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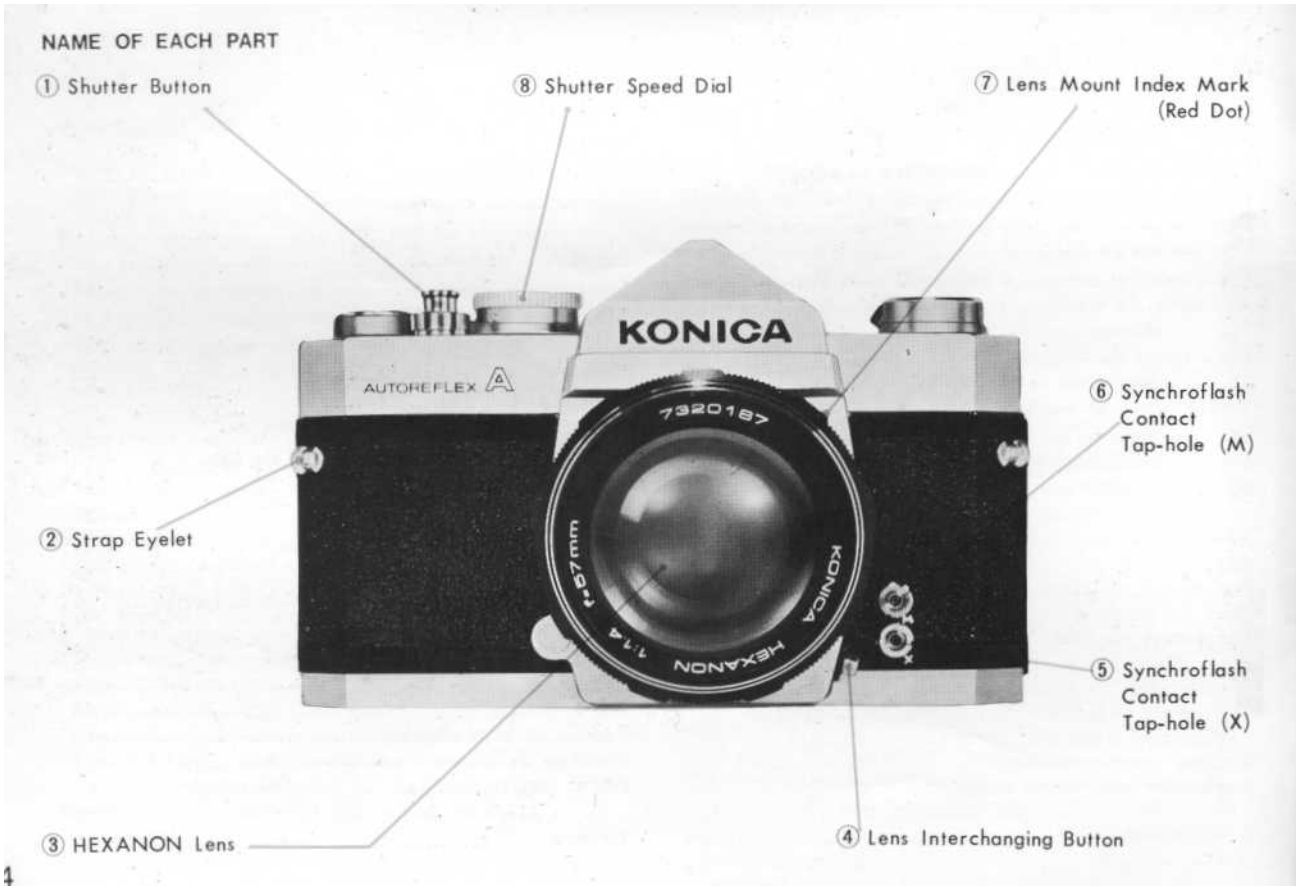
