinder

The exact picture image to be photographed on the film can be seen on the ground glass without any parallax. It is possible to determine the composition exactly according to the viewfinder.

➧ Waist-Level Viewer 2 can be attached to the eyepiece for copying, enlarging and microphotography. In this case, the image is reversed left and right.

Holding the Camera

Holding the camera firmly is very important in order to take a clearly focused picture.
Hold the camera in either vertical or horizontal position, as shown in the photographs. Look through the viewfinder 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:

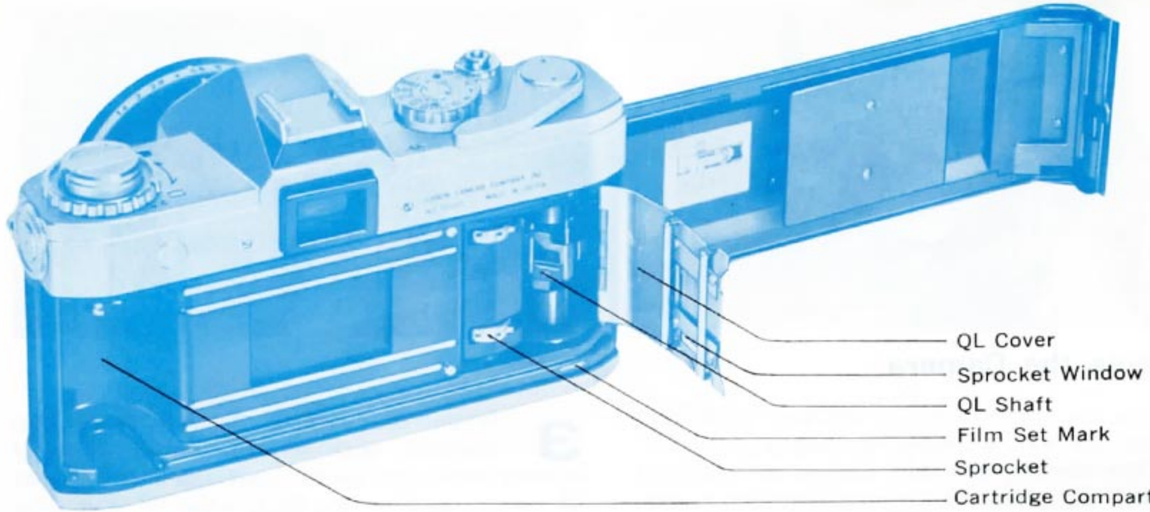
1 Hold the camera with both hands as firmly as possible.

2 Stabilize the camera by pressing it against the cheek or forehead.

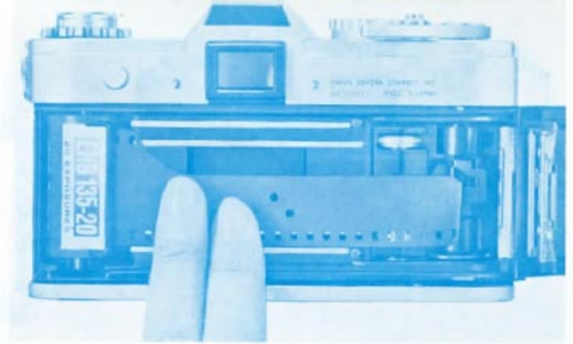
3 When the camera is in a horizontal position, both elbows should be firmly against the body, and at least one elbow should be resting against the body when in a vertical position.

➧ Rough pressing of the shutter button is a cause of blur.

➧ It is advisable to use the tripod and cable release. Particularly recommended when using a slow shutter speed below 1/30 sec.