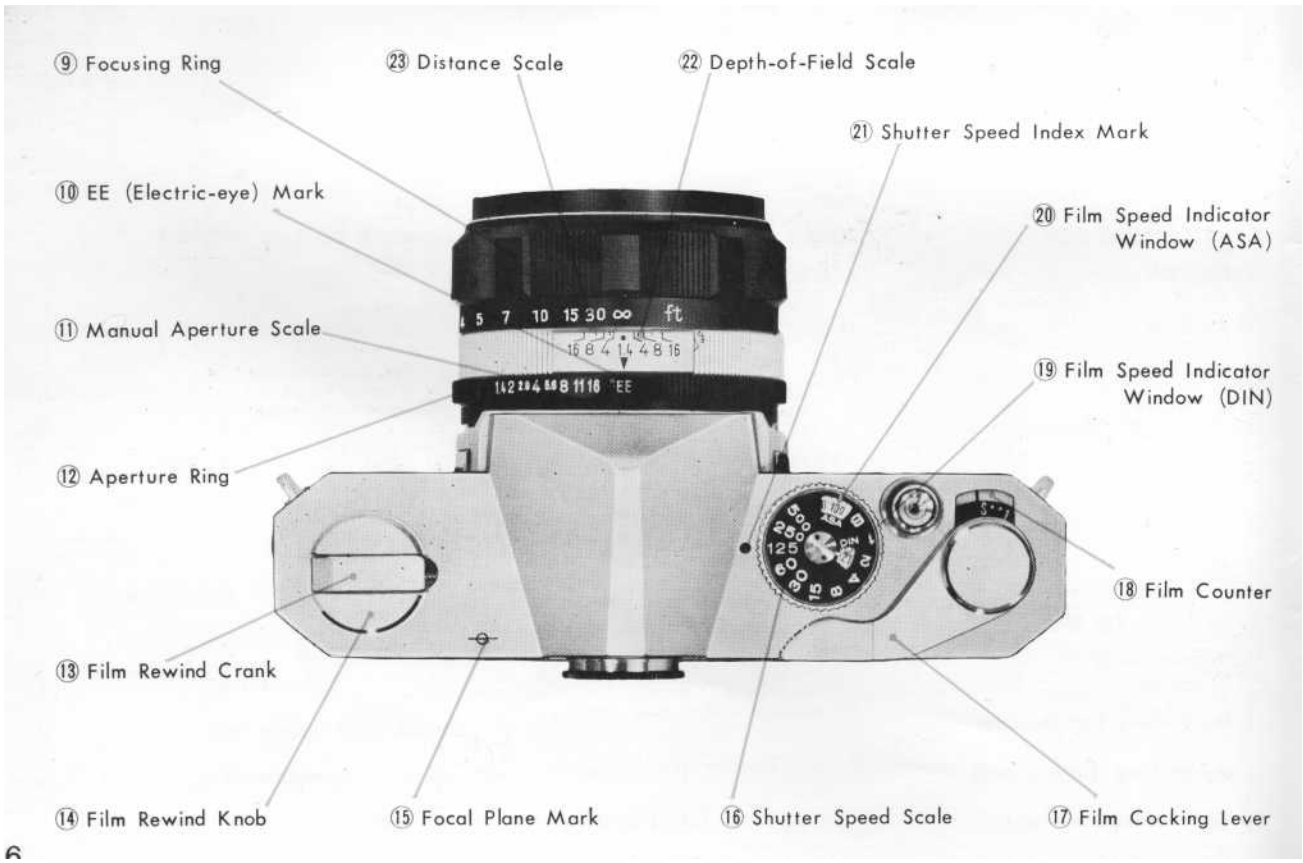
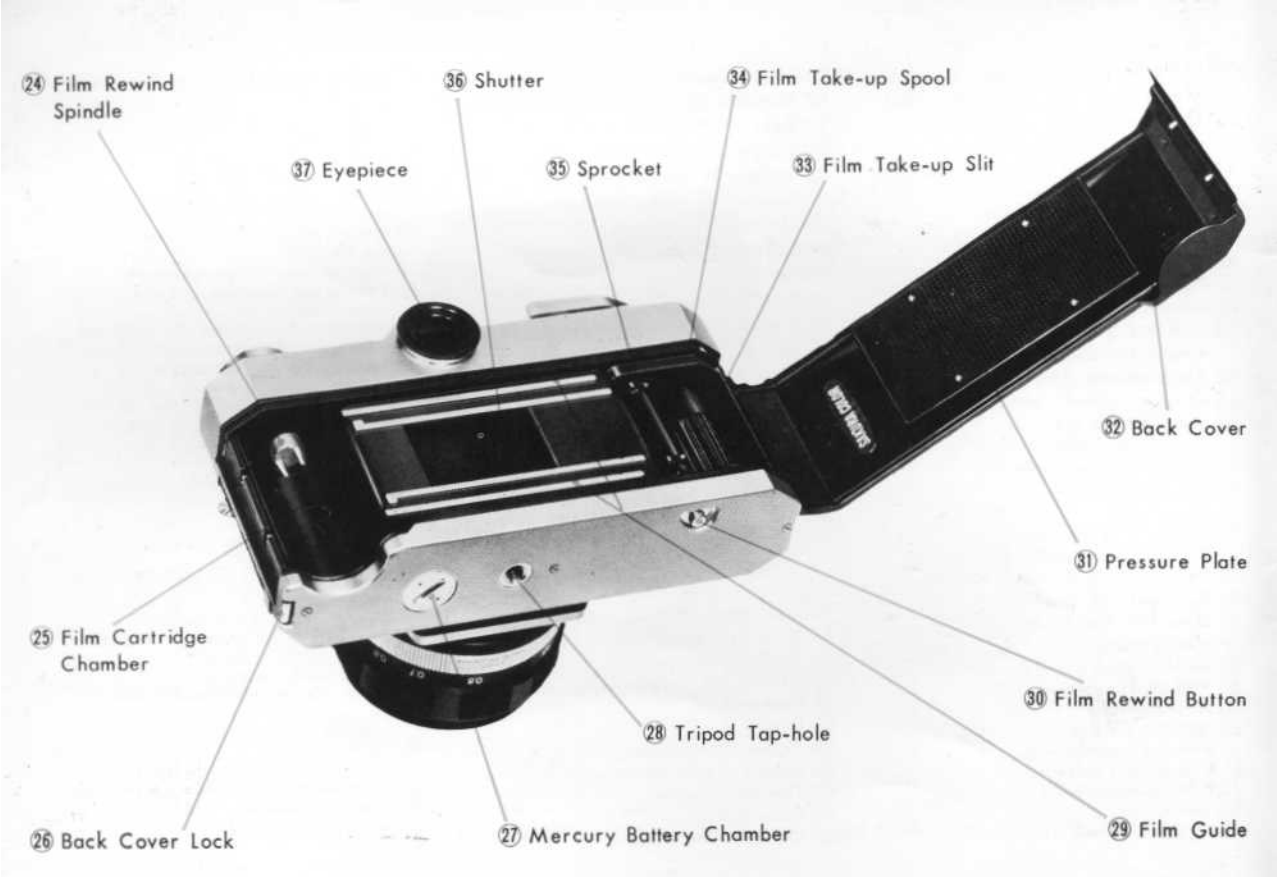