Direction in which film is placed
(emulsified surface facing the back of the lens)



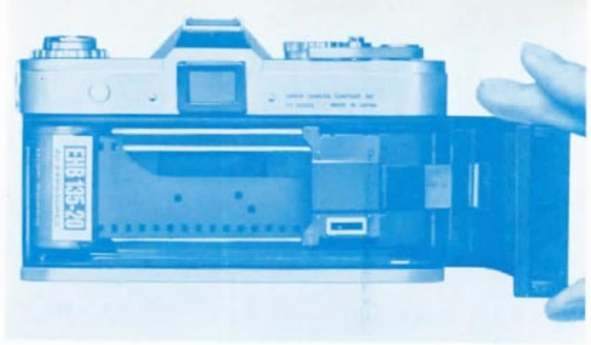
Film Loading

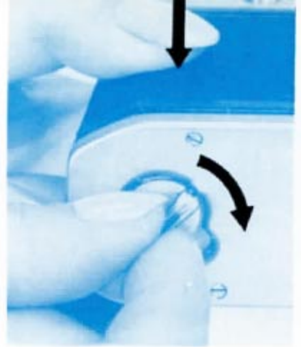
Canon PELLIX QL accepts any standard 35mm film in cartridge for daylight loading.
When loading a new film, avoid direct sunlight.
➧ When repacking a long-wound film for darkroom loading into the ordinary cartridge, trim the end of the leader part in between the perforations.

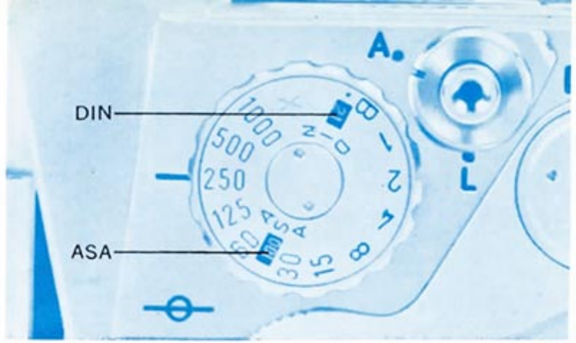
1 **Open the back cover.**
Raise the back cover lock, make a half turn to the left, and the cover will rise.
Open the back cover fully. When the back cover is opened, the QL cover also opens simultaneously and is ready for loading the film.
➧ The QL cover automatically opens and closes together with the opening and closing of the back cover. Do not touch the QL cover.

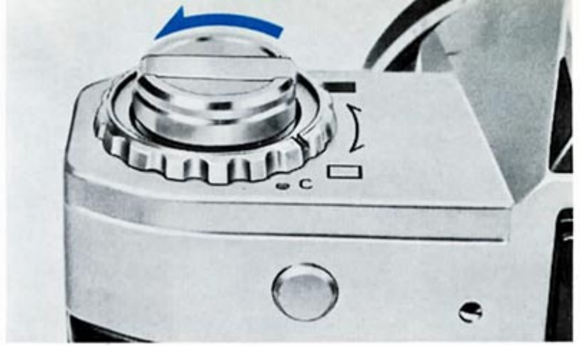
2 **Insert cartridge.**
Raise the rewinding knob all the way. When the cartridge has been inserted, push the knob back to its former position again. Push the fork into the axis of the cartridge. In case the knob does not fully return, it can be easily put into proper position by turning it slightly to the left or right.

3 **Set film tip to the red mark.**
Face the cartridge as shown in the picture and hold the film down with the left hand so that it does not rise.









4 **When the back cover is half-closed,** the QL cover presses down on the film. Check through the sprocket window whether the film has been engaged correctly onto the gear.

5 **Close the back cover.**
Press down to prevent the cover from rising, then turn the back cover lock clockwise to close.
Fold down the rewinding crank.

➧ If the film is sagging, the cartridge will rise and the back cover will not close.

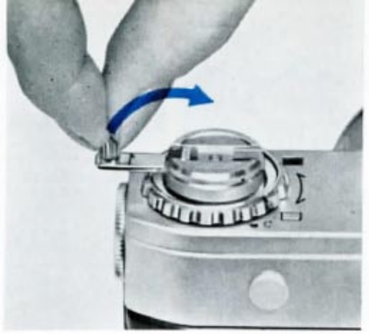
6 **Make three blank shots.**
Leave the lens cap on and advance the film three times, each time releasing the shutter. The film counter will advance from the "S" mark to "0". With one more advance, the camera will be ready for the first shot.

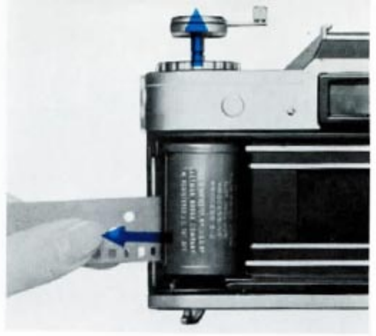
Setting the Film Speed

When loading the film, be sure to set the film speed in the window of the shutter dial. Refer to page 16 for setting the film speed.

Checking Correct Film Loading

The film is properly loaded and transported if the rewind knob rotates when the film advance lever is wound. If the rewind knob does not rotate, it means the film was not loaded properly. If such is the case, take out the film, as illustrated on page 32, and reload the film.





Film Rewinding

Since no further winding is possible when the film has reached the end, rewind the film immediately into the cartridge. As the exposed film is naked within the camera, the entire roll will be exposed and ruined if the cover is opened before rewinding.

1 **Press in the rewinding button.**

2 **Rewind with crank.**

Raise the rewind knob, turn the crank in the direction of the arrow, and return the film into the cartridge. When the rewinding button stops revolving and rewinding resistance becomes light, immediately stop rewinding.

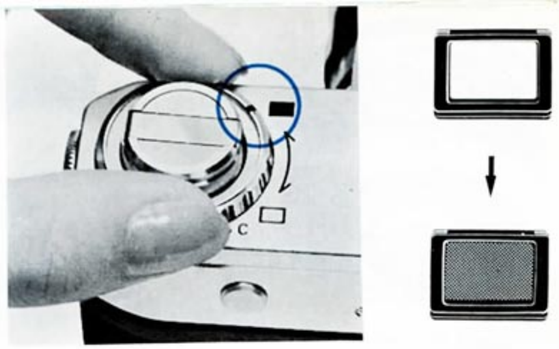
3 **Open the back cover.**

4 **Remove the cartridge.**

Raise the rewind knob completely and remove the cartridge.

➧ Once the rewinding button has been pressed, the finger may be removed. The button will return automatically when the lever is wound.

➧ If winding is continued after the film is at its end, the film will come loose from the cartridge spool or tear and rewinding will become impossible. If this happens, open the back cover in a completely dark room.



Photography Using Self-timer and Eyepiece Shutter

Wind the shutter and close the eyepiece shutter. Turn the self-timer lever in the direction of the arrow and press the shutter button. The shutter will be actuated approximately 10 seconds later.

➧ Be sure to wind the self-timer at least 2/3, i.e., 120°.

➧ Be sure to wind the shutter. If this is neglected and only the self-timer is wound and the shutter button pressed, the self-timer will act but the shutter will not be actuated.

➧ The self-timer lever can be used as a CdS actuating lever as soon as it returns to its original position. When taking shots with the eye off the eyepiece, such as when using the self-timer or cable release, always be sure to close the eyepiece shutter.

Eyepiece Shutter

Since the Canon PELLIX QL incorporates the mirror, the light rays may cause ghosts on the film surface if the viewfinder eyepiece receives strong light.

➧ For closing the eyepiece shutter, turn the eyepiece shutter ring to the left and set the index mark to ■.

Flash Synchronization

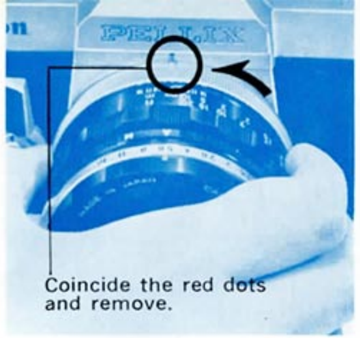
By connecting the cord of the flash unit or speedlight to the flash socket, it is possible to synchronize the following shutter speeds.
When taking pictures with flash, light volume adjustment is required because the Canon PELLIX QL uses a stationary mirror. Obtain F stop by guide number and further open aperture by one-half.

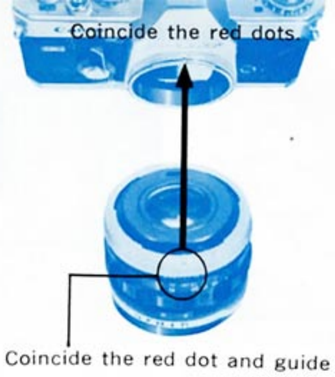
➧ A lens hood is necessary when taking flash pictures.