⑨ Focusing Ring
㉓ Distance Scale
㉒ Depth-of-Field Scale
㉑ Shutter Speed Index Mark
⑩ EE (Electric-eye) Mark
⑳ Film Speed Indicator Window (ASA)
⑪ Manual Aperture Scale
⑲ Film Speed Indicator Window (DIN)
⑫ Aperture Ring
⑱ Film Counter
⑬ Film Rewind Crank
⑭ Film Rewind Knob
⑮ Focal Plane Mark
⑯ Shutter Speed Scale
⑰ Film Cocking Lever



MAJOR SPECIFICATIONS FOR KONICA AUTOREFLEX A

Type : 35 mm SLR equipped with focal plane shutter and built-in CdS meter for automatic exposure determination.

Picture Size : 24 x 36 mm.

Film : 35mm film in cartridge, 20 or 36 exposure.

Standard Lens: HEXANON 57mm f/1.2 (6-group and 7-element), 57mm f/1.4 (5-group and 6-element) or 52 mm f/ 1.8 (5-group and 6-element). Minimum taking distance 1.5 ft. (0.45m.)

Mount: KONICA Mount II (bayonet), 47mm. in diameter and 40.5 mm. in flange back.

Aperture Device : Fully automatic aperture (automatic full lens opening).

Shutter : Copal Square S, B, 1 - 1/500 sec. calibrated in equally-graded 1 :2 progression, M and X synchro, electronic light coupled to 1/125 sec. with X synchro and to all shutter speeds with M synchro.

Viewfinder: Eye-level viewfinder using pentaprism, lens focused with Micro Dia Prism of dispersion alignment type at viewfinder center. Meter visible within field of view.

Mirror: Mirror edge vertically flips. Full quick return type.

Exposure Adjustment : TTL system using super-high sensitive compound CdS meter (light measured mostly at center of picture image). Automatic aperture lens Electric-eye: Full electric-eye system coupled to film speed, shutter speed and interchangeable lenses at full opening. Manual aperture: direct reading of f-number coupled to film speed, shutter speed. **Manual pre-set aperture** lens zero method after camera is set to film and shutter speeds. Zero-method system in which camera is coupled to pre-set aperture, film and shutter speeds. Two 1.3V mercury battery cells used as electric source.

EE Coupling Range: EV4.5 to EV17 with ASA 100. Coupled to ASA 25 to 1,600 (DIN 15 to 33).

Film Wind : Film wound by cocking wind lever in single action. Shutter charged and mirror and automatic aperture set simultaneously.

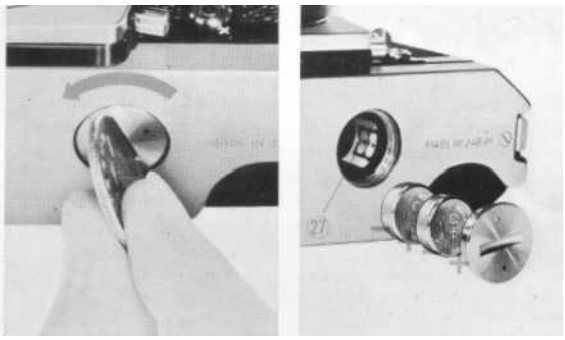
Film Counter : Automatic Film Counter which returns to "Start" mark simultaneously with opening of back cover and indicates number of pictures exposed.

Film Rewind: Film rewind button depressed at first for subsequent film rewind with crank. Button automatically returns to original position.

Dimensions and Weight: With f 1.8 lens -- 148 mm (width) 95mm (height) X 89 mm (thickness), 930grams. With f/1.4 lens - 148mm (width) 95mm (height) x 90mm (thickness), 1,010 grams. With f/1.2lens - - 148mm (

width) x 95mm (height) 96mm (thickness), 1,200grams.

LOADING OF MERCURY BATTERY CELLS



The compound CdS meter of the KONICA AUTOREFLEX A takes two 1.3V mercury battery cells as its electric source. Wipe the mercury battery cells, accessories for camera, with a piece of dry and clean cloth and put them into the mercury battery chamber.

1 Turn the cover of the Mercury Battery Chamber 27 counterclockwise with a coin and detach it from the chamber.
2 Insert the two cells into the mercury battery chamber, the "+" side up, according to the figure printed on the seal inside the chamber. After the cells have been put into position, put the cover on the chamber and screw it tightly.

Handling of Mercury Battery Cells

J A mercury battery is fully serviceable for more than one year if used normally. The battery voltage drops abruptly when it becomes weak, the CdS meter will stop normal operation. When the meter pointer does not move even in bright light, replace the battery with a new one.

For the mercury battery, it is recommendable to use 1.3V battery, Mallory PX-675 or Eveready EPX-675.

Since there are various batteries which resemble the above, but are of a different voltage than that required, caution should be observed when replacing so as not to damage the camera. When not using the camera for a long period, store it in a place with little moisture after taking out the mercury battery.

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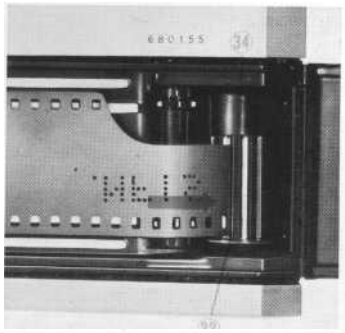
FILM LOADING

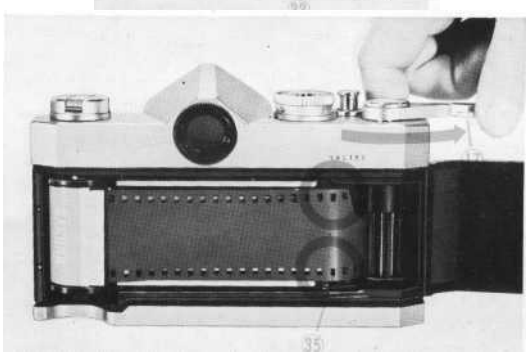
The KONICA AUTOREFLEX A takes 35 mm roll film which comes in a cartridge.

For film loading, avoid the direct sunlight and do it in the shade. If there is no shade, one way would be to use the shadow of your body.

1 Pull the Back Cover Lock 26 and open the Back Cover 32 of the camera.

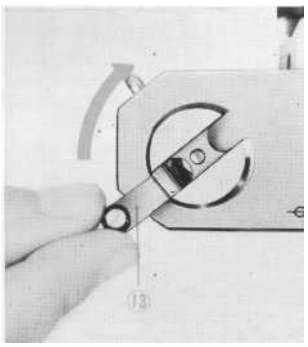
2 Direct toward the underside of the camera that side of the cartridge through which its spindle sticks out and put the cartridge into the Cartridge Chamber 2 .

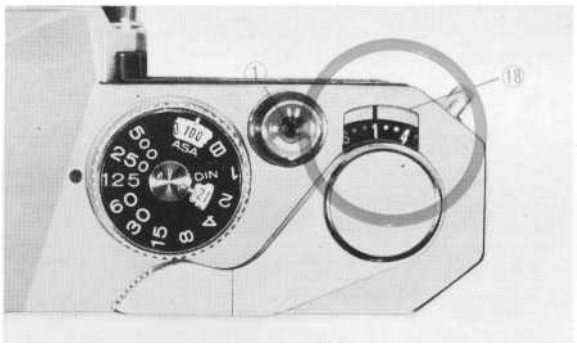




131 Insert the film tip into the Film Take-up Slit 33, of the Film Take-up Spool **34].** Any slit is usable. Choose any slit into which the film tip can be inserted with ease.