➧ The flash socket is Continental-(JIS B-) type.

Flash Bulb	Scope of Synchronization												
	1000	500	250	125	60	30	15	8	4	2	1	B	X
FP class	○	○	○	○	○	×	○	○	○	○	○	○	×
M class	×	×	×	×	×	×	○	○	○	○	○	○	×
F class	×	×	×	×	×	×	○	○	○	○	○	○	×
Speed-light	×	×	×	×	×	○	○	○	○	○	○	○	○
AG-1 AG-3 (GE)	×	×	○	○	○	×	○	○	○	○	○	○	×

× markings cannot be used.





Uses of Lenses

Changing Lenses

In removing the lens from the camera, after turning the bayonet ring of the lens to the left, take out the lens.
In mounting the lens, match the red dot of the lens to the red dot on the camera mount. Turn the bayonet ring to the right and fasten.

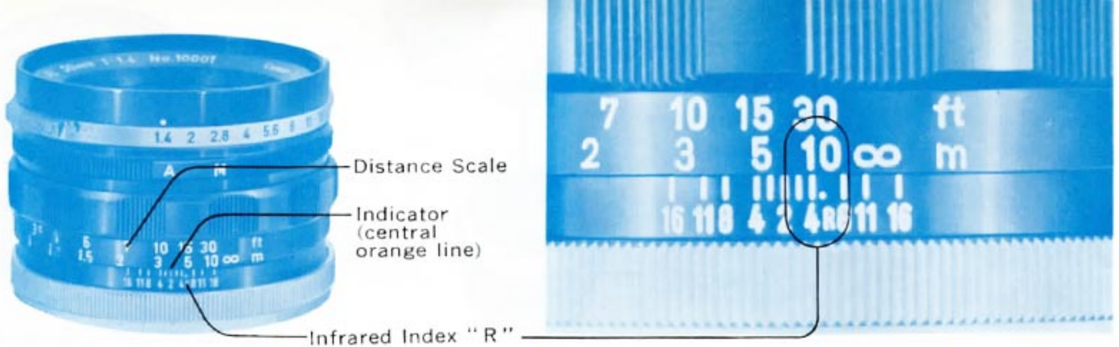
➧ When mounting, turn the bayonet ring of the lens sufficiently to the left and coincide the red dot and guide pin of the lens.

➧ Do not change your lens in a strong light. When changing your lenses have the replacement lens at hand. Then quickly change the lenses in the shade . . . or use your shadow as a shield from direct light.

➧ There is a pre-set aperture lever at the back end of the lens which opens and closes the aperture. When the lens is removed, be sure to always put on the dust cap so as to protect the aperture lever.

➧ If interchangeable lenses are changed while the CdS actuating lever is in locked position, the pre-set aperture lever cannot be connected to the coupling part on the camera body and the pre-set aperture will not function. Be sure to unlock the CdS actuating lever when changing interchangeable lenses.

➧ Do not touch the pellicle mirror or the coupling section of the aperture. When not in use for a long time, protect the pellicle mirror by putting on the flange cap.



Distance Scale

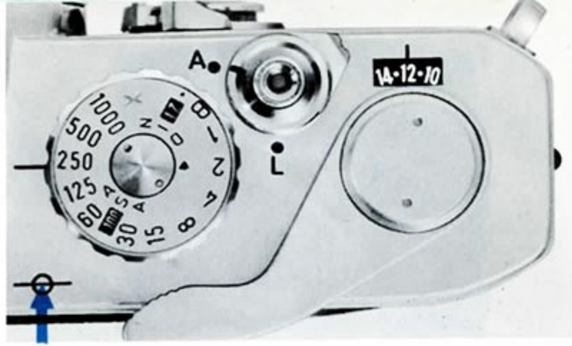
The distance scale indicates the distance between the focused subject and the film plane. The scale is necessary for checking the depth-of-field, for infrared photography and flash photography.

➧ The correct position of the scale, where the distance is a one-digit figure, is in the middle of the figure; if it is a two-digit figure, it is between the two figures; and if it is a three-digit figure, it is in the middle of the central figure.