141 Turn the Film C$_o$cking Lever (17) and take up the film on the spool. Ascertain that the teeth of the Sprocket 15) r in gear with film perforations, before the back cover is to be closed. Depress the back cover with o finger tip, and it will be closed with ease.



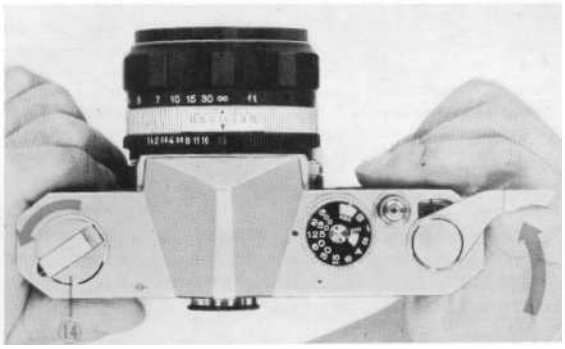


F51 After the back cover is closed, flip up the Film Rewind Crank 13 and turn it in the direction indicated by an arrow mark on it to reduce the slack of the film.

n Wind the film and depress the Shutter Button (1(. Repeat this action until the figure "1" appears in the Film Counter Window 18.

Turn the Film Cocking Lever until it does not move further and the film will be transported by one frame and the shutter charged at the s time. The mirror and the automatic aperture will also be set.

<> Each time when the cocking lever manipulated, the film counter advances one reading, indicating the number of pictures that have been taken. When the back cover is opened after the exposure of a roll of film, the film counter automatically returns to the 'S" (Start) position.



To Check Film Advance: When the film is being taken up in a correct manner, the Film Rewind Knob 14) turns counterclockwise. If it does not turn counterclockwise, it means that the film is not being properly wound.

SHUTTER AND APERTURE

A shutter is designed to control the amount of light reaching the film surface in terms of time and photographically to fix an image of a subject on it. The shutter speed scale has calibrations of B and 1 to 500. The readings of 1, 2, 4, 8 500

indicate the shutter speeds of 1, 1/2, 1/4, 1/8 .... and 1/500 sec., respectively.

- The shutter speed reading of "B" is used when there is the need for the exposure of over one second.

(See the explanation on "B Exposure" on Page 42.)

- The colored figure of "125" is the maximum shutter speed for synchronization with electronic lights.
- Dot not turn the shutter speed dial while the shutter button is depressed.

The lens aperture is designed to control the amount of light reaching the film surface in terms of area and the depth of field (See Page 34), the scope in which the lens may be focused on a subject. The aperture ring of each lens has a scale of f-numbers, ranging from a reading for its full opening to a reading at the time the lens is fully stopped down. The aperture ring clicks into position at each lens aperture reading. As the ring moves from f/2 to f/2.8, the amount of light reaching the film surface proportionally increases. Their relations are indicated in the above figure. For example, the amount of light at f/4 is half the volume of f/2.8, and the amount of light at f'5.6 is half the volume of f'4.

The aperture of a lens bearing the mark of "Electric Eye" is fully automatic. Only during the split moment when the shutter is released, the lens is stopped down to a determined f-number and then automati cally returns to the full opening at once.

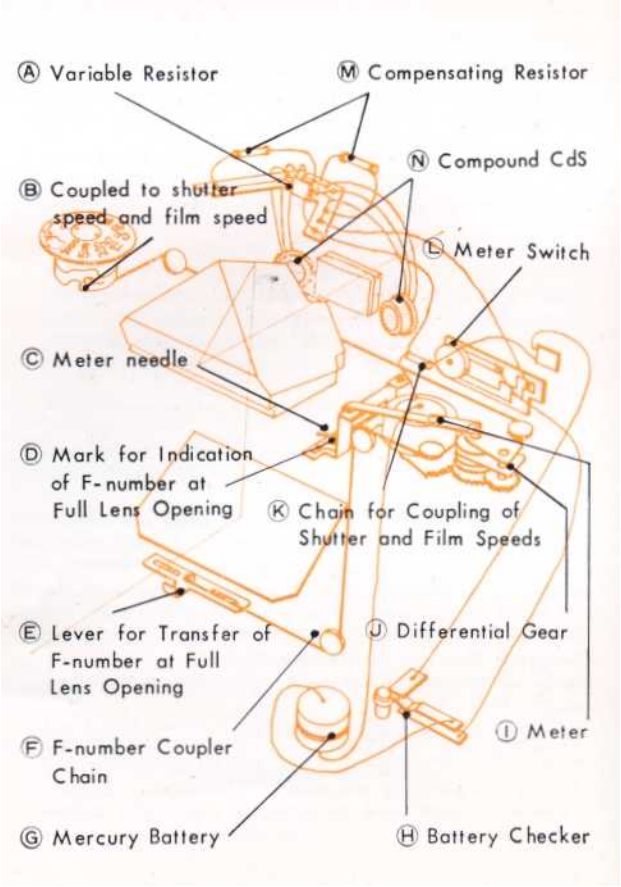
TTL METERING AND FULLY AUTOMATIC CONTROL

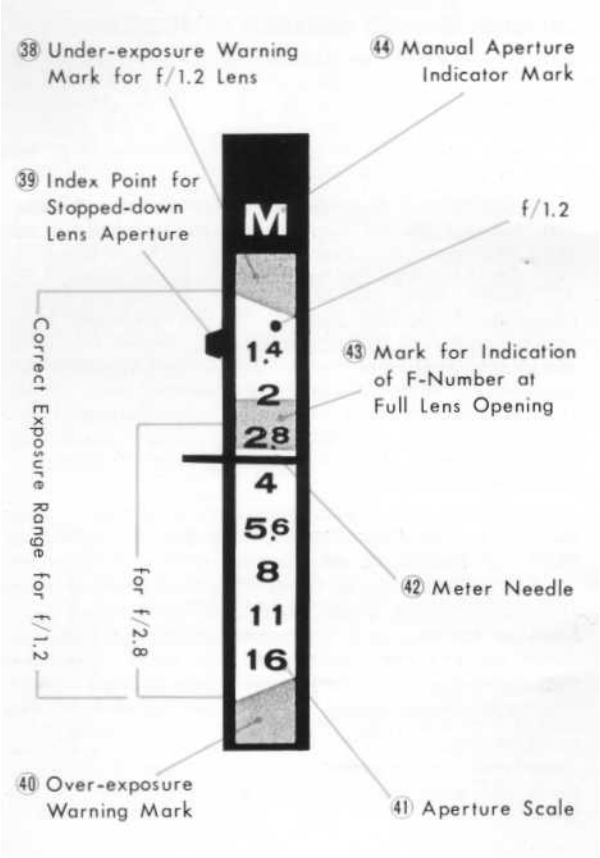
The KONICA AUTOREFLEX A incorporates the latest exposure system in which the compound CdS meter which measures at the center of the taking lens the light coming through the taking lens, and this system is tied in with a fully automatic Electric-Eye (EE) exposure control, making it possible effectively to secure a correct exposure at an instant.

In the fully automatic exposure control, the values of shutter and film speeds, as indicated in a separate figure, are transferred to the CdS meter by a coupler. The value of a fully automatic aperture (Electric-Eye) lens is transferred from the f-number transfer level to the coupler and then by a differential gear to the meter. At the same time, the mark indicating the f-number at the full lens opening of the use lens will be shown in the field of view.

The two CdS cells situated on both sides of the eyepiece and directed inwards measure light on the focal plane, and the measured value is transferred from the circuit having a compensatory resistor and a variable resistor to the meter, making it possible for the meter to start its operation and automatically to determine a correct exposure. The determined f-number will be shown by the meter needle visible in the field of view.

NOTE: In the event that you are possessed of a fully automatic aperture lens of the Electric Eye type for use on the KONICA AUTOREFLEX, it will be remodeled at any service station of the KONICA camera agent without any trouble.


Ⓐ Variable Resistor
Ⓜ Compensating Resistor
Ⓝ Compound CdS
Ⓑ Coupled to shutter speed and film speed
Ⓛ Meter Switch
Ⓒ Meter needle
Ⓓ Mark for Indication of F-number at Full Lens Opening
Ⓚ Chain for Coupling of Shutter and Film Speeds
Ⓔ Lever for Transfer of F-number at Full Lens Opening
Ⓙ Differential Gear
Ⓘ Meter
Ⓕ F-number Coupler Chain
Ⓖ Mercury Battery
Ⓗ Battery Checker



WATCHING METER IN VIEWFINDER

Correct Exposure Range: The stopping of the Meter Needle #2 within the range of correct exposure (or somewhere on the f-number scale for the used lens) is an indication of the feasibility of taking pictures under the Electric-Eye system. Here, the meter needle shows the aperture to which the taking lens is to be set for a shot.

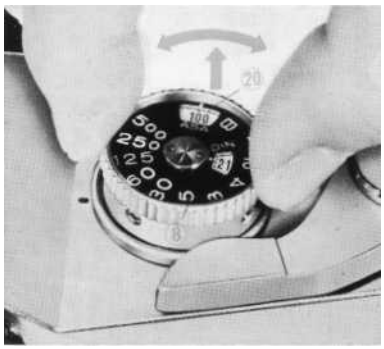
Warning Marks and Mark for the Indication of Fnumber at the Full Opening of the Lens: The red mark visible on the top of the f-number scale visible in the field of view is a mark for the warning of underexposure for an f/1.2 lens. If the lens is not f/ 1.2 in brightness, the Mark for the Indication of the F-Number at the Full Lens Opening (43) will show the f-number at the full opening of the taking lens. If the meter needle is aligned with this mark, pictures will be under-exposed. The signal placed at the bottom of the f-number scale is a warning mark for over-exposure. If the meter needle is brought in line with this Over-exposure Warning Mark 40, it will be impossible to secure a correct exposure. **Index Point for Stopped-Down Aperture Measurement :** When the lens is stopped down for the measurement of light the meter needle will be aligned with the Index Point 39, if a combination of shutter speed and lens aperture which assures correct exposure for the film used in the camera comes out.
Manual Aperture Indicator Mark: "M", the Manual Aperture Indicator Mark 44,, indicates the non-alignment of the Electric Eye Mark I~ of the Aperture Ring 12 with the index mark for a fully automatic aperture (Electric-eye) lens. When the camera is not used under the Electric-eye system, the alphabet "M" is visible at all times, indicating that the aperture of the lens may be manually operated. This manual was created by www.butkus.org/chinon and should only be found at my site.

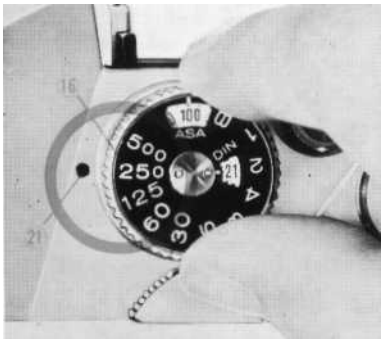
LIGHT MEASUREMENT AT FULL LENS OPENING

ELECTRIC-EYE PHOTOGRAPHY

(Light Measurement at Full Lens Opening)

In the event that a lens equipped with a fully automatic aperture under the Electric-Eye system and having an Electric-Eye mark, pictures may be taken under the Electric-Eye system while light is measured at the full opening of the lens and the viewfinder is brightened as a result of its full opening.





O The ASA and DIN scales visible through the film speed indicator window on the shutter speed dial indicate the degrees to which film is sensitive to light. The film speed of your film is indicated on the box in which it is contained and in its instruction booklet.

O Make sure that the camera is correctly set to the speed of the film loaded in the camera. A mistake in the setting of the film speed will not assure correct exposure.
The figures in brackets are the readings for intermediate film speeds.

1 Set the film speed (ASA or DIN).

Lift and turn the external ring of the Shutter Speed Dial 8, and align the reading equivalent to the speed of the film used in the camera with the index mark of the Film Speed Indicator Window. When they are aligned with each other, the ring drops and is fixed.

2 Determine the shutter speed.

Turn the Shutter Speed Dial 8, select a Shutter Speed Scale 16 suitable for your subject and bring the reading with the index mark.
It is convenient to set the shutter speed to 1%250 sec. for outdoor shooting and 1 30 sec. for indoor s hooting.