Infrared Index "R"

For infrared photography, correction of the distance scale is necessary because the focal position deviates a little from ordinary photography. Make ordinary focusing first, then adjust that distance scale to the infrared mark "R". For instance, if the distance reads 10m after focusing, merely shift the 10 scale to "R" position.

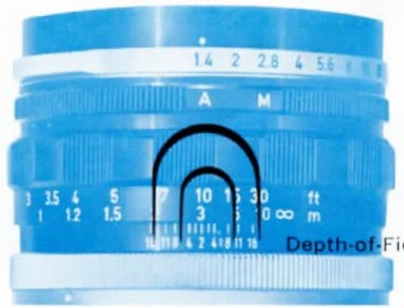
➧ The position of "R" is scaled according to the use of the standard of a film with the highest sensitivity of a wave length of about 8000Å and infrared filter (for example, KODAK IR 135 film and WRATTEN 87 filter or JIS IR 77-87 filter). When you take pictures using the plus X or ordinary panchromatic film with the WRATTEN 25 or red filter of SR 59-60 attached, the correctional movement should be 1/3.



Film Plane Mark

The lens distance index is scaled by measuring the distance from the film position. Thus, in case the focusing is done by actual measurement, measure from the film plane mark and transfer this distance to the lens distance index.

➧ Traces of water bubbles cannot be entirely removed from glass used for high quality lenses because of the manufacturing process. Lens bubbles will not at all affect the sharpness of the picture.



Depth-of-Field Scale

Depth-of-field Scale

The depth-of-field scale indicates the range of subjects which will be in sharp focus on the film. This range will vary with the following factors: The depth-of-field will be deeper the smaller the lens aperture, the further the distance of the subject, and/or the shorter the lens focal length. The depth-of-field will be shallower the larger the lens aperture, the nearer the distance of the subject, and/or the longer the lens focal length.

F 8 50 mm Depth-of-field 2.3 m - 4.3 m
Focused at 3 m

For example, if the lens is 50mm and the subject has been focused at a distance of 3m, with an F 8 aperture, the depth-of-field would be from approximately 2.3m to 4.3m as indicated on both sides of the distance index.

F 16 50 mm Depth-of-field 1.9 m-7.6 m
Focused at 3 m

Similarly, if the aperture is F 16, the picture will be sharp from about 1.9m to 7.6m.
This range will vary with the F stop selected.

➧ FL series of the Canon lenses have a feature which lets you see the actual sharpness through the viewfinder by turning the manual aperture ring.

Lens Mount (FL and R Series Lenses)

As the lens mount for the Canon PELLIX QL is the same as for Canon PELLIX, FT QL, FX, and FP, it is possible to use all FL series lenses except the 19mm F 3.5 lens. The 19mm F 3.5 lens cannot be attached because the PELLIX QL uses stationary type pellicle mirror. Use FL 19mm F 3.5R for exclusive use with the Canon PELLIX QL instead.

➧ It is possible to attach and use all the R series lenses for CANONFLEX use. However, as the automatic aperture mechanism differs, pictures must be taken with the manual aperture.

Double Exposure

Under ordinary usage, there is no danger of double exposure. However, double exposure can be made by the following steps:

1 When the first exposure has been made, press the rewinding button.

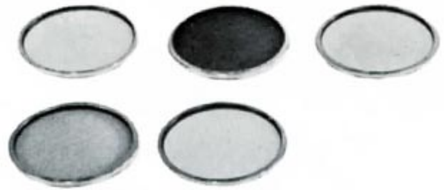
2 Rewind the film with the rewinding crank by watching the mark on the rewinding button carefully.

3 Stop rewinding when the mark has made between 7/8 and one turning, i. e., 315° and 360. Be sure not to exceed one turn of the rewinding button.

4 Next, wind the film advance lever while lightly holding the rewinding crank. When resistance is felt on the rewinding crank, stop the winding.

5 Wind the film advance lever once more. By repeating the above process, it is possible to make any number of exposures on the same film surface. The film counter will, however, continue to advance with each exposure.

Various types of 58mm (for FL 50mm F 3.5, F 1.4, 58mm F 1.2) and 48mm (for FL 50mm F 1.8) screw-in type filters are available for special effects in both color and black and white photography. The exposure meter for the Canon PELLIX QL is of the TTLM system and so there is absolutely no necessity for compensation of exposure factor.