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

[38] **Set the aperture ring to the Electric Eye.**

Turn the Aperture Ring '12) and bring the Electric-Eye Mark 10) in line with the index mark. The ring clicks into position at any f-number calibration.

41 Train the camera at your subject and **look through the** viewfinder, and the meter will be visible **in the** field of **view.**

If the Meter Needle (42) is visible within the correct exposure range, it will be possible to secure correct exposure. Focus the lens and frame the subject before the Shutter Button (1) is depressed to take pictures under the Electric-Eye system.

METER COUPLING RANGE

The meter coupling range of KONICA AUTOREFLEX A is, irrespective of the film speed, from 1/15 to 1/500 sec. of the Shutter Speed Scale (16i. Yellow digits, B, 1, 1/2, 1/4 and 1/8 sec. are not coupled.

In the case of light measurement at full lens opening, the meter will be interlocked (coupled) within the ranges given below.
With f/1.2: EV4.5 (f/1.2,1/15 sec.) - EV 17 (f/16, 1/500 sec.) With f/1.4: EV5 (f/1.4,1/15 sec.) - EV 17 (f/16, 1/500 ec.) With f/1.8: EV 5.7 (f/1.8,1/15 sec.) - EV 1 7 (f/16,11/500 sec.)

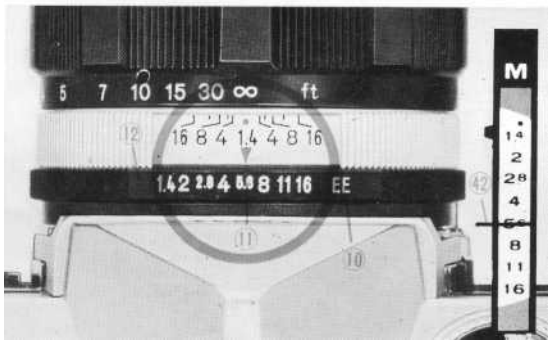
NOTE: Upon changing the film speed and the shutter speed beyond the coupling range, the meter needle swings, but it is advisable not to use the camera.

IMPORTANT POINTS FOR LIGHT MEASUREMENT AT FULL **LENS OPENING**

When under-exposure is recognized by the meter needle, select slow shutter speed. Whereas, in over-exposure, obtain fast shutter speed. In case the meter is within a correct exposure range, it allows making EE photography. On the other hand, if the meter needle is beyond the range, even changing of the shutter speed dial within a range from 1/15 to 1/500 sec., EE photography is impossible.

In the event that you want to give priority to the selection of a lens aperture over a shutter speed because of your specific photographing purpose, turn the shutter speed dial while looking through the viewfinder and bring the meter needle in line with the reading of the desired shutter speed. Make sure at all times that the shutter speed dial clicks into position at the calibration of a desired shutter speed.

When the Electric-Eye system is not used .... When there is the need to manually control exposure due to a specific photographing purpose, turn the Aperture Ring ..12; to detach the Electric-Eye mark 10i from the index mark and an exposure is determined according to the Manual Aperture Scale 11:'. Here, the meter visible in the field of view serves as a meter which is coupled to the film speed, shutter speed and f-number at the full opening of the taking lens, and the Meter Needle (42) indicates a correct lens aperture. Read this f-number and determine a proper lens aperture according to the manual aperture scale.



TRAINING OF CAMERA

Hold the camera tight.

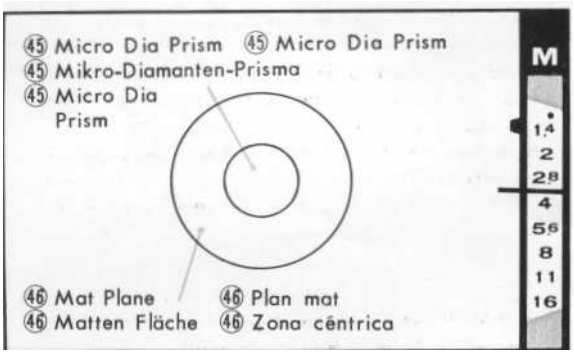
To take a sharp picture, hold the camera in a stable manner to prevent it from being accidentally jarred when the shutter button is depressed. Hold the camera in both hands and make it stable by holding it against the face and nose. Depress the shutter button with the bulb of a finger to release the shutter.

It is more difficult to hold the camera vertically than to hold it horizontally. It would be advisable to get yourself accustomed to the vertical holding of the camera because there are many cases in which the camera must be trained vertically.

FOCUSING

Focusing is done by turning the Focusing Ring 9 and watching the Micro Dia Prism 45 at the center of the viewfinder. When the lens is not focused, the image looks rugged. The image is clearly visible, however, when the lens is accurately focused. The image in the rest of the field of view is also clearly visible. When an interchangeable lens, long in focal length, is used, it is difficult

to observe the Micro Dia Prism. For focusing, it is advisable to watch the image outside the Mat Plane 46, To ensure the accurate focusing of the lens, it is necessary to correct the eyesight of the viewfinder. Eyesight adjustment lenses are available for short- and long-sighted people.
The viewfinder is of the single-lens-reflex real-image type. The image visible in the field of view, therefore, is the same as that exposed on film. This manual was created by www.butkus.org/chinon and should only be found at my site.



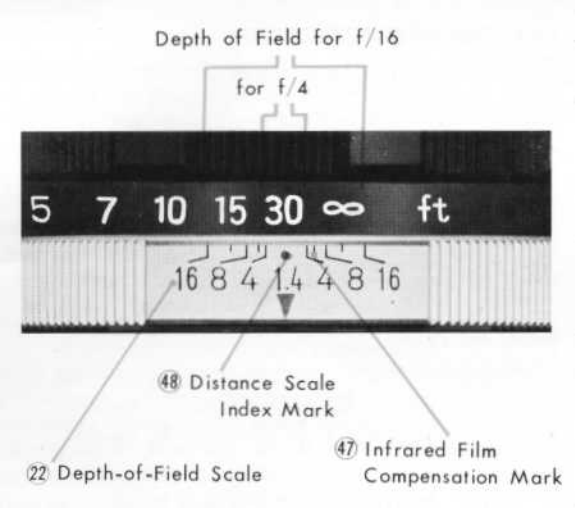

When the lens is not focused ····
Die Einstellung ist nicht richtig ····
Lorsque l'objectif n'est pas mis au point ·
Cuando el lente no está enfocado ····


When the lens is focused ····
Die Einstellung ist richtig ····
Lorsque l'objectif est mis au point ····
Cuando el lente está enfocado ····

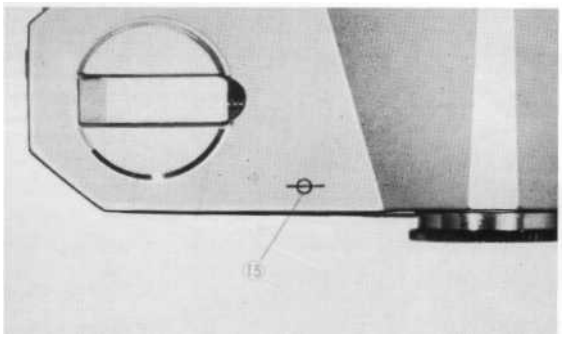
DEPTH OF FIELD
When the lens is focused on a subject at some distance, not only the subject but also a certain area around the subject will be sharply delineated in a photograph, and this area is known as a depth of field and has the following features. 1. The larger the f-number, the bigger the depth of
field.
2. The farther the distance at which the lens is focused, the bigger the depth of field is.
3. When the lens is focused on a subject, the depth of field is bigger for the section in front of the subject than that behind the subject.
.4. The shorter the focal length, the bigger the depth of field is.
The depth of field may be ascertained either with the depth-of-field scale or with the manual aperture. As for details, reference is made to the table of depths of field.

Using the Table of Depths of Field: The Depth-ofField Scale 22 is so calibrated that readings identical to those of the lens

aperture are provided on both sides of the Distance Scale Index Mark '4Q'. After the lens has been focused, read this scale, and the depth of field will be the section sandwiched between the two readings of the used aperture.
For example, let us assume that the distance between the file plane and the subject on which the lens has been focused is 30 feets (10 meters). The depth of field will be 22 to 46 feet (7 to 16 meters) for f:4 and 13 feet (4 meters) to infinity (o) for f/16.



Infrared Film Compensation Mark: When infrared film and a red filter are used in taking infrared photographs, read the Distance Reading 23 aligned with the Distance Scale Index Mark 484 after the lens has been focused as in normal photography and then turn the focusing ring to bring this reading in line with the Infrared Film Compensation Mark 47 before the shutter button is depressed for a shot.

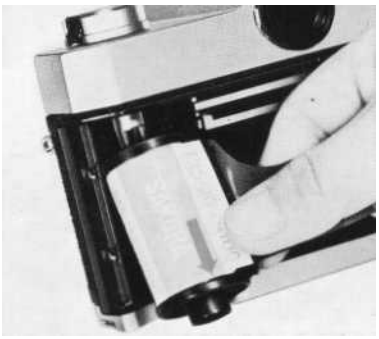


Focal Plane Mark : The distances shown on the Distance Scale 233 are those from the Focal Plane Mark "--" 15' which indicates the position of the film plane.

FILM REWIND

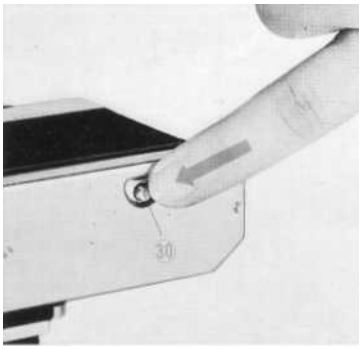
After a pre-determined number of pictures have been taken on the film loaded in the camera, the film will be wound back into the original cartridge. If the back cover of the camera is opened without rewinding the film, note that the film will be exposed to light and the whole of the film will become useless.

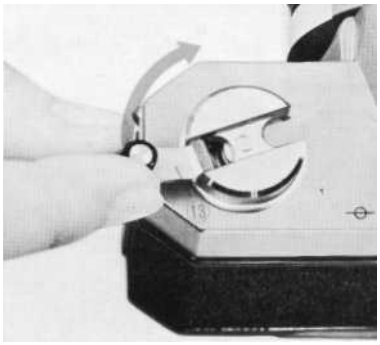
0 When the cocking lever no longer moves further after the advance of the last frame of the film, do not try forcibly to cock the lever but put the lever back to the original position.
Take the cartridge out of the camera in the shade.



1 Depress the Film Rewind Button X30). Once it is depressed, the button remains sinking.
2 Flip up the Film Rewind Crank 13' and turn it in the direction indicated by the arrow mark inscribed on it. This action will take the exposed film back into the cartridge.
[31 The film rewind action comes to an end when there is a sudden easing of the load on the film rewind crank. Open the Back Cover (32) and take out the cartridge.

Q The film rewind button which remains depressed will return to the original position when the film wind lever is cocked.





B (BULB) EXPOSURE

Turn the shutter speed dial to align the "B" mark on the Shutter Speed Scale (16) with the index mark, and the shutter will be opened during the time when the shutter button is kept depressed and it will be closed once the finger is separated from the button. This process is usable when there is the need to expose film for more than one second.

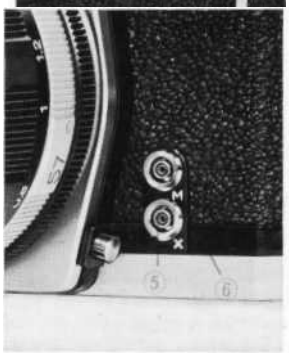
K The bulb exposure is not usable in the electric-eye photography. Turn the aperture ring to detach the Electric-Eye mark from the index mark and use the manual aperture scale.

When a tripod is used, the tripod is screwed into the tap-hole on the underside of the camera. It is advisable to use the KONICA Cable Release designed exclusively for the KONICA cameras. This manual was created by www.butkus.org/ chinon and should only be found at my site.

SYNCHROFLASH PHOTOGRAPHY

When pictures are to be taken in a circumstance which does not permit Electric-Eye photography, such as at night and in a dark

room, or when there is the need to use an auxiliary light during the daytime, use either synchroflash bulbs or electronic lights and take synchroflash pictures.