Filters

TYPE	EFFECTIVENESS OF FILTERS
UV (SL 39 · 3C) for color and black and white	· Absorbs only ultra-violet rays. Especially effective at seaside, high mountains where there is much ultra-violet rays. Recommended for use in color photography.
Y1 (SY 44 · 2 C), Y3 (SY 50 · 2 C), O1 (SO 56 · 2 C), R1 (SR 60 · 2 C), G1 (MG 55C) — for black and white	· Increases contrast of black and white film. Enhances clouds, lightening the blue sky. Brightens red and yellow. · Darkens blue, increases yellow and red volume perceptibly. Good for contrasts in distant landscapes. · Makes strong contrasts. Renders day almost into night. May also be used with infrared film. · Prevents red from turning radically into white. Lightens sky and face approximately, and reflects the lightness of fresh greenery.
Skylight, ND 4, ND 8 — for color and black and white	· Acts to harmonize the blue sky and shade. · ND 4 reduces light values by 1/4, ND 8 by 1/8. No effects on the reproduction of colors of color film.
Color Conversion A, Color Conversion B — for color	· For conversion of color temperature when photographing tungsten type film under sunlight. · Color temperature conversion filter for use with daylight type film under tungsten light.

Proper Care of the Canon PELLIX QL

Storage of Camera

Moisture and dust are harmful to your camera. It should be taken out into the fresh air from time to time.

If your camera is to be stored for a long time, it should be removed from its case. Silica gel or another drying agent should be placed alongside it.

Cleaning of the Camera

When you use your camera on a rainy day, or at the beach, moisture and salt air adhere to it, which can result in stains, rust, and corrosion. Use a soft brush to rid the dust and a soft dry cloth for wiping.

Cleaning of the Lens

Use a blower with a rubber ball to blow away dust on the lens or brush lightly with a brush. Do not touch the lens. If you should inadvertently get a fingerprint on your lens, follow this procedure: use a little pure alcohol, or ether, if available on special lens cleaning tissue. Then wrap the tissue around a wooden matchstick and wipe the lens in a circular motion . . . lightly and systematically.

➧ Never touch the pellicle mirror. If dust should accumulate on it, blow it away with a blower.

➧ In extremely cold areas, expose the camera to the outer air only when in use. Put it back into its case immediately after use. When using in cold climates, expose the camera gradually to the outer air to prevent the lens from clouding.

➧ In hot climates, do not leave the camera inside closed automobiles during the daytime or in direct sunlight. It is not good for the CdS meter.

Canon Zoom Lens FL 85-300mm F 5

Canon Lens FLP 38mm F 2.8

Interchangeable Lenses and Accessories

A wide range of interchangeable lenses from 19mm F 3.5 to 1000mm F 11 and various accessories are available to further enhance your Canon PELLIX QL.

Canon Interchangeable Lenses

FL	19mm	F 3.5R	FL	100mm	F 3.5
FL	35mm	F 2.5	FL	135mm	F 2.5
FLP	38mm	F 2.8	FL	200mm	F 3.5
FL	50mm	F 3.5	R	300mm	F 4
FL	50mm	F 1.8	R	400mm	F 4.5
FL	50mm	F 1.4	R	600mm	F 5.6
FL	58mm	F 1.2	R	800mm	F 8
FL	85mm	F 1.8	R	1000mm	F 11

Canon Zoom Lenses

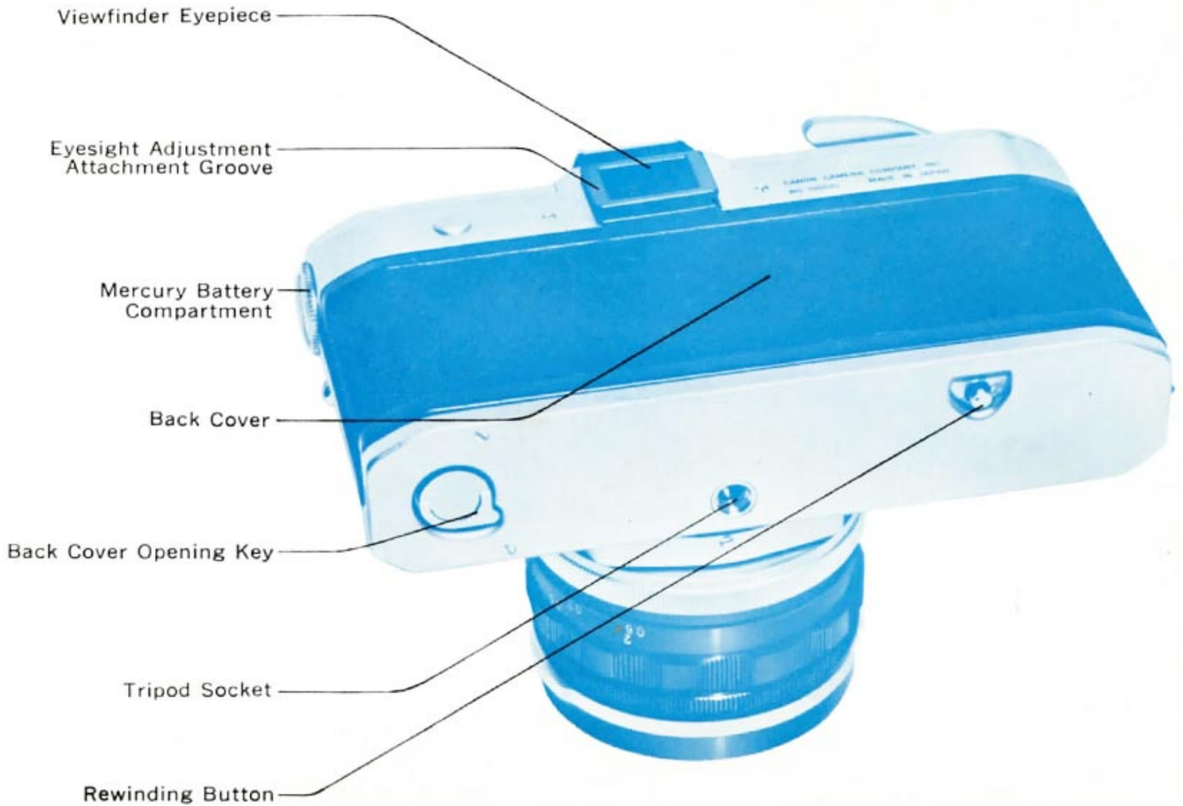
The new Canon zoom lenses are the high performance zoom lenses with fully automatic preset type diaphragm designed specially for the owners of the Canon PELLIX QL.

FL 55 - 135mm F 3.5
FL 85 - 300mm F 5

Accessories

- Filters (48 and 58mm screw-in type)
- Lens Hood
- Flash Quint
- Canon Speedlite 100, 200
- Flash V-3
- Bellows R
- Canon Release
- Waist-Level Viewer 2
- Bellows FL
- Canon Booster
- Copy Stand 3F
- 58 mm Close-up Lens 240, 450, 900
- Camera Holder R4-2

Acceptable Range of Built-in Exposure Meter

Film Speed		Shutter Speed										
ASA	25	· · ·	· · ·	1	1/2	1/4	1/8	1/15	1/30	1/60	1/125	1/250
DIN	15											
ASA	50	· · ·	1	1/2	1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500
DIN	18											
ASA	100	1	1/2	1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500	1/1000
DIN	21											
ASA	200	1/2	1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500	1/1000	· · ·
DIN	24											
ASA	400	1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500	1/1000	· · ·	· · ·
DIN	27											
ASA	800	1/8	1/15	1/30	1/60	1/125	1/250	1/500	1/1000	· · ·	· · ·	· · ·
DIN	30											
ASA	1600	1/15	1/30	1/60	1/125	1/250	1/500	1/1000	· · ·	· · ·	· · ·	· · ·
DIN	33											

When using ASA 100 film, light can be measured at shutter speeds between 1 sec. and 1/1000 sec. Since the exposure meter is coupled to all F stops, the acceptable range would be EV 0.5 (F 1.2 at 1 sec.)–EV 18 (F 16 at 1/1000 sec.) in the case of FL 58 mm F 1.2 lens.