For synchroflash photography, use the Accessory Clip III on which either a synchroflash gun or a small electronic light unit may be mounted. As your camera is equipped with a tap-hole each for Classes M and X, insert the plug into the Synchroflash Contact Tap-hole "M" .6' for bulbs of Classes M and FP or the Synchroflash Contact Tap-Hole "X" 5) for electronic lights and bulbs of Class F.

Flash Synchronization for KONICA AUTOREFLEX A

Contact	Shutter Speed / Bulb	B	1	2	4	8	15	30	60	125	250	500
M	Class M	○	○	○	○	○	○	○	○	○	○	○
	Class FP	○	○	○	○	○	○	○	○	○	○	○
	Class MF	○	○	○	○	○	○	○	○	○	○	○
X	Strobo	○	○	○	○	○	○	○	○	○	×	×

○ - Synchronized × - Not synchronized

Exposure For Synchroflash Pictures

The Electric-Eye system is not usable for synchroflash photography, and exposure is determined according to the Manual Aperture Scale "11). The required lens aperture (f-number) is computed by dividing the guide number of the used synchroflash bulb or electronic light with the taking distance. For example, in the event that a bulb of Class M is in use and the guide number for the shutter and film speeds is 75 and that the taking distance is 9 feet, the lens aperture (fnumber) will be about 8, whereas: 75-9=8 As regards the shutter speeds with which each synchroflash bulb or electronic light is synchronized, refer to the table.

0 The guide number is shown on the package of each synchroflash bulb. A table of guide numbers is available depending on the synchroflash gun. Here, use this table.

LENS INTERCHANGE

To dismount the lens

To dismount the lens, depress the Lens Interchanging Button (4), when the silver part of the lens barrel is gripped and the barrel is turned counterclockwise and pulled out of the camera as the red dots of the barrel and camera are aligned with each other.

NOTES:

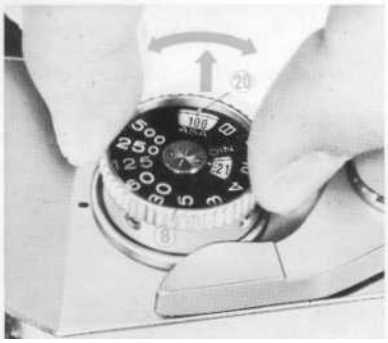
Q When the lens is detached from the camera, do not touch the inside of the camera.

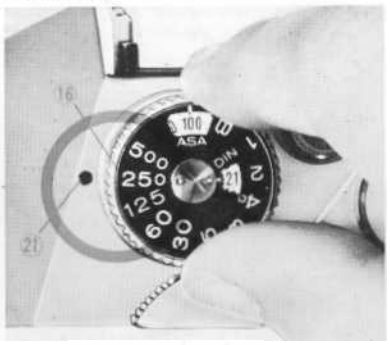
Q Prevent dust from coming into the camera and falling on the dismounted lens and see to it that the lens surface is neither scratched nor marred with fingerprints.

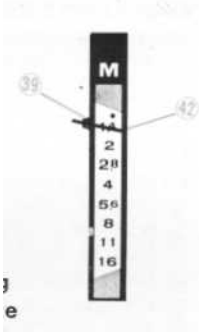
To mount a lens on the camera

To mount a lens on the camera, bring the red dot of the lens in line with the Lens Mount Index Mark (red dot) (7) of the lens barrel and correctly sink it into the camera. Then grip the silver port of the lens barrel and gently turn the lens clockwise until it clicks into position.

STOPPED-DOWN APERTURE MEASUREMENT







1 Set the Film Speed (ASA or DIN).

Lift and turn the external ring of the shutter speed dial so that the reading of the sensitivity speed of the film used in the camera appears in the Film Speed Indicator Window.

Manual Aperture
(Stopped-Down Aperture Measurement)

The lens is stopped down to measure light when a preset or click aperture lens is used or when the automatic aperture system may not be put to use due to the utilization of an extension ring or bellows.

21 Determine the Shutter Speed.

Turn the Shutter Speed Dial 8 , select a shutter speed suitable for your subject and bring the reading of this speed in line with the index mark.

3 **Determine the Exposure.**

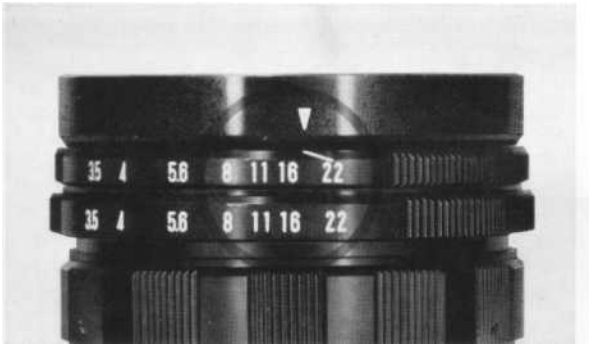
Train the camera at your subject, look through the viewfinder and turn the aperture ring so that the Meter Needle 42 will come in line with the Index Mark 39; visible in the viewfinder. Correct exposure is assured when the meter needle is aligned with the index mark. Focus the lens and frame the subject before the shutter button is depressed.

IMPORTANT POINTS OF STOPPED-DOWN APERTURE MEASUREMENT

The stopped-down aperture measurement system has nothing directly to do with the aperture scale visible in the field of view. In the event that the meter needle does not come in line with the index mark even if the aperture ring is turned, select another shutter speed. If the needle comes above the index mark, pictures will be under-exposed. Here, select a slower shutter speed. If it comes below the index mark, choose a faster speed.

Q There is no aperture in microphotography. Here, pictures must be taken while the shutter speed and the lights are adjusted.

Q When the lens is stopped down for a close-up, select a correct exposure while seeing to it that strong light does not come in the camera through the eyepiece.



When a manual pre-set aperture lens is to be used, set the pre-set aperture ring to the reading of the smallest aperture, before the ring is turned to secure a correct exposure.

In the event that the subject is moving so fast that there is the need for quick photographing actions, exposure may be determined by simultaneously turning the pre-set aperture ring and the aperture ring after they have been aligned with each other.